A Grammar of Kusaal

Agolle Dialect

David Eddyshaw 2019



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Preface

I worked as an eye surgeon in the Bawku Presbyterian Hospital in Ghana for some years in the 1990s. I had previously not so much as heard the name of the major language of the district, Kusaal. Although I had the benefit of some coaching in the language by SB (see Sources), there were no written instructional materials of any kind available to me at the time I first arrived. (I would have been saved a good deal of trouble, though denied some pleasure of discovery, if I had then seen David Spratt's introductory sketch and vocabulary.) Accordingly I embarked on the wholly new adventure of trying to work out the structure of an entirely unfamiliar language essentially by myself from scratch, armed with a longstanding interest in language but very little in the way of prior helpful skills and experience.

Through enthusiasm, perseverance and the help of some very tolerant and patient informants, along with a good deal of exposure to the language in the course of my work, I did eventually acquire enough competence to be able to function in the highly stylised context of medical interaction with patients. I also became fascinated by the language and delighted by the order and beauty which underlie a surface which initially seemed chaotic. I hope that this work will convey a little of that beauty.

No linguist will fail to recognise that the account below is the work of an amateur. Whatever it has produced which is of value is a testimony to the intelligence of my informants, who also had perfectly good day jobs in which they proved themselves some of the best colleagues I have ever worked with.

When I lived in Ghana, there were very few linguistic works available on Kusaal. Happily, the situation has changed; in the References section I list numerous works by Urs Niggli on the Toende Kusaal of Burkina Faso, and more encouragingly still, accounts of aspects of Toende Kusaal by Hasiyatu Abubakari, and a complete grammar of Agolle Kusaal by Agoswin Musah, both speakers themselves.

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

My brief description of the Kusaasi people themselves in my Introduction is merely a short list of points I found especially interesting, and not even the beginning of an adequate account of a deep and intricate culture. It is much to be hoped that Kusaasi culture finds worthy investigators who can portray it as it deserves. Until then I would recommend Ernst Haaf's "Die Kusase" (see References.) Haaf was a doctor in Bawku Presbyterian Hospital from 1959 to 1962; he was still remembered with affection thirty years later. The work concentrates especially on Kusaasi traditional medicine, but contains a great deal of other interesting material.

I am grateful to Dr Tony Naden, who sportingly put up with being visited out of the blue in his home in northern Ghana and showed me hospitality worthy of Africa, while giving me a number of helpful pointers; I was also helped by several individuals working for the Ghana Institute of Linguistics in Tamale, who among other kindnesses provided me with photocopies of David Spratt's unpublished introductory materials on Kusaal. It goes without saying that none of these people is responsible for the errors in my work. I am particularly grateful to Brian McLemore, Executive Director of Global Translation Services at Bible League International and to the Ghana Institute of Linguistics, Literacy and Bible Translation for permission to cite verses from the Kusaal Bible versions.

More generally, I am grateful to the Presbyterian Church of Ghana, an organisation working in often difficult circumstances with tenacity and wisdom; and to the excellent Christoffelblindenmission, by whom I was seconded to Ghana; they did not mean to sponsor the writing of a grammar, but I am sure they will not mind that they did so as a happy side-effect.

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

David Eddyshaw Swansea, March 2019 david.eddyshaw@btinternet.com

Abbreviations

AdvP adverbial phrase

agt agent noun

BNY Bunkonbid ne Niis ne ba yɛla (see Sources)

C consonant

cb combining form

CGEL Cambridge Grammar of the English Language (see References)

DK informant (see Sources)

dp discontinuous past

ger gerund

H High toneme

ILK "An Introduction to Learning Kusaal" (David Spratt)

imp imperative ipfv imperfective irreg irregular

KB Kusaal Bible of 2016 (see Sources)

KED "A Short Kusaal-English Dictionary" (David Spratt)

KKY Kusaas Kuob nε Yir yela Gbauŋ (see Sources)

KSS Kusaal Solima ne Siilima (see Sources)

KT informant (see Sources)

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

NT Kusaal New Testament Versions of 1976 and 1996 (see Sources)

pfv perfective pl plural

SB informant (see Sources)

SF Short Form sg singular V vowel

VP verb phrase

WK informant (see Sources)

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

Abbreviations of the names of books of the Bible are fairly standard and should occasion no difficulty. Citations are from the 2016 version unless stated otherwise.

Interlinear glossing

ABSTR	abstract	8.1
ADV	adverbial	11.2
AN	animate gender	<u>15.3</u>
CAT	clause catenator (underlyingly <i>n</i>)	<u>22.1</u>
CNTR	contrastive (personal pronouns)	<u>27.5</u>
СОР	copula <i>àeĕ</i> ă	<u>19.11.2</u>
CQ	content question prosodic clitic	7.1
DEM	demonstrative pronoun (discourse)	 15.4.2
DEMST	demonstrative pronoun (spatio-temporal)	
DP	discontinuous-past marker n^{ε}	23.1.1
EXIST	existence/location verb $b\dot{\varepsilon}^+$	<u>19.11.1</u>
FOC	focus particle $n\bar{\varepsilon}^{+/}$	27.1.2
GER	gerund	<u>11.1.1</u>
IDEO	ideophone	<u>17</u>
IMP	independent imperative verb form	<u>10.1</u>
IN	inanimate gender	<u>15.3</u>
INDF	indefinite pronoun	<u>15.4.3</u>
IPFV	imperfective verb form	<u>10.1</u>
IRR	positive irrealis mood marker	<u>19.4</u>
LOC	locative postposition $(n\bar{\iota}^{+/} \sim n^{\epsilon})$	<u>16.3</u>
NEG	negative prosodic clitic	<u>7.1</u>
NEG.BE	negative verb to and COP and EXIST	<u>19.5</u>
NEG.HAVE	(another use of the same verb)	
NEG.IMP	negative imperative marker	<u>19.4</u>
NEG.IND	negative indicative marker	
NEG.IRR	negative irrealis marker	
NEG.KNOW	negative verb zī'+	<u>19.5</u>
NEG.LET	negative verb <i>mìt</i>	<u>19.5</u>
NULL	semantically empty NP head sɔ̄ba	<u>15.4.7</u>
NUM	number prefix à- bà- 'n- bὺ-	<u>13.3</u>
NZ	nominaliser (underlyingly \dot{n})	<u>24</u>
PERS	personifier particle (\grave{a} - or \grave{n} -)	<u>15.6</u>
PFV	independent-perfective marker <i>yā</i> ⁺	<u>19.6.2.1</u>
PL	plural	<u>15.2</u>
PQ	polar question prosodic clitic	<u>7.1</u>
REL	relative pronoun	<u>24.3.2</u>
SG	singular	<u>15.2</u>
TNS	tense marker	<u>19.3.1</u>
VOC	vocative prosodic clitic	<u>7.1</u>

Personal pronouns:

15.4.1

 $\begin{array}{ll} {\tt 1SG\ 1PL} & {\tt 1St\ sg/pl} \\ {\tt 2SG\ 2PL} & {\tt 2nd\ sg/pl} \end{array}$

3AN 3IN 3rd sg animate/inanimate

3rd pl

2PL.SUB postposed 2nd pl Subject

.ob object (pronouns)

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

Mass nouns are not specified as sg or pl in the glossing; similarly, single-aspect verbs $\underline{10.2}$ are not labelled for aspect. The perfective of dual-aspect verbs is also unlabelled.

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

Bound words which the traditional orthography writes solid with their hosts, as if they were word fragments, are in both the working orthography of this grammar and in glossing joined to their hosts by hyphens: these comprise the combining forms of nouns and adjectives, the personifier particle \dot{A} -/ \dot{N} -, and the liaison words n^{ϵ} LOC n^{ϵ} DP ya 2PL.SUB along with the LF of o 3AN.OB 2.3.

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

Transcription conventions

Phonetic transcriptions are written in square brackets; they are generally broad, ignoring all allophony not immediately under discussion. Starred forms representing the input of morphophonemic rules are given *ad hoc* to illustrate the rule in question, and do not represent a uniform underlying level of language.

For Agolle Kusaal orthography see $\underline{3}$. In general, symbols have approximately their IPA values, but long vowels are written with double symbols, $e \iota$ both represent $[\mathfrak{v}]$, \check{n} and 'mark nasalisation and glottalisation of adjacent vowels respectively, y stands for $[\mathfrak{j}]$, and kp gb stand for $[\widehat{kp}]$ $[\widehat{gb}]$.

Hausa words are cited as in Jaggar 2001, except that long vowels are written with double letters rather than macrons. High tone is unmarked, low tone is marked with a grave, and a circumflex represents falling tone. Kano forms are given, although the actual source of the loanwords in Kusaal is the *Gaanancii* lingua franca.

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

For Moba, I follow Kantchoa 2005, except that I write y for [j].

For Nawdm, I use the orthography of Babakima 2013.

Arabic transcriptions use IPA symbols, except that y is used for [j]; classical forms are cited, but without case endings and omitting the t of ta:7 marbu: $t^{c}a$.

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

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

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

Internal and external hyperlinks appear like this.

Sources

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

WK	from Koka	K'I'	from Tempane
DK	from Kukpariga	SB	from Bawku

The treatment of phrase-level syntax is largely based on work with these informants both in elicitation and in exploring puzzling constructions I had encountered while attempting to communicate at work. All four are first-language speakers of Agolle Kusaal, and have essentially first-language level competence in English. All are male, and were then around forty years old. I noted examples of conversation from many speakers, but recorded few examples of the usage of younger speakers specifically; I did notice a few comments about the incorrect grammar of the young from my informants (surely a cultural universal.) I found no evidence of significant differences between the speech of men and women but made

no systematic enquiries on this point. My informants showed a number of minor speech differences from one another, which were probably dialectal, but I have not explored the question of subdialects within Agolle Kusaal.

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

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

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

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

Written sources are cited in their original orthography, with a transliteration into the working orthography of this grammar. The tone marking of examples drawn from written materials is supplied by me; it was checked against the audio New Testament version in those few cases where a tonal point is at issue, but in other cases should be regarded as illustrating the tonal principles described elsewhere, not as evidence for their validity.

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

Wina'am Gbauŋ Winà'am Gbáuŋ Kusaal Bible
1976 NT © World Home Bible League
1996 NT © The Bible League/GILLBT
available as <u>Audio and searchable text</u>
2016 Complete Bible © GILLBT
available as an <u>Android application</u>

Bunkonbid ne Niis ne ba yɛla Bōn-kɔňbìd nē Níis né bà yēlá

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

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

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

Other studies of Kusaal

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

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

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

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

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

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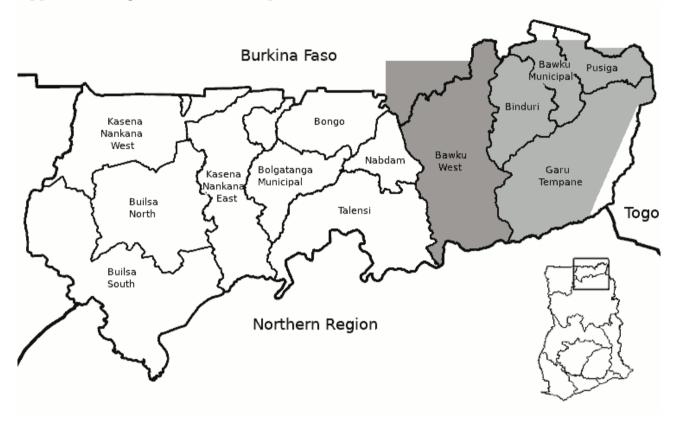
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1 Kusaal and the Kusaasi

1.1 The Kusaasi people

Upper East Region of Ghana (adapted from Macab5387):



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

The land is mostly open savanna with scattered trees. The population density is fairly high for northern Ghana, and much former woodland has been turned over to cultivation; tracts survive especially along the White Volta where settlements are few because of the river blindness (onchocerciasis) endemic there until recent times.

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

The Kusaasi are divided into numerous patrilineal exogamous clans (dòog, "hut") which tend to be associated with particular areas. (The clans being both exogamous and area-based, I was once told: "The first thing a young man looking for a wife needs to do is to get a bicycle.") A Kusaasi person knows his or her clan, and often its pɔ̃ɔr "slogan", part of its traditional lineage, but unlike the Mossi, the Kusaasi do not use clan names as surnames. Clans have their own distinctive customs (such as prohibitions against eating particular animals) but no administrative function; the Kusaasi originally had no chiefs. In religious matters the leading man of the area is the *tèn-dāan* "earth-priest", taken to be the descendant and heir of the original first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the remarkably durable continuations and offshoots of polities founded, probably around the fourteenth century, by incoming conquerors traditionally held to be from the region of Lake Chad. The invaders created hereditary chiefdoms among previously acephalous peoples, who continued to provide the tèn-dàan-nàm. The founder of these kingdoms is called Naa [King] Gbεwaa in Mampruli. His seat was at Pusiga (Kusaal Pūsιg) in what is now Kusaasi territory; he is said to have been swallowed by the earth at that place. In his sons' time the capital was relocated south to the Mamprussi lands. The Dagomba and Mossi kingdoms are cadet branches of this centuries-old militaryaristocratic Mamprussi state (Iliasu 1971.) Unlike their Mamprussi neighbours, the Kusaasi were not absorbed into the system, and intermittent conflict has continued to this day, particularly over the chieftaincy of Bawku. Both in colonial times and since independence, wider political issues have complicated the situation (Lund 2003.)

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

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

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

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

Dìm $n\bar{\varepsilon}$ Wīn, $d\bar{a}$ $t\hat{v}$ 'as $n\bar{\varepsilon}$ Wīnn $\hat{\varepsilon}$ $^{+}$ Ø. Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG. "Eat with God, don't talk with God."

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

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

A human being is understood as having four components: nin- $gb\bar{i}g$ "body"; $ny\dot{j}$ - $v\bar{v}r$ "life" as opposed to death, possessed by all living animals; $w\bar{i}n$ (in this sense) "genius, spirit, a person's own spiritual self"; and $kik\bar{i}ris$, protective spirits (called "fairies" in local English.) Men have three $kik\bar{i}ris$, 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 $kik\bar{i}ris$ in the bush which are hostile and try to lead travellers astray. $S\bar{i}ig$ "life force", used for "spirit" in Christian materials, is in traditional belief identified with a person's tutelary $kik\bar{i}ris$.

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

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

When speaking English or French, Kusaasi normally cite Kusaal personal and place names without apocope 5.1: AWIn from $Widi-Nyá'a\eta$ will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for $K\bar{v}s\hat{a}as$, "Bawku" for $B\grave{o}k$ etc. "Woriyanga" also shows a Mampruli rather than Kusaal form for the initial combining form "horse": Mampruli wuri-, Kusaal wid-. This reflects the origin of the convention in the use of Mamprussi guides and interpreters by the British in their initial explorations of the area. A parallel development took place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" (Dagbani Gambaga) for the Mampruli place name Gambaa (Naden.)

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

1.2 The Kusaal language

1.2.1 Status

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

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

Of the major lingua francas of Ghana, Hausa is the most important locally. It is the main source of identifiable loanwords in Kusaal. In the 1990's few people outside Bawku knew Twi/Fante or English. Perhaps 5-10% of patients attending our clinics in Bawku at that time could communicate in English well enough for the purposes of medical consultation; the majority were most comfortable with Kusaal, with Hausa and Mooré about equal in second place, in both cases often as vehicular languages.

1.2.2 Dialects

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

The major dialect division is between Agolle and Toende. The differences are striking: Agolle vowel breaking 3.2 correlates with numerous other isoglosses, resulting in a sharp discontinuity between Agolle and Toende Kusaal, probably attributable to the depopulation of the border zone along the White Volta caused by the river blindness (onchocerciasis) prevalent in the region until quite recent times.

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

exposure to the dialect. The paper also reports that Toende speakers feel their own dialect is "purer", which may affect judgments of comprehensibility.

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

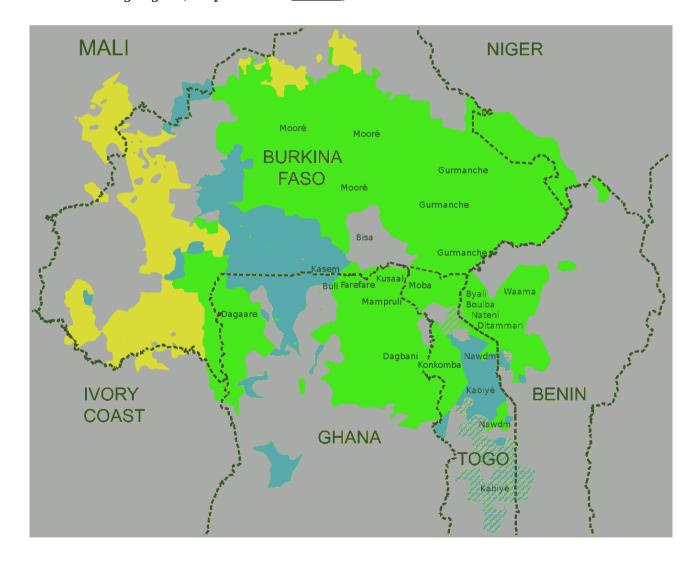
Agolle and Toende Kusaasi agree that they constitute a single ethnic group, and that they speak dialects of a single language. Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

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

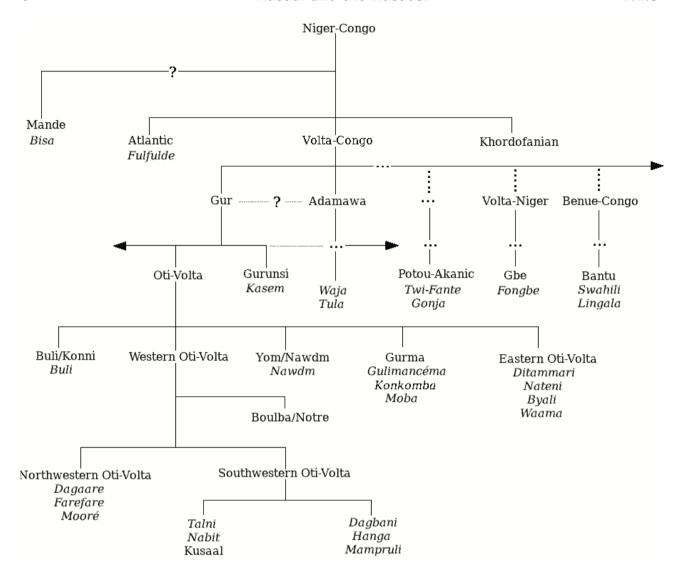
1.2.3 Related languages

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

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



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



The chart above shows relationships between some of the languages mentioned below. Subclassifications are very often uncertain; in particular, the relationship between Gur and Adamawa is unclear. Mande may well not belong with Niger-Congo at all. Even the inclusion of Kordofanian and Atlantic in Niger-Congo is a long-range hypothesis, rather than a well-established linguistic grouping like Indo-European: striking typological similarities with Volta-Congo do not prove genetic unity. For West Africa (and beyond) as a *Sprachbund* see especially Güldemann 2007.

However, there is unequivocal evidence for Volta-Congo as a genetic grouping. Basic lexical items recur frequently: compare Kusaal $b\bar{n}ig$ "child", $d\hat{\iota}$ "eat", $n\bar{\iota}$ "drink", $kp\hat{\iota}$ "die", $t\hat{\iota}\iota g$ "tree", $a\hat{\iota}tan$ "three", $t\hat{\iota}bbvr$ "ear" with their Fongbe equivalents $v\hat{\iota}$, $d\hat{\iota}$, $n\hat{\iota}$, $h\hat{\iota}$, $h\hat{\iota$

The most salient morphological feature of Niger-Congo is the presence of noun class systems, with frequent congruences in both form and meaning among the Volta-Congo branches. Thus the Kusaal human-plural noun $suffix - b^a$ seen in $n\bar{\iota}d\iota b$ "people", plural of $n\bar{\iota}d$, matches the Gonja human-plural prefix in $b\acute{a}$ - $s\grave{a}$ "people", plural of \acute{e} - $s\grave{a}$, and the ba of Lingala bato "people", plural of moto. Particular sg/pl pairings of noun class affixes recur throughout Volta-Congo; for example, the suffixes $r^{\epsilon}|a^+|$ seen in Kusaal $t\grave{v}bvr$ "ear", $t\grave{v}ba$ "ears" are cognate to the Bantu prefix pair labelled 5/6 in the Bleek-Meinhof system (Nurse and Phillippson, p104.) Lingala has the cognate of Kusaal $t\grave{v}bvr$ in this very class: $lit\acute{o}i$ "ear", plural $mat\acute{o}i$. The affixes of other Volta-Congo languages correspond to the Bantu pronominal/verbal agreement prefixes rather than noun class prefixes; for Proto-Bantu 5/6 these are sg/r, pl $g\acute{a}$ (ibid. p149.)

Similarities also appear in verbal derivation by suffixes, usually called "verbal extensions", as in Bantu, where such processes are often very productive. However, form and function can be difficult to correlate, and some processes may even be areal phenomena, found also in Afro-Asiatic and Nilo-Saharan (Hyman 2007.)

With some lower-level groupings detailed comparative work has achieved much already. High-level comparative work is generally at an early stage; see, however, Gabriel Manessy on Gur, and especially the publications of John Stewart on Potou-Akanic and its relationships with Bantu and Atlantic.

At the lowest level Kusaal belongs to Manessy's **Western Oti-Volta** family. Except in Boulba (see below), Proto-Oti-Volta *c *f have here become f z; there is a strikingly simple system of verbal inflection, with almost all inflecting verbs using the bare stem for perfective aspect and adding a suffix *f-da for imperfective; some noun classes have been lost, and words referring to trees have been transferred wholesale to the f-ga|f-ga|f-class (Buli f-tree", Kusaal f-tree", Mooré f-tree", Mooré f-tree is much distinctive vocabulary, e.g. Kusaal f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f-ga|f

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

Apart from Boulba, the group is subdivided into Northwestern and Southwestern. Northwestern Oti-Volta includes Mooré, Safaliba, the dialect continuum Dagaare-Waale-Birifor, and Farefare-Gurenne-Ninkare. (Glossing over complex issues, I will refer to the two last simply as Dagaare and Farefare.) Mooré and Farefare share innovations absent in Dagaare. Southwestern Oti-Volta includes Kusaal, Nabit, Talni, Mampruli, Dagbani, Hanga, Kamara and some smaller languages. A distinctive Southwestern feature is the imperative inflection *-ma.

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

Kusaal itself probably constitutes a subgroup with Nabit and Talni, spoken respectively in the Nabdam and Talensi districts adjacent to Bawku West. Tony Naden's Nabit materials closely resemble Toende Kusaal. Giffen 2015 notes that Talni speakers understand Nabit to some extent.

Nabit, Talni, and Kusaal have lost inherited final short vowels in citation forms. Naden's materials suggest that Nabit and Talni, like Kusaal, retain the final vowel at the end of questions and negated clauses (Toende materials from Niggli):

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

Toende La $b\iota'\iota$ me. Agolle Lì bi'ig $n\bar{\epsilon}$.

зи ripen гос.

Nabit La na bu biigɛ. "It is not yet ripe."

Toende La nan bu bu'uge.

Agolle Lì nàm p $\bar{\nu}$ bí'ig $\bar{\epsilon}$ + ϕ .

3IN still NEG.IND ripen NEG.

Talni Bunpok doxam pu bokəra, buraa doxam m bokət.

Toende Bupok dogim bu bokira, buraa dogim bokit.

Agolle $[P_{\mathcal{U}}'\bar{a}]$ $d\hat{v}'am$ $p\bar{v}$ $b_{\mathcal{U}}ak_{\mathcal{U}}d\bar{a}^{+}$ ø, $[d\bar{a}_{\mathcal{U}}]$ $d\hat{v}'am_{\mathcal{U}}$ ø $b_{\mathcal{U}}ak_{\mathcal{U}}d\bar{a}$

 $Woman: \verb|sg kindred neg.ind split: | \verb|pfv neg, man: \verb|sg kindred cat split: | \verb|pfv. |$

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

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

Both Buli and Gurma have three-tone systems, and the three Western Oti-Volta Tone Patterns <u>6.1</u> can be systematically matched with them. However, 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"
тōэg	mūub	mźźùg	"grass"
tìıg	tìib	tīīġ	"tree"

It is Gurma, with L corresponding to Western Oti-Volta Pattern H, which is conservative: cf Proto-Bantu $-n\dot{u}\dot{a}$ "mouth", Fongbe $\dot{o}n\dot{u}$ = Kusaal $n\bar{o}$ (Pattern H) versus Proto-Bantu $-t\acute{o}$ "ear", Fongbe $t\acute{o}$ = Kusaal $t\dot{v}\dot{b}vr$.

Nawdm aligns tonally with Western Oti-Volta and Buli: $w\dot{a}\dot{a}\ddot{g}\dot{b}$ "snake", $m\dot{o}\dot{g}\dot{u}$ "grass", $til\dot{b}$ "tree." Nawdm has shifted $p \rightarrow f$, $p \rightarrow f$, $p \rightarrow f$, $p \rightarrow f$, and $p \rightarrow f$. It preserves Proto-Oti-Volta $p \rightarrow f$ in all word positions $p \rightarrow f$. It preserves Oti-Volta shows vowel glottalisation. Most verbs use a stem form as perfective and add $p \rightarrow f$ are imperfective, but there are several other patterns, such as perfective $p \rightarrow f$ versus imperfective $p \rightarrow f$. Nawdm shows much less lexical similarity to Western Oti-Volta than Buli does, but there are some notable parallels in verb flexion and derivation.

Sambiéni 2005 provides considerable detail on the Eastern Oti-Volta languages Ditammari, Nateni, Byali and Waama. He takes it as given that Manessy's Eastern Oti-Volta is a valid subgroup, but this subgrouping is partly based on initial consonant changes which are probably areal, and shared with Boulba/Notre.

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

By ali verbs mostly oppose perfective -s = 0 to imperfective -u. By ali usually shows mid tones in cognates of Kusaal Pattern H words.

Waama shows high tones in words corresponding to Western Oti-Volta Pattern H. A group of verbs with stems ending in vowels or alveolars opposes perfective -i to imperfective -u, but most verbs use the bare stem as perfective and add -ri -di or -ti for the imperfective. Of roughly 400 vocabulary items compared by Sambiéni, 55 Waama words are not cognate to those of the other languages; the figures for the other languages are all under 20. Some have cognates in Western Oti-Volta and Buli, e.g. Waama wōmmā "entendre", Kusaal wòm, Boulba wàmú, Buli wom; Waama cáárō "forgeron", Kusaal sāeň; Waama yété "maison", Kusaal yīr, Boulba yere, Buli yérí.

There is much less similarity between Oti-Volta as a whole and the other major branch of Gur, the **Gurunsi** languages, which include Kasem and Kabiyè among many others. Oti-Volta and Gurunsi may be coordinate members of a continuum including at least some Adamawa subgroups: Kleinewillinghöfer 1996 references studies suggesting that the Adamawa languages Waja and Tula are closer to Gurunsi than to Oti-Volta. Further progress on this issue will probably only come about after more descriptive work on Adamawa languages. Manessy takes Koromfe as a third branch of "Central Gur" alongside Oti-Volta and Gurunsi. He classified a number of languages as Gur on the basis of very scanty documentation; when adequate descriptions appear, such classifications may need to be revisited. The Senufo languages were previously regarded as a branch of Gur, largely on the basis of their having noun class suffixes rather than prefixes; they are now usually held to constitute a distinct branch of Volta-Congo.

1.2.4 Grammatical sketch

Kusaal is in most respects a typical Western Oti-Volta language. It is chiefly distinctive in having undergone **apocope** of word-final short vowels even in citation forms, a feature shared with Nabit and Talni. (Clause-medial loss or reduction of word-final vowels is in contrast extremely common throughout the group.) Thus where Mooré has the citation form biiga "child", the cognate Kusaal word normally appears in the **Short Form** (SF) $b\bar{i}ig$. This is not a simple historical matter, however: the Kusaal final vowel is still present in certain contexts. It reappears clause-finally when the clause contains a negation, ends a question, or is used as a vocative: the final word then appears as a **Long Form** (LF):

```
Ò à nē bīig.

"He/she's a child."

AN COP FOC child:sg.

"He/she is not a child."

"He/she is not a child."

AN NEG.BE child:sg NEG.

"Is he/she a child?"

AN COP FOC child:sg PQ?

"M bīiga +ø!

"My child!"

1sg child:sg voc!
```

Following apocope, word-final consonant clusters drop the second consonant:

```
Lì k\bar{a}' gb\bar{\imath}gimn\epsilon + \emptyset. "It's not a lion." 
3IN NEG.BE lion:SG NEG. 
Lì à n\bar{\epsilon} gb\bar{\imath}gim. "It's a lion." 
3IN COP FOC lion:SG.
```

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

In citing word forms, superscripts will be used to write the parts of words which are dropped everywhere except before prosodic clitics and liaison: $b\bar{\imath}ig^a$ "child", $gb\bar{\imath}g\iota m^{n\epsilon}$ "lion", $k\bar{\upsilon}k^a$ "chair", $d\bar{\upsilon}k^{5/}$ "pot."

The phonology of Kusaal is significantly complicated by apocope. For example, apocope deletes segments responsible for rounding and fronting effects on preceding vowels, and renders those effects contrastive. This creates diphthongs, along with emic contrasts among epenthetic vowels. Thus the Long Form $v\bar{\iota}ug5$ "owl" has iu for ii because of the rounding effect of the final vowel, to which the velar -g- is transparent. After apocope this becomes the Short Form $v\bar{\iota}ug$ "owl": the diphthong iu itself now contrasts with the vowel of $v\bar{\iota}id$ "owls", shortened from $v\bar{\iota}id\varepsilon$. Similarly, $\bar{a}and\iota ga$ "black plum tree" has the default epenthetic vowel ι before the flexion, and appears as $\bar{a}and\iota g$ after apocope, whereas the gerund gadvg "passing" has rounding of the vowel to v before the flexion $-g_2$, and after apocope this rounding itself becomes contrastive in the usual Short Form gadvg.

Liaison words cause a preceding word to appear as a Long Form 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:

```
Μ̈́ pū
          bóodā +ø.
                                "I don't want to."
                                 Long Form bɔɔdā preceding negative clitic.
1SG NEG.IND want NEG.
                                 "I love them."
M bɔ́ɔdī bá.
                                 Modified Long Form bɔɔdī before liaison.
1SG want 3PL.OB.
                                "I haven't fought."
Ďα M
          zábē +ø.
                                 Long Form zab\bar{\epsilon} preceding negative clitic.
1SG NEG.IND fight NEG.
                                 "I've fought them."
M zábī bá.
1SG fight 3PL.OB.
                                 Modified Long Form zàbī before liaison.
```

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

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

```
\dot{M} p\bar{v} b\acute{o}d\bar{t} f\acute{o} +ø. "I don't love you."

1SG NEG.IND want 2SG.OB NEG. Long Form f\acute{o} of the pronoun "you (sg)"

\dot{M} b\acute{o}d\bar{t} f. "I love you."

1SG want 2SG.OB. Short Form f of the pronoun "you (sg)"
```

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

```
Lì kā'
                                      "It's not a chair."
          kūka
                     +ø.
3IN NEG.BE chair:SG NEG.
Lì kā'
          kūkι-nέ
                                      "It's not in a chair."
3IN NEG.BE chair:SG-LOC NEG.
                                      "in a chair"
kūkı-n
chair:sg-Loc
                                      "It's not a pot."
Lì kā'
           dūkó +ø.
3IN NEG.BE pot:SG NEG.
Lì kā'
          d\bar{v}k(-n\bar{\varepsilon} +\phi.
                                      "It's not in a pot."
3IN NEG.BE pot:SG-LOC NEG.
dōkί-n
                                      "in a pot"
pot:sg-Loc
```

The 3sg animate object pronoun o "him/her" has the Long Form o [v] which is deleted entirely by apocope, producing a Short Form which is segmentally *zero*. Its presence is still shown by the replacement of the preceding host-word-final vowel mora by [v], always written $\cdot o$ with a preceding raised point.

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

```
\dot{M} p\bar{v} b\acute{o}od\bar{\iota} f\acute{o} ^+ø. "I don't love you." 1SG NEG.IND want 2SG.OB NEG.
```

```
M bɔ́ɔdī f.
                                "I love you"
1SG want 2SG.OB.
Θα Μ
          bóod·ó-o
                      +ø.
                                "I don't love him/her."
                                                                [:vb:cdvqm]
                                Long Form o of the pronoun "him/her"
1SG NEG.IND want-3AN.OB NEG.
                                "I love him/her."
M bɔ́ɔd·ō ø.
                                                                [mbo:dv]
                                 Short Form \emptyset of the pronoun "him/her"
1sg want
           3AN.OB.
```

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

```
Gʻɔsɪm! "Look!"

Look:IMP!

Gʻɔsɪmī ø! "Look ye!" by apocope from gʻɔsɪmī-yá

Look:IMP 2PL.SUB!
```

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

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

```
    m zūgó ø zàbid lā zúg "because my head hurts" (nominaliser-n)
    lsg head:sg nz fight:IPFV ART upon
    M zūgo ø zábìd. "My head hurts." (catenator-n)
    lsg head:sg cat fight:IPFV.
```

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

Kusaal has contrastive vowel glottalisation.

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

The **tone system** resembles the locally common terracing two-tone type in structure, but the original H toneme has become mid (M), displaced by a new H derived from original HL on a single mora. The tone-bearing unit is now the syllable. Acute, macron and grave mark H, M and L respectively. *CVVC* syllables may also have a circumflex (X) toneme, derived from HL on a single syllable. Macron and grave marks apply not only to the syllable on which they are placed, but to all following syllables within the same word up to another tone mark; the next toneme after an acute or circumflex is marked normally.

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

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

```
dr̄ əs(dìb "receivers" bāŋιdıb "wise men" gbīgımnε "lion" (Long Form)
```

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

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

Other word-internal clusters are confined to loanwords.

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

```
Gbīgım lā dāa kvvd búŋ lā.
Lion:sg art tns kill:IPFV donkey:sg art.
"The lion (gbīgım<sup>nɛ</sup>) was killing (kvvda/) the donkey (bùŋa)."
```

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

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

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

būυg	"goat"	būิบร	"goats"
sàbùa	"lover"	sàbùes	"lovers"
nūa	"hen"	ทวิวร	"hens"
kūk	"chair"	kūgus	"chairs"
zàk	"compound"	zà'as	"compounds"
dà'a	"market"	dà'as	"markets"
bùŋ	"donkey"	bùmıs	"donkeys"
tēη	"land"	tēεňs	"lands"

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

būυg	"goat"	+ pìəlıg	"white"	→ bù-pìəlıg	"white goat"
būυg	"goat"	+ <i>sī</i> 'a	"another"	→ bù-sī¹a	"another goat"
kūk	"chair"	+ pìəlıg	"white"	→ kừg-pìəlıg	"white chair"
kūk	"chair"	+ kàŋā	"this"	→ kùg-kàŋā	"this chair"

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

Like virtually all the local languages (including *Gaanancii* Hausa, and, disconcertingly for a British native speaker, even some local English) Kusaal makes no grammatical distinction between male and female. In the English translations I have used "he" or "she" randomly where the antecedent is unspecified.

A characteristic feature of Western Oti-Volta is a striking simplification of **verb flexion**, with just one "conjugation" of prototypical dual-aspect verbs, using the bare stem for perfective aspect and marking the imperfective with a single suffix $-d^a$. There are few real irregularities, though unobvious consonant changes and vowel deletions again complicate the surface picture:

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

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

```
Ò dìgi nē. "She's lying down."
BAN be.lying.down foc. "She has a donkey."
D mòr búŋ. "She has a donkey."
BAN have donkey:sg. "She's short."
BAN be.short.
```

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

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

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

```
\grave{O} k\bar{a}' b\bar{\imath}iga ^+\varnothing. "He's not a child."
```

Kusaal is well-provided with word-level derivational processes. For example, regular deverbal gerunds, agent nouns and instrument nouns can be made freely from most verb types: $k\bar{\nu}\nu b$ "killing", $k\bar{\nu}\nu d$ "killer", $k\bar{\nu}\nu d$ "killing implement."

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

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

```
M tís dự átà bóŋ lā.
1SG give doctor:SG donkey:SG ART.
"I've given Doctor the donkey."
```

As seen above, an adjective follows its noun and forms a compound with it. There are two native prepositions, $n\bar{\epsilon}$ "with" and $w\bar{\nu}$ "like" ($n\bar{\epsilon}$ also links NPs and some AdvPs in the sense "and", but $k\dot{a}$ is "and" when linking VPs and clauses.)

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

```
m bīig "my child" dāu lā bîig "the man's child"
```

Adverbs often appear as postpositions preceded by NP dependents, as with $z\bar{u}g$ "head" used adverbially in

```
tέεbὸl lā zúg "onto the table"
```

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

```
m\dot{v}'arī-n "in a lake" (m\dot{v}'arɛ "lake", Long Form) lake:sg-Loc
```

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

Ιā.

```
Lion:sg art tns kill donkey:pl art.

"The lion killed the donkeys yesterday."

Gbīguma lā dāa pō kō bóŋ láa +ø.

Lion:pl art tns neg.ind kill donkey:sg art neg.

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

Gbīgim lā sá kỳ býmìs

The focus particle $n\bar{\epsilon}$ may focus VPs or VP constituents (as after $\grave{a}\underline{e}\check{n}$ "be something" above), but if no unbound words intervene between the verb and $n\bar{\epsilon}$ and the verb meaning permits, it instead has an *aspectual* sense, limiting the reference of the VP to "at the time referred to in particular":

Nīdıb kpîid. "People die."

Person:PL die:IPFV.

Nīdıb kpîid $n\bar{\epsilon}$. "People are dying."

Person:PL die:IPFV FOC.

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

Ò zàb du'átà. "He's fought the doctor."

зам fight doctor:sg.

Ò gòs dự átà. "He's looked at the doctor."

зан look.at doctor:sg.

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

Kà ò záb du'átà. "And he fought the doctor."

And SAN fight doctor:sg.

Kà ò gōs dụ'átà. "And he looked at the doctor."

And SAN look.at doctor:sg.

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

Dā gōs du'átāa +ø! "Don't look at the doctor!"

NEG.IMP look.at doctor:sg NEG!

but Gòsım du'átà! "Look at the doctor!"

Look.at:IMP doctor:sg!

Main clauses frequently have adjuncts preceding the subject which express time or circumstance; conditional subordinate clauses, which contain $y\dot{a}'$ "if" after their own subject, appear before the main clause subject:

```
Fù yá' bòɔd, m̀ ná tīst f búŋ.

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

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

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

```
M dāa kûes bòŋv ø tís du'átà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to Doctor."
```

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

```
Lì à n\bar{\epsilon} gbīgım lá kà \dot{m} n\bar{\gamma}\bar{\epsilon}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 \dot{n} (frequently realised as segmental \emptyset) after the subject:

```
gbīgım lá g kō búŋ "the lion having killed the donkey" lion:sg art nz kill donkey:sg art
```

One type of relative clause is internally-headed:

```
[Paul n sɔ̄b gbáun-sī a n tís Efesus dím lā] ø nwá.
Paul nz write letter-INDEIN CAT give Ephesus one.PL ART CAT this.
"This is [the letter Paul wrote to the Ephesians]." (NT heading)
```

Here $gb\grave{a}\underline{u}\eta$ - $s\ddot{\imath}$ a is $gb\grave{a}\underline{u}\eta$ "book" compounded with the dependent pronoun $s\ddot{\imath}$ a which marks it as antecedent, and the bracketed sequence is the relative clause. The subordinator is not the pronoun but the nominaliser particle \grave{n} .

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

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

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

```
\dot{M} ná tī f tî m yế fờ nīf dā zábē ^+Ø.

1SG IRR give 2SG.OB medicine that 2SG eye:SG NEG.IMP fight NEG.

"I'll give you medicine so your eye won't hurt."
```

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

Dau da be mori o po'a yimmir, ka po'a la ye **on** pu lem bood ye o sid la di po'a ya'ase.

Clefting constructions are based on catenation. By ellipsis they produce structures using n for focussing subjects and $k\grave{a}$ for foregrounding other elements:

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

```
Fù bôɔd bó ^+ø? "What do you want?" 25G want what co?

Bó kà fù ňyētá ^+ø? "What can you see?" What and 25G see:IPFV co?
```

```
Ànɔʻɔnì ø kō bóŋ lā +ø?
Who cat kill donkey:sg art co?
"Who has killed the donkey?"
```

Place and manner adjuncts may only precede the subject if preposed with *kà*:

```
Moogin ka mam b\varepsilon. "I'm in the bush." BNY p10 Mɔ̄ɔgʊʻ-n kà mām b\varepsilon. (kà required)

Grass:sg-loc and 1sg.CNTR EXIST.
```

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

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

```
À-P\bar{\upsilon}-z\acute{\jmath}t-y\bar{\varepsilon}l d\acute{a} n\acute{\varepsilon} \acute{o} s\grave{a}am b\^{i}ig m\grave{a}'aa. Pers-neg.ind-fear:ipfv-thing:sg tns copfoc 3an father:sg child:sg only. Kà d\bar{a}ar y\bar{\iota}nn\acute{\iota} kà b\bar{\iota}ig l\bar{a} n\acute{\varepsilon} \acute{o} s\grave{a}am z\acute{\iota}n''i \not{o} s\ddot{\jmath}n's\iota d. And day:sg one and child:sg art with 3an father:sg sit cat converse:ipfv. Kà b\bar{\iota}ig l\bar{a} t\acute{\iota} y\grave{\varepsilon}l \acute{o} s\grave{a}am y\bar{\varepsilon} ... And child:sg art after say 3an father:sg that...
```

"Fears-nothing was his father's only son. [And] one day the son and father were sitting talking. [And] then the son said to his father ..." KSS p35

The past-tense marker $d\grave{a}$ occurs only in the first clause. The second $k\grave{a}$ is preposing the time expression $d\~{a}$ ar $y\={\iota}$ n $n\acute{\iota}$ in a foregrounding construction, while the first and third are carrying on the narrative.

Morphophonemics

2 Preliminaries

2.1 Morae, syllables and stress

All segments constitute morae, except for consonants immediately followed by vowels within the same word; other consonants represent non-vocalic morae. Written $k p t \eta$ between vowels represent $kk pp tt \eta\eta$, so that e.g. $s\acute{u}'e\eta$ "rabbit" has three morae, while the corresponding Long Form $s\acute{u}'e\eta\grave{a}$ has four.

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

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

```
dìtúŋ "right hand" \leftarrow dì+ "eat"

dàtìu̞ŋ "right hand"

botuŋ "cup" (originally the instrument noun from bòd "plant seeds")

pl botus with reanalysis as prefix bō + tīŋ
```

Stress affects the realisation of the H toneme, but the relevant phenomena can be described by reference to syllable weight alone $\underline{4}$.

2.2 Free and bound words

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."

Free words fulfil the concept of "word" expressed in Bloomfield 1926: "A minimum free form is a word. A word is thus a form which may be uttered alone (with meaning) but cannot be analysed into parts that may (all of them) be uttered alone (with meaning.)" Many bound forms are also best regarded as words. In Kusaal even members of the *open* class of nouns have regular "combining forms", used exclusively with following words as parts of compounds. Combining forms may appear as dependents, but more often as NP heads before adjectives and even demonstratives:

tì- $k\grave{a}\eta\bar{a}$ "this tree." There are no consistent phonological differences between combining forms and free words, and compounds may incorporate unbound words: $[\bar{a}nz\acute{u}r\iota f\grave{a}\ n\bar{\epsilon}\ s\bar{a}l\iota ma\ l\acute{a}'-]m\bar{a}an$ "[silver and gold goods]-maker." Combining forms are thus best regarded as bound words, not word fragments.

Word status for other bound forms may depend on distinguishing them from affixes. Although non-contrastive personal pronouns and many bound particles resemble free-word affixes segmentally, they show no tendencies to phonological fusion with their hosts other than those also seen between free words, and they clearly differ in tonal behaviour from affixes. For cases where my analyses of wordhood differ from those implied by traditional orthography see <u>2.3</u> below.

Because Kusaal stress allocation does not distinguish between bound and free words as such, I will reserve the term "clitic" for prosodic clitics $\underline{7.1}$, and will elsewhere use the non-committal labels "left-bound" and "right-bound."

Boundness is entirely distinct from the syntactic feature of *dependency*. Most open-class words are neither bound nor intrinsically dependent, and most particles are both bound and intrinsically dependent. However, combining forms, though always bound, may be dependents or heads, and bound personal pronouns are *never* dependent: Kusaal has no possessive pronouns <u>15.4.1</u>.

2.3 Word division

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

bùrkìn	"honest person"	kpùkpàrıg	"palm tree"
zīm-gbâň'ad	"fisherman"	bù-pìəlıg	"white goat"
bὺ-kàŋā	"this goat"	bù-pìəl-kàŋā	"this white goat"

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

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

```
\dot{M} b\acute{o}od\bar{\iota}_{c}f. "I love you." [mbo:dɪf] 1SG want 2SG.OB.
```

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

```
Fv bɔɔdi ti. "You love us." [fʊbɔ:dɪtɪ] Fv bɔɔdī tí. 2SG want 1PL.OB.
```

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

```
"I've seen you."
1996 M nye uf.
                                                              [mĩãỡf]
      M ňyε̂o_f.
      1SG see
               2SG.OB,
1996 Fu boodi m.
                                     "You love me."
                                                              [fub:dim]
2016 Fv boodim.
      Fù bóɔdī m.
      2SG want 1SG.OB.
1996 M bood if.
                                     "I love you."
                                                              [hb:cdm]
2016 M boodif.
      M bɔ́ɔdī f.
      1SG want 2SG.OB.
```

The liaison word 7.2 pronoun ° [v] "him/her" loses its entire segmental form by apocope, after causing the final vowel mora of the preceding word to become [v]. This mora is traditionally mistaken for the pronoun itself and written separately; in this grammar it is written $\cdot o$, and the form without apocope is written $\cdot o$ -o.

```
Fv bood o.
                                      "You love her."
                                                                    [fʊbɔ:dʊ]
Fù bóɔd·ō ø.
2SG want
              3AN.OB.
                                      "You don't love her."
Fu pu bood oo.
                                                                    [fʊpʊbɔ:dʊ:]
Fὺ ρῦ
            bóod·ó-o
2SG NEG.IND want-3AN.OB NEG.
                                      "You've seen her."
                                                                    [fʊj̃ɛ̃ʊ̃]
Fυ nyε ο.
Fù ňyέ·o_ ø.
2SG see
             3AN.OB.
                                      "You've not seen her."
                                                                    [f \sigma p \sigma \tilde{g} \tilde{e} \tilde{\sigma}:]
Fυ ρυ ηγε οο.
Fὺ ρῦ
            ňyē·ó-o
2SG NEG.IND See-3AN.OB NEG.
```

Locative $n\varepsilon$ and discontinuous-past $n\varepsilon$ are reduced to n by apocope, and the postposed 2pl subject pronoun ya is reduced to zero. Traditionally they are written solid with the preceding word: pvvgvn, b>din. However, they follow flexional suffixes, and are preceded by liaison changes just like object pronouns; postposed ya is in complementary distribution with subject ya, and locative $n\varepsilon$ has an allomorph $n\bar{t}$ with a vowel after apocope; they behave differently from flexional suffixes tonally. They are thus words, not flexions; they are hyphenated to the preceding word in the working orthography: $p\bar{v}vgv-n$ "inside", $bbd\bar{t}-n$ "might wish."

The personifier particle \grave{a}/\grave{n} , traditionally written solid with the following word, will also be hyphenated to its host, as it can be attached to entire phrases 15.6.

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

```
O ane biig. "He/she's a child." 
 Ò à n\bar{\epsilon} bīig. 
 3AN COP FOC child:SG.
```

Ka o nindaa wenne nintaŋ ne.

```
Kà ò n\bar{l}n-dáa w\bar{l}n n\bar{l}n n\bar{l}n n\bar{l}n. And 3AN eye-face:sg resemble with sun:sg like. "His face is like the sun." (Rev 10:1, 1996)
```

In KB *wε̄n nε̄* appears as *nwεnε*: *Ka o nindaa nwɛnε winnig nɛ.*

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

```
Amaa fo anε ninsaal ka ka' win nε.
Àmáa fò á nē nīn-sâal kà kā' wīnnέ +ø.
But 2SG COP FOC person-smooth:sG and NEG.BE god:SG NEG.
"But you are a human being and not a god." (Ezekiel 28:2)
```

3 Segments

3.1 Consonants

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

```
k t p kp
g d b gb
n n m
s f h
z v
l
r
```

Values resemble the corresponding IPA symbols, except as noted below. t d n s z l r represent alveolars in general, but s z are often dental, or even interdental. Before the vowel u, s and z are sometimes heard as [$\{\}$] [$\{3\}$].

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

```
Àláasìd (dâar) "Sunday" ← Hausa Lahàdì (← Arabic)

Dàsmáanì 「Abdu-r-Raħma:n(i) (personal name)

or Dàhamáanì
```

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

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

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

```
n\bar{\it o}-dâvg [nɔraʊg] "cock" n\bar{\it a}'-dâad [na̞ra:d] "oxen" vs wid-dāvg [wɪd:aʊg] "stallion"
```

Word-initially, d will be written throughout. Some words are written with root-initial r after a prefix vowel, following traditional orthography: $t\bar{t}r\hat{a}an^a$ "neighbour", $arazak^a$ "riches", $arazana^+$ "heaven", $arakana^+$ "one." It is not clear whether r contrasts with d in this position.

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

ὲňdιg	"unplug"	ēňrιg	"shift along"
mɔ̄d	"swell"	mōr	"have"
yàad	"graves"	yāar	"scatter"
zàbıd	"fight" (ipfv)	zàbır	"fight" (gerund)

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

I is never velarised.

 \boldsymbol{z} is only found word-initially and after prefixes.

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

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

 $k\ g\ \eta$ show considerable allophony. Before front vowels, they are palatalised, for some speakers even becoming palatal stops or affricates. Velars may represent original palatal stops or affricates in loanwords:

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

Before rounded vowels, velars are labialised.

Before a and 2 velars are pronounced further back, or even as uvulars:

```
kòbıgā [qwobiga] "hundred"
```

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

fūfūm	"envv"	náaf	"cow"

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

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

The sequence -mt preceding liaison can absorb the vowel to become -m:

Gòsımī m! "Look at me!"

Gòsīm. "Look at me!" vs Gòsim! "Look!"

Gòsımí fò nû'ug! "Look at your hand!"

Gòsím fò nû'ug! id

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

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

kūm	"death"	cf <i>kpì</i>	"die"	
kɔ̄ba	"bones"	cf Gulimancéma	kpábá	id
kpàkūr	"tortoise"	cf Dagbani	kpàkpílí	id

In loanwords kp qb are used for the Hausa labialised velars kw qw:

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

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

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

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

w occurs only root-initially, i.e. word-initially and after prefixes: wi alpha f "horse", d alpha w alpha n "pigeon"; however y occurs not only root-initially, but also medially before a: $y alpha a \eta$ "grandchild", d alpha y alpha u g "rat", n alpha y alpha "mouths." Syllable-final y w are replaced by the glides y alpha g and y alpha g respectively y alpha g.

3.2 Vowels

The vowel system displays marked **positional prominence**. Diphthongs, glottalisation, emic nasalisation and full quality contrasts appear only in roots <u>5.2</u>.

Agolle Kusaal has a nine-vowel system. Seven of these are written by default as $a \in J \mid u \mid v$, respectively [a] [ɛ] [ɔ] [i] [u] [ɪ] [v]; the corresponding long vowels contrast with short vowels in length, but not quality, and are written by doubling the vowel symbol: $b\bar{a}a$ [ba:] "dog." The vowel ι is more central after velars and labials, and v is slightly fronted after alveolars and v; v is distinctly fronted after alveolars, and preceding v v may be realised as palato-alveolars: v v "head" [3yg].

Lax ι υ do not appear after m or n in roots or prefixes. There are few minimal pairs for short i/ι u/υ , except as the result of apocope 5.1; however, examples are

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

The allophony [1]~[i] and [σ]~[u] in epenthetic and prefix vowels <u>5.2</u> is ignored, only ι υ being used in writing.

The two remaining vowels are the **broken vowels** \underline{ia} \underline{ua} ; the corresponding long vowels are \underline{ia} \underline{ua} . All are realised as written, $\underline{[ia]}$ $\underline{[va]}$ $\underline{[ia]}$ $\underline{[ua]}$; however, they everywhere pattern as monophthongs, and will be so labelled throughout below. The symbols \underline{a} \underline{a} are used only here, and \underline{i} \underline{u} do not otherwise occur before a vowel symbol.

```
tiàk
        [tɪak]
                   "change"
                                       puāk [pyak]
                                                           "female"
                                                           "cut"
kpjà'
        [kpia]
                   "shape wood"
                                       kjà
                                              [kɪa]
pìəlıg
        [piəlig]
                   "white"
                                       bū'es [bues]
                                                           "ask"
```

Before y word-internally, ja wa are realised [iɪ] [vɪ] and written je we.

```
bjēyá [bija] "elder siblings" syēyá [syja] "roads"
```

Word-final $i \ni u \bullet only$ arise by monophthongisation in external sandhi 7.2 7.3. Nasalised $i \ni \check{n} u \bullet \check{n}$ (including after m n) occur only before underlying *g, and in the ipfv of fusion verbs by analogy 5.6. In all other contexts original $*\tilde{\epsilon}\tilde{\epsilon} *\tilde{\jmath}\tilde{\jmath}$ and $*\tilde{\epsilon}\tilde{\epsilon} *\tilde{\jmath}\tilde{\jmath}$ and $*\tilde{\epsilon}\tilde{\epsilon} *\tilde{\jmath}\tilde{\jmath}$ have fallen together as $\epsilon\epsilon\check{n}\;\tilde{\jmath}\check{\jmath}\check{n}$. They were distinct historically: cf $n\bar{\jmath}\check{\jmath}r$ "times", Mooré $n\acute{a}oor\acute{e}$, $n\bar{\jmath}\check{\jmath}r$ "mouth", Mooré $n\acute{o}or\grave{e}$.

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

Elsewhere, \underline{ia} \underline{ua} replace ε \supset before k and before underlying *g, which is deleted, with vowel glottalisation and fusion $\underline{5.6}$. $\underline{B} \ni k$ "pit" contrasting with \underline{buak} "split" is due to the rounding change $*\underline{uakkv} \to \underline{jkkv}$, while $\underline{t\bar{\varepsilon}k}$ "pull", contrasting with $\underline{t\underline{i}ak}$ "change" is due to shortening of a long vowel before an original plosive cluster $*t\varepsilon\varepsilon kk\iota$. Presumably $n\bar{\jmath}k$ "pick up" is similarly derived by shortening of $*n\varepsilon kk\iota$; Toende Kusaal has $n\dot{\jmath}k$, with a variant form $n\varepsilon$ (for $*n\varepsilon$)2.)

Toende Kusaal preserves the equivalents of the broken vowels as phonetic monophthongs, more open than the Toende vowels corresponding to ε $\supset \varepsilon\varepsilon$ \supset \supset which have expanded in Agolle into the phonetic space vacated by breaking:

Toende	Agolle	
sēēs	sīəs	"waists"
pē'ēs	pē'εs	"sheep" pl
bó'ɔs	bū'es	"ask"
tōom	tōɔm	"depart, disappear"

The common Kusaal protolanguage preserved other contrasts, like Mooré; Kusaal $20/u\theta$ pairings correspond to Mooré oo, but Mooré ao corresponds to 20/20: Toende $b\dot{o}\dot{o}t$, Agolle $b\dot{o}od$, Mooré $b\dot{a}oda$ "want, wish."

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

```
sar{\it 5}eň [sɔ̃ɪ] "witch" mùi [mũi] "rice" dar{\it a}u [daʊ] "man" gb\dot{\it a}un [ḡbaʊn] "book" bia

\dot{\it a}un [byāvk] "shoulder"
```

Unlike $y \ w$, $\not \in \not \sqsubseteq u$ do not form syllable boundaries. Word-final $-V \not \in -V \not \sqsubseteq -V \not u$ behave just like short vowels in being followed by [?] before pause in statements 3.2.2, and word-initial ya [ja] contrasts with $\not \sqsubseteq a$ [ja] in the tenseness of the semivowel, and probably in timing features; the contrast is not [?ja] \sim [ja].

```
įā [ɪ̯a] "seek" yā [ja] "houses"
```

KB has *uak* "inundate"; cf *wak* "be sleepless" (from Naden's dictionary.)

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

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

Primary diphthongs arise from word-final *Vw *Vy 5.3.1 and from fusion, fronting and rounding 5.6 5.5. All also occur nasalised, and if not short, glottalised; those written glottalised below *only* occur glottalised.

		ia	[ia]	iaa	[ia:]
		i̯a'a ua υ'a	[va] [ua] [va]	uaa	[ua:]
		va	ເດືອາ		
ae	[aĭ]	ae	[aɪ]	aee	[aɪ:]
		ie	[iɪ]	iee	[iɪ:]
э́е	[ŭ]	ɔ'e	[ɔ̃i]		
uį	[ui̯]	ui	[ui]		
		ue	[uɪ]	uee	[uɪ:]
υĕ	[ΩĬ]	υ'e	[ດັາ]		
aŭ	[aʊ̯]	aυ	[aʊ]		
εň	[x͡z]	εο	[ɛʊ]		
įaų	[ĭaŭ]				
ιŭ	[ɪ¤]				
		iu	[iu]		
		io	[iʊ]		

Long diphthongs become overlong by prolongation of the second mora before the polar-question prosodic clitic 7.1. The diphthongs v'a $v\check{n}'a$ appear as $\check{u}'aa$ $\check{u}\check{n}'aa$ respectively when LF-final.

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

32 Segments 3.2

The symbol o also represents [v] in the 3sg pronoun o, and in the mora preceding it in liaison, which is written $\cdot o$; any nasalisation mark \check{n} precedes $\cdot o$.

```
\dot{o} b\bar{\imath}ig [vbi:g] "her child" z\dot{u}\cdot o [zuv] "steal him" d\dot{a}'\cdot o [davg] "bought for him" \bar{a}\check{n}\cdot o [ã\check{v}] "be him/her" but d\bar{a}vg [davg] "male"
```

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

gàad	"pass" pfv	gàt	"pass" ipfv
tēεg	"drag, draw"	tēk	"pull" (*tεεkkι)
Hausa	tèeku	àtìu̯k	"sea"
Hausa	kootù (← English)	kźtù	"court"

An overlong monophthong appears in $m\grave{a}'aa$ "only"; everywhere else, overlong monophthongs reduce to long 7.1.

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

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

3.2.1 Nasalisation

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

```
t\bar{\varepsilon}\varepsilon\check{n}s[t\tilde{\varepsilon}:s]"lands"\check{a}\check{n}s\grave{i}b[\tilde{a}sib]"mother's brother"g\bar{\varepsilon}\check{n}[g\tilde{\varepsilon}]"get tired"g\bar{\varepsilon}\check{n}'[g\tilde{\varepsilon}]"get angry"g\bar{\varepsilon}\check{n}'\varepsilon d[g\tilde{\varepsilon}:d]"get angry" ipfv\check{n}w\bar{a}m[\tilde{w}\tilde{a}m]"calabash"
```

Nasalisation is **automatic** on long vowels after *m n*: *mὲεd* "build" ipfv [mɛ̃:d]. Short *iň uň* are laxer than oral *i u*, but there are no contrasting short *ιň *υň. They nearly always arise from apocope <u>5.1</u> of *iiň uuň*, as in *sīiňf* "bee" cb *sīň-*, *zùuňg* "vulture", cb *zùň-*; the only exception is *sūňf* "heart" (pl *sūňyá*), written *svnf* in KB.

Contrastive nasalisation often represents originally automatic nasalisation after * η * η * η $\widehat{\eta}m$, or arises before underlying *ns*nf 5.4.

Nasalised $i \ni \check{n} u \ni \check{n}$ occur only in fusion verbs <u>5.6</u>. Long $\iota \iota \check{n} \upsilon \upsilon \check{n}$ appear solely through the change of *nf *ns to fs with nasalisation of the preceding vowel <u>5.4</u>:

```
p(i) if"genet"pl p\bar{\iota}iniz\dot{\upsilon}'\upsilonnif"dawadawa seed"pl z\bar{\upsilon}'\upsilonnit\dot{\varepsilon}\eta-z\dot{\upsilon}\upsilonnis"foreign lands"sg t\dot{\varepsilon}\eta-z\dot{\upsilon}\eta
```

3.2.2 Glottalisation

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

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

Glottalisation may be realised as [?] after the first vocalic mora, or as vowel creakiness, but in either case behaves as a vowel feature. Flapping of initial d 3.1 occurs after V' as well as after V, and the pattern of downstepping before H shows that 'does not begin a syllable $\underline{4}$. Glottalisation which has arisen from deletion of *g after a ia ua 5.6 does not differ phonetically from other types.

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

```
Kà bà g\bar{\epsilon}n."and they got tired" is homophonous withKà bà g\bar{\epsilon}n."and they got angry"but Ba g\dot{\epsilon}n n\bar{\epsilon}."they're tired" differs in realisation from<br/>"they're angry"
```

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

There is no vowel glottalisation in Mooré, Dagaare, Mampruli, Hanga or Dagbani, but Farefare, Nabit and Talni share it: $y\bar{v}'vr$ "name", Farefare $y\dot{v}'\dot{v}r\dot{\varepsilon}$; $k\dot{u}'\theta m$ "water", Talni kwo?m; $kp\dot{a}'v\eta$ "guinea fowl", Nabit $kpa'u\eta$; $n\bar{\jmath}-n\bar{\jmath}\dot{a}'a\eta$ "hen", Nabit $n\jmath nya'a\eta$. Nawdm has h [?] in many cognate words, e.g. $mt\dot{a}h'$ "three" = Kusaal $nt\dot{a}h'$; $n\dot{u}h\dot{u}$ "arm, hand" = $n\dot{u}'ug$; $r\dot{a}h\dot{m}$ "bile" = Kusaal $y\bar{a}'am$ (WK), Farefare $y\dot{a}'\dot{a}m$.

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

kpὲ'ŋ	"strengthen"	lā'ŋ	"set alight"
nī'm	"meat"	kɔ̄'m	"hunger"
sù'ṇā	"well"	sù'm	"goodness"

 $S \dot{v} \eta$ pl $s \dot{v} ma$ "good" never has glottalisation. Toende Kusaal, Farefare, Nabit and Talni lack this phenomenon. It probably arose from gemination of $m \eta$; KB has 385 examples of an svm to 47 of an sv'vm àň $s\acute{v}m$ "is good", but 30 of ka'svm to 40 of ka'sv'vm $k\bar{a}'s\acute{v}mm$ "is not good" clause-finally.

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

3.3 Traditional orthography

For word division see 2.3. Tone is unmarked. If $mm \ nn$ are often written single before 2016. KSS uses ng for ng.

Before 2016, $e \ o$ were used for $\varepsilon \supset$, i for i and ι , and u for u and v; $e \ o$ were sometimes also used for $\iota \ v$ as root vowels. KB has the same basic conventions as this grammar except that i is used for both [i] and [i]: $tiig = ti\iota g$ "tree", $biig = b\overline{\iota}ig$ "child."

Word-final short - ι after m n is usually written ε in KB; so always with the relative pronouns one kane line bane, and with anɔ'ɔnɛ "who?" before liaison.

 $e\ o$ are used for [i] [v] as in this grammar. In addition, the pronouns 5n/5n/5n $3n\bar{a}$ are written on ona, and KB writes ye "that", $te\eta$ "land", $ke\eta$ "go" (pfv), ken "go" (ipfv) for $y\bar{\epsilon}\ t\bar{\epsilon}\eta\ k\bar{\epsilon}\eta$ k $\bar{\epsilon}n$. This may reflect actual variants with [i]: cf Toende $t\bar{\iota}\eta$ "land", Mampruli $ti\eta\eta a$ "land", versus Toende $me\eta$, Mampruli $ma\eta\eta a = m\bar{\epsilon}\eta$ "self."

After a or $\mathfrak o$ epenthetic ι is often written e: sanrega for sār ι gá "prison."

ie is used for *iə* and *ie*, but the sequences only contrast in the marginal case of external sandhi when final *ie* is monophthongised <u>7.3</u>.

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

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

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

Segments 3.3

Traditional orthography uses e i u for e j u and consequently does not mark length consistently in diphthongs, but only two length contrasts are actually found in phonemic diphthongs: of these ae/ae is expressed by writing aae (or aae) for ae versus ae for ae: thus e.g. $paae = p\bar{a}e$ "reach."

The contrast av/au is unmarked. KB uses au or av consistently for each word, but not as marking length: yavg yavg "grave", but $na'araug = n\bar{a}'-d\hat{a}vg$ "ox"; $dau = d\bar{a}u$ "man" but $tavn = t\bar{a}u\bar{n}$ "sibling of opposite sex." Ambiguity appears before η : $gbau\eta = gb\bar{a}u\eta$ "skin", $mangau\eta = mangau\eta$ "crab."

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

```
kia = k \dot{k} \dot{a} "cut" sia = s \bar{i} a "waist" kua = k \dot{k} \dot{a} "hoe" sabua = s \dot{a} b \dot{u} a "lover"
```

' is not written after i when it represents j, thereby disambiguating

```
kpia' = kpia' "shape wood" kpi'a = kpi'a "neighbour"
```

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

Traditional orthography writes -ey- in Long Forms 5.1 corresponding to Short Forms where final -y becomes -e: vveya = vvya, Long Form of vveya "be alive." Older NT versions also write veya "living things" as veya, but KB has veya.

Traditional orthography has dunia, laafia for dūniya "world", láafiya "health."

KB writes $bieya = b\underline{i}\bar{e}y\acute{a}$ "elder same-sex siblings", but $suoya = s\underline{v}\bar{e}y\acute{a}$ "roads", $zuoya = z\underline{v}\bar{e}ya$ "hills" etc. Older sources have sueya, zueya.

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

Ending a prefix, n represents n: $dunduug = d\dot{v}nd\dot{v}ug$ [dundu:g] "cobra."

When n would be word-final without even a following glottalisation mark, the orthography formerly wrote nn to mark nasalisation, but the 2016 system has unfortunately adopted an ambiguous single n: gaan (old: gaann) = $g\bar{a}a\bar{n}$ [g \tilde{a} :] "ebony tree" versus gaan (old: gaann) = gaan [da:n] "owner."

4 Tones

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

The tone-bearing unit is the syllable 2.1. Every syllable carries a toneme, except for superlight syllables and catenator-n, which are toneless, and realised by extension of the toneme of the preceding syllable to cover both. Overlong diphthongs are disyllable, with syllable division following the first mora, and thus carry two tonemes, as in the Long Form $n\bar{u}\acute{a}a$ "hen."

There are four tonemes: High (H), marked with an acute: $g \not\in I$ "egg"; Mid (M), marked with a macron: $b\bar{a}n$ "ring"; Low (L), marked with a grave: $b\dot{>}k$ "pit"; and Circumflex (X), marked with a circumflex: $n\hat{u}'ug$ "hand." The circumflex toneme can only appear on a superheavy CVVC syllable; when such a syllable becomes open, H toneme replaces X. Words like $n\hat{u}'ug$ "hand" and $n\acute{a}af$ "cow" thus fall together tonally in the Long Form 5.1:

```
Lì k\bar{a}' n\dot{u}'ug\bar{b} ^{+}ø. "It's not a hand."

3IN NEG.BE hand:SG NEG.

Lì k\bar{a}' n\acute{a}af\bar{b} ^{+}ø. "It's not a cow."

3IN NEG.BE COW:SG NEG.
```

Kusaal M toneme corresponds to H in the other Western Oti-Volta languages. H and X tonemes are secondary. M syllables become H before a following L; superheavy L syllables become X after a preceding M, or as a result of the M-spreading external tone sandhi <u>7.4.3</u>, while other L syllables here become H.

M toneme is always realised as a level tone; L and H are level except before pause, where they are realised as falling tones, beginning at their usual pitch. X is realised as a falling tone from H to L pitch within the syllable; it differs from H on a superheavy syllable before pause, where the pitch fall occurs on the second mora: contrast mān sâam "my father", mān sáam "my guests."

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

Tones 4

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

```
HH → H↓H

HX → H↓X

MH → M↓H if the next syllable is superheavy

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

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

Kà m̀ **gɔ̃s gɛ́l** lā bēogv-n.

And 1sg look.at egg:sg art morning-loc.

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

but *Ṁ gʻs* ↓*gél* lā bēogv-n.

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

"I looked at the egg in the morning."

Kà m̀ **gɔ̄s náaf** lā bēogυ-n.

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

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

but M gós ↓náaf lā bēogv-n.

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

"I looked at the cow in the morning."

Kà m̀ **gɔ̄s nû'ug** lā bēogυ-n.

And 1sg look.at hand:sg ART morning-Loc.

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

but M gós ↓nû'ug lā bēogv-n.

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

"I looked at the hand in the morning."

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

Ànɔʻɔnì \emptyset nyē **púkɔ̀ɔn**řrɛ $^+\emptyset$? "Who saw a widow?"

Who cat see widow:sg co?

Lì $k\bar{a}'$ $p \dot{\nu} k \dot{\nu} \gamma n r \bar{\epsilon}^{+} \phi$. "It's not a widow."

3IN NEG.BE widow:SG NEG.

but *Lì à nē ↓púkòɔňr lā.* "It's the widow."

3IN COP FOC widow:SG ART.

Bīig lā **sá mè** yīr lā.

Child:SG ART TNS build house:SG ART.

"The child built the house yesterday."

but Bīig lā **↓sá mὲɛd** yīr lā.

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

"The child was building the house yesterday."

Mān **bú-sùn** $k\bar{a}$ 'e $+\bar{\varphi}$. "My good goat isn't there."

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

Mān $k \vec{v} k \vec{b} r k \vec{a} = + \vec{\omega}$. "My voice isn't there."

1SG.CNTR VOICE:SG NEG.BE NEG.

but Mān ↓**bú-pìəl** kā'e +ø.

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

"My white goat isn't there."

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

Kà \dot{m} $g\bar{g}s$ $\downarrow b\acute{u}\eta$ $l\bar{a}$. "And I looked at the donkey."

And 1sg look.at donkey:sg ART.

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

Camel:sg NEG.BE NEG.

3IN COP FOC COW:SG ART.

```
ÒρŪ
          yādı↓gídā +ø.
                                       "He isn't scattering."
3AN NEG.IND scatter: IPFV NEG.
Lì kā'
         bī-↓púŋā +ø.
                                       "It's not a girl."
3IN NEG.BE child-girl:SG NEG.
                                       "She didn't find a knife."
ÒρŌ
          ňyē ↓sύ'υgā <sup>+</sup>ø.
3AN NEG.IND see knife:sg NEG.
Lì kā'
        ňyī↓rífɔ˙ +ø.
                                       "It's not an egusi seed."
3IN NEG.BE egusi:SG
                   NEG.
Kà m̀ gɔ̄s
                búŋ
                          lā bēogυ-n.
And 1sg look.at donkey:sg ART morning-Loc.
"And I looked at the donkey in the morning." (/ā not prepausal)
Yūgóm lā kā'e +ø.
                                       "The camel's not there."
Camel:sg art neg.be neg.
                                       (lā not prepausal)
Lì à nē dôog lā.
                                       "It's the hut." (MX not MH)
3IN COP FOC hut:SG ART.
Ànó'ənì ø yādıgídà +ø?
                                       "Who is scattering?" (L after H)
Who
         CAT scatter: IPFV co?
                                       "Isn't it a girl?" (L after H)
Lì kā'
         bī-púŋàa
3IN NEG.BE child-girl:SG PQ?
Ànɔʻɔnὶ ø ňyē sύˈυgà +ø?
                                       "Who found a knife?" (L after H)
Who
         CAT see knife:sg cq.
Ò pū
          dúgὲε +ø +ø?
                                       "Didn't she cook?" (L after H)
3AN NEG.IND COOK
                 NEG PO.
```

but

A CV syllable is superlight if it is not word-initial, word-final or root-initial, and is preceded by another CV syllable which is not itself superlight. Superlight syllables are toneless, with the toneme of the preceding syllable extended to cover both.

Bà $k\bar{a}$ ' $d\bar{l} \partial s (dl b\bar{a}^{\dagger} \phi)$. "They are not receivers." 3PL NEG.BE receiver: PL NEG.

40 Tones 4

An intervening superlight syllable prevents the insertion of downstep between M and H when the syllable after the superlight is prepausal:

```
Lì k\bar{a}' \downarrow n\acute{u}'ug\bar{\jmath} ^{+}\varnothing. "It's not a hand."

3IN NEG.BE hand:SG NEG.

but Lì k\bar{a}' m\acute{\jmath} ^{+}\varnothing. "It's not a gazelle."

3IN NEG.BE gazelle:SG NEG.
```

A syllable introduced by $k p t \eta$ cannot be superlight, because written intervocalic $k p t \eta$ represent $kk tt pp \eta \eta$, which close the preceding syllable:

```
Ka ya pv siakida. "But you did not agree." (Lk 13:34)

Kà yà p\bar{v} siákidā ^+ø.

And 2PL NEG.IND agree:IPFV NEG.
```

Heavy, root-initial, word-initial and word-final syllables always carry tonemes.

```
Lì à n\bar{\varepsilon} mólìf.
                                            "It's a gazelle."
3IN COP FOC gazelle:sg.
Lì kā'
          būn-sábìllē
                           +ø.
                                            "It's not a black thing."
3IN NEG.BE thing-black:SG NEG.
Lì kā'
                                            "It's not a left hand."
          dágòbıgā
3IN NEG.BE left.hand:SG NEG.
                                            (Prefix d\dot{a}-, root g\dot{b}- 13)
Bà à nĒ dígà.
                                            "They are dwarfs."
3PL COP FOC dwarf:PL.
```

Word-division creates a prominence contrast leading to a tonal contrast between the bolded syllables in

```
\dot{O} p\bar{v} z\acute{a}b\grave{\iota} f\bar{\jmath} +ø. "He didn't fight you." 3AN NEG.IND fight 2SG.OB NEG. and L\grave{\iota} k\bar{a}' m\acute{\jmath} \iota \iota "It's not a gazelle." 3IN NEG.BE gazelle:SG NEG.
```

5 Word segmental structure

This section deals with open-class words.

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

5.1 Apocope

Every Kusaal word which can potentially stand clause finally has two surface forms, which differ in nearly all cases, the **Long Form** (LF) and the **Short Form** (SF.)

For example, "child" appears as the Short Form $b\bar{\imath}ig$ in isolation and in most contexts, including clause finally for the most part, and clause medially everywhere except when followed by a particular set of "liaison words" 7.2:

```
    Ò dāa ňyē bīig. "She saw a child."
    BAN TNS see child:sg.
    bīig lā nû'ug "the child's hand"
    child:sg ART hand:sg
```

The Long Form (here, bīiga) is found in the final word of

```
Clauses with a negation (negative particle or negative verb)

Questions, both content and polar

Clauses used as vocatives
```

```
Ò kā' bīiga +ø. "He/she is not a child."
¡AAN NEG.BE child:sG NEG.
Ò dāa pō ňyē bīiga +ø. "He/she did not see a child."
¡AAN TNS NEG.IND see child:sG NEG.
Ànɔʻɔnì ø dāa ňyē bíigà +ø?
Who cat tns see child:sG co?
"Who saw a child?"
M bīiga +ø! "My child!"
1sg child:sG voc!
```

The Long Form also appears as a **derivational** feature in the *citation* form of some words (see below.) Direct commands sometimes end in a LF $\underline{21.3}$.

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

The SF is always derivable from the LF by **apocope**:

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

Subsequently

Word-final consonant clusters drop the second consonant ($kk \ tt \ pp \ gg$ become $k \ t \ p \ g$ but are written single in any case $\underline{3.1}$) Word-final y becomes \underline{e} after back vowels and zero elsewhere

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

```
ia \rightarrow ja ua \rightarrow ua ja'a \rightarrow ja' u'aa \rightarrow u'a
ae \rightarrow ae av \rightarrow au ui \rightarrow uj
Vaa \rightarrow Va Vee \rightarrow Ve Vvv \rightarrow Vv
```

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

Examples:

```
Lì à n\bar{\epsilon} k\bar{\upsilon}k. "It's a chair."

SIN COP FOC Chair:SG.

K\bar{\upsilon}k l\bar{a} b\acute{z}d\grave{\iota}g y\bar{a}. "The chair has got lost."

Chair:SG ART get.lost PFV.

Lì k\bar{a}' k\bar{\upsilon}ka. +\emptyset. "It's not a chair."

SIN NEG.BE Chair:SG NEG.
```

Òρῦ

sįákē +ø.

3AN NEG.IND agree NEG.

"He didn't agree."

Lì à nĒ kúkàa "Is it a chair?" +ø? 3IN COP FOC chair:SG PQ? "Who saw a chair?" Ànó'onì ø ňyε kúkà +ø? Who CAT see chair:sg co? Similarly, with the same frames (also using \dot{o} 3AN "he/she", $b\dot{a}$ 3PL "they"): Lì à nē dūk. "It's a cooking pot." Dūk lā bódìg yā. "The pot's got lost." Lì kā' dūkó. /kk/ "It's not a pot." Lì à nē dūkɔ́ɔ? "Is it a pot?" Ànó'onì ňyē dūkó? "Who saw a pot?" "It's a lion." Lì à nē gbīgım. Lì kā' gbīgımne. "It's not a lion." Lì à nē gbígìmnee? "Is it a lion?" Ànó'ənì ňyē gbígìmne? "Who saw a lion?" Lì à nĒ yáarìm. "It's salt." "It's not salt." Lì kā' yáarīmm. Lì à nē yáarìmm? "Is it salt?" "Who saw salt?" Ànó'onì ňyē yáarìmm? "They're lions." Bà à nĒ gbīgıma. Bà kā' gbīgımaa. "They're not lions." "Are they lions?" Bà à nĒ gbígimàa? "Who saw lions?" Ànó'ənì ňyē gbígımà? Ò à nĒ dāu. "He's a man." Ò kā' dāv. "He's not a man." Ò à nĒ dáùu? "Is he a man?" Ànό'ɔnì ἤyē dáυ? "Who saw a man?" "And he agreed." Kà ò sják. And SAN agree.

```
Kà ò dīgı.
                                 "And she's lying down."
Ò pū dīgıyá.
                                 "She isn't lying down."
Kà ò vūe.
                                 "And she's alive."
Ò pū vūvá.
                                 "She's not alive."
Kà ò kiá.
                                  "And she cut (it)."
Ò pū kía.
                                  "She hasn't cut (it)."
Kà ò pāe.
                                 "And he reached (it)."
Ò pũ pāée.
                                 "He hasn't reached (it)."
```

The derivational type of Long Form appears in many adverbs and quantifiers. Thus with the adjective $b\dot{\epsilon}dvg$ "big" and the adverb $b\dot{\epsilon}dvg\bar{\nu}$ "a lot":

```
Lì à nē būn-bédùg.

"It's a big thing."

"It's a big thing."

Lì kā' būn-bédvgō +ø.

"It's not a big thing."

"It's not a big thing."
```

The LF is undoubtedly historically primary, with the SF derived by apocope, but it does not automatically follow that the LF must be primary synchronically. It can usually be predicted from the SF given the aspect of a verb or the natural gender of a noun, and in several cases historically expected LFs have actually been replaced by different forms corresponding to the same SFs. Apocope often does *not* lead to loss of contrasts despite deleting the segments which conditioned them, and working in reverse, such features can predict LFs from SFs; even words completely deleted by apocope remain recognisable from effects on preceding words. Some SFs are too short to show a tonal difference between Pattern H and all-M Pattern A, as with $k\bar{\nu}k$ "chair" and $d\bar{\nu}k$ "pot" above, but Tone Patterns are suprasegmental stem features <u>6.1</u>.

Nevertheless, it is descriptively simplest to regard LFs as primary. With SFs ending in consonants the LF may end in $a \varepsilon$ or \mathfrak{I} ; SF-final m n or l may or may not be geminated; -m may become -mn- instead of -mm-. Even before liaison 7.2, with vowel quality neutralised, the same issues arise with consonants:

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

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

```
Pu'abi du'a sieba la wusa, sɔ' kae gat Joon nɛ [sic \underline{2.3}].
Pū'abí ø du'à sīəba lā wūsa, sɔ̄' kā'e ø gát Joonɛ +ø.
Woman:PL Nz bear INDF.PL ART all, INDF.AN NEG.BE CAT pass:IPFV John NEG.
"Of all those born of women, none surpasses John." (Lk 7: 28)
```

All SFs ending in vowels other than front vowels or fronting diphthongs now have LFs obtainable simply by lengthening the final vowel or diphthong:

```
LF kūυ
                  "kill"
                                          LF màa
                                                       "mother"
kū
                                    mà
kūgá LF kūgáa
                                          LF bāa
                                                       "dog" 7.1
                  "stones"
                                    bāa
sīa
     LF sīaa
                  "waist"
                                    sàbùa LF sàbùaa
                                                       "girlfriend"
     LF diā'a
                  "get dirty"
                                          Farefare dêgê
diā'
                                    but
     LF du'àa
                  "bear, beget"
                                          Farefare dàαὲ
du'à
                  "run"
ΖÒ
     LF zòɔ
                                          Farefare zòè
     LF dāυ
                  "man"
                                          Mooré ráoa
dāu
tāuň LF távň
                  "opposite-sex sib"
                                          Mooré tãoa
```

(A marginal exception to predictability is the fact that words ending in <code>ia</code> may have LFs in <code>ia</code> like <code>diā</code> "get dirty" or in <code>i</code> like <code>kpià</code> "shape wood with an axe.")

Most SFs ending in fronting diphthongs or front vowels behave likewise:

```
pāe LF pāée "reach" nìe LF nìee "appear" dūe LF dūée "raise/rise" wìdı LF wìdı "horses"
```

Two nouns have variant sg LFs in -ya: sāeň "blacksmith", LF sāeň or sāňya and sɔeň "witch", LF sɔeň or sɔňya. All other LFs in -ya occur in single-aspect verbs 10.2, where LF -ya corresponds to all vowel-final SFs except in a few bare root forms:

```
dīgi LF dīgiyá "be lying" võe LF võyá "be alive"
```

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

The exact shape of a Long Form differs in different contexts. Final vowel length may be neutralised, final short vowel qualities may be altered or completely neutralised, and final tonemes may be altered. Changes to LFs occur clause-medially before **liaison** 7.2, and clause-finally before **prosodic clitics** 7.1, which have no segmental form of their own but cause the preceding word to appear as a LF rather than the default SF. Derivational LF types are described as showing apocope-blocking (see below.) The LF as such is an abstraction, representing the underlying word-form which produces the surface SF through apocope, and the various surface LFs through application of the rules for each environment. For convenience, the LF preceding the negative prosodic clitic will be taken as basic segmentally. It shows underlying final short -ι -ν as -ε -ͻ, *-mν *-mι as -mm -mm and -iə -ue as -ia -ua 7.1.

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

bīig ^a	"child"	kūk ^a	"chair"
dūk ^{⊃/}	"pot"	s <u>i</u> àk ^ɛ	"agree"
gbīgım ^{nɛ}	"lion"	yàarım ^m	"salt"
dīgı ^{ya/}	"be lying down"	zì'e ^{ya}	"be standing"

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

gbīgıma ⁺	"lions"	SF gbīgıma	LF gbīgımaa
mòlı+	"gazelles"	SF mòlı	LF m ɔ̀lιι
gòň ⁺	"hunt"	SF gòň	LF gòɔň
tìeň ⁺	"inform"	SF tìeň	LF <i>tìeeň</i>
kjà+	"cut"	SF <i>kjà</i>	LF <i>kìa</i>
k <u>u</u> ā+	"hoe"	SF k <u>u</u> ā	LF <i>kūa</i>
dāu ⁺	"man"	SF dāu	LF <i>dāυ</i>
sāeň+	"blacksmith"	SF <i>sāeň</i>	LF <i>sāeň</i>

Words ending in LF \dot{a} are written with superscript ^a rather than ⁺ to distinguish them from words ending in LF \dot{a} \dot{a} \dot{a} \dot{a}

	kpjà' ⁺	"shape wood"	SF <i>kpi</i> à'	LF <i>kpì</i> 'a
but	dįā' ^a	"get dirty"	SF <i>djā</i> '	LF dįā'a
	kuā+	"hoe"	SF k <u>u</u> ā	LF <i>kūa</i>
but	pu'ā ^a	"woman"	SF pu'ā	LF puˈāa

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

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

Words with segmentally identical SF and LF and are written with =, as in $d\dot{a}'a=$ "market." In a few cases where superscript notation is impractical, the forms will be written out separately, e.g. $p\bar{a}mm$ SF $p\bar{a}mn\dot{\epsilon}$ 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, and writes an acute mark $^{\prime}$ after forms with LF-final H. For the actual realisation before different prosodic clitics and liaison words see 7.4.

Words like SF $n\hat{u}'ug$ LF $n\hat{u}'ug\hat{\sigma}$ "hand", where the X of the SF has to become H in the LF, are written in superscript notation with their SF tonemes: $n\hat{u}'ug^{\hat{\sigma}}$ "hand." So too are words like SF $n\hat{\sigma}b\hat{\iota}r$ LF $n\hat{\sigma}b\hat{\iota}r\hat{\epsilon}$ "foot, leg", which show a toneless superlight second syllable in the LF corresponding to a L closed syllable in the SF: $n\hat{\sigma}b\hat{\iota}r^{\hat{\epsilon}}$ "foot", $d\hat{r}\hat{\sigma}s(d\hat{\iota}b^{\hat{\sigma}})$ "receivers." The orthographic convention that macrons and graves apply to all following unmarked syllables means that no special superscript notation is needed to express the change from LF superlight to SF closed toneme-bearing syllables in words like $w\bar{\sigma}bvg^{\hat{\sigma}}$ "elephant" or $d\hat{\iota}g\iota r^{\hat{\epsilon}}$ "dwarf."

Apocope-blocking is seen with some nouns ending in $-\iota$ or $-\upsilon$ <u>8.5</u>, as a derivational feature in adverbs and quantifiers, as a downtoning measure with adjectives, and in many words with only one underlying mora, including pronouns.

Apocope-blocked words uses LFs as *citation* forms. They lack the lowering of postconsonantal final ι υ to ε ι seen before prosodic clitics, but do change final - $m\upsilon$ to -mm. Final L tonemes change to M. Apocope-blocked words make secondary LFs before prosodic clitics by prolonging a short final vowel; except in polysyllabic words with M tonemes throughout, final M tonemes become H in such LFs.

būudı+	"tribe"	bὲdυgῦ ^{+/}	"a lot"
sùŋā+/	"well"	ànāasí ^{+/}	"four"
yā+/	"houses"		

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

5.2 Roots, stems and flexions

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

Stems are derived from roots by adding up to three of the **derivational suffixes** b d g l m n s r. Only d l m can follow another suffix. Nominal stems may also have derivational **prefixes** V CV CVN CVslN or CVllN, where N is a nasal homorganic with the following consonant and l is an epenthetic vowel: $t\bar{l}t\bar{a}$ "big", $b\dot{v}$ "ant", $s\bar{l}$ "spider." A few stems have two prefixes.

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

Prefixes and flexional suffixes show only the **affix vowels** $a \iota v a a \iota \iota v v$. Most bound words of the form (C)V(V) have the same vowel restrictions, though the various particles $n\bar{\varepsilon}$ show ε for ι . Prosodic clitics 7.1 cause short LF-final ιv to be lowered to ε ι , here realised [e] [o]; short ιv remain as such only before apocope-blocking 5.1.

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

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

Before vowel-initial flexions CVV root-stems become CVy or CVd 5.3.1.

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

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

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

The cluster *mn* is unstable. All informants have *mm* in the LFs of dual-aspect verb ipfvs like *kàrımma* "read", but a few examples of the original *mn* occur in NT:

```
ka ba li' ba toba ka pu wum na [sic\ 2.3]
kà bà lí bà tùba kà p\bar{v} wớmnā ^+ø.
And 3PL block 3PL ear:PL and NEG.IND hear:IMPF NEG.
"they have blocked their ears and do not hear" (Mt 13:15, 1996)
```

Informants differ with regard to the LF sg forms of $r^{\varepsilon}|a^{+}$ class m-stems; thus SB has $gb\bar{\imath}g\imath mn\varepsilon$ "lion", $d\bar{u}mn\varepsilon$ "knee" whereas WK has $gb\bar{\imath}g\imath mm\varepsilon$, $d\bar{u}mm\varepsilon$.

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

```
m naan ku aan Kiristo tumtum na [sic 2.3].
m nāan kú āa-n Kiristo túm-tūmna +ø.
1SG then NEG.IRR COP-DP Christ work-worker:SG NEG.
"I would not have been Christ's servant." (Gal 1:10, 1996; KB tυπτυππα)
```

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

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

The default **epenthetic vowel** is ι . Before LF -g2 - η 2 it becomes v, remaining v in the SF <u>5.5</u>.

```
SF āaňdıg LF āaňdıga "black plum tree"
but SF gàadvg LF gàadvgɔ "(sur)passing"
pl SF mālıma LF mālımaa "sacrifices"
but SF mālvŋ LF mālvŋɔ "sacrifice"
```

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

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

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

```
tìsid [tisid] "gives" sīgid [sigid] "lowers" būgvr [bʊgʊr] "spirit's dwelling" kūgvr [kugur] "stone"
```

Epenthetic vowels show two distinct levels of prominence. The weaker is seen in **superlight** CV syllables 2.1. A CV syllable is superlight if it is a word-internal non-root vowel and is preceded by another CV syllable which is not itself superlight, working from left to right. Bolded syllables are thus superlight in the LFs $d\vec{r} \rightarrow s(dt)$ "receivers", $m \rightarrow ltf$ "gazelle", but in LF $y \dot{u} g v d v r e$ "hedgehog" only the second syllable is superlight, not the third, and in LF $y \dot{u} u g v r e$ "delaying" (gerund) there is no superlight syllable. With marginal exceptions after -Vr-, superlight syllables do not carry tonemes, and they do not show contrasts of vowel quality even in surface forms. They are structurally analogous to the second morae of long vowels or diphthongs. Epenthetic v in syllables which are not superlight (typically in the third mora of a stem, disregarding any prefix) have the same prominence as affix vowels.

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

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

5.3 Root alternations

5.3.1 CV~CVV~CVC

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

A number of such roots show vowel length alternation. Those with glottalised vowels are all underlyingly *CVg, and their behaviour is due to *g deletion and vowel fusion <u>5.6</u>. Non-glottalised types show a long vowel before the class suffixes - g^a - g^b and short elsewhere, with following *g g (but not *g (but not *g g or *g):

dāvg ^o	"male"	cf <i>dāp</i> a	"men"
bīig ^a	"child"	cf <i>bīl</i> a	"little"
dàɔgɔ	"hut"	pl <i>dòt</i> ε	
fūug ^{ɔ/}	"clothing"	pl <i>fūt^{ε/}</i>	

ňyē̄+	"see"	ipfv <i>ňyēt^{a/}</i>	imp <i>ňyèm</i> a
kē ⁺	"allow"	ipfv <i>kēt^{a/}</i>	imp <i>kèl</i> a
dì+	"eat"	ipfv <i>dìt</i> a	imp <i>dìm</i> a
yī ⁺	"emerge"	ipfv <i>yīt^{a/}</i>	imp <i>yìm</i> a
zò+	"run"	ipfv <i>zòt</i> a	imp <i>zòm</i> a
dū ⁺	"rise"	ipfv <i>dūt^{a/}</i>	imp <i>dòm</i> a
$l\dot{u}^+$ or $l\dot{i}^+$	"fall"	ipfv <i>lùt</i> a or <i>lìt</i> a	imp <i>lùm</i> a or <i>lìm</i> a

VV before sg $-g^a$ or $-g^b$ may be introduced into the pl, optionally or always:

dāvg ^o	"male"	pl <i>dāad</i> ²		
bīig ^a	"child"	pl <i>bīis</i> ε		
pɔ̄ɔgɔ/	"field"	pl <i>pɔ̄ɔdɛ/</i>	or	pɔ̄t ^{ε/}
dòɔgɔ	"hut"	pl dɔ̀ɔdɛ́	or	dòt ^ε
fūug ^{ɔ/}	"clothing"	pl <i>fūud^{ε/}</i>	or	fūt ^{ε/}

Before derivational suffixes the vowel is usually long:

dìιs ^ε	"feed"	dì+	"eat"
dàalım ^m	"masculinity"	dāp ^a	"men"
νῡ'υg ^{ε/}	"come alive"	vūr ^{ε/}	"alive"
yīis ^{ε/}	"make go/come out"	yī ⁺	"emerge"

There are exceptions before s, e.g. $y\bar{t}s^{\epsilon}$ beside $y\bar{t}is^{\epsilon}$ above, and the alternating CV/CVs stems seen in $g\bar{t}s^{\epsilon}$ "look", ipfv $g\bar{t}t^{a}$ or $g\bar{t}s^{\epsilon}$ "give" ipfv $t\hat{t}t^{a}$ or $t\hat{t}std^{a}$.

Gerunds in $-b^{\circ}$ always show long vowels: $d\bar{\iota}\iota b^{\circ}$ "food", $n \bar{\iota} b^{\circ}$ "seeing"; so do all regualr gerunds in $-r^{\varepsilon}$: $n \bar{\jmath} - l \bar{\jmath} c^{\varepsilon}$ "fasting" ("mouth-tying"), $n \bar{\iota} b^{\circ}$ "shirt-wearing", but WK has $n \bar{\iota} b^{\circ} b^{\circ}$ "place for tying up cows", $n \bar{\iota} b^{\circ} b^{\circ}$ "place for tying up horses."

Historically, such roots probably ended in a consonant preserved before vowelinitial suffixes, assimilated before homorganic consonants, and otherwise deleted with vowel fusion to produce CVV. For example, three roots with CVp- allomorphs show evidence of an underlying form *CVw with $*wb \rightarrow pp$: $d\bar{a}u^+$ "man" (Mooré $r\acute{a}oa$) pl $d\bar{a}p^a$; $t\bar{a}u\check{n}^{+/}$ "sib of opposite sex" pl $t\bar{a}n\check{p}^{a/}$; $t\grave{o}n^+$ "shoot" (Mooré $t\^{a}o$) $t\bar{a}n\check{p}^0$ "war."

Kusaal *CVV* roots with *CVt*- allomorphs typically have Mooré cognates with fronting diphthongs or front vowels: e.g. Mooré zòe "run" $l\dot{\nu}\iota$ "fall", ipfvs zòeta, $l\dot{\nu}\iota$ ta, versus $k\dot{\nu}$ "kill", ipfv $k\dot{\nu}\nu d\dot{a}$. Mooré shows much less levelling than Kusaal in such cases. Sporadic monophthongisation of earlier **Vy* explains the Kusaal alternation $l\dot{\nu}^+ \sim l\dot{\iota}^+$ "fall", and Western Oti-Volta contrasts like Kusaal $d\dot{\nu}$ Mampruli/Dagbani duu, Mooré $r\dot{\nu}$ as against Hanga $d\ddot{\imath}\iota$, Farefare $d\dot{\nu}$ Dagaare $d\dot{\nu}$ "hut, room."

These diphthongs usually correspond to Nawdm $Vr: t\grave{\epsilon}' \epsilon g^a$ "baobab", Mooré $t\grave{\delta}\epsilon g\acute{a}$, Nawdm $t\grave{\delta}d$ pl $t\grave{\delta}r\acute{a}$ (Nawdm $*rr \to d$); $d\grave{\epsilon}\epsilon g^a$ "warthog", Mooré $r\grave{\epsilon}oog\acute{o}$ (\leftarrow * $r\grave{\epsilon}eg\acute{o}$), pl reto, Nawdm $d\grave{\delta}d$ pl $d\grave{\delta}r\acute{a}$. Positing Proto-Oti-Volta * $l \to l$ Nawdm $l \to l$ Nawdm

	Kusaal	Mampruli	Dagbani	Nawdm	
*[y ā'am ^{m/}	y am		r áĥŕn	"gall"
	('n) y í'	(n) y i	(a) y i	(m) r éĥ	"two"
	y ò+	y >	y o	r iw	"close"
	zì'e ^{ya}	zε y a	ʒіε у а	jeh r a	"be standing"
	yàa r ım ^m	yaa r im	ya l im	yáà r ŕn	"salt"
	nōɔ r ε/	noo r i	no l i	nóó ŕ	"mouth"
	tùbu r ɛ	tub r i	tibi l i	tób ŕ	"ear"
*[[yī r ε/	yi r i	yi l i		"house"
	gū r a/	gu r i	gu l i		"guard"
	mɔ̃ r a/	ma r i	ma l i	ma d a (d ← rr)	"have" (Nawdm <i>tenir</i>)
*d	m5 d ε	mɔ r i	mɔ r i	тэ d	"swell"
	mɔ̄ɔ d ε	moo r i	mɔ r i	móó ť	"grass" pl

Mooré/Agolle Kusaal r following a short root vowel is either due to gemination or the result of analogy or borrowing: thus Dagbani kpari "lock" corresponds to Kusaal $*kp\grave{a}r^{\epsilon}$ (not $*kp\grave{a}d^{\epsilon}$), with r probably from an obsolete single-aspect $*kp\grave{a}r^{a}$ $\leftarrow *kpal[a \leftarrow *kpad[a]$ "be locked" (cf $g\grave{v}|^{\epsilon}$ "suspend", $g\grave{v}|^{la}$ "be suspended"); the gerunds $p\~{o}\~{n}r\iota b^{o}$ from $p\grave{o}\~{n}r^{a}$ "be near" and $t\grave{e}\~{n}r^{a}$ "remember" are modelled on dual-aspect root-stems; borrowing may underlie the irregular correspondences seen in Mampruli nyarinnu, Dagbani narin, Toende Kusaal $\~{a}\~{a}r\grave{v}n$ and Agolle $\grave{a}\~{n}rvn^{o}$ "boat."

Buli has y for *[initially (y'aam "gall"); <math>r for $*[l (y\'er\'a "house", tara "have" = Kusaal <math>t\bar{a}r^{a/})$; and i or zero otherwise ($t\bar{u}ik$ "baobab", $d\grave{o}k$ "hut", $n\acute{o}ai$ "mouth.") "Warthog" is $d\grave{e}r\grave{i}$ or $d\grave{u}ok$, with the same stem but different noun classes: the vowel in $d\grave{e}r\grave{i}$ is monophthongised, with $r \leftarrow *[l (stem-final + flexion-initial *[l])]$.

In Moba *[appears as I: $\acute{n}l\acute{e}$ "two", $l\bar{o}o\acute{n}$ "close", $d\bar{o}ol\grave{g}$ "pig", $t\bar{o}ol\grave{g}$ "baobab." $Y\grave{a}\grave{m}$ "gall" may reflect confusion between two originally distinct Oti-Volta words "gall" and "sense." Gulimancéma has zero for *[before consonants.

The Eastern Oti-Volta languages differ among themselves in the reflexes of *l: e.g. Byali $dy\bar{a}$ "two", $t\bar{e}\bar{e}b\bar{u}$ "baobab", $d\bar{u}g\bar{e}$ "warthog", $n\bar{u}\bar{i}$ "mouth", but Waama $y\bar{e}n\bar{i}$ "two", $t\bar{o}\bar{o}r\bar{i}b\bar{u}$ "baobab", $d\bar{o}r\bar{i}b\bar{u}$ "warthog", $n\dot{o}r\bar{e}$ "mouth."

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

```
gāňr<sup>€/</sup>
                  "ebony fruit"
                                                     pl qānyá<sup>+</sup> (short sq vowel from pl)
bàlàar<sup>€</sup>
                  "stick, club"
                                                     pl bàlàya+
kùk5r<sup>ε/</sup>
                  "voice"
                                                     pl kùkɔ̄yá+ (*CVy- root)
n̄ɔɔr<sup>ε/</sup>
                                                     pl nōyá+
                  "mouth"
zōυr<sup>ε</sup>
                  "tail"
                                                     pl zūya+
bīər<sup>€/</sup>
                                                     pl bjēyá+
                  "elder same-sex sib"
zūerε
                 "hill"
                                                     pl zuēya+
```

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

```
t\bar{\jmath}\jmath g^{3} "bitter" t\bar{\jmath}\underline{e}^{a/} "be bitter" (Mooré t\acute{o}e) but s\bar{\upsilon}'\upsilon l\acute{u}^{m} gerund of s\bar{\upsilon}'e^{ya/} "own"
```

The y belongs to the suffix: $t\bar{\jmath}e^{a/}$ is not a *CVy root (cf Nawdm $t\acute{o}g\acute{u}$ "amer.") With the irregular nouns $s\bar{a}e\check{n}^a/s\bar{a}e\check{n}^+$ "blacksmith" pl $s\bar{a}a\check{n}b^a$ and $s\bar{\jmath}e\check{n}^a/s\bar{\jmath}e\check{n}^+$ "witch" pl $s\bar{\jmath}\check{\jmath}\check{n}b^a$ there are no CVt- allomorphs (cf Mooré $s\~{a}ado$ "smithing", $s\~{o}odo$ "witchcraft"), and the roots were perhaps originally * $CV\~{n}$.

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

```
t\bar{t}t\bar{a}'ar^{\epsilon} "big" pl t\bar{t}t\bar{a}da^{+} p \geq n' "cripple" pl p \geq n' a^{+} y \bar{v}' v r^{\epsilon} "name" pl y \bar{v}da^{+} y \bar{u}' e r^{\epsilon} "penis" pl y \bar{u}ada^{+}
```

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

```
b\dot{a}'ar^{\epsilon} "idol" pl b\dot{a}'a^{+} or b\dot{a}da^{+}*bagr\iota; Farefare b\dot{a}gr\dot{\epsilon} s\dot{a}\dot{a}'ar^{\epsilon} "forest" pl s\dot{a}\dot{a}'a^{+} m\dot{b}'ar^{\epsilon} "reservoir, dam" pl mu\dot{a}a^{+} or m\dot{b}'ada^{+}
```

In $CV'V \sim CVd$ alternations an original root-final consonant appears as d before vowels but is deleted with glottalisation elsewhere. This consonant may simply have been *d, with * $Vdr \rightarrow V'Vr$ after short root vowels and a cb based on the sg. Stems

with sg CVd- in the $r^{\varepsilon}|a^{+}$ noun class could be explained by levelling. Levelling of the pl on the sg would naturally be avoided due to the ambiguity of $CV'V^{+}$ forms, and many such words are in fact commoner in the pl, e.g. $kp\bar{\varepsilon}\check{n}dur^{\varepsilon/}$ "cheek." Deverbal nouns (as in $n\bar{\imath}f$ - $n\acute{\sigma}d\hat{\imath}r$ "trachoma") are remodelled on finite forms, and adjectives level stems across noun classes. The second component of $p\underline{\nu}$ 'à- $s\bar{a}dur^{\varepsilon/}$ "young woman" is "nulliparous", with former $a|b^a$ agreement: cf Mooré $p\grave{o}g$ - $s\acute{a}d\grave{a}$ "young woman." Languages without glottalisation treat $r^{\varepsilon}|a^+$ class cognates of CV'V-stems exactly like CVV- stems (Mooré $p\~oya$, Kusaal $p\grave{o}\breve{n}da^+$ "cripples"), but the rules for originally unglottalised stems before pl a^+ also differ among Western Oti-Volta subgroups.

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

	<i>15</i> +	"tie"	l5dιg ^{ε/}	"untie"
cf	lóe	"tie" (Mooré)	lódgè (or lókè)	"untie" (Mooré)
	pū ⁺	"divide"	pῦdιg ^{ε/}	"divide"
cf	púi	"divide" (Mooré)		
	bòι	"get lost" (Toende)	bòdιg ^ε	"lose, get lost":
	yāar ^{ε/}	"scatter"	yādıg ^{ɛ/}	"scatter"

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

	<i>k</i> ∂ ⁺	"break" intrans	kὸ'ɔg ^ε	"break" trans/intrans
	pòɔd ^a	"be few"	pὸ'ɔg ^ε	"diminish"
	vū́ea/	"be alive"	νō'υg ^{ε/}	"make, come alive"
cf	vɔpa	"live things" (Farefare)	νῡ'υs ^{ε/}	"breathe, rest"
	kὸɔlúŋ ^ɔ	"broken"	kὸ'ɔs ^ε	"break several times"
	tòň+	"shoot"	tòň'ɔs ^ε	"hunt"

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

	nō+	"tread"	nōbá ⁺	"feet"
cf	nao	"tread" (Mooré)		
	รวิวทัr ^ะ	"liver"	sɔbri	"liver" (Mampruli)
	sãoore	"liver" (Mooré)	sabili	"liver" (Dagbani)

There are few CVb- stems in the $r^{\varepsilon}|a^{+}$ noun class. $N5bir^{\varepsilon}$ "foot" has introduced -b- from the plural (Toende sg n5'5t) and $t\dot{v}bvr^{\varepsilon}$ "ear" may have done so; others are deverbal or adjectival: cf the discussion of $CV'V\sim CVd$ alternations above.

CVV~CVg alternations appear in:

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

5.3.2 *CVVC~CVC*

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

tūυma ⁺	"work" noun	tùm ^m	"work" verb
yέoŋ	"one"	yīun ^{ɔ/}	"single"
kāal ^{ε/}	"count"	kāl ^{lε/}	"number"
tūvlúg ^o	"hot"	tūl ^{la/}	"be hot"

The short allomorph is invariable before derivational suffixes other than - $l\iota m$ -"-ness/-hood" and the -y- of stative verbs; thus $s\acute{a}ann\grave{\iota} m^m$ "strangerhood" \leftarrow * $saanl\iota mmv$, $kp\ddot{\iota}$ ' $\ni m^{ma/}$ "be strong" \leftarrow * $kp\dot{\iota}$ ' $\ni mya$, but

màal ^ɛ	"sacrifice" (verb)	mālvŋ ^ว	"sacrifice" (noun)
pìəlıg ^a	"white"	pὲlιg ^ε	"whiten"
kpī'oŋ ^ɔ	"strong"	kpὲ'ŋ ^ε	"strengthen"
lìəb ^ε	"become"	lὲbιg ^ε	"turn over"
tūυlύg ^ɔ	"hot"	tῦlιg ^{ε/}	"heat"
yāar ^{ε/}	"scatter"	yādıg ^{ɛ/}	"scatter"
dēεŋ ^a	"first"	dὲŋ ^ε	"go first"
pìəb ^ε	"blow" (flute)	pὲbιs ^ε	"blow" (wind)
yùul ^ɛ	"swing" intransitive	yùlıg ^ɛ	"swing" transitive

Alternation appears in flexion in a few nouns:

zíiŋª (← *zīímgā)	zīmí+	zīm-	"fish"
náaf ^ɔ (← *nāágfū)	nīigí+	nā'- (← *nāg-)	"cow"
wáaf¹(← *wāágfō)	wīigí+	wā'- (← *wāg-)	"snake"
pīim ^{m/}	pīmá ⁺		"arrow"
yὺυm ^{mε}	yùma ⁺		"year"

5.4 Consonant cluster assimilation

The changes described below precede deletion of postvocalic *g.

Except between a prefix and a root, adjacent consonants within a word must either assimilate to one of the clusters *kk pp tt ŋŋ mm nn ll mn* or insert an epenthetic vowel (*i* by default.) Nasals take up the position of articulation of a following consonant, and then homorganic consonants form clusters; however, alveolars often fail to assimilate due to remodelling by analogy in flexion.

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

1↓ 2→	g	d	b	m	n	r	s	1	f	У
g	kk	ә	ә	ә	Ф	Ә	ә	ə		Ә
d	Ð	tt	ə	ə		ə	ә			r
b	ə	ə	рр	[mm]	ð	ə	ə	ə		ə
m	ממ	mn	mm	mm		mn	[:̃s]	nn		mm
n	ממ	nn	mm	ə		nn	ĩs	nn	~f	nn
r	ə	ə	ə	ə		r	ə	tt	ə	
S	ə	ə	ə	ə		ə	ə			S
1	ə	nn	ə	ə		11	ə	11	ə	11

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

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

```
bm \rightarrow mm only occurs after a short root vowel ms \rightarrow is never occurs after a short root vowel; elsewhere it is optional.
```

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

tēŋ ^a	"land"	pl	tēεňs ^ε	← *tɛnsı
kỳlın ^a	"door"	la	kùlıs ^ε	← *kvlınsı

For the pl $b\bar{v}t\iota\iota s^{\epsilon}$ of $b\bar{v}t\iota \eta^{a}$ "cup" see 2.1.

* \mathbf{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:

$$n\bar{i}f^{0}$$
 "eye" pl $n\bar{i}n(\hat{i}+\hat{i})$ "genet" pl $p\bar{i}(in(\hat{i}+\hat{i}))$

***ss** inserts an epenthetic vowel in the plural $p\bar{u}sis^{\epsilon}$ of $p\bar{u}sig^{a}$ "tamarind." All other examples of $g^a|s^{\epsilon}$ plurals ending in -sis^{\epsilon} in my materials are for *-sinsi, from stems in *m. A plural * $p\bar{u}s^{\epsilon}$ would have appeared to show no ending in SF; substituting a flexion from a different noun class would be inhibited by the strong association of tree names with the $g^a|s^{\epsilon}$ class and of fruits with $r^{\epsilon}|a^+$ and $g^0|d^{\epsilon}$.

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

Derivation precedes flexion in consonant cluster formation.

Regardless of origin, stem-final kk pp tt $\eta\eta$ mn nn never assimilate further; stem-final mm assimilates only with $mmm \rightarrow mm$ in imperatives $\underline{10.1}$. Thus e.g. $k\bar{\jmath}t^{\epsilon l}$ "slaughter", ipfv $k\bar{\jmath}t(d^a; dam^m$ "shake", ipfv $damm\iota d^a$ ipfv, gerund $damm\iota g^{\jmath}$ but imperative dam^{ma} .

However, stem-final || r(r)| assimilate the initial of the noun class suffix $-r^{\varepsilon}$: $k \dot{v} g$ - $d \bar{\varepsilon} l^{|\varepsilon|}$ "chair for leaning on." This assimilation has led to the sg SF forms of agent nouns from single-aspect verbs in || r(r)| being reinterpreted as $r^{\varepsilon} |a^{+}|$ class <u>8.3.1</u>.

Stem-internal nn and mm become single n and m after after epenthetic vowels and long root vowels. $P\bar{\imath}b\imath n^{n\epsilon}$ pl $p\bar{\imath}b\imath n^{a}$ "covering" has single -n- for my informants, but the Mooré cognate has -nd-: $p\grave{\imath}b\imath ndg\grave{a}$ "lid, cover." The Mooré equivalent of the assume-stance derivational suffix -n- 12.1.1 is -nd-: $z\check{\imath}ndi=z\grave{\imath}n\check{m}$ "sit down"; $v\acute{a}bende=v\grave{a}b\imath n^{\epsilon}$ "lie prone"; $t\grave{a}bende$ "get stuck to" of Kusaal $t\grave{a}b^{\epsilon}id$. The corresponding Nawdm suffix is -nt-: jehra ipfv $=z\grave{\imath}'e^{ya}$ "be standing, jehnt pfv $=z\grave{\imath}'an^{\epsilon}$ "stand up." Geminate mm has become single m in most sources after after epenthetic vowels and long root vowels in single-aspect verbs 12.1.5.1.

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

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

bùn ^ɛ	bùn ^{na}	bùnım ^a	"reap"
bนิทเb ^ว			gerund
dìgın ^ε	dìgınıd ^a	dìgınım ^a	"lie down"
dìgınvg ^ɔ			gerund
gὸ'ɔn ^ε	gà'ɔnɪd ^a	gà'ɔnım ^a	"extend neck"

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:

```
w\dot{v}m^{\mathsf{m}} w\dot{v}m^{\mathsf{ma}} "hear"
```

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

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

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

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

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

tōɔm ^{m/}	tɔ́ɔm ^{ma} /tɔ̄ɔmída	tàɔm ^{ma}	"depart"
tɔʻɔŋɔ'/tɔ̄ɔmʊ́gɔ			gerund
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"
kàrvŋ³/kàrımvg³			gerund

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

```
M pō kárìmmā."I'm not reading."M kárìm nē."I'm reading."Kà bà kárımìd."And they were reading."Kà bà kárìm.only "And they read."
```

Examples for assimilation versus epenthetic vowel insertion:

*gg → kk	gìk ^a	"dumb" sg	<i>gìgιs</i> ε pl
(cf <i>kɔ̃lɪg</i> a	"river" sg	<i>kɔ̄lιs</i> ε pl
$*dd \rightarrow tt$	bùt ^a	"plant" ipfv	<i>bὺd</i> ε pfv
(cf <i>dūgvd</i> a/	"cook" ipfv	<i>dōg</i> ε pfv
*bb → pp	sōp ^{⊃/}	"writing" ger	<i>s5̄b</i> ε pfv
(ef <i>kpārīb</i> o	"locking" ger	<i>kpàr</i> ε pfv
*ld → nn	kòn ^{nε}	"bags" pl	<i>kὸlυg</i> ͻ sg
(cf <i>zūebíd</i> ²	"hairs" pl	<i>zūebύg</i> ⊃ sg
*mg → ŋŋ	bùŋ ^a	"donkey" sg	<i>bὺmιs</i> ε pl
*ng → ŋŋ	gbàun ^o	"book" sg	<i>gbàna</i> + pl
(cf ňwādıg^{a/}	"month" sg	<i>ňwādιs</i> ε/ pl
*nr → nn	tān ^{nε}	"earth" sg	<i>tāna</i> + pl

```
*mr → mn
                   dūm<sup>nε</sup>
                                       "knee" sq
                                                                     dūma<sup>+</sup> pl
                   gέl<sup>lε</sup>
                                       "egg" sg
*/r → //
                                                                     g\bar{\epsilon}l\acute{a}^+ pl
                                       "palm fruit" sg
*rr \rightarrow r
                   kùkpàr<sup>ɛ</sup>
                                                                     kùkpàra<sup>+</sup> pl
               cf dìaır<sup>€</sup>
                                       "dwarf" sq
                                                                     dìga<sup>+</sup> pl
*nb → mm sáam<sup>ma</sup>
                                       "strangers" pl
                                                                     sāan<sup>a/</sup> sg
               cf nīdiba/
                                                                     nīd<sup>a/</sup> sg
                                       "people" pl
*mb \rightarrow mm \ k\bar{\iota}m^{mo}
                                       "shepherding" ger kìm<sup>m</sup> pfv
              cf kādıb<sup>o</sup>
                                       "driving off" ger
                                                                     kàdε pfv
                   Βùl<sup>lε</sup>
                                       "Buli"
*// → //
                                                                     Bùlıs<sup>ɛ</sup>
                                                                                         "Bulsa"
*rl \rightarrow tt
                   Bāt<sup>ε/</sup>
                                                                     Bārıs<sup>€/</sup>
                                       "Bisa language"
                                                                                         "Bisa people"
                                       "Dagbani"
                                                                                         "Dagomba"
*ml → nn
                   Dàgbān<sup>nε/</sup>
                                                                     Dàgbām<sup>ma/</sup>
                   Gōrín<sup>ne</sup>
                                                                     Gūrís<sup>ε</sup>
*nl → nn
                                       "Farefare
                                                                                         "Farefare people"
                                         language"
```

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

The changes described below apply after consonant-cluster assimilation/epenthetic-vowel insertion and before deletion of *g after vowels.

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

SF	νū́e	LF	νūyá	"be alive"
SF	tōe	LF	tōyá	"be bitter"
SF	sāeň	LF	sāňya	"blacksmith"
SF	sōeň	LF	sōňya	"witch"

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

Before LF y, long vowels undergo fronting of a back second mora to e [1]:

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

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

```
gbaun^{\circ}\leftarrow *gbannv"book"pl\ gbana^+l\bar{a}uk^{\circ}\leftarrow *lakkv"goods item"pl\ l\bar{a}'ad^{\epsilon}y\bar{\iota}un^{\circ l}\leftarrow *y\iota\eta\eta\upsilon"single"pl\ y\bar{\iota}n\acute{a}^+
```

Tense *i* does not diphthongise in the only case in my materials: $nin-gb\bar{i}\eta^{3/}$ "body" pl $nin-gb\bar{i}n\acute{a}^+$; this may be due to the analogy of the alternative sg $nin-gb\bar{i}n$.

Short ja becomes jau, but short ua becomes ⊃: *uakkv → ɔkkv

```
bjaunk^{3} ← *bjakkv "shoulder" pl bjan'ad^{\epsilon}

bjk^{3} ← *bjakkv "pit" pl bv'ad^{\epsilon}
```

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

```
d\grave{a}\upsilon g^{2} \leftarrow *daag\upsilon "log" pl d\grave{a}ad^{\epsilon} f\bar{\epsilon}\check{n}^{\dagger}\circ g^{2} \leftarrow *f\tilde{\epsilon}^{\dagger}\check{\epsilon}g\upsilon "ulcer" pl f\bar{\epsilon}\check{n}^{\dagger}\epsilon d^{\epsilon}
```

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

```
v\bar{\imath}ug^{5/} \leftarrow *viigv "owl" pl v\bar{\imath}id^{\epsilon/} but d\dot{a}b\bar{\imath}og^{5} \leftarrow *dabi\partial gv "coward" pl d\dot{a}b\bar{\imath}\partial d^{\epsilon} kp\bar{\imath}'og^{5} \leftarrow *kpi'\partial \eta y "strong" pl kp\bar{\imath}'\partial ma^{+}
```

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

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

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

```
b\bar{r}'a^+ b\bar{r}'\partial s^{\epsilon} b\dot{g}'a'- "bad" b\dot{\epsilon}'og^{\circ} b\dot{\epsilon}'\epsilon d^{\epsilon} b\dot{\epsilon}'-
```

 $B\bar{l} \rightarrow m^m$ "enemy" shows the same root with derivational *m. The alternation suggests a rule * $i \rightarrow \epsilon \nu g \nu$, parallel to * $u \rightarrow \nu g \nu$, with the pl vowels again remodelled on the sg. The broken vowel of $dab\bar{l} o g^{\sigma}$ "coward" is perhaps carried over from an obsolete * $dab\bar{l} \rightarrow m^m$ "coward" (= Mooré $rab \epsilon mail$)

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

```
ar{a}aar{n}dig^a \leftarrow *ar{a}adiga "black plum tree"

but g\grave{a}advg^{\circ} \leftarrow *gaadigv "(sur)passing" (gerund)

pl mar{a}lima^+ \leftarrow *malimaa "sacrifices"

but mar{a}lv\eta^{\circ} \leftarrow *mali\eta\eta v "sacrifice"
```

5.6 Deletion of *g with vowel fusion

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

Underlying *g is deleted after a ia wa an ian wan before any vowel, affix or epenthetic, with fusion resulting in glottalised long vowels and diphthongs:

```
*agV \rightarrow a'a *aňgV \rightarrow aň'a

*iagV \rightarrow ia'a *iaňgV \rightarrow iaň'a

*yagV \rightarrow v'a (word-final y'aa) *yaňgV \rightarrow vň'a (word-final yň'aa)
```

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

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

	pįāň' ^a	"speak" pfv	pįāň'ad ^{a/}	ipfv	
	pu̞'āa	"woman"	pū'ab ^a	pl	(^a b ^a class)
but	zàk ^a	"compound"	zà'as ^ε	pl	$(g^{a} s^{\epsilon} \text{ class})$
	lāuk ^o	"item of goods"	lā'ad [€]	pl	$(g^{\circ} d^{\varepsilon} \text{ class})$
	pįàuňk ^o	"word"	pi̯àňˈad ^ɛ	pl	$(g^{3} d^{\varepsilon} \text{ class})$
	pųāk ^a	"female" (adj)	pῦ'as ^ε	pl	$(g^a s^\epsilon \text{ class})$
	bàk ^o	"pit"	bὺ'ad ^ε	pl	$(g^{\circ} d^{\varepsilon} \text{ class})$

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

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

```
*aaga\rightarrow aa \overline{7.1}*aagı\rightarrow aee*iəga\rightarrow iaa*iəgı\rightarrow iee*uoga\rightarrow uaa*uogı\rightarrow uee
```

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

```
"goat"
                                                                  pl būυsε
       būυga
but
       bāa=
                      ← *baaga
                                                   "dog"
                                                                  pl bāas<sup>€</sup>
       sīa+
                      ← *siəga
                                                                  pl sīəsε
                                                   "waist"
       sàbùa+
                      ← *sabuega
                                                   "lover"
                                                                  pl sàbùes<sup>ε</sup>
```

The diphthongs aee iee uee appear in dual-aspect "fusion" verbs $\underline{10.1}$ with stems in *Caag *Ciag *Cuag and their glottalised counterparts:

```
p\bar{a}e^{+/} \leftarrow *paagı "reach" 

kpi'e^+ \leftarrow *kpi'əgı "approach" cf kpi'əs<sup>ɛ</sup> "neighbours" 

d\bar{u}e^{+/} \leftarrow *duəgı "raise, rise"
```

Original open nasalised ${}^*\tilde{\epsilon}\tilde{\epsilon}$ ${}^*\tilde{5}\tilde{5}$ only undergo vowel breaking 3.2 before *g , elsewhere falling together with the reflexes of former close ${}^*\tilde{e}\tilde{e}$ ${}^*\tilde{o}\tilde{o}$ as ${}^*\tilde{\epsilon}\tilde{n}$ ${}^*\tilde{b}\tilde{n}$: breaking occurs in all contexts where *g would suffer deletion and nowhere else.

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

zìň'a ⁺	"red" $g^a s^\epsilon$ class sg	zὲň'ɛs ^ɛ	"red" g ^a s ^ε class pl
		zὲň'og ^ɔ	"red" $g^{\scriptscriptstyle D} d^{\scriptscriptstyle E}$ class sg 5.5
dùaň+	"dawadawa" sg	dòɔňs ^ε	"dawadawa" pl
Mùa ⁺	"Mossi person"	Mὸɔsε	"Mossi people"
		Мэ̀эg ^э	"Mossi country"
nìe ⁺	"appear"	nèɛl ^ɛ	"reveal"
йуū'е ^{+/}	"set alight"	ทั <i>yว</i> ิ'วร ^{ɛ/}	"smoke" (noun)
sūeň ^{+/}	"anoint"	sōň+	"rub"
sūň'e ^{+/}	"become better" WK	sɔ̃n̆'e ^{ya/}	"be better than" (← *sɔ̃'ɔ̃ya)

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

```
n\acute{a}f^{O} \leftarrow *naagfv "cow" pl n\bar{\imath}ig\acute{\iota}^{+} cb n\bar{a}^{-} d\acute{\iota}^{-}e^{+} "receive" \leftarrow *d\bar{\imath}^{-}eg\acute{\iota} "receiving" (d\bar{\imath}^{-}e^{+}) "receive" \leftarrow *d\bar{\imath}^{-}eg\acute{\iota}
```

However, broken *iǝň uǝň* appear instead of εεň ɔɔň:

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

6 Word tonal structure

6.1 Tone Patterns

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

Pattern H initial H or MH

Pattern L all-L (but with non-initial H in longer *m*-stems)

Pattern A (for "alternating")

nominals: all-M in sg/pl all-L in cb

verbs: all-M in irrealis all-L in other moods

Any tonemes after H are L.

Allocation precedes apocope and all synchronic rules which delete segments. Later loss of segments may result in unexpected distributions of tonemes <u>6.2.1</u>.

Superlight syllables $\underline{2.1}$ are toneless. If a superlight LF syllable becomes closed in the SF, it must acquire a toneme: this is M after a preceding M syllable, and L otherwise, e.g. LF $k\bar{u}gvr\dot{\epsilon}$ SF $k\bar{u}gvr$ (i.e. $k\bar{u}g\bar{v}r$) "stone", LF $n\dot{\delta}bir\dot{\epsilon}$ SF $n\dot{\delta}bir$ "foot."

A single flexional paradigm only shows more than one Tone Pattern in the case of agent nouns which drop derivational -d- in the sg and cb 6.2.3.

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

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

6.2 Nominals

For prefixes see <u>6.2.4</u>. They are ignored in counting stem syllables below. Examples will be given as sg, pl, cb <u>8.1</u>. Cbs are always affected by apocope. Quantifiers and adverbs have the same segmental and tonal structure as nouns and adjectives, though often with the addition of apocope-blocking <u>5.1</u>.

6.2.1 Pattern H

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

νūr ^{ε/}	νῦyá ⁺	vūr-	"alive"
yīr ^{ɛ/}	yā ^{+/}	yī-	"house"
fūug ^{ɔ/}	fūud ^{ε/}	fū-	"shirt, clothes"
dūk ^{ɔ/}	dūgυd ^{ε/}	dūg-	"cooking pot"
nīd ^{a/}	nīdıb ^{a/}	nīn-	"person"
kūgvr ^{ε/}	kūgá ⁺	kūg-	"stone"
gɔ̄t ^{a/}	<i>gōtíb</i> a /tt/	gōt-	"seer, prophet"
sābılíg ^a	sābılís ^ɛ	sābıl-	"black"
sābíl ^{lɛ}	sābılá ⁺		
yūgύm ^{mε}	yūgumá ⁺	yūgum-	"camel"
dī'əs ^{a/}	dī əsídìb ^a	dī'əs-	"receiver"
sūgvríd ^a	sūgvrídìb ^a	sūgvríd -	"forgiver, forbearer"
kū'alíŋ ^a	kū'alίs ^ε	kū'alíŋ-	traditional smock
<i>sú</i> ' <i>θŋ</i> a /ŋŋ/	sū'emís ^ε	sū'eŋ-	"rabbit"
sāan ^{a/}	sáam ^{ma}	sāan-	"stranger, guest"
sáannìm ^m			"strangerhood"

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

nūa+/	SF nūa	LF nūáa	"hen"
νӣm ^{m/}	SF <i>vōm</i>	LF vớmm	"life"
dāam ^{m/}	SF dāam	LF dáamm	"millet beer"

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

H may appear on a *superlight* syllable if it is preceded by r derived from *rr:

Many words have a long root vowel followed by a segment which has been deleted either by reduction of a consonant cluster to a single consonant 5.4 or by deletion of *g 5.6. The first syllable still behaves as superheavy and carries H:

```
(beside n\bar{i}im(s^{\epsilon})
níis<sup>ɛ</sup>
                 ← *niinsı
                                                                           "birds" (sg níina /nn/)
                                 (pl p\bar{\iota} \iota n i^+)
píιňf
                 ← *punfv
                                                                           "genet"
wáaf
                 ← *waagfv
                                 (pl w\bar{i}ig(t)
                                                                           "snake"
váab<sup>a</sup>
                 ← *yaagba
                                                                           "grandparent"
vúerε
                 ← *vuəarı
                                                                           "fruit of red kapok"
náar<sup>ε</sup>
                                 gerund of nāe+/
                                                                           "finishing"
                 ← *naagrı
dí¹ər<sup>ε</sup>
                                 gerund of dre+/
                 ← *di'əarı
                                                                           "getting"
                                 gerund of pūň'e+/
púň'er<sup>ε</sup>
                 ← *pɔ̃'ɔ̃grı
                                                                           "rotting"
```

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

nû'ug ^ɔ	nû'us ^ε	nū'-	"hand, arm"
à-gâvňg ^ɔ	à-gâaňd ^ɛ	à-gāň-	"pied crow"
gbĉɛňm ^m	no pl	gbēň-	"sleep"
nóbìr ^ɛ	nōbá+	nōb-	"foot, leg"
gél ^{le}	gēlá ⁺	gēl-	"egg"
kísùg ^o	kīsá ⁺	kīs-	"hateful, taboo" (adj)
áňsìb ^a	āňs-nám ^a	āňs-	"mother's brother"

So too the gerunds $s ilde{\sigma} ilde{n} ilde{s} ilde{g}^a$ "talking", $g ilde{\sigma} ilde{s} ilde{g}^a$ "looking", $k ilde{k} ilde{k} ilde{r} ilde{v} ilde{g}^o$ "hurrying."

The superheavy X syllables only occur in the SFs: corresponding LFs have open initial syllables with H: LF $n ilde{u} ilde{u} ilde{g}$ "hand", tonally identical to the LF $w ilde{a} ilde{a} ilde{f}$ "snake."

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

6.2.2 Pattern L

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

sὺ'υg ^a	<i>s</i> ὺ'υς ^ε	sὺ'-	"knife"
zàk ^a	zà'as ^ɛ	zà'-	"dwelling-compound"
mòlɪf ^ɔ	mὸlι+	mòl-	"gazelle"
pùgudıb ^a	pùgud-nàm ^a	pùgud-	"father's sister"
sàal ^a	sàalıb ^a	sàal-	"human"
nòŋıd ^a			"lover"
bɔ̀ɔdιm ^m	no pl		"will"
zòtım ^m	no pl		"fear"
dàalım ^m	no pl		"maleness"

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

	sàam ^{ma}	sàam-nàm ^a	sàam-	"father"
	mὲεŋ ^a	mὲεmιs ^ε	mὲεŋ -	"turtle"
	àทั <i>r</i> บŋ ^ɔ	àňrıma+	àňrvŋ-	"boat"
	kàrvŋ³/kàrımvg³			"reading" (gerund)
	yàluŋ ^ɔ	yàlıma ⁺	yàluŋ-	"wide"
	zìlım ^{mɛ}	zìlıma+	zìlım-	"tongue"
But	sìilíŋ ^a	sìilímìs ^ɛ	sìilíŋ-	"proverb"
		sìilís ^E		
		sìilímà ⁺		
	zàaňsúŋ ^ɔ	zàaňsímà ⁺	zàaňsúŋ-	"dream"
	nàŋılím ^m		nàŋılím-	"love"
	sờŋɪdím-tāa ⁼			"co-helper" <u>12.2.1.4</u>
	dàalím ^m	dàalímìs ^ɛ	dàalím-	"male sex organs"
	bì'isím ^m			"milk"

Tonally exceptional, with H after a light root syllable, is

bùgύm^m no pl bùgύm- or bùgῦm- "fire"

 $T\grave{a}dim(s^{\epsilon}$ "weakness", $b\grave{u}dim(s^{\epsilon}$ "confusion" may derive from *-mimsi.

6.2.3 Pattern A

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

būυg ^a	būυs ^ε	bù-	"goat"
tān ^{nε}	tāna+	tàn-	"earth"
sīd ^a	sīdıb ^a	sìd-	"husband"
pu̞'āa	pū'ab ^a	pu̯'à-	"woman, wife"
sā'ab ^ɔ	no pl	sà'-	"millet porridge"
gbīgιm ^{nε}	gbīgıma+	gbìgım-	"lion"
йwāaŋ ^a	ňwāamιs ^ε	ňwàaŋ-	"monkey"
mēεd ^a	mēεdιb ^a	mὲεd-	"builder"
sįākıd ^a	si̯ākıdıb ^a	sjàkıd-	"believer"
būtıŋ ^a	būtus ^ε	bùtıŋ-	"cup"
mēεdιŋ ^a	mēεdιs ^ε	mὲεdιŋ -	"building tool"

When derived from Pattern A verbs, agent nouns which have -d- only in the plural have Pattern L sg and Pattern A pl (the cb is in any case all-L) <u>6.5</u>:

ρὺ'υs ^a	pū'vsıdıb ^a	ρὺ'υs -	"worshipper"
--------------------	------------------------	----------------	--------------

Pattern A all-M LFs become all-L before the interrogative clitics <u>7.4.1</u>. Certain Pattern A words show **LF-final H** instead of the expected M toneme before the negative prosodic clitic, but not before liaison words. For WK this occurs when the LF has more than two syllables and does not end in a long vowel or -a, and also with disyllabic LFs ending in -mmV or -mm:

yūgυdιr ^{ε/}	yūgvda ⁺	yùgvd-	"hedgehog"
йwāaŋ ^a	ňwāamιs ^{ε/}	йwàaŋ-	"monkey"
bลิทูเd ^a	bāŋıdıb ^{a/}	bàŋɪd-	"wise man"
kpārıdıŋ ^a	kpārιdιs ^{ε/}	kpàrıdıŋ-	"thing for locking"
gbīgιm ^{mε/}	gbīgıma+	gbìgım-	"lion"
zɔ̄ɔm ^{mε/}	zōɔma+	zòɔm-	"fugitive"
tādım ^{m/}	tādımıs ^{ε/}	tàdım-	"weak person"

Some speakers allow this H optionally before the interrogative prosodic clitics:

```
Lì à nē gbīgımmée? "Is it a lion?" WK only; rejected by DK
Lì à nē gbígìmmee? "Is it a lion?" both WK and DK
```

6.2.4 Prefixes

Noun prefixes $\underline{13}$ are tonally L or M. L noun prefixes do not affect the rest of the tone pattern; M prefixes only affect cbs, which always have H/X after the prefix:

Н	dàyūug ^{ɔ/}	dàyūud ^{ε/}	dàyū-	"rat"
Н	Bùsáŋ ^a	Bùsâaňs ^ɛ	Bùsāŋ-	"Bisa person"
L	kùkpàrıg ^a	kùkpàrıs ^ε	kùkpàr-	"palm tree"
A	dàkīig ^a	dàkīis ^ε	dàkì-	"sib-in-law via wife"
Н	zīnzāuŋɔ/	zīnzāná+	zīnzáun-	"bat"
Η	Ňwāmpūrıg ^{a/}	Ňwāmpūrıs ^{ɛ/}	Ňwāmpúr-	"Mamprussi person"
H H	Ňwāmpūrıg ^{al} gūmpūzēr ^{ɛl}	Ňwāmpūrıs ^{ɛ/} gūmpūzēyá ⁺	Ňwāmpúr- gūmpūzér-	"Mamprussi person" "duck"
		•	•	
Н	gūmpūzēr ^{ε/}	gūmpūzēyá ⁺	gūmpūzέr-	"duck"
H H	gūmpūzēr ^{ε/} pīpīrιg ^{a/}	gūmpūzēyá ⁺ pīpīrιs ^{ε/}	gūmpūzér- pīpír-	"duck" "desert"

Cbs from CV-stems sometimes behave tonally like prefixes:

Η	pūkpāad ^{a/}	pūkpāadíb ^a	pūkpá-	"farmer" <u>13.1.4</u>
A	zūg-kūgυr ^{ε/}	zūg-kūga+	zūg-kúg-	"pillow" <u>8.2</u>
A	kā-wēnnιr ^{ε/}	kā-wēnna+	kā-wέn-	"corn"

6.3 Verbs

Verbs show just two Tone Patterns, H and A. Patterns L and A have fallen together, probably through the regular falling together of the patterns in most perfectives (which resemble nominal cbs tonally) and by the development of imperfectives from *derived* stems <u>6.5</u>. On top of this there has been extensive tonal levelling, extending also to the great majority of gerunds.

Dual-aspect verbs have three finite forms $\underline{10.1}$ but the $-m^a$ imperative is found only with tone overlay $\underline{19.6.1.1}$. Perfective and imperfective will be cited below, in that order. Single-aspect verbs have just one finite form, which is imperfective.

6.3.1 Pattern H

As in nominals, Pattern H 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 in accordance with the usual rule. However, they show final H before liaison-word pronouns:

```
\grave{O} p\bar{v} d\bar{v}g\varepsilon. "She didn't cook." \grave{O} p\bar{v} d\acute{v}g\dot{\varepsilon}\varepsilon? "Didn't she cook?" \check{K}\grave{a} \grave{o} d\bar{v}g\acute{v} l\bar{v} "And she cooked it."
```

Examples for Pattern H:

ňyē̄ ⁺	ňyē̄t ^{a/}	"see"
kū ⁺	kūνd ^{a/}	"kill"
dūg ^ε	dūgvd ^{a/}	"cook"
kūl ^ε	kūn ^{na/}	"go home"
yādıg ^{ɛ/}	yādıgíd ^a	"scatter"
mɔ̄ɔl ^{ε/}	mວ່ວກ ^{na}	"proclaim"
dīgıl ^{ɛ/}	dīgín ^{na}	"lay down"
<i>nōk^{ε/} /</i> kk/	nōkíd ^a /kk/	"take"
<i>lāŋím</i> m /ŋŋ/	<i>lāŋím^{ma} /</i> ŋŋ/	"wander searching"
	νō̃e̞ ^{a/}	"be alive"
	dīgι ^{ya/}	"be lying down"
	tr'i ^{ya/}	"be leaning" (objects)
	zāňl ^{la/}	"be holding"

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

```
t\bar{\jmath}_{2}m^{m/} SF t\bar{\jmath}_{2}m LF t\acute{\jmath}_{2}mm "disappear" p\bar{a}e^{+/} SF p\bar{a}e LF p\bar{a}\acute{e}e "reach"
```

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

```
p\bar{a}e^{+/} p\bar{a}ad^{a/} "reach" d\bar{r}e^{+/} d\bar{r} \partial d^{a/} "get" p\bar{u}\check{n}'e^{+/} p\bar{u}\check{n}'e^{d^{a/}} "rot" WK
```

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

6.3.2 Pattern A

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

bὺd ^ε	bùt ^a	"plant"
dì+	dìt ^a	"eat"
mὲ ⁺	mὲεd ^a	"build"
zàb ^ε	zàbıd ^a	"fight, hurt"
bùel ^ɛ	bùen ^{na}	"call"
bòdιg ^ε	bòdıgıd ^a	"get lost, lose"
nìŋ ^ε	nìŋıd ^a	"do"
màal ^ɛ	màan ^{na}	"sacrifice"
dìgın ^ε	dìgınıd ^a	"lie down"
wàŋım ^m	wàŋɪm ^{ma}	"waste away"
sìilım ^m	sìilım ^{ma}	"cite proverbs"
zàaňsım ^m	zàaňsım ^{ma}	"dream"
	tàbı ^{ya}	"be stuck to"
	vèn ^{na}	"be beautiful"

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

Ò nà bɔ̄dɪg.	"He'll get lost."
Ò nà vēn.	"She'll be beautiful."
Ò kὺ zābε.	"She won't fight."
Ò kὺ bɔ̄dιgε.	"He won't get lost."
Ò nà bὸdιgεε?	"Will she get lost?" <u>7.1</u>
Ò kù bɔ̃dıgıda.	"She won't be getting lost."
Ò kờ būenna.	"She won't be calling."
Ò nà bɔ̄dɪgɪ m.	"He will lose me."
Ò kù bɔ̄dıgı má.	"He will not lose me."
Ò kừ bɔ̄dɪgɪdɪ má.	"He won't be losing me."
Ò kừ zābıdı-nέ.	"He wouldn't have been fighting."
Ò kù sīilımm.	"She won't cite proverbs" WK
Ò nà zāb nâ'ab lā.	"He'll fight the chief."

The LF before the bound pronoun $^{\rm o}$ can show M or H (all WK):

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

6.4 Particles

Particles with the segmental structure of nouns have similar tonal structures. For the tonemes of bound liaison words see 7.4.2. Left-bound particles with SF CV which are not liaison words carry M or L; M changes to H in the LF CVV. Tonally unique is independent-perfective $y\bar{a}^+$ 19.6.2.1, which remains M before the negative prosodic clitic and becomes L before the interrogative clitics 7.1:

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

6.5 Tone in derivation

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

It is exceptional for forms derived from H roots to show L or A Patterns, or vice versa, but this does occur regularly in derivation of assume-stance verbs $\underline{12.1.1}$. $G\bar{\imath}\eta\iota l(m^m$ "shortness", from the Pattern A adjective $g\bar{\imath}\eta^a$ "short", possibly represents a five-mora-stem Pattern A toneme allocation (but of $g\bar{\imath}in\bar{\imath}l(m^m)id$.)

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

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

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

When added to L or A roots the derivational suffixes $b \ g \ l \ s$ always produce Pattern L nominals, while $d \ m$ may produce either Pattern L or Pattern A. The suffix n may produce Pattern A when it is derived from * $nd \ *ld \ 5.4$.

All segmentally 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

 $d\bar{v}a^{\epsilon}$ "cook" dūgvb⁵/ n5kε/ nōkírε "take" dīaıl^{ε/} dīgılúg^o "lay down" mὲ⁺ "build" mēεb^o sùη^ε "help" sὺηιr^ε dìgin^ε "lie down" dìginug^o zàaňsım^m "dream" zàaňsún^o \rightarrow

The assignment of 3- and 4-mora Pattern A verb gerunds to Pattern L is natural, as the great majority have a suffix which in nominals only derives Pattern L.

Imperfective gerunds formed with *d from Pattern A verbs are Pattern L: $b \dot{D} \dot{D} d \iota m^{m}$ "will", $m \dot{\epsilon} \epsilon d (m - t \bar{a} a)^{=}$ "fellow-builder." This Pattern-L-deriving *d is probably historically identifiable with the d preceding the original ipfv -a in the imperfective of dual-aspect verbs; extensive levelling has now resulted in -da behaving as a single flexional suffix. This accounts for the fact that original Pattern L and A dynamic imperfectives have merged, and that they show behaviour resembling nominal Pattern L, with no change to all-M despite the fact that they are followed by M spreading and show final M tonemes before liaison.

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

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

from Pattern H verbs

from Pattern A verbs

containing derivational -dotherwise

Pattern A
Pattern L

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

7 External sandhi

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

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

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

7.1 Prosodic clitics

Prosodic clitics² cause a preceding word to appear as a Long Form, completely suppressing apocope. All four cause lowering of short LF-final ι υ to ε \supset respectively, which are realised slightly closer in this case than as root vowels.

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

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

	sīa ⁺	"waist"	SF <i>sīa</i>	LF sīaa	← *siəga
but	dà'a ⁼ bāa ⁼	"market" "dog"	SF dà'a SF bāa	LF dà'a LF bāa	← *da'aga ← *baaga
	kύ·o=	"kill him" ←	kῡ+ "kill" +	° "him/her"	SF/LF [kʊ:]

²⁾ The concept of prosodic "clitics" is also useful for describing complex clause structures. Mooré has the clause-final particle *yé* after negative VPs, and segmental vocative and interrogative clitics are also common in West Africa. For clitic-like elements cross-linguistically which lack segmental form see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent."

The **negative prosodic clitic** appears at the end of a clause containing a negated or negative verb <u>19.5</u>. Superscript notation represents LFs as they appear before the negative prosodic clitic segmentally, with lowering of short final to $\iota \ \nu$ to ϵ ι :

```
Lì à nĒ nóbìr.
                                    "It's a leq."
3IN COP FOC leg:sg.
                                    "It's not a leq."
Lì kā'
          nóbιrē +ø.
3IN NEG.BE leg:sg NEG.
Lì à nĒ dōk.
                                    "It's a cooking pot."
3IN COP FOC pot:SG.
Lì kā'
          d\bar{\nu}k\acute{\sigma}^{+}ø.
                                    "It's not a pot."
3IN NEG.BE pot:SG NEG.
Long final u vv are not lowered:
Bà à nĒ mɔ́lì.
                                    "They are gazelles."
3PL COP FOC gazelle:PL.
Bà kā'
           mźlīt
                      +ø.
                                    "They are not gazelles."
```

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

```
M bīisε +ø! "My children!"

1SG child:PL VOC!

Pu'aa, bɔ ka fv kaasida?

Pu̯'āa +ø, bɔ́ kà fv kāasídà +ø?

Woman:sG voc, what and 2SG cry:IPFV co?

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

dau onε an yadda niŋida

dāu ɔ́nì àň yàddā-níŋìdā +ø

man:sG REL.SG COP faith-doer:sG voc

"You man, who are a believer!" (1 Cor 7:16)
```

3PL NEG.BE gazelle:PL NEG.

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

```
Lì à nē nóbìr.
                                     "It's a leg (n5bir^{\epsilon})."
3IN COP FOC leg:sg.
Ànó'onì ø ňyē nóbirè †ø?
                                     "Who saw a leg?"
           cat see leg:sg co?
Who
Lì à n\bar{\epsilon} nóbirè\epsilon +\phi?
                                     "Is it a leg?"
зім сор ғос lea:sg
Lì à nĒ kūk.
                                     "It's a chair (kūka)."
Ànó'ɔnì ňyē kύkà?
                                     "Who saw a chair?"
                                     "Is it a chair?"
Lì à nĒ kúkàa?
                                     "It's a lion (qb\bar{l}qlm^{n\epsilon})."
Lì à nĒ gbīgim.
Ànó'ənì ňyē gbígìmne?
                                     "Who saw a lion?"
                                     "Is it a lion?"
Lì à nē gbígìmnee?
Lì à nε dūk.
                                     "It's a cooking pot (d\bar{\nu}k^{5/})."
Ànó'ɔnì ňyē dūkó?
                                     "Who saw a pot?"
Lì à nē dūkóɔ?
                                     "Is it a pot?"
Ànó'onì ňyē mólì?
                                     "Who saw gazelles (m)(l^+)?"
                                     "Who saw a lot (b \dot{\epsilon} d v g \bar{v}^{+/})?"
Ànó'ənì ňyē bédugú?
```

7.1.1 Long Forms in clause adjuncts

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

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

Kìkīrig yá' mɔ̄r bōvdɛ, fōn tís·ò ø kà ò lɛ̀big ò mɔ̄ɔgv-n.

Fairy:sg if have innocence, 2sg.cntr give 3AN.OB and 3AN return 3AN grass:sg-Loc.

"When a fairy is right agree so that it will go back to the bush." KSS p38

(Give the devil his due.)
```

```
F\grave{v} n\acute{a} k\bar{u}l b\bar{\varepsilon}og. "You'll go home tomorrow." 2SG IRR go.home tomorrow.
```

but $B\bar{\epsilon}og\acute{o}$ $f\grave{v}$ $n\acute{a}$ $k\bar{u}l.$ "You're going home tomorrow." SB Tomorrow 2SG IRR go.home.

Forms displaying this feature cannot be used as VP or NP constituents. The LF form is like that seen before the negative prosodic clitic. In KB, all examples written $b\varepsilon og\upsilon$ precede liaison; clause adjuncts with a final vowel are always written $b\varepsilon og\upsilon$. Similarly, KB consistently shows final $-\upsilon$ in the apocope-blocked word $b\varepsilon deg\upsilon$ $b\dot{\varepsilon} d\upsilon g\bar{\upsilon}^{+/}$ "a lot", but just as consistently has final $-\upsilon$ in $b\upsilon zug\upsilon$ $b\bar{\upsilon}$ $z\acute{u}g\bar{\upsilon}$ "because", $dinzug\upsilon$ $d\grave{\iota}n$ $z\acute{u}g\bar{\upsilon}$ "therefore", $alazug\upsilon$ $alazug\upsilon$ $alazug\upsilon$ "therefore."

```
bɔzugɔ ba zi' onɛ tvmi m la naa. bɔ̄ zúgɔ̄, bà zī' ɔ́nì tvmi m lā náa ^+ø. because 3PL NEG.KNOW REL.AN send 1SG.OB ART hither NEG. "Because they do not know him who sent me here." (In 15:21)
```

7.2 Liaison

Liaison words prevent apocope applying to the preceding word, which retains its final affix vowel, but with loss of quality contrasts. This vowel is not epenthetic and occurs where epenthesis does not: contrast the gerund $d\bar{u}m^{m_0}$ from *dumbv "biting" with dumv $b\bar{a}$ "bite them." Words which have not undergone apocope, such as the clause linker particles $k\dot{a}$ and $y\bar{\epsilon}$, do not change before liaison.

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

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

Position 2 left-bound liaison words comprise the bound object personal pronouns $m^a f^{\circ o} l \iota^+ t \iota^+ y a^+ b a^+ 15.4.1$. They either attach directly to a verb word or after discontinuous-past n^{ε} or 2pl subject y^a . They are written as separate words, except with the 3sg animate pronoun, which is deleted by apocope.

Liaison words which are either right-bound or free comprise all the right-bound personal pronouns \dot{m} $\dot{f}\dot{v}$ \dot{o} $\dot{l}\dot{t}$ $\dot{t}\dot{v}$ \dot{a} $\dot{b}\dot{a}$, the personifier particle \dot{a}/\dot{n} 15.6, $\dot{a}n\dot{a}$ 'on^{ϵ} "who?" 15.4.4, nominaliser- \dot{n} 24, catenator-n 22.1, all words with the number prefixes \dot{a} $\dot{b}\dot{a}$ $\dot{b}\dot{v}$ 13.3, and all words with manner-adverb prefix \dot{a} 13.2. Liaison is not invariable before these words, except with with personal pronouns immediately preceded by a verb within the same verb phrase; older texts show liaison more widely.

```
Tì gòsí bà bīis. "We looked at their children." 1PL look.at 3PL child:PL. (Liaison before bà "their")
```

The basic liaison change is that when the preceding host word LF ends in a short vowel it becomes ι . For some speakers, this ι becomes υ after g preceded by a rounded root vowel. LF-final -mm behaves as -m ι ; -i ϑ -u ϑ remain as such, not becoming -i α -u α . If the host LF ends in an overlong vowel sequence it is reduced to long, and fronting diphthongs are simplified to monophthongs. The liaison words ${}^{\circ}$ y ${}^{\circ}$ y ${}^{\circ}$ y ${}^{\circ}$ y ${}^{\circ}$ and words beginning with the number prefix ${}^{\circ}$ subsequently cause new quality changes in the mora preceding liaison.

Examples:

```
kūka
                  "chair"
                                   + n^{\varepsilon} "at"
                                                                       kūkι-n<sup>ε/</sup>
d\bar{\nu}k^{2/}
                  "pot"
                                    + n^{\varepsilon} "at"
                                                                       dūkί-n<sup>ε</sup>
                                   + tı+ "us"
bòɔda
                  "want"
                                                                       bàadī tí+
"field"
                                    + n^{\varepsilon} "at"
                                                                       yàug<sup>o</sup>
                  "grave"
                                    + n^{\varepsilon} "at"
                                                                       vàυgū-n<sup>ε/</sup>
Bà bòɔdī m.
                                             "They love me."
                                            "They don't love me."
Bà pũ bósdĩ má.
tòm<sup>m</sup>
                  "send"
                                    + tı+ "us"
                                                                       tùmı tī+/
dāam<sup>m/</sup>
                  "beer"
                                    + n^{\varepsilon} "at"
                                                                       dāamí-n<sup>ε</sup>
                                                                       kù'emī-n<sup>ε/</sup>
kù'em<sup>m</sup>
                                    + n^{\varepsilon} "at"
                  "water"
                                            "And they saw me." (n y \bar{\epsilon}^+ "see")
Kà bà ňyέε m.
                                             "And they cut it." (kjà+ "cut")
Kà bà kíə lī.
                  "market"
                                   + n^{\epsilon} "at"
                                                                       dā'a-n<sup>ε/</sup>
dà'a=
pāe<sup>+/</sup>
                  "reach"
                                   + tı+ "us"
                                                                       páa tī+/
pīe<sup>+/</sup>
                  "wash"
                                   + tı+ "us"
                                                                       píə tī<sup>+/</sup>
                                                                       dúe tī+/
dūe<sup>+/</sup>
                  "raise"
                                    + tu+ "us"
```

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

$$s\bar{v}$$
'e^{ya/} "own" + $l\iota^+$ "it" \rightarrow $s\dot{v}$ ' v $l\bar{\iota}^{+/}$ $v\bar{v}e^{a/}$ "live" + n^{ε} dp \rightarrow $v\bar{v}v-n^{\varepsilon/}$

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

Nominaliser-n 24 combines with a preceding pronoun subject to produce a special set of pronouns 15.4.1, but for my informants it is segmental zero in all other contexts; its presence remains apparent in the change of pre-liaison M tonemes to H. Older texts frequently show n and/or liaison, but even texts which use n nearly always omit it after words with SFs ending in nasal consonants. In KB, n (without liaison) occurs mostly after foreign proper names.

All sources realise catenator-n 22.1 21.4.1 after pause as a syllabic nasal assimilated to the position of the following consonant. Elsewhere, WK has liaison before segmental zero:

```
Kà ò zóɔ ø kēŋ nā. "And he came running" And 3AN run CAT come hither.

Bōɔ ø lá +ø? "What's that?"

What CAT that co?
```

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

Realisations with neither n nor liaison also occur, particularly after "auxiliary" verbs. This is most frequent in NT/KB after words ending in -m -n -l or in vowels.

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

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

```
tvvm kane ka m tvmmi tisid Wina'am la.
tvvm-kànı kà m̀ tvmmī ø tísid Winà'am lā
work-rel.sg and 1sg work:ipfv cat give:ipfv God ART
"The work which I do for God" (Rom 15:17)
```

7.2.1 Vowel quality changes

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

```
Bà bòɔdī yá. "They love you."

Kà bà ňy\dot{\epsilon}ɛ yā. "And they saw you (pl)." (\check{n}y\bar{\epsilon}+ "see")

but Kà bà k\acute{\nu}e yā. [kvija] "And they killed you (pl)." (k\bar{\nu}+ "kill")

Kà bà k\acute{\nu}e yā. [kija] "And they cut you (pl)." (k\dot{\mu}+ "cut")
```

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

```
K\grave{a} b\grave{a} p\acute{a}a b\bar{a}.

"And they reached them." (p\bar{a}e^{+/} "reach")

but K\grave{a} b\grave{a} p\acute{a}e y\bar{a}.

"And they reached you (pl)."
```

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

```
Kà bà kîə f.
"And they cut you (sg)."
or Kà bà κῖο f.
Kà bà ἤyέε f.
or Kà bà ἤyέο f.
M gbáň'a f.
"I've grabbed you (sg)."
or M gbáň'υ f.
```

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

The 3sg animate object pronoun o [σ] "him/her" and the postposed 2pl subject pronoun ya , both of which lose their entire segmental form in their SFs, share the property that they completely override the vowel quality of the pre-liaison mora, creating **secondary diphthongs** 3.2.

The mora before o becomes $\cdot o$ 2.3 $[\sigma]$, always lax. In the LF this mora fuses with the $[\sigma]$ of the LF of the pronoun itself create a long vowel $[\sigma]$, written $\cdot o$ -o:

80 External sandhi 7.2.1

```
+ 0
                                              bàad·ó-o
bàoda
               "wants"
                                      \rightarrow
                                                             SF bàad·ō
tùmı
               "send"
                              + 0
                                              tùm·ó-o
                                                             SF tùm∙ō
                                      \rightarrow
               "cut"
kìa
                              + 0
                                              kì∙o-o
                                                             SF kì·o
                                      \rightarrow
                               + 0
                                              ἤνε̄∙ό-ο
                                                             SF ἤyέ·ο
ňγĒε
               "see"
Fù bóod ō ø.
                                      "You love her."
                                                                     [fʊbɔ:dʊ]
2SG want
              3AN.OB.
            bóod∙ó-o
Fù pū
                          +ø.
                                      "You don't love her."
                                                                     [fʊpʊbɔ:dʊ:]
2SG NEG.IND want-3AN.OB NEG.
                                      "You've seen her."
Fù ňyέ·ο Ø.
                                                                     [fʊj̃ɛ̃ʊ̃]
2SG see
             3AN.OB.
Εὺ ρῦ
            "You've not seen her."
                                                                     [f \sigma \rho \sigma \tilde{\epsilon} \tilde{\sigma}:]
2SG NEG.IND See-3AN.OB NEG.
zū+
               "steal"
                               + 0
                                              zú·o<sup>-0</sup>
                                                             SF [zuʊ]
                                                                            LF [zuʊ:]
                                      \rightarrow
                              + 0
dì+
               "eat"
                                              dì·o⁻0
                                                             SF [diʊ]
                                                                             LF [div:]
kià+
               "cut"
                               + 0
                                              kì∙o<sup>-0</sup>
                                                             SF [kiʊ]
                                                                             LF [kiσ:]
                                      \rightarrow
pāe+/
                                              pá·o<sup>-o</sup>
               "reach"
pīe+/
                                              pí·o⁻0
               "wash"
                               + 0
                                      \rightarrow
dūe+/
                              + 0
               "raise"
                                              dú·o⁻o
                                      "I am he." (Jn 18:5, 1976)
Mane a o.
                                      (àeňa "be")
Mānı ø áň o ø.
1SG.CNTR CAT COP
                    3AN.OB.
```

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

```
SF
         gàsımī_
                                                        "look ye!"
                                                                           Traditional: gosimi
LF
         gàsımī
                                                         21.3
                                                                           Traditional: gosimiya
                          yá
         kū+
                            "kill"
                                               + ya
                                                                 kūe<sup>-ya/</sup>
                                                                                    [kʊɪ]
                                                        \rightarrow
         kįà+
                                               + ya
                                                                 kīē<sup>-ya/</sup>
                            "cut"
                                                                                    [kiɪ]
                                                        \rightarrow
         pāe+/
                            "reach"
                                               + ya
                                                                 pāe-ya/
                                                        \rightarrow
         pīe+/
                                                                 pīe<sup>-ya/</sup>
                            "wash"
                                               + ya
                                                        \rightarrow
         dūe<sup>+/</sup>
                            "raise"
                                               + ya
                                                                 dūe<sup>-ya/</sup>
                                                        \rightarrow
                                                                  b̄ει-ya/
         bὲ<sup>+</sup>
                            "be"
                                               + ya
but
                                                        \rightarrow
                                                                                    [bɛɪ]
```

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

Before $\partial n\hat{j} n^{\epsilon}$ "who?", the manner-adverb prefix ∂ - and the personifier-particle allomorph ∂ - the LF-final vowel is ι , or ν after a velar preceded by a rounded vowel:

```
O nìn( àlá. "She did thus."

3AN do ADV:thus (contrast àlá "how many?" below)

yeli Abaa "said to Dog" KSS p20
yèli À-Bāa
say PERS-dog:SG
```

Fusion verbs $\underline{10.1}$ show forms in final e [I] in these cases, instead of the monophthongs aa $i \neq ue$ usual before another word in the VP $\underline{7.3}$:

```
... [n] loo Abaa zuur
                                     "... tying Dog's tail" <u>15.6</u> KSS p20
      ... n lóɔˌˌÀ-Bāa
                           zûur
      ...cat tie PERS-dog:sg tail:sg
      ka ba gban'e Adayuug
                                     "and they seized Rat" KSS p20
but
      kà bà gbáň'e_À-Dàyūug
      and 3PL seize
                       PERS-rat:sG
      However, àeňa "be something" always appears as àaň, not àeň.
                                      "And who are you?" (Jn 1:19)
      Ka fu aan anɔ'ɔnε?
      Kà fù áaň ànó'ənè +ø?
      And 2SG COP who
                           co?
      Before the number prefix a- the pre-liaison vowel is instead -a:
      M mór nε̄ bīisá àtáň'.
                                     "I have three children."
      1SG have FOC child:PL NUM:three.
      Pèedá àlá
                             +ø?
                                      "How many baskets?"
```

These rules are consistent in written materials. However, my informants contract $-\acute{a}$ \grave{a} - to \acute{a} - with the number prefix:

basket:PL NUM:how.many cq?

(contrast àlá "thus" above)

```
Nū'-bíbìs álá kà fù ňyētá +ø?
hand-small:PL NUM:how.many and 2SG see:IPFV CQ?
"How many fingers do you see?"
```

Elsewhere, my informants show liaison before à only between imperatives and àlá, where -í à- is contracted to either -á- or -í- depending on the speaker: gòsımí lá or gòsım álá "Keep on looking!"

WK and DK both always round the LF-final vowel before ò "his/her":

```
Bà gòsú ò bīig. "They've looked at her child." 
3PL look:at 3AN child:sg.
```

All written sources show -i (i.e. $-\iota$ [1]), presumably the original form.

The number prefix a- originated as * ηa - 13.3, and prefix-initial * η seems to have disappeared early throughout Western Oti-Volta. Sandhi effects may outlive the complete disappearance of a consonant, as with the French "H aspiré"; the personifier particle and the manner-adverb prefix probably began with consonants like y or w which, though now also deleted, were maintained long enough for consonant-initial sandhi to be preserved.

7.2.2 The pronoun ya before liaison

The pronoun y^a adopts the allomorph $-n\ell$ - before liaison. The pronoun was historically *pa, which regularly became $*y\tilde{a}$ with subsequent loss of emic nasalisation, as always with affix vowels. When the -a is deleted by apocope, y is also deleted. When followed by a liaison word, the vowel a was not deleted but became ℓ , before which p became p-. (Cf also p) "do" = Toende Kusaal ℓ , locative p0 " ℓ 0 " ℓ 0 Toende ℓ 1, ℓ 1 " appear" = Toende ℓ 2, ℓ 3 " body" = Mooré ℓ 3 " ℓ 1 " appear" = Toende ℓ 4 " ℓ 6 " ℓ 9 "

```
Dā
       d5llι yá
                                 "Follow ve not!"
                    +ø!
NEG.IMP follow 2PL.SUB NEG!
                                 "Receive ye!"
Dì'əmī
receive: IMP 2PL.SUB!
Dì'əmī-ní
                                 "Receive ye them!"
                  bā!
receive:IMP-2PL.SUB 3PL.OB
Dì'əmī-n∙ó
                  ø!
                                 "Receive ye her!"
receive:IMP-2PL.SUB 3AN.OB.
```

```
Biise, siakimini ya du'adib nɔya.

Bīise '#ø, si̯àkımī-ní yà dv̄'adıb nɔ́yà.

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

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

Dì'əmī-ní àlá! "Keep ye on receiving!"

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

7.3 Segmental contact

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

	bīis ňwá	"these children"	[bi:sa]
	zàam ňwá	"this evening"	[za:ma]
but	pu'ā ňwá	"this woman"	[pʊawã]

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

```
y\bar{l}r lā "the house" [jira] p\dot{v}\dot{k}\dot{j}\dot{j} "the widow" [pʊkɔ̃:ra]
```

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

Initial n of focus- $n\bar{\varepsilon}^{+/}$ often assimilates completely to a preceding word-final dt nr/m in normal rapid speech. Subsequently [r:] becomes [r] and [d:] becomes [d]:

Bà kpìid nē.	"They're dying."	[ba k̄pi:dε]
Μ̀ zót nē.	"I'm afraid."	[3:tcz m̩]
M̀ mór nε̄ bīisá àyí¹.	"I have two children with me."	[ji:sa:ji]
Lì pè'ɛl nē.	"It's full."	[lɪ pɛ̞:l:ɛ]
Lì sàň'am nē.	"It's spoilt."	[lɪ sã̞:m:ε]

Final nasal consonants of right-bound words and noun prefixes assimilate to the place of articulation of a following consonant, as does syllabic \dot{n} but *not* \dot{m} :

dànkòŋ	"measles"	[daŋkɔŋ]
nīn-bámmā	"these people"	[nimbam:a]
nàm zī'	"still not know"	[nanzı̯]

```
\hat{N}-B\bar{\imath}l Mbillah (personal name) [mbil] but \hat{M} n \acute{\jmath} n \bar{\imath} f. "I love you." [mnɔnɪf]
```

I follow traditional orthography in writing final nasals of prefixes as n everywhere except before p b m, where I write m.

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

```
àwá n\bar{a} "like this here" (ànwá "like this") k\bar{\epsilon} n\bar{a} "come hither" (k\bar{\epsilon}\tilde{n}^+ "come")
```

Some right-bound $CV\check{n}$ - elements lose nasalisation even when the following consonant is not a nasal. Thus with compounds of $s\bar{u}\check{n}f^{D/}$ "heart" like $s\bar{u}$ - $m\acute{a}l\iota s\grave{\iota}m^m$ "joy", $s\bar{u}\check{n}$ - $kp\hat{\iota}$ 'o η " "boldness", $s\bar{u}\check{n}$ - $p\hat{\varepsilon}\varepsilon n^{n\varepsilon}$ "anger" the 1996 NT and older sources write $sumalism\ sukpi$ 'o η /sukpi'e $u\eta\ supeen$, reflecting the bleaching and phonological simplification which has created noun prefixes from some original cbs 13.1.4. KB restores the nasalisation in writing: sunkpi'e $u\eta$ "boldness", $sunp\varepsilon\varepsilon n$ "anger."

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

```
M á nē dāu.but Lì àň sύηā."I'm a man.""It's fine."
```

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

Combining forms, and verb forms which are not VP-final, may not end in fronting diphthongs unless the next word begins with y. Otherwise, the fronting diphthongs are replaced by the corresponding monophthongs $\underline{3.2}$: $\underline{ae} \rightarrow a$; $\underline{oe} \rightarrow o$; $\underline{ve} \rightarrow v$; $\underline{ae} \rightarrow aa$; $\underline{ve} \rightarrow vv$; $\underline{ie} \rightarrow ia$; $\underline{ue} \rightarrow ua$. Thus \underline{sae} "the blacksmith", but \underline{sae} "this blacksmith" and e.g.

```
Ò sừ v lớr.
                            "She owns a lorry." (s\bar{v}'e^{ya/} "own")
                            "It's good." (àeňa "be something")
Lì àň súŋā.
Ti ya'a νυe, ti νυnε tis Zugsɔb la.
Tì γá' vūe,
                              nē ø tís Zūg-sób
                  tì vớ
                                                         Ιā.
1PL if be.alive, 1PL be.alive FOC CAT give head-NULL.AN ART.
"If we live, we live to the Lord." (Rom 14:8): (v\bar{\nu}e^{a/} "be alive")
Èňrigim ,
                Ø
                     pāa du'átà.
Shift.along:IMP CAT reach doctor:sg.
"Shift along up to the doctor." (p\bar{a}e^{+/} "reach")
```

```
Lì nàa n\bar{\epsilon}. "It is finished." n\bar{a}e^{+/} "finish" 
Dúe w\bar{\epsilon}lá? "[You] arose how?" 28 d\bar{u}e^{+/} "arise"
```

 $K\bar{a}'e^+$ "not be/not have" loses e before complements but not adjuncts:

```
\dot{O} k\bar{a}' b\bar{i}iga ^+\emptyset. "She is not a child." 3AN NEG.BE child:SG NEG.
```

```
Dāu lā kā' dóɔgō-n láa +ø.
```

 $Man: {\sf SG} \ {\sf ART} \ {\sf NEG.BE} \ room: {\sf SG-LOC} \ {\sf ART} \ {\sf NEG}.$

"The man's not in the room." ($d \partial g \bar{v}$ - $n \ l \bar{a}$ as complement)

```
but Sɔ' kae na nyaŋi dɔl zugdaannam ayi'...
```

```
S\bar{\it 5}' k\bar{\it a}'e ø ná ňyānı ø d\bar{\it 5}l z\bar{\it u}g-d\hat{\it a}an-nàm ày\hat{\it i}' ... INDF.AN NEG.BE CAT IRR prevail CAT follow head-owner:PL NUM:two ... "Nobody can serve two masters." (Mt 6:24)
```

```
Dāu kā'e dóɔgū-n láa +ø.
```

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

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

```
voen= v\bar{\upsilon}\upsilon-n"would live" (Gal 3:21, 1996)Kristo da faaɛn ti= Kristo dá fāaň tí"Christ saved us." (Gal 5:1)m wa'e ne= \grave{m} wá'a nē."I'm going" ILK
```

 \dot{A} e \check{n} a "be something" is always written aa or aan before liaison; this might reflect consistent absence of stress, but it seems more likely that the rarity of phrase-final \dot{a} e \check{n} a has prevented the analogical introduction of phrase-final spelling phrase-medially. $F\bar{a}$ e \check{n} +/ "save" is perhaps written faaenn instead of faann to distinguish the forms from those of $f\bar{a}\check{n}$ + "grab, rob"; the 1996 NT has two instances of the certainly spurious faaenm for imperative faanm. (See also 14.1 on faangid "saviour", faangir "salvation.") Errors like fa0n0 no fa1 no fa2 no fa3 no fa3 no fa3 no fa4 no fa5 no fa5 no fa5 no fa5 no fa6 no fa6 no fa6 no fa7 no fa8 no fa8 no fa9 no fa

[&]quot;There's no man in the room." (dɔ̀ɔgv̄-n lā̄ as adjunct)

7.4 Tone sandhi

The tone overlay of independency marking <u>19.6.1.1</u> precedes external tone sandhi, which follows apocope. M dropping and the change of M to L induced by the interrogative prosodic clitics apply before other external tone sandhi rules, which otherwise apply left to right.

7.4.1 Before prosodic clitics

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

mòlı+	"gazelles"	SF mɔ̀lι	LF m ɔ̀līι
yàarım ^m	"salt"	SF yàarım	LF yàarīmm
tìım ^m	"medicine"	SF tìım	LF tīımm

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

```
but Li \ k\bar{a}' \ \dot{o} \ t\bar{\iota}\iota mm. "It's not her medicine (ti\iota m^m)." Li k\bar{a}' \ t\hat{\iota}\iota mm. "It's not medicine." Li k\bar{a}' \ b\bar{a} \ d\bar{a}'a. "It's not their market (d\dot{a}'a^=)." but Li \ k\bar{a}' \ d\dot{a}'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 ^{ɔ/}	"shirt, clothes"	SF fūug	LF fūugó
pāe ^{+/}	"reach"	SF <i>pāe</i>	LF <i>pāée</i>
nūa+/	"hen"	SF nūa	LF nūáa
yā+/	"houses"	SF <i>yā</i>	LF yáa
Iā⁺/	(article)	SF <i>lā</i>	LF <i>láa</i>
bὲdυgū ^{+/}	"a lot"	SF <i>bὲdυgῦ</i>	LF bὲdυgύυ
gāaň ^{=/}	"Nigerian ebony"	SF <i>gāa</i> ň	LF gáaň
dāam ^{m/}	"millet beer"	SF dāam	LF dáamm
tāu̯ň+/	"opposite-sex sib"	SF tāuň	LF távň
dāam ^{m/}	"millet beer"	SF dāam	LF dáamm
vōm ^{m/}	"life"	SF vūm	LF <i>νύmm</i>

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

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

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

Like many other West African languages, Kusaal signals questions with a final falling intonation. All questions, polar or content, end with a L or H toneme. The two interrogative prosodic clitics cause preceding words with all-M tonemes to change to all-L. This is an actual change of tonemes, not just a matter of intonation, and it precedes M spreading, to which the new L tonemes are subject <u>7.4.3</u>. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

```
\dot{A}nɔʻɔnì \sigma \dot{n}yɛ́ bà bìiga +\sigma?

Who cat see 3pl child:sg cq?

"Who saw their child (b\bar{i}ig^a)?"

\dot{A}nɔʻɔnì \dot{n}yɛ̃ bíigà?

"Who saw a child?" tonally identical to \dot{A}nɔʻɔnì \dot{n}yɛ̃ soʻvgà?

"Who saw a knife (s\dot{v})vga)?"
```

Fù bôɔd bó? "What $(b\bar{b}^+)$ do you want?" Anɔʻɔnì nyē zuéyà? "Who saw hills $(zueya^+)$?"

 \dot{M} ná b \bar{b} dıg. \dot{M} ná b \bar{b} dıgɛɛ? \dot{D} p \bar{v} d \bar{v} gɛ.

"I will get lost."

"Will I get lost?"

"She didn't cook."

"Didn't she cook?"

7.4.2 Before liaison

Left-bound liaison words themselves carry H toneme after host-final M toneme and M after L or H. M on a long vowel becomes H before prosodic clitics, and M becomes H before interrogative clitics.

Kà m̀ zábì bā."And I've fought them."Kà m̀ pō zábì fō."And I didn't fight you."M̀ zábī bá."I've fought them."M̀ pō bɔɔdī fɔ."I don't love you."M̀ pō bɔɔdī báa."I don't love them."Kà m̀ pō zábì báa."And I didn't fight them."Änɔʻɔnì kóv bá?"Who has killed them?"SF kóv bā

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

```
/כמככֿמ
                               "field"
                                                    + n^{\varepsilon}
                                                                                   → pɔ̄ɔgú-n<sup>ε</sup>
          bīiga
                               "child"
                                                    + nε
                                                                                   → bīigι-n<sup>ε/</sup>
                                                                                                                   WK
                                                                                   → mỳ'arī-n<sup>ε/</sup>
          mὺ'ar<sup>ε</sup>
                               "dam, lake" + n^{\varepsilon}
but
                                                                                   → vàadī-n<sup>ε/</sup>
          vàadε
                               "graves"
                                                    + n^{\varepsilon}
                                                                                                                   WK
          kūυdíba
                               "killers"
                                                    + n^{\varepsilon}
                                                                                   → kūvdíbī-n<sup>ε/</sup>
                                                                                                                   WK
```

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

```
dūgε
                                                    + n^{\varepsilon}
                                                                                   → dūgυ-n<sup>ε/</sup>
                               "cook"
                                                                                    → bòdιgī-n<sup>ε/</sup>
          bòdιgε
                               "lose"
                                                    + n<sup>ε</sup>
          yādıg<sup>€/</sup>
                                                                                    → yādıgı-n<sup>ε/</sup>
                               "scatter"
                                                    + n<sup>ε</sup>
                                                                                    → kūυdι-n<sup>ε/</sup>
          kūυd<sup>a</sup>/
                               "kill"
                                                    + n^{\varepsilon}
ipfv
          yādıgíd<sup>a</sup>
                                                                                    → vādιaídī-n<sup>ε/</sup>
                               "scatter"
                                                    + n^{\epsilon}
ipfv
          Dā
                     dɔ̃llı yá
                                                               "Follow ve not!"
                                           +ø!
          NEG.IMP follow 2PL.SUB NEG!
```

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

```
"lose"
                                          + m<sup>a</sup> "me"
                                                                    → bòdigi ma
        bòdιgε
        dì+
                                                                    → dù lī+/
                          "eat"
                                          + /\iota^{+} "it"
                                                                    → yādıgí ma
        yādıg<sup>€/</sup>
                          "scatter"
                                          + m<sup>a</sup> "me"
                                          + /t<sup>+</sup> "it"
        dūgε
                          "cook"
                                                                    → dūgí lī<sup>+/</sup>
but
                                           + °
                                                   "him/her"
        gɔ̄sε
                          "look"
                                                                    → q̄5s·ó⁻o
        kū<sup>+</sup>
                                                                    → kύυ ma
                          "kill"
                                          + m<sup>a</sup> "me"
```

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

```
p\bar{a}e^{+/} "reach" + m^a "me" \rightarrow p\acute{a}a\ m^a d\vec{l}e^{+/} "get" + ba^+ "them" \rightarrow d\acute{l}e^{+/}
```

After all other verb forms, including all imperfective forms and all forms with independency-marking tone overlay <u>19.6.1.1</u>, object pronouns change LF-final L to M:

```
"fights"
                                  + m<sup>a</sup> "me"
zàbıda
                                                            → zàbıdī m<sup>a/</sup>
dìta
                 "eats"
                                  + /\iota^{+} "it"
                                                            → dìtī lí+
yādıgíd<sup>a</sup>
                                                            → yādıgídī bá+
                 "scatters"
                                  + ba+ "them"
kūυd<sup>a/</sup>
                                  + m<sup>a</sup> "me"
                                                            → kūvdí ma
                 "kills"
```

With independency-marking:

```
b \grave{j} d i g^{\epsilon} "lose" + m^{\mathsf{a}} "me" \rightarrow b \grave{j} d i g \bar{\imath} m^{\mathsf{a}/\mathsf{a}}
y \bar{a} d i g^{\epsilon/\mathsf{a}} "scatter" + m^{\mathsf{a}} "me" \rightarrow y \grave{a} d i g \bar{\imath} m^{\mathsf{a}}
```

SF-final $\cdot \bar{o}$ corresponds to LF-final $\cdot \dot{o}$ -o; otherwise final M is imposed as usual before the negative clitic:

```
\dot{M} bɔ́ɔd·ō."I love him/her."\dot{M} pv̄ bɔ́ɔd·ó-o."I don't love him/her."\dot{K}à bà kv́·o.[kv:]"And they killed him."\dot{K}à bà pv̄ kv́·o.7.1"And they didn't kill him."\dot{K}à bà kí·o."And they cut him."\dot{K}à bà pv̄ kí·ō-o."And they didn't cut him."
```

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

```
Kà bà ny \in 0. "And they saw her." 
Kà bà p\bar{v} ny \in 0. "And they didn't see her."
```

Irrealis mood forms of Pattern A verbs have M before liaison; LF-final $\cdot o$ -o may be H or M:

```
Ò nà b5dıgı m.
                                   "He will lose me."
   Ò kừ bɔdıgı má.
                                   "He will not lose me."
                                   "She will lose them."
   Ò nà b5d(g) bá.
                                   "She won't lose them."
   Ò kừ b5digi báa.
   Ò kừ bɔdıgıdı má.
                                   "He won't be losing me."
   Ò kừ zābidi má.
                                   "He won't be fighting me."
   Ò kù zāb·ó-o.
                                   "He won't fight him."
or Ò kù zāb·o-o.
                                   "He won't fight him."
```

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

```
Ò bὲ nέ dâ'a-n.
Dāự lā mêε-n.
"The man built (earlier today.)"
Dāự lā kôυ m.
"The man has killed me."
```

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

```
Ò kūν bá."She has killed them."Dāu lā kύν bá."The man has killed them."
```

Except for catenator-*n*, which is toneless, all liaison words which are not left-bound begin with a fixed-L toneme <u>7.4.3</u>; as always, preceding M must become H:

```
Kà bà dìtī bá. "And they were eating them."

And 3PL eat:PFV 3PL.OB. (ipfv without independency marking)

Kà bà dìtí bà dītb. "And they were eating their food." (ML \rightarrow HL)
```

Noun LFs before fixed-L liaison words end in H:

And 3PL eat: IPFV 3PL food.

but

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

Before the fixed-L toneme $\underline{7.4.3}$ of nominaliser- \dot{n} a final M tone becomes H. For my informants this is the only sign of the presence of the particle, except when it is combined in the special form of the preceding subject pronouns.

```
Dāu lā záb nâ'ab lā. "The man has fought the chief." man:sg art fight chief:sg art
```

but $d\bar{a}u$ $l\acute{a}$ \varnothing $z\grave{a}b$ $n\grave{a}$ 'ab $l\bar{a}$ "the man having fought the chief" man:sg art Nz fight chief:sg art

Before catenator-n the final toneme of a modified LF is M after M toneme and L otherwise. M spreading follows whenever the *preceding* word would induce it:

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

\dot{M} n\acute{o}k s\acute{o}'vg\grave{o} ø k\acute{j}á n\bar{l}m l\bar{a}.
1SG pick.up knife:SG CAT cut meat:SG ART.
```

"I cut the meat with a knife."

7.4.3 M spreading

Most words not bound to the right cause an initial L toneme in a following word to change to X toneme on a superheavy syllable and H otherwise, unless there is an intervening pause; so do *all* words bound to the right which end in M.

If the L toneme is "fixed" (see below) a preceding M toneme must become H instead $\underline{4}$. M spreading follows

```
all words, bound or free, ending in M toneme all other words which are not bound to the right, except Verb perfectives without independency-marking tone overlay \underline{19.6.1.1} Certain words affected by M dropping \underline{7.4.4} Words ending in an affix vowel with H toneme right-bound subject pronouns \underline{19.6.1.2} (including ellipted subjects \underline{20.2.2}) \delta li b\grave{a} except preceding independency marking \mathring{m} f\grave{v} t\grave{i} y\grave{a} except preceding independency marking after y\bar{\varepsilon}
```

Catenator-*n* is transparent to M spreading <u>7.4.2</u>.

M spreading does not occur after clause adjuncts <u>20.2.1</u>. The occurrence of M spreading is otherwise unaffected by syntax:

```
Bà tìs n\hat{a}'ab l\bar{a} b\acute{v}g.

3PL give chief:sg art donkey:sg.

"They gave the chief a donkey (b\grave{v}g^a)."

Bà \check{n}w\grave{c}' n\hat{a}'ab l\bar{a} s\acute{v}g\bar{a}.

"They beat the chief well (s\grave{v}g\bar{a}^{+/})."

3PL beat chief:sg art good:adv.
```

Raising is absent after words ending in an affix vowel with H toneme:

```
M dìga lú yā. "My dwarfs have fallen down."
1SG dwarf:PL fall PFV.
but M yōgomá lù yā. "My camels have fallen down."
1SG camel:PL fall PFV.
```

M spreading examples, with $z\grave{a}b^{\epsilon}$ "fight" $g\bar{\jmath}s^{\epsilon}$ "look at" $n\grave{a}'ab^a$ "chief": $K\grave{a}$ -clause, without independency-marking tone overlay; all subject pronouns are followed by raising; perfectives are followed by raising only if ending in M:

```
Kà m záb nà ab lā."And I've fought the chief."Kà ò záb nà ab lā."And he's fought the chief."Kà m gōs nâ ab lā."And I've looked at the chief."Kà ò gōs nâ ab lā."And he's looked at the chief."
```

Main clause, with independency marking; the verbs have tone overlay and are now both followed by M spreading; 3rd persons are not followed by M spreading:

```
M záb nâ'ab lā."I've fought the chief."O zàb nâ'ab lā."He's fought the chief."M gós nâ'ab lā."I've looked at the chief."O gòs nâ'ab lā."He's looked at the chief."
```

A minimal pair: ba "them" is followed by M spreading; bà "they, their" is not:

```
    Ò gòsī bá bέdvgū.
    "She looked at them a lot." (ba object)
    Ò gòsí bà bèdvgū.
    "She looked at a lot of them." (bà possessive)
```

Certain words carry an initial/sole L toneme which is never subject to M spreading. These **fixed-L** words comprise all liaison words not bound to the left except for catenator-n, which is toneless, along with the linker particle $k\grave{a}$ "and":

```
right-bound personal pronouns \dot{m} fù ò lì tì yà bà personifier particle \dot{a}-/\dot{n}-
\dot{a}n\dot{a}'>\dot{n}E "who?"

nominaliser (however realised) \dot{n}
all words with number prefixes \dot{a}- \dot{b}à- \dot{b}ò-

manner-adverb prefix \dot{a}-
linker particle \dot{k}à
```

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

```
Bà kòvdī bá. "They kill them."

3PL kill:IPFV 3PL.OB.

but Bà kòvdí bà bōvs. "They kill their goats."

3PL kill:IPFV 3PL goat:PL.

Lì à né à-dàalúŋ. "It's a stork"

3IN COP FOC PERS-stork:SG.
```

```
bà dílb nà yīt ná'-tēŋ lā nā zúg

3PL food Nz emerge:IPFV king-land:SG ART hither upon
"because their food came from the king's land" (Acts 12:20, 1996)

wuu saa naani iank ya nya'aŋ n ti paae ya tuona la.

wōv sáa ø nāanı jáňk yà ňyá'aŋ n tí páe yà tùena lā
like rain:SG NZ then jump 2PL behind CAT after reach 2PL before.ADV ART
"like when lightning leaps from East to West" (Mt 24:27, 1996)
```

Though the matter rarely arises, fixed-L syllables are subject to being changed to M before the negative prosodic clitic 7.4.1; thus $n\acute{\epsilon}$ $t\grave{\iota}$ "with us" but

```
Amaa o pv lal nɛ tii.

Àmáa ò p\bar{v} lāl nɛ́ tī\iota +\emptyset.

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

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

ba diib n yit na'aten la na zug

After words ending in M, this tone sandhi is straightforwardly recognisable as tone spreading. Right-bound pronouns have fixed-L tonemes for my informants even when followed by M spreading, but ILK and Niggli's materials show M, which can be taken as having given rise to *floating* M tonemes in current Agolle. M spreading after SFs ending in H or L can similarly be attributed to floating tonemes, here delinked by apocope. However, M spreading may also be determined by syntactic role or by analogy, and prior tonal behaviour persists even after segmental remodelling by *addition* of segments. Words with identical L-final sg and cb, like $m\grave{a}$ "mother", $z\dot{u}\grave{a}$ "friend", $d\dot{u}$ 'átà "doctor", $l\grave{a}nnig$ "squirrel" show M spreading after sg but not cb; the single-aspect verbs $b\grave{\epsilon}^+$ and $n\grave{c}g$ are followed by M spreading, unlike Pattern A perfectives; $l\grave{\epsilon}\varepsilon$ "but", though not even a verb, is followed by M spreading when affected by independency marking.

7.4.4 M dropping

M dropping takes place exclusively within NPs and AdvPs. It occurs after any free form as a predependent, with the exception of the contrastive personal pronouns (like *mān* "my"); it also occurs after any cb ending in M toneme, whether as dependent or head. Historically, M dropping may have arisen by dissimilation of adjacent M tonemes to ML, analogous to Meeussens's Rule (Nurse and Phillippson p65); it is seen after M-final words and after free predependents which mostly originally had M flexions, as shown by M spreading.

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

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

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

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

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

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

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

Examples with a cb as head:

```
b\dot{\upsilon}-p\dot{\imath}əlig^a "white goat" b\dot{\upsilon}-p\bar{a}alig^a "new goat" b\bar{\imath}-p\dot{\upsilon}\eta-p\dot{\imath}əlig^a "white girl" b\bar{\imath}-p\dot{\upsilon}\eta-p\bar{a}alig^a "new girl" n\bar{\jmath}-pialig^a "new hen"
```

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

```
n\bar{b}-d\hat{i}'əsa "chief's interpreter" pl n\bar{b}-d\hat{i}'əsidiba
```

There is no M dropping after personal pronouns:

m̀ bīig	"my child"	ṁ tìıg	"my tree"
mān bīig	"my child"	mān tîıg	"my tree"
mān yūgúm	"my camel"	mān gbīgım	"my lion"

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

```
\dot{m} \dot{b} \dot{l} \dot{b} \dot{b} \dot{l} \dot{b} \dot{b}
```

M dropping after free NPs also followed by M spreading:

```
d\bar{a}\mu\ b\hat{i}ig "a man's child" n\dot{a}'ab\ b\hat{i}ig "a chief's child" d\bar{a}\mu\ l\bar{a}\ y\acute{u}g\grave{v}m "the man's camel" d\bar{a}\mu\ l\bar{a}\ gb\acute{t}g\grave{v}m "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 bîig.

"They've given (it) to the chief's child."

"They've given (it) to the chief's child."

(M dropping applied to bīig<sup>a</sup> "child")

Bà tìs nâ'ab lā bīig.

"They've given the chief a child."

"They've given the chief a child."

(No M dropping applied to bīig<sup>a</sup>)
```

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

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

M dropping follows cb heads, but never uncompounded heads:

```
k\bar{u}g-y(nn) "one stone" with y(nn) as adjective \underline{15.5.2.1} but k\bar{u}g or y\bar{\iota}nn("one stone" wābug l\bar{a} "the elephant" wābus p\bar{\iota}iga "ten elephants"
```

The final element of a compound induces following M spreading in accordance with the usual rules <u>7.4.3</u> regardless of whether it has been subject to M dropping:

bù-wōk	"tall goat"	nō-wók	"tall hen"
bù-wōk-píəlì	g "tall white goat"	bù-wɔ̄k-páalìg	"tall new goat"
nō-wók-pìəlı	g "tall white hen"	nō-wók-pāalíg	"tall new hen"
bù-wōk dîıb	"tall goat's food (dīɪb ^ɔ	")" nō-wók dîıb	"tall hen's food"

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

Pattern H and A nouns, affected by M dropping:

	wābug ^{ɔ/} pɔ̄ɔgɔ/ bāŋa pūuga	"elephant" "field" "ring" "inside"	Dāu lā wábùg bòdıg yā. Dāu lā pôog bòdıg yā. Dāu lā bán bòdıg yā. Dāu lā pûug bòdıg yā.	
but	wābvg ^{ɔ/}	"elephant"	M bịēyá wàbug bódìg yā.	no M spreading
	bāŋ ^a	"ring"	M bịēyá bàŋ bódìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	M bịēyá yùgudır bódìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	Dāu lā yúgudìr bódìg yā.	three syllables

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

bùŋ ^a	"donkey"	Dāụ lā búŋ bódìg yā.
àňrvŋ ^ɔ	"boat"	Dāu lā áňrùŋ bódìg yā.
dàɔgɔ	"house"	Dāu lā dɔ̂ɔg bɔ́dìg yā.

Those Pattern H nouns which have an irregular intrinsic initial H or X toneme seem unchanged after M dropping and spreading, and by analogy have unchanged following tone sandhi; words like *náaf*? "cow" fluctuate:

```
à-gâvňg<sup>5</sup> "pied crow" Dāu lā gâvňg bódìg yā.
náaf<sup>5</sup> "cow" Dāu lā nâaf bódìg yā or Dāu lā nâaf bòdıg yā.
```

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

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

```
[fūug dɔ̂ɔg] "tent" (fūugɔ/ "cloth", dɔ̀ɔgɔ "house") pv̀'vsvg [fûug dɔ̂ɔg] "tabernacle" (pv̀'vsvgɔ "worship") but Lì kā' [[[dāu lā bîig] biər] nâaf] zv̀vrē.

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

Morphology

8 Noun flexion

8.1 Noun classes

Nouns inflect for singular and plural by adding noun class suffixes to the stem; the bare stem is used as a combining form (cb) in composition with a following nominal. This is a regular and frequent occurrence, being for example the regular method of construing a noun with a following adjective or demonstrative. The cb is always subject to apocope, as it can never appear clause-finally or before liaison. Archaisms like *nwadibil* (Mt 2:2, 1996) for *ňwād-bíl*^a "star" (KB *nwadbil*) suggest that consonant-final cbs once ended in an epenthetic vowel, but this is no longer the case.

In the paradigms, noun forms are cited as sg, pl and cb in order.

Each noun class suffix has a basic singular, plural or non-count meaning. Count nouns pair a singular and a plural suffix. Five pairings account for the majority of count nouns: these are labelled using superscript notation forms of the suffixes, as the ${}^a|b^a$, $g^a|s^\epsilon$, $g^b|d^\epsilon$, $r^\epsilon|a^+$ and $f^b|\iota^+$ **noun classes**. Two unpaired non-count suffixes $-b^b-m^m$ form two more noun classes mostly containing mass nouns.

The noun classes were once grammatical genders, with separate 3rd person pronouns and agreement of adjectives and numerals. Kusaal, like Dagbani and Mooré, now has only a natural gender system opposing persons and non-persons, with pronouns based respectively on the original $^a|b^a$ and $r^\epsilon|a^+$ classes. A few isolated remnants of agreement will be pointed out as they occur.

An expected class suffix may be replaced by one from a different class if the regular form would be rendered ambiguous by consonant cluster assimilation and/or apocope. This has become regular with class $g^{\circ}|d^{\varepsilon}$ stems ending in m n following a short vowel, which always use the plural suffix $-a^+$ instead of $-d^{\varepsilon}$, as do all gerunds with sg g° . Mampruli and Dagbani also show -a for the plural of m n stems in this class (cf Mampruli gbannu "skin", pl gbana), so this suppletion is probably driven by the fact that cluster assimilation would cause the expected plural to resemble a $r^{\varepsilon}|a^+$ sg. Suppletion does not take place in Mooré or Farefare, where the $g^{\circ}|d^{\varepsilon}$ pl suffix has a rounded vowel, unlike the $r^{\varepsilon}|a^+$ sg. cf Mooré $g\~anng\`o$ "skin" pl $g\~ando$.

Adjectives avoid potentially ambiguous suffixes altogether $\underline{9}$.

In two cases, the sg LF has adopted the form proper to a different class suffix that would have produced the same SF: rounded vowels before $-g^a$ may result in LFs ending in ->, as in $n\hat{u}^iug^a$ "hand", and $a|b^a$ stems in l n following a short root vowel show LF - ϵ with l and n geminated, as if the suffix were r^ϵ , e.g $Bin^{n\epsilon}$ "Moba person."

Two subclasses are semantically motivated: a subclass of $a|b^a$ referring to older/important people uses b^a as the *singular* suffix, and names of languages belong to a subclass of $r^{\varepsilon}|a^+$ with the singular suffix l^{ε} .

The classes are thus as follows:

^a <i>b</i> ^a <i>b</i> ^a (sg)	sīd ^a nà'ab ^a	sīdıb ^a nà'-nàm ^a	sìd- nà'-	"husband" "chief"
$g^{a} s^{\epsilon}$	bῦυg ^a	būυs ^ε	bù-	"goat"
$g^{\circ} d^{\varepsilon}$	dວ່ງg ^ວ bū'esúg ^ວ	dòɔd ^ɛ bū'esá ⁺	dò- bū'es-	"hut" "question"
r ^ε a ⁺ ε	nɔ̄ɔrɛ/ Kūsâalɛ	nōyá+	nō-	"mouth" "Kusaal"
f ^o i ⁺	mòlɪf ^o	mòlı+	mòl-	"gazelle"
po	sā'ab ^o		sà'-	"porridge"
m ^m	<i>t</i> ìım ^m		tì-	"medicine"

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

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

pε̄'og ^{ɔ/}	pε̄'εs ^{ε/}		pē' -	"sheep"
gbè'og ^o	gbὲ'εd ^ε gbὲda ⁺		gbὲ'-	"forehead"
bįāuňk ^o	bi̯āň'ad ^ɛ bi̯āň'ada ⁺	WK SB	biaň'-	"shoulder"

The sg SF is usually enough to identify the noun class correctly, given whether the word has human reference. Where it is not enough, there is often vacillation between classes, suggesting that speakers do use these criteria to determine class membership; this is confirmed by the assignment of loanwords to noun classes.

Nouns with sg SF ending in a long monophthong, or in an unrounded vowel followed by a velar, belong to $g^a|s^{\epsilon}$ (exceptions are $b\bar{a}|a^{-}$ "traditional diviner" and $n\dot{a}y\bar{i}ig^a$ "thief", both $a|b^a$); all nouns ending in a rounding diphthong followed by a velar belong to $g^a|d^{\epsilon}$, as do most ending in a rounded monophthong followed by a velar, but a fair number are $g^a|s^{\epsilon}$.

Human-reference nouns are otherwise ${}^a|b^a$, except for stems ending in a long vowel, which have been transferred to $r^\epsilon|a^+$ in Agolle Kusaal. The b^a -singular subclass contains most human-reference nouns in sg SF -b, and also $s\grave{a}am^{ma}$ "father", $d\grave{a}am^{ma}$ "man's parent-in-law", $d\grave{a}y\acute{a}am^{ma}$ "woman's parent-in-law"; exceptional is $z\~{5}2m^{n\epsilon}$ "fugitive" $(r^\epsilon|a^+)$.

All nouns in SF -f belong to $f^0|\iota^+$.

Underived mass nouns in -m belong to m^{m} , and in -b or -p to the b^{3} class.

Non-human-reference count nouns ending in l n r belong to the $r^{\epsilon}|a^{+}$ class, as do those ending in m apart from a few m^{m} -class count nouns like $y\bar{a}'am^{m}$ "gall, gall bladder", $p\bar{u}um^{m}$ "flower", $d\hat{a}al(m^{m})$ "male sex organs", $p\hat{v}'al(m^{m})$ "female sex organs." $P\bar{l}lm^{m}$ "arrow" is a relic of a "long thin things" $|r|^{\epsilon}$ class, lost in Western Oti-Volta.

The class membership of regular deverbal nouns is predictable.

As with almost all noun class systems, there are correlations between class membership and meaning, though with frequent exceptions. These associations can be exploited to change the significance of a stem <u>11.2</u>.

The $a|b^a$ class has exclusively human-reference membership, though many nouns referring to people belong to other classes. There is a subclass of nouns for elders and other important people which use the plural b^a as singular.

The $g^a|s^{\varepsilon}$ class has general membership but notably includes the great majority of tree names, many larger animals, and tools. Almost all ethnic group names belong to $a|b^a$ or $g^a|s^{\varepsilon}$ except for $Z\grave{a}ngb\grave{\epsilon}og^{\circ}$ "Hausa" and $N\grave{a}s\bar{a}ara^+$ "European"; the place inhabited by the group has $sg - g^{\circ}$.

The $g^{\circ}|d^{\varepsilon}$ and $r^{\varepsilon}|a^{+}$ classes are the default non-human countable classes. They include all nouns naming fruits, and about four out of five nouns for body parts. Human-reference nouns in $g^{\circ}|d^{\varepsilon}$ seem to be pejorative: $b\bar{a}l\bar{\varepsilon}rvg^{\circ}/$ "ugly person", $d\dot{a}b\bar{\iota}og^{\circ}$ "coward", $z\bar{\iota}lvg^{\circ}/$ "fool." Some original $a|b^{\circ}$ class nouns have been reallocated to $r^{\varepsilon}|a^{+}$ for phonological reasons e.g. $b\bar{\iota}ar^{\varepsilon}/$ "elder same-sex sibling."

The I^{ϵ} subclass includes all names of languages.

The small $f^{0}|_{\iota}^{+}$ class includes two groups: animals, and small round things. It contains all names of seeds. No $f^{0}|_{\iota}^{+}$ noun refers to people.

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

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

8.2 Remodelled combining forms

For levelling between sg and pl forms see 5.3 5.5.

Combining forms, lacking a flexional suffix and always subject to apocope, would be often reduced by the usual rules to ambiguous forms. Often the expected cb is replaced by a form which is segmentally **but not tonally** that of the singular.

nīf ^{o/}	nīní+	nīn- or nīf-	"eye"
zìň'a ⁺	zὲň'εs ^ε	zjàň'- or zèň'-	"red" (adjective)
wōk ^{ɔ/}	wā'ad ^{€/}	wā'- or wɔ̃k-	"long, tall" (adjective)
tāňp ^ɔ		tàňp-	"war"
zūg ^{⊃/}	zūt ^{ε/}	zū- or zūg-	"head"

Mooré and Toende show zu- consistently in cases where Agolle has $z\bar{u}g$ -: Mooré zusoaba, Toende zùsóp, Agolle $z\bar{u}g$ -sób^a "boss"; Mooré zúkúká, Toende zùkúk, Agolle $z\bar{u}g$ -k $\bar{v}gvr^{\varepsilon}$ "pillow." $Z\bar{u}g$ -sób^a "Lord" is very frequently read $Z\bar{u}$ -sób^a in the audio version of the NT. The cb $z\bar{u}g$ - sometimes behaves tonally like a noun prefix <u>6.2.4</u>.

The "regular" cb of $n\bar{i}f^{0/}$ "eye" is $n\bar{i}n$ -, but as a head it appears as $n\bar{i}f$ -: $n\bar{i}f$ -ká $\eta\bar{a}$ "this eye." $N\bar{i}n$ - still predominates as a dependent: $n\bar{i}n$ - $d\acute{a}a$ "face", $n\bar{i}n$ - $t\acute{a}m$ " "tears", $n\bar{i}n$ - $g\acute{z}tis^{\epsilon}$ "spectacles." $Gb\grave{a}\underline{u}\eta^{\circ}$ "letter, book" now has the cb $gb\grave{a}\underline{u}\eta$ -, but the "regular" cb $gb\grave{a}n$ - still occurred as a generic complement in the 1976 NT e.g. gbanmi'id gb\grave{a}n- $m\bar{i}'id$ "scribe" ("book-knower") where later versions have $gbau\eta mi'id$. Similarly, the 1976 NT $zi\eta gban'ad$ $z\bar{i}m$ - $gb\grave{a}\check{n}'ad$ "fisherman" has been replaced by KB $zii\eta gban'ad$.

With m and n stems, the remodelled forms have become the regular cbs:

zīnzāuŋɔ/	zīnzāná ⁺	zīnzáun-	"bat"
àňrvŋ ^ɔ	àňrıma ⁺	àňrvŋ-	"boat"

So too with *CV*-stems in the $r^{\varepsilon}|a^{+}$ class:

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

The cb may be remodelled after the *plural* if there is no sg extant, or if the plural has a distinct specialised meaning:

no sg	kī ^{+/}	kī- or kā-	"cereal, millet"
lā'af ^o	līgıdı+	là'- or lìg-	"cowrie" pl "money"

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

dāu̯+	dāp ^a	<i>dàu្-</i> sg <i>dàp-</i> pl	"man, male person"
tāuň ^{+/}	tāňp ^{a/}	<i>tāuň-</i> sg <i>tāňp</i> -pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

kàlvg ^o	kὸn ^{nε}	kòlug-	"bag"
lànnıg ^a	lànnıs ^ε	lànnıg-	"squirrel"
kòlug-kàŋā	"this bag"	cf cb <i>kòl-</i> from	<i>k5lιg</i> a "river"
lànnıg-pìəlıg	"white squirrel"	cf cb <i>làn-</i> from	<i>lān</i> ^{nε} "testicle"

Remodelling of cbs after sg/pl forms never affects tones, revealing that cases where a sg/pl seems to precede an adjective or dependent pronoun in fact show cbs: $d\dot{a}\dot{u}$ - $s\dot{v}\eta$ "good man", vs sg $d\bar{a}\dot{u}$ "man"; $d\dot{a}p$ - $s\dot{v}ma$ "good men", vs pl $d\bar{a}p$ "men."

Remodelled cbs are traditionally written as separate words; as the orthography does not mark tone, this can lead to ambiguity, e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmug-bī-púŋ* "slave girl" not *yàmmug bí-púŋ* "slave's girl" 15.8.1.4.

8.3 Paradigms

By default, class suffixes attach after a stem-final epenthetic vowel or root vowel. Complications arise from consonant assimilation, rounding before $-g^3 - k^3 - \eta^3$, deletion of *g after aa iə uə aaň εεň ɔɔň, and with CVV-stems before a, ι^+ and a^+ .

8.3.1 alba

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

sīd ^a	sīdıb ^a	sìd-	"husband"
nīd ^{a/}	nīdıb ^{a/}	<i>nīn-</i> irreg	"person"
sàal ^a	sàalıb ^a	sàal-	"human being"
kpāad ^{a/}	kpāadíb ^a	kpāad-	"farmer"
kūυd ^{a/}	kūυdíb ^a	kūud-	"killer"
kpīkpīn ^{na/}	kpīkpīnníb ^a	kpīkpín-	"merchant"
yบิบm-yบิ'บm ^{na}	yūʊm-yʊ̂'ʊmnìb ^a	yū̄υm-yΰ'υm-	"singer"
bì-pīt ^{a/}	bì-pītíb ^a	bì-pīt-	"younger child"
wād-tís ^a	wād-tísìb ^a	wād-tís-	"lawgiver" NT
zà'-nɔ̄-gúr ^a	zà'-nɔ̄-gúrìb ^a	zà'-nō-gúr-	"gatekeeper" NT

Agent nouns from 3-mora stems in s regularly drop the d formant in s and cb, which can result in "tonal heteroclites" <u>6.2.3</u>. Many also have $n \grave{a} m^a$ plurals.

kùes ^a	kūesıdıb ^a	kùes-	"seller"
dì'əs ^a	dī'əsıdıb ^a	dì'əs-	"receiver"
tὺ'as-tὺ'as ^a	tù'as-tū'asıdıb ^a	tὺ'as-tὺ'as-	"talker"
sīgıs ^{a/}	sīgısídìb ^a	sīgıs-	"lowerer"
dìıs ^a	dìıs-nàm ^a	dìıs-	"glutton"

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

sòs ^a	sɔ̄sıdıb ^a	sòs-	"beggar"	
tìs ^a	tīsıdıb ^a	tìs-	"giver"	WK
kīs ^{a/} or kīsıd ^{a/}	kīsıdíb ^a	kīsıd- (only)	"hater"	

These may be original 3-mora stem verbs with * $ss \rightarrow s$. There are also

zàb-zàb ^a	zàb-zàb-nàm ^a	zàb-zàb-	"warrior"
	zàb-zābıdıb ^a		
gbān-záb ^a	gbān-záb-nàm ^a	gbān-záb-	"leatherbeater"
ňwī-ték ^a	ňwī-tέkὶdιb ^a		"rope-puller"

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

```
pu'à-sāň'am<sup>ma</sup> pu'à-sāň'amıdıb<sup>a</sup> pu'à-sàň'am- "adulterer"
```

Stems in *VVn*- undergo consonant assimilation in the pl: $*nb \rightarrow mm$:

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

kpī'im'''	kpī'im(s ^ɛ	kpī'im-	"dead person, corpse"
zū'em ^{m/}	zū'amís ^ɛ	zū'em-	"blind person"
tādım ^{m/}	tādımıs ^ε	tàdım-	"weak person"
	tàdım-nàm ^a		

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

kpēεňm ^m	kpēεňmma LF	only	
	kpὲεňm-nàm ^a	kpὲεňm-	"elder"
<i>bī</i> ⁻əm ^m	<i>bī</i> 'əmma LF	only	
	bì'əm-nàm ^a	bì'əm-	"enemy"

Stems in l n r following a short root vowel show sg LF $-ll\varepsilon$ $-nn\varepsilon$ $-r\varepsilon$, with the SFs reinterpreted as the outcome of adding $-r^\varepsilon$ instead of -a. Sg LF-final $-\varepsilon$ is never seen with b^a -plural words in cases where the stem final would not assimilate sg $-r^\varepsilon$ 5.4.

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

Dàgbān ^{nε/}	Dàgbām ^{ma/}	Dàgbān-	"Dagomba person"
Bìn ^{nε}	<i>Bìm</i> ^{ma}	Bìn-	"Moba person"
Kὺtān ^{nε/}	Kùtām ^{ma/}	Kùtān-	member of EW's clan
M5r ^{ε/}	Мэ́эт ^{та} irreg	M5r-	"Muslim"

Agent nouns from single-aspect verbs with stems in -// or -r(r) not only show alternative - ε LF sg forms but also have analogical plurals in - a^+ alongside - b^a .

	ňyà'an-dὸl ^{la}	ňyà'an-dὸllιb ^a	ňyà'an-dòl-	"disciple" NT
	ňyā'an-dźl ^{lε}	ňyā'an-dɔ́llà+	ňyā'an-dól-	id WK
	gbàn-zāĭI ^{la/}	gbàn-zāňllíb ^a	gbàn-zāňl-	"book-carrier" KT WK
	bὺ-zāňl ^{la/}	bὺ-zāňllíb ^a	bὺ-zāňl-	"goat-carrier" WK
or	bὺ-zāĭl ^{lɛ/}	bù-zāňllá+		
	gbàn-mɔ̄r ^{a/}	gbàn-mɔ̄ríb ^a	gbàn-mɔ̄r-	"book-owner" DK
	gbàn-tār ^{a/}	gbàn-tāríb ^a	gbàn-tār-	id DK
	bù-mɔ̄ra/	bὺ-mɔ̄ríb ^a	bὺ-mɔ̄r-	"goat-owner" WK
or	bὺ-mɔ̄r ^{ɛ/}	bὺ-mɔ̄rá+		

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

dāu̯+		dāp ^a	dàu̯-, dàp- <u>5.3.1</u>	"man"
tāuň ^{+/}		tāňp ^{a/}	tāuň-, tāňp-	"sib of opposite sex"
sāeň+	WK	sāaňb ^a	sàň-	"blacksmith"
sāeň ^a	DK			
sɔ̄e̯ň+	WK	sɔ̄ɔňb ^a	sòň-	"witch"
sōeň ^a	DK			

*CVg-stems appear in

pu̯'ā̄ ^a ← *pu̯aga	pū'ab ^a	pu̯'à-	"woman, wife"
bā'a ⁼ ← *baga	bā'ab ^a	bà'-	"traditional diviner"

Note the irregular long SF vowel of $b\bar{a}'a^{=}$. Sg final - ν is dropped in the cb and pl in

pītύ ⁺	pītíb ^a	pīt-	"younger sibling
			of same sex"

 $S\grave{a}am-p\bar{i}t^{a/}$ "father's younger brother" and $b\grave{i}-p\bar{i}t^{a/}$ "younger child" are regular. Some CVV stems introduce -d- in the sq and in the pl or cb:

wìıd ^a	wìıb ^a	wìıd-	"hunter"
sɔ̃n̆'ɔd ^{a/}	sɔ̃n̆'ɔbª/	รวิทั'วd-	"someone better than"
pūkpāad ^{a/}	pūkpāadíb ^a	pūkpá-	"farmer"

Other CVV stems have become $r^{\epsilon}|a^{+}$ class, accounting for human-reference nouns in $r^{\epsilon}|a^{+}$ like $p \dot{\nu} k \dot{\sigma} \dot{\sigma} r^{\epsilon}$ "widow", $d \dot{a} - k \dot{\sigma} \dot{\sigma} r^{\epsilon}$ "bachelor", $b \bar{\iota} \sigma r^{\epsilon}$ "elder same-sex sib", $p \dot{\sigma} \dot{\sigma} r^{\epsilon}$ "cripple", $\dot{n} y \bar{\epsilon} \dot{\epsilon} r^{\epsilon}$ "next-younger sib." Related languages, including Toende Kusaal, may keep pl $-b^{a}$: Toende $p \dot{\sigma} k \dot{\sigma} \dot{\sigma} d \dot{\sigma$

A subclass referring to older/important people has $-b^a$ for sg, with pl nam^a 8.4:

nà'ab ^a	nà'-nàm ^a	nà'-	"chief"
yáab ^a (*yāágbā)	yāa-nám ^a	yāa-	"grandparent"
pùgvdıb ^a	pùgud-nàm ^a	pùgud-	"father's sister"
áňsìb ^a	āňs-nám ^a	āňs-	"mother's brother"
sàam ^{ma} (*mb)	sàam-nàm ^a	sàam-	"father"
dìəm ^{ma} (*mb)	dìəm-nàm ^a	dìəm-	"man's parent-in-law"
dàyáam ^{ma} (*mb)	dàyāam-nám ^a	dàyāam-	"woman's parent-in-
			law"

8.3.2 $g^a|s^\epsilon$

Straightforward examples include:

bῦυg ^a	būυs ^ε	bù-	"goat"
ňwādıg ^{a/}	ňwādιs ^{ε/}	ňwād-	"moon, month"
āaňdıg ^a	āaňdıs ^ε	àaňd-	"Vitex doniana"
bὺ-dὶbιg ^a	bὺ-dὶbιs ^ε	bὺ-dìb-	"male kid"
kpìibıg ^a	kpìibιs ^ε	kpìib-	"orphan"
yàmmıg ^a	yàmmıs ^ɛ	yàm-	"slave"
kɔ̃lıg ^a	kɔ̃lıs ^ɛ	kòl-	"river"
kpùkpàrıg ^a	kpùkpàrıs ^ɛ	kpùkpàr-	"palm tree"
pūsıg ^{a/}	pūsιs ^{ε/}	pūs-	"tamarind"
zɔ̄ɔga	z̄ɔɔs ^ɛ		"run, race"

Root-stems in *Caa Ciə Cue* delete the *g of the sg suffix -g^a 5.6:

bāa= <u>7.1</u>	bāas ^ε	bà-	"dog"
sīa ⁺	sīəs ^ɛ	s <u>i</u> à-	"waist"
sàbùa ⁺	sàbùes ^ɛ	sàbuà-	"lover, girlfriend"

Nasal *iaň uaň* here alternates with εεň ɔɔň:

zìň'a ⁺	zèň'ɛs ^ɛ	zi̯àň'- or zɛ̀ň'-	"red" (adjective)
nū'-íň'a ⁺	nū'-ε̂ň'εs ^ε	nū'-έň'-	"fingernail"
nūa ^{+/}	nōɔs ^{ε/}	nō-	"hen"

Stems in *CVg- display consonant assimilation in the sg via *gg $\rightarrow kk$:

```
gik^a gigs^{\epsilon} gig- "dumb person"
```

*Cag- *Ciag- *Cuag- delete *g when there is no assimilation 5.6:

zàk ^a	zà'as ^ɛ	zà'-	"compound"
pųāk ^a	pū'as ^ε	pự'à-	"female" (adjective)

Stems in -m- and -n- show *mg $\rightarrow \eta\eta$ and *ng $\rightarrow \eta\eta$ in the sg, with cbs remodelled on the sg. In the pl *ns \rightarrow *is 5.4, but *ms never assimilates in 2-mora stems, and need not do in longer stems. No 3- or 4-mora n-stems occur in this class.

tēŋ ^a	tēεňs ^ε	tèŋ-	"land"
pàŋ ^a	pàaňs ^ε	pàŋ-	"power"
bùŋ ^a	bὺmιs ^ε	bùŋ-	"donkey"
nāŋ ^a	nāmıs ^ε	nàŋ-	"scorpion"
sú'øŋª	sū'emís ^ε	sū'eŋ-	"rabbit"
níiŋ ^a	níis ^ε	nīiŋ-	"bird"
	nīimís ^ε		
kùlıŋ ^a	kùlıs ^ε	kùlıŋ-	"door"
	kùlımıs ^ɛ		
kū'alíŋ ^a	kū'alίs ^ε	kū'alíŋ-	sleeveless traditional
	kū'alímὶs ^ε		smock
mēεdιŋ ^a	mēεdιs ^ε	mὲεdιŋ-	"building tool"
	mēεdιmιs ^ε		
pīəsíŋ ^a	pīəsís ^ɛ	pīəsíŋ-	"sponge for washing"
	pīəsímìs ^ɛ		

Various irregularities are seen in

bīig ^a	bīis ^ε	<i>bī-</i> or <i>bì-</i>	"child"
bèrıŋ ^a	bèrıgıs ^ε		a plant used for fibre
tàmpūa ⁺	tàmpɔ̄ɔs ^ɛ	tàmpò-	"housefly" DK (no \check{n})
būtıŋ ^a	būtus ^ε	bùtıŋ-	"cup" <u>2.1</u>
sāŋá ⁺	<i>sānsá</i> + /ns/	sān-	"time"

These human-reference nouns have alternative plurals with the suffix $-b^a$:

dàsāŋ ^a	dàsām ^{ma}	dàsàŋ-	"young man"
	or <i>dàsāaňs</i> ^ε		
Yàaŋ ^a	Yàam ^{ma}	Yàaŋ-	"Yanga, Yansi person"
	or Yàamıs ^ɛ /Yàaňs ^ɛ		
Sà'dàbùa ⁺	Sà'dàbùeb ^a		clan name
	or <i>Sà'dàbùes</i> ɛ		

Several s^{ϵ} -plural stems with rounded root vowels or epenthetic vowels rounded after m have sg g° for the expected g° . WK avoids this with human-reference nouns.

	kūug ^{a/} or kūug ^{ɔ/}	kūus ^{ε/}	kū-	"mouse"
	sừ'ug ^a or sừ'ug ^o	sὺ'υs ^ε	sờ'-	"knife"
	nû'ug ^ɔ	nû'us ^ε	nū'-	"hand"
	zùnzòŋª or zùnzòŋº	⁾ zùnzɔ̀ɔňs ^ɛ	zùnzòŋ-	"blind person"
	tèŋ-zùŋ ^ɔ	tὲŋ-zὺυἤs ^ε		"foreign land"
	but	pi̯àň'-zùna+		"foreign language"
	<i>y</i> ύ'υŋ ^ɔ	yū'υmίs ^ε	yū'טŋ-	"night"
	zùuňg ^ɔ	z ùuň s^{ϵ} or z ùuň d^{ϵ}	zùň-	"vulture"
	yàmmug ^a WK	yàmmıs ^ɛ	yàm-	"slave"
or	yàmmvg ^ɔ			

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yuŋŋu* pl *yunsi* "night.")

Some original $g^{3}|d^{\varepsilon}$ nouns have substituted pl $-s^{\varepsilon}$ for $-d^{\varepsilon}$ instead of $-a^{+}$ 8.3.3:

	à-dàalúŋ ^ɔ	à-dàalís ^ε WK	à-dàalúŋ-	"stork"
		à-dàalímìs ^ɛ		
	sí'uŋ ^ɔ	sī'imís ^ɛ	รเ'ินŋ-	a kind of big dish
cf	dὶιsύŋ ^ɔ	dìısís ^ɛ	dìısúŋ-	"spoon"
		dìısímà+		

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

พเิโเรบ์ŋ ^ว	wīlımís ^ɛ	wīlเรชŋ-	a kind of snail
yālısúŋ ^ɔ	yālımís ^ɛ	yālısúŋ-	"quail"

8.3.3 $g^{3}|d^{\epsilon}$

All stems in m n after a short vowel, and all gerunds, use pl a^+ instead of d^{ϵ} . Before the sg $-g^{\circ}$ $-k^{\circ}$ $-\eta^{\circ}$ stem-final vowels are rounded, changing epenthetic vowels to v and creating rounding diphthongs from root vowels 5.5.

dàvg ^o	dàad [€]	dà-	"piece of wood"
vāʊṅgɔ/	vāaňd ^{ε/}	vāň-	"leaf"
fēň'og ^{ɔ/}	fēň'εd ^{ε/}	fēň'-	"ulcer"
dàbīog ^o	dàbīəd ^ɛ	dàbịà-	"coward"
vīug ^{ɔ/}	vīid ^{ε/}	VĪ-	"owl"
тōɔg ^ɔ	mɔ̄ɔd ^ε	mò-	"grass, bush"
dùndùug ^ɔ	dùndùud ^ɛ	dùndù-	"cobra"
	zùed ^ɛ		"friendship"
wābug ^{ɔ/}	wābıd ^{ɛ/}	wāb-	"elephant"
zūebúg ^o	zūebíd ^ɛ	zūeb-	"(human head) hair"
bālērvg ^{ɔ/}	bālērīd ^{ɛ/}	bālér-	"ugly person"
	or <i>bālērīs^{ɛ/}</i>		
bēsvg ^o	bēsıd ^ɛ	bès-	kind of pot

Some stems ending in root vowels have plurals of the form CVt^{ε} 5.3.1:

 $d\dot{z}_{z}^{2}$ $d\dot{z}_{z}^{2}$ $d\dot{z}_{z}^{2}$ "hut, room; clan"

So too $p\bar{\jmath} j g^{\jmath/}$ "farm, field", $f\bar{u}ug^{\jmath/}$ "clothing, shirt." The sg has a short vowel in

 $z\bar{u}g^{5/}$ $z\bar{u}t^{\epsilon/}$ $z\bar{u}$ - or $z\bar{u}g$ - "head"

*Cag- *Ciag- *Cuag- stems $\underline{5.6}$ show sg $-k^3$, and $\underline{u}a$ becomes $\underline{5}$ before $-k^3$ $\underline{5.5}$:

lāuk ^o	lā¹ad [€]		là'-	"(item of) goods"
b <u>i</u> āuňk ^o	biāň'ad ^ɛ		bjàň'-	"shoulder"
	bi̯āň'ada+	SB		
<i>l</i> òk⁵	Ιὺ'ad ^ε		lu'à-	"quiver (for arrows)"

Stems in *CVd* show -t- in the pl 5.4 via *dd $\rightarrow tt$:

 $\dot{u}dvg^{\circ}$ $\dot{u}t^{\epsilon}$ $\dot{u}d$ - "(piece of) chaff"

Stems in *CVg* develop kk in the singular via * $gg \rightarrow kk$:

 $d\bar{\upsilon}k^{\rm SI}$ $d\bar{\upsilon}g\upsilon d^{\rm EI}$ "cooking pot" "cooking pots" SB

Stems in I develop the cluster nn in the pl via *Id \rightarrow nn:

 $z\bar{z}l v g^{2l}$ $z\bar{z}n^{n\epsilon l}$ $z\bar{z}l$ "fool" $sil v g^{2}$ $sin^{n\epsilon}$ or $sil v s^{\epsilon}$ sil "hawk"

The only m n stems making plurals with $-d^{\varepsilon}$ are CVVC root-stems:

làngá υ ŋɔ làngāamá+ làngā υ ŋ- "crab" or làngáam^{mɛ}

So too $mangaun^3$ "crab", the plural-only $s\bar{u}n-p\hat{\epsilon}en^{n\epsilon}$ "anger" and perhaps the placename $T\dot{\epsilon}mp\acute{a}an^{n\epsilon}$ "Tempane", if the second element is from $p\ddot{a}al(g^a)$ "new."

All stems in n m following a short vowel use the plural suffix a^+ instead of d^{ϵ} . They show * $mg \rightarrow \eta \eta$ and * $ng \rightarrow \eta \eta$ in the sg, with cbs remodelled on the sg.

gbàuŋɔ gbàna+ gbàn- or gbàun-"letter, book" zīnzāuŋɔ/ zīnzāná+ zīnzáuŋ-"bat" àňruŋ^ɔ àňrıma+ àňrυη-"boat" mālงŋ^ว mālıma+ màluŋ-"sacrifice"

The expected *y*-glide is absent in the sg and cb of

nìn-gbīŋ^{ɔ/} nìn-gbīná⁺ nìn-gbīŋ- "body"

This may represent the influence of the alternate sg form $n in-gb \bar{i} n^{n \epsilon}$.

All regular gerunds of 3-mora- and 4-mora-stem dual-aspect verbs belong to this noun class except for those with stems ending in velars and fusion verbs, which have the singular suffix r^{ε} 11.1.1. Only stems in -s- and -sim- have plurals, always with -a⁺:

bū'esύg ^ο	bū'esá ⁺	bū'es-	"question"
zàaňsúŋ ^ɔ	zàaňsímà ⁺	zàaňsúŋ-	"dream"

Gerunds of 3-mora n-stem verbs never assimilate $*ng \to \eta\eta$, and gerunds of 3-mora m-stems only assimilate $*mg \to \eta\eta$ optionally: thus $diginvg^3$ "lying down", $sunvg^3$ "bowing the head", $zin'invg^3$ "sitting down", $tinvg^3$ or $tinvg^3$ "departing", $tinvg^3$ or $tinvg^3$ "reading."

The place name $D \dot{\epsilon} n \nu g^{\circ}$ "Denugu" (?? $D \dot{\epsilon} n n \nu g^{\circ}$) also fails to assimilate *n g.

8.3.4 $r^{\epsilon}|a^{+}$

Straightforward examples include:

kūgυr ^{ε/}	kūgá ⁺	kūg-	"stone"
dìgır ^ɛ	dìga ⁺	dìg-	"dwarf"
bàlàŋır ^ɛ	bàlàŋa ⁺	bàlàŋ-	"hat"
yūgvdır ^ɛ	yūgvda ⁺	yùgvd-	"hedgehog"
pu̯'à-sādır ^{ε/}	pu̯'à-sādá+	pu̯'à-sād-	"young woman"
nóbìr ^ɛ	nōbá ⁺	nōb-	"leg"
līıbır ^ε	līıba+	lìıb-	"twin"
sāngúnnìr ^ɛ	sāngúnnà+	sāngύn-	"millipede"
bì'isır ^ɛ	bì'isa ⁺	bì'is-	"woman's breast"
sūmmır ^ɛ	sūmma+	sùm-	"groundnut"

CVV- and CV'V-stems (for the allomorphs before pl $-a^+$ see 5.3.1):

bīər ^{ɛ/}	bjēyá+	bịā-	"elder same-sex sib"
zūөr ^ɛ	zuēya+	zụà-	"hill"
nɔ̄ɔr ^{ɛ/}	nōyá+	nō-	"mouth"
zบิบr ^ɛ	zūya+	zù-	"tail"
tītā'ar ^ɛ	tītāda+	tītá'-	"big" (adjective) "next-younger sibling" "cripple" "name" "penis"
ňyē'ɛr ^{ɛ/}	ňyēdá+	ňyē'-	
pòň'ɔr ^ɛ	pòňda+	ρὸň'-	
yū'ʊr ^{ɛ/}	yūdá+	yū'-	
yū'ər ^ɛ	yuāda+	yù'er- <u>8.2</u>	

Stems in *Cag-*Ciag-*Cuag-5.6 may have forms made by analogy with original CV'V-stems, instead of or alongside forms with vowel fusion:

bà'ar [€]	bà'a ⁺ or bàda ⁺	bà'-	"idol" (Farefare <i>bàgrὲ</i>)
ňyā'ar ^ε	йуā'a ⁺	йуа̀'-	"root" (← *ɲεg-)
sià'ar ^ɛ	sįà'a ⁺	sià'-	"forest"

bi̯āň'ar ^{€/}	bi̯áň'a ⁺	bi̯āň'-	"wet mud, riverbed"
mὺ'ar ^ε	mu̯'àa ⁺	mu̯'à-	"reservoir, dam"
	or mờ'ada+		
zànkù'ar ^ɛ	zànkự'àa+	zànkự'à-	"jackal"
	or <i>zànkù</i> 'ada+		
kὺndὺ'ar ^ε	kừndự'àa ⁺	kừndự'à-	"barren woman"
	or kỳndỳ'ada+		

So too, even in a case where the glottalisation is not derived from *g:

ki- $d\dot{a}$ ' ar^{ϵ} ki- $d\dot{a}$ 'ada⁺ WK "bought-in millet"

Stems in deleted *g after a long vowel include fusion verb gerunds $\underline{10.1}$ like $gb\check{a}\check{n}'ar^{\epsilon}$ ($gb\bar{a}\check{n}'e^{+/}$ "grab"), $d\acute{u}e^{\epsilon}$ ($d\bar{u}e^{+/}$ "rise") and also

 $v\dot{u}\theta r^{\epsilon}$ $v\bar{u}\dot{a}a^{=}$ $v\bar{u}\theta$ "fruit of red kapok"

Some root-stems show *CV* with a short vowel before r^{ε} , with cb *CVr*- <u>8.2</u>:

 $gb\bar{\epsilon}r^{\epsilon/}$ $gb\bar{\epsilon}y\dot{a}^+$ $gb\bar{\epsilon}r$ - "thigh"

Similarly $k \dot{v} k \bar{J} r^{\epsilon/}$ "voice" $kp \dot{a} k \bar{v} r^{\epsilon/}$ "tortoise" $g \bar{a} \breve{n} r^{\epsilon/}$ "ebony fruit" $g \bar{v} m p \bar{v} z \bar{\epsilon} r^{\epsilon/}$ "duck" $\breve{n} y \dot{c} - v \bar{v} r^{\epsilon/}$ "life".

2-mora stem verbs make gerunds in $-r^{\varepsilon}$ instead of $-b^{\circ}$ after a noun cb: $n\bar{\circ}-l\hat{\circ}\circ r^{\varepsilon}$ "fasting" ("mouth-tying"), $f\bar{u}-y\hat{\varepsilon}\varepsilon r^{\varepsilon}$ "shirt-wearing"; vowel shortening appears in $n\bar{a}'-l\hat{\circ}r^{\varepsilon}$ "area in compound for tying up cows" and $wid-l\bar{\circ}r^{\varepsilon}$ "area for tying up horses."

Stems in $m \ n \ l \ r$ undergo consonant assimilation in the sg: $*rr \rightarrow r$, $*lr \rightarrow ll$, $*nr \rightarrow nn$, $*mr \rightarrow mn$; on the instability of the cluster mn see $\underline{5.2}$.

kùkpàr ^ɛ kpān ^{nɛ} má'an ^{nɛ}	kùkpàra+ kpāna+ mā'aná+	kùkpàr- kpàn- mā'an-	"palm fruit" "spear" "okra"
pībιn ^{nε}	pībına ⁺	pìbın-	"covering"
dūm ^{nε}	dūma+	dùm-	"knee"
zɔ̄ɔm ^{nε} yùυm ^{nε}	zɔ̄ɔma+ yùma+	zòɔm- yùʊm-	"fugitive" "year" <u>5.3.2</u>
gbīgım ^{nɛ}	gbīgıma ⁺	gbìgım-	"lion"
gél ^{le}	gēlá ⁺	gēl-	"egg"
(ι/ ^{lε}	เิเlá ⁺	<i>ī</i> t/-	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

ňwān^{nε} SB ňwāna⁺ NT ňwàn-/ňwàm- "calabash"

ňwām^{mε} WK ňwāma⁺ SB WK NT

An exceptional suppletive plural, segmentally and tonally, is seen in

dāar[€] dābá⁺ dà- "day"

These two $r^{\varepsilon}|a^{+}$ class words probably have 1-mora stems:

[Mampruli zari] $z\bar{a}^{+/}$ $z\bar{a}$ "millet" $y\bar{\imath}r^{\epsilon/}$ $y\bar{\imath}$ "house"

Language names 29.4 have the suffix $-l^{\epsilon}$ after stems ending in a root vowel:

Language Speakers

Kūsâal^ɛ Kusaal Kūsâas^ε Kusaasi ΜὸͻΙε Mòɔsε Mooré Mossi Zàngbèɛl^ɛ Hausa Zàngbὲεd^ε Hausa Nàsāal^E Nàsàa-nàma English/French Europeans

Stems in *-r-* show the distinctive assimilation * $rl \rightarrow tt \ 5.4$, but other stems ending in a consonant show forms indistinguishable those with the flexion r^{ϵ} :

Yāt^{ε/} Yārıs^{€/} Yarsi Yarsi Bāt^{ε/} Bārιs^{ε/} Bisa Bisa Nàbır[€] Nabit. Nàbidiba Nabdema Tùen^{nε} Tù⊖nnır[€] Toende Kusaal Toende area Dàgbān^{nɛ/} Dàgbām^{ma/} Dagbani Dagomba Bìn^{nε} **Bìm**ma Moba Moba Yàan^{nε} Yàaňs^ɛ Yansi Yansi Gōrín^{ne} Farefare Gūrís^ε Farefare Tàlιn^{nε} Tàlιs^ε Tallensi Talni Bùl^{lε} Buli Bùlıs^E Bulsa ÀgὸΙ^{lε} Àgὸl^{lε} Agolle Kusaal Agolle area

Unexpected epenthesis occurs in:

 $K\grave{a}mb\grave{v}n\iota r^{\epsilon}$ Twi $K\grave{a}mb\grave{v}m\iota s^{\epsilon}$ Ashanti $\check{N}w\bar{a}mp\bar{u}r\iota l^{\epsilon/}$ Mampruli $\check{N}w\bar{a}mp\bar{u}r\iota s^{\epsilon/}$ Mamprussi

8.3.5 P|1+

The plural $-\iota^+$ causes the stem vowels $aa\ i\partial\ \varepsilon\varepsilon$ to undergo "umlaut" to ii. Straightforward examples for the $f^0|\iota^+$ class are

mòlıf ^o	mòlı+	mòl-	"gazelle"
bīilíf ⁹	bīilí+	bīil-	"seed"
ňyīríf ⁹	ňyīrí+	йуīr-	"egusi"
zūríf ⁹	zūrí+	zūr-	"dawadawa seed"
būn-búudìf ^o			"plant"
[Mampruli <i>kaafu</i>]	kī ^{+/}	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
[Mooré muiifu]	mù <u>i</u> +	mù <u>i</u> -	"rice"

Two words have stems in *Caag- with deletion of *g 5.6:

náaf ^o	nīigí+	nā'- <u>5.3.2</u>	"cow"
wáaf ^o	wīigí+	wā'-	"snake"

Stems in -*n*- show consonant assimilation in the sg with * $nf \rightarrow \tilde{i}f = 5.4$:

nīf ^{9/}	nīnί+	nīn- or nīf-	"eye"
ρίιἤf ⁹	pīıní+	pīın-	"genet"
kíiňf ^o	kīiní+		"millet seed"
<i>z</i> ύ'υἤƒ ^ͻ	zū'υnί ⁺		"dawadawa seed"
míif ^o	mīinί ⁺		"okra seed"

Sg m(if) is remodelled after the umlauted pl: cf $m\acute{a}$ 'a $n^{n\epsilon}$ "okra." In two words stem -d- is lost in the sg:

wìəf ⁹	wìdı+	wìd-	"horse"
lā'af ^o	līgıdı+	là'- or lìg-	"cowrie" pl "money"

Some words only have $f^0|_{l}$ class suffixes in one number:

zíiŋ ^a	zīmí+	zīm-	"fish"
wālıg ^a	$w\bar{a}lis^{\epsilon}$ or $w\bar{a}li^{+}$ sic	wàl-	a kind of gazelle
sībıg ^{a/}	sībí+	sīb-	a kind of termite
<i>s</i> īiňf ^{ɔ/} or <i>s</i> īiňg ^{a/}	sīiňs ^{ɛ/}	sīň-	"bee"
sūňf⁰ or sūuňr ^{ε/}	sūňyá ⁺	sūň-	"heart"
kpá'ບŋ ^ɔ	kpī inί+	<i>kpā</i> '- irreg	"guinea fowl"

8.3.6 b³

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

sā'ab ^o	sà'-	"millet porridge, TZ"
tāňp ^o	tàňp-	"war" <u>5.3.1</u>
kī'ιb ^{ɔ/}		"soap"

All regular gerunds from 2-mora-stem dual-aspect verbs belong here $\underline{11.1.1}$: stems in b show -p- via $*bb \to pp$: $s\bar{5}p^{5/}$ from $s\bar{5}b^{\epsilon}$ "write", $l\bar{5}p^{5/}$ from $l\bar{5}b^{\epsilon}$ "throw stones at", and stems in m show $*mb \to mm$: $k\bar{l}m^{m}$ from $k\bar{l}m^{m}$ "tend a flock/herd", $w\bar{v}m^{m}$ from $w\bar{v}m^{m}$ "hear." Stems in n do not assimilate, however: $b\bar{u}nlb^{5}$ from $b\bar{u}n^{\epsilon}$ "reap."

 $Y\overline{i}s^{\varepsilon}$ "make go/come out" has the expected gerund $y\overline{i}s\iota b^{\circ}$; the alternate form $y\overline{i}is^{\varepsilon}$ has $y\overline{i}is(b^{\circ})$, the only 3-mora stem in the b° class.

8.3.7 m^m

Most words in this class are mass nouns. Straightforward forms include:

dāam ^{m/}	dā-	"millet beer, pito"
mèlıgım ^m		"dew"
kūdım ^m		"olden days"
dū'uním ^m	dū'un-	"urine"
dàalım ^m		"masculinity"
yàarım ^m	yàar-	"salt"
zāaňsím ^m	zāaňs-	"soup"

M-stems can be identified from cbs in m, pls in $-ma^+$ or $-m\iota s^\epsilon$, or non-initial H tonemes in Pattern L <u>6.2.2</u>.

νōm ^{m/}		vōm-	"life"
kūm ^m		kùm-	"death"
zōm ^{m/}		zōm-	"flour"
bùgớm ^m		bùgóm- or bùgōm	- "fire"
yā'am ^{m/}		yā'am-	"gall; gall bladder"
pūum ^{m/}		pūum-	"flowers, flora"
bì'isím ^m			"milk"
dàalím ^m	dàalímìs ^ɛ	dàalím-	"male sex organs"
pīim ^{m/}	pīmá ⁺	pīm-	"arrow" <u>5.3.2</u>

 $P\bar{\imath}im^{m/}$ "arrow" is a remnant of an old "long, thin things" $^{5}|^{\epsilon}$ class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm $fiim\dot{u}$ "arrow", plural $fiim\dot{i}$.

8.4 Nàm plurals

Nàm^a is not a suffix. It appears as a NP head, with a predependent noun appearing as cb if it is a count noun and as sg or pl if it is a mass noun.

It is used: when pl stems differs from the sg; to avoid ambiguous regular plurals; with nouns using $-b^a$ or a bare stem as sg 8.3.1; with loanwords; with pronouns 15.2 and quantifiers 15.5.1; with plural forms with singular meanings; for mass nouns with count meanings; with forms with the personifier particle 15.6.

Examples:

mà ⁺	mà nám ^a	mà-	"mother"
	(tone <i>sic</i> , as if und	compounded)	
bā' ^{+/}	bā'-nám ^a	bā'-	"father"
zuà+	zuà-nàm ^a	zuà-	"friend"
bùrkìn ^a	bùrkìn-nàm ^a	bùrkìn-	"honourable person"
kὲεkὲ ⁺	kèɛkè-nàm ^a	kèekè-	"bicycle"
dāan ^a	dàan-nàm ^a	dàan-	"owner of"
tīrâan ^a	tīrâan-nàm ^a	tīrâan-	"neighbour, peer"
	dà-pūvdá nàm ^a		"crosses"
	kūt nám ^a		"nails"; sg also "iron"
	bε̄'εd nám ^a		"evils"
	bùgύm nám ^a		"fires, lights"
	sā'ab nám ^a		"portions of porridge"
	dāam nám ^a		"beers"

8.5 Nouns with apocope-blocking

A number of nouns ending in $-\iota^+$ or $-\upsilon^+$ display apocope-blocking 5.1:

būudι ⁺	bùud-	"tribe"
nà'ası+		"honour"
kābır(+		"entry permission"
sūgvró ⁺		"forbearance"
pīint+	pìin-	"gift"

Some are loans from related languages without apocope, like $k\bar{\imath}ib\dot{\upsilon}^+$ "soap" (from Mampruli.) Cognates of $b\bar{u}ud\iota^+$ show that the $-d\iota$ represents the d^ε pl suffix: Mooré $b\dot{u}udu$ "family, kind" sg $b\dot{u}ugu$. $N\dot{a}^!as\iota^+$ may be s^ε pl. $K\bar{a}b\iota r\dot{\iota}^+$ and $s\bar{u}g\upsilon r\dot{\upsilon}^+$ may be r^ε sg, with $k\bar{a}b\iota r^{\varepsilon/}$ "ask for admission" and $s\bar{u}g\upsilon r^{\varepsilon/}$ "forbear" as back-formations.

With $p\bar{i}in\iota^+$ cf Mampruli piini id; Mampruli also has $r^{\epsilon}|a^+$ type sg piinni pl piina, but Dagbani pini shows that single n is original, because Dagbani preserves long vowels in originally closed syllables. The word may reflect a noun class obsolete in Western Oti-Volta; ii is probably umlauted from aa, as in $f^{\epsilon}|\iota^+$ class plurals (cf Gulimancéma paabu "gift.")

8.6 Loanwords

Loanwords adopt noun classes by analogy <u>8.1</u> or make *nàm*^a plurals <u>8.4</u>:

g ^a s ^ε : àrazàk ^a	àrazà'as ^ɛ	àrazà'-	"riches"
			Hausa <i>arzìkii</i>
màli̯āk ^{a/}	màli̯āˈasɛ/	màlįā'-	"angel" DK (Arabic)
g ^ɔ d ^ɛ : gādvg ^{ɔ/}	gāt ^{ε/}	gād-	"bed" Hausa <i>gadoo</i>
làmbà'ɔgɔ	lòmbò'ɔd ^ε	làmbà'-	"garden"
			Hausa <i>làmbuu</i>
r ^ε a ⁺ : lόr ^ε	<i>lóyà</i> ⁺ tones <i>sic</i>	lór-	"car, lorry"
	or <i>lɔ́ɔm</i> ^{ma}		cf <i>M5r</i> ^ε 8.3.1
àlópìr ^ɛ	àlópìya+		"aeroplane" SB
wādır ^{ε/}	wādá ⁺	wād-	pl "customs, law"
			(English "order")
gādv ⁺	gādv-nám ^a	gādv-	"bed" WK
kὲεkὲ+	kὲεkὲ-nàm ^a	kèekè-	"bicycle" Hausa <i>kèekè</i>
dāká+	dāká-nàm ^a	dāká-	"box" Hausa <i>àdakàa</i>
tέεbὺl ^ε	tέεbὺl-nàm ^a	tέεbùl-	"table"
Nàsāara+	Nàsàar-nàm ^a	Nàsàar-	"white person,
	or <i>Nàsàa-nàm</i> a	Nàsàa-	European" <u>29.4</u> ;
			cf Hausa <i>Nàsaara</i>

Loanwords ending in L or H toneme distinguish sg from cb by the fact that M spreading only follows the sg, conforming to the usual rule 7.4.3:

du̯'átà nâ'ab	"a doctor's chief"
du̯'átà-nà'ab	"a doctor-chief, doctor who is a chief"

Some all-M loanwords change final M to H in the cb on the analogy of Kusaal nouns with M toneme noun prefixes $\underline{6.2.4}$: $d\bar{u}niya^+$ "world" (Arabic dunya:), $d\bar{u}niya^+kan\bar{a}$ "this world."

9 Adjective flexion

Unlike nouns, most Kusaal adjectives show suffixes from more than one noun class. This reflects the prehistory of the language, in which noun classes triggered agreement and adjectives took the suffix of the head noun, which preceded as a combining form, effectively infixing the adjective stem between the noun stem and its suffix. Like most Western Oti-Volta languages, Kusaal has lost the agreement system, but adjectives commonly remain extant with suffixes from more than one class, now usually in free variation. Thus from $b\bar{\nu}vg^a$ "goat":

bὺ-pìəlιg ^a	bὺ - pìəlιs ^ε	bù-pìəl-	(<i>g</i> a <i>s</i> ٤)	"white goat"
bὺ-pìəl ^{lε}	bὺ-pìəla ⁺	bù-pìəl-	$(r^{\varepsilon} a^+)$	id

A few traces of agreement remain, accounting for all cases with $m^{\rm m}$ 15.8.1.1. There is also some preference for $g^{\rm a}|s^{\rm E}$ suffixes for human reference: $n\bar{n}$ -sábilis "Africans", where $n\bar{n}$ -sábilis is accepted by informants but is much less common, and Z_{μ} -wiis "Red Zoose" (clan), where the adjective does not normally use pl $s^{\rm E}$. The suffixes $a|b^{\rm a}$ and $a|b^{\rm a}$ and $a|b^{\rm c}$ in set expressions; $a|b^{\rm c}$ never occurs at all.

WK claims a meaning difference in intensity in gradable adjectives with sg suffixes of different classes, consistently ranking them $g^a r^\epsilon g^{\flat}$ in decreasing order, so that $f\bar{u}$ - $p\hat{i}$ - $p\hat{$

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

	zìň'a ⁺ zὲň'og ^ɔ	zèň'ɛs ^ɛ zèň'ɛd ^ɛ or zèňda+	zὲň'-	"red"
	bīʾa ⁺ bɛ̄'og ^ɔ	bī'əs ^ε bē'εd ^ε	bịà'- bὲ'-	"bad"
also	<i>bε̄'εd</i> ε sg	<i>bὲ'εd-nàm</i> ª pl		

Other adjectives are either g^a - or g^b -type, along with $r^e|a^+$ class suffixes; this probably reflects simplification of the old agreement system prior to its complete abandonment. Adjectives of the g^a type include:

wàbıg ^a	wàbıs ^ɛ	wàb-	"lame"
wàbır ^ɛ	wàba ⁺		

vènnıg ^a vènnır ^ɛ rare	vènnıs ^e vènna ⁺	vèn-	"beautiful"
vèňllıg ^a	vὲňllιs ^ε vὲňlla ⁺		"beautiful"
sābılíg ^a sābíl ^{lɛ}	sābılís ^ɛ sābılá ⁺	sābıl-	"black"

Similar are $w\bar{\epsilon}nn\iota r^{\epsilon}$ "resembling" $p\bar{a}al(g^{a}$ "new" $z\acute{a}al^{|\epsilon}$ "empty" $b\grave{a}a\breve{n}l\iota g^{a}$ "slim" $p\grave{a}bl\iota g^{a}$ "white."

Sg r^{ε} is not used with g^{a} -type stems in m n:

$$d\bar{\epsilon}\epsilon \eta^{\rm a}$$
 $d\bar{\epsilon}\epsilon \check{n}s^{\epsilon}$ "first" $d\bar{\epsilon}\epsilon m\iota s^{\epsilon}$ $d\dot{\epsilon}\epsilon \eta$ -

Pl s^{ε} is not used with 2-mora stems in mn, or with any stems in sd:

gīŋ ^a	gīma ⁺	gìŋ-	"short"
būgvsíg ^a būgvsír ^ɛ	būgusá ⁺	būgvs-	"soft"
pòɔdɪg ^a pòɔdɪr ^ɛ	pɔ̀ɔda ⁺	pòɔd-	"few, small"

Similarly $m\bar{a}$ 'así r^{ϵ} "cold, wet" $m\bar{a}$ lısí r^{ϵ} "sweet" $t\bar{\epsilon}$ bısí r^{ϵ} "heavy" $l\bar{a}$ bısí r^{ϵ} "wide." Adjectives of the g^{3} -type only show pl d^{ϵ} in a few 2-mora stems ending in vowels or plosives:

nèog ^o nèer ^e	nὲεd ^ε nὲya ⁺	nè-	"empty"
	-	>	U JU
wìug ^ɔ wìir ^ɛ	wìid ^ɛ wìya ⁺	wì-	"red"
wɔ̃k ^{ɔ/} wā'ar ^{ɛ/} rare	wā'ad ^{ε/} wá'a ⁺	wā'- or wɔ̄k-	"long, tall"

kūdvg ^ɔ kūdır ^ɛ	kūt [€] rare kūda ⁺	kùd-	"old"
<i>bèdvg</i> ⁵ <i>bèdır[£]</i> rare	bèda ⁺	bèd-	"great"
tītā'vg ^o rare tītā'ar ^e	tītāda+	tītá'-	"big"

Adjectives of the g° -type with stems in lmnrs do not use sg r^{ε} , and accordingly end up with sg g° pl a^{+} only:

sນ້ŋ ^ວ	sùma ⁺	sùŋ -	"good"
kísùg ^o	kīsá ⁺	kīs-	"hateful, taboo"
dà-z̄εmmύg ^ɔ	dà-zēmmá ⁺	dà-zēm-	"equal piece of wood"
tūulúg ^o	tῦυlá ⁺	tōυl-	"hot"
lāllύg ^ο	lāllá+	lāl-	"distant"
mì'isvg ^ɔ	mì'isa ⁺	mì'is-	"sour"
wàu̞ŋɔ	wàna ⁺	wàuŋ-	"wasted, thin"
kpi¹oŋ ^ɔ	kpī'əma+	kpì'oŋ-	"hard, strong"
zùlʊŋɔ	zùlıma+	zùloŋ-	"deep"
yī-pźňrὺg ^ɔ	yī-póňrà+		"nearby house"

Similarly $y \grave{a} l \upsilon \eta^{\circ}$ "wide" $\check{n} y \bar{a} l \dot{\upsilon} \eta^{\circ}$ "wonderful" $y \bar{\epsilon} l - n \acute{a} r \dot{\upsilon} \eta^{\circ}$ "necessary thing." Resultative adjectives derived with *- $l \iota m - 12.2.1.2.2$ belong here. KT (but not WK) also has forms without -m- in both sg and pl:

kpìilύŋ ^ɔ	kpìilímà+	kpìilúŋ-	"dead"	WK
nīn-kpíilùg ^ɔ	nīn-kpíilìma+		"dead person"	KT
gēεĭlύŋ ^ɔ	gēεňlímà ⁺	gēεňlύŋ -	"tired"	WK
nīn - gέεἤlὺg ^ɔ	nīn-gέεἤlìma+		"tired person"	KT
pὲ'εlύŋ ^ɔ	pὲ'εlímà ⁺	pὲ'εlύŋ -	"full" WK	KT
	dūg - pέ'εlà ⁺		"full pots"	KT

Habitual adjectives are derived with d 12.2.1.2.1, but the d is often assimilated or dropped, so not all habitual adjectives are d-stems. They are g^a -type for WK, but g^a -type for KT. In either case, the pl suffix is always a^a , as expected:

kūυdír ^ε	kūυdá ⁺	kūvd-	"murderous;
kūvdíg ^a WK			liable to be killed"
kōυdύg ^ο KT			

tūmmır ^ɛ	tūmma+ WK tūmna+ KT	tùm-	"working, helpful"
sīnnír ^ɛ rare sīnníg ^a	sīnná ⁺	sīn-	"silent"
mɔ̄r ^{ε/} kùg-dɛ̄l ^{lɛ/}	mɔ̄rá+ kὺg-dɛ̄llá+	mōr-	"having" "chair for leaning on"

Stems in $g k \eta$ do not use the sg suffixes $g^a g^a$:

būn-túlıgìr ^ɛ	būn-túlıgà+		"heating thing"
ňwī-tέkὶr ^ε	ňwī-tékà+	ňwī-tέk-	"pulling-rope"
bบิท-รบ์ŋìr ^ะ	būn-súŋà+		"helpful thing"

Adjectives derived from 4-mora stem verbs in -m in KT's speech take g^a or g^b sg and $-a^+$ pl; they may drop the -m- in the plural:

```
n\bar{l}n-p\dot{v}'allna n\bar{l}n-p\dot{v}'allma "harmful person" n\bar{l}n-z\dot{a}a\ddot{n}s\dot{v}" n\bar{l}n-z\dot{a}a\ddot{n}s\dot{v}" "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:

vūr ^{ε/}	νōyá ⁺	vūr-	"alive"
dāvg ^o	dāad ^ɛ	dà-	"male"
tɔ̄ɔgɔ	t5̇ɔd ^ε	tò-	"bitter"
pųāk ^a	pū'as ^ε	pu̯'à-	"female" (human)
йуа́'аŋ ^а	йуа́'as ^ɛ	йуā'aŋ-	"female" (animal)
	or <i>ňyāˈamís</i> ٤		
ňyὲεsíŋ ^a	ňyὲεnsís ^ε	<i>ἤγὲε</i> ςίη -	"self-confident"

and similarly $v\grave{\epsilon}\check{n}ll(\eta^a$ "beautiful" $m\bar{a}l\iota s(\eta^a$ "pleasant" $l\bar{a}ll(\eta^a$ "distant."

```
b\bar{\imath}l^a b\bar{\imath}b\iota s^\epsilon bil- or bi- "little"
```

The sg flexion -la is found more widely in other Western Oti-Volta languages, where it has a diminutive sense: thus Farefare níílá "chick", pììlà "lamb", bùdíblá "boy", púglá "girl", kíílá "young guinea fowl"; Mooré bìríblá "boy", bìpúglá "girl", bùllá "kid." The plural stem bib- is reduplicated.

10 Verb flexion

Though written solid with the verb in traditional orthography, discontinuous-past n^{ϵ} 23.1.1 and the 2pl subject ^{ya} 19.7.3 are not flexions but bound liaison words.

10.1 Dual-aspect

Some 90% of verbs are dynamic $\underline{19.2}$ **dual-aspect** verbs, using the stem form for perfective aspect and adding $-d^a$ for imperfective. Synchronically, $-d^a$ is simply a flexion, but historically this probably represents thoroughgoing levelling of a formation with a *derivational* suffix *d preceding the same imperfective flexion -a as appears in single-aspect verbs. A suffix $-m^a$ marks imperative mood whenever the verb carries the independency-marking tone overlay $\underline{19.6.2.2}$.

Perfective, imperfective and $-m^a$ imperative are cited in order. Straightforward examples include:

kū⁺	kūυd ^{a/}	kὺυm ^a	"kill"
kpèň' ⁺	kpèň'ɛd ^a	kpὲň'εm ^a	"enter"
kįà+	kìəd ^a	kìəm ^a	"cut"
kuā+	kūød ^{a/}	kùem ^a	"hoe"
gòň ⁺	gòɔňd ^a	gɔ̀ɔnĭm ^a	"hunt"
dūg ^ε	dūgvd ^{a/}	dùgvm ^a	"cook"
yùug ^ɛ	yùugıd ^a	yùugım ^a	"delay, get late"
yādιg ^{ε/}	yādıgíd ^a	yàdıgım ^a	"scatter"
pįāň' ^a	pįāň'ad ^{a/}	pi̯àn̆'am ^a	"speak; praise"
du̞'àª	dὺ'ad ^a	dὺ'am ^a	"bear, beget"
n5k ^{ε/}	nōkíd ^a	nòkım ^a	"take"
gāŋ ^{ɛ/}	gāŋíd ^a	gàŋım ^a	"choose"
kpàr ^ε	kpàrıd ^a	kpàrım ^a	"lock"
sūgvr ^{ε/}	sūgvríd ^a	sùgvrım ^a	"forgive"
bàs ^ɛ	bàsıd ^a	bàsım ^a	"go/send away"
sīgıs ^{ɛ/}	sīgısíd ^a	sìgısım ^a	"lower"
kōt ^{ε/}	kōtíd ^a	kòtım ^a	"slaughter"

Some root-stems ending in a vowel show a CV- allomorph in both imperfective and imperative, with -t- for -d- 5.3.1:

dì+	dìt ^a	dìm ^a	"eat"
ňνē ⁺	ἤνĒt ^{a/}	ňvèm ^a	"see"

and likewise $l\hat{i}^+/l\hat{u}^+$ "fall", $d\bar{v}^+$ "go up", $y\bar{i}^+$ "go/come out", $z\hat{\jmath}^+$ "run, fear."

Stems in -d- show -t- in the ipfv via *dd \rightarrow tt:

 $b\dot{v}d^{\rm E}$ $b\dot{v}t^{\rm a}$ $b\dot{v}d_{\rm E}m^{\rm a}$ "plant" $g\dot{a}ad^{\rm E}$ $g\dot{a}t^{\rm a}$ 3.2 $g\dot{a}ad_{\rm E}m^{\rm a}$ "pass, surpass"

Stems in *I* generate a cluster in the ipfv via * $Id \rightarrow nn \ \underline{5.4}$:

νūl ^ε	νōn ^{na/}	νὺlιm ^a	"swallow"
màal ^ɛ	màan ^{na}	màalım ^a	"make; sacrifice"
dīgıl ^{ɛ/}	dīgín ^{na}	dìgılım ^a	"lay down"

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

Ιὲb ^ε	lèbıd ^a	lèm ^{ma}	"return"
s5̄b ^ε	sɔ̄bɪd ^{a/}	sòm ^{ma}	"write"
lì∂b ^ε	lìəbıd ^a	lìəbım ^a	"become"
Ēεňb ^{ε/}	ēεňbíd ^a	ὲεňbιm ^a	"lay a foundation"

Only 2-mora *n*-stems show *nd \rightarrow nn; only $k\bar{\epsilon}\eta^{\epsilon}$ (below) shows *nm \rightarrow mm:

bùn ^ɛ	bùn ^{na}	bùnım ^a	"reap"
m̄ɔnε	mɔ̄n ^{na/}	mònım ^a	"make porridge"
gò'ɔn ^ɛ	gà'ɔnɪd ^a	gà'ɔnım ^a	"extend neck"
dìgın ^ε	dìgınıd ^a	dìgınım ^a	"lie down"

The nn-stem $sùn^{\epsilon}$ does not assimilate at all:

sùn ^{nε}		\a	"bow head"
CHIDIIC	sùnnıd ^a	sùnnıma	"DOM DASO"
J uli	Suillitu	SUIIIIIII	DOM HEAD

4-mora m-stems always assimilate * $md \rightarrow mn$, mm, while 3-mora m-stems assimilate optionally; 2-mora stems regularly assimilate, but the NT/KB sometimes have unassimilated forms to avoid ambiguity 5.4.

sìilım ^m	sìilım ^{ma}	sìilım ^{ma}	"quote proverbs"
lāŋím ^m	lāŋím ^{ma}	làŋım ^{ma}	"wander searching"
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"
tōɔm ^{m/}	tɔ́ɔm ^{ma} /tɔ̄ɔmída	tòɔm ^{ma}	"depart"
từm ^m	từm ^{ma}	từm ^{ma}	"work"

Like $t\grave{v}m^m$ are $w\grave{v}m^m$ "hear", $k\grave{v}m^m$ "tend a flock or herd", $d\grave{v}m^m$ "bite."

Stems in -mm- only assimilate in the imperative:

tàm^m tàmmıd^a tàm^{ma} "forget"

Like $t\grave{a}m^m$ are $z\grave{a}m^m$ "cheat, betray", $d\grave{a}m^m$ "shake", $l\grave{\epsilon}m^m$ "sip, taste"; the cognate Mooré verbs have -mb-: $z\~{a}mbe$ "cheat", $r\~{a}mbe$ "stir", $l\grave{\epsilon}mbe$ "taste".

Fusion verbs show deleted *g after aa iə uə aaň $\varepsilon\varepsilon$ ň ε ð 5.6. *G-deletion appears only in the perfective and gerund; elsewhere *g is absent, not deleted (for the tonal implications see 6.3.1.) For the perfective forms before liaison see see 7.2.

fāeň ^{+/}	fāaňd ^{a/}	fàaňm ^a	"save"
dī¹e ^{+/}	dī'əd ^{a/}	dì'əm ^a	"get, receive"
dūe⁺/	dūed ^{a/}	dùem ^a	"rise, raise"
pūň'e ^{+/}	pūň'ød ^{a/}	pùň'em ^a	"rot" WK

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

kē ⁺	kēt ^{a/}	kèl ^a	"let, allow"
kēň ⁺	kēn ^{a/}	kèm ^a	"come"

All others show a derivational suffix in the perfective which is dropped in the imperfective. This suggests a survival of older patterns: outside the Western group, Oti-Volta languages often drop perfective suffixes when forming imperfectives. Nawdm has a regular conjugation which drops pfv g in the ipfv, e.g jehlg pfv "poser verticalement", jehla ipfv.

2.16.			II.C - t - 1 t II
wìk ^ɛ	wìid ^a <u>5.3.1</u>	wìkım ^a	"fetch water"
įāňk ^{ε/}	įāň'ad ^{a/}	įàňkım ^a	"leap, fly"
gīlıg ^{ε/}	gīn ^{na/}	gìlıgım ^a	"go around"
kēŋ ^{ε/}	kēn ^{na/}	kèm ^a	"go"
yèl ^ɛ	y <i>èt</i> a	yὲlım ^a	"say"
gōs ^ɛ	gɔ̄sıd ^{a/}	gòsım ^a	"look"
	or <i>gɔ̃t</i> a/	gòm ^a	
tìs ^ε	tìsıd ^a	tìsım ^a	"give"
	or <i>tì t</i> a		

A perfective tì may appear before bound object pronouns, e.g. tì f "give you."

10.2 Single-aspect

The remaining 10% of verbs are **single-aspect**, with just one finite form, which is always imperfective. Each single-aspect verb is either **dynamic**, behaving like the imperfective of a dual-aspect verb, or **stative** 19.2; transitive stative verbs typically express relationships, while intransitives have predicative adjectival meanings.

Morphologically, there are three major groups of single-aspect verbs; the morphological division correlates only to a limited extent with meaning.

Six stative single-aspect verbs consist of bare stems alone:

```
m\bar{\iota}^{+} "know" z\bar{\iota}^{+} "not know" b\dot{\varepsilon}^{+} "be somewhere, exist" k\bar{a}'\dot{\varrho}^{+} "not be" (\leftarrow *kag\iota) t\bar{u}\bar{n}'e "be able" 22.2.1 n\dot{\gamma}n^{\epsilon} "love"
```

Uniquely among single-aspect verbs, $n \ni \eta^{\epsilon}$ has a m^a -imperative $n \ni \eta \iota m^a$, used when the verb word carries the tone overlay of independency marking. Unlike perfectives, these forms are never followed by particle $y\bar{a}^+$ 19.6.2.1. The Pattern A verbs $b\dot{\epsilon}^+$ and $n \ni \eta^{\epsilon}$ have M tone before liaison-word pronouns and are followed by M spreading even when not subject to the tone overlay of independency marking 7.4.3.

```
\dot{M} n\acute{o}g. "I love him." (e.g. in reply to a question) not *\dot{M} n\acute{o}g yā specifically stated to be impossible by WK
```

Mit ka Zugsob tumtum a one non zaba.

```
Mìt kà Z\bar{u}g-sób tóm-tōm á ónì nòn zábāa ^+ø.

NEG.LET.IMP and head-NULL.AN work-worker:SG COP REL.AN love conflict:PL NEG.

"Let not a servant of the Lord be someone who loves fights." (2 Tim 2:24, 1996)
```

```
Kà ò nóŋī f. "And she loves you."
```

The agent noun nònida has Pattern L instead of the expected A:

```
O nònid 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 zi' e^{ya} , where Nawdm r and Kusaal y both represent Proto-Oti-Volta *l. With only one aspect, these verbs have not undergone the extensive levelling which has made dual-aspect - d^a into a unitary flexion. In particular, when *y has assimilated to a preceding root-final consonant, resulting in $nn \ mm \ ll$ or r(r), the cluster is carried over into deverbal nominals, or introduced by analogy into cognate adjectives even when the

adjectives are primary. The cluster nn then behaves exactly like nn derived from *nd, but || r(r)| are subject to further assimilation just like single || r| 5.4.

Dynamic verbs with unassimilated *y* mostly express **stances**:

īgι ^{ya/}	"be kneeling"	dīgı ^{ya/}	"be lying down"
vābι ^{ya/}	"be prone"	làbı ^{ya}	"crouch in hiding"
tàbı ^{ya}	"be stuck to"	zì'e ^{ya}	"be standing still"
zìň'i ^{ya}	"be sitting"	tī i ^{ya/}	"be leaning (object)"
gō'e ^{ya/} WK	"have neck extended"	wà'e ^{ya}	"travel to"

Statives include transitive and intransitive types:

```
àeňa "be something/somehow" s\bar{\upsilon}'e^{ya/} "own" s\bar{\jmath}\check{n}'e^{ya/} "be better than" t\bar{\jmath}e^{a/} "be bitter" v\bar{\upsilon}e^{a/} "be alive"
```

Stance verbs with unassimilated y have derived inchoative and causative dual-aspect verbs in n and l 12.1.1. They make perfective gerunds, and have agent nouns, deverbal adjectives and instrument nouns with the formant d like dual-aspect verbs. Some informants inflect these verbs with the ipfv suffix $-d^a$ to express habitual meaning; others use the ipfv of the derived assume-stance verb instead:

```
Ò zìň'i nē.
                                        "She's sitting down." WK KT
      Ò pū zíň'idā.
                                        "She doesn't sit down" WK
                                       "She doesn't sit down." KT
      Ò pū zíň'inìdā.
but
      Ò vàbι nε.
                                       "He's lying prone."
      Ò pō vābīdá.
                                       "He doesn't lie prone." WK
but
      Ò pũ vábınìdā.
                                       "He doesn't lie prone." KT
      Ò dìgi nē.
                                       "She's lying down."
      Ò pū dīgıdá.
                                        "She doesn't lie down" WK
      Lì zì'ə nē.
                                       "It's standing up."
      Lì pū zí adā.
                                       "It (a defective tripod) doesn't stand up." WK
      Lì tì'i nē.
                                       "It's leaning against something."
      Lì tì'id.
                                        "It can be leant against something." WK
      Lì pō tī'iyá.
                                       "It's not leaning against something."
      Lì pō tī idá.
                                        "It's not for leaning against something." WK
```

Dynamic single-aspect verbs in $nn \ mm \ || \ r(r)$ include stance verbs and others:

sīn ^{na/}	"be silent"	dēl ^{la} ∕	"be leaning (person)"
gừl ^{la}	"be hanging"	<i>gɔ̃l</i> la/ KT	"have neck extended
dɔ̃l ^{la/}	"accompany"	zāĭI ^{la/}	"carry in one's hands"
gūr ^{a/}	"guard"	tèňr ^a	"remember"
sùr ^a	"have head bowed"	gōr ^{a/} DK	"have neck extended"

They make imperfective gerunds; in these and in agent nouns, deverbal adjectives and instrument nouns, the stem is in $nn \ mm \ || \ r(r)$ and d is omitted. Similarly, they do not have distinct continuous, habitual or inchoative forms.

Stative verbs in $nn \ mm \ || \ r(r)$ again include transitive and intransitive types:

nēn ^{na/}	"envy"	vèn ^{na}	"be beautiful"
wēn ^{na/}	"resemble"	kpī'əm ^{ma/}	"be strong"
kpēεňm ^{ma/}	"be older than"	zùlım ^{ma}	"be deep"
sùm ^{ma}	"be good"	gīm ^{ma/}	"be short"
yàlım ^{ma}	"be wide"	zēm ^{ma/}	"be equal to"
tàdım ^{ma}	"be weak"	wā'am ^{ma/}	"be long, tall"
νὲἤl ^{la}	"be beautiful"	<i>lāl^{la/}</i>	"be far from"
tūl ^{la/}	"be hot"	mɔ̄ra/	"have"
tār ^{a/}	"have"	dùr ^a	"be many"
kàr ^a	"be few"	nār ^{a/}	"be necessary"
pòňr ^a	"be near to"		

M-stems show single m in most sources after after epenthetic vowels and long root vowels 5.4.

A number of stative verbs end in -sa:

mì'is ^a	"be sour"	būgus ^{a/}	"be soft"
mā'as ^{a/}	"be cool"	tēbιsa∕	"be heavy"
mālıs ^{a/}	"be sweet"	lābıs ^{a/}	"be wide"
ňyὲεs ^a	"be self-confident"	kīs ^{a/}	"hate"

The s of these forms is a derivational suffix producing stative forms.

There is one intransitive stative verb in -da: pɔɔda "be few, small."

Some dual-aspect-verb imperfective forms have become independent stative verbs, e.g. $b \grave{\supset} d^a$ "want, like" $(b \grave{\supset}^+$ "seek"), $z \grave{\supset} t^a$ "fear" $(z \grave{\supset}^+$ "run.")

11 Stem conversion

11.1 Nouns from verbs

11.1.1 Perfective gerunds

Almost all verbs other than intransitive statives can form a **gerund**, a derived abstract noun which expresses the process, event or state described by the verb.

Gerunds from dual-aspect and many dynamic single-aspect verbs are formed by adding noun class suffixes to the verb stem. Gerunds from other single-aspect verbs are based on derived stems 12.2.1.4.

Gerunds may be used as abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals 15.2.

The Tone Patterns of all regularly formed gerunds are predictable 6.5.

Dual-aspect verbs freely form gerunds by adding the following class suffixes to the stem. The choice after 3-mora stems reflects avoidance of suffixes which would give rise to opaque forms, with the usual $-g^{\circ}$ replaced by $-r^{\varepsilon}$ after stems ending in underlying *g.

```
-b^{\circ} but -r^{\varepsilon} as final part of a compound
2-mora stems
3-mora stems in *g
[surface -q^{\varepsilon} - k^{\varepsilon} - n^{\varepsilon} - ae^{+} - ie^{+} - ue^{+}]
                                                               -r<sup>€</sup>
all others
                                                               -g<sup>3</sup>
kū+
                                                               kūυb<sup>⊃/</sup>
                     "kill"
                                                               dūqub<sup>⊃/</sup>
dūgε
                     "cook"
du'àa
                     "bear, beget"
                                                               dū¹ab<sup>⊃</sup>
kàd<sup>€</sup>
                     "drive away"
                                                               kādıb<sup>o</sup>
3líq
                     "cover"
                                                               pīlıb
kpàrε
                     "lock"
                                                               kpārīb<sup>o</sup>
bàsε
                                                               bāsıb<sup>o</sup>
                     "abandon, go away"
sɔ̄bε
                     "write"
                                                               s5p<sup>5</sup>/
I5bε
                     "throw stones at"
                                                               /<sup>د</sup>وردا
kìmm
                     "tend a flock/herd"
                                                               kīm<sup>m</sup><sup>o</sup>
wùm<sup>m</sup>
                     "hear"
                                                               wūm<sup>mɔ</sup>
```

2-mora *n*-stems do not assimilate **nb* \rightarrow *mm*: $b \dot{u} n^{\epsilon}$ "reap", gerund $b \bar{u} n \iota b^{\circ}$.

yùug ^ε	"delay"	yùugʊr ^ɛ
nōk ^{ε/}	"take"	nōkír ^ɛ
nìŋ ^ε	"doing"	nìŋır ^ɛ
gbāň'e ^{+/}	"grab"	gbáň'ar ^ɛ
dī¹e ^{+/}	"get"	dí¹ər ^ɛ
dūe ^{+/}	"rise"	dúer ^ε
gàad ^ɛ	"(sur)pass"	gàadvg ^o
lì∂b ^ε	"become"	lìəbug ^o
dīgıl ^{ɛ/}	"lay down"	dīgılúg ^o
yāar ^{ɛ/}	"scatter"	yāarúg ^o
sīgıs ^{ε/}	"lower"	sīgιsúg ^o
dàm ^m	"shake"	dàmmvg³ (and thus with all mm-stems)

3-mora *n*-stems never assimilate * $ng \rightarrow \eta \eta$:

```
digin^{\epsilon} "lie down" diginvg^{\circ} zi\check{n}'in^{\epsilon} "sit down" zi\check{n}'invg^{\circ}
```

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

tōɔm™/	"depart, disappear"	tớơŋº	or <i>tɔ̄ɔmúg</i> ɔ
sàň'am ^m	"destroy"	sàň'ບŋ ^ɔ	or <i>sàň'amvg</i> ɔ
kàrım ^m	"read"	kàrvŋ ^ɔ	or kàrımug ^o

4-mora stems in -sım -lım follow the rule and use - g^3 (always assimilating), but stems in *-gım drop the -m- and use - r^{ϵ} :

```
sìilm^m"cite proverbs"sìil\acute{u}g²zàa\check{n}sm^m"dream"zàa\check{n}s\acute{u}g²wà\jmath m^m"waste away"wà\jmath m^\epsilonlā\jmath m^m"wander"lā\jmath m^\epsilonzàkm^m"itch"zàkm^\epsilon
```

2-mora stems regularly use $-r^{\varepsilon}$ instead of $-b^{\circ}$ in compounds:

```
p \mu' \hat{a} - d \bar{\iota} \iota r^{\epsilon} "marriage" n \bar{\iota} n - k \hat{\upsilon} \upsilon r^{\epsilon} "murder" d \bar{a} - n \hat{\iota} u r^{\epsilon} "beer-drinking" m \hat{\jmath} - p \bar{\iota} l^{|\epsilon} "grass roof" f \bar{\iota} - y \hat{\epsilon} \epsilon r^{\epsilon} "shirt-wearing" WK
```

Irregular perfective gerunds are rare with stems of three or four morae. A few have plural-as-singular forms $\underline{15.2}$; $y\bar{i}is^{\epsilon}$ "make go/come out" has $y\bar{i}is(b^{\circ})$, like the alternate form $y\bar{i}s^{\epsilon}$ with $y\bar{i}s\iota b^{\circ}$. However, almost 20% of 2-mora-stem verbs in KED use suffixes other than b° . Most irregular 2-mora stem verbs have regular gerunds:

tìs ^ε	"give"	tīsıb ^o
kē ⁺	"let"	kēεb ^{ɔ/}
gὺl ^ε	"suspend"	gūlıb ^o

Few segmentally irregular gerunds are also tonally irregular. However, forms with the suffix $-g^3$ are Pattern L from Pattern A verbs unless there are variants with g^a or s^{ε} showing that the word really belongs to $g^a|s^{\varepsilon}$ with LF remodelling 8.3.2.

Many 2-mora stem verbs with irregular gerunds have stems ending in m or b, where the regular formation would have produced ambiguous SFs $\underline{8.1}$.

```
lì+
                     "fall"
                                                                līiga
zī+
                     "carry on head"
                                                                zīid<sup>ε/</sup>
bὲň'+
                     "fall ill"
                                                                bēň'εs<sup>ε</sup>
                                                                kēn<sup>nε/</sup>
                     "come"
kēň+
zò+
                     "run"
                                                                zūa<sup>+</sup> also zɔɔgɔ
v\bar{u}^+
                     "make noise"
                                                                vūug<sup>ɔ/</sup>
piāň'<sup>a</sup>
                     "speak"
                                                                piàuňk<sup>o</sup>
bùdε
                     "plant"
                                                                būdıg<sup>a</sup> also būdug<sup>o</sup>
νὲl<sup>ε</sup>
                     "sav, tell"
                                                                γὲlυq<sup>5</sup> (cf Mooré γèele)
                                                                kūlıga/ also kūlvg<sup>⊃/</sup>
kūl<sup>ε</sup>
                     "go home"
tàňs<sup>ε</sup>
                     "shout"
                                                                tàňsva<sup>o</sup>
sōňs<sup>ɛ</sup>
                     "converse"
                                                                sóňsì q<sup>a</sup>
                     "look"
ḡsε
                                                                gźsìga
                     "pray, beg"
sòs<sup>ε</sup>
                                                                sɔ̄sıga
kīrε
                     "hurry"
                                                                kìkíròg<sup>o</sup> or kīrıb<sup>o/</sup>
lὲb<sup>ε</sup>
                     "return"
                                                                Ιξbια<sup>a</sup>
tὲb<sup>ε</sup>
                                                                tēbιga
                     "carry in both hands"
kàňb<sup>ε</sup>
                     "scorch"
                                                                kāňbır<sup>ɛ</sup>
òňbε
                     "chew"
                                                                ōňbιrε
lūbε
                     "buck"
                                                                lūbιr<sup>ε/</sup>
                                                                zàbιr<sup>ε</sup>
zàb<sup>ε</sup>
                     "fight"
tὲňbε
                     "tremble"
                                                                tèňbug<sup>o</sup>
tùm<sup>m</sup>
                     "work"
                                                                tū̄υma+
tùm<sup>m</sup>
                                                                tìtūmıs<sup>ɛ</sup>
                     "send"
                                                                w\bar{\nu}m^{m_0} or w\dot{\nu}mm\nu a^0 12.2.1.4
wùm<sup>m</sup>
                     "hear"
```

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

zìň'i ^{ya}	"be sitting"	zīň'ig ^ā	also	"place", regu	ılar <i>g</i> a s ^ɛ class
zì'e ^{ya}	"be standing"	zī'a+	KED	$z\bar{\imath}$ ə g^a (very	irreg <u>5.6</u>) DK KT
dīgι ^{ya/}	"be lying"	dīk ^a ∕	KT	dīgır ^{ε/}	WK
īgι ^{ya/}	"be kneeling"	īk ^{a/}	KT	īgιr ^{ε/}	WK
vābι ^{ya/}	"be lying prone"	vāp ^{ɔ/}	KT	vābιr ^{ε/}	WK
tī i ^{ya/}	"be leaning"	tī¹ib ^{⊃/}	(of an	object)	

 $G\dot{v}l^{la}$ "be hanging" uses $g\bar{v}l\iota b^{\circ}$, from the cognate dual-aspect verb $g\dot{v}l^{\varepsilon}$, and the stative $p\dot{\supset}\tilde{n}r^{a}$ "be near" has $p\bar{\supset}\tilde{n}r\iota b^{\circ}$, probably from an otherwise unused dual-aspect * $p\dot{\supset}\tilde{n}d^{\varepsilon}$ with r for d by analogy. Stative $k\bar{\imath}s^{al}$ "hate" has the gerund $k\acute{\imath}s\dot{v}g^{\circ}$.

Other single-aspect verbs have imperfective gerunds <u>12.2.1.4</u>.

11.1.2 Concrete nouns

When there is a perfective gerund with regular noun class membership, other nouns with the same stem but different class suffixes have **concrete** senses, such as the product of the action, instrument used, or place at which the action occurs.

ēεňbίr ^ε	"(physical) foundation"	ēεňbύg ^ο	"laying a foundation"
dūk ^{⊃/}	"cooking pot"	dūgub ^{ɔ/}	"cooking"
dà'a ⁼	"market"	dā'ab ^ɔ	"buying"
kūk ^a	"chair"	kūgvb ^o	"resting on something"
zūg-kūgvr ^ɛ	"pillow"		
sųāk ^{a/}	"hiding place"	sū'ab ^{ɔ/}	"hiding"
sɔ̄bιr ^{ε/}	"piece of writing"	sōp ^{⊃/}	"writing, orthography"
kūt ^ε	"iron, nail"	kūdvb ^o	"working iron"
kùøsım ^m	"merchandise"	kùəsvg ^ɔ	"selling"
pèbısım ^m	"wind"	pèbısvg ^ɔ	"blowing of the wind; wind"

 $V\bar{a}b\iota r^{\epsilon/l} l\bar{a}b\iota r^{\epsilon/l} l\bar{a}g\iota r^{\epsilon/l} l\bar{g}\iota r^{\epsilon/l}$, used by WK as gerunds, are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting with the gerunds $v\bar{a}p^{5/l}$ etc.

Three concrete deverbal nouns, from $pibil^{\varepsilon}$ "cover", $z\grave{a}\check{n}bil^{\varepsilon}$ "tattoo", $m\grave{a}al^{\varepsilon}$ "sacrifice" show single -n- in place of -l-:

<i>pībιn</i> ^{nε}	pībına+	pìbın-	"covering"
zāňbιn ^{nε}	zāňbına+	zàňbın-	"tattoo" (NT "sign")
māan ^{nε}	māana+	màan-	"sacrifice"

My informants definitely had single -n- in these words, but this is probably a secondary simplification of *nn 5.4. Toende, like Mooré, has Pattern L for these words: $z\tilde{a}b(n, m\grave{a}an)$. As nn is the regular reflex of *ld, these forms may be derivatives with *d in its instrument-noun sense: cf $t\bar{u}ed\iota r^{\epsilon}$ "mortar", from $t\underline{u}\dot{a}^{+}$ "grind in a mortar." The Tone Pattern A is consistent with this.

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is $d\bar{\iota}\iota b^{2}$ "food."

11.2 Nominals from nominals

The partial association of noun class and meaning <u>8.1</u> can be exploited to change the meaning of a stem. Examples include the names of ethnic groups, which belong to the $a|b^a$ or $g^a|s^\epsilon$ classes, their languages, which belong to the $-l^\epsilon$ subclass of $r^\epsilon|a^+$ <u>8.3.4</u> and the associated place, which has the suffix $-g^3$ <u>29.4</u>. Another case of sg $-g^3$ deriving an associated place name is

wèɛda "hunter" wèogɔ "deep bush" Some names of liquids take $-d^{\epsilon}$ rather than $-m^{m}$ 15.2; hence also

 $s\bar{\imath}i\check{n}f^{D/}$ "bee" $s\bar{\imath}i\check{n}d^{E/}$ "honey"

Names of trees are almost all $g^a|s^\varepsilon$ class, and their fruits $r^\varepsilon|a^+$ or $g^0|d^\varepsilon$ 29.5. The strong association of the m^m class with abstracts can be used to convert adjective stems to abstract nouns; less commonly, the sg suffix $-g^0$ serves in the same way. When there are derived stative verbs, these nouns somewhat resemble gerunds, and can, for example, be preceded by combining forms as generic arguments 15.7.1. However, they cannot be used in the immediate-future construction with $b \partial d^a$ "want" 19.3.4, and unlike imperfective gerunds, which show the expected Tone Patterns for gerunds 6.5, they show the same tone pattern as the adjective.

Examples of abstract nouns formed from adjective stems with m^{m} :

pɔ̀ɔdɪm ^m "scarcity" vɛ̀nnɪm ^m "beau	, and the second
positive scarcity verman boda	
vὲňllιm ^m "beauty" būgυsím ^m "softn	ıess"
tēbιsím ^m "weight" mā'asím ^m "coolr	ness, damp"
<i>mālısím</i> ^m "sweetness" <i>lābısím</i> ^m "widtl	h"
<i>pìəlım</i> ^m "brightness" <i>tītā</i> ' <i>am</i> ^m "multi	titude"
kūdιm ^m "old times"	

From $\check{n}y\grave{\varepsilon}\varepsilon s(\eta^a$ "self-confident" is derived $\check{n}y\grave{\varepsilon}\varepsilon s\iota m^m$ "self-confidence."

The suffix $-g^3$ is used to make abstract nouns when the sg adjective form also has $-g^3$; the abstract noun form is identical:

lāllύg ^ο	"distance"	zēmmύg ^ο	"equality"
kpī'oŋ ^ɔ	"hardness, strength"	yàluŋ ^ɔ	"width"
mì'isvg ^ɔ	"sourness"	tɔ̄ɔgɔ	"bitterness"
zùloŋ ^ɔ	"depth"	tῦυΙύg ^ɔ or tῦΙΙίm ^m	"heat"

Some stems referring to people form abstract nouns with $-m^{m}$ or $-g^{3}$:

```
gbáňyà'a=
                 "lazy person"
                                                    gbáňyà'am<sup>m</sup>
                                                                              "laziness"
                 "liar"
                                                    dàmà'am<sup>m</sup>
                                                                              "lving"
dàmà'a=
sāan<sup>a/</sup>
                 "quest"
                                                    sávn<sup>o</sup>
                                                                              "hospitality"
                                                    kpε̄oňη<sup>o</sup>
                                                                              "eldership"
kpē̃εňm<sup>m</sup>
                 "elder"
sɔ̄e̯ňa
                                                    sɔ̄ɔňgɔ
                                                                              "witchcraft"
                 "witch"
```

Cf also zùod^ɛ "friendship" from zuà+ "friend."

The $m^{\rm m}$ class suffix with adjective stems often creates manner adverbs:

```
p\bar{a}al(m^{m}) "recently" b\bar{a}a\breve{n}l(m^{m}) "quietly" z\bar{a}al(m^{m}) "emptily"
```

So too $n \grave{\epsilon} \epsilon m^m$ "for free", from $n \grave{\epsilon} \epsilon r^{\epsilon}$ "empty."

Several adjective stems form manner-adverbs with an ending $-ga^+$, i.e $g^a|s^\epsilon$ class sg with apocope-blocking <u>5.1</u>:

```
s \grave{v} \eta \bar{a}^{+/} "well; very much" m \bar{a}' a s (g \bar{a}^{+/} "coolly" t \bar{v} v l (g \bar{a}^{+/} "hotly" g \bar{\iota} \eta a^{+} "shortly" b \bar{v} g v s (g \bar{a}^{+/} "softly" s \grave{a} a l (\eta \bar{a}^{+/}) "smoothly" n \check{\gamma} \grave{\epsilon} \epsilon s (\eta \bar{a}^{+/}) "self-confidently"
```

Cf also yīigá+ "firstly" 15.5.2.3.

12 Derivational suffixes

The statement of underlying open-class word structure made in 5.2 implies that roots are only of the shapes CV(V)(C), so that any stem consonant which does not immediately follow the root vowel is not part of the root; neither is any consonant following a *long* root vowel unless the root shows $CVC\sim CVVC$ allomorphy.

For simplicity, all such consonants will be called "derivational suffixes", though there may not always be parallel stems lacking the suffix or with different suffixes. Nevertheless, many such consonants are clearly identifiable as derivational. Regular highly productive suffixing processes derive agent nouns, deverbal adjectives and instrument nouns from verbs, and there are several less systematic processes deriving nominals from other nominals. Cognate stems make it possible to recognise many suffixes involved in verb derivation from roots; there are clear patterns, but no completely consistent correlations of suffix and meaning.

The derivational suffixes are $g \le n \mid d \mid m$, along with $b \mid and \mid r$ in just a handful of words. The suffix $n \mid a$ may represent historical * $Id \mid 5.4$.

 $g \ s \ n \ b \ r$ never follow another derivational suffix. g and s cause a preceding CVVC to become CVC, and a preceding oral >> to become glottalised.

I follows another suffix only as part of the combination Im.

d is very productive in the formation of deverbal nouns and adjectives; it often deletes a preceding suffix or is itself deleted.

No stem has more than three derivational suffixes, or more than five morae apart from prefixes. All four-mora verb stems have m as the second suffix, and all five-mora stems are formed with lm.

The rules for consonant assimilation differ slightly from the rules operative in flexion, probably because they are less subject to analogical remodelling.

For Tone Patterns in derivation see 6.5.

12.1 Verbs

All verb derivation is by suffixes, probably always added to roots rather than word stems. Clear meanings can often be recognised in suffixes, but there is no straightforward match of form and meaning.

Possible verb shapes are very constrained. Only two, three and four-mora stems occur. All four-mora stems end in m, and in dual-aspect verbs CVVCm only occurs as CVV root + sim or lim, never CVVC root + m; some stative verbs have stems in CVVmm.

12.1.1 Assume-stance verbs

Stance verbs have derived dual-aspect verbs in $-n^{\varepsilon}$ signifying "assume the stance" and in $-l^{\varepsilon}$ "make assume the stance"; all the $-n^{\varepsilon}$ verbs are Pattern A regardless, but the $-l^{\varepsilon}$ verbs have the same Pattern as the base stance verb.

Stance v	erb	Assume-stance	Make-assume-stance
dīgı ^{ya/}	"be lying"	dìgın ^ɛ	dīgιl ^{ε/}
vābι ^{ya/}	"be lying prone"	vàbın ^ɛ	vābıl ^{ɛ/}
īgι ^{ya/}	"be kneeling"	ìgιn ^ε	īgιΙ ^{ε/}
làbı ^{ya}	"be crouching hidde:	n" <i>làbιn</i> ε	làbıl ^ɛ
zìň'i ^{ya}	"be sitting"	zìň'in ^ɛ	zìň'il ^ɛ
zì'e ^{ya}	"be standing"	zì'ən ^ɛ	zì'əl ^ɛ
tī i ^{ya/}	"be leaning" (of thing	g) tì'in^ε	tī⁻il ^{ɛ/}
gɔ̄'e ^{ya/}	"be looking up" WK	gà'ɔn²	
sùr ^a	"have bowed head"	sùn ^{nɛ}	sùn ^{nε} sic
-	"cover oneself"	lìgın ^ε	lìgιl ^ε
-	"perch" (of bird)	zùen ^ε	zùθl ^ε
-	"perch" (of bird)	yà'an ^ɛ	yà'al ^ɛ

The resultative perfective of $z\dot{u}e^+$ is used for "be perching":

```
Níin l\bar{a} zúe n\bar{\epsilon}. "The bird is perching." KT Bird:sg art perch foc.
```

Nawdm has exactly parallel formations, e.g. *jehra* ipfv "être debout", *jehnt* pfv "se mettre debout", *jehlg* pfv, *jehla* ipfv "poser verticalement".

Other derivational relationships involving stance verbs are seen in

gừl ^{la}	"be suspended"	gὺl ^ε	gὺl ^ε
tàbı ^{ya}	"be stuck to"	tàb ^ε	tàbıl ^ɛ
dε̄l ^{la} /	"be leaning" (person)	dὲlιm ^m	

12.1.2 Causatives

-s- is a common causative suffix:

kpὲň' ⁺	"enter"	kpὲň'εs ^ε	"make enter"
nìe ⁺	"appear"	nèɛs ^ɛ	"reveal"
yī ⁺	"go/come out"	$y\overline{i}is^{\epsilon/}$ or $y\overline{i}s^{\epsilon}$	"make go/come out"
dì+	"eat"	dìıs ^ɛ	"feed"
nū+	"drink"	nūlιs ^{ε/}	"make drink"; also $n\bar{u}lig^{\epsilon/}$

sīg ^ε	"go down"	sīgιs ^{ε/}	"lower"
lὲb ^ε	"return"	lèbıs ^ɛ	"make return; answer"
mu̞'àª	"suck" (of a baby)	mὺ'as ^ɛ	"give to suck"
[Mooré <i>tá</i>	"arrive"]	tā'as ^{ε/}	"help to travel, walk"
zēm ^{ma/}	"be equal"	zēmιs ^{ε/}	"make equal"
kpìig ^ε	"go out (fire)"	kpìis ^ε	"quench"

-*I*- has been seen above as the causative suffix for stance verb roots. It is also found with other roots with location-related meanings:

йуа́'аŋ ^а	"behind"	ňyā'al ^{ε/}	"leave behind"
gε̄og ^ɔ	"space between legs"	gēεl ^{ε/}	"put between legs" Tones sic
līk ^a	"darkness"	lìgιl ^ε	"cover up"
bāň'+	"ride"	bāň'al ^{ε/}	"put on a horse/bicycle etc"
gū' ⁺	"guard"	gū'ul ^{ɛ/}	"set someone on guard"
yὲ ⁺	"dress oneself"	yὲεl ^ε	"dress another person"

Verbs derived with -g- from nominal roots are usually patientive ambitransitives but may have separate causatives in -I-:

mā'e ^{+/}	"get cool"	mā'al ^{ε/}	"make cool"
pūň'e ^{+/}	"rot"	pɔ̃ἤ'ɔl ^{ɛ/}	"cause to rot"
nìe+	"appear"	nὲεl ^ε	"reveal"
mā'e ^{+/}	"get cool, wet"	mā'al ^{ε/}	"make cool, wet"
wū'υg ^{ε/}	"get wet"	wū'טו ^{ɛ/}	"make wet"

There is no obvious reason for the choice of suffix in

zàb ^ε	"fight"	zàbıl ^ɛ	"cause to fight"
du'à ^a	"bear, beget"	dὺ'al ^ε	"make interest (of a loan)"

-g- forms causatives in a few verbs:

dɔ̃l ^{la/}	"accompany"	dɔ̄lιg ^{ε/}	"make accompany"
gōr ^{a/}	"look up" DK	gɔ̄dιg ^{ε/}	"make look up" DK
tèňr ^a	"remember"	tìeň+	"bring to mind, remind"
yùul ^ɛ	"swing" intransitive	yùlıg ^ε	"swing" transitive
kò⁺	"break" intransitive	kὸ'ɔgε	"break" ambitransitive
nū+	"drink"	nūlιg ^{ε/}	"make drink"; also <i>nūlιs^{ε/}</i>

12.1.3 Reverse action

-g- attached to dynamic-verb roots implies reversal:

yὲ ⁺	"dress oneself"	yὲεg ^ε	"undress oneself"
pìd ^ɛ	"put (hat etc) on"	pìdıg ^ε	"take (hat etc) off"
pìl ^ɛ	"cover"	pìlıg ^ε	"uncover"
<i>1</i> 5+	"tie up"	lɔ̄dιg ^{ε/}	"untie"
yò ⁺	"close"	<i>y</i> ὸ'ɔg ^ε	"open"
ὲňd ^ε	"block up"	ὲňdιg ^ε	"unblock"
yà'al ^ɛ	"hang up"	yàk ^ε	"unhang"
pà'al ^ɛ	"put on top"	pàk ^ε	"take off top"
pìbıl ^ɛ	"cover up"	pìbιg ^ε	"uncover"
tàbı ^{ya}	"be stuck to"	tàbıg ^ε	"unstick, get unstuck"
là'as ^ɛ	"gather together"	lāk ^{ε/}	"open" (eye, book); tone sic
		cf <i>lák</i> è	(Mooré) "un-stick together"

Possibly a reversal sense also underlies

lìəb ^ε	"become"	lèbıg ^ε	"turn over"
fāň+	"rob, snatch"	fāeň+/	"save" ?? for "snatch back"

Reversive -g- is a peculiarity of the Western group within Oti-Volta; the other groups show alveolar suffixes: Moba $l\bar{o}\bar{o}n$ "close" $l\bar{o}\bar{o}d$ "open", Byali bya "close" $by\bar{e}ra$ "open", Nawdm riw pfv "close" rawdg pfv rawda ipfv "open." Proto-Bantu had -vl- and -vk-, perhaps respectively transitive and intransitive; an alveolar variant may have been disfavoured in Western Oti-Volta because of the adoption of -da as the regular imperfective flexion for dynamic verbs.

12.1.4 Plural action

-s- may have a pluractional sense:

kà+	"break"	kà'ɔs²	"break several times"
tòň+	"shoot"	tàň'ɔs ^ɛ	"hunt"
pìəb ^ε	"blow (flute etc)"	pὲbιs ^ε	"blow (wind)"
làbı ^{ya}	"crouch in hiding"	làbıs ^ɛ	"walk stealthily"
νōe̞a/	"be alive"	νῦ'υς ^{ε/}	"breathe, rest"
įāňk ^{ε/}	"fly, jump"	įāĭ'as ^{ε/}	"leap, jump repeatedly"
yā'e ^{+/}	"open mouth"	yā'as ^{ε/}	"open repeatedly" WK
dī'e⁺/	"receive"	dī⁻əs ^{ε/}	"receive (many things)"
gū' ⁺	"guard"	gū'us ^{ε/}	"watch out; guard (many)"

-d- appears with a pluractional sense in

```
k\bar{\jmath}d\iota g^{\epsilon/} "slaughter one animal" k\bar{\jmath}t^{\epsilon/} "slaughter several animals"
```

This suffix is perhaps historically connected with the *d of the ipfv suffix *-da, by way of the distinctively habitual sense seen in stance verbs 10.2.

12.1.5 Denominal verbs

12.1.5.1 Single aspect

Intransitive stative verbs are mostly derived from adjectives or humanreference nouns. Some transitive stative verbs are also denominal.

Many stative verbs are formed with $-y^a$, like dynamic single-aspect verbs. Even when the adjective is primary, it may show segmental remodelling on the verbal forms with *y. S-stems show no sign of *y synchronically, and m-stems have lost gemination except after short root vowels for many speakers.

This *y formant differs in tonal behaviour from *y and *d in dynamic verbs <u>6.5</u>. Primary nominals thus show a characteristic Tone Pattern correspondence with the verbs: Pattern L nominals correspond to Pattern A verbs but Pattern H and Pattern A both correspond to Pattern H verbs. Historically, the all-M pattern of verbs corresponding to Pattern A nominals was also Pattern A, and this is still reflected in the tonemes of e.g. $kp\bar{r} \ni m^{ma/}$ "be strong" $kp\bar{\epsilon}\epsilon\bar{n}m^{ma/}$ "be older than", but the LF-final toneme is now always H; similarly, the original Pattern L type now changes to all-M in the irrealis mood just like dynamic Pattern A verbs.

L	vènnıg ^a	"beautiful"	vèn ^{na}	"be beautiful"
	vèňllıg ^a	"beautiful"	vèňl ^{la}	"be beautiful"
	zùluŋ ^ɔ	"deep"	zùlım ^{ma}	"be deep"
	pòɔdɪg ^a	"small"	pòɔd ^a	"be few, small"
	mì'isvg ^ɔ	"sour"	mì'is ^a	"be sour"
	sນ້ŋ ^ວ	"good"	sùm ^{ma}	"be good"
	yàluŋ ^ɔ	"wide"	yàlım ^{ma}	"be wide"
Η	būgvsír ^ε	"soft"	būgus ^{a/}	"be soft"
	vōr ^{ε/}	"alive"	νῡe̞ ^{a/}	"be alive"
	mā'asír ^ɛ	"cool"	mā'as ^{a/}	"be cool"
	tēbısír ^ε	"heavy"	tēbıs ^{a/}	"be heavy"
	mālısír ^ε	"sweet"	mālıs ^{a/}	"be sweet"
	lābısír ^ɛ	"wide"	lābıs ^{a/}	"be wide"
	zēmmύg ^ɔ	"equal"	zēm ^{ma/}	"be equal to"
	lāllúg ^o	"far"	lāl ^{la/}	"be far from"

A	tɔ̄ɔgɔ	"bitter"	tōea/	"be bitter"
	gīŋ ^a	"short"	gīm ^{ma/}	"be short"
	kpī'oŋ ^ɔ	"strong"	kpī'əm ^{ma/}	"be strong"
	kpēεňm ^m	"elder"	kpē̃εňm ^{ma/}	"be older than"
	พริททเr ^ะ	"resembling"	wēn ^{na/}	"resemble"

More complex stem changes occur in

tūυlύg ^ɔ	"hot"	tūl¹a∕	"be hot"
ňyὲεsíŋ ^a	"self-confident"	ĭyὲεs ^a	"be self-confident"
wōk ^{ɔ/}	"long, tall"	wā'am ^{a/}	"be long, tall"

12.1.5.2 Dual aspect

 $\textbf{-g-} \ \, \text{attached to nominal/adjectival roots has the meaning "make/become ...":}$

йуɔ̄'ɔs ^{ε/}	"smoke"	йуū'e ^{+/}	"set alight"
ňwīig ^{a/}	"rope"	ňwīig ^{ε/}	"make a rope"
tādım ^{m/}	"weak person"	tàdıg ^ε	"become weak"
kpì'a ⁺	"neighbour"	kpì'e ⁺	"approach"
zūer ^ε	"hill"	zùe+	"get higher, more"
À-Tūl ^{lɛ}	"Breech-Delivered" 29.2	tùlıg ^ɛ	"invert"
mā'asír ^ɛ	"cool, wet"	mā'e ^{+/}	"get cool, wet"
būgvsír ^ε	"soft"	būk ^{ε/}	"soften"
tēbısír ^ε	"heavy"	tēbιg ^{ε/}	"get/make heavy"
gīŋ ^a	"short"	gìŋ ^ɛ	"scrimp"
kpi'oŋ ^ɔ	"strong"	kpὲ'ŋ ^ε	"strengthen"
νōr ^{ε/}	"alive"	νō'υg ^{ε/}	"make/come alive"
pòɔdɪg ^a	"few"	pὸ'ɔg ^ε	"diminish, belittle"
pìəlıg ^a	"white"	pὲlιg ^ε	"whiten"
sābılíg ^a	"black"	sɔ̄bιg ^{ε/}	"blacken"
nīn-múa+	"concentration"	mù'e+	"redden, become intense"
kūdvg ^o	"old"	kὺdιg ^ε	"shrivel up, dry out, age"
sùŋ ^ɔ	"good"	sùŋ ^ɛ	"help"
tūvlúg ^o	"hot"	tῦlιg ^{ε/}	"heat up"
mì'isvg ^ɔ	"sour"	mì'ig ^ε	"turn sour"
zùlvŋ ^ɔ	"deep"	zùlıg ^ɛ	"deepen"
lāllúg ^ο	"far"	lālιg ^{ε/}	"get to be far, make far"
màuk ^o	"crumpled up"	màk ^ε	"crumple up"
dēεŋ ^a	"first"	dὲŋ ^ε	"precede"

nèer ^e	"clear, empty"	nìe+	"appear"
sɔ̃n̆'e ^{ya/}	"be better than"	sūň'e ^{+/}	"become better than" WK

With the addition of -m as a second derivational suffix:

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wàyŋº "wasted" wànım<sup>m</sup> "waste away"
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-lum- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

pu̯'āª	"woman"		ρὺ'alιm ^m	"cook"
pὸň'ɔr ^ε	"cripple"		pὸň'ɔlιm ^m	"cripple, get crippled"
gìk ^a	"dumb"		gìgılım ^m	"become dumb"
wàbır ^ɛ	"lame"		wàbılım ^m	"make, go lame"
gū'บร ^ะ	"semi-ripe things"		gὺ'υlιm ^m	"become semi-ripe"
būgvd ^a	"client of diviner"		bùgvlım ^m	"cast lots"
		\mathbf{cf}	bὺk ^ε	"cast lots"

Miscellaneous denominal dual-aspect verbs formed with $s\ m\ b$ are seen in

	zuà+	"friend"	zùes ^ɛ	"befriend"
	nēεr ^{ε/}	"millstone"	nēεm ^{m/}	"grind with a millstone"
	yā¹ad [€]	"clay"	yà'ab ^ɛ	"mould clay"
cf	yàge	(Mooré) "make pottery"		

12.1.6 Miscellaneous cases

-m- derives some preverbs 19.7.2:

	Ιὲb ^ε	"return"	lèm	"again"
cf	là'as ^ε	"gather together"	là'am	"together"
	dὲŋ ^ε	"go first"	dèŋım	"first"
cf	malig	(Toende) "do again"	màlıgım	"again"

It has no obvious meaning in $k \ni \check{n} s \iota m^m$ "cough" = $k \ni \check{n} s^{\varepsilon} id$.

-g- occurs with no clear meaning in

sōň+	"rub"	sūeň+/	"anoint"
nōb ^ε	"get fat"	nɔ̄bιg ^{ε/}	"grow" (child, plant)
nā+	"join"	nāe+/	"finish"; compare
			Hausa <i>gamàa</i> "join, finish"

-r- appears in

<i>kāab</i> ε/ "offer, invite"	kābır ^{€/}	"ask for admission"
	cf <i>kábıs</i>	Toende <i>id</i>
[no simplex]	sūgυr ^{ε/}	"forbear, be patient with"

Both words appear frequently in pan-regional set formulae $\underline{28}$ and may well be loanwords. They may be back-formations from the nouns $k\bar{a}b\iota r\dot{\iota}^+$ and $s\bar{u}g\upsilon r\dot{\upsilon}^+$, where $r\iota/r\upsilon$ possibly originated in the equivalent of $r^{\varepsilon}|a^+$ class singular flexions $\underline{8.5}$.

12.2 Nominals

12.2.1 From verbs

The derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality, though this is less true of deverbal adjective formation. Deverbal noun and adjective formation generally shows more analogical levelling than derivational processes elsewhere, in keeping with the strong Kusaal tendency to regularity and transparency in verb morphology.

The Tone Patterns of deverbal nouns and adjectives are predictable 6.5.

12.2.1.1 Agent nouns

Agent nouns can be freely made from almost all verbs which can be used in direct commands. Informants readily supply isolated forms on demand, but in conversation and texts they usually occur as second elements of compounds. All belong to the $a|b^a$ class, although those derived from II- or r(r)-stem single-aspect verbs may also show $r^{\epsilon}|a^+$ class forms 8.3.1. Despite their regularity of formation, agent nouns often develop specialised meanings, as will be seen in the examples. The name "agent noun" is not altogether felicitous; as with English derivatives in "-er", the formation may be found with verbs whose subject is not an agent: agent nouns can even be created from stative verbs if they are usable in direct commands.

The formant of agent nouns and habitual adjectives is the derivational suffix -d. It is probably historically related to the -d- of the imperfective flexion $-d^a$, but the tonal effects differ, and derivational -d shows much less regularity in its mode of attachment; agent nouns show more levelling and regularisation than habitual adjectives. These variations arise from a tendency to limit stem length, resulting in deletion of either -d itself or the suffix preceding it. The absence or presence of the suffix affects the Tone Pattern in forms derived from Pattern A verbs $\underline{6.5}$.

Most dual-aspect verbs have an agent noun with a singular form segmentally identical with the imperfective. For tones see $\underline{6.5}$. If there are alternate forms, the less "regular" form appears as the agent noun.

kū⁺	"kill"	kūυd ^{a/}	"killer"
mὲ ⁺	"build"	mēεd ^a	"builder"
dì+	"eat"	dīt ^a	"eater"
gōs ^ɛ	"look"	gōt ^{a/}	"seer, prophet"
dūg ^ε	"cook"	dūgvd ^{a/}	"cook"
dụ'à ^a	"bear, beget"	dū'ad ^a	"elder relation"
kàd ^ε	"drive away"	saríyà-kāt ^a	"judge"
sɔ̄b ^ε	"write"	sɔ̄bɪd ^{a/}	"writer"
bùn ^ε	"reap"	būn ^{na}	"reaper"
tùm ^m	"work"	tùm-tūm ^{na}	"worker"
kìm ^m	"tend flock"	kɔ̀ňb-kīm ^{na}	"herdsman, shepherd"
kpàr ^ε	"lock"	kpārıd ^a	"lock-er"
gbīs ^ε	"sleep"	gbīsıd ^{a/}	"sleeper"
sjàk ^ɛ	"believe"	sjākıd ^a	"believer"
įāňk ^{ε/}	"jump, fly"	įāň'ad ^{a/}	"flier"
sùŋ ^ɛ	"help"	รงิทูเd ^a	"helper"
bàŋ ^ε	"understand"	bลิŋเd ^a	"wise man"
kēŋ ^{ε/}	"go"	kēn ^{na/}	"traveller"
gàad ^ɛ	"pass"	tùen-gāt ^a	"leader"
mɔ̄ɔl ^{ε/}	"proclaim"	mɔ̄ɔl-mɔ̂ɔn ^{na}	"proclaimer"
màal ^ɛ	"sacrifice"	màal-māan ^{na}	"sacrificer"
pà'al ^ɛ	"teach"	pā'an ^{na}	"teacher"
sūgυr ^{ε/}	"forbear"	sūgvríd ^a	"forgiver"
yv̄'טm ^{m/}	"sing"	yบิบm-yบิ'บm ^{na}	"singer"
		pl yōvm-yô'vmnìb ^a	
sàň'am ^m	"spoil"	pu̯'à-sān̆'am ^{na}	"adulterer"
		pl pu̯'à-sāň'amıdıbª	

Pattern H fusion verbs, which delete the H toneme of the stem in the imperfective 6.3.1, show the same form for the agent noun:

nāe ^{+/}	"finish"	nāad ^{a/}	"someone who doesn't
			give up easily" WK
dī¹e⁺/	"receive"	dī'əd ^{a/}	"receiver"
ňwà'e ⁺	"cut wood"	йwā'ad ^а	"woodcutter"
gbāň'e ^{+/}	"catch"	zīm-gbâň'ad ^a	"fisherman"
pīe ^{+/}	"wash"	pīəd ^{a/}	"washer"
fāeň ^{+/}	"save"	fāaňd ^{a/}	"saviour" WK
		faangid	NT/KB 14

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

sīgıs ^{ɛ/}	"lower"	sīgıs ^{a/}	"lowerer"
		pl <i>sīgısídìb</i> a	
kùøs ^ɛ	"sell"	kùøs ^a	"seller"
		pl <i>kūesıdıb</i> a	
ρὺ'υs ^ε	"worship"	ρὺ'υs ^a	"worshipper"
		pl <i>pū'usıdıb</i> a	
tὺ'as ^ε	"talk"	từ'as-từ'as ^a	"talker"
		pl từ'as-tữ'asıdıb ^a	
dī'əs ^{ε/}	"receive"	nō-dî'əs ^a	"chief's spokesman"
		pl <i>nō-dí¹əsìdıb</i> a	("linguist")

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

zàb ^ε	"fight"	zàb-zàb ^a	"warrior"
		gbān-záb ^a	"leather-worker"
tìs ^ε	"give"	tìs ^a	"giver"
sòs ^ε	"beg"	sòs ^a	"beggar"

Stems in -mm- form reduplicated agent nouns with $n \grave{a} m^a$ plurals:

dàm^m "shake" dàm-dàm^{ma} "shaker"

The nn-stem $sù n^{n\epsilon}$ "bow the head" has an agent noun stem in -nn-, but the tonemes show retention of the -d- formant:

sùn ^{nɛ}	"bow head"	sūn ^{na}	"deep thinker, close
		pl <i>sūnnıb</i> a	observer" WK
		cb <i>sùn-</i>	(cf ipfv <i>sùnnıd</i> a)

Agent nouns can only be formed from 3-mora verb stems in -*g- if the *g is either deleted or assimilated with the root final consonant as -k- or -g-:

yādıg ^{ε/}	"scatter"	yāt ^{a/}	technical term for one
			participant in a
			housebuilding ritual

Various irregular formations in my materials include:

tēk ^{ε/}	"pull"	ňwī-ték ^a	"rope-puller"
		pl <i>ňwī-tékìdıb</i> a	
nòŋ ^ε	"love"	nòŋıd ^a	"lover"; tones irreg
tì¹əb ^ε	"heal"	tī¹əb ^a	"healer"; tones irreg

For 4-mora stems: KT has no agent nouns; WK drops the final -m- and proceeds as for 3-mora stems:

sìilım ^m	"cite proverbs"	sīin ^{na}	"speaker of proverbs"
		pl <i>sīinnıb</i> a	
ρὺ'alιm ^m	"harm"	pū'an ^{na}	"harmer"
zàaňsım ^m	"dream"	zàaňs ^a	"dreamer"
		pl <i>zāaňsıdıb</i> a	

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

zìň'i ^{ya}	"be sitting down"	zīň'id ^a	"sitter"
zì'e ^{ya}	"be standing still"	zī'əd ^a	"stander"
mī⁺	"know"	mī id ^a	"knower"
		gbàn-mī¹id ^{a/}	"scribe" NT
zī' ⁺	"not know"	zī'ıd ^{a/}	"ignorant person"
sū'e ^{ya/}	"own"	sū'vd ^{a/}	"owner"
sɔ̃n̆'e ^{ya/}	"be better than"	sɔ̃n̆'ɔdal pl sɔ̃n̆'ɔbal	8.3.1
dīgı ^{ya/}	"be lying down"	dīgıd ^{a/}	"lier-down"
īgι ^{ya/}	"be kneeling"	īgıd ^{a/}	"kneeler"
vābι ^{ya/}	"be lying prone"	vābıd ^{a/}	"lier prone"
làbι ^{ya}	"be crouching"	lābıd ^a	"croucher in hiding"
àeň ^a	"be something"	āaňd ^a	"someone who
			continually is
			something" sic WK

Stems in $nn \parallel r(r)$ drop -d throughout. Those in $\parallel r(r)$ may use $r^{\epsilon} \mid a^{+}$ class suffixes, coinciding in form with habitual adjectives 8.3.1.

sīn ^{na/}	"be silent"	nīn-sín ^{na}	"silent person"
nēn ^{na/}	"envy"	nīn-nέn ^{na}	"envious person"
dɔ̃l ^{la/}	"be with"	ňyà'an-dɔ̀l ^{la}	"disciple" (irreg. tone)
		or <i>ňyà'an-dòl^{lɛ}</i>	
zāňl ^{la/}	"be holding"	nō-záňl ^{la}	"holder of hens"
		or <i>nō-záňl^{lɛ}</i>	
dε̄l ^{la/}	"be leaning"	nīn-dέl ^{la}	"person prone to lean"

mōra/	"have"	bù-mɔ̄r ^{a/}	"owner of goats"
		or <i>bù-mɔ̄r^{ε/}</i>	
tār ^{a/}	"have"	bù-tār ^{al}	"owner of goats"
		or <i>bὺ-tār^{ε/}</i>	

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

kīs ^{a/}	"hate"	kīs ^{a/} or kīsıd ^{a/}	"hater"
tèňr ^a	"remember"	tēňrıd ^a	"rememberer"
gūr ^{a/}	"be on guard"	gūrıd ^{a/}	"guard"
		zà'-nɔ̄-gúr ^a	"gatekeeper"

12.2.1.2 Deverbal adjectives

12.2.1.2.1 Habitual

In principle these adjectives have the same stem as the agent noun, but they drop the -d formant more readily, probably because they are not made as freely and are correspondingly not as far along the axis from derivational to flexional.

The sense may be active or passive, essentially "habitually connected with the verbal action", like the range of meaning of an English gerund as a noun premodifier. It is not usual for a habitual adjective to have a past passive sense like an English past participle, though examples occur, e.g $s\bar{u}m$ - $d\acute{v}gvd\grave{a}^+$ "cooked groundnuts" WK, $zii\eta dvgida = z\bar{i}i\eta$ - $d\acute{v}gvd\grave{a}^+$ "cooked fish" (Lk 24:42), beside the more usual sense in $ni'im\ dvgida = n\bar{i}m$ - $d\acute{v}gvd\grave{a}^+$ "meat for cooking" (1 Samuel 2:15.)

When used without a preceding noun cb, habitual adjective forms have the meaning of agent nouns: $k\bar{\nu}\nu d(r^{\epsilon}) = k\bar{\nu}\nu d^{a'}$ "killer" = $k\bar{\nu}\nu d^{a'}$ pl $k\bar{\nu}\nu d(b^{a})$. However, with a preceding cb the meanings differ: $p\underline{\nu}'\dot{a}-k\bar{\nu}\nu d^{a'}$ "woman-killer, killer of women" vs $p\underline{\nu}'\dot{a}-k\bar{\nu}\nu d(r^{\epsilon})$ "woman killer, murderous woman." Accordingly, deverbal adjectives will be cited with a preceding cb.

With dual-aspect verbs, 2-mora stems all retain the *d:

gòň ⁺	"hunt"	pu̯'à-gɔ̄ɔňdιr ^ɛ	"prostitute"
là' ⁺	"laugh"	pu̯'à-lā'adır [€]	"woman prone to laughter/
			woman to be laughed at"
ňyē̄ ⁺	"see"	būn-ňyέtìr ^ε	"visible object"
kuā+	"hoe"	nā'-dá-kūedír ^ε	"ox for ploughing"
yὲ ⁺	"don clothes"	fū-yέεdὶr ^ε	"shirt for wearing" WK
		fū-yέεdὺg ^ɔ	KT
kū⁺	"kill"	tì-kūvdím ^m	"poison" ("killing medicine")
du̞'àa	"bear/beget"	tèŋ-dō'adıg ^a	"native land"
dūg ^ε	"cook"	sūm-dúgvdà ⁺	"cooked groundnuts" WK

sīg ^ε	"descend"	yī-sígıdìr ^ɛ	"lodging-house"
su̯'āª	"hide"	yēl-sú'adìr ^ɛ	"confidential matter"
òйb ^ε	"chew"	būn-ʻóňbıdà+	"solid food"
bùn ^ε	"reap"	bōn-búnnìr ^ε	"thing for reaping"
tùm ^m	"work"	būn-tύmmìr ^ε	"useful thing"
νūl ^ε	"swallow"	tì-vōnním ^m	"oral medication"
gbīs ^ɛ	"sleep"	pu̞'à-gbīsıdír ^ɛ	"woman always sleeping"

3-mora stems in *g drop -d in all cases except where the *g derivational suffix is deleted in the imperfective, whether regularly or otherwise $\underline{10.1}$. The dropping of -d is thus much more consistent than in agent nouns.

gīlıg ^{ε/}	"go around"	pu̯'à-gīnnígª	"prostitute"
sūeň ^{+/}	"anoint"	kpā-sɔ́ɔňdìm ^m	"anointing oil"
tῦlιg ^{ε/}	"heat up"	būn-tύlιgìr ^ε	"heater, thing for heating"
pὲlιg ^ε	"whiten"	būn-pέlιgìr ^ε	"whitening thing, whitener"
yādıg ^{ε/}	"scatter"	būn-yátìr ^ɛ	"scattering thing" (cf <i>yāt</i> ^{a/})
įāňk ^{ε/}	"fly, jump"	būn-i̯áň'adìr ^ε	"flying creature"
pàk ^ε	"surprise"	yēl-pákìr ^ɛ	"disaster"
tēk ^{ε/}	"pull"	ňwī-tékìr ^ε	"rope for pulling with"
kēŋ ^{ε/}	"go"	bὺŋ-kĒnnír ^ε	"donkey that doesn't sit still"
sὺŋ ^ε	"help"	būn - súŋìr ^ɛ	"helpful thing"
nòŋ ^ε	"love"	bì-nὸŋιr ^ε	"beloved child"

3-mora stems in -*m* retain the -*d*, forming the consonant cluster -*mm*-:

```
sàň'am<sup>m</sup> "destroy" bὺ-sāň'ammιr<sup>ε</sup> "scapegoat" WK
```

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

```
p\grave{\epsilon}lis^{\epsilon} "sharpen" b\bar{\upsilon}n-p\acute{\epsilon}lis\grave{\imath}r^{\epsilon} "sharpening thing" k\grave{\upsilon}os^{\epsilon} "sell" b\bar{\upsilon}n-k\acute{\upsilon}os\grave{\imath}r^{\epsilon} "item for sale"
```

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

```
"thing relating to proverbs"
sìilım<sup>m</sup>
                "cite proverbs"
                                        būn-síilúŋ<sup>ɔ</sup>
pὺ'alım<sup>m</sup>
                "harm"
                                        nīn-pύ'alὶŋa
                                                                "harmful person"
                                        pu'à-pὺ'alíŋa
                                                                "harmful woman"
                                        nīn-záaňsນ້ŋ<sup>ວ</sup>
zàaňsım<sup>m</sup>
                "dream"
                                                                "dreamy person"
                                        pu'à-zàaňsύη<sup>ο</sup>
                                                                "dreamy woman"
```

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

dīgı ^{ya/}	"be lying"	bὺŋ - dīgιdír ^ε	"donkey that lies down a lot"
vābι ^{ya/}	"be prone"	bὺŋ - vābιdír ^ε	"donkey always lying prone"
zìň'i ^{ya}	"be sitting"	kūg-zíň'idìr ^ɛ	"stone for sitting on"
			(i.e. not a <i>būgvr</i> ^ɛ WK)
zāňl ^{la/}	"be holding"	nō-záňl ^{lε}	"hen for holding"
dēl ^{la} ∕	"be leaning"	nīn-dέl ^{lε}	"person you can lean on" WK
		kὺg-dĒl ^{lɛ/}	"chair for leaning on"
gùl ^{la}	"be hanging"	būn-gύl ^{lε}	"thing for suspending"

12.2.1.2.2 Resultative

Resultative adjectives are only derived from verbs which can use the perfective form in a resultative sense $\underline{19.2.2}$; it is not clear how productive the formation is. Almost all such verbs are either intransitive or patientive ambitransitive $\underline{19.8.1}$, and the adjectives are not passive participles, but express resulting states. There are no resultative adjectives from stance-verb roots meaning e.g. "seated", "standing" or from passives, like "eaten.". The formant -lim- either deletes a preceding derivational suffix or is added only to roots; for the flexion see $\underline{9}$.

kpì+	"die"	kpìilúŋ ^ɔ	"dead"
gēň ⁺	"get tired"	gēεňlύŋ ^ɔ	"tired"
pὲ'εl ^ε	"fill"	pὲ'εlύŋ ^ɔ	"full"
kà+	"break"	kὸɔlúŋ ^ɔ	"broken"
yὲ ⁺	"wear"	yὲεlύŋ ^ɔ	"worn" (of a shirt)
yò+	"close"	yɔ̀ɔlúŋɔ	"closed"
ρὺ'alιm ^m	"harm"	ρὺ'alύŋ ^ɔ	"damaged"
àeň ⁺	"tear"	àaňlúŋ ^ɔ	"torn"

12.2.1.3 Instrument nouns

Instrument nouns can be created freely by adding -m to habitual-adjective stems in dt or s. All are $g^a|s^{\varepsilon}$ class. Meanings may overlap with those of agent nouns.

kū⁺	"kill"	kūvdíŋ ^a	"thing for killing with"
<i>l</i> 5 ⁺	"tie"	si̯à-lɔ̄ɔdíŋa	"belt" ("waist-tying thing")
dūg ^ε	"cook"	dūgvdíŋ ^a	"cooking utensil"
s5b [€]	"write"	sɔ̄bɪdíŋª	"writing implement"
kpàr ^ɛ	"lock"	kpārıdıŋ ^a	"thing for locking"
йwà'e ⁺	"cut wood"	ทัพลิ'adเŋ ^a	"axe"
pīe ^{+/}	"wash self"	pīədíŋ ^a	"thing for washing oneself"

sù ⁺	"bathe"	รงิงdเŋª	"sponge"
gɔ̄sε	"look"	nīn-gɔ́tìŋa	"mirror"
		nīn - gótὶs ^ε	"spectacles" [<i>nīn-</i> "eye"]
bὺd ^ε	"plant"	būtιŋ ^a <u>2.1</u>	"cup" (originally "seed cup")
pīəs ^{ε/}	"clean"	pīəsíŋ ^a	"cleaning implement"
kùøs ^ε	"sell"	kūøsıŋ ^a	"professional salesperson"
dā'e ^{+/}	"push"	dā'adíŋ ^a	"pusher (person or thing)"
zìň'i ^{ya}	"be sitting"	zīň'idɪŋª	"thing for sitting on"

12.2.1.4 Imperfective gerunds

Dynamic single-aspect verbs in $-y^a$, where y is not assimilated, make perfective gerunds, as do a few others $\underline{11.1.1}$; intransitive stative verbs usually lack gerunds altogether. Other single-aspect verbs usually make m^m -class gerunds by adding derivational $-l_{lm}$ -after root vowels and -m- after $nn \parallel r(r)$:

sū'e ^{ya/}	"own" gerun	l: sū'ulím ^m cf so'olimkan Mt 12:25, 1996
mī ⁺	"know"	mī ⁻ ilím ^m
ZĪ'+	"not know"	zī'ılím ^m
àeň ^a	"be something"	àaňlím ^m
bὲ ⁺	"be somewhere"	<i>bὲlím</i> ^m [short vowel <i>sic</i>]
kā'e਼+	"not be"	kā'alím ^m
wēn ^{na/}	"resemble"	$w\bar{\varepsilon}nn(m^{m}$ [tones show this is deverbal]
sīn ^{na/}	"be silent"	sīnním ^m
nēn ^{na/}	"envy"	nēnním ^m
dɔ̃l ^{la/}	"accompany"	dōllím ^m
zāňl ^{la/}	"hold in the hand"	zāňllím ^m
dēl ^{la/}	"be leaning (of person	" dēllúg ^o or dēllím ^m
mɔ̄ra/	"have"	mɔ̄rím ^m
tār ^{a/}	"have"	tārím ^m
nār ^{a/}	"be necessary"	nārím ^m
gūr ^{a/}	"guard"	gūrím ^m

These forms obey the tonal rules for gerund formation $\underline{6.5}$. The non-initial H toneme in Pattern L confirms that they are m-stems $\underline{6.2.2}$.

Stative verbs derived from imperfectives of dual-aspect verbs $\underline{19.2.3}$ also form imperfective gerunds; the tonemes show that these are not m-stems:

```
bɔ̀ɔdım<sup>m</sup> "will" (Pattern L, unlike bɔ̃ɔdır<sup>\epsilon</sup> "desirable")
gɔ̀ɔňdım<sup>m</sup> "wandering" (gɔ̀ň+ "hunt")
zɔ̀tım<sup>m</sup> "fear" [M̀ zɔ́t nɛ̃ "I'm afraid."]
```

The gerund wvmmvg of wvmm "hear" (written wvmug before 2016, but read with -mm- in the 1996 audio NT) perhaps represents *wvmdvg. A number of deverbal abstract nouns from 3-mora verb stems in -s- appear in the m class and resemble gerunds in tone. They too are probably imperfective gerund forms: for the dropping of the -d- formant compare agent nouns and deverbal adjectives.

ρὺ'υs ^ε	"greet, thank"	ρὺ'υsιm ^m	"worship"
		or <i>pù'usug</i> ɔ	
kū⁺	"kill"	nīn-kύʊsìm ^m	"murderousness"
yɔ̄lιs ^{ε/}	"untie"	yɔ̄lɪsím ^m	"freedom"

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

```
-t\bar{a}a^{=} -t\bar{a}as^{\epsilon} -t\dot{a}- or -t\bar{a}- "companion in ..."
```

For dynamic single-aspect verbs with stems in -ll - nn - r(r), and all stative verbs with deverbal gerunds, the forms are identical to the usual imperfective gerunds:

mī ⁻⁺	"know"	mīˈilím-tāa ⁼	"partner in knowledge"
zī'+	"not know"	zī'ılím-tāa=	"partner in ignorance"
bὲ ⁺	"exist"	bèlím-tāa ⁼	"partner in existence" WK
d5l ^{la/}	"be with"	dɔ̃llím-tāa=	"fellow-companion"

For the irregular stative verb $n \ni \eta^{\epsilon}$ WK has two forms with different nuances:

```
nοη^{\epsilon} "love" nοη^{\epsilon} "fellow liker" or nοη^{\epsilon} "fellow lover"
```

Dual-aspect verbs add -m- to the habitual adjective stem, but with gerund Tone Patterns:

mὲ ⁺	"build"	mὲεdím-tāa ⁼	"fellow-builder"
dì+	"eat"	dìtím-tāa=	"messmate"
<i>p</i> ῡ+	"share"	pῦυdím-tāa ⁼	"fellow-sharer"
kpèň'+	"enter"	kpèň'ɛdím-tāa=	"fellow-resident"
zàb ^ε	"fight"	zàbıdím-tāa=	"opponent"
dūg ^ε	"cook"	dūgvdím-tāa ⁼	"fellow-cook"
fāň+	"snatch"	fāaňdím-tāa ⁼	"fellow-robber"
từm ^m	"work"	tùmmím-tāa=	"co-worker"

ρὺ'υς ^ε	"worship"	pὺ'ʊsím-tāa ⁼	"fellow-worshipper"
dìıs ^ε	"feed"	dìısím-tāa ⁼	"fellow-feeder"
sùŋ ^ε	"help"	sờŋím-tāa ⁼	"fellow-helper"
		or sùŋıdím-tāa=	
sjàk ^ε	"agree"	siakím-tāa=	"fellow in agreement"

Stance verbs may use $-d\iota m$ - or $-l\iota m$ - or $-n\iota m$ -; $-l\iota m$ - and $-n\iota m$ - forms may really belong to the derived assume-stance/make-assume-stance verbs 12.1.1:

īgι ^{ya/}	"be kneeling"		īgılím-tāa=	"fellow-kneeler"
		or	īgıdím-tāa=	"fellow-kneeler" WK
zìň'i ^{ya}	"be sitting"		zìň'ilím-tāa=	"fellow-sitter"
		or	zìň'idím-tāa=	"fellow-sitter" WK
vābι ^{ya/}	"lie prone"		vābılím-tāa=	"fellow lier-prone"
		or	vābıdím-tāa ⁼	"fellow lier-prone" WK
làbι ^{ya}	"be crouched"		làbılím-tāa=	"fellow croucher in hiding"
zì'e ^{ya}	"be stood"		zì'əlím-tāa=	"fellow-stander"
		or	zì'ədím-tāa ⁼	"fellow-stander" WK
dīgι ^{ya/}	"be lying"		dīgılím-tāa ⁼	"fellow-lier"
		or	dìgıním-tāa=	"fellow-lier" WK

12.2.1.5 Other deverbal nominals

-s- appears in a few concrete nouns derived from verbs:

dīgı ^{ya/}	"be lying down"	dīgısá ⁺	"lairs"
dū⁺	"go up"	dūυsá ⁺	"steps"

-m- derives nouns from verbal roots in

<i>z</i> ɔ̀ ⁺ "run"		z̄ɔm ^{mε}	"refugee"
kpì+	"die"	kpi⁻im ^{m/}	"corpse"

-d- appears as an instrument noun formant instead of the usual -dim- in

 $t u \dot{a}^+$ "grind in a mortar" $t \bar{u} \theta d \iota r^{\epsilon}$ "mortar"

See also on $p\bar{\imath}b\iota n^{n\epsilon}$ "covering" etc, where the n may represent *Id 11.1.2.

-b- derives nouns from verbal roots in

kpì+	"die"	kpìibıg ^a	"orphan"
dà' ⁺	"buy"	dà'abır ^ɛ	"slave"

This -b may be connected with the stem of $b\bar{\imath}ig^a$ "child"; cf Gulimancéma kpebiga "orphan", $kp\acute{e}$ "die", biga "child". It is conceivable that $l\bar{\imath}\iota b\iota r^\epsilon$ "twin" is a similar formation from Proto-Oti-Volta *li "two" with an aberrant reflex of *li; cf Buli $y\bar{\imath}b\bar{\imath}k$, Gulimancéma $l\acute{e}b\acute{\imath}li$ id. $S\grave{a}l\iota b\iota r^\epsilon$ "bridle" and $k\grave{a}l\iota b\iota r^\epsilon$ "bottle" are not analysable.

12.2.2 From nominals

-s- and -I- form adjectives from roots which are probably primarily adjectival:

mā'e ^{+/}	"cool down"	mā'asír ^ɛ	"cold, wet"
būk ^{ε/}	"weaken"	būgvsír ^ε	"soft"
tēbιg ^{ε/}	"get heavy"	tēbısír ^ε	"heavy"
mì'ig ^ε	"get sour"	mì'isvg ^ɔ	"sour"
s5b [€]	"get dark"	sābılíg ^a	"black"

-d- features in a number of nouns with no evident derivational meaning, such as $y\bar{u}gvd\iota r^{\epsilon}$ "hedgehog", $l\bar{a}'af^{\flat}$ "cowrie" pl $l\bar{\iota}g\iota d\iota^{\dagger}$ "money", $p\dot{\nu}gvd\iota b^{a}$ "father's sister." It can form abstract nouns from human-reference words (examples from KB, Naden):

pu̯'à-sādιr ^{ε/}	"young woman"	pu'asatim	"girlhood, virginity"
būn-kúdùg ^ɔ	"old man"	bunkuttim	"old age"
gɛdvg	"fool"	gɛtim	"folly"
pùkɔ̀ɔňr ^ɛ	"widow"	pυkɔntim	"widowhood"
bā'-bîig ^a	"brother"	ba'abiidvg	"brotherhood"

-m- appears in both concrete nouns, mostly with human reference, and abstracts:

bī¹a ⁺	"bad"	<i>b</i> i⁻əm ^m	"enemy"
tàdıg ^ɛ	"become weak"	tādım ^{m/}	"weak person'
áňsìb ^a	"mother's brother"	āňsíŋ ^a	"sister's child'
yáab ^a	"grandparent"	yáaŋ ^a	"grandchild"
*yāágbā		*yāágmgā	
vúer ^ε	"red kapok fruit"	vúøŋ ^a	"red kapok"
*vūégrī		*vūégmgā	
bì'isır ^ɛ	"breast"	bì'isím ^m	"milk"
nà'ab ^a	"chief"	nā'am ^m	"chiefship"
zɔ̃lvgɔl	"fool"	zɔ̄lımís ^ɛ	"foolishness"

Abstract $-m(s^{\epsilon})$ forms seem always to have H toneme; cf $b\dot{u}d\iota m(s^{\epsilon})$ "confusion", where, however, the -m- is part of the verb stem $b\dot{u}d\iota m^m$ "get confused"; cf also

```
tādιm<sup>m/</sup> "weak person" tàdιmίs<sup>ε</sup> "weakness"
```

Added to existing adjectival stems, -m- produces no change of meaning:

ňyὲεs ^a	"be self-confident"	ňyὲεsíŋ ^a	"self-confident"
vèňllıg ^a	"beautiful"	vὲĭllíŋ ^a	"beautiful"
mālısíg ^a	"pleasant"	mālısíŋ ^a	"pleasant"
lāllύg ^ο	"distant"	lāllíŋ ^a	"distant"
nār ^{a/}	"be necessary"	nàrບŋ ^ɔ	"necessary"
wōk ^{⊃/}	"long, tall"	wā'am ^{a/}	"be long, tall"

-m- is seen in a good many unanalysable 3-mora nominal stems, such as the nouns $y\bar{v}g\acute{v}m^{n\epsilon}$ "camel" (ultimately from Berber), $gb\bar{\iota}g\iota m^{n\epsilon}$ "lion", $z\grave{\iota}\iota\iota m^{m\epsilon}$ "tongue, $\grave{a}\check{n}r\upsilon\eta^{\circ}$ "boat", and the adjectives $z\grave{u}l\upsilon\eta^{\circ}$ "deep", $\check{n}y\bar{a}l\acute{v}\eta^{\circ}$ "wonderful", $y\grave{a}l\upsilon\eta^{\circ}$ "wide."

-I- and -Icm- derive abstract nouns from nouns and adjectives. The suffix -Icm- is the only derivational suffix before which CVVC roots do not become CVC 5.3.2, and it can follow a preceding derivational suffix, creating five-mora stems. The stems of these abstract nouns are not themselves used as adjectives.

dāu̯+	"man"	dàalım ^m	"masculinity"
pu̯'āa	"woman"	ρὺ'alιm ^m	"femininity"
bīig ^a	"child"	bìilím ^m	"childhood"
tītā'al ^{lε}	"proud person"	tītā'alım ^m	"pride"
gīŋ ^a	"short"	gīiňlím ^m	"shortness"
wɔ̄kɔ/	"long, tall"	wā'alím ^m	"tallness"
sāan ^{a/}	"guest, stranger"	sáannìm ^m	"strangerhood"
tīrâan ^a	"neighbour"	tīrâannìm ^m	"neighbourliness"
gīŋ ^a	"short"	gīŋılím ^m	"shortness"

13 Prefixes

13.1 Nouns and adjectives

Many nouns, and one or two adjectives, have an element preceding the root which is not the combining form of any noun. Such elements will be called **noun prefixes**. No finite verb form has a prefix.

Noun prefixes usually have no identifiable individual meanings. Even where parallel stems without prefixes or with different prefixes exist, there are no regular processes relating the various forms. Noun prefixes are common in particular semantic fields, however, such as small animals, reptiles and insects.

Most noun prefixes fall into just a few phonological types, with limited possibilities for vowel distinctions and for tones. Segmentally, they are mostly of the shape CV(n), where V shows only the three-way $a \ \iota \ v$ vowel distinction of affix vowels; the ι/v distinction itself and realisations as [i] or [u] are predictable $\underline{5.2}$. There is also a complex reduplicated type CVsin or CVlin. Stems with noun prefixes usually lack derivational suffixes. Prefixes have either M or L tonemes throughout, and they differ from cbs in their tonal effects on following elements $\underline{6.2.4}$.

The distinction between noun prefixes and combining forms is not absolute, and a few prefixes clearly originated as cbs, sometimes with phonological simplifications. Other prefixes are related to verbal negative particles. Nevertheless, cbs and noun prefixes are distinct in principle, and most cases readily distinguishable in practice. Thus, an element is a combining form if it is part of a noun paradigm, if it ends in a consonant other than a nasal, if it has a vowel other than short <code>a ι v</code> without glottalisation or contrastive nasalisation, or if it has M toneme and is followed by M dropping affecting singular and plural forms. On the other hand, an element is a noun prefix if it is formed by reduplication of the stem-initial consonant, or if it has M toneme and is not followed by M dropping affecting singular and plural forms.

Complicating the issue are many stems with elements preceding the final root which do not fit into the common segmental prefix patterns, though behaving tonally as prefixes. Most are **loanwords**, but not all, and many names of ethnic groups and of Kusaasi clans are of this type.

For the personifier particle as part of some common nouns referring to living creatures see <u>15.6</u>; it is not a prefix but a right-bound particle.

13.1.1 Reduplication-prefixes

The simplest type of noun prefix copies the initial C of the root, followed by a vowel which is ι by default, but v after labials, labiodentals and labiovelars; v replaces ι before root u/v/v and ι replaces v before root $i/\iota/\varepsilon$. A few forms show Ca. No cases occur with voiced stops or voiced fricatives.

kùkōr ^{ε/}	"voice"	kὺkὸm ^{mε}	"leper"
kìkàŋ ^a	"fig tree"	kìkīrıg ^{a/}	"tutelary spirit"
k[p]ùkpàrıg ^a	"palm tree"	kpīkpīn ^{na/}	"merchant"
tītā'ar ^ɛ	"big"	tàtàl ^{lɛ}	"palm of hand"
pīpīrıg ^{a/}	"desert"	sìsì'əm ^m	"wind"
lìlāalíŋ ^a	"swallow"	mìmīilím ^m	"sweetness"
mìmīilúg ^ɔ	"sweetness"	kpàkūr ^{ɛ/}	"tortoise"
tìtūmıs ^ε	"sending" (<i>tòm</i> m "	send")	
fῦfῦm ^{mε}	"envy"; "stye" (believed to result from envy)		
zà-sìsɔ̄bır ^{ɛ/}	"evening" (zà- cb	of <i>zàam</i> m "evening"	', <i>sɔ̄b</i> ε "get dark")

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

```
dùndùug<sup>o</sup>
                        "cobra"
                                                dìndēog<sup>⊃/</sup>
                                                                        "chameleon"
bìmbìm<sup>mɛ</sup>
                                                bùmbàrıg<sup>a</sup>
                                                                        "ant"
                        "altar"
kìnkàna
                        "fig"
                                                tīntōňríg<sup>a</sup>
                                                                        "mole"
zīnzāuŋɔ/
                        "bat"
                                                sīnsáaň=
                                                                         a kind of tiny ant
"foot"
gùngōm<sup>mε</sup>
                        "kapok material" (gỳm<sup>mε</sup> "kapok fruit")
                        "blind" (zū'em<sup>m/</sup> "go/make blind")
zùnzòŋ<sup>a</sup>
                        "housefly" (tàmpūa+ id)
pùmpɔ̄ɔgɔ
```

An even more complex type follows the reduplicated *CV* with -sın or -lın:

kpìsınkpìl ^{lɛ}	"fist"	tàsıntàl ^{lɛ}	"palm of hand"
sīlınsîuňg ^ɔ	"spider"	sīlınsîug ^ɔ	"ghost"
zīlınzîog ^ɔ	"unknown" cf	zī' ⁺ "not know"	
νὺlιnνùuňl ^{lε}	"mason wasp"		
wàsınwàl ^{lɛ}	parasitic gall	on trees ("mistleto	e" in local English)
ทธิรเททธิดg ^{ว/}	"envious perso	on" cf <i>nēn^{na/}</i> "envy"	WK
	others "centip	oede" = WK <i>nà'-nēs</i>	sιnnēog ^{o/}

13.1.2 Ca(n)

Prefixes may be of the form Ca(n), where C is d b n m l s or z.

dàyūug ^{ɔ/}	"rat"	dàwān ^{nɛ/}	"pigeon"		
dàtìu̯ŋɔ	"right hand"	dàgɔ̀bɪgª	"left hand"		
dànkòŋ ^ɔ	"measles"	dàwàlıg ^a	"humid season"		
dàyáam ^{ma}	"woman's paren	"woman's parent-in-law"			
dàtāa ⁼	"enemy" cf <i>nìn-t</i>	"enemy" cf <i>nìn-tāa</i> = "co-wife", Ghanaian "rival"			
dàmà'a ⁼	"liar" cf <i>mà</i> '+ "l	"liar" cf <i>mà</i> ' ⁺ "lie"			
dàkīig ^a	"sibling-in-law v	"sibling-in-law via wife"			
dādúk ^o	a kind of large	a kind of large pot, cf $dar{ u}k^{>/}$ "pot"			
bàlàŋır ^ɛ	"hat"	bàlàar ^ɛ	"stick, staff"		
bānāa ⁼	traditional smock				
bālērvg ^{ว/}	"ugly" cf <i>lɛ̃r</i> ɛ "ge	et ugly"			
bàyε̄og ^{ɔ/}	"betrayer of sec	"betrayer of secrets" cf <i>yɛ̃ɛs^{ɛ/}</i> "betray a secret"			
nānzū'us ^{ε/}	"pepper"	màngávŋ ^ɔ	"crab"		
làngávŋ ^ɔ	"crab"				
sākárùg ^o	"fox"	sàbùa ⁺	"lover, girlfriend"		
sāmán ^{nɛ}	"courtyard"	sāngúnnìr ^ɛ	"millipede"		
zànkù'ar ^ɛ	"jackal"	Zàngbèog ^o	"Hausa person"		

 $N\grave{a}y\bar{i}ig^a$ "thief" is written na'ayiig in NT/KB as if it were a compound with the cb $n\bar{a}'$ - "cow", but it has L toneme initially and the vowel is definitely not glottalised (WK); nor is the sense limited to "cattle thief." It is a $^a|b^a$ class g-stem: pl $n\grave{a}y\grave{i}ig$ - $n\grave{a}m^a$; cf $n\grave{a}y\bar{i}ig$ m^m "thievery." There is an analogical $g^a|s^\varepsilon$ pl $n\grave{a}y\bar{i}is^\varepsilon$. The Farefare cognate is $n\grave{a}y\grave{i}g\grave{a}$, pl nayigba or nayigsi; Dagbani has nayiga pl nayigsi and also tayiga id.

13.1.3 Negative particles as prefixes

Some prefixes are connected with the verb negative particles $p\bar{v}$ $k\dot{v}$:

```
kòndò'ar^{\epsilon} "barren woman"; cf d\underline{u}'à "bear, beget"

n\bar{l}n-p\bar{v}-n\bar{a}n^{na/} "disrespectful person"; cf n\bar{a}n^{\epsilon} "love, respect"

t\dot{v}b-p\bar{v}-w\acute{v}mn\grave{v}b^{a} "deaf people" (Rom 11:7) cf t\dot{v}bvr^{\epsilon} "ear", w\grave{v}m^{m} "hear."
```

However, most cases show no identifiable negative meaning:

kùndùŋ ^a	"jackal"	gūmpūzēr ^{ε/}	"duck"
dāmpūsāar ^ɛ	"stick"		
bān-kύsέl ^{lε}	"lizard" ? first	element connected	with <i>bàŋ</i> ª
	"agama lizar	d", but the tones are	unexpected.

13.1.4 Stranded combining forms

Some original cbs have become partly bleached of their original meaning and/or simplified phonologically, and then detached from their regular paradigms after being ousted by new cbs based on analogy with sg forms 8.2.

nin "body" is accepted by WK as cb of nin^a $niis^{\epsilon}$ [= Mooré yinga] but the word is rare; as a noun prefix cf

```
n in-gb i \eta^{5/} "human skin; body" n in-t \bar{a}a^{=} "co-wife"
```

 $d\grave{a}$ "man" is replaced as regular cb by forms segmentally remodelled on sg and pl $d\grave{a}\dot{u}$ -, $d\grave{a}p$ -, but the $d\grave{a}$ - form is seen in

```
dà-p\bar{a}al^{al} "son, boy" cf p\bar{a}al(g "new" dà-kòɔnr^{\epsilon} "son, bachelor" cf arakon' "one"
```

 $p\dot{v}$ "woman" cf $p\dot{v}$ ' \dot{a} a "woman" cb $p\dot{v}$ ' \dot{a} -. Identifiable in e.g.

```
p \dot{\nu} k \dot{\sigma} \tilde{r}^{\epsilon} "widow"

cf Mooré p \dot{\nu} g k \tilde{o} r \dot{e} "widow"

with Mooré p \dot{\nu} g s \dot{a} d \dot{a} "young woman"

= Kusaal p \dot{\mu} \dot{a} - s \bar{a} d \iota r^{\epsilon/}
```

 $p\bar{\upsilon}$ - "farm" cf $p\bar{\jmath} \supset g^{\supset J}$ "field, farm", pl $p\bar{\jmath} t^{\varepsilon J}$, regular cb $p\bar{\jmath}$ -; Mooré $p\dot{\upsilon} \cup g\dot{\upsilon}$ pl $p\dot{\upsilon} t\dot{\upsilon}$ Tonally, this $p\bar{\upsilon}$ - behaves as a M prefix, not a cb $\underline{6.2.4}$.

```
p\bar{v}kp\bar{a}ad^{a/} "farmer" (= kp\bar{a}ad^{a/}id)
```

 $n\grave{a}'$ "chief"(?) appears before a number of nouns signifying animals and insects:

```
n\grave{a}'-n\bar{\epsilon}sinn\bar{\epsilon}og^{5/} "centipede" WK
cf n\bar{\epsilon}sinn\bar{\epsilon}og^{5/} "envious person" WK; others: "centipede" n\grave{a}'-z\grave{o}m^{m\epsilon} "locust" n\grave{a}'-d\grave{a}w\bar{a}n^{n\epsilon/} "pigeon" = d\grave{a}w\bar{a}n^{n\epsilon/}
```

The "chief" cb perhaps relates to traditional folklore; cf \grave{a} - $k\bar{\jmath}ra$ - $d\hat{\imath}am^{ma}$ "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier particle $\underline{15.6}$ like \grave{a} - $d\grave{a}al\acute{\nu}\eta^{\Im}$ "stork", \grave{a} - $g\hat{a}\nu\check{n}g^{\Im}$ "pied crow", \grave{a} - $m\acute{u}s^{\varepsilon}$ "cat."

13.2 Adverbs

The manner-adverb prefix \grave{a} - appears before some stems which are also followed by apocope-blocking <u>16.4</u>:

àmĒŋá ⁺	"truly"	àsīda+	"truly"
ànínà ⁺	"promptly"		

The same prefix is also seen in a number of proadverbs and in the locative $\frac{\partial g}{\partial l}^{|\epsilon|}$ "upwards" 16.3. It is followed by M spreading. Forms with this prefix are all liaison words. It does not cause a preceding LF-final vowel to appear as -a 7.2.1.

13.3 Number words

In all uses, the numbers 2 to 9 begin with an inseparable number prefix. Forms with number prefixes are all liaison words <u>7.2</u>.

The number prefixes represent **fossilised noun class agreement prefixes**. With the collapse of noun-class based grammatical gender <u>8.1</u>, the old ${}^a|b^a$ class agreement pronouns \dot{o} $b\dot{a}$ have been generalised for animate gender and the old $r^{\epsilon}|a^+$ class singular pronoun $l\hat{\iota}$ has been adopted for inanimate. In Dagbani, where there has been a very similar change, the old plural pronoun ga is still found in older materials for inanimate plural (Olawsky 1999.) Number words originally agreed with the counted noun using a prefix similar to the corresponding plural pronoun, and the \dot{a} - of the numbers 2-9, $\dot{a}y\hat{\iota}^{1+}$ "two", $\dot{a}t\dot{a}\tilde{n}^{1+}$ "three" etc used as quantifiers <u>15.5.2.1</u> represents original *ga-. Because of this origin, the \dot{a} - number prefix, unlike all other \dot{a} - particles and prefixes, causes a preceding LF-final vowel following a consonant to appear as -a rather than - ι <u>7.2.1</u>. This same \dot{a} - is also seen in $\dot{a}l\dot{a}^+$ "how many?" contrasting with $\dot{a}l\dot{a}^+$ "thus", which has manner-adverb \dot{a} -.

The expected corresponding number prefix $b\grave{a}$ - is not now found after nouns with animate gender, but is still preserved after personal pronouns: $t\grave{\iota}$ $b\grave{a}t\acute{a}\breve{n}'$ "we three", $y\grave{a}$ $b\grave{a}y\acute{p}\grave{c}$ "you seven", $b\grave{a}$ $b\grave{a}y\acute{l}'$ "they two."

The forms of the number words 2-9 used for counting $\underline{15.5.2.2}$ represent the old $m^{\rm m}$ class agreement, in the "abstract" sense of $m^{\rm m}$ 8.1: thus ntan' "three", ntan "four", ntan "five" (counting.) Nawdm, which preserves class agreement for numbers (ntan bàtán "three people") uses the agreement prefix for its cognate m-class for counting: mtan "three" mna "four" mnu "five" etc (Fiedler 2012.)

The number prefix $b\dot{v}$ - appears in various adverbial number words <u>15.5.2.4</u>. It probably represents either an old b° or m^{m} class agreement.

àbùyí¹+	"twice"	àbùtáň' ⁺	"three times"
àbùnāasí+	"four times"	bùpīiga+	"ten times"
nɔ̄ɔrím bùtáň'+	"three times"		

14 Unsegmentable complex stems

Numerous words in Kusaal (including the very name of the language, $K\bar{\upsilon}s\hat{a}al^{\epsilon}$) have stems which are more complex structurally than the ordinary unprefixed type but are simply unanalysable units. Tonally, they usually resemble forms with noun prefixes, but examples occur with an initial H toneme. Segmentally, they may contain unusual consonant clusters. Most are identifiable as loanwords, but by no means all. Many names of ethnic groups and clans fall into this category.

Examples of such complex stems are $K\bar{\nu}s\hat{a}as^{\epsilon}$ "Kusaasi", $N\bar{\nu}amp\bar{\nu}r\iota s^{\epsilon}$ "Mamprussi", $K\hat{\nu}t\bar{a}m^{ma}$ the name of WK's clan; $gb\check{a}n\check{\nu}a^{\dagger}a^{\dagger}$ "lazy person" (gonya'am "idleness" 1976 NT), cf Dagbani $gbinva\chi li$ "laziness."

14.1 Loanwords

As usual cross-linguistically, nouns form by far the largest group of identifiable loanwords. They are sometimes fitted into the noun class system by analogy 8.6. Analogy usually causes the initial \grave{a} - of loanwords like $\grave{a}raz\acute{a}n\grave{a}^+$ "heaven" and $\grave{a}raz\grave{a}k^a$ "riches" to be treated tonally as fixed-L 7.4.3.

Most identifiable loanwords in Kusaal come from **Hausa**, the largest African language after Arabic by number of first-language speakers, used by millions more as a lingua franca in the savanna zone of West Africa. Although there are many ethnic $H\grave{a}us\grave{a}awaa$ in the Kusaasi area, especially in Bawku, the language which has influenced Kusaal is the Gaanancii lingua franca; though mutually intelligible with Kano Hausa, Gaanancii among other differences lacks not only grammatical but even natural gender, uses [z] for [\widehat{d}_3], monophthongises diphthongs, and drops the distinction between glottalic consonants and their plain counterparts.

Hausa loans often stand out prominently as foreign elements by their deviation from the typical structure of Kusaal words, with its limitation of possible vowel contrasts by position within the word and its restrictions on consonant distribution.

Among nouns borrowed from Hausa are $d\bar{a}k\dot{a}^+$ "box", Hausa $\dot{a}dak\dot{a}a$ (ultimately from Portuguese arca); $g\bar{a}dv^+$ "bed", Hausa gadoo; $k\dot{\epsilon}\epsilon k\dot{\epsilon}^+$ "bicycle", Hausa $k\dot{e}ek\dot{\epsilon}$; $b\dot{a}kp\dot{a}e^+$ "week", from Hausa $bakw\dot{a}i$ "seven", also used for "week" in Gaanancii.

Identifiable verb loanwords are much less common. They are subject to the usual constraints on possible Kusaal verb shapes $\underline{12.1}$, e.g. $d\grave{a}am^m$ "disturb, trouble", Hausa $d\grave{a}amaa$; $b\grave{v}g^\epsilon$ "get drunk", Hausa $b\grave{u}gu$, literally "get thoroughly beaten", a Hausa idiom.

Several function words are loans, probably from Hausa: $\grave{as}\acute{\epsilon}\epsilon$ "except", Hausa $sai; k\bar{\nu}\nu$ "or", Hausa $koo; b\acute{a}a$ "not a...", Hausa $b\^{a}a$.

Loanwords with clear Hausa counterparts did not necessarily originate in Hausa, itself a great borrower of words. Some such words appear in many languages of the Sahel and Savanna. e.g. $h\bar{a}ll'$ "until", Hausa har, Kikara Songhay $h\'{a}l$, possibly from Arabic $\hbar atta$: (Heath 2005.) With $l\`{a}b\iota^{ya}$ "be crouching behind something", Hausa $lab\`{e}$ "crouch behind something or lean against wall to eavesdrop", Kikara Songhay $l\'{a}$: $b\'{u}$ "hide behind or under something", the close match of form and highly specific meaning is striking; if the Kusaal word is a loan, it may owe its single-aspect flexion and dual-aspect assume-stance and make-assume-stance derivatives to analogy with $v\~{a}b\iota^{ya}$ "be lying prone."

Wide geographical distribution need not rule out Hausa origin or transmission, however: loans from Hausa have travelled far in West Africa, with an entry point into Songhay via the Zarma and Kaado languages of Niger.

Words from **Arabic** are frequent throughout the languages of the Sahel and Savanna; thus, among many others: Kusaal *láafiya*⁺, Hausa *laafiyàa*, Mooré *làafí*, Kikara Songhay *ʔàlà:fíyà* "health", Arabic *ʔal-ʕa:fiya* "(the) wellness"; Kusaal *àrazàk*^a, Hausa *arzìkii*, Mooré *àrzɛká* "riches", Kikara Songhay *ʔárzúkù* "good luck", Arabic *ʔar-rizq* "(the) livelihood" pl *ʔarza:q*; *àrazánà*⁺ "heaven, sky", Hausa *àljannàa*, Mooré *àrzãnà*, Kikara Songhay *ʔàljánnà* "heaven, paradise", Arabic *ʔal-ɟanna* "(the) garden, paradise"; Kusaal *yàddā*^{+/} (yàdā WK) "assent", Hausa *yàrda* (verb) "consent", Kikara Songhay *yárrɛ̂* "consent", probably from the Arabic *yardṣa:*, 3sg masculine ipfv of *radṣiya* "be satisfied"; Kusaal *Tàláatà*⁺, Hausa *Tàlaatàa*, Arabic *ʔaθ-θala:θa:?* "Tuesday."

It is likely that Arabic words have mostly entered Kusaal via Hausa. However, some Kusaal forms clearly resemble **Mooré** rather than Hausa. Many Mossi people are found in the Kusaasi area, and many Kusaasi themselves speak Mooré well; they often attribute local or individual peculiarities of Kusaal speech to Mooré influence. Arabic words have reached Mooré from several other West African languages widely used by Muslims, including Dyula and the Songhay languages.

Thus $m\grave{a}l\dot{a}k^{al}$ "angel" (always malek in NT versions prior to 2016) is derived from the Arabic mal?ak. The vocalism suggests transmission via Mooré $m\grave{a}l\acute{e}k\grave{a}$, and the word is usually found in Christian materials, which would be consistent with this pathway (see below.) The forms clearly do not match Hausa $m\grave{a}laa'ik\grave{a}a$, which is from the Arabic plural mala:?ika. A similar case in the realm of religion is $S\bar{\upsilon}t\acute{a}an\grave{a}^+$ "Satan", matching Mooré $S\upsilon t\~{a}ana$ rather than Hausa $sh\grave{a}id\~{a}n$, which is a learned borrowing of the Arabic $fayt^{\varsigma}a:n$.

Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso) and used Mooré materials, leading to some borrowing and calquing. One word revealed as a loan by its phonology is $Winn\dot{a}'am^m$ (WK) $Win\dot{a}'am^m$ (always Wina'am NT/KB) "God." It is common in Christian materials; the Creator of traditional religion often appears simply as $Winn^{n\epsilon}$ in proverbs etc. $Winn\dot{a}'am$ looks analysable as a compound of $winn^{n\epsilon}$ "god" and the stem of $n\dot{a}'ab^a$ "chief" or $n\ddot{a}'am^m$ "chieftaincy",

but the tones should then have been $*W\bar{\imath}n-n\hat{a}'am$, and the prevalence of the form $W(n\hat{a}'am)$ with single -n- likewise shows that the form is not in fact a synchronic compound in Agolle Kusaal. Direct borrowing of the corresponding Mooré word $W\tilde{e}nn\hat{a}\acute{a}m$ would not account for the glottalised -a'a-; the immediate source of the loan is probably **Toende Kusaal**. Niggli's materials have $W(n\bar{a}'am)$, with a tonal fall like the Agolle $W(n\hat{a}'am)$, and always with single n, probably reflecting consistent loss of consonant gemination in Toende everywhere except before LF affix vowels.

The word faangid "saviour" in the NT/KB is read [fã:ḡjid] by my informants; preservation of g in this position $\underline{5.6}$ is exceptional in my Agolle Kusaal data, the only other cases being faangir "salvation" and the gerund $z\overline{l} \ni g^a$ of $z\overline{l} = g^a$ "be standing" used by DK KT instead of $z\overline{l} = g^a$. The expected agent noun from $f\overline{a}=\overline{n}+f^a$ "save" is $f\overline{a}=f^a$, presumably avoided as identical to the agent noun of $f\overline{a}=f^a$ "rob, snatch", found in NT/KB as faand "robber." WK has $f\overline{a}=f^a$ as the agent noun for both verbs, and specifically confirms that the word has both meanings in his idiolect.

In Toende Kusaal, *g is deleted word-finally after all long vowels (bii "child" = $b\bar{\imath}ig^a$, $b\bar{\nu}\bar{\nu}$ "goat" = $b\bar{\nu}vg^a$), but is otherwise retained by many speakers (Niggli 2012):

```
páa "arriver" (Agolle pāe<sup>+</sup> "reach")
Õ bu paage. "Il n'est pas arrivé." (Agolle Ò pū pāée.)
```

Niggli's dictionary has both *fãagıt* and *fãat* for "saviour", with *fãat* also glossed as "robber." Thus *faangid* too is probably a loan from Toende Kusaal.

Wínà'am fāangíd fāangír appear in the actual speech of many Agolle Kusaasi, and are accordingly used in this grammar in transliterating Bible verses. NT versions prior to 2016 also used the Toende forms aaruŋ (Toende ãarùŋ) for ànrvŋ "boat", and malek (Toende màlék, Mooré màlékà) for màliāk "angel", but KB has anrvŋ and maliak throughout, matching the usage of my informants and of the audio 1996 version.

One clear **Mampruli** loanword is WK's $k\bar{\imath}ib\dot{\upsilon}^+$ cb $k\bar{\imath}ib$ - "soap", which he uses instead of Kusaal $k\bar{\iota}'\iota b^{5/}$. The length and quality of the vowels identify the source as Mampruli kyiibu: contrast Farefare $k(\dot{\iota}'b\dot{\jmath})$, Dagbani chibo. Other words with singulars ending in $-\iota^+$ or $-\upsilon^+$ also probably originated as loans from Mampruli or Mooré 8.5.

Farefare has certainly influenced Nabit and perhaps also Toende Kusaal, but I have no examples of Farefare loanwords in Agolle Kusaal.

Loanwords ultimately from **Songhay** languages include <code>bòrkìna</code> "honest person", Mooré <code>bùrkìná</code> "free, noble", Dagbani <code>bilchina</code> "free, not slave", cf Kikara Songhay <code>bòrkǐn</code> "noble (caste)" and <code>bàunv</code>, used only in <code>kpɛň'</code> <code>bàunv</code> "get circumcised" (<code>kpɛň'+ "enter"</code>), Mooré <code>ke bãongó id</code>, cf Kikara Songhay <code>bàngù "pool</code>, spring", <code>à húró bàngù "he entered the pool"</code>, i.e. "he was circumcised."

Loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana, include $k\bar{\jmath}d\dot{\nu}^+$ "banana", Twi kwadu; $s\bar{a}af\iota^+$ (?tones) "lock, key", Twi $saf\tilde{e}$ "key" (from Portuguese chave); $b\bar{\nu}r\iota y\acute{a}^+$ "Christmas", Twi bronya (itself of unclear origin.)

English stress may be represented by a H toneme which remains fixed throughout the paradigm: $l5y\dot{a}$ "cars", not * $l5y\dot{a}$.

Several words of English origin have probably been transmitted via Hausa: $k\acute{\sigma}t\grave{\upsilon}^+$ "court", Hausa $koot\grave{u}$; $s\acute{\sigma}g\acute{\varrho}\grave{a}^a$ "soldier", Hausa $sooj\grave{a}$; $t\acute{\varepsilon}\epsilon\grave{b}\grave{\upsilon}l^\epsilon$ "table", Hausa $teeb\grave{u}r$; $w\bar{a}d\acute{a}^+$ "law", Hausa $ood\grave{a}$, from English "order", with Kusaal sg $w\bar{a}d\iota r^{\epsilon l}$ cb $w\bar{a}d$ - created by back-formation.

A clear **French** loan in Agolle Kusaal is $l\grave{a}mp5$ (i.e. l'impôt) "tax", as in $l\grave{a}mp5$ - $d\hat{i}$ " bs "tax gatherer." This word is widespread in northern Ghana (Dagbani lampoo), reflecting extensive French influence in the region prior to the British annexation. Another word probably derived from French is $k\grave{a}s\bar{\epsilon}t^{al}$ "witness, testimony", Mooré $k\grave{a}s\acute{\epsilon}t\grave{o}$ "testimony, proof", as in $k\grave{a}s\acute{\epsilon}t$ sé $br\grave{e}$ "receipt" ("evidence writing.") The ultimate origin is probably French cachet in the sense "seal (of authenticity)", with the Mooré -t- perhaps introduced from the corresponding French verb: il $cach\grave{e}te$ "he seals." Mooré $k\grave{a}s\acute{\epsilon}t\grave{o}$ and Farefare $k\grave{a}s\acute{\epsilon}t\grave{o}$ have only the abstract sense "testimony"; the adaptation as a a|b class human-reference noun "witness" seems to be a Kusaal innovation (Agolle and Toende) enabled by the dropping of the final vowel.

There are naturally many more French loans in the Toende Kusaal of Burkina Faso (Niggli 2014.)

160 Syntax

Syntax

15 Noun phrases

15.1 Structure

A nominal phrase may be either a noun phrase (NP) or an adverbial phrase (AdvP.) A noun phrase has a noun, pronoun or quantifier as head. If present, the **article** $|\bar{a}^{+}|$ occurs last in a NP. (For the sole exception, see 19.10.)

Unbound dependent NPs may precede the head recursively. Some pronouns have specialised roles as NP heads; otherwise the meanings correspond to the wide range expressed in English by genitives or NP complements with "of", e.g.

```
dāμ lā bύtὶη "the man's cup" ("cup of the man")
sālıma bύtὶη "a gold cup" ("cup of gold")
```

Predependents with specific or countable-generic reference are **determiners** (answering "which?"), as are the article, dependent pronouns, quantifiers or AdvPs following the NP head; other dependents are **modifiers** (answering "what kind of?") Relative clauses 24.3 are also NPs.

Compounding is pervasive in NP structure where most languages use uncompounded constructions. Kusaal compounds fall into two basic types, depending on whether the combining form is head or dependent. Compounding is the regular construction for head nouns with following adjectives and dependent pronouns:

```
b\bar{\nu}ug^a "goat" b\dot{\nu}-p\hat{\imath}\partial l\iota g^a "white goat" b\dot{\nu}-k\dot{a}n\bar{a}^{+/} "this goat" b\dot{\nu}-p\hat{\imath}\partial l-k\dot{a}n\bar{a}^{+/} "this white goat"
```

Compounds with non-referential cbs as *dependents* are also common:

```
n\dot{a}'ab\ l\bar{a}\ w(d-z\bar{\upsilon}\upsilon r) "the chief's horse-tail" vs n\dot{a}'ab\ l\bar{a}\ w\hat{\imath}of\ z\hat{\upsilon}\upsilon r "the chief's horse's tail"
```

Regardless of which element precedes, the last stem shows the noun class suffixes which mark number for the head. Preceding stems appear as combining forms, typically bare stems which have undergone apocope, though analogical remodelling is common, and regular with some stem types <u>8.2</u>. Compounding is so productive that the cb is a regular part of noun and adjective flexion <u>8.1</u>.

For the tone sandhi rules which affect the component following the combining form see <u>7.4.3</u> <u>7.4.4</u>. They are not sensitive to whether the cb is head or dependent.

Compounds may have compound components, most often as a result of the addition of an adjective or dependent pronoun to an existing compound, where the binding of the new element is weaker than that within the existing compound:

 $[b\dot{\nu}$ - $p\hat{\imath}$ - $j\hat{\imath}$ - $j\hat{\imath}$ "this [white goat]" $[n\bar{n}$ - $m\acute{o}$ k- $j\hat{\nu}$ - $j\hat{\imath}$ - $j\hat{\imath$

[zà'-nɔ̄-]píəlìg "white gate" ("white [compound-mouth]")

A compound may appear as generic argument to a following deverbal noun:

[zà'-nɔ̄-]gúr "gate-keeper"

[[$z\dot{a}$ '- $n\bar{\jmath}$ -] $g\acute{u}r$ -] $k\dot{a}\eta\bar{a}$ "this [gate-keeper]"

Noun-adjective compounds can be used as bahuvrihi adjectives <u>15.8.1.3</u>:

nīf-nyáuk "one eye"

 $b\dot{v}$ -[$n\bar{t}$ - $n\bar{$

nōb-wók "long leg"

 $k\dot{v}g$ - $[n\bar{b}-w\acute{b}k]$ "[long-legged] stool"

Bahuvrihis can appear as complements of $\grave{a}e\check{n}^a$ "be something":

 $K \dot{v} g$ - $k \dot{a} \eta \bar{a}$ a $n \bar{\epsilon}$ $n \bar{\epsilon} b$ - $w \dot{\epsilon} k$. "This chair is long-legged." WK

Chair-DEMST.SG COP FOC leg-long:SG.

Compounds may contain uncompounded elements within their structure.

Predependent NPs as modifiers <u>15.7.2</u> bind tighter than the link between cb generic arguments and deverbal nouns:

ānzúrıfà nē sālıma lâ'ad "silver and gold goods"

[ānzúrɪfà lá'-]māan "silversmith" ("[silver goods]-maker")

[ānzúrɪfà nē sālɪma lá'-]māan "silver- and goldsmith"

Otherwise, cbs are bound tighter to following than preceding words, except that determiners of all kinds have the loosest binding:

[sālıma bótìŋ-]kàŋā "this [gold cup]"

[[sālıma lá'-]màan-]kàŋā "this [[gold-item]-maker]" ò [[sālıma lá'-]māan] "her [[gold-item]-maker]"

sālıma [zá'-nɔ̄ɔr] "golden gate" ("golden [compound-mouth]")

zūgó-n [níf-gbáun] "upper eyelid" ("upper [eye-skin]")

Adjective cbs can only be used before another adjective or a dependent pronoun, so when a noun-adjective compound is used as a generic argument it must adopt a sg or pl form:

```
[f\bar{u}-z\check{\epsilon}\check{n}d\grave{a}] k\grave{u} "seller of red (i.e. dyed) cloth" not *f\bar{u}-z\check{\epsilon}\check{n}'-k\grave{u}
```

Coordination is characteristically a feature of NPs, but also found in AdvPs. The particles for "or" are $b\bar{\epsilon}\epsilon$ or $k\bar{\nu}$. Here the two are synonymous; the only place where they consistently have different senses is in the formation of polar questions. Both, like English "or", are by default taken as exclusive "or" but admit the inclusive interpretation "or both." This can be spelt out explicitly:

```
Bīig lā kūv dāu lā kúv bà wūsa child:sg art or man:sg art or 3PL all "The man, or the child, or both" WK
```

The particle for "and" for NPs and AdvPs is $n\bar{\epsilon}$. This $n\bar{\epsilon}$ is fundamentally the same word as the preposition "with"; the linker adjuncts $b\bar{\epsilon}\epsilon$ and $k\bar{\nu}\nu$ can be used in a parallel way. $N\bar{\epsilon}$ links nominal words and phrases, but no clauses other than (previously nominalised) $n\bar{k}$ -clauses. It is not possible to omit coordinating particles in a series of three or more items, or to use $n\bar{\epsilon}$ to join two words with the same referent:

```
    À-Wīn nέ À-Būgur né À-Nà'ab
    "Awini, Abugri and Anaba"
    du'átà nē nâ'ab
    "a doctor and a chief"
    (necessarily two different people)
```

Coordinated heads may not share determiners:

```
m{m} ba'abiis n \in m{m} saamnama \mbox{$\dot{m}$} bā'-bîis n \in \mbox{$\dot{m}$} sàam-nàmā \mbox{$\dot{p}$} 1sg father-child:PL with 1sg father-PL voc "my siblings and [my] fathers!" (Acts 7:2) \mbox{$\dot{p}$} \mbox{$\dot{q}$} \mbox{$\dot{q}$} \mbox{$\dot{q}$} \mbox{$\dot{q}$} "the woman and the man" woman:sg art with man:sg art
```

An exception is $y\bar{i}ig\dot{a}^+$ "firstly" used as a predependent for "first" 15.7.3:

```
yiiga sangbaun nɛ tengbaun nɛ atɛuk
yīigá sàŋ-gbàun nē téŋ-gbàun né àtìuk
firstly heaven-skin:sg with earth-skin:sg with sea:sg
"the former heaven and earth and sea" (Rev 21:1)
```

Coordinated heads may share modifiers:

Kūsâal sɔ́lımà nē siilímà "Kusaasi stories and proverbs" Kusaal story:PL with proverb:PL

 $K\bar{\upsilon}s\hat{a}as$ $k\hat{u}\theta b$ $n\bar{\varepsilon}$ $y\bar{\imath}r$ "Kusaasi agriculture and housing" Kusaasi:PL hoeing with house:SG

 $s\bar{a}llma\ b\acute{v}tlis\ n\bar{\epsilon}\ d\'lis\'lis\'ma$ "gold cups and spoons" gold cup:PL with spoon:PL ("all of them gold", KT)

However, KT WK both agreed that *sālıma lâ'ad nē būtus* must mean "gold goods and [not gold] cups", WK offering the correction

```
sālıma lâ'ad nέ ὸ būtιις "gold goods and (gold) cups" WK gold item:pL with βΑΝ cup:pL
```

where \grave{o} refers to $s\bar{a}lima$. (See <u>15.3</u> on the unexpected gender of the pronoun.) The difference from $s\bar{a}lima$ $b\acute{u}t$ is $n\bar{e}$ $d\acute{u}s\acute{l}m\grave{a}$ (above) is probably that "cups" are a subtype of "goods", impairing the parallel between the coordinated units and making it less natural to supply the ellipsis than in $s\bar{a}lima$ $b\acute{u}t$ is $n\bar{e}$ [$s\bar{a}lima$] $d\acute{u}s\acute{u}m\grave{a}$ "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

Coordinated heads may even occur before an adjective:

Ka m nyε saŋgbauŋ nε teŋgbaung paal. Kà m̀ ňyē sáŋ-gbàuŋ- nē téŋ-gbàuŋ-páal And 1sG see heaven-skin- with earth-skin-new:sG. "And I saw a new heaven and a new earth." (Rev 21:1)

However, cbs as *dependents* may not be coordinated:

```
*[b\bar{\epsilon}\eta(d\ n\bar{\epsilon}\ k\bar{\iota}]\ k\hat{u}es not possible for "seller of b\bar{\epsilon}\eta(d\ n\bar{\epsilon}\ k\bar{\iota}]" (beanleaf-and-millet, a conceptual unity like "fish and chips", "lox and bagels.")
```

Dependent NPs or AdvPs can naturally include coordinated components:

```
o nya'andəlib pii nɛ yi "his twelve disciples" (Mt 26:20) ò nya'an-dəllıb pii nɛ yi'

3AN after-follower:PL ten with two 

d\underline{u}'atà nɛ nâ'ab lā lɔ́yà "Doctor's and the chief's cars" 
doctor:SG with chief:SG ART car:PL

s\bar{a}lıma nɛ \bar{a}nzurıfà 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:

```
du'átà (lóyà) nē nâ'ab lā lóyà"[Doctor's cars] and [the chief's cars]"sālıma (lâ'ad) nē ānzúrıfà lâ'ad"[gold goods] and [silver goods]"vs[du'átà nē nâ'ab lā] lóyà"the cars of [Doctor-and-the-chief]"[sālıma nē ānzúrıfà] lâ'ad"[gold-and-silver] goods"
```

This is impossible if the ellipted element would have been a cb: an elliptical reading of $\bar{a}nz\dot{u}r\iota f\dot{a}$ $n\bar{\epsilon}$ $s\bar{a}l\iota ma$ $l\dot{a}'$ - $m\bar{a}an$ "silver- and goldsmith" would have to mean "a smith made of silver and a smith made of gold."

NPs can also be combined by **apposition**. For apposition of locatives see $\underline{16.3}$; for relative clauses see $\underline{24.3}$.

NPs may precede personal names in apposition:

```
"King Agrippa." (Acts 25:13)

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì p\bar{v} n\bar{a}r y\acute{e} f\grave{v} d\acute{v} b\bar{a}'-b\^{i}ig p\underline{v}'\acute{a} Herodiase ^+ø.

3IN NEG.IND must that 2SG take 2SG father-child:SG wife:SG Herodias NEG.

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

... lebis ye, eenn, o zua Asibigi n kabirid.

... ø lèbis yē, ēen, ò zuà À-Sībigi n kābirid.

... cat reply that, Yes, 3AN friend:SG PERS-termite:SG CAT ask.admission:IPFV.

"...replying that, Yes, it was his friend Termite asking for admission." KSS p12
```

The fact that the personifier-particle allomorph \grave{a} - is not omitted in these cases shows that the relationship is not dependent-head <u>15.6</u>.

Personal pronouns in apposition use free forms <u>27.5</u>:

```
Man Paul [...] pv'vsidi ya. "I, Paul ... greet you." (2 Thess 3:17)

Mān Paul [...] pύ'vsìdī yá.

1SG Paul greet: IPFV 2PL.OB.
```

Apposition is to be distinguished from cases where a preceding head has no combining form, as with quantifiers, or coordinated structures, and also from cases of segmental remodelling of cbs <u>8.2</u>. The 1996 NT regularly replaces the initial cb of a number of compounds in the 1976 NT with a form written like a singular:

```
Nonaar Paal for Nonapaal N\bar{5}-ná-páal "New Testament" Siig Suŋ for Sisuŋ Sì-s\dot{b}ŋ "Holy Spirit"
```

In the audio version Siig Sun is read Siig-sin (Siig-sin) with M spreading) or Sisin, not *Siig-sin; cf WK's lannig-kana "this squirrel", dap-bamma "these men."

SB showed a greater tendency to produce segmental sg forms before dependent pronouns and even adjectives than my other informants.

15.2 Number

Number is a category only of nouns, pronouns and quantifiers. Agreement is confined to pronouns. However, in a compound of a noun with a following adjective or dependent pronoun, the *dependent* inflects to show the number of the head <u>15.8</u>.

Kusaal resembles English in distinguishing between **count** nouns, with singular and plural, and **mass** nouns which normally make no such distinction, and characteristically refer to liquids or substances or abstractions. Abstract nouns may be count nouns, as with gerunds referring to individual events or actions:

zɔ̄ɔgɔ	zɔ̃ɔs ^ɛ		"race"
bū'esύg ^ο	bū'esá ⁺	bū'es-	"question"
zàaňsúŋ ^ɔ	zàaňsímà ⁺	zàaňsúŋ-	"dream"

Typical underived mass nouns belong to the b° and m^{m} noun classes, which do not have paired sg/pl suffixes, but gerunds of 3-mora stem verbs regularly show sg r^{ε} or g° suffixes, and a number of words referring to uncountables or abstracts are formally plural, but construed as singular:

bāň'as ^ε	bàň'-	"disease"
ňyɔ̄'ɔs ^{ε/}	ňyɔ̄'-	"smoke"
tàdımís ^ɛ		"weakness"

zɔ̄lɪmís ^ɛ		"foolishness"
mēt ^{ε/}	mēt- <u>8.2</u>	"pus"
kūt [€]	kùt- <u>8.2</u>	"iron"
zùed ^ɛ		"friendship"
būυd ^ε		"innocence"
sīiňd ^{ɛ/}		"honey"
nīn-pûʊd ^ɛ		"pus"
wāad ^{ɛ/}		"cold weather"
sūň-pε̂εn ^{nε}		"anger"
ku̞'à-nūud ^{ɛ/}		"thirst"
sālıma ⁺	sàlım-	"gold"
sìda ⁺	sìd-	"truth"

 $K\bar{u}t^{\epsilon}$ is also "nail"; the original sg $k\bar{u}dvg^{\circ}$ appears in the name $A-K\bar{u}dvg^{\circ}$ 29.2. So too with a number of irregularly formed deverbal abstract nouns:

```
gēɛňmís<sup>ɛ</sup>
                      "madness"
                                                        ḡεĕmm<sup>m/</sup>
                                                                                  "madden, go mad"
     bùdım(s<sup>ɛ</sup>
                      "confusion"
                                                        bùdım<sup>m</sup>
                                                                                  "confuse"
                                                                                  "send"
     tìtūmıs<sup>ε</sup>
                      "sending"
                                                        tòm<sup>m</sup>
     zīid<sup>ε/</sup>
                                                        zī+
                      "carrying on head"
                                                                                  "carry on head"
     vūud<sup>ε/</sup>
                      "noise"
                                                        vū+
                                                                                  "make a noise"
     kēn<sup>nε/</sup>
                      "arrival"
                                                        kēň+
                                                                                  "come"
     pịàň'ad<sup>ɛ</sup>
                                                        pįāň'<sup>a</sup>
                                                                                  "speak" (irreg. tones)
                      "speech"
[sg pjàuňk<sup>3</sup>
                      "word"
     dì'əma+
                      "festival"
                                                        dì'əm<sup>m</sup>
                                                                                  "play, not be serious"
     tōvma+
                      "work"
                                                        tùm<sup>m</sup>
                                                                                  "work"
[sg tōυm<sup>mε</sup>
                      "deed"]
     tēň'εsá+
                                                                                  "one thought"
                      "thought"
                                                        tēň'εsá yīnní
                                                  cf
                                                        (Acts 4:32)
```

A single object may be referred to by a plural naming its components:

```
d\dot{a}-p\bar{v}vd\acute{a}^+ d\dot{a}-p\bar{v}vd\acute{a} "cross" cf d\dot{a}-p\bar{v}vd\acute{a}^+ "cross-piece"
```

A Kusaal plural may just happen to correspond to an English mass noun:

lāuk ^o	lā'ad ^ε	là'-	"piece of goods"
lāˈaf ^ɔ	līgıdı+	là'- or lìg-	"cowrie" pl "money"

The count/mass distinction is significant in the choice of quantifiers $\underline{15.5.1}$ and when plurals are formed with $n\grave{a}m^a$ $\underline{8.4}$, and it affects the meaning of constructions with preceding NPs as dependents $\underline{15.7.2}$.

Mass nouns can be used in count senses (as in English): *dāam nám* "beers." Some count nouns also have mass senses:

```
fūug dôɔg"tent" (cloth hut): fūug "item of clothing, shirt"dàad bύn-nám"wooden things": dàad "pieces of wood"
```

15.3 Gender

Gender is marked only in pronouns. It is natural, distinguishing **animate** from **inanimate**. Not only human beings, but also supernatural beings, "fairies" and the like have "animate" gender. Without a context, my informants all rejected

```
*\dot{O} à n\bar{\varepsilon} náaf. attempted "It is a cow."
```

Nevertheless, written sources often use animate pronouns for higher animals:

```
Ka wief ya'a sigi li ni, li zuluŋ na paae o salibir.

Kà wiəf yá' sīgí lì nī, lì zùluŋ ná pāe ò sàlıbır.

And horse:sg if descend 3IN LOC, 3IN depth IRR reach 3AN bridle:sg.

"If a horse goes down in it, its depth will reach its bridle." (Rev 14:20)
```

In stories where animals speak, they are naturally assigned animate gender. Trees, animate in the traditional world view, may have animate gender:

```
Tiig wela bigisid on a si'em.

Tìig wélà bìgisid ón àň sī'əm.

Tree:sg fruit:pl show:ipfv 3AN:NZ COP INDF.ADV.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

(KB: Tiig walaa bigisid lin an tisi'a, with inanimate gender.)
```

Babies may be counted as animate or inanimate gender:

```
\grave{O}/L\grave{\iota} \grave{a} n\bar{\varepsilon} b\acute{\iota}-l\bar{\iota}a. "He/she/it is a baby." 3AN/3IN COP FOC child-baby:sg.
```

When body parts are represented as speaking in this NT passage, they have animate gender:

Nəbir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋgbiŋ la nii," lin ku nyaŋi kɛ ka \mathbf{o} ka' niŋgbiŋ la nii.

Nóbìr yá' yèlī-n yē, Mán kā' nû'ug lā zúg, m̀ kā' nín-gbīŋ lā Leg:sg if say-dp that 3an:nz neg.be hand:sg art upon, 1sg neg.be body-skin:sg art níι $^+$ Ø, līn kú nyānı Ø ké kà ò kā' nín-gbīŋ lā níι $^+$ Ø. Loc neg, dem.in neg.irr prevail cat cause and 3an neg.be body-skin:sg art loc neg. "If a leg said, 'Because I am not a hand, I am not in the body', that could not cause it not to be in the body." (1 Cor 12:15)

The relevant distinction is thus whether the referent is being regarded as a "person"; if first or second person pronouns might apply, the gender is "animate."

A specific human/non-human distinction appears in morphology, in that the $a|b^a$ noun class has exclusively human reference. Elsewhere, such distinctions are essentially lexical, as with $n\bar{l}n$ - "person" vs $b\bar{v}n$ - "thing" as dummy cbs with adjectives. The availability of human-reference nouns as adjectives 15.8.1.4 reflects the fact that nouns referring to people are descriptive, labels for roles, or unique identifiers.

The current gender system distinguishes animate/inanimate in the singular with no distinction in the plural. In older sources like the 1976 NT (as in older Dagbani) inanimate pronoun forms used as heads, like demonstrative $n\bar{\epsilon}^{"+}$, are used indifferently for sg or pl, occasionally with $n\grave{a}m^a$ plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals $b\grave{a}mm\bar{a}^{+}$ $b\grave{a}n^{\epsilon}$ $s\bar{\imath}aba^{+}$ of the dependent pronouns for inanimate, and my informants use the animate plural forms of all pronouns freely for both genders both as dependents and heads:

```
B\grave{a}~\grave{a}~n\bar{\epsilon}~k\bar{u}g\acute{a}. "They are stones." 3PL COP FOC stone:PL.
```

In unselfconscious utterances animate pronouns often appear for inanimate; speakers correct the gender to inanimate if their attention is drawn to it.

```
Nīf-káŋā, ōn sâň'am nē.

Eye-DEMST.SG, 3AN.CNTR spoil FOC.

"This eye, it's spoilt." KT (Overheard)

M pō ňyē·ó-o +ø. "I can't find it [a stethoscope]" (Overheard)

1SG NEG.IND See-3AN.OB NEG.

sālıma lâ'ad né ò bōtus "gold stuff and (gold) cups" WK

gold item:PL with 3AN cup:PL
```

The dummy subject pronoun "it" is always lì, never ò.

The inanimate sg pronoun subject l is not changed to animate \dot{o} to agree with an animate complement of $\dot{a}e\check{n}^a$ "be something":

```
Li an \epsilon Zugsəb la. "It is the Lord." (Jn 21:7)
Lì à n\bar{\epsilon} Zūg-sə́b lā.
```

15.4 Pronouns

15.4.1 Personal

		Right-bound	Left-bound	Free	Subject+'n
Sg	1st	ṁ	m ^a	mān SF mánὲ LF	mán
	2nd	fù	f	fūn SF fúnὲ LF	fún
	3rd an	<u>ὀ</u> [ʊ]	ο [α]	ōn ^ε	ón
	3rd ina	n <i>lì</i> or dì	h+	līn ^ε or dīn ^ε	lín or dín
Pl	1st	tì	tı+	tīnám ^a	tīnámì_ ø
	2nd	yà	ya ⁺	yānám ^a	yānámì_ ø
	3rd	bà	ba ⁺	bān ^ε	bán

"an" = animate, "inan" = inanimate.

 $M\bar{a}m$ also occurs for 1sg in any role. The bound forms are non-contrastive; they are all liaison words 7.2. Left-bound pronouns are used for VP objects, right-bound for all other roles. Personal pronouns are **never dependent**: in e.g. \dot{m} $b\bar{i}ig$ "my child", \dot{m} is the head of its own NP, and it is this NP which is the predependent of $b\bar{i}ig$ "child", exactly like $n\dot{a}$ "the chief" in $n\dot{a}$ $b\bar{i}ig$ "the chief's child."

The " $+\dot{n}$ " forms are used as subjects in \dot{n} -clauses $\underline{24.1}$. The 2pl subject has a form ya used after imperatives $\underline{21.3}$ with the allomorph $-n\dot{\iota}$ - before liaison $\underline{7.2.2}$.

Free forms may be used for cbs before relative pronouns:

```
Fun kane buoli fu meŋ ... "You who call yourself ... (Rom 2:17) F\bar{v}n-kánì bùəlı fù mēŋ ... 2SG-REL.SG call 2SG self ...
```

Toende Kusaal has \tilde{v} for \dot{o} ; the original form was probably $*\widehat{\eta m}v$, with later $*\widehat{\eta m} \rightarrow *\eta$ before the rounded vowel. Toende has tvn nam for $t\bar{t}n\acute{a}m$ $y\bar{a}n\acute{a}m$.

There are no inclusive/exclusive distinctions and no honorific uses of plural for singular or 3rd person for 2nd.

2sg is used in proverbs for a generic "one":

Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.

Bùŋ yá' bòɔd y
$$\epsilon$$
 ò $l\bar{u}b\dot{v}$ f, f \dot{v} p \bar{v} ny $\bar{\epsilon}t\dot{v}$ ò $t\dot{v}b\bar{a}a$ + σ .

Donkey:sg if want that 3AN throw.off 2SG.OB, 2SG NEG.IND See:IPFV 3AN ear:PL NEG.

"If a donkey wants to throw you off, you don't see his ears." KSS p44 ("Where there's a will, there's a way.") $\,$

3pl is used as a non-specific "they" for turning passive constructions actively:

```
Bà yòɔdī f súŋàa +ø?
```

3PL pay:IPFV 2SG.OB good:ADV PQ?

"Are you well paid?" "Do they [never mentioned] pay you well?" SB

This construction has become grammaticalised so far that in n-catenation, the object can be construed as the grammatical subject 22.1, e.g.

```
Diib wusa nari ba di. "All foods may be eaten." (Rom 14:20) Dītb wūsa nárì \emptyset bà dí. Food all must cat 3PL eat.
```

There are formal means of distinguishing different third persons by the use of pronoun ellipsis <u>20.2.2</u> and logophoric use of the free pronouns <u>25.2</u>.

15.4.2 Demonstrative

	Animate sg	Inanimate s	sg	Plural
Long	òŋā⁺/	lìnā ^{+/}	far	bàmmā ^{+/}
Short	òn ^ε	lìn ^ɛ	far	bàn ^ε
Long		nē'ŋá ⁺	near	
Short		nē'+/	near	nē'-námª NΤ
Long	kàŋā ^{+/}	kàŋā+/		
Short	kàn ^ɛ	kàn ^ε		

Note the tone difference between $\partial n^{\epsilon} l \ln^{\epsilon} b \partial n^{\epsilon}$ and free 3rd person pronouns. "Short" demonstratives are used as the basis of relative pronouns <u>24.3.2</u>, for discourse deixis, and for interrogative "which?":

Fune an dau kan la! "You are that man!" (2 Samuel 12:7) Fūnı \emptyset áň dáu-kàn lā! [i.e. in the story just related.] 2SG.CNTR CAT COP man-DEM.SG ART!

```
Lìne? "Which one?"

Nīf-kánè? "Which eye?"

Nīn-kánè? "Which person?"
```

The "long" series are used for spatio-temporal deixis. They do not distinguish near and far except with sg inanimate heads; elsewhere, "that" can be specified by following the demonstrative with $l\bar{a}^{+/}$ and "this" by a following $\check{n}w\grave{a}^{+}$ (cf French $l\grave{a}$ and ci.) This use of $l\bar{a}^{+/}$ as deictic is enabled by the fact that demonstratives automatically make the NP definite 15.8.5.

```
sān-káŋā "at this/that time"
dàu-kàŋā sâam "this/that man's father"
dàu-kàŋā lā sâam "that man's father"
dàu-kàŋā ňwá sâam "this man's father"
```

 $\partial \eta \bar{a}^{+/} l \ln \bar{a}^{+} n \bar{\epsilon}' \eta \acute{a}^{+} n \bar{\epsilon}'^{+/}$ appear only as NP heads, and $\partial n^{\epsilon} l \ln^{\epsilon}$ cannot follow a cb; however, $b\grave{a}mm\bar{a}^{+/}b\grave{a}n^{\epsilon}$ can be used either uncompounded or after a cb.

 $K\grave{a}n^\epsilon k\grave{a}n\bar{a}^{+/}$ are only used as dependent pronouns, and if the head is a noun or noun-adjective compound it must be a cb (sometimes remodelled on the sg.) $K\grave{a}n^\epsilon$ may also follow a free personal pronoun, and $\grave{a}rak\acute{o}n'$ "one", but no other quantifiers. NT avoids $k\grave{a}n\bar{a}^{+/}k\grave{a}n^\epsilon$ for animate gender.

```
du'átà lā lór-kàŋā"this car of the doctor's"bù-kàŋā lā"that goat"nō-pîəl-kàŋā"this white hen"fūn-kánì bùel ..."you who call ..."
```

15.4.3 Indefinite

Animate sg	Inanimate sg	Plural
s5'+	sī əl ^a	sīəba ⁺ (unglottalised vowel)
sī'a ⁺	sī'a ⁺	

 $S\bar{5}^{1+}s\bar{i}^{2}\partial^{a}s\bar{i}\partial ba^{+}$ may be used as heads or dependents, and may follow cbs: $s\bar{i}^{2}a^{+}$ can only follow cbs, as a dependent. For NT WK, but not KT, $s\bar{i}^{2}a^{+}$ is much commoner than $s\bar{i}^{2}\partial^{a}$ used as a dependent. WK feels that for people $s\bar{i}^{2}a^{+}$ is pejorative; NT occasionally has $s\bar{5}^{1+}$ for inanimate: $t\dot{\epsilon}\eta$ - $s\bar{5}^{1-}$ "a certain land." For indefinite pronouns in relative clauses see 24.3.1.

The sense is "some, someone, something", "a certain", indefinite but *specific*:

```
và bì-sɔ̄'
                                      "a certain child of yours"
      2PL child-INDF.AN
      The meaning is often "another, a different" (cf Hausa wani, Jaggar p314.)
      ka man ti ye m sig la, ka sɔ' pυn dɛŋi sig sa.
                     yέ m̀ sīg
      kà mán tì
      and 1SG:NZ after say 1SG descend ART,
      kà sɔ̄'
                        dènı ø sīg
                 pún
                                           sá.
      and INDE.AN already before CAT descend thither.
      "when I'm then about to go down, someone else goes down first." (In 5:7)
      Meeri one an Magdalen ne Meeri so'
      Meeri ɔ´nì àň Magdalen nē Meeri sɔ´'
      Mary Rel.an cop Magdalen with Mary INDE.AN
      "Mary who was Magdalen and another Mary" (Mt 28:1)
      Winnig mor o men venlim, ka nwadig me mor venlim si'a.
      Wìnnıg mór ò mēŋ véňllìm kà ňwādıg mé mɔr véňllìm-sī a.
      Sun:sg have 3AN self beauty and moon:sg also have beauty-INDF.IN.
      "The sun has its own beauty and the moon, another beauty." (1 Cor 15:41)
      Mì ná tī f
                       tí-sīˈa.
      1SG IRR give 2SG.OB medicine-INDF.IN.
      "I'll give you a different medicine." WK
      Indefinite pronouns can be used to introduce new information:
                                      "There was a certain man ..."
      Dàu-sɔ̄'
                  dāa bέ ...
      Man-INDF.AN TNS EXIST ...
but this is likely to mean "There was another man ..."; "Once there was a man ..." is
usually Dāu dāa bέ ...
      Sɔ̄'/sī'əl mέ-kàma means "anyone, anything, everyone, everything":
      O ninid si'el mεkama sv'vna.
      Ò nìnıd sī əl mé-kàma
                                    sύηā.
      3AN do:IPFV INDF.IN also-whatever good:ADV.
```

In negative clauses the indefinites mean "(not) ... anything", "(not) ... anybody":

"He does everything well." (Mk 7:37)

Ka so' kudin ku len nyee li ya'asa.

Kà $s\bar{\it 5}$ ' $k\bar{\it 0}$ dım $k\acute{\it 0}$ $l\bar{\it E}$ m ny $\acute{\it E}$ e $l\bar{\it l}$ yá'as $\bar{\it a}$ + $\it \emptyset$. And INDEAN ever NEG.IRR again see 3IN.OB again NEG. "Nobody will ever see it again." (Rev 18:21, 1996)

 $S\bar{5}$ ' $k\bar{a}$ 'e + \emptyset . "There's nobody there."

INDF.AN NEG.BE NEG.

 \dot{M} $p\bar{v}$ $y\acute{\epsilon}l$ $s\bar{l}$ ∂la d. "I didn't say anything."

1SG NEG.IND Say INDF.IN NEG.

15.4.4 Interrogative

Animate Inanimate

ànɔ̂'ɔnɛ "who?" $b\bar{\it 5}^+$ "what?"

Plurals with $n \grave{a} m^a$ may be used if a specifically plural answer is being sought. B5 kímm "what exactly?" with the ideophone kímm is common in KB 30.1. The initial \grave{a} - of $\grave{a} n \hat{b} = n \hat{b}$ behaves like the manner-adverb prefix in liaison 7.2.1:

```
... keŋ tisi anɔ'ɔnɛ? "to go to whom?" (1 Samuel 6:20) ... kēŋ ø tísì ànɔʻɔnè ^+ø? ... go cat give who co?
```

B5+ can be used after a cb as a dependent interrogative "what?":

nā'-bɔ´ "what cow?" WK DK

(náaf bó can only mean "What, of a cow's?")

 $b\dot{\upsilon}$ - $b\bar{\jmath}$ "what goat?" $d\bar{a}$ - $b\dot{\jmath}$ "what beer?"

The compound bà-būudı+ "what kind of?" can also be used as a dependent:

nā'-bɔ́-būudι "what kind of cow?" dā-bɔ́-būudι "what kind of beer?"

Note the idiom:

Fù á $n\bar{\varepsilon}$ bó-bùudı $+ \varnothing$? "What tribe do you belong to?" 2SG COP FOC what-sort co?

```
Bò- can be used as a predependent, querying a description: "what sort of ...?"

Fù tứm bó-tùvma +ø? "What kind of work do you do?"

2SG work:IPFV what-work co?

Bo yir ka ya na me' n tis mane?

Bò-yír kà yà ná mē n tís mánè +ø?

What-house:SG and 2PL IRR build CAT give 1SG.CNTR CQ?

"What kind of house will you build for me?" (Acts 7:49, 1996)
```

15.4.5 Reciprocal

 $T\bar{a}aba^+$ "one another" appears as $t\bar{a}ab$ clause-medially for some speakers. It can be used after a cb, meaning "fellow-": \dot{o} $t\dot{v}m$ - $t\dot{v}m$ - $t\bar{a}aba$ "his fellow-workers."

```
Sònımī ø tāaba. "Help one another."

Help:IMP 2PL.SUB each.other.

Tì yûug nē tāaba. "It's been a long time." KT

IPL delay with each.other.

Bà dòl nē tāaba. "They went together." (d\bar{o}l^{la/} "accompany")

3PL follow with each.other.
```

15.4.6 Reflexive

 $M\bar{\epsilon}\eta^{a/}$ "self" always has a predependent. It is used indifferently for sg/pl: \dot{m} $m\bar{\epsilon}\eta$ "myself", $y\dot{a}$ $m\bar{\epsilon}\eta$ "yourselves."

```
nà'ab l\bar{a} méŋ "the chief himself" chief:sg art self

Bà myéɛ bà mēŋ. "They've seen for themselves." 

3PL see 3PL self.
```

"Self" forms must be used for complements referring to the clause subject:

```
\dot{M} n w \dot{\epsilon}' \epsilon_m m \bar{\epsilon} \eta. "I hit myself."

15G hit 15G self. not *\dot{M} n \dot{w} \dot{\epsilon}' \epsilon m or *\dot{M} n \dot{M} n
```

Kusaal resembles English, as opposed to French, in using a pronoun possessor with body parts acted on by their owner, e.g.

```
Ba pv piesidi ba nu'us wvv lin nar si'em la ka ditta. Bà p\bar{v} p\bar{l}əsidi bà n\hat{u}'us w\bar{v}v lin n\bar{a}r s\bar{l}'əm lá kà dit\bar{a} +\bar{g}. 3PL NEG.IND clean:IPFV 3PL hand:PL like 3IN:NZ be.proper INDF.ADV ART and eat:IPFV NEG. "They don't wash their hands properly before they eat." (Mt 15:1)
```

Where ordinary pronouns would be permissible, using $m\bar{\epsilon}\eta$ implies contrast:

```
    M píə m mēŋ nû'us. "I washed my own hands."
    15G wash 15G self hand:PL.
    Fò mēŋ kōv bí-lìaa +ø? "Yourself or the baby?"
    25G self or child-baby:SG cQ? ("Which of you needs the doctor?")
```

See also 15.8.3 on $am\bar{\epsilon}\eta\acute{a}^+$ "really, truly" as a modifier "genuine, real"; cf the adjective $m\bar{\epsilon}\eta\acute{r}^\epsilon$ seen in $y\bar{\epsilon}l-m\acute{\epsilon}\eta\grave{r}^\epsilon$ "truth" ("genuine matter.")

15.4.7 Dummy head *s5b*

55b^a is a dummy head for a preceding NP or AdvP dependent; it specifies number and gender but is otherwise semantically empty.

```
Animate sg s\bar{b}^a pl d\hat{\iota}m^a
Inanimate sg/pl d\hat{\iota}n^{n\epsilon}
```

NP predependent constructions have their usual meanings <u>15.7.2</u>:

```
mān dín<sup>nε</sup>
                                    "my one, mine"
À-Wīn dím
                                    "Awini's family"
Fūn
        piâň'ad nē tīnám dín.
2SG.CNTR speak:IPFV FOC 1PL.CNTR NULL.IN.
("We can't speak your language but ...") "You're speaking ours."
pù-pìəlım sóba
                                    "holy person" (pù-pìəlım<sup>m</sup> "holiness")
pl pù-pìəlım díma
dūnιya ní dìn<sup>nε</sup>
                                    "earthly one" (1 Cor 15:44)
Bàk dím
                                    "Bawku people"
vīigá s5ba
                                    "first (person)" beside yīig-sɔ́b<sup>a</sup> id
```

Cb predependents occur in set expressions:

```
(y\bar{i}r^{\epsilon/} "house")
vī-sóba
                pl yī-sób-nàma
                                         "householder"
yī-dím<sup>a</sup>
                                         "members of the household"
nīf-sɔ́ba
                                                                  (nīf<sup>5/</sup>
                                         "miser"
                                                                            "eve")
tàňp-sɔ̄ba
                                         "warrior"
                                                                  (tāňp<sup>o</sup> "war")
zūg-sɔ́ba
                                                                  (z\bar{u}q^{5/}) "head")
                                         "boss" NT "Lord"
                pl zūg-sób-nàma
```

 $O s\bar{b}^a/\bar{b}n s\bar{b}^a$ mean "the person we were just talking about."

15.5 Quantifiers

15.5.1 Overview

Formally, quantifiers resemble noun sg or pl forms, frequently with apocopeblocking <u>5.1</u>; most number words are also preceded by number prefixes.

Quantifiers are **count** or **mass** <u>15.2</u>, but the distinction is only of significance if the quantified noun is mass type, in which case a count quantifier is ungrammatical; with count nouns either type of quantifier is acceptable:

```
n\bar{l}dlb\ bar{\epsilon}dvgar{v} "a lot of people" 

n\bar{l}dlb\ bar{a}bligar{a} "many people" 

k\dot{u}'em b\dot{\epsilon}dvgar{v} "a lot of water" 

not *k\dot{u}'em b\dot{a}bligar{a} *"many water"
```

Mass quantifiers are

```
b\grave{\epsilon}d\upsilon g\bar{\upsilon}^{+/} "a lot" p\bar{a}mm LF p\bar{a}mn\acute{\epsilon} "a lot" f\bar{\imath}i\check{n}^{=} "a little (liquid)" b\bar{\imath} \partial i "a little" w\bar{\upsilon}\upsilon^{=} "all" w\bar{\upsilon}sa^{+} "all"
```

Beside number words, count quantifiers are

```
b\grave{a}b\iota g\bar{a}^{+/} "many" k\grave{a}l\iota g\bar{a}^{+/} "few" f\bar{a}a\check{n}^{=} "every" z\bar{a}\check{n}^{\prime}a^{=} "every"
```

Kàma "every" occurs by itself as a quantifier and also before others:

```
s\bar{a}n\acute{a}k\acute{a}m = s\bar{a}n\acute{a}k\acute{a}m z\bar{a}\breve{n}'a "all the time"
```

Quantifiers appear typically as determiners in NPs $\underline{15.8.2}$, but like pronouns they may also be heads of NPs; they can pluralise with $n\grave{a}m^a$:

```
Pāmm kέ nā.
                               "Many came."
Bèdugō ké nā.
                               "Many came."
                               "The crowd came"
Bèdugū lā ké nā.
Àγí¹ kέ nā.
                               "Two came."
Àyí' lā kέ nā.
                               "The two came."
màliāk-nám túsà pīiga nám
                               "tens of thousands of angels"
Àyí'
       námá àyí
                       á nē nāasí.
NUM:two PL
               NUM: two COP FOC four.
"Two two's are four."
```

A quantifier head after a dependent NP is a **partitive** construction <u>15.7.2</u>. Quantifier heads may be followed by dependent pronouns; as quantifiers have no combining forms, there is no compounding:

```
Ka ti ye ti nye diib yaani moogin nwa diis nidib bedego bama nwa?

Kà tì yé tì ňyē dīlb yáa ní mɔɔgv-n ňwá

And 3PL that 3PL find food where LOC grass:SG-LOC this

Ø dìls nīdlb bédvgū bámmā ňwá +ø?

CAT feed person:PL many DEMST.PL this CQ?

"Where are we going to find food in this wilderness to feed this crowd of people?" (Mt 15:33, 1996: KB nimbama nwa wvsa "all these people")
```

15.5.2 Number words

15.5.2.1 Quantifiers

The numbers in their core role as quantifiers take the forms

1	yīnní ⁺	10	pīiga ⁺	100	kòbıgā ⁼
2	àyí¹+	20	<i>pīsí</i> + [pisi]	200	kàbısí ⁺ [kɔbɪsi]
3	àtáň' ⁺	30	pīs táň' ⁺	300	kòbıs táň' ⁺
4	ànāasí ⁺	40	pīs nāasí+	400	kòbıs nāasí+
5	ànū+	50	pīs nū+	500	kòbıs nū+
6	àyúθbὺ ⁺	60	pīs yúθbὺ ⁺	600	kòbιs yúθbὺ ⁺
7	àyớpòẹ ⁺	70	pīs yópòe+	700	kàbıs yápàe ⁺
8	àníi ⁼	80	pīs níi ⁼	800	kòbıs níi ⁼
9	àwāe+	90	pīs wāe+	900	kàbıs wāe+

The quantified noun is normally plural, except with $y\bar{\imath}nni^+$, but may be singular with units of measure: $y\bar{\jmath}lvg\acute{a}$ $\grave{a}t\acute{a}n'$ " ϕ 600 [cedis]."

The forms for 1, 4, 6, 8, 10, and 100 show apocope-blocking <u>5.1</u>; the forms for 20 and 200 are not apocope-blocked but are combinations with the stem of \grave{ayl}^{+} .

 $K\dot{>}b\iota g\bar{a}^=$ irregularly has identical LF and SF.

"Thousand" is a regular $r^{\varepsilon}|a^{+}$ class noun, $t\bar{u}sir^{\varepsilon/}$: $t\bar{u}s\acute{a}$ àtáň' "3000." "Half" is $p\bar{v}-s\acute{v}k^{a}$ pl $p\bar{v}-s\acute{v}g\grave{v}s^{\varepsilon}$. Other numbers are formed with $n\bar{\varepsilon}$ "with, and":

kòbis táň' nē pīs yúobò nē nū "three hundred and sixty-five"

11 to 19 have the special contracted forms $p\bar{i}i$ $n\bar{\epsilon}$ $y\bar{i}nni$, $p\bar{i}i$ $n\bar{\epsilon}$ yi', $p\bar{i}i$ $n\bar{\epsilon}$ $t\acute{a}n'$... $p\bar{i}i$ $n\bar{\epsilon}$ $w\bar{a}e$ (or $p\bar{i}i$ $n\bar{a}$ $y\bar{i}nni$, $p\bar{i}i$ $n\bar{a}$ yi' ...)

The prefix \dot{a} - is omitted after $n\bar{\varepsilon}$ "with", and sometimes also after focus- $n\bar{\varepsilon}^{+/}$:

Lì à nē nāasí. / Lì à né ànāasí. "They're four."

The forms $\partial y (\eta \bar{a}^{+}) \partial t d\eta \bar{a}^{+}$ mean "two, three exactly." If I have four children

M mór bīisá àtáň."I have three children."15G have child:PL NUM:three.is true, though misleading

but *M mór bīisá àtáṇā*. "I have exactly three children." is false.

These forms can also be used after $n\bar{\epsilon}$ "and", as in $p\bar{i}i$ $n\bar{\epsilon}$ $yin\bar{a}$ "twelve exactly." They are exceptional in not permitting focus with the particle $n\bar{\epsilon}^{+/}$ 27.1.2.

Yīnní⁺ can also be construed with a preceding noun cb:

 $k\bar{u}g$ - $y(nn)^+$ "one stone" (M dropping 7.4.4) cf $k\bar{u}gvr y\bar{v}nn(^+$ "one stone" (no M dropping)

Dà-pīiga is "ten days"; *pīiga* is not otherwise used after cbs.

After personal pronouns the number prefix is $b\grave{a}$ - instead of \grave{a} - $\underline{13.3}$: $t\grave{\iota}$ $b\grave{a}t\check{a}\check{n}$ ' "we three", $y\grave{a}$ $b\grave{a}y\acute{p}\grave{>}\underline{e}$ "you seven", $b\grave{a}$ $b\grave{a}y\acute{i}$ "they two."

15.5.2.2 Counting forms

1 to 9 have different forms used in counting, lacking apocope-blocking and using the number prefix \dot{n} - instead of \dot{a} - 13.3.

```
1
       vέon or àrakóň'
                                               6
                                                       ὴνûθb
2
       'nγí
                                               7
                                                       npòe [tone sic]
3
       ntáň'
                                               8
                                                       'nníi
4
       nnāas
                                               9
                                                       'nwāe
5
       'nnū
                                               continuing p\bar{i}iga, p\bar{i}in\bar{\epsilon}yi' as with quantifiers
```

 $\dot{A}rak\acute{o}n'$ can also be used as a quantifier: $b\acute{v}vg$ $\dot{a}rak\acute{o}n'$ "one goat." The form $k\ddot{o}n'\dot{o}k\ddot{o}$ appears as a postposition 16.6: \dot{m} $k\ddot{o}n'\dot{o}k\ddot{o}$ "by myself." In performing arithmetic the quantifier forms are used:

```
Àyí' námá_àyí' á nē nāasí.

NUM:two PL NUM:two COP FOC four.

"Two twos are four."
```

15.5.2.3 Adjectives and ordinals

"First" can be expressed by *yīigá*⁺ "firstly" as a predependent:

```
line da an yiiga dabisir
līnı ø dá àň yīigá dàbısır.

3IN.CNTR CAT TNS COP firstly day:sg.

"That was the first day." (Genesis 1:5)
```

The only ordinal adjective, as in $s\bar{b}$ - $d\hat{\epsilon}\epsilon\eta$ "first census" (Lk 2:2, 1976) is

```
d\bar{\epsilon}\epsilon\eta^a d\bar{\epsilon}\epsilon\eta^s "first" or d\bar{\epsilon}\epsilon\eta^s or d\bar{\epsilon}\epsilon\eta^s
```

Other ordinal expressions can be created using $p \dot{a} a s^{\epsilon}$ or $p \dot{\epsilon}' \epsilon s^{\epsilon}$ "add up to":

```
dàμ-kànι pὲ'εsa àyí' lā
man-REL.SG add.up.to NUM:two ART
"the second man" ("man who has added up to two")

lìnι pàasa àtáň' lā "the third one"

REL.IN add.up.to NUM:three ART
```

Another construction uses numbers as predependents before $d\bar{a}an^a$ "owner of ..."; such phrases are then themselves used either as NP heads or as determiners:

```
\dot{a}yí' dāan lā "the second one" b\bar{\nu}vg\acute{a} \dot{a}táň' dāan lā "the third goat"
```

Yīigá dāan may be used for "first." In "Kusaal Solima ne Siilima" p35 ordinal forms used in counting "first, second, third ..." appear without apocope-blocking: atan'-daan ... ka anaas-daan ... ka nu-daan ... ka yuob-daan ... ka poi-daan ... ka nii-daan ... ka wai-daan ... ka piig-daan, but my informants use ordinary quantifier forms. Note the adjective

```
y\bar{\imath}mm(r^{\epsilon}) y\bar{\imath}mm\acute{a}^{+} y\bar{\imath}m "single, alone" e.g. bi-y\bar{\imath}mm(r) "only child" w\bar{a}b-y(\bar{\imath}mm)r "solitary elephant"
```

There are two words meaning "one of a pair": $n \dot{\gamma} \dot{a} \dot{\mu} k^{3}$ pl $n \dot{\gamma} \dot{a} d^{\epsilon}$ is only used for eyes, while $y \bar{\iota} \mu \eta^{5}$ pl $y \bar{\iota} n \dot{a}^{+}$ is used for other normally paired body parts: $n \dot{5} b - y (\mu \eta^{5})$ "one leg", $n \dot{\mu} \dot{a}^{-} y (\mu \eta^{5})$ "one hand", $n \bar{\imath} f - n \dot{\nu} \dot{a} \dot{\mu} \dot{a} k$ "one eye", $t \dot{\nu} b - y \bar{\iota} \mu \eta$ "one ear."

15.5.2.4 Adverbs

Multiplicatives (answering abbla? "how many-fold?") are expressed

```
y\bar{\imath}mm\acute{\upsilon}^+ "straight away, at once" 
àb\grave{\upsilon}y\acute{\imath}^{!+} "twice" 
àb\grave{\upsilon}t\acute{a}\breve{n}^{!+} "three times" 
àb\grave{\upsilon}n\bar{a}as\acute{\iota}^+ "four times"
```

and so on, with apocope-blocking like quantifiers, up to bopiga+ "ten times."

This \grave{a} - is not the number prefix but the manner-adverb formant, and a LF-final vowel before it is - ι ; the attachment to 2-9 only is presumably analogical.

Answers to nɔ̄ɔrá àlá "how many times?" have forms of the pattern

This $n\bar{\jmath}$ is not "mouth" (= Mooré $n\acute{o}$ orè) but corresponds to Mooré $n\acute{o}$ oré "times", homophonous with Mooré $n\acute{o}$ oré "leg"; cf Toende Kusaal $n\bar{\jmath}$ ' $\bar{\jmath}$ = Agolle $n\acute{o}$ bùr "leg". Original 20 and 00 fell together when nasalised 3.2. For the semantics cf Hausa $s\grave{a}u$ $uk\grave{u}$ "three times" sau "foot(print)." Niggli's dictionary gives Toende $n\acute{\jmath}$ '2t (tone sic) in the sense "fois" and even has n2ba ayi beside n2t '2t ayi "tayi "tayi" tayi" tayi

Distributives ("two by two" etc) are reduplicated forms without apocopeblocking; there is no M dropping on the second part except with 10, 100, 1000:

1	yīn yīn	10	pīi pîig	100	kàbıg kábìg
2	àyí' yí'	20	pīsí pīsí	200	kàbısí kábısí or kàbıs yí' yí'
3	àtáň' táň'	30	pīs táň' táň'	300	kòbıs táň' táň'
4	ànāas nāas	40	pīs nāas nāas		etc
5	ànū nū	50	pīs nū nū	1000	tūsır túsìr
6	àyûeb yûeb	60	pīs yûeb yûeb		
7	àyópòe póe	70	pīs yópòe póe		
8	àníi níi	80	pīs níi níi		
9	àwāe wāe	90	pīs wāe wāe		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive: $p\bar{l}s$ $n\bar{u}$ $n\bar{e}$ $n\bar{a}as$ "by fifty-fours."

The distributives can have a preceding NP as a dependent:

dābá àyɔʻpɔʻe pɔʻe "weekly" ("by sevens of days")

15.5.3 Proquantifiers

Quantifiers have corresponding proforms; the \grave{a} - is the *number* prefix, and induces preceding LF-final -a not - ι 7.2.1.

Demonstrative	Indefinite	Interrogative
àlá ⁺	<i>sī</i> 'əm ^m	àlá ⁺
"so much/many"	"some amount"	"how much/many?"

15.6 Personifier particle

Indigenous Kusaasi personal names $\underline{29.2}$ are always preceded by the personifier particle, which appears as \mathring{A} - by default, but \mathring{N} - before adjective stems, where \mathring{N} - is a syllabic nasal assimilated to the point of articulation of a following consonant. The particle is a liaison word; the \mathring{A} - allomorph, like the manner-adverb prefix \mathring{a} -, is preceded by word-final - ι , not -a as with the number prefix.

Personal names do not take adjectives or the article, but may occur with other determiners. \hat{A} - is deleted after a predependent, but \hat{N} - remains.

Personal names can pluralise with $n\grave{a}m^a$; such plurals can mean e.g. "more than one person called Awini"; Niggli's Toende Kusaal dictionary also gives the *cum suis* meaning: *Awınnam*: "Awin and his people. *Awinne et consort (les Awinne)*."

 À-Wīn
 "Awini"

 tì Wīn
 "our Awini"

 M Wīn
 "my Awini"

 À-Wīn-káŋā
 "this Awini"

 À-Wīn nám
 "Awinis"

 N-Dāvg
 "Ndago"

 tì N-Dāvg
 "our Ndago"

Although the Kusaal Bible versions (unlike the Mooré Bible) use foreign names without the particle, \dot{A} - normally appears before them in speech:

À-Mūusa"Moses"À-Yīisa"Jesus"À-Sīimɔɔn"Simon"

NT has some personifications of abstractions: \grave{A} - $S\grave{a}\check{n}$ ' $v\eta$ " "Destruction." In stories where animals are characters, animal names take \grave{A} -:

À-Bāa "Mr Dog"

Some animal and bird names incorporate the personifier particle as part of the common noun, with no implication of personification, e.g. \grave{a} -d \grave{a} al \acute{v} η $^{\circ}$ "stork", \grave{a} -g $\^{a}$ v \check{n} g $^{\circ}$ "pied crow", \grave{a} -k $\~{o}$ ra-d $\~{o}$ m $^{\mathsf{ma}}$ "praying mantis", \grave{a} -m \acute{u} s $^{\varepsilon}$ "cat." Thus

à-dàalúŋ "a stork" m̀/mān dáalún "my stork" 1SG/1SG.CNTR stork:SG "the man's stork" dāu lā dáalúη man:sg art stork:sg "It's a stork" Lì à nέ à-dàalúη. 3IN COP FOC PERS-stork:SG. "I've seen a stork." M ňyέ à-dàalúŋ. 1SG see PERS-stork:SG.

The \grave{a} - allomorph is not elided after a predependent but is *replaced* by it, as shown by the M spreading affecting the stem. The fact that \grave{a} - thus effectively fills a predependent slot may reflect a historical origin in an indefinite third-person pronoun "someone", perhaps related to the Mooré 3sg pronoun $y\~{e}\sim a$.

A further similarity with personal pronouns appears when *verb phrases* are nominalised by the personifier particle, which then takes the place of a subject pronoun in the sense "someone who ..." This is particularly common in proverbs.

```
"Siloam" (Jn 9:7)
Atum so'
À-tùm
         sō'
                               ("Someone sent someone")
PERS-send INDEAN
Apv-kpεn'-banv dim
          kpέň' bàunυ
À-pō
                              dím
PERS-NEG.IND enter circumcision NULL.PL
"the Uncircumcised" (Eph 2:11)
À-dāa yél kā'
                    tîımm
                              +ø.
PERS-TNS say NEG.HAVE medicine NEG.
"Did-say has no remedy." (No use crying over spilt milk.)
        nē nīf
                                  À-wùm
À-ἤνĒ
                   sóň'o
                                            tùba.
PERS-see with eye:sg be.better.than PERS-hear ear:PL
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)
À-Kīdıgı ø Bū'es
                               "Crossed over and asked"
PERS-Cross CAT ask
                                (name of the constellation Orion.)
Apozotyel
                               "Doesn't-fear-trouble", character in KSS p35.
À-Pū-zót-yēl
PERS-NEG.IND-run:IPFV-thing:SG
À- as predependent of a clause subject means "someone whose ...":
         nέ À-nà kύυ m̀ nūa
                                        vír,
                                                kà bà pū
```

3PL GO: IPFV FOC PERS-IRR kill 1SG chicken: SG house: SG and 3PL NEG. IND GO: IPFV

"They go to Will-kill-my-chicken's house, but not to Got-chickens' house." ("The rich are not always hospitable.") [Cf $N\bar{b}$ $b\dot{\epsilon}$. "There are chickens."]

+ø.

À-nɔ̄ɔs

bέ vírē

PERS-chicken:PL EXIST house:SG NEG.

Nominalisations with \dot{a} - can pluralise with $n\dot{a}m^a$:

```
À-zī' ø kpí nàm kpîid né kà téňbìd.

PERS-NEG.KNOW CAT die PL die:IPFV FOC and tremble:IPFV.

"Those who don't know death, are dying with a struggle." (Proverb)

(i.e "It's a storm in a teacup.")
```

15.7 Dependents preceding the head

The head of a NP may be preceded by a dependent. Only one is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another predependent. Specific predependents precede generic, with cbs last:

```
W(nà'am [pú'vsòg [fûug dɔ̂ɔg]]
"tabernacle" (God's [worship [cloth hut]])
```

For the rules regarding M dropping after predependents see 7.4.4.

15.7.1 Combining forms

A combining form as a predependent is always generic and non-referential. Compounds with a predependent cb can be freely created, but resemble the compounds seen in other languages more closely than those with cb heads preceding adjectives and dependent pronouns. Specialised lexical meanings often occur with dependent cbs, rarely with head cbs before adjectives and never before pronouns.

If the head is a deverbal noun, it may be preceded by a combining form representing an **argument**, with count or mass meaning:

```
d\bar{a}-n\hat{u}ur^{\epsilon} "beer-drinking" g\bar{\epsilon}l-k\hat{u}es "egg-seller"
```

With **agent nouns** from transitive verbs the cb usually represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb complement. These compounds can be freely coined, and their meanings are generally transparent, but there are many idiomatic set expressions. Examples:

nīn-kûvd ^a	"murderer"	bὺ-kῦυd ^{a/}	"goat-killer"
ทว - kขึบd ^a	"hen-killer"	pu̯'à-kῦυd ^{a/}	"woman-killer"
nō-záňl ^{lε}	"holder of hens"	wìd-kùøs ^a	"horse-seller"
bù-kùes ^a	"goat-seller"	sàlım-kùøs ^a	"gold-seller"
dā-nûud ^a	"beer-drinker"	dà-kīəd ^a	"wood-cutter"

```
"fisherman" ("fish-catcher")
zīm-gbâň'ada
nō-dî¹əsa
                                       "chief's spokesman" ("command-receiver")
                                       "builder" (tān<sup>nε</sup> "earth")
tàn-mɛɛda
làmpɔ̄-dî'əsa
                                       "tax collector" (French l'impôt)
gbàn-mī'ida/
                                       "scribe" NT ("book-knower")
pu'à-sāň'am<sup>ma</sup>
                                       "adulterer" ("woman-spoiler")
zà'-n5-gúra
                                       "gate-keeper" (zà'-nɔ̄ɔr<sup>ε/</sup> "gate")
kàňb-kīm<sup>na</sup>
                                       "herdsman" (k \grave{)} \check{n} b- cb of b \bar{v} n-k \acute{)} \check{n} b \grave{v} g" "animal")
bùl-sīgıd<sup>a/</sup>
                                       "well-diver" (bùlıga "well")
tùen-gāt<sup>a</sup>
                                       "leader" (Ò gàad tûen "He's gone ahead")
ňyà'an-dòl<sup>la</sup>
                                       "disciple" (nyá'an "behind", dɔlla/ "accompany")
pu'à-lā'ada
                                       "laugher at women" WK
                                       (Ò là 'ad pū'ab "He laughs at women")
```

My informants freely create and cite agent nouns in isolation, but it is unusual in practice for agent nouns to appear "bare"; in my materials only <code>bāŋıda</code> "wise man", <code>siākıda</code> "believer", <code>sūŋıda</code> "helper", <code>fāaňda/</code> "robber", "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate cb, sometimes an object, but often apparently just a reduplication of the agent noun stem:

```
m\grave{a}al-m\bar{a}an^{na}"sacrificer"z\bar{\imath}-z\hat{\imath}ida"carrier-on-head"t\grave{\upsilon}'as-t\grave{\upsilon}'asa"talker"z\grave{a}b-z\grave{a}b^a"warrior" (tone sic)z\grave{\jmath}t-z\bar{\jmath}t^a"racer, athlete"t\grave{\upsilon}m-t\bar{\upsilon}m^{na}"worker"
```

Cbs occur before deverbal **instrument nouns** in object or adverb senses:

```
s\dot{a}-l\bar{b}od(\eta^a) "belt" (waist-tying thing)
n\bar{n}-g\acute{b}ti\eta^a "mirror" (eye-looking thing)
n\bar{n}-g\acute{b}tis^\epsilon "spectacles"
```

If the head is a **gerund**, a predependent cb may represent a subject or complement. Gerunds in $-b^{5}$ here replace the suffix with $-r^{\epsilon}$ 11.1.1.

If the underlying verb is transitive, a predependent cb cannot be a subject. It is most often an object:

```
f\bar{u}-y\hat{\varepsilon}\varepsilon r^{\varepsilon} "shirt-wearing" (nonce-form created by WK) p\underline{u}'\dot{a}-d\bar{\iota}\iota r^{\varepsilon} "marriage" (\dot{O} d\hat{\iota} p\underline{u}'\bar{a} "He's married a wife") "murder"
```

```
dā-nûur<sup>€</sup>
                                        "beer-drinking"
Sāmán-píər<sup>£</sup>
                                         traditional New Year ("Courtyard Cleaning")
bùgóm-tɔɔňr<sup>ɛ</sup>
                                         Fire Festival ("Fire Throwing")
nō-lôɔr<sup>ε</sup>
                                        "fasting" ("mouth-tving")
                                        "oath" (pɔ̄+ "swear")
nō-pôor<sup>€</sup>
nō-nâar<sup>ε</sup>
                                        "covenant" (nā<sup>+</sup> "join")
nīn-bâal-zɔ̄ɔr<sup>ɛ</sup>
                                        "pity" (Ò zòt·ō nīn-báalìg. "He has pity on him")
It may represent an AdvP:
mò-pīl<sup>lε</sup>
                                        "grass roof" ("covering with grass")
kùm-vū'ugír<sup>€</sup>
                                        "resurrection"
                                         (Ò vờ vg kūmi-n. "He came alive from death.")
```

Cbs as subjects are seen only with gerunds from intransitive or patientive ambitransitive verbs:

```
n\bar{\jmath}b-k\hat{\jmath}\jmath^{\varepsilon}"breaking a leg" (k\hat{\jmath}^{+}) is intransitive)n\bar{u}'-m\acute{\jmath}d\hat{\iota}r^{\varepsilon}"swelling of the hand"w\hat{\imath}n-l\bar{\imath}ir^{\varepsilon}"sunset" (W\hat{\imath}nn\iota g\ l\acute{\iota}\ y\bar{a}. "The sun has set/fallen.")s\bar{u}\check{n}-s\hat{a}\check{n}'\upsilon\eta^{\jmath}"sorrow"(M\hat{\jmath}s\bar{u}\check{n}f\ s\hat{a}\check{n}'am\ n\bar{\epsilon}. "My heart is spoilt")s\bar{u}\check{n}-p\hat{\varepsilon}\varepsilon n^{n\varepsilon}"anger" (M\hat{\jmath}s\bar{u}\check{n}f\ p\acute{\varepsilon}l\grave{\iota}g\ n\bar{\epsilon}. "My heart is white.")
```

A dependent cb before a deadjectival abstract noun may have a sense much like an argument, corresponding to the subject of a related verb:

```
p\grave{\upsilon}-p\grave{\imath}\ni l\iota m^{\mathsf{m}}"holiness" ("inside-whiteness")s\bar{u}\check{n}-kp\hat{\imath}'\circ g^{\mathsf{D}}"boldness" ("heart-strength")s\bar{u}\check{n}-m\acute{a}'as\grave{\iota}m^{\mathsf{m}}"joy" ("heart-coolness")(\grave{M}\;s\bar{u}\check{n}f\;m\acute{a}'e\;y\bar{a}. "I'm joyful.")n\grave{\imath}n-t\bar{\upsilon}ll\acute{\iota}m^{\mathsf{m}}"fever" ("body-heat")w\bar{\imath}n-t\hat{\jmath}\circ g^{\mathsf{D}}"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 "children's shirt" (i.e. suitable for children)
wìd-zūvr "horsetail"
wāb-mɔ́ɔgū-n WK "in elephant-bush, where there are elephants"
```

```
zà'-nɔ̄ɔr"gate" ("compound-mouth")mà-bīig"sibling" ("child by [same] mother")bā'-bîig"half-sibling" ("child by [same] father")tèŋ-bīig"native" ("child of a country")nàsàa-sìlvg"aeroplane" (European hawk) ILK
```

WK has the exceptional forms $n\acute{a}af-b\grave{i}'is\acute{i}m$ "cow's milk", $b\bar{\nu}\nu g-b\acute{i}'is\acute{i}m$ "goat's milk", where the dependent has singular form and tone, but the tone sandhi is that of a compound (note the lack of M spreading after $n\acute{a}af$ -.)

15.7.2 Noun phrases

Complete NPs as predependents play a role analogous to English genitives and NP complements with "of" (CGEL pp467ff, 441.) The range of meanings is similarly very wide, and dependent on the semantics of both head and dependent. Indefinite non-count predependent NPs function as modifiers, and definite and/or count NPs as determiners. Personal pronouns never function as determiners themselves, but they often head predependent NPs which do 2.2.

Definite predependents do not automatically make a NP head definite $\underline{15.8.5}$. For $m\bar{\epsilon}\eta^{a/}$ "self" and $s\bar{\jmath}b^a$ as heads after predependents see $\underline{15.4.6}$ $\underline{15.4.7}$. If the head is a demonstrative, indefinite or interrogative pronoun or a quantifier, the construction with a predependent is **partitive**:

nīn-síəbà	"certain people"	sīəba	dependent
yà sɔ̄'	"some one among you"	รวิ'	head
nīdıb lā síəbà	"certain of the people"	sīəba	head
nīdıb síəbà	"certain ones among people"	sīəba	head
nīdıbá àyí'	"two people"	àyí'	dependent
nīdıbá àyí' lā	"the two people"	àyí'	dependent
nīdıb lá àyí'	"two of the people"	àyí'	head

The sense is also partitive if the head is a relative clause with an indefinite pronoun as relative:

```
Pa'alimi ti nidiba ayi' nwa fun gaŋ sɔ'
Pà'alımī tí nīdıbá àyí' ňwá fún gāŋ sɔ̄'
Teach:IMP IPL.OB person:PL NUM:two this 2SG:NZ choose INDF.AN
"Tell us which of these two people you have chosen" (Acts 1:24)
```

A partitive sense is not possible with other head types: e.g. $n\bar{l}dlb$ $l\bar{a}$ g(g)s must mean "the dumb ones belonging to the people", not "among the people" (WK.)

Abstract indefinite NPs as predependents ascribe a quality to the head:

 $n\bar{a}$ 'am $k\acute{v}k$ "throne" ("chieftaincy chair") $n\bar{a}$ 'am $s\acute{v}$ 'vlìm"kingdom" ("chieftaincy possession") $p\grave{v}$ 'vsvg $d\^{o}$ 2g"temple" ("worship house") $t\bar{v}$ ligír $b\acute{v}$ n"heater" ("heating thing" = $b\bar{v}$ n- $t\acute{v}$ ligìr $^{\epsilon}$) $d\bar{v}$ gvb $d\acute{v}$ t"cooking pots"

līgidi tύυmà "expensive work" (līgidi⁺ "money")

There are sometimes alternate forms with cbs:

tàňp-sɔ̄ba "warrior" (tānp^o "war") pù-pìəl-sɔ̄ba "holy person" (Rom 3:10, 1996) pù-pìəlım sóba but "holy person" (Mt 10:41, 1996) pù-pìəl-tūυma+ "holy actions" (Rom 6:13, 1996) pù-pìəlim tươmà+ "holy actions" (Mt 5:10, 1996) but

Language names may appear as abstract nouns describing an ethnic group:

Kūsâal yír nē kūeb "Kusaasi houses and agriculture"Nàsāal búgύm "electricity" ("European fire")

Concrete indefinite mass NPs as predependents express the material of which the head consists.

sālıma bύtìŋ "golden cup"

sālīma nē ānzúrīfà lâ'ad "gold and silver goods"

Count nouns may appear here in mass senses <u>15.2</u>:

fūug dɔ̂ɔg "tent" (cloth hut)

dàad bún-nám "wooden things" (dàug³ "piece of wood")

NP predependents of this type can be antecedents of anaphoric pronouns:

sālıma lâ'ad nέ ὸ būtιις "gold goods and [gold] cups" WK <u>15.1</u>

This is never the case with dependent cbs, as in $s\`{a}lim-k\grave{u}es$ "gold-seller", $d\~{a}-n\~{u}ud$ "beer-drinker"; on non-referential NPs as antecedents in English see e.g. CGEL pp400ff, and p1458; the restriction of anaphora to the same clause implied on p400 is not valid in English in the case of generic non-referential NPs.

The cb first element of $k \dot{\mu}' \dot{a} - \check{n} w \bar{i} i g$ "current" ("aquatic rope") suggests that the construction with unbound concrete mass predependents is limited to the specific sense "made of ...", so that * $k \dot{u}'$ em $\check{n} w \hat{i} i g$ would be "rope made of water."

With count and/or definite heads, meanings include kin relations, body parts, and ownership:

```
m bīig "my child"
```

dāu lā bîig "the man's child"

dāu lā bîər bìig nâaf zòvr "the man's elder brother's child's cow's tail"

Kūsâas wádà "customs of the Kusaasi"

Nimbε'og yir na san'am.

Nīn-bɛ̂'og yír nà sāň'am.

Person-bad:sg house:sg IRR spoil.

"The house of a wicked person will be destroyed." (Proverbs 14:11)

A contrast with a non-referential predependent cb:

nà'ab lā wîəf zôvr "the chief's horse's tail" (the chief has a horse)
nà'ab lā wíd-zōvr "the chief's horse-tail" (the chief may not own a complete horse at all)

 $D\bar{a}an^a$ "owner of ..." ($n\grave{a}m^a$ pl) always has a predependent NP; this may represent a concrete possession, or if it is adverbial or has an abstract sense, it may ascribe a quality (as with Hausa $m\grave{a}i$, or Arabic δu :):

lớr dâan^a "car owner"
bōvg dâan^a "goat owner"
kù'em dâan^a "water owner"

tìəŋ dâan^a "bearded man" Hausa *mài geemùu*

dāam dâan^a "beer owner"

"the owner of the field" (Mt 21:40)

Zu-wok daan po gangid bugum.

Zù-wōk dâan pō gáŋìd búgómm +ø.

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-pìəlım dâan^a "holy person"

būgusígā dâan^a "softly-softly sort of person" WK

See $\underline{15.5.2.3}$ on the use of $d\bar{a}an^a$ with numbers to make ordinal expressions. A cb predependent appears before $d\bar{a}an^a$ in a few set expressions:

```
y\bar{\imath}-dâan<sup>a</sup> "householder" = y\bar{\imath}-s\acute{\jmath}b<sup>a</sup> (Hausa m\grave{a}i gidaa) t\grave{\epsilon}\eta-dāan<sup>a</sup> (literally "land-owner"): traditional earth-priest
```

Before gerunds and other abstract nouns describing events or processes, NP predependents refer to *subjects*. Such constructions are themselves most often used as subjects or with postpositions.

```
Dāu lā kúlòg dāa mālısí m.

Man:sg art go.home:ger tns be.sweet 1sg.ob.

"The man's return home pleased me."
```

A generic object cb may also appear, and adjunct AdvPs or VP-final particles may follow the head:

```
ya antu'a morim koto ni ne taaba la
yà àntu'à-mɔr(m kɔ́tv) ní nē tāaba lā

2PL case-have:GER court:SG LOC with each.other ART
"your going to law with each other in court" (1 Cor 6:7, 1976)

Ninsaal Biig la lɛbvg la na
Nīn-sâal Bîig lā lɛ́bvg lā nā

Person-smooth:SG Child:SG ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)
```

15.7.3 Adverbial phrases

Predependent AdvPs may not be proadverbs. Most are locative, or phrases with the postposition $y\bar{\epsilon}l\dot{a}^+$ "about", or depend on the specialised head $d\bar{a}an^a$ 15.7.2.

```
dūnıya ní nìn-gbīŋ "earthly body"
kɔ̄lvgv-n nɔဴ-dâvg "crayfish" ("in-the-river cock")
Bɔ̀k dím "Bawku people"
dàgɔ̀bɪg níf "left eye"
zūgʊ́-n níf-gbáu̯ŋ "upper eyelid"
tēŋɪ-n níf-gbáu̯ŋ "lower eyelid"
```

```
Bà dà mòr mɔɔgin bvnkɔnbid nɛ ba buudi, yin bvnkɔnbid nɛ ba buudi ...

Bà dà mòr mɔ̄ɔgv-n bvn-kɔňbìd nɛ bà būudı, yín bvn-kɔňbìd

3PL TNS have bush:sG-Loc thing-hair:PL and 3PL kind, house:sG:Loc thing-hair:PL

nɛ bà būudu...

and 3PL kind ...

"They took wild animals with their kind, tame animals with their kind ..."

(Gen 7:14)

Kūṣâas kûəb nɛ yīr yɛ́là gbàun "A book about Kusaasi houses and agriculture"

dàu-kànā lā yɛ́là gbàun "a book about that man" WK

Yīigá+ "firstly" appears as a predependent meaning "first" 15.5.2.3, e.g.

linɛ da an yiiga dabisir.

līnɪ ø dá àň yīigá dàbɪsɪr.
```

15.8 Dependents following the head

3IN.CNTR CAT TNS COP firstly day:sg.

"That was the first day." (Genesis 1:5)

Dependents follow a head noun in the order adjective(s), quantifier, dependent pronoun or AdvP, article or $\check{n}w\grave{a}^+$ "this." All except adjectives are determiners.

Adjectives and dependent pronouns follow a head noun which is itself reduced to a combining form, while the dependent inflects to show the number of the head. Compounds with cb heads are formed absolutely freely with completely transparent meanings, and correspond to uncompounded constructions in most other languages. Consequently the cb needs to be treated as a standard part of noun and adjective paradigms. Cb heads are the most liable to segmental remodelling on the basis of the singular form (or even the plural) <u>8.2</u>.

Compounds with dependent pronouns naturally cannot be lexicalised, but compounds with adjectives can develop specialised lexical meanings.

Quantifiers do not have combining forms and cannot be followed by the dependent-only demonstrative forms $k \grave{a} n^{\epsilon} k \grave{a} n^{\bar{a}+l}$.

For WK and DK, a noun before a dependent pronoun must appear as a cb, but SB often produced forms with cbs segmentally remodelled after sg or even pl forms.

15.8.1 Adjectives

Adjectives follow a head cb. They do not themselves normally appear as heads, but a subset of adjectives lacking corresponding stative verbs may be used as heads of predicative complements 19.8.2. Generally, compounds with $n\bar{l}n$ - "person" or $b\bar{v}n$ - "thing" are used instead: $n\bar{l}n$ - $s\dot{v}n$ "good person", $b\bar{v}n$ - $v\dot{v}r$ "living thing" etc. $B\bar{v}n^{n\epsilon/l}$ can make a regular $r^{\epsilon}|a^{+}$ class plural $b\bar{v}n\dot{a}^{+}$ or pluralise with $n\dot{a}m^{a}$:

```
Būn-námá àlá kà fù ňyētá +ø?
Thing-pl Num:how.many and 2sg see:IPFV cq?
"How many things do you see?" SB
```

Būn also occurs with abstract and AdvP predependents:

```
t\bar{\upsilon}lig(r\ b\acute{\upsilon}n^{n\epsilon} "heating thing, heater" = b\bar{\upsilon}n-t\acute{\upsilon}lig\`{\iota}r^{\epsilon} kù'emī-n b\acute{\upsilon}n^{n\epsilon} "water creature"
```

Deverbal adjective forms with no preceding cb are synonymous with agent nouns, so the presence of $b\bar{\nu}n$ - distiguishes different meanings in e.g.

```
b\bar{v}n-k\dot{v}vd\hat{v}r^{\epsilon} "thing to do with killing"

but k\bar{v}vd(r^{\epsilon}) "killer"

Note the idioms

b\bar{v}n-g(n^{a}) "short chap" (informal, humorous)

b\bar{v}n-k\dot{v}d\dot{v}g^{3} "old man" (the normal expression)
```

The combination noun + adjective is almost invariably rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun:

būυg ^a	"goat"	būυs ^ε	"goats"
bù-pìəlıg ^a	"white goat"	bù-pìəlıs ^ɛ	"white goats"
bù-sùŋ ^ɔ	"good goat"	bù-sùma ⁺	"good goats"
nūa ^{+/}	"hen"	nɔ̄ɔs ^{ε/}	"hens"
nō-píəlìg ^a	"white hen"	nō-píəlìs ^ɛ	"white hens"
ทว ิ- รบ์ŋ ^ว	"good hen"	nō-sύmà ⁺	"good hens"

A second adjective or a dependent pronoun can follow a first adjective, which thus itself appears as a cb:

```
n\bar{l}n-w\acute{l}sk-p\grave{l}\partial llg^a "white tall person" n\bar{l}sk-p\hat{l}\partial llg^a "this white hen"
```

However, a noun + adjective compound cannot form a cb to be used as the generic complement of a deverbal noun; a sg/pl form is used instead:

```
f\bar{u}-z\check{\epsilon}\check{n}d\grave{a} k\grave{u} estimates "seller of red (i.e. dyed) cloth" not *f\bar{u}-z\check{\epsilon}\check{n}'-k\grave{u} estimates "seller of red (i.e. dyed) cloth"
```

i.e. adjective cbs may only precede other adjectives or dependent pronouns. Compounds with adjectives may develop specialised lexical meanings:

```
    nū'-bíla "finger" ("small hand")
    tì-sābιlím<sup>m</sup> a traditional remedy ("black medicine")
    gòň'-sābιlíga "Acacia hockii" ("black thorn")
```

15.8.1.1 Class agreement

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'-bīəlíf' "small coin" NT (l\bar{a}'af' "cowrie", b\bar{r} əl\dot{a}+ "a little" dà-s\bar{r}'ər^{\epsilon} "some day, perhaps" (d\bar{a}ar^{\epsilon} "day", s\bar{r}'a+, "some") dàb(s-s\bar{r})=r^{\epsilon} "some day" (d\dot{a}b\iota s\iota r^{\epsilon} "day") "blessing" (y\bar{\epsilon}l^{|\epsilon|} "matter", s\dot{v}\eta^{\circ} "good") "bride" (p\dot{u}'a-p\bar{a}al^{al} "bride" (p\dot{u}'a-p\bar{a}al^{al} "young man, son" (d\bar{a}u+ "man")
```

In WK's speech (not DK's) and many written sources, m^m class nouns require adjectives in $-m^m$, as does $b\bar{\nu}n$ "thing" in abstract (but not concrete) senses:

```
dā-páalìm<sup>m</sup>
                                                "new millet beer"
                                                 WK does not accept *dā-pâal, *dā-páalìg.
        tì-sābılím<sup>m</sup>
                                                "black medicine", a specific traditional remedy
        tì-vōnním<sup>m</sup>
                                                "oral medication" ("swallowing medicine")
        tì-kūvdím<sup>m</sup>
                                                "poison" ("killing medicine")
                                                "anointing oil" (kpāaňm<sup>m/</sup> "oil, grease")
        kpāň-sɔ́ɔňdìm<sup>m</sup>
                                                "desirable thing" (1 Cor 14:1: nɔ̀nˌtlím<sup>m</sup> "love")
        būn-bɔ́ɔdìm<sup>m</sup>
but
        būn-bɔ́ɔdìr<sup>€</sup>
                                                "desirable thing" (BNY p17: a sheep)
        būn-ňyέtìm<sup>m</sup>
                                                "the visible world"
but
        būn-ňyétìr<sup>E</sup>
                                                "a visible object"
```

15.8.1.2 Downtoning

Adjectives may show apocope-blocking 5.1 as a downtoner. Only singular forms seem to be possible. (All examples KT):

```
Lì à n\bar{\varepsilon} fū-píəlìgā.

Lì à n\bar{\varepsilon} fū-píəlìgā lā.

Lì à n\bar{\varepsilon} wîug.

Lì à n\bar{\varepsilon} wîug.

Lì à n\bar{\varepsilon} wíugō.

"It's the whitish shirt."

Lì à n\bar{\varepsilon} wîugō.

"It's red."

"It's reddish."

fū-wíugō lā

"the reddish shirt"

Lì à n\bar{\varepsilon} tītā'arı.

"It's biggish."
```

15.8.1.3 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

```
Lì à nē nū'-kpíilύη.
                                        "It's a dead hand."
Bīig lā á nē nū'-kpíilúη.
                                        "The child is dead-handed."
Ò à nē bí-[nū'-kpíilúŋ].
                                        "He's a dead-handed child."
                                        "long-legged stool"
kùg-n5b-w5k<sup>3</sup>
                                        "long-legged stools"
kùg-n5b-wâ¹ad<sup>€</sup>
zūg-máuk<sup>3</sup> pl zūg-mâ'ad<sup>£</sup>
                                        "crushed-headed"
zù-wɔ̄kɔ/
                                        "long-tailed"
nōb-gíŋa
                                        "short-legged"
z\bar{u}-péel\dot{v}g<sup>o</sup> pl z\bar{u}-péel\dot{a}+
                                        "bald"; cf Dau so' zug ya'a pie
                                         "If a man has gone bald" (Leviticus 13:40)
                                        "toothless" (lām<sup>mε/</sup> "gum" fùe+ "draw out")
lām-fɔ̂ɔg<sup>ͻ</sup> pl lām-fɔ̂ɔd<sup>ε</sup>
```

The two adjectives "one of a pair" $\underline{15.5.2.3}$ are often used in bahuvrihis: $n\bar{i}f$ - $n\bar{$

The construction is not modification of an adjective by a cb. In cases like $bi-n\bar{u}'-kpiilon'$ "child with a withered hand" the adjective is modifying the cb immediately preceding it, not *vice versa*: it is not possible to say * $bi-n\bar{u}'-kpiim^m$. The adjective may even be plural despite singular reference of the whole compound:

```
bi-t\dot{v}b-kp\bar{\imath}da^+ "deaf child" (t\dot{v}bvr^{\epsilon} "ear", kp\dot{\imath}^+ "die") pl bi-t\dot{v}b-kp\bar{\imath}da n\acute{a}m^a, bi-t\dot{v}b-kp\bar{\imath}ds^{\epsilon} "child/children with blocked ears" (l\bar{\imath}^+ "block up")
```

15.8.1.4 Nouns as adjectives

Human-reference nouns may be used as adjectives modifying other human-reference nouns. This is particularly common with $a|b^a$ class words:

```
bì-sāanal or bì-sáana
                                                  "stranger-child"
[only bù-sáana
                                                  "stranger goat"]
        bì-kpī'im<sup>m/</sup> or bì-kpìilύŋ<sup>ɔ</sup>
                                                  "dead child"
[only bù-kpìilúŋ<sup>5</sup>
                                                  "dead goat"]
        bì-dāu<sup>+</sup> or bì-dāvg<sup>o</sup>
                                                  "male child"
[only bù-dāva<sup>o</sup>
                                                  "male goat"]
        bì-puˈāa or bì-puāka
                                                  "female child"
        bì-zū'em<sup>m/</sup> or bì-zùnzòna
                                                  "blind child"
```

The same behaviour is also seen with some agent nouns:

```
p \underline{\nu}'à-zàansa "dreamy woman" KT n \overline{n} - n \epsilon n^{na} "envious person" b i - s \overline{n} n^{na/} or b i - s \overline{n} n \epsilon g^a "silent child" only b v - s \overline{n} n \epsilon g^a "silent goat"
```

However, WK usually reports a contrast between agent nouns/deverbal adjectives with head-second compounds in $a|b^a$ class and head-first compounds in $a|b^a$ or $a^a|s^a$ or $a^b|a^a$ class, even with derivatives of intransitive verbs:

```
p \underline{\nu}'à-k \bar{\nu} \nu d (g^a)"murderous woman, murderess"p \underline{\nu}'à-k \bar{\nu} \nu d^{al}only "killer of women"p \underline{\nu}'à-l \bar{a}'adl g^a"woman given to laughing"p \underline{\nu}'à-l \bar{a}'adl g^a"laugher at women"
```

Nouns (of any class) expressing bodily defects can be used adjectivally:

```
bì-zùnzòŋa "blind child"
bì-gìka "dumb child"
bì-wàbir<sup>ɛ</sup> "lame child"
bì-bālērvgɔ "ugly child"
bì-pòň'ɔrɛ "crippled child"
```

Other examples, which are effectively appositional, include:

```
nàsàa-bīig<sup>a</sup> "European child"
yàmmug-bī-ρύη<sup>a</sup> "girl slave" (yamug bipuŋ Acts 16:16, 1976 <u>8.2</u>)
yàm-bī-ρύη<sup>a</sup> "girl slave" WK

(vs yàmmug bí-ρύη<sup>a</sup> "slave's girl")
bī-ρύŋ-yàmmug<sup>a</sup> "slave girl"
nà'-bīig<sup>a</sup> or bì-nà'ab<sup>a</sup> "prince"
dàu-bīig<sup>a</sup> or bì-dāu<sup>+</sup> "male child"
```

15.8.2 Quantifiers

Quantifiers as determiners follow the head, except for $y\bar{\imath}ig\dot{a}^+$ "firstly." A head can appear as a cb only with $y\bar{\imath}nni^+$ "one" and in a few fixed expressions like $d\dot{a}$ - $p\bar{\imath}iga$ "ten days"; elsewhere, quantifiers are not subject to M dropping: $k\bar{\iota}ug$ - $v(nni^+$ "one stone" but $k\bar{\iota}ugv$ - $v(nni^+$ "one stone."

Quantifiers precede dependent pronouns and $l\bar{a}^{+/}$ "the, that", $n\bar{w}a^{+}$ "this":

```
bunama atan' nwa "these three things" (1 Cor 13:13) b\bar{\nu}n-námá_àtáň' ňwá thing-PL NUM:three this
```

Quantifiers as determiners can be coordinated: this is the mechanism for the creation of numbers other than simple digits, tens or hundreds:

```
o nya'andɔlib pii nɛ yi
ò nya'an-dɔllıb pīi nɛ yı́'
ßAN after-follower:PL ten with two
"his twelve disciples" (Mt 26:20)
```

15.8.3 Adverbial phrases

When an abstract noun with a verbal sense has a preceding NP dependent as subject, complement or adjunct AdvPs may follow the head, including prepositional phrases, which are not found elsewhere as NP dependents, and also VP-final particles. This is therefore best regarded as a clause nominalisation process. Other uses of AdvPs as NP dependents after the head are marginal. $\grave{A}m\bar{\epsilon}\eta\acute{a}$ "really, truly" occurs in the meaning "genuine, real":

```
\bar{\partial}n s\bar{\partial}b \acute{a} n\bar{\epsilon} d\underline{u}'\acute{a}t\grave{a} \grave{a}m\bar{\epsilon}n\acute{a} l\bar{a}.

3AN.CNTR NULL.AN COP FOC doctor:SG ADV:real:ADV ART "That one's the real doctor."
```

With ňwādιs yôυm lā pύυgū-n "months in the year" (SB) and wābυg mɔɔgυ-n lā "the elephant in the bush" (WK), I have not recorded the full contexts, possibly e.g. M dāa ňyē wābυg mɔɔgυ-n lā "I saw an elephant in the bush." The 1976 NT has

```
Lina ane labasuŋ Jesus Christ Wina'am Biig la yela.

Lìnā á nē lábà-sòŋ Jesus Christ Winà'am biig lā yélà.

DEMST.IN COP FOC news-good:sg Jesus Christ God child:sg ART about.

"This is the good news about Jesus Christ, God's Son." (Mk 1:1)
```

but the 1996 revision recasts this as

```
Lina ane Yesu Kiristo one a Wina'am Biig la labasuŋ.

Lìnā á nĒ Yesu Kiristo śnì à Wínà'am bîig lā lábà-sòŋ.

DEMST.IN COP FOC Yesu Kiristo REL.AN COP God child:sg ART news-good:sg.
```

15.8.4 Pronouns

bīiga

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:

bì-kàŋā+/

"this child"

```
bì-sùŋ-kàŋā<sup>+/</sup>
bì-sɔ̄'+
             "a certain child"
                                                    "this good child"
bì-kànε?
             "which child?"
                                 bì-b5?
                                                    "what child?"
yeltəəd ayəpəi bane ka maliaknama ayəpəi mər la
yēl-tôod
                           bánì kà màliāk-námá àyɔ́pɔ̀e
               àyźpże
                                                              mōr lā
matter-bitter:PL NUM:seven REL.PL and angel-PL
                                                    NUM:seven have ART
"the seven plagues which the seven angels have" (Rev 15:8)
```

15.8.5 Deictic particles lā ňwà

"child"

 $L\bar{a}^{+/}$ and $\check{n}w\grave{a}^+$ are corresponding deictic particles "that" and "this." Although $\check{n}w\grave{a}$ always retains this sense, $l\bar{a}^{+/}$ in the great majority of its occurrences is weakened to a **definite article**. It retains its deictic sense in opposition to $\check{n}w\grave{a}^+$ in identificational clauses 21.4.1 and after demonstratives 15.4.2.

Unlike $l\bar{a}^{+/}$, $\tilde{n}w\dot{a}^{+}$ can stand alone as a NP:

```
Nwà 
\dot{a}

n\bar{\epsilon}

b\bar{i}ig.

"This is a child." WK; tones sic.

This cop foc child:sg.
```

 $L\bar{a}^{+/}$ and $\check{n}w\grave{a}^+$ stand finally in the NP (which may itself be a dependent before another NP) except for the marginal case where a VP-final particle occurs in a \grave{n} -clause, when it may follow the article attached to the clause 19.10.

As article, $l\bar{a}^{+/}$ corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", $l\bar{a}^{+/}$ is not typically used for "familiar background", unless there was an explicit prior mention of the referent:

```
Winnig lí yā. "The sun has set." Sun:sg fall PFV.
```

It is not used with pronouns, or with proper names of people or places: $m\bar{a}n$ "me", \dot{A} - $W\bar{\iota}n$ "Awini", $B\dot{\supset}k$ "Bawku." Nor is it used with abstract mass nouns:

```
Nəŋilim pv naada. "Love does not come to an end." (1 Cor 13:8) Nəŋılím pv nāadá + \emptyset. Love Neg.ind finish:IPFV Neg.
```

 $L\bar{a}^{+/}$ is not used in vocatives, contrasting with $\check{n}w\grave{a}^{+}$, which often appears:

```
Bīiga +ø! "Child!"
Child:sg voc!
```

Bīis ňwá!

There is no indefinite article: a NP with no $l\bar{a}^{+/}$ is indefinite if it could have taken $l\bar{a}^{+/}$ in the sense of the article. When a NP of a type which can take the article appears without it, the sense may be non-referential. This is the case, for example, with negative-bound nouns like $b\bar{l}ig$ "child" in

"Children!"

[bi:sa]

```
\dot{M} b\bar{i}ig k\bar{a}'e ^+ø. "I've no child" WK 1SG child:SG NEG.BE NEG.
```

and with the complement of $\grave{a}e\check{n}^a$ "be something" when used ascriptively 19.11.2:

```
\dot{O} à n\bar{\varepsilon} b\bar{i}ig. "She is a child." 3AN COP FOC child:SG.
```

An indefinite NP is only likely to have a *specific* sense in the context of an explicit introductory presentational statement <u>27.4</u>:

Dau da be mori o biribing

Dāu dá bè ø mōrí ò bī-díbìn

Man:sg tns exist cat have 3AN child-boy:sg

"Once there was a man who had a son ..." KSS p35

Anina ka o nyε **dau** ka o yυ'υr buon Aneas.

Àníná kà ò ňyē dáu kà ò yō'vr bûen Aneas.

ADV: there and SAN see man: SG and SAN name: SG call: IPFV Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

Outside such contexts, an indefinite NP is usually *generic*; unlike English "the", $l\bar{a}^{+/}$ is not used with a generic sense:

Tumtum pu gat o zugdaana.

Từm-tữm pữ gát ò zũg-dáanā +ø.

Work-worker:sg neg.ind pass:ipfv 3AN head-owner:sg neg.

"The servant does not surpass his master." (Jn 15:20)

Tiig walaa bigisid lin an tisi'a.

Tìng wélàa ø bìgisid lín àň tí-sī-a.

Tree:sg fruit:pl cat show:ipfv 3in:nz cop tree-indf.in.

"It's the fruit of the tree that shows what tree it is." (Mt 12:33)

Kusaas ye ... "The Kusaasi say ..." KSS p16

drawing the moral of a story.

Generic core arguments are incompatible with aspectual use of $n\bar{\epsilon}^{+/}$ 19.2.1. A predependent NP ending in $|\bar{a}^{+/}|$ makes the following head definite, and the head does not itself take the article:

 $d\mu'$ átà $l\bar{a}$ $b\hat{n}ig$ "the doctor's child" not * $d\mu'$ átà $l\bar{a}$ $b\hat{n}ig$ $l\bar{a}$

Only predependents *with the article* and demonstrative pronouns automatically make their heads definite; predependent personal pronouns or proper names do not:

 $W(n\dot{a}'am\ m\'alj\bar{a}k$ "an angel of God" $W(n\dot{a}'am\ m\'alj\bar{a}k\ l\bar{a}$ "the angel of God"

m bīig "my child" (at first mention)

m bīig lā "my child" (previously mentioned)

Contrast the common idiom at first introduction of a possessed referent, where $l\bar{a}^{+/}$ is absent, with cases where the referent has already been introduced:

```
Dau da be mori o biribing
```

```
Dāu dá bè ø mōrí ò bī-díbìn
```

Man:sg the exist cat have san child-boy:sg

"Once there was a man who had a son ..." KSS p35

On daa an pu'asadir la ka o kul **sidi** paae yuma ayopoi ka **o sid la** kpi.

Ón dāa áň pự'á-sād ι r lá kà ò kūl sīd ι ø pāe 3AN:NZ TNS COP woman-nulliparous:SG ART and 3AN marry husband:SG CAT reach yómà 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)

Note also the contrast of meaning produced by the article in

```
\dot{M} b\bar{i}ig k\bar{a}'e ^+Ø. "I've no child" WK 1SG child:SG NEG.BE NEG.
```

```
M bīig lā kā'e +ø. "My child's not there" WK 1SG child:SG ART NEG.BE NEG.
```

Certain words consistently lack the article after a pronoun possessor even if they are specific old information. This may be a question of uniqueness within a particular context; examples are $b\bar{a}^{!+/}$ and $s\grave{a}am^{ma}$ "father."

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used <u>15.4.3</u>.

```
Nā'-síəbà óňbìd nē mɔɔd.
```

Cow INDF.PL chew:IPFV FOC grass:PL.

"Some cows are eating grass."

An indefinite pronoun is necessary to make the head indefinite after a predependent with the article:

```
d\underline{u}'átà l\bar{a} b\acute{i}-s\bar{\it{5}}' "a child of the doctor's" doctor:sg art child indean
```

16 Adverbial phrases

16.1 Overview

Adverbial phrases typically appear as clause or VP adjuncts, but also occur as arguments of verbs or dependents in NPs <u>15.7.3</u>. AdvPs of time, circumstance or reason (but not place or manner) may appear as postlinker adjuncts <u>20.2.1</u>.

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. Many adverbs do not conform to the structure of ordinary nouns.

Absolute clauses are AdvPs $\underline{24.2}$, as are several relative clause types.

As with NPs, coordination of AdvPs uses the particle $n\bar{\epsilon}$.

16.2 Time and circumstance

AdvPs expressing **time** 29.7 may be instantiated by proadverbs 16.7 or by structurally distinctive time adverbs such as $z\bar{l}n\acute{a}^+$ "today", $s\grave{u}'es^a$ "yesterday", $d\bar{u}nn\acute{a}^+$ "this year." $B\bar{\epsilon}og^{\circ}$ "tomorrow" has the form of a noun but cannot inflect or take dependents; $d\bar{a}ar^{\epsilon}$ "day after tomorrow/day before yesterday" is in the same category but happens to be homophonous with the noun $d\bar{a}ar^{\epsilon}$ "day."

Other time AdvPs are simply NPs with temporal meanings, and no special marking. They may consist of single nouns, such as $y\dot{v}'v\eta^{2}$ "night", $\dot{v}vn^{n\epsilon}$ "dry season", $n\bar{l}nt\bar{l}n^{a}$ "heat of the day", but such nouns inflect and may occur with dependents.

Absolute clauses <u>24.2</u> are frequently used to express time.

No formal distinction is made between points in time and periods of time:

Fè ná kūl bēog. "You'll go home tomorrow." 2SG IRR go.home tomorrow.

Tì kpélìm ànínā dábisà bí'əlà.

1PL remain ADV:there day:PL few.

"We stayed there a few days."

Time AdvPs can be coordinated:

Bēogv-n nē zâam kà fù ná nīŋ tí-kàŋā.

Morning-Loc with evening and 2SG IRR do medicine-DEMST.SG.

"You'll use this medicine morning and evening."

16.3 Place

Locative AdvPs consist of Kusaasi place names, specialised locative adverbs, or NPs followed by postpositions. The core locative postposition is the particle $n\bar{\iota}^{+/} \sim n^{\epsilon}$. Some postpositions are themselves followed by n^{ϵ} ; many postpositions are converted nouns. Nouns other than place names cannot otherwise be used alone as locatives.

Besides locative proforms, specialised locative adverbs include $y i \eta^a$ "outside", $datiu\eta^a$ or dituu' "right(hand)", dagauu "left", agauu or agauu "right(hand)", agauu "left", agauu or agauu "right(hand)", aga

The locative particle takes the form $n\bar{\iota}^{+/}$ after words ending in a short vowel in SF, after pronouns and after loanwords, and the liaison-word form n^{ϵ} elsewhere:

```
m\dot{v}'ar\bar{\iota}-n "in a lake" y\bar{v}dá n\dot{\iota} "among names" \dot{m} n\bar{\iota} "in me" m\bar{a}n n\bar{\iota} "in me" la'asvg dɔɔdin nɛ suoya ni la'asvg dɔɔdi-n nē suēyá nì assembly:sg house:PL-LOC with road:PL LOC "in the synagogues and in the streets" (Mt 6:2)
```

 $Y\bar{i}r^{\epsilon/}$ "house" has the exceptional sg and pl locative forms $y\bar{i}n^{n\epsilon}y\bar{a}a-n^{\epsilon}$ which have the particular nuance "home", as in the parting formula

```
Pù'usım yín. "Greet (those) at home." i.e. "Goodbye."
```

The article $l\bar{a}^{+/}$ may precede or follow the locative particle, as may quantifiers:

```
mồ'arī-n lā or mồ'ar lā ní "in the lake"

m gbana ni wusa "in all my letters" (2 Thess 3:17, 1996)

m̀ gbàna ní wūsa

1sg letter:PL LOC all
```

The meaning is completely non-specific location: at, in, to, from. The locative particle is attached to nouns which are not place names whenever they are used as complements of verbs expressing motion or location:

```
Kem Siloam buligini pie fv nini.

Kèm Siloam búlvgō-nı ø píə fò nīní.

Go:IMP Siloam well:sg-loc cat wash 2sg eye:pl.

"Go to the well of Siloam and wash your eyes." (Jn 9:7)
```

```
Ka Sυntaana kpɛn' Judas [...] sunfun.
Kà Sūtáanà kpɛň' Judas [...] súňfī-n.
And Satan enter Judas [...] heart:sg-loc.
"Satan entered Judas' heart." (Lk 22:3)
Ka Pailet lɛn yi nidibin la na ya'asi yɛli ba ye...
Kà Pailet lɛ́m yī nīdıbí-n lā nā yá'asì ø yɛ́lì bā yē...
And Pilate again emerge person:pl-loc art hither again cat say 3pl.ob that ...
"Pilate came out to the people again and said to them ..." (Jn 19:4)
```

ILK has, transposed into the orthography of this grammar:

```
    Ò bὲ dâ'a-n.
    Ö bὲ sjá'arī-n.
    Ö bὲ pɔ̄ɔgύ-n.
    Ö bὲ yín.
    Ö bὲ mɔ̄ɔgυ-n.
    Ö bὲ kɔ̄lɪgɪ-n
    Ü bὲ tūυmmι-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 meanings are expressed with postpositions 16.6:

```
    Ò dìgιl gbáun lā tέεbùl lā zúg.
    3AN lay.down book:sg ART table:sg ART upon.
    "She's put the book on the table."
```

```
Dāμ lā bέ nē dó-kàŋā lā pύυgū-n.

Man:sg art exist foc hut-demst.sg art inside:sg-loc.

"The man is inside that hut."
```

Kusaasi place names are intrinsically locative:

```
Ò bè Bók.
Ö bè Témpáan.
Ö kèŋ Bók.
"He's at Bawku." ILK
"He's at Tempane." ILK
"He's gone to Bawku."
```

They often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement towards or away:

```
M ná kēŋ Bók."I'm going to Bawku."Fò yûug Bók kpēláa?"Have you been long in Bawku (here)?"Fò yûug Bókàa? SB(rejected by WK as "Mooré")
```

For my informants, foreign place names share the syntactic behaviour of Kusaasi place names, but (especially in the sense of rest at a place) NT often uses $n\bar{\iota}^{+/}$ or paraphrases like *Jerusalem téni-n* "in Jerusalem-land."

The locative particle also appears in some *time* expressions: $b\bar{\epsilon}og^{\circ}$ "tomorrow", $b\bar{\epsilon}ogv-n^{\epsilon}$ "morning", $y\bar{i}ig(-n^{\epsilon}$ "at first" $s\bar{a}n-si^{\circ}\partial-n$ $l\bar{a}$ "at one time, once..."

Proforms used as locative heads of relative clauses are intrinsically locative:

```
One ken likin zi' on ken si'ela.
```

```
\partial n \ell k \bar{\epsilon} n \ell l \bar{\ell} k \ell - n \ell l \ell - n \ell l \ell \ell - n \ell l \ell \ell - n \ell l \ell - n \ell l \ell - n \ell l \ell \ell - n \ell l \ell - n \ell
```

ka mɔri fu keŋ zin'ikanε ka fu pu bɔɔda.

```
kà m\bar{\jmath}r(f\bar{\upsilon}) ø k\bar{\epsilon}\eta z(\bar{n}'-k\lambda n\iota) kà f\bar{\upsilon} p\bar{\upsilon} bɔʻɔdā ^+ø. and have 2SG.OB CAT go place-REL.SG and 2SG NEG.IND want NEG. "and take you where you do not want." (Jn 21:18)
```

Locative AdvPs can be coordinated:

```
Nyalima na bɛ winnigin nɛ nwadigin nɛ nwadbibisin.

Nyālımá nà bē winn\log \bar{l}-n nē nwād\log \ell-n nē nwād-bibis\bar{l}-n.

Wonder:PL IRR EXIST sun:SG-LOC with moon:SG-LOC with moon-small:PL-LOC.

"There will be wonders in the sun, moon and stars." (Lk 21:25)
```

Reason-why AdvPs are constructed by a metaphorical extension of the sense of the postposition $z\bar{u}g$ "upon"; similarly for proforms:

```
àlá z \dot{u} g^{\circ} "therefore" b \bar{b} z \dot{u} g^{\circ} "why?" dùn z \dot{u} g^{\circ} "therefore"
```

16.4 Manner

AdvPs of manner may be instantiated by proforms, and there also are several morphologically distinctive manner-adverb formations; like specialised time adverbs, specialised manner-adverb words do not take dependents. However, various NP types can also be used as manner AdvPs.

Distinctive manner-adverbs often show apocope-blocking <u>5.1</u>. Some have the manner-adverb prefix \grave{a} - <u>13.2</u> or are derived from adjective stems with the suffixes $m^{\rm m}$ or $-ga^+$ <u>11.2</u>. Others include

```
pāalύ<sup>+</sup>
              "openly"
                                   ňyāe<sup>nε/</sup>
                                                  "brightly, clearly"
N v \bar{a} e^{n\epsilon/n} appears as complement of a e n^a "be something" and as an adjunct:
Wina'am a su'um nyain.
                                    "God is light." (1 Jn 1:5, 1996)
Wínà'am áň sým
                           ňyāe.
God
          COP good: ABSTR brightly.
... kε ka ti lieb nyain.
                                   "... make us light." (1 Jn 1:7)
          kà tì lîəb
... kέ
                            ňyāe.
... cause and 1PL become brightly.
                                    "And there truly was light." (Genesis 1:3)
Ka li sid nie nyain.
Kà lì síd nìe
                        ňyāe.
```

The spelling *nyain* appears for *ñyāe* "brightly" even in texts prior to 2016, where *nyainn* or *nyai* might have been expected. The 1992 audio NT renders it [j̃ãĩ]. A number of manner-adverbs are formed by reduplication of roots:

```
n\dot{a}'an\bar{a}^{+/} "easily" k\bar{\jmath}n'\jmath k\bar{\jmath}^+ "solely, by oneself" t\dot{\jmath}'\jmath t\bar{\jmath}^{+/} "straight away"
```

Reduplication of nouns or numbers 15.5.2.4 creates distributive manner-AdvPs:

```
dàbısır dábısìr "day by day" zīň'ig zîň'ig "place by place"
```

And 3IN truly appear brightly.

Reduplication of manner-adverbs themselves is intensifying:

```
    àmēŋá mēŋá "very truly"
    àsídà sídà "very truly"
    M wóm Kūsâal bī'əlá. "I know Kusaal a little."
    15G hear:IPFV Kusaal slightly.
```

```
M wóm bī əl bī əl. "I understand a very little." 1SG hear: IPFV little little.
```

A very common form of manner-AdvP is a relative clause using the proform $s\vec{r} \ni m^m$ "somehow" as head 24.3.1.

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

```
\dot{M} k \in \eta n \ni b \acute{a}. "I went on foot." SB; WK corrected this to 1SG go leg:PL. \dot{M} k \in \eta n \in \eta n \in \eta with."
```

A prepositional phrase with $n\bar{\varepsilon}$ parallels a count plural used adverbially in

```
\dot{A}-\dot{n}y\bar{\epsilon} n\bar{\epsilon} n\bar{i}f s\acute{o}n'5 \dot{A}-w\grave{o}m t\grave{o}ba.

PERS-see with eye:sg be.better.than PERS-hear ear:PL.

"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)
```

Mass quantifiers, like abstract mass nouns, are frequently used adverbially:

```
Ò từm bédugū.Ö từm pāmm."She's worked a lot."
```

Wūsa "all" readily switches from quantifying an object to adverbial use:

```
Bà gòsī tí wōsa. "They've looked at us all." WK 3PL look.at 1PL.OB all. (for: Bà gòsí tì wōsa. 3PL look.at 1PL all.)
```

This is not a universal property of quantifiers:

```
Bà gòsĩ tí bédugō. "They've looked at us a lot." WK
Bà gòsí tì bèdugō. "They've looked at a lot of us." WK
```

Numbers have specific forms for "so many times" <u>15.5.2.4</u>; other count quantifiers sometimes appear similarly as adverbs:

```
Bà gòsī tí bábıgā. "They've looked at us many times." WK Bà gòsí tì bàbıgā. "They've looked at many of us." WK
```

Manner AdvPs can be coordinated: so for example with sram clauses 24.3.1.

16.5 AdvPs as verb arguments

The prototypical use of AdvPs is as VP adjuncts; time/circumstance AdvPs also commonly appear as postlinker adjuncts:

```
Fù dúo wēlá +ø? literally "How did you rise?"; morning greeting.

2SG rise how co?

Nānná-ná mà áň nâ'ab. "Now I am a chief." WK

Now-hither 1SG COP chief:SG.
```

AdvPs also occur as verb arguments. AdvPs as subjects are most often seen with stative verbs, in particular $\grave{a} e \check{n}^a$ "be something/somehow."

```
Yiŋ venl, ka poogin ka'a su'um.

Yìŋ véňl kà pvvgv-n kā' svmm ^+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 yεla la kε ka ti baŋ nɔŋilim an si'em.

```
Kristo ø dà kpìi tì yēlá lā ké kà tì báŋ nònulím ø àň sī əm. Christ nz this die ipl about art cause and ipl realise love nz copinde. "Christ dying for us makes us understand what love is like." (1 Jn 3:16) (absolute clause AdvP 24.2 as subject)
```

```
In S\grave{\upsilon}\eta\bar{a} b\acute{\epsilon}. "OK it is." WK Good:ADV EXIST.
```

sờnā is however used metalinguistically, meaning "the word sờnā."

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts <u>19.8.3</u>.

The verb $\grave{a} \not\in \breve{n}^a$ "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head $\underline{19.11.2}$:

```
Lì à n\bar{\varepsilon} z\bar{a}alím. "It's empty."

Lì à n\bar{\varepsilon} b\bar{\upsilon}g\upsilon s(g\bar{a}. "It's soft."

Lì à s\dot{\upsilon}\eta\bar{a}. "It's good."
```

Kusaal characteristically uses manner proadverbs as predicative complements in place of pronouns with abstract reference. i.e. the language says "be/do how" rather than "be/do what."

```
Dā níŋì àláa +ø! "Don't do that!" ("thus")

NEG.IMP do ADV:thus NEG.

Fu wum ban yɛt si'em laa?

Fù wúm bán yɛt sī'əm láa +ø?

2SG hear:IPFV 3PL:NZ Say:IPFV INDF.ADV ART PQ?

"Do you hear what they are saying?" (Mt 21:16)
```

Relative clauses with the proform $s\vec{r} \ni m^m$ "somehow" as head are accordingly used after verbs of cognition, reporting and perception, to express the subordinate interrogative sense "say [etc] what ..." 24.3.1.

For the idiom "X $n n w \bar{\epsilon} l \dot{a} \dots$?" "how can X ...?" see 22.2.1.

16.6 Postpositions

Postpositions are adverbs with predependents; some also occur without. Most postpositions are literally or metaphorically locative. Postpositions may not be coordinated, but their predependents may:

```
tinam nɛ fun svvginɛ? "[what is there] between us and you?" (Mt 8:29) tīnám nē fūn súvgū-né + \emptyset?

1PL with 2sg between-Loc co?
```

Many postpositions represent special uses of ordinary nouns. Some are AdvPs which include the locative particle.

```
zar ug^{5/} "onto" (zar ug^{5/} "head"): t \dot \epsilon \epsilon b \dot b l \, l \, ar a \, z \dot u g \qquad \qquad \text{"onto the table"}
```

 $Z\bar{u}g^{3/}$ is frequently used metaphorically to express a **reason** "because of ..."; reason AdvPs often occur preposed with $k\dot{a}$ or as postlinker adjuncts 20.2.1:

```
"on account of the man" bɔ̄-zúgɔ̄?

"why?"

Mán ňwὲ' dāu lā zúg kà police gbáň'a_m.

1SG:NZ strike man:SG ART upon and police seize 1SG.OB.

"Because I struck the man the police arrested me." 24.2
```

Pian'akane ka m pian' tisi ya la zug, ya ane nyain.

```
Pịàň'-kànι kà m̀ pịāň' ø tísì yā lā zúg, yà á nē ňyāe.
       Word-REL.SG and 1SG speak CAT give 2PL.OB ART upon, 2PL COP FOC brightly.
       "Because of the the words I have spoken to you, you are clean." (In 15:3)
       The set expression s\bar{a}a z u g^3 is used for "sky"; it is intrinsically locative:
       Ka kukor yi saazug na ...
       Kà kùkōr yī
                        sāa zúg nā...
       And voice emerge rain onto hither
       "And a voice came from heaven..." (In 12:28)
zūgύ-nε "on":
       tέεbùl lā zúgō-n
                                            "on the table"
t\bar{\epsilon}\eta(r^{\epsilon}) "under" (t\bar{\epsilon}\eta^{a} "ground"; with no predependent G\dot{\rho}sim\ t\bar{\epsilon}\eta(r!) "Look down!"):
                                             "under the table"
       tέεbùl lā ténìr
p\bar{v}ugv-n^{\epsilon} "inside" (p\bar{v}vg^a "belly, inside"):
       dūk lā púugū-n
                                             "in the pot"
       ňwādıs yûum lā púugū-n
                                             "months in the year" (metaphorical locative)
b\bar{a}b\acute{a}^+ "beside" (pl of b\bar{a}b\iota r^{\epsilon/} "sphere of activity"):
       m n5bá bàba
                                             "beside my feet"
sìsòugō-n<sup>\epsilon/</sup> "between" (replaced by sòug\bar{\upsilon}-n^{\epsilon/} in KB):
       tīnám nē fūn sísùvgū-n
                                            "between us and you"
tùen<sup>ne</sup> "in front of" (with no predependent Gòsım tûen! "Look to the front!"):
       dāká lā tûen
                                             "in front of the box"
gbin<sup>nɛ</sup> "at the bottom of" (gbin^{ne} "buttock"):
       zūer lā gbín
                                             "at the foot of the mountain"
```

 $\check{n}y\acute{a}'a\eta^a$ "behind; after (time)" ($\check{n}y\acute{a}'a\eta^a$ "back", $l\wr \check{n}y\acute{a}'a\eta^a$ "afterwards"):

 $N\bar{\varepsilon}$ 'ná nyâ'an kà ò $k\bar{u}l$. "After this she went home." DEMST.IN after and 3AN go.home.

 $s\bar{a}$ 'an^{ϵ /} "into/in the presence of", "in the opinion of":

Wínà'am sâ'an

"in the sight of God"

Fù ná dī'e títm pự'á-bàmmā lā sâ'an.

2SG IRR receive medicine woman-DEMST.PL ART among.

"You'll get the medicine from where those women are."

 $y\bar{\epsilon}l\dot{a}^+$ "about, concerning" (pl of $y\bar{\epsilon}l^{|\epsilon|}$ "matter, affair"):

Bà yèl·ō ø mān yēlá wūsa.

3PL say 3AN.OB 1SG.CNTR about all.

"They told him all about me."

kɔ̃n̆'ɔkɔ (cf àrakɔ́n̆' "one" in counting) is used as in m̀ kɔ̃n̆'ɔkɔ "by myself."

16.7 Proadverbs

	Demonstrative		Indefinite	Interrogative	
Place	$kpar{arepsilon}^+$	"here"	zìň'-sī'a+	yáa ní+	"where?"
	kpēlá ⁺ àní ⁺	"there" "there"	"somewhere"	yáa	"whither /whence?"
	ànínā ^{+/}	"there"			
Time	nānná+	"now"	sān-sí'a+	sān-kán ^ε	"when?"
	nānná-nā+/	"now"	"sometime"	būn-dâar [€]	"which day?"
	sān-kán ^ε	"then"		bɔ̀-wìn ^{nε}	"what time of day?"
Manner	àňwá ⁺	"like this"	sī əm ^m	wēlá+	"how?"
	àwá nā ⁺ àlá ⁺	"like this" "like that"	"somehow"		

The indefinites are used in relative clauses <u>24.3.1</u>.

The à- of the "manner" forms is preceded by the LF-final vowel -1 7.2.1.

Proforms expressing reason are formed with the postposition $z\bar{u}g^{5}$: àlá $z\dot{u}g^{5}$ "because of that", $b\bar{z}ug^{5}$? "why?" (cf $b\bar{z}ug^{5}$ "because" 20.2.1.)

17 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

```
Lì à n\bar{\epsilon} píəlìg pāmm. "It's very white"
```

the adverb $p\bar{a}mm$ goes with the copula verb rather than the adjective; it is not possible to say * $f\bar{u}$ - $p(\bar{e}l)g$ $p\bar{a}mm$ $l\bar{a}$ for "the very white shirt."

However, an adjective in any role may be immediately followed by an intensifying ideophone, as may the derived stative verbs. As is common cross-linguistically, ideophones often display unusual phonological features. Such ideophones are specific to particular adjectives and the corresponding stative verbs.

```
"It's very white."
Lì à nē píəlìg fáss fáss.
Lì à nē sābilíg zím zím.
                                 "It's deep black."
Lì à nē zíň'a wím wím.
                                 "It's deep red."
Lì à nē fū-zíň'a wím wím.
                                 "It's a deep red shirt."
                                                                   WK
M ňyέ fū-zíň'a wím wím.
                                 "I've seen a deep red shirt."
                                                                   WK
Fū-zíň'a wím wím bέ.
                                 "There's a deep red shirt."
                                                                   WK
M bôod fū-zíň'a wím wím lā.
                                 "I want the deep red shirt."
                                                                   WK
Ò à nē wāk tálılılı.
                                 "She's very tall."
Ò à nĒ gīŋ tírıgà.
                                 "She's very short."
Ò wà'am tɔ́lılìlı.
                                 "She's very tall."
Ò gìm nē tírīgà.
                                 "She's very short."
```

Not all adjectives, or even all gradable adjectives, have associated ideophones; thus WK has only the adverb $p\bar{a}mm$ in

```
Lì à súŋā pāmm.

Lì à nē bē'ɛd pāmm.

Lì zùlım 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 tòm pāmm. "She's worked hard."
Ò tòm hālí. "She's worked hard." 27.6
Ò zò pāmm. "She's run a lot."
Ò zò hālí. "She's run a lot."
```

However, many verbs can be followed by words which are again stereotyped and often show phonological features not found in the regular vocabulary. These are often more obviously onomatopoeic than the ideophones which intensify adjectives, and are not generally uniquely associated with particular verbs:

```
Ò zòt nɛ̃ tólìb tólìb. "He [a rabbit] is running lollop-lollop." WK
```

Similarly, the stance verb $zi'e^{ya}$ "be standing" and its dual-aspect derivatives are often followed by $s\bar{a}p\iota^+$ "straight" (LF $sappin\epsilon$ KB), but the word is found also after other verbs.

```
ka ku nyaŋe due o meŋi zi'e sapii.
kà kú nyāŋı due ò mēŋı d zi'e sāpu.
and Neg.irr prevail cat rise 3AN self cat stand ideo
"and was not able to rise and stand straight." (Lk 13:11, 1996)
maalim suoraug sappi mɔɔgin la
màalım suā-dâvg sāpi mɔɔgv-n lā
make:imp road-male:sg ideo grass:sg-loc art
"Make straight the high road in the wilderness" (Isaiah 40:3)
```

Ideophones of this type resemble manner adverbs syntactically, and similarly can be preposed with $k\grave{a}$ (Abubakari 2017.) There is perhaps some overlap of categories: see on $\check{n}y\bar{a}e^{n\epsilon/}$ "brightly", for example 16.4.

A third type of ideophone overlaps with emphatics $\underline{27.6}$: so, for example $k\acute{m}m$ in $B\bar{5}$ $k\acute{m}m$ "what exactly?" $\underline{15.4.4}$.

18 Prepositions

Prepositional phrases function typically as VP adjuncts, less often as complements. They cannot form components of noun phrases directly. Neither prepositions nor their complements can be coordinated. Except for $n\bar{\epsilon}$ "with", the prepositions also appear as clause adjuncts 20.2.1.

 $N\bar{\epsilon}$ is "with" in both accompanying and instrumental senses. The $n\bar{\epsilon}$ "and" which coordinates NPs and AdvPs <u>15.1</u> is fundamentally the same word. $N\bar{\epsilon}$ may only take NPs or AdvPs as complements (including nominalised \dot{n} -clauses.)

WK has forms with bound personal pronouns as complements; note the H toneme on the preposition:

```
n(m^a) n(t\bar{\iota}^{+/}) n(f^a) n(y\bar{a}^{+/}) n \cdot \delta^{-0} [n\tilde{v}(:)] n(b\bar{a}^{+/})
```

The *ne o* of the 1996 NT version is frequently read [n\vec{v}] in the audio.

Other speakers only use $n\bar{\epsilon}$ with free pronouns; WK has alternative forms also with $n\epsilon$ before those bound pronouns which have a vowel in SF: $n\epsilon li$, $n\epsilon ti$, $n\epsilon ya$, $n\epsilon ba$, with the pronouns having L toneme throughout; SB has the same forms.

Examples for $n\bar{\varepsilon}$:

```
Lìginím fò nīf
                        fù nû'ug.
                nέ
Cover: IMP 2SG eye: SG with 2SG hand: SG.
"Cover your eye with your hand."
Bà kèn nē nōbá.
                              "They've gone on foot." WK
3PL go with leg:PL.
Dìm
      nē
           Wīn.
                   dā
                         tΰ'as nē
                                    Wīnnέ +ø.
Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG.
"Eat with God, don't talk with God."
(Proverb: Be grateful for God's generosity and don't complain.)
Kulim ne sumbugusum.
                               "Go home in peace." (Mk 5:34)
Kùlım
            nē
               sùmbūgvsím.
Go.home: MP with peace.
```

```
[Bárıkà né fù] kēn kēn.
```

[Blessing with 2SG] arrival arrival.

"Welcome!" (based on a greeting template 28)

```
\dot{M} g \in \breve{n}' n \in f \dot{v}. "I'm angry with you." SB 1SG get.angry:PRV with 2SG.
```

The compound preposition $l\dot{a}'am\ n\bar{\epsilon}$ "together with" derives from a n-catenation construction 22.2.2:

...mɔr ya'am yinne la'am nɛ tɛn'ɛsa yinne.

... mɔr yā'am yīnní là'am nē tēň'ɛsá yīnní.

... have sense one together with thought one.

"... had one mind together with one thought." (Acts 4:32)

Wov means "like." With pronoun complements WK has

```
      wōυ mān LF mánὲ
      wóυ tì

      wōυ fōn LF fónὲ
      wóυ yà

      wōυ ɔ̄n²
      wóυ bà

      wóυ lì
```

WK permits phrases introduced by $w\bar{v}v$ to be preposed with $k\grave{a}$ 27.2, but rejects this construction for $n\bar{\varepsilon}$ + NP:

```
Wūυ búŋ né kà ò zót.
```

Like donkey:sg like and 3AN run:IPFV.

"Like a donkey, he runs."

```
but *Nέ m̀ nû'ug kà m̀ sī'ιs.
```

With 1sg hand:sg and 1sg touch.

is not possible for "With my hand, I touched it."

The complement is often a $s\vec{l} \rightarrow m$ relative clause 24.3.1:

```
Ò zòt wūu bún n zòt sī əm lā.
```

3AN run: IPFV like donkey: SG NZ run: IPFV INDF.ADV ART.

"He runs like a donkey runs."

 $W\bar{\nu}\nu$ occurs often after $w\bar{\epsilon}n^{na/}$ "resemble", introducing its complement; the preposition $n\bar{\epsilon}$ is frequently used instead. In any case, the complement is followed by the empty particle $n\bar{\epsilon}$ whenever it does not already have the article $l\bar{a}^{+/}$, even if it is a pronoun, or is specific:

```
w\bar{\upsilon}\upsilon m\bar{a}n n\bar{\varepsilon}"like me"w\bar{\upsilon}\upsilon b\dot{\upsilon}\eta n\bar{\varepsilon}"like a donkey"
```

Ka o nindaa wenne nintaŋ ne.

```
Kà ò nīn-dáa wēn nē nīntāŋ nē.
And BAN eye-face:sg resemble with sun:sg like.
"His face is like the sun." (Rev 10:1, 1996)
```

```
Alazugə məri ya'am wvv wiigi n\epsilon... Àlá zùgō, mòrī yā'am wvv wīigí n\epsilon... Therefore, have sense like snake:PL like... "Therefore, be wise as serpents ..." (Mt 10:16)
```

 $W\bar{\upsilon}\upsilon$, $w\bar{\varepsilon}n$ $w\bar{\upsilon}\upsilon$, and $w\bar{\varepsilon}n$ $n\bar{\varepsilon}$ can also be used for "about" with numbers. The complement is not followed by the redundant $n\bar{\varepsilon}$ in this case:

```
wōv tūsá àyí' "about 2000" like thousand:PL NUM:two
```

 $W\bar{\epsilon}n\,n\bar{\epsilon}\,X$ and $w\bar{\epsilon}n\,w\bar{\nu}\nu\,X$, using $w\bar{\epsilon}n^{\mathsf{na}/}$ "resemble" in n-catenation 22.2.2, behave as unitary prepositional phrases to the extent that the entire sequence $w\bar{\epsilon}n$ + preposition + complement can be preposed with $k\dot{a}$, or extraposed after the negative prosodic clitic:

```
Da lo ya nindaase, wenne foosug dim la niŋid si'em la.

Dā ló yà nīn-dáasē ^+Ø, wēn nē fɔɔsúg dím lá Ø

NEG.IMP tie 2PL eye-face:PL NEG, resemble with puff:GER NULL.PL ART NZ

nìŋɪd sī'əm lā.

do:IPFV INDEADV ART.

"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

Àséɛ= is "except for"
```

"except for God" (calquing the Twi gye Nyame)

For pronoun complements the free forms are used.

àsέε Wínà'am

```
Hālí+ means "up to and including."
```

O daa pvn anε ninkvvd hali pin'ilvgvn sa.

```
\dot{O} dāa pún à nē nīn-kôvd hālí pīň'ilúgō-n sá. 3AN TNS previously COP FOC person-killer:sG even beginning:sG-LOC since. "He was a murderer from the beginning." (Jn 8:44)
```

For pronoun complements, the free forms are used.

 $H\bar{a}l(\dot{}^+$ can also appear as a prelinker adjunct and as an emphatic <u>27.6</u>. As emphatic "even" preceding $n\bar{\epsilon}$ or $l\dot{a}$ 'am $n\bar{\epsilon}$ "(together) with" and a \dot{n} -clause complement, it produces the meaning "despite, even though, even as":

```
Hali la'am nɛ on daa an yɛlsvm wvsa daan la, o da lieb nɔŋdaan...

Hālí là'am nɛ̄ ɔ́n dāa áň yɛ̄l-svím wv̄sa dâan lā,

Even together with βAN:NZ TNS COP matter-goodness all owner:SG ART,

ò dà lìəb nɔ̄ŋ-dâan...

BAN TNS become poverty-owner:SG...

"Despite his having possessed every blessing, he became poor..." (2 Cor 8:9)
```

Zugsɔb yεl ye, Hali nε man vve nwa...

```
Z\bar{u}g-s5b y\acute{e}l y\bar{e}, H\bar{a}l(n\bar{e} m\acute{a}n v\bar{v}e n/m/a... head-NULL.AN say that even with 1SG:NZ be.alive this ... "The Lord says: Even as I live .." (Rom 14:11)
```

hali nɛ man daa sɔbi tisi ya si'em la, m daa pv sɔbi li hālí nē mán dāa sɔ̄bı ø tísì yā sī'əm lā even with 1sg:nz tns write cat give 2PL.OB INDF.ADV ART \dot{m} dāa pv sɔ̄bí lī ...
1SG TNS NEG.IND write 3IN.OB ...

"Despite how I wrote to you, I did not write it ..." (2 Cor 7:12)

19 Verb phrases

19.1 Structure

The core of the verb phrase is a verb word along with bound particles which, together with verb flexion, mark tense, aspect, mood and polarity. Some verb complements are left-bound liaison words; remaining complements and adjuncts follow in that order, after which VP-final particles may occur.

The VP is subject to independency marking. This is primarily a tone overlay, but there are associated segmental features: the particle $y\bar{a}^+$ after phrase-final perfective forms and the dual-aspect verb imperative flexion $-m^a$ appear only when the tone overlay is present.

The system separates tense, marked by preverbal particles, from aspect, marked by verb flexion and postverbal $n\bar{\varepsilon}^{+/}$. As is common cross-linguistically, future reference is marked by mood. Negative markers vary with mood. Mood itself is marked primarily by such preverbal particles, but the flexion $-m^a$ of dual-aspect verbs is a portmanteau marker of imperative mood, positive polarity and independency.

The VP shows no agreement. Apparent number agreement in imperatives is actually due to the incorporation of the postposed 2nd pl subject pronoun ^{ya}.

	Tense		Mood	Preverb		LW1	LW2	
lὲε	dàa	nàm	ø ↔ pū	pùn	VERB	n ^ε	m ^a	nē+/
	sàa	<i>ἤγε̄ε(tι)</i>	ø ↔ dā	lèm		ya	f	
	Ø		nà ↔ kừ	tì			О	
	pà'			kpὲlιm			/ı+	
	sà			là'am			tı+	
	dāa			dèŋım			ya ⁺	
	dà						ba+	

ø marks slots where the absence of a particle can be contrastive.

The particles in the column "Mood" also mark polarity: positive \leftrightarrow negative.

LW1, LW2 are slots for left-bound liaison words 19.7.3.

For $l \hat{\epsilon} \epsilon$ "but" see <u>19.7.1</u>; for $n \hat{a} m$ "still" and $n \hat{\epsilon} \epsilon (t \iota)$ "habitually" see <u>19.3.2</u>; for aspectual $n \hat{\epsilon}^{+/}$ see <u>19.2.1</u>.

Tone Pattern A verbs have all-M tones in the irrealis mood 6.3.

19.2 Aspect

The basic aspect distinction is **perfective** versus **imperfective**. Dual-aspect verbs distinguish aspects by flexion: the unmarked stem form is perfective, the suffix *-da forms the imperfective, and a form with *-ma is used for imperative when the verb word itself carries the independency-marking tone overlay 19.6.2.2. Single-aspect verbs have a single form which is always imperfective.

The terms **dynamic** and **stative** are used in this description as labels for verb classes, not aspects. Dynamic verbs can be morphologically dual-aspect or single-aspect. They typically express occurrences, but can also express states: the imperfective form of a dynamic verb can have habitual/propensity meaning, which can be regarded either as expressing multiple occurrences or as a state, describing the character of the subject, and the perfective of dynamic verbs which express a change of state in the subject can express the resulting state itself. Stative verbs are all single-aspect. By default, they express persistent/abiding states.

19.2.1 Aspectual *nε*

Following a verb word with no free words intervening, the VP focus particle $n\bar{\epsilon}^{+/}$ 27.1.2 by default marks a contrast with another time at which the situation expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." When $n\bar{\epsilon}^{+/}$ is used in this way, the time referred to is not coextensive with the time of the situation (CGEL pp125 ff); in the terminology of Klein 2013, there is a "topic-time contrast." With imperfective aspect, this happens when the time referred to is strictly contained within the time of the situation: the meaning is similar to the English "progressive", and is similarly not freely used with verbs which by default express abiding states. With perfectives expressing events, the time referred to and the time of the situation always coincide, and aspectual use of $n\bar{\epsilon}^{+/}$ is not possible; however, resultative perfectives express a state resulting from the action of the verb, and because this state is not present prior to the action, there is invariably a topic-time contrast. Accordingly, aspectual $n\bar{\epsilon}^{+/}$ after a perfective form marks it as resultative; conversely, if a perfective verb form does not express a change of state in the subject, any following $n\bar{\epsilon}^{+/}$ cannot be aspectual.

 $N\bar{\epsilon}^{+/}$ may not be used at all in certain syntactic contexts, and may not appear a second time in an aspectual sense if it is already present focusing a constituent. Furthermore, $n\bar{\epsilon}^{+/}$ can only be interpreted aspectually if no free words intervene between the particle and the verb, and the VP has positive polarity and indicative mood. When aspectual senses are not excluded by the meaning of the verb itself, the relevant aspect distinctions still occur, but are formally unmarked:

 \dot{O} $k\dot{u}esid\bar{\iota}_b\acute{a}$ $n\bar{\epsilon}_c$ "She's selling them."

```
Ò kùəsid nē sūmma
                                         "She is selling the groundnuts."
                                    Ιā.
       3AN sell: IPFV FOC groundnut: PL ART.
but
       Ò kùəsid sūmma
                                 l\bar{a} n\bar{\epsilon}. "She sells/is selling the groundnuts."
       3AN sell: IPFV groundnut: PL ART FOC. (VP focussed: "They're not free.")
       Ò zàbid.
                                         "He fights."
       3AN fight: IPFV.
       Ò zàbid
                    nē.
                                         "He's fighting."
       3AN fight: IPFV FOC.
       Òρῦ
                                         "He's not fighting/He doesn't fight."
but
                  zábidā +ø.
       3AN NEG.IND fight: IPFV NEG.
```

 $N\bar{\epsilon}^{+/}$ 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 <u>27.4</u>:

```
Nīigí ɔ̀ñbɪd nē mɔ̄ɔd. Bà nùud nē kû'em.
Cow:PL chew:IPFV FOC grass:PL. 3PL drink:IPFV FOC water.
"Cows eat grass. They drink water." ("What do cows eat? and drink?")
```

 $N\bar{\varepsilon}^{+/}$ is omitted in replying to questions or commands by repeating the verb:

```
A: G \supset sim! "Look!" B: M \supset sid! "I'm looking!" A: F \supset g \supset sid née? "Are you looking?" B: M \supset sid! "I'm looking!"
```

19.2.2 Perfective

Perfective is the unmarked aspect. It is not incompatible with a present tense interpretation, often corresponding to the English "simple present", which is likewise unmarked over against the progressive form. It is the usual aspect found with the irrealis mood to express future events, and in $y\dot{a}$ '-clauses 23.2. Nevertheless, even without tense marking, the perfective often has an implication of completion, in contrast with the imperfective.

The perfective frequently does occur without tense marking, either explicit or implicit from context 19.3.5. With most verbs this simply expresses a completed event or process with the time unspecified, creating the implication that the event is still currently relevant; the sense resembles the English "present perfect":

```
Sāa dāa ní.

"It rained." (before yesterday.)

Rain TNS rain.

Sāa ní yā.

"It has rained."

The time is unspecified: "Perhaps the grass is
```

The time is unspecified: "Perhaps the grass is still wet, or I am explaining that the area is not

really a desert." (WK)

Perfective appears with present meaning with events and processes which can be conceptualised as being coextensive with the moment of utterance:

```
\dot{O} y\dot{\epsilon}l y\bar{\epsilon} ... "He says ...." (translating for the foreign doctor) 3AN say that ...
```

Performatives naturally fall into this category:

but

```
    M pô'vs yā.
    "Thankyou", "I thank you."
    (cf Hausa Naa goodèe, also perfective)
    M siák yā.
    "I agree."
```

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 ňyέ nū'-bíbιsá àtáň'.
15G see hand-small:PL NUM:three.
"I can see three fingers."
M têň'ες kà ... "I think that ..."
15G think and ...
```

With verbs which express a change of state in the subject the perfective may express the resulting state; such resultative perfectives are followed by aspectual $n\bar{\varepsilon}^{+/}$ whenever syntactically permissible, because there is always a topic-time contrast with the situation preceding the action of the verb:

```
Lì bòdıg yā. "It's got lost."
```

Verb phrases 19.2.2

```
but Li bigliarding . "It's lost." 
3IN lose FOC.
```

Most verbs expressing a change of state in the subject are either intransitive or patientive ambitransitive:

```
\dot{O} kpì n\bar{\epsilon}.
                                          "He's dead."
зам die гос.
M gέň
                                          "I'm tired."
                nē.
1SG get.tired Foc.
B\grave{a} k\grave{v}dvg n\bar{\varepsilon}.
                                          "They're old."
3PL grow.old Foc.
                                          "It's full."
Lì p\dot{\varepsilon}'\varepsilon l n\bar{\varepsilon}.
3IN fill FOC.
                                          "It's closed."
Lì yà
          nē.
3IN close Foc.
M bύg
                 nē.
                                          "I'm drunk." (← Hausa bùqu)
1SG get.drunk FOC.
Ò lèr
                                          "He's ugly." WK sic
                nē.
зам get.ugly гос.
Lì sòbig n\bar{\epsilon}.
                                          "It's black." WK sic
зім blacken гос.
```

Agentive transitive verbs of dressing express a change of state in the subject:

```
\dot{M} y\dot{\varepsilon} f\bar{u}ug. "I've put a shirt on." 1SG put.on shirt:SG. \dot{M} y\dot{\varepsilon} n\bar{\varepsilon} f\bar{u}ug. "I'm wearing a shirt." 1SG put.on FOC shirt:SG.
```

A perfective form can *only* be interpreted as resultative if it expresses a change of state in the subject:

```
\dot{M} dá' n\bar{\varepsilon} búŋ. "I've bought a donkey." 
1SG buy FOC donkey:SG. ("What have you bought?"; focussed object)
```

Assume-stance verbs do not express a change of state in the subject, because stance verbs are not stative in Kusaal. Accordingly, the perfective of an assume-stance verb cannot accept a resultative reading:

```
\dot{O} dìgin n\bar{\epsilon}. "He's lain down." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."
```

In catenation and in absolute clauses, the choice of perfective over imperfective implies that the event is complete. Consequently, in catenation the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order <u>22.1</u>. Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

```
Ka dapa ayi' yɛ fupiela zi'e ba san'an. Kà dāpá_àyí' yɛ́ fū-píəlà_ ø zì'e bà sā'an. And man:PL NUM:two dress shirt-white:PL CAT stand 3PL among. "Two men dressed in white were standing with them." (Acts 1:10)
```

In contrast, an imperfective may be followed by a perfective:

```
Nwādisá àtáň' kà fù ná mōr bīig lā n kē nā.
Month Num:three and 2SG IRR have child:SG ART CAT come hither.
"Bring the child here in three months." ("having the child, come here.")
```

With absolute clauses as adjuncts, the temporal relationship to the main clause is determined by aspect, with perfective in the absolute clause implying priority and imperfective simultaneity $\underline{24.2}$. In the same way, narrative generally features series of tense-unmarked perfectives describing events strictly in order $\underline{19.3.5}$.

Perfectives may appear in general statements such as proverbs, which in such cases should probably be regarded as mini-anecdotes:

```
Kukoma da zab taaba ason'e bi'ela yela.

Kùkòma dá zàb tāabá à-sɔ̄ň'e bī'əlá yɛ̀la.

Leper:PL TNS fight each.other PERS-better.than slightly about.

"Lepers once fought each other about who was a bit better." KSS p40
```

19.2.3 Imperfective

1sg be.sitting.

3IN get.cool:IPFV FOC.

Without aspectual $n\bar{\varepsilon}^{+/}$, the imperfective of dynamic verbs is "habitual", expressing multiple occurrences, or a propensity of the subject to the achievement, accomplishment or activity expressed by the verb:

Nīdıb kpîid. "People die."

Person:PL die:IPFV.

Nīigí ɔ̀ňbıd mɔ̄ɔd. "Cows eat grass."

Cow:PL chew:IPFV grass:PL.

M zíň'i. "I sit."

With aspectual $n\bar{\epsilon}^{+/}$, the imperfective of dynamic verbs has a meaning analogous to the English "progressive."

 $N\bar{a}$ '-si ∂b à δmb id $n\bar{\epsilon}$ $m\bar{\delta} d$. "Some cows are eating grass." Cow-INDE.PL chew:IPFV FOC grass:PL.

 \dot{M} $z(\ddot{n}'i$ $n\bar{\epsilon}$. "I'm sitting." 15G be.sitting Foc.

With verbs describing events the sense is often "time-limited habitual":

 $N\bar{l}dlb$ $kp\hat{l}id$ $n\bar{\epsilon}$. "People are dying." Person:PL die:IPFV FOC.

Patientive ambitransitive verbs expressing changes of state can be used in progressive senses:

 \dot{M} $y\hat{\jmath} j j d$ $n\bar{\epsilon}$ $k\acute{v}l i j l \bar{a}$. "I'm closing the door."

1SG close:IPFV FOC door:SG ART. $\ddot{K}\dot{v}l i j l \bar{a}$ $y\hat{\jmath} j j d$ $n\bar{\epsilon}$. "The door is closing."

Door:SG ART close:IPFV FOC. $\ddot{L}i m\dot{a}' a d$ $n\bar{\epsilon}$. "It is getting cool." $(m\bar{a}'e^{+/} "get cool")$

However, passives <u>19.8.1.1</u> cannot be used with progressive meaning:

Dāam lā nûud. "The beer gets drunk." WK

Beer ART drink: IPFV.

Dāam nûud zīná. "Beer gets drunk today." WK

Beer drink: IPFV today.

but $D\bar{a}am l\bar{a} n\hat{u}ud n\bar{\epsilon}$. Only "The beer is for drinking." WK

Beer ART drink: IPFV FOC. ("Not for throwing away."); Focus on the verb:

not "The beer is being drunk."

* $D\bar{a}am\ n\hat{u}ud\ n\bar{\epsilon}$ was rejected by WK altogether, because without a context the subject was intepreted as generic.

Stative single-aspect verbs express persistent or abiding states; accordingly they do not normally display topic-time contrasts or take aspectual $n\bar{\epsilon}^{+/}$:

O gim. "She's short."

зам be.short.

M mór pu'ā. "I have a wife."

1SG have wife:SG.

With stative verbs, the default interpretation of following $n\bar{\varepsilon}^{+/}$ is therefore as focussing the VP or a VP constituent:

O gim $n\bar{\epsilon}$. "He's short." ("I was expecting someone taller.")

3AN be.short Foc.

 \dot{M} mốr nẽ pụ'ā. "I have a woman."

1SG have FOC woman:SG. (not "wife": implies an irregular liaison, WK)

However, if there is an explicit time reference in the clause itself (even just a tense marker) it can constrain the meaning to a temporary state, limited to a particular time period, with a contrast between the time referred to and other times when the state was not in effect. [This requirement for an explicit time marker in the same clause may reflect acceptability judgments based on short isolated clauses.]

Lì $v \dot{\epsilon} n$ $n \bar{\epsilon}$. "It's beautiful." (Focus on the verb.)

3IN be.beautiful Foc.

but $N\bar{a}nn\acute{a}n\bar{a}$, $l\grave{\iota}$ $v\grave{\epsilon}n$ $n\bar{\epsilon}$. "Just now, it's beautiful." Now, 3IN be beautiful Foc.

Lì dāa $v \not\in n$ $n \bar{\epsilon}$. "It was beautiful." WK: "I gave you a cup, and it was OK then, but now you've spoiled it."

Sān-kán lā, lì dāa zúlìm nē.

Time-dem.sg art, 3in ths be.deep foc.

"At that time, it was deep."

 $M\dot{v}$ 'ar $l\bar{a}$ $d\bar{a}a$ $z\acute{u}l\grave{l}m$ $n\bar{\epsilon}$. "The lake was deep."

Lake:sg art this be.deep foc. (Implying, "Now it's shallow." WK)

If the following constituent does not permit focussing with $n\bar{\varepsilon}^{+/}$ 27.1.2, $n\bar{\varepsilon}^{+/}$ must be aspectual even if the verb is stative and there no explicit time marker:

M mór bīisá àtáŋā.

1SG have child:PL NUM:three.exactly.

"I've got exactly three children."

but M mór nē bīisa 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 áň súŋā. "It was good." WK

3IN TNS COP good:ADV.

Lì dāa á $n\bar{\varepsilon}$ súnā. "At the time, it was good." WK

3IN TNS COP FOC good:ADV.

Lì à nε sύηā. "It's good." ("Now; it wasn't before." WK)

3IN COP FOC good:ADV.

Emphatics 27.6 do not reject focus with $n\bar{\varepsilon}^{+/}$:

bozugo o ane fo biig men.

bɔ̄ zúgɔ´ ò à né fù bīig mén.

Because 3AN COP FOC 2SG child:SG also.

"Because he is your child too." (Genesis 21:13)

19.3 Tense

dàa

19.3.1 Tense particles

Tense particles come first in the VP, preceded only by $l\dot{\epsilon}\epsilon$ "but." They are mutually exclusive. They comprise

	day arter territori
sàa	"tomorrow"
Ø	present, or implicit (see below)
pà'	"earlier today"
sà	"yesterday"
dāa	before yesterday
dà	before the time marked by <i>dāa</i>

"day after tomorrow"

The day begins at sunrise:

```
Fù sá gbìs w\bar{\epsilon}l\acute{a} +\phi? "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. "Let him fight the chief tomorrow." 3AN TNS fight chief:sg ART.
```

 $D\bar{a}a$ means "before yesterday" but can be used freely for even remote past. The NT has numerous parallel passages where the same events are narrated in one passage with $d\bar{a}a$ and in another with $d\dot{a}$, but when both markers occur, $d\dot{a}$ always expresses time prior to $d\bar{a}a$. (For other "pluperfects", cf tense marking in content clauses 25.2, and in \dot{n} -clauses within narrative 19.3.5.)

19.3.2 Auxiliary tense particles

Two particles may occur in the slot following tense particles but preceding polarity/mood particles.

Nàm means "still" or with a negative "yet":

```
Tìum l\bar{a} nám b\dot{\epsilon}\epsilon +\emptyset? "Is there any medicine left?" Medicine ART still EXIST PQ? ("Does the medicine still exist?")
```

```
dunia nam pv pin'il la
dūnıyá_ø nàm pv pīň'il lā
world:sg nz still NEG.IND begin ART
```

"before the world began" (Mt 25:34) ("The world having not yet begun.")

 \dot{M} nám $z\bar{\iota}'$ σ $\dot{m}y\bar{\epsilon}$ $gb\bar{\iota}g\iota mn\epsilon + \sigma$.

1SG still NEG.KNOW CAT see lion:SG NEG.

"I've never seen a lion." SB (see 22.2 on *n*-catenation idioms)

 $Ny\bar{\epsilon}\varepsilon$ or $ny\bar{\epsilon}\varepsilon$ tí (KT $\bar{\epsilon}\varepsilon n$ tí, NT nyii ti, KB $\varepsilon\varepsilon n$ ti) means "habitually." The main verb is naturally imperfective.

Ò ňyēɛ zábìd nâ'ab lā.

3AN usually fight: IPFV chief: SG ART.

"He's accustomed to fight the chief." WK

Ò ἤyēε gɔ̄sɪd nâ'ab lā.

3AN usually look.at:IPFV chief:SG ART.

"He's accustomed to look at the chief." WK

Ò dāa ňyēɛ zábìd nâ'ab lā.

3AN TNS usually fight: IPFV chief: SG ART.

"He was accustomed to fight the chief." WK

Ò ĒEŇ tí zàbıd nē nâ'ab lā.

3AN usually fight: IPFV FOC chief: SG ART.

"He's accustomed to fight the chief." KT

 \grave{O} $\bar{\epsilon}\epsilon\check{n}$ $t(z)\check{n}'i$ $kp\bar{\epsilon}l\acute{a}$. "She's accustomed to sit there." KT 3AN usually be sitting there.

 \grave{O} $\bar{\epsilon} \epsilon \check{n}$ $t\acute{\iota}$ $d\bar{\iota} g \iota$ $kp \bar{\epsilon} l \acute{a}$. "She's accustomed to lie there." KT 3AN usually be.lying there.

Ti εεnti pυ sɔbid dinε ka ya na karim ka kυ nyaŋi gban'e li gbinnε.

grab 3IN base:sg NEG.

"We do not write what you will read and not be able to grasp the meaning of." (2 Cor 1:13)

19.3.3 Discontinuous past

My informants use the **discontinuous-past** marker n^{ε} to make an earlier-today past with indicative meaning:

```
M onbidī-n sūmma. "I was eating groundnuts."
```

This implies "and now I'm not", a sort of anti-current-relevance. Such a "discontinuous" past is proposed for many languages (especially in West Africa) in Plungian and van der Auwera 2006; n^{ε} fulfils their criteria for a typical discontinuous past well. They note (5.2) that such markers often acquire attenuative, hypothetical or counterfactual senses, which are much the commonest roles of n^{ε} in Kusaal 23.1.1.

19.3.4 Periphrastic future constructions

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") Note the use of the *perfective* in

```
\dot{M} \dot{k} \dot{u} \dot{y} \ddot{a}. equivalent in usage to "I'm going home now." 1SG go.home PFV. Perfective as an instantaneous present 19.2.2
```

There are two periphrastic indicative constructions for "to be about to ...": (a) $b \dot{>} c d^a$ "want" + gerund. The subject need not be animate; the construction is only possible with gerunds from dynamic verbs.

```
Tree:SG ART want fall:GER. "The tree is about to fall."
```

Yυ'υŋ bɔɔd gaadug, ka bɛog bɔɔd nier. Yú'υŋ bɔ̂ɔd gáadùg kà bēog bɔ̂ɔd nie

Night want pass:GER and morning want appear:GER.

right want passion and morning want appearation.

"The night is about to pass and tomorrow is about to appear." (Rom 13:12)

(b) subject + $y\bar{\varepsilon}$ -purpose clause; the subject must be animate. (Cf also 25.2.)

```
\dot{M} y\dot{\epsilon} \dot{m} k\mu\bar{a} s\bar{u}mma. "I'm going to hoe groundnuts." 1SG that 1SG hoe groundnut:PL.
```

```
\dot{M} y\dot{\epsilon} \dot{m} \dot{k}\dot{j}\dot{a} n\bar{l}m. "I'm going to cut meat" 15G that 15G cut meat:5G.
```

19.3.5 Implicit tense marking and narrative

Tense markers are frequently absent. As a basic principle, explicit marking is not needed when the time reference is recoverable from the linguistic context, but the occurrence of tense markers is not arbitrary, and constrasts with \emptyset may occur.

Real-world context does not in itself licence omission of tense markers. If there is no other time-referring element in the clause, the absence of any tense particle is meaningful. By default, it simply means that the tense is present, whether the aspect is imperfective or perfective:

```
Nīdıb kpîid nē. "People are dying."

Person:PL die:IPFV FOC.

Nīdıb kpîid. "People die."

Person:PL die:IPFV.

Ö mòr pu'ā. "He has a wife."

3AN have wife:SG.

"She's died."

("present perfect" 19.2.2)
```

In isolation, it is not possible to interpret such expressions as referring to the past (see below on informal narrative.)

Tense-markers may be omitted with the irrealis mood, with $-n^{\epsilon}$ as today-past, or with another time reference in the clause itself, like a time adverb:

```
Fù sáa nà kūl.
                                      "You'll go home tomorrow."
      2SG TNS IRR go.home.
      Fù sáa nà kūl
                          bēog.
or
      2SG TNS IRR go.home tomorrow.
      Fù nà kūl
                      bēog.
or
      2SG IRR go.home tomorrow.
      Fù ná kūl.
                                      "You will go home."
cf
      2SG IRR go.home
                                      (today, tomorrow, next week ...)
      M pá' òňbidī-n
                                      "I was eating groundnuts earlier today."
                        sūmma.
      1SG TNS chew:IPFV-DP groundnut:PL.
      M źňbidī-n
or
                     sūmma.
      1SG chew:IPFV-DP groundnut:PL.
```

```
    M sá zàb nâ'ab lā sû'es. "I fought the chief yesterday."
    1SG TNS fight chief:SG ART yesterday.
    or M záb nâ'ab lā sû'es.
    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 an explicit time expression show tense marking much more often than not, *unless* they are introduced by $k\grave{a}$; the first 12 chapters of Acts in the 1996 version show over five times as many tense-marked as unmarked forms. On the other hand, clauses introduced by $k\grave{a}$ only have tense marking to signal that they disrupt the narrative flow, as with flashbacks or descriptive passages. KB/NT narrative varies in the proportion of tense-marked clauses without $k\grave{a}$ to unmarked clauses with $k\grave{a}$; the Balaam's Donkey narrative 30.1 shows a higher proportion of tense-marked clauses without $k\grave{a}$ than typical NT narrative, for example. However, throughout KB, narrative favours long sequences of coordinated $k\grave{a}$ -clauses with perfective aspect without tense marking, narrating the sequence of events in order. Here $k\grave{a}$ itself corresponds to zero in English.

Less formal sources like the Three Murderers text 30.2 drop tense-marking in clauses without $k\grave{a}$ within narrative much more often than the Bible versions. In view of the consistency of the tense marking principles of KB/NT, narrative clauses of this kind are probably analogous to the "historic present" of English informal conversational narration (CGEL p130); significantly, $kp\bar{\epsilon}$ "here" and spatio-temporal deictics like $k\grave{a}\eta\bar{a}$ "this" are also common in such texts.

In any case, tense-marking must be absent in clauses introduced by $k\grave{a}$ which are carrying the narrative forward, and conversely, disruptions in narrative flow must normally be tense-marked (with exceptions as noted below.) Informants interpreted isolated $k\grave{a}$ -clauses without tense marking as fragments of narratives expressing events, leading to consistent rejection of any aspectual interpretation of the particle $n\bar{\epsilon}^{+/}$ in favour of constituent focus; but with tense marking, $n\bar{\epsilon}^{+/}$ was taken as aspectual just as in clauses without $k\grave{a}$:

```
"It's lost."

"It's lost."

Kà lì bódìg nē.

Rejected by WK; accepted after some thought by DK, explained as contradicting "someone hid it" i.e. as contrastive focus

Bà kòdıg nē.

"They're old."

"They're old."
```

Kà bà kúdìg nē. And 3PL get.old FOC. "And they're old." Rejected by WK; accepted by DK with the gloss "You're saying they're old when he promised to give you new ones", i.e. as contrastive focus

But $K\grave{a}$ $l\grave{\iota}$ $d\bar{a}a$ $b\acute{o}d\grave{\iota}g$ $n\bar{\epsilon}$. And SIN TNS get.lost FOC.

"And it was lost."

Kà bà sá kùdıg nē. Kà bà dāa kúdìg nē.

etc all acceptable as "and they were old."

Thus, both with and without $k\grave{a}$, tense-marking signals disruption of the narrative flow:

Ka Yesu **daa** an yuma pii nε ayi' la, ka ba keŋ maluŋ la wuu ban εεnti niŋid si'em la. Ka maluŋ la dabisa naae la, ka ba lɛbidi kun. Ka Yesu kpɛlim Jerusalem teŋin ka o ba' nɛ o ma pu baŋ ye o kpɛlim yaa. Ba **daa** tɛn'ɛs ye o dɔlnɛ ba teŋ dim la, ka keŋ ...

Kà Yesu ø dāa áň yómà pīi né àyí' lā, kà bà kēŋ málỳŋ And Jesus NZ TNS COP year:PL ten with NUM:two ART, and 3PL go sacrifice:SG lā wūυ bán ēεň tí nìnιd sī əm lā. Kà màlun lā dábisà ø ART like 3PL:NZ usually do:IPFV INDF.ADV ART. And sacrifice:SG ART day:PL nāe lā, kà bà lébīdì ø kūn. Kà Yesu kpélìm Jerusalem finish ART, and 3PL return: IPFV CAT go.home: IPFV. And Jesus remain Jerusalem tέnī-n kà ò bā' nέ ò mà ρū bán vé ò kpèlim land:sg-loc and 3AN father:sg with 3AN mother:sg NEG.IND realise that 3AN remain yāa ⁺ø. Bà dāa tēň'εs yέ ò dòl nέ bà tèη-dìm lā, kà kēη... PFV NEG. 3PL TNS think that 3AN accompany FOC 3PL land-person.PL ART, and go... "When Jesus was twelve years old, they went to Jerusalem to sacrifice as they were accustomed to. When the days of sacrifice were over, they were going home, but Jesus remained behind in Jerusalem, and his father and mother didn't realise that he had stayed. They thought that he was accompanying their fellow-countrymen. And they went ..." (Lk 2:42-44)

Note the "aside" O mà **dá** à $n\bar{\epsilon}$... in the genealogy of Jesus in Matthew 1.1ff 1996, which has dozens of clauses of the pattern kà X du'á Y "and X begat Y":

Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma **da** anɛ Uria pu'a. Ka Solomon du'a Rehoboam.

Kà Jese dự'á nâ'ab David. Kà David dự'á Solomon. Ò mà And Jesse beget king:sg David. And David beget Solomon. 3AN mother:sg dá à nē Uria pự'á. Kà Solomon dự'á Rehoboam...

TNS COP FOC Uriah wife:sg. And Solomon beget Rehoboam...

"And Jesse begat King David. And David begat Solomon. His mother **was** Uriah's wife. And Solomon begat Rehoboam..." (Mt 1:6-7)

In contrast, the genealogy in Luke 3:23ff 1996, which moves backwards in time, has dozens of consecutive examples of

```
k\grave{a} X s\^{a}am d\acute{a} \grave{n}\bar{\epsilon} Y "and X's father was Y" and X father:sg TNS COP FOC Y
```

Disruptions in narrative flow normally must be tense-marked, but very long series of coordinated "asides" do sometimes drop tense marking; in KB the genealogy in Luke shows $ka\ X\ saam\ da\ ane\ Y$ at the beginning of paragraphs in the text, but $ka\ X\ saam\ an\ Y$ otherwise.

Tense-unmarked dynamic-verb imperfectives can appear without aspectual $n\bar{\epsilon}^{+/}$ in narrative to express several instances of an event:

```
Ka on kpɛn' la, o yɛli ba ye [...]. Ka ba la'ad o. Kà ón kpɛň' lā, ò yɛ́lì bā yɛ̄ [...]. Kà bà lá'ad·ō Ø. And 3AN:NZ enter ART, 3AN say 3PL.OB that ... and 3PL laugh:IPFV 3AN.OB. "After he came in, he said to them [...]. But they laughed at him." (Mk 5:39-40)
```

 \dot{N} -clauses normally mark tense independently, but within narrative they mark tense relative to the narrative timeline:

```
\bar{\mathcal{D}}n dāa nyēt súnā ón dāa án bí-līa láa +\emptyset? 3AN.CNTR TNS see:IPFV good:ADV 3AN:NZ TNS COP child-baby:SG ART PQ? "Did he see well when he was a baby?"
```

but Ka Pita yv'vn tien Yesu n sa yel si'el la ye ...

```
Kà Pita y\bar{v}'vn tíeň Yesu n sà y\hat{\epsilon}l sī'əl lā y\bar{\epsilon}...
```

And Peter then remember Jesus NZ TNS say INDF.IN ART that ...

"And Peter then remembered what Jesus had said the day before..." (Mt 26:75)

Main clauses lack tense marking after absolute clauses preposed with $k\grave{a}$ 27.2, regardless of whether tense marking appears in the absolute clause (132/136 cases in Mark, Luke, and Acts 1-14, 1976.) After absolute clauses as postlinker adjuncts 20.2.1, tense marking in main clauses follows the usual principles for narrative, with absolute clauses agreeing with their main clauses in tense-marking (69/78 cases.)

 $N\bar{\varepsilon}$ is perhaps marking constituent focus in

```
Ka ban ken la, Jesus gbisid ne.
```

```
Kà bán kēn lā, Jesus gbīsıd nē.
```

And 3PL:NZ GO:IMPF ART, Jesus sleep:IPFV FOC.

"As they were travelling, Jesus was sleeping." (Lk 8:22-23, 1976)

KB ka gbeem zeeg Yesu ka o gbisid. "sleep overcame Jesus and he slept."

If $n\bar{\varepsilon}$ were aspectual, one would have expected tense marking.

Tense marking is not affected by clause adjuncts other than time expressions or by the "resumptive" $y\bar{\varepsilon}$ of indirect speech 25.2.1; cf:

Amaa ba da zot o ne dabiem, ban da pv niŋ o yadda ye o sid ane nya'andol la zug. Amaa ka Barnabas zaŋ Saul n mor o keŋ ...

```
Àmáa bà dà zòt·ō ø nē dábīəm, bán dà pō níŋ·ò ø
But 3PL TNS fear:IPFV 3AN.OB FOC fear, 3PL:NZ TNS NEG.IND do 3AN.OB
yáddā yé ò sìd à nē ňyâ'an-dòl lā zúg. Àmáa kà Barnabas
faith that 3AN truly COP FOC after-follower:SG ART upon. But and Barnabas
záŋ Saul n mōr·ó ø ø kēŋ ...
take Saul CAT have 3AN.OB CAT go ...
```

"But they were afraid of him, because they did not believe that he was really a disciple. But Barnabas brought Saul ..." (Acts 9:26-27)

A tense-marked interruption in the narrative flow may itself contain clauses coordinated with $k\grave{a}$; the tense marker of the first such clause is not repeated, but the following $k\grave{a}$ -clauses are not carrying on the narrative and can thus have any aspect:

Ba da pu mor biiga, bozugo Elizabet **da** ane kundu'ar, ka babayi la wusa me **kudigne**.

```
Bà dà pō mōr bīiga +ø, bōzúgō Elizabet dá à nē

3PL TNS NEG.IND have child:sg NEG, because Elizabeth TNS COP FOC

kύndờ'ar kà bà bàyí' lā wōsa mέ kờdιg 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 nε in the KB ka babayi' la wυsa mε kυdig hali.)
```

19.4 Mood

There are three moods: indicative, imperative and irrealis. The distinction among them is in itself quite straightforward, but the *marking* of mood involves portmanteau morphs which also express polarity, and in the case of the imperative, independency as well.

Indicative is the unmarked mood. It uses the negative particle $p\bar{v}$. It is used for statements and questions about the present and past, and timeless events and states. It can express the immediate future in periphrastic constructions. It is the only mood which permits the use of the particle $n\bar{\varepsilon}^{+/}$ with aspectual meaning.

Imperative mood is negated by $d\bar{a}$. With dual-aspect verbs carrying the independency-marking tone overlay it shows a special inflection $-m^a$ 19.6.2.2 but otherwise the verb word coincides in form with the indicative.

 \dot{O} $\dot{v}\dot{v}l$ $t\hat{\iota}\iota m$ $k\grave{a}$ \grave{o} $n\acute{o}b\grave{\iota}r$ $p\bar{v}$ $z\acute{a}b\bar{\varepsilon}$ $^{+}$ ø. 3AN swallow medicine and 3AN leg:SG NEG.IND fight NEG. "She took medicine and her leg didn't hurt." WK

 \grave{O} $v\grave{v}l$ $t\^{l}lm$ $k\grave{a}$ \grave{o} $n\acute{o}b\grave{l}r$ $d\~{a}$ $z\acute{a}b\~{\epsilon}$ $^+$ Ø. 3AN swallow medicine and 3AN leg:SG NEG.IMP fight NEG. "She took medicine so her leg wouldn't hurt." WK

The $-m^a$ imperative of dual-aspect verbs is perfective by default:

Kòňsım! "Cough!"

Imperatives without independency-marking tone overlay make perfective/imperfective distinctions in the usual way by verb flexion:

Dākɔ́ňsē +ø!"Don't cough!" (To a patient who has coughedNEG.IMP cough NEG!during an eye operation with local anaesthetic)Dākɔ́ňsɪdā +ø!"Don't cough!" (Explaining before the operationNEG.IMP cough:IPFV NEG!what to avoid throughout)

See $\underline{21.3}$ on the postposed 2pl pronoun ^{ya} in commands to several people. The particle $n\bar{\varepsilon}^{+/}$ cannot appear in its aspectual sense with the imperative, but àlá "thus" after imperatives imposes continuous/progressive meaning:

Dìm! "Eat!"
Dìmί àlá! "Carry on eating!"

Informants contract -(-à- either to -(- or to -á-: [dɪmɪla] [dɪmala].

Dìmī-ní àlá! "Keep ye on eating!" [dɪmɪnɪla] [dɪmɪnala] Eat:IMP-2PL.SUB ADV:thus!

Single-aspect verbs used as imperatives frequently add àlá:

Zì'é àlá! text zi'ela "Be still!" (Jesus to the storm, Mk 4:39, 1976)

Dìgī-ní àlá! "Keep (ye) on lying down." [dɪgɪnɪla] [dɪgɪnala] Be.lying.down-2PL.SUB ADV:thus!

Āa-ní àlá bāaňlím! "Be (ye) quiet!" COP-2PL.SUB ADV:thus quiet:ABSTR!

 $B\bar{\epsilon}\iota$ -n() ala) "Be ye there!" EXIST-2PL.SUB ADV:thus ADV:there!

Imperative mood is used in direct commands and prohibitions and in purpose clauses. Imperative mood follows another imperative in catenation.

Gòsımī_ø! "Look ye!"

Look: IMP 2PL. SUB!

 $D\bar{a}$ $g\bar{\jmath}s\varepsilon + \emptyset!$ "Don't look!"

NEG.IMP look NEG!

 $K\grave{\epsilon}l$ $k\grave{a}$ \grave{o} $g\bar{\jmath}s!$ "Let her look!"

Cause: IMP and 3AN look!

Kèm nā n gɔ̄s! "Come and look!"

Come: IMP hither CAT look!

Dòllī-ní m! "Follow ye me!"

Follow-2PL.SUB 1SG.OB!

Mòr nīn-báalìg! "Have pity!"

Have eye-pity!

Irrealis mood expresses future statements and questions and has the preverbal mood markers $n\grave{a}$ (positive) $k\grave{v}$ (negative.) Tone Pattern A verbs show a tone perturbation to all-M tonemes <u>6.3</u>. The irrealis distinguishes aspects by verb flexion like the indicative, but aspectual $n\bar{\varepsilon}^{+/}$ cannot occur. Perfective aspect occurs much more often than imperfective. Irrealis mood with past tense markers is contrary-to-fact, not future-in-the-past: see <u>23.1</u> for its use in conditionals.

Ò dāa ná zāb nâ'ab lā. "He would have fought the chief" (but didn't) 3AN TNS IRR fight chief:SG ART.

19.5 Polarity

VP negation markers combine this function with mood marking. They appear after tense markers but before preverbs. They induce the appearance of a clause final negative prosodic clitic 7.1. 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 $d\bar{a}$; conversely, forms which are negated by $d\bar{a}$ are imperative. Irrealis is negated by $k\dot{v}$, which replaces the positive irrealis marker $n\dot{a}$. Younger speakers sometimes use $k\dot{v}$ for $p\bar{v}$, but none of my informants accepts this.

```
\grave{O} z\grave{a}b n\hat{a}'ab l\bar{a}. "He's fought the chief." 3AN fight chief:SG ART.
```

 \dot{O} $p\bar{v}$ $z\acute{a}b$ $n\grave{a}$ 'ab $l\acute{a}a$ $^{+}$ ø. "He hasn't fought the chief." 3AN NEG.IND fight chief:SG ART NEG.

```
Zàm nâ'ab lā! "Fight the chief!" Fight:™ chief:sg ART!
```

 $D\bar{a}$ $z\acute{a}b$ $n\grave{a}'ab$ $l\acute{a}a$ $^+\varnothing!$ "Don't fight the chief!" NEG.IMP fight chief:SG ART NEG!

Ò nà zāb nâ'ab lā. "He'll fight the chief." 3AN IRR fight chief:sg art.

 \grave{O} $k\grave{v}$ $z\bar{a}b$ $n\hat{a}$ 'ab $l\acute{a}a$ $^{+}$ 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 $\underline{19.6.1.1}$. Negative prosodic clitics appear as usual.

 $K\bar{a}'e^+$ "not be, not have" appears as $k\bar{a}'$ before a complement 7.3. It is the negative to both "be" verbs, $\grave{a}e\check{n}^a$ "be something/somehow" and $b\grave{\epsilon}^+$ "be somewhere, exist" and also to $m\bar{\sigma}r^{a/}$ "have." $*P\bar{v}$ $b\acute{\epsilon}$ is not found, but $p\bar{v}$ $m\bar{\sigma}r$ is quite common; $p\bar{v}$ $\acute{a}e\check{n}$ is rare but can be found in contrastive contexts 19.11.2. Examples:

 $D\bar{a}u$ $l\bar{a}$ $k\bar{a}'$ $n\dot{a}'ab\bar{a}$ $^+$ ø. "The man isn't a chief." Man:sg art neg.be chief:sg neg.

 $D\bar{a}u$ $I\bar{a}$ $k\bar{a}$ ' $b\bar{i}iga$ $^+$ ø. "The man hasn't got a child." Man:sg art neg.have child:sg neg.

 $P \underline{\psi}$ \bar{a} $I \bar{a}$ $m \acute{o}r$ $b \bar{i} i g$, $a \acute{o}m \acute{a}a$ $d \bar{a} \underline{\psi}$ $I \bar{a}$ $k \bar{a}$ 'e $+ \not o$. Woman:sg art have child:sg but man:sg art neg. have neg. "The woman has a child but the man hasn't."

 $D\bar{a}u$ $l\bar{a}$ $k\bar{a}'e$ $^+$ ø. "The man isn't there." Man:sg art neg.be neg.

 $D\bar{a}\underline{u}$ $k\bar{a}'\underline{e}$ $d\acute{o}g\bar{v}$ -n $l\acute{a}a$ $^+$ \emptyset . "There's no man in the room." Man:sg neg.be room:sg-loc art neg.

 $D\bar{a}u$ $l\bar{a}$ $k\bar{a}$ ' $d\acute{o}g\bar{v}$ -n $l\acute{a}a$ $^{+}\varphi$. "The man is not in the room." Man:sg art neg.be room:sg-Loc art neg.

 $K\bar{a}'e^+$ has a clause-final variant $k\dot{a}'asig\epsilon$ (always LF):

 \dot{O} $b\bar{i}ig$ $k\acute{a}$ 'as $ig\bar{\epsilon}$ $^{+}$ Ø. "She has no child."

Mit "see that it doesn't happen that ..." <u>22.3</u> is always imperative. In this sense, the postposed 2pl subject ^{ya} does not occur, even in address to several people.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi.

Mìt kà yà mâal yà tùvm-sỳma nīd ι b tûen yé bà gōs ϵ + \emptyset . NEG.LET.IMP and 2PL do 2PL deed-good:PL person:PL before that 3PL look.at NEG. "See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1996)

KB has mid without a following negative clitic: Mid ka ya maali ya tuum suma nidib tuon ye ba gos.

Mìt also appears with a NP object in the sense "beware of ..."; no final negative clitic appears in this case:

```
Miti ziri nodi'esidib bane kene ya sa'an na la.

Mìtī ø zīrí nò-dí'əsìdıb bánì kēnní yà sā'an nā lā.

Beware 2PL.SUB lie mouth-receiver:PL REL.PL come:IPFV 2PL among hither ART.
```

"Beware of false prophets who come among you." (Mt 7:15, 1996)

 $Z\bar{\imath}^{"+}$ "not know" normally replaces negative particle $+ m\bar{\imath}$. A clause-final LF zi" isige also appears in KB, NT (e.g. Lk 12:40.)

```
Bùŋ-bāň'ad zī' yē tēŋ túllā <sup>+</sup>ø.
```

Donkey-rider:sg NEG.KNOW that ground:sg be.hot NEG.

"He who rides a donkey does not know the ground is hot." (Proverb)

Mr does occur with negative particles:

```
M biig Solomon anε dasaŋ , ka pv mi' wvv lin nar si'em.
```

M bīig Solomon á nē dá-sāŋ, kà pū mī

1SG child:SG Solomon foc cop young.man:SG, and NEG.IND know

พบิบ lín nār sī əmm +ø.

how 3IN:NZ be.proper INDF.ADV NEG.

"My son Solomon is young, and does not know how things ought to be."

(1 Chronicles 22:5)

19.6 Independency marking

The VP of a main clause or content clause is marked as independent. The marking is absent in all subordinate clause types other than content clauses. It is also absent in all clauses introduced by $k\grave{a}$ other than content clauses, regardless of whether they are subordinate or coordinate. The marker is primarily a tone overlay, but has associated segmental manifestations.

19.6.1 Tonal Features

19.6.1.1 Tone overlay

The independency-marking tone overlay is manifested only on VPs with positive polarity and indicative or imperative mood. It affects only the *first* word in the VP capable of carrying it: first the preverbal particle $l\grave{\epsilon}\epsilon$ "but", next any preverb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker $d\bar{a}a$, auxiliary tense marker $\check{n}y\bar{\epsilon}\epsilon$) not only remain M themselves but also prevent the overlay from applying to any subsequent words.

The overlay otherwise changes all tonemes in the affected word to L if they were not L already. Affected words, regardless of their intrinsic tones, are always followed by M spreading, and show M toneme on the final syllable before liaison (changed as usual to H before liaison words beginning with a fixed-L toneme <u>7.4.3</u>.)

Examples of tone overlay manifesting independency marking in main clauses (with zab^{ϵ} "fight", $g\bar{\jmath}s^{\epsilon}$ "look at", $na^{\dagger}ab^{a}$ "chief"):

```
Ò zàb nâ'ab lā.
Ö gòs nâ'ab lā.
Ü sà zàb nâ'ab lā.
Ü sà gòs nâ'ab lā.
"He's fought the chief."
"He fought the chief yesterday."
"He looked at the chief yesterday."
```

In contrast, the intrinsic tones appear after $k\grave{a}$, with preverbal particles having intrinsic M tonemes, with negative polarity, and in subordinate clauses:

```
Kà ò záb nà ab lā.
                                 "And he's fought the chief."
                                 "And he's looked at the chief."
Kà ò gōs nâ'ab lā.
Ò dāa záb nà'ab lā.
                                 "He didn't fight the chief."
Ò dāa gōs nâ'ab lā.
                                 "He didn't look at the chief."
Ò pū záb nà'ab láa.
                                 "He hasn't fought the chief."
Ò pũ gōs nâ'ab láa.
                                 "He hasn't looked at the chief."
Ò vá' zàb nà'ab lā.
                                 "If he fights the chief."
Ò yá' gōs nâ'ab lā.
                                 "If he looks at the chief."
Ón zàb nà ab lā.
                                 "He having fought the chief"
Ón gōs nâ'ab lā.
                                 "He having looked at the chief."
```

Content clauses have independency marking 25.2:

```
B\grave{a} y\grave{\epsilon}l y\acute{\epsilon} \grave{o} z\grave{a}b n\^{a}'ab l\~{a}. 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 $b \partial d \iota g^{\varepsilon}$ "lose", $y \bar{a} d \iota g^{\varepsilon/}$ "scatter" and the pronouns m^a "me" ba^+ "them":

Intrinsic tones:	bòdıgı m ^a	bòdıgıdī m ^{al} (ipfv)	bòdıgı bā ^{+/}
	yādıgí m ^a	yādıgídī m ^{al} (ipfv)	yādıgí bā ^{+/}
With overlay:	bòdıgī m ^{a/}	bòdıgıdī m ^{al}	bàdıgī bá+
	yàdıgī m ^{a/}	yàdıgıdī m ^{al}	yàgıdī bá+

Before a liaison word with initial fixed-L toneme 7.4.3: contrast

```
Bà kòvdī bá."They kill them."3PL kill:IPFV 3PL.OB."They kill their goats."with Bà kòvdí bà b\bar{v}vs."They kill their goats."3PL kill:IPFV 3PL goat:PL."They looked at her."and Bà gòs·\bar{o} Ø."They looked at her."3PL look.at 3AN.OB."They looked at her child."with Bà gòsú ò b\bar{i}ig."They looked at her child."3PL look.at 3AN child:sg.
```

with ML necessarily changed to HL before the fixed-L pronouns.

19.6.1.2 Tone sandhi after subject pronouns

Bound pronoun subjects are normally followed by M spreading despite their own fixed L tonemes 7.4.3. However, the *third* persons \grave{o} $l\grave{i}$ $b\grave{a}$ are never followed by M spreading when the following VP has independency marking.

Examples with zab^{ϵ} "fight" $g\bar{\jmath}s^{\epsilon}$ "look at" $na^{\dagger}ab^{a}$ "chief": Without independency marking after coordinating ka:

```
Kà m záb nà ab lā."And I've fought the chief."Kà ò záb nà ab lā."And he's fought the chief."Kà m gōs nâ ab lā."And I've looked at the chief."Kà ò gōs nâ ab lā."And he's looked at the chief."
```

With independency marking:

```
M záb nâ'ab lā."I've fought the chief."Ò zàb nâ'ab lā."He's fought the chief."M gós nâ'ab lā."I've looked at the chief."Ò gòs nâ'ab lā."He's looked at the chief."
```

The first and second person bound subject pronouns *are* followed by M spreading before a VP with independency marking, *unless* they are immediately preceded by $y\bar{\varepsilon}$ "that" (here introducing a content clause 25.2):

*Ò tèň'ɛs kà ò zàb nâ'ab lā.*3AN think and 3AN fight chief:SG ART.

"He thinks he's fought the chief." WK

*Ò tèň'ɛs kà m záb nâ'ab lā.*3AN think and 1SG fight chief:SG ART.

"He thinks I've fought the chief."

but \dot{O} $y\dot{\epsilon}l$ $y\dot{\epsilon}$ \dot{o} $z\dot{a}b$ $n\hat{a}$ 'ab $l\bar{a}$.

3AN say that 3AN fight chief:sg ART.

"He says he's fought the chief."

and *Ò yèl yé* **m̀ zàb** nâ'ab lā.

3AN say that 1SG fight chief:SG ART.

"He says I've fought the chief."

Absence of M spreading after bound subject pronouns is independent of tone overlay and is still seen when tone overlay is absent, e.g. when the VP has irrealis mood, or there is a preverbal particle carrying a M toneme:

 \dot{O} $\dot{k}\dot{v}$ $z\bar{a}b$ $n\hat{a}$ 'ab $l\acute{a}a$ $^{+}$ ø. "He will not fight the chief." 3AN NEG.IRR fight chief:SG ART NEG.

Ò lèε dāa záb nà lā. "But he did fight the chief."
 3AN but TNS fight chief:sg ART.

*Ò yèl yé m nà zāb nâ'ab lā.*3AN say that 1SG IRR fight chief:SG ART.
"He says I'll fight the chief."

19.6.2 Segmental features

There are two segmental features of independency marking. They occur when and only when the verb word itself has undergone *tone* overlay, and are therefore absent whenever the verb is preceded by the particle $l\grave{\varepsilon}\varepsilon$ "but", a preverb, or a particle with M toneme, or when the VP has irrealis mood or negative polarity. Verbs which have intrinsic L tonemes have unchanged stem tonemes after overlay, but these segmental features and the following M spreading reveal its presence.

19.6.2.1 Perfective yā

Any perfective verb form carrying the independency-marking tone overlay which would otherwise be phrase-final is followed by the particle $y\bar{a}^+$. NT usually writes this particle as -eya, but informants show no trace of liaison, and KB writes ya solid with a preceding ordinary perfective SF. It is perhaps connected historically with the perfective flexion -ra of one conjugation of Nawdm verbs.

```
Ò zàb yā.
                                       "She's fought."
      3AN fight PFV.
      Ò gàs yā.
                                      "She's looked."
      3AN look PEV.
      Ò sà zàb vā.
                                      "She fought (vesterday.)"
      3AN TNS fight PFV.
      Sāa
                                      "It has rained."
              ní vā.
      Rain:sg rain pfv.
      M têň'εs kà lì lù yā.
                                      "I think it's fallen down." (content clause)
      1SG think and 3IN fall PFV.
      Ò zàbī m.
                                      "He's fought me." (not final)
But
      3AN fight 1SG.OB.
      Ò gòsī m.
                                      "He's looked at me." (not final)
      зан look.at isg.ов.
                                      "It rained." (M preverbal particle)
      Sāa
              dāa ní.
      Rain:sg TNS rain.
      Ò dāa záb.
                                      "He fought." (M preverbal particle)
      зан тиѕ fight.
      Ò nà zāb.
                                       "She'll fight." (irrealis)
      3AN IRR fight.
      Kà ò záb.
                                       "And he fought." (no independency marking)
      And SAN fight.
```

```
Kà ò gɔ̄s.
                                "And he looked." (no independency marking)
And SAN look.
Òρῦ
          zábē +ø.
                                "He's not fought." (negative)
3AN NEG.IND fight NEG.
   טֿמ
          āsε +ø.
                                "He's not looked." (negative)
3AN NEG.IND look NEG.
Ò gìm.
                                "She's short." (stative)
Ò mì'.
                                "She knows." (stative)
Ò nòŋ.
                                "She loves him." (stative)
```

The particle $y\bar{a}$ is tonally unique among left-bound words bearing M toneme in being Pattern A: when the LF occurs in questions, the toneme is L not H $\underline{6.4}$:

"It's got lost."

```
"Has it got lost?"

"Has it got lost?"

"In get.lost PFV PQ?

Phrase constituents can only follow yā+ by extraposition 27.3:

"Ya yidigya bɛdegv.

"You are very much mistaken." (Mk 12:27)

Yà yídìg yā bɛ́dvgv.

"Plus it got lost?"

"You are very much mistaken."

"Thank you very much."

"Thank you very much."
```

19.6.2.2 Imperative -m

Lì bòdig vā.

Imperatives of dual-aspect verbs carrying the independency-marking tone overlay adopt the flexion $-m^a$ 10.1.

```
Gòsim! "Look!" (or Gòsīm! with the vowel absorbed 3)

Gòsimī m! "Look at me!"

Look:IMP 1SG.OB!
```

Gàsımí fù nû'ug! "Look at your hand!" Look:IMP 2SG hand:SG! (or *Gòsím fò nû'ug!* with the vowel absorbed) "Receive ve!" Dì'əmī Receive: IMP 2PL.SUB! "Receive ye them!" Dì'əmī-ní bā! (-ni- for -ya *na before liaison 7.2.2)Receive: IMP-2PL.SUB 3PL.OB! Dì'əmī-n·ó "Receive ye her!" ø! Receive: IMP-2PL.SUB 3AN.OB! Dì'əmī-ní "Keep ye on receiving!" àlá! Receive: IMP-2PL.SUB ADV: thus! But Dā ḡsε +ø! "Don't look!" (negative) NEG.IMP look NEG! ΚὲΙ kà "Let her look!" ò gɔ̄s! Cause: IMP and 3AN look! (No independency marking: subordinate) Κèm "Come and look!" nā n gɔ̄s! Come: IMP hither CAT look! (No independency marking: subordinate) "Follow ye me!" (single-aspect verb) Dòllī-ní m!Follow-2PL.SUB 1SG.OB!

19.7 Other bound words in the VP

For non-contrastive subject pronouns see <u>15.4.1</u> <u>19.6.1.2</u>.

19.7.1 *Lὲε* "but"

Lèe "but" precedes even tense particles, but like a preverb, and unlike a postsubject particle <u>20.2.3</u>, it prevents the independency-marking tone overlay from falling on the verb, and is then itself followed by M spreading:

```
Κà ὁ léε dāa záb nà lā.And βΑΝ but της fight chief:sg ART."But he fought the chief."
```

Bà lὲε záb nà lā. "But they've fought the chief." WK 3PL but fight chief:sg ART.

Kà bà lέε zàb nà'ab lā. "But they've fought the chief." WK And 3PL but fight chief:sg ART.

Lès záb nà'ab lā! "But fight the chief!" WK But fight chief:sg ART!

Ka man pian'ad la lee ku gaade.

Kà mān pi̯âň'ad lā lέε kờ gāadε +ø.

And 1SG.CNTR speech ART but NEG.IRR pass NEG.

"But my words will not pass away. (Mt 24:35, 1996)

NT has the $-m^a$ -imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la...

Lὲε ìəmī-ní ò nā'am sứ'vlìm lā...

But seek: IMP-2PL.SUB 3AN kingship possession ART...

"But seek ye his kingdom ..." (Lk 12:31, 1976)

WK does not accept this, and he corrected e.g.

* $L\dot{\epsilon}\epsilon$ gʻsim nâ'ab lā! attempted: "But look at the chief!" But look.at:IMP chief:SG ART!

to $L\grave{\varepsilon}\varepsilon\,g\bar{\jmath}s$ $n\hat{a}'ab$ $l\bar{a}.$ But look.at chief:sg ART.

19.7.2 Preverbs

Preverbs follow all other preverbal particles. All carry the independency marking tone overlay in place of the following main verb (cf $l\grave{\epsilon}\epsilon$ "but" 19.7.1.)

Pùn "previously, already":

 \dot{O} $p\dot{v}n$ $z\acute{a}b$ $n\grave{a}'ab$ $l\bar{a}.$ "He's already fought the chief." 3AN already fight chief:SG ART.

Kà ò pún zàb nà'ab lā

And SAN already fight chief:SG ART.

"And he's already fought the chief."

```
Lèm "again" (cf l \dot{\epsilon} b^{\epsilon} "return"):
                                       "He's fought the chief again"
      Ò lèm záb nà'ab lā.
      3AN again fight chief:sg ART.
               lém zàb nà ab lā. "And he's fought the chief again."
      And SAN again fight chief:SG ART.
      Òρῦ
                 lém zàb nà ab láa +ø.
      3AN NEG.IND again fight chief:SG ART NEG.
      "He hasn't fought the chief again."
      Ò nà lēm záb nà ab lā.
                                       "He'll fight the chief again."
      3AN IRR again fight chief:sg ART.
      M nīf
                 lέm zábìd nē.
                                       "My eve is hurting again."
      1SG eye:SG again fight FOC.
      Ka so' kudin ku len nyee li ya'asa.
      Kà s5'
                               lēm ňyέε <u>ļ</u>ī
                 kūdιm kύ
                                                vá'asā +ø.
      And INDF.AN ever NEG.IRR again see
                                           3IN.OB again NEG.
      "Nobody will ever see it again." (Rev 18:21, 1996)
      Kpèlim is "still" before an ipfy, but "immediately afterwards" before a pfy. It
occurs also as a main verb "remain, still be." KB has the reduced form kpèn.
      Ka o kpelim zu'om.
      Kà ò kpélìm
                            zū'em.
      And SAN immediately go.blind.
```

```
And 3AN immediately go.blind.

"Immediately he went blind." (Acts 13:11, 1996: KB Ka o kpɛn zu'om.)

m biig Josef nan kpɛn vve.

m bīig Josef nán kpèn vve.

1sg child:sg Joseph still still be.alive.

"My child Joseph is still alive." (Genesis 45:28)
```

 $L\dot{a}'am$ "together" (cf $l\dot{a}'as^{\epsilon}$ "gather"); as a main verb $l\dot{a}'am^{\mathsf{m}}$ is "associate with."

```
ka nidib wusa da la'am kpi n\epsilon o.
kà nīdib wūsa dá là'am kpì n\epsilon ò.
and person:PL all TNS together die with 3AN.
"so all people died together with him." (2 Cor 5:14)
```

Dènim "beforehand" (cf $d \grave{\epsilon} \eta^{\epsilon}$ "go, do first": \grave{m} $d \acute{\epsilon} \eta^{\bar{\iota}}$ f "I've got there before you"; $d \grave{\epsilon} \eta^{\epsilon}$ is used with the same meaning in n-catenation $\underline{22.2}$.)

```
Pin'ilugun sa ka Pian'ad la da pun dɛŋim bɛ. Pīň'ilugun sa ka Pian'ad la da pun dɛŋim bɛ. Beginning:sg-loc hence and word:sg art tns already beforehand exist. "In the beginning, the Word already existed beforehand." (Jn 1:1)
```

Màlıgım "again" (cf Toende Kusaal malig "do again"):

```
Amaa man pian'ad la ku maligim gaade. Àmáa mān piāň'ad lā ku māligim gáadē + \emptyset. But 15G.CNTR speech ART NEG.IRR again pass NEG. "But my words will not pass away. (Mt 24:35)
```

Ti "after" occurs often in n-catenation; for $h\bar{a}li$ ti $p\bar{a}a$... "up until" see 20.2.1. If the next following VP in the same clause or series of coordinated clauses is perfective, there is disturbance of the usual iconic alignment of VPs with event order, with ti corresponding to English "before."

```
"Until Herod had died." (Mt 2:15)
hali ka Herod ti kpi.
hālí kà Herod tí
                      kpì.
Until and Herod after die.
Kèm ø tí
              ňyε̄ dụ'átà.
                               "Go to see the doctor." SB
Go:IMP CAT after see doctor:sg.
Bεogu ti nied la ka ba gaad!
Bēogύ ø tì
                 nìəd
                            lá kà
                                    bà gâad.
Morning NZ after appear: IPFV ART and 3PL pass.
"Before morning appears they have passed!" (Isaiah 17:14)
```

19.7.3 Left-bound liaison words

A verb may be followed by up to two successive left-bound liaison words. They precede all other verb phrase complements and also precede the focus particle $n\bar{\epsilon}^{+/}$.

The first slot may be occupied by either ya "2pl subject of direct command" 21.3 or discontinuous-past n^{ε} 23.1.1; they can never occur together.

The second slot is for bound object pronouns. There is no formal distinction between direct and indirect objects. Only one bound object pronoun may occur; cases where a verb has both non-contrastive direct and indirect object pronouns without ellipsis are expressed by n-catenation using $t i s^{\epsilon}$ "give" 22.2.

19.8 Complements

"Complement" will be used below to describe all verb core arguments other than the subject. Complements may be NPs, AdvPs, prepositional phrases or clauses.

Verbs vary in the kind of complement they take and in whether the complements are obligatory; the matter is complicated in Kusaal by the fact that "obligatory" complements in fact need not be explicitly present: if they are absent, the gap then represents an anaphoric pronoun.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

19.8.1 Transitivity and objects

Indirect objects precede direct, and objects precede other complements, except in cases of extraposition due to weight <u>27.3</u>. A bound pronoun before a noun object therefore cannot be the direct object:

```
M dāa tísì lī nâ'ab lā.
1SG TNS give 3IN.OB chief:SG ART.
"I gave the chief to it."
```

There is otherwise no formal difference between direct and indirect objects. Transitive verbs vary in whether they require a direct object/complement:

```
da ku nidaa, da zuuda dā kū nīdá ^+ø, dā zūudá ^+ø... NEG.IMP kill person:SG NEG, NEG.IMP steal:IPFV NEG... "Do not kill [a person] ... do not steal ..." (Lk 18:20, 1996)
```

Obligatorily transitive verbs may appear without any expressed object, but in such cases the meaning is necessarily **anaphoric**:

```
\dot{O} p\bar{v} z\acute{a}mm ^+\phi. "She didn't cheat him/her." 3AN NEG.IND cheat NEG.
```

Transitive single-aspect verbs which do not take locative complements are all obligatory transitives. Thus with $\grave{a} e \check{n}^a$ "be something/somehow":

```
Mānı ø áň dụ'átà àmáa fūn pū áňyā †ø.

1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP NEG.

"I'm a doctor but you aren't."

Mānı ø áň dụ'átà kà fūn mén áẹň.

1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.

"I'm a doctor and you are too."
```

Particular cases of null anaphora appear with direct objects preposed with $k\grave{a}$ 27.2 and in adnominal $k\grave{a}$ -catenation 22.3.

In replies to questions and reponses to commands, null anaphora of complements may refer to an antecedent in the previous speaker's words:

- Q. Fù mór gbāun láa +ø? "Do you have the letter?" 2SG have letter:sg ART PO?
- A. $\bar{\mathcal{E}}$ $\bar{\mathcal{E}}$
- Q. $F\dot{v}$ $b\acute{o}$ 2 $d\cdot\acute{o}$ -o + \emptyset ? "Do you love her?" 2SG want-3AN.OB PQ?
- A. $\acute{A}y \wr \iota$, \grave{m} $p \bar{\upsilon}$ $b \acute{D} d \bar{a} * \emptyset$. "No, I don't love her." No, 1SG NEG.IND want NEG.

Agentive ambitransitive verbs appear with and without objects, with no change in the role of the subject, and no anaphoric implication if the object is absent:

```
bane zuud nidibi gban'ad
bànı zūud nīdıbı ø gbāň'ad
REL.PL steal:IPFV person:PL CAT seize:IPFV
"those who steal people by force" (1 Tim 1:10)
```

```
one daa zuud "he who used to steal" (Eph 4:28) 
ònı dāa zūud REL.AN TNS steal:IPFV
```

Some verbs only take objects of a very limited type, often expressed with a "cognate accusative" noun formed from the same stem. They may be obligatorily transitive or agentive ambitransitive:

```
Fù tứm bó-tùvma +ø? "What work do you do?"
2SG work:IPFV what-work cQ?

Ka ya ninkvda zaansim zaansima.

Kà yà nīn-kúdà zàaňsım záaňsímà.

And 2PL person-old:PL dream:IPFV dream:PL.

"And your old people dream dreams." (Acts 2:17)
```

Patientive ambitransitive verbs can appear transitively with an expressed object, but if there is no object they are normally interpreted as intransitive, with the object of the transitive appearing as the subject. Examples include $y\dot{\flat}^+$ "close", $n\bar{a}e^{+/}$ "finish", $z\dot{a}m\iota s^{\epsilon}$ "learn/teach", $n\bar{a}m\iota s^{\epsilon/}$ "suffer/make suffer", $b\dot{\flat}d\iota g^{\epsilon}$ "lose, get lost", $b\dot{a}s^{\epsilon}$ "go/send away", $d\bar{u}e^{+/}$ "raise/rise", $m\bar{a}'e^{+/}$ "get cool."

Many, though not all, patientive ambitransitive verbs express a change of state and can use the perfective form in a resultative sense <u>19.2.2</u>:

```
M náa tōvma lā."I've finished the work."1SG finish work ART."The work is finished."Tōvma lā náa nē."The work is finished."Work ART finish Foc.
```

Almost any verb can potentially take an indirect object expressing benefit, interest etc (this could lead to ambiguity in principle):

```
Ö dògō m. "He cooked (for) me."
Δὶ màlisī m. "I like it." ("It's sweet for me.")
Δὶ be.sweet 1SG.OB.
Äláafò bέε bá. "They are well." ("Health exists for them.")
Health exist 3Pl.OB.
```

Ditransitive verbs require an indirect object, which cannot be ellipted unless any direct object is too, with a necessarily anaphoric sense; tis^{ϵ} "give" is the prototypical example, along with causatives like dis^{ϵ} "feed", $n\bar{u}lvs^{\epsilon}$ "give to drink."

```
M tís ná'ab
                                 "I've given the chief a box."
               lā dāká.
1SG give chief:SG ART box:SG.
M tís nâ'ab
                                 "I've given it to the chief."
               Ιā.
1SG give chief:SG ART.
*M tís dāká.
                                 impossible as "I've given him a box", which is
M tís·ō ø
                 dāká.
1SG give 3AN.OB box:SG.
Dā
      tís·ò ø
                    sī əla +ø.
                                 "Don't give her anything!"
NEG.IMP give 3AN.OB INDF.IN NEG.
      tísē +ø!
                                 "Don't give it to her!"
Dā
NEG.IMP give NEG.
M tís vā.
                                 "I've given it to him."
1SG give PFV.
```

Certain verbs take a fixed direct object as a set idiom after an indirect object which expresses the functional object, e.g. $k\grave{a}d$ X $s\grave{a}r\acute{y}\grave{a}$ "judge X", $m\bar{\jmath}r$ X $n\bar{\imath}n$ - $b\acute{a}al\grave{\imath}g$ or $z\grave{\jmath}$ X $n\bar{\imath}n$ - $b\acute{a}al\grave{\imath}g$ "have pity on X", $n\grave{\imath}n$ X $y\grave{a}dd\bar{a}$ "believe X, believe in X", $z\grave{\jmath}$ X $d\grave{a}b\bar{\imath}am$ "fear X", $s\dot{\imath}ak$ X $n\bar{\jmath}\jmath r$ "obey X", $n\check{m}w\grave{\epsilon}'$ X $n\hat{u}'ug$ "make an agreement with X."

```
Ò zòt·ō ø nīn-báalìg. "She has pity on him."
Bà zòt·ō ø dábīəm. "They are afraid of him."
3PL feel:IPFV 3AN.OB fear.
Wina'am na kad nidib poten'esua'ada saria.
Wínà'am ná kād nīdıb pó-tèň'-sō'adá sàríyà.
God IRR drive person:PL inside-mind-secret:PL judgment.
"God will judge people's secret thoughts." (Rom 2:16, 1996)
```

```
Bà nìŋ\cdotō \emptyset  yáddā. "They believed her." 3PL do 3AN.OB assent.
```

 \dot{O} $n\tilde{w}\dot{\varepsilon}'$ $n\hat{a}'ab$ $l\bar{a}$ $n\hat{u}'ug$. "He made an agreement with the king." 3AN strike king:SG ART hand:SG.

19.8.1.1 Passives

For passive meaning expressed by an empty *bà* "they" as subject see <u>15.4.1</u>. Transitive verbs expressing a change of state are usually patientive ambitransitives. Obligatory transitives or agentive ambitransitives can be used *passively* with no formal change. The original agent may not then be expressed.

```
M nú dāam lā.
"I've drunk the beer."

1SG drink beer ART.
```

Beer ART drink PFV.

yā.

Letter:sg art write:IPFV good:ADV.

Dāam lā nú

Indirect objects cannot become passive subjects:

```
D\bar{a}k\acute{a} l\bar{a} t\acute{i}s y\bar{a}. "The box was given." Box:sg ART give PFV.
```

but *Nà'ab $l\bar{a}$ tís yā. not possible in sense "The chief was given (it.)" Chief:sg art give PFV.

"The beer has got drunk."

Imperfective passives can only appear with habitual/propensity meanings. Stative verbs accordingly cannot make passives.

The verb $s\bar{\jmath}b^{\epsilon}$ "write" is a specialised usage of $s\bar{\jmath}b^{\epsilon}$ "make/go dark", and is patientive ambitransitive. It can form a resultative; the imperfective $s\bar{\jmath}b\iota d^{a/}$ seems to accept intransitive use only when some adverbial modification is present.

```
Gbàun lā sób nē. "The letter is written."

Letter:sg art write foc.

Gbàna sóbìd zīná. "Letters get written today." WK

Letter:pl write:IPFV today.

Gbàun lā sóbìd sónā. "The letter is writing well (i.e. easily.)" WK
```

19.8.1.2 Middle use of intransitives

The assume-stance verbs $\underline{12.1.1}$, rather than the make-assume-stance series, are often used transitively for parts of one's own body:

```
Lìginím fò nīf né fò nû'ug.

Cover:IMP 2SG eye:SG with 2SG hand:SG.

"Cover your eye with your hand."
```

```
Thus Dìginím fò nû'ug. "Put your hand down." is commoner than Lie.down:
```

```
Dìgulím fò nû'ug. "Put your hand down." Lay.down:
```

Similarly $n i e^+$ "appear" is usually intransitive, corresponding to transitive $n \hat{\epsilon} \epsilon l^{\epsilon}$ "reveal", but $n i e^+$ is much more frequent than $n \hat{\epsilon} \epsilon l^{\epsilon}$ before \hat{o} $m \hat{\epsilon} \eta^{a}$ "him/herself" etc.

```
Ka o nie o mɛŋ Jemes san'an ...
Kà ò níe ò mēŋ Jemes sâ'an ...
And βΑΝ appear βΑΝ self James among ...
And he revealed himself to James (1 Cor 15:7)
```

19.8.2 Predicative complements

Predicative complements may or may not be required, in the sense of omission implying anaphora. As in English, they can be "depictive" or "resultative"; in Kusaal this falls out naturally from the stative or dynamic nature of the verb:

```
Kεl ka m liebi fv tvmtvm yinne.
Kὲl kà m líəbì fù tòm-tōm yīnní.
Cause: IMP and 1sG become 2sG work-worker: sG one.
"Make me [become] one of your servants" (Lk 15:19); dynamic lìəb<sup>ε</sup>
M á nέ fù tòm-tōm. "I am your servant."; stative àẹňa
1sG COP FOC 2SG work-worker: sG.
```

Adjectives may appear as NP heads so long as the NP is a predicative complement. The only permitted dependents are the article and ideophones $\underline{17}$. This is most frequent with $\grave{a} e \breve{n}^a$ "be something" $\underline{19.11.2}$, but is seen also with other verbs:

"It's white, a white one."

```
Lì à nē píəlìg fáss.

"It's very white."

Bà à nē píəlà.

"They're white."

si'el zie sabili wuu nidne.

sī'əl zí'e sābíllì ø wōv nīd nē.

INDEIN stand black:sg cat like person:sg like.

"something stood, black like a person." KSS p16

Mam ane pielug amaa m ya'a paae bugumin asee ka m leb zin'a.

Mām á nē píəlòg àmáa m yá' pāe búgúmī-n,
```

Lì à nĒ píəlìg.

àsέε

kà m̀ lέb

except and 1sG become red:sG.
"I am white, but when I reach the fire I turn red." [a crayfish] (BNY p16)

Most adjectives do not permit this. All examples in my materials involve adjectives without corresponding stative verbs. More often, compounds with $n\bar{l}n$ -"person" or $b\bar{v}n$ - "thing" + adjective are used instead. Even adjectives which may appear without a noun head cannot do so before a dependent pronoun; thus only

```
Lì à n\bar{\varepsilon} b\bar{\upsilon}n-p\hat{\imath}\partial l-kàn\bar{a}. "It is this white one."
```

1SG COP FOC white:SG but 1SG if reach fire-LOC,

zìň'a.

Some transitive verbs may have a predicative complement after the direct object. With verbs are used in the relevant senses, this complement is compulsory. The verb $p\dot{v}d^{\epsilon}$ "name, dub" has as first object a NP with the head $y\bar{v}'vr^{\epsilon}$

"name", and the name itself as second object; this may be introduced by $y\bar{\varepsilon}$ "that."

```
Ka fv na pvd o yv'vr ye Yesu.

Kà fừ ná púd ò yv'vr yē Yesu.

And 2SG IRR dub 3AN name:SG that Jesus.

"And you will call him Jesus." (Mt 1:21)

Ka o pvd biig la yv'vr Yesu.

Kà ò púd bīig lā yv'vr Yesu.

And 3AN dub child:SG ART name:SG Jesus.

"And he called the child Jesus." (Mt 1:25)
```

 $B\grave{u}el^{\varepsilon}$ "call, call out, summon" can be used in the ipfv with an object expressing the person and the name as a complement, again often introduced by $y\bar{\varepsilon}$:

```
on ka ba buon ye Pita la \dot{\rho} \dot{\rho} \dot{\rho} \dot{\rho} \dot{\rho} \dot{\rho} \dot{\rho} \dot{\rho} Pita \dot{\rho} REL.AN and 3PL call:IPFV that Peter ART "who was called Peter" (Mt 10:2)
```

 $B\grave{u}el^{\epsilon}$ is often used passively with $y\bar{v}'vr^{\epsilon}$ "name" as subject and the name itself as complement:

```
dau sɔ' ka o yv'vr buon Joon. dàu-sɔ' kà ò y\bar{v}'vr bû\thetan Joon. man-INDF.AN and 3AN name:sg call:IPFV John. "a man [habitually] called John." (Jn 1:6)
```

 $M\grave{a}al^{\epsilon}$ "make" is used with object and resultative predicative complement in

Ka o maal o men nintita'ar.

```
Kà ò mâal ò mēŋ nīn-títā'ar.
```

And SAN make SAN self person-great:sg.

"He made himself out to be a great man." (Acts 8:9. 1976)

A $k\dot{a}$ -catenation 22.3 can appear as a resultative predicate.

19.8.3 Locatives

Locative AdvPs occur as complements after verbs of position and movement. Some verbs *require* a locative complement, and its absence is anaphoric.

```
\dot{M} y\acute{i} B\grave{o}k. "I left Bawku."

1SG emerge Bawku.

\dot{M} y\acute{i} y\bar{a}. "I've left [there]."

1SG emerge PFV.
```

No single-aspect verb or dual-aspect verb derived from a stance verb requires a locative; nor does $k\bar{\epsilon}\eta^{\epsilon/}$ "go/walk." No verb requires a locative *second* complement.

```
...ka pv tun'e kenna..

...kà p\bar{v} t\bar{u}n'e ø k\bar{\epsilon}nná ^{+}ø.

...and NEG.IND be.able CAT go:IPFV NEG.

"who couldn't walk." (Acts 14:8)
```

but *Ò kèŋ Bók.* "She's gone to Bawku."

зан go Bawku.

Ò dìgın yā. "He's lain down."

3AN lie.down PFV.

but Diginim $kp\bar{\epsilon}!$ "Lie down here!"

Lie.down: MP here!

Ò dìgıl gbáun lā. "She's put the book down."

зан lay.down book:sg art.

but Ò dìgιl gbáμŋ lā tέεbùl lā zúg.

3AN lay.down book:sg art table:sg art upon.

"She's put the book on the table."

Àláafù $b \in o g$. "He's well." ("Health exists for him.")

Health EXIST 3AN.OB. Indirect object but no complement.

but Dāu lā bé nē dó-kànā lā púvgō-n.

Man:sg art exist foc hut-demst.sg art inside:sg-loc.

"The man is inside that hut."

19.8.4 Prepositional phrases

 $W\bar{\epsilon}n^{\text{na/}}$ "resemble" usually takes a phrase introduced by $n\bar{\epsilon}$ or $w\bar{\nu}\nu$ 18.

Ka o nindaa wenne nintan ne.

Kà ò nīn-dáa wēn nē nīntān nē.

And SAN eye-face:sg resemble with sun:sg like.

"His face is like the sun." (Rev 10:1, 1996)

 $L\bar{a}I^{la/}$ "be far" usually takes a phrase introduced by $n\bar{\epsilon}$:

Amaa o pυ lal nε tii.

Àmáa ò pū lāl né tīt +ø.

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

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

 $D5/^{la/}$ "accompany" with the preposition $n\bar{\varepsilon}$ means "be in accordance with":

```
Li dɔlnɛ lin sɔb Wina'am gbauŋvn si'em la ye ...

Lì dòl nɛ̄ lín sɔ̄b Wínà'am gbáu̞ŋv̄-n sr̄ əm lā yē ...

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)
```

The preposition $n\bar{\varepsilon}$ can be distinguished from focus- $n\bar{\varepsilon}^{+/}$ 27.1.2 by contexts where focus is prohibited. $Y\bar{l}^+$ "emerge" does not take a prepositional phrase:

"I come from Bawku." SB

```
but Meeri one yi Magdala "Mary who came from Magdala"

Meeri ɔ´nì yī Magdala (Mk 16:9, 1996)

Mary RELAN emerge Magdala
```

19.8.5 Clauses

Μ yí

nē Bók.

Certain verbs require a following subordinate clause introduced by $k\grave{a}$ or $y\bar{\varepsilon}$. $K\bar{\varepsilon}^+$ "let" does not appear at all without a following $k\grave{a}$ -catenation, while if $n\bar{a}r^{a/}$ "be obliged to" appears without a purpose clause there is a necessarily anaphoric sense; $m\grave{i}t$ in its usual sense "let not" always takes a $k\grave{a}$ -catenation. $B\grave{b}\supset d^a$ "want, love" takes a purpose clause in the sense "want to ..."; without any object it has an anaphoric meaning in either sense. $G\bar{u}r^{a/}$ "be on guard, watch, wait for" takes a NP headed by a gerund or a purpose-clause complement to express "waiting for an event." $\grave{A}\underline{e}\check{n}^a$ "be something/somehow", which is uniquely flexible in the variety of different types of argument it may appear with, may also take a content-clause complement.

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with $s\bar{r} \ni m$, or a postpositional AdvP with $y\bar{\epsilon}l\acute{a}$ "about." Most such verbs have an anaphoric sense without such an object.

19.9 Adjuncts

Adjuncts, typically AdvPs, occur as the last element in the VP. Several VP adjuncts may occur together. Clause-final adjuncts are always taken as VP adjuncts in this grammar; clause-level adjuncts precede the subject <u>20.2.1</u>.

```
Bà dìt n\bar{\varepsilon} sā'ab dó-kàŋā lā pứugū-n.

3PL eat:IPFV FOC porridge hut-DEMST.SG ART inside:SG-LOC.

"They're eating porridge in that hut."
```

19.10 Verb-phrase-final particles

For the independent-perfective marker $y\bar{a}^+$ see 19.6.2.1.

The particles $n\bar{a}^{+/}$ "hither" and $s\dot{a}^+$ "hence; ago" follow any complements. The verb $k\bar{\epsilon}n^+$ "come" is invariably used with $n\bar{a}^{+/}$; the imperative SF $k\dot{\epsilon}m$, which coincides for $k\bar{\epsilon}n^+$ "come" and $k\bar{\epsilon}n^{\epsilon/}$ "go", is always disambiguated by the fact that it is followed by $n\bar{a}^{+/}$ or $s\dot{a}^+$ respectively: $k\dot{\epsilon}m$ $n\bar{a}!$ "come" $k\dot{\epsilon}m$ $s\dot{a}!$ "go!"

```
M mór kû'em náa
                               "Shall I bring water?" SB
1SG have water hither PQ?
Bùgóm lā vít
                      váa
                             ní ná
                                       +ø?
       ART emerge: IPFV where Loc hither co?
"Where is the light coming from?"
                  ní ná
Fù yí
            váa
                             +ø?
2SG emerge where Loc hither co?
"Where have you come from?" WK
Sà<sup>+</sup> is often used temporally, for "since" or "ago":
Fu na ban li nya'an sa.
Fù ná bán lì ňyá'an sá.
2SG IRR realise 3IN behind since.
"You will come to understand afterwards." (Jn 13:7, 1976)
Lazarus pun be yaugun la daba anaasi sa.
Lazarus pún
                   bὲ yáugū-n
                                    lā dābá anāasí
                                                        sà.
Lazarus previously exist grave:sg-loc art day:pl num:four since.
"Lazarus had already been in the grave four days." (In 11:17)
The particles are VP-final, not clause-final:
                               "Come and look!" SB
Κὲm
         nā
                n gōs.
Come: IMP hither CAT look.
Man ya'a ρυ kεεn na tu'asini ba ...
                  kēε-n nā j ø tú'asī-ní þā...
Mān
       yá' pū
```

1SG.CNTR if NEG.IND come-DP hither CAT talk-DP

"If I had not come to talk to them ..." (In 15:22)

 $N\bar{a}^{+/}$ and $s\dot{a}^{+}$ often follow any article $I\bar{a}^{+/}$ ending an \dot{n} -clause containing them; closely parallel constructions may show either $n\bar{a}$ $I\bar{a}$ or $I\bar{a}$ $n\bar{a}$:

```
ňwādig-kánì kēn nā lā month REL.SG come:IPFV hither ART "next month" SB
```

```
dunia kanɛ ken la na
dūnɪyá-kànɪ kɛ̄n lā nā
world-REL.SG come:IPFV ART hither
"the world which is coming" (Lk 20:35)
```

ti tυm onε tυm man **na la** tυυma.

```
tì túm ònı tùm mān nā lā tū\nuoma 1PL work REL.AN send 1SG.CNTR hither ART work "Let us do the work of him who sent me." (Jn 9:4)
```

M diib anε ye m tum onε tumi m la na boodim naae.

```
\dot{M} dīth á nē yé m túm ònt tùmt m lā nā bóɔdìm ø nāe. 1SG food copfoc that 1SG work Relan send 1SG.OB ART hither will cat finish. My food is that I do the will of him who sent me completely. (In 4:34)
```

VP-final particles can also follow the *gerund* of a verb which is associated with such a particle, and again may follow the associated article:

```
Nidib la daa gur Zakaria yiib na.

Nīdib lā dāa gūr Zakaria yîib nā.

Person:PL ART TNS watch Zechariah emerge:GER hither.

"The people were watching for Zechariah's coming out." (Lk 1:21)
```

```
Nīn-sâal Bîig lā lébòg lā nā
Person-smooth:sG Child:sG ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)
```

Ninsaal Biig la lebug la na

19.11 Verbs "to be"

19.11.1 $B\dot{\epsilon}$ "be somewhere, exist"

With no following locative $b\dot{\varepsilon}^+$ means simply "exist"; before a locative, $b\dot{\varepsilon}^+$ means "be located in a place" when the locative is focussed or foregrounded <u>27.1</u>, but "exist in a place" otherwise:

Wínà'am bέ. "God exists." (Calque of the West African Pidgin

God Exist. God dey, implying "It'll all work out.")

Àláafù $b \dot{\epsilon} \cdot o_{\lambda} = \emptyset$. "She's well." ("Health exists for her.")

Health EXIST 3AN.OB.

Wāad bέ. "It's cold."

Cold.weather EXIST.

Mam bene moogin. "I'm in the bush." BNY p8

Mām bέ nē mɔ̄ɔgυ-n.

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

Moogin ka mam $b\varepsilon$. "I'm in the bush." BNY p10

Mɔ̄ɔgύ-n kà mām bέ.

Grass:sg-loc and 1sg.cntr exist.

Dāu lā bέ nē dó-kànā lā pύυgō-n.

Man:sg art exist foc hut-demst.sg art inside:sg-loc.

"The man is inside that hut." (Reply to "Where is that man?")

Dàu-sɔ̄' bέ dɔ́-kànā lā pύυgū-n.

Man-INDF.AN EXIST hut-DEMST.SG ART inside:SG-LOC.

"There's a certain man in that hut."

For the corresponding negative $k\bar{a}^{\dagger}e^{+}$ see 19.5; * $p\bar{v}$ $b\hat{\epsilon}$ is not used.

 $B\dot{\epsilon}^+$ plays a role analogous to a "passive" to $m\bar{\nu}_r^{a/}$ "have" in constructions like:

M bīig bέ. "I have a child." Equivalent to M mór bīig.

1SG child:SG EXIST.

 \dot{M} $b\bar{i}ig$ $k\bar{a}'e$ $+\phi$. "I have no child." Equivalent to \dot{M} $k\bar{a}'$ $b\bar{i}iga$.

1SG child:SG NEG.BE NEG.

 $B\dot{\varepsilon}^+$ can be used in direct commands:

Bέε ànínā. "Be (i.e. stay) there!" SB

EXIST ADV:there.

 $B\bar{\varepsilon}\iota$ - $n(\underline{\ })$ àlá ànínā. "Be ye there!" [bɛ:nala anina]

EXIST-2PL.SUB ADV:thus ADV:there.

19.11.2 Aen "be something/somehow"

For the loss of \underline{e} and nasalisation see $\underline{7.3}$.

 \dot{O} à $n\bar{\varepsilon}$ $b\bar{i}ig$. "She is a child."

3AN COP FOC child:SG.

but Mānı ø áň dụ'átà kà fūn mén áẹň.

1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.

"I'm a doctor and you are too."

The usual negative uses $k\bar{a}'e^+$ "not be", but $p\bar{v}$ $\acute{a}e\check{n}$ does occur, for example in expressing contrasts:

 \dot{M} $k\bar{a}$ ' du' \dot{a} $t\bar{a}$ du' du'

1SG NEG.BE doctor:SG NEG.

Mānı ø áň du'átà àmáa fūn pū áňyā +ø.

1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP NEG.

"I'm a doctor but you aren't."

Àeňa can be used in direct commands:

Āa-ní àlá bāaňlím! "Be (ye) quiet!"

COP-2PL.SUB ADV:thus quiet:ABSTR!

As with English copular clauses, the sense may be ascriptive or specifying (CGEL p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with $n\bar{\varepsilon}^{+/}$ if permitted <u>27.1.2</u>:

 \dot{O} à $n\bar{\varepsilon}$ $b\bar{i}ig$. "She is a child."

3AN COP FOC child:SG.

In **specifying** constructions focus frequently falls on the subject, which usually then has n-focus 27.1.1:

```
Mane an konbkem sun la.

Mānu ø áň kóňb-kìm-sùŋ lā.

1SG.CNTR CAT COP animal-tender-good:SG ART.

"I am the good shepherd." (Jn 10:11)

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

Mānu ø áň·o ø.

1SG.CNTR CAT COP 3AN.OB.

Nɔbibisi a mam disuŋ.

Nō-bíbɪsì ø áň mām dí-sùŋ.

Hen-small:PL CAT COP 1SG.CNTR food-good:SG.

"Chicks are my favourite food." BNY p13
```

When the complement of $\grave{a} \underline{e} \check{n}^a$ is definite, the construction is usually specifying, with the subject in focus:

```
    M á nē dự'átà. "I'm a doctor." ("What do you do?")
    1SG COP FOC doctor:SG. Ascriptive.
    but Mānı ø áň dự'átà lā. "I'm the doctor." ("Which one is the doctor?")
    1SG.CNTR CAT COP doctor:SG ART. Specifying.
```

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors: see <u>27.1.2.1</u>.

 $\dot{A}e\ddot{n}^a$ allows a wide range of different types of NP as arguments. It shares with deadjectival stative verbs the ability to take an AdvP of any type as subject <u>16.5</u>:

```
Zīná à nē dá'a. "Today [time] is market."

Today COP FOC market:sg.

Yiŋ venl, ka poogin ka'a su'um.

Yìŋ véňl kà pōυgυ-n kā' súmm +ø.

Outside be.beautiful and inside:sg-Loc NEG.BE good:ABSTR NEG.

"Outside is beautiful but inside [place] is not good." (Acts 23:3, 1996)
```

```
Man noni ya si'em la ane bedego.

Mán nònı yā sī'əm lā á nē bédugū.

1SG:NZ love 2PL.OB INDF.ADV ART COP FOC much.

"How much I love you [manner], is a lot." (2 Cor 7:3, 1976)
```

 $\dot{A}\underline{e}\check{n}^a$ takes a predicative complement. Some adjectives can appear as NP heads as predicative complements after $\dot{a}\underline{e}\check{n}^a$ and other verbs 19.8.2, but typically $\dot{a}\underline{e}\check{n}^a$ has a derived manner-adverb or abstract noun as complement instead. In any case, such constructions are ascriptive, and use $n\bar{\epsilon}^{+/}$ where syntactically permissible:

```
Mam ane sabilig, la'am ne wala m venl hali.
Mām á nē sābilíg, là'am
                                nē wālá m̀ vέňl
                                                            hālί.
1SG COP FOC black:SG, together with how 1SG be.beautiful so.far.
"I am dark, although I am very beautiful." (Song of Songs 1:5)
Lì à n\bar{\varepsilon} ná'anā.
                                  "It's easy."
3IN COP FOC easily.
Lì à nē būgusígā.
                                  "It's soft."
3IN COP FOC soft:ADV.
Lì à nĒ zāalím.
                                  "It's empty."
3IN COP FOC empty: ABSTR.
Lì àň súŋā.
                                  "It's good." <u>27.1.2</u>
3IN COP good:ADV.
```

Absolute clauses <u>24.2</u> and even content clauses may be complements of àeňa:

M diib ane ye m tum one tumi m la na boodim naae.

```
\dot{M} dī \dot{b} á \dot{n} \dot{e} \dot{m} \dot{
```

20 Clauses

Typical clauses consist of a subject NP followed by a VP. Clause-linker particles and clause adjuncts may precede the subject position; post-subject particles may intervene between NP and VP.

20.1 Clause types

Criteria for describing a clause as **main** or **subordinate** do not always neatly align. **Independency marking** of VPs <u>19.6</u> in principle marks a clause as non-subordinate, but main clauses are downranked to subordinate content clauses without internal alteration, and **main clauses preceded by** *coordinating kà* "and" **lack independency marking.** *Kà* was perhaps once always subordinating; its coordinating role is characteristic especially of narrative, and cross-linguistically, non-initial narrative clauses are often formally subordinate. There are three types of clause subordination: **nominalisation**, **catenation**, and **complementisation**.

	independency-marked	not independency-marked
main <u>21</u>	main without <i>kà</i>	main with initial <i>kà</i>
complementised <u>25</u>	yē/kà content	yε̃/kà purpose
catenated <u>22</u>		n/kà catenation
nominalised		n absolute/relative <u>24</u>yà' conditional <u>23</u>

Main and content clauses can be statements, questions or commands. Only main and content clauses may lack VPs.

Complementised clauses are introduced by $y\bar{\varepsilon}$ "that", less often $k\dot{a}$. Purpose clauses lack independency marking, have VPs with imperative mood, and show tense marking only if the main clause is ellipted; content clauses are downranked main clauses, with independency marking and the full range of main clause structures:

```
\dot{M} p\bar{v} b\hat{j} d y\hat{\epsilon} f\hat{v} k\bar{\epsilon}\eta B\hat{j} k\bar{j} +\emptyset.

1SG NEG.IND want that 2SG go Bawku NEG.

"I don't want you to go to Bawku."
```

Ka o ba' nɛ o ma pv baŋ ye o kpɛlim yaa. Kà ò bā' nɛ ò mà pv báŋ yɛ ò kpɛlim yāa $^+$ ø. and 3AN father:sg with 3AN mother:sg NEG.IND realise that 3AN remain PFV NEG.

"His father and mother did not realise that he had remained." (Lk 2:43)

Catenated clauses introduced by n lack their own subjects and resemble serial verb constructions in many ways; those introduced by $k\grave{a}$ have their own subjects. Catenated clauses lack independency and tense marking. They are part of their main clauses for focus purposes, and the main clause is often semantically subordinate.

Clauses marked by the post-subject particles \dot{n} and $y\dot{a}'$ are nominalised. They have independent tense-marking. Like other AdvPs and NPs, \dot{n} -clauses are coordinated with $n\bar{\epsilon}$, not $k\dot{a}$:

```
... pa'ali ba [on daa nyɛ Zugsɔb la suorin, ka o pian' tis o si'em],
πε [Saul n mɔɔl Yesu yɛla nɛ svnkpi'euŋ Damaskus teŋin si'em.]
... pá'alì bā
               źп
                     dāa ňyē Zūg-sób
                                          lā sūerί-n,
... teach 3PL.OB 3AN:NZ TNS see head-NULL.AN ART road:SG-LOC and 3AN
piāň' ø tís·ò ø
                      sī'əm, nē Saul n mɔɔl
                                                   Yesu vélà
speak cat give
                3AN.OB INDEADV with Saul NZ proclaim Jesus about
    sūň-kpî'on
                   Damaskus ténī-n
                                         sī'əm.
with heart-strength Damascus land:sg-loc INDF.ADV
"informing them how he had seen the Lord on the road and He had spoken to
him, and how Saul had preached boldly about Jesus in Damascus." (Acts 9:27)
```

A clause must be subordinate if it precedes clause-final elements belonging to the preceding clause, such as negative prosodic clitics:

```
ka pv nar ka ba buolim ye Tvmtvmma.

kà pō nár kà bà búelì m yē Tvm-tōmma ^+ø.

and NEG.IND must and 3PL call 1SG.OB that work-worker:SG NEG.

"and (I) ought not to be called an apostle" (1 Cor 15:9)
```

Structures can be obscured by extraposition <u>27.3</u>. Even a catenated clause after $k\bar{\epsilon}^+$ "cause" is unexpectedly placed after the VP-final perfective marker $y\bar{a}^+$ in

```
Amaa Wina'am kεya ka ya an nɔɔr yinne nɛ Yesu Kristo.
Àmáa Wínà'am kέ yá kà yà áň nɔ̄ɔr yūnní nē Yesu Kristo.
But God cause PFV and 2PL COP mouth:sg one with Jesus Christ.
"But God has caused you to be in agreement with Jesus Christ." (1 Cor 1:30)
```

Any subordinate clause type can be embedded (potentially recursively) in any other, but catenated clauses cannot follow complementised clauses at the same level. A catenated clause embedded in a content clause in a purpose clause:

M pv bood [ye fv ti yɛl bɛog daar [ye fvnɛ kɛ [ka mam Abram lieb bvmmɔra.]]] \dot{M} pv bôod yɛ fv tí yɛl bɛog dāar yɛ fvnc ø 1SG NEG.IND want that 2SG after say tomorrow day.after.tomorrow that 2SG.CNTR CAT kɛ kà mām Abram lîəb bvn-mɔrā +ø. cause and 1SG Abram become thing-haver:SG NEG.
"I do not want you afterwards some day saying that it was you who made me, Abram, rich." (Gen 14:23)

A content clause within an absolute nominalised clause:

```
[ban mi' [ye biig la kpinɛ la]] zug bán mi' yē bīig lā kpí nē lā zúg ^{3PL:NZ} know that child:SG ART die FOC ART upon "because they knew that the child was dead" (Lk 8:53)
```

A *n*-catenated clause within a relative nominalised clause:

```
[Paul n sob gbauŋ si'a [n tis Efesus dim la]] nwa.

Paul n sɔ̄b gbáu̞ŋ-sī'a n tís Efesus dím lā_ø nwá.

Paul nz write book-INDE.IN CAT give Ephesus NULL.PL ART CAT this.

"This is the letter Paul wrote to the Ephesians." (1996 NT heading)
```

20.2 Structure

Except in special circumstances, clauses require a subject NP, which is followed by a VP, with any post-subject particles intervening.

The **clause-linker particles** $k\grave{a}$ "and" and $y\bar{\varepsilon}$ "that" are placed before the subject (which may itself be ellipted after $k\grave{a}$.) Clause-level adjuncts may precede, follow, or occupy the clause-linker position before the subject.

 $Y\bar{\varepsilon}$ is invariably subordinating, but $k\dot{a}$ may be coordinating or subordinating: it appears in a great variety of constructions and meanings 19.3.5 22.3 25 27.2.

Kusaal is strictly SVO; deviations not achieved by $k\grave{a}$ -preposing always represent extraposition. Indirect objects precede direct, and objects precede other complements. VP adjuncts follow complements.

Emphatics <u>27.6</u> are clause-level particles associated with top-level NPs/AdvPs.

Main clauses and content clauses have similar structures. Both display independency marking on the first VP, unless preceded by coordinating $k\grave{a}$ 19.6, and they have structural possibilities not permitted to other clauses, including lacking VPs altogether.

20.2.1 Clause adjuncts

Clause-level adjuncts precede the subject position. They fall into three groups: prelinker adjuncts, linker adjuncts and postlinker adjuncts, which respectively precede, occupy, or follow the clause linker position. English conjunctions largely correspond to clause linkers, prelinker adjuncts and linker adjuncts.

Linker adjuncts do not occur along with linker particles at all. They include

kūυ	"or"	bēε	"or"
dìn zúgō	"therefore"	lìn zúgō	"therefore"
àlá zùgɔ̄	"thus"	bō zúgō	"because"

Bɔ̄ zúgɔ̄, stigmatised as a calque in ILK, is freely used in NT/KB for "because."

```
Police gbâň'a m bō zúgó m̀ ňwέ' dāμ lā.
Police seize 1sg.ob because 1sg hit man:sg ART.
"The police arrested me because I hit the man." (ILK)
```

It also appears after an absolute clause, like the postposition $z\bar{u}g^{3}$ alone. **Prelinker adjuncts** may precede but never follow linker particles.

```
\dot{a}m\acute{a}a "but" h\bar{a}l\acute{\iota} "until" \dot{a}s\acute{\epsilon}\epsilon "unless" \dot{a}l\acute{a}z\grave{u}q "thus"
```

Hālí and $\grave{as}\acute{\epsilon}\epsilon$ are also used as prepositions 18.

KB has no examples of $k\grave{a}$ àmáa to 365 of àmáa $k\grave{a}$, one of $k\grave{a}$ às $\check{\epsilon}\varepsilon$ to 247 of às $\check{\epsilon}\varepsilon$ $k\grave{a}$ and 436 examples of $h\bar{a}l\acute{\iota}$ $k\grave{a}$ but none of $k\grave{a}$ $h\bar{a}l\acute{\iota}$ as a clause adjunct. Prelinker adjuncts also precede $y\bar{\varepsilon}$, both as linker and "resumptive" $y\bar{\varepsilon}$ 25.2.1. Thus

```
Ka sieba la' o. Amaa ka sieba yɛl ye ...
Kà sīəba lá'·o ø. Àmáa kà sīəba yɛ́l yɛ̄ ...
And INDF.PL laugh 3AN.OB. But and INDF.PL say that...
"Some laughed at him, but others said..." (Acts 17:32)
```

```
Wina'am daa pv gaŋi ti ye ti tvm dian'ad tvvma, amaa ye ti bɛ nyain. Wínà'am dāa pv gāŋí tī yɛ́ tì tóm dia'ad tvvmà +ø, God tns neg.ind choose ipl.ob that ipl work dirt work neg, àmáa yɛ́ tì bɛ́ nyāe. but that ipl exist brightly.
```

"God did not choose us so that we would do the work of impurity, but so that we would be in cleanliness." (1 Thess 4:7)

Postlinker adjuncts follow any clause-linker particle or other clause adjunct but precede all other clause constituents, including $k\grave{a}$ -preposed elements:

```
Amaa on sadigim kpi la, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ?

Àmáa ɔ́n sādɪgim kpi lā, bɔ́ kà m̀ lɛ́m

But зʌnːnz since die ʌrt, what and ɪsg again

lɔ̄ɔd nɔ̄ɔr yá'asɛ̀ +ø +ø?

tie:IPFV mouth:sg again NEG CQ?

"But since he has died, why should I still be fasting?" (2 Samuel 12:23)
```

Some constituents occur *exclusively* as postlinker adjuncts: $y\dot{a}$ '-clauses "if/when ..." 23.1, $s\bar{a}d\iota g\ell m$ -clauses 24.2, $b\bar{\epsilon}og\acute{o}$ "tomorrow" and $d\bar{a}a$ - $s\ell$ ' $\epsilon r\bar{\epsilon}$ "perhaps." $Y\dot{a}$ '-clauses and $s\bar{a}d\iota g\ell m$ -clauses can only appear after main clauses by extraposition.

In addition, AdvPs referring to time, circumstance or reason may be either be used as postlinker adjuncts or as VP adjuncts. All VP adjunct AdvPs, including those referring to place or manner as well, may be placed before the clause subject by $k\grave{a}$ -preposing 27.2. This means that AdvPs referring to time, circumstance or reason can potentially occur before the subject alone, preceded by $k\grave{a}$, followed by $k\grave{a}$, or both preceded and followed by $k\grave{a}$, whereas other types of AdvP must be followed by $k\grave{a}$ when they appear before the subject. Thus

```
N\bar{a}nná-ná \dot{m} á n\bar{\epsilon} nâ'ab. "Now I am a chief." Now-hither 1SG COP FOC chief:SG.
```

is grammatical, but * $M\bar{\nu}$ 00 was corrected by WK to

```
M\bar{\jmath}οgύ-n kà mām bέ. "I'm in the bush." Grass:sg-loc and 1sg.cntr exist.
```

Any AdvPs or clauses expressing time, circumstances, or reason may appear as postlinker adjuncts, including absolute clauses, dìn zúg "therefore" lìn zúg "therefore", lì ňyá'aŋ "afterwards", lín à sī əm lā "as things stand", àsīda "truly."

In KB nannanna $n\bar{a}nn\dot{a}-n\bar{a}^{+/}$ "now" appears without preceding or following $k\dot{a}$ much more often than not (394/437 cases) and is thus usually a clause adjunct. WK requires $k\dot{a}$ after $k\dot{a}$ $n\bar{a}nn\dot{a}-n\bar{a}$, showing that that for him $n\bar{a}nn\dot{a}-n\bar{a}^{+/}$ is a prelinker adjunct but can be a preposed VP adjunct; this rule is not followed in KB.

```
Kà nānná-ná kà m̀ án̆ nâ'ab. "And now I am a chief."

And now-hither and 1sg cop chief:sg. Rejected by WK without the second kà
```

Dìn zúg and lìn zúg "therefore" without final -5 appear very often before $k\grave{a}$ (177/371 cases), i.e. as $k\grave{a}$ -preposed VP adjuncts. Constructions without $k\grave{a}$ probably arose by original VP-only dìn zúg and lìn zúg encroaching on the function of the corresponding linker adjuncts dìn zúgō and lìn zúgō.

Bɔ̄ zúg without -ɔ̄ appears in KB only as kà-preposed bɔ̄ zúg kà ...? "why ...?"

```
Bozug ka li aan ala? "Why is it so?" (Haggai 1:9) Bō zúg kà lì áaň àlá ^+ø? What on and 3IN COP thus co?
```

 $H\bar{a}li$ can be a prelinker adjunct before a n-catenated clause:

```
Ti nwa'ae li hali paae Nofa.

Tì nwa'a lī hālí ø pāe Nofa.

1PL strike 3IN.OB until CAT reach Nophah.

"We struck them as far as Nophah." (Numbers 21:30)
```

Clause adjuncts are otherwise found only in main and content clauses. The position of the negative clitic shows that the $k\grave{a}$ -clauses are not subordinate in e.g.

```
O ρυ yεεd fuugɔ, hali ka li yuug.
Ò ρῦ yêεd fūugɔ́ +ø, hālí kà lì yûug.

ЗАΝ NEG.IND wear:IPFV shirt:SG NEG, even and 3IN take.long.

"He had not worn clothes for a long time." (Lk 8:27)
```

M kυ basif ka fυ **keŋɛ** asεε ka fυ niŋi m zug bareka.

```
\dot{M} \dot{k}\dot{o} \dot{b} \dot{a}sí \dot{f} \dot{k}à \dot{f}\dot{o} \dot{k} \dot{e}né \dot{e} \dot
```

Wōυ "like" <u>18</u> appears as a linker adjunct before content clauses:

ka tuumbe'ed **ku** len so'e ti wuu ti aa li **yamugo**. kà tùvm-bē'ɛd kú lēm sú'v tī wūv tì áaň lì yàmmvgɔ̄ +ø. and work-bad:pl neg.irr again own ipl.ob like ipl cop 3in slave:sg neg.

"and that sin will not again own us as if we were its slave." (Rom 6:6, 1996)

```
M pian'adi tisidi ya wυυ ya anε m biis nε.

M piáň'adī ø tísidī yá wūυ yà á nέ m̀ bīis nē.

1SG speak:IPFV CAT give:IPFV 2PL.OB like 2PL COP FOC 1SG child:PL like.

"I talk to you as if you were my children." (2 Cor 6:13)
```

20.2.2 Subjects

Kusaal is not a pro-drop language. A dummy subject pronoun $l \hat{l}$ (never \hat{o}) is required in impersonal constructions:

```
Lì tùl.

"It [weather] is hot."

Lì àň súŋā.

"It's good."

Contrast Mooré yaa sõama, with no pronoun.

Lì nàr kà fù kūl.

"It's necessary for you to go home."

3IN must and 2SG go.home.
```

 $Zi'isig \varepsilon 19.5$ appears without a subject as "unbeknownst" at KSS p16. Lì may be omitted in $y\dot{a}$ '-clauses:

```
Ya'a ka'anɛ alaa, m naan kv yɛlinɛ ya ye ...

Yà' kā'a-ní àlá, m nāan kv yɛlı-ní yā yē ...

If Neg.Be-DP ADV:thus, 1sg then Neg.IRR say-DP 2PL.OB that...

"If it were not so, I would not have told you that ..." (Jn 14:2)
```

See $\underline{21.3}$ for omission and movement of subject pronouns in commands. Subject pronouns are regularly ellipted after $k\grave{a}$ when they would have the same reference as the subject of the preceding clause, except when $k\grave{a}$ introduces a content clause; M spreading still follows $k\grave{a}$. As $k\grave{a}$ -catenation typically involves a change of subject, this is characteristic of coordination, where a retained pronoun after $k\grave{a}$ usually signals a change of subject. Conversations may be reported $k\grave{a}$ $k\grave{a}$ 0 $k\grave{a}$ 1 with each $k\grave{a}$ 2 marking a switch of speaker. The implication of subject change can override gender agreement (which is no longer robust $k\^{a}$ 3 even in the face of semantic inappropriateness, though it cannot override number:

```
Pự 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

Pự āb lā dá' dāká kà bà kēŋ Bók.

Woman:pl art buy box:sg and 3pl go Bawku.

"The women bought a box and they went to Bawku." WK

(Possible, though unusual, with "they" referring to "the women.")
```

but Pu'ā lā dá' dāká kà **ò** kēŋ Bók.

Woman:sg art buy box:sg and 3an go Bawku.

"The woman bought a box and it went to Bawku." WK

The pronoun after $k\grave{a}$ may be ellipted as referring to the subject of a preceding $k\grave{a}$ -preposed absolute clause:

Ban wυm nε'εŋa la ka sin.

Bán wòm nē'ηá lá kà sīn.

3PL:NZ hear DEMST.IN ART and be.silent.

"After they heard this they fell silent." (Acts 11:18)

Elsewhere, absence of subject pronouns is due to *informal* ellipsis, "corrected" when informants' attention is drawn to it. M spreading after pronouns again remains:

```
Náe yàa +ø? "[Have you] finished?" Finish prv po?
```

20.2.3 Post-subject particles

For ya' "if" 23.1; nominaliser-n 24; sadigim "since" 24.2; naan(i) 23.1.2.

sìd "truly"

 \grave{O} sìd dāa á n $\bar{\epsilon}$ n \hat{a} 'ab. "Truly, he was a chief." WK 3AN truly TNS COP FOC chief:sg.

kūlım or **kūdım** "always" (← Hausa) is most often found with negatives:

Ka so' kudin ku len nyee li ya'asa.

```
Kà sɔ̄' kūdım kú lēm ňyéɛ lī yá'asā +ø.
```

And INDEAN ever NEG.IRR again see 3IN.OB again NEG.

"Nobody will ever see it again." (Rev 18:21, 1996)

nyāan or **nāan** "next, afterwards":

Ka Yesu tans nε kυkɔtita'ar ka nyaan kpi.

```
Kà Yesu táňs nē kύkō-títā'ar kà ňyāan kpí.
```

And Jesus shout with voice-great:sg and next die.

"Jesus cried out with a loud voice and then died." (Mt 27:50)

```
pà' tì "perhaps":
```

```
One pa'ati an Kristo la bee? 

\bar{D}nı \emptyset p\acute{a}' t\grave{\iota} àn Kristo lā bée ^+\emptyset? 

3AN.CNTR CAT perhaps cop Christ ART or ^{PQ}? 

"Perhaps he is the Christ?" (Jn 4:29)
```

```
עט'טח "then, next"
```

```
Manoa yυ'un da baŋ ye o anε Zugsɔb maliak.

Manoa yū'un dá bàŋ yє ò à nē Zūg-sɔ́b máli̯āk.

Manoah then της realise that βαν cop foc head-νυμμαν angel:sg.

"Then Manoah realised that he was an angel of the Lord." (Judges 13:12)
```

20.3 Ellipsis

Informal ellipsis is liable to be declared incorrect by speakers if their attention is drawn to it; it does not affect meaning. It is common in greetings $\underline{28}$. More systematic ellipsis may imply anaphora or avoid repetition, as after $k\grave{a}$ (above), with VP complements $\underline{19.8.1}$, coordination within NPs $\underline{15.1}$, implicit tense marking $\underline{19.3.5}$, or in replies to questions $\underline{19.2.1}$. Ellipsis can become formalised, as with $y\grave{\epsilon}l$ before $y\bar{\epsilon}$ $\underline{25.2}$, questions with $k\acute{\nu}\upsilon^+$ or $b\acute{\epsilon}\epsilon^+$ $\underline{21.2}$, indirect commands $\underline{25.1}$ $\underline{25.2.1}$, $k\grave{a}$ -preposing and n-focus $\underline{27.1.1}$ $\underline{27.2}$ or $h\bar{a}l\acute{t}^+$ as a stand-alone intensifier $\underline{27.6}$.

Clause-level bound words may be left standing alone, but not phrase-level:

```
Wina'am tisid ... ka mɛ tisid ... Winà'am tisìd ... kà mɛ́ tìsıd ... God give:IPVF ... and also give:IPFV ... "God gives ... and [God] also gives ..." (1 Cor 15:38); emphatic mɛ̀ \underline{27.6}
```

Ellipsis of repeated elements in clause coordination is common, e.g.

```
Dāu lā nyé bī-d(bìn kōv bī-pónàa +ø?
Man:sg art see child-boy:sg or child-girl:sg pq?
"Did the man see a boy or a girl?"
```

21 Main clauses

Main clauses show information-packaging possibilities $\underline{27}$ not found in subordinate clauses other than content clauses, which are downranked main clauses and show the same structures $\underline{25.2}$. Unless preceded by coordinating $k\grave{a}$, they display independency marking $\underline{19.6}$. They divide into declarative types (the unmarked default), content and polar questions, commands, and types lacking VPs. They are coordinated with $k\grave{a}$ "and", $k\bar{v}v$ "or", $b\bar{\varepsilon}\varepsilon$ "or"; $k\bar{v}v$ and $b\bar{\varepsilon}\varepsilon$ are synonyms in this use. Coordinating $k\grave{a}$ corresponds to English zero before $l\grave{\varepsilon}\varepsilon$ $\underline{19.7.1}$ and in narrative $\underline{19.3.5}$.

21.1 Content questions

Content questions (except those with lia 21.4.2) 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 7.4.1. $N\bar{\epsilon}^{+/}$ may not appear 27.1.2.

There is no special interrogative word order, but if the subject contains the interrogative pronoun it must be n-focussed 27.1.1 whenever syntactically possible, and interrogatives other than subjects are very often $k\grave{a}$ -preposed 27.2:

```
Fù bôod bó
             + ø?
                               "What do you want?"
2SG want what co?
Fù bôad línè
                               "Which do you want?"
2SG want DEM.IN CQ?
Ànɔʻɔnì ø nyē bíigà +ø?
                               "Who has seen a child?"
Who
         CAT see child:sg co?
Ànɔ̂'ɔn bíigì ø ňwá +ø?
                               "Whose child is this?"
Who
       child:sg cat this co?
                               "Whom did the man see?"
Dāu
       Iā ňyέ àn σ'>n ε + ø?
Man:sg art see who
                       cq?
                  l\bar{a} ἤyέε +ø? "Whom did the man see?"
Ànô'ɔn kà dāu
Who
       and man:sg ART see co?
Preposing is obligatory for b\bar{2} zúg, "why?" and for b\bar{2} when used for "why?":
B5
                               "Why are you crying?"
     kà
          fù kύmmà +ø?
What and 2SG weep: IPFV co?
```

21.2 Polar questions

Polar questions are of two types. One is exactly like a statement but ending in a LF showing final vowel lengthening and tone changes imposed by the polar-question clitic 7.4.1. $N\bar{\epsilon}^{+/}$ appears as in statements. The answer expected is $\bar{\epsilon}\epsilon\check{n}$ 21.4.4.

```
Dāylā ňyế bốigàa ^+ø?"Has the man seen a child?"Man:sg art see child:sg pq?"Am I a man?"\dot{M} á n\bar{\epsilon} dá\dot{\nu} ^+ø?"Am I a man?"1sg cop foc man:sg pq?"Are they killing goats?"Bà k\dot{\nu}vd n\bar{\epsilon} b\dot{\nu}vs\dot{\epsilon}\dot{\epsilon} ^+ø?"Are they killing goats?"3pl kill:IPFV foc goat:pl pq?"Don't you understand?"2sg neg.IND hear:IPFV neg pq?(expects \bar{\epsilon}\dot{\epsilon}n, here "no")
```

The second type follows the ordinary statement form with either $b\dot{\varepsilon}\varepsilon$ "or" (expecting disagreement) or $k\dot{\upsilon}\upsilon$ "or" (expecting agreement; rare in NT/KB):

```
Dāu lā ňyέ bīig kύυ +ø?

Man:sg art see child:sg or pQ?

"Has the man seen a child?" (I expect so.)

Dāu lā ňyέ bīig bέε +ø?

Man:sg art see child:sg or pQ?

"Has the man seen a child?" (I expect not.)
```

21.3 Commands

For indirect commands, see $\underline{25.1}$ $\underline{25.2.1}$. In direct commands the subject is 2nd person: 2sg pronouns are deleted, and 2pl pronouns moved to immediately after the verb, assuming the liaison-word form ya $\underline{7.2.1}$ $\underline{7.2.2}$. Thus

```
Fù gós bīig lā. "You (sg) have looked at the child."

2SG look.at child:SG ART.

Yà gós bīig lā. "You (pl) have looked at the child."

2PL look.at child:SG ART.
```

```
but
      Gàsım
                  bīia
                           lā!
                                        "Look (sq) at the child!"
      Look.at:IMP child:SG ART!
      Gàsımī
                         bīia
                                        "Look (pl) at the child!"
                   Ø
                                 lā!
      Look.at:IMP 2PL.SUB child:SG ART!
      Dā
                           láa +ø!
              gās bīig
                                         "Don't (sq) look at the child!"
      NEG.IMP look child:SG ART NEG!
                                   láa +ø!
      Dā
              gōsı ø
                           bīia
      NEG.IMP look 2PL.SUB child:SG ART NEG!
      "Don't (pl) look down!"
              q̄sε +ø!
                                        "Don't (sg) look."
      Dā
      NEG.IMP look NEG!
      Dā
                                        "Don't (pl) look."
              gōsı yá
                            +ø!
      NEG.IMP look 2PL.SUB NEG!
```

2sg/2pl subject pronouns are not changed after yà'-clauses:

```
Fv ya'a mɔr pu'a, fvn da mɔɔd ye fv bas oo.

Fv ya' mɔr pu'a, fvn da mɔɔd yɛ fv bás·o-o +ø.

2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon-3AN.OB NEG.

"If you have a wife, don't try to leave her." (1 Cor 7:27)
```

They also remain in quoted direct commands within indirect speech <u>25.2.1</u>, even when the addressee is the same as in the original utterance:

```
Ò yèl yé bà gòsim tēŋi-n.
3AN say that 3PL look:IMP ground:SG-LOC.
"She said to them: Look down!" WK
Ò yèl yé fù gòsim tēŋi-n.
3AN say that 2SG look:IMP ground:SG-LOC.
"She said to you SG: Look down!"
Ò yèl yé yà gòsim tēŋi-n.
3AN say that 2PL look:IMP ground:SG-LOC.
"She said to you PL: Look down!"
```

Some speakers still keep postposed ^{ya} after the verb even when there is a pronoun subject before it; such speakers also repeat ^{ya} in catenated clauses.

```
O yèl yé bà gòsımī ø tēŋı-n.

3AN say that 3PL look:IMP 2PL.SUB ground:SG-LOC.

"He said to them: Look down!"

Kèmī ø nā n gōsı ø!

Come:IMP 2PL.SUB hither CAT look 2PL.SUB!

"Come (ye) and look!" (WK Kèmī nā n gōs!)
```

Direct commands which consist only of a verb, or a verb with a following postposed subject pronoun, occasionally end in a Long Form like that preceding a negative prosodic clitic:

Gòsımā! "Look!"
Gòsımīyá! "Look! (plural)

21.4 Verbless clauses

21.4.1 Identificational clauses

Verbless identificational clauses have the form NP + catenator-n + deictic particle or $w\grave{a}$ $n\bar{a}$ "this here." The NP may be an interrogative pronoun.

```
Kùlını ø lā.
                              "That is a door."
Door:sg cat that.
                              "This here is a door."
Kùlını ø wá nā.
Door:sg cat this hither.
Bēogυ
                              "See you tomorrow" ("That's tomorrow.")
Tomorrow CAT that.
                              "What's that?"
Bɔɔ ø lá
What CAT that co?
Ňwāamıs ø ňwá!
                              "Monkeys!"
                                                 [w̃ã:mɪsa]
Monkey:PL CAT this!
                               (Said by a passenger in my car, on suddenly
                               catching sight of some.)
```

Identificational clauses may append clauses by catenation:

```
Anɔ'ɔn nwaa yisid nidib tvvmbɛ'ɛdi basida? 
Ànɔ'ɔn ø nwáa ø yīsıd nīdıb tvvm-bɛ̄'ɛdı ø básıdà +ø? 
Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV co? 
"Who is this who drives people's sins out?" (Lk 7:49)
```

```
Yεl boo nwa ka Wina'am kε ka li paae ti?

Ȳɛl-bɔɔ ø nwa ka Wina'am kε ka lì paa tì +ø?

Matter-what cat this and God cause and 3IN arrive 1PL.OB co?

"What is this that God has made to come to us?" (Genesis 42:28)
```

Verbless clauses can be embedded in verbal clauses:

```
Yà ningid bɔɔ nwa?
Yà ningid bɔɔ ø ňwá +ø?

2PL do:IPFV what cat this co?
"What is this you are doing?" (Nehemiah 2:19)

Fu maal bɔɔ la tis mam?
Fù mâal bɔɔ ø lā ø tís màm +ø?

2SG make what cat that cat give me co?
"What is this that you have done to me?" (Numbers 23:11)
```

21.4.2 Lia-clauses

X + lia means "where is X?" Although I often heard lia in spontaneous conversation in the 1990's, no examples appear in the 1996 or 2016 Bible versions.

```
Fù mà lā lía +ø?

2SG mother:SG ART be.where cQ?

"Where is your mother?" (WK to a child in the outpatient clinic.)

Ka awai la dia [sic]?

"But where are the nine?" (Lk 17:17, 1976)

Kà àwāe lā lía +ø?

And NUM:nine ART be.where cQ?
```

21.4.3 Vocatives

Vocative clauses usually either precede a main clause, or stand alone. They take the form of NPs followed by the vocative prosodic clitic 7.1:

```
1SG wife:SG with 1SG child:PL VOC!

"My wife and my children!"

M diammā +ø, bɔ́ kà fù kúesìda +ø?

1SG parent.in.law:SG VOC, what and 2SG sell:IPFV CQ?

"Madam, what are you selling?"
```

 \dot{M} pu'ā né \dot{m} bīise $+ \varphi!$

Vocatives do not take the article $l\bar{a}^{+/}$, but often end in $n\bar{w}$ "this":

Bīis ňwá! Pu̯'ā ňwá!	"Children!"	[bi:sa]
	"Woman!"	[pʊ̯awã]
Zōn ňwá	"Fools!"	[zɔn:a]

21.4.4 Particles as clauses

Some particles occur characteristically as complete utterances. Some are onomatopoeic; others are widely shared among local languages.

```
Tò. "OK." (= Hausa tôo)
Báp. "Wallop!"

Nfá! "Well done!"
```

"Yes" is $\bar{\epsilon}\epsilon\check{n}$; "No" is $\acute{a}y\iota\iota$. As in many languages, the reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

```
Lì nàa née ^+ø? "Is it finished?"

\bar{\mathcal{E}}Eň. "Yes."

\dot{\mathcal{A}}yìι. "No"

Lì pō nāée ^+ø ^+ø? "Isn't it finished?"

3IN NEG.IND finish NEG PQ?

\bar{\mathcal{E}}Eň. "No."

\dot{\mathcal{A}}yìι. "Yes."
```

22 Catenated clauses

22.1 Overview

A clause may be followed by one or more VPs, each introduced by catenator-n; for the realisation of this particle see 7.2. Complements, VP adjuncts, and even other clauses introduced by $k\grave{a}$ may be incorporated within such chains.

Amaa ka Zugsob malek daa keŋ n yo'og sarega doog za'anoor la **yu'uŋ kan**, n more ba n yiis yiŋ.

```
Àmáa kà Z\bar{u}g-sób máliāk dāa kēŋ n yô'ɔg sārugá dôɔg But and head-NULL.AN angel:sg TNS go cat open prison:sg house:sg z\dot{a}'-nōɔr lā yō'vŋ-kán, n mōrí bā n yīis yíŋ. compound-mouth:sg art night-dem.sg, cat have 3PL.OB cat extract outside. "But an angel of the Lord came and opened the gate of the prison that night and took them outside ..." (Acts 5:19, 1996)
```

Ka dau so' due n zi'e la'asug la nidib sisoogin, n a Parisee nid **ka o yu'ur buon Gamaliel**, n a one pa'an Wina'am wada la yela, ka lem a yu'ur daan nidib sa'an.

Kà dàu-sɔ̄' dūe n zí'e lá'asòg lā nīdıb sísὺυgō-n, n áň And man-INDF.AN rise CAT stand assembly:SG ART person:PL among-LOC, CAT COP Parisee kà ò yū'ur bûen Gamaliel, n áň ónì Pharisee person:sg and 3AN name:sg call:IPFV Gamaliel, CAT COP REL.AN teach:IPFV dâan Wínà'am wádà lā yélà, kà lém àň yū'ur nīdıb sâ'an. God law ART about, and again COP name:sg owner:sg person:pl among. "A man stood up in the assembly, a Pharisee called Gamaliel, a teacher of God's law and also reputable among the people." (Acts 5:34, 1976)

Toende Kusaal (like Dagaare, Bodomo 1997) has zero throughout corresponding to catenator-n, but most other Western Oti-Volta languages show n, at least in slow speech. In languages with the zero realisation, these structures have usually been regarded as serial verb constructions, and many uses of catenation are indeed closely parallel to uncontroversial serial verb constructions in other languages. For example, substitution of ka for catenator-n makes it impossible to interpret "auxiliary" verbs in the specialised senses associated with n-catenation:

```
M zání m nú'ugò ø sī'ıs dāká lā.

1SG pick.up 1SG hand:SG CAT touch box:SG ART.

"I touched the box with my hand."
```

```
"I picked up my hand and touched the box."

M dāa kûes bùŋv ø tís dự'átà.

1SG TNS sell donkey:SG CAT give doctor:SG.

"I sold a donkey to the doctor."

?? M dāa kûes bùŋ kà tís dự'átà.

"I sold a donkey and gave it to the doctor."
```

?? Mì zání mì nû'ug kà sī'ıs dāká lā.

However, *n*-catenation shows much greater flexibility than typical serial verb constructions, and in particular VPs can be catenated to verbless clauses <u>21.4.1</u>:

```
Anɔ'ɔn nwaa yisid nidib tvvmbɛ'ɛdi basida?
Ànɔ̂'ɔn_ø nwáa_ø yīsıd nīdıb tvvm-bɛ̄'ɛdı_ø básıdà +ø?
Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV co?
"Who is this who drives people's sins out?" (Lk 7:49)
```

Catenator-n thus attaches a VP to the preceding clause, not VP. In fact, the catenated VP itself will be considered to be a *clause*, which shares its subject with the main clause. This analysis is supported by the existence of clearly parallel constructions using $k\grave{a}$ in place of catenator-n 22.3. Catenation is a closer relationship than complementisation; mood and aspect are mostly determined by the first VP, and the catenation behaves as one unit with regard to focus 27.1.2.

There are similarities with "catenative" constructions in English. CGEL pp1176ff reanalyses many traditional auxiliary verbs as taking non-finite clauses (with or without their own subjects) as "catenative complements." There is evidence for catenator-n originating as a non-finite marker. Olawsky describes the Dagbani structure n+verb as an "infinitive", presumably meaning that it is used as the citation form, though he gives no examples of usage. Both Niggli and Zongo describe the same construction in Mooré as an *infinitif*, and Canu, who calls it the "état neutre" (p272), confirms that it is used in citation and in one-word answers to questions (p175) and in constructions like $\bar{e}m$ dátā $nd\bar{\iota}$ "je désire manger."

Normally only the first VP carries tense and polarity particles, which apply to the entire catenation, but (especially in n-catenation) each retains discontinuous-past n^{ε} , and while initial irrealis mood marking applies to the whole chain, a VP following an indicative may be in the irrealis, in which case it will be marked itself. The preverb $t\hat{\iota}$ is often found with non-initial VPs in n-catenation.

Catenation seems always to involve semantic subordination; the equivalent in translation in European languages would often be a participle modifying the main verb subject. However, it may be the *first* component which is semantically subordinate; many verbs have characteristic subordinate "auxiliary" roles in *n*-catenation, and whether they precede or follow the "main" verb depends on their own semantics. Moreover, in catenation the order of events, if they are not simultaneous, must always be mirrored in the order of the VPs <u>19.2.2</u>.

Common n-catenation patterns with verbs without specialised roles are (a) main VP + imperfective VP expressing accompanying events:

```
Ka Ninsaal Biig la kena dit ka nuud...

Kà Nīn-sâal Bîig kēn nā Ø dít kà nūud...

And Person-smooth:sg child:sg come:IPFV hither CAT eat:IPFV and drink:IPFV...

"And the Son of Man comes eating and drinking ..." (Mt 11:19)
```

(b) perfective VP expressing prior event + main VP

1SG.CNTR if NEG.IND come-DP hither CAT talk-DP

```
Ka dapa ayi' yε fupiela zi'e ba san'an.

Kà dāpá_àyí' yέ fū-píəlà_ Ø zì'e bà sā'an.

And man:PL NUM:two dress shirt-white:PL CAT stand 3PL among.

"Two men dressed in white were standing with them." (Acts 1:10)
```

(c) main VP + perfective VP in irrealis or imperative mood, expressing purpose. The preverb $t\hat{i}$ is commonly seen in the second VP.

```
Amaa m pv mɔr antu'a zugv o yɛla na sɔbi tis na'atita'ar laa.
Àmáa ṁ pū
               mɔr ántù'a zúgύ ο yēlá ø nà sɔ̄bι ø tís
But 1SG NEG.IND have case:SG upon 3AN about CAT IRR write CAT give
ná'-tītā'ar
             láa +ø.
king-great:SG ART NEG.
"But I have no case about him to write to the Emperor." (Acts 25:26)
Kèm ø tí
               ňyε̄ du'átà.
                               "Go and see the doctor."
Go:IMP CAT after see doctor:sg.
Man ya'a ρυ kεεn na tu'asini ba ...
       yá' pū
                 kēε-n
                         nā jø tú'asī-ní þā...
```

"If I had not come to talk to them ..." (Jn 15:22): Note of on both verbs.

3PL.OB...

(d) $H\bar{a}l(+)$ "until" can precede *n*-catenated clauses as a prelinker adjunct 20.2.1.

Catenated VPs can be coordinated with kà "and":

```
ka keŋ ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'uŋa.
kà kēŋ ... n jāň'asíd kà pjāň'ad n dū'osíd Wínà'am yô'vr súŋā.
and go ... cat leap:IPFV and praise:IPFV CAT elevate:IPFV God name:sg good:ADV.
"and went ... leaping and praising the name of God greatly." (Acts 3:8, 1996)

Sogia so' kae' n tum ka yood o meŋa.
```

Sógià-sɔ̄' kā'e n túm kà yɔ̄ɔd ò mēŋá $^+$ ø. Soldier-INDF.AN NEG.BE CAT WORK:IPFV and pay:IPFV 3AN self NEG.

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

22.2 Auxiliary verbs in *n*-catenation

Certain verbs have characteristic specialised meanings in n-catenation. Dual-aspect verbs agree in aspect with the main VP verb.

22.2.1 Preceding the main VP

 $b\dot{\epsilon}^+$ "exist, be somewhere" + $\dot{a}nin\bar{a}$ "there" + imperfective "be in the process of ..."

```
\grave{O} b\grave{\epsilon} \grave{a}nínā n \check{n}w\hat{\epsilon}'\epsilon d b\bar{i}ig l\bar{a}. 3AN EXIST ADV: there CAT beat: IPFV child: SG ART. "He's currently beating the child."
```

àeňa "be something/somehow" can be used in foregrounding by clefting 27.1.1:

```
Li ane o sidi sv'oe li.

Lì á né ò sīdı Ø sv'v lī.

3IN COP FOC 3AN husband:SG CAT OWN 3IN.OB.

"It's her husband who owns it." (1 Cor 7:4)

mī'+ "know", zī'+ "not know": nàm mī' n + perfective "always have X-ed",
```

nàm zī' n + perfective "never have X-ed":

Makir banε buudi paadi ya la nan mi' paae sieba mɛn.

Mākir bànι būudι pāadί yā lā nám mī' ø pāe sīəba mɛ́n.

Testing REL.PL sort reach: IPFV 2PL.OB ART still know CAT reach INDE.PL also.

"Trials of the kind that have reached you have always reached others too."

(1 Cor 10:13)

```
M nám zī' φ ňyē gbīgιmnε +ø.
      1SG still NEG.KNOW CAT see lion:SG
      "I've never seen a lion." SB
z a n^{\epsilon} and n \bar{b} k^{\epsilon} "pick up, take" with object "using" (of a literal object as instrument)
      M nók
                 sύ'υgὺ ø kịá nīm
      1SG pick.up knife:SG CAT cut meat:SG ART.
      "I cut the meat with a knife."
      M zání m nú'ugò ø sī'ıs dāká lā.
      1SG pick.up 1SG hand:SG CAT touch box:SG ART.
      "I touched the box with my hand."
mɔra/ "have" + object "bringing" with motion verbs:
      Dābá_àyópòe kà fù mōr·ó_ø_ ø kē
                                                      nā.
      Day:PL NUM:seven and 2SG have 3AN.OB CAT come hither.
      "Bring her here in a week." WK
dɔ̃la/ "accompany in subordinate role, attend"
      Bà dòll·ō ø ø kēŋ Bók.
                                      "They went to Bawku with him."
      3PL follow 3AN.OB CAT go Bawku.
"Beginning" verbs naturally precede:
      Ka Pita pin'ili pa'ali ba ...
      Kà Pita pīň'il ø pá'alì bā...
      And Peter begin cat teach 3PL.OB ...
      "Peter began to tell them." (Acts 11:4)
      Tì dέηὶ ø tís·ò ø
      1PL precede CAT give 3AN.OB car.
      "We previously gave him a car." (d \dot{\epsilon} \eta^{\epsilon} "do/go first")
      Ka dau sɔ' duoe zi'en la'asvg la svvgin ...
      Kà dàu-sɔ̄'
                      dūe ø zî'ən
                                        là'asvg lā súvgū-n...
      And man-INDF.AN rise cat stand.up assembly art among-loc ...
```

"And a man (having risen) stood up in the synagogue ..." (Acts 5:34)

 $k\bar{\epsilon}\check{n}^+$ "come" and $k\bar{\epsilon}\eta^{\epsilon/}$ "go" can be used similarly as initiators:

 \dot{M} $k \in n \setminus g$ $p = n \hat{u}$ "I went and washed my hands." 1SG go CAT wash hand:PL.

su'āa "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baŋidib la ...

Kà Nà'ab Herod sự'ā g bû el bānıdıb lā ..

And king:sg Herod conceal cat ask understander:pl art...

"Herod secretly called for the wise men ..." (Mt 2:7)

nìŋ wālá⁺ literally "do how?" is used in catenation for "how can ...?" (see also 22.3):

Ninsaal na niŋ wala an pupiel Wina'am tuonnɛ? Ninsaal biig na niŋ wala pu mɔr taal Wina'am tuonnɛ?

Nīn-sâal ná nīŋ wālá ø àň pú-pìəl Wínà'am tûənnè †ø?

Person-smooth:sg irr do how cat cop inside-white:sg God before cq?

Nīn-sâal bîig nà nīŋ wālá ø pū mɔ̄r tâal

Person-smooth:sg child:sg irr do how cat neg.ind have fault:sg

Wínà'am tûennè +ø?

God before co?

"How can a human being be pure before God? How can the child of a human being not have sin before God?" (Job 25:4)

 $\check{\textit{nyan}}^{\epsilon/}$ means "overcome" as a main verb:

Ka m nyan dunia. "I have overcome the world." (Jn 16:33)

Kà m̀ nyāŋ dūnıya.

And 1sg overcome world:sg.

As a *n*-catenation auxiliary it means "carry out successfully, prevail in":

M pū ňyāηι 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", $\check{n}y\bar{a}\eta^{\epsilon l}$ expresses events and not states. Thus, to express present ability or inability, the auxiliary is in the irrealis mood; if the main verb is imperfective the auxiliary is imperfective too.

```
M kú ňyānı 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 nyanedin ketin ka nidib voen

wād-línì ňyānídī-n ø kētí-n kà nīdib vōu-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)
```

tūň'e means "be able"; it is a stative single-aspect verb. As a main verb

```
bà daa tis ka li zemisi ba paŋi na tun'e si'em
bà dāa tís kà lì zēmísì bà pàŋı ø nà tūň'e sī'əm

3PL TNS give and 3IN become.equal 3PL strength NZ IRR be.able INDF.ADV

"They gave as much as their strength would permit" (2 Cor 8:3)
```

Because of its stative meaning, when $t\bar{u}n'e$ is used as a n-catenation auxiliary both indicative and irrealis moods can express present ability or inability.

```
ka li ku tun'e su'a.
kà lì kứ
              tūň'e ø su'āa +ø.
and 3IN NEG.IRR be.able CAT hide NEG.
"which cannot be hidden" (Mt 5:14)
Ya na tun'e zin' tenin la nε ti.
Yà ná tūň'e ø zíň'i
                           tēηι-n
                                      lā nέ tì.
2PL IRR be.able CAT be.sitting land:SG-LOC ART with 1PL.
"You can dwell in the land with us." (Genesis 34:10)
Fυ tun'e nyεt si'ela?
Fù túň'e ø ňyε̄t sí'əlàa +ø?
2SG be.able CAT see: IPFV INDF.IN PQ?
"Can you see anything?" (Mk 8:23)
O pυ tun'e pian'ada.
         tūň'e ø piāň'adá +ø.
ÒρŌ
3AN NEG.IND be.able CAT speak: IPFV NEG.
"He could not speak." (Lk 1:22)
```

With $nyan^{\epsilon}$ as the main verb in the sense "overcome":

```
bozugo ba ku tun'e nyaŋe ba meŋa. bɔ̄ zúgɔ̄ bà kù tūň'e_ ø ňyāŋí_ bà mɛ̄ŋá ^+ø. because 3PL NEG.IRR be.able CAT control 3PL self NEG. "because they cannot control themselves." (1 Cor 7:5, 1996)
```

22.2.2 Following the main VP

tìs^E "give" is used for "to, for"; the meaning may have nothing to do with "giving", and is simply a way of adding an indirect object. This can be used to put an indirect object after a direct, or to have both direct and indirect bound pronoun objects.

```
Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ.

Fù pō má' n tìs nīn-sáalā +ø, àmáa fù mà'

25G NEG.IND lie CAT give person-smooth:sG NEG but 25G lie

n tís nē Wínà'am Sí-sùŋ.

CAT give FOC God Spirit-good:sG.

"You have not lied to a human being; rather, you have lied to God's Holy Spirit." (Acts 5:4, 1996)

M dāa kûes bùŋʊ ø tís dự'átà.

15G TNS sell donkey:sG CAT give doctor:sG.

"I sold a donkey to the doctor."
```

gàad^E "pass, surpass" can be used in comparisons:

Isaac kárím ø gát

```
Isaac read:IPFV CAT pass:IPFV John.

"Isaac reads better than John." SB

À-Wīn gím ø gát À-Būgur.

PERS-Awini be.short CAT pass:IPFV PERS-Abugri.

"Awini is shorter than Abugri." SB

Fu sid non mam gat bamaa?

Fù síd nòn 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)
```

John.

```
gàlis<sup>E</sup> "get to be too much" (Sāa gálìs yā "There's too much rain"):
      Ò dì n gálìs.
                                       "She's eaten too much."
      зам eat caт exceed.
             kárìm gbánà ø gálisìdā
      Dā
      NEG.IMP read:IPFV book:PL CAT exceed:IPFV NEG.
      "Don't read books too much."
bàs<sup>ε</sup> "send/go away" is used for "away, off, out":
      Ano'on nwaa yisid nidib tuumbe'edi basida?
      Ànɔ̂'ɔn ø ňwáa ø yīsıd
                                     nīdıb
                                               tΰυm-bĒ'εdι ø básıdà
                                                                              +ø?
      Who
              CAT this CAT expel: IPFV person: PL deed-bad: PL CAT throw.out: IPFV CQ?
      "Who is this who drives people's sins out?" (Lk 7:49)
Ending verbs naturally follow the main VP:
      Ò dù ø nāe.
                                       "He's finished eating."
      зам eat сат finish.
      Ò dù ø tīg.
                                       "She's eaten to satiety."
      зам eat сат get.sated.
Motion verbs occur in n-catenation with meanings like local prepositions e.g.
      Ò kàt
                   kíkīr-bê'ɛd-nàm n yīisíd
                                                nīdıb.
      3AN drive:IPFV fairy-bad-PL CAT expel:IPFV person:PL.
      "He drives evil spirits out of people."
                                       "Shift along up to me." (pāe<sup>+/</sup> "reach")
      Èňrigim
                     ø páa m.
      Shift.along:IMP CAT reach 1SG.OB.
w\bar{\epsilon}n^{na/} "be like" is very common in n-catenation. W\bar{\epsilon}n^{na/} + complement sequences
are often treated like prepositional phrases 18. As a main verb:
      Ka o nindaa wenne nintan ne.
      Kà ò nīn-dáa
                          wĒn
                                   nē nīntāŋ nē.
      And SAN eye-face:sg resemble with sun:sg like.
```

"His face is like the sun." (Rev 10:1, 1996: KB Ka o nindaa nwɛnɛ winnig nɛ)

 $W\bar{\epsilon}n^{\mathsf{na/}}$ takes a prepositional phrase with $w\bar{\nu}\nu$ "like" or $n\bar{\epsilon}$ "with" as complement. Any object without the article $l\bar{a}^{+/}$, even a pronoun or proper name, must be followed by a meaningless $n\bar{\epsilon}$. Before numbers and measurements $w\bar{\epsilon}n^{\mathsf{na/}}$ means "about, approximately"; numbers appearing alone are not followed by $n\bar{\epsilon}$:

```
Lì à nẽ wōv maila àyí' nẽ.

3IN COP FOC like mile NUM:two like.

"It's about two miles." (Jn 11:18)

but ka ba kal an wvv kɔbiga nɛ pisi.

kà bà kāl áň wōv kɔbigā nē pīsí.

and 3PL number:sg cop like hundred with twenty

"and their number was about 120." (Acts 1:15)
```

Li anε wυυ maila ayi' nε.

 $l\grave{a}$ 'am^m "together" is also found as a preverb <u>19.7.2</u> and in the compound preposition $l\grave{a}$ 'am $n\bar{\varepsilon}$ "together with" <u>18</u>. As a main verb it means "associate with":

... ye labasuŋ moolug la ket ka buudi wusa la'amid ne taaba pudugid Wina'am piini. ... yē lábà-sùŋ mɔɔlùg lā kɛt kà būudı wōsa lá'amìd

... that news-good:sg proclamation art cause:IPFV and tribe all gather:IPFV $n\bar{\varepsilon}$ $t\bar{a}aba$ \emptyset $p\bar{\nu}digid$ Wina'am piini. with each other cat share:IPFV God gift.

"....that the proclamation of the good news is making every tribe gather with one another to share God's gifts." (Eph 3:6, 1996)

 $y\grave{a}'as^{\epsilon}$ or $y\grave{a}'as^{a}$ "again" is rarely preceded by liaison (never in KB) and has now effectively simply become an adverb; it is even preposable with $k\grave{a}$ 27.2. ILK glosses it "repeat", but I have no examples as a main verb.

```
ka m lem yeti ya'as ... "and I say again ..." (Gal 1:9, 1996) kà m lém yètı g yâ'as and 1sG again say:IPFV CAT again "Again I looked ..." (Rev 5:11, 1976) Yâ'as kà m g\bar{b}s ... Again and 1sG look ...
```

22.3 Kà-catenation

Certain constructions with a clause introduced by $k\grave{a}$ have clear affinities with catenation using n. They never have alternate forms with the linker $y\bar{\varepsilon}$. With few exceptions, they either have different subject from the preceding clause or differ in polarity. They resemble n-catenation in that they have the aspect and mood of the preceding VP.

 $K\bar{\varepsilon}^+$ "let, leave off" is used with $k\dot{a}$ -catenation in the sense "let, cause that." The subject of the catenation cannot be the same as the main clause subject (in the whole KB, the only counterexample is Titus 2:7 $k\varepsilon l$ ka fv $m\varepsilon \eta$ an zanbinn ε tisi ba "Let you yourself be a sign to them", where the pronoun fv is formally a predependent.) The mood of the catenation matches the VP containing $k\bar{\varepsilon}^+$, though imperative often replaces irrealis mood.

```
Ba kvdim niŋidi lin ye li kɛ ka ba da nyɛ Kristo kum dapuudir namisvg laa. Bà kvdim niŋidī_lí yɛ́ lì kɛ́ kà bà dā nyɛ̄ Kristo kum 3PL ever do:IPFV 3IN.OB that 3IN cause and 3PL NEG.IMP see Christ death dà-pvvdir namisvg 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.

D\bar{l} ní ké kà bà dā kp\bar{l}'ılímm +ø.

3IN.CNTR CAT IRR cause and 3PL NEG.IMP finish NEG.

"That will cause them not to come to an end." (Genesis 6:20)
```

After $k \dot{\epsilon} \epsilon - n \ k \dot{a}$, with discontinuous-past n^{ϵ} , the catenated clause generally had n^{ϵ} in the 1976 Bible, but this is no longer invariable. Aspect usually matches:

```
Ka li ane wada la ket ka tvvmbe'ed nyet paŋ.

Kà lì à né wādá lā ø két kà tvvm-bē'ed ňyēt páŋ.

And sin cop foc law art cat cause:ipfv and deed-bad see:ipfv power:sg.

"It is the law which makes sin find power." (1 Cor 15:56)
```

The irregular imperative $k\grave{\epsilon}l^a$, followed by a $k\grave{a}$ -clause with imperative mood, creates a way of expressing commands to third or first persons:

kà ò gōs tēn:-n.

ΚὲΙ

 $K\grave{\epsilon}l~k\grave{a}~...$ is often ellipted informally, leaving the lack of independency marking as the only sign that the clause is a command:

```
M gós
                 nīf
                       Ιā.
                                      "I've looked at the eye."
      1SG look.at eye:SG ART.
                                      Independency marked: tone overlay on gós
      M aās
                 nīf
                                      "Let me look at the eye." (Overheard in clinic)
but
                        Ιā.
                                      No tone overlay on g5s
      1SG look.at eye:SG ART.
      M d(gιnèε +ø?
                                      "Am I to lie down?" (Overheard in clinic)
      1SG lie.down PO?
                                      No independency imperative -m^a
      Ò záb nà ab lā.
                                      "He should fight the chief."
      3AN fight chief:SG ART.
                                      M spreading after ò, not záb 19.6.1.2
```

Mìt is a defective verb used only in the imperative $\underline{19.5}$. Much its most common use is with $k\grave{a}$ -catenation as "see that it doesn't happen that ...". In this sense it never appears with the postposed 2pl subject ya, suggesting that it is impersonal.

```
Mid ka ya maali ya tvvm svma nidib tuon ye ba gɔs.

Mìt kà yà máalì yà tvνm-svma nīdıb tûen yέ bà gɔ̄s.

NEG.LET.IMP and 2PL make 2PL deed-good:PL person:PL front that 3PL look.at.

"Don't do your good deeds in front of people so they'll look." (Mt 6:1)
```

X *nìŋ wēlá n...?* "how can X ...?" has an impersonal variant using a dummy subject in the main clause and the effective subject in $k\hat{a}$ -catenation.

```
Li niŋ wala ka o an David yaaŋa?

Lì nìŋ wēlá kà ò áň David yâaŋà + \emptyset?

3IN do how and 3AN COP David descendant:sG CQ?

"How can he be David's descendant?" (Mt 22:45)
```

Where there is no change of subject, n-catenation is overwhelmingly more common, but a few cases of the personal type do appear with $k\grave{a}$:

```
M na niŋ wala ka nyɛ faangirɛ?

M ná nīŋ wēlá kà nyē fāangirè +ø?

1SG IRR do how and find salvation co?

"How can I find salvation?" (Acts 16:30)
```

 $K\grave{a}$ usually replaces n when there is a change of polarity in catenation:

Ka dau daa zin'i Listra ni ka pu tun'e kenna.

```
Kà d\bar{a}u d\bar{a}a zi\bar{n}'i Listra ni kà p\bar{v} t\bar{u}\bar{n}'e \emptyset k\bar{\epsilon}nn\acute{a} ^+\emptyset. And man:sg tns sit Lystra loc and neg.ind be.able cat go:ipfv neg. "There was a man in Lystra who could not walk." (Acts 14:8, 1996)
```

Ka Joon kena lood noor ka pv nuud daam

Change from positive to negative can nevertheless occur with n:

```
Ya sieba bɛ kpɛla kv kpii ...

Yà sīəba bɛ́ kpɛlá ø kv kpīi ^+ø ...

2PL INDF.PL EXIST here CAT NEG.IRR die NEG

There are some of you here who will not die ..." (Lk 9:27)
```

An **adnominal** $k\grave{a}$ -catenated clause follows, usually directly, a NP anchor other than the main clause subject, and contains a pronoun referring to it, which is ellipted if it is an object <u>19.8.1</u>. The sense resembles a non-restrictive relative clause:

```
Anina ka o nyɛ dau ka o yʊ'vr buon Aneas.
Àniná kà ò nyɛ dáu kà ò yō'vr bûen Aneas.

ADV:there and BAN see man:sg and BAN name:sg call:IPFV Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)
```

Li ane ya taaba bane pu'usid Wina'am ka li nar ka ya kad saria.

Lì à né yà tāaba bánì pù'vsid Wínà'am kà lì nár 3IN COP FOC 2PL fellow REL.PL greet:IPFV God and 3IN must kà yà kád sàríyà.

and 2PL drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

If the main clause is a verbless identificational clause <u>21.4.1</u>, the NP of the main clause can be the anchor:

YEI boo nwa ka Wina'am ke ka li paae ti? YĒl-bóo Ø ňwá kà Wínà'am ké kà lì páa tì +Ø? Matter-what CAT this and God cause and 3IN arrive 1PL.OB CQ? "What is this that God has made to come to us?" (Genesis 42:28)

Adnominal $k\grave{a}$ -catenation is the basis of $k\grave{a}$ -clefting and $k\grave{a}$ -preposing 27.2. The subject of the catenated clause does not normally refer to the anchor; if it does, the $k\grave{a}$ -catenation is a resultative predicate 19.8.2:

...ka la'am maan gigis ka ba wum ka pia'ad.

...kà lâ'am màan gígìs kà bà wóm kà piāň'ad.

...and together make: IPFV dumb: PL and 3PL hear: IPFV and speak: IPFV.

"...and even makes the dumb hear and speak." (Mk 7:37, 1976)

With $n v \bar{\epsilon}^+$ "see", this construction has the predicative sense "see as":

M dāa nyē dāu lá kà ò án nâ'ab.

1SG TNS see man:SG ART and 3AN COP chief:SG.

"I saw the man as a chief." KT: not possible as "who was a chief"

 \dot{M} dāa p \bar{v} \dot{n} y $\bar{\epsilon}$ dāu lá kà \dot{o} á \dot{n} ná'abā $^{+}$ ø.

1SG TNS NEG.IND see man:SG ART and 3AN COP chief:SG NEG.

"I didn't see the man as a chief." KT

As expected, KT rejected constructions with tense marking in the $k\grave{a}$ -catenation. He also rejected focus- $n\bar{\epsilon}^{+/}$ in the catenated clause:

*M dāa pū ňyē dāu lá kà ò á nē ná'abā †ø.

1SG TNS NEG.IND see man:SG ART and 3AN COP FOC chief:SG NEG.

23 Conditional clauses

23.1 Overview

Conditional clauses have a subordinate $y\grave{a}'$ -clause as a postlinker adjunct before the subject of the main clause, after any other adjuncts. $Y\grave{a}'$ -clauses cannot be coordinated with each other, though they may contain coordinated subclauses, and a main clause may contain more than one $y\grave{a}'$ -clause:

```
Fù yá' bòɔd, m̀ yá' lèb nā, m̀ ná yóɔ_f.

2SG if want, 1SG if return hither, 1SG IRR pay 2SG.OB.

"If you want, when I return, I will pay you."
```

The main clause must have an unellipted subject. Direct commands keep a subject pronoun in place; some speakers require a free pronoun form in such cases:

```
Fv ya'a mɔr pu'a, fvn da mɔɔd ye fv bas oo.

Fv ya' mɔr pu'ā, fvn dā mɔɔd yɛ́ fv bás·o-o +ø.

2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon-3AN.OB NEG.

"If you have a wife, don't try to leave her." (1 Cor 7:27)
```

Occasionally, the $y\grave{a}$ '-clause appears clause-finally because of extraposition due to weight, notably in constructions meaning "it would be better if ...":

```
Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa. Dìn-zúg lì nāan áň sóm bà yá' p\bar{v} d\hat{v}'a-n dáu-kàŋáa +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)
```

The main clause can be of any type, including a command, as above, or a question; it may have elements preposed with $k\grave{a}$ 27.2:

```
Fù yá' gōs kpēlá, bó kà fù ňyētá +ø?
2SG if look here, what and 2SG see:IPFV CQ?
"If you look here, what do you see?"
```

 $Y\dot{a}$ '-clauses express tense independently. They can have irrealis mood, but an indicative event-perfective need not have past reference in a $y\dot{a}$ '-clause:

```
Fv ya'a na dollimi keŋ, m na keŋ.

Fv ya' nà dōllí mī ø kēŋ, m̀ ná kēŋ.

25G if IRR accompany 15G CAT go, 15G IRR go.

"If you will go with me, I will go." (Judges 4:8)

M ya'a pv keŋɛ, Svŋid la kv kɛɛn ya ni naa.

M yá' pv kēŋɛ +ø, svŋıd lā kó kɛɛn yà nī náa +ø.

15G if Neg.IND go Neg, helper:sg ART Neg.IRR come 2PL Loc hither Neg.

"If I do not go, the Helper will not come here to you." (Jn 16:7)
```

23.1.1 Discontinuous-past *n*

The left-bound liaison word n^{ϵ} can express a discontinous today-past $\underline{19.3.3}$, but much more often has a meaning analogous to the modal remoteness expressed by the use of the English preterite in non-temporal usage (CGEL pp148ff.) It expresses a hypothetical or unlikely state of affairs; if it is accompanied by post-subject $n\bar{a}an(\iota)$, the sense is contrary-to-fact. It can attach to any verb form in indicative or irrealis mood, but is incompatible with the imperative. In n-catenation, if n^{ϵ} is found in the first VP it is usually repeated in all. It appears most often in $y\dot{a}'$ -clauses, but occurs both with and without $n\bar{a}an(\iota)$ in other clause types; without $n\bar{a}an(\iota)$ this is most often in the expression $b\dot{b} \supset d\bar{\iota} - n$ "might wish":

```
m pa'ati nye ka ya pu wenne wuu man boodin ye ya aan si'em laa. \grave{m} pá' tì \check{n}yé kà yà p\bar{v} w\bar{\epsilon}n n\bar{\epsilon} 1SG perhaps see and 2PL NEG.IND resemble with w\bar{v}v mán b\grave{\supset} d\bar{\iota}-n yé yà âa-n s\bar{\iota}'əm láa ^+ø. like 1SG:NZ want-DP that 2PL COP-DP INDF.ADV ART NEG. "I will perhaps find you not as I might wish." (2 Cor 12:20, 1996)
```

Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tvuliga.

Mān bɔ́ɔdī-n nē yānámì ø nāan âa-n mā'asígā bēɛ

1SG.CNTR want-DP that 2PL Nz then COP-DP cold:ADV or yānámì ø nāan âa-n tvulígā.

2PL Nz then COP-DP hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15)

23.1.2 Nāan(ı) "in that case"

Post-subject $n\bar{a}an(\iota)$ is distinct from $n\bar{y}aan$ "next, afterwards, then", but $n\bar{y}aan$ itself has a frequent alternative form $n\bar{a}an$. Thus, in parallel NT passages:

```
Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas. Fù ná kī'ıs nɔʻɔr àtáň' yế fù zí'ı mā ^+ø, 2SG IRR deny occasion:SG NUM:three that 2SG NEG.KNOW 1SG.OB NEG, kà nɔʻ-dâvg ňyāan kāas. and hen-male:SG next cry. "You will deny three times that you know me before the cock crows." (Mt 26:75, 1996)
```

```
Fu na ki'is man noor atan' ka noraug naan [KB nyaan] kaas noor ayi.

Fù ná kī'ıs mān nɔʻɔr àtáň' kà nɔ̄-dâvg

2SG IRR deny 1SG.CNTR occasion:SG NUM:three and hen-male:SG

nāan kāas nɔʻɔr àyi'.

next cry occasion:SG NUM:two.

"You will deny me three times before the cock crows twice." (Mk 14:30, 1996)
```

The distinct particle $n\bar{a}an(\iota)$ has a core verbal sense "be(ing) there/thus"; it can appear with its own locative complement, typically before a n-catenated clause:

```
dap banɛ gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na dàp-bànı gūr yɛ́ bà zūg-dâan nāan pu̯'á-dītr dí'əmà man-rel.pl wait that 3pl head-owner:sg be.there wife-taking:sg feast:pl zíň'igī-n ø kūl nā place:sg-loc cat go.home hither. "men who are waiting for their lord at a wedding feast to return ..." (Lk 12:36)
```

Ka nwadbibis na naan agɔla lit tenin na.

Kà nwād-bíbìs ná nāan àgɔ́là ø lít tēni-n nā.

And moon-small:plir be.there adv:above cat fall:ipfv ground:sg-loc hither.

"And the stars [being] above will fall to earth." (Mk 13:25)

 $N\bar{a}an\iota$ evidently originated in $n\bar{a}an$ followed by catenator-n, but I will omit CAT in the interlinear glossing henceforward.

Most cases of modal $n\bar{a}an(\iota)$ appear in conditional main clauses. In other main clauses $n\bar{a}an$ without n^{ϵ} is often a by-form of $n\bar{b}y\bar{a}an$ as described above; if not, the meaning is "in that case, matters being thus." Examples of $n\bar{a}an(\iota)$ in subordinate clauses are uncommon in KB, which usually simply shows the irrealis marker $n\bar{a}$ where older versions have $n\bar{a}an$.

 $N\bar{a}an(\iota)$ without n^{ε} is often effectively equivalent to $y\dot{a}'$ "if/when."

Li an sum ye dau yinne naan kpi nidib la yɛla gaad ...
Lì àň súm yē dāu yīnní nāan kpí nīdib lā yɛ́là 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 ..." (In 11:50)

Fun naani tum be'ed ka ba sigis uf ne kpisiŋkpil ka fu sin ka mor suguru, li su'um a bo?

```
Fún nāanı túm bē'ɛd kà bà sīgɪsú f nē kpísìnkpìl 25G:Nz then do bad and 3PL put.down 25G.OB with fist:SG kà fù sín kà mōr sūgurú, lì sòm áň bó ^+ø? and 25G be.silent and have forbearance, 3IN good:ABSTR COP what CQ? "If you do evil and they down you with fists and you are silent and forbear, what is the good of it?" (1 Pet 2:20, 1996)
```

Noŋir lem kae' gaad nidi naan kpi o zuanam zugo.

```
Nòŋır lém kā'e ø gâad nīdí ø nāan kpí ò zuà-nàm zúgō ^+ø. Love again NEG.BE CAT pass person:sg NZ then die 3AN friend-PL upon NEG. "There is no love greater than if a person dies for his friends." (Jn 15:13, 1996)
```

Ba wenne zunzon naani ve'ed zunzon ne.

```
Bà w\bar{\epsilon}n n\bar{\epsilon} z\acute{v}nz\grave{o}g \emptyset n\bar{a}an\iota v\bar{\epsilon}'\epsilon d z\acute{v}nz\grave{o}g n\bar{\epsilon}.

3PL resemble with blind.person:sg Nz then lead:IPFV blind.person:sg like.

"They are like when a blind person leads a blind person." (Mt 15:14, 1996)
```

When $n\bar{a}an(\iota)$ is accompanied by discontinuous-past n^{ε} the meaning is contrary-to-fact, as in conditional clauses:

```
Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni.

Lì sờ'm kà fờ dāa nāan záŋí-n m līgidi n sỡ'a-n bánkì ní.

3IN be.good and 2SG TNS then take-DP 1SG money CAT hide-DP bank:SG LOC.

"You should have put my money in the bank." (Mt 25:27, 1976)
```

```
Yà' nāan(ı) means "if only":

M zugdaan la ya'a naan siaki keŋ nyɛɛn nɔdi'es la bɛ Samaria la!

M zūg-dâan lā yá' nāan siákì ø kēŋ ø ňyēɛ-n

1SG head-owner:SG ART if then agree CAT go CAT see-DP

nɔ-dî'əs lá ø bɛ Samaria lā!

mouth-transmitter:SG ART NZ EXIST Samaria ART!

"If only my lord would agree to go to see the prophet in Samaria!" (2 Kings 5:3)

23.2 Open

Conditional clauses without discontinuous-past nɛ or nāan(ı) express "if", and also "when" with a main clause with present or future reference. With main clauses
```

with past reference, $y\grave{a}'$ is only used for conditionals; for the meaning "when", an absolute clause with time reference is used as a postlinker or VP adjunct 24.2.

```
Nid ya'a tum tuuma, o di'ed yood.
Nīd
         yá' từm
                      tūυma, ò dì'əd
                                            vɔ̄ɔd.
Person:sg if work:IPFV work, 3AN receive:IPFV pay.
"If a person works, he gets pay." (Rom 4:4)
Ka Kristo ya'a da ρυ νυ'υg kuminε, alaa ti labasuŋ la mɔɔlug la anɛ zaalim.
Kà Kristo yá' dà pū
                        νū'υg
                                   kūmι-nέ +ø, àláa tì làba-sòn
And Christ if TNS NEG.IND come.alive death-loc NEG, ADV:thus 1PL news-good:sg
                lā á nε̄ zāalím.
lā mɔ́ɔlùg
ART proclamation ART COP FOC empty: ABSTR.
"If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)
Fù yá' siàk, tì ná dīgılí f.
2SG if agree, 1PL IRR lay.down 2SG.OB.
"If you agree, we'll put you to bed [i.e. admit you to hospital.]"
Bεog ya'a nie fu na wum o pian'ad.
ΒĒog
          vá' nìe,
                     fù ná wúm ò piàň'ad.
Tomorrow if appear, 2SG IRR hear 3AN speech.
```

Cf Hausa *idan gàrii yaa waayèe zaa mù tàfi* "When dawn comes we'll go." (Jaggar p608), where *idan* is likewise "if/when."

"When tomorrow comes, you will hear his words." (Acts 25:22)

23.3 Hypothetical

If discontinuous-past n^{ε} occurs in the $y\dot{a}$ '-clause and the main clause does not have $n\bar{a}an(\iota)$, the meaning is hypothetical. The main clause has irrealis mood; in the 1976 NT, but not later Bible versions, it also has n^{ε} .

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' niŋgbiŋ nii, lin ku nyaŋin keen ka o ka' niŋgbiŋ nii.

```
Nóbìr yá' yèlī-n yē, ón
                                   áň nû'ug lā zúg,
                            υū
Leg:sg if say-dp that 3AN:NZ NEG.IND COP hand:sg ART upon,
ò kā'
         nín-gbīŋ
                       níι +ø, līn kύ
                                            ňyāηι-n
3AN NEG.BE body-skin:SG LOC NEG, DEM.IN NEG.IRR accomplish-DP CAT
         kà ò kā'
                       nín-abīn
                                    níι <sup>+</sup>ø.
kέε-n
cause-DP and 3AN NEG.BE body-skin:SG LOC NEG.
"If the leg said, because it is not a hand, it is not in the body, that would not
cause it not to be in the body." (1 Cor 12:15, 1976)
```

2016: Nobir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋbiŋ la nii," lin kυ nyaŋi kɛ ka o ka' niŋgbiŋ la nii.

Later versions also use open conditionals with irrealis mood in the main clause:

```
Wief ya'a sigin li ni, li zuluŋ na paaen o salabir. Wiəf yá' sīgí-n lì nī, lì zùluŋ ná páa-n ò sàlıbır. Horse:sg if descend-dp 3IN LOC, 3IN depth IRR reach-dp 3AN bridle:sg. "If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)
```

2016: Ka wief ya'a sigi li ni, li zulun na paae o salibir.

23.4 Contrary-to-fact

If the main clause has $n\bar{a}an(\iota)$, there is a contrary-to-fact implication. Both main and $y\dot{a}$ '-clause have discontinuous-past n^{ε} :

```
Man ya'a pv kɛɛn na tu'asini ba, ba naan kv mɔrin taalɛ. Mān yá' pv kēɛ-n nā ø tú'asī-ní bā, bà nāan kú 1SG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB, 3PL then NEG.IRR mɔ̄rɪ-n tâallē ^+ø. have-DP fault:SG NEG. "If I had not come to speak to them, they would not have been guilty." (In 15:22)
```

```
Ya'a ka'anɛ alaa, m naan kv yɛlinɛ ya ye ...
Yà' kā'a-ní àlá, m nāan kv yɛlinɛ ya yē ...
If NEG.BE-DP ADV:thus, 1SG then NEG.IRR say-DP 2PL.OB that...
"If it were not so, I would not have told you that ..." (Jn 14:2)
```

Ba ya'a daa mi'inε li, ba naan kυ kpa'an Zugsɔb onε an na'atita'ar la dapuudir zugɔ.

```
Bà yá' dāa mī'i-ní l\bar{\iota}, bà nāan kú kp\bar{a}'a-n Z\bar{u}g-sób ónì 3PL if TNS know-dp 3IN.OB, 3PL then NEG.IRR fasten-dp head-NULL.AN REL:AN àň ná'-t\bar{\iota}tā'ar l\bar{a} dá-p\bar{\upsilon}\upsilondá z\dot{u}g\bar{\jmath} +ø. cop king-great:SG ART wood-cross:SG upon NEG.
```

"If they had known it, they would not have fastened the Lord, who was a great king, to a cross." (1 Cor 2:8)

```
Ya ya'a mi'in linɛ na tisi ya sumbugusum zina nwa, li naan aan su'um!
Yà yá' mī'i-n línì nà tīsı yá súmbūgusím zīná ňwá,

2PL if know-DP REL.IN IRR give 2PL.OB peace today this,
lì nāan âa-n súm!
3IN then COP-DP good:ABSTR.
"If you had known this day what would have brought you peace, that would have been good." (Lk 19:42)
```

Contrary-to-fact conditions in the past are also sometimes marked by combining the irrealis mood with preverbal past tense markers in the main clause; the $y\dot{a}$ '-clause has n^{ε} as usual:

Bɔzugɔ Josua ya'a da tisini ba vv'vsvm zin'ig, Wina'am da kv lɛm pian' dabis-si'a yɛla ya'asɛ.

```
B\bar{\jmath} zúg\bar{\jmath} Josua yá' dà tìs\bar{\imath}-ní \bar{\jmath}b\bar{a} v\bar{v}'vsím zîň'ig, Wínà'am dá kv Because Joshua if this give-dp 3PL.OB resting place:sg, God this neg.irr l\bar{\varepsilon}m p\underline{i}āň' dáb\bar{\imath}s-s\bar{\imath}'a yélà yà'd3s\bar{\varepsilon} +d8. again speak day-inde.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)

Similarly, without a $y\dot{a}$ '-clause:

```
Ò dāa ná zāb nâ'ab lā.
```

3AN TNS IRR fight chief:SG ART.

"He would have fought the chief" (but didn't)

WK confirmed this meaning, as against "He was going to fight the chief."

24 N-clauses

24.1 Overview

Ōп

sīb

Kusaal transforms complete clauses into AdvPs or NPs by inserting the post-subject particle \grave{n} (for the realisation, see 7.2.) The \grave{n} by itself is a nominaliser, which turns the original clause "X" into an "absolute" clause signifying "it being the fact that X." \grave{N} -clauses also form the basis of Kusaal relative clauses, though in the commonest type the nominaliser has fused with a preceding demonstrative pronoun to create what is synchronically simply a relative pronoun.

 \dot{N} -clauses have independent tense marking (but relative to the *narrative* timeline within narrative 19.3.5.) Irrealis mood must replace the imperative:

```
Yanamɛ na mɔr sam si'a anɛ ye ya nɔŋ taaba.

Yānámì ø nà mɔr sām-si'a á nē yɛ́ yà nɔ́ŋ tāaba.

2PL NZ IRR have debt-INDF.IN COP FOC that 2PL love each.other.

"The debt which you are to have is to love each other." (Rom 13:8)
```

 \dot{N} -clauses cannot contain focus particles, but relative pronouns are often preposed with $k\dot{a}$. Dependents of \dot{n} -clauses may only be articles or predependent NPs, but \dot{n} -clauses can themselves be predependents.

Absolute \dot{n} -clauses normally take the article $l\bar{a}^{+/}$. After relative clauses $l\bar{a}^{+/}$ has its usual function; clauses without $l\bar{a}^{+/}$ are usually indefinite but specific.

sû'es

nā

Ιā.

á nē dáu-kànı sà kē

```
3AN.CNTR NULL.AN COP FOC man-REL.SG TNS come hither yesterday ART.
"That one's the man who came yesterday."
Dàp-bànı bòod yé bà nyée f
                                      kέ
                                             nā.
Man-Rel.pl want that 3pl see
                                2SG.OB come hither.
"Some men who want to see you have come."
one du'a ne Siig
                                 "someone born of the Spirit" (Jn 3:8)
      dụ'à nẽ Sĩig
ònι
REL.AN bear with spirit:SG
onε tumi m la na
                                 "he who sent me hither" (Mk 9:37)
                                 (\partial nl = REL.AN; contrast <math>\partial n 3SG:NZ)
     từmi, m
                  lā nā
REL.AN send 1SG.OB ART hither
```

The article is not repeated a second time after an \dot{n} -clause which ends in a NP with $l\bar{a}^{+/}$. If the clause contains the VP-final particles $n\bar{a}^{+/}$ "hither" $s\dot{a}^{+}$ "hence", these may follow an article belonging to the \dot{n} -clause 19.10.

If a \dot{n} -clause has a negative VP, the negative prosodic clitic is dropped unless the \dot{n} -clause lacks $|\bar{a}^{+}|$ and is itself clause-final in the superordinate clause 26.

24.2 Absolute clauses

Dāu

 \hat{N} -clauses without relative pronouns or indefinite pronouns used as relatives are **absolute clauses**, meaning "it being the fact that ...":

```
Man:sg art the fight chief:sg art.

"The man has fought the chief."

dāu lá ø dāa záb nà'ab lā

Man:sg art nz the fight chief:sg art

"the man having fought the chief"
```

lā dāa záb nà'ab

The most characteristic use of absolute clauses is as AdvPs of time or circumstance. They are the usual way of expressing past "when", used as postlinker adjuncts $\underline{20.2.1}$ or as VP adjuncts, generally preposed with \underline{ka} $\underline{27.2}$. As Kusaal is stricter than English in requiring constituent order to reflect event order, the VP-final adjunct position is usually confined to cases where the absolute clause expresses a state of affairs rather than a single event:

```
\bar{\partial}n d\bar{a}a\, ny\bar{\epsilon}t\, sun\bar{a}, d\bar{a}a\, an\, bi-l\bar{\iota}a l\dot{a}a\, + \varnothing? 3AN.CNTR TNS see:IPFV good:ADV, 3AN:NZ TNS COP child-baby:SG ART PQ? "Did she see well when she was a baby?"
```

Tense markers in an absolute clause are the same as in the main clause; the main clause markers may be omitted if the absolute clause precedes. It is thus not possible to manipulate the time relationship with tense particles; instead, this is determined by aspect, with a perfective in the absolute clause implying a prior event and imperfective a simultaneous one, setting the temporal scene for the main clause.

```
Ka ban dit la, Yesu yɛli ba ...

Kà bán dìt lā, Yesu yɛ́lì bā ...

And <code>3PL:NZ</code> eat:IPFV ART, Jesus say <code>3PL.OB</code>

"As they were eating, Jesus said to them ..." (Mt 26:21)
```

Ka ban yi la, ka Zugsob malek nie o meŋ ... Kà bán yī lā, kà Zūg-sɔ́b máli̯āk nie ò mɛ̄ŋ ... And <code>3PL:NZ</code> emerge <code>ART</code> and head-<code>NULL.AN</code> angel:sg appear <code>3AN</code> self "After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Like other AdvPs, absolute clauses have limited use as verb arguments, most often as the complement of $\grave{a} e \check{n}^a$ "be", though occasionally as subjects:

```
Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.

Kristo ø dà kpìi tì yɛlá lā kɛ́ kà tì báŋ nɔŋılím ø àň sr̄ əm.

Christ Nz τNs die 1pl about ART cause and 1pl realise love Nz COP INDF.ADV.

"Christ dying for us makes us understand what love is like." (1 Jn 3:16)
```

Dine $k\epsilon$ ka m a saalbiis zua la an ϵ mam pu sa'amidi ba la'ad ka m ϵ pu diti ba ki la. Dìni $k\epsilon$ kà m̀ án̆ sâal-bīis zuá lā á n ϵ mán rel.sg cause and 1sg cop smooth-child:pl friend:sg art cop foc 1sg:nz $p\bar{v}$ sánˇamìdí bà lā'ad kà m ϵ p \bar{v} dítí bà kī 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

Verbs of perception or communication take content clauses or relative clauses with indefinite pronouns as objects, never absolute clauses.

lā, tì dā

tēň'εs ...

Absolute clauses with $s\bar{a}dig(m)$ "since, because" immediately following nominaliser- \dot{n} occur as postlinker adjuncts expressing "reason why":

Tiname sagidim aan o biis la, ti da ten'es ...

Tīnámì ø sādīgím áan ò bīis

For absolute clauses with post-subject $n\bar{a}an(\iota)$ see 23.1.2.

Absolute clauses occur after $h\bar{a}l\acute{l}$ $n\bar{\epsilon}$ or $h\bar{a}l\acute{l}$ $l\grave{a}$ and $h\bar{a}l\acute{l}$ n $t\grave{l}$ $p\bar{a}a$..."up until the time when ..." 20.2.1.

Before the postposition $z\bar{u}g^{5}$ "on account of", or $b\bar{b}$ $z\dot{u}g\bar{b}$ "because", absolute clauses form reason-why AdvPs used as adjuncts:

Ka ba la'as taaba n deŋi nye Blestus one a na'ab Herod samanna'ab la n maal suer ye o nwe' na'ab nu'ug, ba diib n yit na'ateŋ la na zug.

Kà bà lâ'as tāaba n dénì ø nyē Blestus ɔ́nì àn nâ'ab Herod And 3PL gather each other cat do.first cat see Blastus rel.an cop king:sg Herod sāmán-nà'ab lā n mâal sūer yé ò nwé' nà'ab nû'ug, courtyard-chief:sg art cat make way:sg that 3AN strike king:sg hand:sg, bà dī lb n yīt ná'-tēn lā nā zúg.

3PL food NZ emerge:IPFV king-country:SG ART hither upon.

"They gathered together after first seeing Blastus, king Herod's chamberlain, to get him to make an agreement with the king, because their food came from the king's land." (Acts 12:20, 1996)

 $K\grave{a}$ -preposing 27.2 may be needed to match word order to event order 19.2.2:

Mán ňwὲ' dāu lā zúg kà police gbáň'a m.

1SG:NZ strike man:SG ART upon and police seize 1SG.OB.

"Because I struck the man the police arrested me."

It is commoner for causation to be simply implied by an absolute clause as postlinker adjunct or $k\grave{a}$ -preposed VP adjunct, or just by coordination with $k\grave{a}$.

 $Y\bar{\epsilon}l\acute{a}^+$ "concerning" appears after absolute clauses in NT section headings, and absolute clauses alone are used as picture captions:

```
Jesus n kpen' Jerusalem la yela
Jesus n kpèň' Jerusalem lā yélà
Jesus nz enter Jerusalem ART about
"[about] Jesus entering into Jerusalem."
```

Ban meed yir "A house being built" Bán mè ϵ d y $\bar{\imath}$ r "A puild:IPFV house:SG

24.3 Relative clauses

Relative clauses are of two structural types: those which use relative pronouns, and those which use indefinite pronouns in the role of relatives. The relative clause subject is followed by \dot{n} in the indefinite-pronoun type; diachronically, the unitary relative pronouns have arisen from fusion of a clause-initial short demonstrative pronoun with a following \dot{n} .

In either case, the pronoun may be a head, as clause antecedent, or a dependent after a cb which is the clause antecedent. Relative clauses are restrictive when the pronouns are compounded with a cb, but need not be so otherwise.

Written materials avoid $kan\epsilon kan\iota$ as a relative for human reference (invariably so after proper names), substituting $on\epsilon \lambda n\iota$, which cannot be preceded by a cb; the resulting construction is appositional:

```
o sid one da be ne o la \dot{o} sīd \dot{o} nì dà bè né \dot{o} lā 3AN husband:SG REL.AN TNS EXIST with 3AN ART "her husband, who was there with her" (Genesis 3:6)
```

Note that this example is unequivocally non-restrictive.

Uncompounded pronouns are obviously necessary with heads that lack cbs or have a coordinate structure:

```
kokor kaŋa lini yi arazana ni la na kùkōr-káŋā línì yí àrazánà 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)
```

```
nimbane yvda sɔb Pɛbil la gbauŋvn line an nyɔvvpaal dim gbauŋ la nīn-bánì yūdá sɔ̄b Pɛ̄'-bíl lā gbáuŋv̄-n línì person-rel.pl name:pl write Lamb:sg art book:sg-loc rel.in àň nyɔ́-vv̄-pâal dím gbáuŋ 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" (Rev 21:27)
```

Mam Paul nε Timoti banε an Yesu Kristo tvmtvmnib la

Mām Paul nē Timoti bánὶ àň Yesu Kristo túm-tūmníb lā

1SG.CNTR Paul with Timothy REL.PL COP Jesus Christ work-worker:PL ART

"I, Paul, and Timothy, the servants of Jesus Christ" (Phil 1:1)

A relative clause introduced by a relative pronoun may contain indefinite pronouns with their normal meaning, and a relative clause with an indefinite pronoun as relative may contain other indefinite pronouns in their normal function so long as they precede the pronoun with relative meaning. Short demonstrative pronouns are never relatives when non-initial, and long demonstratives are never relatives at all:

```
Wina'am onε gaad si'el wυsa la
Wínà'am ɔ́nì
               gàad sī'əl wūsa lā
God
         REL.AN pass INDF.IN all
"God who surpasses everything." (Lk 1:35)
พบบ bani gban'ad si'el si'em la
wūu bāní ø gbāň'ad sī'əl sī'əm lā
like trap:sg nz seize:IPFV INDF.IN INDF.ADV ART
"like a trap seizes something" (Lk 21:35)
O pa'al ne'enam nyain tis so' wusa on vu'ug ninkan kumin la zug.
Ò pà'al nē'-nám ňyāe ø tís sɔ̄'
                                       พบิรล ว์ท
                                                  νῦ'υg nīn-kán
3AN show DEM.IN-PL clearly CAT give INDF.AN all 3AN:NZ revive person-DEM.SG
kūmı-n lā zúg.
death-Loc ART upon.
"He has shown this clearly to everyone because he has raised that person from
death." (Acts 17:31)
o na tum tuumnyalima gaad dau kaŋa tum si'el laa?
ò nà tūm tôum-ňyālımá ø gàad dàu-kàná ø tùm sī 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?" (In 7:31)
```

24.3.1 With indefinite pronouns

Relative clauses using indefinite pronouns as relatives are **internally headed**. The pronoun may be a head, as clause antecedent, or a dependent after a cb which is then the clause antecedent; in either case it remains *in situ* within the relative clause.

```
Wina'am nodi'esidib n daa yel si'el n sob Wina'am gbauŋin la, ane ameŋa.

Wina'am nó-di'əsidib n dāa yél sī'əl n sɔ̄b

God mouth-receiver:PL NZ TNS say INDF.IN CAT write

Wina'am gbáu̞ŋʊ̄-n lā á né àmēŋá.

God book:sg-loc ART COP FOC truly.

"What God's prophets said and wrote in God's book is true." (Mt 26:56, 1996)
```

The indefinite pronoun need not follow the verb directly:

```
... fon yelim fon niŋ li si'el.
... fon yélim fón niŋı lī sī'əl.
... 2SG.CNTR Say:IMP 2SG:NZ do 3IN.OB 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. It is either a verb object or complement, or adverbial, or a predependent in such a constituent. It may belong to a subordinate clause within the relative clause. The fact that the pronoun may be a predependent or appear in a subordinate clause proves that these constructions are internally headed; elements following the pronoun cannot simply be taken as dependents of the relative clause.

If the indefinite pronoun is not compounded with a preceding cb and is not part of an AdvP, it normally retains a specific-indefinite sense (the main exception in KB is a sequence in Rev 2-3 of $man\ ny\varepsilon\ so'\ la$ "the one I saw.")

```
Ka ban tυm sɔ' la kυ gaad onε tυm o la.
Kà bán từm sɔ̄'
                      lā kύ
                               gāad
                                       źηὶ
                                             tùm·o ø
And 3PL:NZ send INDF.AN ART NEG.IRR surpass Rel.AN send
                                                     3AN.OB ART NEG.
"One who was sent does not surpass the one who sent him." (In 13:16)
Ka o nin on tun'e si'el.
Kà ò nín ón
                  tūň'e
And SAN do SAN:NZ be.able INDF.IN.
"She has done what she could." (Mk 14:8,1996)
M na tisif fun bood si'el wusa.
M ná tīsı f
                 fún
                       bòod sī'əl wūsa.
1SG IRR give 2SG.OB 2SG:NZ want INDF.IN all.
"I will give you anything you want." (Mk 6:23)
```

Very often either the relative clause is the complement of a verb of cognition, reporting, or perception, or the pronoun is the complement of such a verb within the relative clause (or both.) Relative clauses with indefinite pronouns as relatives are strongly preferred in clauses corresponding to English "subordinate interrogative clauses" (CGEL pp1070ff, pp972ff.) Such cases account for most relative clauses with uncompounded indefinite pronouns in KB. (For example, 20/33 examples of relative clause with \$5' in the 1996 NT are of this type.)

```
m na pa'ali ya on nwεnε sɔ'.
m ná pā'alı yá
                   źп
                         wĒη
                                  nē
                                       sō'.
1SG IRR teach 2PL.OB 3AN:NZ resemble with INDF.AN.
"I will teach you what he is like." (Lk 6:47)
                                      "I know who you are." (Lk 4:34)
M mi' fun an so'.
M mí' fún
               àň sɔ̄'.
1SG know 2SG:NZ COP INDEAN.
David da tum so' ye o bu'osi ban pu'a la an so'.
David dá từm sɔ̄'
                     yέ ò bū'esι ø bán
                                                             lá ø àň sɔ̄'.
                                                    pu'ā
David TNS send INDF.AN that 3AN ask
                                  CAT understand woman:SG ART NZ COP INDE.AN.
"David sent someone to ask and find out who the woman was." (2 Samuel 11:3)
ya na ban man yɛl ye m an sɔ' la.
                  mán yèl yé mà àn sɔ̄'
yà ná bān
2PL IRR understand 1SG:NZ say that 1SG COP INDF.AN ART.
"you will understand who I say that I am." (Jn 8:28)
Gosim ye fu na ban la'abama an so' bunnεε?
                               lá'-bàmmá ø àň sɔ̄'
Gòsιm γέ fù ná bān
                                                        bύnnὲε +ø?
Look: IMP that 2SG IRR understand item-DEMST.PL NZ COP INDEAN thing: SG PO?
"Can you look and find out whose property these things are?" (Genesis 38:25)
Alaa mam mε kυ yεli ya mam nyε nɔɔr la sɔ' san'anε.
Àláa mām
             mέ kù
                        yēlı yá
                                   mán ňyē nōɔr
                                                      lā sɔ̄'
                                                                sá'anē +ø.
Thus 1SG.CNTR also NEG.IRR say 2PL.OB 1SG:NZ see mouth:SG ART INDF.AN among NEG.
"Thus I too will not tell you from whom I derived the authority." (Mt 21:27)
M na tυmi m Ba' zi'el nɔɔr sɔ' yεla la tisi ya
M ná tōmí m Bá'
                        ø zì'əl nɔɔr
                                          รวิ'
                                                 yélà ø tísì yā.
1SG IRR send 1SG father:SG NZ stand mouth:SG INDF.AN about CAT give 2PL.OB.
"I will send whom my Father made a promise about to you." (Lk 24:49)
... baŋi ba yaanamε an sieba
... báηὶ
              bà yāa-námì ø àň sīəba
... understand 3PL ancestor-PL NZ COP INDF.PL
"... discover who their ancestors were." (Ezra 2:61)
```

M mi' man gan **sieba** la.

```
Μ̀ mí¹
         mán gān
                      sīəba lā.
1SG know 1SG:NZ choose INDEPLART.
"I know those whom I have chosen." (In 13:18)
Man mi' si'el nan ang bi'ela.
Mán mĩ sĩ əl nān á nē bĩ əlá.
1SG:NZ know INDEIN now COP FOC small.ADV.
"What I know now is small." (1 Cor 13:12)
Źп
      yèl sī'əl lā kā' sídāa <sup>+</sup>ø.
3AN:NZ SAY INDF.IN ART NEG.BE truth NEG.
"What he says is not true" SB
Kem yεli Joon yanamε wum ka nyε si'el.
Kèm ø yēlı ø
                     Joon yānámì ø wòm kà ňyē sī əl.
Go:IMP CAT sav 2PL.SUB John 2PL
                                   NZ hear and see INDF.IN.
"Go and tell John what you have heard and seen." (Mt 11:4)
Ya baŋ man niŋ si'el la gbinnεε?
Yà bán
               mán nìn sī əl lā gbínnèe
                                             +ø?
2PL understand 1SG:NZ do INDEIN ART meaning:SG co?
"Do you understand the meaning of what I have done?" (In 13:12)
```

Most occurrences of $s\vec{r} \ni l^a$ in the 1996 NT are as relatives. 75/130 cases in Matthew, Mark, Luke and John show $s\vec{r} \ni l^a$, the entire relative clause, or both as the complement of a verb of cognition, reporting, or perception. Of the remaining 55 examples, in 33 $s\vec{r} \ni l^a$ consistently has an abstract uncountable meaning, shading into "whatever", often with $w\bar{v}sa^+$ "all"; in the other 22 $s\vec{r} \ni l^a$ has the locative meaning "where, whither"; neither the pronoun nor the clause have the locative particle.

```
Bozugo ya araza'ase be si'el la, ya potenda me bene anina. Bō zúgó yà àrazà'así \emptyset bὲ sī'əl lā, yà pù-tὲňda mé bὲ né àní nā. Because 2PL treasure NZ EXIST INDE.IN ART, 2PL mind:PL too EXIST FOC there. "For where your treasure is, your mind is too." (Mt 6:21, 1996)
```

```
One keŋ likin zi' on ken si'ela.

Ònι kēŋ līkι-n zī' ón kēn sī'əla <sup>+</sup>ø.

REL.AN go darkness-loc NEG.KNOW 3AN:NZ go:IPFV INDF.IN NEG.
```

"He who walks in darkness does not know where he is going." (Jn 12:35, 1996)

Sī'əm^m is the corresponding indefinite adverbial form "somehow." As Kusaal frequently uses manner-adverbs as predicative complements, relative clauses with *sī'əm* are common as objects of verbs of cognition, reporting, and perception:

Kristo da kpii ti yεla la kε ka ti baŋ nɔŋilim an si'em.

Kristo ø dà kpìi tì yēlá lā ké kà tì báŋ nònulím ø àň sī əm. Christ Nz TNS die 1PL about ART cause and 1PL realise love NZ COP INDF.ADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16)

The article $l\bar{a}^{+/}$ has its usual function with $s\bar{l}$ ∂m -relative clauses:

M mí' mán nà nīŋ sī'əm. "I know what to do."

1SG know 1SG:NZ IRR do INDEADV.

M mí' mán nà nīŋ sī'əm lā. 1SG know 1SG:NZ IRR do INDEADV ART.

"I know what I'm to do" (WK: "You explained the plan earlier; this is my reply when you ask if I remember it")

In the 1976 NT almost all relative clauses with $s\bar{r} \ni m$ and past tense marking have $|\bar{a}^{+}|$; 75% lacking $|\bar{a}^{+}|$ have irrealis mood. Cf the two standing expressions

ón bòɔd sī əm "as he wishes"

3AN:NZ want INDF.ADV

lín àň sī əm lā "as things are"

3IN:NZ COP INDF.ADV ART

 $Y \grave{\varepsilon} I^{\varepsilon}$ "say, tell" tends to take a $s \bar{r} \ni m$ -relative clause with $I \bar{a}$ in its sense of "say, tell how something is" and without $I \bar{a}$ in the sense "say how to do something":

Bà $y \grave{\epsilon} l \cdot \bar{o} \mathscr{D}$ bán nìn sĩ əm lā. 3PL say 3AN.OB 3PL:NZ do INDF.ADV ART "They told him what they'd done"

Bà nà $y\bar{\epsilon}l$ f fún nà nīŋ sī'əm. 3PL IRR tell 2SG.OB 2SG:NZ IRR do INDF.ADV. "They'll tell you what to do."

 $P\dot{a}'al^{\epsilon}$ "teach, inform", surprisingly, takes a relative clause object without $l\bar{a}$:

```
Bà pà'al·ō \emptyset bán nìŋ sī'əm.

3PL inform 3AN.OB 3PL:NZ do INDF.ADV.

"They informed him of what they'd done."

Gàad<sup>\epsilon</sup> "pass, surpass" is used with a s\bar{\imath}'əm-clause for comparing actions:
```

Mam tom bedego gaad ban tom si'em la.

Mām tóm bédogō ø gâad bán tòm sī'əm lā.

1SG.CNTR work much CAT pass 3PL:NZ work INDF.ADV ART

"I've worked much harder than (how) they have." (2 Cor 11:23)

Gbāň'e^{+/} "catch" is used with a sr̄əm-clause for "decide what to do":

```
M gbáň'e mán nà nīŋ sī'əm.1SG seize 1SG:NZ IRR do INDF.ADV."I've decided what to do."
```

With verbs of doing, a *sī əm*-relative clause can be a manner-adverb:

```
Bà nìn \acute{o}n \acute{y}\grave{\epsilon}l \acute{b}\bar{a} \acute{s}\vec{l} \ni m l\bar{a}. 3PL do 3AN:NZ tell 3PL.OB INDF.ADV ART. "They did as he'd told them."
```

 $S\bar{l}$ ∂m -relative clauses occur often as objects of $w\bar{\nu}\nu$ "like", $w\bar{\epsilon}n^{\text{na}/}$ "resemble"

```
...ka ya na kε ka nidib dɔl man wvv ziiŋgba'adibi gban'ad zimi si'em la.
...kà yà ná kέ kà nīdıb dɔl mān wvv zīiŋ-gbáň'adìb_ø
...and βρι irr cause and person:ρι follow 1sg.cntr like fish-catcher:ρι nz
gbāň'ad zīmί sī'əm lā.
catch:ipfv fish:ρι indf.adv art
"... you will make people follow me like fishermen catch fish." (Mt 4:19)
```

Hālί (là'am) nē "although" can take a sī'əm-clause for "despite how..." 18.

Relative clauses with an indefinite pronoun dependent on a preceding cb are uncommon compared with $k\grave{a}$ -preposing with relative pronouns. KB has only a few cases with $s\bar{b}^{+}$ or $s\bar{a}ba^{+}$; $s\bar{a}^{+}$ is commoner, but mostly follows cbs expressing place or time. Indefinite pronouns used as relatives after cbs are not confined to specific indefinite meanings or complements of verbs of cognition, reporting, or perception.

```
Fun bood ye fu ku dau so' la ya'a kpi...
Fún bòɔd yέ fù kū dáu-sɔ̄'
                                  lā vá' kpì...
2SG:NZ want that 2SG kill man-INDEAN ART if die...
"If the man whom you are seeking to kill dies ..." (2 Samuel 17:3)
Nidib la da wum Yesu n tum tuum sieba ...
         lā dá wòm Yesu n tòm tòvm-sīəba ...
Person:PL ART TNS hear Jesus NZ work work-INDF.PL ...
"The people heard of the deeds that Jesus had performed..." (Mk 3:7, 1996)
Ban da ku ninsieba da ka' bi'elaa.
Bán dà kō nīn-síəbà
                          dá kā'
                                    bī əláa +ø.
3PL:NZ TNS kill person-INDE.PL TNS NEG.BE few
"Those they had killed were not few." (1 Samuel 4:10)
Kem tv'vs Samaria na'abi tvm ninsieba la na ...
Kèm ø tū'us Samaria ná'abí ø tùm nīn-síəbà
                                                    lā nā...
Go:IMP CAT greet Samaria king:sg NZ send person-INDF.PL ART hither ...
"Go and greet the men sent by the king of Samaria ..." (2 Kings 1:3)
Tiig walaa bigisid lin an tisi'a.
       wélà ø bìgisid
                            lίn
                                 àň tí-sī'a.
Tìıa
Tree:sg fruit:pl cat show:impf 3in:nz cop tree-indf.in.
"It's the fruit of the tree that shows what tree it is." (Mt 12:33)
Ka bugum dit ten tita'asi'a la nyo'os dut ne agol sana dine ka' benne.
Kà bùgóm ø dìt
                       téη-tītá'-sī'a lā ňyɔ̂'ɔs dùt
                                                            nέ
And fire
             NZ eat: IPFV land-big-INDF.IN ART smoke ascend: IPFV FOC
             sāŋá dìnı kā'
àqźl
                                 bēnnε +ø.
ADV:upwards time:sg rel.in Neg. Have end:sg Neg.
"The smoke of the great city which fire consumes goes up eternally." (Rev 19:3)
referring to Babilon ten tita'ar la "the great city of Babylon" (Rev 18:21)
Nannanna, yaname daa sob gbauŋ si'a la ka m sobidi lebisidi ya.
Nānná-nā, yānámì ø dāa sɔb gbáun-sī a lá kà
                    NZ TNS write letter-INDF.IN ART and
Now.
           2PL
m sɔ̄bɪdɪ ə lɛ́bɪsidī yá.
1SG write: IPFV CAT answer: IPFV 2PL.OB.
"Now, it's the letter you wrote that I'm writing back to you about." (1 Cor 7:1)
```

Paul n sob **gbauŋ si'a** n tis Efesus dim la
Paul n sɔ̄b gbáu̞ŋ-sī'a n tís Efesus dím lā
Paul nz write letter- INDEIN CAT give Ephesus NULL.PL ART
"**the letter** which Paul wrote to the Ephesians" (NT heading)

In 42/56 relative clauses with $s\vec{r}a^+$ in the 1996 NT, $s\vec{r}a^+$ follows cbs of nouns referring to times or places:

 \dot{M} Zugsoba, ti zi' fun ken **zin'isi'a** la. \dot{M} Zūg-sɔ́bā +ø, tì zī' fun kēn zíň'-sī'a láa +ø. 1SG Head-NULL.AN VOC, 1PL NEG.KNOW 2SG:NZ go:IPFV place-INDF.IN ART NEG. "My Lord, we don't know where you are going." (Jn 14:5, 1996)

Ka bugum nie on be **doog si'a** la ni.

Kà bùgóm níe ón bè dó-sĩ a 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' **saŋsi'a** la, ka man pun be.

Abraham dá nàm kā'e sān-sí'a lā, kà mān pún bè.

Abraham this still neg.be time-inde.in art, and 1sg.cntr already exist.

"When Abraham still did not exist, I already existed." (Jn 8:58, 1996)

Indefinite pronouns as relatives may be omitted before ordinal expressions:

ka fun gban'e **ziiŋ si'a yiiga** la, fun ya'am o nɔɔr ...
kà fún gbāň'e zīŋ-sí'a yīigá lā, fūn yâ'am ò nɔ̄ɔr ...
and 2SG:NZ catch fish-INDF.IN firstly ART, 2SG.CNTR open:IMP 3AN mouth:SG
"and the first fish you catch, open its mouth..." (Mt 17:27)

but Paul n sob **gbauŋ yiiga daan** n tis Korint dim la nwa.

Paul n sōb gbáuŋ yīigá dāan n tís Korint dím lā ø nwá.

Paul nz write letter:sg firstly owner:sg cat give Corinth one.pl art cat this.

"This is **the first letter** which Paul wrote to the Corinthians." (NT heading)

24.3.2 With relative pronouns

The commonest type of relative clause begins with a relative pronoun or an NP with a relative pronoun as a dependent. In origin, these pronouns are short demonstrative pronouns followed by \grave{n} . When the head is the subject of the relative clause, this produces the forms \grave{n} $k\grave{n}$ $k\grave{n}$ $l\hat{n}$ $l\hat{$

```
M nyé dáu-kànı ø zàb nà'ab lā.
1SG see man-DEM.SG NZ fight chief:SG ART
"I saw the man who fought the chief."
```

When the pronoun is not itself the subject of the relative clause one might expect the \dot{n} to be absent and the pronoun to have the normal SF form. This indeed the case for WK, and commonly in the older NT versions too:

```
bàn kà nà'ab lā záb lā "those whom the chief fought" WK

DEM.PL and chief:sg art fight art

yikan ka mam Paul be la

yī-kán kà mām Paul bɛ lā

house-DEM.SG and 1SG.CNTR Paul EXIST ART

"the house where I, Paul, am" (Rom 16:23, 1976)

on buudi ka Jew dim kis

>n būudí kà Jew dím kīs

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; rarely, the nomaliser may be inserted after the relative clause subject as well.

```
gbauŋ kanɛ ka dau la sɔb la
for gbàuŋ-kàn kà dāu lā sɔ̄b lā
letter-DEM.SG and man:SG ART write ART
"the letter which the man has written"
```

```
dau kanɛ yadda niŋiri pv zu'oe dàu-kànı yàddā-niŋìrı ø pv zú'e lā man-dem.sg assent-doing:sg nz neg.ind become.great art "a man whose faith is not great..." (Mt 14:31)
```

It is thus best to regard $\partial n k a n l n b a n$ synchronically as subordinating relative pronouns rather than demonstrative + nominaliser combinations. Where the historically expected $\partial n k a n l n b a n$ appear as heads of relative clauses they will elsewhere be regarded as allomorphs of the relative pronouns in that context:

```
"I saw the man who fought the chief."

bàn kà nà'ab lā záb lā "those whom the chief fought."
```

Toende Kusaal shows the same development (nominaliser- \dot{n} is *ne* in Toende):

```
N sa nye buraa kanne da da'a gbana la.
"I saw the man who bought the book." (Abubakari 2011)
```

N sa nye buraa **kanne ka** Ayi da nye la. "I saw the man that Ayi saw." *ibid*

REL.PL and chief:SG ART fight ART

If the antecedent is the subject within a relative clause, or a predependent of the subject, a relative pronoun must be used:

```
bànı zàb nà'ab lā "those who fought the chief"
REL.PL fight chief:sg ART

M ňyé dáu-kànı zàb nà'ab lā.

1sg see man-REL.sg fight chief:sg ART
"I saw the man who fought the chief."
```

```
nimbane yuda sɔb Pɛbil la gbaunun line an nyɔvupaal dim gbaun la nīn-bánì yūdá sɔ̄b Pē'-bíl lā gbáunū-n línì person-rel.pl name:pl write Lamb:sg art book:sg-loc rel.in àň nyɔ́-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 new life" (Rev 21:27)
```

A relative pronoun can also relativise a complement or adjunct, or an antecedent extracted from a prepositional phrase or from a subordinate clause. The antecedent is preposed with $k\grave{a}$ and a resumptive pronoun is placed in any gap left by extraction, or for an indirect object, and occasionally for a human-reference direct object. Here $k\grave{a}$ -preposing has no foregrounding sense. $K\grave{a}$ -preposed relative pronouns are commoner than indefinite pronouns as relatives, except with clauses used adverbially or corresponding to English subordinate interrogative clauses.

```
Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa.
```

Gbàu̞ŋ-kànι kà Jerusalem kpɛ̂εňm-nàm dāa sɔ̄b lā ø ňwá.

Letter-rel.sg and Jerusalem elder-pl this write art cat this.

"This is the letter that the elders of Jerusalem wrote." (Acts 15:23, 1996)

m antu'a linε [1996 lin] ka ba mɔr na

m àntù'a lìni kà bà mōr nā

1SG case REL.IN and 3PL have hither

"the charge they are bringing against me" (Acts 25:11)

yeltəəd ayəpəi bane ka maliaknama ayəpəi mər la

 $y\bar{\epsilon}l$ -tɔ̂ɔd àyɔ́pɔ̀e bánì kà màlịāk-námá àyɔ́pɔ̀e mɔ̄r lā matter-bitter:PL NUM:Seven REL.PL and angel-PL NUM:Seven have ART "the seven plagues which the seven angels have" (Rev 15:8)

niŋkanε [1996 niŋkan] ka ba gban'e ο la

nīn-kánì kà bà gbáň'∙o_ø lā

person-rel.sg and 3PL seize 3AN.OB ART

"a person **whom** they have seized" (Acts 25:16) (human VP object)

Onε ka ba tis **o** ka li zu'oe, ba mε mɔr pυtɛn'ɛr ye o na lɛbis linɛ zu'oe.

Ͻnι kà bà tís·ò ̞ø kà lì zú'e, bà mὲ mòr

REL.AN and 3PL give 3AN.OB and 3IN become.much, 3PL also have

 $p\dot{\upsilon}$ -tèň'er $v\dot{\varepsilon}$ ò nà lēbis línì zù'e.

inside-mind:sg that 3AN IRR return REL.IN become.much.

"Whom they have given much to, they expect he will return much." (Lk 12:48)

Búraa số dāa bế ànīa, ôn kà mān néōn dāa túm lā.

Būrá-sɔ̄' dāa bέ ànínā, òn kà mān nē ɔ̄n dāa túm lā.

Man-INDEAN TNS EXIST ADV: there, RELAN and 1SG with 3AN TNS work: IPFV ART.

"There was a man there **whom** I used to work **with**." ILK

```
nimbane ka ya tɛn'ɛs ye ba anɛ tuongatib la nīn-bánì kà yà tɛ̃n'ɛs yé bà à nɛ̄ tûen-gātíb lā person-REL.PL and 2PL think that 3PL COP FOC ahead-passer:PL ART "those whom you consider to be leaders" (Gal 2:6)
```

```
linε [1996 lin] ka Kristo bood ye ti pian' la lìnι kà Kristo bôod yέ tì piāň' lā
REL.IN and Christ want that 1PL speak ART
"what Christ wishes us to say" (2 Cor 12:19)
```

If the antecedent is a predependent in an NP which is not the subject, that entire NP is $k\grave{a}$ -preposed, but obviously no resumptive pronoun is needed:

```
bikane [1996 biig kan] puug ka o mɔr la
bì-kànı pûug kà ò mɔr lā
child-rel.sg belly:sg and 3AN have ART
"the child which she is pregnant with [whose belly she has]" (Mt 1:20)
```

Relative clauses with locative reference do not take the locative $n\bar{\iota}^{+/}$:

```
yikan ka mam Paul be la yidaan

yī-kán kà mām Paul bέ lā yí-dâan

house-REL.SG and 1SG.CNTR Paul EXIST ART house-owner:SG

"the owner of the house where I, Paul, am" (Rom 16:23, 1976)
```

25 Complementised clauses

Complementised clauses are usually introduced by the clause linker $y\bar{\varepsilon}$. Both types may appear with $k\dot{a}$ instead, but usually much less often, and never exclusively; constructions which only permit $k\dot{a}$ and never $y\bar{\varepsilon}$ must be coordination or catenation. Complementised clauses follow any catenated clauses. Complementised clauses can be coordinated with $k\dot{a}$:

ka lin anε **ye** fv kv maali ti bε'εdε nwɛnɛ tinamɛ daa pv maalif bɛ'ɛd si'em la asɛɛ sv'vm ma'aa, **ka ye** fv yim nɛ sumbvgvsvm la.

```
nē νέ fù kù
kà līn
                                māalί tì bē'εdι ø wēn
                                                              nē
and 3IN.CNTR COP FOC that 2SG NEG.IRR make 1PL bad
                                                 CAT resemble with
tīnámì ø dāa pū
                    máalì f
                                 bē'εd sī'əm lá àsέε sùm má'àa.
1PL
        NZ TNS NEG.IND make 2SG.OB bad INDF.ADV ART except good only
       fù yīm
                      nē
                          súmbūgusím lā.
and that 2SG emerge: IMP with peace
                                        ART.
"Which is that you will not do us harm, as we did not do you harm but only
```

good, and that you will depart in peace." (Genesis 26:29)

25.1 Purpose clauses

Purpose clauses lack independency marking and have imperative mood. As there is no $-m^a$ flexion with dual-aspect verbs, the imperative is apparent only in the use of $d\bar{a}$ as the negation particle. The term "purpose clause" is convenient but such clauses are also used as complements of verbs expressing necessity and permission, and the meaning is sometimes attenuated from "so that" to merely "until."

Purpose clauses may be VP adjuncts:

```
Bà tìs·ō ø
                kû'θm yέ
3PL give 3AN.OB water that 3AN drink.
"They gave him water to drink. ("So that he might drink it.")
M ná tĩ, f
                           νέ
                                fù nīf
                                         dā
                                                zábē +ø.
                 tîım
1SG IRR give 2SG.OB medicine that 2SG eye:SG NEG.IMP fight NEG.
"I'll give you medicine so your eye won't hurt."
Ò
   vìl
            tîım
                      kà ò
                             nóbìr dā
                                          zábē +ø.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight NEG.
"She took medicine so her leg wouldn't hurt." WK
```

```
Ka ba gban'e ba kpεn'εs sanrega ni ye bεog nie.
```

```
Kà bà gbáň'a bā ø kpêň'es sārīgá nì yē bēog níe.
```

And 3PL seize 3PL.OB CAT put.in prison:SG LOC that morning appear.

"They seized them and put them in prison until tomorrow came." (Acts 4:3)

Purpose clauses can be coordinated without repetition of $v\bar{\varepsilon}$:

```
\dot{M} bɔ̂ɔd yē dāy lā kēŋ dâ'a-n, kà py'ā lā dōg dī\taub. 1SG want that man:SG ART go market:SG-LOC, and woman:SG ART cook food. "I want the man to go to market and the woman to cook food." WK
```

Purpose clauses appear as complements of particular verbs, e.g $b \ni d^a$ "want"; or $y \not \in l^{\varepsilon}$ "tell." Negative raising occurs with $b \ni d^a$ but not with $y \not \in l^{\varepsilon}$.

```
\dot{M} b\hat{\sigma} y\hat{\epsilon} \dot{o} k\bar{u}l. "I want her to go home." 1SG want that 3AN go.home.
```

```
\dot{M} p\bar{v} b\hat{j} d y\hat{\epsilon} \dot{m} k\bar{u}l\epsilon ^{+}\emptyset.

1SG NEG.IND want that 1SG go.home NEG.

"I don't want [me] to go home."
```

```
\dot{M} y \not\in l\bar{l} f y \not\in f\dot{v} d\bar{a} k\bar{u}l\varepsilon + \emptyset.
1SG tell 2SG.OB that 2SG NEG.IMP go.home NEG.
"I've told you not to go home."
```

The verb $g\bar{u}r^{a/}$ "be on guard, watch, wait for" in the sense of "waiting for an event" may take as complement either a NP headed by gerund, or a purpose clause introduced by $y\bar{\varepsilon}$, again with an attenuated sense:

```
Nidib la daa gur Zakaria yiib na.

Nīdıb lā dāa gūr Zakaria yîib nā.

Person:PL ART TNS watch Zechariah emerge:GER hither.

"The people were watching for Zechariah's coming out." (Lk 1:21)

... gur ye pu'a la du'a ka o ɔnb biig la.

... gūr yē pu'ā lā du'á kà ò ɔ́ňb bīig 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." (Rev 12:4)

Purpose-clause complements follow expressions of **necessity** or **permission** such as $n\bar{a}r^{a/}$ "be obliged to" (negated "be obliged not to"); $m\bar{b}r$ $s\bar{u}er$ "be allowed to"; $l\hat{u} = l\hat{u} = l\hat{u}$ "it is necessary":

```
Fù ρῦ
          nār γέ fù nín àláa
2SG NEG.IND must that 2SG do ADV:thus NEG.
"You're not allowed to do that."
Lì nàr yέ/kà
                                      "You must go home."
                 fù kūl.
3IN must that/and 2SG go.home.
In KB there are 258 examples of nar ye to 45 of nar ka.
Yà mór sūer
               γέ và kūl.
                                      "You may go home."
2PL have way:sg that 2PL go.home.
       bέ vέ/kà
Sūer
                    tì kūl.
                                      "We may go home."
                                      ("There's a way that we go home.")
Way:sg exist that/and 1PL go.home.
Li ane tilas ye m ken Jerusalem.
Lì à nĒ tīlás
                   yέ m̀ kēη Jerusalem.
3IN COP FOC necessity that 1SG go Jerusalem.
"I must go to Jerusalem." (Mt 16:21, 1996)
Li ane tilas ka m ninid ala.
Lì à nē tīlás
                    kà m nínìd àlá.
3IN COP FOC necessity and 1SG do:IPFV ADV:thus.
"I must do that." (1 Cor 9:16, 1996); there are no examples with kà in KB
N\bar{a}r^{a/} is occasionally used in a personal construction "deserve that":
babayi' la nar ye ba kuu ba
bà bàyí' lā nár yε bà kύυ bā
3PL NUM: two ART must that 3PL kill 3PL.OB
"both of them must be killed" (Leviticus 20:12)
Anɔ'ɔnε nar ka na nyani lak titabir la ...
```

tītābır lā ...?

Ànó'ənì ø nár kà ná ňyāŋı ø lāk

"Who is worthy to open the seal ...?" (Rev 5:2)

CAT must and IRR prevail CAT unstick glue ART ...?

25.2 Content clauses

Complementised clauses with independency marking <u>19.6</u> on the VP are content clauses. They are downranked main clauses, and show all the structural features possible for main clauses. They occur very frequently representing passages of indirect speech, but are also found much more generally after verbs of cognition, reporting, and perception.

Verbs taking content clauses as complements include, for example $y \dot{\epsilon} l^{\epsilon}$ "say", $w\dot{\nu}m^{m}$ "hear", $n\ddot{\eta}\bar{\epsilon}$ "see", $t\bar{\epsilon}n\ddot{\eta}\epsilon s^{\epsilon}$ "think", $m\ddot{\iota}$ "know", $b\dot{a}\eta^{\epsilon}$ "come to know", $p\dot{a}'al^{\epsilon}$ "teach, show", $k\dot{a}r\iota m^{m}$ "read", $z\bar{\iota}'$ "not know" and $si\dot{a}k^{\epsilon}$ "agree":

```
ban mi' ye biig la kpi n\epsilon la zug bán m\bar{r}' y\bar{\epsilon} b\bar{i}ig lā kpi n\bar{\epsilon} lā zug 3PL:NZ know that child:SG ART die FOC ART upon "because they knew that the child was dead" (Lk 8:53): focus-n\bar{\epsilon}^{+/} B\dot{\nu}\eta-b\bar{a}\check{n}'ad z\bar{\iota}' y\bar{\epsilon} t\bar{\epsilon}\eta t\acute{\nu}ll\bar{a} ^+ø. Donkey-rider:SG NEG.KNOW that ground:SG be.hot NEG.
```

"The donkey-rider doesn't know the ground is hot." Tone overlay: $T\bar{\epsilon}\eta$ $t\acute{o}l$. "The ground is hot." cf $t\bar{o}l^{la/}$ "be hot"

```
Fune siak ye fu ya'a ti kae, o na zin'ini fu na'am gbaun la zugɔɔ?

Fūnı Ø siák yế fừ yá' từ kā'e, ò nà zīň'iní fừ nā'am

2SG.CNTR CAT agree that 2SG if after NEG.BE, 3AN IRR sit 2SG chieftaincy gbáun lā zúgɔʻɔ +ø?

skin:SG ART upon PQ?

"Did you agree that when you are no more, he will sit on your throne?"

(1 Kings 1:24): postlinker adjunct
```

Absolute clauses $\underline{24.2}$ cannot be used as objects of such verbs, but another possibility apart from content clauses is NP + $y\bar{\epsilon}l\acute{a}$ "about" $\underline{16.6}$.

Except in indirect speech (see below), content clauses are usually declarative. There are exceptions, possibly characteristic of verbs of opinion and judgment:

```
Ya tɛnɛs ka m aan anɔ'ɔnɛ?
Yà tɛ̂n'ɛs kà m áan ànɔ'ɔnɛ̀ +ø?

2PL think and 1SG COP who CQ?
"Who do you think I am?" (Acts 13:25)
```

WK usually has $y\bar{\varepsilon}$ before content clauses, but prefers $k\dot{a}$ after $t\bar{\varepsilon}\check{n}'\varepsilon s^{\varepsilon/}$ "think." KB has 219 examples of $t\varepsilon n\varepsilon s$ ye to 31 of $t\varepsilon n\varepsilon s$ ka and shows $k\dot{a}$ after other verbs too:

```
Ya pun wum ka ba da yɛl ye...

Yà pún wùm kà bà dá yɛl yē ...

2PL previously hear and 3PL TNS say that...

"You previously heard that they had said ..." (Mt 5:43)
```

 $K\grave{a}$ + content clause is the only context where $k\grave{a}$ is followed by independency marking, and where $k\grave{a}$ does not delete a following subject pronoun with the same reference as the preceding subject:

```
M tên'es kà m lú yā. "I think I've fallen" WK 15G think and 15G fall PFV.
```

There are a few examples in KB of $n\varepsilon$ for $y\varepsilon$ $y\bar{\varepsilon}$ "that" (cf Mampruli ni id):

```
Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tvuliga.

Mān bɔ́ɔdī-n nē yānámì ø nāan âa-n mā'asígā bēɛ

1SG.CNTR want-DP that 2PL Nz then COP-DP cold:ADV or

yānámì ø nāan âa-n tūvlígā.

2PL Nz then COP-DP hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15)
```

The verb $y \dot{\epsilon} l$ is frequently ellipted before $y \bar{\epsilon}$:

```
Ka Zugsəb la ye ... "And the Lord said: ..." (Genesis 18:28) Kà Z\bar{u}g-sɔ́b lā yē ... And head-NULLAN ART that ...
```

Pronouns are changed throughout in the content clause to reflect its setting, on the same basis as in English "indirect speech." The free 3rd person pronouns have **logophoric** sense. In contexts where bound pronouns could have occurred instead (i.e. where they are contrastive) they replace 1st persons of the original utterance:

```
Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem. Festus táňs Paul yé ò gèeňm nē ... kà Paul lébìs Festus shout Paul that 3AN go.mad FOC ... and Paul reply y\bar{\varepsilon} \bar{\delta}n p\bar{\upsilon} g\acute{\varepsilon}e\~nmm +ø. that 3AN.CNTR NEG.IND go.mad NEG. "Festus shouted to Paul that he [Paul] was mad ... Paul replied that he [Paul] was not mad." (Acts 26:24-25, 1976)
```

Bound 3rd persons may also have this sense, but the free pronouns are much commoner as subjects. Thus "He1 said he1 would kill them." is usually

```
O y \hat{\epsilon} l y \hat{\epsilon} \bar{\delta} n n \hat{a} k \hat{\nu} \hat{\nu} \hat{b} \bar{a}.

3AN Say that 3AN.CNTR IRR kill 3PL.OB.
```

Ò dāa yél yé bà dāa kūl.

It is possible to say O $y \ge l$ $y \le O$ $n \ge k \le O$ but this is much more likely to mean "He₁ said he₂ would kill them."

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

```
3AN TNS say that 3PL TNS go.home. "She said that they had gone home." Tì dāa tēň'ɛs yé ò nà zāb nâ'ab lā. 1PL TNS think that 3AN IRR fight chief:sg ART.
```

"We thought he was going to fight the chief."

25.2.1 Reported speech

After a speech-verb $y\bar{\epsilon}$ may introduce the words of the speech itself, unaltered except for "resumptive" $y\bar{\epsilon}$ at intervals (see below.) This is uncommon in older texts, and in the 1976 NT is mostly confined to utterances of Jesus. Usually the original speech is downranked to a content clause or series of coordinated content clauses, with personal pronouns altered throughout as in English indirect speech, and free personal pronouns used logophorically. All other features of the original main clauses, including tense marking and independency marking, are unchanged. Such passages of indirect speech may be kept up for very long stretches; the 1976 NT version has examples extending over several pages. Later Bible versions consistently replace all indirect speech with direct.

Indirect speech may include questions and commands:

```
Ka Peter bu'os o ye, Ananias, ye bo ka o ke ka Sutaana kpen' o suunrin...

Kà Peter bū'os·ó ø yē Ananias, yē bó kà ò ké kà Sūtáanà

And Peter ask 3AN.OB that Ananias, that what and 3AN cause and Satan

kpèň' ò sūuňrí-n ... +ø?

enter 3AN heart:sG-LOC ... cQ?

"Peter asked him: Ananias, why did you let Satan enter your heart ...?"

(Acts 5:3, 1976)
```

In indirect commands the usual deletion of a 2nd sg subject and change of 2pl subject to postposed ya does not occur, even if the addressee is the same as in the original utterance and the pronoun remains 2nd person. Some speakers keep the postposed ya after the verb even when there is a preceding pronoun subject 21.3.

Indirect speech is an alternative to catenation with $k\bar{\varepsilon}^+$ 22.3 for expressing third/first person commands; main clause and linker may again be ellipted informally:

```
[M yél yé] ò gòsim tēṇi-n.

1SG say that 3AN look:IMP ground:SG-LOC.

"[I said] she should look down."

[M têň'ɛs kà] tì pú'vsìm Wínà'am.

1SG think and 1PL greet:IMP God.

"[I think] we should praise God."
```

A main clause with no VP can also appear in indirect speech:

Pronouns are changed even within a vocative:

```
Ka m wum Wina'am kokor ka li yi arazana ni na ye,

o nidiba, ye ba yimi teng la ni na.

Kà m wύm Wínà'am kύkόr kà lì yī áràzánà ní nā yē,

And 1sg hear God voice:sg and 3IN emerge heaven Loc hither that

o nīdιbá +ø, yέ bà yìmī ø tēŋ lā ní nā.

3AN person:PL VOC, that 3PL emerge:IMP 2PL.SUB land:sg ART Loc hither.

"And I heard God's voice coming from heaven, saying

'My people, come out of the land!'" (Rev 18:4, 1976)
```

Passages of direct or indirect speech longer than two or three clauses insert **resumptive** $y\bar{\epsilon}$ at intervals of roughly every third clause, after any prelinker adjuncts but before clause-linker $k\dot{a}$:

```
amaa ye ba yaanam da pu bood ye ba siak o noore àmáa yé bà yāa-nám dá p\bar{v} bôɔd yé bà siák·ò ø nɔɔré +ø. but that 3PL ancestor-PL TNS NEG.IND want that 3PL agree 3AN.OB mouth:SG NEG "But their ancestors did not want to obey him" (Acts 7:39, 1976)
```

```
Ye ka Paul yel ye o bood ye o kpelim sarega ni.
```

```
Yế kà Paul yếl yế ò bòod yế ò kpélìm sārīgá nì.
```

That and Paul say that 3AN want that 3AN remain prison:SG LOC.

"But Paul said he wanted to remain in prison...(Acts 25:21, 1976)

Amaa **ye ka** on yeli ba ye ...

```
Àmáa yé kà 5n yélì bā yē...
```

But that and SAN.CNTR say 3PL.OB that...

"But he [the speaker] had said to them ..." (Acts 25:16, 1976)

Alazug **ye ka** on ke ka ba mor o ba sa'an na ...

```
Àlá zùg yế kà 5n kế kà bà m5r·ó_ø bà sā'an nā ...
```

Thus that and SAN.CNTR let and SPL have SAN.OB SPL before hither...

"So he [the speaker] had made them bring him [Paul] into their presence..." (Acts 25:26, 1976)

Resumptive $y\bar{\varepsilon}$ may be placed between a postlinker adjunct and the subject, or between a vocative and the following clause:

Ka nanana **ye** o niŋi ba Wina'am ne o popielim pia'ad la nu'usin...

Kà nānná-nā yế ò nìnī bá Wínà'am nế ò pù-pìəl ι m And now-hither that 3AN do 3PL.OB God with 3AN inside-whiteness piâň'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 zuà-nàm né ò sàam-nàmā +ø, yé bà kèlısım!
```

3AN friend-PL with 3AN father-PL VOC that 3PL listen:IMP!

"His friends and his fathers should listen." (Acts 7:2, 1976)

26 Negation

Negation of clauses is achieved by using a negative particle in the VP, $p\bar{v}$ for indicative, $d\bar{a}$ for imperative, $k\dot{v}$ for irrealis replacing the positive marker $n\dot{a}$ 19.5, along with a clause-final negative prosodic clitic 7.1:

```
Ti pv bood ye dau kaŋa aan ti na'aba.

Tì p\bar{v} bôod yē dáu-kàŋā áaň tì nà'abā ^+ø.

1PL NEG.IND want that man-demst.sg cop 1PL king:sg NEG.

"We don't want this man to be our king." (Lk 19:14)

Dìm n\bar{\varepsilon} Wīn, d\bar{a} tô'as n\bar{\varepsilon} Wīnné ^+ø.

Eat:IMP with God:sg, NEG.IMP talk with God:sg NEG.

"Eat with God, don't talk with God."
```

Amaa man pian'ad la **kυ** maligim **gaadε**.

```
Àmáa mān pịâň'ad lā k\acute{v} mālıgım gáad\~{\epsilon} +\~{\varphi}. But 1sg.cntr speech art neg.irr again pass neg. "But my words will not pass away. (Mt 24:35)
```

The negative prosodic clitic appears at the end of the clause containing the negated verb, passing over all subordinate clauses:

```
Ti pv bood ye dau kaŋa aan ti na'aba.

Tì p\bar{v} bôod y\bar{\varepsilon} dáu-kàŋā áaň tì nà'abā ^+ø.

1PL NEG.IND want that man-DEMST.SG COP 1PL king:SG NEG.

"We don't want this man to be our king." (Lk 19:14)
```

There are no unequivocal examples in my materials of a negative clitic placed before a subordinate clause to exclude it from the scope of a negation. Thus the adjunct $y\bar{\varepsilon}$ -clause has probably been extraposed in:

```
Nidib be ka pu tum si'ela ye ba a popielim dim...

Nīdib bé kà pō tóm sī'əla ^+ø yé bà áň pó-pìəlim

person:PL EXIST and NEG.IND WORK:IPFV INDF.IN NEG that 3PL COP inside-whiteness dím ...

NULL.PL.

"There are people who haven't done anything that they become blessed"
```

(Rom 4:5, 1976); revised completely in the 1996 version.

Again, in this example, the $k\grave{a}$ -clause can be taken as a coordinate clause carrying on the narrative:

```
Ka li pv yuugε ka o pu'a mε kena.
```

```
Kà lì p\bar{v} yúug\bar{e} +\phi, kà ò pụ'ā m\hat{e} k\bar{e} nā.
```

And 3IN NEG.IND delay NEG, and 3AN wife:sg also come hither.

"Not much later, his wife came too." (Acts 5:7)

Negative clitics are omitted after \dot{n} -clauses containing a negative unless they both lack articles and are clause-final within the main clause:

```
Nīn-bánì pō dít ná kpī.
```

Person-rel.pl neg.ind eat:ipfv irr die.

"People who don't eat will die." WK

```
M ňyέ nīn-bánì pū dítā +ø.
```

1SG see person-rel.pl neg.ind eat:ipfv neg.

"I've seen some people who don't eat." WK

The same is true of VPs nominalised by the personifier particle:

Apozotyel da ane o saam biig ma'aa.

```
À-Pū-zɔ´t-yēl dá à né ò sàam bîig mà'aa.
```

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

"Fears-nothing was his father's only child." KSS p35

Clauses with $y\dot{a}$ ' "if" keep their own negative clitics:

```
Ba ya'a pυ niŋ si'ela, o pυ'υsim dɔɔg la na lieb zaalim.
```

```
Bà yá' pū nín sī'əla +ø, ò pù'usım dɔ̂ɔg lā ná līəb 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)

Apparent exceptions in the NT probably all involve $y\dot{a}$ '-clauses ending in words with final vowels or final -m, and do in fact end with a negative clitic.

Negative raising seems to operate in Kusaal in a way generally analogous to English. It takes place with complement clauses after verbs expressing opinions or judgments:

```
Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì p\bar{v} n\bar{a}r v\dot{\varepsilon} f\dot{v} d\dot{v} b\bar{a}'-b\hat{v}
```

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)

pu'á Herodiasε +ø.

Ti pv bood ye dau kana aan ti na'aba.

mam ρυ tɛn'ɛs ye o na kɛligi m pian'adɛ.

Mām pō $t\bar{\epsilon}$ ň'ɛs yé ò nà kēlıgí m piàň'ad +ø.

1SG NEG.IND think that 3AN IRR listen 1SG word:PL NEG.

"I do not think that he will listen to my words." (Job 9:16)

It does not occur with verbs of knowing or informing:

linzug ka ti baŋ ye o pv yi Wina'am san'an naa.

Lìn-zúg kà tì bán yế ò p \bar{v} y \bar{i} Wínà'am sâ'an náa $+ \emptyset$. Therefore and IPL realise that 3AN NEG.IND emerge God with hither NEG. "Therefore we realise he has not come from God." (In 9:16)

ka o lεε pu ban ye li anε onε.

kà ò lée pū báŋ yé lì à nē ɔ̄ne +ø.

And SAN but NEG.IND realise that SIN COP FOC SAN.CNTR NEG.

"but she didn't realise it was him." (Jn 20:14)

Constituent negation is commonly achieved by clefting, using the patterns

```
Lì k\bar{a}' X k\dot{a} ... /Lì k\bar{a}' X n ... "It's not X that ..." X k\dot{a}' e k\dot{a} ... /X k\bar{a}' e n ... "There's no X that ..."
```

Sɔ' kae na nyani dɔl zugdaannam ayi'...

 $S\bar{5}$ ' $k\bar{a}$ 'e ø ná ňyāŋı ø d $\bar{5}$ l zūg-dâan-nàm àyí' ... INDF.AN NEG.BE CAT IRR prevail CAT follow head-owner:PL NUM:two ... "Nobody can serve two masters." (Mt 6:24)

Sogia so' kae' n tum ka yood o mena.

```
Ságià-sā' kā'e n túm kà yāod ò mēŋá +ø.
```

Soldier-INDF.AN NEG.BE CAT WORK: IPFV and pay: IPFV 3AN self NEG.

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

Di lɛn ka' fʊn yɛl si'el la zug, ka ti niŋ o yadda. Lì lɛ̀m kā' fʊ́n yɛ̀l sī'əl lā zúg kà tì níŋ·ò ø yáddáa +ø. 3IN again NEG.BE 2SG:NZ Say INDF.IN ART upon and 1PL do 3AN.OB assent NEG.

"It is no longer because of what you said that we believe in him." (Jn 4:42)

Relative clauses can be used:

Da mor noor yinne ne bane ka' yadda ninidib la ye ya nin si'ela. Dā mōr nōor yīnní nē bánì kā' yáddā-nínìdib lā Neg.IMP have mouth:sg one with Rel.Pl Neg.Be assent-doer:pl art yé yà nín sī'əla $^+$ ø. that 2Pl do INDF.IN Neg. "Do not agree with those who are not believers to do anything." (2 Cor 6:14)

The particle $b\acute{a}a$ (Hausa $b\^{a}a$ "not exist") appears in $b\acute{a}a$ $b\~{i}$ a b "not at all", $b\acute{a}a$ $y\={i}nn\'{i}^+$ "not one", which are both used with a negative VP. $B\acute{a}a$ $y\={i}nn\'{i}^+$ can be used as a NP head, or as a postdependent.

Da tumi si'el baa bi'elaa.

 $D\bar{a}$ $t\acute{u}m\bar{\iota}_{g}$ $s\bar{\imath}$ ∂l $b\acute{a}a$ $b\bar{\imath}$ $\partial l\acute{a}a$ $^{+}g.$ NEG.IMP WORK 2PL.SUB INDF.IN at.all NEG "Do no work at all." (Leviticus 23:31)

Amaa ba pv nyani nye line tu'al baa yinne.

Àmáa bà pō ňyāŋı ø ňyē línì tò'al [+ø] báa yīnní.

But 3PL NEG.IND prevail CAT find REL.IN condemn [NEG] not one.

"But they couldn't find anything condemning, not one thing." (Mt 26:60)

Ka nid baa yinne pυ yεl ye on mɔr si'el la, onε sυ'oe lii.

Kà $n\bar{l}d$ $b\acute{a}a$ $y\bar{l}nn\acute{l}$ $p\bar{v}$ $y\acute{e}l$ $y\bar{e}$ $\acute{o}n$ $m\bar{o}r$ and person:sg not one NEG.IND say that 3AN:NZ have $s\bar{l}$ all all

INDF.IN ART 3AN.CNTR CAT own 3IN.OB NEG.

"Not one person said that what he had, he owned." (Acts 4:32)

Fυ du'adib baa yinne kae ka o yυ'υr buon alaa.

Fù d \bar{v} 'adıb báa y \bar{i} nní ká'e kà ò y \bar{v} 'vr bûen àláa $+ \varphi$. 2SG relative:PL not one NEG.BE and 3AN name:SG call:IPFV ADV:thus NEG. "Not one of your relatives is named thus." (Lk 1:61)

27 Information packaging

27.1 Focus

As a starting point, I adopt the formulation from Lambrecht 1994: "[Focus] is the UNPREDICTABLE or pragmatically NON-RECOVERABLE element in an utterance. The focus is what makes the utterance into an assertion."

A distinction is made between **ordinary** and **contrastive focus**.

Separate from the notion of focus is the concept of **foregrounding**, the usual function of it-clefting in English; as pointed out in CGEL p1424, foregrounded elements in English need not be focussed.

Two syntactic devices in Kusaal relate to focus: subject focussing with catenator-n, and the use of the particle $n\bar{\varepsilon}^{+/}$. Clefting constructions with the clause linker $k\dot{a}$ and corresponding ellipted types relate to foregrounding rather than focus, or are motivated simply by ordering constraints.

Main clauses without any special syntactic marking of focus have ordinary focus on the predicate by default.

The usage of the article $l\bar{a}^{+/}$ interacts with these focus mechanisms.

27.1.1 With catenator-n

N-clefting uses a n-catenation in the sense of a relative clause with the subject as antecedent, after a main clause with $L \wr a n \bar{\epsilon}$ "It is ..." The sense resembles that of the formally analogous "it-clefting" of English, foregrounding the clefted element and backgrounding the rest:

```
Ka dau mɛ pv sv'oe o mɛŋ niŋgbinaa. Li anɛ o pu'a sv'oe li.

Kà dāu mɛ́ pv̄ sv'v ò mēŋ nín-gbīnáa ^+ø.

And man:sg also neg.ind own 3an self body-skin:pl neg.

Lì á nɛ́ ò pu'ā ø sv'v ʃī.

3IN COP FOC 3AN wife CAT own 3IN.OB.

"And a husband, too, does not own his own body. It is his wife who owns it."

(1 Cor 7:4)
```

Like English it-clefting (CGEL p1416) the construction has an implicature of exhaustiveness and exclusiveness: the wife (only), not the husband, is the owner.

The main clause may be a verbless identificational clause <u>21.4.1</u>:

```
Anɔ'ɔn nwaa yisid nidib tvvmbɛ'ɛdi basida?

Ànɔ̂'ɔn ø nwáa ø yīsıd nīdıb tvvm-bɛ̄'ɛdı ø básıdà ^+ø?

Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV co?

"Who is this who drives people's sins out?" (Lk 7:49)
```

N-focus of subjects presumably arose from n-clefting by ellipsis. The focussed subject stands first, with the rest of the clause introduced by n, phonologically identical to catenator-n. The clause lacks independency marking but has independent tense marking; compare tense marking in ellipted indirect commands 19.3.1.

The meaning of this construction is *focus* rather than foregrounding:

```
Wáaf\dot{v} ø dúm\cdotō ø. "A snake bit him." WK Snake:sg cat bite 3AN.OB.
```

would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"

Focus rather than foregrounding is demonstrated by the fact that interrogative pronouns as subjects are always n-focussed. As a subject $\grave{a}n\hat{\jmath}$ "who" thus always appears as $\grave{a}n\acute{\jmath}$ n [ang:nɪ] (always NT ano'one, KB anɔ')n:

```
Ànɔʻɔnì ø kābırídà +ø?
Who cat ask.for.entry:IPFV co?
"Who is asking permission to enter?"
```

Clauses containing interrogative pronouns may not contain focus- $n\bar{\epsilon}^{+/}$, an incompatibility which is most readily explained by analysing interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

Furthermore, the focus particle $n\bar{\varepsilon}^{+/}$ in all its roles is excluded from clauses which are n-focussed, with the corresponding VP aspect distinctions present but unmarked, as in other cases of formal exclusion of the marker:

```
M zūgv ø zábìd. "My head is hurting." (Reply to "Where is the pain?")
cf M zūg lā pύ'alìm nē. "My head is hurting." (Reply to "What's the matter with you?")
```

Accordingly, the ellipted construction with catenator-n after the subject represents focus, filling the gap caused by the fact that a clause subject cannot be focussed with $n\bar{\varepsilon}^{+/}$.

27.1.2 With $n\bar{\epsilon}$

Preceding a VP constituent, the particle $n\bar{\varepsilon}^{+/}$ focusses that constituent, while VP-final $n\bar{\varepsilon}^{+/}$ focusses the entire VP contrastively.

On distinguishing constituent-focus $n\bar{\epsilon}^{+/}$ from the preposition $n\bar{\epsilon}$ "with, and" see <u>19.8.4</u>. Confusion with the $n\bar{\epsilon}$ following objects of comparison is unlikely <u>18</u>.

The aspect particle $n\bar{\varepsilon}^{+/}$ bound to the verb <u>19.2.1</u> represents a specialised use of the same particle for temporal focus. The aspectual interpretation normally prevails over constituent focus. When $n\bar{\varepsilon}^{+/}$ is excluded by formal constraints, or is present but separated from the verb by free words, the different aspectual meanings still appear if the verb meaning permits it, but are unmarked.

 $N\bar{\varepsilon}^{+/}$ cannot appear in either constituent-focus or aspectual senses

if the subject has *n*-focus in nominalised clauses in content questions.

$N\bar{\epsilon}^{+}$ may only occur *once* in a clause or series of catenated clauses:

```
Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ. Fù pō má' n tìs nīn-sáalā ^+ø, àmáa fù mà' 2SG NEG.IND lie CAT give person-smooth:SG NEG but 2SG lie n tís nē Wínà'am Sí-sùŋ. CAT give FOC God Spirit-good:SG. "You have not lied to a human being, but you have lied to the Holy Spirit." (Acts 5:4, 1996)
```

N-focussing of the subject:

```
\dot{M} z\bar{u}gv_{\varnothing} z\acute{a}b\grave{\iota}d. "My head is hurting/hurts." (No aspectual n\bar{\epsilon}^{+/}) 1SG head CAT fight:IPFV. Reply to "Where is the pain?" \dot{A}n\acute{\sigma}'on\grave{\iota}_{\varnothing} d\acute{\iota}t s\acute{a}'ab\grave{\sigma} + \varnothing?
```

Nominalised clauses:

Who

```
O dāa á nē bīig. "She was a child." 3AN TNS COP FOC child:SG.
```

"Who eats/is eating millet porridge?" (No aspectual $n\bar{\epsilon}^{+/}$)

CAT eat: IPFV porridge co?

332 Information packaging "because she's a child" but źп àň bīig lā zúg 3AN:NZ COP child:SG ART upon Ň ví "I come from Bawku." SB nē Bók. 1SG emerge FOC Bawku. but Meeri one yi Magdala "Mary who came from Magdala" Meeri śnì vī Magdala (Mk 16:9, 1996) Mary REL.AN emerge Magdala Focus- $n\bar{\varepsilon}^{+}$ can occur in complementised clauses, including purpose clauses: Pian'am ka m bood ye fu nyε**nε** buud. Pịàň'am kà m bôod yế fù nyē nē būvd. Speak: MP and 1sg want that 2sg see Foc innocence. "Speak, for I want you to be vindicated." (Job 33:32) Content questions: Вź kà fù kúmmà +ø? "Why are you crying/do you cry? What and 2SG cry:IPFV co? Fù nínìd bó 2SG do: IPFV what co? Fù wá'e yáa

"What are you doing/do you do?" "Where are you going/do you go?" 2SG go where co? yáa Bùgóm lā yít ní ná +ø?

ART emerge: IPFV where Loc hither co? "Where is the light coming from?" SB

M á nε dāu. "I am a man." 1SG COP FOC man:SG.

áň bó +ø? "What am I?" but Mām 1SG.CNTR COP what co?

> Fù áaň ànɔʻɔnè +ø? "Who are you?" 2SG COP who co?

```
F\grave{\upsilon} b\^{\jmath} 2d b\acute{\jmath} b\acute{\jmath} "What do you want?"

2SG want what co?

but F\grave{\upsilon} b\^{\jmath} 2d n\bar{\varepsilon} b\acute{\jmath} "What do you want it with?"

2SG want with what co? N\bar{\varepsilon} must be interpreted as preposition (WK)
```

Certain words do not prevent focus- $n\bar{\varepsilon}^{+/}$ from being used in the clause but cannot themselves be focussed with $n\bar{\varepsilon}^{+/}$. They include $s \dot{v} \eta \bar{a}^{+/}$ "good", $s \dot{v} m^{\text{m}}$ "good", $b\bar{\varepsilon}^{!} \varepsilon d^{\varepsilon}$ "bad", $s \dot{l} da^{+}$ "truth" when used as adverbs, and the "two, three exactly" quantifier forms $\dot{a} y i \eta \bar{a}^{+/} \dot{a} t \dot{a} \eta \bar{a}^{+/}$. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

```
Lì àň súŋā.

"It's good."

Lì àň bē'ɛd.

"It's bad."

In cop bad:ABSTR.

[ye ka] o sariakadib a sum ne sida.

ò sàríyà-kādıb áň súm nē sídà.

Ban law-drive:GER cop good:ABSTR with truth.

"His judgment is good and true. (Rev 19:2, 1976)
```

If $n\bar{\epsilon}^{+/}$ does occur before such constituents it must be interpreted aspectually, limiting the state described to a particular time period, even with stative verbs where there is no explicit time marker in the clause 19.2.3.

27.1.2.1 VP constituent focus

The use of $n\bar{\varepsilon}^{+/}$ to focus a VP constituent, as opposed to the entire VP, is possible only in statements and polar questions. The aspectual sense of $n\bar{\varepsilon}^{+/}$ 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:

```
M dá' búŋ.
15G buy donkey:sG.
I've bought a donkey."
M dá' nē búŋ.
I've bought a donkey."
15G buy Foc donkey:sG.
("What have you bought?")
```

```
Nīigí àňbıd
                nē mɔ̄ɔd.
                               "Cows eat grass."
                                ("What do [generic] cows eat?")
Cow:pl chew:ipfv foc grass:pl.
```

However, under the scope of a negative, focus is likely to be **contrastive**:

```
dá' bùŋā
                               "I haven't bought a donkey."
Μ̈́pū
                        +ø.
1SG NEG.IND buy donkey:SG NEG.
Μ̈́pū
          dá' nε̄ bύŋā
                               "I haven't bought a donkey."
                         +ø.
1SG NEG.IND buy FOC donkey 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 $n\bar{\varepsilon}^{+/}$ before a definite object is usually aspectual:

```
Nīigí
       lā śňbìd
                  nē mɔ̄ɔd lā.
Cow:pl art chew:ipfv foc grass:pl art.
"The cows are eating the grass."
                   nē mɔ̄ɔd lā.
Nā'-síəbà
           źňbìd
```

Cow-INDF.PL chew:IPFV FOC grass:PL ART.

If focus does occur with old-information arguments, it is **contrastive**.

Line ka ba'amaannib maanne tisid bada la, ba maanne tisid**ne** kikiris, ka pu maannε tisid Wina'am.

Lìnı kà bà'-māannıb mâannì ø tísìd bádà lā, bà màannı REL.IN and idol-sacrifice:PL sacrifice:IPFV CAT give:IPFV idol:PL ART 3PL sacrifice:IPFV ø tísìd nē kíkīrιs kà pū mâannì Ø tísìd Wínā'amm +ø. CAT give: IPFV FOC fairy: PL and NEG. IND sacrifice: IPFV CAT give: IPFV God "That which idol-worshippers sacrifice to an idol, they sacrifice to *demons* and they don't sacrifice to God." (1 Cor 10:20)

The predicative complement of $\grave{a}e\check{n}^a$ "be something/somehow" in its ascriptive sense 19.11.2 is non-referring and prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by $n\bar{\epsilon}^{+/}$ for **ordinary** focus:

```
"She is a child."
\hat{O} à n\bar{\varepsilon} b\bar{i}ig.
3AN COP FOC child:SG.
```

[&]quot;Some cows are eating the grass."

```
Ò dāa á nē bīig. "She was a child."
BAN TNS COP FOC child:SG.
Dītb á nē būn-súŋ. "Food is a good thing."
Food COP FOC thing-good:SG.
Ò à nē bāaňlím. "She is quiet."
BAN COP FOC quiet:ABSTR.
```

Lì à nē būgusígā.

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:

"It's soft."

```
Ka bumbuuda banɛ lu gɔn'ɔs suugin la anɛ banɛ wum pian'ad la, ka... Kà būn-búudà bànɪ lù gòň'ɔs súugū-n lā á nɛ̄ And thing-planting:pl rel.pl fall thorn:pl among-loc art cop foc bánì wùm piạn'ad lā, kà rel.pl hear speech art, and... "And the seeds which fell among thorns are those who heard the word, but..." (Lk 8:14)
```

```
Biis la diemid nε dua gbinin. Ba zamisid nε bula wa'ab. Ba anε Apam biis.

Bīis lā dí'əmìd nε dúaň gbínnī-n. Bà zàmιsıd nε

Child:PL ART play:IPFV FOC dawadawa:sg base:sg-Loc. 3PL learn:IPFV FOC

būla wâ'ab. Bà à nε À-Pām bîis.

shoot:PL dance:sg. 3PL COP FOC PERS-Apam child:PL.

"The children are playing under a dawadawa tree. They are learning the dance of the young shoots. They are Apam's children." KKY p6
```

In this context proper names are not referential:

```
O yv'vr na anɛ Joon. "His name will be John." (Lk 1:60) 
Ò yv̄'vr ná ā nɛ̄ Joon. 
3AN name:sg irr cop foc John.
```

(The relationship between Apam and the children is new information.)

As with objects, when the complement falls under the scope of a negative, focus is usually **contrastive**:

```
\dot{M} \acute{a} n\bar{\epsilon} du'\acute{a}t\grave{a}. "I'm a doctor."

1SG COP FOC doctor:SG.

\dot{M} k\bar{a}' du'\acute{a}t\bar{a}a ^{+}ø. "I'm not a doctor."

1SG NEG.BE doctor:SG NEG.

\dot{M} k\bar{a}' n\bar{\epsilon} du'\acute{a}t\bar{a}a ^{+}ø. "I'm not a doctor." ("I'm a lab assistant.")
```

Focus on a **locative complement** typically involves either a place name or a definite predependent with a postposition. The fact that a referent is at a known place is new information.

```
D\bar{a}\underline{u} I\bar{a} b\dot{\epsilon} n\bar{\epsilon} d\acute{o}-k\grave{a}\eta\bar{a} I\bar{a} p\acute{v}vg\bar{v}-n.

Man:sg art exist foc hut-demst.sg art inside-loc.

"The man is inside that hut." (Reply to "Where is that man?")

Mam bene moogin. "I'm in the bush." BNY p8

Mām b\dot{\epsilon} n\bar{\epsilon} m\bar{o}2gv-n.

1sg.Cntr exist foc grass:sg-loc.

\dot{M} y\acute{l} n\bar{\epsilon} B\acute{o}k. "I come from Bawku." SB
```

1SG emerge FOC Bawku.

1SG NEG.BE FOC doctor:SG NEG.

Yadda niŋir yitnɛ labaar la wwmmvg ni. Yàddā-niŋìr yit nɛ lábāar lā wẃmmvg ní. Assent-doing emerge:IPFV FOC news ART hearing LOC. "Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of $b\dot{\varepsilon}^+$, where the locative is an adjunct:

```
Dàu-sō' bέ dó-kànā lā pύυgō-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 dit s\bar{a}'ab n\bar{\epsilon} z\hat{a}am. "We eat millet porridge in the evening." 
1PL eat:IPFV porridge FOC evening. ("When do you eat porridge?")
```

27.1.2.2 VP focus

Focus on the VP as a whole with VP-final $n\bar{\varepsilon}^{+/}$ 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 $n\bar{\varepsilon}^{+/}$:

```
\dot{O} kù\dot{\Theta}sid s\bar{u}mma l\bar{a} n\bar{\epsilon}. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. ("They're not free.")
```

Aspectual sense ruled out by mood:

```
Gòsim n\bar{\epsilon}. "Look!" ("Don't touch." WK) Look: MP FOC.
```

Stative verbs without an explicit time indicator:

```
\dot{O} gim n\bar{\epsilon}. "He's short." ("I was expecting someone taller.") 3AN be.short FOC.
```

```
\dot{M} bɔʻɔdī f n\bar{\epsilon}. "I really love you." WK 1SG want 2SG.OB FOC.
```

Imperfective passives:

зи be.deep гос.

```
Dāam lā nûud nē."The beer is for drinking."Beer ART drink:IPFV FOC.("Not washing with!")Lì mà'an nē."It gets cooled." (ipfv of m\bar{a}'al^{+/} "make cool")3IN get.cool:IPFV FOC.("Not heated!")
```

```
D\bar{a}k\acute{a} I\bar{a} z\acute{a}n\'{l} n\bar{\epsilon}. "The box gets carried in the hands." Box:sg ART carry.in.hands Foc. ("Not on your head.")
```

```
D\bar{a}k\acute{a} l\bar{a} z\hat{i}id n\bar{\epsilon}. "The box is for carrying on the head." Box:sg art carry.on.head:IPFV Foc. ("Not carrying in the hands.")
```

Perfectives which cannot be interpreted as resultative:

Ò dìgil "He's *laid it down*." ("I thought he'd pick it up.") nē. зан lay.down гос. Kà lì bódìg nē. "It's lost." And 3IN get.lost Foc. Contradicting "someone hid it." 19.3.5 dìgın "He's lain down." DK: "Someone calls at your Ò nē. 3AN lie.down Foc. house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed." WK: "You've said: the child looks filthy. I'm replying: He's been lying down." Ò zì'an "She's pregnant." (Not "She has stood still.") nē.

An idiomatic euphemistic use.

27.2 Clefting and preposing with kà

зам stand.still гос.

 $K\grave{a}$ -clefting arises from constructions with adnominal $k\grave{a}$ -catenation 22.3 in much the same way that n-clefting arises by ellipsis from n-catenation. $K\grave{a}$ -clefting has a similar implicature of exhaustiveness and exclusiveness.

The preposed element may be extracted from a subordinate clause:

Li ane ya taaba bane pu'usid Wina'am ka li nar ka ya kad saria.

Lì à né yà tāaba bánì pù'usid 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)

Again, the main clause may be a verbless identificational clause <u>21.4.1</u>:

```
Jnı ø lá kà fù dāa ňyēt.

3AN.CNTR CAT that and 2SG TNS see:IPFV.

"This is he whom you saw." WK

Ànɔʻɔnì ø ňwá kà tì ňyētá +ø?

Who cat this and 1PL see:IPFV co?

"Who is this that we can see?"
```

```
Bɔɔ ø lá kà m̀ nyētá +ø?
What cat that and 1sg see:IPFV co?
"What is that that I can see?"
```

Once again, there is a construction with ellipse of all the main clause except the NP. Independent tense marking is possible in the ellipted structure, as with n-focus. Preposed direct objects leave a null-anaphora gap.

```
Asee line an be'ed ma'aa ka m na tun'e nin.

Àsée línì à \ddot{n} be'ed ma'aa kà \ddot{m} ná tūn'e \not o nín.

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)

Bó kà fù kúesìda +\not o? "What are you selling?"

What and 2sg sell:ipfy co?
```

The effect of $k\hat{a}$ -preposing remains *foregrounding*, not focus. It is compatible both with n-focus and with the occurrence of the focus particle $n\bar{\epsilon}^{+/}$:

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.

Dìn-zúg kà mām Paul n bé sārīgá nì Yesu Kiristo zúg yānám That-upon and 1sg.cntr Paul cat exist prison:sg loc Jesus Christ upon 2PL.cntr bûud-bànī kā' Jew dím lā yélà.

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)

```
Br̄əl bí'əl kà kɔ̄lıg pɛ̂'ɛl nē.
Little little and river:sg get.full Foc.
"Little by little, and a river is full." (Proverb)
```

Kà-foregrounding of VP objects containing interrogative pronouns is very common. There is no syntactic movement rule for interrogative pronouns/proforms:

```
Bùgóm lā yít yáa ní ná +ø?
Fire ART emerge:IPFV where LOC hither co?
"Where is the light coming from?" SB
```

However b5 "what?" is very often preposed with ka, as in the example above; preposing is *required* if the sense is "why?" rather than "what?":

```
Bó kà fù kúmmà? "Why are you crying?" cf *Fù kúm bó? "What are you crying?"
```

B5 ka... is by far the most frequent way of rendering "Why?", and usually has this meaning, but foregrounding of b5 in the normal sense "What?" also occurs:

```
Bɔ ka ti na niŋɛ? "What are we going to do?" (Acts 21:22) Bɔ́ kà tì ná nìŋɛ ^+ø? What and <code>lplirr</code> do co?
```

Other queried NP objects in content questions are often preposed with $k\dot{a}$:

```
Nū'-bíbısá àlá kà fù ňyētá +ø?
Hand-small:pl Num:how.many and 2sg see:IPFV cq?
"How many fingers can you see?" SB
```

Kà-preposing can also be used to extract an interrogative pronoun from a prepositional phrase; the original position must be filled by an anaphoric pronoun:

```
Ka anɔ'ɔnam ka Wina'am svnf da pɛlig nɛ ba yvma piisnaasi la?

Kà ànɔ̂'ɔn-nàm kà Wínà'am súňf dá pɛlig nɛ́ bà

And who-pl and God heart:sg τνς whiten with βρl

yòma pīs nāasí lá +ø?

year:pl forty ART co?

"And who was God angry with for forty years?" (Heb 3:17)
```

As interrogative pronouns are intrinsically focussed, these constructions, like other cases of preposing with $k\grave{a}$, are best regarded as foregrounding, not focus.

Preposing the complement of a single-aspect verb is uncommon, and interrogative pronouns in such cases usually remain *in situ*, probably necessarily so in the case of $\grave{a} e \breve{n}^a$ "be something":

```
Ningbin bə buudi ka ba na ti məra?

nìn-gbīn bɔ-būudí kà bà ná tī mɔrá +ø?

Body-skin:sg what-sort and splir afterwards have co?

"What kind of body will they have?" (1 Cor 15:35)

but Fù bɔ̂ɔd bɔ́ +ø? "What do you want?"

2sg want what co?
```

```
Mām áň bó +ø? "What am I?"

1SG.CNTR COP what co?

Kà fù áaň ànó'ɔnè +ø? "Then who are you?"

And 2SG COP who co?
```

VP adjuncts are often preposed with $k\grave{a}$; there is probably a contrast between foregrounding with $k\grave{a}$ and focussing with $n\bar{\epsilon}^{+/}$:

```
Ňwādısá_àtáň' kà fù ná lēb nā.
```

Month:PL NUM:three and 2SG IRR return hither.

"You're to come back in three months." (Instructions, not a reply.)

```
Tì dít sā'ab nē zâam.
```

1PL eat: IPFV porridge FOC evening.

"We eat millet porridge in the evening." ("When do you eat porridge?")

 $k\grave{a}$ -preposed elements cannot be clause subjects, as is to be expected: an adnominal $k\grave{a}$ -clause normally has a different subject from its main clause.

The only structure other than a NP (including \dot{n} -clauses) or AdvP that I have found preposed with $k\dot{a}$ is $w\bar{v}v$ "like" + object:

```
Wūυ bύη nέ kà ò zót.
```

Like donkey:sg like and 3AN run:IPFV.

"It's like a donkey that he runs."

```
*Né mì nû'ug kà mì sī'ıs.
```

*With 1sg hand:sg and 1sg touch.

attempted for "With my hand, I touched it."

 $k\grave{a}$ -preposing is often simply a means of bringing a constituent before the clause subject with **no implication of foregrounding** at all. Formal $k\grave{a}$ -preposing is a feature of many relative clauses 24.3.2. Manner, place and reason adjuncts can *only* precede the subject by $k\grave{a}$ -preposing, and absolute clauses in adjuncts must often precede the main clause subject so that constituent order parallels event order 24.2:

```
Mán ňwè' dāu lā zúg kà police gbáň'a_m.

1SG:NZ hit man:SG ART upon and police seize 1SG.OB.

"Because I hit the man, the police caught me." ILK
```

27.3 Extraposition

A NP or AdvP placed after a distinctively phrase-final verb form must have been extraposed. Extraposed manner-adverbs are intensified:

```
Ya yidigya bεdegv. "You are very much mistaken." (Mk 12:27)
Yà yídìg yā bέdvgū.
2PL go.astray PFV much.
M pô'vs yā bέdvgū. "Thank you very much."
1SG greet PFV much.
```

Objects, other than pronouns, can be extraposed; the sense seems to be that the extraposed element is contrary to expectation:

```
O dà' yā múi.
3AN buy PFV rice.
"She's bought rice." ("of all things!")
O dà' nē múi.
3AN buy FOC rice.
"She's bought rice."
(reply to "What did she buy?")
Lì à nē múi kà ò dá'.
3IN COP FOC rice and 3AN buy.
```

Leftward extraposition of objects and complements on the basis of **weight**, without clefting or $k\grave{a}$ -preposing, occurs in e.g.

```
Wilkane bee m ni ka pu wanna, m Ba' nwaadi li ne [sic: 1996 n] basid.
Wìl-kànı
             bὲε mì ní kà pū
                                    wέnnā
                                                 +ø.
Branch-rel.sg exist 1sg loc and Neg.IND bear.fruit: IPVF NEG.
            ňwá'adī lí
                          n básìd.
1SG father:SG cut:IPFV 3IN.OB CAT throw.out:IPFV.
"A branch which is in me and does not bear fruit, my father cuts out."
(Jn 15:2)
One ka ba tis o ka li zu'oe, ba me mor puten'er ye o na lebis line zu'oe.
Ònι kà bà tís·ò_ø
                                               bà mè mòr
                         kà lì zú'e.
REL.AN and 3PL give 3AN.OB and 3IN become.much, 3PL also have
              vέ ò nà lēbιs línì zù'e.
inside-mind:sg that 3AN IRR return REL.IN become.much.
"Whom they have given much to, they expect he will return much." (Lk 12:48)
```

A heavy indirect object is extraposed to follow the object in

Mam Paul ... tisid gboŋ kaŋa Wina'am nidib bane a sida dim ka a yinni ne Jesus Christ Efesus tenin la.

```
Mām Paul ... tísìd gbáun-kànā Wínà'am nídìb bàni àň 15G.CNTR Paul ... give:IPFV book-DEMST.SG God person:PL REL.PL COP sídà dím kà áň yīnní nē Jesus Christ Efesus ténī-n lā. truth NULL.PL and COP one with Jesus Christ Ephesus land:SG-LOC ART "I, Paul ... give this letter to God's people who are truthful and one in Jesus Christ in Ephesus." (Eph 1:1, 1976; KB ...gbaun kana tisid Wina'am...)
```

27.4 Presentational constructions

A number of constructions are employed to introduce new entities into discourse. Referring NPs are indefinite; it is here that absence of the article $l\bar{a}^{+/}$ typically reflects an indefinite but *specific* rather than generic reference <u>15.8.5</u>. Dependent indefinite pronouns or quantifiers are possible but not required.

 $B\dot{\varepsilon}^+$ "be somewhere/exist" is frequent in presentational clauses, often with a following *n*-catenation <u>22</u> or adnominal $k\dot{a}$ -catenation <u>22.3</u>.

```
Farisee dim nid yinne da be
Farisee dím
               nìd
                         yīnní dà bè ...
Pharisee NULL.PL person:SG one TNS EXIST ...
"There was one man of the Pharisees ..." (In 3:1)
                               "There were once three men." KSS p16
Dapa atan' n da be.
Dāpá atáň'
                n dá bὲ.
Man:PL NUM:three CAT TNS EXIST.
Dau da be mori o po'a yimmir
Dāu
       dá bè ø mōrí ò pu'à-yīmmír
Man:sg the exist cat have san wife-single:sg
"There was a man who had one wife." KSS p26
Pu'a sɔ' da bε mɔr o bipuŋ ka kikirig dɔl o.
Kà pu'à-sɔ̄'
                  dá bè ø mór ò bī-púŋ
                                                 kà kìkīrıg dɔll·ó ø.
And woman-INDF.AN TNS EXIST CAT have 3AN child-girl:sg and fairy:sg follow 3AN.OB.
"There was a woman whose daughter was oppressed by a devil." (Mk 7:25)
```

Other verbs expressing location can introduce the subject as a new topic, and verbs of finding, seeing etc can introduce their objects in a similar way.

```
Ka dau daa zin'i Listra ni ka pu tun'e kenna.
```

```
Kà dāu dāa zíň'i Listra ní kà pō tūň'e ø kēnná +ø.
```

And man:sg tns sit Lystra loc and Neg.IND be.able CAT go:IPFV NEG.

"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Anina ka o nyε dau ka o yυ'υr buon Aneas.

```
Àníná kà ò ňyε̄ dáu kà ò yū'vr bûθn 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)

27.5 Free personal pronouns

In some contexts only free pronoun *forms* are possible, and they are then simply allomorphs of the bound pronouns:

Isolation: Mánè? "Me?"
Apposition: mān Paul "I, Paul"

Coordination: $t\bar{\iota}n\acute{a}m\ n\bar{\epsilon}\ f\bar{\upsilon}n$ "us and you" Before relative pronouns: $f\bar{\upsilon}n-k\acute{a}n\grave{\iota}$... "you, who ..."

and for some speakers, the 2nd persons before direct commands after a $y\grave{a}'$ -clause 23. In other contexts, the choice of a free pronoun over bound implies *contrast*. For the special case of **logophoric** use see 25.2.

A personal pronoun which is focussed must be contrastive; conversely, contrastive pronouns are normally focussed where possible:

Manε an konbkem sun la.

```
Mānı ø áň kóňb-kìm-sùŋ lā.
```

1SG.CNTR CAT COP animal-tender-good:SG ART.

"I am the good shepherd." (Jn 10:11)

Contrastive pronouns can be subjects of \dot{n} -clauses <u>15.4.1</u>:

```
wuu mane a si'em la. "as I am." (1 Cor 7:7, 1996)
```

wūv **mánì** ø àň sī əm lā.

like 1SG.CNTR NZ COP INDF.ADV ART.

27.6 Emphatics

I have borrowed the term "emphatic" from Jeffrey Heath's Songhay grammars (Heath pp202ff.) Emphatics relate a NP or AdvP to the discourse context. They follow top-level NPs or AdvPs, with the exception of $h\bar{a}l(^+)$, which precedes.

```
mè DK KT SB NT mèn WK; clause finally (all sources) mèn<sup>ε</sup> "also, too"
      bozugo o ane fo biig men.
      bō zúgó ò à né fù bīig
      Because 3AN COP FOC 2SG child:SG also.
      "Because he is your child too." (Genesis 21:13)
      O pu'a mε kena.
                                        "His wife also came." (Acts 5:7)
      Ò pu'ā mé kè
                             nā.
      3AN wife:sg also come hither.
      The particle may follow k\dot{a} + ellipted subject pronoun 20.3.
mà'aa (LF mà'anε) "only"
      Asee line an be'ed ma'aa ka m na tun'e nin.
      Àsée línì àň bē'ed má'àa kà mì ná tūň'e jø níŋ.
      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)
      (Kà-foregrounding of the NP, which also implies exclusiveness 27.2.)
gὑllīmm (LF gὑllɪmnε) "only"
      Li ka'anɛ Wina'am gullim nɛ?
      Lì k\bar{a}' n\bar{\epsilon} Wínà'am gúllìmn\epsilon\epsilon + \phi + \phi?
      3IN NEG.BE FOC God
                              only
                                         NEG PQ?
      "Is it not God alone?" (Lk 5:21)
kòtàa<sup>nε</sup> "at all":
                                        "Not at all."
      Áyìı kòtàa.
nɔ̃ɔ= "just, exactly"
      dàa-kàn lā nōɔ
                                        "that very day"
```

```
Fυ ya'a mɔr ya'am, fun nɔɔ na dii li malisim.
      Fù yá' mōr yā'am, fūn
                                  ทวิว
                                          ná díu lì mālısím.
      2SG if have sense, 2SG.CNTR exactly IRR eat 3IN joy.
      "If you have wisdom, it is you who will have joy of it." (Proverbs 9:12)
hālí+ can be used as an emphatic, preceding a NP or AdvP with the meaning "even":
      Hali tvvmbε'εd dim niŋid ala.
      Hālí tùvm-bē'ed dím
                               nínìd àlá.
      Even deed-bad:PL NULL.PL do:IPFV ADV:thus.
      "Even sinners do that." (Lk 6:33)
      Before a manner-adverb it effectively means "very":
      Lì tàe
                   hālί bέdvgō.
                                      "It's very difficult."
      3IN be.bitter until much.
      The adverb may be ellipted: Lì the hālí.
      H\bar{a}li may be preposed with k\dot{a}:
      Hali ka nidib mor ban'adnam na.
      Hālí kà nīdīb
                          mɔr bân'ad-nàm
      Even and person:PL have sick.person-PL hither.
      "People even brought the sick" (Acts 5:15)
      Hālí báa is also used for "even" before a NP:
      Hali baa lampɔdi'esidib mε ninid ala.
      Hālí báa làmpō-dí'əsìdıb mé nìnıd àlá.
               tax-receiver:PL also do:IPFV ADV:thus.
      Even
      "Even tax-collectors do that." (Mt 5:46)
      Hali baa bama wusa ya'a na zo ka basif, man ku basi fo.
      Hālí báa bàmmā wūsa yá' nà zó kà básì
               DEMST.PL all
                             if
                                 IRR run and abandon 2SG.OB,
      Even
                     bāsı
                              fź
      mān
              kύ
      1SG.CNTR NEG.IRR abandon 2SG.OB NEG.
      "If even they all run away and leave you, I will not leave you." (Mt 26:33)
```

Lexicon and texts

28 Greetings and other formulae

(a) Enquiries after health.

Gbís wēlá? "How did you sleep?" or Dúo wēlá? "How did you get up?"

(morning greetings at first meeting)

Nīntāŋ á wēlá? "How is the day/afternoon?"

Yύ'υη á wēlá? "How is the evening?" literally "night"

Fù yī-dímàa? "[How are] your household?"

Nìn-gbīnáa? "[How is your] body?" i.e. "How are you?"

Fù sìdaa? "[How is your] husband?"

Pu'ā nē bíisὲε? "[How are your] wife and children?"

... and so on, often at great length. Replies may be

Àláafù bέ. literally "There is health."

(Also a general purpose greeting in itself.)

 $\dot{A}l\acute{a}af\grave{v}$ $b\acute{\epsilon}\cdot o.$... for him/her. $\dot{A}l\acute{a}af\grave{v}$ $b\acute{\epsilon}\epsilon$ $b\acute{a}.$... for them.

(b) Blessings follow the pattern $B\acute{a}r\iota k\grave{a}$ $n\acute{\epsilon}$ $f\grave{v}/y\grave{a}$... "Blessing with your ..." with the introductory words usually ellipted; the reply to all of these is $N\acute{a}a$.

 $K\bar{\epsilon}n \ k\bar{\epsilon}n$. "Welcome!" $K\bar{\epsilon}n$, gerund of $k\bar{\epsilon}\tilde{n}$ "come"

cf Hausa: Barkà dà zuwàa.

Nε̄ zâam zâam. "Good evening."

Tōυma! or Tōυma tōυma! "(Blessing on your) work!"; includes practically

anything which could be regarded as work, making this the commonest daytime greeting.

Νε̄ sɔ́ňsιgā. "(Blessing on your) conversation"; greeting a

group of people talking; also greeting a person sitting quietly alone, assumed to be conversing

with his or her own $w\bar{\iota}n^{n\varepsilon/}$.

Nέ fò būrιyá-sòŋ. "Merry Christmas." Nέ fò yòυm-pāalíg. "Happy New Year." (c) Prayers. Reply Amí! "Amen!"

Wīn ná lēbisi f nē láafiya. "Safe journey!" literally "[I pray that]

God will bring you back in health."

Wīn ná sōŋı f. "God will help you"; usually expresses thanks Wīn ná tā'así f. "Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply 75 "OK", or as appropriate.

Bε̄ogυ lā. "See you tomorrow!" ("That's tomorrow.")

Àtínì dáarì lā. "See you on Monday."

Gbìsım súŋā. "Sleep well."

κρὲlιmī sύm.Pὺ'υsιm yín."Remain well"; Goodbye, to those remaining."Greet (those) at home"; Goodbye, to leaver.

Reply Tò "OK", or Bà nà wōm "They will hear."

(e) Miscellaneous formulae

 \dot{M} $p\dot{v}$ 'vs $y\bar{a}$ [$b\dot{\epsilon}dvg\bar{v}$]. "Thankyou [very much]." Reply $T\dot{o}$, or $P\dot{v}$ 'vsvg

kā'e. "No thanks [needed]."

Gáafàra. "Sorry." Like Ghanaian English "sorry", may be

just an expression of sympathy.

Kābır kābırí! Formula asking admission to a dwelling. Twi

agoo is also used. (Knocking is for robbers trying to find out if anyone is at home.)

Dìm sūgυrύ. "Please forgive me."

 \dot{M} bélim $n\bar{\epsilon}$. "I beg you." Not "please"; Kusaasi etiquette

needs no spoken equivalent of "please."

X lábāar á wēlá? "What is the news of X?" A common initial reply

is Dītb má'àa. "Only food." i.e. "good."

M mɔr kû'em náa? "Shall I bring water?" Traditional first words to

guest. "No, thank you" is Kù'θm á sύm.

("Water is good.")

Wīn yέl sídà. "Bless you!" Literally "God speaks truth"; WΚ

explained: "If you sneeze, it means someone

elsewhere is praising you."

Fὺ wớm Kūsáalὲε? "Do you understand ['hear'] Kusaal?"

 $\bar{\mathcal{E}}$ Eň, \dot{m} wóm. "Yes, I do." \dot{A} yìι, \dot{m} pō wómmā. "No, I don't."

29 Selected lexical fields

29.1 Kinship terms

Pervading the whole system of Kusaal kinship terms is the importance of birth order among same-sex siblings, and its irrelevance between siblings of opposite sex. Many basic terms do not distinguish sex in the way familiar in European languages. 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 $s\grave{a}am^{ma}$, less formally $b\bar{a}^{1+/}$ father's elder brother $s\grave{a}am$ - $kp\bar{\epsilon}\epsilon\check{n}m^m$ father's younger brother $s\grave{a}am$ - $p\bar{\iota}t^{a/}$ father's sister $p\grave{\upsilon}g\upsilon d\iota b^a$

My mother is my $m\grave{a}^+$

mother's elder sister

or senior co-wife mà-kpξεňm^m

mother's younger sister

or junior co-wife mà-bīla or mà-pīta/

mother's co-wives are my mà nám^a mother's brother is my áňsìb^a

I am my mother's brother's $\bar{a}nsin^a$; to all the other relatives above I am $b\bar{i}ig^a$ "child" or specifically $d\dot{a}-k\dot{>})nr^\epsilon$ "son" or $pu\dot{a}-y\dot{u}a^+$ "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent role towards his sister's child.

There are no special terms for aunts or uncles by marriage.

My grandparent is my $y\acute{a}ab^a$ (σ' $y\bar{a}a-d\acute{a}\mu^+$, Q $y\bar{a}a-p\mu'\acute{a}^a$) grandchild $y\acute{a}a\eta^a$

These words are also used for ancestor/descendant.

My elder sibling of my own sex is my $b\bar{\iota} = e^{\xi}$ younger sibling of my own sex is my $e^{\bar{\iota}} = e^{\xi}$ sibling of opposite sex is my $e^{\bar{\iota}} = e^{\xi}$ These words are also used for cousins, with seniority, as always, going by family branch.

```
My wife is my y\bar{l}-pu'\dot{a}^a or simply pu'\bar{l}^a wife's parent diam^{ma} (d' diam-dau', Q diam-puak^a) wife's sibling diakiig^a (d' diaki-dau', Q diaki-puak^a)
```

 $Diam^{ma}$ is also used in polite address to an unrelated person of opposite sex and similar or greater age to oneself but not old enough to be called \dot{m} $m\dot{a}$ "my mother" or \dot{m} $b\bar{a}$ ' "my father." Parents-in-law are greatly respected, but with siblings-in-law there is a traditional reciprocal joking relationship; certain whole ethnic groups are said to bear this relationship to each other, called "playmate" in local English. At $B\dot{u}g\acute{u}m$ - $t\bar{z}\supset \check{n}r^{\epsilon}$, the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' bīiga "child" and my wife's siblings' dàkīiga.

```
My husband is my s\bar{\iota}d^a husband's parent d\dot{a}y\acute{a}am^{ma} (d'd\dot{a}y\bar{a}am-d\acute{a}u^+, Q'd\dot{a}y\bar{a}am-pu\acute{a}k^a) husband's elder brother s\dot{\iota}d-kp\bar{\epsilon}\epsilon\check{n}m^m husband's younger brother s\dot{\iota}d-b\bar{\iota}l^a
```

I am my husband's parents' $b\bar{i}ig^a$ "child"; all my husband's siblings (of both sexes) call me $pu'\bar{a}^a$ "wife."

My co-wife is my $nin-t\bar{a}a^=$, "rival" in Ghanaian English. In traditional stories the role of the "wicked stepmother" in European folklore is assumed by one of the father's other wives.

sìd-puāka

Two men married to sisters are $d\hat{a}k\hat{i}-t\hat{u}es^{\epsilon}$; two women married to brothers are $n\hat{i}n-t\bar{a}as^{\epsilon}$, "co-wives." "Fiancée" is $p\underline{u}'\hat{a}-\bar{\epsilon}l(\eta^a)$.

29.2 Personal names

husband's sister

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices. Personal names are preceded by the personifier particle, \dot{A} - by default but \dot{N} -before adjective stems, where \dot{N} - is a syllabic nasal assimilated to the point of articulation of a following consonant. Most names are based on common nouns, but a few are based on adjectives, and some on whole VPs, or even clauses.

On 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."

29.2

Many names allude to a guardian spirit $(s\bar{\iota}g\iota r^{\epsilon})$ assigned to a newborn child through the father's consultation with a diviner $(b\bar{a}^{\dagger}a^{=})$; this may be the $w\bar{\iota}n^{n\epsilon}$ 1.1 of an ancestor, or of a spiritually powerful tree:

À-Wīn ^{nɛ/}	Awini	person with a $s\bar{\iota}g\iota r^{\varepsilon}$ from father's family
À-Βūgυr ^ε	Abugri	person with a $s\bar{\iota}g\iota r^{\epsilon/}$ from mother's family
À-Tìıg ^a	Atiga	"tree" as <i>sīgır^{ɛ/}</i>
À-Kūdvg ^ɔ	Akudugu	"piece of iron" (sc. as a marker on a tree-
		$s\bar{\iota}g\iota r^{\epsilon}$); displaced as a common noun by
		the pl-as-sg <i>kūt</i> ^ε

A younger sibling of $\grave{A}-W\bar{\iota}n^{n\epsilon/}$ with the same $s\bar{\iota}g\iota r^{\epsilon/}$ is called $\grave{A}-W\bar{\iota}n-b\acute{\iota}l^a$ "Awimbillah", of $\grave{A}-K\bar{\iota}udvg^3$, $\grave{A}-Kud-b\bar{\iota}l^a$ "Akudibillah" etc. Names for girls may follow the pattern $\grave{A}-W\bar{\iota}n-pu\acute{a}k^a$ "Awimpoaka."

Other names refer to birth circumstances:

À-Nà'ab ^a	Anaba	"chief" but in the sense "afterbirth"	
		(because a chief leaves his house after	
		his retainers): sole survivor of twins	
À-Fūug ^{ɔ/}	Afugu	"clothing": child born with a caul	
À-Tūl ^{lε}	Atuli	$(tù lig^{\epsilon}$ "invert"): breech-delivered child	

A whole clause is seen as a birth-circumstance personal name in

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\dot{A}-Tim b\acute{s}dig y\bar{a} "The medicine has got lost."
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Many names relate to customs intended to break a cycle of stillbirths. One such custom is the apotropaic practice of throwing away the dead child or just burying it in a pot; the next surviving child may then be called e.g.

A - Tàmpบิบr ^ะ	Tampuri	"ashpit, rubbish tip"
À-Dūk ^{ɔ/}	Aruk	"pot"

Another strategy is pretended adoption by an outsider, resulting in names like Jambeedu "Fulani", or

À-Sāan ^{a/}	Asana	"guest, stranger"
À-Sāan-dύ ⁺	Sandow	"guest" + <i>dāu្</i> + "man"
À-Zàngbèog ^o	Azangbego	"Hausa person"
À-Nàsà-pụāk ^a	Anasapoaka	"European woman"; also "child delivered
		by a European midwife"

Names based on adjectives:

N-Dāvg ^ว	Ndago	"male"
Ň-Puāk ^a	Mpoaka	"female"
Ň-Bīl ^a	Mbillah	"little"

Muslims often use day-of-the-week names depending on birth. The system does not cover all weekdays; examples are \grave{A} - $T(n\grave{\iota}^+$ "Girl born on Monday", \grave{A} - $T\grave{a}l\acute{a}at\grave{a}^+$ "Girl born on Tuesday", \grave{A} rz $\acute{u}m\grave{a}^+$ "Boy born on Friday", \grave{A} - $S(b\grave{\iota}^+$ "Boy born on Saturday."

Muslims also have formal Arabic names, sometimes adapted into Kusaal, like Dàhamáanì+/Dàsmáanì+ fAbdu-r-Raħma:n. KKY p6 has the interesting girl's name Amɔryam, ? Arabic Maryam "Mary", interpreted as À-Mɔ̄r Yām "Has Common Sense."

29.3 Places

For Kusaal place names in English-language contexts see 1.1.

This section has been improved by consultation with John Turl, who maintains an extensive website dedicated to Ghanaian toponymy (see References.)

Many, though by no means all, Kusaal place names have transparent meanings. Place names include:

Bòk ^o	Bawku	"pit, geographical depression"
Kūk ^{a/}	Koka	"mahogany tree"
Kùkpàrıg ^a	Kokpariga	"palm tree"
Tèmpáan ^{nɛ}	Tempane	perhaps "new villages"
Mu̯'à-nɔ̄ɔr ^{ε/}	Mogonori	"lakeside" ("lake-mouth")
Bàs-yɔ̄n ^{nε/}	Basyonde	"abandon sacks" ?reason for name
Kūgυr ^{ε/}	Kugri	"stone"
Būg∪r ^ε	Bugri	bῦgυr ^ε , object housing a wīn ^{nε/}
Wìdì-ňyá'aŋ ^a	Woriyanga	archaic for wìd-ňyá'aŋª "mare"
Bì-nà'ab ^a	Binaba	"prince"
Gàarv ⁺	Garu	Hausa <i>gàaruu</i> "wall around a town
		or compound"
Wìid-nà'ab ^a	Widinaba	"chief of the clan <i>Wìid</i> a"
Pūsıg ^{a/}	Pusiga	"tamarind"
Τīl ^{lε/}	Tilli	"tree trunk" cf Toende Kusaal <i>tíl id</i>
		(Hasiyatu Abubakari, p.c.)
Dὲnυg ^ɔ	Denugu	No known meaning
Pùlıma Kû'əm ^m	Pulimakom	"water by <i>pùlıma</i> + (grass sp)"

Wìdāan ^a	Widana	for <i>Wìd-dāan</i> ^a "Horse-Owner", title
		of a chief's <i>nɔ̄-dî'əs</i> ^a "linguist."
Mì'isıg ^a	Missiga	Explained locally as "mission", i.e.
		of the Assemblies of God; perhaps
		influenced by <i>mì'isvg</i> ³ "baptism"
Sā-bíl ^a	Zebilla	"small grass"?
Sā-píəlìg ^a	Sapeliga	"Isoberlinia Doka"
K̀̀̀̀̀̀̀l-tā̄ʿamí́s ^ε	Kultamse	"dog almonds"

The meanings given for "Sapeliga" and "Kultamse" are based on a careful 1935 report by an assistant agricultural officer who lists among local trees in the Farefare/Nabit area sapelaga Isoberlinia doka, ta-anga Butyrospermum parkii (Kusaal tá'aŋa), and kulta-anga Andira inermis (p.c. John Turl.)

WK thought that the $s\bar{a}$ - of $S\bar{a}$ - $b\acute{l}l^a$ and $S\bar{a}$ - $p\acute{l}ell^a$ was a plant used in making brooms. No * $s\bar{a}a^{=l}$ occurs in my data (only $s\bar{a}a^{=l}$ "rain"), but the Farefare cognate $s\acute{a}ag\acute{a}$ appears in Niggli's dictionary as "a kind of grass used for making brooms", and Blench 2006 identifies Mampruli/Dagbani saa as $Sporobolus\ subglobosus\ A.\ Chev$, used for binding in making mats and traps.

For $K\grave{v}lvg\acute{v}\eta^{\circ}$ "Kulungungu", Turl cites a Bisa-speaking informant who suggests a plausible origin in Bisa Kuurgongu, "Crooked Sheanut Tree." Prost's Bisa grammar confirms that adjectives follow nouns, and his dictionary cites $k\acute{u}r$ " $karit\acute{e}$." The second element is probably a simplex form of gongeda " $arqu\acute{e}$ " ($ng = [\eta]$); Prost has an adjectival suffix -da "s'appliquant aux grandes choses ou marquant $intensit\acute{e}$."

Àgὸl ^{lε}	Agolle	cf <i>àgڬا^{اد}</i> "upwards"
Tùen ^{nε}	Toende	cf <i>tùθn</i> ^{nε} "in front", "West"
Bārυg ^{⊃/}	North	"Bisa country"
Ňyá'aŋ ^a	East	"behind"
Z <u>u</u> ēya+	South	"hills", i.e. the Gambaga Escarpment
Tù <i>en</i> nε	West	"in front"

The forms above were given by WK; KB has ya-dagɔbug yà dàgɔbuga ("your left hand") for "south" and ya-datiuŋ yà dàtluŋ ("your right hand") for "north," along with ya-nya'aŋ "east", ya-tuona "west."

Words referring to ethnic groups and clans create place names by adding the suffix $-g^{\circ}$ to the stem. These can be nonce-formations and need not necessarily refer to any established political entity or permanent settlement: $K\dot{v}t\bar{a}\mu\eta^{\circ}$ "any place inhabited by the clan $K\dot{v}t\bar{a}m^{\text{ma}}$; $K\bar{v}s\hat{a}vg^{\circ}$ "Kusaasiland"; $M\dot{\circ}\circ g^{\circ}$ "Mossi country" ($M\dot{\circ}\circ g$ $N\hat{a}'ab^{\circ}$ "Moro Naba, King of the Mossi.")

Places outside $K\bar{v}s\hat{a}vg^{\circ}$ generally do not have Kusaal names (an exception is $S\bar{a}nk\hat{a}a\check{n}s^{\varepsilon}$ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name Ankara is usual. Niggli's dictionary has Toende Wa'arvk for "Ouagadougou", but I could not elicit any Agolle equivalent. The Mooré name Waogdgo apparently does not have a transparent meaning for Mooré speakers, and its etymology is uncertain.

There seems to be no Agolle Kusaal proper name for the White Volta river, which is simply $k\bar{\jmath}lvg^a$ "river"; presumably this is simply because it is the only real river within $K\bar{\nu}s\hat{a}vg^a$.

29.4 Ethnic groups and clans

Names for the group belong to the ${}^a|b^a$ or $g^a|s^{\varepsilon}$ classes (apart from $Z\grave{a}ngb\grave{\varepsilon}og^{\circ}$ "Hausa" and $N\grave{a}s\bar{a}ara^+$ "European") and their language to the I^{ε} subclass of $r^{\varepsilon}|a^+$. The place they inhabit has the suffix $-g^{\circ}$.

Ethnic gp sg	Ethnic gp pl	Language	Place	
Kūsáa ⁼	Kūsâas ^ɛ	Kūsâal ^ɛ	Kūsâvg ^o	Kusaasi
Ňwāmpūrıg ^{a/}	Ňwāmpūrιs ^{ε/}	Ňwāmpūrıl ^{ɛ/}	Йwāmpūrvg ^{ɔ/}	Mamprussi
Bārıg ^{a/}	Bārιs ^{ε/}	Bāt ^{ε/}	Bārvg ^{ɔ/}	Bisa
Mùa ⁺	Mὸɔs ^ε	MὸͻͿ ^ε	Мэ̀эg ^э	Mossi
Dàgbān ^{nɛ/}	Dàgbām ^{ma/}	Dàgbān ^{nε/}	Dàgbāuŋ ^{ɔ/}	Dagomba
Bìn ^{nε}	<i>Bìm</i> ^{ma}	Bìn ^{nε}	Bìևցը ^շ	Moba
Sìmīig ^a	Sìmīis ^ɛ	Sìmīil ^ɛ	Sìmīug ^o	Fulße
Yàaŋ ^a	Yàaňs ^ɛ	Yàan ^{nε}		Yansi
Gūríŋ ^a	Gūrís ^ε	Gūrín ^{nε}		Farefare
Yārıg ^{a/}	Yārιs ^{ε/}	Υāt ^{ε/}		Yarsi
Zàngbèog ^o	Zàngbὲεd ^ε	Zàngbὲεl ^ε		Hausa
Bùlıg ^a	Bùlıs ^ε	Bùl ^{lε}		Bulsa
Tàlıŋ ^a	Tàlıs ^ɛ	Tàlιn ^{nε}		Tallensi
Nàbıd ^a	Nàbıdıb ^a	Nàbır ^ɛ		Nabdema
Bùsáŋ ^a	Bùsâaňs ^ɛ	Bùsâaňl ^ɛ		Bisa
Nàsāara ⁺	Nàsàa-nàm ^a	Nàsāal ^ɛ		European
Kàmbùŋ ^a	Kàmbùmıs ^ɛ	Kàmbùnır ^ɛ		Ashanti

 $B\bar{a}r\iota s^{\epsilon/}$ is "Bisa" generally, not just the Bareka; $B\iota m^{\mathsf{ma}}$ is "Moba" in general, and not only the Bemba (WK.)

Note $T \dot{u} \theta n^{n\epsilon}$ "Toende area", $T \dot{u} \theta n n \iota r^{\epsilon}$ "Toende dialect of Kusaal", $A \dot{g} \dot{z} l^{l\epsilon}$ "Agolle area", $A \dot{g} \dot{z} l^{l\epsilon}$ "Agolle dialect of Kusaal", e.g.

Ò pịàň'ad Àgòl. "She speaks Agolle Kusaal." 3AN speak: IPFV Agolle. Kusaasi clan names include, among many others:

Singular	Plural	Place	
Kὺtān ^{nε/}	Kùtām ^{ma/}	Kừtāṇŋɔl	WK's clan
Zùa ⁺	Zùes ^ε		
	Zμà-sābιlίs ^ε		subclans
	Zμà-wìib ^a or Zμà-wìis ^ε		
Wìid ^a	Wìid-nam ^a	Wìidvg ^o	
Nàbıd ^a	Nàbıdıb ^a	Nàbıdvg ^o	
Gòɔga	Gòɔs ^ɛ	Gὸɔgɔ	
Sà'dàbùa ⁺	Sà'dàbùes ^ε -bùeb ^a	Sà'dàbɔ̀ɔgɔ	
	Nà'dàm ^{ma}	Nà'dau̯ŋɔ	
	Gùm-dìm ^a	Gὺm ^{mε}	

Nàbida as a clan name is different from the ethnic group "Nabdema" (WK.)

29.5 Trees and fruits

Tree names are almost all $g^a|s^{\varepsilon}$ class, like $t i \iota g^a$ "tree"; their fruits belong to classes $r^{\varepsilon}|a^+$ or $g^{\circ}|d^{\varepsilon}$.

Tree sg	Tree pl	Fruit sg	Fruit pl	
āaňdıg ^a	āaňdıs ^ɛ	āaňdır ^ε	āaňda ⁺	Vitex doniana
dùaň+	dòɔňs ^ε	dàɔňgɔ	dòɔňd ^ε	dawadawa
gāaň ^{=/}	gāaňs ^{ɛ/}	gāňr ^{ε/}	gāňyá ⁺	Nigerian ebony
gùŋ ^a	gὺmιs ^ε	gὺm ^{mε}	gùma ⁺	kapok
kìkàŋ ^a	kìkàmıs ^ɛ	kìkàm ^{mɛ}	kìkàma ⁺	fig tree
kpùkpàrıg ^a	kpùkpàrıs ^ɛ	kpùkpàr ^ɛ	kpùkpàra+	palm
lí'əŋª	lī'əmís ^ɛ	lí¹əm ^{mε}	lī'əmá+	Ximenia americana
pūsıg ^{a/}	pūsιs ^{ε/}	pūsır ^{ε/}	pūsá ⁺	tamarind
sīsíbìg ^a	sīsíbìs ^ε	sīsíbìr [£]	sīsíbà ⁺	neem
tá'aŋ ^a	tā'amís ^ɛ	tá'am ^{mε}	tā'amá+	shea butter
tὲ'εg ^a	tὲ'εs ^ε	tὲ'og ^ɔ	tὲ'εd ^ε	baobab
vúøŋ ^a	vūemís ^ε	vúer ^ε	vūáa ⁼	red kapok

The stems for "red kapok" and its fruit are slightly different: tree *vuegm- fruit *vueg-

29.6 Colours

Kusaal, like many local languages, has a basic three-colour system:

zὲň'og ^ɔ	"red"	all reddish shades
sābılíg ^a	"black"	all darker shades of colour
pìəlıg ^a	"white"	all lighter shades of colour

 $Wiug^{\circ}$ is synonymous with $z \grave{\epsilon} \check{n}' o g^{\circ}$. Kusaal has many other standard expressions for colour (e.g. $w\bar{\nu}v$ $t\acute{a}mp\bar{\nu}vr$ $n\bar{\epsilon}$ "like ash", i.e. "grey"), often with parallels in other West African languages: the system is "three-colour" because any colour can be allocated to one of only three terms, not because only three colour terms exist.

29.7 Time

The day begins at sunrise. Answers to bɔ̀-wìn^{nε} "what time of day?"

bε̄ogυ-n ^{ε/}	"morning"	àsùbá ⁺	"dawn" (← Arabic)
bèkèkèoňg ^o	"very early morning"	zàam ^m	"evening"
wìn-līir ^ɛ	"sunset"	yטׂ'טŋ ^ɔ	"night"
wìn-kɔ̀ɔňr ^ε	"sunset"	nīntāŋ ^{a/}	"heat of the day, early
			afternoon"

Win^{ne} "time of day" (cf winnig^a "sun") always has a predependent.

There are no traditional expressions for clock time; NT/KB adapts the Hausa constructions, as with $k\acute{\epsilon}r\iota f\grave{a}$ $\grave{a}t\acute{a}\check{n}'$ "three o'clock", Hausa $\acute{k}arf\grave{e}e$ $uk\grave{u}$.

The deictic particle $\check{n}w\grave{a}$ "this" is commonly attached to time words:

zàam ňwá	"this evening" [za:ma]	yบ์'บŋ ทัพá	"tonight" [yʊ̯:ŋ:a]

Answers to $b\bar{v}n$ -dâar^{ϵ} "which day?":

zīná ⁺	"today"	sù'øs ^a	"yesterday"
bē̄og ^ɔ	"tomorrow"	dāar [€]	"day after tomorrow/
			day before yesterday"

Weekday names are of Arabic origin, the seven-day week being a Muslim importation. (The traditional "week" is a three day market cycle, differing from village to village and carrying on regardless of any weekdays or festivals. Many older speakers do not use weeks at all, but count in days instead.)

Àláasìd dâar ^ɛ	"Sunday"	Àtínì dâar ^ɛ	"Monday"
Àtàláatà dâar ^ɛ	"Tuesday"	Àlárıbà dâar ^ɛ	"Wednesday"
Àlàmíisì dâar ^ɛ	"Thursday"	À(r)zúmà dâar ^ɛ	"Friday"
Àsíbıtì dâar ^ɛ	"Saturday"		

 $D\bar{a}ar^{\epsilon}$ "day" is "twenty-four hour period" ($n\bar{i}nt\bar{a}n$ "day as opposed to night") and is used with predependents to specify a particular day; the word $d\bar{a}b\iota s\iota r^{\epsilon}$ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyópòẹ dâar kà fù ná lēb nā.	"You'll come back in a week."
Dābá àyópòẹ kà fù ná lēb nā.	"You'll come back for a week."
Àláasìd dâar kà fù ná lĒb nā.	"You'll come back on Sunday."
Tì kpélìm ànínā dábısà bī əlá.	"We stayed there a few days."

Longer periods of time:

dābá àyópòe	"week"	also <i>bákpàė ←</i> Hausa <i>bakwài</i> "seven"
йwādıg ^{a/}	"moon, month"	
ňwād-kánì kēn nā lā	"next month"	("the month which is coming")
ňwād-kánì gàad lā	"last month"	("the month which has passed")

There are two seasons:

sēoňg ^ο "rainy season" ύνη ^{nε} "dry sea	ason"
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The Harmattan part of $\dot{v}vn$ is called $s\bar{a}p\acute{a}l^{|\epsilon}$ and the very hot humid part before the rains is $d\grave{a}w\grave{a}l\iota g^a$.

γὺυm ^{mε}	"vear"	dūnná+	"this year"

"Time" in general is $s\bar{a}\eta\dot{a}^+$ pl $s\bar{a}ns\dot{a}^+$ cb $s\bar{a}n$ -; "time of day" is $win^{n\epsilon}$; "time" as in "several times" is $n\bar{b}>r$ 15.5.2.4. Examples with $s\bar{a}\eta\dot{a}^+$:

sān-kánè?	"when?"	sān-kán lā	"at that time"
sāŋá kám	"all the time"	sāŋá bὲdυgῦ	"a long time"
sānsá bèdvaū	"many times"	sāná bī əlá	"for/in a short time"

30 Texts

30.1 Balaam's Donkey

From the 2016 Kusaal Bible, Numbers 22:21-35.

Balaam da duoe bεogun lɔɔ o buŋu dɔl Moab na'ayikpɛm la keŋ. Amaa Wina'am sunf da duoe nɛ on keŋ la, ka Zugsɔb maliak kidigi zi'en suor la zug ye o geŋ o. Balaam da ban'adnɛ o buŋ, ka o yammis ayi' dɔl o. Buŋ la da nyɛ Zugsɔb maliak la ka o zi'e suor la zug ka fuoe su'ugu zanl o nu'ugin, ka o buŋi kpɛn' mɔɔgi gaad. Ka Balaam pin'ili bu'ud buŋ la ye o lɛb suor puug.

Zugsəb maliak la da təlisi zi'en ləmbən'əd ayi' banɛ ka ba mɛ' zaŋguoma ayi' bɛŋ, ka suobaanlig bɛɛ li teŋsvk la. Bvŋ la n da nyɛ Zugsəb maliak la, o da miee labin zaŋguom la urig Balaam nəbir. Ka o lɛm bv' o ya'as.

Zugsəb maliak la da lɛn vurigi təlis zi'en tuon zin'ikanɛ ka sə' kv nyaŋi fɛndig datiuŋ bɛɛ dagəbvga. Bvŋ la da lɛn nyɛ Zugsəb maliak la, o da digin nɛ Balaam wvsa teŋin, ka Balaam svnf duoe hali ka o vəb bvŋ la nɛ o dansaar. Ka Zugsəb kɛ ka bvŋ la ya'ae o nəəri pian' Balaam ye, "Bə kimm ka m maalif ka li kɛ ka fv bv'vm nəər atan' sa?" Balaam da lɛbis o ye, "Fv mərim nɛ maan galim! M ya'a mərin sv'vgv m nu'ugin m naan kvvnif nannanna." Bvŋ la da lɛbis Balaam ye, "Man ka'anɛ fv mɛŋ bvŋ onɛ ka fv ban'ad saŋa wvsa ti paae zinaa? Fv nam mi' nyɛ ka m maal anwa tisi fəɔ?" Ka o lɛbis ye, "Ayei!"

Ka Zugsəb yə'əg Balaam nini ka o nyɛ maliak la zi'e suor la teŋsvk ka fuoe sv'vgv zanl. Ka o igin ka vanbin teŋin. Zugsəb maliak la da bu'os o ye, "Bə ka fv bv' bvŋ la nəər atan' sa? M kena ye m giŋif bəzugə ken la ka' sv'vm m nini nii. Nəər atan' ka bvŋ la nyɛɛm ka yuk. Bvŋ la ya'a pv yukinɛ, anwaa m kvvnif ka basin bvŋ la." Balaam da lɛbisi yɛl Zugsəb maliak la ye, "M tvm taal, m pa'a pv baŋ ye fv zi'enɛ suorin la ye fv geŋi ma. Nannanna li ya'a pv malisi fə m na lɛbi kul." Ka maliak la lɛbisi yɛl Balaam ye, "Dəl nidib la keŋ, amaa yɛlim nɛ man ye fv yɛl si'el ma'aa." Ka Balaam dəl Balak na'ayikpɛm la keŋ.

Balaam dá dùe bēogv-n \emptyset lɔ́ɔ ò bùŋv \emptyset dɔ̄l Moab Balaam tns rise morning-loc cat tie 3an donkey:sg cat accompany Moab ná'-yī-kpém lā \emptyset kéŋ. 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."

"But God was angry that he went, and an angel of the Lord met him and stood in the road to obstruct him."

Balaam dá bàň'ad né ò bùŋ, kà ò yàmmıs àyí' dɔɔ̃ll·ó ø.
Balaam tns ride:IPFV FOC 3AN donkey:sg, and 3AN slave:PL NUM:two accompany 3AN.OB.
"Balaam was riding his donkey, and his two slaves accompanied him."

Bùŋ lā dá ňyὲ Zūg-sɔ́b máljāk lá kà ò zí'e sūer lā zúg Donkey:sg art tns see Head-null.an angel:sg art and 3an be.standing road:sg art upon kà fúe sù'vgv ø záňl ò nú'ugī-n, kà ò búŋኒ ø kpὲň' and draw knife:sg cat have.in.hand 3an hand:sg-loc, and 3an cut.across cat enter mɔ̄ɔgı ø gâad. grass:sg cat pass.

"The donkey saw the angel of the Lord standing in the road with a drawn sword in his hand and cut across into the grass and went on."

Kà Balaam pīň'ilı ø bū'vd búŋ lā yé ò léb sūer pûvg.
And Balaam begin cat beat:IPFV donkey:sg art that 3AN return road:sg inside.
"Balaam started beating the donkey to make it return to the road."

 $Z\bar{u}g$ -s5b $m\acute{a}l_i\bar{a}k$ $l\bar{a}$ $d\acute{a}$ $t\acute{o}l_i\bar{s}l_i$ \emptyset $z\^{i}$ -an $l\acute{o}mb\acute{o}$ -od $\grave{a}y\^{i}$ $b\acute{a}n\grave{i}$ $k\grave{a}$ $b\grave{a}$ $m\acute{\epsilon}$ Head-NULL:AN angel:SG ART TNS do.next CAT stand orchard:PL NUM:two REL.PL and 3PL build $z\grave{a}ng\grave{u}ema$ $\grave{a}y\^{i}$ \emptyset $b\~{\epsilon}n$, $k\grave{a}$ $s\~{u}\bar{a}$ -báa $n\~{l}lig$ $b\acute{\epsilon}\epsilon$ _ $l\grave{i}$ $t\grave{\epsilon}n$ -s $n\~{u}k$ $l\~{a}$. Wall:PL NUM:two CAT demarcate, and road-narrow:SG EXIST 3IN middle:SG ART. "The angel of the Lord then stood where dividing walls had been built between two orchards and there was a narrow path between them."

Bùŋ lá ǹ dà nyē Zūg-sɔ́b máli̯āk lā, ò dà mìe ø làbın Donkey:sg art nz tns see Head-null.an angel:sg art, san tns squeeze cat hide.behind zàngùem lā ø ūrıg Balaam nɔ́bìr. Kà ò lém bʊ́'·o ø yâ'as. wall:sg art cat scrape Balaam leg:sg. And san again beat san.ob again. "When the donkey saw the angel of the Lord, it squeezed against the wall and scraped Balaam's leg. And he beat it again."

Bùŋ lá ø dà lèm ňyē Zūg-sɔ́b máljāk lā, ò dà dìgın nē Balaam Donkey:sg art nz tns again see Head-null.an angel:sg art, san tns lie.down with Balaam wōsa tēŋı-n, kà Balaam súňf dūe hālí kà ò vɔ̄b búŋ lā nɛ́ all ground:sg-loc, and Balaam heart:sg rise so.far and san strike donkey:sg art with ò dànsàar.

зам staff:sg.

"When the donkey again saw the angel of the Lord, it lay down along with Balaam on the ground, and Balaam was so angry he beat the donkey with his staff."

Kà $Z\bar{u}g$ -sób $k\acute{\epsilon}$ kà bùŋ $l\bar{a}$ yá'e ò nōɔrı ø piāň' Balaam yē, And Head-Null.an let and donkey:sg art open 3an mouth:sg cat speak Balaam that $B\bar{o}$ $k\acute{\epsilon}$ $k\acute{a}$ m máalì f $k\acute{a}$ lì $k\acute{\epsilon}$ $k\grave{a}$ $f\dot{v}$ $b\acute{v}$ m nōɔr átáň' 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 mouth of the donkey to open to speak to Balaam: 'Just what have I done to you to make you beat me these three times?'"

Balaam dá lèbis·ō ø yē, Fù mớrī m nē ø mâan ø gálìm! M yá' Balaam tns reply 3an.ob that, 2sg have 1sg foc cat make:IPFV cat joke:IPFV! 1sg if mɔ̄ri-n sú'vgù m nú'ugī-n, m nāan kūv-ní f nānná-nā. have-dp knife:sg 1sg hand:sg-loc, 1sg then kill-dp 2sg now. "Balaam replied: 'You are holding me in contempt! If I'd had a sword in my hand, I would have killed you now.'"

Bùŋ lā dá lèbis Balaam yē, Mān kā' nế fù mēŋ búŋ ónì kà fù Donkey:sg art tns reply Balaam that, 1sg.cntr neg.be foc 2sg self donkey:sg rel.an and 2sg bāň'ad sāŋá wūsa ø tí pāe zīnáa $^+$ ø $^+$ ø? Fù nám mī' ø ňyé kà ṁ ride:IPFV time all cat after reach today neg po? 2sg already know cat see and 1sg mâal àňwá ø tísì fò $^+$ ø? Kà ò lébìs yē, Áyìi! make thus cat give 2sg co? 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?' He replied, 'No.'"

Kà $Z\bar{u}g$ -sób yô'ɔg Balaam nínì kà ò nyē máljāk lā ø zí'e sūer And Head-NULL.AN open Balaam eye:pl and 3AN see angel:sg ART CAT be.standing road:sg lā téŋ-sōk, kà fúe sò'vgv ø zānl.

ART centre:sg and draw knife:sg cat have.in.hand.

"Then the Lord opened Balaam's eyes so he could see the angel standing in the middle of the road with a drawn sword in his hand."

Kà ò ígìn kà vábìn tēnı-n.

And SAN kneel and lie.prone ground:sg-Loc.

"And he knelt down and lay face down."

Zūg-sób máliāk lā dá bù'es∙ō ø γē, Bó kà fù bū' bún Ιā Head-null.an angel:sg art the ask 3AN.OB that, What and 2SG beat donkey:SG ART nōɔr átáň' sá +ø? M kέ nā yέ m gīní f bō zúgō kēn lā time:sg NUM:three hence co? 1sg come hither that 1sg obstruct 2sg because go:ger ART m nīní nīl +ø. Nōɔr átáň' kà bùn lā ἤyέε m kà NEG.BE good: ABSTR 1SG eye: PL LOC NEG. Time: SG NUM: three and donkey: SG ART See 1SG and yūkı-ní_àňwáa_m kūv-ní_f kà básī-n vūk. Bùn lā yá' pū deviate. Donkey:sg art if NEG.IND deviate-DP thus 1sg kill-DP 2sg and release-DP bún Ιā.

donkey:sg art.

return home."

"The angel of the Lord asked him: 'Why have you beaten the donkey these three times? I came here to obstruct you because your journey is not good in my eyes. Three times the donkey saw me and turned aside. If the donkey had not turned aside, I would have killed you and spared the donkey."

Balaam dá lèbisi ø yél Zūg-sób máliāk lā yē, M tóm tâal, m pá' Balaam this reply cat say Head-nullian angel:sg art that, 1sg work fault:sg, 1sg this pō báŋ yé fò zí'e nē sūerí-n lā yé fò gīŋí mā +ø. Neg.IND realise that 2sg be.standing foc road:sg-loc art that 2sg obstruct 1sg neg. Nānná-nā, lì yá' pō mālisí fɔ +ø, m ná lēbi ø kūl. Now, sin if neg.IND be.pleasing 2sg neg, 1sg irr return cat go.home. "Balaam replied to the angel of the Lord: 'I have transgressed. I did not realise that you were standing in the road to obstruct me. Now, if it is not pleasing to you, I will

Kà màliāk lā lébisì \emptyset yèl Balaam yē, Dòl nīdib lā \emptyset kēŋ, And angel:sg art reply cat say Balaam that, Accompany person:pl art cat go, àmáa yèlim nē mán yé fò yél sī'əl má'àa.

but say: IMP FOC 1SG:NZ that 2SG say INDF.IN only.

"But the angel replied to Balaam: 'Go with the people, but say only what I tell you.'"

Kà Balaam dɔ̃l Balak ná'-yī-kpém lā ø kéŋ.

And Balaam accompany Balak chief-house-elder:PL ART CAT go. "So Balaam went with Balak's courtiers."

30.2 The Three Murderers

From *Kusaal Solima ne Siilima* p16. The story is clearly related to Chaucer's *Pardoner's Tale*; the fable is familiar throughout Europe, Asia and Africa, and is probably ultimately derived from a Buddhist *Jātaka* story. (Hamel and Merrill 1991.)

The style is much less formal than in the passage from KB above.

NING KUUDIBA ATAN'

Dapa atan' n da be. Ba da ane dap kanda su'unga. Ka daar yinni ka ba la'asi zin'ini gban'e ye ba duom ia budaalim la'ad n ginni kuum nidib ma'aa ka da lem tum si'ela. Ba sid due ia su'us ne zan'ana ne tiraad ne piima ne lu'ad, ne kpana ne mali su'unga n pin'ili ginni ied nidib ye ba ya'a nye so' ban ku.

Ba giligi ala ne nwadisa atan' ne dabisa atan' ba po nye nidii na kuu. Ka kpelim mor ken ne ken ne ken. Daba anu daar ba nye ne lallisa ka si'el zie sabili wuu nidne, ka ba kpeem la ye ba kem kuu o, ye o sob ya'a pun ton'e ka morne lauksia'a wusa ba na nyangi kuu o. Ka onga gingid kpe, ka onga gingid kpe, ba ti keng paae nye ka li ka'a nida, ka ane boto ka ligidi pe'el ma'aa ma'aa ma. Ka ba ye, Ato, ka nannanna nwa, ti ye ti ning ligidi nwa walla? Ka ba ye, ba na pudigne. Amaa ba ye li nar ka ba yis ligidi la n keng da'a daam na nu yiiga ka nyaan pudig ligidi la. Ka yis ligidi la bi'ela ye biig la kem da' yoor na ka ba nu.

Biig la ken la o ten'esidne on na nnig [sic] si'em ku bane kpelim anniga [sic] la ka vaae ligidi la wusa wusa n su'e, o yeli o meng ye, o na da' ne daam ka bo tikuudim n los daamin la n paae tii ba ka ba nuu kpi ka o su'e ligidi la wusa. Ka sid da' daam la ka bo tikuudim n los.

Ziisige, ka baba yi'i la kpellim la, me gban'e ne ye ba ku biig la keng daam la da'ab la ka me su'e ligidi la. Biig la n mor daam la paa na la, ka onga kiak [sic] kpe, ka on kiak [sic] kpe, n kia o ku ka yu'un zang daam la nu wan wan, li pu yuuge, ka ba wusa wusa me kpelim kpi zin'i kan la noo ka ba so'o so' pu nyangi paam la'af la baa yinni mori kule ba yaane.

Din ka Kusaas ye fu ya'a ten'es bee tumbe'ed ye fu tisi fu tiraan, fu maane fu meng ya'as la.

Nīn-kúvdìbá àtáň'. "The three murderers."

Person-kill:AGT:PL NUM:three.

Dāpá_àtáň' n dá bè. Bà dà à nē dáp-kāňda súŋā. Man:PL NUM:three CAT TNS EXIST. 3PL TNS COP FOC man-tough:PL well. "There were once three men. They were really tough men."

Kà dāar yīnní kà bà lá'asì ø zíň'inì ø gbāň'e yé bà dûem ø And day:sg one and 3PL gather cat sit cat grab that 3PL rise:IMP CAT $i\bar{a}$ búdàalım lâ'ad n gīnnı ø kō nīdıb má'àa seek manliness goods:PL CAT wander:IPFV CAT kill person:PL only $k\bar{a}$ dā $l\acute{e}$ m tòm $s\bar{a}$ 0 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."

that 3PL if find INDF.AN 3PL.CNTR kill.

"So indeed they went and found lots of swords and bludgeons and bows and arrows and quivers and spears and guns and started out looking for people so if they found someone they would kill him."

Bà gìligí àlá nē ňwādisá àtáň' nē dábisà àtáň'. Bà pō ňyē 3PL go.round thus with month:PL NUM:three with day:PL NUM:three. 3PL NEG.IND find nīdi Ø ná kōv $^+$ Ø. Kà kpélìm mōr kēn nē kēn nē kēn. person:SG CAT IRR kill NEG. And remain have go:GER with go:GER with go:GER "They went round like this for three months and three days and didn't find a person to kill. They carried on walking and walking and walking."

Dābá ànū dâar bà nyē nē lāllí sà kà sī əl zí e sābíllì ø Day:pl num:five day:sg 3pl find with far hence and inde.in stand black:sg cat wōv nīd nē, kà bà kpēenm lā yé bà kém ø kó·o ø, yé ò sōb like person:sg like, and 3pl elder:sg art that 3pl go:IMP cat kill 3an.ob, that 3an null.an yá' pùn túň'e kà mōr nē láuk-sī a wōsa, bà nà nyānı ø kó·o ø. if already be able and have foc item-inde.in all, 3pl irr prevail cat kill 3an.ob. "On the fifth day they saw something standing in the distance, black like a human being, and the eldest of them said that they should go and kill him; when he himself was ready and had every piece of equipment, they would be able to kill him."

only only IDEO.

"And this one blocked this way, and that one blocked that way, but after they got there they saw that it wasn't a person but a bag chock full of money."

Kà bà yē, Àtò, kà nānná-nā ňwá, tì yé tì níŋ līgιdι ňwá wālá $^+$ ø? And $_{3PL}$ say, So.then, and now this, $_{1PL}$ that after do money this how co? "They said: 'Well, now! What are we going to do with this money?'"

Kà bà yē, bà nà pōdig nē. Àmáa bà yé lì nár kà bà yīs līgidi lā n And 3PL say, 3PL IRR share FOC. But 3PL that 3IN must and 3PL extract money ART CAT $k\bar{\epsilon}\eta$ ø dá' dāam ø ná nū yīigá kà ňyāan pōdig līgidi 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 yīs līgudu lā bī'əlá yē bīig lā kém_ø dá' yōvr ná kà bà nū. And extract money ART little that child:sg ART go:IMP CAT buy jug:sg hither and 3PL drink. "And they took out a little of the money so the youngest could go and buy a jug so they could drink."

Bīig lā, ò tèň'esıd nē ón nà nīŋ sī əm ø kū bánì kpèlim lá ø kēn Child:sg art nz go:ipfv art, 3an think:ipfv foc 3an:nz irr do indf.adv cat kill rel.pl remain līgıdı lā wūsa wūsa n sū'e, ò yèlí ò mēŋ yē, àní nā lā, kà váe there ART, and gather money ART all all CAT own, 3AN say 3AN self that, ò nà dā' nē dāam, kà bɔ́ tì-kūvdím n lás dāamí-n lā 3AN IRR buy Foc beer, and seek medicine-killing CAT immerse beer-Loc ART n pāe ø tít bá kà bà nūu ø kpí kà ò sū'e līgīdī lā wūsa. CAT reach CAT give 3PL.OB and 3PL drink CAT die and 3AN own money ART all. "As the youngest was travelling, he was thinking how he might kill those who stayed in that place and take absolutely all of the money as his own; he said to himself that he would buy the beer, and look for a poison to put into the beer and go and give it to them to drink and die so he'd possess all of the money."

Kà síd dà' dāam lā, kà b \acute{o} tì-k $\~{v}$ vdím n l \acute{o} s. And truly buy beer ART, and seek medicine-killing CAT immerse. "And indeed he bought the beer and sought poison to put in it."

Zī is $(g\bar{\epsilon}^{+}\emptyset, k\dot{a})$ bà bày(l) lá (l) (l)

lá n mōr dāam lā ø pāa nā Bīig lā, kà ɔ̀nā kiá kpε̄, Child:sg ART NZ have beer ART CAT reach hither ART, and DEMST.AN cut here, kà kiá kpē, n kí·o ø ø kū, kà yū'un záŋ dāam lā ø and SAN.CNTR cut here, CAT cut SAN.OB CAT kill, and then take beer ART CAT yúugē +ø, kà bà wūsa wūsa mé kpélìm пū wán wán. lì pō kpì drink ideo ideo, sin neg.ind delay neg and 3PL all all also immediately die zìň-kàn lā nóo kà bà sɔ̄' sō' ňyānı ø pâam lā'af סֿמ Ιā place-dem.sg art exactly and 3PL INDF.AN INDF.AN NEG.IND prevail cat receive cowry:sg art báa yīnní jø mōri jø kūlí j bà váanē CAT have CAT go.home 3PL house:PL.LOC NEG. not.one

"When the youth arrived back with the beer, this one cut him here and that one cut him there, cutting him to death, and they then picked up the beer and drank it in gulps; before long both of them died immediately in the exact same place, and none of them was able to take even a single coin home."

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Dìn kà Kūsâas yế fừ yá' tēň'ɛs bēɛ tóm bē'ɛd yế fừ tísì 3IN.CNTR and Kusaasi:PL that 2SG if think or act bad that 2SG give fừ tīrâan, fừ mâanní fừ mēŋ yâ'as lā.
2SG neighbour:SG, 2SG make:IPFV 2SG self again ART.
"That's why the Kusaasi say: if you think or do evil toward your neighbour, you're doing it to yourself in return."
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30.3 Proverbs

These are a selection from *Kusaal Solima ne Siilima* pp38ff; others are cited above in the body of the grammar itself. I have added English proverbs with similar implications where possible; the art of deploying proverbs appropriately is hard, however, and I will be happy to accept corrections.

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Benga nobid ka o sob la'adne.
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Bēná nòbιd kà ò sɔ̄b lâ'ad nē.
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Bean:PL grow:IPFV and 3AN NULL.AN laugh:IPFV FOC.

[&]quot;Beans grow and their owner is laughing." (Make hay while the sun shines.)

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Ku'om kaadi lebisne m geegun.
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Kù'em káadì ø lébìs né m gēogv-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'θm zót nē biāň'ar zúg.

Water run: IPFV FOC riverbed: sg upon.

"Water runs on mud." (What's in it for me?)

Kuga la'asidne zuorin.

Kūgá là'asıd nē zūerı-n.

Stone:PL gather:IPFV FOC hill:SG-LOC.

"Stones build up on a hill." (The rich get richer and the poor get poorer.)

Awiak seung zi' senne.

À-wiāk sēong $z\bar{\iota}$ sínnē $+ \omega$.

PERS-hatch rainy.season NEG.KNOW hawk:PL NEG.

"The one hatched in the rainy season doesn't know about hawks."

(It's a fool's paradise.)

Po nye saa kuubo, ka nye saa niib.

Pū ňyē sāa kύυbɔ̄ ⁺ø, kà ňyē sāa nîib.

NEG.IND see rain threaten: GER NEG, and see rain rain: GER.

"Didn't see the rain coming, but did see the rain." (Easy to be wise after the event.)

Ba pu nokid na'ambinni lobigid naafo.

Bà pū nōkíd nā'-bínnì g lōbigíd náafō †ø.

3PL NEG.IND take:IPFV cow-dung:SG CAT throw.at:IPFV cow:SG NEG.

"They don't take cow dung and throw it at the cow."

(Don't carry coals to Newcastle.)

Zu'om ya'a ye o na lobug, bangim ka o none kugir.

Zū'θm yá' yέ ò nà lɔ̄bιg, bàŋιm kà ò nɔ̀ nē kūgιr.

Blind.person:sg if that 3AN IRR throw.at, realise:IMP and 3AN stand.on FOC stone:sg.

"If a blind man says he'll stone you, know that he's got a stone under his foot." (Be prepared!)

Nong daan fuug tigidne gum ka li po tigid ki'ibo.

Nɔ̄ŋ-dâan fûug tìgıd nē góm, kà lì pō tīgıd kī'ıbɔ́ + ø.

Poverty-owner:sg shirt:sg sate:IPFV foc cotton, and 3IN NEG.IND sate:IPFV soap NEG.

"The poor man's shirt has a lot of material but not a lot of soap."

(i.e. wastefulness leads to poverty.)

Balerigu zi' ye o a balerigu, ka tadim mi' ye o tadim.

Bālērvgv_ø zī' yé ò à bālērvgó +ø, kà tādım mī' yé ò [à] tādım.

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."

(Self-delusion about poverty is not possible.)

Fu ya'a bood tampiing siind, fu po lem zot lieng daug nyoogo.

Fù yá' bōɔd támpìiňg sîiňd, fù pū lém zòt líəŋ dâvg ňyōɔgɔ +ø.

2SG if want rock:SG honey, 2SG NEG.IND again run:IPFV axe:SG wood:SG sympathy NEG.

"If you're trying to get honey out of a stone, you shouldn't feel sorry for the shaft of the axe." (You can't make an omelette without breaking eggs.)

Moodi pilig ka yu'ada be.

Mɔ̄ɔdı ø pílìg kà yū'ada bέ.

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.

 $B\grave{v}$ -d \grave{b} lg kúnní \grave{o} bā' yír n $\bar{\epsilon}$ n $\bar{5}$ b-k $\hat{5}$ 2g d \hat{a} ar.

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-dī'e būvd pū zíň'i ná'-yīrέ ⁺ø.

PERS-receive innocence NEG.IND be.sitting chief-house:sg NEG.

"He who has been declared innocent doesn't hang around the courthouse." (Quit while you're ahead.)

Ba ye balerug ka fu ye zumauk.

Bà yē bālērug, kà fù yē zūg-máuk.

3PL that ugly:sg, and 2sg that head-crumpled:sg.

"They say 'ugly' and you say 'funnyface.'"

(Six of one, half a dozen of the other.)

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Bungdaug po kaasidi o tiraan tengine.

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.

Kpēεňm á nē tê'εg, ò tìgιd nē bálàya.

Elder:sg cop foc baobab:sg, 3AN sate:IPFV foc stick:pl.

"An elder is like a baobab - no shortage of sticks."

(Uneasy lies the head that wears the crown.)

A proverb related to me by KT:

Sāan-súŋ á nē yī-dâan áňsìb.

Stranger-good:sg cop foc house-owner:sg mother's.brother:sg.

"A good guest is a householder's uncle."

KT explained: Entertaining a guest gives the householder a reason to bring out all his best food and drink and enjoy himself. (The mother's brother is traditionally a generous benefactor to his sister's child.)

31 Vocabulary

The abbreviations *n adj adv ideo q sv dv* stand respectively for noun, adjective, adverb, ideophone, quantifier, single-aspect verb and dual-aspect verb.

Nouns are listed under the sg. Adjectives are listed under the $g^a|s^\epsilon$ class form if extant; if not, $g^a|d^\epsilon$ or $r^\epsilon|a^+$. Dual-aspect verbs are listed under the perfective; other forms are listed only if irregular. Regular deverbal nominals are not listed. Compounds are not listed if they are regularly formed and have transparent meanings. Those that *are* listed are included under the entry for the first element.

Personal and place names are not listed: see 29.2 29.3 for examples.

Binomial names of plants are mostly taken from Haaf (see References); he checked the identifications carefully with botanical experts.

Arabic words have probably all been transmitted via other languages.

Α

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à- personifier particle (default allomorph) 15.6
āandıga pl āandıs<sup>ɛ</sup> cb àand- n. black plum tree, Vitex doniana
\bar{a}a\bar{n}d\iota r^{\epsilon} pl \bar{a}a\bar{n}da^{+} n. black plum fruit
\grave{a} a \breve{n} s^{\epsilon} dv. tear
àbòlá<sup>+</sup> q. adv. how many-fold?
àbùyí¹+ àbùtáň¹+ àbùnāasí+ q. adv. twice, three times etc
à-dàal\acute{u}<sub>0</sub> pl à-dàal\acute{u}s à-dàal\acute{u}n. stork 15.6
àeňa ger àaňlím<sup>m</sup> sv. be something/somehow 19.11.2 7.3
àeň<sup>+</sup> dv. get torn; resultative adj àaňlúη<sup>3</sup> torn
\dot{a}-gâung \dot{q} pl \dot{a}-gâand \dot{c} cb \dot{a}-gān \dot{q}-n. pied crow 15.6
àgɔ́l<sup>|ɛ</sup> àgɔ̄lá<sup>+</sup> adv. upwards
Agirailian J = n. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect
à-kōra-dîəm<sup>ma</sup> pl à-kōra-dîəm-nàm<sup>a</sup> n. praying mantis 15.6
àlá<sup>+</sup> adv. thus
\grave{a}l\acute{a}^+ q. so many; how many?
àláafù<sup>+</sup> n. health; in greetings 28; cf láafùya<sup>+</sup> \leftarrow Arabic ?al-\( \frac{1}{2} = \
Àláasìd dâar \epsilon n. Sunday \leftarrow Arabic
Àlàmíisì dâar^{\epsilon} n. Thursday \leftarrow Arabic
Àlárıbà dâar^{\varepsilon} n. Wednesday \leftarrow Arabic
àlá zùg<sup>3</sup> therefore 20.2.1
àlópìr<sup>ε</sup> pl àlópìya<sup>+</sup> n. aeroplane ← English
àmáa = but 20.2.1 ← Hausa ← Arabic
am\bar{\epsilon}\eta a^+ adv. really, truly
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àmí amen ← Arabic ?a:mi:n; in replies to greetings 28
à-mús<sup>ɛ</sup> pl à-mús-nàma n. cat 15.6; cf Hausa mussàa id
ànāasí<sup>+</sup> q. four
àní+ adv. there
àníi= q. eight
àní nā<sup>+/</sup> adv. there
ànínà<sup>+</sup> adv. promptly
an3'2n^{\epsilon} who? 15.4.4
\dot{a} \dot{n} 
\bar{a}ns^{\epsilon} dv. pluck (leaves)
áňsìba pl āňs-náma cb āňs- n. mother's brother
\bar{a}\tilde{n}sig^{\epsilon}/dv, break at an angle
\bar{a}ns(n^a pl \bar{a}ns(s^\epsilon cb \bar{a}ns(n-n) sister's child
àntù'a= pl àntù'esε cb àntu'à- n. lawsuit
an\bar{u} a. five
àňwá+ adv. like this
ānzúrıfà<sup>+</sup> n. silver ← Hausa azùrfaa
àrakóň¹+ q. one
\dot{a}raz\dot{a}k^a pl \dot{a}raz\dot{a}'as^\epsilon cb \dot{a}raz\dot{a}'- generally pl: n. wealth, riches \leftarrow Arabic ?ar-rizq
àrazánà<sup>+</sup> n. heaven ← Arabic ?al-¡anna
Àrzúmà dâar<sup>\epsilon</sup> n. Friday ← Arabic
àsée except, unless 18 20.2.1 ← Hausa sai
Àsíbıtì dâar<sup>ε</sup> n. Saturday ← Arabic
àsīda<sup>+</sup> adv. truly
àsùbá<sup>+</sup> n. dawn ← Arabic ?as<sup>r</sup>-s<sup>r</sup>aba:ħ
àtáň'+ q. three
Àtàláatà dâar<sup>€</sup> n. Tuesday ← Arabic
atána^{+/}q, three exactly
Àtínì dâar<sup>\epsilon</sup> n. Monday ← Arabic
àtìuk<sup>3</sup> n. sea ← Hausa tèeku
àwán\bar{a}^{+/} adv. like this
àwāe+ q. nine
\dot{a}yi^{+}q. two
áyὶι no <u>21.4.4</u>
\dot{a}yi\eta\bar{a}^{+/}q, two exactly
àyɔ́pɔ̀e+ q. seven
àyúθbὺ+ q. six
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В
bà they, their (right-bound); ba+ them (left-bound) 15.4.1
b\bar{a}^{+} pl b\bar{a}^{-} náma ch b\bar{a}^{-} n. father 8.4
b\bar{a}a^{=} pl b\bar{a}as^{\epsilon} cb b\dot{a}- n. dog
báa (← Hausa bâa "not exist") in constituent negation 26
b\bar{a}'a^{-} pl b\bar{a}'ab^{a} cb b\dot{a}'-n. traditional diviner; b\dot{a}'-k\dot{b}l\nu q^{0} pl b\dot{a}'-k\dot{b}n^{0} cb b\dot{a}'-k\dot{b}l-n.
         diviner's bag
b\bar{a}'a^{=} pl b\bar{a}'as^{\epsilon}cb b\dot{a}'-n. peg to hang things on
bà'an<sup>nε</sup> pl bà'ana<sup>+</sup> cb bà'an- n. stocks (punishment)
bàaňliga pl bàaňlis<sup>ε</sup> adj. narrow, slender
bāaňlíga adj. quiet
bāaňlím<sup>m</sup> adv. quietly
bà'ar<sup>ɛ</sup> pl bàda+ bà'a+ cb bà'- n. idol
b\bar{a}b\dot{a}^+ beside postposition 16.6; cf b\bar{a}b\iota r^{\epsilon/} sphere of activity
bàbıgā<sup>+/</sup> q. many
bákpàe+ n. week ← Hausa bakwài "seven"
bàlàar<sup>ɛ</sup> pl bàlàya<sup>+</sup> cb bàlà- n. stick, staff, club
bàlànır<sup>ɛ</sup> pl bàlàna<sup>+</sup> cb bàlàn- n. hat
b\bar{a}l\bar{\epsilon}r u g^{5/} pl b\bar{a}l\bar{\epsilon}r l d^{\epsilon/} b\bar{a}l\bar{\epsilon}r l s^{\epsilon/} cb b\bar{a}l\acute{\epsilon}r - n. ugly person; cf l\bar{\epsilon}r^{\epsilon} get ugly
bàmmā<sup>+/</sup> these, those demonstrative 15.4.2
ban^{\epsilon} these, those demonstrative 15.4.2
bán they (subject of n-clause); bān<sup>ε</sup> they, them (contrastive) 15.4.1
bāň¹⁺ dv. ride
bānāa<sup>=</sup> pl bānāas<sup>ε</sup> cb bànà- (tone sic in my materials) n. traditional "fugu" smock
bàň'ada pl bàň'ad-nàma n. ill person
b\bar{a}\ddot{n}'al^{\epsilon}/dv. make to ride (horse, bicycle)
bāň'as<sup>ε</sup> cb bàň'- n. pl as sg disease
bàn-dāug<sup>o</sup> pl bàn-dāad<sup>ɛ</sup> cb bàn-dà- n. crocodile
bān-kúsél<sup>le</sup> pl bān-kúsēlá<sup>+</sup> cb bān-kúsēl- n. lizard
bāη<sup>a</sup> pl bāaňs<sup>ε</sup> cb bàη- n. ring, chain, fetter
bàn<sup>a</sup> n. agama lizard
ban^{\varepsilon} dv. come to know
báp wallop!
B\bar{a}r_{i}q^{al} pl B\bar{a}r_{i}s^{\epsilon l} cb B\bar{a}r_{i} n. Bisa person (not only the Bareka, WK)
bárıkà<sup>+</sup> n. blessing; in greetings 28 ← Arabic baraka
B\bar{a}rvg^{5/n}. Bisa country; North 29.3
bas^{\varepsilon} dv. go away; abandon; throw out
B\bar{a}t^{\varepsilon/} n. Bisa language
bàtáň' + q. three (after a personal pronoun)
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bàuηυ⁺ n. found only as in Ò kpὲň' báuηυ. He was circumcised. ← Songhay "pool"

 $b \dot{a} y \bar{\epsilon} o g^{5/}$ betrayer of secrets ($cf y \bar{\epsilon} \epsilon s^{\epsilon/}$)

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bàyí¹+ q. two (after a personal pronoun)
bàyópòe<sup>+</sup> q. seven (after a personal pronoun)
b\dot{\epsilon}^+ qer b\dot{\epsilon}l(m^m (sic) sv. exist; be in a place 19.11.1
b\bar{\epsilon}d\iota g^{\epsilon}/dv. go rotten
bèdvg<sup>o</sup> bèdir<sup>e</sup> pl bèda<sup>+</sup> cb bèd- adj. great
b \dot{\epsilon} d \nu q \bar{\nu}^{+/} q, much, a lot
bε̃ε or 20.2.1 21.2
bèkèkèongo or bèkèongo n. very early morning
bèlim<sup>m</sup> dv. beg
b \dot{\epsilon} l s^{\epsilon} dv. comfort
bēn<sup>nε</sup> pl bēna+ cb bèn- n. end
b \dot{\epsilon} \ddot{n}^{\dagger} qer b \bar{\epsilon} \ddot{n}^{\dagger} \epsilon s^{\epsilon} dv, fall ill
b \dot{\epsilon} n s i g^{\epsilon} dv. serve soup
b \dot{\epsilon} \eta^{\epsilon} dv. mark out a boundary
b\bar{\epsilon}\eta(d^{\epsilon}cb\ b\bar{\epsilon}\eta- n. pl bean leaves, Vigna unguiculata (Haaf); b\bar{\epsilon}\eta(d\ n\bar{\epsilon}\ k\bar{\iota}^{+/} n. beanleaf-
          and-millet, a traditional snack
b\bar{\epsilon}n(r^{\epsilon}pl\ b\bar{\epsilon}n\dot{a}^{+}cb\ b\bar{\epsilon}n- n. brown bean
b\bar{\epsilon}og^{3} n. tomorrow 20.2.1; Kà b\bar{\epsilon}og níe kà ... The next day ...
b\bar{\varepsilon}'og^{\circ}b\bar{\iota}'a^{+}pl\ b\bar{\varepsilon}'\varepsilon d^{\varepsilon}\ b\bar{\iota}' \ni s^{\varepsilon}\ cb\ b\dot{\varepsilon}'- bià'- adj. bad
b\bar{\epsilon}og\upsilon-n^{\epsilon/} n. morning
b \dot{\epsilon} r \iota \eta^a pl \ b \dot{\epsilon} r \iota g \iota s^{\epsilon} sic \ n. a plant used for fibre (KED), Hibiscus cannabinus (Haaf)
bērīga+ cb bèrīg- pl leaves of bèrīn used for soup (KED)
b\bar{\epsilon}svg^{\circ} pl b\bar{\epsilon}sid^{\varepsilon} cb b\dot{\epsilon}s- n. a kind of wide-mouthed pot
bj\bar{a}n'ar^{\epsilon} pl bj\bar{a}n'ada' bja'a' a^+ cb bj\bar{a}n' a^- n. wet mud, black mud; riverbed
bjāuňk<sup>o</sup> pl bjāň'ad<sup>ɛ</sup> cb bjàň'- n. shoulder
bīálle pl bīalá adj. naked
bi \ni l^{\varepsilon} dv. accompany
br əlá+ q. a little; br əl br əl q. and adv. a very little; little by little
bī'əm<sup>m</sup> pl bì'əm-nàm<sup>a</sup> bī'əmma LF cb bì'əm- n. enemy
bīən<sup>nε</sup> pl bīəna<sup>+</sup> cb bìən- n. shin
b\bar{\imath} = r^{\epsilon}/pl \ bi\bar{e} \gamma \dot{a}^+ \ cb \ bi\bar{a}- n. elder sibling of the same sex
bi' = s^{\varepsilon} dv. doubt
bìgis^{\varepsilon} dv. show, teach
b\bar{i}ig^a pl b\bar{i}is^\epsilon cb b\hat{i}- b\bar{i}- n. child; b\bar{i}-d(b\hat{i})g^a n. boy; b\hat{i}-l\bar{i}a^+ n. baby; b\hat{i}-n\hat{a}'ab^a n. prince;
          bì-pīta/ pl bì-pīt(ba cb bì-pīt- n. father's younger brother; bī-pύηa n. girl
bi'ig^{\varepsilon} dv. ripen, become pregnant
bīilíf pl bīilí cb bīil n. seed
bìilím<sup>m</sup> n. childhood
bīım<sup>m/</sup> cb bī- n. soup, stew
bì'isím<sup>m</sup> n. milk (human or animal)
bi'isir^{\epsilon} pl bi'isa^+ cb bi'is- n. woman's breast
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b\bar{\imath}l^a pl b\bar{\imath}b\imath s^{\epsilon} cb bil- or bi- adj. little, small
bilig^{\varepsilon} dv. roll (transitive)
bìlım<sup>m</sup> dv. roll (intransitive)
bìmbìm<sup>mε</sup> pl bìmbìma<sup>+</sup> cb bìmbìm- n. altar NT (KED: mound or pillar of earth)
Bìn<sup>nε</sup> pl Bìm<sup>ma</sup> cb Bìn- n. Moba, Bimoba person (not only Bemba, WK)
Bin^{n\epsilon} n. Moba language
b\bar{l}n^{n\epsilon} n. excrement
Bìun<sup>o</sup> n. Moba country
bà+ dv. seek; bàada ipfv used for: want, like, love (sexual, romantic); ipfv ger
         bɔ̀ɔdım<sup>m</sup> will 12.2.1.4
b\bar{\jmath}^+ cb b\bar{\jmath}- what? why? 15.4.4; b\bar{\jmath}-būud\iota^+ what sort of ..?; b\bar{\jmath}-zúg\bar{\jmath} because 20.2.1,
         why? 16.7; bò-wìn<sup>nɛ</sup> what time of day?; bɔ̄ kímm "exactly what?"
b > b \circ g^{\epsilon} dv. wrap round, tie round
b \dot{\sigma} d \iota g^{\varepsilon} d v. lose, become lost
b \hat{b} k^{3} pl b \hat{b}' a d^{\epsilon} cb b u' \hat{a} - n. pit
bɔ̄sır<sup>ε</sup> pl bɔ̄sa<sup>+</sup> cb bɔ̀s- n. puff adder
bɔ̄tυ<sup>+</sup> n. sack
b\bar{v}^{+}dv, beat
buàk^{\varepsilon} dv. split
bù'ar<sup>ε</sup> pl bu'àa<sup>+</sup> cb bu'à- n. hole
b\bar{\nu}'ar^{\epsilon} pl bu'áa<sup>+</sup> cb bu'ā- n. skin bottle
bùd<sup>ɛ</sup> ger būdıg<sup>a</sup> būdvg<sup>o</sup> dv. plant seeds
bùdàalım<sup>m</sup> n. manhood, courage
bùdım<sup>m</sup> dv. get confused
bùdımís^{\varepsilon} n. confusion
b\dot{u}'e^+dv. pour out
bὺg<sup>ε</sup> dv. get drunk; cf Hausa bùgu id
b\bar{\nu}g\nu d^a n. client of a b\bar{a}'a^= traditional diviner
bùgulım<sup>m</sup> dv. cast lots
b\bar{\nu}g\nu^{\epsilon} pl b\bar{\nu}ga^{+} cb b\bar{\nu}g- n. dwelling-place of a w\bar{\iota}n^{n\epsilon} localised spirit; also a w\bar{\iota}n^{n\epsilon} as
          a s\bar{i}gir^{\epsilon/2} inherited from one's mother's family
bùgým<sup>m</sup> cb bùgým- bùgým- n. fire; Bùgým-tɔ̄ɔňr^{\epsilon} n. Fire Festival
būgusa/ sv. be soft
b\bar{\nu}g\nu s(g^a b\bar{\nu}g\nu s(r^{\epsilon}pl b\bar{\nu}g\nu sa^+ cb b\bar{\nu}g\nu s-adj. soft, weak
b\bar{\nu}g\nu s(g\bar{a}^{+}) adv. softly
būgυsίm<sup>m</sup> n. softness, weakness
b\bar{\nu}k^{\epsilon}/dv. weaken
b\dot{\nu}k^{\epsilon}dv, cast lots
b \dot{u} l^{\epsilon} dv, germinate, ooze
b\bar{u}l^{|\epsilon} pl b\bar{u}la^+ n. shoot, sprout
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b\dot{v}l^{\varepsilon}dv, astonish
Bùl<sup>lε</sup> n. Buli language
Bùlig^a pl Bùlis^\epsilon cb Bùl- n. Bulsa person
bùlq^a pl bùls^{\epsilon} cb bùl- n. well, pond
bùmbàrıga pl bùmbàrıs cb bùmbàr- n. ant
bùn^{\varepsilon} dv. reap, harvest
b\bar{v}n^{n\epsilon} pl b\bar{v}n\dot{a}^+ b\bar{v}n-n\dot{a}m^a cb b\bar{v}n-n. thing (concrete or abstract); b\bar{v}n-b\dot{v}v\dot{d}\dot{v}f n.
         plant; b\bar{v}n-g(\eta^a n. \text{ short chap (informal, joking)}; <math>b\bar{v}n-k\acute{2}\check{n}b\grave{v}g^3 pl\ b\bar{v}n-k\acute{2}\check{n}b\grave{l}d^2
         cb kònb- (sic) n. animal; b\bar{\nu}n-kúd\dot{\nu}g^{3} n. old man
b\bar{\nu}n-dâar<sup>\epsilon</sup> which day? 16.7
b\dot{v}\eta^a pl b\dot{v}m\iota s^{\epsilon} cb b\dot{v}\eta- n. donkey
b \dot{v} n^{\epsilon} dv. take a short cut
b\dot{u}e^{\epsilon}dv. call, summon; \dot{O} y\bar{v}'vr b\hat{u}en X. She is called X. 19.8.2
bù e^{\epsilon} pl bue ya^+ cb bua- n. grain store, silo
b\bar{u}'es^{\epsilon}dv, ask; qer b\bar{u}'es\dot{v}q^{3}n, question; bu'oskana this question (In 18:34)
bù-pīiga q. adv. ten times
b\bar{v}r\dot{a}a^{-} n. man, male adult (in ILK, but characteristically Toende Kusaal; see d\bar{a}u^{+})
būrıyá<sup>+</sup> n. Christmas ← Twi/Fante bronya
bùrkìn<sup>a</sup> pl bùrkìn-nàm<sup>a</sup> cb bùrkìn- n. free person; honourable person ← Songhay
Bùsâaňl<sup>ε</sup> n. Bisa language
Bὺsáŋa pl Bὺsâaňs cb Bὺsāŋ- n. Bisa person
b\bar{v}ti\eta^a pl b\bar{v}tiis^{\epsilon} 5.4; cb b\dot{v}ti\eta- n. cup (in general; originally "seed-planting [cup]")
b\bar{\nu}\nu d^{\epsilon} n. pl as sg innocence
būudi<sup>+</sup> cb bùud- n. kind, sort, ethnic group
b\bar{\nu}\nu g^a pl b\bar{\nu}\nu s^\epsilon cb b\dot{\nu}- n. goat; b\dot{\nu}-dibig^a n. male kid
D
dà before two days ago, tense particle 19.3.1
dā not with imperative mood 19.5
dàa day after tomorrow, tense particle 19.3.1
dāa before yesterday, tense particle 19.3.1
d\dot{a}^{+}dv. buy
d\dot{a}'a^{=} pl d\dot{a}'as^{\epsilon} cb d\dot{a}'- n. market
d\dot{a}'ab\iota r^{\epsilon} n. slave
dàalım<sup>m</sup> n. masculinity
daal(m^m pl daal(m)s^{\epsilon} n. male organs
d\bar{a}am^{m/}cb\ d\bar{a}- n. millet beer, "pito"; d\bar{a}-nûur^{\epsilon} n. beer-drinking; d\bar{a}-bín^{n\epsilon} cb d\bar{a}-bín- n.
         beer residue; NT yeast (cf bīn<sup>nε</sup>)
dàam<sup>m</sup> dv. disturb, trouble (cf Hausa dàamaa id)
dāana pl dàan-nàma cb dàan- n. owner of ... 15.7.2
d\bar{a}ar^{\epsilon} pl d\bar{a}b\dot{a}^{+}cb d\dot{a}- n. day (24-hour period); d\dot{a}-p\bar{i}iga^{+} n. ten days
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dāa-sí εrε̄ perhaps 20.2.1
dàbīəm<sup>m</sup> tone sic n. fear
dab\bar{l} o g^{3} pl dab\bar{l} = d^{\epsilon} c b dabia - n. coward
d\dot{a}b\iota s\iota r^{\epsilon} pl d\dot{a}b\iota sa^{+} cb d\dot{a}b\iota s- n. day (as one of several)
d\bar{a}d\dot{\nu}k^{3} n. a kind of large pot
d\bar{a}'e^{+/}dv. push; blow (of wind)
Dàgâad<sup>a</sup> pl Dàgáadìb<sup>a</sup> Dàgâad-nàm<sup>a</sup> cb Dàgâad- n. Dagaaba person (L prefix sic)
Dàgbān<sup>nɛ/</sup> pl Dàgbām<sup>ma/</sup> cb Dàgbān- n. Dagomba person
Dàgbān<sup>nε/</sup> n. Dagbani language
Dàgbāun<sup>5</sup>/ n. Dagomba country, Dagbon
dàgòbiga n. left-hand; (yà) dàgòbiga South KB 29.3
dāká+ pl dāká-nàma cb dāká- n. box ← Hausa àdakàa
dàkīiga pl dàkīis cb dàkì- n. wife's sibling; dàkì-dāu<sup>+</sup> n. wife's brother; dàkì-puāka n.
                 wife's sister; dàkì-tùa+ n. wife's sister's husband
dà-kònr<sup>e</sup> pl dà-kònya<sup>+</sup> cb dà-kòn- n. unmarried son 29.1
dàm<sup>m</sup> ipfv dàmmıda dv. shake
dama'a=n. liar cf ma'+
dàmà'am<sup>m</sup> n. lie, untruth, lying
dàmà'ar^{\varepsilon} n. lie, untruth
dāmpūsāar<sup>€</sup> n. stick
dank n^{3} n. measles
dansaar^{\epsilon} n, staff, club
dà-pāala/ n. young man, son
d\dot{a}-sā\eta^a pl d\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}-sād\dot{a}
d\dot{a}-t\bar{a}a^{=} pl d\dot{a}-t\bar{a}as^{\epsilon} cb d\dot{a}-t\dot{a}- n. enemy
dàtìun<sup>3</sup> n. right-hand; (yà) dàtìun<sup>3</sup> North KB 29.3
d\bar{a}u^+ pl d\bar{a}p^a cb d\dot{a}u- d\dot{a}p- 8.2 n. man (as opposed to woman)
dàug<sup>5</sup> pl dàad<sup>ɛ</sup> cb dà- n. piece of wood, log; pl also: wood (material); dà-kīəd<sup>a</sup> n.
                 wood-cutter; d\hat{a}-kp\bar{l} \partial d^a n. carpenter; d\hat{a}-p\bar{v}vd(\hat{r}^{\epsilon}) n. cross-piece, pl d\hat{a}-p\bar{v}vd\hat{a}^{\dagger} n.
                 used as sq cross NT
d\bar{a}vg^{\circ} pl d\bar{a}ad^{\varepsilon} cb d\dot{a}- adj. male
dàwàlıga n. hot humid season before the rains
dàwān<sup>nɛ/</sup> pl dàwāná<sup>+</sup> cb dàwān- n. pigeon
dàyáam<sup>ma</sup> pl dàyāam-nám<sup>a</sup> cb dàyāam- n. husband's parent; dàyāam-dáu<sup>+</sup> n.
                 husband's father; dàyāam-puáka n. husband's mother
day\bar{u}ug^{5/} pl day\bar{u}ud^{\epsilon/} cb day\bar{u}- n. rat
d\dot{\epsilon}bir^{\epsilon} pl d\dot{\epsilon}ba^{+} n. mat, pallet, bed
d\grave{\epsilon} g^a pl d\grave{\epsilon} \varepsilon s^{\varepsilon} n. warthog
d\bar{\epsilon}\epsilon\eta^a pl d\bar{\epsilon}\epsilon\check{n}s^\epsilon d\bar{\epsilon}\epsilon m\iota s^\epsilon d\bar{\epsilon}\epsilon na^+ cb d\dot{\epsilon}\epsilon\eta- q. first
d\bar{\epsilon}l^{|a|} ger d\bar{\epsilon}ll\dot{\nu}g^{3} d\bar{\epsilon}ll(m^{m} sv. be leaning on something (of a person)
dèlum<sup>m</sup> dv. begin to lean on something (of a person)
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d\bar{\epsilon}\eta^a pl d\bar{\epsilon}m\iota s^{\epsilon} cb d\dot{\epsilon}\eta- n. accidental bruise
d \dot{\epsilon} \eta^{\epsilon} dv. go, do first
dènım beforehand, preverb 19.7.2
dì it, its (right-bound) 15.4.1 = 1ì
dì+ ipfv dìta imp dìma dv. eat, receive; ger dīlbo n. food; Ò dì pu'ā. He's married a
                wife. O dì nyán. She's ashamed.
diā'a dv. get dirty
di\bar{a}'ad^{\epsilon}/n. dirt
d\vec{r}e^{+/} dv. receive, get
dìəm<sup>ma</sup> pl dìəm-nàm<sup>a</sup>cb dìəm- n. wife's parent; also in polite address to an unrelated
                person of opposite sex and similar or greater age than onself; diam-dau+ n.
                wife's father; dìəm-puāka n. wife's mother
dì'əm<sup>m</sup> dv. play, not be serious
dì'əma<sup>+</sup> n. festival
d\vec{r} \ni s^{\epsilon} dv. receive (many things)
d\bar{i}gi^{ya} ger d\bar{i}k^{a} KT d\bar{i}gir^{\epsilon} WK sv. be lying down
dīgisá<sup>+</sup> n. pl lairs
d\bar{\iota}g\iota^{\epsilon}/d\nu. lay down
digin^{\varepsilon} dv. lie down
digir^{\epsilon} pl diga^{+} cb dig- n. dwarf
dìis<sup>E</sup> dv. feed; agt dìis<sup>a</sup> n. glutton
dìιsύη^{2} pl dìιsίmà^{+} dìιsίsε cb dìιsύη^{-} n. spoon
dlm^a dummy head pronoun, animate pl; dln^{n\epsilon} inanimate sg <u>15.4.7</u>
dín it (subject of n-clause) 15.4.1
d\bar{l}n^{\epsilon} it (contrastive) 15.4.1 = l\bar{l}n^{\epsilon}
dìnd\bar{\epsilon}og^{5/} pl dìnd\bar{\epsilon}ed^{\epsilon/} cb dìnd\bar{\epsilon}- n. chameleon
dìndìis<sup>a</sup> n. glutton
dìn zúg<sup>3</sup> therefore 16.7
d i t i \eta^{\circ} n. right-hand (see d a t i u \eta^{\circ})
di-z\bar{z}rvg^{3/} pl di-z\bar{z}r\dot{a}^+ cb di-z\bar{z}r- n. crumb
dɔ̄lla/ ger dɔ̄llím<sup>m</sup> sv. accompany in a subordinate role; Ànɔʻɔnì dɔ̄llí fɔ̂? Who has
                come with you? (to an elderly patient.) Bà dòl nē tāaba. They went together.
d \bar{\partial} l l q^{\epsilon} / d v. make accompany, send along with
d5lis^{\epsilon}/dv. investigate, trace
d\bar{\rho} | dv. stretch oneself
d\grave{)}\check{n}'>s^{\varepsilon} dv. water plants
d g^{3} p l d g^{2} d t^{\epsilon} c b d g^{\epsilon} - n. house, hut; clan; d g^{3} p l d g^{\epsilon} - n. housecat
d 	imes 	i
d\bar{v}^+ ipfv d\bar{v}t^{a/} imp d\hat{v}m^a dv. go up
du'\dot{a}^a dv, bear, give birth, beget; agt d\bar{v}'ad^a n, elder relation
d\dot{v}'al^{\epsilon} dv, make interest (of a loan)
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d\bar{v}'am^m n. birth
dùaň<sup>+</sup> pl dòɔňs<sup>ɛ</sup> cb dòň- n. dawadawa Parkia clappertoniana [biglobosa] (Haaf)
du' ata ata
d\bar{u}e^{+/} dv. raise, rise
d\bar{\nu}q^{\varepsilon}d\nu. cook
d\bar{\nu}k^{3} pl d\bar{\nu}q\nu d^{\epsilon} cb d\bar{\nu}q- n. cooking pot; d\bar{\nu}q-pé'\epsilonlà n. full pots; d\bar{\nu}q\nu b dút cooking
                  pots
dùm<sup>m</sup> dv. bite
dūm<sup>mε</sup> dūm<sup>nε</sup> pl dūma<sup>+</sup> cb dùm- n. knee
d\dot{v}nd\dot{v}ug<sup>5</sup> pl d\dot{v}nd\dot{v}ud<sup>\epsilon</sup> cb d\dot{v}nd\dot{v}- n. cobra
dūnıya+ cb dūnıyá- 8.6 n. world ← Arabic dunya:
dūnná<sup>+</sup> adv. this year
d\bar{u}\eta^a pl d\bar{u}m\iota s^{\epsilon} cb d\dot{u}\eta- n. mosquito
d\bar{u}e^{\epsilon} pl du\bar{e}y\dot{a}^+ cb du\bar{a}- n. stick
d\bar{u}'es^{\epsilon}/dv. lift up, honour
dùr<sup>a</sup> sv. be many
d\bar{u}'un^{\epsilon}/dv. pass water (ger recorded as d\bar{u}'un\dot{v}g^{\circ})
dū'uním<sup>m</sup> cb dū'un- n. urine
dūυsá<sup>+</sup> n. pl. steps
Ε
ε̃εň yes 21.4.4
εξε or εξε tί see ἤγες, ἤγες tί habitually auxiliary tense marker 19.3.2
\bar{\varepsilon} \tilde{\varepsilon} \tilde{h} b^{\varepsilon} dv. lay a foundation
\bar{\epsilon}\epsilon nb(r^{\epsilon}) n. foundation 11.1.2
\grave{\epsilon}\check{n}b\iota s^{\epsilon}dv. scratch
\grave{\epsilon} \check{n} d^{\epsilon} dv. block up, plug up
\grave{\epsilon} \check{n} d \iota g^{\epsilon} d v. unblock, unplug
\bar{\epsilon}\bar{n}r_{i}g^{\epsilon}/dv. shift along (e.g. a bench)
f<sup>9</sup> you sg (left-bound) <u>15.4.1</u>
fāaň = q. every
f\bar{a}e\check{n}^{+/}dv. save; agt f\bar{a}a\check{n}d^{a/} f\bar{a}a\check{n}g(d^a n. saviour 14.1
fāň+ dv. grab, rob
fáss ideo. for pìəliga white
f\bar{\epsilon}\epsilon g^{\epsilon}/dv. (of food) get old, cold
f\bar{\epsilon}\check{n}dig^{\epsilon}/dv. turn round (tone uncertain)
f\bar{\epsilon}\bar{n}'og^{5/} pl f\bar{\epsilon}\bar{n}'\epsilon d^{\epsilon/} cb f\bar{\epsilon}\bar{n}'- n. ulcer
fi \ni b^{\varepsilon} dv, beat
fi'ig^{\varepsilon} dv. cut off
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fiin q. a little (liquid)
fitlá<sup>+</sup> n. lamp \leftarrow Hausa fitilàa; in KB adapted to the r^{\epsilon}|a^{+} class: sg fitir pl fita
f \ni 2 \le \epsilon / dv. blow, puff (wind); ger f \ni 2 \le \epsilon / dv. hypocrisy NT
fù you, your sa (right-bound) 15.4.1
fùe+ dv. draw out
fūfūm<sup>mε</sup> pl fūfūma<sup>+</sup> cb fūfúm- n. envy; stye (believed to result from envy)
fún you sg (as subject of n-clause); fūn SF fúnè LF you sg (contrastive) 15.4.1
f\bar{u}uq^{5/} pl f\bar{u}ud^{\epsilon/} f\bar{u}t^{\epsilon/} cb f\bar{u}- n. shirt, clothing; pl also: cloth
G
g \dot{a} a d^{\epsilon} dv. pass, surpass 22.2.2
gáafàra sorry formula 28 (Hausa gaafaràa, ultimately ← Arabic)
g\dot{a}'al^{\epsilon} dv. button up
gà'am<sup>m</sup> dv. grind teeth
gāaň<sup>=/</sup> pl gāaňs<sup>ɛ/</sup> cb gāň- n. Nigerian ebony Diospyros mespilliformis (Haaf)
g a a s^{\epsilon} dv, pass by
g\bar{a}dv^+ g\bar{a}dvg^{5/} pl g\bar{a}dv-n\acute{a}m^a g\bar{a}t^{\epsilon/} cb g\bar{a}d-g\bar{a}dv-n. bed \leftarrow Hausa gadoo
gàlım<sup>m</sup> dv. joke
galls^{\varepsilon} dv, exceed, get to be too much
g\bar{a}\bar{n}r^{\epsilon} pl g\bar{a}\bar{n}y\dot{a}^+ cb g\bar{a}\bar{n}r- n. fruit of Nigerian ebony
g a \eta^{\epsilon} dv. step over
g\bar{a}\eta^{\epsilon}/dv. choose
gb\bar{a}\ddot{n}'e^{+/}dv. catch
gbáňyà'a= n. lazy person 14
gbáňyà'amm n. laziness; 1976 NT gonya'am
gbàun<sup>5</sup> pl gbàna<sup>+</sup> cb gbàn- gbàun- n. book WK
gbāun<sup>5</sup> pl gbāná<sup>+</sup> cb gbān- gbāun- n. animal skin WK; animal skin, book DK
gbêεňm<sup>m</sup> cb gbēň- n. sleep
gb\dot{\epsilon}'og^{3} pl gb\dot{\epsilon}'\epsilon d^{\epsilon} gb\dot{\epsilon}da^{+} cb gb\dot{\epsilon}'- n. forehead; shore of a lake
gb\bar{\epsilon}r^{\epsilon} pl gb\bar{\epsilon}y\dot{a}^+ cb gb\bar{\epsilon}r- n. thigh
gbīgιm<sup>nε</sup> pl gbīgιma<sup>+</sup> cb gbìgιm- n. lion
gbìn<sup>nε</sup> pl gbìna<sup>+</sup> cb gbìn- n. buttock; base (e.g. of a mountain); postposition 16.6
abin-v \ni j n. anus
qb\bar{i}s^{\epsilon}dv. sleep
g\bar{\varepsilon}\epsilon^{|\varepsilon|}dv. place between one's legs (Pattern H)
g\bar{\varepsilon}\varepsilon\bar{n}m^{m}/dv. go mad, madden
g\bar{\epsilon}\epsilon\check{n}m(s^{\epsilon}n. pl as sq madness
g \dot{\epsilon} \dot{\epsilon} \dot{n} \eta^{a} p l g \bar{\epsilon} \dot{\epsilon} \dot{n} m (s^{\epsilon} n. \text{ madman})
g \dot{\epsilon} l^{|\epsilon} p l g \bar{\epsilon} l \dot{a}^+ c b g \bar{\epsilon} l- n. egg
g\bar{\epsilon}\tilde{n}^+ dv. get tired; resultative adj g\bar{\epsilon}\epsilon\tilde{n}l\dot{\nu}\eta^{\circ} tired
g\bar{\varepsilon}\check{n}^{\prime +} dv. get angry
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g\bar{\epsilon}og^{\circ} n. place between one's legs (Pattern A sic)
gīiňlím<sup>m</sup> n. shortness
gik^a pl gigis^{\epsilon} cb giginary n. dumb person
gìgılım<sup>m</sup> dv. become dumb
g\bar{l}llg^{\epsilon}/ipfv g\bar{l}n^{na}/dv. go around 10.1
gīm<sup>ma/</sup> sv. be short
gīŋa pl gīma+ cb gìn- adi. short
gin^{\epsilon} dv. scrimp
gin^{\epsilon} dv. surround, intercept, obstruct
gīna<sup>+</sup> adv. shortly
gīnılím<sup>m</sup> n. shortness
q\bar{\partial}d_{\xi}q^{\xi}/q\dot{\partial}^{\xi}'\partial^{\xi}dv. look up
a\bar{j}^{la/} a\bar{j}^{ra/} a\bar{j}^{ra/} a\bar{j}^{ra/} sv. be looking up
g \ni \check{n}^+ dv. hunt; ipfv g \ni \supset \check{n}d^a wander, ger g \ni \supset \check{n}d\iota m^m wandering 12.2.1.4
G \ni g^a pl G \ni s^{\epsilon} n. clan name
G \ni g^{\circ} n. place of the G \ni g^{\varepsilon} Goosi clan
gỳ'ɔn<sup>ε</sup> dv. look up
g\bar{\rho}r^{a} sv. be looking up
g\bar{j}s^{\epsilon} ipfv g\bar{j}sid^{a/} g\bar{j}t^{a/} imp g\bar{j}sim^{a} g\bar{j}m^{a} ger g\bar{j}sig^{a} dv. look; agt g\bar{j}t^{a/} n. seer,
          prophet
g\bar{u}^{\dagger} dv. guard, protect
gỳl<sup>ε</sup> ipfv gỳn<sup>na</sup> dv. suspend
g\dot{v}l^{la} ger g\bar{v}l\iota b^{3} sv. be suspended
gùllīmm SF gùllımnɛ LF only; emphatic 27.6
gỳm<sup>mε</sup> pl gỳma<sup>+</sup> n. kapok fruit; also thread WK
Gὑm<sup>mε</sup> n. place of the clan Gὑm-dìm<sup>a</sup>
g\bar{\nu}mp\bar{\nu}z\bar{\epsilon}r^{\epsilon/} pl g\bar{\nu}mp\bar{\nu}z\bar{\epsilon}y\dot{a}^+ cb g\bar{\nu}mp\bar{\nu}z\dot{\epsilon}r- n. duck
gùň'a<sup>+</sup> pl gòň'ɔs<sup>ɛ</sup> cb gòň'- n. thorn; Acacia; gòň'-sābılíg<sup>a</sup> Acacia hockii (Haaf)
gὑngōm<sup>mε</sup> n. kapok material
g \dot{\nu} \eta^a pl g \dot{\nu} m \iota s^{\epsilon} cb g \dot{\nu} \eta- n. kapok tree Ceiba pentandra (Haaf)
gūr<sup>a</sup>/ ger gūrím<sup>m</sup> sv. be on guard, watch for 25.1
Gūrίn<sup>nε</sup> n. Farefare language
G\bar{v}r(n^a pl G\bar{v}r(s^{\epsilon} n. \text{ Farefare person})
g\bar{u}'ul^{\epsilon}/dv. put on guard
gò'vlım<sup>m</sup> dv. become half-ripe
g\dot{\nu}\nu r^{\epsilon} pl g\dot{\nu}ya^{+} cb g\dot{\nu}- n. upland; bank of river
g\bar{\nu}\nu^{\epsilon} pl g\bar{\nu}ya^{+} cb g\dot{\nu}- n. ridge of back
g\bar{u}'us^{\epsilon}/dv. take care, watch out
g\bar{v}'vs^{\epsilon} n. pl half-ripe fruit
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Н
h\bar{a}l(+) until, up to and as far as, even 18 20.2.1 22.1 27.6; ? \leftarrow Arabic \hbaratta:;
          hālí báa even
iā<sup>+</sup> dv. seek
i\bar{a}\check{n}'as^{\epsilon}/dv. leap
i\bar{a}n'k^{\epsilon}/qer i\bar{a}n'ad^{a}/qat i\bar{a}n'ad^{a}/dv. leap, fly 10.1
iqi^{ya} ger ik^{a} KT iqir^{\epsilon} WK sv. be kneeling
\overline{igl}^{\varepsilon}dv, make to kneel
igin^{\varepsilon} dv. kneel down
(il^{l\epsilon} pl \bar{i}ll\acute{a}^+ cb \bar{i}ll-n. horn
\bar{i}sir^{\epsilon} pl \bar{i}sa^{+}cb is- n. scar
isig^{\varepsilon} dv. get up early
Κ
kà and, that 20.2
k\bar{a}^+ dv. bail (water)
k\bar{a}ab^{\epsilon}/dv, offer, invite
k\bar{a}al^{\epsilon}/dv. count
k\bar{a}as^{\epsilon}/dv. cry out, weep; (cock) crow
kà'asıgɛ LF only; sv. not exist 19.5
k\bar{a}b\iota g^{\epsilon}/dv. ladle out (liquid)
k\bar{a}bir^{\epsilon/l} ger k\bar{a}biri^+ dv. call out asking for admission 28
kàd<sup>ɛ</sup> dv. drive away; kàd sàríyà dv. judge 19.8.1; agt sàríyà-kāt<sup>a</sup> n. judge NT
k\bar{a}^{\dagger}e^{+} ger k\bar{a}^{\dagger}al(m^{m} sv. not exist, not be, not have \underline{1}9.57.3
kāl<sup>|ε|</sup> pl kālá<sup>+</sup> cb kāl- n. number
kàlıgā+/ q. few
kàma q. every
Kàmb\dot{v}n. Twi language
Kàmb\dot{v}n pl Kàmb\dot{v}m\dot{v}s cb Kàmb\dot{v}n. Ashanti person
k an^{\epsilon} this, that demonstrative 15.4.2
k \tilde{a} \tilde{n} b^{\epsilon} qer k \tilde{a} \tilde{n} b \iota r^{\epsilon} dv. scorch
kāňdvg<sup>o</sup> adj. fat, tough (person)
k a n \bar{a}^{+/} this, that demonstrative 15.4.2
kàra sv. be few
kàrım<sup>m</sup> dv. read
k \grave{a} s \bar{\epsilon} t^{\mathsf{a}/n}. witness; testimony (Mooré k \grave{a} s \acute{e} t \grave{o} "proof, testimony"; probably ultimately
          ← French cachet; pl kàsētíba witnesses)
k\bar{\epsilon}^+ ipfv k\bar{\epsilon}t^{a/} imp k\hat{\epsilon}l^a dv. let, cause to ... 10.1 22.3
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kèɛkè+ pl kèɛkè-nàma cb kèɛkè- n. bicycle ← Hausa kèekè

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k \dot{\epsilon} \epsilon s^{\epsilon} dv. say farewell to
k \dot{\epsilon} l l g^{\epsilon} or k \dot{\epsilon} l l s^{\epsilon} dv. listen
k\bar{\epsilon}\check{n}^+ ipfv k\bar{\epsilon}n^{a/} imp k\grave{\epsilon}m^a ger k\bar{\epsilon}n^{n\epsilon/} dv. come 10.1; always with n\bar{a} 19.10; k\bar{\epsilon}n
          welcome! 28
k\bar{\epsilon}n^{\epsilon/} ipfy k\bar{\epsilon}n^{na/} imp k\hat{\epsilon}m^a (disambiguated with sà 19.10) dv. go; walk 10.1; agt
          k\bar{\epsilon}n^{\text{na}/} n. traveller
kérıfà or kárıfà ← Hausa karfèe; in telling time, e.g. kérıfà àtáň' three o'clock
k\bar{i}^{+} cb k\bar{i}- k\bar{a}- n. cereal, millet; k\hat{i}-dà'ar^{\epsilon} pl k\hat{i}-dà'ada^{+} n. purchased millet; k\bar{a}-
          w\bar{\epsilon}nn\iota r^{\epsilon} pl k\bar{a}-w\bar{\epsilon}nna^{+} cb k\bar{a}-w\epsilon n- n. corn
kià+ dv. cut
k\bar{l}dlg^{\epsilon}dv. cross over, meet; A-K\bar{l}dlgl B\bar{u}'es n. the constellation Orion
k\bar{\imath}'\iota b^{3}/n, soap; WK has instead the Mampruli loan k\bar{\imath}ib\dot{\upsilon}^{+} cb k\bar{\imath}ib-
k(inf) pl kin(+n) millet seed
k i \iota s^{\epsilon} dv. listen
k\bar{\iota}'\iota s^{\epsilon}/dv. denv
kìkàm<sup>mε</sup> pl kìkàma<sup>+</sup> n. fig
kìkàna kìnkàna pl kìkàmıs cb kìkàn- n. fig tree Ficus capensis (Haaf)
k i k \bar{l} r i g^{a/l} p l k i k \bar{l} r i s^{\epsilon/l} c b k i k \bar{l} r - n. "fairy" in local English; protective spiritual beings
          associated with a person (three for a man, four for a woman because of the
          dangers of childbirth.) Wild kikīrıs<sup>ɛ/</sup> hostile to man live in the bush: "Their feet
          are attached backwards to confuse trackers." WK; kìkīr-bε̂'εσε n. NT evil
          spirit, demon (KB just uses kikīrīga/)
kīlım<sup>m/</sup> dv. become, change into
kìm<sup>m</sup> dv. tend flock, herd; agt kònb-kīm<sup>na</sup> n. herdsman, shepherd
k\bar{l}r^{\varepsilon} ger k\hat{l}k(r)^{\delta}g^{\delta} k\bar{l}r(b^{\delta}) dv. hurry, tremble
kīsal ger kísbg agt kīsal kīsıdal sv. hate
kísùg<sup>3</sup> adj. hateful, taboo
kɔ̀+ dv. get broken, break (intransitive); resultative adj kɔ̀ɔlúŋɔ broken
k \geq b \log \bar{a} = q. one hundred; k \geq b \log i + t two hundred
k\bar{\jmath}bir^{\epsilon} pl k\bar{\jmath}ba^{+} cb k\dot{\jmath}b- n. bone
k\bar{\partial} dig^{\epsilon}/dv. slaughter (one animal) by cutting its throat
k\bar{\jmath}d\dot{\upsilon}^+ n. banana ← Twi kwadu
k \geq l^{\epsilon} dv, put something around the neck
k i l l b l r^{\epsilon} pl k i l l b a n. bottle
k\bar{\jmath}lig^a pl k\bar{\jmath}lis^\epsilon cb k\dot{\jmath}l- n. river; k\bar{\jmath}lugu-n n\acute{\jmath}-d\acute{a}ug^{\jmath} n. crayfish
k \partial l u g^{3} p l k \partial n^{n \epsilon} c b k \partial l u g - 8.2 n. sack, bag
k5m<sup>m/</sup> cb k5m- n. hunger
k\bar{j}hbug^{3} pl k\bar{j}hbug^{5} co k\bar{j}hbug^{5} (also used as cb of b\bar{b}n-k\bar{j}hbug^{5} animal) n. animal hair
          or human body hair; cf zūøbúg³; kòňb-kīm<sup>na</sup> pl kòňb-kīmmıb<sup>a</sup> n. shepherd,
          herdsman
k\bar{j}n'jkj^+ adv. alone, by oneself
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k \rangle \tilde{n} s^{\epsilon} dv, cough
kòňsim<sup>m</sup> dv. cough
k\grave{\flat}' \gt g^{\epsilon} dv. break (transitive or intransitive)
k \dot{\Sigma}^{5} \dot{\Sigma}^{\epsilon} dv. break several times
k\bar{j}t^{\epsilon/}dv. slaughter (several animals) by cutting their throats
kɔ̀tàa<sup>nε</sup> at all; emphatic 27.6
k\acute{o}t\grave{v}^{+} n. lawcourt \leftarrow English, probably via Hausa
kpà'a= pl kpà'a-nàma n. rich person
kpāadal pl kpāadíba cb kpāad- n. farmer, cultivator
kpà'am<sup>m</sup> n. riches
kpāaňm<sup>m/</sup> cb kpāň- n. grease, ointment; kpāň-sóň'ɔdìm<sup>m</sup> n. anointing oil
kp ak \bar{v}^{\epsilon} pl kp ak \bar{v} y a^+ cb kp ak \bar{v}^- n. tortoise
kpān<sup>nε</sup> pl kpāna<sup>+</sup> cb kpàn- n. spear
kpàňdır<sup>ɛ</sup> pl kpàňda<sup>+</sup> cb kpàňd- n. baboon
kp ar^{\epsilon} dv. lock
kpār-kĉoňg<sup>o</sup> pl kpār-kĉeňd<sup>e</sup> cb kpār-kéň- n. rag
kpá'vη<sup>5</sup> pl kpī'iní<sup>+</sup> cb kpā'- n. guinea fowl
kp\bar{\varepsilon}^+ adv. here
kpēsňm<sup>m</sup> pl kpèsňm-nàm<sup>a</sup> cb kpèsňm-n. elder
kp\bar{\epsilon}\epsilon\check{n}m^{ma/}sv. be older than
kpēlá<sup>+</sup> adv. here
kpèlim still; immediately after, preverb 19.7.2
kpèlim<sup>m</sup> dv. remain
kpèn reduced form of the preverb kpèlim
kp \grave{\epsilon} \breve{n}^{"} dv. enter
kp\bar{\epsilon}ndir^{\epsilon} pl kp\bar{\epsilon}nda^+ cb kp\bar{\epsilon}nda^- n. cheek
kp \grave{\epsilon} \check{n}' \varepsilon s^{\varepsilon} dv. make enter
kp\dot{\varepsilon}'\eta^{\varepsilon} dv. strengthen
kp\bar{\epsilon}o\bar{n}\eta^{3} n. seniority
kpì<sup>+</sup> dv. die; resultative adj kpìilύη<sup>5</sup> dead
kpi'a^+ pl kpi'as^{\epsilon} cb kpià'- n. neighbour
kpjà'+ dv. shape wood with axe etc
kpi'e^+dv. approach
kpi əm<sup>ma/</sup> sv. be strong, hard
kpiibig^a pl kpiibis^{\epsilon} cb kpiib- n. orphan
kp i i g^{\epsilon} dv. go out (fire)
kpī'ılím<sup>m</sup> dv. finish, come to an end
kpī im<sup>m/</sup> pl kpī imίs<sup>ε</sup> cb kpī im- n. dead person, corpse
kpiis^{\epsilon} dv. quench (fire)
kpīkpīn<sup>na/</sup> pl kpīkpīnníb<sup>a</sup> cb kpīkpín- n. merchant
kpī'on<sup>3</sup> pl kpī'əma<sup>+</sup> cb kpì'on- adj. strong, hard
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kpisinkpil^{l\epsilon} pl kpisinkpila^+ cb kpisinkpil- n. fist
kp i s \nu kp i l^{l\epsilon} n. fist
kp \dot{\nu} kp \dot{a} r^{\epsilon} pl kp \dot{\nu} kp \dot{a} ra^{+} n. palm tree fruit
kpùkpàrıga pl kpùkpàrıs<sup>ɛ</sup> cb kpùkpàr- n. palm tree (Borassus akeassii/aethiopum)
kpὑkpàuη<sup>3</sup> pl kpὑkpàma<sup>+</sup> cb kpὑkpàuη- n. arm, wing
kù not; negates irrealis mood 19.5
k\bar{v}^+ dv. kill (= Mooré k\dot{v})
k\bar{v}^+ dv. gather, threaten (of rain): Sāa k\dot{v} v\bar{a}. It looks like rain (= Mooré k\dot{v}\iota)
ku\bar{a}^+ dv. hoe, farm
k\bar{v}'al(\eta^a pl k\bar{v}'al(m)s^{\epsilon} k\bar{v}'al(s^{\epsilon} cb k\bar{v}'al(\eta - n. sleeveless traditional smock)
k\dot{u}d^{\epsilon}dv. work iron
k\dot{\nu}dig^{\varepsilon}dv. shrivel up, dry out, age
kūdım<sup>m</sup> n. the olden days; also for kūlım qv
k\bar{\nu}d\nu g^{3} k\bar{\nu}d\iota r^{\varepsilon} pl k\bar{\nu}da^{+} k\bar{\nu}t^{\varepsilon} cb k\dot{\nu}d- adj. old
k\bar{u}dvg^{3} pl k\bar{u}t^{\epsilon} (used as sg 15.2) cb k\dot{u}t- n. iron, nail; sg only in names 29.2
k\bar{u}gvr^{\epsilon} pl k\bar{u}g\dot{a}^+ cb k\bar{u}g- n. stone
k\bar{\nu}k^a pl k\bar{\nu}g\nu s^{\epsilon} cb k\dot{\nu}g- n. chair
kùk<sup>a</sup> n. ghost
kūka/ n. mahogany tree, Khaya senegalensis (Haaf); cf Hausa kuukàa
kùkòm<sup>mε</sup> pl kùkòma<sup>+</sup> cb kùkòm- n. leper
k \dot{\nu} k \bar{\nu} r^{\epsilon} pl k \dot{\nu} k \bar{\nu} \gamma a^+ cb k \dot{\nu} k \bar{\nu} r- n. voice
kùkpàrıga see kpùkpàrıga id
k\bar{u}l^{\epsilon} ger k\bar{u}l_{i}g^{a}/dv. return home; transitive marry (woman subject, man object)
kūlım always, post-subject particle 20.2.3
k\dot{\nu}li\eta^a pl k\dot{\nu}limis^{\epsilon} k\dot{\nu}lis^{\epsilon} cb k\dot{\nu}li\eta- n. door
kỳm<sup>m</sup> dv. cry, weep
k\bar{u}m^{\mathsf{m}} cb k\dot{u}m- n. death; k\dot{u}m-v\bar{v}'vg(r^{\varepsilon}) n. resurrection NT
kùndù'ar<sup>ɛ</sup> pl kùndù'ada<sup>+</sup> cb kùndu'à- n. barren woman
k \dot{\nu} n d \dot{\nu} \eta^a p l k \dot{\nu} n d \dot{\nu} m \iota s^{\epsilon} k \dot{\nu} n d \dot{\nu} n a^+ n. jackal, hyena
k\dot{u}'\theta m^{\rm m} cb \ k\underline{u}'\dot{a}-n. \ {\rm water}; \ k\underline{u}'\dot{a}-n\bar{u}ud^{\epsilon l} \ n. \ {\rm thirst}; \ k\underline{u}'\dot{a}-n\bar{w}iig^{a l} \ pl \ k\underline{u}'\dot{a}-n\bar{w}iis^{\epsilon l} \ n.
          current in a river
k \dot{u} \theta s^{\epsilon} dv. sell
k \dot{\nu} r k \bar{\nu} r^{\epsilon/} p l k \dot{\nu} r k \bar{\nu} v \dot{a}^+ c b k \dot{\nu} r k \bar{\nu} r- n. pig
Kūsáa= pl Kūsâasε cb Kūsá- n. Kusaasi person
Kūsâal<sup>ε</sup> n. Kusaal language
Kūsâvg<sup>o</sup> n. Kusaasi country
Kὑtān<sup>nε/</sup> pl Kὑtām<sup>ma/</sup> cb Kὑtān- n. member of WK's clan
Kỳtāun<sup>5/</sup> n. country of clan Kỳtām<sup>ma/</sup> Kutamba
kūυ or 20.2 21.2 ← Hausa koo
k\bar{u}ug^{a}/k\bar{u}ug^{b}/pl k\bar{u}us^{\epsilon}/cb k\bar{u}- n. mouse
kὺυ/ε dv. get drunk
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L
l\bar{a}^{+/} definite article 15.8.5
l\dot{a}^{\dagger} dv. laugh
lā'af' n. cowrie; pl līgıdı+ n. cowries, money; cb lìg- là'-; là'-bīəlíf' n. small coin
láafiya<sup>+</sup> n. health ← Arabic ?al-sa:fiya; replaced by laafe láafi in 1996 NT and KB
là'am together, preverb 19.7.2
là'am<sup>m</sup> dv. associate with; together with 22.2
là'as<sup>ε</sup> dv. gather together (transitive); Bà là'as tāaba They gathered together.
làbāar<sup>ε</sup> cb làbà- n. news ← Arabic ?al-?axba:r
làbι<sup>ya</sup> sv. be crouching, hiding behind something (cf Hausa laβèe "crouch behind
         something to eavesdrop" 14.1)
labul^{\varepsilon} dv, make crouch behind something
labin^{\varepsilon} dv, crouch behind something
labis^{\varepsilon} dv. walk stealthily
lābisa/ sv. be wide
lābisíga lābisír pl lābisá ch lābis adj. wide
lābιsίm<sup>m</sup> n. width
l\bar{a}k^{\epsilon}/dv. open (eye, book)
|\bar{a}|^{|a|} sv. be distant
l\bar{a}lig^{\epsilon}/dv. get to be far, make far
lāllί<sup>+</sup> adν. far off
l\bar{a}ll(\eta^a pl l\bar{a}ll(s^{\varepsilon} cb l\bar{a}ll(\eta - adj. distant))
lāllúg<sup>3</sup> pl lāllá<sup>+</sup> cb lāl- adj. distant
l\bar{a}m^{m\epsilon}/pl\ l\bar{a}m\dot{a}^+cb\ l\bar{a}m- n. gum (of tooth); l\bar{a}m-fɔ̂ɔgɔ pl l\bar{a}m-fɔ̂ɔdɛ adj. toothless
lamp5-dî'asa n. tax collector <u>14</u> ← French l'impôt
lān<sup>nε</sup> pl lāna<sup>+</sup> cb làn- n. testicle
làngáuη<sup>2</sup> pl làngáam<sup>mε</sup> làngāamá<sup>+</sup> cb làngāuη- n. crab (cf màngáuη<sup>2</sup> id)
lànnig<sup>a</sup> pl lànnis<sup>e</sup> cb lànnig-8,2 n. squirrel
l\bar{a}'\eta^{\epsilon}/dv. set alight
lāním<sup>m</sup> dv. wander around searching
lāuk<sup>3</sup> pl lā'ad<sup>ε</sup> cb là'- n. item of goods pl goods
l\dot{a}'\upsilon\eta^{\circ} pl l\dot{a}'ama^{+} n. fishing net
lèb<sup>e</sup> ger lēbig<sup>a</sup> dv. return (intrans)
l\grave{\epsilon}big^{\epsilon}dv. turn over; return
l\dot{\epsilon}bis^{\epsilon}dv. answer; send back; divorce (wife)
lèε but, VP particle 19.7.1
lèm again, preverb 19.7.2
lèm<sup>m</sup> ipfv lèmmıd<sup>a</sup> dv. sip, taste
l\bar{\varepsilon}r^{\varepsilon}dv. get ugly
li it, its (right-bound); li^+ it (left-bound) 15.4.1
lì+ ipfv lìta imp lìma ger līiga dv. fall
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l\bar{\iota}^+ dv, block up
lìa where is ...? 21.4.2
lidig^{\epsilon} dv. turn a shirt WK
lidig^{\varepsilon} dv, astonish, be amazed
li \ni b^{\varepsilon} dv, become
|i|^{2} = dv. approach, come near
lí am<sup>mε</sup> pl lī amá n. fruit of yellow plum tree
líana pl līamís^{\epsilon} cb līana n. axe
li^{\dagger} \ni \eta^{a} pl \ l\bar{l} \ni m(s^{\epsilon} n. yellow plum tree, Ximenia americana
lig^{\varepsilon} dv. patch
ligil^{\epsilon} dv. cover
ligin^{\varepsilon} dv, cover oneself
l\bar{\iota}\iota b\iota r^{\epsilon} pl l\bar{\iota}\iota ba^{+} cb l\iota\iota b- n. twin
l\bar{l}k^a pl l\bar{l}gls^{\epsilon} n. darkness
lìlāalín^a pl lìlāalís^{\epsilon} lìlāalímìs^{\epsilon} cb lìlāalín- n. swallow
lín it (subject of \dot{n}-clause); \bar{l} it (contrastive) 15.4.1
lin^{\epsilon} that demonstrative 15.4.2
lìná<sup>+</sup> that demonstrative 15.4.2
15^+ dv. tie
l\bar{b}^{\varepsilon} or l\bar{b}lg^{\varepsilon}/dv. throw stones at
l\bar{b}bid(g^a pl l\bar{b}bid(s^{\epsilon} n. \text{ water drawing vessel})
l\bar{b}dig^{a/}pl\ l\bar{b}dis^{\epsilon/}cb\ l\bar{b}d- n. corner; l\bar{b}dig(n\ k\acute{u}g-s\acute{v}g) cornerstone NT
l\bar{b}d\iota g^{\epsilon}/dv. untie
l \hat{b} k^{3} p l l \hat{b}' a d^{\epsilon} cb l \underline{u}' \hat{a} - n. quiver (for arrows)
lòmbò'ɔgo pl lòmbò'ɔd<sup>ε</sup> cb lòmbò'- n. garden ← Hausa làmbuu
l\bar{j}\eta^a pl l\bar{j}m\iota s^\epsilon cb l\dot{j}\eta- n. a kind of frog
15'\eta^{\epsilon}/dv. go across river, road etc
l\acute{z}r^{\epsilon} pl l\acute{z}y\grave{a}^{+} l\acute{z}zm^{ma} cb l\acute{z}r- n. car, lorry ← English
l \ni s^{\varepsilon} dv. dip, immerse in liquid
lù<sup>+</sup> ipfv lùt<sup>a</sup> imp lùm<sup>a</sup> dv. fall
l\bar{u}b^{\varepsilon} ger l\bar{u}b\iota r^{\varepsilon l} dv. buck, kick, struggle, throw off rider
l\bar{u}g^{\varepsilon}dv. swim
l\bar{\nu}g\nu r^{\epsilon} n. organ, member
М
m I, my (right-bound); ma me (left-bound) 15.4.1
mà+ cb mà- n. mother; pl mà náma (tone sic) mother's sisters/co-wives; mà-bīiga n.
          sibling with same mother; m\grave{a}-b\bar{l}|^a n. mother's younger sister or junior co-wife;
          m\grave{a}-kp\bar{\epsilon}\epsilon\check{n}m^m n. mother's elder sister or senior co-wife; m\grave{a}-p\bar{i}t^{a/} n. mother's
          younger sister
mà'+ dv. lie, deceive
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mà'aa SF mà'anɛ LF only; emphatic 27.6
m\grave{a}al^{\epsilon}dv, prepare, sacrifice; agt m\grave{a}al-m\bar{a}an^{na}n, sacrificer; priest NT; traditionally
                    just a worker who conducts the actual slaying for the tèn-dāan<sup>a</sup> earth-priest
m\bar{a}'al^{\epsilon}/dv, make cool, wet
māan<sup>nε</sup> pl māana<sup>+</sup> cb màan- n. sacrifice 11.1.2
má'an<sup>nε</sup> pl mā'aná<sup>+</sup> cb mā'an- n. okra
mā'asa/ sv. be cool, wet
m\bar{a}'asíg<sup>a</sup> m\bar{a}'asír<sup>\epsilon</sup> pl m\bar{a}'asá<sup>+</sup> cb m\bar{a}'as- adj. cool, wet
m\bar{a}'asíg\bar{a}^{+/} adv. coolly
mā'asím<sup>m</sup> n. coolness, wetness
m\bar{a}dig^{\varepsilon}/dv. overflow, abound
m\bar{a}'e^{+/}dv. cool down
m \grave{a} k^{\epsilon} dv, crumple up
m\bar{a}k^{\epsilon/} dv. measure, judge
m \stackrel{|}{a} l_i = m \stackrel{|}{a} l_
                      written malek in NT versions before 2016
m\grave{a}l\iota f^{\flat} pl m\grave{a}l\iota^{+} n. gun, rifle (ultimately \leftarrow Arabic)
màligim again; preverb 19.7.2
mālıs<sup>a/</sup> sv. be sweet, pleasant
m\bar{a}lisig^a m\bar{a}lisir^\epsilon pl m\bar{a}lisa^+ cb m\bar{a}lis- adj. sweet, pleasant
mālısím<sup>m</sup> n. sweetness
m\bar{a}lis(\eta^a pl m\bar{a}lis(s^\epsilon cb m\bar{a}lis(\eta - adj. sweet, pleasant))
mālvŋ² pl mālıma+ cb màlvŋ- n. sacrifice
mām I, me 15.4.1
mán I (as subject of n-clause); mān SF mánž LF I, me (contrastive) 15.4.1
màngáuη<sup>2</sup> pl màngáam<sup>mε</sup> màngāamá<sup>+</sup> cb màngāuη- n. crab (cf làngáuη<sup>2</sup> id)
màuk<sup>3</sup> pl mà'ad<sup>8</sup> adj. crumpled up
m\dot{\varepsilon}^+ dv, build
m \approx m \approx n^{\epsilon} too, also; emphatic 27.6; m \approx -k \approx n^{\epsilon} -soever 15.4.3
mēd<sup>ε</sup> dv. mash up
m \grave{\epsilon} \epsilon \eta^a pl \ m \grave{\epsilon} \epsilon m \iota s^{\epsilon} cb \ m \grave{\epsilon} \epsilon \eta^- n. turtle
mèligim<sup>m</sup> n. dew
m\bar{\epsilon}n^{a/} self 15.4.6
m\bar{\epsilon}\eta ir^{\epsilon} adj. genuine
m\bar{\epsilon}t^{\epsilon} cb m\bar{\epsilon}t- n. pl as sq pus
mī<sup>+</sup> ger mī ilím<sup>m</sup> sv. know; agt gbàn-mī id<sup>a/</sup> n. scribe ("book-knower") NT
mie<sup>+</sup> dv. squeeze(?) 30.1; uncertain meaning and tones
míif<sup>p</sup> pl mīiní<sup>+</sup> n. okra seed
mi'ig^{\varepsilon} dv. become sour
mì'isa sv. be sour
mì'isvg<sup>o</sup> pl mì'isa<sup>+</sup> cb mì'is- adj. sour
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m\bar{l}lg^{\epsilon}/dv. get dirty
mìmīilím<sup>m</sup> mìmīilúg<sup>o</sup> n. sweetness
mit see that it doesn't happen that... 19.5; always mid in KB
m\bar{5}^+ dv, strive, struggle
m\bar{j}d^{\epsilon}dv. swell
m\bar{\rho}dig^{\epsilon}/dv. be patient, endure
mɔlıf pl mɔlı+ cb mɔl- n. gazelle
m\bar{p}n^{\epsilon} dv. grind millet to make s\bar{a}^{\dagger}ab^{\circ} porridge
m\bar{\jmath}\eta^{\epsilon}/dv. refuse to lend
m\bar{z}_{2} pl m\bar{z}_{3} cb m\bar{z}_{5} n. grass, "bush"; m\bar{z}_{5} pil^{|\epsilon} n. grass thatch
Mɔ̀ɔgɔ n. Mossi realm; Mɔ̀ɔg Nâ'aba n. the Moro Naba, King of the Mossi
m\bar{z} = 1 dv. proclaim; agt m\bar{z} = 1 dv. proclaimer
Mòɔl^{\epsilon} n. Mooré language
M̄ɔrɛ/ pl Mɔ́ɔm<sup>ma</sup> cb M̄ɔr- n. Muslim
mɔra/ ger mɔrím sv. have, possess; mɔr nā bring 19.10
Mùa<sup>+</sup> pl Mòɔs<sup>ɛ</sup> cb Mò- n. Mossi person
mu'à dv. suck (of a baby)
mu\grave{a}k^a pl m\grave{v}'as^{\varepsilon} cb mu'\grave{a}- n. maggot
mὑ'ar<sup>ε</sup> pl mu'àa<sup>+</sup> mὑ'ada<sup>+</sup> cb mu'à- n. dam; reservoir
m\dot{v}'as<sup>\epsilon</sup> dv. give (to baby) to suck
mù'e+ dv. redden; catch fire/ignite; become intense, severe
mùi+ cb mùi- n. pl as sa rice
mùl^{\varepsilon} dv. itch
mùm<sup>m</sup> dv. bury
N
n clause nominaliser particle 24
n clause catenator particle <u>22.1</u>
n- personifier particle (allomorph used before an adjective) 15.6
n^{\epsilon} discontinuous-past marker 23.1.1
n^{\epsilon} n_{i}^{+} locative particle 16.3
nà positive irrealis mood marker 19.4
nā<sup>+/</sup> hither; VP-final particle 19.10
n\bar{a}^+ dv. join
náa reply to greetings invoking blessings 28
n\dot{a}'ab^a pl n\dot{a}'-n\dot{a}m^a cb n\dot{a}'-n. chief, king; n\dot{a}'-b\bar{i}ig^a n. prince/princess; n\dot{a}'-y\bar{i}r^{\epsilon}/n.
         palace; nà'-yī-kpέm<sup>ma</sup> n. pl king/chief's retainers
n\acute{a}af^{\circ} pl n\ddot{i}ig(\dot{t}+cb\ n\ddot{a}'-n.\ cow;\ n\ddot{a}'-l\acute{z}r^{\varepsilon} n. place in compound for tying up cows;
         n\bar{a}'-d\hat{a}\nu g^{3} pl n\bar{a}'-d\hat{a}ad^{\epsilon} cb n\bar{a}'-d\hat{a}-n. ox; n\bar{a}'-d\hat{a}-k\bar{u}-\theta d(r^{\epsilon}) n. ox for ploughing
nàam<sup>m</sup> dv. happen
nā'am<sup>m</sup> cb nà'am- n. chieftaincy, kingdom
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n\bar{a}an next, afterwards = n\bar{y}aan
nāan or nāanı then, in that case, being thus/there 23.1.2
n\dot{a}'an\bar{a}^{+/} adv. easily
n\dot{a}'as^{\varepsilon} dv, honour: aer n\dot{a}'asi^{\dagger} n, honour
Nàbida pl Nàbidiba ch Nàbid- n. Nabdema person
Nàbidug<sup>3</sup> n. Nabdema country
Nàbur<sup>E</sup> n. Nabit language
Nà'dàm<sup>ma</sup> n. clan name
Nà'dàun<sup>o</sup> n. place of clan Nadamba
n\dot{a}'-d\dot{a}w\bar{a}n^{n\epsilon}/n. pigeon KED (= d\dot{a}w\bar{a}n^{n\epsilon}/n)
n\bar{a}e^{+/}dv. finish
nàm still, yet; auxiliary tense particle 19.3.1
nàma pluraliser 8.4
n\bar{a}m\iota s^{\epsilon}/dv. persecute, suffer
n\bar{a}n^{\epsilon} dv, love, respect, appreciate
nà'-nēsınnēog<sup>5</sup>/ n. centipede WK
nānná<sup>+</sup> adv. now
nānná-nā<sup>+/</sup> adv. now
n\bar{a}nz\bar{u}'us^{\epsilon}/n, pepper tones uncertain
n\bar{a}\eta^a pl n\bar{a}m\iota s^{\epsilon} cb n\dot{a}\eta- n. scorpion
nāra/ ger nārím<sup>m</sup> sv. be obliged to; impersonal: to be necessary; with following
         purpose clause 25.1; negated: be obliged not to
nàrun<sup>3</sup> pl nàrıma<sup>+</sup> cb nàrun- adj. necessary
Nàsāal<sup>ɛ</sup> n. English/French language
Nàsāara<sup>+</sup> pl Nàsàa-nàm<sup>a</sup> Nàsàar-nàm<sup>a</sup> cb Nàsàa- Nàsàar- n. European person
          ← Arabic Nas<sup>r</sup>a:ra: "Christians"; Nàsàa-bīiga n. European child
nàyīig<sup>a</sup> pl nàyìig-nàm<sup>a</sup> nàyìis<sup>ε</sup> n. thief
nàyīigim<sup>m</sup> n. thievery
nà'-zòm<sup>mε</sup> n. locust
n\bar{\varepsilon} preposition: with 18; linking NPs and AdvPs: and 15.1
n\bar{\varepsilon} uncommon variant of y\bar{\varepsilon} that 25.2 (cf Mampruli ni id)
n\bar{\epsilon}^{+/} focus particle 27.1.2; aspectual marker 19.2.1
n\bar{\varepsilon}^{+/} meaningless particle after objects of wvv and w\bar{\varepsilon}n<sup>na/</sup> 18
n\bar{\varepsilon}^{+} this (pronoun) 15.4.2
n \hat{\epsilon} \epsilon l^{\epsilon} dv. reveal
nèem<sup>m</sup> adv. for free
n\bar{\varepsilon}\varepsilon m^{m/}dv, grind with a millstone
n\bar{\varepsilon}\varepsilon r^{\varepsilon/} n. millstone
n \dot{\epsilon} \varepsilon s^{\epsilon} dv, reveal
nὲεsιm<sup>m</sup> n. light
n\bar{\epsilon}m-n\hat{\epsilon}\epsilon r^{\epsilon} pl n\bar{\epsilon}m-n\epsilon yà<sup>+</sup> n. someone who grinds
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n\bar{\epsilon}n^{\text{na}}/qer n\bar{\epsilon}nn(m^{\text{m}}sv.\text{ envy})
n\bar{\varepsilon}'\eta\dot{a}^+ this (pronoun) 15.4.2
n \grave{\epsilon} o g^{\Im} n \grave{\epsilon} \epsilon r^{\epsilon} p l n \grave{\epsilon} \epsilon d^{\epsilon} n \grave{\epsilon} \gamma a^{+} c b n \grave{\epsilon} - a d j. empty
n\bar{\epsilon}sinn\bar{\epsilon}og^{3/} pl n\bar{\epsilon}sinn\bar{\epsilon}\epsilon d^{\epsilon/} cb n\bar{\epsilon}sinn\epsilon- n. envious person WK; others: centipede
nfá! Well done! 21.4.4
n\bar{\iota}^{+} locative particle 16.3 see n^{\epsilon}
n^{+} dv. rain
nīda/ pl nīdıba/ cb nīn- n. person; nīn-sâala pl nīn-sáalìba cb nīn-sâal- n. human being;
                                  nīnpūnān<sup>na/</sup> pl nīnpūnānníb<sup>a</sup> cb nīnpūnán- n. disrespectful person; nīn-
                                  sábilis<sup>E</sup> n. Africans
nie^+ dv. appear, reveal
n\bar{i}f^{0/} pl n\bar{i}n(+) cb n\bar{i}n- n\bar{i}f- n. eye; n\bar{i}f-gbáu\eta^{0} n. eyelid; n\bar{i}f-sóba n. miser; n\bar{i}f-nyáuk^{0} adj.
                                  one-eyed 15.8.1.3; n\bar{i}n-d\hat{a}a^{=} pl n\bar{i}n-d\hat{a}as^{\epsilon} cb n\bar{i}n-d\hat{a}-n. face; n\bar{i}n-q\acute{o}t\grave{\iota}n<sup>a</sup> n.
                                  mirror pl n\bar{l} = n\bar
                                  evebrow; nīn-tâ'am<sup>m</sup> n. tear(s); nīn-múa<sup>+</sup> n. concentration ("eve-redness");
                                  \dot{m} n\bar{l}n(m\dot{u})e n\bar{e} ... I'm concentrating on ... (KB "zealous for ...")
n(in^a pl n \overline{i} im(s^{\epsilon} n i) s^{\epsilon} cb n \overline{i} in - n. bird
n\bar{l}m^{n\epsilon} n\bar{l}m^{n\epsilon} pl n\bar{l}m\acute{a}^+ cb n\bar{l}m- n. meat
n\bar{n}-báalìga n. pity; n\bar{n}-bâal-z\bar{z}-z^{\epsilon} n. pity; O z \to t \cdot \bar{o} n\bar{n}-báalìg. He has pity on him.
n\bar{l}_{l} n\bar{l} n\bar{l}_{l} n\bar{l} n\bar{l}_{l} n\bar{l}_{l} n\bar{l}_{l} n\bar{l}_{l} n\bar{l}_{l} 
                                  tāas<sup>ɛ</sup> cb nìn-tà- n. co-wife; husband's brother's wife (Ghanaian English: "rival");
                                  nin-qb\bar{i}\eta^{5/} pl nin-qb\bar{i}n\dot{a}^{+} cb nin-qb\bar{i}\eta- n. body (plural often used as singular);
                                  n\bar{n}-p\hat{v}vd^{\epsilon} n. pl as sa pus
n\bar{l}_{a} n\bar{l
n i \eta^{\epsilon} dv. do
n lā that is ... 21.4.1
nnāas q. four, in counting
nníi q. eight, in counting
nnū q. five, in counting
n ňwà this is ...; n ňwà nā this here is ... 21.4.1
n\bar{2} dv. tread
n\bar{b}^{\varepsilon} dv, get fat
n\bar{b} \log^{\varepsilon} dv. grow (e.g. child, plant)
n5bir^{\epsilon} pl n5ba^{+} cb n5b^{-} n. leg, foot; n5b^{-} bíla n. toe; n5b^{-} yíun adj. one-legged
                                  15.8.1.3; n\bar{b}-i\tilde{n}'a^+ n. toenail; n\bar{b}-p\acute{v}mpàu\eta^{\bar{o}} n. foot
n\bar{j}k^{\epsilon}/dv. pick up, take up
n \ni \eta^{\epsilon} agt n \ni \eta \iota d^{a} (irregularly Pattern L) sv. love (family, spiritual); irregularly has
                                  the m<sup>a</sup>-imperative form nɔnım<sup>a</sup> 10.2
n\bar{b}\eta^{5}/cb n\bar{b}\eta- n. poverty; n\bar{b}\eta-dâana n. poor person
nàŋılím<sup>m</sup> n. love
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n\bar{5} exactly, just; emphatic 27.6
n\bar{z} = n\bar{z}^{\epsilon} pl n\bar{z} = n\bar{z}^{\epsilon} n. mouth; command, message, opinion; n\bar{z} = n\bar{z}^{\epsilon} n. "linguist",
         a councillor who speaks on a chief's behalf on all official occasions (not only
         in the region of the old Mossi-Dagomba states 1.1: "linguist" in Ghana typically
         refers to an Akan chief's herald and spokesman, the okyeame); Winà'am nó-
         d\hat{i}'əs<sup>a</sup> ("God's linguist") prophet NT/KB; n\bar{j}-l\hat{j}or^{\epsilon} n. fasting ("mouth-tying", as
         nō-gbánà<sup>+</sup> n. lip
n\bar{2} r^{\epsilon} n\bar{2} r (m^{\rm m} {\rm times} 15.5.2.4)
npòe q. seven, in counting
ntán' q. three, in counting
n\bar{u}^+ dv. drink
n\bar{u}a^{+/} pl n\bar{\nu} > s^{\epsilon} cb n\bar{\nu} n. hen; n\bar{\nu} dâug n. cock; n\bar{\nu} n. (specifically female)
         hen; Nō-nyâ'an-né-ò-Bīis the Pleiades
n\bar{u}l_{i}q^{\epsilon l}dv. make drink
n\bar{u}l(s^{\epsilon}) dv. make drink
n\hat{u}'ug^{\circ} pl n\hat{u}'us^{\varepsilon} cb n\bar{u}'- n. hand, arm; n\bar{u}'-bíla pl n\bar{u}'-bíbìs n. finger; n\bar{u}'-dâvg^{\circ}
         n. thumb; n\bar{u}'-\gamma(u\eta^{3} adj. one-armed 15.8.1.3; n\bar{u}'-i\check{n}'a^{+} pl n\bar{u}'-\hat{\epsilon}\check{n}'\epsilon s^{\epsilon}
         cb n\bar{u}'-\epsilon n'- n. fingernail; n\bar{u}'-w\hat{\epsilon} n'\epsilon d^a n. mediator
ňwà<sup>+</sup> this <u>15.8</u>.5
\tilde{n}w\bar{a}^{\dagger}dv. smash, break up
ňwāana pl ňwāamιsε cb ňwàan- n. monkey
\check{n}w\bar{a}d_{i}g^{a}/pl \check{n}w\bar{a}d_{i}s^{\epsilon}/cb \check{n}w\bar{a}d_{i}-n. moon, month; \check{n}w\bar{a}d_{i}-b(l^{a}pl) \check{n}w\bar{a}d_{i}-b(l^{b})s^{\epsilon} n. star;
         Nw\bar{a}d-d\acute{a}r^{\epsilon} n. Venus
ňwà'e+ dv. cut wood
n w \bar{a} e^{+/} dv. strike, break
nwāe q. nine, in counting
ňwām<sup>mε</sup> ňwān<sup>nε</sup> pl ňwāma<sup>+</sup> ňwāna<sup>+</sup> cb ňwàm- ňwàn- n. calabash
\check{N}w\bar{a}mp\bar{u}r_{i}g^{a} pl \check{N}w\bar{a}mp\bar{u}r_{i}s^{\epsilon} cb \check{N}w\bar{a}mp\hat{u}r_{i} n. Mamprussi person
Ňwāmpūr∪<sup>ε</sup>/ n. Mampruli language
Ňwāmpūrug<sup>5</sup>/ n. Mamprussi country
n w \dot{\epsilon}^{+} dv. beat; n w \dot{\epsilon}^{+} X n \dot{u}^{-} u g make an agreement with X; n w \dot{\epsilon}^{+} \dot{u} y \dot{z}^{-} z g boast
\check{n}w\bar{i}ig^{a/} pl \check{n}w\bar{i}is^{\epsilon/} cb \check{n}w\bar{i}- n. rope; \check{n}w\bar{i}-ték<sup>a</sup> pl \check{n}w\bar{i}-ték\dubardu cb \check{n}w\bar{i}-ték- n. rope-puller;
         n = n \cdot n
\tilde{n}w\tilde{i}iq^{\epsilon}/dv. make a rope
ny\bar{a}'al^{\epsilon}dv. leave behind
nyāan next, afterwards; post-subject particle 20.2.3
nya'an^a pl nya'as^\epsilon nya'am(s^\epsilon cb nya'an-adj. female (animal)
ňyá'aŋa behind, postposition 16.6; East 29.3; ňyà'an-dòlla ňyà'an-dòlle pl ňyà'an-
         dòlla<sup>+</sup> nyà'an-dòllıba cb nyà'an-dòl- n. disciple NT; tones unexpected, Pattern L
ny\bar{a}'ar^{\epsilon} pl ny\bar{a}'a^{+} cb ny\bar{a}'- n. root
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ny\bar{a}e^{n\varepsilon/} adv. in the light, brightly, clearly
ňyālúη<sup>3</sup> pl ňyālımá<sup>+</sup> cb ňyāluη- adj. wonderful
ňyàn<sup>nε</sup> n. shame; Ò dì ňyán. He's ashamed.
ny\bar{a}\eta^{\epsilon}/dv. overcome 22.2
nyàuk^3 pl nyà'ad^{\epsilon} adj. only (eye) 15.8.1.3
n v \bar{\epsilon}^+ ipfv n v \bar{\epsilon} t^{a/} imp n v \hat{\epsilon} m^a dv, see, find; n v \bar{\epsilon} l \hat{\epsilon} a \hat{\epsilon} t v \hat{\epsilon} dv get well
ňyēε, ňyēε tí habitually, auxiliary tense marker 19.3.2
n y \bar{\epsilon} \epsilon^{\epsilon} pl n y \bar{\epsilon} da^+ cb n y \bar{\epsilon} - n. next-younger sibling
nyὲεs<sup>a</sup> sv. be self-confident
ňyὲεsιm<sup>m</sup> n. self-confidence
nγεες(η<sup>a</sup> pl nγεες(s<sup>ε</sup> cb nγεες(η- adj. self-confident
ny \geq \epsilon s (n\bar{a}^{+}) a dv. self-confidently
ηνί' q. two, in counting
n v \bar{n}^{n\epsilon} pl n v \bar{n} a^+ cb n v \bar{n}. tooth
nyīríf<sup>o</sup> pl nyīríf<sup>+</sup> n. a kind of edible seed, egusi: Colocynthis citrullus (Haaf)
n = n \cdot n intestines
n \sqrt{2} a^{3} n. chest
n = n \cdot n, sympathy: n \cdot n \cdot n n \cdot n. She sympathises with him.
ny\bar{j} = r^{\epsilon} pl \, ny\bar{
                           ny\bar{2}'2sε/ n. smoke
nyûeb q. six, in counting

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0
ò [σ] he, she, his, her (right-bound); ° LF [σ] him, her (left-bound) 15.4.1
5n he, she (subject of n-clause); 5n^{\epsilon} he, she (contrastive) 15.4.1
\partial n^{\epsilon} this, that (animate sg demonstrative) 15.4.2
)\check{n}b^{\varepsilon} ger \check{n}b\iota r^{\varepsilon} dv. chew
\partial \eta \bar{a}^{+/} this, that (animate sq demonstrative) 15.4.2
\bar{\partial} S^{\epsilon} dv. warm oneself; \dot{O} \partial S^{\epsilon} dn\bar{\epsilon} bugum l\bar{a}. She's warming herself at the fire.
pà' earlier today, tense particle 19.3.1
pà'al<sup>ɛ</sup> dv. teach, inform; agt pā'an<sup>na</sup> pl pā'annıb<sup>a</sup> cb pà'an- n. teacher
p\dot{a}'al^{\varepsilon} dv. put on top of something
pāalíga páalle pl pāalíse pāalá+ cb pāal- adj. new
pāalím<sup>m</sup> adv. recently
p\bar{a}al\dot{v}^+ adv. openly
pàaňl\acute{u}n<sup>2</sup> pl pàaňl\acute{u}m\acute{l}s<sup>\epsilon</sup> n. spider's web
pàam<sup>m</sup> dv. receive a gift
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p \stackrel{\circ}{a} a s^{\epsilon} dv, add up to, amount to
p\bar{a}e^{+/}dv, reach
p \grave{a} k^{\epsilon} dv. surprise
p \grave{a} k^{\epsilon} dv. take off from the top
pāmm SF pāmnέ LF q. much, a lot
pàň'alım<sup>m</sup> dv. dedicate
p \stackrel{\circ}{a} \stackrel{\circ}{n} s_i g^{\epsilon} dv. lack
pàna pl pàans cb pàn- n. power
pà' tì perhaps; post-subject particle 20.2.3
p \dot{\epsilon} b \iota s^{\epsilon} dv. blow (of wind)
p \hat{\epsilon} b i s i m^m p \hat{\epsilon} b i s v g^0 n. wind
p \dot{\epsilon}' \epsilon l^{\epsilon} dv. fill; resultative adj p \dot{\epsilon}' \epsilon l \dot{\nu} \eta^{\circ} full
pεεlυg<sup>o</sup> in zū-pέεlὑg<sup>o</sup> bald 15.8.1.3; cf pie "go bald" (Leviticus 13:40), Mooré pẽoogè
p\dot{\varepsilon}'\varepsilon s^{\varepsilon} dv. add up to, amount to
p \dot{\epsilon} l l q^{\epsilon} dv, whiten, go white
p \dot{\epsilon} l \iota s^{\epsilon} dv. sharpen
pὲn<sup>nε</sup> n. vagina
p\bar{\varepsilon}'\eta^{\varepsilon}/dv. borrow; knock over WK
p \dot{\epsilon} o g^{\circ} p l p \dot{\epsilon} \epsilon d^{\epsilon} c b p \dot{\epsilon} - n. basket
p\bar{\varepsilon}'og^{3} pl p\bar{\varepsilon}'\varepsilon s^{\varepsilon} cb p\bar{\varepsilon}' - n. sheep; p\bar{\varepsilon}' - sá'a = n. ewe lamb
p\bar{\varepsilon}sig^{\varepsilon}/dv. sacrifice
pi\bar{a}^+ dv. dig up
pjāň'a dv. speak, praise; ger pjàuňk<sup>o</sup> n. word pl pjàň'ad<sup>ɛ</sup> language cb pjàň'-;
          piàň'-zùna<sup>+</sup> n. foreign language
pibig^{\varepsilon} dv. uncover
pibil^{\varepsilon} dv. cover up
p\bar{l}bln^{n\epsilon} pl p\bar{l}bln^{a+} cb p\bar{l}bln- n. covering 11.1.2
pid^{\varepsilon} dv. put on (hat, shoes, rings); clothing item as object; with indirect object put
          (hat, shoes, rings) on someone else
p\bar{l}d^{\varepsilon}dv. get bloated
pidig^{\varepsilon} dv. take off (hat, shoes, rings)
p\bar{l}e^{+/}dv. wash (part of one's own body)
p i \ni b^{\epsilon} dv. blow (e.g. flute)
pìəlg^a pìəl^{l\epsilon} pl pìəla^+ pìəl(s^{\epsilon} cb p)əl- adj. white
pìəlım<sup>m</sup> n. whiteness
p i \ni s^{\epsilon} dv, fool someone
p\bar{i} = s^{\epsilon}/dv. wash
pīiga+ q. ten
pīim<sup>m/</sup> pl pīmá<sup>+</sup> cb pīm- n. arrow
píinf<sup>o</sup> pl pīiní<sup>+</sup> cb pīin- n. genet
pīinı+ cb pìin- pl as sg (?) n. gift
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pil^{\epsilon} dv. cover
pilig^{\varepsilon} dv. uncover
p\bar{i}\tilde{n}'il^{\epsilon}dv. begin
p\bar{l}p\bar{l}rlg^{a/} pl p\bar{l}p\bar{l}rls^{\epsilon/} cb p\bar{l}p\acute{l}r- n. desert
p\bar{i}si^+q. twenty
pītύ<sup>+</sup> pl pītίb<sup>a</sup> cb pīt- n. younger sibling of the same sex
p\bar{5}^+ dv. swear
pòňd<sup>ε</sup> dv. crouch down
p\bar{j}\tilde{n}'jl^{\epsilon}/dv. cause to rot
pòň'ɔ/ım<sup>m</sup> dv. cripple, get crippled
p \ni \check{n}' \ni r^{\varepsilon} pl p \ni \check{n} da^{+} cb p \ni \check{n}' - n. cripple
pòňr<sup>a</sup> ger pōňrvb<sup>o</sup> sv. be near
pòɔda sv. be few, small
p \ni 2d ig^a p \ni 2d ir^{\epsilon} p l p \ni 2d a^+ cb p \ni 2d - adj. few, small
pòɔdιm<sup>m</sup> n. fewness
p\bar{\jmath} \supset q^{\Im/} pl p\bar{\jmath} \supset d^{E/} p\bar{\jmath} t^{E/} cb p\bar{\jmath}- n. field, farm
p)'g dv. diminish, belittle
p\bar{z} = r^{\epsilon/n}. "slogan" of a clan, part of its traditional genealogy WK; \leftarrow p\bar{z}^+ swear (cf.
          Farefare pɔtɛ, pɔrɛ "nom de famille, nom par lequel on jure", also "oath")
p\bar{v} not: negates indicative mood 19.5
p\bar{v}^+ dv. divide
pu'\bar{a}^a pl p\bar{v}'ab^a cb pu'a-n. woman, wife; Odi pu'\bar{a}. He's married a wife; pu'a-d\bar{\iota}\iota r^{\epsilon} n.
          marriage; p\underline{u}'\dot{a}-\bar{\epsilon}l(\eta^a n. \text{ fiancée}; p\underline{u}'\dot{a}-g\bar{\imath}nn(g^a, p\underline{u}'\dot{a}-g\bar{\jmath}))
          pu'à-nyá'ana pl pu'à-nyá'as^{\varepsilon} n. old woman; pu'à-pāala n. bride; pu'à-sād(r^{\varepsilon}) n.
          young woman; pu'à-sāň'am<sup>na</sup> n. adulterer; pu'à-yùa<sup>+</sup> n. daughter
pu\bar{a}k^a pl p\bar{v}'as^{\epsilon} adj. female (human only)
pὺ'alım<sup>m</sup> dv. cook
pὑ'alım<sup>m</sup> dv. harm, damage; resultative adj pὑ'alúŋ<sup>o</sup> damaged
ρὐ'alım<sup>m</sup> n. femininity
p\dot{v}'al(m^m pl p\dot{v}'al(m)\dot{s}^{\epsilon} cb p\dot{v}'al(m-n) female sex organs
p\dot{v}d^{\epsilon}dv. name
p\bar{\nu}d\iota g^{\epsilon}/d\nu. divide, share out
pùgudiba pl pùgud-nàma cb pùgud- n. father's sister
p \dot{\nu} k \dot{\gamma} \gamma n r^{\epsilon} p l p \dot{\nu} k \dot{\gamma} n \gamma a^{+} c b p \dot{\nu} k \dot{\gamma} n. widow
pūkpāada/ pl pūkpāadíba cb irreg pūkpá- n. farmer
pùlima<sup>+</sup> n. a species of grass, Imperata cylindrica (Haaf)
pùmpɔ̃ɔgɔ n. housefly
pùn previously, already; preverb 19.7.2
p\bar{u}n'e^{+/}dv. rot
p\bar{u}s_{1}g^{a}/pl p\bar{u}s_{1}s^{\epsilon}/cb p\bar{u}s_{2}-n. tamarind
p\bar{u}sir^{\epsilon}/pl p\bar{u}sa^+ n. tamarind fruit
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p\bar{\nu}t^{\epsilon} n. pl as sq contents of stomach WK
pūum<sup>m/</sup> cb pūum- n. flowers
p\bar{\nu}\nu g^a cb p\dot{\nu}- n. inside, belly; Pu'\bar{a} l\bar{a} m\acute{z}r p\bar{\nu}\nu g The woman is pregnant; p\bar{\nu}\nu g\nu-n^{\epsilon/2}
         inside 16.6; p\dot{v}-p\dot{l}=l(m^m n. holiness; p\dot{v}-t\dot{\epsilon}\check{n}'\epsilon r^\epsilon pl p\dot{v}-t\dot{\epsilon}\check{n}da^+ cb p\dot{v}-t\dot{\epsilon}\check{n}'-n.
         mind
p\bar{v}v^{\epsilon}/n. stomach
p\dot{v}'vs^{\epsilon}dv. greet, worship, thank; ger\ p\dot{v}'vs\iota m^{\mathsf{m}}\ n. worship; ger\ p\dot{v}'vsvg^{\mathsf{o}}\ n. thanks;
         ρὺ'υsug dôɔg<sup>o</sup> NT temple
S
sà yesterday, tense particle 19.3.1
sà hence, ago, VP-final particle 19.10
s\bar{a}^{\dagger} dv. be in distress
sàa tomorrow, tense particle 19.3.1
s\bar{a}a^= pl s\bar{a}as^\epsilon cb s\dot{a}- n. rain; sky; as subject of i\bar{a}nk^{\epsilon/} "leap": lightning; s\bar{a}a dind\bar{\epsilon}og^{5/}
         rainbow ("rain chameleon"); sāa zúg<sup>3</sup> n. sky 16.6
sā'ab<sup>o</sup> cb sà'- n. millet porridge, "TZ", the staple food of the Kusaasi
s\bar{a}afl^+ (?tones) n. lock, key \leftarrow Twi saf\tilde{e}
sàala pl sàalb^a cb sàal- n. human (perhaps \leftarrow "hairless" cf b\bar{v}n-k\acute{o}b\dot{v}\dot{o}); sàal-b\bar{i}iga
         pl sàal-bīis^{\epsilon} n. human being
s \stackrel{\circ}{a} a l (\eta \bar{a}^{+}) a dv. smoothly
sàam<sup>ma</sup> pl sàam-nàm<sup>a</sup> cb sàam- n. father; sàam-kpēεňm<sup>m</sup> n. father's elder brother;
         sàam-pīta/ pl sàam-pītíba cb sàam-pīt- n. father's younger brother
sāam<sup>m/</sup> dv. mash, crumble
s\bar{a}'an^{\epsilon} in the presence of, in the opinion of; postposition 16.6
sāan<sup>a/</sup> pl sáam<sup>ma</sup> cb sāan- n. guest, stranger
sáanním<sup>m</sup> n. strangerhood
sàb\bar{\epsilon}og<sup>3</sup> pl sàb\bar{\epsilon}ed<sup>\epsilon</sup> cb sàb\hat{\epsilon}- n. wind, storm
s\bar{a}b\iota l(g^a s\bar{a}b\iota l^{l\epsilon}pl s\bar{a}b\iota l(s^{\epsilon} s\bar{a}b\iota l\dot{a}^+cb s\bar{a}b\iota l-adj. black
sàbùa<sup>+</sup> pl sàbùes<sup>ɛ</sup> cb sàbuà- n. lover, girlfriend
Sà'dàbòɔg<sup>o</sup> n. place of the clan Sarabose
Sà'dàbùa<sup>+</sup> pl Sà'dàbùes<sup>ɛ</sup> Sà'dàbùeb<sup>a</sup> n. clan name
sādıgím since, because 24.2
sāeň or sāeň pl sāaňb cb sàň n. blacksmith
sākárùg<sup>o</sup> pl sākárìd<sup>ɛ</sup> cb sākár- n. fox
sàlıbır<sup>ɛ</sup> n. bridle
sālıma+ cb sàlım- n. pl as sq gold; sàlım-kùesa n. gold merchant
s\bar{a}m^{n\epsilon}/pl s\bar{a}m\dot{a}^+cb s\bar{a}m-n. debt; s\bar{a}m-kp\hat{a}^+as^a n. household servant
sāmán<sup>nɛ</sup> pl sāmánà<sup>+</sup> cb sāmán- n. open space in front of a zàka compound;
         S\bar{a}m\acute{a}n-p\acute{l}e^{\epsilon} n. traditional New Year ceremony
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sàn'am<sup>m</sup> dv. spoil, get spoiled, get broken; destroy
s\bar{a}ng\acute{v}nn\grave{i}r^{\epsilon} pl s\bar{a}ng\acute{v}nn\grave{a}^{+} cb s\bar{a}ng\acute{v}n- n. millipede
s\bar{a}\eta\dot{a}^+ pl s\bar{a}ns\dot{a}^+ cb s\bar{a}n- n. time 29.7 8.3.2; s\bar{a}n-k\acute{a}n° adv. then; when?
         sān-sî'ə-n lā adv. at one time, once ... 20.2.1
sàn-gbàun<sup>o</sup> n. sky, heaven; cf sāa=
sāpál<sup>lε</sup> n. Harmattan part of the dry season ύνη<sup>nε</sup>
sāpı+ ideo. straight
sārīgá<sup>+</sup> n. prison ← Hausa sarkàa "chain"
sariya^+ or seriya^+ n. law \leftarrow Arabic [ari: a; sariya-kat^a n. judge NT
s\bar{a}vg^{\circ} pl s\bar{a}ad^{\varepsilon}/cb s\bar{a}- n. broom, brush
sàvk<sup>3</sup> pl sà'ad<sup>E</sup> n. mote of dust
sáυη<sup>5</sup> n. hospitality
s \dot{\epsilon}^+ ip f v s \dot{\epsilon} \epsilon d^a dv. transplant
s\bar{\epsilon}o\tilde{n}g^{\circ} n. rainy season
si^+ dv. skin, flav
s\bar{r}a^{+} some, any (sg) 15.4.3
s\bar{i}a^+ pl s\bar{i} \rightarrow s\epsilon cb sia^+ n. waist; sia^-l\bar{j} \rightarrow d(\eta^a n. belt ("waist-tying-thing"); <math>sia^-n\bar{i}f^{3/2}
         n. kidney
si\bar{a}'al^{\epsilon}dv. get to be enough
sjà'ar<sup>ɛ</sup> pl sjà'a<sup>+</sup> cb sjà'- n. forest (WK), wilderness
sjàk<sup>ε</sup> dv. agree (cf Mooré sàke, Buli siagi id)
siāk<sup>ε/</sup> dv. suffice (cf Mooré sékè, Buli chagi id)
s\bar{\imath}b\iota g^{a/} pl s\bar{\imath}b\iota^+ cb s\bar{\imath}b- n. a kind of termite
sìd truly, post-subject particle 20.2.3
sìda<sup>+</sup> pl sìd- n. pl as sg truth
sīda pl sīdıba cb sìd- n. husband; sìd-bīla n. husband's younger brother;
         sìd-kpēεňm<sup>m</sup> n. husband's elder brother; sìd-puāk<sup>a</sup> n. husband's sister
s\bar{i}e^{+/}dv. descend, be humbled
sīəba+ some(ones), any (ones) 15.4.3
s\vec{l} \ni l^a something, anything 15.4.3
sī'əm<sup>m</sup> somehow, anyhow 15.4.3 16.7
sig^{\varepsilon} dv. descend
s\bar{\iota}g\iota r^{\epsilon}/n. guardian spirit, typically but not invariably the w\bar{\iota}n^{n\epsilon}/n of an ancestor 29.2
s\bar{i}gis^{\epsilon}dv. lower
s\bar{i}gis(r^{\epsilon}pls\bar{i}gisa^{+}n. stopping-place)
s\bar{\iota}\iota g^a pl s\bar{\iota}\iota s^{\epsilon} cb s\hat{\iota}- n. shade, personal spirit (KED); used in NT for "spirit"; in
         traditional belief rather Lebenskraft (Haaf) "vital energy", closely associated
         with a person's tutelary k i k \bar{l} r i s^{\epsilon/l} (qv); S i - s i \eta^{\circ} n. Holy Spirit NT; cf Buli chíik
s\bar{\iota}\iota g^a pl s\bar{\iota}\iota s^\epsilon n. African birch, Anogeissus leiocarpa; cf Buli s\bar{\iota}ik
sìilım<sup>m</sup> dv. cite proverbs
sìilí\eta^a sìilí\eta^b pl sìilís^{\epsilon} sìilímès sìilímà cb sìilíg- n. proverb
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s\bar{i}i\check{n}d^{\epsilon/} n. honey
s\bar{\imath}i\check{n}f^{0/} s\bar{\imath}i\check{n}g^{a/} pl s\bar{\imath}i\check{n}s^{\epsilon/} cb s\bar{\imath}\check{n}- n. bee
s\bar{\iota}'\iota s^{\epsilon}/dv, touch
s\bar{l}llns\hat{l}llg^{\circ} pl s\bar{l}llns\hat{l}ls^{\varepsilon} n. ghost
sīlınsîuňg<sup>o</sup> pl sīlınsîiňd<sup>ɛ</sup> n. spider
sìlog^{\circ} pl sìn^{n\epsilon} sìlis^{\epsilon} cb sìlightarrow n. hawk
sim^m dv. sink in a liquid
Sìmīiga pl Sìmīis<sup>ɛ</sup> cb Sìmì- n. Fulbe person, Fulani
Sìmīil<sup>ɛ</sup> n. Fulfulde language
Sìmīug<sup>o</sup> n. place of the Fulbe
sīn<sup>na/</sup> ger sīnním<sup>m</sup> sv. be silent
s\bar{l}ns\acute{a}a\check{n}^{=}n. a kind of tiny ant
sin^a pl siins^{\epsilon} cb sin-n. a kind of very big pot
s\bar{\iota}'\eta^{\epsilon}/dv. begin
sīsíbìga pl sīsíbìs cb sīsíb- n. neem tree Azadirachta indica (Haaf)
s\bar{\imath}s\acute{\imath}b\grave{\imath}r^{\epsilon} pl s\bar{\imath}s\acute{\imath}b\grave{a}^{+} n. fruit of neem tree
sìsì'əm<sup>m</sup> n. wind, storm
sìsòvg\bar{\nu}-n^{\epsilon/} between, postposition 16.6 KB svvgvn
si^{\mu}u\eta^{\nu} pl si^{\mu}im(s^{\epsilon}cb\ si^{\mu}u\eta^{\mu}-n. a kind of large dish
s\bar{5}^{++} some(one), any(one), animate sq 15.4.3
sɔ̄ba dummy head pronoun, animate sg 15.4.7
s\bar{b}b^{\epsilon}dv. go/make dark; usually write; s\bar{b}bir^{\epsilon}n. piece of writing
s\bar{b}lg^{\epsilon}/dv. blacken
sɔ̄en̈<sup>+</sup> or sɔ̄en̄a pl sɔ̄ɔn̆ba cb sòn̄- n. witch
sógjàa n. soldier ← English
รวิไขทุ<sup>ว/</sup> pl รวิไเmá<sup>+</sup> n. story
s5ň+ dv. rub
s\bar{j}\bar{n}'e^{ya/}sv. be better than; agt s\bar{j}\bar{n}' > d^{a/}pl s\bar{j}\bar{n}' > b^{a/}cb s\bar{j}\bar{n}' > d
sɔ̄nnır<sup>ε</sup> pl sɔ̄nna<sup>+</sup> cb sɔ̀n- n. courtyard dividing wall
s\bar{\jmath}ns^{\epsilon} ger s\dot{\jmath}nsig^{a} dv. converse, talk with
sɔ̄ɔnĕgɔ n. witchcraft
sɔɔnre pl sɔnya+ cb sòn- n. liver
sòs<sup>ɛ</sup> ger sɔ̄sɪga dv. ask; agt sòsa n. beggar
s\dot{v}^+ dv. take a bath
su'āa dv. do secretly, hide
suāk<sup>a/</sup> n. hiding place
s\bar{u}e\check{n}^{+/}dv. anoint
s\bar{v}'e^{ya/}sv. own; ger s\bar{v}'vlim^m n. property, country, realm
s\bar{u}g\nu r^{\xi}/d\nu. show forbearance, be patient with; s\bar{u}g\nu r\dot{v}^+ n. forbearance
sờm<sup>m</sup> n. goodness; well
sùm<sup>ma</sup> sv. be good
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sùmbūgvsím<sup>m</sup> n. peace
s\bar{u}mm\iota r^{\varepsilon} pl s\bar{u}mma^{+} cb s\dot{u}m- n. groundnuts; s\bar{u}m-d\dot{u}gvd\dot{a}^{+} n. cooked groundnuts
sùn^{n\epsilon} ger sùnn\iota r^{\epsilon} or sùnn\iota q^{\epsilon} dv. bow one's head; agt s\bar{u}n^{na} n. ("someone who
          goes about with bowed head") deep thinker, close observer WK
s\bar{u}\bar{n}'e^{+/}dv, become better than
s\bar{u}nf^{5/} s\bar{u}unr^{\epsilon/} pl s\bar{u}nva^+ cb s\bar{u}n- n. heart; s\bar{u}n-kpî'on n. boldness 15.7.1;
          s\bar{u}\check{n}-má'asìm<sup>m</sup> n. joy (\check{M} sūňf má'e yā. "My heart has cooled"= I'm joyful);
          s\bar{u}\check{n}-málism^m cb s\bar{u}\check{n}-máls- n. joy; s\bar{u}\check{n}-p\hat{\epsilon}\varepsilon n^{n\varepsilon} n. anger (\check{M} s\bar{u}\check{n}f p\hat{\epsilon}lig n\bar{\epsilon}. "My
          heart is whitened"= I'm angry); s\bar{u}\check{n}-s\hat{a}\check{n}'v\eta^{2} n. sorrow (\dot{M} s\bar{u}\check{n}f s\hat{a}\check{n}'am n\bar{\epsilon}.
          "My heart is spoilt" = I'm sad)
s \dot{v} \eta^{\epsilon} dv. help
sờη<sup>5</sup> sờm<sup>mε</sup> pl sờma<sup>+</sup> cb sờη- adj. good
s \dot{\nu} n \bar{a}^{+/} a dv. well, much
s\dot{u}'\theta\eta^a pl s\bar{u}'\theta m(s^{\epsilon} cb s\bar{u}'\theta\eta - n. rabbit
s\bar{u}e^{\epsilon/p} pl suevá<sup>+</sup> cb sua- n. road; permission in suer bé, mor suer 25.1
sù'es n. yesterday
s\dot{u}'\theta s^{\epsilon} dv. trick
sùr<sup>a</sup> sv. have one's head bowed
sὺsòm<sup>mε</sup> n. grasshopper
Sūtáanà+ n. Satan
s\bar{\nu}\nu q^{\epsilon}/d\nu, wither (leaves) WK
s\dot{v}'vg^a s\dot{v}'vg^b pl s\dot{v}'vs^{\epsilon} cb s\dot{v}'-n. knife
Т
t\bar{a}a^{-} t\bar{a}as^{\epsilon} fellow- as second part of compound 12.2.1.4
tāaba+ tāab each other 15.4.5
tā'adır<sup>ɛ</sup> pl tā'ada<sup>+</sup> cb tà'ad- n. sandal
tàal<sup>lɛ</sup> pl tàala<sup>+</sup> cb tàal- n. fault, sin
tá'am<sup>mε</sup> pl tā'amá<sup>+</sup> n. shea tree fruit
tá'aη<sup>a</sup> pl tā'amís<sup>ε</sup> cb tā'aη- n. shea butter tree Butyrospermum parkii (Haaf)
t\bar{a}'as^{\epsilon}/dv, help someone to walk; in greetings 28
t \grave{a} b^{\epsilon} dv. get stuck to
tàbiya sv. be stuck to
t \grave{a} b \iota g^{\epsilon} dv. get unstuck from
t \grave{a} b \iota l^{\epsilon} dv. stick to (transitive)
t \stackrel{\circ}{a} d \iota q^{\epsilon} n. become weak
tādım<sup>m/</sup> pl tàdım-nàm<sup>a</sup> cb tàdım- n. weak person
t \grave{a} d \iota m (s^{\epsilon} n. \text{ weakness})
Tàlιn<sup>nε</sup> n. Talni language
Tàlin^a pl Tàlis^{\epsilon} cb Tàlin- n. Tallensi person
tàm<sup>m</sup> ipfv tàmmıd<sup>a</sup> dv. forget
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tàmpìinga n. rock
tàmpūa<sup>+</sup> pl tàmpɔ̄ɔs^{\epsilon} cb tàmpɔ̄- n. housefly 8.3.2
t amp \bar{v} v^{\epsilon} cb t amp \dot{v}- n. ashpit, rubbish tip
tān<sup>nε</sup> pl tāna<sup>+</sup> cb tàn- n. earth: tàn-mɛ̃εda n. builder
tāňp<sup>o</sup> n. war; tàňp-sɔ̄ba n. warrior
t a m s^{\epsilon} ger t a m s v g^{\epsilon} dv, shout; Winnig t a m s i d n \bar{\epsilon}. The sun is shining.
tāra/ ger tārím<sup>m</sup> sv. have; more typical of Toende Kusaal; NT/KB always mɔ̄ra/
t \approx n \cdot n \cdot n palm of hand
t at a l^{|\epsilon|} n. palm of hand
tāuň<sup>+/</sup> pl tāňp<sup>a/</sup> cb tāuň- tāňp- n. sibling of opposite sex
t \dot{\epsilon} b^{\epsilon} ger t \bar{\epsilon} b_i g^a dv. carry in both hands
t\bar{\epsilon}b\iota g^{\epsilon}/dv. get heavy
t\bar{\varepsilon}b\iota s^{a/}sv. be heavy
t\bar{\epsilon}bisig^a t\bar{\epsilon}bisir^{\epsilon} pl t\bar{\epsilon}bisa^+ cb t\bar{\epsilon}bis- adj. heavy
t\bar{\epsilon}b\iota s(m^m n. \text{ heaviness})
téɛbùl<sup>ɛ</sup> pl téɛbùl-nàm<sup>a</sup> n. table ← English
t\bar{\epsilon}\epsilon g^{\epsilon}/d\nu. drag, draw; t\bar{\epsilon}\epsilon g \times t\dot{\nu}b\nu r punish X
t\dot{\epsilon}'\epsilon g^a pl t\dot{\epsilon}'\epsilon s^\epsilon cb t\dot{\epsilon}'- n. baobab Adansonia digitata (Haaf)
t\bar{\varepsilon}k^{\varepsilon}/dv. pull
tὲňb<sup>ε</sup> ger tὲňbυg<sup>3</sup> dv. tremble, struggle
t \dot{\epsilon} \ddot{n}' \varepsilon s^{\varepsilon} dv. remind
t\bar{\epsilon}\check{n}'\epsilon s^{\epsilon}/dv. think; qer t\bar{\epsilon}\check{n}'\epsilon s\acute{a}^+ n. thought
tèňra ger tēňribo sv. remember
t\bar{\epsilon}\eta^a pl t\bar{\epsilon}\epsilon\check{n}s^{\epsilon} cb t\dot{\epsilon}\eta- n. land; t\dot{\epsilon}\eta-bīig n. native; t\dot{\epsilon}\eta-dāan n. traditional earth-
            priest; t \dot{\epsilon} \eta - d \bar{\nu}' a d \iota g^a n. native land; t \dot{\epsilon} \eta - g b \dot{a} u \eta^{\circ} n. earth, land; t \dot{\epsilon} \eta - p \bar{\nu} v g^{\circ} / p l
            t \dot{\epsilon} \eta - p \bar{\nu} \nu d^{\epsilon/} cb t \dot{\epsilon} \eta - p \bar{\nu} - n. village, town; t \dot{\epsilon} \eta - z \dot{\nu} \eta^{\circ} p l t \dot{\epsilon} \eta - z \dot{\nu} \nu \eta^{\varepsilon} n. foreign country;
            t \grave{\epsilon} \eta - s \bar{\nu} k^a n. centre
t\bar{\epsilon}\eta\iota-n^{\epsilon}l or t\bar{\epsilon}\eta(r^{\epsilon}) downward; as postposition under 16.6
t \grave{\epsilon} o g^{\circ} p l \ t \grave{\epsilon} \epsilon d^{\varepsilon} n. nest
t\dot{\epsilon}'og^{\circ} pl t\dot{\epsilon}'\epsilon d^{\varepsilon} n. baobab fruit
tì we, our (right-bound); ti + us (left-bound) 15.4.1
tì preverb conveying completion or purpose 19.7.2
tia^{\dagger}al^{\epsilon}dv. come next
ti\grave{a}k^{\varepsilon}dv. change
ti' \ni b^{\epsilon} dv. prepare, get ready; heal in this sense perhaps influenced by
            Arabic t<sup>r</sup>ibb "medicinal art"; tī əba n. healer
tieň dv. inform WK (KED remember)
tìeň+ dv. stretch out
tìə\eta^a pl tìəm\iota s^{\epsilon} cb tìə\eta- n. beard; tìə\eta-g\bar{\upsilon}\upsilon r^{\epsilon} n. chin
t\bar{t}g^{\varepsilon} dv, become sated, have too much/many; ger t\bar{t}g\iota r^{\varepsilon}/n, glut
triya/ ger trib<sup>5</sup> sv. be leaning (object)
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tìlig^a pl tìlig^\epsilon cb tì- n. tree; tì-dālig^0 pl tì-dālig^0 cb tì-dà- n. bow (for arrows)
t\bar{r}'il^{\epsilon}/dv. lean something
t lim^m cb t line n, medicine; t line k \bar{\nu} \nu d lim^m n, poison (killing-medicine); t line k \bar{\nu} \nu d lim^m n.
         "black medicine" (a particular traditional remedy); tì-vōnním<sup>m</sup> n. oral
         medication
ti'in^{\varepsilon} dv, begin to lean
t\bar{l}ids<sup>ε</sup> n. necessity ← Hausa tiilàs 25.1
tiliq^{\varepsilon} dv. survive, be saved
tīnám<sup>a</sup> we, us (contrastive); tīnámì we (subject of n-clause) 15.4.1
tīntɔ̃nríga pl tīntɔ̃nrísɛ cb tīntɔ́nr- n. mole (animal)
tìpa pl tìp-nàma cb tìp- n. healer (see tī əba id)
tīrâana pl tīrâan-nàma ch tīrâan-n. neighbour, peer
tīrâannìm<sup>m</sup> n. neighbourliness
tírigà ideo. for gīna short
tìs<sup>E</sup> ipfv tìsid<sup>a</sup> tìt<sup>a</sup> agt tìs<sup>a</sup> dv. give; also tì before bound pronouns: tì f gave you
tītā'al<sup>lɛ</sup> n. proud person
tītā'alım<sup>m</sup> n. pride
tītā'am<sup>m</sup> n. multitude
tītā'vg<sup>5</sup> tītā'ar<sup>£</sup> pl tītāda<sup>+</sup> cb tītá'- adj. big, great
tò OK <u>21.4.4</u> (= Hausa tôo)
t \partial d^{\epsilon} dv. give to the poor, share
t̄ɔea/ sv. be bitter, difficult
t5klàe<sup>+</sup> n. torch ← English "torchlight"
tólìb ideo.
t\bar{b}l(s^{\epsilon}) dv. do next, advance, carry on
táltíli ideo. for w\bar{b}^{3/} tall
t \ni \check{n}^+ dv. shoot
t \grave{\partial} \check{n}' \supset s^{\epsilon} dv. hunt
t\bar{z} g^{3} pl t\bar{z} d^{\epsilon} cb t\hat{z} adj. bitter, difficult
tɔ̄ɔm<sup>m/</sup> dv. depart, disappear
t\dot{\partial}' \partial t\bar{\partial}^{+} adv. straight away
tuà+ dv. grind in a mortar; tuà-bīla n. pestle
tu'à dv. speak, plead in court
t\dot{v}'al^{\varepsilon}dv. condemn in court
t\dot{v}'as^{\epsilon}dv. talk
t\dot{v}bvr^{\varepsilon} pl t\dot{v}ba^{+} cb t\dot{v}b- n. ear; t\dot{v}b-kpir^{\varepsilon} n. half of jaw; t\dot{v}b-y\bar{\iota}u\eta^{5/2} adj. one-eared
          15.8.1.3
t\bar{\nu}I^{|a|}sv. be hot
tù l_i q^{\epsilon} dv. invert
t\bar{\nu}l_{i}q^{\epsilon}/dv. heat up
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t\dot{v}m^{m} dv, work; qer t\bar{v}vm^{m\epsilon} n, deed pl t\bar{v}vma^{+} n, deeds; work cb t\dot{v}vm-; t\dot{v}vm-b\bar{\epsilon}'\epsilon d^{\epsilon}
           n. bad deeds; t\dot{v}vm-b\bar{\varepsilon}'\varepsilon d-d(m^a n. sinners NT; agt <math>t\dot{v}m-t\bar{v}m^{na} n. worker
tòm<sup>m</sup> qer tìtōmıs<sup>ɛ</sup> dv. send; compare Hausa àikaa "send", aikàtaa "work"
tūň'e sv. be able 22.2
t\bar{u}ed\iota r^{\epsilon} pl t\bar{u}eda^{+} cb t\dot{u}ed- n. mortar
tùen<sup>nɛ</sup> in front; as postposition 16.6; West (KB yà tùena) 29.3; tùen-gāt<sup>a</sup> n. leader
Tùen<sup>nε</sup> n. Toende, western part of Kusaasiland
Tùennir^{\varepsilon} n. Toende dialect of Kusaal
t\bar{u}sir^{\epsilon}/n. thousand 15.5.2.1
từ tulle n. upside-down thing, cf tù lige
t\bar{\upsilon}\upsilon l(g\bar{a}^{+/}adv. hotly
tūvlúg<sup>o</sup> pl tūvlá<sup>+</sup> cb tūvl- adj. hot
t\bar{v}'vs^{\epsilon}/dv, meet
U
\dot{u}dvg^{\circ} pl \dot{u}t^{\varepsilon} cb \dot{u}d- n. (piece of) chaff
\bar{u}gvs^{\epsilon}/dv, bring up a child
\dot{v}k^{\varepsilon} dv. vomit
\bar{u}k^{\varepsilon} dv. bloat
òm<sup>m</sup> dv. close eyes
\bar{u}r_{i}g^{\epsilon}/dv. scrape
ύνη<sup>ηε</sup> n. dry season
vābι<sup>ya/</sup> ger vāp<sup>ɔ/</sup> KT vābιr<sup>ε/</sup> WK sv. be lying prone
v\bar{a}b\iota l^{\epsilon}/dv, make lie prone
v \grave{a} b \iota n^{\epsilon} dv. lie prone
v \grave{a} e^+ dv. gather up
v\bar{a}v\bar{n}g^{2} pl v\bar{a}a\bar{n}d^{\epsilon} cb v\bar{a}\bar{n}- n. leaf
v\bar{\varepsilon}^{+} dv. lead
v\bar{\varepsilon}'\varepsilon g^{\varepsilon}/dv. drag
vèn<sup>na</sup> or vèňl<sup>la</sup> sv. be beautiful
vèňllig<sup>a</sup> pl vèňllis<sup>ɛ</sup> vèňlla<sup>+</sup> cb vèňl- adi. beautiful
v \dot{\epsilon} n n i g^a v \dot{\epsilon} n n i r^{\epsilon} p l v \dot{\epsilon} n n i s^{\epsilon} v \dot{\epsilon} n n a^+ c b v \dot{\epsilon} n- a d j. beautiful
νὲnnιm<sup>m</sup> n. beauty
vi^+ dv. uproot
v\bar{i}k^{\epsilon}/dv. uproot
v\bar{l}ug^{5/} pl v\bar{l}ld^{\epsilon/} cb v\bar{l}l n. owl
v\bar{b}^{\varepsilon}/dv, thrash (tones uncertain)
v\bar{u}^+ ger v\bar{u}ug^{5/} dv. make a noise; v\bar{u}ud^{\epsilon/} n. noise
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v\bar{\nu}e^{a/}sv, be alive
v\bar{\nu}l^{\epsilon}dv. swallow
νὸΙιηνὰμἤΙ<sup>Ιε</sup> n. mason wasp
v\bar{v}m^{\text{m/}}cb\ v\bar{v}m- n. life; v\bar{v}m-p\hat{a}al^{\text{l}\epsilon} n. new life
vúeη<sup>a</sup> pl vūemís<sup>ε</sup> n. red kapok Bombax buonopozense (Haaf)
νύθ<sup>ε</sup> pl νūάa<sup>=</sup> cb νūθ- n. fruit of red kapok
v\bar{v}r^{\epsilon}/pl\ v\bar{v}y\acute{a}^+\ cb\ v\bar{v}r- adj. alive
v\bar{u}rig^{\epsilon}/dv, shift along, move over (tones uncertain)
v\bar{\upsilon}'\upsilon q^{\varepsilon}/dv. come, make alive
v\bar{v}'vs^{\epsilon}/dv, breathe, rest
งง'งร์เm<sup>m</sup> n. resting
W
w\bar{a}^{\dagger}dv. dance
w\bar{a}ad^{\varepsilon/} n. cold weather
wáaf<sup>o</sup> pl wīigí+ cb wā'- n. snake
w\bar{a}al^{\epsilon}/dv. sow, scatter seed
wā'alím<sup>m</sup> n. length
w\bar{a}'am^{a/}sv. be long, tall
wàblg^a wàblg^\epsilon pl wàblg^\epsilon wàblg^\epsilon wàblg^\epsilon wàblg^\epsilon n. lame person
wàbilim<sup>m</sup> dv. make, go lame
w\bar{a}bvg^{5/} pl w\bar{a}b\iota d^{\epsilon/} cb w\bar{a}b- n. elephant
w\bar{a}d\iota r^{\varepsilon /} pl w\bar{a}d\acute{a}^+ cb w\bar{a}d- n. law (\leftarrow English "order" via Hausa) plural as sg: law
          wād-tísa n. lawgiver NT
wà'eya sv. be travelling
w\bar{a}lig^a pl \ w\bar{a}lis^\epsilon \ w\bar{a}li^+ \ (tone \ sic) \ cb \ w\dot{a}l- n. a kind of gazelle
wànım<sup>m</sup> dv. waste away
w \dot{a} \sin w \dot{a}^{|\epsilon} n. a parasitic gall on trees, called "mistletoe" in local English
wàuŋ² pl wàna+ cb wàuŋ- adj. wasted, thin
wὲεda see wìιda
w\bar{\varepsilon}\varepsilon^{|\varepsilon|}dv, be left unsold (KED) but see w\bar{\varepsilon}oq^{5/2}
w\bar{\varepsilon}l^{\varepsilon}dv. bear fruit
w\bar{\epsilon}l^{|\epsilon|} pl w\bar{\epsilon}l\dot{a}^+ cb w\bar{\epsilon}l- n. fruit
w\bar{\epsilon}l\dot{a}^+ or w\bar{a}l\dot{a}^+ how? 16.7; nìn w\bar{\epsilon}l\dot{a} n/kà how can ...? 22.2.1
wēn<sup>na/</sup> sv. resemble; in KB wēn nē appears as nwεnε; ger wēnním<sup>m</sup>
w\bar{\epsilon}nn\iota^{\epsilon} adj. resembling (Pattern A, specifically confirmed with WK)
w \dot{\epsilon} o g^{3} n. deep bush
w\bar{\epsilon}og^{5/} pl w\bar{\epsilon}\epsilon d^{\epsilon/} n. cheap thing sold in abundance WK
wi\bar{a}k^{\epsilon}/dv. hatch (from an egg)
widig^{\epsilon} dv. scatter
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wi \partial f^{\circ} pl \ wi dl^{+} cb \ wi dl^{-} n. horse; wi dl^{-} J r^{\epsilon l} n. place for tying up horses in a compound;
         w i d - d \bar{a} v g^{\circ} n. stallion; w i d - \bar{n} y \dot{a}^{\circ} a \eta^{\circ} n. mare; w i d - z \bar{v} v r^{\varepsilon} n. horsetail
wìida or wèeda pl wìiba ch wìid- n. hunter
Wìida pl Wìid-nàma ch Wìid-n, member of the clan Wiid
Wildug<sup>3</sup> n. place of the clan Wild
w\bar{i}iq^{a/}n, whistle
wìιm<sup>m</sup> n. sickness, disease ("worse than bāň'as<sup>ε</sup>" WK)
wik^{\epsilon} ipfy wiid<sup>a</sup> dv. fetch water 10.1
wil^{|\varepsilon|} pl wila+ cb wil- n. branch
w\bar{l}ls\dot{v}\eta^{3} pl w\bar{l}lm(s^{\epsilon}cb) w\bar{l}ls\dot{v}\eta- n. a kind of snail 8.3.2
wím ideo. for zìň'a+ red
wīn<sup>nε/</sup> pl wīná<sup>+</sup> cb wīn- n. God; god; spiritual double, genius; destiny; wīn-tɔ̂ɔgɔ̂
         n. misfortune
Wínà'am<sup>m</sup> n. God 14.1
wìnnlg^a cb wìn- n. sun; talent; wìn-l\overline{l}ir^{\epsilon} n. sunset; wìn-k)><math>nr^{\epsilon} n. sunset
wìug<sup>3</sup> wìir<sup>\epsilon</sup> pl wìya<sup>+</sup> wìid<sup>\epsilon</sup> cb wì- adj. red
w\bar{b}k^{3}/w\bar{a}'ar^{\epsilon}/pl w\dot{a}'a^{+} w\bar{a}'ad^{\epsilon}/cb w\bar{b}k- w\bar{a}'- adi. long, tall
wòm<sup>m</sup> dv. hear; understand (a language); smell
w\bar{v}sa^+q. all
w\bar{\upsilon}\upsilon^+q. all
พบิบ like, resembling <u>18</u>
w\bar{\upsilon}'\upsilon a^{\varepsilon}/dv, get wet
w\bar{\upsilon}'\upsilon^{|\varepsilon|}dv. make wet
Υ
yà you, your pl (right-bound); ya<sup>+</sup> you pl (left-bound) 15.4.1
ya you pl, left-bound subject after imperative 7.2.1 15.4.1 21.3
yā<sup>+</sup> independent-perfective particle 19.6.2.1
y\dot{a}' if, when 23
yáa adv. whither?
yáab<sup>a</sup> pl yāa-nám<sup>a</sup> cb yāa- n. grandparent, ancestor; yāa-dáu<sup>+</sup> n. grandfather;
         yāa-pu'áa n. grandmother
v\dot{a}'ab^{\varepsilon} dv. mould clav
y\bar{a}'ad^{\epsilon} cb y\dot{a}'-n. clay
y\dot{a}'al^{\epsilon}dv. hang up; make perch (bird)
y\dot{a}'an^{\epsilon} dv. perch (of a bird)
Yàan<sup>nε</sup> n. Yansi language (apparently Mooré now)
yáa ní<sup>+</sup> adv. where?
yáaη<sup>a</sup> pl irr yáas<sup>ε</sup> (consistently without nasalisation) cb yāaη- n. grandchild,
         descendant 29.1
Yàa\eta^a pl Yàam^{ma} Yàamıs^\epsilon Yàas^\epsilon cb Yàa\eta- n. Yansi person
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v\bar{a}ar^{\epsilon}/dv, scatter
yàarım<sup>m</sup> cb yàar- n. salt
v\dot{a}'as^a v\dot{a}'as^{\epsilon} again 22.2
v\bar{a}'as^{\epsilon}/dv, open repeatedly
y \stackrel{.}{a} dd\bar{a} or y \stackrel{.}{a} d\bar{a} n. faith, trust 19.8.1 \leftarrow Hausa y \stackrel{.}{a} rda; probably \leftarrow Arabic y \stackrel{.}{a} rd^3a;
          v add \bar{a} - n(n) r^{\epsilon} n. belief
y\bar{a}dig^{\epsilon}/dv. scatter; agt y\bar{a}t^{a}/irreg. agt: participant in a housebuilding ritual
v\bar{a}'e^{+/}dv. widen, open (mouth)
y \grave{a} k^{\epsilon} dv. unhang, unhook
yàlım<sup>ma</sup> sv. be wide
yālım<sup>m/</sup> pl yālım-nám<sup>a</sup> n. worthless person
y\bar{a}lls \dot{v} \eta^{3} pl y\bar{a}llm (s^{\epsilon} cb y\bar{a}lls \dot{v} \eta - n. quail 8.3.2)
yàlun<sup>o</sup> pl yàlıma<sup>+</sup> cb yàlun- adj. wide
yām<sup>mε</sup> pl yàma<sup>+</sup> cb yàm- n. hay WK
yām<sup>m/</sup> cb yām- n. gall; gall bladder; common sense. WK yā'am<sup>m/</sup>; probably originally
          two distinct words 3.2.2
yàmmıga yàmmuga yàmmuga pl yàmmıse ch yàm- n. slave
yānám<sup>a</sup> you pl (contrastive); yānámì you pl (subject of n-clause) 15.4.1
Yārıga/ pl Yārıs<sup>ɛ</sup>/ cb Yār- n. Yarsi person; also called Kantonsi; said to have been
          originally of Manding/Dyula origin
Y\bar{a}t^{\epsilon} n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)
y a u g^{3} p l y a a d^{\epsilon} n. grave, tomb
y\bar{\varepsilon} that 25; be about to ... 19.3.4
y \dot{\epsilon}^+ dv. dress oneself; resultative adj y \dot{\epsilon} \epsilon l \dot{\nu} \eta^{3} worn (e.g. of a shirt)
v \dot{\epsilon} \epsilon q^{\epsilon} dv. undress oneself
y \dot{\epsilon} \epsilon l^{\epsilon} dv. dress someone
y\bar{\varepsilon}\varepsilon^{\varepsilon}/dv. betray a secret
y \dot{\epsilon} l^{\epsilon} ip f v \dot{\epsilon} t^{a} ger \dot{\epsilon} l v g^{\circ} dv. say, tell
y\bar{\epsilon}l^{|\epsilon|} pl y\bar{\epsilon}l\dot{a}^+ (as postposition: about 16.6) cb y\bar{\epsilon}l^- n. matter, affair; y\bar{\epsilon}l^- ménìr^{\epsilon}
          n. truth; y\bar{\epsilon}l-nár\dot{\nu}\eta^{3} n. necessity; y\bar{\epsilon}l-pák\dot{\epsilon}r^{\epsilon} n. disaster; y\bar{\epsilon}l-s\dot{\nu}'ad\dot{\epsilon}r^{\epsilon}
          n. confidential matter; y\bar{\epsilon}l-s\acute{\nu}m^{m\epsilon} n. blessing 15.8.1.1
y\bar{\epsilon}\eta im^{m} dv. oscillate (like waves)
v \dot{\epsilon} o g^{\circ} pl v \dot{\epsilon} \epsilon d^{\epsilon} n. bird's crop; person displaced from family (KED)
yέοη q. one, in counting
y\bar{i}^+ ipfv y\bar{i}t^{a/} imp y\bar{i}m^a dv. go, come out
yidig^{\epsilon} dv. go astray
y\bar{l}dlg^{\epsilon}dv. untie
yì = r^{\epsilon} n.  jaw
yīigá<sup>+</sup> q. firstly; former 15.1; yīig-sób<sup>a</sup> n. first person 15.4.7
v_i^{iis} = \sqrt{v_i^{iis}} dv. make go/come out, extract
y\bar{t}mm(r^{\epsilon} pl y\bar{t}mma^{+} cb y\bar{t}m-adj. solitary, lone 15.5.2.3
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yῑmmύ<sup>+</sup> q. adv. straight away, at once
y\bar{\imath}nni^+q, one
yìn<sup>a</sup> adv. outside
y\bar{i}r^{\xi/} pl y\bar{a}^{+/} cb y\bar{i}- n. house; y\bar{i}-dâana n. householder; y\bar{i}-sóba pl y\bar{i}-sób-nàma n.
          householder; yī-díma n. members of the household; yī-pɔ́nrògɔ pl yī-pɔ́nrà+ n.
          neighbouring house; v\bar{i}-sígidìr^{\epsilon} n. lodging-house; vin^{n\epsilon} at home pl váan^{\epsilon}
v\bar{i}s^{\epsilon} dv. make go/come out, extract
v\bar{\iota}un^{5/} pl v\bar{\iota}n\dot{a}^{+} adj. single- 15.8.1.3
y<sup>2</sup> dv. close; resultative adj y<sup>2</sup> closed
y\bar{\jmath}^{+n}vv. pay; qer y\bar{\jmath} j d^{\epsilon}/n. pay
y\bar{\partial}l\iota s^{\epsilon}/dv. untie
yɔ̄lısím<sup>m</sup> n. freedom
\sqrt{2}\log^{2}/pl\sqrt{2}n^{n\epsilon}/cb\sqrt{2}l- n. sack, moneybag; (like Hausa jàkaa) £100, ¢200 (cedis)
y \dot{\sigma}' \sigma g^{\epsilon} dv. open
v \ni r^{\varepsilon} pl \ v \ni va^{+} cb \ v \ni - n. soldier ant
yuà + dv. bleed; also fornicate WK
y\dot{v}'ad\iota r^{\varepsilon} pl y\dot{v}'ada^{+} n. rafter
y\dot{u}big^a pl y\dot{u}bis^{\epsilon} cb y\dot{u}b- n. small bottle-like pot
yūgvdır<sup>ɛ</sup> pl yūgvda<sup>+</sup> cb yùgvd- n. hedgehog
yūgύm<sup>mε</sup> yūgύm<sup>nε</sup> pl yūgumá<sup>+</sup> cb yūgum- n. camel
y\dot{u}lig^{\epsilon} dv. swing (transitive)
y\bar{u}\bar{n}'e^{+/}dv. set alight
y\bar{u}'e^{\epsilon} pl yu\bar{a}da^+ cb y\dot{u}'e^{\epsilon} n. penis
y\dot{u}ug^{\varepsilon}dv. get to be a long time, delay; T\dot{\iota} y\dot{u}ug n\bar{\varepsilon} t\bar{a}aba. It's long since we met.
yùul^{\epsilon} dv. swing (intransitive)
y\bar{\upsilon}'\upsilon m^{m/}dv. sing; agt\ y\bar{\upsilon}\upsilon m-y\hat{\upsilon}'\upsilon m^{na}\ pl\ y\bar{\upsilon}\upsilon m-y\hat{\upsilon}'\upsilon mn\wr b^a\ n. singer
yύ'υm<sup>nε</sup> pl yū'υmá<sup>+</sup> cb yū'υm- or yūυm- n. song
yὑυm<sup>mε</sup> pl yὑma<sup>+</sup> cb yὑυm- n. year; yὑυm-pāalíg<sup>a</sup> n. new year
y\bar{v}'vn then, next 20.2.3
y\dot{v}'υη<sup>2</sup> pl y\bar{v}'υm(s^{\epsilon} cb y\bar{v}'υη- n. night
y\bar{v}'vr^{\epsilon}/pl\ y\bar{v}d\acute{a}^+\ cb\ y\bar{v}'-n. name
y\bar{\upsilon}\upsilon r^{\varepsilon} pl y\bar{\upsilon}ya^{+} cb y\dot{\upsilon}- n. water pot
Ζ
z\bar{a}^{+/} cb z\bar{a}- n. millet
zāalíga záal^{|\epsilon|} pl zāalís^{\epsilon} zāalá^{+} cb zāal- adj. empty
zāalím<sup>m</sup> adv. emptily
zàam<sup>m</sup> cb zà- n. evening; zà-sìsɔ̄bır^{\epsilon} n. evening
zàn'an<sup>ne</sup> pl zàn'ana<sup>+</sup> n. metal hammer, iron-tipped weapon, bludgeon
zàaňsım<sup>m</sup> dv. dream
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zāaňsím<sup>m</sup> cb zāaňs- n. soup; soup in general, not "fish soup" despite Mampruli
          zaasim "fish"; cf Toende zãasím "meat soup" (Niggli)
zàaňsύη<sup>3</sup> pl zàaňsímà<sup>+</sup> cb zàaňsύη- n. dream
z\dot{a}b^{\varepsilon} ger z\dot{a}b\iota r^{\varepsilon} dv. fight; hurt (of body part); agt z\dot{a}b-z\dot{a}b^{a} n. warrior;
          agt gbān-zába n. leather-beater, leather-worker
z \grave{a} b \iota l^{\epsilon} dv, cause to fight
zàk^a pl zà'as^{\epsilon} cb zà'-n. compound; zà'-n\bar{z}z^{\epsilon} n. gate; zà'-n\bar{z}-g\acute{u}r^a n. gatekeeper
zàkım<sup>m</sup> dv. itch
z \dot{a} l \iota \eta^a p l z \dot{a} l \iota m \iota s^{\epsilon} c b z \dot{a} l \iota \eta- n. electric eel
zàm<sup>m</sup> ipfv zàmmıda dv. cheat; agt zàm-zām<sup>na</sup> n. cheat
z \grave{a} m \iota s^{\epsilon} dv. learn, teach
z\bar{a}n'a=q. every
z \grave{a} \check{n}' a s^{\epsilon} dv, refuse
z \stackrel{\circ}{a} \stackrel{\circ}{n} b \iota l^{\epsilon} dv, tattoo, mark skin
zāňbιn<sup>nε</sup> pl zāňbιna<sup>+</sup> cb zàňbιn- n. tattoo; NT sign <u>11.1.2</u>
Zàngbὲε/ε n. Hausa language
Zàngb\dot{\epsilon}og<sup>3</sup> pl Zàngb\dot{\epsilon}ɛd^{\epsilon} n. Hausa person
zàngùem<sup>mɛ</sup> pl zàngùema<sup>+</sup> cb zàngùem- n. wall
zànkù'ar<sup>ɛ</sup> pl zànku'àa<sup>+</sup> zànkù'ada<sup>+</sup> cb zànku'à- n. jackal
zāňl<sup>la/</sup> ger zāňllím<sup>m</sup> sv. be holding, carrying in hands
zàňl<sup>lɛ</sup> n. umbilicus
z a n^{\epsilon} dv. pick up, take up
z\bar{\epsilon}m^{\text{ma}/} ger z\bar{\epsilon}mm\dot{\nu}g^{\text{o}} sv. be equal
z\bar{\varepsilon}mis^{\varepsilon}dv, make equal
zēmmúg<sup>o</sup> pl zēmmá<sup>+</sup> cb zēm- adj. equal
z\bar{i}^+ ger z\bar{i}id^{\epsilon}l dv. carry on one's head; agt z\bar{i}-z\hat{i}id^a n. carrier on the head
z\bar{\iota}^{+} ger z\bar{\iota}^{-}\iota l(m^{m} sv. not know 19.5; agt <math>z\bar{\iota}^{-}\iota d^{a/n}. ignorant person
zì'e<sup>ya</sup> ger zī'a<sup>+</sup> KED; DK KT zī'əg<sup>a</sup> (exceptional phonology 14 11.1.1) sv. be standing
zi' \ni l^{\varepsilon} dv. make to stand; zi' \ni l n\bar{z} \supset r^{\varepsilon l} promise, command; with n tis X: promise to X
zi' \ni n^{\varepsilon} dv. stand still; O zi' \ni n n\overline{\varepsilon}. She's pregnant.
zīım<sup>m/</sup> cb zī- n. blood
zíina pl zīmí cb zīm- n. fish; zīm-gbâň ada n. fisherman
zìlım<sup>mɛ</sup> pl zìlıma<sup>+</sup> cb zìlım- n. tongue
zīlınzîog<sup>o</sup> adj. unknown
zím ideo. for sābilíga black
zīná<sup>+</sup> today
zì\dot{n}'a<sup>+</sup> zè\dot{n}'vg<sup>\sigma</sup> pl zè\dot{n}'\epsilond\epsilon zè\dot{n}'\epsilons\epsilon zè\dot{n}da<sup>+</sup> cb zè\dot{n}'- adj. red
zìň'iya sv. be sitting; ger zīň'iga pl zīň'isɛ cb zìň- (also place)
z i n' i l^{\epsilon} dv. make sit, seat
zin'in^{\varepsilon} dv, sit down
zīnzāun<sup>ɔ/</sup> pl zīnzāná+ cb zīnzáun- n. bat
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z\bar{\imath}ri^+ n. lie. untruth
z\dot{b}^+ ipfv z\dot{b}t^a imp z\dot{b}m^a dv. run; fear; experience emotion; ger z\bar{u}a^+ z\bar{b}g^0 run;
           ipfv ger zòtım<sup>m</sup> fear 12.2.1.4 Ò zòt·ō nīn-báalìg. He has pity on him
z\bar{\jmath}l^{\epsilon}dv. castrate
z\bar{\jmath}l\iota m(s^{\epsilon}n. foolishness
z\bar{z}\log^{2/p} pl \ z\bar{z}n^{n\epsilon/c} \ cb \ z\bar{z}l- n. fool
zɔ̄m<sup>m/</sup> cb zɔ̄m- n. flour
z\bar{c}om<sup>mɛ</sup> z\bar{c}om<sup>nɛ</sup> pl z\bar{c}oma+ cb z\bar{c}om- n. refugee, fugitive
zɔ̄rɪga/ n. small child WK
z\bar{z}rvg^{5/} pl z\bar{z}r\acute{a}^{+} n. piece
z\bar{u}^+ dv. steal
zuà+ pl zuà-nàma cb zuà- n. friend
Zùa<sup>+</sup> pl Zùes<sup>ε</sup> n. member of clan Zoose; subclans pl Zuà-wìis<sup>ε</sup>/-wìib<sup>a</sup>, pl Zuà-sābιlís<sup>ε</sup>
z\dot{u}'e^+dv. get higher, more
z\dot{u}e^+ dv. perch, get on top (? variant of z\dot{u}'e^+)
z\bar{u}g^{3} pl z\bar{u}t^{\epsilon} cb z\bar{u}g- z\bar{u}- 8.2 n. head; as postposition 16.6; z\bar{u}g\dot{v}-n<sup>\epsilon</sup> is also used as a
           postposition; zūg-dâana n. boss, master (replaces zūg-sɔ́ba in KB for meanings
           other than "the Lord"); z\bar{u}g-k\bar{v}gvr^{\epsilon} pl z\bar{u}g-k\bar{v}ga^{+} cb z\bar{u}g-k\dot{v}g- n. pillow; z\bar{u}g-
           m\acute{a}\mu k^{3} pl z\ddot{u}g-m\^{a}'ad^{\epsilon} adj. crushed-headed 15.8.1.3; z\ddot{u}g-s\acute{o}b<sup>a</sup> n. boss; NT
           Lord; z\bar{u}-p\dot{\varepsilon}\varepsilon l\dot{v}g^{3} pl z\bar{u}-p\dot{\varepsilon}\varepsilon l\dot{a}^{+} adj. bald \underline{15.8.1.3}; z\bar{u}-p\dot{\varepsilon}\varepsilon l\dot{v}g^{3} n. hat
zùlig^{\varepsilon} dv. deepen
zùlım<sup>ma</sup> sv. be deep
zùlvŋ² pl zùlıma+ cb zùlvŋ- adj. deep
zùlvŋ<sup>o</sup> n. depth
z\dot{v}nz\dot{\gamma}\eta^a z\dot{v}nz\dot{\gamma}\eta^b pl z\dot{v}nz\dot{\gamma}\dot{\gamma}\delta^\epsilon cb z\dot{v}nz\dot{\gamma}\eta- n. blind person
z\bar{u}\theta b\dot{u}g^{3} pl z\bar{u}\theta b\dot{u}d^{\epsilon} cb z\bar{u}\theta b- n. hair (of human head); see k\bar{j}hbug^{3}
z\dot{u}ed^{\epsilon} n. friendship
z\dot{u}\theta^{\varepsilon}dv. make to perch
z\bar{u}'\Theta m^{m/} pl z\bar{u}'\Theta m(s^{\epsilon} cb z\bar{u}'\Theta m - n. blind person
z\bar{u}'em^{m}dv. go blind, make blind
z\dot{u}en^{\varepsilon} dv. begin to perch
z\bar{u}\theta r^{\epsilon} pl zueya<sup>+</sup> cb zuà- n. hill
z\dot{u}es^{\epsilon}dv. befriend
zūríf<sup>9</sup> pl zūrí + cb zūr- n. dawadawa seed
zύ'υňf<sup>9</sup> pl zū'υnί<sup>+</sup> n. dawadawa seed
zùung^{\circ} pl zùuns^{\varepsilon} zùund^{\varepsilon} cb zùn- n. vulture
z\bar{\upsilon}\upsilon r^{\varepsilon} pl z\bar{\upsilon}va^{+} cb z\dot{\upsilon}- n. tail; z\dot{\upsilon}-w\bar{\jmath}k^{\jmath} adj. long-tailed 15.8.1.3
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