A Grammar of Kusaal

Agolle Dialect

David Eddyshaw

2019

Contents

Preface ... vi

Abbreviations ... vii
Interlinear glossing ... viii
Transcription conventions ... ix

Sources ... x
References/Bibliography ... xii

1 Introduction ... 1

1.1 The Kusaasi people ... 1
1.2 The Kusaal language ... 4
1.2.1 Status ... 4
1.2.2 Dialects ... 4
1.2.3 Related languages ... 5
1.2.4 Grammatical sketch ... 9

2 Sound system ... 20

2.1 Consonants ... 20
2.2 Vowels ... 22
2.3 Syllables and tonemes ... 25
2.4 Traditional orthography ... 29

3 Word structure ... 30

3.1 Word boundaries ... 30
3.2 Apocope ... 33
3.3 Roots, stems and flexions ... 38
3.4 Root alternations ... 39
3.5 Consonant clusters ... 43
3.6 Vowel changes before *-*ya* *-*gʊ* *-*kkʊ* *-*ŋŋʊ* ... 46
3.7 Consonant deletion and vowel fusion ... 48
3.8 Tone Patterns ... 50
3.8.1 Nouns and adjectives ... 51
3.8.2 Verbs ... 55
3.8.3 Other word classes ... 57
3.8.4 Derivation ... 57

4 External sandhi ... 59

4.1 Prosodic clitics ... 59
4.2 Liaison ... 62
4.3 Segmental contact ... 71
4.4 M spreading ... 73
4.5 M dropping ... 75

5 Noun flexion ... 79
5.1 Noun classes ... 79
5.2 Remodelled combining forms ... 82
5.3 Paradigms ... 83
5.3.1 *a|ba* ... 83
5.3.2 *ga|sɛ* ... 86
5.3.3 *gɔ|dɛ* ... 89
5.3.4 *rɛ|aa* ... 91
5.3.5 *fɔ|ɪɪ* ... 94
5.3.6 *bɔ* ... 95
5.3.7 *mm* ... 95
5.4 *Nàm* plurals ... 96
5.5 Loanwords ... 96
6 Adjective flexion ... 97
7 Verb flexion ... 101
7.1 Dual-aspect ... 101
7.2 Single-aspect ... 104
8 Stem conversion ... 107
8.1 Nouns from verbs ... 107
8.1.1 Perfective gerunds ... 107
8.1.2 Concrete nouns ... 110
8.2 Nominals from nominals ... 110
9 Derivation by suffixes ... 112
9.1 Verbs ... 112
9.1.1 From verbs ... 112
9.1.2 From nominals ... 116
9.1.2.1 Single aspect ... 116
9.1.2.2 Dual aspect ... 117
9.2 Nominals ... 118
9.2.1 From verbs ... 118
9.2.1.1 Agent nouns ... 118
9.2.1.2 Adjectives ... 122
9.2.1.3 Instrument nouns ... 124
9.2.1.4 Imperfective gerunds ... 124
9.2.1.5 Others ... 127
9.2.2 From nominals ... 127
10 Prefixes ... 129
10.1 Nouns and adjectives ... 129
10.2 Quantifiers and adverbs ... 132
11 Unsegmentable complex stems ... 133
11.1 Loanwords ... 133

12 Noun phrases....136
12.1 Structure....136
12.2 Number....140
12.3 Gender....142
12.4 Pronouns....144
12.4.1 Personal....144
12.4.2 Demonstrative....145
12.4.3 Indefinite....146
12.4.4 Interrogative....148
12.4.5 Reciprocal....149
12.4.6 Reflexive....149
12.4.7 Dummy head....150
12.5 Quantifiers....151
12.5.1 Numbers....152
12.5.2 Proquantifiers....155
12.6 Personifier particle....156
12.7 Dependents before the head....158
12.7.1 Combining forms....158
12.7.2 Noun phrases....161
12.7.3 Adverbial phrases....165
12.8 Dependents after the head....165
12.8.1 Adjectives....166
12.8.1.1 Bahuvrihis....168
12.8.1.2 Nouns as adjectives....168
12.8.2 Quantifiers....169
12.8.3 Adverbial phrases....170
12.8.4 Pronouns....170
12.8.5 *Lā* and *ňwà*....171
13 Adverbial phrases....174
13.1 Forms and functions....174
13.2 Time/circumstance....175
13.3 Place....176
13.4 Manner....178
13.5 Postpositions....180
13.6 Proadverbs....182
14 Ideophones....183
15 Prepositions....185

16 Verb phrases ... 188
16.1 Structure ... 188
16.2 Aspect ... 189
16.2.1 Aspectual *nɛ̄* ... 189
16.2.2 Perfective ... 190
16.2.3 Imperfective ... 194
16.3 Tense ... 197
16.3.1 Tense particles ... 197
16.3.2 Discontinuous past ... 199
16.3.3 Periphrastic futures ... 199
16.3.4 Implicit tense and narrative ... 200
16.4 Mood ... 205
16.5 Polarity ... 207
16.6 Independency marking ... 209
16.6.1 Tonal ... 209
16.6.2 Segmental ... 212
16.7 *Lɛ̀ɛ* "but" ... 214
16.8 Preverbs ... 215
16.9 Complements ... 217
16.9.1 Objects ... 217
16.9.2 Predicatives ... 221
16.9.3 Locatives ... 223
16.9.4 Prepositional phrases ... 223
16.9.5 Clauses ... 224
16.10 Adjuncts ... 224
16.11 Verb-phrase-final particles ... 225
16.12 "Be" verbs ... 226
17 Clauses ... 230
17.1 Clause types ... 230
17.2 Structure ... 232
17.2.1 Clause adjuncts ... 232
17.2.2 Subjects ... 235
17.2.3 Post-subject particles ... 237
18 Main clauses ... 238
18.1 Content questions ... 238
18.2 Polar questions ... 239
18.3 Commands ... 239
18.4 Verbless clauses ... 241
19 Catenated clauses ... 244
19.1 *N*-catenation ... 246
19.2 *Kà*-catenation ... 254
20 Conditional clauses ... 258
20.1 Structure ... 258
20.2 Open ... 261
20.3 Hypothetical ... 262
20.4 Contrary-to-fact ... 262

21 *Ǹ*-clauses....264
21.1 Absolute clauses....265
21.2 Relative clauses....267
21.2.1 With indefinite pronouns....269
21.2.2 With relative pronouns....275
22 Complementised clauses....279
22.1 Purpose clauses....279
22.2 Content clauses....282
22.2.1 Reported speech....284
23 Negation....287
24 Information packaging....290
24.1 Focus....290
24.1.1 Subjects....290
24.1.2 Verb phrases....291
24.2 Clefting....298
24.3 Preposing....299
24.4 Dislocation....301
24.5 Presentational constructions....302
24.6 Free personal pronouns....303
24.7 Emphatics....304
25 Greetings and other formulae....306
26 Selected lexical fields....308
26.1 Kinship terms....308
26.2 Personal names....309
26.3 Places....311
26.4 Ethnic groups and clans....313
26.5 Trees and fruits....314
26.6 Colours....314
26.7 Time....314
27 Texts....316
27.1 Balaam's Donkey....316
27.2 Three Murderers....320
27.3 Proverbs....323
28 Vocabulary....326

Preface

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

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

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

I am grateful to Dr Tony Naden, who sportingly put up with being visited out of the blue in his home in northern Ghana and showed me hospitality worthy of Africa, while giving me a number of helpful pointers. I was much helped by the staff of the Ghana Institute of Linguistics in Tamale, who among other kindnesses provided me with photocopies of David Spratt's unpublished introductory materials on Kusaal.

I am particularly grateful to Brian McLemore, Executive Director of Global Translation Services at Bible League International and to the Ghana Institute of Linguistics, Literacy and Bible Translation for permission to cite verses from the Kusaal Bible versions.

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

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

Abbreviations

AdvP	adverbial phrase
agt	agent noun
BNY	*Bunkonbid ne Niis ne ba ɣɛla*
C	consonant
cb	combining form
CGEL	Cambridge Grammar of the English Language
DK	informant
dp	discontinuous past
ger	gerund
H	High toneme
ILK	*An Introduction to Learning Kusaal*
imp	imperative
ipfv	imperfective
irreg	irregular
KB	Kusaal Bible of 2016
KED	*A Short Kusaal-English Dictionary*
KKY	*Kusaas Kuob nɛ Yir ɣela Gbauŋ*
KSS	*Kusaal Solima ne Siilima*
KT	informant
L	Low toneme
LF	Long Form
M	Mid toneme
NP	noun phrase
NT	Kusaal New Testament, 1976 and 1996
pfv	perfective
pl	plural
SB	informant
SF	Short Form
sg	singular
V	vowel
VP	verb phrase
WK	informant
1sg 2pl …	first person singular, second person plural etc

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

Interlinear glossing

ABSTR	abstract	8.2
ADV	adverbial	
AN	animate gender	12.3
CAT	clause catenator (underlyingly *n*)	19
CNTR	contrastive (personal pronouns)	24.6
COP	copula *àe̯ň*^{ya}	16.12
CQ	content question prosodic clitic	4.1
DEM	demonstrative pronoun (discourse)	12.4.2
DEMST	demonstrative pronoun (spatio-temporal)	
DP	discontinuous-past marker *n*^{ɛ}	16.3.2
EXIST	existence/location verb *bɛ̀*	16.12
FOC	focus particle *nɛ̄*$^{/}$	24.1.2
GER	gerund	8.1.1
IDEO	ideophone	14
IMP	independent imperative verb form	7.1
IN	inanimate gender	12.3
INDF	indefinite pronoun	12.4.3
IPFV	imperfective verb form	7.1
IRR	positive irrealis mood marker	16.4
LOC	locative postposition (*nī*$^{/}$ ~ *n*^{ɛ})	13.3
NEG	negative prosodic clitic	4.1
NEG.BE	negative verb to and COP and EXIST	16.5
NEG.HAVE	(another use of the same verb)	
NEG.IMP	negative imperative marker	
NEG.IND	negative indicative marker	
NEG.IRR	negative irrealis marker	
NEG.KNOW	negative verb *zī*'	
NEG.LET	negative verb *mị̀t*	
NULL	semantically empty NP head *sɔ̄b*^{a}	12.4.7
NUM	number prefix *à- bà- ǹ- bʊ̀-*	10.2
NZ	nominaliser (underlyingly *ǹ*)	21
PERS	personifier particle (*à-* or *ǹ-*)	12.6
PFV	independent-perfective marker *yā*	16.6.2
PL	plural	12.2
PQ	polar question prosodic clitic	4.1
REL	relative pronoun	21.2.2
SG	singular	12.2
TNS	tense marker	16.3.1
VOC	vocative prosodic clitic	4.1

Personal pronouns: 12.4.1

1SG 1PL	1st sg/pl
2SG 2PL	2nd sg/pl
3AN 3IN	3rd sg animate/inanimate
3PL	3rd pl
2PL.SUB	postposed 2nd pl Subject

The linker particle *kà* is glossed "and" throughout, though this often does not reflect its meaning in context; similarly *yà'* is glossed "if" in all cases. The empty particle *nɛ̄* following objects of comparison 15 is glossed "like."

Mass nouns are not specified as SG or PL in the glossing; single-aspect verbs 7.2 are not labelled for aspect. The perfective of dual-aspect verbs is also unlabelled.

ø represents words with zero surface segmental representation, detectable only from tonal and segmental effects on preceding words. Prosodic clitics 4.1 are represented by =*ø*. Liaison enclitics 4.2 are preceded by = in glossing as in the working orthography. Other bound words which are traditionally written solid with their hosts are joined with hyphens in glossing as in the working orthography 3.1. Liaison before non-enclitic words is marked with ◡.

A few very common compounds are glossed with single words.

Transcription conventions

Phonetic transcriptions are broad, ignoring all allophony not immediately under discussion. Starred forms are *ad hoc*, simply illustrating single rules.

For Agolle Kusaal orthography see 2. Symbols have approximately their IPA values, but long vowels are written with double symbols, *e ɪ* both represent [ɪ], *o ʊ* both represent [ʊ], *ň* marks nasalisation and ' glottalisation of adjacent vowels, *y* stands for [j], and *kp gb* stand for [k͡p] [g͡b]. The symbol *i* is written with the dot below when it carries a tone mark, e.g. *bi̩ig* "child" [bi:g]. *This* colour is reserved for words and word fragments in the working orthography of the grammar.

Hausa words are cited as in Jaggar 2001, but using double letters rather than macrons for long vowels; Mooré as in Niggli 2016; Nawdm as in Babakima 2013; Moba as in Kantchoa 2005, but with *y* for [j]. Arabic transcriptions use IPA, but with *y* for [j]; forms are classical, but without case endings and the *t* of *ta:ʔ marbu:tˤa*.

Words from other languages are cited as given in the sources, adding the tone marks acute for H, grave for L, and macron for mid tone where necessary.

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

Internal and external hyperlinks appear like this.

Sources

All analyses adopted in this grammar are original, except for the most basic aspects of the tonal system, where I was much helped initially by David Spratt's brief "Introduction to Learning Kusaal." The phonology and morphology are otherwise based on elicitation work with four informants. The treatment of phrase-level syntax is also primarily based on the help they gave both through elicitation and in exploring puzzling constructions I had encountered while attempting to communicate at work.

With great reluctance I have omitted their names, as I am not currently able to confirm that they would be happy to be identified. I am very grateful to all four. If any would like to see his name included in its rightful place, I would happy to comply. Meanwhile I identify them by abbreviations (which are not their initials):

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

All are first-language speakers of Agolle Kusaal, with full competence also in English. All are male, and were then around forty years old. I noted examples from many other speakers, but few of the usage of younger speakers specifically; my informants did occasionally comment on the incorrect grammar of the young (surely a cultural universal.) There have been changes in the language itself over the fifty years covered by my sources, and traditional orthography sometimes preserves obsolete forms. 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 foreign names more closely to ordinary Kusaal spelling. Many changes were made to improve accuracy and clarity; strikingly, all instances of the previously very common indirect speech construction were replaced by direct speech. The 2016 Bible makes significant orthographic changes.

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

Except for a few examples from David Spratt's *Introduction to Learning Kusaal*, written sources are cited in their original orthography, with a transliteration into the working orthography of this grammar. Tone marking is supplied by me; it was checked against the audio New Testament version in those few cases where a tonal point is at issue, but in other cases should be regarded as illustrating the tonal principles described elsewhere, not as evidence for their validity.

The following Bible versions are cited:

Wina'am Gbauŋ *Wínà'am Gbáu̱ŋ*	Kusaal Bible 1976 NT © World Home Bible League 1996 NT © The Bible League/GILLBT available as Audio and searchable text 2016 Complete Bible © GILLBT available as an Android application

I also cite these materials published by GILLBT (the Ghana Institute of Linguistics, Literacy and Bible Translation) in Tamale:

Bunkonbid ne Niis ne ba yɛla *Bū̄n-kóňbìd nɛ̄ Nị́is né bà yɛ̄lá*	"Animals and birds and their affairs" Matthew M. Abokiba
Kusaal Solima ne Siilima *Kʊ̄sâal Sólımà nɛ̄ Sị́ilímà*	"Kusaal Stories and Proverbs" Samuel Akon, Joe Anabah
Kusaas Kuob nɛ Yir yela Gbauŋ *Kʊ̄sâas Kûɵb nɛ̄ Yīr yɛ́là Gbàu̱ŋ*	"A book on Kusaasi farming and housing" William A. Sandow, Joseph A.H.Anaba

References/Bibliography

Abubakari, Hasiyatu. 2011. Object-sharing as symmetric sharing: Predicate Clefting and Serial Verb Constructions in Kusaal. University of Tromsø.

Abubakari, Hasiyatu. 2017. Ideophones in Kusaal. *Journal of West African Languages*, Vol 44.1.

Akanlig-Pare, George and Michael Kenstowicz. 2002. Tone in Buli. *Studies in African Linguistics*, Volume 31, Numbers 1/2.

Anttila, Arto and Adams Bodomo. 1996. Stress and Tone in Dagaare.

Babakima, Stéphane (and many others.) 2013. *Nawdm n Faransm Gwɛɛt Buugu (Dictionnaire Nawdm-Français.)* ASDN et SIL Togo, Niamtougou et Lomé.

Berthelette, John. 2001. Sociolinguistic Survey Report for the Kusaal Language. SIL.

Blench, Roger. 2006. Dagomba Plant Names.

Boafo, Ebenezer and Angela Kluge, 2010. A sociolinguistic survey of the Boulba (Notre) language area. SIL International.

Bodomo, Adams. 1997. *The structure of Dagaare*. Stanford Monographs in African Languages, CSLI, Stanford.

Canu, Gaston. 1976. *La Langue Mò:rē; Dialecte de Ouagadougou (Haute-Volta.)* Société d'Études Linguistiques et Anthropologiques de France.

Giffen, Robyn. 2015. Creating and using the first Nabit orthography. MA Thesis, University of British Columbia.

Güldemann, Tom. 2007. The Macro-Sudan Belt: towards identifying a linguistic area in northern sub-Saharan Africa. *A Linguistic Geography of Africa*, Bernd Heine, Derek Nurse (eds.), Cambridge University Press.

Guthrie, Malcolm, 1951. *Grammaire et Dictionnaire de Lingala*. Librairie Évangelique au Congo, Léopoldville.

Guthrie, Malcolm. Proto-Bantu reconstructions.

Haaf, Ernst. 1967. *Die Kusase*. Gießener Beiträge zur Entwicklungsforschung, Reihe II, Band 1. Gustav Ficher.

Hamel, Mary, and Charles Merrill. 1991. The Analogues of the 'Pardoner's Tale' and a New African Version. *The Chaucer Review*, vol. 26, no. 2, 1991, pp175–183.

Heath, Jeffrey. 2005. *Tondi Songway Kiini (Songhay, Mali.)* Stanford Monographs in African Languages.

Huddleston, Rodney and Geoffrey Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge University Press.

Hyman, Larry M, 2007. Niger-Congo Verb Extensions: Overview and Discussion. *Selected Proceedings of the 37th Annual Conference on African Linguistics*, Doris L. Payne and Jaime Peña (eds.) 149-163.

Iliasu, A A, 1971. The Origins of the Mossi-Dagomba States. Institute of African Studies: Research Review.

Jaggar, Philip. 2001. *Hausa*. Benjamins.
Kantchoa, Laré, 2005. *Description de la langue Moba*. Université de Lomé.
Kleinewillinghöfer, Ulrich. 1996. Relationship between Adamawa and Gur Languages: the Case of Waja and Tula. *Cahiers Voltaïques* I, 25-45
Kröger, Frantz. 1992. *Buli-English Dictionary*. LIT.
Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents.* Cambridge University Press.
Lefebvre, Claire and Anne-Marie Brousseau. 2002. *A Grammar of Fongbe*. Mouton de Gruyter.
Lund, Christian. 2003. 'Bawku is still volatile.' *Journal of Modern African Studies*, 41, 4 pp. 587–610. Cambridge University Press.
Manessy, Gabriel. 1979. *Contribution à la Classification Généalogique des Langues Voltaïques*. Société d'Études Linguistiques et Anthropologiques de France.
Musah, Anthony Agoswin. 2018. *A Grammar of Kusaal*. Peter Lang.
Naden, Tony. Dictionaries of Mampruli, Kusaal, Nabit and Talni.
Newman, Paul and Roxana Ma Newman. 1979. *Modern Hausa-English Dictionary*. University Press, Ibadan.
Niggli, Urs. 2012. La phonologie du kusaal.
Niggli, Urs. 2013. Dictionnaire Ninkãrɛ-Français.
Niggli, Urs. 2016. Dictionnaire mooré-français-anglais. SIL International.
Niggli, Urs. 2017. Dictionnaire kusaal-français-anglais.
Nurse, Derek and Gérard Phillippson (eds.) 2003. *The Bantu Languages*. Routledge.
Olawsky, Knut. 1999. *Aspects of Dagbani grammar*. LINCOM Europa.
Painter, Colin. 1970. *Gonja: a Phonological and Grammatical Study*. Indiana University Publications.
Plungian, Vladimir A and Johan van der Auwera. 2006. Towards a typology of discontinuous past marking. *Sprachtypol. Univ. Forsch*. Berlin 59:4, 317–349.
Prost, André. 1979. *Le Kusaal*. Université de Dakar.
Sambiéni, Coffi. 2005. *Le Proto-Oti-Volta-Oriental*. Rüdiger Köppe.
Spencer, Andrew and Ana Luís. 2012. *Clitics: An Introduction*. Cambridge University Press.
Spratt, David. 1972. *Kusal Syntax*. Institute of African Studies, University of Ghana.
Spratt, David. *A Short Kusaal-English Dictionary.* Typed MS from GILLBT, Tamale.
Spratt, David. *An Introduction to Learning Kusaal*. Typed MS from GILLBT, Tamale.
Stewart, John M. 2002. The potential of Proto-Potou-Akanic-Bantu as a pilot Proto-Niger-Congo, and the reconstructions updated. *Journal of African Languages and Linguistics* 23, 197–224.
Turl, John. Ghana Place Names.

1 Introduction

1.1 The Kusaasi people

Upper East Region of Ghana (adapted from Macab5387):

Kusaal is the language of the Kusaasi, the majority ethnic group of the far northeast of Ghana, east of the Red Volta and north of the Gambaga Escarpment; the local major town is Bawku. There are also many Kusaasi settlements in the neighbouring part of Burkina Faso south of Zabré, and a few in Togo. The White Volta separates this predominantly Kusaasi territory into **Toende** (French *Tondé*, Kusaal *Tùɵn* "West", shaded dark grey above) and **Agolle** (Kusaal *Àgɔ̀l* "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 Fulɓe 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 *sā'ab*, called "TZ" /ti:'zɛd/ in local English (Hausa *tuwon zaafii*, "hot porridge"), and the traditional millet beer, *dāam*, called "pito" (Hausa *fitoo*) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans (*dɔ̀ɔg*, "hut") which tend to be associated with particular areas (I was once told: "The first thing a young man looking for a wife needs to do is to get a bicycle.") A Kusaasi person knows his or her clan, and often its *pɔ̄ɔr* "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 *tɛ̀ŋ-dāan* "earth-priest", taken to be the descendant and heir of the original first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the continuations and offshoots of polities founded, probably around the fourteenth century, by incoming conquerors traditionally held to be from the region of Lake Chad. The invaders created hereditary chiefdoms among previously acephalous peoples, who continued to provide the *tɛ̀ŋ-dàan-nàm*. The founder of these kingdoms is called *Naa* [King] *Gbɛwaa* in Mampruli. His seat was at Pusiga (Kusaal *Pūsīg*) in what is now Kusaasi territory; he is said to have been swallowed by the earth at that place. In his sons' time the capital was relocated south to the Mamprussi lands. The Dagomba and Mossi kingdoms are cadet branches of this centuries-old military-aristocratic Mamprussi state (Iliasu 1971.) Unlike their Mamprussi neighbours, the Kusaasi were not absorbed into the system, and intermittent conflict has continued to this day, particularly over the chieftaincy of Bawku. Both in colonial times and since independence, wider political issues have complicated the situation (Lund 2003.)

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

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

Most Kusaasi retain their traditional animist outlook. 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 nɛ̄ Wīn, dā tʊ̂'as nɛ̄ Wīnnɛ́=ø.
Eat:IMP with God:SG, NEG.IMP talk with God:SG=NEG.
"Eat with God, don't talk with God."

Wīn ňyɛ́ kà sị̄n.
God:SG see and be.silent.
"God sees and is silent."

Everyday religious practice is concerned with local non-anthropomorphic spirits, also called *wīn*. A *wīn* resides in a *bʊ̄gʊ̄r*, an object such as a stone or horn, but it is the *wīn* that is spiritually significant, not its place of attachment. A central figure is the *bā'a* "diviner", who seeks guidance for a client by casting lots.

A human being is understood as having four components: *nị̀n-gbī̩ŋ* "body"; *ňyɔ̀-vʊ̄r* "life" as opposed to death, possessed by all living animals; *wīn* (in this sense) "*genius*, spirit, a person's own spiritual self"; and *kìkī̩rīs*, protective spirits (called "fairies" in local English.) Men have three *kìkī̩rīs*, 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 *kìkī̩rīs* in the bush which are hostile and try to lead travellers astray. *Sīıg* "life force", used for "spirit" in Christian materials, is in traditional belief identified with a person's tutelary *kìkī̩rīs*.

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

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

When speaking English or French, Kusaasi normally cite Kusaal personal and place names without apocope 3.2: *À-Wīn* from *Wìdì-ňyá'aŋ* will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for *Kʊ̄sâas*, "Bawku" for *Bɔ̀k* etc. "Woriyanga" also shows a Mampruli rather than Kusaal form for the initial combining form "horse": Mampruli *wuri-*, Kusaal *wìd-*. This reflects the origin of the convention in the use of Mamprussi guides and interpreters by the British in their initial explorations of the area. A parallel development took place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" (Dagbani *Gambaɣa*) 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 *À-Dʊ̄k*, and the language name "Kusaal" *Kʊ̄sâal* itself.

1.2 The Kusaal language

1.2.1 Status

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

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

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

1.2.2 Dialects

There is no standard dialect of Kusaal; every district has local peculiarities and my informants show numerous small differences in speech. Bawku itself is a multiethnic trading centre around a Muslim quarter or "zongo" (Hausa *zangòo* "camping ground") where the main common language is Hausa.

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

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

Berthelette reports a rate of apparent lexical cognates of 84%.

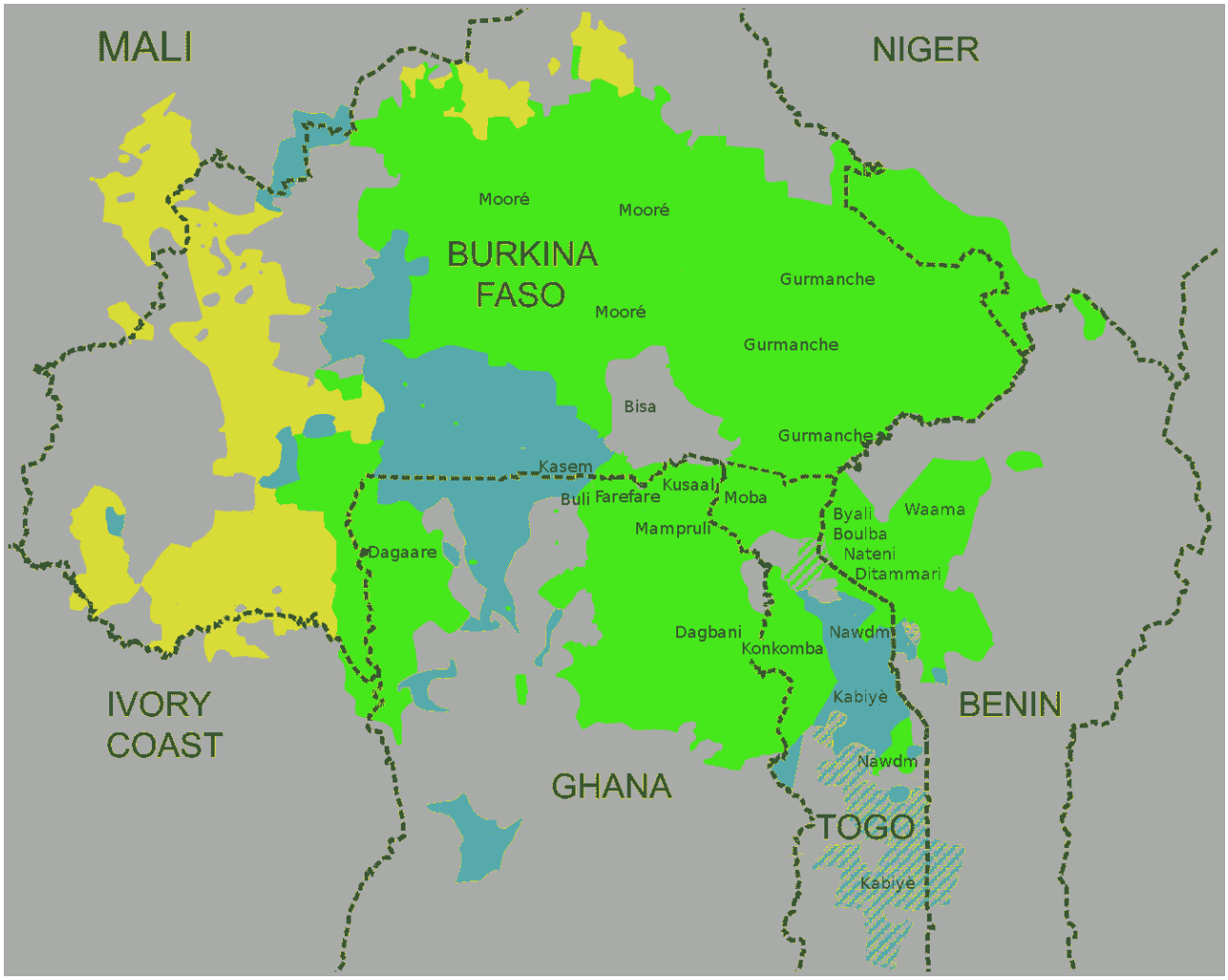
Agolle and Toende Kusaasi agree that they constitute a single ethnic group, and that they speak dialects of a single language. Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

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

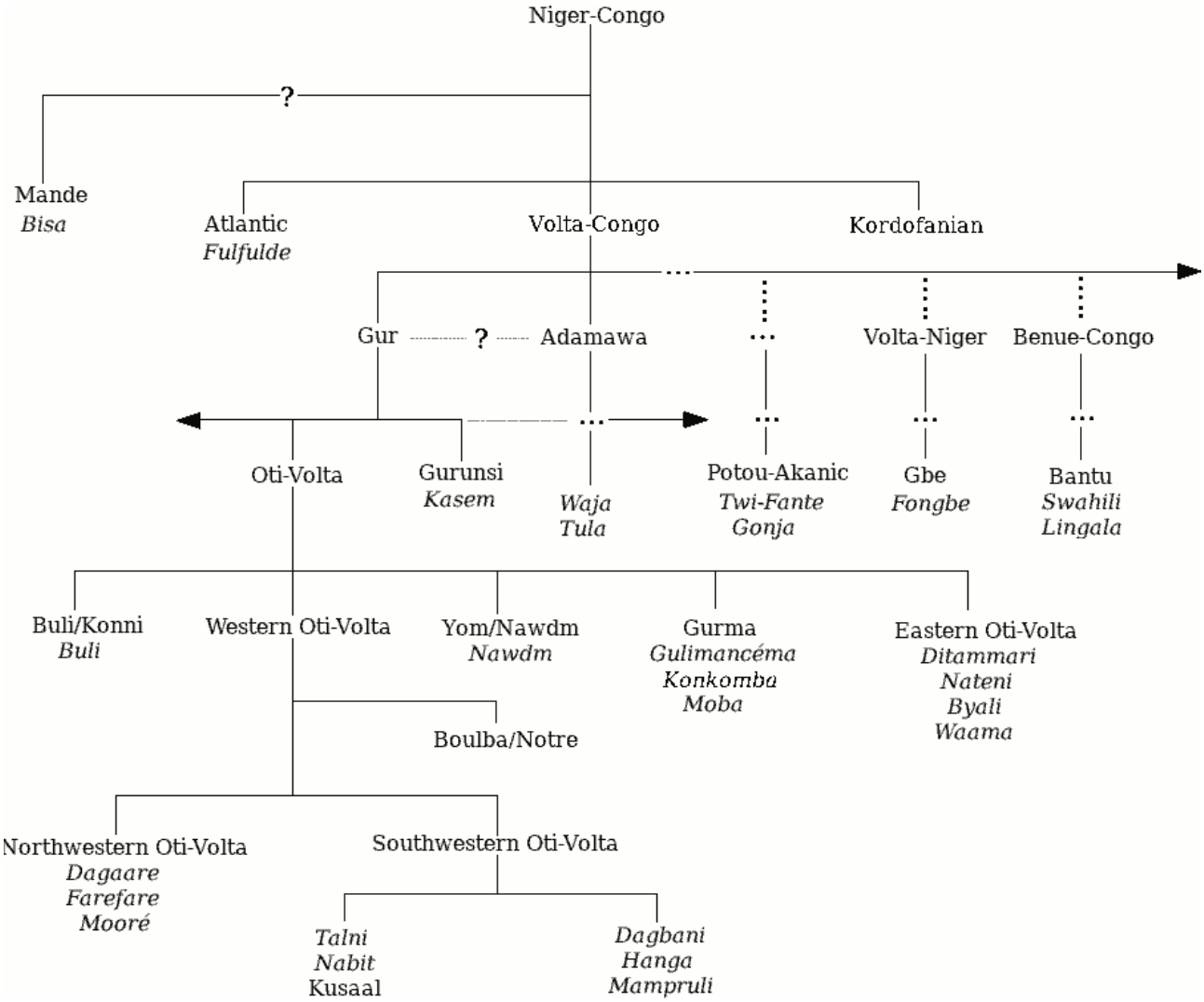
1.2.3 Related languages

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

The Gur Languages (adapted from Davius):



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



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

However, there is unequivocal evidence for Volta-Congo as a genetic group. Basic lexical items recur frequently: compare Kusaal *bīig* "child", *dì* "eat", *nū* "drink", *kpị* "die", *tìıg* "tree", *àtáň'* "three", *tʊ̀bʊ̀r* "ear" with their Fongbe equivalents *ví*, *ɖù*, *nù*, *kú*, *átín*, *àtɔ̀n*, *tó*. Guthrie's Proto-Bantu reconstructions parallel all except "child": *dí-* "eat", *nú-* "drink", *kú-* "die", *-tí* "tree", *-tátɔ̀* "three", *-tó* "ear", and his Proto-Bantu *tóm-* "send" corresponds to Kusaal *tʊ̀m*. The Potou-Akanic language group, which includes Twi/Fante and Gonja, here shows a regular sound correspondence *t* ~ *s*: Twi *ɛsã* "three", *asõ* "ear", *soma* "send", Gonja *à-sá* "three", *kò-sówé* "ear."

The most salient morphological feature of Niger-Congo is the presence of noun class systems, with frequent matches of form and meaning among Volta-Congo branches. Thus the Kusaal human-plural noun *suffix -ba* seen in *nīdīb* "people", plural of *nīd*, matches the Gonja human-plural *prefix* in *bá-sà* "people", plural of *é-sà*, and the *ba* of Lingala *bato* "people", plural of *moto*. Particular sg/pl *pairings* of affixes recur; for example, the suffixes *rɛ*|*aa* seen in Kusaal *tʊ̀bʊ̀r* "ear", pl *tʊ̀bà* are cognate to the Bantu prefix pair 5/6 (Nurse and Phillippson, p104.) Lingala has the cognate of *tʊ̀bʊ̀r* in this very class: *litói* "ear", pl *matói*. 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 *lɪ*, pl *gá* (*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.

The closest relatives of Kusaal form Manessy's **Western Oti-Volta** family. Here Proto-Oti-Volta **c *ɟ* have merged with **s *z*; almost all inflecting verbs use a bare stem for perfective aspect and add a suffix **-da* for imperfective; some noun classes have been lost, such as a *bɔ*-sg class including words for trees (Buli *tìib* "tree", Kusaal *tɪ̀ɪg*, Mooré *tìɪgá*); there is much distinctive vocabulary, e.g. Kusaal *kʊ̀'ʊ̀m* "water", Mooré *kʊ̀ʊ́m*, vs Moba *ɲúm̀*, Buli *nyíam*, Nawdm *nyáálḿ*, Nateni *nɛ́ɛ̄ma*. Boulba/Notre in Benin is an outlier: it shares distinctive lexicon (*kʊ́à* "water") but has, for example, devoiced **g → k*, **gb → kw*, **z → c͡ç*, reflecting areal features shared with Eastern Oti-Volta, and kept the "tree" class: *tìebò* "tree."

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

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

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

Kusaal probably forms a subgroup with Nabit and Talni, spoken in the adjacent Nabdam and Talensi districts. Tony Naden's Nabit data closely resemble Toende Kusaal, and 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:

Nabit	*La **bi'i**mɛ.*	"It is ripe." (*mɛ* = Toende *me*, Agolle *nɛ̄* 16.2.1)
	*La na bu **biigɛ**.*	"It is not yet ripe."
Talni	*Bunpɔk dɔɣam pu **bɔkəra**, buraa dɔɣam m **bɔkət**.*	"A woman's kindred is not divided, a man's kindred is divided."

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

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

The Gurma languages are much less close. Verb flexion is complex, marking aspects by changing stem tones and/or adding or dropping several different suffixes. Gulimancéma and Konkomba show nouns with paired class prefixes and suffixes. Moba shows some features suggestive of Western Oti-Volta influence.

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

Kusaal	Buli	Moba	
wáaf	*wáab*	*wààùg*	"snake"
mɔ̄ɔg	*mūub*	*mɔ́ɔ́ùg*	"grass"
tìɪg	*tìib*	*tīīg̀*	"tree"

It is Gurma which is conservative: cf Proto-Bantu *-nùà* "mouth", Fongbe *ònù* = Kusaal *nɔ̄ɔr* (Pattern H) versus Proto-Bantu *-tó* "ear", Fongbe *tó* = Kusaal *tùbʊ̀r*.

Nawdm aligns tonally with Western Oti-Volta and Buli: *wáàg̀ɓ́* "snake", *móógú* "grass", *tììɓ́* "tree." It has shifted **p → f*, **s → h*, **c → s*, **z → ɟ*. It often has *ɦ* [ʔ] where Western Oti-Volta shows vowel glottalisation. Nawdm shows much less lexical similarity than Buli to Western Oti-Volta, but there are parallels in verb morphology. Most verbs use the stem as perfective and add *-a* for imperfective, dropping any perfective *-g* suffix; another common pattern is perfective *-ra* ~ imperfective *-l*.

Sambiéni 2005 provides considerable detail on the Eastern Oti-Volta languages. He assumes Manessy's Eastern Oti-Volta as a valid subgroup, but this subgrouping is partly based on initial consonant changes which are areal, and shared with Boulba.

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

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

Waama shows high tones in words corresponding to Western Oti-Volta Pattern H. 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 *wʋ̀m*, Boulba *wàmú*, Buli *wom*; Waama *yété* "*maison*", Kusaal *yɪ̄r*, Boulba *yere*, Buli *yérí*.

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

1.2.4 Grammatical sketch

Kusaal is in most respects a typical Western Oti-Volta language. It is chiefly distinctive in having undergone **apocope** of word-final short vowels even in citation forms, a feature shared with Nabit and Talni. Thus where Mooré has the citation form *gíɣemde* "lion", the cognate Kusaal word normally appears in the **Short Form** (SF) *gbīgīm*. 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):

Lì à nɛ̄ gbīgīm. "It's a lion."
3IN COP FOC lion:SG.

Lì kā' gbīgīmnɛ̄=ø. "It's not a lion."
3IN NEG.BE lion:SG=NEG.

Lì à nɛ̄ gbígìmnèɛ=ø. "Is it a lion?"
3IN COP FOC lion:SG=PQ.

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

This appearance of 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 =ø, as above.

In citing word forms, superscripts are used to write the parts of words which are dropped everywhere except before prosodic clitics and liaison: *gbīgīm*^{nɛ} "lion", *bi̱ig*^{a} "child", *kʊ̄k*^{a} "chair", *dʊ̄k*$^{ɔ/}$ "pot."

The phonology of Kusaal is significantly complicated by apocope. For example, apocope deletes segments responsible for rounding and fronting effects on preceding vowels, and renders those effects contrastive. This creates diphthongs, along with emic contrasts among epenthetic vowels. Thus the LF *vi̱ugɔ́* "owl" has *iu* for *ii* because of the rounding effect of the suffix vowel. After apocope, the diphthong *iu* in *vi̱ug* contrasts with the vowel of *vi̱id* "owls", shortened from *vi̱idɛ́*. Similarly, *āaňdīgā* "black plum tree" has the default epenthetic vowel *ɪ*, and appears as *āaňdīg* after apocope, whereas *gàadʊ̀gɔ̀* "passing" has rounding to *ʊ* before the flexion *-gɔ*, and after apocope this becomes contrastive in the SF *gàadʊ̀g*.

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

M̀ pʊ̄ bɔ́ɔdā=ø. "I don't want to."
1SG NEG.IND want=NEG. LF *bɔ̀ɔdā* preceding negative clitic.

M̀ bɔ́ɔdī=bá. "I love them."
1SG want=3PL. Modified LF *bɔ̀ɔdī* before liaison.

M̀ pʊ̄ zábɛ̄=ø. "I haven't fought."
1SG NEG.IND fight=NEG. LF *zàbɛ̄* preceding negative clitic.

M̀ zábī=bá. "I've fought them."
1SG fight =3PL. Modified LF *zàbī* before liaison.

Apocope reduces several liaison words of the underlying form *CV* to a single consonant. So with the object pronoun *fᵓ* "you (sg)" and the locative postposition *nᵋ*:

M̀ pū bɔ́ɔdī=fɔ́=ø. "I don't love you."
1SG NEG.IND want=2SG=NEG. LF *fɔ* of the pronoun "you (sg)"

M̀ bɔ́ɔdī=f. "I love you."
1SG want=2SG. SF *f* of the pronoun "you (sg)"

Lì kā' kʊ̄kā=ø. "It's not a chair."
3IN NEG.BE chair:SG=NEG.

Lì kā' kʊ̄kī=nɛ́=ø. "It's not in a chair."
3IN NEG.BE chair:SG=LOC=NEG.

kʊ̄kī=n "in a chair"
chair:SG=LOC

Lì kā' dʊ̄kɔ́=ø. "It's not a pot."
3IN NEG.BE pot:SG=NEG.

Lì kā' dʊ̄kí=nɛ̄=ø. "It's not in a pot."
3IN NEG.BE pot:SG=LOC=NEG.

dʊ̄kí=n "in a pot"
pot:SG=LOC

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

Compare the above forms with *fᵓ* "you (sg)" to the forms with ᵒ "him/her":

M̀ pū bɔ́ɔdó=o=ø. "I don't love him/her." [m̩pʊbɔ:dʊ:]
1SG NEG.IND want=3AN=NEG. LF *o* of the pronoun "him/her"

M̀ bɔ́ɔdō=ø. "I love him/her." [m̩bɔ:dʊ]
1SG want=3AN. SF *ø* of the pronoun "him/her"

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

Gɔ̀sɪ̀m! "Look!"
Look:IMP!

Gɔ̀sɪmī=ø! "Look ye!" by apocope from *gɔ̀sɪmī=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 *à-* and all words beginning with certain prefixes. Before words not bound to the left, liaison is marked by ‿ in interlinear glossing.

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

m̀ zūgú=ø zàbìd lā zúg
1SG head:SG=NZ fight:IPFV ART upon
"because my head hurts" (nominaliser-*ǹ*)

M̀ zūgū‿ ø zábìd. "My head hurts." (catenator-*n*)
1SG head:SG CAT fight:IPFV.

Kusaal has contrastive vowel glottalisation.

Vowel **breaking** results in four vowels realised *i̯a u̯a iə uɵ* which nevertheless pattern throughout as *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.

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

Open-class word stems are built around roots of the form *(C)V(V)(C)*. Stems may have up to three consonantal derivational suffixes, and a word may have one flexional suffix *(C)V(V)*. Many nominal stems have a prefix before the root, taking the forms *CV-* or *CVn-*, less often *CVlɪn-* or *CVsɪn-*, e.g. *pīpi̩rī̩g* "desert." Such stems may

thus contain *nC* clusters between prefix and root: *dìndɛ̄og* "chameleon." Except in loanwords, the only other consonant clusters possible within stems are *kk tt pp ŋŋ nn mm ll mn*, of which *kk tt pp ŋŋ* are written and usually realised single. Clusters cannot occur word-initially or finally, except for final *mm*. Other pairs of consonants are separated by epenthetic high vowels, e.g. *dḭ̀ˈəsídìb* "receivers", *bāŋīdīb* "wise men", *gbīgīmnɛ̄* "lion" LF. Two-consonant clusters occur freely across word division (including within compounds) due to apocope of word-final short vowels.

Prefixes and flexional suffixes have only a three-way vowel contrast *a*/*ɪ*/*ʊ*. Suffix vowels are lost by apocope in SFs; before prosodic clitics *ɪ ʊ* become *ɛ ɔ*.

Most common **particles** are short bound words, like the postposed article *lā* "the", and the preverbal tense marker *dāa* "before yesterday."

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

Flexion is straightforward, but with some morphophonemic complications; for example, these words are all regular members of the same noun class:

bʊ̄ʊg	"goat"	*bʊ̄ʊs*	"goats"
sàbùa	"lover"	*sàbùʊs*	"lovers"
nūa	"hen"	*nɔ̄ɔs*	"hens"
kʊ̄k	"chair"	*kʊ̄gʊ̄s*	"chairs"
zàk	"compound"	*zàˈas*	"compounds"
dàˈa	"market"	*dàˈas*	"markets"
bʊ̀ŋ	"donkey"	*bʊ̀mìs*	"donkeys"
tɛ̄ŋ	"land"	*tɛ̄ɛn̆s*	"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. The classes show partial correlations with meaning. The bare stem is itself an important part of the paradigm, because 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:

bʊ̄ʊg	"goat"	+ *pɪ̀əlɪ̀g*	"white"	→ *bʊ̀-pɪ̀əlɪ̀g*	"white goat"
bʊ̄ʊg	"goat"	+ *sɪ̄ˈa*	"another"	→ *bʊ̀-sɪ̄ˈa*	"another goat"
kʊ̄k	"chair"	+ *pɪ̀əlɪ̀g*	"white"	→ *kʊ̀g-pɪ̀əlɪ̀g*	"white chair"
kʊ̄k	"chair"	+ *kàŋā*	"this"	→ *kʊ̀g-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.

Kusaal makes no grammatical distinction between male and female.

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

kʊ̄	pfv	*kʊ̄ʊd*	ipfv	"kill"
ňyɛ̄	pfv	*ňyɛ̄t*	ipfv	"see"
vʊ̄l	pfv	*vʊ̄n*	ipfv	"swallow"

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

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

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

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

Ò gịm. "She's short."
3AN be.short.

There are two verbs "to be": *bɛ̀* "exist, be in a place" and *àe̯ň* "be something/somehow." *Àe̯ň* is usually followed by the focus particle *nɛ̄* whenever syntactically permitted, and then loses both the final *e̯* and the nasalisation:

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

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

Ò kā' bīigā=ø. "He's not a child."
3AN NEG.BE child:SG=NEG.

Kusaal is well-provided with word-level derivational processes. For example, regular deverbal gerunds, agent nouns and instrument nouns can be made freely from most verb types: *kʊ̄ʊb* "killing", *kʊ̄ʊd* "killer", *kʊ̄ʊdíŋ* "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. *gbìgìm-kʊ̄ʊd* "lion-killer."

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

M̀ tís dʊ́'atà bʊ́ŋ lā.
1SG give doctor:SG donkey:SG ART.
"I've given Doctor the donkey."

As seen above, an adjective follows its noun and forms a compound with it. There are two native prepositions, *nɛ̄* "with" and *wʊ̄ʊ* "like" (*nɛ̄* also links NPs and some AdvPs in the sense "and", but *kà* is "and" when linking VPs and clauses.)

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

m̀ bi̱ig	"my child"
dāu̱ lā bi̱ig	"the man's child"

Adverbs often appear as postpositions preceded by NP dependents, as with *zūg* "head" used adverbially in *tɛ́ɛbʊ̀l lā zúg* "onto the table."

The liaison word n^{ε} mentioned above is a very general locative postposition. It In its SF it is reduced to *n*:

mʊ̀'arī=n "in a lake" (*mʊ̀'arɛ̀* "lake", LF)
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.

Gbīgīm lā sá kʊ̀ bʊ́mìs lā.
Lion:SG ART TNS kill donkey:PL ART.
"The lion killed the donkeys yesterday."

Gbīgımā lā dāa pʊ̄ kʊ̄ bʊ́ŋ láa=ø.
Lion:PL ART TNS NEG.IND kill donkey:SG ART=NEG.
"The lions didn't kill the donkey."

The focus particle *nɛ̄* may focus VPs or VP constituents (as after *àẹ̌ň* "be something" above), but if no unbound words intervene between the verb and *nɛ̄* 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":

Nı̣dīb kpı̂id. "People die."
Person:PL die:IPFV.

Nı̣dīb kpı̂id nɛ̄. "People are dying."
Person:PL die:IPFV FOC.

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

Ò zàb dʋ́'atà. "He's fought the doctor."
3AN fight doctor:SG.

Ò gɔ̀s dʋ́'atà. "He's looked at the doctor."
3AN look.at doctor:SG.

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

Kà ò záb dʋ́'atà. "And he fought the doctor."
And 3AN fight doctor:SG.

Kà ò gɔ̄s dʋ́'atà. "And he looked at the doctor."
And 3AN look.at doctor:SG.

When the verb itself has the tone overlay, clause-final perfectives are followed by the particle *yā*, and imperatives of inflecting verbs take the flexion *-ma*:

Dā gɔ̄s dʋ́'atāa=ø! "Don't look at the doctor!"
NEG.IMP look.at doctor:SG=NEG!

but *Gɔ̀sı̀m dʋ́'atà!* "Look at the doctor!"
Look.at:IMP doctor:SG!

Main clauses frequently have time or circumstance adjuncts preceding the subject; conditional clauses, with *yà'* "if" after their own subjects, appear here:

Fù yá' bɔ̀ɔd, m̀ ná tīsī=f búŋ.
2SG if want, 1SG IRR give=2SG 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 *tìs* "give" is used simply as means of adding an indirect object:

M̀ dāa kûɵs bùŋù◡ ø tís dú'atà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to Doctor."

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

Lì à nɛ̄ gbīgīm lá kà m̀ ňyɛ̄t.
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 *ǹ* (frequently realised as segmental *ø*) after the subject:

gbīgīm lá=ø kū búŋ "the lion having killed the donkey"
lion:SG ART=NZ kill donkey:SG ART

One type of relative clause is internally-headed:

[*Paul=ǹ sɔ̄b gbáu̲ŋ-sı̣'a n tís Efesus dím lā*]◡*ø ňwá.*
Paul=NZ write letter-INDF.IN CAT give Ephesus one.PL ART CAT this.
"This is [the letter Paul wrote to the Ephesians]." (NT heading)

Here *gbàu̲ŋ-sı̣'a* is *gbàu̲ŋ* "book" compounded with the dependent pronoun *sı̣'a* which marks it as antecedent, and the bracketed sequence is the relative clause.

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

dàu̲-kànì pu̲'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 *yɛ̄* or *kà* in **complementisation**. Purpose clauses are of this type:

M̀ ná tī=f tîɪm yɛ́ fʊ̀ nɪ̄f dā zábɛ̄=ø.
1SG IRR give=2SG medicine that 2SG eye:SG NEG.IMP fight=NEG.
"I'll give you medicine so your eye won't hurt."

Content clauses are formally identical to main clauses, and have independency marking, but with personal pronouns altered as in indirect speech. They are used for reporting speech and after verbs expressing communication or thought. Most are introduced by *yɛ̄* "that." There are logophoric uses of contrastive personal pronouns:

Dau da be mori o po'a yimmir, ka po'a la ye ***on*** *pu lem bood ye o sid la di po'a ya'ase.*
Dāu̱ dá bɛ̀◡ ø mɔ̄rí◡ò pu̱'à-yīmmír, kà pu̱'ā lā yɛ̄
Man:SG TNS EXIST CAT have 3AN wife-single:SG and wife:SG ART that
ɔ̄n pʊ̄ lém bɔ̀ɔd yɛ́ ò sīd lā dí pu̱'ā yá'asɛ̄=ø.
3AN.CNTR NEG.IND again want that 3AN husband:SG ART take wife:SG again=NEG.
"There was a man who had only one wife. [And] the wife said that **she** did not want her husband to take another wife." KSS p26

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

M̀ zūgʊ̄◡ø zábìd. "My head is hurting."
1SG head CAT fight:IPFV. (Reply to "Where is the pain?")

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

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

Fʊ̀ bɔ̂ɔd bɔ́=ø? "What do you want?"
2SG want what=CQ?

Bɔ́ kà fʊ̀ ǹyɛ̄tá=ø? "What can you see?"
What and 2SG see:IPFV=CQ?

Ànɔ́'ɔnì◡ ø kʊ̄ bʊ́ŋ lá=ø?
Who CAT kill donkey:SG ART=CQ?
"Who has killed the donkey?"

Preposing with *kà* is often simply due to ordering constraints and then has no foregrounding implication.

Kusaal narrative links clause after clause with *kà*, 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-Pʊ̄-zɔ́t-yɛ̄l dá à né ò sàam bi̱ig mà'àa.
PERS-NEG.IND-fear:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only.
Kà dāar yīnní kà bi̱ig lā né ò sàam zi̱ň'i◡ ø sɔ̄ňsīd.
And day:SG one and child:SG ART with 3AN father:SG sit CAT converse:IPFV.
Kà bi̱ig lā tí yɛ̀l ò sàam yɛ̄ ...
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 *dà* occurs only in the first clause. The second *kà* is preposing the time expression *dāar yīnní* in a foregrounding construction, while the first and third are carrying on the narrative.

2 Sound system

2.1 Consonants

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

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

kp gb z v are only found prefix- or root-initially §3.3, and *w* only root-initially. Syllable-final *y* becomes the glide *i̯*/*e̯*. No *ŋ* occurs prefix- or root-initially. Phonemic *h* occurs only syllable-initially in loans, but these include the common *hālí* "as far as."

Root syllables with no initial consonant are optionally realised with initial [ʔ].

k t p represent [kʰ] [tʰ] [pʰ] prefix- or root-initially, [k] [t] [p] elsewhere. Except after prefixes, word-internal *k t p ŋ* represent /kk/ /tt/ /pp/ /ŋŋ/, but they are only *realised* as geminates in very slow speech. Word-final *g d b* are partly devoiced, but still contrast with *k t p*. Toende Kusaal word-final *g d b* normally become *k t p*, but *g b* ending perfectives and cbs remain (*ya'ab* "mould pots", *ya'ap* "potter"): Toende apocope only occurs *after* final stop devoicing in the case of perfectives and cbs.

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

tɔ́klàe	"torch"	← English "torchlight"
sɔ́gi̯à	"soldier"	(probably via Hausa *soojà*)

Before *a* and *ɔ* velars are backed, or even uvular: *kɔ̀bɪgā* [qʷɔbɪɢa] "hundred."

k g are labialised before rounded vowels; they might here be regarded as allophones of *kp gb* rather than *k g*: cf *kūm* "death", *kpì̯* "die"; *kɔ̄bīr* "bone", Moba *kpábl̀*; *kpàkʊ̄r* "tortoise", Dagbani *kpàkpílí*.

t d n s z l r represent alveolars in general, but *s z* are often dental, or even interdental; *l* is never velarised. Before *u*, *z* is sometimes heard as [ʒ].

s is often realised as [h] word-internally; it can represent *h* in loanwords:

Àláasìd (*dâar*)	"Sunday"	← Hausa *Lahàdì* (← Arabic)
Dàsmáanì	personal name: *ʕAbdu-r-Raħma:ni* (also *Dàhàmáanì*)	

d represents [d], and *r* represents [ɾ] (often [l̥] after an epenthetic vowel.) They do not contrast prefix- or root-initially: [d] appears by default, but often [ɾ] phrase-internally after vowels, and always so within compounds:

nɔ̄-dâʋg [nɔɾaʊg] "cock" *nā'-dâad* [nɑ̰ɾa:d] "oxen"

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

ɛ̀n̆dìg	"unplug"	*ɛ̄n̆rīg*	"shift along"
mɔ̄d	"swell"	*mɔ̄r*	"have"
yàad	"graves"	*yāar*	"scatter"
zàbìd	"fight" (ipfv)	*zàbìr*	"fight" (gerund)

Word-initially, *d* is written throughout, but *r* is often used after prefix vowels: *tīrâan* "neighbour", *àràzàk* "riches", *àràzánà* "heaven", *àràkɔ́n̆* "one."

Within Western Oti-Volta only Mooré and Agolle Kusaal contrast *r* and *d*. Agolle *r* corresponds to Dagbani *l* but *r* elsewhere: Mampruli *yaarim*, Dagbani *yalim* = *yàarìm* "salt"; Mampruli *tubri*, Dagbani *tibili* = *tʊ̀bʊ̀r* "ear"; Mampruli *mari*, Dagbani *mali* = *mɔ̄r* "have." Postvocalic Agolle/Mooré *d* correspond to *r* elsewhere: Mampruli/Dagbani *mɔri* = *mɔ̄d* "swell"; Mampruli *moori*, Dagbani *mɔri* = *mɔ̄ɔd* "grass."

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

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

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

Gɔ̀sīm. "Look at me!" for *Gɔ̀sɪmī m!*
Gɔ̀sɪmí fʊ̀ nû'ug! "Look at your hand!" for *Gɔ̀sím fʊ̀ nû'ug!*

kp gb represent [k͡p] [g͡b]; *kp* is unaspirated. They occur only before unrounded vowels, and (for some speakers) in prefixes like *kpʊ̀kpàrìg*/*kʊ̀kpàrìg* "palm tree." They represent labialised velars in loans: *bákpàe̱* "week", Hausa *bakwài* "seven."

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

n̆yɛ̄ [j̃ɛ̃] "see" *n̆wādīg* [w̃ãdɪg] "moon"

n̆y n̆w reflect earlier initial *ɲ ŋ͡m* respectively, cf Dagbani *nyá* "see", *ŋmariga* "moon." Some Toende speakers retain initial [ɲ] [ŋ͡m]. Kusaal initial nasalised vowels reflect earlier initial *ŋ*: Dagbani *ŋubi*, Kusaal *ɔ̀n̆b* "chew."

2.2 Vowels

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

Agolle Kusaal has a nine-vowel system. Seven of these are written by default as *a ɛ ɔ i u ɪ ʊ*, respectively [a] [ɛ] [ɔ] [i] [u] [ɪ] [ʊ]; the corresponding long vowels contrast with short vowels in length, but not quality, and are written by doubling the vowel symbol: *bāa* [ba:] "dog." *Mà'àa* "only" has a unique overlong monophthong. The vowel *ɪ* is more central after velars and labials, and *ʊ* is slightly fronted after alveolars and *y*; *u* is fronted after alveolars: *zūg* "head" [ʒyg].

Lax *ɪ ʊ* do not appear after *m* or *n* in roots or prefixes. Distinctions of short *i*/*ɪ* and *u*/*ʊ* have a very low functional load even in roots. The allophony [ɪ]~[i] and [ʊ]~[u] in epenthetic and prefix vowels 3.3 is ignored, only *ɪ ʊ* being used in writing.

The two remaining vowels are the **broken vowels** *i̯a u̯a*; the corresponding long vowels are *iə uɵ*. Though realised [i̯a] [u̯a] [iə] [uɵ] as written, they pattern throughout as *monophthongs*, and will be referred to as such below. Before *y* word-internally, *i̯a u̯a* are realised [i̯ɪ] [u̯ɪ] and written *i̯e u̯e*.

ti̯àk	[tɪ̯ak]	"change"	*pu̯āk*	[pʊ̯ak]	"female"
kpi̯à'	[k͡pi̯a̰]	"shape wood"	*ki̯à*	[kɪ̯a]	"cut"
pìəlìg	[piəlɪg]	"white"	*bū'ɵs*	[bʊ̯ʊ̯s]	"ask"
bi̯ēyá	[bi̯ɪja]	"elder siblings"	*su̯ēyá*	[sʊ̯ɪja]	"roads"

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

Nasalised *iəň uɵň* (including after *m n*) occur only before underlying **g*, and in the ipfv of fusion verbs by analogy 3.7. Elsewhere they have fallen together with *ɛɛň ɔɔň*: cf *nɔ̄ɔr* "times", Mooré *náooré, nɔ̄ɔr* "mouth", Mooré *nóorè*.

Short *i̯a u̯a* have just two origins. Apocope 3.2 shortens final *iə uɵ* to *i̯a u̯a*:

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

Elsewhere, *i̯a u̯a* replace *ɛ ɔ* before *k* and before underlying **g*, which is deleted with vowel fusion 3.7. *Bɔ̀k* "pit" (vs *bu̯àk* "split") is due to the change **u̯akkʊ* → *ɔkkʊ*; other *ɛk ɔk* arise by shortening of long vowels before *k* (see below), as with *tɛ̄k* "pull" (vs *ti̯àk* "change.")

Toende Kusaal here preserves phonetic monophthongs: Toende *sɛ̄ɛ̄s* = *sɪ̄əs* "waists" vs *pē'ēs* = *pɛ̄'ɛs* "sheep (pl)"; *bɔ́'ɔs* = *bū'ɵs* "ask" vs *tōom* = *tɔ̄ɔm* "depart." Mooré *oo* corresponds to Toende *ɔɔ*/Agolle *uɵ*, but Mooré *ao* to Toende *ɔɔ*/Agolle *ɔɔ*: Mooré *bàoda*, Toende *bɔ̀ɔ̀t*, Agolle *bɔ̀ɔd*, "want, wish."

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

gàad	"pass" pfv	*gàt*	"pass" ipfv
tɛ̄ɛg	"drag"	*tɛ̄k*	"pull" (**tɛɛkkɪ*)
tɔ̄ɔg	"bitter"	*tɔ̄e̯*	"be bitter" (**tɔɔya*)

The process also applies in loanwords: *àtìu̯k* "sea" ← Hausa *tèeku*, *kɔ́tɔ̀* "court."

All sequences of dissimilar vowel symbols other than *i̯a u̯a i̯e u̯e iə uɵ* represent phonemic **diphthongs**. After a vowel symbol *e̯* represents [ɪ̯], *i̯* is [i̯] (found only after *u*), and *u̯* represents [ʊ̯]:

sɔ̄e̯ň	[sɔ̃ɪ̯]	"witch"	*mùi̯*	[mũi̯]	"rice"
dāu̯	[daʊ̯]	"man"	*bi̯āu̯ň̆k*	[bi̯ãʊ̯k]	"shoulder"

Unlike *y w*, *e̯ i̯ u̯* do not form syllable boundaries. Initial *ya* contrasts with *i̯a* in tenseness and timing: *i̯ā* "seek" and *yā* "houses" contrast as [i̯a] ~ [ja], not [ʔja] ~ [ja].

Primary diphthongs arise from word-final **Vw *Vy* 3.4 and from fronting, rounding and fusion 3.6 3.7. All also occur nasalised, and if not short, glottalised; those written glottalised below *only* occur glottalised. As non-initial elements, [ɪ] is written *e* except after *ɛ*, and [ʊ] is written *o* except after *a*.

		ia	[ia]	*iaa*	[ia:]
		i̯a'a	[i̯a̯:]		
		ua	[ua]	*uaa*	[ua:]
		ʊ'a	[ʊ̯a̯]		
ae̯	[aɪ̯]	*ae*	[aɪ]	*aee*	[aɪ:]
		ie	[iɪ]	*iee*	[iɪ:]
ɔe̯	[ɔɪ̯]	*ɔ'e*	[ɔ̯ɪ̯]		
ui̯	[ui̯]	*ui*	[ui]		
		ue	[uɪ]	*uee*	[uɪ:]
ʊe̯	[ʊɪ̯]	*ʊ'e*	[ʊ̯ɪ̯]		
au̯	[aʊ̯]	*aʊ*	[aʊ]		
ɛu̯	[ɛʊ̯]	*ɛo*	[ɛʊ]		
i̯au̯	[i̯aʊ̯]				
ɪu̯	[ɪʊ̯]				
		iu	[iu]		
		io	[iʊ]		

The diphthongs *ʊ'a ʊň'a* appear as *u̯'aa u̯ň'aa* respectively when LF-final. Long diphthongs become overlong before the polar-question prosodic clitic 4.1.

Diphthongs may be short, long, or overlong 2.3. The only length contrasts in identical environments are *avŋ*/*aa̰ŋ* and word-final *ae*/*aḛ*. Rounding diphthongs occur only word-finally and before velars, fronting diphthongs word-finally and before *y*.

Secondary diphthongs are created by *replacement* of final morae of word-final root vowels by [ɪ] (never [i]) before the liaison word 4.2 2pl subject ya and by [ʊ] (never [u]) before the liaison word o "him/her." Any vowel may precede:

zūó=o	[zuʊ:]	"steal him"	Long Form 3.2
zúo	[zuʊ]	"steal him"	Short Form
bɛ̄ıyá	[bɛıja]	"be ye!"	Long Form
bɛ̄ı	[bɛı]	"be ye!"	Short Form

The symbol *o* is used for [ʊ] both in the 3sg pronoun *o* and in the mora preceding it in liaison: thus *dāvg* [daʊg] "male", but e.g.

ò bi̱ig	[ʊbi:g]	"her child"	*zúo*	[zuʊ]	"steal him"
dà'o	[da̰ʊ̰]	"bought for him"	*āňo*	[ãʊ̃]	"be him/her"

Nasalisation is automatic on long vowels after *m n*: *mɛ̀ɛd* "build" ipfv [mɛ̃:d]. Elsewhere it is marked by a following *ň*, but if the vowel or diphthong is also glottalised, *ň* precedes the ' mark, and after initial *y* or *w*, *ň* precedes the *y* or *w*; *ň* also precedes *o* [ʊ] before the 3sg pronoun: *āňo* [ãʊ̃] "be him/her."

tɛ̄ɛňs	[tɛ̃:s]	"lands"	*áňsìb*	[ãsıb]	"mother's brother"
gɛ̄ň	[gɛ̃]	"get tired"	*gɛ̄ň'*	[gɛ̰̃]	"get angry"
gɛ̄ň'ɛd	[gɛ̰̃:d]	"get angry" ipfv	*ňwām*	[w̃ãm]	"calabash"

There are no short **ıň *ʊň*. Short *iň uň* nearly always arise from apocope 3.2 of *iiň uuň*, as in *sḭ̄iňf* "bee" cb *sḭ̄ň-, zùuňg* "vulture", cb *zùň-*; the only exception is *sūňf* "heart" (pl *sūňyá*), written *sʋnf* in KB. Nasalised *iəň uəň* occur only in fusion verbs 3.7. Nasalisation may result after lost initial **ŋ *ɲ *n͡m* or before underlying **ns *nf*; so with all *ııň ʋʋň*: *píıňf* "genet", pl *pīıní*; *zʋ́'ʋňf* "dawadawa seed", pl *zʋ̄'ʋní*; *tɛ̀ŋ-zʋ̀ʋňs* "foreign lands", sg *tɛ̀ŋ-zʋ̀ŋ*.

Glottalisation does not affect vowel quality. It may be realised as creakiness or as [ʔ̰] after the first mora; this [ʔ̰] is never treated as a consonant. Glottalisation is marked by ' following the first/only vowel symbol (including *u̱*) *other* than *i̱*:

dà'	[da̰]	"buy"	*dà'a*	[da̰:]	"market"
kù'ʊm	[ku̱ʊ̰m]	"water"	*pu̱'ā*	[pʊ̰a̰]	"woman"
kpḭ̀'a	[k͡pi̱a̰]	"neighbour"	*kpi̱à'*	[k͡pi̱a̰]	"carve"

Word-final short vowels and diphthongs ending statements and commands, but not questions, become glottalised; for example *dāu̯* "man" is realised [dạ̰ʊ̰]/[daʊ̰ʔ], and *gɛ̄ň* "get tired" falls together with *gɛ̄ň'* "get angry."

Farefare, Talni and Nabit also preserve glottalisation: Farefare *yʊ́'ʊ́rɛ́* "name" = *yʊ̄'ʊr*, Talni *kwoʔm* "water" = *kʊ̀'ɵm*, Nabit *kpa'uŋ* "guinea fowl" = *kpá'ʊŋ*. Nawdm has *ɦ* [ʔ] in many cognates, e.g. *bɛ́ɦgú* "bad" = *bɛ̄'og*, *daɦ-* "buy" = *dà'*.

Glottalised short vowels arise by apocope 3.2. Besides *kā'e̱* "not be" (**kagɪ*) all other cases precede *m* or *ŋ* in closed syllables, e.g. *kpɛ̀'ŋ* "strengthen", *lā'ŋ* "set alight", *nɪ̄'m* "meat", *kɔ̄'m* "hunger", *sʊ̀'ŋā* "well", *sʊ̀'m* "goodness" (but only *sʊ̀ŋ* pl *sʊ̀mà* "good.") The vowels are traditionally written long: *sʊ'ʊŋa* etc. Only Agolle Kusaal shows this phenomenon, and only some informants. It probably arose from gemination of *m ŋ*; KB has 385 examples of *an sʊm* to 47 of *an sʊ'ʊm àň sʊ́m* "is good", but 30 of *ka' sʊm* to 40 of *ka' sʊ'ʊm kā' sʊ́mm* "is not good."

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

2.3 Syllables and tonemes

Syllables may be light *(C)V* or heavy *(C)VV~(C)VC~(C)VVC*; *(C)VVC* syllables are *superheavy*. A *CV* syllable is *superlight* if it is not word-initial, word-final or root-initial, and preceded by a *CV* syllable which is not itself superlight, working from left to right: *dɪ̄'əsí**dɪ**bà* "receivers", *sɪ̄**gɪ**sí**dɪ**bà* "lowerers", *mɔ̀**lɪ**fɔ* "gazelle." Three-mora vowel sequences are *disyllabic*, dividing after the first mora: Long Form *nū-áa* "hen."

Stress falls on the root syllables of free words, but is subject to complex sandhi phenomena which have yet to be properly investigated. It is probably never contrastive, and roots can be reinterpreted as prefixes: *dìtʊ́ŋ* "right hand" is derived from *dì* "eat", but also appears as *dàtìu̯ŋ*, while *bʊ̄tɪ̄ŋ* "cup" is the instrument noun from *bʊ̀d* "plant seeds", but has the plural *bʊ̄tɪ̄ɪs*, as if from *bʊ̄* + *tɪ̄ŋ*.

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

Tone is mostly distinctive as a syntactic marker, but lexical minimal pairs are quite common, e.g. *bʊ̄k* "weaken", *bʊ̀k* "cast lots"; *kʊ̄k* "chair", *kʊ̀k* "ghost."

The tone-bearing unit is the syllable. Superlight syllables and catenator-*n* are toneless; the toneme of the preceding syllable extends over them. Being disyllabic, overlong diphthongs carry two tonemes, as in the Long Form 3.2 *nūáa* "hen."

There are four tonemes: High (H), marked ˊ: *gél* "egg"; Mid (M), marked ¯: *bāŋ* "ring"; Low (L), marked ˋ: *bɔ̀k* "pit"; and Circumflex (X): *nû'ug* "hand." When *i* carries a tone mark the dot is written below: *bi̱ig* "child."

X toneme only appears on superheavy *CVVC* syllables; on *CVV* syllables, H replaces X: *nû'ug* "hand", *náaf* "cow", but Long Forms *nú'ugɔ̀*, *náafɔ̀*.

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

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

Superlight syllables are toneless:

*Bà kā' dị̄'əsí**dɪ**bā=ø.* "They are not receivers."
3PL NEG.BE receiver:PL=NEG.

*Lì kā' mó**lɪ**fɔ̄=ø.* "It's not a gazelle."
3IN NEG.BE gazelle:SG=NEG.

vs *Ò pō zá**bì**=fɔ̄=ø.* "He didn't fight you."
3AN NEG.IND fight=2SG=NEG. (word-final syllable)

Ka ya pʋ siakida. "But you did not agree." (Lk 13:34)
*Kà yà pō sị́á**kì**dā=ø.* (*k* /kk/ closes the preceding syllable)
And 2PL NEG.IND agree:IPFV=NEG.

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

HH	→	H↓H
HX	→	H↓X
MH	→	M↓H if the next syllable is **superheavy** *CVVC* *or* if the next syllable precedes pause and is not L

Downstep (marked with ↓) between HH and HX:

*M̀ **gɔ́s** **↓náaf** lā bɛ̄ogʊ̄=n.*
1SG look.at cow:SG ART morning=LOC.
"I looked at the cow in the morning."

*M̀ **gɔ́s** **↓nû'ug** lā bɛ̄ogʊ̄=n.*
1SG look.at hand:SG ART morning=LOC.
"I looked at the hand in the morning."

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

*Kà m̀ **gɔ̄s** **nû'ug** lā bɛ̄ogʊ̄=n.*
And 1SG look.at hand:SG ART morning=LOC.
"And I looked at the hand in the morning."

MH → M↓H before a superheavy *CVVC* syllable:

*Lì à nɛ̄ **↓pú-kɔ̀ɔ̌nr** lā.* "It's the widow."
3IN COP FOC widow:SG ART.

*Bi̱ig lā **↓sá mɛ̀ɛd** yi̱r lā.*
Child:SG ART TNS build:IPFV house:SG ART.
"The child was building the house yesterday."

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

vs *Lì kā' **pú-kɔ̀ɔ̌n**rɛ̄=ø.* "It's not a widow."
3IN NEG.BE widow:SG=NEG.

*Bi̱ig lā **sá mɛ̀** yi̱r lā.* "The child built the house yesterday."
Child:SG ART TNS build house:SG ART.

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

*Mān **kʊ́kɔ̄r** kā'e=ø.* "My voice isn't there."
1SG.CNTR voice:SG NEG.BE=NEG.

MH → M↓H when the next syllable is followed by pause, and is not L:

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

*Yʊ̄**↓gʊ́m** **kā'e**=ø.* "There's no camel."
Camel:SG NEG.BE=NEG.

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

Ò pū̄ yādɪ ***↓gídā*****=ø.** "He isn't scattering."
3AN NEG.IND scatter:IPFV=NEG.

Lì kā' bḭ̄- ***↓púŋā*****=ø.** "It's not a girl."
3IN NEG.BE child-girl:SG=NEG.

Ò pū̄ ňyɛ̄ ***↓sú'ʊgā*****=ø.** "She didn't find a knife."
3AN NEG.IND see knife:SG=NEG.

Lì kā' ňyḭ̄ ***↓rífɔ̄*****=ø.** "It's not an egusi seed."
3IN NEG.BE egusi:SG=NEG.

vs *Kà m̀ gɔ̄s* ***búŋ lā*** *bɛ̄ogū̄=n.*
And 1SG look.at donkey:SG ART morning=LOC.
"And I looked at the donkey in the morning." (*lā* not prepausal)

Yūgúm lā *kā'e=ø.* "The camel's not there."
Camel:SG ART NEG.BE=NEG. (*lā* not prepausal)

Lì à nɛ̄ ***dɔ̂ɔg*** *lā.* "It's the hut." (MX not MH)
3IN COP FOC hut:SG ART.

*Ànɔ́'ɔnì◡ ø yādɪ****gídà*****=ø?** "Who is scattering?" (L after H)
Who CAT scatter:IPFV=CQ?

*Lì kā' bḭ̄-****púŋàa*****=ø?** "Isn't it a girl?" (L after H)
3IN NEG.BE child-girl:SG=PQ?

Ànɔ́'ɔnì◡ø ňyɛ̄ ***sú'ʊgà*****=ø?** "Who found a knife?" (L after H)
Who CAT see knife:SG=CQ.

Ò pū̄ ***dúgɛ̀ɛ*****=ø=ø?** "Didn't she cook?" (L after H)
3AN NEG.IND cook=NEG=PQ.

Ò pū̄ ňyɛ̄ ***mɔ́lɪfɔ̄*****=ø.** "She didn't find a gazelle."
3AN NEG.IND see gazelle:SG=NEG. (Superlight *-lɪ-* intervenes before the prepausal syllable *-fɔ̄*.)

2.4 Traditional orthography

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

Before 2016, *e o* were used for *ɛ ɔ*, *i* for *i* ~ *ɪ*, and *u* for *u* ~ *ʊ*; *e o* were also sporadically used for *ɪ ʊ* as root vowels. KB has the same basic conventions as this grammar except for using *i* for both [i] and [ɪ]: *tiig tìɪg* "tree", *biig bi̱ig* "child."

Word-final short -*ɪ* after *m n* is usually written *ɛ* in KB; so always with the pronouns *onɛ kanɛ linɛ banɛ anɔ'ɔnɛ*.

KB has *ye* "that", *teŋ* "land", *keŋ* "go" pfv, *ken* "go" ipfv for *yɛ̄ tɛ̄ŋ kɛ̄ŋ kɛ̄n*, and *on oŋa* for the pronouns *ɔ̄n*/*ɔ́n*/*ɔ̀n ɔ̀ŋā*, probably reflecting actual variants with [ɪ] [ʊ]: cf Toende *tīŋ* "land" versus *meŋ mɛ̄ŋ* "self" (Mampruli *tiŋŋa*, *maŋŋa*.)

After *a* or *ɔ* epenthetic *ɪ* is often written *e*: *sanrega sārɪgá* "prison."

ie is used for *iə* and *ie*, but they are almost in complementary distribution.

uo is used for *uɵ* and *uo*, but traditional orthography always separates the vowel symbols in the latter case: *bu'os bū'ɵs* "ask", *zu o zúo* "steal him."

KB writes *-uoe -ʋoe* for *-ue -ʋe*: *duoe dūe* "raise, rise", *sʋ'oe sʋ̄'e* "own."

io [iʊ] is written *ieu* in the 1996 NT and KB: *kpi'euŋ kpi̱'oŋ* "strong."

e i u are used for *e̱ i̱ u̱*. The contrast *ae*/*ae̱* is expressed by writing *aae* (or *aaɛ*) for *ae*, e.g. *paae pāe* "reach." KB spells words consistently with either *au* or *aʋ*, but not distinguishing *au̱*/*aʋ*: *yaʋg yàʋg* "grave", *na'araug nā'-dâʋg* "ox", *dau dāu̱* "man", *taʋn tāu̱ň* "sibling of opposite sex." The symbols *ia ua* are used for *i̱a u̱a* and *ia ua*: *kia ki̱à* "cut", *sia si̱a* "waist"; *kua ku̱ā* "hoe", *sabua sàbùa* "lover." The glottalisation marking conventions distinguish *kpia' kpi̱à'* "carve", *kpi'a kpi̱'a* "neighbour."

Before 2016, *u̱'a ʋ'a* were both usually written *o'a*, but KB has *u'a*: *pu'a pu̱'ā* "woman", *pu'ab pʋ̄'ab* "women."

Long Forms 3.2 with final *-ya* corresponding to Short Forms with final *-e̱* are written with *-eya*: *vʋeya vʋ̄yá* "be alive." Older texts also write *bʋ̄n-vʋ́yà* "living things" as *bunvoeya*, but KB has *bʋnvʋya*.

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

y is omitted in *dunia dūnɪyā* "world", *laafia láafɪyà* "health."

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

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

3 Word structure

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

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

3.1 Word boundaries

Free words fulfil the concept of "word" expressed in Bloomfield 1926: "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. Nominals regularly have "combining forms" (cbs), used as initial members of compounds: cbs may be dependents, but are more often NP heads before adjectives and demonstratives: *tì-kàŋā* "this tree." There are no consistent phonological differences between cbs and free words, and compounds may include unbound words: [*ānzúrıfà nɛ̄ sālımā lá'-*]*māan* "[silver and gold goods]-maker."

Word status for other bound forms depends on distinguishing them from affixes. Bound personal pronouns and many particles resemble free-word affixes segmentally, but differ in tonal behaviour, mode of attachment, and distribution.

Stress allocation does not distinguish between bound and free words, and tone does not distinguish between right-bound and free words. However, left-bound liaison words 4.2 are distinct segmentally and tonally both from free words and from other left-bound words; the term **clitic** will be reserved for these words and for "prosodic" clitics 4.1. Clitics are preceded by = in the working orthography whenever they have a non-zero segmental form; with interlinear glossing, =ø is also used.

Boundness is distinct from syntactic *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 personal pronouns always head their own NPs: Kusaal has no possessive pronouns, only possessive NPs.

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

bʊ̀rkìn	"honest person"	*kpʊ̀kpàrìg*	"palm tree"
zīm-gbâň'ad	"fisherman"	*bʊ̀-pìəlìg*	"white goat"
bʊ̀-kàŋā	"this goat"	*bʊ̀-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: *bʋkaŋa bʊ̀-kàŋā* "this goat", but *yamug bipuŋ (*Acts 16:16, 1976) for *yàmmʊ̀g-bḭ̄-pʊ́ŋ* "slave girl."

Traditional orthography writes pronouns as separate words if they have vowels of their own. Pronouns may be reduced to single consonants by apocope 3.2; prior to 2016, *m* [m] "me" was written as a separate word, while the mora before *f* "you" was separated from the verb and joined to the pronoun as *if* or *uf*. KB writes *m f* solid with the preceding word. In this grammar they are joined to the preceding word by = 4.2.

Fʋ bɔɔdi ti. "You love us." [fʊbɔːdɪtɪ]
Fʊ̀ bɔ́ɔdī=tí.
2SG want=1PL.

M nye uf. (2016: *nyɛɛf*) "I've seen you." [m̩j̃ɛ̃ʊ̃f]
M̀ ňyêo=f.
1SG see=2SG.

Fu boodi m. (2106: *bɔɔdim*) "You love me." [fʊbɔːdɪm]
Fʊ̀ bɔ́ɔdī=m.
2SG want=1SG.

M bood if. (2106: *bɔɔdif*) "I love you." [m̩bɔːdɪf]
M̀ bɔ́ɔdī=f.
1SG want=2SG.

The pronoun º "him/her" loses its entire segmental form by apocope, after causing the final vowel mora of the preceding word to become [ʊ]. This mora is traditionally mistaken for the pronoun itself and written separately; in this grammar it is not separated, but is written *o* as a concession to tradition.

Fʋ bɔɔd o. "You love her." [fʊbɔːdʊ]
Fʊ̀ bɔ́ɔdō=ø.
2SG want=3AN.

Fʋ pʋ bɔɔd oo. "You don't love her." [fʊpʊbɔːdʊː]
Fʊ̀ pʊ̄ bɔ́ɔdó=o=ø.
2SG NEG.IND want=3AN=NEG.

Fʋ nyɛ o. "You've seen her." [fʊ̃j̃ɛ̃ʊ̃]
Fʊ̀ ňyɛ́o=ø.
2SG see=3AN.

Fʊ pʊ nyɛ oo. "You've not seen her." [fʊpʊ̃ɟɛ̃ʊ̃ː]
Fʊ̀ pʊ̄ ǹyɛ́ó=o=ø.
2SG NEG.IND see=3AN=NEG.

Locative *nɛ* and discontinuous-past *nɛ* 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: *pʊʊgʊn*, *bɔɔdin*. However, all three are liaison enclitics, not suffixes, and accordingly joined to the preceding word by = in the working orthography: *pʊ̄ʊgʊ̄=n* "inside", *bɔ̀ɔdī=n* "might wish."

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

Traditional orthography always writes focus-*nɛ̄* solid after *à* "be", and usually after other verbs; *nɛ̄* "with" is written solid after *wɛ̄n* "resemble" by analogy:

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

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

In KB *wɛ̄n nɛ̄* appears as *nwɛnɛ*: *Ka o nindaa nwɛnɛ winnig nɛ.*
KB writes independent-perfective *yā* 16.6.2 solid with the preceding verb:

Nannanna o gaadya. "Now he has gone." (2 Samuel 3:24)
Nānná-nā, ò gàad yā.
Now 3AN pass PFV.

Older texts write *-eya* after consonants: *gaadeya* etc.

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

Arezana nɛ dunia gaadʊg pʊ tɔi yaa
Àràzánà nɛ̄ dūnɪyā gáadʊ̀g pʊ̄ tɔ̄yá=ø.
Heaven with world passing NEG.IND be.difficult=NEG.
"The passing of heaven and earth is not difficult" (Lk 16:17)

3.2 Apocope

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

For example, "child" usually appears as the SF *bị̄ig*:

Ò dāa ňyɛ̄ bị̄ig. "She saw a child."
3AN TNS see child:SG.

bị̄ig lā nû'ug "the child's hand"
child:SG ART hand:SG

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

Ò dāa pʋ̄ ňyɛ̄ bị̄igā=ø. "He/she did not see a child."
3AN TNS NEG.IND see child:SG=NEG.

Ànɔ́'ɔnì◡ø dāa ňyɛ̄ bíigà=ø?
Who CAT TNS see child:SG=CQ?
"Who saw a child?"

M̀ bị̄igā=ø! "My child!"
1SG child:SG=VOC!

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

A final long vowel is shortened and a final short vowel is deleted. Final diphthongs shorten by one mora.
Subsequently Word-final consonant clusters drop the second consonant (*kk tt pp ŋŋ* become *k t p ŋ* but are written single in any case) Word-final *y* becomes *e̯* after back vowels and zero elsewhere

The shortening changes of final diphthongs induced by apocope are

ia	→ *i̯a*	*ua*	→ *u̯a*	*i̯a'a*	→ *i̯a'*	*u̯'aa*	→ *u̯'a*
ae	→ *ae̯*	*aʋ*	→ *au̯*	*ui*	→ *ui̯*		
Vaa	→ *Va*	*Vee*	→ *Ve*	*Vʋʋ*	→ *Vʋ*		

Identical changes occur with nasalised and/or glottalised diphthongs.

Apocope is described as a single rule, but comparative and internal evidence shows that loss of quality contrasts preceded complete deletion of word-final vowels clause-medially, which was itself distinct from the clause-final apocope characteristic of Kusaal, Nabit and Talni. In Toende Kusaal, apocope still involves two steps 2.1.

Examples:

Lì à nɛ̄ dʊ̄k. "It's a cooking pot."
3IN COP FOC pot:SG.

Dʊ̄k lā bɔ́dìg yā. "The pot has got lost."
Pot:SG ART get.lost PFV.

Lì kā' dʊ̄kɔ́=ø. "It's not a pot." (/kk/)
3IN NEG.BE pot:SG=NEG.

Lì à nɛ̄ dʊ̄kɔ́ɔ=ø? "Is it a pot?"
3IN COP FOC pot:SG=PQ?

Ànɔ́'ɔnì◡ ø ňyɛ̄ dʊ̄kɔ́=ø? "Who saw a pot?"
Who CAT see pot:SG=CQ?

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

Lì à nɛ̄ kʊ̄k. "It's a chair."
Lì kā' kʊ̄kā. "It's not a chair."
Lì à nɛ̄ kʊ́kàa? "Is it a chair?"

Lì à nɛ̄ gbīgīm. "It's a lion."
Lì kā' gbīgīmnɛ̄. "It's not a lion."

Lì à nɛ̄ yáarìm. "It's salt."
Lì kā' yáarīmm. "It's not salt."

Bà à nɛ̄ gbīgɪmā. "They're lions."
Bà kā' gbīgɪmāa. "They're not lions."

Ò à nɛ̄ dāu̯. "He's a man."
Ò kā' dāʊ. "He's not a man."

Kà ò sị́ák. "And he agreed."
And 3AN agree.

Ò pō sị́ákɛ̄=ø. "He didn't agree."
3AN NEG.IND agree=NEG.

Kà ò dīgī. "And she's lying down."
Ò pō dīgıyá. "She isn't lying down."

Kà ò vōẹ̀. "And she's alive."
Ò pō vōyá. "She's not alive."

Kà ò kị́á. "And she cut (it)."
Ò pō kị́a. "She hasn't cut (it)."

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

The appearance of clause-final LFs is triggered by following **prosodic clitics**, which have no segmental form themselves 4.1. LFs occur clause-medially before **liaison words** 4.2, and as the *citation* forms of **apocope-blocked** words. The exact shape of a LF differs in these different contexts: length and quality of final vowels may be altered or neutralised, and final tonemes altered. For convenience, the LF preceding the negative prosodic clitic will be taken as basic segmentally.

The LF is historically primary, but it can usually be predicted from the SF given the aspect of a verb or the gender of a noun. Apocope often does *not* lead to loss of contrasts despite deleting the segments which conditioned them, and working in reverse, such features can predict LFs from SFs. Historically expected LFs may be replaced by other forms with the same SFs. Nevertheless, LFs are best regarded as synchronically primary. Consonant-final SFs may have LFs ending in *a ɛ* or *ɔ*, final *m n* or *l* may or may not be geminated, and *m* may become *mn* or *mm*. The issues with consonants arise even before liaison:

*ka ban ka kikirbe'ednam **daamne** ba daa nye laafiya*
kà bàn kà kìkị̀r-bɛ̂'ɛ́d-nàm dâamnī=bá dāa ňyɛ̄ láafı̀yà
and REL.PL and fairy-bad-PL trouble:IPFV=3PL TNS see health
"And people who were afflicted by evil spirits became well." (Lk 6:18, 1976)

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

Pu'abi du'a sieba la wʋsa, sɔ' kae gat Joon nɛ [*sic* 3.1].
Pʊ̄'abí=ø du̯'à sị̄əbā lā wʊ̄sā, sɔ̄' kā'e‿ø gát Joonɛ=ø.
Woman:PL=NZ bear INDF.PL ART all, INDF.AN NEG.BE CAT pass:IPFV John=NEG.
"Of all those born of women, none surpasses John." (Lk 7: 28)

All SFs ending in vowels other than long monophthongs, front vowels or fronting diphthongs have LFs obtainable simply by lengthening the final vowel or diphthong, as do most but not all SFs ending in fronting diphthongs or front vowels:

zɔ̀	LF *zɔ̀ɔ*	"run"	*kūgá*	LF *kūgáa*	"stones"
sị̄a	LF *sị̄āa*	"waist"	*sàbùa*	LF *sàbùàa*	"girlfriend"
kpi̯à'	LF *kpị̀'a*	"carve wood"	*dāu̯*	LF *dāʋ*	"man"
wị̀dì	LF *wị̀dìɪ*	"horses"	*pāe*	LF *pāée*	"reach"
nị̀e	LF *nị̀èe*	"appear"	*dūe*	LF *dūée*	"raise/rise"

SFs ending in *i̯a' u̯'ā* may have LFs in *i̯a'a u̯'aa* or *i'a u'a* (see below.)

Some SFs ending in fronting diphthongs or front vowels have LFs in *-ya*. In two nouns this appears as a variant: *sāe̯ň* "blacksmith", LF *sāeň* or *sāňyā* and *sɔ̄e̯ň* "witch", LF *sɔ̄eň* or *sɔ̄ňyā*. All other LFs in *-ya* occur in single-aspect verbs 7.2, where LF *-ya* corresponds to all vowel-final SFs except in a few bare root forms:

dīgī	LF *dīgɪyá*	"be lying"	*vʊ̄e̯*	LF *vʊ̄yá*	"be alive"

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

bị̄ig^{a}	"child"	*kʊ̄k*^{a}	"chair"
dʊ̄k$^{ɔ/}$	"pot"	*si̯àk*^{ɛ}	"agree"
gbīgīm^{nɛ}	"lion"	*yàarìm*^{m}	"salt"
dīgī$^{ya/}$	"be lying down"	*zị̀'e*^{ya}	"be standing"

Words with LFs in *-ya* where SF-final *y* becomes *e̯* are written with ^{ya}:

vʊ̄e̯$^{ya/}$	"be alive"	SF *vʊ̄e̯*	LF *vʊ̄yá*

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

gbīgɪmā	"lions"	SF *gbīgɪmā*	LF *gbīgɪmāa*
mɔ̀lì	"gazelles"	SF *mɔ̀lì*	LF *mɔ̀lìɪ*

gɔ̀ň	"hunt"	SF *gɔ̀ň*	LF *gɔ̀ɔň*
dį̄'e$^{/}$	"receive"	SF *dį̄'e*	LF *dį̄'ée*
nūa$^{/}$	"hen"	SF *nūa*	LF *nūáa*
kpi̱à'	"shape wood"	SF *kpi̱à'*	LF *kpì'a*
ku̱ā	"hoe"	SF *ku̱ā*	LF *kūa*
dāu̱	"man"	SF *dāu̱*	LF *dāʊ*
sāe̱ň	"blacksmith"	SF *sāe̱ň*	LF *sāeň*
dà'a	"market"	SF *dà'a*	LF *dà'a*
ànį́i	"eight"	SF *ànį́i*	LF *ànį́i*

Words ending in LF *i̱a'a u̱'aa* rather than *i'a u'a* are written with superscript ^{a}:

di̱ā'^{a}	"get dirty"	SF *di̱ā'*	LF *di̱ā'a*
pu̱'ā^{a}	"woman"	SF *pu̱'ā*	LF *pu̱'āa*

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

Intrinsic **LF-final tonemes** are L whenever the last stem toneme is L or H, but may be either M or H after stem-final M; superscript notation takes M as the default, writing $^{/}$ after forms with LF-final H: *dʊ̄k*$^{ɔ/}$ "pot", LF *dʊ̄kɔ́*; *nūa*$^{/}$ "hen", LF *nūáa*.

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

nû'ug^{ɔ}	"hand"	SF *nû'ug*	LF *nú'ugɔ̀*
nɔ́bìr^{ɛ}	"foot"	SF *nɔ́bìr*	LF *nɔ́bɪrɛ̀*
wābʊ̄g$^{ɔ/}$	"elephant"	SF *wābʊ̄g*	LF *wābʊgɔ́*
dìgìr^{ɛ}	"dwarf"	SF *dìgìr*	LF *dìgɪrɛ̀*

Apocope-blocked words use LFs as *citation* forms. Final *ɪ ʊ* do not become *ɛ ɔ*, but *-mʊ* becomes *-mm*. Final L tonemes become M. Secondary LFs are created before prosodic clitics by prolonging short final vowels; final M becomes H, except in Pattern A words 3.8. Apocope-blocking is seen in some nouns ending in *-ɪ* or *-ʊ*, 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.

būudī	"tribe"	*bɛ̀dʊgʊ̄*$^{/}$	"a lot"
sʊ̀ŋā$^{/}$	"well"	*yā*$^{/}$	"houses"

Blocked words which do not end in a short vowel add *-nɛ* for the secondary LF: *pāmm* SF *pāmné* LF "a lot"; *mà'àa* SF *mà'anɛ̀* LF "only"; *gʊ̀llīmm* SF *gʊ̀llìmnɛ̀* LF "only"; *kɔ̀tàa*^{nɛ} "at all." The LF of *ňyāe*$^{nɛ/}$ "brightly, clearly" is similarly *ňyāené* [j̃ãĩnɛ̃]. Cf *mɛ̀* DK KT SB NT *mɛ̀n* WK; clause-finally (all sources) *mɛ̀n*^{ɛ} "also, too."

3.3 Roots, stems and flexions

Word structure is based on *(C)V(C)* or *(C)VV(C)* **roots**. All vowels may occur in roots. Root-final consonants may only be *b d g l m n s r*. Before vowel-initial flexions *CVV* root-stems show *CVC* allomorphs.

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 CVsɪN* or *CVlɪN*, where *N* is a nasal homorganic with the following consonant and *ɪ* is an epenthetic vowel: *tītā'ar* "big", *bʊ̀mbàrìg* "ant", *sīlīnsị̂uňg* "spider." A few stems have two prefixes. A stem may constitute a word by itself, or may add a single **flexional suffix** *(C)V(V)* or *-mm* [m:].

Prefixes and flexional suffixes show only the **affix vowels** *a ɪ ʊ aa ɪɪ ʊʊ*. Most bound words of the form *(C)V(V)* have the same vowel restrictions, though the various particles *nɛ̄* show *ɛ* for *ɪ*. Prosodic clitics 4.1 cause short LF-final *ɪ ʊ* to become *ɛ ɔ*, here realised [e] [o]; short *ɪ ʊ* remain only in apocope-blocking 3.2.

Prefix *ɪ ʊ* are realised [i] [u] when the first vowel mora of the root is *i* or *u*; as this is non-contrastive, the orthography uses *ɪ ʊ* throughout. Thus *tītā'ar* [tɪtą̯:r] "big", *kʊ̀kɔ̄r* [kʊkɔr] "voice", but *kìkị̄rīg* [kikirig] "fairy", *sìsị̀'əm* [sisi̯ə̯m] "wind", *sīlīnsị̂uňg* [silinsĩũg] "spider", *vʊ̀lìnvùuňl* [vuliŋvũ:l] "mason wasp", *dʊ̀ndùug* [dundu:g] "cobra" (KB *dunduug*.) Only [i] [u] occur after *m* or *n*: *nị̀n-tāa* [ninta:] "co-wife."

As affix vowels, short *ɪ* and *ʊ* contrast only after velars and word-initially: *ɪ* is the default after alveolars, and *ʊ* after labials, labiodentals and labiovelars, but prefixes show *ʊ* rather than *ɪ* before root *u*/*ʊ*/*ɔ* (*dʊ̀ndùug* "cobra") and *ɪ* instead of *ʊ* before *i*/*ɪ*/*ɛ* (*kpīkpị̄n* "merchant.") In flexions *-mm* appears in place of **-mʊ*; *ɪ* appears after labial consonants only by analogy in pfv LFs like *zàbɛ* "fight."

No consonant clusters appear word-initially or finally except final *-mm*: *pāmm* "a lot." Homorganic nasal + *C* may occur after noun prefixes: *kʊ̀ndʊ̀ŋ*ᵃ "jackal", *gʊ̄mpʊ̄zɛ̄r*ᵋ/ "duck", *dànkɔ̀ŋ* [daŋkɔŋ] "measles." Except in loanwords, the only other word-internal clusters permitted are *kk tt pp ŋŋ nn mm ll mn*.

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

Stem	*nɔ́b-*	"leg"	+ sg *-rɪ*	→	LF *nɔ́bɪrɛ̀*	SF *nɔ́bìr*
	dūm-	"knee"	+ sg *-rɪ*	→	LF *dūmnɛ̄*	SF *dūm*

The default **epenthetic vowel** is *ɪ*. Before **-gʊ *-ŋŋʊ* it becomes *ʊ* 3.6. A similar **diphthongisation** of root vowels occurs before **-ya *-gʊ *-kkʊ *-ŋŋʊ* and also from deletion of **g* with vowel fusion. Apocope renders these changes contrastive:

SF *āaňdīg*	LF *āaňdīgā*	"black plum tree"
SF *gàadʊ̀g*	LF *gàadʊ̀gɔ̀*	"(sur)passing"

SF *vḭ̄id*	LF *vḭ̄idɛ́*	"owls"
SF *vḭ̄ug*	LF *vḭ̄ugɔ́*	"owl"

Epenthetic vowels are also rounded when *preceded* by a short rounded root vowel with intervening *g* (but not *ŋ* or *k*): thus *gbīgīm* "lion" but *yōgʊ́m* "camel." WK also has rounding after *mm* always, and after *b m l* preceded by a short rounded vowel: *yàmmʊ̀g* "slave", *nɔ̄bʊ̄g* "grow", *kɔ̄lʊ̄g* "river"; other sources vary.

After a single consonant preceded by short root *i* or *u*, epenthetic *ɪ ʊ* are realised [i] [u] respectively; this is not contrastive and is ignored in the orthography: *sḭ̄gīd* "lowers" [sigid], *kūgʊ̄r* "stone" [kugur].

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

3.4 Root alternations

Most roots ending in a vowel have either a long or short vowel throughout, but some show length alternation. All *glottalised* roots of this kind are underlyingly **CVg* 3.7. In flexion, the non-glottalised type shows long vowels before *-ga -gɔ* and short elsewhere, with following **d* → *tt* **b* → *pp* (but *not* **m* → *mm* or **l* → *ll*):

dāʊgᵓ	"male"	cf *dāpᵃ*	"men"
bḭ̄igᵃ	"child"	cf *bḭ̄lᵃ*	"little"
dɔ̀ɔgᵓ	"hut"	pl *dɔ̀tᵋ*	
fūugᵓ/	"clothing"	pl *fūtᵋ/*	
ňyɛ̄	"see"	ipfv *ňyɛ̄tᵃ/*	imp *ňyɛ̀mᵃ*
kɛ̄	"allow"	ipfv *kɛ̄tᵃ/*	imp *kɛ̀lᵃ*
dì	"eat"	ipfv *dìtᵃ*	imp *dìmᵃ*
yḭ̄	"emerge"	ipfv *yḭ̄tᵃ/*	imp *yḭ̀mᵃ*
zɔ̀	"run"	ipfv *zɔ̀tᵃ*	imp *zɔ̀mᵃ*
dʊ̄	"rise"	ipfv *dʊ̄tᵃ/*	imp *dʊ̀mᵃ*
lù or *lḭ̀*	"fall"	ipfv *lùtᵃ* or *lḭ̀tᵃ*	imp *lùmᵃ* or *lḭ̀mᵃ*

VV before sg *-ga* or *-gɔ* may be introduced into the pl, optionally or always: thus *dɔ̀ɔdᵋ* "huts", *fūudᵋ/* "shirts", and always *dāadᵋ* "male" pl, *bḭ̄isᵋ* "children."

Before derivational suffixes the vowel is long:

dìɪsᵋ	"feed"	*dì*	"eat"
dàalìmᵐ	"masculinity"	*dāpᵃ*	"men"
vʊ̄'ʊgᵋ/	"come alive"	*vʊ̄rᵋ/*	"alive"

Exceptions are *yīs*ᵋ beside *yīis*ᵋ/ "make emerge" from *yī* "emerge"; *gɔ̄s*ᵋ "look", ipfv *gɔ̄t*ᵃ/ or *gɔ̄sīd*ᵃ/, imp *gɔ̀m*ᵃ or *gɔ̀sɪ̀m*ᵃ; *tɪ̀s*ᵋ "give" ipfv *tɪ̀t*ᵃ or *tɪ̀sɪ̀d*ᵃ.

All regular gerunds show long vowels, as in *ňyɛ̄ɛ̄b*ɔ/ "seeing", *nɔ̄-lɔ̂ɔr*ᵋ "fasting", but WK has *nā'-lɔ́r*ᵋ "place for tying up cows", *wɪ̀d-lɔ̄r*ᵋ/ "place for tying up horses."

Historically, these roots ended in a consonant preserved before vowel-initial suffixes, assimilated before homorganic consonants, or deleted with vowel fusion.

Evidence for **wb* → *pp* is seen in *dāu̯* "man" (Mooré *ráoa*) pl *dāp*ᵃ; *tāu̯ňˊ* "sib of opposite sex" pl *tāňp*ᵃ/; *tɔ̀ň* "shoot" (Mooré *tãɔ*) *tāňp*ɔ "war."

CVV roots with *CVt-* allomorphs typically have Mooré cognates with diphthongs or front vowels derived from **Vy*, e.g. Mooré *lʊ̀ɪ* "fall" ipfv *lʊ̀ɪta* versus *kʊ́* "kill" ipfv *kʊ́ʊdà*. Sporadic monophthongisation explains *lù* ~ *lị̀* "fall" and e.g. Kusaal *dɔ̀ɔgᵓ*, Farefare *dèegò* "hut, room." This **y* is the reflex of a Proto-Oti-Volta **r* (perhaps [rʲ]) preserved in Western Oti-Volta when originally geminated or between a long vowel or consonant and **ɪ*, but otherwise becoming **y*. (For the *r*/*d* contrast see 2.1.)

	Kusaal	Nawdm	Moba		
**r*	*(ǹ)yɪ́'*	*(m)réɦ*	*(ń)lé*	"two"	
	yɔ̀		*lōōń*	"close"	
	tɛ̀'ɛgᵃ	*tòrá* (pl)	*tōōlg̀*	"baobab"	cf Mooré *tòɛɛgá*
	dɛ̀ɛgᵃ	*dɔ̀rá* (pl)	*dōōlg̀*	"warthog; pig"	cf Mooré pl *rètó*
	zɪ̀'eʸᵃ	*jeɦra*		"be standing"	
	yàarɪ̀mᵐ	*yáàrḿ*	*yààlm̀*	"salt"	
	nɔ̄ɔrᵋ/	*nóóŕ*		"mouth"	
	tʊ̀bʊ̀rᵋ	*tóbŕ*	*tūbl̀*	"ear"	
**rr*	*mɔ̄rᵃ/*	*mada*		"have; hold"	
**d*	*mɔ̄dᵋ*	*mɔd*	*mɔ̀l̀*	"swell"	
**t*	*mɔ̄ɔdᵋ*	*móót́*	*móɔ́d̀*	"grass"	

	Buli	Byali	Waama	
**r*	*tūik*	*tēēbū*	*tōōríbū*	"baobab"
	dùok	*dīīgə̄*	*dōríbū*	"warthog"
	nóai	*nūī*	*nɔ́rē*	"mouth"

Agolle *r* after a short root vowel reflects **rr* or is due to analogy or borrowing. So, for example, *kpàrᵋ* "lock" for expected **kpàdᵋ* (cf Dagbani *kpari*, not **kpali*) has *r* from an obsolete **kpàrᵃ* ← **kparra* ← **kpadra* "be locked" (cf *gʊ̀lᵋ* "suspend", *gʊ̀lˡᵃ* "be suspended") and the irregular correspondences seen in Mampruli *nyariŋŋu*, Dagbani *ŋariŋ*, Toende *ǎarʊ̀ŋ*, Agolle *àňrʊ̀ŋᵓ* "boat" suggest borrowing.

The roots of *sāe̯ňʸᵃ* "blacksmith" and *sɔ̄e̯ňʸᵃ* "witch" show no *CVt-* allomorphs (cf Mooré *sãado* "smithing", *sõodo* "witchcraft"), and were perhaps originally **CVñ*.

Before the noun pl suffix *-aa* unglottalised *CV(V)*-stems insert *-y-*, with long vowels shortened and *iə uɵ* becoming *i̯e u̯e* [i̯ɪ] [u̯ɪ], found only in this context:

gāňr$^{ɛ/}$	"ebony fruit"	pl *gāňyá* (short sg vowel from pl)
bàlàar^{ɛ}	"stick, club"	pl *bàlàyà*
kʊ̀kɔ̄r$^{ɛ/}$	"voice"	pl *kʊ̀kɔ̄yá* (**CVy-* root)
nɔ̄ɔr$^{ɛ/}$	"mouth"	pl *nɔ̄yá*
zʊ̄ʊr^{ɛ}	"tail"	pl *zʊ̄yā*
bi̯ər$^{ɛ/}$	"elder same-sex sib"	pl *bi̯ēyá*
zūɵr^{ɛ}	"hill"	pl *zu̯ēyā*

Historically, this may represent analogical introduction of the **r* of the sg suffix into the pl, as in the regular Nawdm pattern: *nóóŕ* "mouth" pl *nóórá*.

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

tītā'ar^{ɛ}	"big"	pl *tītādā*
pɔ̀ň'ɔr^{ɛ}	"cripple"	pl *pɔ̀ňdà*
yʊ̄'ʊr$^{ɛ/}$	"name"	pl *yʊ̄dá*
yū'ɵr^{ɛ}	"penis"	pl *yu̯ādā*

Western Oti-Volta languages without glottalisation treat cognate stems exactly like other *CVV-*; Farefare has the pattern *yʊ́'ʊrɛ́* "name" pl *yʊ'ʊra*.

Stems in **-ag-* **-i̯ag-* **-u̯ag-* may show analogical forms with *-d-*:

bà'ar^{ɛ}	"idol" (Farefare *bàgrɛ̀*)	pl *bà'a* or *bàdà*	
mʊ̀'ar^{ɛ}	"reservoir, dam"	pl *mu̯'àa* or *mʊ̀'adà*	

A derivational change **rg* → *dg* appears in

lɔ̄	"tie" (Mooré *lóe*)	*lɔ̄dɪ̄g*$^{ɛ/}$	"untie"
pʊ̄	"divide" (Mooré *púi*)	*pʊ̄dɪ̄g*$^{ɛ/}$	"divide"
bòɪ	"get lost" (Toende)	*bɔ̀dɪ̀g*^{ɛ}	"lose, get lost":
yāar$^{ɛ/}$	"scatter"	*yādɪ̄g*$^{ɛ/}$	"scatter"

**CVw* roots become glottalised before derivational **g* and **s*, probably reflecting another historical consonant cluster change; thus *yɛ̀* "dress oneself", *yɛ̀ɛg*^{ɛ} "undress oneself", *dì* "eat", *dìɪs*^{ɛ} "feed", but

kɔ̀	"break" intrans	*kɔ̀'ɔg*^{ɛ}	"break" trans/intrans
pɔ̀ɔd^{a}	"be few"	*pɔ̀'ɔg*^{ɛ}	"diminish"
vʊ̄e̯$^{ya/}$	"be alive"	*vʊ̄'ʊg*$^{ɛ/}$	"make, come alive"

vɔpa	"live things" (Farefare)	*vʊ̄'ʊs*$^{ɛ/}$	"breathe, rest"
kɔ̀ɔlʊ́ŋ^{ɔ}	"broken"	*kɔ̀'ɔs*^{ɛ}	"break several times"
tɔ̀ň	"shoot"	*tɔ̀ň'ɔs*^{ɛ}	"hunt"

Other sporadic *CVV~CVC* alternations are also probably relics of root-final consonant lenitions and deletions. *CVw~CVb* alternations appear in

nɔ̄	"tread" (Mooré *nao*)	*nɔ̄bá*	"feet"
sɔ̄ɔň$r^{ɛ}$	"liver" (Mooré *sãoore*)	*sɔbri*	"liver" (Mampruli)

Apparent *CVV~CVg* alternations appear in *wị̀id*^{a} "draw water" ipfv beside *wị̀k*^{ɛ} pfv (← **wiggɪ*) and *vị́* "uproot", *vī̩k*$^{ɛ/}$ *id* (← **viggɪ*).

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

tʊ̄vmā	"work" noun	*tʊ̀m*^{m}	"work" verb
yɛ́oŋ	"one"	*yīu̯ŋ*$^{ɔ/}$	"single"
kāal$^{ɛ/}$	"count"	*kāl*$^{lɛ/}$	"number"
tʊ̄vlʊ́g^{ɔ}	"hot"	*tʊ̄l*$^{la/}$	"be hot"

CVC is invariable before derivational suffixes other than -*lɪm*- "-ness" and the -*y*- of stative verbs; thus *sáannìm*^{m} "strangerhood", *kpī̩'əm*$^{ma/}$ "be strong", but

màal^{ɛ}	"sacrifice" (verb)	*mālʊ̄ŋ*^{ɔ}	"sacrifice" (noun)
pị̀əlì g^{a}	"white"	*pɛ̀lì g*^{ɛ}	"whiten"
kpī̩'oŋ^{ɔ}	"strong"	*kpɛ̀'ŋ*^{ɛ}	"strengthen"
lị̀əb^{ɛ}	"become"	*lɛ̀bì g*^{ɛ}	"turn over"
tʊ̄vlʊ́g^{ɔ}	"hot"	*tʊ̄lī g*$^{ɛ/}$	"heat"
yāar$^{ɛ/}$	"scatter"	*yādī g*$^{ɛ/}$	"scatter"
dɛ̄ɛŋ^{a}	"first"	*dɛ̀ŋ*^{ɛ}	"go first"
pị̀əb^{ɛ}	"blow" (flute)	*pɛ̀bìs*^{ɛ}	"blow" (wind)
yùul^{ɛ}	"swing" intransitive	*yùlì g*^{ɛ}	"swing" transitive

Alternation appears in flexion in a few nouns:

zị́iŋ^{a} (← **ziimga*)	*zī̩mí*	*zīm-*	"fish"
náaf^{ɔ} (← **naagfʊ*)	*nī̩igí*	*nā'-* (← **nag-*)	"cow"
wáaf^{ɔ}(← **waagfʊ*)	*wī̩igí*	*wā'-* (← **wag-*)	"snake"
pī̩im$^{m/}$	*pī̩má*		"arrow"
yʊ̀vm^{mɛ}	*yʊ̀mà*		"year"

3.5 Consonant clusters

The changes described below precede deletion of postvocalic *g*.

Except after prefixes, adjacent consonants within a word must assimilate to *kk pp tt ŋŋ mm nn ll mn* or insert an epenthetic vowel, as shown below; *ə* marks pairs which insert an epenthetic vowel.

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

The change *bm* → *mm* only occurs after a short root vowel, whereas *ms* → *˜ːs* never occurs after a short root vowel, and is optional elsewhere.

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

*tɛ̄ŋ*ᵃ	"land"	pl	*tɛ̄ɛ̆nsᵋ*	← **tɛnsɪ*
*kʊ̀lɪ̀ŋ*ᵃ	"door"	pl	*kʊ̀lɪ̀sᵋ*	← **kʊlɪnsɪ*

For the pl *bʊ̄tɪ̄ɪsᵋ* of *bʊ̄tɪ̄ŋ*ᵃ "cup" see 2.3.

****nf*** becomes *f* with nasalisation of a preceding root vowel, but there is no lengthening of a short preceding root vowel in the only case which occurs:

nɪ̄fᵓ/	"eye"	pl	*nɪ̣́nɪ́*
pɪ́ɪ̆fᵓ	"genet"	pl	*pɪ̄ɪnɪ́*

****ss*** only inserts an epenthetic vowel in the pl *pūsɪ̄sᵋ/* of *pūsɪ̄gᵃ/* "tamarind." All other plurals in *-sɪsᵋ* in my materials are for **-sɪnsɪ*. **Pūsᵋ/* would have appeared to show no ending in SF.

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

ka ba li' ba toba ka pu wum na [*sic* 3.1]
kà bà lí bà tʊ̀bà kà pʊ̄ wʊ́mnā=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 *rɛ*|*aa* class *m*-stems; thus SB has *gbīgīmnɛ̄* "lion", *dūmnɛ̄* "knee" whereas WK has *gbīgīmmɛ̄*, *dūmmɛ̄*.

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

m naan ku aan Kiristo tumtum na [*sic*].
m̀ nāan kʊ́ āa=n Kiristo tʊ́m-tʊ̄mnā=ø.
1SG then NEG.IRR COP=DP Christ worker:SG=NEG.
"I would not have been Christ's servant." (Gal 1:10, 1996; KB *tʊmtʊmma*)

Agent noun plurals usually show *mn*, as in *tʊ̀m-tʊ̄mnīb* "servants", but habitual adjectives from *m*-stem verbs show *mm* before epenthetic vowels: *bʊ̄n-tʊ́mmìr* "useful thing" (pl *tʊ̄mnā* for some), *bʊ̀-sāň'ammɪr* "goat for destruction" WK.

All *mna* and *mnɛ* in KB cross word division by the criteria of this grammar, but *mni* is usual in plurals like *tʊmtʊmnib tʊ̀m-tʊ̄mnīb* "servants."

Derivation precedes flexion in consonant cluster formation.

Stem-final *kk pp tt ŋŋ mn nn* never assimilate further; *mm* assimilates only with *mmm* → *mm* in imperatives. Thus e.g. *kɔ̄t*$^{ɛ/}$ "slaughter", ipfv *kɔ̄tíd*^{a}; *dàm*^{m} "shake", ipfv *dàmmìd*^{a} ipfv, gerund *dàmmʊ̀g*^{ɔ} but imperative ***dàm***$^{\mathbf{ma}}$.

However, stem-final *ll r(r)* assimilate the initial of the noun class suffix *-rɛ*: *kʊ̀g-**dɛ̄l***$^{\mathbf{lɛ/}}$ "chair for leaning on." This assimilation has led to the sg SF forms of agent nouns from single-aspect verbs in *ll r(r)* being reinterpreted as *rɛ*|*aa* class 5.3.1.

Stem-internal *nn* and *mm* become single *n* and *m* after after epenthetic vowels and long root vowels. *Pị̄bīn*^{nɛ} pl *pị̄bɪnā* "covering" has single *-n-* for my informants, but the Mooré cognate has *-nd-*: *pìbíndgà* "lid, cover." The Mooré equivalent of the assume-stance derivational suffix *-n-* 9.1.1 is *-nd-*: *zĩ̈ndi* = *zị̀ň'in*^{ɛ} "sit down"; *vábende* = *vàbìn*^{ɛ} "lie prone"; *tàbende* "get stuck to" cf Kusaal *tàb*^{ɛ} *id*. The corresponding Nawdm suffix is *-nt-*: *jeɦra* ipfv = *zị̀'e*^{ya} "be standing, *jeɦnt* pfv = *zị̀'ən*^{ɛ} "stand up." Simplification of *mm* to single *m* appears in single-aspect verbs 9.1.2.1.

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

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

bùn$^{\varepsilon}$	*bùn*^{na}	*bùnìm*^{a}	"reap"
dìgìn$^{\varepsilon}$	*dìgɪnìd*^{a}	*dìgɪnìm*^{a}	"lie down"
gɔ̀'ɔn$^{\varepsilon}$	*gɔ̀'ɔnìd*^{a}	*gɔ̀'ɔnìm*^{a}	"extend neck"

N-stem gerunds never show assimilation: *būnībᵓ*, *dìgɪnʊ̀gᵓ*.

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:

wʊ̀m^{m}	*wʊ̀m*^{ma}	*wʊ̀m*^{ma}	"hear"

but *ka nan kpɛn wʊmid ye m bɛɛ li pʊʊgin nannanna la.*
kà nán kpɛ̀n wʊ̀mìd yé m̀ bɛ́ɛ◡ lì pʊ̄ʊgʊ̄=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:

tɔ̄ɔm$^{m/}$	*tɔ́ɔm*^{ma}/*tɔ̄ɔmíd*^{a}	*tɔ̀ɔm*^{ma}	"depart"
kàrìm^{m}	*kàrìm*^{ma}/*kàrɪmìd*^{a}	*kàrìm*^{ma}	"read"

The corresponding gerunds are *tɔ́ɔŋᵓ*/*tɔ̄ɔmʊ́gᵓ* and *kàrʊ̀ŋᵓ*/*kàrɪmʊ̀gᵓ*.

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 *nɛ̄*/:

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

Examples for assimilation versus epenthetic vowel insertion:

**gg* → *kk*	*gìk*^{a}	"dumb" sg	*gìgìs*$^{\varepsilon}$ pl
	cf *kɔ̄līg*^{a}	"river" sg	*kɔ̄līs*$^{\varepsilon}$ pl
**dd* → *tt*	*bʊ̀t*^{a}	"plant" ipfv	*bʊ̀d*$^{\varepsilon}$ pfv
	cf *dʊ̄gʊ̄d*$^{a/}$	"cook" ipfv	*dʊ̄g*$^{\varepsilon}$ pfv

**bb* → *pp*	*sɔ̄p*ɔ/	"writing" ger	*sɔ̄b*ɛ pfv	
cf	*kpārīb*ɔ	"locking" ger	*kpàr*ɛ pfv	
**ld* → *nn*	*kɔ̀n*nɛ	"bags" pl	*kɔ̀lʊ̀g*ɔ sg	
cf	*zūɵbíd*ɛ	"hairs" pl	*zūɵbʊ́g*ɔ sg	
**mg* → *ŋŋ*	*bʊ̀ŋ*a	"donkey" sg	*bʊ̀mìs*ɛ pl	
**ng* → *ŋŋ*	*gbàu̯ŋ*ɔ	"book" sg	*gbànà* pl	
cf	*ňwādīg*a/	"month" sg	*ňwādīs*ɛ/ pl	
**nr* → *nn*	*tān*nɛ	"earth" sg	*tānā* pl	
**mr* → *mn*	*dūm*nɛ	"knee" sg	*dūmā* pl	
**lr* → *ll*	*gɛ́l*lɛ	"egg" sg	*gɛ̄lá* pl	
**rr* → *r*	*kʊ̀kpàr*ɛ	"palm fruit" sg	*kʊ̀kpàrà* pl	
cf	*dìgìr*ɛ	"dwarf" sg	*dìgà* pl	
**nb* → *mm*	*sáam*ma	"strangers" pl	*sāan*a/ sg	
cf	*nị̄dīb*a/	"people" pl	*nị̄d*a/ sg	
**mb* → *mm*	*kīm*mɔ	"shepherding" ger	*kìm*m pfv	
cf	*kādīb*ɔ	"driving off" ger	*kàd*ɛ pfv	
**ll* → *ll*	*Bùl*lɛ	"Buli"	*Bùlìs*ɛ	"Bulsa"
**rl* → *tt*	*Bāt*ɛ/	"Bisa language"	*Bārīs*ɛ/	"Bisa people"
**ml* → *nn*	*Dàgbān*nɛ/	"Dagbani"	*Dàgbām*ma/	"Dagomba"
**nl* → *nn*	*Gʊ̄rín*nɛ	"Farefare language"	*Gʊ̄rís*ɛ	"Farefare people"

3.6 Vowel changes before **-ya *-gʊ *-kkʊ *-ŋŋʊ*

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 *e̯*, producing a short fronting diphthong:

SF *vʊ̄e̯*	LF *vʊ̄yá*	"be alive"	SF *tɔ̄e̯*	LF *tɔ̄yá*	"be bitter"
SF *sāe̯ň*	LF *sāňyā*	"smith"	SF *sɔ̄e̯ň*	LF *sɔ̄ňyā*	"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* [ɪ]:

*sɔ̄ň'e*ya/	← **sɔ̃'ɔ̃ya*	"be better than"
*sʊ̄'e*ya/	← **sʊ'ʊya*	"own" (cf *sʊ̄'ʊlím*m "property")

Short unrounded root vowels become diphthongs in *u̯* before LF **ŋŋʊ *kkʊ*:

*gbàu̯ŋ*ɔ	← **gbaŋŋʊ*	"book"	pl *gbànà*
*lāu̯k*ɔ	← **lakkʊ*	"goods item"	pl *lā'ad*ɛ
*yīu̯ŋ*ɔ/	← **yɪŋŋʊ*	"single"	pl *yīná*

Short tense *i* does not diphthongise in *nɩ̀n-gbɪ̄ŋ*ɔ/ "body."
Short *i̯a* becomes *i̯au̯*, but short *u̯a* becomes *ɔ*: ****u̯akkʊ* → *ɔkkʊ***

*bi̯āu̯ňk*ɔ	← **bi̯ãkkʊ*	"shoulder"	pl *bi̯āň'ad*ɛ
*bɔ̀k*ɔ	← **bu̯akkʊ*	"pit"	pl *bʊ̀'ad*ɛ

Unrounded second morae of long vowels become [ʊ] before LF **gʊ *ŋŋʊ*:

*dàʊg*ɔ	← **daagʊ*	"log"	pl *dàad*ɛ
*fɛ̄ň'og*ɔ/	← **fɛ̃'ɛ̃gʊ*	"ulcer"	pl *fɛ̄ň'ɛd*ɛ/

Long *ii* becomes *iu*, whereas *iə* becomes *io* [iʊ]:

	*vɩ̣ug*ɔ/	← **viigʊ*	"owl"	pl *vɩ̣̄id*ɛ/
but	*dàbɩ̣̄og*ɔ	← **dabiəgʊ*	"coward"	pl *dàbɩ̣̄əd*ɛ
	*kpɩ̣̄'oŋ*ɔ	← **kpi'əŋŋʊ*	"strong"	pl *kpɩ̣̄'əmā*

No case with *uu/uʊ* occurs, because of the rule ****uəgʊ* → *ɔɔgʊ***:

*Sà'dàbɔ̀ɔg*ɔ	← **Sa'dabuəgʊ*	"place of the Sarabose *Sà'dàbʊ̀əs*ɛ clan"
*lām-fɔ̂ɔg*ɔ	← **lam-fuəgʊ*	"toothless" (*lām*mɛ/ "gum", *fùe* "extract")

Pl vowels are remodelled on the sg: *lām-fɔ̂ɔd*ɛ "toothless." The only stem with final *uə* in the *gɔ|dɛ* class is formally-plural *zʊ̀əd*ɛ "friendship." There is probably a parallel rule ****iəgʊ* → *ɛʊgʊ***, with similar pl remodelling: with *bɩ̄'əm*m "enemy" cf

*bɛ̄'og*ɔ	*bɛ̄'ɛd*ɛ	*bɛ̀'-*	"bad"
bɩ̄'a	*bɩ̄'əs*ɛ	*bɩ̣à'-*	

*Dàbɩ̣̄og*ɔ is perhaps influenced by an obsolete **dàbɩ̄əm*m "coward" (Mooré *ràbɛ́ɛmà*.)

The **epenthetic vowel** *ɩ* is rounded to *ʊ* before LF **-gʊ *-ŋʊ*:

	*āaňdīg*a	← **ããdɪga*	"black plum tree"
but	*gàadʊ̀g*ɔ	← **gaadɪgʊ*	"(sur)passing" (gerund)
pl	*mālɪmā*	← **malɪmaa*	"sacrifices"
but	*mālʊ̄ŋ*ɔ	← **malɪŋŋʊ*	"sacrifice"

3.7 Consonant deletion and vowel fusion

The changes described below apply after diphthongisation by fronting and rounding but before apocope. They are late historically: Haaf 1967 still has e.g. *baga* for *bāˈa* "diviner" (Prost 1979 *baxa*) and *winbagr* for *wīn-bâˈar* "altar"; Toende Kusaal has different deletion rules from Agolle, and no fusion.

g is deleted after *a i̯a u̯a and their nasalised counterparts before any vowel, affix or epenthetic; fusion then results in glottalised long vowels and diphthongs:

*agV → aˈa	*i̯agV → i̯aˈa	*u̯agV → ʊˈa

ʊˈa becomes *u̯ˈaa* word-finally. The rule applies later than *gg → *kk* 3.5; thus

	pu̯ˈāᵃ	← *pu̯aga	"woman"	pl *pʊ̄ˈabᵃ*
but	*zàkᵃ*	← *zakka	"compound"	pl *zàˈasᵋ*
	lāu̯kᵓ	← *lakkʊ	"item of goods"	pl *lāˈadᵋ*
	pi̯àu̯ňkᵓ	← *pi̯ãkkʊ	"word"	pl *pi̯àňˈadᵋ*
	pu̯ākᵃ	← *pu̯akkʊ	"female" (adj)	pl *pʊ̄ˈasᵋ*
	bɔ̀kᵓ	← *bu̯akkʊ	"pit"	pl *bʊ̀ˈadᵋ*

g is deleted after *aa iə uɵ and their glottalised counterparts (but not after *aʊ ɛo io ɔɔ* resulting from rounding before **gʊ*.) When an affix vowel follows the **g*, fusion creates overlong diphthongs:

*aaga → *aa* 4.1	*iəga → *iaa*	*uɵga → *uaa*
*aagɪ → *aee*	*iəgɪ → *iee*	*uɵgɪ → *uee*

Glottalised vowels behave in the same way.
Thus with deletion of the **g* in *ga*|*sɛ* class singulars:

bāa	← *baaga	"dog"	pl *bāasᵋ*
sị̄a	← *siəga	"waist"	pl *sị̄əsᵋ*
sàbùa	← *sabuɵga	"lover"	pl *sàbùɵsᵋ*

So too with dual-aspect "fusion verbs" in **gɪ*:

pāeˈ	← *paagɪ	"reach"
kpị̀ˈe	← *kpiˈəgɪ	"approach" cf *kpị̀ˈəsᵋ* "neighbours"
dūeˈ	← *duɵgɪ	"raise, rise"

Original open **ɛ̃ɛ̃ *ɔ̃ɔ̃*, which elsewhere fall together with the reflexes of former close **ẽẽ *õõ* as *ɛɛ̆ ɔɔ̆* 2.2, undergo breaking before **g*. Alternations thus arise:

zi̯ɛ̆'a	"red" *ga*|*sɛ* class sg	*zɛ̀ɛ̆'ɛsᵋ*	"red" *ga*|*sɛ* class pl
		zɛ̀ɛ̆'ogᵓ	"red" *gɔ*|*dɛ* class sg 3.6
dùaă	"dawadawa" sg	*dɔ̀ɔ̆̆sᵋ*	"dawadawa" pl
Mùa	"Mossi person"	*Mɔ̀ɔsᵋ*	"Mossi people"
		Mɔ̀ɔgᵓ	"Mossi country"
ni̯e	"appear"	*nɛ̀ɛlᵋ*	"reveal"
ɲ̆yū'eˊ	"set alight"	*ɲ̆yɔ̄'ɔsᵋˊ*	"smoke" (noun)
sūeɲ̆ˊ	"anoint"	*sɔ̄ɲ̆*	"rub"
sūɲ̆'eˊ	"become better" WK	*sɔ̄ɲ̆'eʸᵃˊ*	"be better than" (← **sɔ̃'ɔ̃ya*)

When *aa aaă iə uɵ* precede a **g* which is *not* followed by an affix vowel, the only trace of **g* is the disturbance of toneme allocation in Tone Pattern H 3.8.1.

náafᵓ	← **naagfʊ*	"cow" pl *nī̯igí*
dí̯'ərᵋ	← **di'əgrɪ*	gerund of *dī̯'eˊ* "receive" ← **di'əgɪ*
vúɵrᵋ	← **vuɵgrɪ*	"fruit of red kapok"

However, *ɛɛ̆ ɔɔ̆* are broken to *iəɲ̆ uɵɲ̆*:

	nɛ̀ɛrᵋ		"empty" (← "clear")
but	*ni̯ərᵋ*	← **nĩ̃əgrɪ*	gerund of *ni̯e* "appear"
	pɔ̄ɲ̆'ɔlᵋˊ		"cause to rot"
but	*púɲ̆'ɵrᵋ*	← **pũ'ɵ̃grɪ*	gerund of *pūɲ̆'eˊ* "rot"

Tones show that the imperfective of fusion verbs has no underlying **g*, and older forms in texts reflect this by keeping *ɛɛ̆ ɔɔ̆*, e.g. *pon'od* from *pūɲ̆'eˊ*. Later texts, and all my informants, consistently introduce *iəɲ̆ uɵɲ̆* into imperfectives and imperatives by analogy: *pun'od pūɲ̆'ɵdᵃˊ*.

3.8 Tone Patterns

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

Pattern H	initial H or MH		
Pattern L	all-L (but with non-initial H in longer *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. Superlight syllables 2.3 are always toneless.

Allocation precedes all synchronic rules which delete segments, including apocope. Superlight LF syllables which become closed as a result of apocope must acquire a toneme, which is M after a preceding M syllable, and L otherwise:

wābʊ̄g$^{ɔ/}$	"elephant"	LF *wābʊgɔ́*	SF *wābʊ̄g*
dìgìr^{ɛ}	"dwarf"	LF *dìgɪrɛ̀*	SF *dìgìr*
nɔ́bìr^{ɛ}	"foot"	LF *nɔ́bɪrɛ̀*	SF *nɔ́bìr*

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

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

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

3.8.1 Nouns and adjectives

Examples will be given as sg, pl, cb 5.1. Cbs are always affected by apocope.

Noun prefixes 10 are ignored in counting stem syllables below. Prefixes are L or M: L prefixes do not affect the rest of the tone pattern, while M prefixes only affect cbs, which always have H/X after the prefix.

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

pʊ̄-kpāad$^{a/}$	*pʊ̄-kpāadíb*^{a}	*pʊ̄-kpá-*	"farmer" 10.1
zūg-kʊ̄gʊ̄r$^{ɛ/}$	*zūg-kʊ̄gā*	*zūg-kúg-*	"pillow" 5.2
kā-wɛ̄nnīr$^{ɛ/}$	*kā-wɛ̄nnā*	*kā-wɛ́n-*	"corn"

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

vʊ̄r$^{ɛ/}$	*vʊ̄yá*	*vʊ̄r-*	"alive"
yi̱r$^{ɛ/}$	*yā*$^{/}$	*yi̱-*	"house"
fūug$^{ɔ/}$	*fūud*$^{ɛ/}$	*fū-*	"shirt, clothes"
dʊ̄k$^{ɔ/}$	*dʊ̄gʊ̄d*$^{ɛ/}$	*dʊ̄g-*	"cooking pot"
nị̄d$^{a/}$	*nị̄dīb*$^{a/}$	*nị̄n-*	"person"
kūgʊ̄r$^{ɛ/}$	*kūgá*	*kūg-*	"stone"
gɔ̄t$^{a/}$	*gɔ̄tíb*^{a} /tt/	*gɔ̄t-*	"seer, prophet"
sābɪlíg^{a}	*sābɪlís*^{ɛ}	*sābīl-*	"black"
sābíl^{lɛ}	*sābɪlá*		
yʊ̄gʊ́m^{mɛ}	*yʊ̄gʊmá*	*yʊ̄gʊ̄m-*	"camel"
dị̄'əs$^{a/}$	*dị̄'əsídìb*^{a}	*dị̄'əs-*	"receiver"
sūgʊríd^{a}	*sūgʊrídìb*^{a}	*sūgʊríd-*	"forgiver, forbearer"
kʊ̄'alíŋ^{a}	*kʊ̄'alís*^{ɛ}	*kʊ̄'alíŋ-*	traditional smock
sú'əŋ^{a} /ŋŋ/	*sū'əmís*^{ɛ}	*sū'əŋ-*	"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"
vʊ̄m$^{m/}$	SF *vʊ̄m*	LF *vʊ́mm*	"life"
dāam$^{m/}$	SF *dāam*	LF *dáamm*	"millet beer"

Loss of underlying segments may shift the H toneme to the left.

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

*ňyīríf*ɔ	*ňyīrí*	"egusi seed"

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

*nį́is*ɛ	← **niinsɪ*	(beside *nį̄imís*ɛ)	"birds" (sg *nį́iŋ*a /ŋŋ/)
*píɪňf*ɔ	← **pɪɪnfʊ*	(pl *pīɪní*)	"genet"
*wáaf*ɔ	← **waagfʊ*	(pl *wį̄igí*)	"snake"
*yáab*a	← **yaagba*		"grandparent"
*vúɵr*ɛ	← **vuɵgrɪ*		"fruit of red kapok"
*náar*ɛ	← **naagrɪ*	gerund of *nāe*/	"finishing"
*dį́'ər*ɛ	← **di'əgrɪ*	gerund of *dį̄'e*/	"getting"
*púň'ɵr*ɛ	← **pɔ̃'ɔ̃grɪ*	gerund of *pūň'e*/	"rotting"

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

*nû'ug*ɔ	*nû'us*ɛ	*nū'-*	"hand, arm"
*à-gâʋňg*ɔ	*à-gâaňd*ɛ	*à-gāň-*	"pied crow"
*gbêɛňm*m		*gbɛ̄ň-*	"sleep"
*nɔ́bìr*ɛ	*nɔ̄bá*	*nɔ̄b-*	"foot, leg"
*gɛ́l*lɛ	*gɛ̄lá*	*gɛ̄l-*	"egg"
*kį́sʊ̀g*ɔ	*kį̄sá*	*kį̄s-*	"hateful, taboo" (adj)
*áňsìb*a	*āňs-nám*a	*āňs-*	"mother's brother"

So too the gerunds *sɔ́ňsìg*a "talking", *gɔ́sìg*a "looking", *kìkį́rʊ̀g*ɔ "hurrying."

LFs corresponding to SFs with superheavy X syllables have open initial H syllables: *nú'ugɔ̀* "hand" is tonally identical to LF *wáafɔ̀* "snake."

Some of these words have probably lost a segment: *s r* can represent older *ss rr*, and cf Mooré *gãoobgó* "pied crow." *Nû'ug*ɔ "hand" has added further class suffixes to old *ɔ*|*ɛ* class forms: cf Nawdm *núɦú* pl *níɦí*. *Nɔ́bìr*ɛ "leg" is remodelled segmentally on the basis of the plural: cf Toende sg *nɔ̄'ɔ̄t* pl *nɔba*.

Examples for Pattern H with prefixes:

*dàyūug*ɔ/	*dàyūud*ɛ/	*dàyū-*	"rat"
*Bʊ̀sáŋ*a	*Bʊ̀sâaňs*ɛ	*Bʊ̀sāŋ-*	"Bisa person"

zīnzāu̯ŋ$^{ɔ/}$	*zīnzāná*	*zīnzáu̯ŋ-*	"bat"
gʊ̄mpʊ̄zɛ̄r$^{ɛ/}$	*gʊ̄mpʊ̄zɛ̄yá*	*gʊ̄mpʊ̄zɛ́r-*	"duck"
pīpịrīg$^{a/}$	*pīpịrīs*$^{ɛ/}$	*pīpịr-*	"desert"
tīntɔ̄ňríg^{a}	*tīntɔ̄ňrís*^{ɛ}	*tīntɔ́ňr-*	"mole" (*r* ← **rr*)

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

sʊ̀'ʊg^{a}	*sʊ̀'ʊs*^{ɛ}	*sʊ̀'-*	"knife"
zàk^{a}	*zà'as*^{ɛ}	*zà'-*	"dwelling-compound"
mɔ̀lìf^{ɔ}	*mɔ̀lì*	*mɔ̀l-*	"gazelle"
pʊ̀gʊdìb^{a}	*pʊ̀gʊ̀d-nàm*^{a}	*pʊ̀gʊ̀d-*	"father's sister"
sàal^{a}	*sàalìb*^{a}	*sàal-*	"human"
nɔ̀ŋìd^{a}			"lover"
bɔ̀ɔdìm^{m}			"will"
zɔ̀tìm^{m}			"fear"
dàalìm^{m}			"maleness"

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

	sàam^{ma}	*sàam-nàm*^{a}	*sàam-*	"father"
	mɛ̀ɛŋ^{a}	*mɛ̀ɛmìs*^{ɛ}	*mɛ̀ɛŋ-*	"turtle"
	àňrʊ̀ŋ^{ɔ}	*àňrɪmà*	*àňrʊ̀ŋ-*	"boat"
	kàrʊ̀ŋ^{ɔ} or *kàrɪmʊ̀g*^{ɔ}			"reading" (gerund)
	yàlʊ̀ŋ^{ɔ}	*yàlɪmà*	*yàlʊ̀ŋ-*	"wide"
	zìlìm^{mɛ}	*zìlɪmà*	*zìlìm-*	"tongue"
But	*sịilíŋ*^{a}	*sịilímìs*^{ɛ} or *sịilís*^{ɛ}	*sịilíŋ-*	"proverb"
	zàaňsʊ́ŋ^{ɔ}	*zàaňsímà*	*zàaňsʊ́ŋ-*	"dream"
	nɔ̀ŋìlím^{m}		*nɔ̀ŋìlím-*	"love"
	sʊ̀ŋìdím-tāa			"co-helper" 9.2.1.4
	dàalím^{m}	*dàalímìs*^{ɛ}	*dàalím-*	"male sex organs"
	bị'isím^{m}			"milk"

Tonally exceptional forms are *bùgʊ́m*^{m} cb *bùgʊ́m-* or *bùgʊ̄m-* "fire", *tàdɪmís*^{ɛ} "weakness", *bùdɪmís*^{ɛ}"confusion."

Pattern L with prefixes:

kʊ̀kpàrìg^{a}	*kʊ̀kpàrìs*^{ɛ}	*kʊ̀kpàr-*	"palm tree"
sāmán^{nɛ}	*sāmánà*	*sāmán-*	"courtyard"

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

bʊ̄ʊg^{a}	*bʊ̄ʊs*^{ɛ}	*bʊ̀-*	"goat"
tān^{nɛ}	*tānā*	*tàn-*	"earth"
sīd^{a}	*sīdīb*^{a}	*sìd-*	"husband"
pu̱'ā^{a}	*pʊ̄'ab*^{a}	*pu̱'à-*	"woman, wife"
sā'ab^{ɔ}	no pl	*sà'-*	"millet porridge"
gbīgīm^{nɛ}	*gbīgɪmā*	*gbìgìm-*	"lion"
ňwāaŋ^{a}	*ňwāamīs*^{ɛ}	*ňwàaŋ-*	"monkey"
mɛ̄ɛd^{a}	*mɛ̄ɛdīb*^{a}	*mɛ̀ɛd-*	"builder"
si̱ākīd^{a}	*si̱ākīdīb*^{a}	*si̱àkìd-*	"believer"
bʊ̄tīŋ^{a}	*bʊ̄tīɪs*^{ɛ}	*bʊ̀tìŋ-*	"cup"
mɛ̄ɛdīŋ^{a}	*mɛ̄ɛdīs*^{ɛ}	*mɛ̀ɛdìŋ-*	"building tool"

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

pʊ̀'ʊs^{a}	*pʊ̄'ʊsīdīb*^{a}	*pʊ̀'ʊs-*	"worshipper"

Pattern A all-M LFs become all-L before the interrogative clitics 4.1.

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

yūgʊdīr$^{ɛ/}$	*yūgʊdā*	*yùgʊ̀d-*	"hedgehog"
ňwāaŋ^{a}	*ňwāamīs*$^{ɛ/}$	*ňwàaŋ-*	"monkey"
bāŋīd^{a}	*bāŋīdīb*$^{a/}$	*bàŋìd-*	"wise man"
kpārɪdīŋ^{a}	*kpārɪdīs*$^{ɛ/}$	*kpàrɪdìŋ-*	"thing for locking"
gbīgīm$^{mɛ/}$	*gbīgɪmā*	*gbìgìm-*	"lion"
zɔ̄ɔm$^{mɛ/}$	*zɔ̄ɔmā*	*zɔ̀ɔm-*	"fugitive"
tādīm$^{m/}$	*tādɪmīs*$^{ɛ/}$	*tàdìm-*	"weak person"

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

Pattern A with prefixes:

dàkɪ̰īg^{a}	*dàkɪ̰īs*^{ɛ}	*dàkɪ̰̀-*	"sib-in-law via wife"
fʊ̄fʊ̄m^{mɛ}	*fʊ̄fʊ̄mā*	*fʊ̄fʊ́m-*	"envy; stye"

3.8.2 Verbs

Pattern L has merged with A in verbs, probably through the regular falling together of most perfectives (which resemble nominal cbs structurally) and the *derivational* origin of the imperfective flexion 3.8.4. Further levelling has extended to all but a few gerunds.

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

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

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

Ò pō dūgɛ̄.	"She didn't cook."
Ò pō dúgɛ̀ɛ?	"Didn't she cook?"
Kà ò dūgí lī	"And she cooked it."

Examples for Pattern H:

ňyɛ̄		*ňyɛ̄t*$^{a/}$		"see"
kū		*kūʊd*$^{a/}$		"kill"
dūg^{ɛ}		*dūgʊ̄d*$^{a/}$		"cook"
kūl^{ɛ}		*kūn*$^{na/}$		"go home"
yādīg$^{ɛ/}$		*yādıgíd*^{a}		"scatter"
mɔ̄ɔl$^{ɛ/}$		*mɔ́ɔn*^{na}		"proclaim"
dīgīl$^{ɛ/}$		*dīgín*^{na}		"lay down"
nɔ̄k$^{ɛ/}$	/kk/	*nɔ̄kíd*^{a}	/kk/	"take"
lāŋ́m^{m}	/ŋŋ/	*lāŋ́m*^{ma}	/ŋŋ/	"wander searching"
		vūẹ̰$^{ya/}$		"be alive"
		dīgī$^{ya/}$		"be lying down"
		tị̄'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:

tɔ̄ɔm$^{m/}$	SF *tɔ̄ɔm*	LF *tɔ́ɔmm*	"disappear"
pāe$^{/}$	SF *pāe*	LF *pāée*	"reach"

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

pāe$^{\text{/}}$	*pāad*$^{\text{a/}}$	"reach"
dḭ̄'e$^{\text{/}}$	*dḭ̄'əd*$^{\text{a/}}$	"get"
pūn̆'e$^{\text{/}}$	*pūn̆'ɵd*$^{\text{a/}}$	"rot" WK

Contrast the corresponding gerunds: *páar*^{ɛ} *dī́'ər*^{ɛ} *pún̆'ɵr*^{ɛ}.

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

bɔ̀d^{ɛ}	*bɔ̀t*^{a}	"plant"
dì	*dìt*^{a}	"eat"
mɛ̀	*mɛ̀ɛd*^{a}	"build"
zàb^{ɛ}	*zàbìd*^{a}	"fight, hurt"
bùɵl^{ɛ}	*bùɵn*^{na}	"call"
bɔ̀dìg^{ɛ}	*bɔ̀dɪgìd*^{a}	"get lost, lose"
nị̀ŋ^{ɛ}	*nị̀ŋìd*^{a}	"do"
màal^{ɛ}	*màan*^{na}	"sacrifice"
dìgìn^{ɛ}	*dìgɪnìd*^{a}	"lie down"
wàŋ̀ìm^{m}	*wàŋ̀ìm*^{ma}	"waste away"
sị̀ilìm^{m}	*sị̀ilìm*^{ma}	"cite proverbs"
zàañ̆sìm^{m}	*zàañ̆sìm*^{ma}	"dream"
	tàbì^{ya}	"be stuck to"
	vɛ̀n^{na}	"be beautiful"

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

Ò kʊ̀ zābɛ̄.	"She won't fight."
Ò kʊ̀ bɔ̄dɪgɛ̄.	"He won't get lost."
Ò nà bɔ̀dɪgɛ̀ɛ?	"Will she get lost?" 4.1
Ò kʊ̀ bɔ̄dɪgīdā.	"She won't be getting lost."
Ò kʊ̀ būɵnnā.	"She won't be calling."
Ò kʊ̀ bɔ̄dɪgī má.	"He will not lose me."
Ò kʊ̀ bɔ̄dɪgīdī má.	"He won't be losing me."

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

	Ò kʊ̀ zābó=o.	"He won't fight him."
or	*Ò kʊ̀ zābō=o.*	"He won't fight him."

3.8.3 Other word classes

Quantifiers, adverbs and particles with the segmental structure of nouns have similar tonal structures; they may also show apocope-blocking 3.2. For the tonemes of bound liaison words see 4.2. Left-bound particles with SF *CV* which are *not* liaison enclitics carry M or L; M changes to H in the LF *CVV*. Tonally unique is independent-perfective *yā* 16.6.2, which remains M before the negative prosodic clitic and becomes L before the interrogative clitics 4.1:

Lì bɔ̀dì g nέε?	"Is it lost?" (focus-*nɛ̄*/)
Lì bɔ̀dì g yàa?	"Has it got lost?"

3.8.4 Derivation

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

It is exceptional for forms derived from H roots to show L or A Patterns, or vice versa, but this does occur regularly in derivation of assume-stance verbs 9.1.1. *Gi̱ŋīlím*^{m} "shortness", from the Pattern A adjective *gi̱ŋ*^{a} "short", possibly represents a five-mora-stem Pattern A toneme allocation (but cf *gi̱ĭnlím*^{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"
kí̱sɔ̀g^{ɔ}	"hateful"	*kī̱s*$^{a/}$	"hate"
gɔ́sìg^{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*:

bī̱ig^{a}	"child"	*bi̱ìlím*^{m}	"childhood"	(*-l-*)
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* 3.5.

All regular gerunds have predictable Tone Patterns:

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

dʊ̄g$^{\varepsilon}$	"cook"	→	*dʊ̄gʊ̄b*$^{ɔ/}$
nɔ̄k$^{\varepsilon/}$	"take"	→	*nɔ̄kír*$^{\varepsilon}$
dīgīl$^{\varepsilon/}$	"lay down"	→	*dīgılʊ́g*^{ɔ}
mɛ̀	"build"	→	*mɛ̄ɛb*^{ɔ}
sʊ̀ŋ$^{\varepsilon}$	"help"	→	*sʊ̀ŋìr*$^{\varepsilon}$
dìgìn$^{\varepsilon}$	"lie down"	→	*dìgınʊ̀g*^{ɔ}
zàaňsìm^{m}	"dream"	→	*zàaňsʊ́ŋ*^{ɔ}

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

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

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

from Pattern H verbs		Pattern H
from Pattern A verbs:	containing derivational *-d-*	Pattern A
	otherwise	Pattern L

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

4 External sandhi

External sandhi includes segmental contact phenomena, tone sandhi, and complete or partial suppression of apocope. Tone sandhi follows apocope and the tone overlay of independency marking 16.6.1. M dropping and the tone changes induced by interrogative prosodic clitics apply before other external tone sandhi rules, which then apply left to right.

Sandhi after right-bound words differs from that after unbound forms: *sàǹ-kàŋā* "this blacksmith", *sāe̯ǹ lā* "the blacksmith." Perfectives behave as if right-bound in tone sandhi and in final stop devoicing in Toende Kusaal 2.1, and verb forms monophthongise final fronting diphthongs phrase-internally like bound forms.

4.1 Prosodic clitics

Prosodic clitics have no segmental form, but cause a preceding word to appear as a Long Form, completely suppressing apocope. Mooré has clause-final *yé* after negative VPs, and vocative and interrogative clitics are common in West Africa; for clitic-like elements cross-linguistically which lack segmental form see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent." The concept of prosodic clitics as *words* is also useful in describing complex clause structures.

All four prosodic clitics cause lowering of short LF-final *ɪ ʊ* to *ɛ ɔ* respectively, which are realised slightly closer in this case than as root vowels.

Before prosodic clitics, and in forms with apocope-blocking, final *-mɪ* and *-mʊ* 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 *iə uɵ* diphthongise to *ia ua* before prosodic clitics: pfv LF *kị̀a* "cut" vs ipfv *kị̀əd*, pfv LF *kūa* "hoe" vs ipfv *kūɵd*. None of these changes occur before liaison.

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

	sị̄a	"waist"	SF *sị̄a*	LF *sị̄āa*	← **siəga*
but	*bāa*	"dog"	SF *bāa*	LF *bāa*	← **baaga*
	kʊ̄ + º	"kill him/her"	SF *kʊ́o*	LF *kʊ́o*[*-o*]	both [kʊ:]

The **negative prosodic clitic** appears at the end of a clause containing a negated or negative verb 16.5. Superscript notation represents LFs as they appear before the negative prosodic clitic segmentally, with lowering of short final *ɪ ʊ* to *ɛ ɔ*; long final *ɪɪ ʊʊ* are not lowered:

Lì kā' nɔ́bɪrɛ̄=ø. "It's not a leg (*nɔ́bìr*$^{\varepsilon}$)."
3IN NEG.BE leg:SG=NEG.

Lì kā' dʊ̄kɔ́=ø. "It's not a pot (*dʊ̄k*$^{ɔ/}$)."
3IN NEG.BE pot:SG=NEG.

Bà kā' mɔ́lī=ø. "They are not gazelles (*mɔ̀lì*)."
3PL NEG.BE gazelle:PL=NEG.

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

mɔ̀lì	"gazelles"	SF *mɔ̀lì*	LF *mɔ̀lī*
yàarìm^{m}	"salt"	SF *yàarìm*	LF *yàarīmm*
tìɪm^{m}	"medicine"	SF *tìɪm*	LF *tīɪmm*

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

	Lì ká' ò tīɪmm.	"It's not her medicine (*tìɪm*^{m})."
but	*Lì kā' tîɪmm.*	"It's not medicine."
	Lì ká' bà dā'a.	"It's not their market (*dà'a*)."
but	*Lì kā' dá'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 *fūugɔ́*
pāe$^{/}$	"reach"	SF *pāe*	LF *pāée*
nūa$^{/}$	"hen"	SF *nūa*	LF *nūáa*
yā$^{/}$	"houses"	SF *yā*	LF *yáa*
bɛ̀dʊgʊ̄$^{/}$	"a lot"	SF *bɛ̀dʊgʊ̄*	LF *bɛ̀dʊgʊ́ʊ*
gāaň$^{/}$	"Nigerian ebony"	SF *gāaň*	LF *gáaň*
tāu̯ň$^{/}$	"opposite-sex sib"	SF *tāu̯ň*	LF *táʊň*
dāam$^{m/}$	"millet beer"	SF *dāam*	LF *dáamm*
vʊ̄m$^{m/}$	"life"	SF *vʊ̄m*	LF *vʊ́mm*

Before the SF of ^{o} "him/her", a Pattern H perfective ending in a root vowel has H toneme, but the overlong diphthong formed with the LF *o* carries MH:

ňyɛ̄ + ^{o}	"see him/her"	SF *ňyɛ́o*	LF *ňyɛ̄ó=o*

LFs of the same form appear with some single-word clause adjuncts. KB consistently writes such adjuncts with final *ɛ ɔ* rather than *ɪ ʊ*.

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

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

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

Kikirig ya'a mor ***buude****, fun tis o ka o lebig o moogin.*
Kɪ̀kɪ̣rɪ̄g yá' mɔ̄r bʊ̄ʊdɛ̄, fʊ̄n tísò=ø kà ò lɛ̀bɪ̀g ò mɔ̄ɔgʊ̄=n.
Fairy:SG if have innocence, 2SG.CNTR give=3AN and 3AN return 3AN grass:SG=LOC.
"When a fairy is right agree so that it will go back to the bush." KSS p38
(Give the devil his due.)

The **vocative prosodic clitic** ends a vocative clause. It has similar effects to the negative clitic, although the audio NT version sometimes shows a change of final M tone to falling (as with final-H vocatives for some Hausa speakers, Jaggar p18.)

M̀ bɪ̄isɛ̄=ø! "My children!"
1SG child:PL=VOC!

Pu'aa, bɔ ka fʊ kaasida?
Pu̱'āa=ø, bɔ́ kà fʊ̀ kāasídà=ø?
Woman:SG=VOC, what and 2SG cry:IPFV=CQ?
"Woman, why are you crying?" (Jn 20:13)

dau onɛ an yadda niŋida
dāu̱ ɔ́nì àn̆ yàddā-nɪ́ŋ̀ɪdā=ø
man:SG REL.SG COP faith-doer:SG=VOC
"You man, who are a believer!" (1 Cor 7:16)

The two **interrogative prosodic clitics** end questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions. This results in a five-way *a ɛ ɔ ɪ ʊ* contrast in final vowels by quality alone:

Ànɔ́ˈɔnì◡ø ňyɛ̄ nɔ́bɪrɛ̀=ø? "Who saw a leg (*nɔ́bìr*$^{\varepsilon}$)?"
Who CAT see leg:SG=CQ?

Lì à nɛ̄ nɔ́bɪrɛ̀ɛ=ø? "Is it a leg?"
3IN COP FOC leg:SG=PQ?

Ànɔ́ˈɔnì ňyɛ̄ kʊ́kà? "Who saw a chair (*kʊ̄k*^{a})?"
Ànɔ́ˈɔnì ňyɛ̄ dʊ̄kɔ́? "Who saw a pot (*dʊ̄k*$^{ɔ/}$?"
Ànɔ́ˈɔnì ňyɛ̄ mɔ́lì? "Who saw gazelles (*mɔ̀lì*)?"
Ànɔ́ˈɔnì ňyɛ̄ bɛ́dʊgʊ́? "Who saw a lot (*bɛ̀dʊgʊ̄*$^{/}$)?"

Like many other West African languages, Kusaal signals questions with a final *falling* intonation. All questions end with a L or H toneme. Both **interrogative prosodic clitics cause preceding words with all-M tonemes to change to all-L.** This is a change of tonemes, not just a matter of intonation, and it precedes M spreading, to which the new L tonemes are subject 4.4. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

Ànɔ́ˈɔnì◡ø ňyɛ́ bà bị̀igà=ø? "Who saw their child (*bị̄ig*^{a})?"
Who CAT see 3PL child:SG=CQ?

Ànɔ́ˈɔnì ňyɛ̄ bí̩igà? "Who saw a child?" tonally identical to
Ànɔ́ˈɔnì ňyɛ̄ sʊ́ˈʊgà? "Who saw a knife (*sʊ̀ˈʊg*^{a})?"
Fʊ̀ bɔ̂ɔd bɔ́? "What (*bɔ̄*) do you want?"
Ànɔ́ˈɔnì ňyɛ̄ zú̩yà? "Who saw hills (*zū̩yā*)?"
M̀ ná bɔ̄dīg. "I will get lost."
M̀ ná bɔ̀dɪgɛ̀ɛ? "Will I get lost?"
Ò pʊ̄ dʊ̄gɛ̄. "She didn't cook."
Ò pʊ̄ dʊ́gɛ̀ɛ? "Didn't she cook?"

4.2 Liaison

Liaison words prevent apocope applying to the preceding word, which retains its final vowel mora, but with loss of quality contrasts. Words which have not undergone apocope, like the linker particles *kà* and *yɛ̄*, do not change before liaison.

When the LF preceding liaison ends in a short vowel it becomes *ɪ*. For some speakers, this *ɪ* becomes *ʊ* after *g* preceded by a rounded root vowel. LF-final *-mm* behaves as *-mɪ*; *-iə -uɵ* remain as such, not becoming *-ia -ua*. LFs ending in an overlong vowel sequence reduce to long, and fronting diphthongs are simplified to monophthongs. Certain liaison words then induce further quality changes in the preceding LF, as discussed below.

Liaison enclitics are always preceded by liaison. They are joined to the preceding word by =. The locative particle *n*ᵋ 13.3 attaches after nominal sg or pl forms; discontinuous-past *n*ᵋ 16.3.2 and the postposed 2pl subject pronoun ʸᵃ 18.3 attach after verb forms. The bound object pronouns *m*ᵃ *f*ᵓ ᵒ *lı tı ya ba* 12.4.1 attach directly to a verb word or after *n*ᵋ or ʸᵃ. Nominaliser-*ǹ* 21 follows complete NPs.

Examples of the basic liaison changes:

*kʊ̄k*ᵃ	"chair"	+ *n*ᵋ	"at"	→	*kʊ̄kī=n*ᵋ/
*dʊ̄k*ᵓ/	"pot"	+ *n*ᵋ	"at"	→	*dʊ̄kí=n*ᵋ
*bɔ̀ɔd*ᵃ	"want"	+ *tı*	"us"	→	*bɔ̀ɔdī=tí*
*pɔ̄ɔg*ᵓ/	"field"	+ *n*ᵋ	"at"	→	*pɔ̄ɔgʊ́=n*ᵋ
*yàʊg*ᵓ	"grave"	+ *n*ᵋ	"at"	→	*yàʊgʊ̄=n*ᵋ/
*tʊ̀m*ᵐ	"send"	+ *tı*	"us"	→	*tʊ̀mì=tī*/
*dāam*ᵐ/	"beer"	+ *n*ᵋ	"at"	→	*dāamí=n*ᵋ
*kù'ɵm*ᵐ	"water"	+ *n*ᵋ	"at"	→	*kù'ɵmī=n*ᵋ/
ǹyɛ̄	"see"	+ *m*ᵃ	"me"	→	*ǹyɛ́ɛ=m*ᵃ
kɻ̀à	"cut"	+ *lı*	"it"	→	*kɻ̀ə=lī*/
dà'a	"market"	+ *n*ᵋ	"at"	→	*dā'a=n*ᵋ/
pāe/	"reach"	+ *tı*	"us"	→	*páa=tī*/
pɻ̄e/	"wash"	+ *tı*	"us"	→	*pɻ́ə=tī*/
dūe/	"raise"	+ *tı*	"us"	→	*dúɵ=tī*/

Single-aspect verbs with LFs ending in -*ya* behave like fusion verb perfectives; they drop -*ya*, monophthongise diphthongs and prolong preceding short vowels:

*sʊ̄'e*ʸᵃ/	"own"	+ *lı*	"it"	→	*sʊ́'ʊ=lī*/
*vʊ̄e̯*ʸᵃ/	"live"	+ *n*ᵋ	dp	→	*vʊ̄ʊ=n*ᵋ/

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun *ya* exactly as before word-internal *y*, with any back mora becoming *e* [ɪ] but no change to front morae, thereby recreating fronting diphthongs in fusion verb pfv forms:

	Bà bɔ̀ɔdī=yá.		"They love you."
	Kà bà ǹyɛ́ɛ=yā.		"And they saw you (pl)." (*ǹyɛ̄* "see")
but	*Kà bà kʊ́e=yā.*	[kʊɪja]	"And they killed you (pl)." (*kʊ̄* "kill")
	Kà bà kɻ́e=yā.	[kiɪja]	"And they cut you (pl)." (*kɻ̀à* "cut")
	Kà bà páa=bā.		"And they reached them." (*pāe*/ "reach")
but	*Kà bà páe=yā.*		"And they reached you (pl)."

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

Kà bà kɪ̂ə=f or *Kà bà kɪ̂o=f.*	"And they cut you."
Kà bà ňyɛ́ɛ=f or *Kà bà ňyɛ́o=f.*	"And they saw you."
M̀ gbáň'a=f or *M̀ gbáň'ʋ=f.*	"I've grabbed you."

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

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

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

*bɔ̀ɔd*ᵃ	"want"	+ ᵒ	→	SF *bɔ̀ɔdō*	LF *bɔ̀ɔdó=o*	[bɔ:dʊ:]
*tʊ̀m*ᵐ	"send"	+ ᵒ	→	SF *tʊ̀mò*	LF *tʊ̀mò=o*	
ňyɛ̄	"see"	+ ᵒ	→	SF *ňyɛ́o*	LF *ňyɛ̄ó=o*	
zū	"steal"	+ ᵒ	→	SF *zúo*	LF *zūó=o*	[zuʊ:]
dì	"eat"	+ ᵒ	→	SF *dìo*	LF *dìò=o*	
kɪ̯à	"cut"	+ ᵒ	→	SF *kɪ̀o*	LF *kɪ̀ò=o*	
*pāe*ˡ	"reach"	+ ᵒ	→	SF *páo*	LF *pāó=o*	
*pɪ̄e*ˡ	"wash"	+ ᵒ	→	SF *pɪ́o*	LF *pɪ̄ó=o*	
*dūe*ˡ	"raise"	+ ᵒ	→	SF *dúo*	LF *dūó=o*	

Mane a o.	"I am he." (Jn 18:5, 1976)
Mānī‿ ø áňo=ø.	(*àe̯ň*ʸᵃ "be")

1SG.CNTR CAT COP=3AN.

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

	*gɔ̀sìm*ᵃ	"look!"	+ ʸᵃ	→	SF *gɔ̀sɪmī*		LF *gɔ̀sɪmī=yá*
	kʊ̄	"kill"	+ ʸᵃ	→	SF *kʊ̄e*	[kʊɪ]	LF *kʊ̄e=yá*
	kɪ̯à	"cut"	+ ʸᵃ	→	SF *kɪ̄e*	[kiɪ]	LF *kɪ̄e=yá*
	*pāe*ˡ	"reach"	+ ʸᵃ	→	SF *pāe*		LF *pāe=yá*
	*pɪ̄e*ˡ	"wash"	+ ʸᵃ	→	SF *pɪ̄e*		LF *pɪ̄e=yá*
	*dūe*ˡ	"raise"	+ ʸᵃ	→	SF *dūe*		LF *dūe=yá*
but	*bɛ̀*	"be"	+ ʸᵃ	→	SF *bɛ̄ɪ*	[bɛɪ]	LF *bɛ̄ɪ=yá*

Except for nominaliser-*ǹ*, liaison enclitics themselves carry H toneme after host-final M toneme and M after L or H. Liaison-enclitic SF-final M becomes H before prosodic clitics, and SF-final M becomes H before interrogative clitics.

Kà m̀ zábì=bā.	"And I've fought them."
Kà m̀ pō̄ zábì=fɔ̄.	"And I didn't fight you."
M̀ zábī=bá.	"I've fought them."
M̀ pō̄ bɔ́ɔdī=fɔ́.	"I don't love you."
M̀ pō̄ bɔ́ɔdī=báa.	"I don't love them."
Kà m̀ pō̄ zábì=báa.	"And I didn't fight them."
Ànɔ́ˈɔnì kʊ́ʊ=bá?	"Who has killed them?" SF *kʊ́ʊ=bā*

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

	pɔ̄ɔg$^{ɔ/}$	"field"	+ *n*$^{\varepsilon}$	→ *pɔ̄ɔgʊ́=n*$^{\varepsilon}$		
	bi̱ig^{a}	"child"	+ *n*$^{\varepsilon}$	→ *bi̱igī=n*$^{\varepsilon/}$		WK
but	*mʊ̀ˈar*$^{\varepsilon}$	"dam, lake"	+ *n*$^{\varepsilon}$	→ *mʊ̀ˈarī=n*$^{\varepsilon/}$		
	yàad$^{\varepsilon}$	"graves"	+ *n*$^{\varepsilon}$	→ *yàadī=n*$^{\varepsilon/}$		WK
	kʊ̄ʊdíb^{a}	"killers"	+ *n*$^{\varepsilon}$	→ *kʊ̄ʊdíbī=n*$^{\varepsilon/}$		WK

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

	dʊ̄g$^{\varepsilon}$	"cook"	+ *n*$^{\varepsilon}$	→ *dʊ̄gʊ̄=n*$^{\varepsilon/}$	
	bɔ̀dɪ̀g$^{\varepsilon}$	"lose"	+ *n*$^{\varepsilon}$	→ *bɔ̀dɪgī=n*$^{\varepsilon/}$	
	yādīg$^{\varepsilon/}$	"scatter"	+ *n*$^{\varepsilon}$	→ *yādɪgī=n*$^{\varepsilon/}$	
ipfv	*kʊ̄ʊd*$^{a/}$	"kill"	+ *n*$^{\varepsilon}$	→ *kʊ̄ʊdī=n*$^{\varepsilon/}$	
ipfv	*yādɪgíd*^{a}	"scatter"	+ *n*$^{\varepsilon}$	→ *yādɪgídī=n*$^{\varepsilon/}$	

Dā	*dɔ̄llī=yá=ø!*	"Follow ye not!"
NEG.IMP	follow=2PL.SUB=NEG!	

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

	bɔ̀dɪ̀g$^{\varepsilon}$	"lose"	+ *m*^{a}	"me"	→ *bɔ̀dɪgì=m*^{a}		
	dì	"eat"	+ *lɪ*	"it"	→ *dìɪ=lī*$^{/}$		
	yādīg$^{\varepsilon/}$	"scatter"	+ *m*^{a}	"me"	→ *yādɪgí=m*^{a}		
but	*dʊ̄g*$^{\varepsilon}$	"cook"	+ *lɪ*	"it"	→ *dʊ̄gí=lī*$^{/}$		
	gɔ̄s$^{\varepsilon}$	"look"	+ ^{o}	"him/her"	→ *gɔ̄só*	LF	*gɔ̄só=o*
	kʊ̄	"kill"	+ *m*^{a}	"me"	→ *kʊ́ʊ=m*^{a}		

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

pāe$^{/}$	"reach"	+ *m*^{a}	"me"	→ *páa=m*^{a}
dį̄'e$^{/}$	"get"	+ *ba*	"them"	→ *dį́'ə=bā*$^{/}$

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

zàbìd^{a}	"fights"	+ *m*^{a}	"me"	→ *zàbıdī=m*$^{a/}$	
zàbìd^{a}	"fights"	+ ^{o}	"him/her"	→ *zàbıdō*	LF *zàbıdó=o*
dìt^{a}	"eats"	+ *lı*	"it"	→ *dìtī=lí*	
yādıgíd^{a}	"scatters"	+ *ba*	"them"	→ *yādıgídī=bá*	
yādıgíd^{a}	"scatters"	+ ^{o}	"him/her"	→ *yādıgídō*	LF *yādıgídó=o*
kʊ̄ʊd$^{a/}$	"kills"	+ *m*^{a}	"me"	→ *kʊ̄ʊdí=m*^{a}	
kʊ̄ʊd$^{a/}$	"kills"	+ ^{o}	"him/her"	→ *kʊ̄ʊdó*	LF *kʊ̄ʊdó=o*

With independency-marking:

bɔ̀dìg^{ɛ}	"lose"	+ *m*^{a}	"me"	→ *bɔ̀dıgī=m*$^{a/}$	
bɔ̀dìg^{ɛ}	"lose"	+ ^{o}	"him/her"	→ *bɔ̀dıgō*	LF *bɔ̀dıgó=o*
yādīg$^{ɛ/}$	"scatter"	+ *m*^{a}	"me"	→ *yàdıgī=m*$^{a/}$	
yādīg$^{ɛ/}$	"scatter"	+ ^{o}	"him/her"	→ *yàdıgō*	LF *yàdıgó=o*

The sequence *o=o* forms a tautosyllabic long vowel; thus word-final *ō* becomes *ó=o* before prosodic clitics, and *ò* becomes *ō=o* before the negative clitic:

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

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

Kà bà ňyɛ́o.	"And they saw her."
Kà bà pʊ̄ ňyɛ̄ó=o.	"And they didn't see her."

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

Ò nà bɔ̄dıgī=m.	"He will lose me."
Ò nà bɔ̄dıgī=bá.	"She will lose them."
Ò kʊ̀ bɔ̄dıgīdī=má.	"He won't be losing me."
Ò kʊ̀ zābıdī=má.	"He won't be fighting me."

Ò kʊ̀ zābó=o. "He won't fight him."
or *Ò kʊ̀ zābō=o.* "He won't fight him."

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

Kà bà kʃ̣ə=m. "And they cut me."

Toneme changes induced by liaison words *follow* external tone sandhi induced by words before the host; thus *dà'a* "market" + n^{ε} "at"→ *dā'a=*$n^{\varepsilon/}$; *mɛ̀* "build" + n^{ε} dp → *mɛ̄ɛ=*$n^{\varepsilon/}$; *kʊ̀* "kill" [*kʊ̄* with independency marking] + m^{a} "me" → *kʊ̄ʊ=*$m^{a/}$; but

Ò bɛ̀ nɛ́ dâ'a=n. "She is at market"
Dāu̯ lā mɛ̂ɛ=n. "The man built (earlier today.)"
Dāu̯ lā kʊ̂ʊ=m. "The man has killed me."

The toneme on the enclitic itself is the same as it would have been *without* the toneme changes induced by preceding words:

Ò kʊ̄ʊ=bá. "She has killed them."
Dāu̯ lā kʊ́ʊ=bá. "The man has killed them."

The pronoun ^{ya} becomes *-ní-* before liaison. The pronoun was historically **ɲa*, regularly becoming **yã* with subsequent loss of nasalisation; when *-a* is deleted by apocope, *y* is also deleted. Before a liaison word, *-a* was not deleted but became *ɪ*, before which *ɲ* became *n-*. (Cf also *nɪ̀ŋ*$^{\varepsilon}$ "do" = Toende Kusaal *ɛ̃ŋ*, locative n^{ε} ~ *nī*$^{/}$ = Toende *-ɪ*, *nɪ̣e* "appear" = Toende *yẽe*, *nɪ̄ŋ*^{a} "body"= Mooré *yĩnga*.)

Dā dɔ̄llī=yá=ø! "Follow ye not!"
NEG.IMP follow=2PL.SUB=NEG!

Dɪ̣'əmī=ø! "Receive ye!"
Receive:IMP=2PL.SUB!

Dɪ̣'əmī=ní=bā! "Receive ye them!"
Receive:IMP=2PL.SUB=3PL.

Dɪ̣'əmī=nó=ø! "Receive ye her!"
Receive:IMP=2PL.SUB=3AN.

Biisɛ, siakimini ya du'adib nɔya.
Bịisɛ̄=ø, si̯àkìmī=ní‿ yà dʊ̄'adīb nɔ́yà.
Child:PL=VOC, agree:IMP=2PL.SUB 2PL parent:PL mouth:PL.
"Children, obey your parents." (Eph 6:1)

Dị̀'əmī=ní‿ àlá! "Keep ye on receiving!"
Receive:IMP=2PL.SUB ADV:thus!

Nominaliser-*ǹ* is bound to both left and right. It combines with a preceding pronoun subject to produce a special set of pronouns 12.4.1, but for my informants it is segmental zero in all other contexts. Older texts frequently show *n* and/or liaison, though *n* is nearly always omitted after words with SFs ending in nasal consonants; in KB, *n* (without liaison) occurs mostly after foreign proper names.

ya zuobid wʊsa kalli an si'em
yà zūəbíd wʊ̄sā kāllí=ø àň sị̄'əm
2PL hair:PL all number:SG=NZ COP INDF.ADV
"how much the number of all your hairs is" (Lk 12:7)

Nominaliser-*ǹ* has a fixed-L toneme 4.4. Except after subject pronouns, the change of a preceding M toneme to H is often the only sign of its presence:

Dāu̯ lā záb nâ'ab lā. "The man has fought the chief."
man:SG ART fight chief:SG ART

but *dāu̯* ***lá***=*ø zàb nà'ab lā* "the man having fought the chief"
man:SG ART=NZ fight chief:SG ART

Non-enclitic liaison words comprise the pronouns *m̀ fʊ̀ ò lì tì yà bà*, the personifier particle *à*/*ǹ* 12.6, catenator-*n*, all words with the number prefixes *à bà bʊ̀* or the manner-adverb prefix *à*, and *ànɔ̂'ɔnᵋ* "who?"

Liaison before these words is marked with ‿ in glossing. It is only invariably seen in the case of pronouns preceded by a verb within a VP:

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

Particularly in written materials, the quality of the final vowel mora before liaison words beginning with *à-* is not predictable from the phonology alone.

Before *ànɔ̂'ɔnᵋ* "who?", the manner-adverb prefix *à-* and personifier-particle *à-* the forms are the same as before consonant-initial liaison words:

Ò nìŋí◡ àlá. "She did thus."
3AN do ADV:thus (contrast *àlá* "how many?" below)

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

... [n] loo Abaa zuur "... tying Dog's tail" KSS p20
... n lɔ́ɔ◡ À-Bāa zʊ̂ʊr
...CAT tie PERS-dog:SG tail:SG

Fusion verbs 7.1 here show forms in final *e* [ɪ], instead of the monophthongs usual before another word in the VP, but *àe̯ň*^{ya} "be something" always appears as *àaň*, not *àeň*, suggesting that this may be simply orthographic:

ka ba gban'e Adayuug "and they seized Rat" KSS p20
kà bà gbáň'a◡À-Dàyūug
and 3PL seize PERS-rat:SG

Ka fʊ aan anɔ'ɔnɛ? "And who are you?" (Jn 1:19)
Kà fʊ̀ áaň ànɔ́'ɔnɛ̀=ø?
And 2SG COP who=CQ?

Before the number prefix *a-* a pre-liaison short vowel is not *-ɪ* but *-a*:

Ǹ mór nɛ̄ bi̯isá◡ àtáň'. "I have three children."
1SG have FOC child:PL NUM:three.

Pɛ̀ɛdá◡ àlá=ø? "How many baskets?"
basket:PL NUM:how.many=CQ? (contrast *àlá* "thus" above)

Informants usually contract *-á à-* to *á-* and *-í à-* to *-á-* or *-í-*:

Nū'-bíbìs álá kà fʊ̀ ňyɛ̄tá=ø?
hand-small:PL NUM:how.many and 2SG see:IPFV=CQ?
"How many fingers do you see?"

Gɔ̀sɪmí lá! or *Gɔ̀sìm álá!* "Keep on looking!"

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

WK and DK round LF-final *ɪ* before *ò* "his/her", but all written sources have *-i*:

Ba gɔsi o biig. "They've looked at her child."
Bà gɔ̀sʊ́◡ ò bī̤ig.
3PL look:at 3AN child:SG.

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

Kà bà dìtī=bá. "And they were eating them."
And 3PL eat:PFV=3PL. (ipfv without independency marking)

but *Kà bà dìtɪ́◡ bà dīɪb.* "And they were eating their food." (ML → HL)
And 3PL eat:IPFV 3PL food.

bane na yel Zugsobi ba tuuma a si'em la
bànì nà yɛ̄l Zūg-sɔ́bɪ́ bà tʊ̄vmá=ø àn̆ sī̤'əm lā
REL.PL IRR say Lord 3PL deed:PL=NZ COP INDF.ADV ART
"Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

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

tʊvm kanɛ ka m tʊmmi tisid Wina'am la.
tʊ̀vm-kànì kà m̀ tʊ́mmì◡ ø tísìd Wínà'am lā
work-REL.SG and 1SG work:IPFV CAT give:IPFV God ART
"The work which I do for God" (Rom 15:17)

Kà ò zɔ́ɔ◡ø kɛ̄ŋ nā. "And he came running"
And 3AN run CAT come hither.

Bɔ̄ɔ◡ ø lá=ø? "What's that?"
What CAT that=CQ?

Almost all instances of *n* in KB appear after words with apocope-blocking or foreign names; the particle is usually segmental zero, with preceding liaison. Older sources often show *n* and/or liaison, but *n* is unusual after words with SFs ending in nasal consonants, where liaison is often also absent.

Realisations with neither *n* nor liaison are common after "auxiliary" verbs.

Catenator-*n* is tonally null. Before it the final toneme of a modified LF is M after M toneme and L otherwise, and M spreading follows whenever the *preceding* word would induce it:

amaa o kena ye o tʊm tisi ba
àmáa ò kɛ̄ nā yɛ́ ò tʊ́m◡ ø tìsì=bā
but 3AN come hither that 3AN work CAT give=3PL
"but he came to serve them" (Mt 20:28)

M̀ nɔ́k sʊ́ˈʊgʊ̀◡ø kɪ̰á nɪ̄m lā.
1SG pick.up knife:SG CAT cut meat:SG ART.
"I cut the meat with a knife."

4.3 Segmental contact

The initial consonant and emic nasalisation of the deictic particle *ňwà* "this" are lost when it appears as a dependent after a word ending in a consonant:

	bɪ̄is ňwá	"these children"	[bi:sa]
	zàam ňwá	"this evening"	[za:ma]
but	*pʊ̰ˈā ňwá*	"this woman"	[pʊ̰ã̰wã]

The initial *l* of the definite article *lā*/ assimilates totally to a preceding word-final -*r*, and [r:] simplifies to [r]:

yɪ̄r lā	"the house"	[jira]
pʊ̀-kɔ̀ɔňr lā	"the widow"	[pʊkɔ̃:ra]

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 NT occasionally shows forms like *nidiba* for *nɪ̄dīb lā* "the people."

Initial *n* of focus-*nɛ̄*/ often assimilates completely to a preceding word-final *d t n r l m* in normal rapid speech. Subsequently [r:] becomes [r] and [d:] becomes [d]:

Bà kpɪ̀id nɛ̄.	"They're dying."	[ba k͡pi:dɛ]
M̀ zɔ́t nɛ̄.	"I'm afraid."	[m̩ zɔt:ɛ]

M̀ mór nɛ̄ bī̱isá àyḭ́'.	"I have two children with me."	[m̩ mɔrɛ bi:sa:j̰i̱]
Lì pɛ̀'ɛl nɛ̄.	"It's full."	[lɪ pɛ̰:l:ɛ]
Lì sàn̆'am nɛ̄.	"It's spoilt."	[lɪ sã̰:m:ɛ]

Final nasal consonants of right-bound words and noun prefixes assimilate to the place of articulation of a following consonant, as does syllabic *ǹ* but *not* *m̀*:

dànkɔ̀ŋ	"measles"	[daŋkɔŋ]
nī̱n-bámmā	"these people"	[nimbam:a]
nàm zī'	"still not know"	[nanz̰ɪ]
Ǹ-Bī̱l	Mbillah (personal name)	[m̩bil]
but *M̀ nɔ́ŋī=f.*	"I love you."	[m̩nɔŋɪf]

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

àwá nā	"like this here" (*àn̆wá* "like this")
kɛ̄ nā	"come hither" (*kɛ̄n̆* "come")

Some right-bound *CVn̆-* elements lose nasalisation even when the following consonant is not a nasal. Thus with compounds of *sūn̆f*$^{ɔ/}$ "heart" like *sū-málɪsìm*^{m} "joy", *sūn̆-kpḭ̂'oŋ*^{ɔ} "boldness", *sūn̆-pɛ̂ɛn*^{nɛ} "anger" the 1996 NT and older sources write *sumalism sukpi'oŋ/sukpi'euŋ supeen*, reflecting the bleaching and phonological simplification which has created noun prefixes from some original cbs 10.1. KB restores the nasalisation in writing: *sʋnkpi'euŋ* "boldness", *sʋnpɛɛn* "anger."

Cbs, and verb forms which are not VP-final, do not end in fronting diphthongs unless the next word begins with *y*; diphthongs are replaced by corresponding monophthongs: *aɐ̰* → *a*; *oɐ̰* → *o*; *ʋɐ̰* → *ʋ*; *ae* → *aa*; *ʋe* → *ʋʋ*; *ie* → *iə*; *ue* → *uɵ*. Thus *sāɐ̰n̆ lā* "the blacksmith", but *sàn̆-kàŋā* "this blacksmith" and e.g.

Ò sʊ̀'ʋ lór.	"She owns (*sʊ̄'e*) a lorry."
Dúɵ wɛ̄lá?	"[You] arose (*dūe*) how?" (Morning greeting)

Ti ya'a vʋe, ti vʋnɛ tis Zugsɔb la.
Tì yá' vʋ̄ɐ̰, tì vʊ́ nɛ̄◡ ø tís Zūg-sɔ́b lā.
1PL if be.alive, 1PL be.alive FOC CAT give Lord ART.
"If we live (*vʋ̄ɐ̰*), we live to the Lord." (Rom 14:8)

Ɛ̀n̆rɪgìm◡ ø pāa dʊ́'atà.
Shift.along:IMP CAT reach doctor:SG.
"Shift along up to (*pāe*) the doctor."

With *àe̱ň*^{ya} "be" before the focus particle *nɛ̄*$^{/}$ there is also loss of nasalisation:

	M̀ á nɛ̄ dāu̱.	"I'm a man."
but	*Lì àň sʊ́ŋā.*	"It's fine."

Older written materials write *àň* directly before a complement as *a* not *ann*, but KB consistently has *an* [ã] whenever the form is not followed by *nɛ̄*$^{/}$.

This monophthongisation is fairly recent: Haaf still has e.g. *soiput* for *sɔ̀ň-pʊ̄t*^{a} "witchfinder." In texts diphthongs may appear where informants and the audio NT have monophthongs, e.g. *voen vʊ̄ʊ=n* "would live" (Gal 3:21, 1996), *Kristo da faaɛn ti Kristo dá fāaň=tí* "Christ saved us" (Gal 5:1), but *àe̱ň*^{ya} "be" is always *aa(n)* before liaison because the rarity of phrase-final *àe̱ň* inhibits the introduction of analogical spellings, and in the 1996 NT analogy has even led to forms like *faaenm* for imperative *fàaňm* "save" and *naae da* for ipfv LF *nāadá* "end."

4.4 M spreading

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

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

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

Bà tìs nâ'ab lā bʊ́ŋ. "They gave the chief a donkey (*bʊ̀ŋ*^{a})."
3PL give chief:SG ART donkey:SG.

Bà ňwɛ̀' nâ'ab lā sʊ́ŋā. "They beat the chief well (*sʊ̀ŋā*$^{/}$)."
3PL beat chief:SG ART good:ADV.

Absent M spreading after nominal plurals in -*á* or -*í*:

M̀ dìgà lú yā. "My dwarfs have fallen down."
1SG dwarf:PL fall PFV.

but *M̀ yɔ̄gʊmá lù yā.* "My camels have fallen down."
1SG camel:PL fall PFV.

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

Kà m̀ gɔ̄s nâ'ab lā. "And I've looked at (*gɔ̄s*$^{\varepsilon}$) the chief."
Kà ò gɔ̄s nâ'ab lā. "And he's looked at the chief."
but *Kà m̀ záb nà'ab lā.* "And I've fought (*zàb*$^{\varepsilon}$) the chief (*nà'ab*^{a})."
Kà ò záb nà'ab lā. "And he's fought the chief."

Certain words carry an initial/sole L toneme which is never subject to M spreading. These **fixed-L** words comprise all liaison words not bound to the left except for catenator-*n*, which is toneless, along with the linker particle *kà* "and":

right-bound pronouns	*m̀ fʊ̀ ò lì tì yà bà*
personifier particle	*à-*/*ǹ-*
pronoun "who?"	*ànɔ̂'ɔn*$^{\varepsilon}$
nominaliser (all forms)	*ǹ*
words with number or manner-adverb prefixes	*à- bà- bʊ̀-*
linker particle	*kà*

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

Bà kʊ̀ʊdī=bá. "They kill them."
3PL kill:IPFV=3PL.

but *Bà kʊ̀ʊdí‿bà bʊ̄ʊs.* "They kill their goats."
3PL kill:IPFV 3PL goat:PL.

*Lì à **nɛ́** à-dàalʊ́ŋ.* "It's a stork"
3IN COP FOC PERS-stork:SG.

Ò gɔ̀sī bá bɛ́dʋgʊ̄. "She looked at them a lot." (*ba* object)
Ò gɔ̀sí bà bɛ̀dʋgʊ̄. "She looked at a lot of them." (*bà* possessive)

ba diib n yit na'ateŋ la na zug
bà ***díɪb****=ǹ yị̄t ná'-tɛ̄ŋ 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.
wʊ̄ʋ ***sáa****=ø nāanī i̯áňk yà ňyá'aŋ n tí páe‿yà tùɵnà lā*
like rain:SG=NZ then jump 2PL behind CAT after reach 2PL before.ADV ART
"like when lightning leaps from East to West" (Mt 24:27, 1996)

Fixed-L syllables *are* changed to M before the negative prosodic clitic 4.1; thus *nɛ́ tì* "with us" but

Amaa o pʋ lal nɛ tii.
Àmáa ò pʊ̄ lāl nɛ́ tīɪ=ø.
But 3SG NEG.IND be.far with 1PL=NEG.
"But he is not far from us." (Acts 17:27)

After words ending in M, this sandhi is straightforwardly recognisable as tone spreading. Right-bound pronouns have fixed-L tonemes for my informants even when followed by M spreading, but ILK and Niggli's materials show M, which can be taken as having given rise to *floating* M tonemes in current Agolle. M spreading after SFs ending in H or L can be attributed to floating tonemes delinked by apocope, but in this case M spreading is synchronically mostly determined by syntactic role and by analogy, and prior tonal behaviour persists even after remodelling by *addition* of segments. Words with identical L-final sg and cb, like *mà* "mother", *zu̯à* "friend", *dʋ́'atà* "doctor", *lànnìg* "squirrel" show M spreading after sg but not cb, and unlike perfectives, the bare-stem imperfectives *bɛ̀* and *nɔ̀ŋ* are followed by M spreading.

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

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

M dropping also precedes tonal changes induced by following liaison words: *dāu̯ lā pɔ́ɔgʊ̄=n* "in the man's field (*pɔ̄ɔg*$^{ɔ/}$)."

Examples with a cb as head:

bʊ̀-pi̯əlì g^{a}	"white goat"	*bʊ̀-pāalíg*^{a}	"new goat"
bi̯-pʊ́ŋ-pi̯əlì g^{a}	"white girl"	*bi̯-pʊ́ŋ-pāalíg*^{a}	"new girl"
nɔ̄-pi̯əlì g^{a}	"white hen"	*nɔ̄-páalì g*^{a}	"new hen"

With a cb as dependent (*nɔ̄ɔr*$^{ɛ/}$ "mouth", *di̯'əs*$^{a/}$ "receiver" pl *di̯'əsídì b*^{a}):

nɔ̄-dî̯'əs^{a}	"chief's interpreter"	pl	*nɔ̄-di̯'əsì dì b*^{a}

There is no M dropping after personal pronouns:

m̀ bi̯ig	"my child"	*m̀ tì ɪg*	"my tree"
mān bi̯ig	"my child"	*mān tî ɪg*	"my tree"
mān yʊ̄gʊ́m	"my camel"	*mān gbīgīm*	"my lion"

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

m̀ bi̯ēyá bi̯is	"my elder same-sex siblings' children (*bi̯is*^{ɛ})"
m̀ bi̯ēyá fùud	"my elder same-sex siblings' clothes (*fūud*$^{ɛ/}$)"

M dropping after free NPs also followed by M spreading:

dāu̯ bî̯ig	"a man's child"	*nà'ab bî̯ig*	"a chief's child"
dāu̯ lā yʊ́gʊ̀m	"the man's camel"	*dāu̯ lā gbígì 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 bị̂ig.	"They've given (it) to the chief's child."
3PL give chief:SG ART child:SG.	(M dropping applied to *bị̄ig*ᵃ "child")

Bà tìs nâ'ab lā bị̄ig.	"They've given the chief a child."
3PL give chief:SG ART child:SG.	(No M dropping applied to *bị̄ig*ᵃ)

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

mɔ̄ɔgʊ̄=n wábʊ̀g lā	"the wild (in-the-bush) elephant (*wābʊ̄g*ᵓ/)"

M dropping follows cb heads, but never uncompounded heads:

	kūg-yínnì	"one stone"	with *yínnì* as adjective 12.5.1
but	*kūgʊ̄r yīnní*	"one stone"	
	wābʊ̄g lā	"the elephant"	
	wābīs pị̄igā	"ten elephants"	

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

bʊ̀-wɔ̄k	"tall goat"	*nɔ̄-wɔ́k*	"tall hen"
bʊ̀-wɔ̄k-pị́əlìg	"tall white goat"	*bʊ̀-wɔ̄k-páalìg*	"tall new goat"
nɔ̄-wɔ́k-pị̀əlìg	"tall white hen"	*nɔ̄-wɔ́k-pāalíg*	"tall new hen"
bʊ̀-wɔ̄k dîɪb	"tall goat's food (*dīɪb*ᵓ)"	*nɔ̄-wɔ́k dîɪb*	"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 (*dāu̯ lā*) X has got lost (*bɔ̀dìg yā*)" and "my elder same-sex siblings' (*m̀ bi̯ēyá*) X has got lost":

Pattern H and A nouns, affected by M dropping:

	*wābʊ̄g*ᵓ/	"elephant"	*Dāu̯ lā wábʊ̀g bɔ̀dìg yā.*
	*pɔ̄ɔg*ᵓ/	"field"	*Dāu̯ lā pɔ̂ɔg bɔ̀dìg yā.*
	*bāŋ*ᵃ	"ring"	*Dāu̯ lā báŋ bɔ̀dìg yā.*
	*pʊ̄ʊg*ᵃ	"inside"	*Dāu̯ lā pʊ̂ʊg bɔ̀dìg yā.*

but	*wābʊ̄g*ᵓ/	"elephant"	*M̀ bi̯ēyá wàbʊ̀g bɔ́dìg yā.*	no M spreading
	*bāŋ*ᵃ	"ring"	*M̀ bi̯ēyá bàŋ bɔ́dìg yā.*	no M spreading
	*yūgʊdīr*ᵋ	"hedgehog"	*Dāu̯ lā yúgʊdìr bɔ́dìg yā.*	three syllables

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

*bʊ̀ŋ*ª	"donkey"	*Dāu̯ lā bʊ́ŋ bɔ́dʲìg yā.*
*àn̆rʊ̀ŋ*ɔ	"boat"	*Dāu̯ lā án̆rʊ̀ŋ bɔ́dʲìg yā.*
*dɔ̀ɔg*ɔ	"house"	*Dāu̯ lā dɔ̂ɔg bɔ́dʲìg 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*ɔ "cow" fluctuate:

*à-gâʊn̆g*ɔ	"pied crow"	*Dāu̯ lā gâʊn̆g bɔ́dʲìg yā.*
*náaf*ɔ	"cow"	*Dāu̯ lā nâaf bɔ́dʲìg yā* or *Dāu̯ lā nâaf bɔ̀dʲìg 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:

	dāu̯ lā bʊ́-pʲəlʲìg	"the man's white goat (*bʊ̀-pʲəlʲìg*)"
	dāu̯ lā bʊ́-pāalíg	"the man's new goat (*bʊ̀-pāalíg*)"
	dāu̯ lā nɔ́-pʲə́lʲìg	"the man's white hen (*nɔ̄-pʲə́lʲìg*)"
	dāu̯ lā nɔ́-páalʲìg	"the man's new hen (*nɔ̄-páalʲìg*)"
but	*dʊ̄g-káŋā*	"this pot" (*dʊ̄k*ɔ/ cb *dʊ̄g-* "pot")
	[*sālɪmā dʊ́g-*]*kàŋā*	"this [golden pot]"

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

[*fūug dɔ̂ɔg*]	"tent" (*fūug*ɔ/ "cloth", *dɔ̀ɔg*ɔ "house")
pʊ̀'ʊsʊ̀g [*fûug dɔ̂ɔg*]	"tabernacle" (*pʊ̀'ʊsʊ̀g*ɔ "worship")

but *Lì kā'* [[[*dāu̯ lā bʲîig*] *bʲìər*] *nâaf*] *zʊ̀ʊrɛ̄.*
"It's not the man's child's elder-same-sex-sibling's cow's tail." WK
(*bʲīig*ª "child", *bʲīər*ɛ/ "elder sib of same sex", *náaf*ɔ "cow", *zʊ̄ʊr*ɛ "tail")

5 Noun flexion

5.1 Noun classes

Nouns inflect for singular and plural by adding noun class suffixes to the stem; the bare stem is used as a combining form (cb) in composition with a following nominal. This is a frequent occurrence, as it is the regular method of construing a noun with a following dependent adjective or demonstrative. The cb is always subject to apocope, as it can never appear clause-finally or before liaison. Archaisms like *nwadibil* (Mt 2:2, 1996) for *ňwād-bi̱lᵃ* "star" (KB *nwadbil*) suggest that consonant-final cbs once ended in an epenthetic vowel.

In the paradigms, noun forms are cited as sg, pl and cb in order.

Each noun class suffix has a basic singular, plural or non-count meaning. Count nouns pair a singular and a plural suffix. Five pairings account for the majority of count nouns: these are labelled using Long Forms of the suffixes, as the *a*|*ba*, *ga*|*sɛ*, *gɔ*|*dɛ*, *rɛ*|*aa* and *fɔ*|*ɪɪ* **noun classes**. Two unpaired non-count suffixes *bɔ mm* form two more noun classes mostly containing mass nouns.

The noun classes were once grammatical genders, with separate 3rd person pronouns and agreement of adjectives and numerals. Kusaal, like Dagbani and Mooré, now has only a natural gender system opposing persons and non-persons, with pronouns based respectively on the original *a*|*ba* and *rɛ*|*aa* classes. A few isolated remnants of agreement will be pointed out as they occur.

An expected class suffix may be replaced by one from a different class if the regular form would be rendered ambiguous by consonant cluster assimilation and/or apocope. This has become regular with class *gɔ*|*dɛ* stems ending in *m n* following a short vowel, which always use the plural suffix -*aa* instead of -*dɛ*, as do all gerunds with sg *gɔ*. Mampruli and Dagbani also show -*a* for the plural of *m n* stems in this class (cf Mampruli *gbaŋŋu* "skin", pl *gbana*), so this suppletion is probably driven by the fact that cluster assimilation would cause the expected plural to resemble a *rɛ*|*aa* sg. Suppletion does not take place in Mooré or Farefare, where the *gɔ*|*dɛ* pl suffix has a rounded vowel, unlike the *rɛ*|*aa* sg: cf Mooré *gãongò* "skin" pl *gãndo*.

Adjectives avoid potentially ambiguous suffixes altogether 6.

In two cases, the sg LF has adopted the form proper to a different class suffix that would have produced the same SF: rounded vowels before -*ga* may result in LFs ending in -*ɔ*, as in *nû'ugᵓ* "hand", and *a*|*ba* stems in *l n r* following a *short* root vowel show LF -*ɛ* with *l* and *n* geminated, as if the suffix were *rɛ*, e.g *Bɩ̀nⁿᵋ* "Moba person."

Two subclasses are semantically motivated: a subclass of *a*|*ba* referring to older/important people uses *ba* as the *singular* suffix, and names of languages belong to a subclass of *rɛ*|*aa* with the singular suffix *lɛ*.

The classes are thus as follows:

a|*ba* *ba* (sg)	*sīd*[a] *nà'ab*[a]	*sīdīb*[a] *nà'-nàm*[a]	*sìd-* *nà'-*	"husband" "chief"
ga|*sɛ*	*bʊ̄ʊg*[a]	*bʊ̄ʊs*[ɛ]	*bʊ̀-*	"goat"
gɔ|*dɛ*	*dɔ̀ɔg*[ɔ] *bū'ɵsʊ́g*[ɔ]	*dɔ̀ɔd*[ɛ] *bū'ɵsá*	*dɔ̀-* *bū'ɵs-*	"hut" "question"
rɛ|*aa* *lɛ*	*nɔ̄ɔr*[ɛ/] *Kʊ̄sâal*[ɛ]	*nɔ̄yá*	*nɔ̄-*	"mouth" "Kusaal"
fɔ|*ɪɪ*	*mɔ̀lìf*[ɔ]	*mɔ̀lì*	*mɔ̀l-*	"gazelle"
bɔ	*sā'ab*[ɔ]		*sà'-*	"porridge"
mm	*tìɪm*[m]		*tì-*	"medicine"

Stems in *m* with long root vowels in the *a*|*ba* class avoid the plural suffix *ba*; some *ga*|*sɛ* class nouns with human reference have alternative plurals with *ba*; countable nouns in the *mm* class form plurals with *-aa* or *-sɛ* or *nàm*[a]; and the small *fɔ*|*ɪɪ* class has some members with *fɔ*|*ɪɪ* suffixes in only one number. The sg suffix *la* is found only in the irregular adjective *bi̩l*[a] "little."

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

pɛ̄'ogɔ/	*pɛ̄'ɛsɛ*/		*pɛ̄'-*	"sheep"
gbɛ̀'ogɔ	*gbɛ̀'ɛdɛ* *gbɛ̀dà*		*gbɛ̀'-*	"forehead"
bi̩āu̩ňkɔ	*bi̩āň'adɛ* *bi̩āň'adā*	WK SB	*bi̩àň'-*	"shoulder"

A few nouns end in *-ɪ* or *-ʊ* with apocope-blocking 3.2:

būudī	*bùud-*	"tribe"
nà'asì		"honour"
kābɪrí		"entry permission"
sūgʊrʊ́		"forbearance"

They are probably loans from related languages without apocope, like *kɪ̄ibʊ́* "soap" from Mampruli. Cognates of *būudī* show that *-dɪ* represents the *dɛ* pl suffix: Mooré *búudu* "family, kind" sg *búugu*. *Nà'asì* may be *sɛ* pl. *Kābɪrí* and *sūgʊrʊ́* may be *rɛ* sg, with *kābīr*[ɛ/] "ask for admission" and *sūgʊ̄r*[ɛ/] "forbear" as back-formations.

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

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

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

The *gɔ*|*dɛ* and *rɛ*|*aa* classes are the default non-human countable classes. They include all nouns naming fruits, and about four out of five nouns for body parts. Human-reference nouns in *gɔ*|*dɛ* are pejorative: *bālɛ̄rʊ̄g*$^{ɔ/}$ "ugly person", *dàbḭ̄og*^{ɔ} "coward", *zɔ̄lʊ̄g*$^{ɔ/}$ "fool." Some originally *a*|*ba* nouns have been reallocated to *rɛ*|*aa* for phonological reasons e.g. *bḭ̄ər*$^{ɛ/}$ "elder same-sex sibling."

The *lɛ* subclass includes all names of languages.

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

The *bɔ* class has only three members known to me that are not gerunds: *sā'ab*^{ɔ} "millet porridge, TZ", *tāňp*^{ɔ} "war" and *kī'ɪb*$^{ɔ/}$ "soap."

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

The class membership of regular deverbal nouns is predictable.

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

Nouns with sg SFs ending in long monophthongs or in unrounded vowels followed by velars all belong to *ga*|*sɛ* except for *bā'a* "traditional diviner" and *nàyḭ̄ig*^{a} "thief", both *a*|*ba*. Those ending in rounding diphthongs before velars all belong to *gɔ*|*dɛ*; those in rounded monophthongs before velars are *gɔ*|*dɛ* or *ga*|*sɛ*.

Human-reference nouns in SF -*m* are *a*|*ba*, some of the *ba*-sg type, like *sàam*^{ma} "father"; exceptional is *zɔ̄ɔm*^{nɛ} "fugitive" (*rɛ*|*aa*). Human-reference nouns ending in a long vowel before *r* are *rɛ*|*aa*. All remaining human-reference nouns are *a*|*ba*.

All nouns in SF -*f* belong to *fɔ*|*ɪʊ*.

Underived mass nouns in -*m* belong to *mm*, and in -*b* or -*p* to the *bɔ* class.

Non-human-reference count nouns ending in *l n r* belong to *rɛ*|*aa*, as do those ending in *m* apart from a few *mm*-class count nouns like *pūum*$^{m/}$ "flower." *Pḭ̄im*$^{m/}$ "arrow" is a relic of a "long thin things" *ɔ*|*ɛ* class, lost in Western Oti-Volta.

5.2 Remodelled combining forms

For levelling between sg and pl forms see 3.4 3.6.

Combining forms, lacking a flexional suffix and always subject to apocope, would be often reduced by the usual rules to ambiguous forms. Often the expected cb is replaced by a form which is segmentally **but not tonally** that of the singular.

nīf$^{ɔ/}$	*nīní*	*nīn-*	or *nīf-*	"eye"
zìň'a	*zɛ̀ň'ɛs*^{ɛ}	*zi̯àň'-*	or *zɛ̀ň'-*	"red" (adjective)
wɔ̄k$^{ɔ/}$	*wā'ad*$^{ɛ/}$	*wā'-*	or *wɔ̄k-*	"long, tall" (adjective)
tāňp^{ɔ}		*tàňp-*		"war"
zūg$^{ɔ/}$	*zūt*$^{ɛ/}$	*zū-*	or *zūg-*	"head"

Mooré and Toende show *zu-* consistently in cases where Agolle has *zūg-*: Mooré *zusoaba*, Toende *zùsóp*, Agolle *zūg-sɔ́b*^{a} "boss"; Mooré *zúkʋ́ká*, Toende *zùkʋ́k*, Agolle *zūg-kʋ̄gʋ̄r*^{ɛ} "pillow." *Zūg-sɔ́b*^{a} "Lord" is very frequently read *Zū-sɔ́b*^{a} in the audio version of the NT. The cb *zūg-* sometimes behaves tonally like a noun prefix 3.8.1.

Head-first compounds are formed with complete freedom, which leads to a greater tendency to levelling of cbs than in modifier-first compounds. Thus the cb of *nīf*$^{ɔ/}$ "eye" is *nīn-* as dependent but *nīf-* as head: *nīn-dáa* "face", *nīn-tám*^{m} "tears", *nīn-gɔ́tìs*^{ɛ} "spectacles" but *nīf-káŋā* "this eye." *Gbàu̯ŋ*^{ɔ} "letter, book" now has the cb *gbàu̯ŋ-*, but the dependent cb *gbàn-* still occurred in the 1976 NT *gbanmi'id gbàn-mī'id* "scribe" ("book-knower"), KB *gbauŋmi'id.*

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

zīnzāu̯ŋ$^{ɔ/}$	*zīnzāná*	*zīnzáu̯ŋ-*	"bat"
àňrʋ̀ŋ^{ɔ}	*àňrɪmà*	*àňrʋ̀ŋ-*	"boat"

So too with *CV*-stems in the *rɛ|aa* class:

gbɛ̄r$^{ɛ/}$	*gbɛ̄yá*	*gbɛ̄r-*	"thigh"
kʋ̀kɔ̄r$^{ɛ/}$	*kʋ̀kɔ̄yá*	*kʋ̀kɔ̄r-*	"voice"
		kʋ̀kɔ̄-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^{ɔ}	*līgɪdī*	*là'-* or *lìg-*	"cowrie" pl "money"

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

dāu̯	*dāp*^{a}	*dàu̯-* sg *dàp-* pl	"man, male person"
tāu̯ǎ$^{/}$	*tāǎp*$^{a/}$	*tāu̯ǎ-* sg *tāǎp*-pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

kɔ̀lʊ̀g^{ɔ}	*kɔ̀n*^{nɛ}	*kɔ̀lʊ̀g-*	"bag"
lànnɪ̀g^{a}	*lànnɪ̀s*^{ɛ}	*lànnɪ̀g-*	"squirrel"
kɔ̀lʊ̀g-kàŋā	"this bag"	cf cb *kɔ̀l-* from	*kɔ̄lɪ̄g*^{a} "river"
lànnɪ̀g-pɪ̣̀əlɪ̀g	"white squirrel"	cf cb *làn-* from	*lān*^{nɛ} "testicle"

Remodelling of cbs after sg/pl forms never affects tones, revealing that cases where a sg/pl seems to precede an adjective or dependent pronoun in fact show cbs: *dàu̯-sʊ̀ŋ* "good man", sg *dāu̯* "man"; *dàp-sʊ̀mà* "good men", pl *dāp* "men."

Traditionally, remodelled cbs are written as separate words, and as there is no tone marking this may lead to ambiguity: e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmʊ̀g-bɪ̄-púŋ* "slave girl" not *yàmmʊ̀g bɪ́-púŋ* "slave's girl" 12.8.1.2.

5.3 Paradigms

By default, class suffixes attach after a stem-final epenthetic vowel or root vowel. Complications arise from consonant assimilation, rounding before *-gɔ -kɔ -ŋɔ*, deletion of **g* after *aa iə uɵ aaǎ ɛɛǎ ɔɔǎ*, and with *CVV*-stems before *a*, *ɪɪ* and *aa*.

5.3.1 *a|ba*

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

sīd^{a}	*sīdīb*^{a}	*sɪ̀d-*	"husband"
nɪ̣̄d$^{a/}$	*nɪ̣̄dīb*$^{a/}$	*nɪ̣̄n-* *irreg*	"person"
sàal^{a}	*sàalɪ̀b*^{a}	*sàal-*	"human being"
kpāad$^{a/}$	*kpāadíb*^{a}	*kpāad-*	"farmer"
kʊ̄ʊd$^{a/}$	*kʊ̄ʊdíb*^{a}	*kʊ̄ʊd-*	"killer"
kpīkpɪ̣̄n$^{na/}$	*kpīkpɪ̣̄nníb*^{a}	*kpīkpɪ́n-*	"merchant"
yʊ̄ʊm-yʊ̂'ʊm^{na}	*yʊ̄ʊm-yʊ̂'ʊmnɪ̀b*^{a}	*yʊ̄ʊm-yʊ̂'ʊm-*	"singer"
bɪ̣̀-pɪ̣̄t$^{a/}$	*bɪ̣̀-pɪ̣̄tíb*^{a}	*bɪ̣̀-pɪ̣̄t-*	"younger child"
wād-tís^{a}	*wād-tísɪ̀b*^{a}	*wād-tís-*	"lawgiver" NT
zà'-nɔ̄-gúr^{a}	*zà'-nɔ̄-gúrɪ̀b*^{a}	*zà'-nɔ̄-gúr-*	"gatekeeper" NT

Agent nouns from 3-mora stems in *s* regularly drop the *d* formant in sg and cb, which can result in tonal heteroclites 3.8.1. Many also have *nàm*^{a} plurals.

kùɵs[a]	*kūɵsīdīb*[a]	*kùɵs-*	"seller"
dị̀ˈəs[a]	*dị̄ˈəsīdīb*[a]	*dị̀ˈəs-*	"receiver"
tὺˈastὺˈas[a]	*tὺˈastūˈasīdīb*[a]	*tὺˈastὺˈas-*	"talker"
sị̄gīs[a/]	*sị̄gɪsídìb*[a]	*sị̄gīs-*	"lowerer"
dìɪs[a]	*dìɪs-nàm*[a]	*dìɪs-*	"glutton"

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

sɔ̀s[a]	*sɔ̄sɪdīb*[a]	*sɔ̀s-*	"beggar"	
tìs[a]	*tīsɪdīb*[a]	*tìs-*	"giver"	WK
kị̄s[a/] or *kị̄sīd*[a/]	*kị̄sɪdíb*[a]	*kị̄sīd-* (only)	"hater"	

These may be original 3-mora stem verbs with **ss* → *s*. There are also

zàb-zàb[a]	*zàb-zàb-nàm*[a]	*zàb-zàb-*	"warrior"
	zàb-zābɪdīb[a]		
gbān-záb[a]	*gbān-záb-nàm*[a]	*gbān-záb-*	"leatherbeater"
ňwị̄-tɛ́k[a]	*ňwị̄-tɛ́kìdìb*[a]		"rope-puller"

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

pu̯ˈà-sāňˈam[ma]	*pu̯ˈà-sāňˈamīdīb*[a]	*pu̯ˈà-sàňˈam-*	"adulterer"

Stems in *VVn-* undergo consonant assimilation in the pl: **nb* → *mm*:

sāan[a/]	*sáam*[ma]	*sāan-*	"guest, stranger"

Stems in *VVm-* have sg *-mm* instead of *-ma*. The assimilation **mb* → *mm* would cause SF sg and pl to coincide segmentally; plurals in *-sɛ* or *nàm*[a] appear instead:

kpị̄ˈim[m/]	*kpị̄ˈimís*[ɛ]	*kpị̄ˈim-*	"dead person, corpse"
zūˈɵm[m/]	*zūˈamís*[ɛ]	*zūˈɵm-*	"blind person"
tādīm[m/]	*tādɪmīs*[ɛ]	*tàdìm-*	"weak person"
	tàdìm-nàm[a]		

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

kpɛ̄ɛňm[m]	*kpɛ̄ɛňmmā* LF only		
	kpɛ̀ɛňm-nàm[a]	*kpɛ̀ɛňm-*	"elder"
bị̄ˈəm[m]	*bị̄ˈəmmā* LF only		
	bị̀ˈəm-nàm[a]	*bị̀ˈəm-*	"enemy"

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

The assimilation **nb* → *mm* takes place in the plural:

Dàgbān$^{nɛ/}$	*Dàgbām*$^{ma/}$	*Dàgbān-*	"Dagomba person"
Bìn^{nɛ}	*Bìm*^{ma}	*Bìn-*	"Moba person"
Kʊ̀tān$^{nɛ/}$	*Kʊ̀tām*$^{ma/}$	*Kʊ̀tān-*	member of EW's clan
Mɔ̄r$^{ɛ/}$	*Mɔ́ɔm*^{ma} *irreg*	*Mɔ̄r-*	"Muslim"

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

	ňyà'an-dɔ̀l^{la}	*ňyà'an-dɔ̀llìb*^{a}	*ňyà'an-dɔ̀l-*	"disciple" NT
	ňyā'an-dɔ́l^{lɛ}	*ňyā'an-dɔ́llà*	*ňyā'an-dɔ́l-*	*id* WK
	gbàn-zāňl$^{la/}$	*gbàn-zāňllíb*^{a}	*gbàn-zāňl-*	"book-carrier" KT WK
	bʊ̀-zāňl$^{la/}$	*bʊ̀-zāňllíb*^{a}	*bʊ̀-zāňl-*	"goat-carrier" WK
or	*bʊ̀-zāňl*$^{lɛ/}$	*bʊ̀-zāňllá*		
	gbàn-mɔ̄r$^{a/}$	*gbàn-mɔ̄ríb*^{a}	*gbàn-mɔ̄r-*	"book-owner" DK
	gbàn-tār$^{a/}$	*gbàn-tāríb*^{a}	*gbàn-tār-*	*id* DK
	bʊ̀-mɔ̄r$^{a/}$	*bʊ̀-mɔ̄ríb*^{a}	*bʊ̀-mɔ̄r-*	"goat-owner" WK
or	*bʊ̀-mɔ̄r*$^{ɛ/}$	*bʊ̀-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-* 3.4	"man"
tāu̯ň$^{/}$		*tāňp*$^{a/}$	*tāu̯ň-*, *tāňp-*	"sib of opposite sex"
sāe̯ň	WK	*sāaňb*^{a}	*sàň-*	"blacksmith"
sāe̯ň^{ya}	DK			
sɔ̄e̯ň	WK	*sɔ̄ɔňb*^{a}	*sɔ̀ň-*	"witch"
sɔ̄e̯ň^{ya}	DK			

**CVg*-stems appear in

pu̯'ā^{a} ← **pu̯aga*	*pʊ̄'ab*^{a}	*pu̯'à-*	"woman, wife"
bā'a ← **baga*	*bā'ab*^{a}	*bà'-*	"traditional diviner"

Note the irregular long SF vowel of *bā'a*.
Sg final *-ʊ* is dropped in the cb and pl in

pịtʊ́	*pịtíb*[a]	*pịt-*	"younger sibling of same sex"

Sàam-pịt[a/] "father's younger brother" and *bị-pịt*[a/] "younger child" are regular. Some *CVV* stems introduce *-d-* in the sg and in the pl or cb:

wìɪd[a]	*wìɪb*[a]	*wìɪd-*	"hunter"
sɔ̄ň'ɔd[a/]	*sɔ̄ň'ɔb*[a/]	*sɔ̄ň'ɔd-*	"someone better than"
pʊ̄-kpāad[a/]	*pʊ̄-kpāadíb*[a]	*pʊ̄-kpá-*	"farmer"

Other *CVV* stems have become *rɛ|aa* class, accounting for human-reference nouns in *rɛ|aa* like *pʊ̀-kɔ̀ɔň̌r*[ɛ] "widow", *dà-kɔ̀ɔň̌r*[ɛ] "bachelor", *bīər*[ɛ/] "elder same-sex sib", *pɔ̀ň'ɔr*[ɛ] "cripple", *ňyɛ̄'ɛr*[ɛ/] "next-younger sib." Related languages, including Toende Kusaal, may keep pl *-ba*: Toende *pɔ́kɔ́ót* pl *pɔkɔ̃p* "widow", *dákɔ́ot* pl *dakɔ̃p* "bachelor", but sg *yɛ̃'et* pl *yɛ̃ra* "next-younger sib."

A subclass referring to older/important people has *-ba* for sg, with pl *nàm*[a] 5.4:

nà'ab[a]	*nà'-nàm*[a]	*nà'-*	"chief"
yáab[a] (**yaagba*)	*yāa-nám*[a]	*yāa-*	"grandparent"
pʊ̀gʊdìb[a]	*pʊ̀gʊ̀d-nàm*[a]	*pʊ̀gʊ̀d-*	"father's sister"
áňsìb[a]	*āňs-nám*[a]	*āňs-*	"mother's brother"
sàam[ma] (**mb*)	*sàam-nàm*[a]	*sàam-*	"father"
dịəm[ma] (**mb*)	*dịəm-nàm*[a]	*dịəm-*	"man's parent-in-law"
dàyáam[ma] (**mb*)	*dàyāam-nám*[a]	*dàyāam-*	"woman's parent-in-law"

5.3.2 *ga|sɛ*

Straightforward examples include:

bʊ̄ʊg[a]	*bʊ̄ʊs*[ɛ]	*bʊ̀-*	"goat"
ňwādīg[a/]	*ňwādīs*[ɛ/]	*ňwād-*	"moon, month"
āaňdīg[a]	*āaňdīs*[ɛ]	*àaňd-*	"Vitex doniana"
bʊ̀-dìbìg[a]	*bʊ̀-dìbìs*[ɛ]	*bʊ̀-dìb-*	"male kid"
kpịibìg[a]	*kpịibìs*[ɛ]	*kpịib-*	"orphan"
yàmmìg[a]	*yàmmìs*[ɛ]	*yàm-*	"slave"
kɔ̄līg[a]	*kɔ̄līs*[ɛ]	*kɔ̀l-*	"river"
kpʊ̀kpàrìg[a]	*kpʊ̀kpàrìs*[ɛ]	*kpʊ̀kpàr-*	"palm tree"
pūsīg[a/]	*pūsīs*[ɛ/]	*pūs-*	"tamarind"
zɔ̄ɔg[a]	*zɔ̄ɔs*[ɛ]		"run, race"

Root-stems in *Caa Ciə Cuɵ* delete the **g* of the sg suffix *-ga* 3.7:

bāa	*bāas*^{ɛ}	*bà-*	"dog"
sị̄a	*sị̄əs*^{ɛ}	*sį̣à-*	"waist"
sàbùa	*sàbùɵs*^{ɛ}	*sàbų̣à-*	"lover, girlfriend"

Nasal *iaň uaň* here alternates with *ɛɛň ɔɔň*:

zị̀ň'a	*zɛ̀ň'ɛs*^{ɛ}	*zį̣àň'-* or *zɛ̀ň'-*	"red" (adjective)
nū'-ḯň'a	*nū'-ɛ̂ň'ɛs*^{ɛ}	*nū'-ɛ́ň'-*	"fingernail"
nūa$^{/}$	*nɔ̄ɔs*$^{ɛ/}$	*nɔ̄-*	"hen"

Stems in **CVg-* display consonant assimilation in the sg via **gg* → *kk*:

gìk^{a}	*gìgìs*^{ɛ}	*gìg-*	"dumb person"

**Cag- *Cį̣ag- *Cų̣ag-* delete **g* when there is no assimilation 3.7:

zàk^{a}	*zà'as*^{ɛ}	*zà'-*	"compound"
pų̣āk^{a}	*pū'as*^{ɛ}	*pų̣'à-*	"female" (adjective)

Stems in *-m-* and *-n-* show **mg* → *ŋŋ* and **ng* → *ŋŋ* in the sg, with cbs remodelled on the sg. In the pl **ns* → *˜s* 3.5, but **ms* never assimilates in 2-mora stems, and need not do in longer stems. No 3- or 4-mora *n*-stems occur in this class.

tɛ̄ŋ^{a}	*tɛ̄ɛňs*^{ɛ}	*tɛ̀ŋ-*	"land"
pàŋ^{a}	*pàaňs*^{ɛ}	*pàŋ-*	"power"
bʊ̀ŋ^{a}	*bʊ̀mìs*^{ɛ}	*bʊ̀ŋ-*	"donkey"
nāŋ^{a}	*nāmīs*^{ɛ}	*nàŋ-*	"scorpion"
sú'ɵŋ^{a}	*sū'ɵmís*^{ɛ}	*sū'ɵŋ-*	"rabbit"
nị́iŋ^{a}	*nị́is*^{ɛ} *nī̤imís*^{ɛ}	*nī̤iŋ-*	"bird"
kʊ̀lìŋ^{a}	*kʊ̀lìs*^{ɛ} *kʊ̀lɪmìs*^{ɛ}	*kʊ̀lìŋ-*	"door"
kʊ̄'alíŋ^{a}	*kʊ̄'alís*^{ɛ} *kʊ̄'alímìs*^{ɛ}	*kʊ̄'alíŋ-*	sleeveless traditional smock
mɛ̄ɛdīŋ^{a}	*mɛ̄ɛdīs*^{ɛ} *mɛ̄ɛdīmīs*^{ɛ}	*mɛ̀ɛdìŋ-*	"building tool"
pī̤əsíŋ^{a}	*pī̤əsís*^{ɛ} *pī̤əsímìs*^{ɛ}	*pī̤əsíŋ-*	"sponge for washing"

Various irregularities are seen in

*bi̱ig*ᵃ	*bi̱is*ᵋ	*bi̱-* or *bi̱-*	"child"
*bɛ̀rɪŋ*ᵃ	*bɛ̀rɪgɪ̀s*ᵋ		a plant used for fibre
tàmpūa	*tàmpɔ̄ɔs*ᵋ	*tàmpɔ̀-*	"housefly" DK (no *ň*)
*bʊ̄tī*ŋᵃ	*bʊ̄tī*ɪsᵋ 2.3	*bʊ̀tɪ̀*ŋ-	"cup"
sāŋá	*sānsá* /ns/	*sān-*	"time"

These human-reference nouns have alternative plurals with the suffix -*ba*:

*dàsāŋ*ᵃ	*dàsām*ᵐᵃ	*dàsàŋ-*	"young man"
	or *dàsāaňs*ᵋ		
*Yàaŋ*ᵃ	*Yàam*ᵐᵃ	*Yàaŋ-*	"Yanga, Yansi person"
	or *Yàamɪ̀s*ᵋ/*Yàaňs*ᵋ		
Sà'dàbùa	*Sà'dàbùɵb*ᵃ		clan name
	or *Sà'dàbùɵs*ᵋ		

Several *sɛ*-plural stems with rounded root vowels or epenthetic vowels rounded after *m* have sg *gɔ* for the expected *ga*. WK avoids this with human-reference nouns.

*kūug*ᵃ/*kūug*ᵓ/	*kūus*ᵋ/	*kū-*	"mouse"
*sʊ̀'ʊg*ᵃ/*sʊ̀'ʊg*ᵓ	*sʊ̀'ʊs*ᵋ	*sʊ̀'-*	"knife"
*nʊ̂'ug*ᵓ	*nʊ̂'us*ᵋ	*nʊ̄'-*	"hand"
*zʊ̀nzɔ̀*ŋᵃ/*zʊ̀nzɔ̀*ŋᵓ	*zʊ̀nzɔ̀ňs*ᵋ	*zʊ̀nzɔ̀ŋ-*	"blind person"
*tɛ̀ŋ-zʊ̀*ŋᵓ	*tɛ̀ŋ-zʊ̀*ʊňsᵋ		"foreign land"
but	*pi̱àň'-zʊ̀nà*		"foreign language"
*yʊ́'ʊ*ŋᵓ	*yʊ̄'ʊmísᵋ*	*yʊ̄'ʊŋ-*	"night"
*zùuňg*ᵓ	*zùuňs*ᵋ or *zùuňd*ᵋ	*zùň-*	"vulture"
*yàmmʊ̀g*ᵃ WK	*yàmmɪ̀s*ᵋ	*yàm-*	"slave"
or *yàmmʊ̀g*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 *gɔ*|*dɛ* nouns have substituted pl -*sɛ* for -*dɛ* instead of -*aa* 5.3.3:

	*à-dàalʊ́*ŋᵓ	*à-dàalísᵋ* WK	*à-dàalʊ́ŋ-*	"stork"
		*à-dàalímɪ̀s*ᵋ		
	*si̱'u*ŋᵓ	*si̱'imísᵋ*	*si̱'uŋ-*	a kind of big dish
cf	*dɪ̀ɪsʊ́*ŋᵓ	*dɪ̀ɪsísᵋ*	*dɪ̀ɪsʊ́ŋ-*	"spoon"
		dɪ̀ɪsímà		

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

*wīlɪsʊ́ŋ*ɔ	*wīlɪmís*ɛ	*wīlɪsʊ́ŋ-*	a kind of snail
*yālɪsʊ́ŋ*ɔ	*yālɪmís*ɛ	*yālɪsʊ́ŋ-*	"quail"

5.3.3 *gɔ|dɛ*

All stems in *m n* after a short vowel, and all gerunds, use pl *aa* instead of *dɛ*.

Before the sg -*gɔ* -*kɔ* -*ŋɔ* stem-final vowels are rounded, changing epenthetic vowels to *ʊ* and creating rounding diphthongs from root vowels 3.6.

*dàʊg*ɔ	*dàad*ɛ	*dà-*	"piece of wood"
*vāʊ̆g*ɔ/	*vāăd*ɛ/	*vā̆-*	"leaf"
*fɛ̄ĕ̆'og*ɔ/	*fɛ̄ĕ̆'ɛd*ɛ/	*fɛ̄ĕ̆'-*	"ulcer"
*dàbi̱og*ɔ	*dàbi̱əd*ɛ	*dàbi̱à-*	"coward"
*vi̱ug*ɔ/	*vi̱id*ɛ/	*vi̱-*	"owl"
*mɔ̄ɔg*ɔ	*mɔ̄ɔd*ɛ	*mɔ̀-*	"grass, bush"
*dʊ̀ndʊ̀ug*ɔ	*dʊ̀ndʊ̀ud*ɛ	*dʊ̀ndʊ̀-*	"cobra"
	*zʊ̀ʊd*ɛ		"friendship"
*wābʊ̄g*ɔ/	*wābʊ̄d*ɛ/	*wāb-*	"elephant"
*zʊ̄ʊbʊ́g*ɔ	*zʊ̄ʊbʊ́d*ɛ	*zʊ̄ʊb-*	"(human head) hair"
*bālɛ̄rʊ̄g*ɔ/	*bālɛ̄rʊ̄d*ɛ/	*bālɛ́r-*	"ugly person"
	or *bālɛ̄rʊ̄s*ɛ/		
*bɛ̄sʊ̄g*ɔ	*bɛ̄sʊ̄d*ɛ	*bès-*	kind of pot

Some stems ending in root vowels have plurals of the form *CVt*ɛ 3.4:

*dɔ̀ɔg*ɔ	*dɔ̀ɔd*ɛ or *dɔ̀t*ɛ	*dɔ̀-*	"hut, room; clan"

So too *pɔ̄ɔg*ɔ/ "farm, field", *fūug*ɔ/ "clothing, shirt." The sg has a short vowel in

*zūg*ɔ/	*zūt*ɛ/	*zū-* or *zūg-*	"head"

**Cag-* **Ci̱ag-* **Cu̱ag-* stems 3.7 show sg -*k*ɔ, and *u̱a* becomes *ɔ* before -*k*ɔ 3.6:

*lāu̱k*ɔ	*lā'ad*ɛ		*là'-*	"(item of) goods"
*bi̱āu̱ĕ̆k*ɔ	*bi̱āĕ̆'ad*ɛ	WK	*bi̱àĕ̆'-*	"shoulder"
	bi̱āĕ̆'adā	SB		
*lɔ̀k*ɔ	*lʊ̀'ad*ɛ		*lu̱'à-*	"quiver (for arrows)"

Stems in *CVd* show *-t-* in the pl 3.5 via **dd* → *tt*:

ùdʊ̀g^{ɔ}	*ùt*^{ɛ}	*ùd-*	"(piece of) chaff"

Stems in *CVg* develop *kk* in the singular via **gg* → *kk*:

dʊ̄k$^{ɔ/}$	*dʊ̄gʊ̄d*$^{ɛ/}$	*dʊ̄g-*	"cooking pot"
	dʊ̄gʊ̄b dʊ́t^{ɛ}		"cooking pots" SB

Stems in *l* develop the cluster *nn* in the pl via **ld* → *nn*:

zɔ̄lʊ̄g$^{ɔ/}$	*zɔ̄n*$^{nɛ/}$	*zɔ̄l-*	"fool"
sìlʊ̀g^{ɔ}	*sìn*^{nɛ} or *sìlìs*^{ɛ}	*sìl-*	"hawk"

The only *m n* stems making plurals with *-dɛ* are *CVVC* root-stems:

làngáʋŋ^{ɔ}	*làngāamá*	*làngāʋŋ-*	"crab"
	or *làngáam*^{mɛ}		

So too *màngáʋŋ*^{ɔ} "crab", the plural-only *sūn̆-pêɛn*^{nɛ} "anger" and perhaps the placename *Tɛ̀mpáan*^{nɛ} "Tempane", if the second element is from *pāalíg*^{a} "new."

All stems in *n m* following a short vowel use the plural suffix *aa* instead of *dɛ*. They show **mg* → *ŋŋ* and **ng* → *ŋŋ* in the sg, with cbs remodelled on the sg.

gbàu̯ŋ^{ɔ}	*gbànà*	*gbàn-* or *gbàu̯ŋ-*	"letter, book"
zīnzāu̯ŋ$^{ɔ/}$	*zīnzānáˊ*	*zīnzáu̯ŋ-*	"bat"
àn̆rʊ̀ŋ^{ɔ}	*àn̆rɪmà*	*àn̆rʊ̀ŋ-*	"boat"
mālʊ̄ŋ^{ɔ}	*mālɪmā*	*màlʊ̀ŋ-*	"sacrifice"

The expected *u̯*-glide is absent in the sg and cb of

nɪ̀n-gbɪ̄ŋ$^{ɔ/}$	*nɪ̀n-gbɪ̄náˊ*	*nɪ̀n-gbɪ̄ŋ-*	"body"

This may represent the influence of the alternate sg form *nɪ̀n-gbɪ̄n*$^{nɛ/}$.

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 *rɛ* 8.1.1. Only stems in *-s-* and *-sɪm-* have plurals, always with *-aa*:

bū'ɵsʊ́g^{ɔ}	*bū'ɵsáˊ*	*bū'ɵs-*	"question"
zàaǹsʊ́ŋ^{ɔ}	*zàaǹsímà*	*zàaǹsʊ́ŋ-*	"dream"

Gerunds of 3-mora *n*-stem verbs never assimilate **ng* → *ŋŋ*, and gerunds of 3-mora *m*-stems only assimilate **mg* → *ŋŋ* optionally: thus *dìgɪnùgᵓ* "lying down", *sùnnùgᵓ* "bowing the head", *zi̱ǐ'inùgᵓ* "sitting down", *tɔ́ɔŋᵓ* or *tɔ̄ɔmúgᵓ* "departing", *sàǐ'ʊŋᵓ* or *sàǐ'amùgᵓ* "destroying", *kàrùŋᵓ* or *kàrɪmùgᵓ* "reading."

The place name *Dènùgᵓ* "Denugu" (?? *Dènnùgᵓ*) also fails to assimilate **ng*.

5.3.4 *rɛ|aa*

Straightforward examples include:

kūgʊ̄rᵋ/	*kūgá*	*kūg-*	"stone"
dìgìrᵋ	*dìgà*	*dìg-*	"dwarf"
bàlàŋìrᵋ	*bàlàŋà*	*bàlàŋ-*	"hat"
yūgʊdīrᵋ	*yūgʊdā*	*yùgʊ̀d-*	"hedgehog"
pu̱'à-sādīrᵋ/	*pu̱'à-sādá*	*pu̱'à-sād-*	"young woman"
nɔ́bìrᵋ	*nɔ̄bá*	*nɔ̄b-*	"leg"
līɪbīrᵋ	*līɪbā*	*lìɪb-*	"twin"
sāngʊ́nnìrᵋ	*sāngʊ́nnà*	*sāngʊ́n-*	"millipede"
bi̱'isìrᵋ	*bi̱'isà*	*bi̱'is-*	"woman's breast"
sūmmīrᵋ	*sūmmā*	*sùm-*	"groundnut"

CVV- and *CV'V*-stems (for the allomorphs before pl *-aa* see 3.4):

bi̱ərᵋ/	*bi̱ēyá*	*bi̱ā-*	"elder same-sex sib"
zu̱ɵrᵋ	*zu̱ēyā*	*zu̱à-*	"hill"
nɔ̄ɔrᵋ/	*nɔ̄yá*	*nɔ̄-*	"mouth"
zʊ̄ʊrᵋ	*zʊ̄yā*	*zʊ̀-*	"tail"

tītā'arᵋ	*tītādā*	*tītá'-*	"big" (adjective)
ňyɛ̄'ɛrᵋ/	*ňyɛ̄dá*	*ňyɛ̄'-*	"next-younger sibling"
pɔ̀ǹ'ɔrᵋ	*pɔ̀ǹdà*	*pɔ̀ǹ'-*	"cripple"
yʊ̄'ʊrᵋ/	*yʊ̄dá*	*yʊ̄'-*	"name"
yū'ɵrᵋ	*yu̱ādā*	*yù'ər-* 5.2	"penis"

Stems in **Cag- *Ci̱ag- *Cu̱ag-* 3.7 may have forms made by analogy with original *CV'V*-stems, instead of or alongside forms with vowel fusion:

bà'arᵋ	*bà'a* or *bàdà*	*bà'-*	"idol" (Farefare *bàgrɛ̀*)
ňyā'arᵋ	*ňyā'a*	*ňyà'-*	"root" (← **ɲɛg-*)
si̱à'arᵋ	*si̱à'a*	*si̱à'-*	"forest"

bi̯āň'ar$^{ɛ/}$	*bi̯áň'a*	*bi̯āň'-*	"wet mud, riverbed"
mʋ̀'ar^{ɛ}	*mu̯'àa*	*mu̯'à-*	"reservoir, dam"
	or *mʋ̀'adà*		
zànkʋ̀'ar^{ɛ}	*zànku̯'àa*	*zànku̯'à-*	"jackal"
	or *zànkʋ̀'adà*		
kʋ̀ndʋ̀'ar^{ɛ}	*kʋ̀ndu̯'àa*	*kʋ̀ndu̯'à-*	"barren woman"
	or *kʋ̀ndʋ̀'adà*		

So too, even in a case where the glottalisation is not derived from **g*:

kị̀-dà'ar^{ɛ}	*kị̀-dà'adà* WK	"bought-in millet"

Stems in deleted **g* after a long vowel include fusion verb gerunds 7.1 like *gbáň'ar*^{ɛ} (*gbāň'e*$^{/}$ "grab"), *dị́'ər*^{ɛ} (*dị̄'e*$^{/}$ "get"), *dúɵr*^{ɛ} (*dūe*$^{/}$ "rise") and also

vúɵr^{ɛ}	*vūáa*	*vūɵ-*	"fruit of red kapok"

Some root-stems show *CV* with a short vowel before *rɛ*, with cb *CVr-* 5.2:

gbɛ̄r$^{ɛ/}$	*gbɛ̄yá*	*gbɛ̄r-*	"thigh"

Similarly *kʋ̀kɔ̄r*$^{ɛ/}$ "voice" *kpàkʊ̄r*$^{ɛ/}$ "tortoise" *gāňr*$^{ɛ/}$ "ebony fruit" *gʊ̄mpʊ̄zɛ̄r*$^{ɛ/}$ "duck" *ňyɔ̀-vʊ̄r*$^{ɛ/}$ "life".

2-mora stem verbs make gerunds in *-rɛ* instead of *-bɔ* after a noun cb: *nɔ̄-lɔ̂ɔr*^{ɛ} "fasting" ("mouth-tying"), *fū-yɛ̂ɛr*^{ɛ} "shirt-wearing"; vowel shortening appears in *nā'-lɔ́r*^{ɛ} "area in compound for tying up cows" and *wìd-lɔ̄r*$^{ɛ/}$ "area for tying up horses."

Stems in *m n l r* undergo consonant assimilation in the sg: **rr* → *r*, **lr* → *ll*, **nr*→ *nn*, **mr* → *mn*; on the instability of the cluster *mn* see 3.3.

kʋ̀kpàr^{ɛ}	*kʋ̀kpàrà*	*kʋ̀kpàr-*	"palm fruit"
kpān^{nɛ}	*kpānā*	*kpàn-*	"spear"
má'an^{nɛ}	*mā'aná*	*mā'an-*	"okra"
pị̄bīn^{nɛ}	*pị̄bɪnā*	*pị̀bìn-*	"covering"
dūm^{nɛ}	*dūmā*	*dùm-*	"knee"
zɔ̄ɔm^{nɛ}	*zɔ̄ɔmā*	*zɔ̀ɔm-*	"fugitive"
yʋ̀ʊm^{nɛ}	*yʋ̀mà*	*yʋ̀ʊm-*	"year" 3.4
gbīgīm^{nɛ}	*gbīgɪmā*	*gbìgìm-*	"lion"
gɛ́l^{lɛ}	*gɛ̄lá*	*gɛ̄l-*	"egg"
íɪl^{lɛ}	*īɪlá*	*īɪl-*	"horn"

With an unusual **mr* → *nn* sandhi, and analogical levelling:

ňwān^{nɛ} SB	*ňwānā* NT	*ňwàn-*/*ňwàm-*	"calabash"
ňwām^{mɛ} WK	*ňwāmā* SB WK NT		

An exceptional suppletive plural, segmentally and tonally, is seen in

dāar^{ɛ}	*dābá*	*dà-*	"day"

These two words probably have 1-mora stems:

[Mampruli *zari*]	*zā*$^{/}$	*zā-*	"millet"
yị̄r$^{ɛ/}$	*yā*$^{/}$	*yị̄-*	"house"

Language names 26.4 have the suffix *-lɛ* after stems ending in a root vowel:

Language		Speakers	
Kʊ̄sâal^{ɛ}	Kusaal	*Kʊ̄sâas*^{ɛ}	Kusaasi
Mɔ̀ɔl^{ɛ}	Mooré	*Mɔ̀ɔs*^{ɛ}	Mossi
Zàngbɛ̀ɛl^{ɛ}	Hausa	*Zàngbɛ̀ɛd*^{ɛ}	Hausa
Nàsāal^{ɛ}	English/French	*Nàsàa-nàm*^{a}	Europeans

Stems in *-r-* show the distinctive assimilation **rl* → *tt* 3.5, but other stems ending in a consonant show forms indistinguishable those with the flexion *rɛ*:

Yāt$^{ɛ/}$	Yarsi	*Yārīs*$^{ɛ/}$	Yarsi
Bāt$^{ɛ/}$	Bisa	*Bārīs*$^{ɛ/}$	Bisa
Nàbìr^{ɛ}	Nabit	*Nàbɪdìb*^{a}	Nabdema
Tùɵnnìr^{ɛ}	Toende Kusaal	*Tùɵn*^{nɛ}	Toende area
Dàgbān$^{nɛ/}$	Dagbani	*Dàgbām*$^{ma/}$	Dagomba
Bìn^{nɛ}	Moba	*Bìm*^{ma}	Moba
Yàan^{nɛ}	Yansi	*Yàaňs*^{ɛ}	Yansi
Gʊ̄rín^{nɛ}	Farefare	*Gʊ̄rís*^{ɛ}	Farefare
Tàlìn^{nɛ}	Talni	*Tàlìs*^{ɛ}	Tallensi
Bùl^{lɛ}	Buli	*Bùlìs*^{ɛ}	Bulsa
Àgɔ̀l^{lɛ}	Agolle Kusaal	*Àgɔ̀l*^{lɛ}	Agolle area

Unexpected epenthesis occurs in:

Kàmbʊ̀nìr^{ɛ}	Twi	*Kàmbʊ̀mìs*^{ɛ}	Ashanti
Ňwāmpūrīl$^{ɛ/}$	Mampruli	*Ňwāmpūrīs*$^{ɛ/}$	Mamprussi

5.3.5 *fɔ|ɯ*

mɔ̀lìfɔ	*mɔ̀lì*	*mɔ̀l-*	"gazelle"
bi̱ilífɔ	*bi̱ilí*	*bi̱il-*	"seed"
ňyi̱rífɔ	*ňyi̱rí*	*ňyi̱r-*	"egusi"
zūrífɔ	*zūrí*	*zūr-*	"dawadawa seed"
bɔ̄n-bʊ́ʊdìfɔ			"plant"
[Mooré *muiifu*]	*mùi̱*	*mùi̱-*	"rice"

The plural -*ɪɯ* causes umlaut of the stem vowels *aa iə* to *ii*.

náafɔ (**naagfʊ*)	*ni̱igí*	*nā'-* 3.4	"cow"
wáafɔ (**waagfʊ*)	*wi̱igí*	*wā'-*	"snake"
[Mampruli *kaafu*]	*ki̱/*	*ki̱-* or *kā-*	"cereal, millet"

Stems in -*n*- show consonant assimilation in the sg with **nf* → *ɔ̃̀f* 3.5:

nī̱fɔ/	*ni̱ní*	*ni̱n-* or *nī̱f-*	"eye"
píɪňfɔ	*pīɪní*	*pīɪn-*	"genet"
ki̱íňfɔ	*ki̱íní*		"millet seed"
zʊ́'ʊňfɔ	*zʊ̄'ʊní*		"dawadawa seed"
mi̱ífɔ	*mi̱íní*		"okra seed"

Sg *mi̱ífɔ* is remodelled after the umlauted pl: cf *má'an*^{nɛ} "okra."
In two words stem -*d*- is lost in the sg:

wi̱əfɔ	*wi̱dì*	*wìd-*	"horse"
lā'afɔ	*li̱gɪdī*	*là'-* or *li̱g-*	"cowrie" pl "money"

Some words only have *fɔ*|*ɪɯ* class suffixes in one number:

zi̱íŋ^{a}	*zi̱mí*	*zi̱m-*	"fish"
wālī̱g^{a}	*wālīs*^{ɛ} or *wālí sic*	*wàl-*	a kind of gazelle
si̱bī̱g$^{a/}$	*si̱bí*	*si̱b-*	a kind of termite
si̱iňfɔ/ or *si̱iňg*$^{a/}$	*si̱iňs*$^{ɛ/}$	*si̱ň-*	"bee"
sūňfɔ/ or *sūuňr*$^{ɛ/}$	*sūňyá*	*sūň-*	"heart"
kpá'ʊŋɔ	*kpi̱'iní*	*kpā'-* *irreg*	"guinea fowl"

Pi̱inī "gift" reflects a class obsolete in Western Oti-Volta, with *aa* umlauted to *ii* by the flexion *ɪɯ*: cf Moba *pāāb̀* "gift", pl *pāānîi*. It is used as sg, with cb *pi̱in-*.

5.3.6 *bɔ*

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

sā'ab^{ɔ}	*sà'-*	"millet porridge, TZ"
tāǎp^{ɔ}	*tàǎp-*	"war" 3.4
kī'ɪb$^{ɔ/}$		"soap"

All regular gerunds from 2-mora-stem dual-aspect verbs belong here 8.1.1: stems in *b* show -*p*- via **bb* → *pp*: *sɔ̄p*$^{ɔ/}$ from *sɔ̄b*^{ɛ} "write", *lɔ̄p*$^{ɔ/}$ from *lɔ̄b*^{ɛ} "throw stones at", and stems in *m* show **mb* → *mm*: *kīm*^{mɔ} from *kìm*^{m} "tend a flock/herd", *wʊ̄m*^{mɔ} from *wʊ̀m*^{m} "hear." Stems in *n* do not assimilate, however: *būnīb*^{ɔ} from *bùn*^{ɛ} "reap."

Yīs^{ɛ} "make go/come out" has the expected gerund *yīsīb*$^{ɔ/}$; the alternate form *yīis*$^{ɛ/}$ has *yīisíb*^{ɔ}, the only 3-mora stem in the *bɔ* class.

5.3.7 *mm*

Most words in this class are mass nouns. Straightforward forms include:

dāam$^{m/}$	*dā-*	"millet beer, pito"
mɛ̀lɪgìm^{m}		"dew"
kʊ̄dīm^{m}		"olden days"
dū'uním^{m}	*dū'un-*	"urine"
dàalìm^{m}		"masculinity"
yàarìm^{m}	*yàar-*	"salt"
zāaǎnsím^{m}	*zāaǎns-*	"soup"

M-stems can be identified from cbs in *m*, pls in *-ma* or *-mɪs*^{ɛ}, or non-initial H tonemes in Pattern L 3.8.1.

vʊ̄m$^{m/}$		*vʊ̄m-*	"life"
kūm^{m}		*kùm-*	"death"
zɔ̄m$^{m/}$		*zɔ̄m-*	"flour"
bùgʊ́m^{m}		*bùgʊ́m-* or *bùgʊ̄m-*	"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" 3.4

Pīim$^{m/}$ "arrow" is a remnant of an old "long, thin things" *ɔ*|*ɛ* class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm *fíímú* "arrow", plural *fíímí*.

5.4 *Nàm* plurals

Nàm[a] is not a suffix, but a NP head, with a predependent noun appearing as cb for count nouns (*kpɛ̄ɛ̆m*[m] pl *kpɛ̀ɛ̆m-nàm*[a] "elder") and as sg or pl for mass nouns (*sā'ab nám*[a] "portions of porridge", *bùgúm nám*[a] "fires, lights.")

Nàm[a] is used with loanwords, pronouns 12.4, quantifiers 12.5, plurals with singular meaning and mass nouns with count meaning 12.2, and with forms with the personifier particle 12.6. It is also used to avoid ambiguous regular plurals, with nouns using -*ba* as sg 5.3.1, and to pluralise the bare-root sg forms of

mà	*mà nám*[a]	*mà-*	"mother"
	(tone *sic*, as if uncompounded)		
bā'[/]	*bā'-nám*[a]	*bā'-*	"father"
zu̱à	*zu̱à-nàm*[a]	*zu̱à-*	"friend"

5.5 Loanwords

Loanwords 11.1 adopt noun classes by analogy or make *nàm*[a] plurals:

ga|*sɛ*:	*àràzàk*[a]	*àràzà'as*[ɛ]	*àràzà'-*	"riches"
	màli̱āk[a/]	*màli̱ā'as*[ɛ/]	*màli̱ā'-*	"angel" DK
gɔ|*dɛ*:	*gādʊ̄g*[ɔ/]	*gāt*[ɛ/]	*gād-*	"bed"
	lɔ̀mbɔ̀'ɔg[ɔ]	*lɔ̀mbɔ̀'ɔd*[ɛ]	*lɔ̀mbɔ̀'-*	"garden"
rɛ|*aa*:	*lɔ́r*[ɛ]	*lɔ́yà* or *lɔ́ɔm*[ma]	*lɔ́r-*	"car, lorry" (cf *Mɔ̄r*[ɛ])
	àlɔ́pìr[ɛ]	*àlɔ́pìyà*		"aeroplane" SB
	wādīr[ɛ/]	*wādá*	*wād-*	pl "customs, law"
	gādʊ̄	*gādʊ̄-nám*[a]	*gādʊ̄-*	"bed" WK
	kɛ̀ɛkɛ̀	*kɛ̀ɛkɛ̀-nàm*[a]	*kɛ̀ɛkɛ̀-*	"bicycle"
	dāká	*dāká-nàm*[a]	*dāká-*	"box"
	tɛ́ɛbʊ̀l[ɛ]	*tɛ́ɛbʊ̀l-nàm*[a]	*tɛ́ɛbʊ̀l-*	"table"
	Nàsāarā	*Nàsàa(r)-nàm*[a]	*Nàsàa(r)-*	"European" 26.4

Loanwords ending in L or H toneme distinguish sg from cb by the fact that M spreading only follows the sg, conforming to the usual rule 4.4:

dʊ́'atà nâ'ab	"a doctor's chief"
dʊ́'atà-nà'ab	"a doctor-chief, doctor who is a chief"

Some all-M loanwords change final M to H in the cb on the analogy of Kusaal nouns with M toneme noun prefixes 3.8.1: *dūnıyā* "world", *dūnıyá-kàŋā* "this world."

6 Adjective flexion

Unlike nouns, most Kusaal adjectives show suffixes from more than one noun class. This reflects the prehistory of the language, in which noun classes triggered agreement and adjectives took the suffix of the head noun, which preceded as a combining form, effectively infixing the adjective stem between the noun stem and its suffix. Like most Western Oti-Volta languages, Kusaal has lost the agreement system, but adjectives commonly remain extant with suffixes from more than one class, now usually in free variation. Thus from *bʊ̄ʊg*^{a} "goat":

bʊ̀-pi̱əlɪ̀g^{a}	*bʊ̀-pi̱əlɪ̀s*^{ɛ}	*bʊ̀-pi̱əl-*	(*ga*|*sɛ*)	"white goat"
bʊ̀-pi̱əl^{lɛ}	*bʊ̀-pi̱əlà*	*bʊ̀-pi̱əl-*	(*rɛ*|*aa*)	*id*

A few traces of agreement remain, accounting for all cases with *mm* 12.8.1. There is also some preference for *ga*|*sɛ* suffixes for human reference: *nī̱n-sábɪlɪ̀s*^{ɛ} "Africans", where *nī̱n-sábɪlà* is accepted by informants but is much less common, and *Zu̱à-wi̱ɪs*^{ɛ} "Red Zoose" (clan), where the adjective does not normally use pl *sɛ*. The suffixes *a*|*ba* and *fɔ*|*ɪʊ* appear only in set expressions; *bɔ* never occurs at all.

WK claims a meaning difference in intensity in gradable adjectives with sg suffixes of different classes, consistently ranking them *ga rɛ gɔ* in decreasing order, so that *fū-pi̱əlɪ̀g* "white shirt" is whiter than *fū-pî̱əl id*. However, DK specifically denied any difference of meaning.

Class suffixes are avoided when their combination with stem finals would give rise to unclear or ambiguous SFs. The availability of alternatives from three classes permits avoidance much more freely than with nouns. A further major constraint is that only two adjectives show suffixes from both the *ga*|*sɛ* and *gɔ*|*dɛ* classes:

	zi̱ňˈa	*zɛ̀ňˈɛs*^{ɛ}	*zɛ̀ňˈ-*	"red"
	zɛ̀ňˈog^{ɔ}	*zɛ̀ňˈɛd*^{ɛ} or *zɛ̀ňdà*		
	bī̱ˈa	*bī̱ˈəs*^{ɛ}	*bì̱à-*	"bad"
	bɛ̄ˈog^{ɔ}	*bɛ̄ˈɛd*^{ɛ}	*bɛ̀ˈ-*	
also	*bɛ̄ˈɛd*^{ɛ} sg	*bɛ̀ˈɛd-nàm*^{a} pl		

Other adjectives are *either ga-* or *gɔ*-type, along with *rɛ*|*aa* class suffixes; this probably reflects simplification of the old agreement system prior to its complete abandonment. Adjectives of the *ga* type include:

wàbɪ̀g^{a}	*wàbɪ̀s*^{ɛ}	*wàb-*	"lame"
wàbɪ̀r^{ɛ}	*wàbà*		

*vɛ̀nnìg*ᵃ *vɛ̀nnìr*ᵋ rare	*vɛ̀nnìs*ᵋ *vɛ̀nnà*	*vɛ̀n-*	"beautiful"
*vɛ̀ňllìg*ᵃ	*vɛ̀ňllìs*ᵋ *vɛ̀ňllà*		"beautiful"
*sābɪlíg*ᵃ *sābíl*ˡᵋ	*sābɪlís*ᵋ *sābɪlá*	*sābīl-*	"black"

Similar are *wɛ̄nnīr*ᵋ "resembling" *pāalíg*ᵃ "new" *záal*ˡᵋ "empty" *bàaňlìg*ᵃ "slim" *pi̱əlìg*ᵃ "white."

Sg *rɛ* is not used with *ga*-type stems in *m n*:

*dɛ̄ɛŋ*ᵃ	*dɛ̄ɛňs*ᵋ *dɛ̄ɛmīs*ᵋ *dɛ̄ɛnā*	*dɛ̀ɛŋ-*	"first"

Pl *sɛ* is not used with 2-mora stems in *m n*, or with any stems in *s d*:

*gi̱ŋ*ᵃ	*gi̱mā*	*gì̱ŋ-*	"short"
*bʊ̄gʊsíg*ᵃ *bʊ̄gʊsír*ᵋ	*bʊ̄gʊsá*	*bʊ̄gʊ̄s-*	"soft"
*pɔ̀ɔdìg*ᵃ *pɔ̀ɔdìr*ᵋ	*pɔ̀ɔdà*	*pɔ̀ɔd-*	"few, small"

Similarly *mā'asír*ᵋ "cold, wet" *mālɪsír*ᵋ "sweet" *tɛ̄bɪsír*ᵋ "heavy" *lābɪsír*ᵋ "wide."

Adjectives of the *gɔ*-type only show pl *dɛ* in a few 2-mora stems ending in vowels or plosives:

*nɛ̀og*ᵓ *nɛ̀ɛr*ᵋ	*nɛ̀ɛd*ᵋ *nɛ̀yà*	*nɛ̀-*	"empty"
*wi̱ug*ᵓ *wi̱ir*ᵋ	*wi̱id*ᵋ *wi̱yà*	*wi̱-*	"red"
*wɔ̄k*ᵓ/ *wā'ar*ᵋ/ rare	*wā'ad*ᵋ/ *wá'a*	*wā'-* or *wɔ̄k-*	"long, tall"

kʊ̄dʊ̄gɔ	*kʊ̄tɛ* rare	*kʊ̀d-*	"old"
kʊ̄dīrɛ	*kʊ̄dā*		
bɛ̀dʊ̀gɔ		*bɛ̀d-*	"great"
bɛ̀dìrɛ rare	*bɛ̀dà*		
tītā'ʊgɔ rare	*tītādā*	*tītá'-*	"big"
tītā'arɛ			

Adjectives of the *gɔ*-type with stems in *l m n r s* do not use sg *rɛ*, and accordingly end up with sg *gɔ* pl *aa* only:

sʊ̀ŋɔ	*sʊ̀mà*	*sʊ̀ŋ-*	"good"
kísʊ̀gɔ	*kīsá*	*kīs-*	"hateful, taboo"
dà-zɛ̄mmʊ́gɔ	*dà-zɛ̄mmá*	*dà-zɛ̄m-*	"equal piece of wood"
tʊ̄vlʊ́gɔ	*tʊ̄vlá*	*tʊ̄vl-*	"hot"
lāllʊ́gɔ	*lāllá*	*lāl-*	"distant"
mì'isʊ̀gɔ	*mì'isà*	*mì'is-*	"sour"
wàu̱ŋɔ	*wànà*	*wàu̱ŋ-*	"wasted, thin"
kpī'oŋɔ	*kpī'əmā*	*kpì'oŋ-*	"hard, strong"
zùlʊ̀ŋɔ	*zùlımà*	*zùlʊ̀ŋ-*	"deep"
yī-pʊ́ňrʊ̀gɔ	*yī-pʊ́ňrà*		"nearby house"

Similarly *yàlʊ̀ŋɔ* "wide" *ňyālʊ́ŋɔ* "wonderful" *yɛ̄l-nárʊ̀ŋɔ* "necessary thing."

Deverbal adjectives 9.2.1.2 of the **resultative** type derived with *-*lım*- belong here. KT (but not WK) also has forms without -*m*- in both sg and pl:

kpì̱ilʊ́ŋɔ	*kpì̱ilímà*	*kpì̱ilʊ́ŋ-*	"dead"	WK
nī̱n-kpí̱ilʊ̀gɔ	*nī̱n-kpí̱ilìmà*		"dead person"	KT
gɛ̄ɛňlʊ́ŋɔ	*gɛ̄ɛňlímà*	*gɛ̄ɛňlʊ́ŋ-*	"tired"	WK
nī̱n-gɛ́ɛňlʊ̀gɔ	*nī̱n-gɛ́ɛňlìmà*		"tired person"	KT
pɛ̀'ɛlʊ́ŋɔ	*pɛ̀'ɛlímà*	*pɛ̀'ɛlʊ́ŋ-*	"full" WK	KT
	dʊ̄g-pɛ́'ɛlà		"full pots"	KT

Deverbal adjectives of the **habitual** type are derived with *d*, but the *d* is often assimilated or dropped, so not all habitual adjectives are *d*-stems. They are *ga*-type for WK, but *gɔ*-type for KT. In either case, the pl suffix is always *aa*, as expected:

kʊ̄vdírɛ	*kʊ̄vdá*	*kʊ̄vd-*	"murderous;
kʊ̄vdígª WK			liable to be killed"
kʊ̄vdʊ́gɔ KT			

tʊ̄mmīr^{ɛ}	*tʊ̄mmā* WK *tʊ̄mnā* KT	*tʊ̀m-*	"working, helpful"
sı̣̄nnír^{ɛ} rare *sı̣̄nníg*^{a}	*sı̣̄nná*	*sı̣̄n-*	"silent"
mɔ̄r$^{ɛ/}$	*mɔ̄rá*	*mɔ̄r-*	"having"
kʊ̀g-dɛ̄l$^{lɛ/}$	*kʊ̀g-dɛ̄llá*		"chair for leaning on"

Stems in *g k ŋ* do not use the sg suffixes *ga gɔ*:

bʊ̄n-tʊ́lıgìr^{ɛ}	*bʊ̄n-tʊ́lıgà*		"heating thing"
ňwı̣̄-tɛ́kìr^{ɛ}	*ňwı̣̄-tɛ́kà*	*ňwı̣̄-tɛ́k-*	"pulling-rope"
bʊ̄n-sʊ́ŋìr^{ɛ}	*bʊ̄n-sʊ́ŋà*		"helpful thing"

Adjectives derived from 4-mora stem verbs in -*m* in KT's speech take *ga* or *gɔ* sg and *aa* pl; they may drop the -*m*- in the plural:

nı̣̄n-pʊ́'alìŋ^{a}	*nı̣̄n-pʊ́'alìmà*		"harmful person"
nı̣̄n-záaňsʊ̀ŋ^{ɔ}	*nı̣̄n-záaňsà*		"dreamy person"

Some adjectives simply belong to a single noun class even though this cannot be accounted for by the stem-suffix incompatibilities outlined above:

vʊ̄r$^{ɛ/}$	*vʊ̄yá*	*vʊ̄r-*	"alive"
dāʊg^{ɔ}	*dāad*^{ɛ}	*dà-*	"male"
tɔ̄ɔg^{ɔ}	*tɔ̄ɔd*^{ɛ}	*tɔ̀-*	"bitter"
pu̱āk^{a}	*pʊ̄'as*^{ɛ}	*pu̱'à-*	"female" (human)
ňyá'aŋ^{a}	*ňyá'as*^{ɛ}	*ňyā'aŋ-*	"female" (animal)
	or *ňyā'amís*^{ɛ}		
ňyɛ̀ɛsíŋ^{a}	*ňyɛ̀ɛnsís*^{ɛ}	*ňyɛ̀ɛsíŋ-*	"self-confident"

and similarly *vɛ̀ňllíŋ*^{a} "beautiful" *mālısíŋ*^{a} "pleasant" *lāllíŋ*^{a} "distant."

bı̣̄l^{a}	*bı̣̄bīs*^{ɛ}	*bı̣̀l-* or *bı̣̀-*	"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.

7 Verb flexion

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

7.1 Dual-aspect

Some 90% of verbs are dynamic 16.2 **dual-aspect** verbs, using the stem form for perfective aspect and adding *-da* for imperfective. Synchronically, *-da* is simply a flexion, but historically this probably represents thoroughgoing levelling of a formation with a *derivational* suffix **d* preceding the same imperfective flexion *-a* as appears in single-aspect verbs. A suffix *-ma* marks imperative mood whenever the verb carries the independency-marking tone overlay 16.6.2.

Perfective, imperfective and *-ma* imperative are cited in order.

Straightforward examples include:

kʊ̄	*kʊ̄ʊd*$^{a/}$	*kʊ̀ʊm*^{a}	"kill"
kpɛ̀ň'	*kpɛ̀ň'ɛd*^{a}	*kpɛ̀ň'ɛm*^{a}	"enter"
kɻ̀à	*kɻ̀əd*^{a}	*kɻ̀əm*^{a}	"cut"
kɻ̀ā	*kūɵd*$^{a/}$	*kùɵm*^{a}	"hoe"
gɔ̀ň	*gɔ̀ɔň̀d*^{a}	*gɔ̀ɔň̀m*^{a}	"hunt"
dʊ̄gᵋ	*dʊ̄gʊ̄d*$^{a/}$	*dʊ̀gʊ̀m*^{a}	"cook"
yùugᵋ	*yùugìd*^{a}	*yùugìm*^{a}	"delay, get late"
yādīgᵋ$^{/}$	*yādɪgíd*^{a}	*yàdɪgìm*^{a}	"scatter"
pɻ̀āň'^{a}	*pɻ̀āň'ad*$^{a/}$	*pɻ̀àň'am*^{a}	"speak; praise"
dɻ̀'à^{a}	*dʊ̀'ad*^{a}	*dʊ̀'am*^{a}	"bear, beget"
nɔ̄kᵋ$^{/}$	*nɔ̄kíd*^{a}	*nɔ̀kìm*^{a}	"take"
gāŋᵋ$^{/}$	*gāŋíd*^{a}	*gàŋìm*^{a}	"choose"
kpàrᵋ	*kpàrìd*^{a}	*kpàrìm*^{a}	"lock"
sūgʊ̄rᵋ$^{/}$	*sūgʊríd*^{a}	*sùgʊrìm*^{a}	"forgive"
bàsᵋ	*bàsìd*^{a}	*bàsìm*^{a}	"go/send away"
sɻ̀gɪsᵋ$^{/}$	*sɻ̀gɪsíd*^{a}	*sɻ̀gɪsìm*^{a}	"lower"
kɔ̄tᵋ$^{/}$	*kɔ̄tíd*^{a}	*kɔ̀tìm*^{a}	"slaughter"

Some root-stems ending in a vowel show a *CV-* allomorph in both imperfective and imperative, with *-t-* for *-d-* 3.4:

dì	*dìt*^{a}	*dìm*^{a}	"eat"
ňyɛ̄	*ňyɛ̄t*$^{a/}$	*ňyɛ̀m*^{a}	"see"

and likewise *lɻ̀*/*lù* "fall", *dʊ̄* "go up", *yɻ̄* "go/come out", *zɔ̀* "run, fear."

Stems in -*d*- show -*t*- in the ipfv via **dd* → *tt*:

bʊ̀d$^{\varepsilon}$	*bʊ̀t*^{a}	*bʊ̀dɪ̀m*^{a}	"plant"
gàad$^{\varepsilon}$	*gàt*^{a} 2.2	*gàadɪ̀m*^{a}	"pass, surpass"

Stems in *l* generate a cluster in the ipfv via **ld* → *nn* 3.5:

vʊ̄l$^{\varepsilon}$	*vʊ̄n*$^{na/}$	*vʊ̀lɪ̀m*^{a}	"swallow"
màal$^{\varepsilon}$	*màan*^{na}	*màalɪ̀m*^{a}	"make; sacrifice"
dɪ̄gɪ̄l$^{\varepsilon/}$	*dɪ̄gín*^{na}	*dɪ̀gɪlɪ̀m*^{a}	"lay down"

Only 2-mora *b*-stems assimilate **bm* → *mm*:

lɛ̀b$^{\varepsilon}$	*lɛ̀bɪ̀d*^{a}	*lɛ̀m*^{ma}	"return"
sɔ̄b$^{\varepsilon}$	*sɔ̄bɪ̄d*$^{a/}$	*sɔ̀m*^{ma}	"write"
lɪ̣əb$^{\varepsilon}$	*lɪ̣əbɪ̀d*^{a}	*lɪ̣əbɪ̀m*^{a}	"become"
ɛ̄ɛ̆nb$^{\varepsilon/}$	*ɛ̄ɛ̆nbíd*^{a}	*ɛ̀ɛ̆nbɪ̀m*^{a}	"lay a foundation"

Only 2-mora *n*-stems show **nd* → *nn*; only *kɛ̄ŋ*$^{\varepsilon/}$ (below) shows **nm* → *mm*:

bʊ̀n$^{\varepsilon}$	*bʊ̀n*^{na}	*bʊ̀nɪ̀m*^{a}	"reap"
mɔ̄n$^{\varepsilon}$	*mɔ̄n*$^{na/}$	*mɔ̀nɪ̀m*^{a}	"make porridge"
gɔ̀'ɔn$^{\varepsilon}$	*gɔ̀'ɔnɪ̀d*^{a}	*gɔ̀'ɔnɪ̀m*^{a}	"extend neck"
dɪ̀gɪ̀n$^{\varepsilon}$	*dɪ̀gɪnɪ̀d*^{a}	*dɪ̀gɪnɪ̀m*^{a}	"lie down"

The *nn*-stem *sʊ̀n*$^{\varepsilon}$ does not assimilate at all:

sʊ̀n$^{n\varepsilon}$	*sʊ̀nnɪ̀d*^{a}	*sʊ̀nnɪ̀m*^{a}	"bow head"

4-mora *m*-stems always assimilate **md* → *mn*, *mm*, while 3-mora *m*-stems assimilate optionally; 2-mora stems regularly assimilate, but the NT/KB sometimes have unassimilated forms to avoid ambiguity 3.5.

sɪ̣ɪlɪ̀m^{m}	*sɪ̣ɪlɪ̀m*^{ma}	*sɪ̣ɪlɪ̀m*^{ma}	"quote proverbs"
lāŋím^{m}	*lāŋím*^{ma}	*làŋɪ̀m*^{ma}	"wander searching"
kàrɪ̀m^{m}	*kàrɪ̀m*^{m}/*kàrɪmɪ̀d*^{a}	*kàrɪ̀m*^{ma}	"read"
tɔ̄ɔm$^{m/}$	*tɔ́ɔm*^{ma}/*tɔ̄ɔmíd*^{a}	*tɔ̀ɔm*^{ma}	"depart"
tʊ̀m^{m}	*tʊ̀m*^{ma}	*tʊ̀m*^{ma}	"work"

Like *tʊ̀m*^{m} are *wʊ̀m*^{m} "hear", *kɪ̀m*^{m} "tend a flock or herd", *dʊ̀m*^{m} "bite."

Stems in -*mm*- only assimilate in the imperative:

tàm^{m}	*tàmmìd*^{a}	*tàm*^{ma}	"forget"

Like *tàm*^{m} are *zàm*^{m} "cheat, betray", *dàm*^{m} "shake", *lɛ̀m*^{m} "sip, taste"; the cognate Mooré verbs have -*mb*-: *zãmbe* "cheat", *rãmbe* "stir", *lèmbe* "taste".

Fusion verbs show deleted **g* after *aa iə uɵ aaŋ̆ ɛɛŋ̆ ɔɔŋ̆* 3.7. **G*-deletion appears only in the perfective and gerund; elsewhere **g* is absent, not deleted (for the tonal implications see 3.8.2.) For the perfective forms before liaison see see 4.2.

fāeŋ̆$^{/}$	*fāaŋ̆d*$^{a/}$	*fàaŋ̆m*^{a}	"save"
dī̱'e$^{/}$	*dī̱'ɘd*$^{a/}$	*dì̱'ɘm*^{a}	"get, receive"
dūe$^{/}$	*dūɵd*$^{a/}$	*dùɵm*^{a}	"rise, raise"
pūŋ̆'e$^{/}$	*pūŋ̆'ɵd*$^{a/}$	*pùŋ̆'ɵm*^{a}	"rot" WK

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

kɛ̄	*kɛ̄t*$^{a/}$	*kɛ̀l*^{a}	"let, allow"
kɛ̄ŋ̆	*kɛ̄n*$^{a/}$	*kɛ̀m*^{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 *jeɦlg* pfv "*poser verticalement*", *jeɦla* ipfv.

wi̱k^{ɛ}	*wi̱id*^{a} 3.4	*wi̱kìm*^{a}	"fetch water"
i̱āŋ̆k$^{ɛ/}$	*i̱āŋ̆'ad*$^{a/}$	*i̱àŋ̆kìm*^{a}	"leap, fly"
gī̱lɪg$^{ɛ/}$	*gī̱n*$^{na/}$	*gi̱lɪgìm*^{a}	"go around"
kɛ̄ŋ$^{ɛ/}$	*kɛ̄n*$^{na/}$	*kɛ̀m*^{a}	"go"
yɛ̀l^{ɛ}	*yɛ̀t*^{a}	*yɛ̀lìm*^{a}	"say"
gɔ̄s^{ɛ}	*gɔ̄sɪd*$^{a/}$	*gɔ̀sìm*^{a}	"look"
	or *gɔ̄t*$^{a/}$	*gɔ̀m*^{a}	
tìs^{ɛ}	*tìsìd*^{a}	*tìsìm*^{a}	"give"
	or *tìt*^{a}		

A perfective *tì* may appear before bound object pronouns, e.g. *tì=f* "give you."

7.2 Single-aspect

The remaining 10% of verbs are **single-aspect**, with just one finite form, which is always imperfective. Each single-aspect verb is either **dynamic**, behaving like the imperfective of a dual-aspect verb, or **stative** 16.2; transitive stative verbs typically express relationships, while intransitives have predicative adjectival meanings.

Morphologically, there are three major groups of single-aspect verbs; the morphological division correlates only to a limited extent with meaning.

Six stative single-aspect verbs consist of bare stems alone:

mḭ'	"know"	*zī'*	"not know"
bɛ̀	"be somewhere, exist"	*kā'e̯*	"not be" (← **kagɪ*)
tūn̆'e	"be able" 19.1	*nɔ̀ŋ*^{ɛ}	"love"

Uniquely among single-aspect verbs, *nɔ̀ŋ*^{ɛ} has a *ma*-imperative *nɔ̀ŋ̀m*^{a}, used when the verb word carries the tone overlay of independency marking. Unlike perfectives, these forms are never followed by particle *yā* 16.6.2. The Pattern A verbs *bɛ̀* and *nɔ̀ŋ*^{ɛ} have M tone before liaison-word pronouns and are followed by M spreading even when not subject to the tone overlay of independency marking 4.4.

	M̀ nɔ́ŋ.	"I love him." (e.g. in reply to a question)
not	**M̀ nɔ́ŋ yā*	specifically stated to be impossible by WK

Mit ka Zugsob tumtum a one noŋ zaba.
Mḭ̀t kà Zūg-sɔ́b tʊ́m-tʊ̄m á ɔ́nì nɔ̀ŋ zábāa=ø.
NEG.LET.IMP and Lord worker:SG COP REL.AN love conflict:PL=NEG.
"Let not a servant of the Lord be someone who loves fights." (2 Tim 2:24, 1996)

Kà ò nɔ́ŋī=f. "And she loves you."

The agent noun *nɔ̀ŋ̀ɪd*^{a} has Pattern L instead of the expected A:

Ò nɔ̀ŋ̀ɪd 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 *jeñra* ipfv "*être debout*" = Kusaal *zḭ̀'e*^{ya}, where Nawdm *r* and Kusaal *y* both represent Proto-Oti-Volta **r*. With only one aspect, these verbs have not undergone the extensive levelling which has made dual-aspect -*da* into a unitary flexion. In particular, when **y* has assimilated to a preceding root-final consonant, resulting in *nn mm ll* or *r(r)*, the cluster is carried over into deverbal nominals, or introduced by analogy into cognate adjectives even when the

adjectives are primary. The cluster *nn* then behaves exactly like *nn* derived from **nd*, but *ll r(r)* are subject to further assimilation just like single *l r* 3.5.

Dynamic verbs with unassimilated *y* mostly express **stances**:

*ị̄gī*ya/	"be kneeling"	*dīgī*ya/	"be lying down"
*vābī*ya/	"be prone"	*làbì*ya	"crouch in hiding"
*tàbì*ya	"be stuck to"	*zị̀'e*ya	"be standing still"
*zị̀ǐ̌'i*ya	"be sitting"	*tị̄'i*ya/	"be leaning (object)"
*gɔ̄'e*ya/ WK	"have neck extended"	*wà'e*ya	"travel to"

Statives include transitive and intransitive types:

*àe̯ǐ̌*ya	"be something/somehow"		
*sʊ̄'e*ya/	"own"	*sɔ̄ǐ̌'e*ya/	"be better than"
*tɔ̄e̯*ya/	"be bitter"	*vʊ̄e̯*ya/	"be alive"

Stance verbs with unassimilated *y* have derived inchoative and causative dual-aspect verbs in *n* and *l* 9.1.1. They make perfective gerunds, and have agent nouns, deverbal adjectives and instrument nouns with the formant *d* like dual-aspect verbs. Some informants inflect these verbs with the ipfv suffix *-da* to express *habitual* meaning; others use the ipfv of the derived assume-stance verb instead:

	Ò zị̀ǐ̌'i nɛ̄.	"She's sitting down." WK KT
	Ò pʊ̄ zǐ́ǐ̌'idā.	"She doesn't sit down" WK
but	*Ò pʊ̄ zǐ́ǐ̌'inìdā.*	"She doesn't sit down." KT
	Ò vàbì nɛ̄.	"He's lying prone."
	Ò pʊ̄ vābɪdá.	"He doesn't lie prone." WK
but	*Ò pʊ̄ vábɪnìdā.*	"He doesn't lie prone." KT
	Ò dìgì nɛ̄.	"She's lying down."
	Ò pʊ̄ dīgɪdá.	"She doesn't lie down" WK
	Lì zị̀'ə nɛ̄.	"It's standing up."
	Lì pʊ̄ zǐ́'ədā.	"It (a defective tripod) doesn't stand up." WK
	Lì tị̀'i nɛ̄.	"It's leaning against something."
	Lì tị̀'id.	"It can be leant against something." WK
	Lì pʊ̄ tị̄'iyá.	"It's not leaning against something."
	Lì pʊ̄ tị̄'idá.	"It's not for leaning against something." WK

Dynamic single-aspect verbs in *nn mm ll r(r)* include stance verbs and others:

sịn$^{na/}$	"be silent"	*dɛ̄l*$^{la/}$		"be leaning (person)"
gʊ̀l^{la}	"be hanging"	*gɔ̄l*$^{la/}$	KT	"have neck extended
dɔ̄l$^{la/}$	"accompany"	*zāňl*$^{la/}$		"carry in one's hands"
gūr$^{a/}$	"guard"	*tɛ̀ňr*^{a}		"remember"
sùr^{a}	"have head bowed"	*gɔ̄r*$^{a/}$	DK	"have neck extended"

They make imperfective gerunds; in these and in agent nouns, deverbal adjectives and instrument nouns, the stem is in *nn mm ll r(r)* and *d* is omitted. Similarly, they do not have distinct continuous, habitual or inchoative forms.

Stative verbs in *nn mm ll r(r)* again include transitive and intransitive types:

nɛ̄n$^{na/}$	"envy"	*vɛ̀n*^{na}	"be beautiful"
wɛ̄n$^{na/}$	"resemble"	*kpị̄'əm*$^{ma/}$	"be strong"
kpɛ̄ɛňm$^{ma/}$	"be older than"	*zùlìm*^{ma}	"be deep"
sʊ̀m^{ma}	"be good"	*gịm*$^{ma/}$	"be short"
yàlìm^{ma}	"be wide"	*zɛ̄m*$^{ma/}$	"be equal to"
tàdìm^{ma}	"be weak"	*wā'am*$^{ma/}$	"be long, tall"
vɛ̀ňl^{la}	"be beautiful"	*lāl*$^{la/}$	"be far from"
tʊ̄l$^{la/}$	"be hot"	*mɔ̄r*$^{a/}$	"have"
tār$^{a/}$	"have"	*dùr*^{a}	"be many"
kàr^{a}	"be few"	*nār*$^{a/}$	"be necessary"
pɔ̀ňr^{a}	"be near to"		

M-stems show single *m* in most sources after after epenthetic vowels and long root vowels 3.5.

A number of stative verbs end in *-sa*:

mị̀'is^{a}	"be sour"	*bʊ̄gʊ̄s*$^{a/}$	"be soft"
mā'as$^{a/}$	"be cool"	*tɛ̄bīs*$^{a/}$	"be heavy"
mālīs$^{a/}$	"be sweet"	*lābīs*$^{a/}$	"be wide"
ňyɛ̀ɛs^{a}	"be self-confident"	*kịs*$^{a/}$	"hate"

The *s* of these forms is a derivational suffix producing stative forms.

There is one intransitive stative verb in *-da*: *pɔ̀ɔd*^{a} "be few, small."

Some dual-aspect-verb imperfective forms have become independent stative verbs, e.g. *bɔ̀ɔd*^{a} "want, like" (*bɔ̀* "seek"), *zɔ̀t*^{a} "fear" (*zɔ̀* "run.")

8 Stem conversion

8.1 Nouns from verbs

8.1.1 Perfective gerunds

Almost all verbs other than intransitive statives can form a **gerund**, a derived abstract noun which expresses the process, event or state described by the verb.

Gerunds from dual-aspect and many dynamic single-aspect verbs are formed by adding noun class suffixes to the verb stem. For gerund Tone Patterns see 3.8.4.

Gerunds may be used as abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals 12.2.

Dual-aspect verbs form gerunds by adding the following class suffixes to the stem. 3-mora stems ending in underlying **g* replace the *-gɔ* suffix with *-rɛ*.

2-mora stems	*-bɔ* but *-rɛ* as final part of a compound
3-mora stems in **g*	
[surface *-g*$^{\varepsilon}$ *-k*$^{\varepsilon}$ *-ŋ*$^{\varepsilon}$ *-ae -ie -ue*]	*-rɛ*
all others	*-gɔ*

kʊ̄	"kill"	*kʊ̄ʊb*$^{ɔ/}$
dʊ̄g$^{\varepsilon}$	"cook"	*dʊ̄gʊ̄b*$^{ɔ/}$
dʊ̱'àa	"bear, beget"	*dʊ̄'ab*^{ɔ}
kàd$^{\varepsilon}$	"drive away"	*kādīb*^{ɔ}
pi̱l$^{\varepsilon}$	"cover"	*pi̱līb*^{ɔ}
kpàr$^{\varepsilon}$	"lock"	*kpārīb*^{ɔ}
bàs$^{\varepsilon}$	"abandon, go away"	*bāsīb*^{ɔ}
sɔ̄b$^{\varepsilon}$	"write"	*sɔ̄p*$^{ɔ/}$
lɔ̄b$^{\varepsilon}$	"throw stones at"	*lɔ̄p*$^{ɔ/}$
kìm^{m}	"tend a flock/herd"	*kīm*^{mɔ}
wʊ̀m^{m}	"hear"	*wʊ̄m*^{mɔ}

2-mora *n*-stems do not assimilate **nb* → *mm*: *bùn*$^{\varepsilon}$ "reap", gerund *būnīb*^{ɔ}.

yùug$^{\varepsilon}$	"delay"	*yùugʊ̀r*$^{\varepsilon}$
nɔ̄k$^{\varepsilon/}$	"take"	*nɔ̄kír*$^{\varepsilon}$
ni̱ŋ$^{\varepsilon}$	"doing"	*ni̱ŋ̀ir*$^{\varepsilon}$
gbān̆'e$^{/}$	"grab"	*gbán̆'ar*$^{\varepsilon}$
dī̱'e$^{/}$	"get"	*dí̱'ər*$^{\varepsilon}$
dūe$^{/}$	"rise"	*dúər*$^{\varepsilon}$

gàad$^{\varepsilon}$	"(sur)pass"	*gàadʊ̀g*^{ɔ}
lị̀əb$^{\varepsilon}$	"become"	*lị̀əbʊ̀g*^{ɔ}
dīgīl$^{\varepsilon/}$	"lay down"	*dīgɪlʊ́g*^{ɔ}
yāar$^{\varepsilon/}$	"scatter"	*yāarʊ́g*^{ɔ}
sị̄gīs$^{\varepsilon/}$	"lower"	*sị̄gɪsʊ́g*^{ɔ}
dàm^{m}	"shake"	*dàmmʊ̀g*^{ɔ} (and thus with all *mm*-stems)

3-mora *n*-stems never assimilate **ng* → *ŋŋ*:

dì gɪn$^{\varepsilon}$	"lie down"	*dì gɪnʊ̀g*^{ɔ}
zị̀ň'in$^{\varepsilon}$	"sit down"	*zị̀ň'inʊ̀g*^{ɔ}

3-mora *m*-stems assimilate **mg* → *ŋŋ* optionally:

tɔ̄ɔm$^{m/}$	"depart, disappear"	*tɔ́ɔŋ*^{ɔ}	or *tɔ̄ɔmʊ́g*^{ɔ}
sàň'am^{m}	"destroy"	*sàň'ʊŋ*^{ɔ}	or *sàň'amʊ̀g*^{ɔ}
kàrìm^{m}	"read"	*kàrʊ̀ŋ*^{ɔ}	or *kàrɪmʊ̀g*^{ɔ}

4-mora stems in *-sɪm -lɪm* follow the rule and use *-gɔ* (always assimilating), but stems in **-gɪm* drop the *-m-* and use *-rɛ*:

sị̀ilìm^{m}	"cite proverbs"	*sị̀ilʊ́ŋ*^{ɔ}	
zàaňsìm^{m}	"dream"	*zàaňsʊ́ŋ*^{ɔ}	
wàŋ̀ìm^{m}	"waste away"	*wàŋ̀ɪr*$^{\varepsilon}$	
lāŋ́ím^{m}	"wander"	*lāŋ́ír*$^{\varepsilon}$	
zàkìm^{m}	"itch"	*zàkɪr*$^{\varepsilon}$	

2-mora stems regularly use *-rɛ* instead of *-bɔ* in compounds:

pu̱'à-dīɪr$^{\varepsilon}$	"marriage"	*nī̱n-kʊ̂ʊr*$^{\varepsilon}$	"murder"
dā-nûur$^{\varepsilon}$	"beer-drinking"	*mɔ̀-pị̄l*$^{l\varepsilon}$	"grass roof"
fū-yêɛr$^{\varepsilon}$	"shirt-wearing" WK		

Irregular gerunds are rare with stems of three or four morae. A few are formally plural 12.2, and *yī̱is*$^{\varepsilon/}$ "make go/come out" has *yī̱isíb*^{ɔ}. Most irregular 2-mora stem verbs have regular gerunds, e.g. *tìs*$^{\varepsilon}$ "give" → *tīsīb*^{ɔ}, *kɛ̄* "let" → *kɛ̄ɛb*$^{ɔ/}$, *gʊ̀l*$^{\varepsilon}$ "suspend" → *gʊ̄līb*^{ɔ}. However, almost 20% of 2-mora-stem verbs in KED use suffixes other than *bɔ*; many of these have stems ending in *m* or *b*. Most irregular gerunds are tonally regular, but forms with *-gɔ* from Pattern A verbs are Pattern L unless variants with *ga* or *sɛ* show that the word is *ga*|*sɛ* with LF remodelling 5.3.2.

lị	"fall"	*lī̤ig*ᵃ
zī	"carry on head"	*zī̤id*ᵋ/
bɛ̀ň'	"fall ill"	*bɛ̄ň'ɛs*ᵋ
kɛ̄ň	"come"	*kɛ̄n*ⁿᵋ/
zɔ̀	"run"	*zūa* also *zɔ̄ɔg*ᵓ
vū	"make noise"	*vūug*ᵓ/
*pi̤āň'*ᵃ	"speak"	*pi̤àṳňk*ᵓ
*bʊ̀d*ᵋ	"plant"	*bʊ̄dīg*ᵃ also *bʊ̄dʊ̄g*ᵓ
*yɛ̀l*ᵋ	"say, tell"	*yɛ̀lʊ̀g*ᵓ (cf Mooré *yèele*)
*kūl*ᵋ	"go home"	*kūlīg*ᵃ/ also *kūlʊ̄g*ᵓ/
*tàňs*ᵋ	"shout"	*tàňsʊ̀g*ᵓ
*sɔ̄ňs*ᵋ	"converse"	*sɔ́ňsì̤g*ᵃ
*gɔ̄s*ᵋ	"look"	*gɔ́sì̤g*ᵃ
*sɔ̀s*ᵋ	"pray, beg"	*sɔ̄sī̤g*ᵃ
*kị̄r*ᵋ	"hurry"	*kì̤kị́rʊ̀g*ᵓ or *kị̄rī̤b*ᵓ/
*lɛ̀b*ᵋ	"return"	*lɛ̄bī̤g*ᵃ
*tɛ̀b*ᵋ	"carry in both hands"	*tɛ̄bī̤g*ᵃ
*kàňb*ᵋ	"scorch"	*kāňbī̤r*ᵋ
*ɔ̀ňb*ᵋ	"chew"	*ɔ̄ňbī̤r*ᵋ
*lūb*ᵋ	"buck"	*lūbī̤r*ᵋ/
*zàb*ᵋ	"fight"	*zàbì̤r*ᵋ
*tɛ̀ňb*ᵋ	"tremble"	*tɛ̀ňbʊ̀g*ᵓ
*tʊ̀m*ᵐ	"work"	*tʊ̄ʊmā*
*tʊ̀m*ᵐ	"send"	*tì̤tʊ̄mī̤s*ᵋ
*wʊ̀m*ᵐ	"hear"	*wʊ̄m*ᵐᵓ or *wʊ̀mmʊ̀g*ᵓ 9.2.1.4

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

*zì̤ň'i*ʸᵃ	"be sitting"	*zī̤ň'ig*ᵃ	also "place", regular *ga*|*sɛ* class		
*zì̤'e*ʸᵃ	"be standing"	*zī̤'a*	KED	*zī̤'əg*ᵃ (very irreg 3.7)	DK KT
*dīgī*ʸᵃ/	"be lying"	*dīk*ᵃ/	KT	*dīgīr*ᵋ/	WK
*ī̤gī*ʸᵃ/	"be kneeling"	*ī̤k*ᵃ/	KT	*ī̤gīr*ᵋ/	WK
*vābī*ʸᵃ/	"be lying prone"	*vāp*ᵓ/	KT	*vābīr*ᵋ/	WK
*tī̤'i*ʸᵃ/	"be leaning"	*tī̤'ib*ᵓ/	(of an object)		

*Gʊ̀l*ˡᵃ "be hanging" uses *gʊ̄lī̤b*ᵓ from dual-aspect *gʊ̀l*ᵋ. *Tɛ̀ňr*ᵃ "remember" and the stative *pɔ̀ňr*ᵃ "be near" have *tɛ̄ňrī̤b*ᵓ *pɔ̄ňrī̤b*ᵓ by analogy with dual-aspect verbs following the simplification **rr* → *r*. Stative *kị̄s*ᵃ/ "hate" has the gerund *kị́sʊ̀g*ᵓ.

Other single-aspect verbs have imperfective gerunds 9.2.1.4.

8.1.2 Concrete nouns

When there is a perfective gerund with regular noun class membership, other nouns with the same stem but different class suffixes have **concrete** senses, such as the product of the action, instrument used, or place at which the action occurs.

ɛ̄ɛn̆bír^{ɛ}	"(physical) foundation"	*ɛ̄ɛn̆bʊ́g*^{ɔ}	"laying a foundation"
dʊ̄k$^{ɔ/}$	"cooking pot"	*dʊ̄gʊ̄b*$^{ɔ/}$	"cooking"
dà'a	"market"	*dā'ab*^{ɔ}	"buying"
kʊ̄k^{a}	"chair"	*kʊ̄gʊ̄b*^{ɔ}	"resting on something"
zūg-kʊ̄gʊ̄r^{ɛ}	"pillow"		
su̯āk$^{a/}$	"hiding place"	*sʊ̄'ab*$^{ɔ/}$	"hiding"
sɔ̄bīr$^{ɛ/}$	"piece of writing"	*sɔ̄p*$^{ɔ/}$	"writing, orthography"
kūt^{ɛ}	"iron, nail"	*kūdʊ̄b*^{ɔ}	"working iron"
kùɵsìm^{m}	"merchandise"	*kùɵsʊ̀g*^{ɔ}	"selling"
pɛ̀bɪsìm^{m}	"wind"	*pɛ̀bɪsʊ̀g*^{ɔ}	"blowing of the wind; wind"

Vābīr$^{ɛ/}$ *lābīr*$^{ɛ/}$ *dīgīr*$^{ɛ/}$ *ị̄gīr*$^{ɛ/}$, used by WK as gerunds, are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting with the gerunds *vāp*$^{ɔ/}$ etc.

From *pị̀bìl*^{ɛ} "cover", *zàn̆bìl*^{ɛ} "tattoo", *màal*^{ɛ} "sacrifice" are derived

pị̄bīn^{nɛ}	*pị̄bɪnā*	*pị̀bìn-*	"covering"
zān̆bīn^{nɛ}	*zān̆bɪnā*	*zàn̆bìn-*	"tattoo" (NT "sign")
māan^{nɛ}	*māanā*	*màan-*	"sacrifice"

The *-n-* in these words is simplified from **nn* 3.5. Toende and Mooré have Pattern L instead of A: *zã̀bín*, *màan*. The **nn* may represent **ld*, with **d* in instrument-noun sense: cf *tūɵdīr*^{ɛ} "mortar", from *tu̯à* "grind in a mortar."

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is *dīɪb*^{ɔ} "food."

8.2 Nominals from nominals

The partial association of noun class and meaning 5.1 can be exploited to change the meaning of a stem. Examples include the names of ethnic groups, which belong to the *a*|*ba* or *ga*|*sɛ* classes, their languages, which belong to the *-lɛ* subclass of *rɛ*|*aa* 5.3.4 and the associated place, which has the suffix *-gɔ* 26.4. Another case of sg *-gɔ* deriving an associated place name is *wɛ̀ɛd*^{a} "hunter", *wɛ̀og*^{ɔ} "deep bush."

Names of trees are almost all *ga*|*sɛ* class, and their fruits *rɛ*|*aa* or *gɔ*|*dɛ* 26.5.

Note also *sị̄in̆f*$^{ɔ/}$ "bee", *sị̄in̆d*$^{ɛ/}$ "honey."

The strong association of the *mm* class with abstracts can be used to convert adjective stems to abstract nouns. These nouns somewhat resemble gerunds, and can

be preceded by combining forms as generic arguments 12.7.1, but they cannot be used in the future construction with *bɔ̀ɔdᵃ* "want" 16.3.3, and unlike imperfective gerunds, which show the expected gerund Tone Patterns 3.8.4, they show the same tone pattern as the adjective. These forms sometimes also appear as manner adverbs.

Examples formed from adjective stems with *mm*:

vʊ̄mᵐ/	"life"	*sʊ̀mᵐ*	"goodness"
pɔ̀ɔdʊ̀mᵐ	"scarcity"	*vɛ̀nnʊ̀mᵐ*	"beauty"
vɛ̀ɛ̆llʊ̀mᵐ	"beauty"	*bʊ̄gʊsʊ́mᵐ*	"softness"
tɛ̄bɪsʊ́mᵐ	"weight"	*mā'asʊ́mᵐ*	"coolness, damp"
bāaɛ̆lʊ́mᵐ	"quietly"	*zāalʊ́mᵐ*	"emptily"
mālɪsʊ́mᵐ	"sweetness"	*lābɪsʊ́mᵐ*	"width"
pi̱ələ̀mᵐ	"brightness"	*tītā'amᵐ*	"multitude"
kʊ̄dīmᵐ	"old times"	*pāalʊ́mᵐ*	"recently"
nɛ̀ɛmᵐ	"for free" (*nɛ̀ɛrᵋ* "empty")		

From *ɛ̆yɛ̀ɛsʊ́ŋᵃ* "self-confident" is derived *ɛ̆yɛ̀ɛsʊ̀mᵐ* "self-confidence."
The suffix *-gɔ* makes abstract nouns when the sg adjective form also has *-gɔ*:

lāllʊ́gᵓ	"distance"	*zɛ̄mmʊ́gᵓ*	"equality"
kpi̱'oŋᵓ	"hardness, strength"	*yàlʊ̀ŋᵓ*	"width"
mi̱'isʊ̀gᵓ	"sourness"	*tɔ̄ɔgᵓ*	"bitterness"
zʊ̀lʊ̀ŋᵓ	"depth"	*tʊ̄vlʊ́gᵓ* or *tʊ̄llʊ́mᵐ*	"heat"

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

gbáɛ̆yà'a	"lazy person"	→	*gbáɛ̆yà'amᵐ*	"laziness"
dàmà'a	"liar"	→	*dàmà'amᵐ*	"lying"
sāanᵃ/	"guest"	→	*sávŋᵓ*	"hospitality"
kpɛ̄ɛɛ̆mᵐ	"elder"	→	*kpɛ̄oɛ̆ŋᵓ*	"eldership"
sɔ̄e̱ɛ̆ʸᵃ	"witch"	→	*sɔ̄ɔɛ̆gᵓ*	"witchcraft"

Cf also *zʊ̀ɵdᵋ* "friendship" from *zʊ̱à* "friend."
Several stems form manner-adverbs with apocope-blocked *-ga* 3.2:

sʊ̀ŋā/	"well; very much"	*mā'asʊ́gā/*	"coolly"
tʊ̄vlʊ́gā/	"hotly"	*gi̱ŋā*	"shortly"
bʊ̄gʊsʊ́gā/	"softly"	*sàalʊ́ŋā/*	"smoothly"
ɛ̆yɛ̀ɛsʊ́ŋā/	"self-confidently"	*yi̱igá*	"firstly"

9 Derivation by suffixes

In 3.3 all roots are stated to be *CV(V)(C)*, implying that any stem consonant not immediately following the root vowel is not part of the root, and neither is any consonant following a *long* root vowel unless the root shows *CVC~CVVC* allomorphy.

All such stem consonants will be called "derivational suffixes." Very productive suffixing processes derive agent nouns, adjectives and instrument nouns from verbs, and several less systematic processes derive nominals from other nominals. Stem comparison can identify many suffixes deriving verbs from roots, though correlations of suffix and meaning are only partial. For Tone Patterns in derivation see 3.8.4.

Derivational suffixes are *g s n l d m*, along with *b* and *r* in just a handful of words; *n* may represent historical **ld* 3.5. *G s n b r* never follow another suffix, and *l* follows another suffix only as part of the combination *lm*. *D* is very productive in the formation of deverbal nominals; it often deletes a preceding suffix or is itself deleted.

No stem has more than three derivational suffixes, or more than five morae apart from prefixes. All four-mora verb stems have *m* as the second suffix, and all five-mora stems are formed with *lm*.

9.1 Verbs

All verb derivation is by suffixes, probably always added to roots. Clear meanings are often seen, but there is no straightforward match with form.

Possible verb shapes are very constrained. Only two, three and four-mora stems occur. All four-mora stems end in *m*, and in dual-aspect verbs *CVVCm* only occurs as *CVV* root + *sɪm* or *lɪm*, never *CVVC* root + *m*.

9.1.1 From verbs

-***n***- derives dual-aspect **assume-stance** verbs from stance verbs, which also have corresponding derivatives in -*l* for "make assume the stance"; all the -*n* verbs are Pattern A regardless, but the -*l* verbs have the same Pattern as the base stance verb.

Nawdm has exactly parallel formations, e.g. *jeɦra* ipfv "*être debout*", *jeɦnt* pfv "*se mettre debout*", *jeɦlg* pfv, *jeɦla* ipfv "*poser verticalement*".

Some stance verbs correspond instead to a simplex dual-aspect verb for "assume the stance", and *dɛ̄l*[la/] "be leaning" (of a person)has the idiosyncratic assume-stance derivative *dɛ̀lɪ̀m*[m]. Some -*n* and -*l* derivatives lack a corresponding stance verb: thus "be perching" is expressed with the resultative perfective of *zùe*:

Nɪ́iŋ lā zúɵ nɛ̄. "The bird is perching." KT
Bird:SG ART perch FOC.

Stance verb		Assume-stance	Make-assume-stance
dīgī$^{\text{ya/}}$	"be lying"	*dìgìn*^{ɛ}	*dīgīl*$^{\text{ɛ/}}$
vābī$^{\text{ya/}}$	"be lying prone"	*vàbìn*^{ɛ}	*vābīl*$^{\text{ɛ/}}$
ị̄gī$^{\text{ya/}}$	"be kneeling"	*ị̀gìn*^{ɛ}	*ị̄gīl*$^{\text{ɛ/}}$
làbì^{ya}	"be crouching hidden"	*làbìn*^{ɛ}	*làbìl*^{ɛ}
zị̀ǐ'i^{ya}	"be sitting"	*zị̀ǐ'in*^{ɛ}	*zị̀ǐ'il*^{ɛ}
zị̀'e^{ya}	"be standing"	*zị̀'ən*^{ɛ}	*zị̀'əl*^{ɛ}
tị̄'i$^{\text{ya/}}$	"be leaning" (of thing)	*tị̀'in*^{ɛ}	*tị̄'il*$^{\text{ɛ/}}$
gɔ̄'e$^{\text{ya/}}$	"be looking up" WK	*gɔ̀'ɔn*^{ɛ}	
sùr^{a}	"have bowed head"	*sùn*^{nɛ}	*sùn*^{nɛ} *sic*
-	"cover oneself"	*lị̀gìn*^{ɛ}	*lị̀gìl*^{ɛ}
-	"perch" (of bird)	*zùɵn*^{ɛ}	*zùɵl*^{ɛ}
-	"perch" (of bird)	*yà'an*^{ɛ}	*yà'al*^{ɛ}
gùl^{la}	"be suspended"	*gùl*^{ɛ}	*gùl*^{ɛ}
tàbì^{ya}	"be stuck to"	*tàb*^{ɛ}	*tàbìl*^{ɛ}

-***l***- derives causatives from nominals and from verbs expressing states or positions:

	ňyá'aŋ^{a}	"behind"	*ňyā'al*$^{\text{ɛ/}}$	"leave behind"
	gɛ̄og^{ɔ}	"space between legs"	*gɛ̄ɛl*$^{\text{ɛ/}}$	"put between legs" Tones *sic*
	lị̄k^{a}	"darkness"	*lị̀gìl*^{ɛ}	"cover up"
	bāň'	"ride"	*bāň'al*$^{\text{ɛ/}}$	"put on a horse/bicycle etc"
	gū'	"guard"	*gū'ul*$^{\text{ɛ/}}$	"set someone on guard"
	yɛ̀	"dress oneself"	*yɛ̀ɛl*^{ɛ}	"dress another person"
	mā'e$^{\text{/}}$	"get cool"	*mā'al*$^{\text{ɛ/}}$	"make cool"
	pūň'e$^{\text{/}}$	"rot"	*pɔ̄ň'ɔl*$^{\text{ɛ/}}$	"cause to rot"
	nị̀e	"appear"	*nɛ̀ɛl*^{ɛ}	"reveal"
	mā'e$^{\text{/}}$	"get cool, wet"	*mā'al*$^{\text{ɛ/}}$	"make cool, wet"
	wɔ̄'ʊg$^{\text{ɛ/}}$	"get wet"	*wɔ̄'ʊl*$^{\text{ɛ/}}$	"make wet"
?also	*zàb*^{ɛ}	"fight"	*zàbìl*^{ɛ}	"cause to fight"
	dụ̀'à^{a}	"bear, beget"	*dɔ̀'al*^{ɛ}	"make interest (of a loan)"

-***s***- derives causatives from dynamic verbs for the most part:

kpɛ̀ň'	"enter"	*kpɛ̀ň'ɛs*^{ɛ}	"make enter"
nị̀e	"appear"	*nɛ̀ɛs*^{ɛ}	"reveal"
yī	"go/come out"	*yīis*$^{\text{ɛ/}}$ or *yīs*^{ɛ}	"make go/come out"
dì	"eat"	*dìɪs*^{ɛ}	"feed"
nū	"drink"	*nūlīs*$^{\text{ɛ/}}$	"make drink"; also *nūlīg*$^{\text{ɛ/}}$
sị̄g^{ɛ}	"go down"	*sị̄gīs*$^{\text{ɛ/}}$	"lower"

lɛ̀b^{ɛ}	"return"	*lɛ̀bìs*^{ɛ}	"make return; answer"
mu̱'à^{a}	"suck" (of a baby)	*mʊ̀'as*^{ɛ}	"give to suck"
[Mooré *tá*	"arrive"]	*tā'as*$^{ɛ/}$	"help to travel, walk"
zɛ̄m$^{ma/}$	"be equal"	*zɛ̄mīs*$^{ɛ/}$	"make equal"
kpi̱ig^{ɛ}	"go out (fire)"	*kpi̱is*^{ɛ}	"quench"

-*s*- may have a pluractional sense:

kɔ̀	"break"	*kɔ̀'ɔs*^{ɛ}	"break several times"
tɔ̀ň	"shoot"	*tɔ̀ň'ɔs*^{ɛ}	"hunt"
pi̱əb^{ɛ}	"blow (flute etc)"	*pɛ̀bìs*^{ɛ}	"blow (wind)"
làbì^{ya}	"crouch in hiding"	*làbìs*^{ɛ}	"walk stealthily"
vʊ̄e̱$^{ya/}$	"be alive"	*vʊ̄'ʊs*$^{ɛ/}$	"breathe, rest"
i̱ānňk$^{ɛ/}$	"fly, jump"	*i̱ānň'as*$^{ɛ/}$	"leap, jump repeatedly"
yā'e$^{/}$	"open mouth"	*yā'as*$^{ɛ/}$	"open repeatedly" WK
dī̱'e$^{/}$	"receive"	*dī̱'əs*$^{ɛ/}$	"receive (many things)"
gū'	"guard"	*gū'us*$^{ɛ/}$	"watch out; guard (many)"

-***g***- attached to dynamic roots implies reversal:

yɛ̀	"dress oneself"	*yɛ̀ɛg*^{ɛ}	"undress oneself"
pi̱d^{ɛ}	"put (hat etc) on"	*pi̱dìg*^{ɛ}	"take (hat etc) off"
pi̱l^{ɛ}	"cover"	*pi̱lìg*^{ɛ}	"uncover"
lɔ̄	"tie up"	*lɔ̄dīg*$^{ɛ/}$	"untie"
yɔ̀	"close"	*yɔ̀'ɔg*^{ɛ}	"open"
ɛ̀ňd^{ɛ}	"block up"	*ɛ̀ňdìg*^{ɛ}	"unblock"
yà'al^{ɛ}	"hang up"	*yàk*^{ɛ}	"unhang"
pà'al^{ɛ}	"put on top"	*pàk*^{ɛ}	"take off top"
pi̱bìl^{ɛ}	"cover up"	*pi̱bìg*^{ɛ}	"uncover"
tàbì^{ya}	"be stuck to"	*tàbìg*^{ɛ}	"unstick, get unstuck"
là'as^{ɛ}	"gather together"	*lāk*$^{ɛ/}$	"open" (eye, book); tone *sic*
		cf *lákè*	(Mooré) "un-stick together"

?also *li̱əb*^{ɛ}	"become"	*lɛ̀bìg*^{ɛ}	"turn over"
fāň	"rob, snatch"	*fāeň*$^{/}$	"save" ?? for "snatch back"

Reversive -*g*- is peculiar to the Western group within Oti-Volta; elsewhere alveolar suffixes appear: Moba *lōōń* "close" *lōōd́* "open", Byali *byá* "close" *byērə́* "open", Nawdm *riw* pfv "close" *rawdg* pfv *rawda* ipfv "open." Proto-Bantu had *-ʊl-* and *-ʊk-*; an alveolar variant may have been lost in Western Oti-Volta because of the adoption of *-da* as the regular dynamic imperfective flexion.

-*g*- also forms a few causatives:

dɔ̄l$^{\text{la/}}$	"accompany"	*dɔ̄līg*$^{\text{ɛ/}}$	"make accompany"
gɔ̄r$^{\text{a/}}$	"look up" DK	*gɔ̄dīg*$^{\text{ɛ/}}$	"make look up" DK
tɛ̀ňr^{a}	"remember"	*tị̀eň*	"bring to mind, remind"
yùul^{ɛ}	"swing" intransitive	*yùlìg*^{ɛ}	"swing" transitive
kɔ̀	"break" intransitive	*kɔ̀'ɔg*^{ɛ}	"break" ambitransitive
nū	"drink"	*nūlīg*$^{\text{ɛ/}}$	"make drink"; also *nūlīs*$^{\text{ɛ/}}$

-*g*- occurs with no clear meaning in

sɔ̄ň	"rub"	*sūeň*$^{\text{/}}$	"anoint"
nɔ̄b^{ɛ}	"get fat"	*nɔ̄bīg*$^{\text{ɛ/}}$	"grow" (child, plant)
nā	"join"	*nāe*$^{\text{/}}$	"finish"; compare Hausa *gamàa* "join, finish"

-***d***- appears with a pluractional sense in *kɔ̄dīg*$^{\text{ɛ/}}$ "slaughter one animal", *kɔ̄t*$^{\text{ɛ/}}$ "slaughter several animals." This is perhaps historically connected with the **d* of the ipfv suffix **-da*, by way of the distinctively habitual sense seen in stance verbs 7.2.

-***m***- derives some preverbs 16.8:

	lɛ̀b^{ɛ}	"return"	*lɛ̀m*	"again"
cf	*là'as*^{ɛ}	"gather together"	*là'am*	"together"
	dɛ̀ŋ^{ɛ}	"go first"	*dɛ̀ŋìm*	"first"
cf	*malig*	(Toende) "do again"	*màlıgìm*	"again"

It has no obvious meaning in *kɔ̀ňsìm*^{m} "cough" = *kɔ̀ňs*^{ɛ} *id*.

-***r***- appears in

kāab$^{\text{ɛ/}}$	"offer, invite"	*kābīr*$^{\text{ɛ/}}$	"ask for admission"
		cf *kábıs*	Toende *id*
[no simplex]		*sūgʊ̄r*$^{\text{ɛ/}}$	"forbear, be patient with"

Both words appear frequently in pan-regional set formulae 25 and may well be loanwords. They may be back-formations from the nouns *kābırí* and *sūgʊrʊ́*, where *rı*/*rʊ* possibly originated in the equivalent of *rɛ*|*aa* class singular flexions 5.1.

9.1.2 From nominals

9.1.2.1 Single aspect

Intransitive stative verbs are mostly derived from adjectives or human-reference nouns. Some transitive stative verbs are also denominal.

Many stative verbs are formed with -*ya*, like dynamic single-aspect verbs. Even when the adjective is primary, it may show segmental remodelling on the verbal forms with **y*. *S*-stems show no sign of **y* synchronically, and *m*-stems have lost gemination except after short root vowels for many speakers.

This **y* differs in tonal behaviour from the **y* and **d* of dynamic verbs 3.8.4. Primary nominals 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, as reflected in the tonemes of e.g. *kpī'əm*$^{\text{ma/}}$ "be strong" (not **kpí'əm*$^{\text{ma/}}$), but the LF-final toneme is now always H; similarly, the original Pattern L type now changes to all-M in the irrealis mood just like dynamic Pattern A verbs: *Ò nà vɛ̄n* "She'll be beautiful."

L	*vɛ̀nnìg*^{a}	"beautiful"	*vɛ̀n*^{na}	"be beautiful"
	vɛ̀ňllìg^{a}	"beautiful"	*vɛ̀ňl*^{la}	"be beautiful"
	zùlʊ̀ŋ^{ɔ}	"deep"	*zùlìm*^{ma}	"be deep"
	pɔ̀ɔdìg^{a}	"small"	*pɔ̀ɔd*^{a}	"be few, small"
	mì'ísʊ̀g^{ɔ}	"sour"	*mì'ís*^{a}	"be sour"
	sʊ̀ŋ^{ɔ}	"good"	*sʊ̀m*^{ma}	"be good"
	yàlʊ̀ŋ^{ɔ}	"wide"	*yàlìm*^{ma}	"be wide"
H	*bʊ̄gʊsír*^{ɛ}	"soft"	*bʊ̄gʊ̄s*$^{\text{a/}}$	"be soft"
	vʊ̄r$^{\text{ɛ/}}$	"alive"	*vʊ̄e̱*$^{\text{ya/}}$	"be alive"
	mā'asír^{ɛ}	"cool"	*mā'as*$^{\text{a/}}$	"be cool"
	tɛ̄bısír^{ɛ}	"heavy"	*tɛ̄bīs*$^{\text{a/}}$	"be heavy"
	mālısír^{ɛ}	"sweet"	*mālīs*$^{\text{a/}}$	"be sweet"
	lābısír^{ɛ}	"wide"	*lābīs*$^{\text{a/}}$	"be wide"
	zɛ̄mmʊ́g^{ɔ}	"equal"	*zɛ̄m*$^{\text{ma/}}$	"be equal to"
	lāllʊ́g^{ɔ}	"far"	*lāl*$^{\text{la/}}$	"be far from"
A	*tɔ̄ɔg*^{ɔ}	"bitter"	*tɔ̄e̱*$^{\text{ya/}}$	"be bitter"
	gīŋ^{a}	"short"	*gīm*$^{\text{ma/}}$	"be short"
	kpī'oŋ^{ɔ}	"strong"	*kpī'əm*$^{\text{ma/}}$	"be strong"
	kpɛ̄ɛňm^{m}	"elder"	*kpɛ̄ɛňm*$^{\text{ma/}}$	"be older than"
	wɛ̄nnīr^{ɛ}	"resembling"	*wɛ̄n*$^{\text{na/}}$	"resemble"

More complex stem changes occur in

*tʊ̄vlʊ́g*ɔ	"hot"	*tʊ̄l*la/	"be hot"
*ňyɛ̀ɛsíŋ*a	"self-confident"	*ňyɛ̀ɛs*a	"be self-confident"
*wɔ̄k*ɔ/	"long, tall"	*wā'am*a/	"be long, tall"

9.1.2.2 Dual aspect

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

*ňyɔ̄'ɔs*ɛ/	"smoke"	*ňyū'e*/	"set alight"
*ňwi̱ig*a/	"rope"	*ňwi̱ig*ɛ/	"make a rope"
*tādīm*m/	"weak person"	*tàdīg*ɛ	"become weak"
kpi̱'a	"neighbour"	*kpi̱'e*	"approach"
*zūɐr*ɛ	"hill"	*zùe*	"get higher, more"
*À-Tūl*lɛ	"Breech-Delivered" 26.2	*tùlìg*ɛ	"invert"
*mā'asír*ɛ	"cool, wet"	*mā'e*/	"get cool, wet"
*bʊ̄gʊsír*ɛ	"soft"	*bʊ̄k*ɛ/	"soften"
*tɛ̄bɪsír*ɛ	"heavy"	*tɛ̄bīg*ɛ/	"get/make heavy"
*gi̱ŋ*a	"short"	*gi̱ŋ*ɛ	"scrimp"
*kpi̱'oŋ*ɔ	"strong"	*kpɛ̀'ŋ*ɛ	"strengthen"
*vʊ̄r*ɛ/	"alive"	*vʊ̄'ʊg*ɛ/	"make/come alive"
*pɔ̀ɔdìg*a	"few"	*pɔ̀'ɔg*ɛ	"diminish, belittle"
*pi̱əlìg*a	"white"	*pɛ̀lìg*ɛ	"whiten"
*sābɪlíg*a	"black"	*sɔ̄bīg*ɛ/	"blacken"
ni̱n-múa	"concentration"	*mù'e*	"redden, become intense"
*kʊ̄dʊ̄g*ɔ	"old"	*kʊ̀dìg*ɛ	"shrivel up, dry out, age"
*sʊ̀ŋ*ɔ	"good"	*sʊ̀ŋ*ɛ	"help"
*tʊ̄vlʊ́g*ɔ	"hot"	*tʊ̄līg*ɛ/	"heat up"
*mi̱'isʊ̀g*ɔ	"sour"	*mi̱'ig*ɛ	"turn sour"
*zùlʊ̀ŋ*ɔ	"deep"	*zùlìg*ɛ	"deepen"
*lāllʊ́g*ɔ	"far"	*lālīg*ɛ/	"get to be far, make far"
*màu̱k*ɔ	"crumpled up"	*màk*ɛ	"crumple up"
*dɛ̄ɛŋ*a	"first"	*dɛ̀ŋ*ɛ	"precede"
*nɛ̀ɛr*ɛ	"clear, empty"	*ni̱e*	"appear"
*sɔ̄ň'e*ya/	"be better than"	*sūň'e*/	"become better than" WK

With the addition of -*m* as a second derivational suffix:

*wàu̱ŋ*ɔ	"wasted"	*wàŋìm*m	"waste away"

-***lɪm***- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

	pu̱'ā^{a}	"woman"	*pʊ̀'alɪ̀m*^{m}	"cook"
	pɔ̀ň'ɔr^{ɛ}	"cripple"	*pɔ̀ň'ɔlɪ̀m*^{m}	"cripple, get crippled"
	gɪ̀k^{a}	"dumb"	*gɪ̀gɪlɪ̀m*^{m}	"become dumb"
	wàbɪ̀r^{ɛ}	"lame"	*wàbɪlɪ̀m*^{m}	"make, go lame"
	gʊ̄'ʊs^{ɛ}	"semi-ripe things"	*gʊ̀'ʊlɪ̀m*^{m}	"become semi-ripe"
	bʊ̄gʊ̄d^{a}	"client of diviner"	*bʊ̀gʊlɪ̀m*^{m}	"cast lots" (cf *bʊ̀k*^{ɛ} *id*)

Miscellaneous denominal dual-aspect verbs formed with *s m b* are seen in

	zu̱à	"friend"	*zʊ̀ʊs*^{ɛ}	"befriend"
	nɛ̄ɛr$^{ɛ/}$	"millstone"	*nɛ̄ɛm*$^{m/}$	"grind with a millstone"
	yā'ad^{ɛ}	"clay"	*yà'ab*^{ɛ}	"mould clay"
cf	*yàge*	(Mooré) "make pottery"		

9.2 Nominals

9.2.1 From verbs

The derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality. Deverbal noun and adjective formation shows more analogical levelling than derivational processes elsewhere, in keeping with the strong tendency to regularity and transparency in verb morphology. For Tone Patterns see 3.8.4.

9.2.1.1 Agent nouns

Agent nouns can be freely made from almost all verbs which can be used in direct commands. Informants readily supply isolated forms, but in practice they usually occur as second elements of compounds. All are *a*|*ba* class, but those derived from *ll-* or *r(r)*-stem single-aspect verbs also show *rɛ*|*aa* forms 5.3.1. Despite their regularity of formation, agent nouns often develop specialised meanings. As with English derivatives in "-er", "agent nouns" may be created from verbs whose subject is not in fact an agent, including even stative verbs if usable in direct commands.

The formant of agent nouns and habitual adjectives is -*d*, probably historically related to the -*d*- of the imperfective flexion -*da*, though it has different tonal effects. Derivational -*d* shows much less regularity in its mode of attachment than ipfv -*da*; agent nouns are more regular than habitual adjectives. There is a tendency to limit stem length, causing deletion of either -*d* itself or the suffix preceding it. Absence or presence of -*d* affects the Tone Pattern 3.8.4.

Most dual-aspect verbs have an agent noun with sg segmentally identical to the ipfv. If there are alternate forms, the less "regular" form appears as the agent noun.

mɛ̀	"build"	*mɛ̄ɛdᵃ*	"builder"
dì	"eat"	*dītᵃ*	"eater"
gɔ̄sᵋ	"look"	*gɔ̄tᵃ/*	"seer, prophet"
dʊ̄gᵋ	"cook"	*dʊ̄gʊ̄dᵃ/*	"cook"
dụ̀'àᵃ	"bear, beget"	*dʊ̄'adᵃ*	"elder relation"
kàdᵋ	"drive away"	*sarịyà-kātᵃ*	"judge"
sɔ̄bᵋ	"write"	*sɔ̄bīdᵃ/*	"writer"
bùnᵋ	"reap"	*būnⁿᵃ*	"reaper"
tʊ̀mᵐ	"work"	*tʊ̀m-tʊ̄mⁿᵃ*	"worker"
kpàrᵋ	"lock"	*kpārīdᵃ*	"lock-er"
gbịsᵋ	"sleep"	*gbịsīdᵃ/*	"sleeper"
sịàkᵋ	"believe"	*sịākīdᵃ*	"believer"
ịāňkᵋ/	"jump, fly"	*ịāň'adᵃ/*	"flier"
sʊ̀ŋᵋ	"help"	*sʊ̄ŋīdᵃ*	"helper"
kɛ̄ŋᵋ/	"go"	*kɛ̄nⁿᵃ/*	"traveller"
gàadᵋ	"pass"	*tùɵn-gātᵃ*	"leader"
màalᵋ	"sacrifice"	*màal-māanⁿᵃ*	"sacrificer"
pà'alᵋ	"teach"	*pā'anⁿᵃ*	"teacher"
sūgʊ̄rᵋ/	"forbear"	*sūgʊrídᵃ*	"forgiver"
yʊ̄'ʊmᵐ/	"sing"	*yʊ̄ʊm-yʊ̂'ʊmⁿᵃ*	"singer"
		pl *yʊ̄ʊm-yʊ̂'ʊmnìbᵃ*	
sàň'amᵐ	"spoil"	*pụ̀'à-sāň'amⁿᵃ*	"adulterer"
		pl *pụ̀'à-sāň'amīdībᵃ*	

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

nāeˡ	"finish"	*nāadᵃ/*	"someone who doesn't give up easily" WK
ňwà'e	"cut wood"	*ňwā'adᵃ*	"woodcutter"
gbāň'eˡ	"catch"	*zīm-gbâň'adᵃ*	"fisherman"
fāeňˡ	"save"	*fāaňdᵃ/*	"saviour" WK 11
dị̄'eˡ	"receive"	*dị̄'ədᵃ/*	"receiver"

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

sị̄gīs$^{ɛ/}$	"lower"	*sị̄gīs*$^{a/}$	"lowerer"
		pl *sị̄gısídìb*^{a}	
kùɵs^{ɛ}	"sell"	*kùɵs*^{a}	"seller"
		pl *kūɵsīdīb*^{a}	
pʊ̀'ʊs^{ɛ}	"worship"	*pʊ̀'ʊs*^{a}	"worshipper"
		pl *pʊ̄'ʊsīdīb*^{a}	
tʊ̀'as^{ɛ}	"talk"	*tʊ̀'as-tʊ̀'as*^{a}	"talker"
		pl *tʊ̀'as-tʊ̄'asīdīb*^{a}	
dị̂'əs$^{ɛ/}$	"receive"	*nɔ̄-dị̂'əs*^{a}	"chief's spokesman"
		pl *nɔ̄-dí'əsìdìb*^{a}	("linguist")

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

zàb^{ɛ}	"fight"	*zàb-zàb*^{a}	"warrior"
		gbān-záb^{a}	"leather-worker"
tìs^{ɛ}	"give"	*tìs*^{a}	"giver"
sɔ̀s^{ɛ}	"beg"	*sɔ̀s*^{a}	"beggar"

Stems in *-mm-* form reduplicated agent nouns with *nàm*^{a} plurals:

dàm^{m}	"shake"	*dàm-dàm*^{ma}	"shaker"

The *nn*-stem *sùn*^{nɛ} (ipfv *sùnnìd*^{a}) "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 *sūnnīb*^{a} cb *sùn-*	observer" WK

Agent nouns can only be formed from 3-mora verb stems in *-*g-* if the **g* is either deleted or assimilated with the root final consonant as *-k-* or *-ŋ-*:

yādīg$^{ɛ/}$	"scatter"	*yāt*$^{a/}$	(a participant in a housebuilding ritual)

Various irregular formations in my materials include:

tɛ̄k$^{ɛ/}$	"pull"	*ňwị̄-tɛ́k*^{a}	"rope-puller"
		pl *ňwị̄-tɛ́kìdìb*^{a}	
nɔ̀ŋ^{ɛ}	"love"	*nɔ̀ŋìd*^{a}	"lover"; tones irreg
tị̀'əb^{ɛ}	"heal"	*tị̄'əb*^{a}	"healer"; tones irreg

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

sị̀ilì̀m^{m}	"cite proverbs"	*sī̀in*^{na}	"speaker of proverbs"
		pl *sī̀innīb*^{a}	
pʊ̀'alì̀m^{m}	"harm"	*pʊ̄'an*^{na}	"harmer"
zàaǎnsì̀m^{m}	"dream"	*zàaǎns*^{a}	"dreamer"
		pl *zāaǎnsīdīb*^{a}	

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

zì̀ǐ'i^{ya}	"be sitting down"	*zī̀ǐ'id*^{a}	"sitter"
zì'e^{ya}	"be standing still"	*zī'ɘd*^{a}	"stander"
mī̀'	"know"	*mī̀'id*$^{a/}$	"knower"
		gbàn-mī̀'id$^{a/}$	"scribe" NT
zī'	"not know"	*zī'ɪd*$^{a/}$	"ignorant person"
sʊ̄'e$^{ya/}$	"own"	*sʊ̄'ʊd*$^{a/}$	"owner"
sɔ̄ǐ'e$^{ya/}$	"be better than"	*sɔ̄ǐ'ɔd*$^{a/}$ pl *sɔ̄ǐ'ɔb*$^{a/}$	5.3.1
dɪ̄gī$^{ya/}$	"be lying down"	*dɪ̄gīd*$^{a/}$	"lier-down"
ɪ̄gī$^{ya/}$	"be kneeling"	*ɪ̄gīd*$^{a/}$	"kneeler"
vābī$^{ya/}$	"be lying prone"	*vābīd*$^{a/}$	"lier prone"
làbì^{ya}	"be crouching"	*lābīd*^{a}	"croucher in hiding"
àe̯ǐ^{ya}	"be something"	*āaǐd*^{a}	"someone who always *is* something" *sic* WK

Stems in *nn ll r(r)* drop *-d* throughout. Those in *ll r(r)* may use *rɛ*|*aa* class suffixes, coinciding in form with habitual adjectives 5.3.1.

sɪ̣́n$^{na/}$	"be silent"	*nɪ̣̄n-sɪ́n*^{na}	"silent person"
nɛ̄n$^{na/}$	"envy"	*nɪ̣̄n-nɛ́n*^{na}	"envious person"
dɔ̄l$^{la/}$	"be with"	*ǹyà'an-dɔ̀l*^{la} *-dɔ̀l*^{lɛ}	"disciple" (irreg. tone)
zāǹl$^{la/}$	"be holding"	*nɔ̄-záǹl*^{la} *-záǹl*^{lɛ}	"holder of hens"
dɛ̄l$^{la/}$	"be leaning"	*nɪ̣̄n-dɛ́l*^{la}	"person prone to lean"
mɔ̄r$^{a/}$	"have"	*bʊ̀-mɔ̄r*$^{a/}$ *-mɔ̄r*$^{ɛ/}$	"owner of goats"
tār$^{a/}$	"have"	*bʊ̀-tār*$^{a/}$ *-tār*$^{ɛ/}$	"owner of goats"

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

kɪ̣̄s$^{a/}$	"hate"	*kɪ̣̄s*$^{a/}$ or *kɪ̣̄sīd*$^{a/}$	"hater"
tɛ̀ǹr^{a}	"remember"	*tɛ̄ǹrīd*^{a}	"rememberer"
gūr$^{a/}$	"be on guard"	*gūrīd*$^{a/}$	"guard"
		zà'-nɔ̄-gúr^{a}	"gatekeeper"

9.2.1.2 Adjectives

Habitual deverbal adjectives in principle have the same stem as the agent noun, but drop the *-d* formant more readily. The sense may be active or passive, essentially "habitually connected with the verbal action", like the range of meaning of an English gerund as a noun premodifier. A past passive sense is unusual, though examples occur: *sūm-dúgʊdà* "cooked groundnuts" WK, *ziiŋdʊgida* = *zī̩iŋ-dúgʊdà* "cooked fish" (Lk 24:42), beside the more usual sense in *ni'im dʊgida* = *nī̩m-dúgʊdà* "meat for cooking" (1 Samuel 2:15.)

Without a preceding cb, these adjective forms have the same meaning as agent nouns: *kʊ̄ʊdír*$^{\varepsilon}$ pl *kʊ̄ʊdá* "killer" = *kʊ̄ʊd*$^{a/}$ pl *kʊ̄ʊdíb*^{a}. After a cb the meanings differ: *pu̱'à-kʊ̄ʊd*$^{a/}$ "woman-killer, killer of women" vs *pu̱'à-kʊ̄ʊdír*$^{\varepsilon}$ "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*:

gɔ̀ň	"hunt"	*pu̱'à-gɔ̄ɔ̀ňdīr*$^{\varepsilon}$	"prostitute"
là'	"laugh"	*pu̱'à-lā'adīr*$^{\varepsilon}$	"woman prone to laughter/ woman to be laughed at"
ňyɛ̄	"see"	*bʊ̄n-ňyétìr*$^{\varepsilon}$	"visible object"
ku̱ā	"hoe"	*nā'-dá-kūɵdír*$^{\varepsilon}$	"ox for ploughing"
yɛ̀	"don clothes"	*fū-yɛ́ɛdìr*$^{\varepsilon}$	"shirt for wearing" WK
		fū-yɛ́ɛdʊ̀g^{ɔ}	KT
kʊ̄	"kill"	*tì-kʊ̄ʊdím*^{m}	"poison" ("killing medicine")
du̱'à^{a}	"bear/beget"	*tɛ̀ŋ-dʊ̄'adīg*^{a}	"native land"
dʊ̄g$^{\varepsilon}$	"cook"	*sūm-dúgʊdà*	"cooked groundnuts" WK
sī̩g$^{\varepsilon}$	"descend"	*yī̩-sí̩gɪdìr*$^{\varepsilon}$	"lodging-house"
su̱'ā^{a}	"hide"	*yɛ̄l-sú'adìr*$^{\varepsilon}$	"confidential matter"
ɔ̀ňb$^{\varepsilon}$	"chew"	*bʊ̄n-ɔ́ňbɪdà*	"solid food"
bùn$^{\varepsilon}$	"reap"	*bʊ̄n-búnnìr*$^{\varepsilon}$	"thing for reaping"
tʊ̀m^{m}	"work"	*bʊ̄n-tʊ́mmìr*$^{\varepsilon}$	"useful thing"
vʊ̄l$^{\varepsilon}$	"swallow"	*tì-vʊ̄nnímm*^{m}	"oral medication"
gbī̩s$^{\varepsilon}$	"sleep"	*pu̱'à-gbī̩sɪdír*$^{\varepsilon}$	"woman always sleeping"

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

tʊ̄līg$^{\varepsilon/}$	"heat up"	*bʊ̄n-tʊ́lɪgìr*$^{\varepsilon}$	"heater, thing for heating"
pɛ̀lìg$^{\varepsilon}$	"whiten"	*bʊ̄n-pɛ́lɪgìr*$^{\varepsilon}$	"whitening thing, whitener"
pàk$^{\varepsilon}$	"surprise"	*yɛ̄l-pákìr*$^{\varepsilon}$	"disaster"
tɛ̄k$^{\varepsilon/}$	"pull"	*ňwī̩-tɛ́kìr*$^{\varepsilon}$	"rope for pulling with"
sʊ̀ŋ$^{\varepsilon}$	"help"	*bʊ̄n-sʊ́ŋìr*$^{\varepsilon}$	"helpful thing"
nɔ̀ŋ$^{\varepsilon}$	"love"	*bī̩-nɔ̀ŋìr*$^{\varepsilon}$	"beloved child"

but	*kɛ̄ŋ*$^{ɛ/}$	"go"	*bʊ̀ŋ-kɛ̄nnír*^{ɛ}	"donkey that doesn't sit still"
	gi̱lī́g$^{ɛ/}$	"go around"	*pu̱'à-gi̱nní́g*^{a}	"prostitute"
	sūeň$^{/}$	"anoint"	*kpā-sɔ́ɔňdʊ̀m*^{m}	"anointing oil"
	yādī́g$^{ɛ/}$	"scatter"	*bʊ̄n-yátʊ̀r*^{ɛ}	"scattering thing" (cf *yāt*$^{a/}$)
	i̱ā́ňk$^{ɛ/}$	"fly, jump"	*bʊ̄n-i̱á́ň'adʊ̀r*^{ɛ}	"flying creature"

3-mora stems in -*m* retain the -*d*, forming the consonant cluster -*mm*-:

sàň'am^{m}	"destroy"	*bʊ̀-sāň'ammīr*^{ɛ}	"scapegoat" WK

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

pɛ̀lʊ̀s^{ɛ}	"sharpen"	*bʊ̄n-pɛ́lʊsʊ̀r*^{ɛ}	"sharpening thing"
kʊ̀ɵs^{ɛ}	"sell"	*bʊ̄n-kʊ́ɵsʊ̀r*^{ɛ}	"item for sale"

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

sị̀ilʊ̀m^{m}	"cite proverbs"	*bʊ̄n-sí́ilʊ́ŋ*^{ɔ}	"thing relating to proverbs"
pʊ̀'alʊ̀m^{m}	"harm"	*nī̱n-pʊ́'alʊ̀ŋ*^{a}	"harmful person"
		pu̱'à-pʊ̀'alí́ŋ^{a}	"harmful woman"
zàaňsʊ̀m^{m}	"dream"	*nī̱n-záaňsʊ̀ŋ*^{ɔ}	"dreamy person"
		pu̱'à-zàaňsʊ́ŋ^{ɔ}	"dreamy woman"

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

dīgī$^{ya/}$	"be lying"	*bʊ̀ŋ-dīgɪdír*^{ɛ}	"donkey that lies down a lot"
vābī$^{ya/}$	"be prone"	*bʊ̀ŋ-vābɪdír*^{ɛ}	"donkey always lying prone"
zị̀ň'i^{ya}	"be sitting"	*kūg-zí́ň'idʊ̀r*^{ɛ}	"stone for sitting on"
zāňl$^{la/}$	"be holding"	*nɔ̄-záňl*^{lɛ}	"hen for holding"
dɛ̄l$^{la/}$	"be leaning"	*nī̱n-dɛ́l*^{lɛ}	"person you can lean on" WK
		kʊ̀g-dɛ̄l$^{lɛ/}$	"chair for leaning on"
gʊ̀l^{la}	"be hanging"	*bʊ̄n-gʊ́l*^{lɛ}	"thing for suspending"

Resultative deverbal adjectives are only derived from verbs which can use the perfective form in a resultative sense 16.2.2; it is not clear how productive the formation is. Almost all such verbs are either intransitive or patientive ambitransitive, and the adjectives are not passive participles, but express resulting states. There are no resultative adjectives from stance-verb roots meaning e.g. "seated", "standing" or from passives, like "eaten." The formant -*lɪm*- either deletes a preceding derivational suffix or is added only to roots; for the flexion see 6.

kpì	"die"	*kpìilúŋ*ɔ	"dead"
gɛ̄ň	"get tired"	*gɛ̄ɛňlúŋ*ɔ	"tired"
*pɛ̀'ɛl*ɛ	"fill"	*pɛ̀'ɛlúŋ*ɔ	"full"
kɔ̀	"break"	*kɔ̀ɔlúŋ*ɔ	"broken"
yɛ̀	"wear"	*yɛ̀ɛlúŋ*ɔ	"worn" (of a shirt)
yɔ̀	"close"	*yɔ̀ɔlúŋ*ɔ	"closed"
*pù'alìm*m	"harm"	*pù'alúŋ*ɔ	"damaged"
àeň	"tear"	*àaňlúŋ*ɔ	"torn"

9.2.1.3 Instrument nouns

Instrument nouns can be created freely by adding -*m* to habitual-adjective stems in *d t* or *s*. All are *ga*|*sɛ*. The meanings may overlap with those of agent nouns.

kʊ̄	"kill"	*kʊ̄ʊdíŋ*a	"thing for killing with"
lɔ̄	"tie"	*sa̰à-lɔ̄ɔdíŋ*a	"belt" ("waist-tying thing")
dʊ̄gɛ	"cook"	*dʊ̄gʊdíŋ*a	"cooking utensil"
sɔ̄bɛ	"write"	*sɔ̄bɪdíŋ*a	"writing implement"
kpàrɛ	"lock"	*kpārɪdīŋ*a	"thing for locking"
ňwà'e	"cut wood"	*ňwā'adīŋ*a	"axe"
pɪ̰e/	"wash self"	*pɪ̰ədíŋ*a	"thing for washing oneself"
sʊ̀	"bathe"	*sʊ̄ʊdīŋ*a	"sponge"
*gɔ̄s*ɛ	"look"	*nɪ̰n-gɔ́tìŋ*a	"mirror"; *nɪ̰n-gɔ́tìs*ɛ "glasses"
*bʊ̀d*ɛ	"plant"	*bʊ̄tīŋ*a 2.3	"cup" (originally "seed cup")
*pɪ̰əs*ɛ/	"clean"	*pɪ̰əsíŋ*a	"cleaning implement"
*kʊ̀ɵs*ɛ	"sell"	*kʊ̄ɵsīŋ*a	"professional salesperson"
dā'e/	"push"	*dā'adíŋ*a	"pusher (person or thing)"
*zɪ̀ň'i*ya	"be sitting"	*zɪ̰ň'idīŋ*a	"thing for sitting on"

9.2.1.4 Imperfective gerunds

Dynamic single-aspect verbs in -*ya* without assimilation of the *y* make perfective gerunds, as do a few others 8.1.1. Other single-aspect verbs which make gerunds add -*lɪm*- after root vowels and -*m*- after *nn ll r(r)*; the forms are *mm*-class.

*sʊ̄'e*ya/	"own"	*sʊ̄'ʊlím*m	cf *so'olimkan* Mt 12:25, 1996
mɪ̰'	"know"	*mɪ̰'ilím*m	
zī'	"not know"	*zī'ɪlím*m	
*àḛň*ya	"be something"	*àaňlím*m	
bɛ̀	"be somewhere"	*bɛ̀lím*m	*sic*
kā'ḛ	"not be"	*kā'alím*m	
*wɛ̄n*na/	"resemble"	*wɛ̄nním*m	[tones show this is *deverbal*]

sn̩̄$^{\text{na/}}$	"be silent"	*sn̩̄nímᵐ*
nɛ̄n$^{\text{na/}}$	"envy"	*nɛ̄nnímᵐ*
dɔ̄l$^{\text{la/}}$	"accompany"	*dɔ̄llímᵐ*
zāňl$^{\text{la/}}$	"hold in hand"	*zāňllímᵐ*
dɛ̄l$^{\text{la/}}$	"be leaning"	*dɛ̄llʊ́gᵓ* or *dɛ̄llímᵐ*
mɔ̄r$^{\text{a/}}$	"have"	*mɔ̄rímᵐ*
tār$^{\text{a/}}$	"have"	*tārímᵐ*
nār$^{\text{a/}}$	"be necessary"	*nārímᵐ*
gūr$^{\text{a/}}$	"guard"	*gūrímᵐ*

These forms obey the tonal rules for gerund formation 3.8.4. The non-initial H toneme in Pattern L confirms that they are *m*-stems 3.8.1.

Stative verbs derived from imperfectives of dual-aspect verbs 16.2.3 also form imperfective gerunds; the tonemes show that these are not *m*-stems:

bɔ̀ɔdìmᵐ	"will" (Pattern L, unlike *bɔ̄ɔdīrᵋ* "desirable")
gɔ̀ɔňdìmᵐ	"wandering" (*gɔ̀ň* "hunt")
zɔ̀tìmᵐ	"fear" [*M̀ zɔ́t nɛ̄* "I'm afraid."]

The gerund *wʊmmʊg* of *wʊ̀mᵐ* "hear" (written *wumug* before 2016, but read with *-mm-* in the 1996 audio NT) represents **wʊmdʊgɔ*. Some deverbal abstract nouns from 3-mora verb stems in *-s-* are imperfective gerund forms with dropping of *-d-* as in agent nouns and deverbal adjectives.

pʊ̀ˈʊsᵋ	"greet, thank"	*pʊ̀ˈʊsìmᵐ* or *pʊ̀ˈʊsʊ̀gᵓ*	"worship"
kʊ̄	"kill"	*nīn-kʊ́ʊsìmᵐ*	"murderousness"
yɔ̄līsᵋ/	"untie"	*yɔ̄lɪsímᵐ*	"freedom"

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

-tāa	*-tāasᵋ*	*-tà-* or *-tā-*	"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:

mɪ̄ˈ	"know"	*mɪ̄ˈilím-tāa*	"partner in knowledge"
zɪ̄ˈ	"not know"	*zɪ̄ˈɪlím-tāa*	"partner in ignorance"
bɛ̀	"exist"	*bɛ̀lím-tāa*	"partner in existence" WK
dɔ̄l$^{\text{la/}}$	"be with"	*dɔ̄llím-tāa*	"fellow-companion"

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

nɔ̀ŋ$^{\varepsilon}$	"love"		*nɔ̀ŋìlím-tāa*	"fellow liker"
		or	*nɔ̀ŋìdím-tāa*	"fellow lover"

Dual-aspect verbs add *-m-* to the habitual adjective stem, but with *gerund* Tone Patterns:

mɛ̀	"build"		*mɛ̀ɛdím-tāa*	"fellow-builder"
dì	"eat"		*dìtím-tāa*	"messmate"
pō	"share"		*pōʊdím-tāa*	"fellow-sharer"
kpɛ̀ň'	"enter"		*kpɛ̀ň'ɛdím-tāa*	"fellow-resident"
zàb$^{\varepsilon}$	"fight"		*zàbɪdím-tāa*	"opponent"
dʊ̄g$^{\varepsilon}$	"cook"		*dʊ̄gʊdím-tāa*	"fellow-cook"
fāň	"snatch"		*fāaňdím-tāa*	"fellow-robber"
tʊ̀m^{m}	"work"		*tʊ̀mmím-tāa*	"co-worker"
pʊ̀'ʊs$^{\varepsilon}$	"worship"		*pʊ̀'ʊsím-tāa*	"fellow-worshipper"
dìɪs$^{\varepsilon}$	"feed"		*dìɪsím-tāa*	"fellow-feeder"
sʊ̀ŋ$^{\varepsilon}$	"help"		*sʊ̀ŋím-tāa*	"fellow-helper"
		or	*sʊ̀ŋìdím-tāa*	
sịàk$^{\varepsilon}$	"agree"		*sịàkím-tāa*	"fellow in agreement"

Stance verbs may use *-dɪm-* or *-lɪm-* or *-nɪm-*; *-lɪm-* and *-nɪm-* forms may really belong to the derived assume-stance/make-assume-stance verbs 9.1.1:

ī̩gī$^{\mathrm{ya/}}$	"be kneeling"		*ī̩gɪlím-tāa*	"fellow-kneeler"
		or	*ī̩gɪdím-tāa*	"fellow-kneeler" WK
zi̩ň'i^{ya}	"be sitting"		*zi̩ň'ilím-tāa*	"fellow-sitter"
		or	*zi̩ň'idím-tāa*	"fellow-sitter" WK
vābī$^{\mathrm{ya/}}$	"lie prone"		*vābɪlím-tāa*	"fellow lier-prone"
		or	*vābɪdím-tāa*	"fellow lier-prone" WK
làbì^{ya}	"be crouched"		*làbɪlím-tāa*	"fellow croucher in hiding"
zi̩'e^{ya}	"be stood"		*zi̩'əlím-tāa*	"fellow-stander"
		or	*zi̩'ədím-tāa*	"fellow-stander" WK
dīgī$^{\mathrm{ya/}}$	"be lying"		*dīgɪlím-tāa*	"fellow-lier"
		or	*dìgɪním-tāa*	"fellow-lier" WK

9.2.1.5 Others

-***s***- appears in a few concrete nouns derived from verbs:

dīgī$^{\text{ya/}}$	"be lying down"	*dīgısá*	"lairs"
dɔ̄	"go up"	*dɔ̄vsá*	"steps"

-***m***- derives nouns in

zɔ̀	"run"	*zɔ̄ɔm*^{mɛ}	"refugee"
kpı̀	"die"	*kpı̄'im*$^{\text{m/}}$	"corpse"

-***d***- appears as an instrument noun formant instead of the usual -*dım*- in

tu̱à	"grind in a mortar"	*tūɵdīr*^{ɛ}	"mortar"

See also on *pībīn*^{nɛ} "covering" etc, where the *n* may represent **ld* 8.1.2.

-***b***- derives nouns in

kpı̀	"die"	*kpı̀ibìg*^{a}	"orphan"
dà'	"buy"	*dà'abìr*^{ɛ}	"slave"
?? cf *àyí'*	"two"	*līıbīr*^{ɛ}	"twin" (Buli *yībīk id*)

9.2.2 From nominals

-***s***- and -***l***- form adjectives from adjectival roots:

mā'e$^{\text{/}}$	"cool down"	*mā'asír*^{ɛ}	"cold, wet"
bʊ̄k$^{\text{ɛ/}}$	"weaken"	*bʊ̄gʊsír*^{ɛ}	"soft"
tɛ̄bīg$^{\text{ɛ/}}$	"get heavy"	*tɛ̄bısír*^{ɛ}	"heavy"
mı̀'ig^{ɛ}	"get sour"	*mı̀'isʊ̀g*^{ɔ}	"sour"
sɔ̄b^{ɛ}	"get dark"	*sābılíg*^{a}	"black"

-***d***- features in a number of nouns with no evident derivational meaning, such as *yūgʊdīr*^{ɛ} "hedgehog", *lā'af*^{ɔ} "cowrie" pl *lı̄gıdī* "money", *pʊ̀gʊdʊ̀b*^{a} "father's sister."
It can form abstract nouns from human-reference words (examples from KB, Naden):

pu̱'à-sādīr$^{\text{ɛ/}}$	"young woman"	*pu'asatim*	"girlhood, virginity"
bʊ̄n-kʊ́dʊ̀g^{ɔ}	"old man"	*bʊnkʊttim*	"old age"
gɛdʊg	"fool"	*gɛtim*	"folly"
pʊ̀-kɔ̀ɔn̆r^{ɛ}	"widow"	*pʊkɔntim*	"widowhood"
bā'-bı̂ig^{a}	"brother"	*ba'abiidʊg*	"brotherhood"

-***m***- is seen in several unanalysable 3-mora stems, e.g. *yūgʊ́m*^{nɛ} "camel" (ultimately from Berber), *gbīgīm*^{nɛ} "lion", *zìlìm*^{mɛ} "tongue, *àn̆rʊ̀ŋ*^{ɔ} "boat", *zʊ̀lʊ̀ŋ*^{ɔ} "deep", *n̆yālʊ́ŋ*^{ɔ} "wonderful", *yàlʊ̀ŋ*^{ɔ} "wide." It also derives both human-reference and mass nouns:

bi̱'a	"bad"	*bi̱'əm*^{m}	"enemy"
tàdìg^{ɛ}	"become weak"	*tādīm*$^{\text{m/}}$	"weak person"
án̆sìb^{a}	"mother's brother"	*ān̆síŋ*^{a}	"sister's child"
bi̱'isìr^{ɛ}	"breast"	*bi̱'isím*^{m}	"milk"
nà'ab^{a}	"chief"	*nā'am*^{m}	"chiefship"
zɔ̄lʊ̄g$^{\text{ɔ/}}$	"fool"	*zɔ̄lɪmís*^{ɛ}	"foolishness"

Added to adjectival stems, -*m*- produces no change of meaning: thus with resultative deverbal adjective stems in -*l*- or -*lɪm*- 6; *vɛ̀n̆llìg*^{a} or *vɛ̀n̆llíŋ*^{a} "beautiful"; *mālɪsíg*^{a} or *mālɪsíŋ*^{a} "pleasant"; *lāllʊ́g*^{ɔ} or *lāllíŋ*^{a} "distant." It may appear only in the adjective or only in the corresponding stative verb:

n̆yɛ̀ɛs^{a}	"be self-confident"	*n̆yɛ̀ɛsíŋ*^{a}	"self-confident"
nār$^{\text{a/}}$	"be necessary"	*nàrʊ̀ŋ*^{ɔ}	"necessary"
wɔ̄k$^{\text{ɔ/}}$	"long, tall"	*wā'am*$^{\text{a/}}$	"be long, tall"

Sometimes -*m*- seems to be introduced to avoid **gg* → *kk*: *yáaŋ*^{a} "grandchild", pl *yáas*^{ɛ} **yaagsɪ*, *yáab*^{a} **yaagba* "grandparent"; *vúʊŋ*^{a} "red kapok", *vúʊr*^{ɛ} **vuʊgrɪ* "red kapok fruit" (pl *vūʊmís*^{ɛ} "red kapoks" would have to be analogical); *bɛ̀rìŋ*^{a} *pl* *bɛ̀rɪgìs*^{ɛ} *Hibiscus cannabinus*, *bɛ̄rɪgā cb* *bɛ̀rìg- pl* leaves of *bɛ̀rìŋ*^{a}.

-***l***- and -***lɪm***- derive abstract nouns from nouns and adjectives. The suffix -*lɪm*- is the only derivational suffix before which *CVVC* roots do not become *CVC*, and it can follow a preceding derivational suffix, creating five-mora stems. The stems of these abstract nouns are not themselves used as adjectives.

dāu̯	"man"	*dàalìm*^{m}	"masculinity"
pu̯'ā^{a}	"woman"	*pʊ̀'alìm*^{m}	"femininity"
bi̱ig^{a}	"child"	*bi̱ilím*^{m}	"childhood"
tītā'al^{lɛ}	"proud person"	*tītā'alīm*^{m}	"pride"
gi̱ŋ^{a}	"short"	*gi̱in̆lím*^{m}	"shortness"
wɔ̄k$^{\text{ɔ/}}$	"long, tall"	*wā'alím*^{m}	"tallness"
sāan$^{\text{a/}}$	"guest, stranger"	*sáannìm*^{m}	"strangerhood"
tīrâan^{a}	"neighbour"	*tīrâannìm*^{m}	"neighbourliness"
gi̱ŋ^{a}	"short"	*gi̱ŋīlím*^{m}	"shortness"

10 Prefixes

10.1 Nouns and adjectives

Many nouns, and one or two adjectives, have an element preceding the root which is not the combining form of any noun. Such elements will be called **noun prefixes**. Noun prefixes usually have no identifiable meanings; however, they are common in particular semantic fields, such as small animals, reptiles and insects.

Most noun prefixes fall into just a few phonological types. Segmentally, they are mostly of the shape *CV(n)*, where *V* shows only the three-way *a ɪ ʊ* vowel distinction of affix vowels; the *ɪ*/*ʊ* distinction itself and realisations as [i] or [u] are predictable 3.3. There is also a complex reduplicated type *CVsɪn* or *CVlɪn*. Stems with noun prefixes usually lack derivational suffixes. Prefixes have either M or L tonemes throughout, and they differ from cbs in their tonal effects on following elements 3.8.1.

A few cbs have become separated from their original paradigms through phonological simplifications and/or semantic bleaching and are effectively now prefixes. Other prefixes are related to verbal negative particles.

The personifier particle 12.6 it is not a prefix but a right-bound particle.

The simplest type of noun prefix copies the initial *C* of the root, followed by a vowel which is *ɪ* by default, but *ʊ* after labials, labiodentals and labiovelars; *ʊ* replaces *ɪ* before root *u*/*ʊ*/*ɔ* and *ɪ* replaces *ʊ* before root *i*/*ɪ*/*ɛ*. A few forms show *Ca*. No cases occur with voiced stops or voiced fricatives.

kʊ̀kɔ̄r$^{ɛ/}$	"voice"	*kʊ̀kɔ̀m*^{mɛ}	"leper"
kɪ̀kàŋ^{a}	"fig tree"	*kɪ̀kɪ̣̄rɪ̄g*$^{a/}$	"tutelary spirit"
k[*p*]*ʊ̀kpàrɪ̀g*^{a}	"palm tree"	*kpīkpɪ̣̄n*$^{na/}$	"merchant"
tītā'ar^{ɛ}	"big"	*tàtàl*^{lɛ}	"palm of hand"
pīpɪ̣̄rɪ̄g$^{a/}$	"desert"	*sɪ̀sɪ̣̀'əm*^{m}	"wind"
lɪ̀lāalíŋ^{a}	"swallow"	*mɪ̀mɪ̣̄ilím*^{m}	"sweetness"
mɪ̀mɪ̣̄ilʊ́g^{ɔ}	"sweetness"	*kpàkʊ̄r*$^{ɛ/}$	"tortoise"
tɪ̀tʊ̄mīs^{ɛ}	"sending"	*fʊ̄fʊ̄m*^{mɛ}	"envy"; "stye"
zà-sɪ̀sɔ̄bīr$^{ɛ/}$	"evening" (*zà-* cb of *zàam*^{m} "evening", *sɔ̄b*^{ɛ} "get dark")		

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

dʊ̀ndʊ̀ug^{ɔ}	"cobra"	*dɪ̀ndɛ̄og*$^{ɔ/}$	"chameleon"
bɪ̀mbɪ̀m^{mɛ}	"altar"	*bʊ̀mbàrɪ̀g*^{a}	"ant"
kɪ̀nkàŋ^{a}	"fig"	*tīntɔ̄ňríg*^{a}	"mole"
zīnzāu̯ŋ$^{ɔ/}$	"bat"	*sīnsáaň*	a kind of tiny ant
nɔ̄b-pʊ́mpàu̯ŋ^{ɔ}	"foot"		

gʋ̀ngʋ̄m^{mɛ}	"kapok material" (*gʋ̀m*^{mɛ} "kapok fruit")
zʋ̀nzɔ̀ŋ^{a}	"blind" (*zū'ɵm*$^{m/}$ "go/make blind")
pʋ̀mpɔ̄ɔg^{ɔ}	"housefly" (*tàmpūa id*)

An even more complex type follows the reduplicated *CV* with *-sɪn* or *-lɪn*:

kpìsìnkpi̩l^{lɛ}	"fist"	*tàsìntàl*^{lɛ}	"palm of hand"
sīlīnsî̩uňg^{ɔ}	"spider"	*sīlīnsî̩ug*^{ɔ}	"ghost"
zīlīnzîog^{ɔ}	"unknown" cf *zī'* "not know"		
vʋ̀lìnvùuňl^{lɛ}	"mason wasp"		
wàsìnwàl^{lɛ}	parasitic gall on trees ("mistletoe" in local English)		
nɛ̄sīnnɛ̄og$^{ɔ/}$	"envious person" cf *nɛ̄n*$^{na/}$ "envy" WK		
	others "centipede" = WK *nà'-nɛ̄sīnnɛ̄og*$^{ɔ/}$		

Prefixes may also be of the form *Ca(n)*, where *C* is *d b n m l s* or *z*.

dàyūug$^{ɔ/}$	"rat"	*dàwān*$^{nɛ/}$	"pigeon"
dàtìu̯ŋ^{ɔ}	"right hand"	*dàgɔ̀bìg*^{a}	"left hand"
dànkɔ̀ŋ^{ɔ}	"measles"	*dàwàlìg*^{a}	"humid season"
dàyáam^{ma}	"woman's parent-in-law"		
dàtāa	"enemy" cf *nì̩n-tāa* "co-wife", Ghanaian "rival"		
dàmà'a	"liar" cf *mà'* "lie"		
dàkī̩ig^{a}	"sibling-in-law via wife"		
dādʋ́k^{ɔ}	a kind of large pot, cf *dʋ̄k*$^{ɔ/}$ "pot"		
bàlàŋìr^{ɛ}	"hat"	*bàlàar*^{ɛ}	"stick, staff"
bānāa	traditional smock		
bālɛ̄rʋ̄g$^{ɔ/}$	"ugly" cf *lɛ̄r*^{ɛ} "get ugly"		
bàyɛ̄og$^{ɔ/}$	"betrayer of secrets" cf *yɛ̄ɛs*$^{ɛ/}$ "betray a secret"		
nānzū'us$^{ɛ/}$	"pepper"	*màngáʋŋ*^{ɔ}	"crab"
làngáʋŋ^{ɔ}	"crab"		
sākárʋ̀g^{ɔ}	"fox"	*sàbùa*	"lover, girlfriend"
sāmán^{nɛ}	"courtyard"	*sāngʋ́nnìr*^{ɛ}	"millipede"
zànkʋ̀'ar^{ɛ}	"jackal"	*Zàngbɛ̀og*^{ɔ}	"Hausa person"

Nàyī̩ig^{a} "thief" is written *na'ayiig* in NT/KB as if with the cb *nā'-* "cow", but it has L toneme initially and the vowel is definitely not glottalised (WK); nor is the sense limited to "cattle thief." It is an *a|ba* class *g*-stem: pl *nàyì̩ig-nàm*$^{a;}$ cf *nàyī̩igīm*^{m} "thievery." There is an analogical *ga|sɛ* pl *nàyī̩is*^{ɛ}. The Farefare cognate is *nàyì̩gà*, pl *nayigba* or *nayigsi*; Dagbani has *nayiɣa* pl *nayiɣsi* and also *tayiɣa*.

Some prefixes are connected with the verb negative particles *pō kʊ̀*:

kʊ̀ndʊ̀'ar^{ɛ}	"barren woman"; cf *dʊ̱'à*^{a} "bear, beget"
nɪ̀n-pō-nān$^{na/}$	"disrespectful person"; cf *nān*^{ɛ} "love, respect"
tʊ̀b-pō-wʊ́mnɪ̀b^{a}	"deaf people" (Rom 11:7) cf *tʊ̀bʊ̀r*^{ɛ} "ear", *wʊ̀m*^{m} "hear."

However, most cases show no identifiable negative meaning:

kʊ̀ndʊ̀ŋ^{a}	"jackal"	*gʊ̄mpʊ̄zɛ̄r*$^{ɛ/}$	"duck"
dāmpʊ̄sāar^{ɛ}	"stick"	*bān-kʊ́sɛ́l*^{lɛ}	"lizard"

Some original cbs have become partly bleached of their original meaning and/or simplified phonologically, and then detached from their regular paradigms after being ousted by new cbs based on analogy with sg forms.

Nɪ̀n- "body" is accepted by WK as cb of *nɪ̄ŋ*^{a} *nɪ̄ɪs*^{ɛ} [= Mooré *yĩnga*] but the word is rare; it appears in *nɪ̀n-tāa* "co-wife" and *nɪ̀n-gbɪ̄ŋ*$^{ɔ/}$ "human skin; body."

Dà- "man" has been replaced as regular cb by forms segmentally remodelled on sg and pl *dàʊ̱-*, *dàp-*, but *dà-* is seen in *dà-pāal*$^{a/}$ "son, boy" (*pāalíg* "new") and *dà-kɔ̀ɔ̆nr*^{ɛ} "son, bachelor" (cf *àràkɔ́ɲ̆'* "one.")

Pʊ̀- "woman" (cf *pʊ̱'ā*^{a} "woman" cb *pʊ̱'à-*) appears in *pʊ̀-kɔ̀ɔ̆nr*^{ɛ} "widow"; cf Mooré *pʊ̀gkõoré* "widow" along with *pʊ̀gsádà* "young woman" = Kusaal *pʊ̱'à-sādīr*$^{ɛ/}$.

Pō- "farm" (cf *pɔ̄ɔg*$^{ɔ/}$ "field, farm", pl *pɔ̄t*$^{ɛ/}$, cb *pɔ̄-*, Mooré *púʋgò* pl *púʋtò*) appears in *pō-kpāad*$^{a/}$ "farmer" (= *kpāad*$^{a/}$ *id*); tonally, it behaves as a M prefix 3.8.1.

Nà'- "chief"(?) appears before a number of nouns signifying animals and insects: *nà'-zɔ̀m*^{mɛ} "locust", *nà'-dàwān*$^{nɛ/}$ "pigeon" (=*dàwān*$^{nɛ/}$) and WK's *nà'-nɛ̄sɪ̄nnɛ̄og*$^{ɔ/}$ "centipede" (*nɛ̄sɪ̄nnɛ̄og*$^{ɔ/}$ "envious person" WK; others: "centipede.")

The cb perhaps relates to traditional folklore; cf *à-kɔ̄rā-dʃ̀əm*^{ma} "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier particle, like *à-dàalʊ́ŋ*^{ɔ} "stork", *à-gâʋɲ̆g*^{ɔ} "pied crow", *à-mús*^{ɛ} "cat."

10.2 Quantifiers and adverbs

Unlike noun prefixes, prefixes with quantifiers and adverbs have identifiable meanings. All such prefixed forms are liaison words 4.2.

All forms of the numbers 2 to 9 begin with a number prefix 12.5.1. The number prefixes are fossilised noun class agreement flexions. With the collapse of grammatical gender, the *a*|*ba* class agreement pronouns *ò bà* were generalised for animate gender and the *rɛ*|*aa* class singular pronoun *lì* was adopted for inanimate. In Dagbani, where there has been a similar change, the old plural pronoun *ŋa* is still found in older materials for inanimate plural (Olawsky 1999.) The *à-* of numbers used as quantifiers like *àyį́* "two", *àtáǹ* "three" etc used as quantifiers represents original **ŋa-*. This same *à-* is also seen in *àlá* "how many?" contrasting with *àlá* "thus", which has manner-adverb *à-*.

The expected corresponding number prefix *bà-* is not now found after nouns with animate gender, but is still preserved after personal pronouns: *tì bàtáǹ* "we three", *yà bàyɔ́pɔ̀ɛ̀* "you seven", *bà bàyį́* "they two."

The form of the number words 2-9 used for counting represents the old *mm* class agreement, in the "abstract" sense of *mm* 5.1: thus *ǹtáǹ* "three", *ǹnāas* "four", *ǹnū* "five." Nawdm, which preserves class agreement for numbers (*nídbá bàtáɦ* "three people") uses the agreement prefix for its cognate *m*-class for counting: *mtáɦ* "three" *mnàà* "four" *mnù* "five" etc (Babakima 2013, p51.)

The number prefix *bù-* appears in various adverbial number words; it probably represents either an old *bɔ* or *mm* class agreement.

àbùyį́	"twice"	*àbùtáǹ*	"three times"
àbùnāasí	"four times"	*bùpį̄igā*	"ten times"
nɔ̄ɔrím bùtáǹ	"three times"		

Several manner-adverbs have a prefix *à-* along with apocope-blocking 13.4. It is followed by M spreading. It differs from the number prefix in that it does *not* cause a preceding LF-final vowel to appear as *-a*.

àmɛ̄ŋá	"truly"	*àsīdā*	"truly"
àníŋà	"promptly"		

The same prefix is also seen in a number of proadverbs and in the locative *àgɔ́l*^{lɛ} "upwards."

11 Unsegmentable complex stems

Numerous words in Kusaal (including *Kʊ̄sâal*$^{\varepsilon}$ itself) have stems more complex structurally than ordinary unprefixed types but which are simply unanalysable. Most resemble forms with noun prefixes tonally, but examples occur with initial H, like *gbáňyà'a* "lazy person", cf Dagbani *gbinyaɣli* "laziness." Segmentally, they may contain unusual consonant clusters. Most are loanwords, but by no means all. Many names of ethnic groups and clans fall into this category, such as *Kʊ̄sâas*$^{\varepsilon}$ "Kusaasi", *Ňwāmpūrīs*$^{\varepsilon/}$ "Mamprussi", *Kʊ̀tām*$^{ma/}$ "Kotamba" (WK's clan.)

11.1 Loanwords

Nouns are by far the largest group of identifiable loanwords. They are often fitted into the noun class system by analogy 5.5. The initial *à-* of loanwords like *àràzánà* "heaven" and *àràzàk*^{a} "riches" is usually treated tonally as fixed-L 4.4.

Most identifiable loanwords come from **Hausa**, which is used by millions as a lingua franca in the savanna zone of West Africa. There are many ethnic *Hàusàawaa* in the Kusaasi area, especially in Bawku, but the language which has influenced Kusaal is the *Gaanancii* lingua franca; though mutually intelligible with Kano Hausa, *Gaanancii* among other differences uses [z] for [d͡ʒ], monophthongises diphthongs, drops the distinction between glottalic consonants and their plain counterparts, and lacks not only grammatical but even natural gender.

Nouns borrowed from Hausa often deviate from typical Kusaal noun structure. Examples include *dāká* "box", Hausa *àdakàa* (ultimately from Portuguese *arca*); *gādʊ̄* "bed", Hausa *gadoo*; *kɛ̀ɛkɛ̀* "bicycle", Hausa *kèekè*; *bákpàe̱* "week", from Hausa *bakwài* "seven", also used for "week" in *Gaanancii*.

Borrowed verbs are much less common. They are subject to the usual constraints on verb shapes 9.1, e.g. *dàam*^{m} "disturb, trouble", Hausa *dàamaa*; *bʊ̀g*$^{\varepsilon}$ "get drunk", Hausa *bùgu,* literally "get thoroughly beaten", a Hausa idiom.

Several function words are loans, probably from Hausa: *àsɛ́ɛ* "except", Hausa *sai*; *kʊ̄ʊ* "or", Hausa *koo*; *báa* "not a...", Hausa *bâa.*

Loanwords with Hausa counterparts did not necessarily originate in Hausa, itself a great borrower. Some appear in many languages of the region, e.g. *hālí* "until", Hausa *har*, Kikara Songhay *hálì*, possibly from Arabic *ħatta:* (Heath 2005.) With *làbì*^{ya} "be crouching behind something", Hausa *laɓèe* "crouch behind something to eavesdrop", Kikara Songhay *lá:bú* "hide behind or under something", the match of form and meaning is striking; if *làbì*^{ya} is a loan, its single-aspect flexion and dual-aspect derivatives are probably due to the analogy of *vābī*$^{ya/}$ "be lying prone."

Wide geographical distribution need not rule out Hausa origin or transmission, however: loans from Hausa have travelled far in West Africa, with an entry point into Songhay via the Zarma and Kaado languages of Niger.

Arabic loans are frequent throughout the languages of the Sahel and Savanna; thus, among many others: Kusaal *láafiyà*, Hausa *laafiyàa,* Mooré *làafĩ*, Kikara Songhay *ʔàlà:fíyà* "health", Arabic *ʔal-ʕa:fiya* "the wellness"; Kusaal *àràzàk*ᵃ, Hausa *arzìkii*, Mooré *àrzɛ́ká* "riches", Kikara Songhay *ʔárzúkù* "good luck", Arabic *ʔar-rizq* "the livelihood" pl *ʔarza:q*; *àràzánà* "heaven, sky", Hausa *àljannàa*, Mooré *àrzã̀nà*, Kikara Songhay *ʔàljánnà* "heaven, paradise", Arabic *ʔal-ɟanna* "the garden, paradise"; Kusaal *yàddā*/ "assent", Hausa *yàrda* (verb) "consent", Kikara Songhay *yárrɛ̀* "consent", probably from the Arabic *yardˤa:,* 3sg masculine ipfv of *radˤiya* "be satisfied"; Kusaal *Tàláatà*, Hausa *Tàlaatàa,* Arabic *ʔaθ-θala:θa:ʔ* "Tuesday."

Arabic words have mostly entered Kusaal via Hausa, but some Kusaal forms more closely resemble **Mooré**. Many Mossi live in the Kusaasi area, and many Kusaasi speak Mooré well; they often attribute local or individual peculiarities of Kusaal speech to Mooré influence. Arabic words have reached Mooré from several other West African languages widely used by Muslims, including Dyula and the Songhay languages. Thus *màl̩ìāk*ᵃ/ "angel" (*malek* in NT versions prior to 2016) is derived from the Arabic *malʔak*; the vocalism suggests transmission via Mooré *màlɛ́kà*. The forms clearly do not match Hausa *màlaa'ikàa*, which is from the Arabic plural *mala:ʔika*. Similarly, *Sʊ̄táanà* "Satan" matches Mooré *Sʋtãana* rather than Hausa *shàiɗân*, which is a learned borrowing of the Arabic *ʃaytˤa:n*.

Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso) and used Mooré materials, leading to borrowing and calquing. *Wínnà'am*ᵐ (WK) *Wínà'am*ᵐ (*Wina'am* NT/KB) is "God" in Christian materials, though the Creator of traditional religion often appears simply as *Wīn*ⁿɛ/ in proverbs etc. *Wínnà'am* looks like a compound of *wīn*ⁿɛ/ "god" and the stem of *nà'ab*ᵃ "chief" or *nā'am*ᵐ "chieftaincy", but the tones would then have been **Wīn-nâ'am*, and the prevalence of *Wínà'am* with single *n* confirms that the form is not a synchronic compound. Direct borrowing of Mooré *Wɛ̃̄nnàám* would not account for the glottalised *a'a*, and the immediate source is probably **Toende Kusaal**. Niggli has *Wínā'am*, with a tonal fall like Agolle *Wínà'am*, and single *n*, reflecting the loss of consonant gemination in Toende everywhere except before LF affix vowels.

Faangid "saviour" (NT/KB) is read [fã:g̟ʲɪd] by my informants; preservation of *g* in this environment is exceptional, the only other cases in my data being *faangir* "salvation" and the gerund *zi̱'əg*ᵃ of *zi̱'e*ʸᵃ "be standing" used by DK KT instead of *zi̱'a*. The agent noun of *fāe*/ "save" is *fāaňd*ᵃ/, identical to the agent noun of *fāň* "snatch", NT/KB *faand* "robber"; WK confirmed that *fāaňd*ᵃ/ has *both* meanings in his idiolect. *Faangid* is probably another loan from Toende Kusaal, which can retain **g* in this position: Niggli has *fãagɪt* and *fãat* for "saviour", with *fãat* also glossed "robber." *Wínà'am fāaňgíd fāaňgír* are used by many Agolle speakers. Older NT versions also wrote the Toende forms *aaruŋ* (Toende *ãarʊ̀ŋ*) for *àňrʊ̀ŋ* "boat", and *malek* (Toende *màlɛ́k*, Mooré *màlɛ́kà*) for *màl̩ìāk* "angel", but KB has *anrʊŋ* and *maliak* throughout, matching the usage of my informants and of the audio 1996 version.

A clear **Mampruli** loanword is WK's *kɪ̄ibʊ́* cb *kɪ̄ib-* "soap", which he uses instead of Kusaal *kī'ɪbɔ*/. The length and quality of the vowels identify the source as Mampruli *kyiibu*: contrast Farefare *kí'íbɔ́*, Dagbani *chibo*. Other words with singulars ending in *-ɪ* or *-ʊ* also probably originated as loans from Mampruli or Mooré.

Loanwords of **Songhay** origin include *bʊ̀rkɪ̀n*a "honest person", Mooré *bùrkĩná* "free, noble", Dagbani *bilchina* "free, not slave", cf Kikara Songhay *bòrkǐn* "noble (caste)" and *bàu̯ŋʊ̀*, used only in *kpɛ̀ň' bàu̯ŋʊ̀* "get circumcised" (*kpɛ̀ň'* "enter"), Mooré *kẽ bãongó id*, cf Kikara Songhay *bàŋgù* "pool, spring", *à húró bàŋgù* "he entered the pool", i.e. "he was circumcised."

Loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana, include *kɔ̄dʊ́* "banana", Twi *kwadu*; *sāafī* "lock, key", Twi *safẽ* "key" (from Portuguese *chave*); *bʊ̄rɪyá* "Christmas", Twi *bronya*.

English loanwords sufficiently naturalised to be used by speakers unfamiliar with English have often undergone considerable changes: *àlɔ́pɪ̀r*ɛ "aeroplane", perhaps a back-formation from [alɔpɪlɪn] taken as a locative *àlɔ́pɪ̀rī=n*ɛ/; *dʊ́'atà* "doctor" (cf Dagbani *dɔ́χtɛ́* id); *tɔ́klàe* "torch" ("torchlight"); *lɔ́r*ɛ "car, lorry" (often borrowed even in Francophone Africa: cf Mooré *lórè*, Nawdm *lɔ̀ɔ́r̂*); *pɔɔtim* (Jeremiah 20:10) "complain about officially" ("report.")

English stress may be represented by a H toneme which remains fixed throughout the paradigm: *lɔ́yà* "cars", not **lɔ̄yá*.

Several words of English origin have probably been transmitted via Hausa: *kɔ́tʊ̀* "court", Hausa *kootù*; *sɔ́gi̯à*a "soldier", Hausa *soojà*; *tɛ́ɛbʊ̀l*ɛ "table", Hausa *teebùr*; *wādá* "law", Hausa *oodà* , from English "order", with Kusaal sg *wādīr*ɛ/ cb *wād-* created by back-formation.

A clear **French** loan in Agolle Kusaal is *làmpɔ̄* (i.e. *l'impôt*) "tax", as in *làmpɔ̄-dɪ̂'əs*a "tax gatherer." This word is widespread in northern Ghana (Dagbani *lampoo*), reflecting extensive French influence in the region prior to the British annexation. Another word probably derived from French is *kàsɛ̄t*a/ "witness, testimony", Mooré *kàsétò* "testimony, proof", as in *kàsét sébrè* "receipt" ("evidence writing.") The ultimate origin is probably French *cachet* in the sense "seal (of authenticity)", with *-t-* perhaps introduced from the corresponding verb: *il cachète* "he seals." Mooré and Farefare *kàsétò* have only the abstract sense "testimony"; the adaptation as an *a*|*ba* class human-reference noun "witness" seems to be a Kusaal innovation enabled by the dropping of the final vowel.

There are naturally many more French loans in the Toende Kusaal of Burkina Faso (Niggli 2014.)

12 Noun phrases

12.1 Structure

A nominal phrase may be either a noun phrase (NP) or an adverbial phrase (AdvP.) A noun phrase has a noun, pronoun or quantifier as head. If present, the **article** *lā/* occurs last in a NP. (For the sole exception, see 16.11.)

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.

dāu̯ lā bútìŋ	"the man's cup" ("cup of the man")
sālımā bútìŋ	"a gold cup" ("cup of gold")

Predependents with specific or countable-generic reference are **determiners** (answering "which?"), as are the article, dependent pronouns, quantifiers or AdvPs following the NP head; other dependents are **modifiers** (answering "what kind of?")

Relative clauses 21.2 are also NPs.

Compounding is pervasive in NP structure where most languages use uncompounded constructions. Kusaal compounds fall into two basic types, depending on whether the combining form is head or dependent. Compounding is the regular construction for head nouns with following adjectives and dependent pronouns:

bʊ̄ʊg	"goat"	*bʊ̀-pìəlìg*	"white goat"
bʊ̀-kàŋā	"this goat"	*bʊ̀-pìəl-kàŋā*	"this white goat"

Compounds with non-referential cbs as *dependents* are also common:

	nà'ab lā wíd-zʊ̄ʊr	"the chief's horse-tail"
vs	*nà'ab lā wîəf zʊ̂ʊr*	"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 5.2. Compounding is so productive that the cb is a regular part of noun and adjective flexion 5.1.

For the tone sandhi rules which affect the component following the combining form see 4.4 4.5. They are not sensitive to whether the cb is head or dependent.

Compounds may have compound components, most often as a result of the addition of an adjective or dependent pronoun to an existing compound, where the binding of the new element is weaker than that within the existing compound:

[*bʊ̀-pị̀əl-*]*kàŋā*	"this [white goat]"
[*nị̄n-wɔ́k-*]*pị̀əlìg*	"white [tall person]"
[*zà'-nɔ̄-*]*pị́əlìg*	"white gate" ("white [compound-mouth]")

A compound may appear as generic argument to a following deverbal noun:

[*zà'-nɔ̄-*]*gúr*	"gate-keeper"
[[*zà'-nɔ̄-*]*gúr-*]*kàŋā*	"this [gate-keeper]"

Noun-adjective compounds can be used as bahuvrihi adjectives 12.8.1.1:

kʊ̀g-[*nɔ̄b-wɔ́k*]	"[long-legged] stool"

Compounds may contain uncompounded elements within their structure.

Determiners always bind looser than modifiers. Cbs as modifiers bind tighter to following than preceding words, but cbs as generic arguments bind closer to preceding modifiers than to the following word:

[*sālɪmā bʊ́tìŋ-*]*kàŋā*	"this [gold cup]"
[[*sālɪmā lá'-*]*màan-*]*kàŋā*	"this [[gold-item]-maker]"
ò [[*sālɪmā lá'-*]*māan*]	"her [[gold-item]-maker]"
sālɪmā [*zá'-nɔ̄ɔr*]	"golden gate" ("golden [compound-mouth]")
zūgʊ́=n [*nị́f-gbáu̯ŋ*]	"upper eyelid" ("upper [eye-skin]")
ānzúrɪfà nɛ̄ sālɪmā lâ'ad	"silver and gold goods"
[*ānzúrɪfà lá'-*]*māan*	"silversmith" ("[silver goods]-maker")
[*ānzúrɪfà nɛ̄ sālɪmā lá'-*]*māan*	"silver- and goldsmith"

Adjective cbs can only be used before an adjective or a dependent pronoun: a noun-adjective compound as a generic argument must adopt a sg or pl form:

[*fū-zɛ́ňdà*] *kùɵs*	"seller of red (i.e. dyed) cloth"

not **fū-zɛ́ň'-kùɵs*

Coordination is characteristically a feature of NPs, but also found in AdvPs.

The particles for "or" are *bɛ̄ɛ* or *kʊ̄ʊ*, synonymous in this usage. By default they are taken as exclusive "or" but can admit the inclusive interpretation "or both":

Dāu̯ lā ňyɛ́ bị̄-díbìŋ kʊ̄ʊ bị̄-pʊ́ŋàa=ø?

Man:SG ART see child-boy:SG or child-girl:SG=PQ?

"Did the man see a boy or a girl?"

Bi̱ig lā kʊ̄ʊ dāu̱ lā kʊ́ʊ bà wʊ̄sā
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 *nɛ̄*, fundamentally the same word as the preposition "with"; it can only link clauses if they have been nominalised. It is not possible to omit coordinating particles in a series of three or more items, or to use *nɛ̄* to join two words with the same referent:

À-Wīn nɛ́ À-Bʊ̄gʊ̄r nɛ́ À-Nà'ab "Awini, Abugri and Anaba"
dʊ́'atà nɛ̄ nâ'ab "a doctor and a chief" (*two* people)

Coordinated heads may not share determiners:

m *ba'abiis nɛ* ***m*** *saamnama*
m̀ bā'-bi̱is nɛ́ m̀ sàam-nàmā=ø
1SG father-child:PL with 1SG father-PL=VOC
"my siblings and [my] fathers!" (Acts 7:2)

pu̱'ā ***lā*** *nɛ̄ dāu̱* ***lā*** "the woman and the man"
woman:SG ART with man:SG ART

An exception is *yi̱igá* "firstly" used as a predependent for "first" 12.7.3:

yiiga saŋgbauŋ nɛ teŋgbauŋ nɛ atɛuk
yi̱igá sàŋ-gbàu̱ŋ nɛ̄ tɛ́ŋ-gbàu̱ŋ nɛ́ àtìu̱k
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 by ellipsis:

Kʊ̄sâal sólɪmà nɛ̄ si̱ilímà "Kusaasi stories and [Kusaal] proverbs"
Kusaal story:PL with proverb:PL

Kʊ̄sâas kûɵb nɛ̄ yi̱r "Kusaasi farming and [Kusaasi] housing"
Kusaasi:PL hoeing with house:SG

sālɪmā bʊ́tìɪs nɛ̄ díɪsímà "gold cups and [gold] spoons"
gold cup:PL with spoon:PL ("all of them gold", KT)

However, KT WK both agreed that *sālımā lâ'ad nɛ̄ bʊ̄tī ıs* must mean "gold goods and [not gold] cups", WK offering the correction

sālımā lâ'ad né ò bʊ̄tī ıs	"gold goods and (gold) cups" WK
gold item:PL with 3AN cup:PL	(for *ò* referring to *sālımā* see 12.3)

Tony Naden notes that "cups" being a subtype of "goods" impairs the parallel between the coordinated units, making it less natural to supply the ellipsis.

Coordinated heads may even occur before an adjective:

Ka m nyɛ saŋgbauŋ nɛ teŋgbaung paal.
Kà m̀ ǹyɛ̄ sáŋ-gbàu̱ŋ- nɛ̄ tɛ́ŋ-gbàu̱ŋ-páal
And 1SG see heaven-skin- with earth-skin-new:SG.
"And I saw a new heaven and a new earth." (Rev 21:1)

However, cbs as *dependents* may not be coordinated:

*[bɛ̄ŋíd nɛ̄ kı̄] kûɵs	not possible for "seller of *bɛ̄ŋíd nɛ̄ kı̄*" (beanleaf-and-millet, a traditional snack)

Dependent NPs or AdvPs can naturally include coordinated components:

o nya'andɔlib pii nɛ yi	"his twelve disciples" (Mt 26:20)
ò ǹyà'an-dɔ̀llìb pı̄i nɛ̄ yı́'	
3AN disciple:PL ten with two	
dʊ́'atà nɛ̄ nâ'ab lā lɔ́yà	"Doctor's and the chief's cars"
doctor:SG with chief:SG ART car:PL	
sālımā nɛ̄ ānzúrıfà lâ'ad	"gold and silver goods"
gold with silver item:PL	

The last two examples are ambiguous; they can also be construed as ellipsis of the first of two identical heads within a coordination of two dependent-head NPs:

	dʊ́'atà (*lɔ́yà*) *nɛ̄ nâ'ab lā lɔ́yà*	"[Doctor's cars] and [the chief's cars]"
	sālımā (*lâ'ad*) *nɛ̄ ānzúrıfà lâ'ad*	"[gold goods] and [silver goods]"
vs	[*dʊ́'atà nɛ̄ nâ'ab lā*] *lɔ́yà*	"the cars of [Doctor-and-the-chief]"
	[*sālımā nɛ̄ ānzúrıfà*] *lâ'ad*	"[gold-and-silver] goods"

This is impossible if the ellipted element would have been a cb: an elliptical reading of *ānzúrɪfà nɛ̄ sālɪmā lá'-māan* "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 13.3; for relative clauses see 21.2.

NPs may precede personal names in apposition. The personifier particle is not omitted, showing that the relationship is not dependent-head 12.6.

Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì pū nār yé fù dí fù bā'-bḭ̂ig pu̱'á Herodiasɛ=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 lɛ̀bìs yɛ̄, ɛ̄ɛ̌n, ò zu̱à À-Sḭ̀bɪgī◡ n kābɪríd.
...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

Personal pronouns in apposition use free forms 24.6:

Man Paul [...] *pʋ'ʋsidi ya.* "I, Paul ... greet you." (2 Thess 3:17)
Mān Paul [...] *pʋ́'ʋsìdī=yá.*
1SG Paul greet:IPFV=2PL.

Apposition is to be distinguished from cases where a preceding head has no combining form, as with quantifiers, or coordinated structures, and also from cases of segmental remodelling of cbs 5.2. The 1996 NT has *Nonaar Paal* for 1976 *Nonapaal Nɔ̄-ná-páal* "New Testament", *Siig Suŋ* for *Sisuŋ Sì-sʋ̀ŋ* "Holy Spirit", but the audio NT has *Sìɪg-sʋ̀ŋ* (*Sîɪg-sʋ̀ŋ* with M spreading) or *Sì-sʋ̀ŋ*, never **Sīɪg-sʋ́ŋ*.

12.2 Number

Number is a category only of nouns, pronouns and quantifiers. Agreement is confined to pronouns. However, in a compound of a noun with a following adjective or dependent pronoun, the *dependent* inflects to show the number of the head 12.8.

Count nouns distinguish sg/pl, unlike **mass** nouns, which characteristically refer to liquids, substances or abstractions. Count nouns may be abstract:

zɔ̄ɔgɔ	*zɔ̄ɔsɛ*		"race"
bū'ɵsʋ́gɔ	*bū'ɵsá*	*bū'ɵs-*	"question"
zàaňsʋ́ŋɔ	*zàaňsímà*	*zàaňsʋ́ŋ-*	"dream"

The count/mass distinction affects the choice of quantifiers 12.5, the form of plurals with *nàm*[a] 5.4, and the meaning of NPs as predependents 12.7.2.

Typical underived mass nouns belong to the *bɔ* and *mm* noun classes, but gerunds of 3-mora-stem verbs regularly show sg *rɛ* or *gɔ*, and a number of words referring to uncountables or abstracts are formally plural, but construed as singular:

bāǎ'as[ɛ]	*bàǎ'-*	"disease"	
ǎyɔ̄'ɔs[ɛ/]	*ǎyɔ̄'-*	"smoke"	
tàdɪmís[ɛ]		"weakness"	
zɔ̄lɪmís[ɛ]		"foolishness"	
mɛ̄t[ɛ/]	*mɛ̄t-*	"pus"	
kūt[ɛ]	*kùt-*	"iron"	
zùɵd[ɛ]		"friendship"	
bʊ̄ʋd[ɛ]		"innocence"	
sḭ̄iǎd[ɛ/]		"honey"	
nḭ̄n-pʊ̂ʋd[ɛ]		"pus"	
wāad[ɛ/]		"cold weather"	
sūǎ-pɛ̂ɛn[nɛ]		"anger"	
kṵ'à-nūud[ɛ/]		"thirst"	
sālɪmā	*sàlìm-*	"gold"	
sìdà	*sìd-*	"truth"	

Kūt[ɛ] is also "nail"; the original sg *kūdʊ̄g*[ɔ] appears in the name *À-Kūdʊ̄g*[ɔ] 26.2.

So too with a number of irregularly formed deverbal abstract nouns:

	gɛ̄ɛǎmís[ɛ]	"madness"	←	*gɛ̄ɛǎm*[m/]	"madden, go mad"
	bùdɪmís[ɛ]	"confusion"	←	*bùdìm*[m]	"confuse"
	tìtʊ̄mīs[ɛ]	"sending"	←	*tʊ̀m*[m]	"send"
	zḭ̄id[ɛ/]	"carrying on head"	←	*zḭ̄*	"carry on head"
	vūud[ɛ/]	"noise"	←	*vū*	"make a noise"
	kɛ̄n[nɛ/]	"arrival"	←	*kɛ̄ǎ*	"come"
	pi̱àǎ'ad[ɛ]	"speech"	←	*pi̱āǎ'*[a]	"speak" (irreg. tones)
[sg	*pi̱àu̱ǎk*[ɔ]	"word"]			
	dḭ̀'əmà	"festival"	←	*dḭ̀'əm*[m]	"play, not be serious"
	tʊ̄ʋmā	"work"	←	*tʊ̀m*[m]	"work"
[sg	*tʊ̄ʋm*[mɛ]	"deed"]			
	tɛ̄ǎ'ɛsá	"thought"	cf	*tɛ̄ǎ'ɛsá yīnní*	"one thought"

A single object may be referred to by a plural naming its components:

	dà-pʊ̄vdá	*dà-pʊ̄vdá nàm*[a]	"cross"
cf	*dà-pʊ̄vdír*[ɛ]	*dà-pʊ̄vdá*	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

lāu̯k[ɔ]	*lā'ad*[ɛ]	*là'-*	"piece of goods"
lā'af[ɔ]	*lịgɪdī*	*là'-* or *lị̀g-*	"cowrie" pl "money"

Mass nouns can be used in count senses: *dāam nám* "beers."
Some count nouns can have mass senses:

fūug dôɔg	"tent" (cloth hut): *fūug* "item of clothing, shirt"
dàad bʊ́n-nám	"wooden things": *dàad* "pieces of wood"

12.3 Gender

Gender is marked only in pronouns. It is natural, distinguishing **animate** from **inanimate**. Not only human beings, but also supernatural beings, "fairies" and the like have "animate" gender. Without a context, my informants all rejected

**Ò à nɛ̄ náaf.*	attempted "It is a cow."
3AN COP FOC cow:SG.	

Nevertheless, written sources often use animate pronouns for higher animals:

*Ka wief ya'a sigi li ni, li zulʊŋ na paae **o** salibir.*
Kà wị̀əf yá' sīgí◡ lì nī, lì zùlʊ̀ŋ ná pāe ò sàlɪbìr.
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. Even body parts have animate gender when represented as speaking in

*Nɔbir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋgbiŋ la nii," lin kʊ nyaŋi kɛ ka **o** ka' niŋgbiŋ la nii.*
Nɔ́bìr yá' yɛ̀lī=n yɛ̄, 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:SG ART
nɪ́ɪ=ø, līn kʊ́ ňyāŋī◡ø kɛ́ kà ò kā' nín-gbīŋ lā nɪ́ɪ=ø.
LOC=NEG, DEM.IN NEG.IRR prevail CAT cause and 3AN NEG.BE body:SG ART LOC=NEG.
"If a leg said, 'Because I am not a hand, I am not in the body', that could not cause it not to be in the body." (1 Cor 12:15)

Trees are animate in the traditional world view:

Tiig wela bigisid ***on*** *a si'em.*
Tìıg wɛ́là bịgısìd ɔ́n àň sị̄'əm.
Tree:SG fruit:PL show:IPFV 3AN:NZ COP INDF.ADV.
"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

Babies may be counted as animate or inanimate gender:

Ò/Lì à nɛ̄ bị́-lị̄a. "He/she/it is a baby."
3AN/3IN COP FOC child-baby:SG.

The relevant distinction is thus whether the referent is being regarded as a "person"; if first or second person pronouns might apply, the gender is "animate."

A specific human/non-human distinction appears in morphology, where the *a|ba* noun class has exclusively human reference. Elsewhere, such distinctions are lexical, as with *nị̄n-* "person" vs *bʊ̄n-* "thing" as dummy cbs with adjectives. The use of human-reference nouns specifically as adjectives 12.8.1.2 reflects the fact that if such nouns are not unique identifiers or labels for roles they are descriptive.

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 *nɛ̄'*$^{/}$, are used indifferently for sg or pl, occasionally with *nàm*^{a} plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals *bàmmā*$^{/}$ *bàn*^{ɛ} *sị̄əbā* of the *dependent* pronouns for inanimate, and my informants use the animate plural forms of all pronouns freely for both genders both as dependents and heads:

Bà à nɛ̄ kūgá. "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.

Nị̄f-káŋā, ɔ̄n sâň'am nɛ̄.
Eye-DEMST.SG, 3AN.CNTR spoil FOC.
"This eye, it's spoilt." KT (Overheard)

M̀ pʊ̄ ňyɛ̄ó=o=ø. "I can't find it [a stethoscope]" (Overheard)
1SG NEG.IND see=3AN=NEG.

sālɪmā lâ'ad né ò bʊ̄tīɪs "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 *lì* is not changed to animate *ò* to agree with an animate complement of *àe̯ň*^{ya} "be something":

Li anɛ Zugsɔb la. "It is the Lord." (Jn 21:7)
Lì à nɛ̄ Zūg-sɔ́b lā.
3IN COP FOC Lord ART.

12.4 Pronouns

12.4.1 Personal

		Right-bound	Enclitic	Free	Subject+*ǹ*
Sg	1st	*m̀*	*m*^{a}	*mān* SF *mánɛ̀* LF	*mán*
	2nd	*fʊ̀*	*f*^{ʊ}	*fʊ̄n* SF *fʊ́nɛ̀* LF	*fʊ́n*
	3rd an	*ò*	^{o}	*ɔ̄n*^{ɛ}	*ɔ́n*
	3rd inan	*lì* or *dì*	*lɪ*	*līn*^{ɛ} or *dīn*^{ɛ}	*lín* or *dín*
Pl	1st	*tì*	*tɪ*	*tīnám*^{a}	*tīnámì*
	2nd	*yà*	*ya*	*yānám*^{a}	*yānámì*
	3rd	*bà*	*ba*	*bān*^{ɛ}	*bán*

"an"= animate, "inan" = inanimate.

Toende Kusaal has *ʊ̃* for *ò* (probably ← **ŋ͡mʊ*) and *tʊn nam* for *tīnám yānám*.

Mām also occurs for 1sg in any role. The bound forms are non-contrastive; they are all liaison words 4.2. The liaison enclitic pronouns are used for VP objects, right-bound for all other roles. Personal pronouns are never dependent: in e.g. *m̀ bi̯ig* "my child", *m̀* is the head of its own NP, and it is *this NP* which is the predependent of *bi̯ig* "child", exactly like *nà'ab lā* "the chief" in *nà'ab lā bi̯ig* "the chief's child." There are no possessive pronouns.

The "+*ǹ*" forms are used as subjects in *ǹ*-clauses 21. The 2pl subject has an enclitic form ^{ya} used *after* imperatives 18.3 with the allomorph *ní* before liaison.

Free forms may be used for cbs before relative pronouns:

Fʊn kanɛ buoli fʊ mɛŋ ... "You who call yourself ... (Rom 2:17)
Fʊ̄n-kánì bùʊ̀lì‿ fʊ̀ mɛ̄ŋ ...
2SG-REL.SG call 2SG self ...

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.
Bʊ̀ŋ yá' bɔ̀ɔd yɛ́ ò lūbʊ́=f, fʊ̀ pʊ̄ ňyɛ̄tí◡ ò tʊ̀bāa=ø.
Donkey:SG if want that 3AN throw.off=2SG, 2SG NEG.IND see:IPFV 3AN ear:PL=NEG.
"If a donkey wants to throw you off, you don't see his ears." KSS p44
("Where there's a will, there's a way.")

3pl is used as a non-specific "they" for turning passive constructions actively:

Bà yɔ̀ɔdī=f sʊ́ŋàa=ø?
3PL pay:IPFV=2SG good:ADV=PQ?
"Are you well paid?" "Do they [never mentioned] pay you well?" SB

This construction has become grammaticalised so far that in *n*-catenation, the object can be construed as the grammatical subject 19.1, e.g.

Diib wʊsa nari ba di. "All foods may be eaten." (Rom 14:20)
Dīıb wʊ̄sā nárì◡ ø bà dí.
Food all must CAT 3PL eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis 17.2.2 and logophoric use of the free pronouns 22.2.

12.4.2 Demonstrative

	Animate sg	Inanimate sg		Plural
Long	*ɔ̀ŋā*/	*lìnā*/	far	*bàmmā*/
Short	*ɔ̀n*ɛ	*lìn*ɛ	far	*bàn*ɛ
Long		*nɛ̄'ŋá*	near	
Short		*nɛ̄'*/	near	*nɛ̄'-nám*a NT
Long	*kàŋā*/	*kàŋā*/		
Short	*kàn*ɛ	*kàn*ɛ		

Note the tone difference between *ɔ̀n*ɛ *lìn*ɛ *bàn*ɛ and free 3rd person pronouns.

"Short" demonstratives are used as the basis of relative pronouns 21.2.2, for discourse deixis, and for interrogative "which?":

Fʋnɛ an dau kan la!	"*You* are that man!" (2 Samuel 12:7)
Fʊ̄nī◡ ø áǹ dáu̯-kàn lā!	[i.e. in the story just related.]
2SG.CNTR CAT COP man-DEM.SG ART!	

Lìnɛ̀?	"Which one?"
Nīf-kánɛ̀?	"Which eye?"
Nīn-kánɛ̀?	"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 *lā/* and "this" by a following *ǹwà* (cf French *là* and *ci*.) This use of *lā/* as deictic is enabled by the fact that demonstratives automatically make the NP definite 12.8.5.

sān-káŋā	"at this/that time"
dàu̯-kàŋā sâam	"this/that man's father"
dàu̯-kàŋā lā sâam	"that man's father"
dàu̯-kàŋā ǹwá sâam	"this man's father"

Ɔ̀ŋā/ lìnā/ nɛ̄'ŋá nɛ̄'/ appear only as NP heads, and *ɔ̀nᵋ lìnᵋ* cannot follow a cb; however, *bàmmā/ bànᵋ* can be used either uncompounded or after a cb.

Kànᵋ kàŋā/ 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.) *Kànᵋ* may also follow a free personal pronoun, and *àràkɔ́ǹ'* "one", but no other quantifiers. NT avoids *kàŋā/ kànᵋ* for animate gender.

dʊ́'atà lā lɔ́r-kàŋā	"this car of the doctor's"
bʊ̀-kàŋā lā	"that goat"
nɔ̄-pʃ̣əl-kàŋā	"this white hen"
fʊ̄n-kánì bùəl …	"you who call …"

12.4.3 Indefinite

Animate sg	Inanimate sg	Plural
sɔ̄'	*sʃ̣'əlᵃ*	*sʃ̣əbā* (*unglottalised* vowel)
sʃ̣'a	*sʃ̣'a*	

Sɔ̄' sʃ̣'əlᵃ sʃ̣əbā may be heads or dependents, and may follow cbs. *Sʃ̣'a* is only dependent; for NT WK (not KT) it is much commoner than *sʃ̣'əlᵃ* as dependent. WK feels *sʃ̣'a* is pejorative if used for people. For indefinites in relative clauses see 21.2.1.

The sense is "some, someone, something", "a certain", indefinite but *specific*:

yà bị̀-sɔ̄' "a certain child of yours"
2PL child-INDF.AN

The meaning is often "another, a different" (cf Hausa *wani*, Jaggar p314.)

Mɛɛri onɛ an Magdalen nɛ Mɛɛri sɔ'
Meeri ɔ́nì àn̆ Magdalen nɛ̄ Meeri sɔ̄'
Mary REL.AN COP Magdalen with Mary INDF.AN
"Mary who was Magdalen and another Mary" (Mt 28:1)

M̀ ná tī=f tí-sī̤'a.
1SG IRR give=2SG medicine-INDF.IN.
"I'll give you a different medicine." WK

Indefinite pronouns can be used in presentational constructions, but often still imply "another, a different": *Dāu̱ dāa bɛ́ ...* "Once there was a man ...", but

Dàu̱-sɔ̄' *dāa bɛ́ ...* "There was a certain/another man ..."
Man-INDF.AN TNS EXIST ...

Sɔ̄'/sī̤'əl mɛ́-kàmà means "anyone, anything, everyone, everything":

O niŋid si'el mɛkama sʋ'ʋŋa.
Ò nìŋìd sī̤'əl mɛ́-kàmà sʋ́ŋā.
3AN do:IPFV INDF.IN also-whatever good:ADV.
"He does everything well." (Mk 7:37)

With negatives the indefinites mean "nobody, nothing":

Ka so' kudin ku len nyee li ya'asa.
Kà sɔ̄' kʋ̄dīm kʋ́ lɛ̄m ǹyɛ́ɛ=lī yá'asā=ø.
And INDF.AN ever NEG.IRR again see=3IN again=NEG.
"Nobody will ever see it again." (Rev 18:21, 1996)

Sɔ̄' kā'e=ø. "There's nobody there."
INDF.AN NEG.BE=NEG.

M̀ pʋ̄ yɛ́l sī̤'əlā=ø. "I didn't say anything."
1SG NEG.IND say INDF.IN=NEG.

12.4.4 Interrogative

Animate		Inanimate	
ànɔ̂'ɔn$^{\varepsilon}$	"who?"	*bɔ̄*	"what?"

Plurals with *nàm*^{a} may be used if a specifically plural answer is being sought.
Bɔ̄ kɨ́mm "what exactly?" with the ideophone *kɨ́mm* is common in KB.
The initial *à-* of *ànɔ̂'ɔn*$^{\varepsilon}$ behaves like the manner-adverb prefix in liaison 4.2:

... keŋ tisi anɔ'ɔnɛ? "to go to whom?" (1 Samuel 6:20)
... kɛ̄ŋ◡ ø tísì◡ ànɔ́'ɔnɛ̀=ø?
... go CAT give who=CQ?

Bɔ̄ can be used after a cb as a dependent interrogative "what?":

nā'-bɔ́?	"what cow?" WK DK (*náaf bɔ́* can only mean "What, of a cow's?")
bɔ̀-bɔ̀?	"what goat?"
dā-bɔ́?	"what beer?"

The compound *bɔ̀-būudī* "what kind of?" can also be used as a dependent:

nā'-bɔ́-bùudì?	"what kind of cow?"
dā-bɔ́-bùudì?	"what kind of beer?"

Fù á nɛ̄ bɔ́-bùudì=ø? "What ethnic group do you belong to?"
2SG COP FOC what-sort=CQ?

Bɔ̀- can be used as a predependent, querying a description: "what sort of ...?"

Fù tʊ́m bɔ́-tʊ̀ʊmà=ø? "What kind of work do you do?"
2SG work:IPFV what-work=CQ?

Bo yir ka ya na me' n tis mane?
Bɔ̀-yɪ́r kà yà ná mɛ̄ n tís mánɛ̀=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)

12.4.5 Reciprocal

Tāabā "one another" appears as *tāab* clause-medially for some speakers. It can be used after a cb, meaning "fellow-": *ò tʊ̀m-tʊ̀m-tāabā* "his fellow-workers."

Sʊ̀ŋɪmī=ø *tāabā.* "Help one another."
Help:IMP=2PL.SUB each.other.

Tì yûug nɛ̄ tāabā. "It's been a long time." KT
1PL delay with each.other.

Bà dɔ̀l nɛ̄ tāabā. "They went together." (*dɔ̄l*[la/] "accompany")
3PL follow with each.other.

12.4.6 Reflexive

Mɛ̄ŋ[a/] "self" always has a predependent. It is used indifferently for sg/pl: *m̀ mɛ̄ŋ* "myself", *yà mɛ̄ŋ* "yourselves."

nà'ab lā mɛ́ŋ "the chief himself"
chief:SG ART self

Bà ǹyɛ́ɛ◡ bà mɛ̄ŋ. "They've seen for themselves."
3PL see 3PL self.

"Self" forms must be used for complements referring to the clause subject:

M̀ ǹwɛ́'ɛ◡m mɛ̄ŋ. "I hit myself."
1SG hit 1SG self. not **M̀ ǹwɛ̂'ɛ m* or **M̀ ǹwɛ́' mān.*

Kusaal uses a pronoun possessor with body parts acted on by their owner, e.g.

Ba pʊ piesidi ba nu'us wʊʊ lin nar si'em la ka ditta.
Bà pʊ̄ pɪ̣əsídí◡ bà nû'us wʊ̄ʊ lín nār sɪ̣'əm lá kà dítā=ø.
3PL NEG.IND clean:IPFV 3PL hand:PL like 3IN:NZ be.right INDF.ADV ART and eat:IPFV=NEG.
"They don't wash their hands properly before they eat." (Mt 15:1)

Where ordinary pronouns would be permissible, using *mɛ̄ŋ* implies contrast:

M̀ pɪ́ə◡ m̀ mɛ̄ŋ nû'us. "I washed my own hands."
1SG wash 1SG self hand:PL.

Fù mɛ̄ŋ kʊ̄ʊ bị́-lị̀àa=ø? "Yourself or the baby?"
2SG self or child-baby:SG=CQ? ("Which of you needs the doctor?")

See also 12.8.3 on *àmɛ̄ŋá* "really, truly" as a modifier "genuine, real"; cf the adjective *mɛ̄ŋír*ᵋ seen in *yɛ̄l-mɛ́ŋìr*ᵋ "truth" ("genuine matter.")

12.4.7 Dummy head

*Sɔ̄b*ᵃ is a dummy head for a preceding NP or AdvP dependent; it specifies number and gender but is otherwise semantically empty.

Animate	sg	*sɔ̄b*ᵃ	pl *dìm*ᵃ
Inanimate	sg/pl	*dìn*ⁿᵋ	

NP predependent constructions have their usual meanings 12.7.2:

*mān dín*ⁿᵋ	"my one, mine"
*À-Wīn dím*ᵃ	"Awini's family"

Fʊ̄n pi̯âň'ad nɛ̄ tīnám dín.
2SG.CNTR speak:IPFV FOC 1PL.CNTR NULL.IN.
("We can't speak your language but ...") "You're speaking ours."

*pù-pị̀əlìm sɔ́b*ᵃ	
pl *pù-pị̀əlìm dím*ᵃ	"holy person" (*pù-pị̀əlìm*ᵐ "holiness")
*dūnɪyā ní dìn*ⁿᵋ	"earthly one" (1 Cor 15:44)
*Bɔ̀k dím*ᵃ	"Bawku people"
*yị̄igá sɔ̄b*ᵃ	"first (person)" beside *yị̄ig-sɔ́b*ᵃ *id*

Cb predependents occur in set expressions:

*yị̄-sɔ́b*ᵃ	pl *yị̄-sɔ́b-nàm*ᵃ	"householder"	(*yị̄r*ᵋ/ "house")
*yị̄-dím*ᵃ		"members of the household"	
*nị̄f-sɔ́b*ᵃ		"miser"	(*nị̄f*ᵓ/ "eye")
*tàňp-sɔ̄b*ᵃ		"warrior"	(*tāňp*ᵓ "war")
*zūg-sɔ́b*ᵃ	pl *zūg-sɔ́b-nàm*ᵃ	"boss" NT "Lord"	(*zūg*ᵓ/ "head")

*Ò sɔ̄b*ᵃ/*ɔ̄n sɔ̄b*ᵃ mean "the person we were just talking about."

12.5 Quantifiers

Formally, quantifiers resemble noun sg or pl forms, frequently with apocope-blocking 3.2; most number words are also preceded by number prefixes.

Quantifiers are **count** or **mass** 12.2, 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:

	nịdīb bɛ́dʋgʋ̄	"a lot of people"
	nịdīb bábɪgā	"many people"
	kù'ʊm bɛ́dʋgʋ̄	"a lot of water"
not	**kù'ʊm bábɪgā*	*"many water"

Mass quantifiers are

bɛ̀dʋgʋ̄/	"a lot"	*pāmm* LF *pāmnɛ́*	"a lot"
fị̄iň	"a little (liquid)"	*bị̄'ʊlá*	"a little"
wʊ̄ʊ	"all"	*wʊ̄sā*	"all"

Beside number words, count quantifiers are

bàbɪgā/	"many"	*kàlɪgā*/	"few"
fāaň	"every"	*zāň'a*	"every"

Kàm[a] "every" occurs by itself as a quantifier and also before others:

sāŋá kám = *sāŋá kám zāň'a*	"all the time"

Quantifiers appear typically as determiners in NPs 12.8.2, but like pronouns they may also be heads of NPs; they can pluralise with *nàm*[a]:

Pāmm kɛ́ nā.	"Many came."
Bɛ̀dʋgʋ̄ kɛ́ nā.	"Many came."
Bɛ̀dʋgʋ̄ lā kɛ́ nā.	"The crowd came"
Àyị́' kɛ́ nā.	"Two came."
Àyị́' lā kɛ́ nā.	"The two came."
màlị̄āk-nám túsà pị̄igā nám	"tens of thousands of angels"

A quantifier head after a dependent NP is a **partitive** construction 12.7.2.

Quantifier heads may be followed by dependent pronouns; as quantifiers have no combining forms, there is no compounding:

Ka ti ye ti nye diib yaani moogin nwa diis nidib ***bedego bama*** *nwa?*
Kà tì yé tì ñyɛ̄ dīıb yáa ní mɔ̄ɔgū=n ñwá
And 1PL that 1PL find food where LOC grass:SG=LOC this
ø dìıs nị̄dīb bédʊgū bámmā ñwá=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 wʊsa* "all these people")

12.5.1 Numbers

The numbers in their core role as **quantifiers** take the forms

1	*yīnní*	10	*pị̄igā*	100	*kɔ̀bıgā*
2	*àyį́'*	20	*pị̄sį́* [pisi]	200	*kɔ̀bısį́* [kɔbısi]
3	*àtáň'*	30	*pị̄s táň'*	300	*kɔ̀bìs táň'*
4	*ànāasí*	40	*pị̄s nāasí*	400	*kɔ̀bìs nāasí*
5	*ànū*	50	*pị̄s nū*	500	*kɔ̀bìs nū*
6	*àyúɵbɔ̀*	60	*pị̄s yúɵbɔ̀*	600	*kɔ̀bìs yúɵbɔ̀*
7	*àyɔ́pɔ̀ɐ̧*	70	*pị̄s yɔ́pɔ̀ɐ̧*	700	*kɔ̀bìs yɔ́pɔ̀ɐ̧*
8	*ànį́i*	80	*pị̄s nį́i*	800	*kɔ̀bìs nį́i*
9	*àwāɐ̧*	90	*pị̄s wāɐ̧*	900	*kɔ̀bìs wāɐ̧*

The quantified noun is normally plural, except with *yīnní*, but may be singular with units of measure: *yɔ̄lʊgá àtáň'* "¢600 [cedis]."

The forms for 1, 4, 6, 8, 10, and 100 show apocope-blocking; the forms for 20 and 200 are not apocope-blocked but are combinations with the stem of *àyį́'*.

Kɔ̀bıgā irregularly has identical LF and SF.

"Thousand" is a regular *rɛ|aa* class noun, *tūsīr*$^{ɛ/}$: *tūsá àtáň'* "3000." "Half" is *pɔ̄-súk*^{a} pl *pɔ̄-súgùs*^{ɛ}. Other numbers are formed with *nɛ̄* "with, and":

kɔ̀bìs táň' nɛ̄ pị̄s yúɵbɔ̀ nɛ̄ nū "three hundred and sixty-five"

11 to 19 have the special contracted forms *pị̄i nɛ̄ yīnní*, *pị̄i nɛ̄ yį́'*, *pị̄i nɛ̄ táň' ... pị̄i nɛ̄ wāɐ̧* (or *pị̄i nā yīnní*, *pị̄i nā yį́' ...*)

The prefix *à-* is omitted after *nɛ̄* "with", and sometimes also after focus-*nɛ̄*$^{/}$:

Lì à nɛ̄ nāasí. / *Lì à né ànāasí.* "They're four."

The forms *àyį́ŋā*$^{/}$ *àtáŋā*$^{/}$ mean "two, three exactly." If I have four children

M̀ mɔ́r bị̄isá‿ àtáň'. "I have three children."
1SG have child:PL NUM:three. is true, though misleading

but *M̀ mɔ́r bị̄isá àtáŋā.* "I have exactly three children." is false.

These forms can also be used after *nɛ̄* "and", as in *pị̄i nɛ̄ yị̄ŋā* "twelve exactly." They are exceptional in not permitting focus with the particle *nɛ̄*/ 24.1.2.

Yīnní can also be construed with a preceding noun cb:

kūg-yínnì "one stone" (M dropping 4.5)
cf *kūgʊ̄r yīnní* "one stone" (no M dropping)

Dà-pị̄igā is "ten days"; *pị̄igā* is not otherwise used after cbs.

After personal pronouns the number prefix is *bà-* instead of *à-*: *tì bàtáň'* "we three", *yà bàyɔ́pɔ̀e̯* "you seven", *bà bàyị̄'* "they two."

1 to 9 have different forms used in **counting**, lacking apocope-blocking and using the number prefix *ǹ-* instead of *à-*:

1	*yɛ́oŋ* or *àràkɔ́ň'*	6	*ǹyûɵb*
2	*ǹyị̄'*	7	*ǹpɔ̀e̯* [tone *sic*]
3	*ǹtáň'*	8	*ǹnị̄i*
4	*ǹnāas*	9	*ǹwāe̯*
5	*ǹnū*	continuing *pị̄igā*, *pị̄i nɛ̄ yị̄'* as with quantifiers	

Àràkɔ́ň' can also be used as a quantifier: *bʊ́ʊg àràkɔ́ň'* "one goat."

The form *kɔ̄ň'ɔkɔ* appears as a postposition: *m̀ kɔ̄ň'ɔkɔ* "by myself."

In performing arithmetic the quantifier forms are used:

Àyị̄' námá‿àyị̄' á nɛ̄ nāasí.
NUM:two PL NUM:two COP FOC four.
"Two twos are four."

The only **ordinal** adjective, as in *sɔ̄b-dɛ̂ɛŋ* "first census" (Lk 2:2, 1976) is

*dɛ̄ɛŋ*ᵃ *dɛ̄ɛňs*ᵋ *dɛ̀ɛŋ-* "first"
or *dɛ̄ɛmīs*ᵋ or *dɛ̄ɛnā*

"First" can also be expressed by *yị̄igá* "firstly" as a predependent:

linɛ da an yiiga dabisir
līnī◡ ø dá àň yi̱igá dàbɪsìr.
3IN.CNTR CAT TNS COP firstly day:SG.
"That was the first day." (Genesis 1:5)

Other ordinal expressions can be created using *pàas*^{ɛ} or *pɛ̀'ɛs*^{ɛ} "add up to":

dàu̱-kànì pɛ̀'ɛsà◡ àyi̱' lā
man-REL.SG add.up.to NUM:two ART
"the second man" ("man who has added up to two")

lìnì pàasà◡ àtáň' lā "the third one"
REL.IN add.up.to NUM:three ART

Another construction uses numbers as predependents before *dāan*^{a} "owner of ..."; such phrases are then themselves used either as NP heads or as determiners:

àyi̱' dāan lā "the second one"
bʊ̄vgá àtáň' dāan lā "the third goat"

Yi̱igá 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

yīmmír^{ɛ} *yīmmá* *yīm-* "single, alone"

as in *bi̱-yīmmír* "only child", *wāb-yímmìr* "solitary elephant."

There are two words meaning "one of a pair": *ňyàu̱k*^{ɔ} pl *ňyà'ad*^{ɛ} is only used for eyes, while *yīu̱ŋ*$^{ɔ/}$ pl *yīná* is used for other normally paired body parts: *nɔ̄b-yíu̱ŋ* "one leg", *nū'-yíu̱ŋ* "one hand", *nīf-ňyáu̱k* "one eye", *tʊ̀b-yīu̱ŋ* "one ear."

Multiplicatives (answering *àbʊ̀lá?* "how many-fold?") are expressed

yīmmʊ́ "straight away, at once"
àbʊ̀yi̱' "twice"
àbʊ̀táň' "three times"
àbʊ̀nāasí "four times"

and so on, with apocope-blocking like quantifiers, up to *bʊ̀pi̱igā* "ten times."

This *à-* is not the number prefix but the manner-adverb formant, and a LF-final vowel before it is *-ɪ*; the attachment to 2-9 only is presumably analogical.

Answers to *nɔ̄ɔrá àlá* "how many times?" have forms of the pattern

	nɔ̄ɔr yīnní	"once"
	nɔ̄ɔrá àtáň'	"three times"
or	*nɔ̄ɔrím bʊ̀táň'*	"three times" NT

This *nɔ̄ɔr* is not "mouth" (= Mooré *nóorè*) but corresponds to Mooré *náooré* "times", homophonous with Mooré *náooré* "leg"; cf Toende Kusaal *nɔ̄'ɔ̄t* = Agolle *nɔ́bìr* "leg". Original *ɔɔ* and *oo* fell together when nasalised 2.2. For the semantics cf Hausa *sàu ukù* "three times" *sau* "foot(print)." Niggli's dictionary gives Toende *nɔ́'ɔt* (tone *sic*) in the sense "*fois*" and even has *nɔba ayi* beside *nɔ'ɔt ayi* "*deux fois*."

Distributives ("two by two" etc) are reduplicated forms without apocope-blocking; there is no M dropping on the second part except with 10, 100, 1000:

1	*yīn yīn*	10	*pi̱i pi̱ig*	100	*kɔ̀bìg kɔ́bìg*
2	*àyí' yí'*	20	*pi̱sí pi̱sí*	200	*kɔ̀bɪsí kɔ́bɪsí* or *kɔ̀bìs yí' yí'*
3	*àtáň' táň'*	30	*pi̱s táň' táň'*	300	*kɔ̀bìs táň' táň'*
4	*ànāas nāas*	40	*pi̱s nāas nāas*		*etc*
5	*ànū nū*	50	*pi̱s nū nū*	1000	*tūsīr túsìr*
6	*àyûəb yûəb*	60	*pi̱s yûəb yûəb*		
7	*àyɔ́pɔ̀e̱ pɔ́e̱*	70	*pi̱s yɔ́pɔ̀e̱ pɔ́e̱*		
8	*àni̱i ni̱i*	80	*pi̱s ni̱i ni̱i*		
9	*àwāe̱ wāe̱*	90	*pi̱s wāe̱ wāe̱*		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive: *pi̱s nū nɛ̄ nāas nāas* "by fifty-fours."

The distributives can have a preceding NP as a dependent:

dābá àyɔ́pɔ̀e̱ pɔ́e̱	"weekly" ("by sevens of days")

12.5.2 Proquantifiers

Quantifiers have corresponding proforms; the *à-* is the *number* prefix, and induces preceding LF-final *-a* not *-ɪ* 4.2.

Demonstrative	Indefinite	Interrogative
àlá	*si̱'əm*^{m}	*àlá*
"so much/many"	"some amount"	"how much/many?"

12.6 Personifier particle

Indigenous Kusaasi personal names 26.2 are always preceded by the personifier particle, which appears as *À-* by default, but *Ǹ-* before adjective stems, where *Ǹ-* is a syllabic nasal assimilated to the point of articulation of a following consonant. The particle is a liaison word; the *À-* allomorph, like the manner-adverb prefix *à-*, is preceded by word-final *-ɪ*, not *-a* as with the number prefix.

Personal names do not take adjectives or the article, but may occur with other determiners. *À-* is deleted after a predependent, but *Ǹ-* remains.

Personal names can pluralise with *nàm*[a]; such plurals can mean e.g. "more than one person called Awini"; Niggli's Toende Kusaal dictionary also gives the *cum suis* meaning: *Awɪnnam*: "Awin and his people. *Awinne et consort (les Awinne).*"

À-Wīn	"Awini"
tì Wīn	"our Awini"
Ǹ Wīn	"my Awini"
À-Wīn-káŋā	"this Awini"
À-Wīn nám	"Awinis"
Ǹ-Dāvg	"Ndago"
tì Ǹ-Dāvg	"our Ndago"

Although the Kusaal Bible versions (unlike the Mooré Bible) use foreign names without the particle, *À-* normally appears before them in speech:

À-Mūusā	"Moses"
À-Yīisā	"Jesus"
À-Sīimôɔn	"Simon"

NT has some personifications of abstractions: *À-Sàň'vŋ* "Destruction."
In stories where animals are characters, animal names take *À-*:

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. *à-dàalʊ́ŋ*[ɔ] "stork", *à-gâvňg*[ɔ] "pied crow", *à-kɔ̄rā-dɪ̂əm*[ma] "praying mantis", *à-mús*[ɛ] "cat." Thus

à-dàalʊ́ŋ	"a stork"

m̀/mān	*dáalʊ́ŋ*	"my stork"
1SG/1SG.CNTR	stork:SG	

dāu̯ lā dáalʊ́ŋ "the man's stork"
man:SG ART stork:SG

Lì à né à-dàalʊ́ŋ. "It's a stork"
3IN COP FOC PERS-stork:SG.

M̀ ňyé à-dàalʊ́ŋ. "I've seen a stork."
1SG see PERS-stork:SG.

The *à-* allomorph is not elided after a predependent but is *replaced* by it, as shown by the M spreading affecting the stem. The fact that *à-* 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 *yẽ~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.

Atʋm sɔ' "Siloam" (Jn 9:7)
À-tʊ̀m sɔ̄' ("Someone sent someone")
PERS-send INDF.AN

Apʋ-kpɛn'-baŋʋ dim
À-pʊ̄ kpɛ́ň' bàu̯ŋʊ̀ dím
PERS-NEG.IND enter circumcision NULL.PL
"the Uncircumcised" (Eph 2:11)

À-dāa yɛ́l kā' tîɪmm=ø.
PERS-TNS say NEG.HAVE medicine=NEG.
"Did-say has no remedy." (No use crying over spilt milk.)

À-ňyɛ̄ nɛ̄ nīf sɔ́ň'ɔ◡ À-wʊ̀m tʊ̀bà.
PERS-see with eye:SG be.better.than PERS-hear ear:PL
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

À-Kī̩dɪgī◡ ø Bū'ɵs "Crossed over and asked"
PERS-cross CAT ask (name of the constellation Orion.)

Apozotyel "Doesn't-fear-trouble", character in KSS p35.
À-Pʊ̄-zɔ́t-yɛ̄l
PERS-NEG.IND-run:IPFV-thing:SG

À- as predependent of a clause subject means "someone whose ...":

Bà kɛ̀n nɛ́ À-nà kʊ́ʊ‿m̀ nūa yı̣́r, kà bà pʊ̄ kɛ́n
3PL go:IPFV FOC PERS-IRR kill 1SG chicken:SG house:SG and 3PL NEG.IND go:IPFV
À-nɔ̄ɔs bɛ́ yı̣́rɛ̄=ø.
PERS-chicken:PL EXIST house:SG=NEG.
"They go to Will-kill-my-chicken's house, but not to Got-chickens' house."
("The rich are not always hospitable.") [*Nɔ̄ɔs bɛ́.* "There are chickens."]

Nominalisations with *à-* can pluralise with *nàm*ᵃ:

À-zī'‿ ø kpı̣́ nàm kpı̣̂id nɛ́ kà tɛ́ňbìd.
PERS-NEG.KNOW CAT die PL die:IPFV FOC and tremble:IPFV.
"Those who don't know death, are dying with a struggle." (Proverb)
(i.e "It's a storm in a teacup.")

12.7 Dependents before the head

The head of a NP may be preceded by a dependent. Only one is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another predependent. Specific predependents precede generic, with cbs last:

Wínà'am [*pʊ́'ʊsʊ̀g* [*fûug dɔ̂ɔg*]]
"tabernacle" (God's [worship [cloth hut]])

For the rules regarding M dropping after predependents see 4.5.

12.7.1 Combining forms

A combining form as a predependent is always generic and non-referential. Compounds with a predependent cb can be freely created, but resemble the compounds seen in other languages more closely than those with cb heads preceding adjectives and dependent pronouns. Specialised lexical meanings often occur with dependent cbs, rarely with head cbs before adjectives and never before pronouns.

If the head is a deverbal noun, it may be preceded by a combining form representing an **argument**, with count or mass meaning:

*dā-nûur*ᵋ "beer-drinking" *gɛ̄l-kûɵs*ᵃ "egg-seller"

With **agent nouns** from transitive verbs the cb usually represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb complement. These compounds can be freely coined, and their meanings are generally transparent, but there are many idiomatic set expressions. Examples:

nịn-kûʋd^{a}	"murderer"	*bʋ̀-kʋ̄ʋd*$^{a/}$	"goat-killer"
nɔ̄-kûʋd^{a}	"hen-killer"	*pu̯'à-kʋ̄ʋd*$^{a/}$	"woman-killer"
nɔ̄-záňl^{lɛ}	"holder of hens"	*wìd-kùɵs*^{a}	"horse-seller"
bʋ̀-kùɵs^{a}	"goat-seller"	*sàlìm-kùɵs*^{a}	"gold-seller"
dā-nûud^{a}	"beer-drinker"	*dà-kịəd*^{a}	"wood-cutter"

zịm-gbâň'ad^{a}	"fisherman" ("fish-catcher")
nɔ̄-dị̂'əs^{a}	"chief's spokesman" ("command-receiver")
tàn-mɛ̄ɛd^{a}	"builder" (*tān*^{nɛ} "earth")
làmpɔ̄-dị̂'əs^{a}	"tax collector" (French *l'impôt*)
gbàn-mị̄'id$^{a/}$	"scribe" NT ("book-knower")
pu̯'à-sāň'am^{ma}	"adulterer" ("woman-spoiler")
zà'-nɔ̄-gúr^{a}	"gate-keeper" (*zà'-nɔ̄ɔr*$^{ɛ/}$ "gate")
kɔ̀ňb-kīm^{na}	"herdsman" (*kɔ̀ňb-* cb of *bʋ̄n-kɔ́ňbʋ̀g*^{ɔ} "animal")
bùl-sịgīd$^{a/}$	"well-diver" (*bùlìg*^{a} "well")
tùɵn-gāt^{a}	"leader" (*Ò gàad tûɵn* "He's gone ahead")
ňyà'an-dɔ̀l^{la}	"disciple" (*ňyá'aŋ*^{a} "behind", *dɔ̄l*$^{la/}$ "accompany")
pu̯'à-lā'ad^{a}	"laugher at women" WK (*Ò là'ad pʋ̄'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 *bāŋīd*^{a} "wise man", *si̯ākīd*^{a} "believer", *sʋ̄ŋīd*^{a} "helper", *fāaňd*$^{a/}$ "robber", "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate cb, sometimes an object, but often apparently just a reduplication of the agent noun stem:

màal-māan^{na}	"sacrificer"	*zị̄-zị̂id*^{a}	"carrier-on-head"
tʋ̀'as-tʋ̀'as^{a}	"talker"	*zàb-zàb*^{a}	"warrior" (tone *sic*)
zɔ̀t-zɔ̄t^{a}	"racer, athlete"	*tʋ̀m-tʋ̄m*^{na}	"worker"

Cbs occur before deverbal **instrument nouns** in object or adverb senses:

si̯à-lɔ̄ɔdíŋ^{a}	"belt" (waist-tying thing)
nịn-gɔ́tìŋ^{a}	"mirror" (eye-looking thing)
nịn-gɔ́tìs^{ɛ}	"spectacles"

If the head is a **gerund**, a predependent cb may represent a subject or complement. Gerunds in -*bɔ* here replace the suffix with -*rɛ* 8.1.1.

If the underlying verb is transitive, a predependent cb cannot be a subject. It is most often an object:

fū-yêɛr^{ɛ}	"shirt-wearing" (nonce-form created by WK)
pu̱'à-dīɪr^{ɛ}	"marriage" (*Ò dì pu̱'ā* "He's married a wife")
nị̄n-kʊ̂ʊr^{ɛ}	"murder"
dā-nûur^{ɛ}	"beer-drinking"
Sāmán-pí̱ər^{ɛ}	traditional New Year ("Courtyard Cleaning")
bùgʊ́m-tɔ̄ɔ̌ŋr^{ɛ}	Fire Festival ("Fire Throwing")
nɔ̄-lɔ̂ɔr^{ɛ}	"fasting" ("mouth-tying")
nɔ̄-pɔ̂ɔr^{ɛ}	"oath" (*pɔ̄* "swear")
nɔ̄-nâar^{ɛ}	"covenant" (*nā* "join")
nị̄n-bâal-zɔ̄ɔr^{ɛ}	"pity" (*Ò zɔ̀tō nị̄n-báalìg.* "He has pity on him")

It may represent an AdvP:

mɔ̀-pī̱l^{lɛ}	"grass roof" ("covering with grass")
kùm-vʊ̄'ʊgír^{ɛ}	"resurrection" (*Ò vʊ̀'ʊg kūmī=n.* "He revived from death.")

Cbs as subjects are seen only with gerunds from intransitive or patientive ambitransitive verbs:

nɔ̄b-kɔ̂ɔr^{ɛ}	"breaking a leg" (*kɔ̀* is intransitive)
nū'-mɔ́dìr^{ɛ}	"swelling of the hand"
wị̀n-lī̱ir^{ɛ}	"sunset" (*Wị̀nnìg lí̱ yā.* "The sun has set/fallen.")
sūn̆-sân̆'ʊŋ^{ɔ}	"sorrow" (*Ǹ sūn̆f sân̆'am nɛ̄.* "My heart is spoilt")
sūn̆-pɛ̂ɛn^{nɛ}	"anger" (*Ǹ sūn̆f pɛ́lìg nɛ̄.* "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:

pʊ̀-pị̀əlìm^{m}	"holiness" ("inside-whiteness")
sūn̆-kpí̱'oŋ^{ɔ}	"boldness" ("heart-strength")
sūn̆-má'asìm^{m}	"joy" ("heart-coolness": *Ǹ sūn̆f má'e yā.* "I'm joyful.")
nị̀n-tʊ̄llím^{m}	"fever" ("body-heat")
wīn-tɔ̂ɔg^{ɔ}	"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*ɔ/	"children's shirt" (i.e. suitable for children)
*wìd-zʊ̄ʊr*ɛ	"horsetail"
*wāb-mɔ́ɔgʊ̄=n*ɛ/	"in elephant-bush, where there are elephants" WK
*zà'-nɔ̄ɔr*ɛ/	"gate" ("compound-mouth")
*mà-bḭ̄ig*a	"sibling" ("child by [same] mother")
*bā'-bḭ̂ig*a	"half-sibling" ("child by [same] father")
*tɛ̀ŋ-bḭ̄ig*a	"native" ("child of a country")
*nàsàa-sìlʊ̀g*ɔ	"aeroplane" (European hawk) ILK

WK has *náaf-bḭ̀'isím*m "cow's milk", *bʊ̄ʊg-bḯ'isím*m "goat's milk", where the dependent has singular form and tone, but the tone sandhi is that of a compound.

12.7.2 Noun phrases

Complete NPs as predependents play a role analogous to English genitives and NP complements with "of" (CGEL pp467ff, 441.) The range of meanings is similarly very wide, and dependent on the semantics of both head and dependent. Indefinite non-count predependent NPs function as modifiers, and definite and/or count NPs as determiners. Personal pronouns never function as determiners themselves, but they often head predependent NPs which do 3.1.

Definite predependents do not automatically make a NP head definite 12.8.5.

For *mɛ̄ŋ*a/ "self" and *sɔ̄b*a as heads after predependents see 12.4.6 12.4.7.

If the head is a demonstrative, indefinite or interrogative pronoun or a quantifier, the construction with a predependent is **partitive**:

nḭ̄n-sḭ́əbà	"certain people"	*sḭ̄əbā*	dependent
yà sɔ̄'	"some one among you"	*sɔ̄'*	head
nḭ̄dīb lā sḭ́əbà	"certain of the people"	*sḭ̄əbā*	head
nḭ̄dīb sḭ́əbà	"certain ones among people"	*sḭ̄əbā*	head
nḭ̄dɪbá àyḭ́'	"two people"	*àyḭ́'*	dependent
nḭ̄dɪbá àyḭ́' lā	"the two people"	*àyḭ́'*	dependent
nḭ̄dīb lá àyḭ́'	"two of the people"	*àyḭ́'*	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 fʊn gaŋ sɔ'
Pà'alìmī=tí nịdıbá‿ àyị́' ňwá fʊ́n gāŋ sɔ̄'
Teach:IMP=1PL person:PL NUM:two this 2SG:NZ choose INDF.AN
"Tell us which of these two people you have chosen" (Acts 1:24)

A partitive sense is not possible with other head types: e.g. *nịdīb lā gígìs* must mean "the dumb ones *belonging* to the people", not "among the people" (WK.)

Abstract indefinite NPs as predependents ascribe a quality to the head:

nā'am kʊ́k	"throne" ("chieftaincy chair")
nā'am sʊ́'ʊlìm	"kingdom" ("chieftaincy possession")
pʊ̀'ʊsʊ̀g dɔ̂ɔg	"temple" ("worship house")
tʊ̄lıgír bʊ́n	"heater" ("heating thing" = *bʊ̄n-tʊ́lıgìr*ᵋ)
dʊ̄gʊ̄b dʊ́t	"cooking pots"
lịgıdī tʊ́ʊmà	"expensive work" (*lịgıdī* "money")

There are sometimes alternate forms with cbs:

	tàňp-sɔ̄b	"warrior"	(*tāňp*ᵓ "war")
	pʊ̀-pịəl-sɔ̄b	"holy person"	(Rom 3:10, 1996)
but	*pʊ̀-pịəlìm sɔ́b*	"holy person"	(Mt 10:41, 1996)
	pʊ̀-pịəl-tʊ̄ʊmā	"holy actions"	(Rom 6:13, 1996)
but	*pʊ̀-pịəlìm tʊ́ʊmà*	"holy actions"	(Mt 5:10, 1996)

Language names may appear as abstract nouns describing an ethnic group:

Kʊ̄sâal yịr nɛ̄ kūɵb	"Kusaasi houses and agriculture"
Nàsāal búgʊ́m	"electricity" ("European fire")

Concrete indefinite mass NPs as predependents express the material of which the head consists.

sālımā bʊ́tìŋ	"golden cup"
sālımā nɛ̄ ānzúrıfà lâ'ad	"gold and silver goods"

Count nouns may appear here in mass senses 12.2:

fūug dɔ̂ɔg	"tent" (cloth hut)
dàad bʊ́n-nám	"wooden things" (*dàʊg*ᵓ "piece of wood")

NP predependents of this type can be antecedents of anaphoric pronouns:

sālımā lâ'ad nɛ́ ò bʊ̄tīıs	"gold goods and [gold] cups" WK 12.1

This is never the case with dependent cbs, as in *sàlìm-kùəs* "gold-seller", *dā-nûud* "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 *ku̯'à-ňwị̄ig* "current" ("aquatic rope") suggests that the construction with unbound concrete mass predependents is limited to the specific sense "made of ...", so that **kù'əm ňwị̂ig* would be "rope made of water."

With count and/or definite heads, meanings include kin relations, body parts, and ownership:

m̀ bị̄ig	"my child"
dāu̯ lā bị̂ig	"the man's child"
dāu̯ lā bị̂ər bị̀ig nâaf zʊ̀ʊr	"the man's elder brother's child's cow's tail"
Kʊ̄sâas wádà	"customs of the Kusaasi"

Nimbɛ'og yir na san'am.
Nị̄n-bɛ̂'og yị́r 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 wị̂əf zʊ̂ʊr	"the chief's horse's tail" (the chief has a horse)
nà'ab lā wíd-zʊ̄ʊr	"the chief's horse-tail" (the chief may not own a complete horse at all)

*Dāan*ª "owner of ..." (*nàm*ª pl) always has a predependent NP; this may represent a concrete possession, or if it is adverbial or has an abstract sense, it may ascribe a quality (as with Hausa *mài*, or Arabic *ðu:*):

lɔ́r dâan	"car owner"
bʊ̄ʊg dâan	"goat owner"
kù'əm dâan	"water owner"
tị̀əŋ dâan	"bearded man" Hausa *mài geemùu*
dāam dâan	"beer owner"
pɔ̄ɔg lā dâan	"the owner of the field" (Mt 21:40)

Zu-wok daan po gangid bugum.
Zʊ̀-wɔ̄k dâan pʊ̄ gáŋ̀ìd búgʊ́mm=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

pʊ̀-pi̱əlì m dâan	"holy person"
bʊ̄gʊsígā dâan	"softly-softly sort of person" WK

See 12.5.1 on the use of *dāan*[a] with numbers to make ordinal expressions.
A cb predependent appears before *dāan*[a] in a few set expressions:

yi̱-dâan	"householder" = *yi̱-sɔ́b* (Hausa *mài gidaa*)
tɛ̀ŋ-dāan	(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.

Dāu̱ lā kúlʊ̀g dāa mālɪsí=m.
Man:SG ART go.home:GER TNS be.sweet=1SG.
"The man's return home pleased me."

Generic-object cbs, adjunct AdvPs and VP-final particles may appear:

ya antu'a morim koto ni ne taaba la
yà àntu̱'à-mɔ̄rím kɔ́tʊ̀ ní nɛ̄ tāabā lā
2PL case-have:GER court:SG LOC with each.other ART
"your going to law with each other in court" (1 Cor 6:7, 1976)

Ninsaal Biig la lɛbʊg la na
Nī̱n-sâal Bi̱ig lā lɛ́bʊ̀g lā nā
Human:SG child:SG ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)

12.7.3 Adverbial phrases

Predependent AdvPs may not be proadverbs. Most are locative, or phrases with the postposition *yɛ̄lá* "about", or depend on the specialised head *dāan*[a] 12.7.2.

dūnıyā ní nị̀n-gbī̩ŋ	"earthly body"
kɔ̄lʊgʊ̄=n nɔ́-dâʊg	"crayfish" ("in-the-river cock")
Bɔ̀k dím	"Bawku people"
dàgɔ̀bì g nī́f	"left eye"
zūgʊ́=n nī́f-gbáu̯ŋ	"upper eyelid"
tɛ̄ŋī=n nī́f-gbáu̯ŋ	"lower eyelid"

Ba da mɔr mɔɔgin bʊnkɔnbid nɛ ba buudi, yin bʊnkɔnbid nɛ ba buudi ...
Bà dà mɔ̀r mɔ̄ɔgʊ̄=n bʊ́n-kɔ́ňbìd né bà būudī, yī́n bʊ́n-kɔ́ňbìd
3PL TNS have bush:SG=LOC thing-hair:PL and 3PL kind, house:SG:LOC thing-hair:PL
né bà būudī ...
and 3PL kind ...
"They took wild animals with their kind, tame animals with their kind ..."
(Gen 7:14)

Kʊ̄sâas kûɵb nɛ̄ yī̩r yɛ́là gbàu̯ŋ	"A book about Kusaasi houses and agriculture"
dàu̯-kàŋā lā yɛ́là gbàu̯ŋ	"a book about that man" WK

Yī̩igá "firstly" appears as a predependent meaning "first" 12.5.1.

12.8 Dependents after the head

Dependents follow a head noun in the order adjective(s), quantifier, dependent pronoun or AdvP, article or *ňwà* "this." All except adjectives are determiners.

Adjectives and dependent pronouns follow a head noun which is itself reduced to a combining form, while the dependent inflects to show the number of the head. Compounds with cb heads are formed absolutely freely with completely transparent meanings, making the cb a standard part of noun and adjective paradigms. Cbs as heads are the most liable to segmental remodelling 5.2.

Compounds with dependent pronouns naturally cannot be lexicalised, but compounds with adjectives can develop specialised lexical meanings.

Quantifiers do not have combining forms and cannot be followed by the dependent-only demonstrative forms *kàn*[ɛ] *kàŋā*[/].

For WK and DK, a noun before a dependent pronoun must appear as a cb, but SB often produced forms with cbs segmentally remodelled after sg or even pl forms.

12.8.1 Adjectives

Adjectives follow a head cb. They do not themselves normally appear as heads, but a subset of adjectives lacking corresponding stative verbs may be used as heads of predicative complements 16.9.2. Generally, compounds with *nɪ̣̄n-* "person" or *bʊ̄n-* "thing" are used instead: *nɪ̣̄n-sʊ́ŋ*ɔ "good person", *bʊ̄n-vʊ́r*ɛ "living thing" etc. *Bʊ̄n*nɛ/ can make a regular *rɛ*|*aa* class plural *bʊ̄ná* or pluralise with *nàm*a:

Bʊ̄n-námá‿àlá *kà fʊ̀ ňyɛ̄tá=ø?*
Thing-PL NUM:how.many and 2SG see:IPFV=CQ?
"How many things do you see?" SB

Bʊ̄n also occurs with abstract and AdvP *pre*dependents:

*tʊ̄lɪgír bʊ́n*nɛ "heating thing, heater" = *bʊ̄n-tʊ́lɪgìr*ɛ
*kù'ɵmī=n bʊ́n*nɛ "water creature"

Deverbal adjective forms with no preceding cb are synonymous with agent nouns, so the presence of *bʊ̄n-* distiguishes different meanings in e.g. *bʊ̄n-kʊ́ʋdì̀r*ɛ "thing to do with killing" versus *kʊ̄ʋdír*ɛ "killer."

Note the idioms

*bʊ̄n-gɪ́ŋ*a "short chap" (informal, humorous)
*bʊ̄n-kʊ́dʊ̀g*ɔ "old man" (the normal expression)

The combination noun + adjective is rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun:

nūa/	"hen"	*nɔ̄ɔs*ɛ/	"hens"
*nɔ̄-pɪ́əlɪ̀g*a	"white hen"	*nɔ̄-pɪ́əlɪ̀s*ɛ	"white hens"
*nɔ̄-sʊ́ŋ*ɔ	"good hen"	*nɔ̄-sʊ́mà*	"good hens"

Another adjective or a dependent pronoun can follow a first adjective cb:

*nɪ̣̄n-wɔ́k-pɪ̣̀əlɪ̀g*a "white tall person"
nɔ̄-pɪ̂əl-kàŋā/ "this white hen"

However, noun-adjective compounds cannot form cbs for deverbal noun generic complements; sg/pl forms appear instead:

*fū-zɛ́ňdà kʊ̀ɵs*a "seller of red (i.e. dyed) cloth" (not **fū-zɛ́ň'-kʊ̀ɵs*a)

Compounds with adjectives may develop specialised lexical meanings:

nū'-bíl^{a}	"finger" ("small hand")
tì-sābılím^{m}	a traditional remedy ("black medicine")
gɔ̀ň'-sābılíg^{a}	Haaf *gosabliga* "Acacia hockii" ("black thorn")

There are isolated set forms showing traces of the old agreement system; the dependents do not regularly appear with the class suffixes seen in

là'-bīəlíf^{ɔ}	"small coin" NT (*lā'af*^{ɔ} "cowrie", *bī'əlá* "a little"
dà-sī'ər^{ɛ}	"some day, perhaps" (*dāar*^{ɛ} "day", *sī'a* "some")
dàbìs-sī'ər^{ɛ}	"some day" (*dàbısìr*^{ɛ} "day")
yɛ̄l-sʊ́m^{mɛ}	"blessing" (*yɛ̄l*$^{lɛ/}$ "matter", *sʊ̀ŋ*^{ɔ} "good")
pu̱'à-pāal$^{a/}$	"bride" (*pu̱'ā*^{a} "wife", *pāalíg*^{a} "new")
dà-pāal$^{a/}$	"young man, son" (*dāu̱* "man")

In WK's speech (not DK's) and many written sources, *mm*-class nouns require adjectives in *-mm*, as does *bʊ̄n* "thing" in abstract but not concrete senses:

	dā-páalìm^{m}	"new millet beer"; WK does not accept **dā-pâal*, **dā-páalìg*.
	tì-sābılím^{m}	"black medicine", a specific traditional remedy
	tì-vʊ̄nním^{m}	"oral medication" ("swallowing medicine")
	tì-kʊ̄ʋdím^{m}	"poison" ("killing medicine")
	kpāň-sɔ́ɔňdìm^{m}	"anointing oil" (*kpāaňm*$^{m/}$ "oil, grease")
	bʊ̄n-bɔ́ɔdìm^{m}	"desirable thing" (1 Cor 14:1: *nɔ̀ŋìlím*^{m} "love")
but	*bʊ̄n-bɔ́ɔdìr*^{ɛ}	"desirable thing" (BNY p17: a sheep)
	bʊ̄n-ňyɛ́tìm^{m}	"the visible world"
but	*bʊ̄n-ňyɛ́tìr*^{ɛ}	"a visible object"

Adjectives may show apocope-blocking 3.2 as a downtoner. Only singular forms seem to be possible. (All examples KT):

Lì à nɛ̄ fū-píəlìgā.	"It's a whitish shirt."
Lì à nɛ̄ fū-píəlìgā lā.	"It's the whitish shirt."
Lì à nɛ̄ wíug.	"It's red."
Lì à nɛ̄ wíugʊ̄.	"It's reddish."
fū-wíugʊ̄ lā	"the reddish shirt"
Lì à nɛ̄ tītā'arī.	"It's biggish."

12.8.1.1 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

Lì à nɛ̄ nū'-kpíílúŋ.	"It's a dead hand."
Bíig lā á nɛ̄ nū'-kpíílúŋ.	"The child is dead-handed."
Ò à nɛ̄ bí-[*nū'-kpíílúŋ*]*.*	"He's a dead-handed child."
*kʊ̀g-nɔ̄b-wɔ́k*ɔ	"long-legged stool"
*kʊ̀g-nɔ̄b-wâ'ad*ɛ	"long-legged stools"
Kʊ̀g-kàŋā á nɛ̄ nɔ̄b-wɔ́k.	"This stool is long-legged." WK
*zūg-máu̱k*ɔ pl *zūg-mâ'ad*ɛ	"crushed-headed"
*zʊ̀-wɔ̄k*ɔ/	"long-tailed"
*nɔ̄b-gíŋ*a	"short-legged"
*zū-pɛ́ɛlʊ̀g*ɔ pl *zū-pɛ́ɛlà*	"bald"; cf *Dau sɔ' zug ya'a pie* "If a man has gone bald" (Leviticus 13:40)
*lām-fɔ̂ɔg*ɔ pl *lām-fɔ̂ɔd*ɛ	"toothless" (*lām*mɛ/ "gum", *fùe* "draw out")

The two adjectives "one of a pair" 12.5.1 are often used in bahuvrihis: *nīf-ňyáu̱k*ɔ "one eye", *bà-nīf-ňyáu̱k*ɔ "one-eyed dog"; *tʊ̀b-yīu̱ŋ*ɔ/ "one ear" *bì-tʊ̀b-yīná* "one-eared children."

The construction is not modification of an adjective by a cb. In cases like *bì-nū'-kpíílúŋ*ɔ "child with a withered hand" the adjective is modifying the cb immediately preceding it, not *vice versa*: it is not possible to say **bì-nū'-kpî̂im*m. The adjective may even be plural despite singular reference of the whole compound:

	bì-tʊ̀b-kpīdā	"deaf child" (*tʊ̀bʊ̀r*ɛ "ear", *kpì* "die")
pl	*bì-tʊ̀b-kpīdā nám*a, *bì-tʊ̀b-kpīdīs*ɛ	
	*bì-tʊ̀b-līɪd*ɛ	"child/children with blocked ears" (*lī* "block")

12.8.1.2 Nouns as adjectives

Human-reference nouns may be used as adjectives modifying other human-reference nouns; the construction is effectively appositional:

	*bì-sāan*a/ or *bì-sáaŋ*a	"stranger-child"
[only	*bʊ̀-sáaŋ*a	"stranger goat"]
	*bì-kpī'im*m/ or *bì-kpìílúŋ*ɔ	"dead child"
[only	*bʊ̀-kpìílúŋ*ɔ	"dead goat"]
	bì-dāu̱ or *bì-dāʊg*ɔ	"male child"
[only	*bʊ̀-dāʊg*ɔ	"male goat"]
	*bì-pu̱'ā*a or *bì-pu̱āk*a	"female child"

bì-zū'ɵm$^{m/}$ or *bì-zùnzɔ̀ŋ*^{a}	"blind child"
bì-zùnzɔ̀ŋ^{a}	"blind child"
bì-gìk^{a}	"dumb child"
bì-wàbìr^{ɛ}	"lame child"
bì-bālɛ̄rʊ̄g^{ɔ}	"ugly child"
bì-pɔ̀ň'ɔr^{ɛ}	"crippled child"
nà'-bī̱ig^{a} or *bì-nà'ab*^{a}	"prince"
dàu̱-bī̱ig^{a} or *bì-dāu̱*	"male child"
nàsàa-bī̱ig^{a}	"European child"
yàmmʊ̀g-bī̱-púŋ^{a}	"girl slave" (*yamug bipuŋ* Acts 16:16, 1976 5.2)
yàm-bī̱-púŋ^{a}	"girl slave" WK (*yàmmʊ̀g bī́-púŋ*^{a} "slave's girl")
bī̱-púŋ-yàmmʊ̀g^{a}	"slave girl"

Even agent nouns can appear as modifiers, but only of human-reference cbs which cannot be interpreted as complements:

	pu̱'à-zàaňs^{a}	"dreamy woman" KT
	bì-sī̱n$^{na/}$ or *bì-sī̱nníg*^{a}	"silent child"
but	*bʊ̀-sī̱nníg*^{a} or *bʊ̀-sī̱nnʊ́g*^{ɔ}	"silent goat"
	pu̱'à-kʊ̄vdíg^{a}	"murderous woman, murderess" WK
	pu̱'à-lā'adī̱g^{a}	"woman given to laughing" WK
cf	*pu̱'à-kʊ̄vd*$^{a/}$	only "killer of women" WK
	pu̱'à-lā'ad^{a}	only "laugher at women" WK

12.8.2 Quantifiers

Quantifiers as determiners follow the head, except for *yī̱igá* "firstly." A head can appear as a cb only with *yīnní* "one" and in a few fixed expressions like *dà-pī̱igā* "ten days"; elsewhere, quantifiers are not subject to M dropping: *kūg-yínnì* "one stone" but *kūgʊ̄r yīnní* "one stone."

Quantifiers precede dependent pronouns and *lā*$^{/}$ "the, that", *ňwà* "this":

bʊnama atan' nwa	"these three things" (1 Cor 13:13)
bʊ̄n-námá‿àtáň' ňwá	
thing-PL NUM:three this	

Quantifiers as determiners can be coordinated:

o nya'andɔlib pii nɛ yi	"his twelve disciples" (Mt 26:20)
ò ňyà'an-dɔ̀llìb pī̱i nɛ̄ yī́'	
3AN disciple:PL ten with two	

12.8.3 Adverbial phrases

When an abstract noun with a verbal sense has a preceding NP dependent as subject, complement or adjunct AdvPs may follow the head, including prepositional phrases, which are not found elsewhere as NP dependents, and also VP-final particles. This is therefore best regarded as a clause nominalisation process. Other uses of AdvPs as NP dependents after the head are marginal. *Àmɛ̄ŋá* "really, truly" occurs in the meaning "genuine, real":

Ɔ̄n sɔ̄b á nɛ̄ dʉ́'atà àmɛ̄ŋá lā.
3AN.CNTR NULL.AN COP FOC doctor:SG ADV:real:ADV ART
"That one's the real doctor."

With *ǹwādīs yʉ̂ʉm lā púʉgʉ̄=n* "months in the year" (SB) and *wābʉ̄g mɔ̄ɔgʉ̄=n lā* "the elephant in the bush" (WK), I have not recorded the full contexts, possibly e.g. *M̀ dāa ǹyɛ̄ wābʉ̄g mɔ̄ɔgʉ̄=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 nɛ̄ lábà-sʉ̀ŋ Jesus Christ Wínà'am bí̱ig 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 nɛ̄ Yesu Kiristo ónì à Wínà'am bí̱ig lā lábà-sʉ̀ŋ.
DEMST.IN COP FOC Yesu Kiristo REL.AN COP God child:SG ART news-good:SG.

12.8.4 Pronouns

Demonstrative, indefinite and interrogative pronouns may be used as determiners following a noun cb as NP head, or a noun cb as NP head followed by an adjective cb; they follow quantifiers without compounding:

bí̱ig[a]	"child"	*bì̱-kàŋā/*	"this child"
bì̱-sɔ̄'	"a certain child"	*bì̱-sʉ̀ŋ-kàŋā/*	"this good child"
bì̱-kànɛ̀?	"which child?"	*bì̱-bɔ́?*	"what child?"

yɛltɔɔd ayɔpɔi banɛ ka maliaknama ayɔpɔi mɔr la
yɛ̄l-tɔ̂ɔd àyɔ́pɔ̀e̱ bánì kà màlī̱k-námá◡àyɔ́pɔ̀e̱ 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)

12.8.5 *Lā* and *ňwà*

Lā/ and *ňwà* are corresponding deictic particles "that" and "this." Although *ňwà* always retains this sense, *lā*/ in the great majority of its occurrences is weakened to a **definite article**. It retains its deictic sense in opposition to *ňwà* in identificational clauses 18.4 and after demonstratives 12.4.2.

Unlike *lā*/, *ňwà* can stand alone as a NP:

Ňwà á nɛ̄ bi̱ig. "This is a child." WK; tones *sic*.
This COP FOC child:SG.

Lā/ and *ňwà* 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 *ǹ*-clause, when it may follow the article attached to the clause 16.11.

As article, *lā*/ corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", *lā*/ is not typically used for "familiar background" references:

Wi̱nnìg lí̱ yā. "The sun has set."
Sun:SG fall PFV.

It is not used with pronouns, or with proper names of people or places: *mān* "me", *À-Wīn* "Awini", *Bɔ̀k* "Bawku." Nor is it used with abstract mass nouns:

Nɔŋilim pʋ naada. "Love does not come to an end." (1 Cor 13:8)
Nɔ̀ŋìlím pʋ̄ nāadá=ø.
Love NEG.IND finish:IPFV=NEG.

Lā/ is not used in vocatives, contrasting with *ňwà*, which often is:

Bi̱igā=ø! "Child!"
Child:SG=VOC!

Bi̱is ňwá! "Children!" [bi:sa]

There is no indefinite article: a NP with no *lā*/ is indefinite if it could have taken *lā*/ in the sense of the article. When a NP of a type which can take the article appears without it, the sense may be non-referential. This is the case, for example, with negative-bound nouns, and with the complement of *àɛ̱ňya* "be something" when used ascriptively:

M̀ bīig kā'e=ø. "I've no child" WK
1SG child:SG NEG.BE=NEG.

Ò à nɛ̄ bīig. "She is a child."
3AN COP FOC child:SG.

An indefinite NP is only likely to have a *specific* sense in the context of an explicit introductory presentational statement 24.5:

***Dau** da be mori o biribing*
Dāu̱ dá bɛ̀◡ ø mɔ̄rí◡ò bī̱-díbìŋ
Man:SG TNS EXIST CAT have 3AN child-boy:SG
"Once there was a man who had a son ..." KSS p35

Outside such contexts, an indefinite NP is usually *generic*; unlike English "the", *lā/* is not used with a generic sense:

Tʊmtʊm pʊ gat o zugdaana.
Tʊ̀m-tʊ̄m pʊ̄ gát ò zūg-dáanā=ø.
Worker:SG NEG.IND pass:IPFV 3AN head-owner:SG=NEG.
"The servant does not surpass his master." (Jn 15:20)

Tiig walaa bigisid lin an tisi'a.
Tɪ̀ɪg wɛ́làa◡ ø bɪ̀gɪsɪ̀d lín àn̆ tí-sɪ̄'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.

A predependent NP ending in *lā/* makes the following head definite, and the head does not itself take the article:

nà'ab lā bī̱ig "the chief's child"
not **nà'ab lā bī̱ig lā*

Only predependents *with the article* and demonstrative pronouns automatically make their heads definite; predependent personal pronouns or proper names do not:

Wínà'am máli̱āk "an angel of God"
Wínà'am máli̱āk lā "the angel of God"

m̀ bi̱ig "my child" (at first mention)
m̀ bi̱ig lā "my child" (previously mentioned)

Contrast the common idiom at first introduction of a possessed referent, where *lā*/ is absent, with cases where the referent has already been introduced:

Dau da be mori ***o biribing***
Dāu̱ dá bɛ̀◡ ø mɔ̄rí◡ò bi̱-díbìŋ
Man:SG TNS EXIST CAT have 3AN child-boy:SG
"Once there was a man who had a son ..." KSS p35

On daa an pu'asadir la ka o kul ***sidi*** *paae yʊma ayɔpɔi ka* ***o sid la*** *kpi.*
Ɔ́n dāa áň pu̱'á-sādīr lá kà ò kūl sīdī◡ ø pāe
3AN:NZ TNS COP woman-nulliparous:SG ART and 3AN marry husband:SG CAT reach
yʊ́mà àyɔ́pɔ̀e̱ 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

M̀ bi̱ig kā'e=ø. "I've no child" WK
1SG child:SG NEG.BE=NEG.

M̀ bi̱ig 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 *bā*'/ and *sàam*^{ma} "father."

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used:

Nā'-síəbà ɔ́ňbìd nɛ̄ mɔ̄ɔd. "Some cows are eating grass."
Cow INDF.PL chew:IPFV FOC grass:PL.

An indefinite pronoun is necessary to make the head indefinite after a predependent with the article:

nà'ab lā bí-sɔ̄' "a child of the chief's"
chief:SG ART child INDF.AN

13 Adverbial phrases

13.1 Forms and functions

Many AdvPs represent adverbial *uses* of NPs. Other kinds of AdvP have fewer structural possibilities than NPs; for example, only specialised *postpositions* have NP predependents, and many adverbs do not conform to the structure of ordinary nouns.

Absolute clauses are AdvPs 21.1, as are several relative clause types.

As with NPs, coordination of AdvPs uses the particle *nɛ̄*:

Bɛ̄ogū=n nɛ̄ 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." [Time]

Nyalima na bɛ winnigin nɛ nwadigin nɛ nwadbibisin.
Ňyālımá nà bɛ̄ wḭ́nnìgī=n nɛ̄ ňwādıgí=n nɛ̄ ňwād-bḭ́bısī=n.
Wonder:PL IRR EXIST sun:SG=LOC with moon:SG=LOC with moon-small:PL=LOC.
"There will be wonders in the sun, moon and stars." (Lk 21:25) [Place]

For manner-AdvP coordination see on *sḭ̄'əm*-clauses 21.2.1.

The prototypical use of AdvPs is as VP adjuncts. For AdvPs as dependents in NPs see 12.7.3; time/circumstance AdvPs may appear as postlinker adjuncts 17.2.1.

AdvPs also occur as verb arguments. AdvP subjects are most often seen with *àe̯ň*^{ya} "be something/somehow," but occur with other verbs too, especially statives.

Yiŋ venl, ka poogin ka'a su'um.
Yḭ̀ŋ vɛ́ňl kà pūʊgū=n kā' sʊ́mm=ø.
Outside be.beautiful and inside:SG=LOC NEG.BE good:ABSTR=NEG.
"Outside is beautiful but inside is not good." (Acts 23:3, 1996)

Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.
Kristo=ø dà kpìi‿tì yɛ̄lá lā kɛ́ kà tì báŋ nɔ̀ŋìlím=ø àň sḭ̄'əm.
Christ=NZ TNS die 1PL about ART cause and 1PL realise love=NZ COP INDF.ADV
"Christ dying for us makes us understand what love is like." (1 Jn 3:16)
(absolute clause AdvP as subject)

In *Sʊ̀ŋā bɛ́* "OK it is" (WK), *sʊ̀ŋā* used metalinguistically: "the word *sʊ̀ŋā*."

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts 16.9.3.

The verb *àe̯ň*^{ya} "be something/somehow" 16.12 typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head:

Lì à nɛ̄ zāalím. "It's empty."
Lì à nɛ̄ bʊ̄gʊsígā. "It's soft."
Lì à sʊ́ŋā. "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 nɪ́ŋì◡àláa=ø! "Don't do that!" ("thus")
NEG.IMP do ADV:thus=NEG.

Fʊ wʊm ban yɛt si'em laa?
Fʊ̀ wʊ́m bán yɛ̀t sɪ̀'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 *sɪ̀'əm*^{m} "somehow" as head are accordingly used after verbs of cognition, reporting and perception, to express the subordinate interrogative sense "say [etc] what ..." 21.2.1.

For the idiom "X *nɪ̀ŋ wɛ̄lá ...?*" "how can X ...?" see 19.1.

13.2 Time/circumstance

AdvPs expressing **time** 26.7 may be instantiated by proadverbs 13.6 or by structurally distinctive time adverbs such as *zɪ̄ná* "today", *sù'ʊ́s*^{a} "yesterday", *dūnná* "this year." *Bɛ̄og*^{ɔ} "tomorrow" has the form of a noun but cannot inflect or take dependents; *dāar*^{ɛ} "day after tomorrow/day before yesterday" is in the same category but happens to be homophonous with the noun *dāar*^{ɛ} "day."

Other time AdvPs are simply NPs with temporal meanings, and no special marking. They may consist of single nouns, such as *yʊ́'ʊŋ*^{ɔ} "night", *ʊ́ʊn*^{nɛ} "dry season", *nɪ̄ntāŋ*$^{a/}$ "heat of the day", but such nouns inflect and may occur with dependents.

Absolute clauses 21.1 are frequently used to express time.

No formal distinction is made between points in time and periods of time:

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

Tɪ̀ kpɛ́lɪ̀m ànɪ́nā dábɪsà bɪ́'əlà.
1PL remain ADV:there day:PL few.
"We stayed there a few days.

13.3 Place

Locative AdvPs consist of Kusaasi place names, specialised locative adverbs, or NPs followed by postpositions. The core locative postposition is the particle *nī*/~ *n*ɛ. Some postpositions are themselves followed by *n*ɛ; many postpositions are converted nouns. Nouns other than place names cannot otherwise be used alone as locatives.

Besides locative proforms, specialised locative adverbs include *yị̀ŋ*ª "outside", *dàtìu̯ŋ*ɔ or *dìtʊ́ŋ*ɔ "right(hand)", *dàgɔ̀bìg*ª "left", *àgɔ́l*ˡɛ or *àgɔ̄lá* "upwards", *lāllí* "far off" (perhaps from *lāl ní*.)

The locative particle takes the form *nī*/ after words ending in a short vowel in SF, after pronouns and after loanwords, and the liaison-word form *n*ɛ elsewhere:

mʊ̀'arī=n	"in a lake"	*yʊ̄dá nì*	"among names"
m̀ nī	"in me"	*mān nī*	"in me"

la'asʊg dɔɔdin nɛ suoya ni
là'asʊ̀g dɔ́ɔdī=n nɛ̄ su̯ēyá nì
assembly:SG house:PL=LOC with road:PL LOC
"in the synagogues and in the streets" (Mt 6:2)

*Yī̀r*ɛ/ "house" has the exceptional sg and pl locative forms *yí̀n*ⁿɛ *yáa=n*ɛ which have the particular nuance "home", as in the parting formula

Pʊ̀'ʊsìm yí̀n.	"Greet (those) at home." i.e. "Goodbye."

The article *lā*/ may precede or follow the locative particle, as may quantifiers:

mʊ̀'arī=n lā or *mʊ̀'ar lā ní*	"in the lake"

m gbana ni wusa	"in all my letters" (2 Thess 3:17, 1996)
m̀ gbànà ní wʊ̄sā	
1SG letter:PL LOC all	

The meaning is completely non-specific location: "at, in, to, from." The locative particle is attached to nouns which are not place names whenever they are used as complements of verbs expressing motion or location:

Kem Siloam buligini pie fʊ nini.
Kɛ̀m Siloam búlʊgʊ̄=nī◡ø pí̀ə◡ fʊ̀ nī̀ní.
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 Sʊntaana kpɛn' Judas [...] *sʊnfʊn.*
Kà Sʊ̄táanà kpéñ' Judas [...] *súñfī=n.*
And Satan enter Judas [...] heart:SG=LOC.
"Satan entered Judas' heart." (Lk 22:3)

Ka Pailet lɛn yi nidibin la na ya'asi yɛli ba ye...
Kà Pailet lém yī̤ nī̤dɪbí=n lā nā yá'asì◡ø yélì=bā yē...
And Pilate again emerge person:PL=LOC ART hither again CAT say=3PL that ...
"Pilate came out to the people again and said to them ..." (Jn 19:4)

ILK has e.g.

Ò bè dâ'a=n.	"He's at market."
Ò bè si̱á'arī=n.	"He's at the bush."
Ò bè pɔ̄ɔgʊ́=n.	"He's at the farm."
Ò bè yí̱n.	"He's at home."
Ò bè mɔ̄ɔgʊ̄=n.	"He's in the grasslands."
Ò bè kɔ̄lɪgī=n	"He's at the stream."
Ò bè tʊ̄ʊmmī=n.	"He's at work."

More precise meanings are expressed with postpositions 13.5.

Kusaasi place names are intrinsically locative and do not take the locative particle; however, they often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement:

Ò bè Bɔ́k.	"He's at Bawku." ILK
Ò bè Tɛ́mpáan.	"He's at Tempane." ILK
Ò kèŋ Bɔ́k.	"He's gone to Bawku."
M̀ ná kɛ̄ŋ Bɔ́k.	"I'm going to Bawku."
Fʊ̀ yûug Bɔ́k kpɛ̄láa?	"Have you been long in Bawku (here)?"
Fʊ̀ yûug Bɔ́kàa? 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 *nī*/ or paraphrases like *Jerusalem téŋī=n* "in Jerusalem-land."

The locative particle also appears in some *time* expressions: *bɛ̄og*ɔ "tomorrow", *bɛ̄ogʊ̄=n*ɛ/ "morning", *yī̤igí=n*ɛ "at first" *sān-si̱'ə=n lā* "at one time, once..."

Proforms used as locative heads of relative clauses are intrinsically locative:

Onɛ ken likin zi' on ken si'ela.
Ɔ̀nì kɛ̄n lı̣̄kī=n zī' ɔ́n kɛ̄n sı̣̄'əlā=ø.
REL.AN go:IPFV darkness=LOC NEG.KNOW 3AN:NZ go:IPFV INDF.IN=NEG.
"He who walks in darkness does not know where he is going." (Jn 12:35)

ka mɔri fʋ keŋ zin'ikanɛ ka fʋ pʋ bɔɔda.
kà mɔ̄rí=fʋ̀◡ ø kɛ̄ŋ zı̣́ň'-kànì kà fʋ̀ pʋ̄ bɔ́ɔdā=ø.
and have=2SG CAT go place-REL.SG and 2SG NEG.IND want=NEG.
"and take you where you do not want." (Jn 21:18)

Reason-why AdvPs are constructed by a metaphorical extension of the sense of the postposition *zūg* "upon"; similarly for proforms:

*àlá zùg*ɔ "therefore" *bɔ̄ zúg*ɔ "why?"
*dìn zúg*ɔ "therefore"

13.4 Manner

Various NP types can be used as manner AdvPs. AdvPs of manner may be proforms, and there are several morphologically distinctive manner-adverb formations; like specialised time adverbs, specialised manner-adverbs do not take dependents. They often show apocope-blocking 3.2; some have the manner-adverb prefix *à-* 10.2 or are derived from adjective stems with the suffixes *mm* or *-ga* 8.2. Others include *pāalʋ́* "openly" and *ňyāe*nɛ/ "brightly, clearly." *Ňyāe*nɛ/ appears as complement of *àe̱ňya* "be something" and as an adjunct:

Wina'am a su'um nyain. "God is light." (1 Jn 1:5, 1996)
Wínà'am áň sʋ́m ňyāe.
God COP good:ABSTR brightly.

... kɛ ka ti lieb nyain. "... make us light." (1 Jn 1:7)
... kɛ́ kà tì lı̣̂əb ňyāe.
... cause and 1PL become brightly.

Ka li sid nie nyain. "And there truly was light." (Genesis 1:3)
Kà lì síd nı̣̀e ňyāe.
And 3IN truly appear brightly.

The spelling *nyain* appears for *ňyāe* 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:

nà'anā/	"easily"	*kɔ̄ň'ɔkɔ*	"solely, by oneself"
tɔ̀'ɔtɔ̄/	"straight away"		

Reduplication of nouns or numbers 12.5.1 creates distributive manner-AdvPs:

zīň'ig zîň'ig	"place by place"	*dàbısìr dábısìr*	"day by day"

Reduplication of manner-adverbs themselves is intensifying:

àsídà sídà	"very truly"	*àmɛ̄ŋá mɛ̄ŋá*	"very truly"

M̀ wúm Kʊ̄sâal bi̱'ələ́. "I know Kusaal a little."
1SG hear:IPFV Kusaal slightly.

M̀ wúm bi̱'əl bi̱'əl. "I understand a very little."
1SG hear:IPFV little little.

Relative clauses with *si̱'əm*[m] "somehow" are common as AdvPs 21.2.1.

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

M̀ kɛ́ŋ nɔ̄bá. "I went on foot." SB; WK corrected this to
1SG go leg:PL. *M̀ kɛ́ŋ nɛ̄ nɔ̄bá*, using *nɛ̄* "with."

A prepositional phrase with *nɛ̄* parallels a count plural used adverbially in

À-ňyɛ̄ nɛ̄ nīf sɔ́ň'ɔ◡ À-wʊ̀m tʊ̀bà.
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 tʊ̀m bɛ́dʊgʊ̄. "She's worked a lot."
Ò tʊ̀m pāmm. "She's worked a lot."

Wʊ̄sā "all" readily switches from quantifying an object to adverbial use:

Bà gɔ̀sī=tí wʊ̄sā. "They've looked at us all." WK
3PL look.at=1PL all. (for: *Bà gɔ̀sí◡tì wʊ̄sā.* 3PL look.at 1PL all.)

This is not a universal property of quantifiers:

Bà gɔ̀sī tí bɛ́dʋgʊ̄.	"They've looked at us a lot." WK
Bà gɔ̀sí tì bɛ̀dʋgʊ̄.	"They've looked at a lot of us." WK

Numbers have specific forms for "so many times" 12.5.1; other count quantifiers sometimes appear similarly as adverbs:

Bà gɔ̀sī tí bábɪgā.	"They've looked at us many times." WK
Bà gɔ̀sí tì bàbɪgā.	"They've looked at many of us." WK

13.5 Postpositions

Postpositions are adverbs with predependents; some also occur without. Most postpositions are literally or metaphorically locative. Postpositions may not be coordinated, but their predependents may:

tinam nɛ fʋn sʋʋginɛ?	"[what is there] between us and you?" (Mt 8:29)

tīnám nɛ̄ fʊ̄n sʊ́ʋgʊ̄=nɛ́=ø?
1PL with 2SG between=LOC=CQ?

Many postpositions represent special uses of ordinary nouns. Some are AdvPs which include the locative particle.

Zūgɔ/ "onto" (*zūgɔ/* "head"):

Ò dìgìl gbáu̱ŋ lā tɛ́ɛbʊ̀l lā zúg.
3AN lay.down book:SG ART table:SG ART upon.
"She's put the book on the table."

Zūgɔ/ is frequently used metaphorically to express a **reason** "because of ..."; reason AdvPs often occur preposed with *kà* or as postlinker adjuncts:

bɔ̄-zúgɔ̀?	"why?"	*dāu̱ lā zúg*	"on account of the man"

Pian'akanɛ ka m pian' tisi ya la zug, ya anɛ nyain.
Pi̱ǎň'-kànì kà m̀ pi̱ǎň'◡ø tísì=yā lā zúg, yà á nɛ̄ ňyāe.
Word-REL.SG and 1SG speak CAT give=2PL ART upon, 2PL COP FOC brightly.
"Because of the words I have spoken to you, you are clean." (Jn 15:3)

The set expression *sāa zúgɔ* is used for "sky"; it is intrinsically locative:

Ka kʋkɔr yi saazug na …
Kà kʋ̀kɔ̄r yī̱ sāa zúg nā …
And voice:SG emerge rain:SG onto hither
"And a voice came from heaven…" (Jn 12:28)

Zūgʊ́=nɛ "on":

tɛ́ɛbʊ̀l lā zúgʊ̄=n "on the table"

*Tɛ̄ŋír*ɛ "under" (*tɛ̄ŋ*a "ground"; with no predependent *Gʊ̀sìm tɛ̄ŋír!* "Look down!"):

tɛ́ɛbʊ̀l lā tɛ́ŋ̀ír "under the table"

*Pʊ̄vgʊ̄=n*ɛ/ "inside" (*pʊ̄vg*a "belly, inside"):

Dāu̯ lā bɛ́ nɛ̄ dɔ́-kàŋā lā púvgʊ̄=n.
Man:SG ART EXIST FOC hut-DEMST.SG ART inside:SG=LOC.
"The man is inside that hut."

ǹwādīs yʊ̂vm lā púvgʊ̄=n "months in the year" (metaphorical locative)

Bābá "beside" (pl of *bābīr*ɛ/ "sphere of activity"):

m̀ nɔ̄bá bàbà "beside my feet"

*Sìsʊ̀vgʊ̄=n*ɛ/ "between" (replaced by *sʊ̀vgʊ̄=n*ɛ/ in KB):

tīnám nɛ̄ fʊ̄n sísʊ̀vgʊ̄=n "between us and you"

*Tʊ̀ɔn*nɛ "in front of" (with no predependent *Gʊ̀sìm tʊ̂ɔn!* "Look to the front!"):

dāká lā tʊ̂ɔn "in front of the box"

*Ňyá'aŋ*a "behind; after (time)" (*ňyá'aŋ*a "back", *lì ňyá'aŋ*a "afterwards"):

Nɛ̄'ŋá ňyâ'aŋ kà ò kūl. "After this she went home."
DEMST.IN after and 3AN go.home.

Gbịn^{nɛ} "at the bottom of" (*gbịn*^{nɛ} "buttock"):

zūər lā gbín "at the foot of the mountain"

Sā'an$^{ɛ/}$ "into/in the presence of", "in the opinion of", "*chez*":

Wínà'am sâ'an "in the sight of God"

Fò ná dī'e tîım pu̱'á-bàmmā lā sâ'an.
2SG IRR receive medicine woman-DEMST.PL ART among.
"You'll get the medicine from where those women are."

Yɛ̄lá "about, concerning" (pl of *yɛ̄l*$^{lɛ/}$ "matter, affair"):

Bà yɛ̀lō=ø mān yɛ̄lá wʊ̄sā.
3PL say=3AN 1SG.CNTR about all.
"They told him all about me."

Kɔ̄ň'ɔkɔ (cf *àràkɔ́ň'* "one" in counting) is used as in *m̀ kɔ̄ň'ɔkɔ* "by myself."

13.6 Proadverbs

	Demonstrative		Indefinite	Interrogative	
Place	*kpɛ̄*	"here"	*zị̀ň'-sī'a*	*yáa ní*	"where?"
	kpɛ̄lá	"there"	"somewhere"	*yáa*	"whither /whence?"
	àní	"there"			
	àníná$^{/}$	"there"			
Time	*nānná*	"now"	*sān-sí'a*	*sān-kán*^{ɛ}	"when?"
	nānná-nā$^{/}$	"now"	"sometime"	*bʊ̄n-dâar*^{ɛ}	"which day?"
	sān-kán^{ɛ}	"then"		*bɔ̀-wịn*^{nɛ}	"what time of day?"
Manner	*àňwá*	"like this"	*sī'əm*^{m}	*wɛ̄lá*	"how?"
	àwá nā$^{/}$	"like this"	"somehow"		
	àlá	"like that"			

The indefinites are used in relative clauses 21.2.1.

The *à-* of the "manner" forms is preceded by the LF-final vowel *-ɪ* 4.2.

Proforms expressing reason are formed with the postposition *zūg*$^{ɔ/}$: *àlá zùg*^{ɔ} "because of that", *bɔ̄zúgɔ̀?* "why?" (cf *bɔ̄ zúgɔ̄* "because" 17.2.1.)

14 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

Lì à nɛ̄ pı́əlìg pāmm.	"It's very white"

the adverb *pāmm* goes with the copula verb rather than the adjective; it is not possible to say **fū-pı́əlìg pāmm lā* 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.

Lì à nɛ̄ pı́əlìg fáss fáss.	"It's very white."	
Lì à nɛ̄ sābılíg zı́m zı́m.	"It's deep black."	
Lì à nɛ̄ zı́ň'a wı́m wı́m.	"It's deep red."	
Lì à nɛ̄ fū-zı́ň'a wı́m wı́m.	"It's a deep red shirt."	WK
M̀ ňyɛ́ fū-zı́ň'a wı́m wı́m.	"I've seen a deep red shirt."	WK
Fū-zı́ň'a wı́m wı́m bɛ́.	"There's a deep red shirt."	WK
M̀ bɔ̂ɔd fū-zı́ň'a wı́m wı́m lā.	"I want the deep red shirt."	WK

Ò à nɛ̄ wɔ̄k tɔ́lılìlì.	"She's very tall."
Ò à nɛ̄ gı̄ŋ tı́rıgà.	"She's very short."
Ò wà'am tɔ́lılìlì.	"She's very tall."
Ò gı̀m nɛ̄ tı́rıgà.	"She's very short."

Not all adjectives, or even all gradable adjectives, have associated ideophones; thus WK has only the adverb *pāmm* in

Lì à sʊ́ŋā pāmm.	"It's very good."
Lì à nɛ̄ bɛ̄'ɛd pāmm.	"It's very bad."
Lì zùlìm pāmm.	"It's very deep."
Lì mà'as pāmm.	"It's very damp."

Most dynamic verbs likewise are not associated with ideophones:

Ò tʊ̀m pāmm.	"She's worked hard."
Ò tʊ̀m hālí.	"She's worked hard." 24.7
Ò zɔ̀ pāmm.	"She's run a lot."
Ò zɔ̀ 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 zɔ̀t nɛ̄ tólìb tólìb. "He [a rabbit] is running lollop-lollop." WK

Similarly, the stance verb *zi̩'e*^{ya} "be standing" and its dual-aspect derivatives are often followed by *sāpī* "straight" (LF *sappinɛ* KB), but the word is found also after other verbs.

ka ku nyaŋe due o meŋi zi'e sapii.
kà kú ňyāŋī◡ø dúe ò mɛ̄ŋī◡ø zi̩'e sāpīı.
and NEG.IRR prevail CAT rise 3AN self CAT stand IDEO
"and was not able to rise and stand straight." (Lk 13:11, 1996)

maalim suoraug sappi mɔɔgin la
màalìm sṵ̱ā-dâʋg sāpī mɔ̄ɔgʊ̄=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 *kà* (Abubakari 2017.) There is perhaps some overlap of categories: see on *ňyāe*$^{nɛ/}$ "brightly", for example 13.4.

A third type of ideophone overlaps with emphatics 24.7: so, for example *kḭ́mm* in *Bɔ̄ kḭ́mm* "what exactly?" 12.4.4.

15 Prepositions

Prepositional phrases function as VP adjuncts or complements. They cannot be direct components of noun phrases. Neither prepositions nor their complements can be coordinated. *Nɛ̄* "with" only takes NPs or AdvPs (including *ǹ*-clauses) as complements, but the other prepositions also appear as clause adjuncts 17.2.1.

Nɛ̄ is "with" in both accompanying and instrumental senses. *Nɛ̄* "and", coordinating NPs and AdvPs, is fundamentally the same word.

Some speakers only use free pronoun forms after *nɛ̄*, but WK and SB have

*ní m*ᵃ	*ní tī*/ or *nɛ́ tì*
*ní f*ᵓ	*ní yā*/ or *nɛ́ yà*
nó [nɔ̃] LF *nó=o* [nɔ̃:]	*ní bā*/ or *nɛ́ bà*
ní lī/ or *nɛ́ lì*	

Written *ne o* is usually read [nɔ̃] in the audio NT.

Examples for *nɛ̄*:

Lìgɪním‿fʊ̀ nịf nɛ́ fʊ̀ nû'ug.
Cover:IMP 2SG eye:SG with 2SG hand:SG.
"Cover your eye with your hand."

Bà kɛ̀ŋ nɛ̄ nɔ̄bá. "They've gone on foot." WK
3PL go with leg:PL.

Dịm nɛ̄ Wīn, dā tʊ̂'as nɛ̄ Wīnnɛ́=ø.
Eat:IMP with God:SG, NEG.IMP talk with God:SG=NEG.
"Eat with God, don't talk with God."
(Proverb: Be grateful for God's generosity and don't complain.)

Kulim nɛ sumbʊgʊsʊm. "Go home in peace." (Mk 5:34)
Kùlìm nɛ̄ sùmbʊ̄gʊsím.
Go.home:IMP with peace.

[*Bárɪkà nɛ́ fʊ̀*] *kɛ̄n kɛ̄n.*
[Blessing with 2SG] arrival arrival.
"Welcome!" (based on a greeting template 25)

M̀ gɛ́ň' nɛ́ fʊ̀. "I'm angry with you." SB
1SG get.angry:PRV with 2SG.

Là'am nɛ̄ "together with" derives from a *n*-catenation construction 19.1:

...mɔr ya'am yinne la'am nɛ tɛn'ɛsa yinne.
... mɔ̄r yā'am yīnní là'am nɛ̄ tɛ̄ň'ɛsá yīnní.
... have sense one together with thought one.
"... had one mind together with one thought." (Acts 4:32)

Wʊ̄ʊ means "like." With pronoun complements WK has

wʊ̄ʊ mān LF *mánɛ̀*	*wúʊ tì*
wʊ̄ʊ fʊ̄n LF *fʊ́nɛ̀*	*wúʊ yà*
wʊ̄ʊ ɔ̄n$^{\varepsilon}$	*wúʊ bà*
wúʊ lì	

WK permits phrases introduced by *wʊ̄ʊ* to be preposed with *kà* 24.3, but rejects this construction for *nɛ̄* + NP:

Wʊ̄ʊ búŋ nɛ́ kà ò zɔ́t.
Like donkey:SG like and 3AN run:IPFV.
"Like a donkey, he runs."

but **Nɛ́ m̀ nû'ug kà m̀ sī'ɪs.*
With 1SG hand:SG and 1SG touch.
is not possible for "With my hand, I touched it."

The complement is often a *sị̄'əm* relative clause 21.2.1:

Ò zɔ̀t wʊ̄ʊ búŋ̀=ø zɔ̀t sị̄'əm lā.
3AN run:IPFV like donkey:SG=NZ run:IPFV INDF.ADV ART.
"He runs like a donkey runs."

Wɛ̄n$^{na/}$ "resemble" takes as complement a prepositional phrase introduced by *wʊ̄ʊ* or *nɛ̄*. A complement of *wɛ̄n wʊ̄ʊ*, *wɛ̄n nɛ̄* or of *wʊ̄ʊ* alone is followed by an empty particle *nɛ̄* whenever it does not have the article *lā*$^{/}$, even if it is a pronoun, or is specific, though not if it is a number (in which case, the meaning is "about"):

wʊ̄ʊ mān nɛ̄	"like me"	*wʊ̄ʊ búŋ nɛ̄*	"like a donkey"
wʊ̄ʊ tūsá àyị́'	"about 2000"		

Alaʒugɔ mɔri ya'am wʋʋ wiigi nɛ...
Àlá zùgɔ̄, mɔ̀rī=ø yā'am wʋ̄ʋ wī̩igí nɛ̄...
Therefore, have=2PL.SUB sense like snake:PL like...
"Therefore, be wise as serpents ..." (Mt 10:16)

Àsɛ́ɛ is "except for." Pronoun complements appear as free forms.

àsɛ́ɛ Wínà'am "except for God" (calquing Twi *gye Nyame*)

Hālí means "up to and including." Pronoun complements are free forms.

O daa pʋn anɛ ninkʋʋd hali pin'ilʋgʋn sa.
Ò dāa pʋ́n à nɛ̄ nī̩n-kʋ̂ʋd hālí pī̩ǐ'ilʋ́gʋ̄=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)

Hālí can also appear as a prelinker adjunct and as an emphatic 24.7. As emphatic "even" preceding *nɛ̄* or *là'am nɛ̄* "(together) with" and a *ǹ*-clause complement, it produces the meaning "despite, even though, even as":

Hali la'am nɛ on daa an yɛlsʋm wʋsa daan la, o da lieb nɔŋdaan...
Hālí là'am nɛ̄ ɔ́n dāa áǹ yɛ̄l-sʋ́m wʋ̄sā dâan lā,
Even together with 3AN:NZ TNS COP matter-goodness all owner:SG ART,
ò dà lī̩əb nɔ̄ŋ-dâan...
3AN TNS become poverty-owner:SG...
"Despite his having possessed every blessing, he became poor..." (2 Cor 8:9)

Zugsɔb yɛl ye, Hali nɛ man vʋe nwa...
Zūg-sɔ́b yɛ́l yɛ̄, Hālí nɛ̄ mán vʋ̄e̱ ǹwá ...
Lord 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 pʋ sɔbi li
hālí nɛ̄ mán dāa sɔ̄bī◡ ø tísì=yā sī̩'əm lā
even with 1SG:NZ TNS write CAT give=2PL INDF.ADV ART
m̀ dāa pʋ̄ sɔ̄bí=lī ...
1SG TNS NEG.IND write=3IN ...
"Despite how I wrote to you, I did not write it ..." (2 Cor 7:12)

16 Verb phrases

16.1 Structure

The core of the verb phrase is a verb word along with bound particles which, together with verb flexion, mark tense, aspect, mood and polarity. Some verb complements are liaison enclitics; remaining complements and adjuncts follow in that order, after which VP-final particles may occur.

The VP is subject to independency marking. This is primarily a tone overlay, but there are associated segmental features: the particle *yā* after phrase-final perfective forms and the dual-aspect verb imperative flexion *-ma* appear only when the tone overlay is present.

The system separates tense, marked by preverbal particles, from aspect, marked by verb flexion and postverbal *nɛ̄/*. As is common cross-linguistically, future reference is marked by *mood*. Negative markers vary with mood. Mood itself is marked primarily by such preverbal particles, but the flexion *-ma* of dual-aspect verbs is a portmanteau marker of imperative mood, positive polarity and independency.

The VP shows no agreement. Apparent number agreement in imperatives is actually due to the incorporation of the postposed 2nd pl subject pronoun ^{ya}.

Bound VP particles occur in a fixed order:

	T1	T2	Mood	Preverb		E1	E2	
lɛ̀ɛ	*dàa*	*nàm*	*ø ↔ pʊ̄*	*pʊ̀n*	VERB	n^{ε}	m^{a}	*nɛ̄/*
	sàa	*ǹyɛ̄ɛ(tí)*	*ø ↔ dā*	*lɛ̀m*		^{ya}	$f^{\text{ɔ}}$	
	ø		*nà ↔ kʊ̀*	*tì*			^{o}	
	pà'			*kpɛ̀lì̩m*			*lɪ*	
	sà			*là'am*			*tɪ*	
	dāa			*dɛ̀ŋ̀m*			*ya*	
	dà			*…*			*ba*	

ø marks slots where the absence of a particle can be contrastive.

T1, T2 are slots for tense particles; E1 for the liaison enclitics *n*$^{\varepsilon}$ 16.3.2 ^{ya} 18.3; E2 for enclitic personal pronouns as (direct or indirect) objects, which unlike all other complements *precede* aspect-marking *nɛ̄/* 16.2.1. Only one bound object pronoun may occur; cf *n*-catenation using *tì̩s*$^{\varepsilon}$ "give" 19.1.

The particles in the column "Mood" also mark polarity: positive ↔ negative.

For *lɛ̀ɛ* "but" see 16.7.

Tone Pattern A verbs have all-M tones in the irrealis mood.

16.2 Aspect

The basic aspect distinction is **perfective** versus **imperfective**. Dual-aspect verbs distinguish aspects by flexion: the unmarked stem form is perfective, the suffix *-*da* forms the imperfective, and a form with *-*ma* is used for imperative when the verb word itself carries the independency-marking tone overlay 16.6.2. 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.

16.2.1 Aspectual *nɛ̄*

Following a verb word with no free words intervening, the VP focus particle *nɛ̄*/ 24.1.2 by default marks a contrast with another time at which the situation expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." This usually occurs because the time referred to is not coextensive with the time of the situation (CGEL pp125 ff.) With imperfective aspect, this happens when the time referred to is strictly contained within the time of the situation: the meaning is similar to the English "progressive", and is similarly not freely used with verbs which by default express abiding states. With perfectives expressing events, the time referred to and the time of the situation always coincide, and aspectual use of *nɛ̄*/ is not possible; however, *resultative* perfectives express a state resulting from the action of the verb, and because this state follows the action the time referred to and the time of the situation never coincide. Accordingly, aspectual *nɛ̄*/ 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 *nɛ̄*/ cannot be aspectual.

Nɛ̄/ may not be used at all in certain syntactic contexts, and may not appear a second time in an aspectual sense if it is already present focussing a constituent. Furthermore, *nɛ̄*/ 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:

Ò kùɵsìdī=bá nɛ̄. "She's selling them."
3AN sell:IPFV=3PL FOC.

Ò kùɵsìd nɛ̄ sūmmā lā. "She is selling the groundnuts."
3AN sell:IPFV FOC groundnut:PL ART.

but *Ò kùɵsìd sūmmā lā nɛ̄.* "She *sells/is selling* the groundnuts."
3AN sell:IPFV groundnut:PL ART FOC. (VP focussed: "They're not free.")

Ò zàbìd. "He fights."
3AN fight:IPFV.

Ò zàbìd nɛ̄. "He's fighting."
3AN fight:IPFV FOC.

but *Ò pʊ̄ zábɪdā=ø.* "He's not fighting/He doesn't fight."
3AN NEG.IND fight:IPFV=NEG.

Nɛ̄/ cannot have aspectual meaning in **generic** statements. These are usually recognisable by the fact that they have indefinite subjects without determiners (or pronouns referring to such subjects) and are not presentational 24.5:

Nɪ̣̄igí ɔ̀ňbìd nɛ̄ mɔ̄ɔd. Bà nùud nɛ̄ kû'ɵm.
Cow:PL chew:IPFV FOC grass:PL. 3PL drink:IPFV FOC water.
"Cows eat *grass*. They drink *water*." ("What do cows eat? and drink?")

Nɛ̄/ is omitted in replying to questions or commands by repeating the verb:

A: *Gɔ̀sìm!*	"Look!"	B: *M̀ gɔ́sìd!*	"I'm looking!"
A: *Fʊ̀ gɔ́sìd nɛ́ɛ?*	"Are you looking?"	B: *M̀ gɔ́sìd!*	"I'm looking!"

16.2.2 Perfective

Perfective is the unmarked aspect. It is not incompatible with a present tense interpretation, often corresponding to the English "simple present", which is likewise unmarked over against the progressive form. It is the usual aspect found with the irrealis mood to express future events, and in *yà'*-clauses 20.2. Nevertheless, even without tense marking, the perfective often has an implication of completion, in contrast with the imperfective.

The perfective frequently does occur without tense marking, either explicit or implicit from context. 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 nị́. "It rained." (before yesterday.)
Rain TNS rain.

but *Sāa nị́ yā.* "It has rained."
Rain rain PFV. The time is unspecified: "Perhaps the grass is still wet, or I am explaining that the area is not really a desert." (WK)

Perfective appears with present meaning with events and processes which can be conceptualised as being coextensive with the moment of utterance:

Ò yɛ̀l yɛ̄ ... "He says ...." (translating for the foreign doctor)
3AN say that ...

Performatives naturally fall into this category:

M̀ pû'ʋs yā. "Thankyou", "I thank you."
1SG greet PFV. (cf Hausa *Naa goodèe*)

M̀ si̯ák yā. "I agree."
1SG agree PFV.

Verbs of perception and cognition (often corresponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

M̀ ňyɛ́ nū'-bị́bɪsá‿ àtáň'. "I can see three fingers."
1SG see hand-small:PL NUM:three.

M̀ tɛ̂ň'ɛs kà ... "I think that ..."
1SG think and ...

Verbs expressing a change of state in the subject may use the perfective to express the resulting state. Aspectual *nɛ̄*/ must then follow whenever syntactically permissible:

Lì bɔ̀dìg yā . "It's got lost."
3IN lose PFV.

but *Lì bɔ̀dìg nɛ̄ .* "It's lost."
3IN lose FOC.

Most verbs expressing a change of state in the subject are either intransitive or patientive ambitransitive:

Ò kpị̀ nɛ̄. "He's dead."
3AN die FOC.

M̀ gɛ́ň nɛ̄. "I'm tired."
1SG get.tired FOC.

Bà kʊ̀dʊ̀g nɛ̄. "They're old."
3PL grow.old FOC.

Lì pɛ̀'ɛl nɛ̄. "It's full."
3IN fill FOC.

Lì yɔ̀ nɛ̄. "It's closed."
3IN close FOC.

M̀ bʊ́g nɛ̄. "I'm drunk." (← Hausa *bùgu*)
1SG get.drunk FOC.

Ò lɛ̀r nɛ̄. "He's ugly." WK *sic*
3AN get.ugly FOC.

Lì sɔ̀bì̀g nɛ̄. "It's black." WK *sic*
3IN blacken FOC.

Agentive transitive verbs of dressing express a change of state in the subject:

M̀ yɛ́ fūug. "I've put a shirt on."
1SG put.on shirt:SG.

M̀ yɛ́ nɛ̄ fūug. "I'm wearing a shirt."
1SG put.on FOC shirt:SG.

A perfective form can *only* be interpreted as resultative if it expresses a change of state in the subject:

M̀ dá' nɛ̄ bʊ́ŋ. "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:

Ò dìgìn nɛ̄.
3AN lie.down FOC.

"He's *lain down.*" DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."

In catenation and in absolute clauses, the choice of perfective over imperfective implies that the event is complete. Consequently, in catenation the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order 19. Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

Ka dapa ayi' yɛ fupiela zi'e ba san'an.
Kà dāpá◡ àyí' yé fū-píəlà◡ ø zì'e bà sā'an.
And man:PL NUM:two dress shirt-white:PL CAT stand 3PL among.
"Two men dressed in white were standing with them." (Acts 1:10)

In contrast, an imperfective may be followed by a perfective:

Ňwādısá◡ àtáň' kà fù ná mɔ̄r bīig lā n kɛ̄ 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 21.1. In the same way, narrative generally features series of tense-unmarked perfectives describing events strictly in order 16.3.4.

Perfectives may appear in general statements such as proverbs, which in such cases should probably be regarded as mini-anecdotes:

Kukoma da zab taaba ason'e bi'ela yela.
Kʊ̀kɔ̀mà dá zàb tāabá à-sɔ̄ň'e bī'ələ́ yɛ̀là.
Leper:PL TNS fight each.other PERS-better.than slightly about.
"Lepers once fought each other about who was a bit better." KSS p40

16.2.3 Imperfective

Without aspectual *nɛ̄/*, 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:

Nɪ̣dīb kpɪ̂id. "People die."
Person:PL die:IPFV.

Nɪ̣igí ɔ̀ňbìd mɔ̄ɔd. "Cows eat grass."
Cow:PL chew:IPFV grass:PL.

M̀ zɪ́ňˈi. "I sit."
1SG be.sitting.

Stative single-aspect verbs express abiding states:

Ò gɪ̣m. "She's short."
3AN be.short.

M̀ mɔ́r pu̱ˈā. "I have a wife."
1SG have wife:SG.

With aspectual *nɛ̄/*, the imperfective has continuous/progressive meaning. This is permitted only if the subject is an agent (including the subjects of stance verbs), is undergoing a change in internal state, or is moving without external agency.

Nāˈ-sɪ́əbà ɔ́ňbìd nɛ̄ mɔ̄ɔd. "Some cows are eating grass."
Cow-INDF.PL chew:IPFV FOC grass:PL.

M̀ zɪ́ňˈi nɛ̄. "I'm sitting."
1SG be.sitting FOC.

M̀ yɔ̂ɔd nɛ̄ kʊ́lɪ̀ŋ lā. "I'm closing the door."
1SG close:IPFV FOC door:SG ART.

Kʊ̀lɪ̀ŋ lā yɔ̂ɔd nɛ̄. "The door is closing."
Door:SG ART close:IPFV FOC.

Lì màˈad nɛ̄. "It is getting cool." (*māˈe/* "get cool")
3IN get.cool:IPFV FOC.

Gbànà sɔ́bìd zi̱ná. "Letters get written today." WK
Letter:PL write:IPFV today.

Gbàu̱ŋ lā sɔ́bìd sʊ́ŋā. "The letter is writing well (i.e. easily.)" WK
Letter:SG ART write:IPFV good:ADV.

Lì lị̀t nɛ̄. "It is falling."
3IN fall:IPFV FOC.

Otherwise, *nɛ̄/* must be interpreted as focussing a constituent, not as aspectual:

Dāam lā nûud. "The beer gets drunk." WK
Beer ART drink:IPFV.

but *Dāam lā nûud nɛ̄.* 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."

Nɛ̄/ after stative verbs is thus normally interpreted as focussing a constituent:

Ò gị̀m nɛ̄. "He's *short*." ("I was expecting someone taller.")
3AN be.short FOC.

M̀ mɔ́r nɛ̄ pu̱'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.

Lì vɛ̀n nɛ̄. "It's *beautiful*." (Focus on the verb.)
3IN be.beautiful FOC.

but *Nānnánā, lì vɛ̀n nɛ̄.* "Just now, it's beautiful."
Now, 3IN be.beautiful FOC.

Lì dāa vɛ́n nɛ̄. "It *was* beautiful." WK: "I gave you a cup, and
3IN TNS be.beautiful FOC. it was OK then, but now you've spoiled it."

Sān-kán lā, lì dāa zúlìm nɛ̄.
Time-DEM.SG ART, 3IN TNS be.deep FOC.
"At that time, it was deep."

Mʊ̀'ar lā dāa zúlìm nɛ̄. "The lake *was* deep."
Lake:SG ART TNS be.deep FOC. (Implying, "Now it's shallow." WK)

With dynamic verbs describing events the sense is often an analogous time-limited habitual rather than progressive:

Nɪ̣dīb kpɪ̣̂id nɛ̄. "People are dying."
Person:PL die:IPFV FOC.

If the following constituent does not permit focussing with *nɛ̄*/ 24.1.2, *nɛ̄*/ is constrained to be aspectual even without an explicit time limitation present:

M̀ mór bɪ̄isá◡ àtáŋā.
1SG have child:PL NUM:three.exactly.
"I've got exactly three children."

but *M̀ mór nɛ̄ bɪ̄isá◡ àtáŋā.*
1SG have FOC child:PL NUM:three.exactly.
"I've got exactly three children just now." DK: "You're on a school trip, talking about how many children everyone has brought."

Lì dāa áň sʊ́ŋā. "It was good." WK
3IN TNS COP good:ADV.

Lì dāa á nɛ̄ sʊ́ŋā. "At the time, it was good." WK
3IN TNS COP FOC good:ADV.

Lì à nɛ̄ sʊ́ŋā. "It's good." ("Now; it wasn't before." WK)
3IN COP FOC good:ADV.

Emphatics 24.7 do not reject focus with *nɛ̄*/:

bɔzugɔ o anɛ fʊ biig mɛn.
bɔ̄ zúgɔ́ ò à né fʊ̀ bɪ̄ig mén.
Because 3AN COP FOC 2SG child:SG also.
"Because he is your child too." (Genesis 21:13)

16.3 Tense

16.3.1 Tense particles

Tense particles come first in the VP, preceded only by *lɛ̀ɛ* "but." They are mutually exclusive:

dàa	"day after tomorrow"
sàa	"tomorrow"
ø	present, or implicit (see below)
pà'	"earlier today"
sà	"yesterday"
dāa	before yesterday
dà	before the time marked by *dāa*

These particles (including *ø*) may be followed immediately in the tense slot by either of the two auxiliary tense particles *nàm* "still/yet" or *ňyɛ̄ɛ (tí)* "habitually."

The day begins at sunrise:

Fò sá gbìs wɛ̄lá=ø? "How did you sleep yesterday?" i.e."last night"
2SG TNS sleep how=CQ?

Future tense markers normally require irrealis mood, but imperative is possible if a main clause has been ellipted before a subordinate clause of purpose:

Ò sáa zàb nà'ab lā. "Let him fight the chief tomorrow."
3AN TNS fight chief:SG ART.

Dāa 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 *dāa* and in another with *dà*, but when both markers occur, *dà* always expresses time prior to *dāa*. (For other "pluperfects", cf tense marking in content clauses 22.2, and in *ǹ*-clauses within narrative 16.3.4.)

Nàm means "still" or with a negative "yet":

Tʉ̀ım lā nám bɛ̀ɛ=ø? "Is there any medicine left?"
Medicine ART still EXIST=PQ? ("Does the medicine still exist?")

dunia nam pʋ pin'il la
dūnɪyá=ø nàm pʋ̄ pi̱ň'il lā
world:SG=NZ still NEG.IND begin ART
"before the world began" (Mt 25:34) ("The world having not yet begun.")

M̀ nám zī'◡ ø ňyɛ̄ gbīgīmnɛ̄=ø.
1SG still NEG.KNOW CAT see lion:SG=NEG.
"I've never seen a lion." SB (see 19.1 on *n*-catenation idioms)

Ňyɛ̄ɛ or *ňyɛ̄ɛ tí* (KT *ɛ̄ɛň tí,* NT *nyii ti,* KB *ɛɛnti*) means "habitually." The main verb is imperfective.

Ò ňyɛ̄ɛ zábìd nâ'ab lā.
3AN usually fight:IPFV chief:SG ART.
"He's accustomed to fight the chief." WK

Ò ňyɛ̄ɛ gɔ̄sīd nâ'ab lā.
3AN usually look.at:IPFV chief:SG ART.
"He's accustomed to look at the chief." WK

Ò dāa ňyɛ̄ɛ zábìd nâ'ab lā.
3AN TNS usually fight:IPFV chief:SG ART.
"He was accustomed to fight the chief." WK

Ò ɛ̄ɛň tí zàbìd nɛ̄ nâ'ab lā.
3AN usually fight:IPFV FOC chief:SG ART.
"He's accustomed to fight the chief." KT

Ò ɛ̄ɛň tí zi̱ň'i kpɛ̄lá. "She's accustomed to sit there." KT
3AN usually be.sitting there.

Ò ɛ̄ɛň tí dīgī kpɛ̄lá. "She's accustomed to lie there." KT
3AN usually be.lying there.

Ti ɛɛnti pʋ sɔbid dinɛ ka ya na karim ka kʋ nyaŋi gban'e li gbinnɛ.
Tì ɛ̄ɛň tí pʋ̄ sɔ̄bīd dínì kà yà ná kārím kà kʋ́ ňyāŋī◡ ø
1PL usually NEG.IND write:IPFV REL.IN and 2PL IRR read and NEG.IRR prevail CAT
gbáň'e lì gbi̱nnɛ̄=ø.
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)

16.3.2 Discontinuous past

My informants use the **discontinuous-past** marker *n*$^{\varepsilon}$ to make an earlier-today past with indicative meaning:

M̀ ɔ́ñbɪdī=n sūmmā. "I was eating groundnuts."
1SG chew:IPFV=DP groundnut:PL.

This implies "and now I'm not", a sort of anti-current-relevance. Such a "discontinuous" past is proposed for many languages (especially in West Africa) in Plungian and van der Auwera 2006; *n*$^{\varepsilon}$ fulfils their criteria for a typical discontinuous past well. They note (5.2) that such markers often acquire attenuative, hypothetical or counterfactual senses, which are much the commonest roles of *n*$^{\varepsilon}$ in Kusaal 20.1.

16.3.3 Periphrastic futures

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") Note the use of the *perfective* in

M̀ kúl yā. equivalent in usage to "I'm going home now."
1SG go.home PFV. Perfective as an instantaneous present 16.2.2

There are two periphrastic indicative constructions for "to be about to ...": (a) *bɔ̀ɔd*^{a} "want" + gerund. The subject need not be animate; the construction is only possible with gerunds from dynamic verbs.

Tɪ̀ɪg lā bɔ̂ɔd lɪ̄ig. "The tree is about to fall."
Tree:SG ART want fall:GER.

Yʊ'ʊŋ bɔɔd gaadʊg, ka bɛog bɔɔd nier.
Yʊ́'ʊŋ bɔ̂ɔd gáadʊ̀g kà bɛ̄og bɔ̂ɔd nɪ̂ər.
Night want pass:GER and morning want appear:GER.
"The night is about to pass and tomorrow is about to appear." (Rom 13:12)

(b) subject + *yɛ̄*-purpose clause; the subject must be animate. (Cf also 22.2.)

M̀ yɛ́ m̀ kṵā sūmmā. "I'm going to hoe groundnuts."
1SG that 1SG hoe groundnut:PL.

M̀ yɛ́ m̀ kɪ̰á nɪ̄m. "I'm going to cut meat"
1SG that 1SG cut meat:SG.

16.3.4 Implicit tense 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 *ø* 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:

Nɪ̣dīb kpɪ̂id nɛ̄. "People are dying."
Person:PL die:IPFV FOC.

Nɪ̣dīb kpɪ̂id. "People die."
Person:PL die:IPFV.

Ò mɔ̀r pu̱'ā. "He has a wife."
3AN have wife:SG.

Ò kpɪ̀ yā. "She's died." ("present perfect")
3AN die PFV.

In isolation, it is not possible to interpret such expressions as referring to the past (see below on informal narrative.)

Tense-markers may be omitted with the irrealis mood, with -n^{ε} 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.
or *Fù sáa nà kūl bɛ̄og.*
2SG TNS IRR go.home tomorrow.
or *Fù nà kūl bɛ̄og.*
2SG IRR go.home tomorrow.

cf *Fù ná kūl.* "You will go home."
2SG IRR go.home (today, tomorrow, next week ...)

M̀ pá' ɔ̀ňbɪdī=n sūmmā. "I was eating groundnuts earlier today."
1SG TNS chew:IPFV=DP groundnut:PL.
or *M̀ ɔ́ňbɪdī=n sūmmā.*
1SG chew:IPFV=DP groundnut:PL.

M̀ sá zàb nâ'ab lā sû'ɵs. "I fought the chief yesterday."
1SG TNS fight chief:SG ART yesterday.
or *M̀ záb nâ'ab lā sû'ɵs.*
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 *kà*; 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 *kà* 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 *kà* to unmarked clauses with *kà*; the Balaam's Donkey narrative 27.1 shows a higher proportion of tense-marked clauses without *kà* than typical NT narrative, for example. However, throughout KB, narrative favours long sequences of coordinated *kà*-clauses with perfective aspect without tense marking, narrating the sequence of events in order. Here *kà* itself corresponds to *zero* in English.

Less formal sources like the Three Murderers text 27.2 drop tense-marking in clauses *without kà* within narrative much more often than the Bible versions. In view of the consistency of the tense marking principles of KB/NT, narrative clauses of this kind are probably analogous to the "historic present" of English informal conversational narration (CGEL p130); significantly, *kpɛ̄* "here" and spatio-temporal deictics like *kàŋā* "this" are also common in such texts.

In any case, tense-marking must be absent in clauses introduced by *kà* which are carrying the narrative forward, and conversely, disruptions in narrative flow must normally be tense-marked (with exceptions as noted below.)

Presented with isolated *kà*-clauses with perfective aspect and no tense marking, my informants always interpeted them as expressing events, rejecting any aspectual interpretation of the particle *nɛ̄/* in favour of constituent focus; but with tense marking, *nɛ̄/* was, as usual, taken as aspectual by default:

Lì bɔ̀dìg nɛ̄. "It's lost."
3IN get.lost FOC.

Kà lì bɔ́dìg nɛ̄. Rejected by WK; accepted after some thought
And 3IN get.lost FOC. by DK, explained as contradicting
"someone hid it" i.e. as contrastive focus

Bà kɔ̀dìg nɛ̄. "They're old."
3PL get.old FOC.

Kà bà kʊ́dìg nɛ̄. "And they're old." Rejected by WK; accepted
And 3PL get.old FOC. by DK with the gloss "You're saying they're old when he promised to give you new ones", i.e. as contrastive focus

But *Kà lì dāa bɔ́dìg nɛ̄.* "And it was lost."
And 3IN TNS get.lost FOC.

Kà bà sá kʊ̀dìg nɛ̄.
Kà bà dāa kʊ́dìg nɛ̄. etc all acceptable as "and they were old."

Thus, both with and without *kà*, tense-marking signals disruption of the narrative flow:

*Ka Yesu **daa** an yʊma pii nɛ ayi' la, ka ba keŋ malʊŋ la wʊʊ ban ɛɛnti niŋid si'em la. Ka malʊŋ la dabisa naae la, ka ba lɛbidi kun. Ka Yesu kpɛlim Jerusalem teŋin ka o ba' nɛ o ma pʊ baŋ ye o kpɛlim yaa. Ba **daa** tɛn'ɛs ye o dɔlnɛ ba teŋ dim la, ka keŋ ...*
Kà Yesu=ø dāa áň yʊ́mà pị̄i nɛ́ àyị̄' lā, kà bà kɛ̄ŋ málʊ̀ŋ
And Jesus=NZ TNS COP year:PL ten with NUM:two ART, and 3PL go sacrifice:SG
lā wʊ̄ʊ bán ɛ̄ɛň tí nị̀ŋìd sị̄'əm lā. Kà màlʊ̀ŋ lā dábɪsà=ø
ART like 3PL:NZ usually do:IPFV INDF.ADV ART. And sacrifice:SG ART day:PL=NZ
nāe lā, kà bà lɛ́bɪdì‿ ø kūn. Kà Yesu kpɛ́lìm Jerusalem
finish ART, and 3PL return:IPFV CAT go.home:IPFV. And Jesus remain Jerusalem
tɛ́ŋī=n kà ò bā' nɛ́ ò mà pʊ̄ báŋ yɛ́ ò kpɛ̀lìm
land:SG=LOC and 3AN father:SG with 3AN mother:SG NEG.IND realise that 3AN remain
yāa=ø. Bà dāa tɛ̄ň'ɛs yɛ́ ò dɔ̀l nɛ́ bà tɛ̀ŋ-dìm lā, kà kɛ̄ŋ...
PFV=NEG. 3PL TNS think that 3AN accompany FOC 3PL land-person.PL ART, and go...
"When Jesus **was** twelve years old, they went to Jerusalem to sacrifice as they were accustomed to. When the days of sacrifice were over, they were going home, but Jesus remained behind in Jerusalem, and his father and mother didn't realise that he had stayed. They **thought** that he was accompanying their fellow-countrymen. And they went ..." (Lk 2:42-44)

Note the "aside" *O ma **da** ane Uria po'a* in the genealogy of Jesus in Matthew 1.1ff 1996, which has dozens of clauses of the pattern *kà* X *du̯'á* Y "and X begat Y":

*Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma **da** ane Uria po'a. Ka Solomon du'a Rehoboam.*
Kà Jese dụ́'á nâ'ab David. Kà David dụ́'á Solomon. Ò mà
And Jesse beget king:SG David. And David beget Solomon. 3AN mother:SG
dá à nɛ̄ Uria pụ́'á. Kà Solomon dụ́'á Rehoboam...
TNS COP FOC Uriah wife:SG. And Solomon beget Rehoboam...
"And Jesse begat King David. And David begat Solomon. His mother **was** Uriah's wife. And Solomon begat Rehoboam..." (Mt 1:6-7, 1996)

In contrast, the genealogy in Luke 3:23ff 1996 moves backwards in time and has dozens of consecutive examples of *ka* X *saam **da** ane* Y "and X's father **was** Y."

Disruptions in narrative flow normally *must* be tense-marked, but very long series of coordinated "asides" do sometimes drop tense marking; in KB the genealogy in Luke shows *ka X saam da anɛ 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 *nɛ̄*/ in narrative to express several instances of an event:

Ka on kpɛn' la, o yɛli ba ye [...]*. Ka ba **la'ad** o.*
Kà ɔ́n kpɛ̀ň' lā, ò yɛ́lì=bā yɛ̄ [...]*. Kà bà lá'adō=ø.*
And 3AN:NZ enter ART, 3AN say=3PL that ... and 3PL laugh:IPFV=3AN.
"After he came in, he said to them [...]. But they **laughed** at him." (Mk 5:39-40)

Ǹ-clauses normally mark tense independently, but within narrative they mark tense relative to the narrative timeline:

Ɔ̄n dāa ňyɛ̄t sʊ́ŋā ɔ́n dāa áň bḭ́-lḭ̀a láa=ø?
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 yʊ'ʊn tiɛn Yesu n sa yɛl si'el la ye ...*
Kà Pita yʊ̄'ʊn tḭ́eň Yesu=n sà yɛ̀l sḭ̄'əl lā yɛ̄ ...
And Peter then remember Jesus=NZ TNS say INDF.IN ART that ...
"And Peter then remembered what Jesus had said the day before..." (Mt 26:75)

Main clauses lack tense marking after absolute clauses preposed with *kà* 24.3, regardless of whether tense marking appears in the absolute clause (132/136 cases in Mark, Luke, and Acts 1-14, 1976.) After absolute clauses as postlinker adjuncts 17.2.1, tense marking in main clauses follows the usual principles for narrative, with absolute clauses agreeing with their main clauses in tense-marking (69/78 cases.)

Nɛ̄ is perhaps marking constituent focus in

*Ka ban ken la, Jesus **gbisid ne**.*
Kà bán kɛ̄n lā, Jesus gbīsīd nɛ̄.
And 3PL:NZ go:IMPF ART, Jesus sleep:IPFV FOC.
"As they were travelling, Jesus was sleeping." (Lk 8:22-23, 1976)
KB *ka gbɛɛm zɛɛg Yesu ka o gbisid.* "sleep overcame Jesus and he slept."

If *nɛ̄* were aspectual, one would have expected tense marking.

Tense marking is not affected by clause adjuncts other than time expressions or by the "resumptive" *yɛ̄* of indirect speech 22.2.1; cf:

***Amaa** ba **da** zɔt o nɛ dabiem, ban da pʋ niŋ o yadda ye o sid anɛ nya'andɔl la zug. **Amaa ka** Barnabas zaŋ Saul n mɔr o keŋ ...*
Àmáa bà dà zɔ̀tō=ø nɛ̄ dábīəm, bán dà pū níŋɔ̀=ø
But 3PL TNS fear:IPFV=3AN FOC fear, 3PL:NZ TNS NEG.IND do=3AN
yáddā yɛ́ ò sìd à nɛ̄ ňyâ'an-dɔ̀l lā zúg. Àmáa kà Barnabas
faith that 3AN truly COP FOC disciple:SG ART upon. But and Barnabas
záŋ Saul n mɔ̄ró=ø ø kɛ̄ŋ ...
take Saul CAT have=3AN CAT go ...
"But they were afraid of him, because they did not believe that he was really a disciple. But Barnabas brought Saul ..." (Acts 9:26-27)

A tense-marked interruption in the narrative flow may itself contain clauses coordinated with *kà*; the tense marker of the first such clause is not repeated, but the following *kà*-clauses are not carrying on the narrative and can thus have any aspect:

*Ba da pu mor biiga, bozugo Elizabet **da** ane kundu'ar, ka babayi la wusa me **kudigne**.*
Bà dà pū mɔ̄r bīigā=ø, bɔ̄zúgɔ̄ Elizabet dá à nɛ̄
3PL TNS NEG.IND have child:SG=NEG, because Elizabeth TNS COP FOC
kʋ́ndʊ̀'ar kà bà bàyį́' lā wʊ̄sā mɛ́ kʊ̀dɪ̀g nɛ̄.
barren.woman:SG and 3PL NUM:two ART all also get.old FOC.
"They had no child, because Elizabeth was barren and they were both old." (Lk 1:7, 1996; no *nɛ* in the KB *ka babayi' la wʋsa mɛ kʋdig hali.*)

16.4 Mood

There are three moods: indicative, imperative and irrealis. The distinction among them is in itself quite straightforward, but the *marking* of mood involves portmanteau morphs which also express polarity, and in the case of the imperative, independency as well.

Indicative is the unmarked mood. It uses the negative particle *pʊ̄*. 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 *nɛ̄/* with aspectual meaning.

Imperative mood is negated by *dā*. With dual-aspect verbs carrying the independency-marking tone overlay it shows a special inflection *-ma* 16.6.2 but otherwise the verb word coincides in form with the indicative.

Ò vʊ̀l tîɪm kà ò nɔ́bìr pʊ̄ zábɛ̄=ø.
3AN swallow medicine and 3AN leg:SG NEG.IND fight=NEG.
"She took medicine and her leg didn't hurt." WK

Ò vʊ̀l tîɪm kà ò nɔ́bìr dā zábɛ̄=ø.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight=NEG.
"She took medicine so her leg wouldn't hurt." WK

The *-ma* imperative of dual-aspect verbs is perfective by default:

Kɔ̀ňsìm! "Cough!"

Imperatives without independency-marking tone overlay make perfective/imperfective distinctions in the usual way by verb flexion:

Dā kɔ́ňsɛ̄=ø! "Don't cough!" (To a patient who has coughed
NEG.IMP cough=NEG! during an eye operation with local anaesthetic)

Dā kɔ́ňsɪdā=ø! "Don't cough!" (Explaining before the operation
NEG.IMP cough:IPFV=NEG! what to avoid throughout)

See 18.3 on the postposed 2pl pronoun ya in commands to several people.

The particle *nɛ̄/* cannot appear in its aspectual sense with the imperative, but *àlá* "thus" after imperatives imposes continuous/progressive meaning:

Dịm! "Eat!"
Dịmí àlá! "Carry on eating!"

Informants contract *-í-à-* either to *-í-* or to *-á-*: [dımıla] [dımala].

Dìmī=ní◡ àlá! "Keep ye on eating!" [dımınıla] [dımınala]
Eat:IMP=2PL.SUB ADV:thus!

Single-aspect verbs used as imperatives frequently add *àlá*:

Zį́'ə àlá! (text *zi'ela*) "Be still!" (Jesus to the storm, Mk 4:39, 1976)

Dìgī=ní◡ àlá! "Keep (ye) on lying down." [dıgınıla] [dıgınala]
Be.lying.down=2PL.SUB ADV:thus!

Āa=ní◡ àlá bāaňlím! "Be (ye) quiet!" [a:nıla] [a:nala]
COP=2PL.SUB ADV:thus quiet:ABSTR!

Bɛ̄ı=ní◡ àlá àníná! "Be ye there!" [bɛ:nıla] [bɛ:nala]
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.

Gɔ̀sımī=ø! "Look ye!"
Look:IMP=2PL.SUB!

Dā gɔ̄sɛ̄=ø! "Don't look!"
NEG.IMP look=NEG!

Kɛ̀l kà ò gɔ̄s! "Let her look!"
Cause:IMP and 3AN look!

Kɛ̀m nā n gɔ̄s! "Come and look!"
Come:IMP hither CAT look!

Dɔ̀llī=ní=m! "Follow ye me!"
Follow=2PL.SUB=1SG!

Mɔ̀r nį̄n-báalì̄g! "Have pity!"
Have eye-pity!

Irrealis mood expresses future statements and questions and has the preverbal mood markers *nà* (positive) *kʊ̀* (negative.) Tone Pattern A verbs show a tone perturbation to all-M tonemes 3.8.2. The irrealis distinguishes aspects by verb flexion like the indicative, but aspectual *nɛ̄*/ cannot occur. Perfective aspect occurs much more often than imperfective. Irrealis mood with past tense markers is contrary-to-fact, not future-in-the-past: see 20.4 for its use in conditionals.

16.5 Polarity

VP negation markers combine this function with mood marking. They appear after tense markers but before preverbs. They induce the appearance of a clause final negative prosodic clitic 4.1. Aspectual *nɛ̄*/ is incompatible with negative polarity.

Indicative mood is negated by *pʊ̄* (for some speakers *bʊ̄*, as in Toende Kusaal.) Imperative is negated by *dā*; conversely, forms which are negated by *dā* are imperative. Irrealis is negated by *kʊ̀*, which *replaces* the positive irrealis marker *nà*.

Ò zàb nâ'ab lā. "He's fought the chief."
3AN fight chief:SG ART.

Ò pʊ̄ záb nà'ab láa=ø. "He hasn't fought the chief."
3AN NEG.IND fight chief:SG ART=NEG.

Zàm nâ'ab lā! "Fight the chief!"
Fight:IMP chief:SG ART!

Dā záb nà'ab láa=ø! "Don't fight the chief!"
NEG.IMP fight chief:SG ART=NEG!

Ò nà zāb nâ'ab lā. "He'll fight the chief."
3AN IRR fight chief:SG ART.

Ò kʊ̀ zāb nâ'ab láa=ø. "He won't fight the chief."
3AN NEG.IRR fight chief:SG ART=NEG.

Three **negative verbs** are equivalent to negative particle + verb. They do not carry the independency tone overlay 16.6.1. Negative clitics appear as usual.

Kā'e̱ "not be, not have" appears as *kā'* before a complement 4.3. It is the negative to both "be" verbs, *àe̱ň*ya "be something/somehow" and *bɛ̀* "be somewhere, exist" and also to *mɔ̄r*a/ "have." **Pʊ̄ bɛ́* is not found, but *pʊ̄ mɔ̄r* is quite common; *pʊ̄ áe̱ň* is rare but can be found in contrastive contexts.

Dāu̯ lā kā' ná'abā=ø. "The man isn't a chief."
Man:SG ART NEG.BE chief:SG=NEG.

Dāu̯ lā kā' bi̯igā=ø. "The man hasn't got a child."
Man:SG ART NEG.HAVE child:SG=NEG.

Pu̯'ā lā mór bi̯ig, àmáa dāu̯ lā kā'e=ø.
Woman:SG ART have child:SG but man:SG ART NEG.HAVE=NEG.
"The woman has a child but the man hasn't."

Dāu̯ lā kā'e=ø. "The man isn't there."
Man:SG ART NEG.BE=NEG.

Dāu̯ kā'e̯ dɔ́ɔgʊ̄=n láa=ø. "There's no man in the room."
Man:SG NEG.BE room:SG=LOC ART=NEG.

Dāu̯ lā kā' dɔ́ɔgʊ̄=n láa=ø. "The man is not in the room."
Man:SG ART NEG.BE room:SG=LOC ART=NEG.

Kā'e̯ has a clause-final variant *kà'asìgɛ̀* (always LF):

Ò bi̯ig ká'asìgɛ̄=ø. "She has no child."
3AN child NEG.EXIST=NEG.

Mi̯t "see that it doesn't happen that ..." 19.2 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.
Mi̯t kà yà mâal yà tʊ̀ʊm-sʊ̀mà nī̯dīb tûɵn yɛ́ bà gɔ̄sɛ̄=ø.
NEG.LET.IMP and 2PL do 2PL deed-good:PL person:PL before that 3PL look.at=NEG.
"See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1996)

KB uses *mid* with no clitic: *Mid ka ya maali ya tʊʊm sʊma nidib tuon ye ba gɔs.*
Mi̯t appears with a NP object and no negative clitic in the sense "beware of ...":

Miti ziri nodi'esidib bane kene ya sa'an na la.
Mi̯tī=ø zīrí nɔ̀-dī̯'əsìdìb bánì kɛ̄nní◡ yà sā'an nā lā.
Beware=2PL.SUB lie mouth-receiver:PL REL.PL come:IPFV 2PL among hither ART.
"Beware of false prophets who come among you." (Mt 7:15, 1996)

Zī' "not know" normally replaces negative particle + *mḭ̄'*. A clause-final LF *zi'isigɛ* also appears in KB, NT (e.g. Lk 12:40.)

Bʊ̀ŋ-bāň'ad zī' yɛ̄ tɛ̄ŋ tʊ́llā=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)

Mḭ̄' does occur with negative particles:

M biig Solomon anɛ dasaŋ , ka pʊ mi' wʊʊ lin nar si'em.
M̀ bḭ̄ig Solomon á nɛ̄ dá-sāŋ, kà pʊ̄ mḭ̄'
1SG child:SG Solomon FOC COP young.man:SG, and NEG.IND know
wʊ̄ʊ lín nār sḭ̄'əmm=ø.
how 3IN:NZ be.proper INDF.ADV=NEG.
"My son Solomon is young, and does not know how things ought to be."
(1 Chronicles 22:5)

16.6 Independency marking

The VP of a main clause or content clause is marked as independent. The marking is absent in all subordinate clause types other than content clauses. It is also absent in all clauses introduced by *kà* other than content clauses, regardless of whether they are subordinate or coordinate. The markers are primarily tonal, but there are associated segmental manifestations.

16.6.1 Tonal

The **independency-marking tone overlay** is manifested only on VPs with positive polarity and indicative or imperative mood. It affects only the *first* word in the VP capable of carrying it: first the preverbal particle *lɛ̀ɛ* "but", next any preverb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker *dāa*, auxiliary tense marker *ňyɛ̄ɛ*) not only remain M themselves but also prevent the overlay from applying to any subsequent words.

The overlay otherwise changes all tonemes in the affected word to L if they were not L already. Affected words, regardless of their intrinsic tones, are always followed by 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 4.4.)

Examples of tone overlay manifesting independency marking in main clauses (with *zàb*^{ɛ} "fight", *gɔ̄s*^{ɛ} "look at", *nà'ab*^{a} "chief"):

Ò zàb nâ'ab lā.	"He's fought the chief."
Ò gɔ̀s nâ'ab lā.	"He's looked at the chief."
Ò sà zàb nâ'ab lā.	"He fought the chief yesterday."
Ò sà gɔ̀s nâ'ab lā.	"He looked at the chief yesterday."

In contrast, the intrinsic tones appear after *kà*, with preverbal particles having intrinsic M tonemes, with negative polarity, and in subordinate clauses:

Kà ò záb nà'ab lā.	"And he's fought the chief."
Kà ò gɔ̄s nâ'ab lā.	"And he's looked at the chief."
Ò dāa záb nà'ab lā.	"He didn't fight the chief."
Ò dāa gɔ̄s nâ'ab lā.	"He didn't look at the chief."
Ò pɔ̄ záb nà'ab láa.	"He hasn't fought the chief."
Ò pɔ̄ gɔ̄s nâ'ab láa.	"He hasn't looked at the chief."
Ò yá' zàb nà'ab lā.	"If he fights the chief."
Ò yá' gɔ̄s nâ'ab lā.	"If he looks at the chief."
Ɔ́n zàb nà'ab lā.	"He having fought the chief"
Ɔ́n gɔ̄s nâ'ab lā.	"He having looked at the chief."

Content clauses have independency marking 22.2:

Bà yɛ̀l yɛ́ ò zàb nâ'ab lā.
3PL say that 3AN fight chief:SG ART.
"They say he's fought the chief."

Examples for the final M before liaison, using the verbs *bɔ̀dìgᵋ* "lose", *yādīgᵋ/* "scatter" and the pronouns *mᵃ* "me" *ba* "them":

Intrinsic tones:	*bɔ̀dɪgì=mᵃ*	*bɔ̀dɪgìdī=mᵃ/* ipfv	*bɔ̀dɪgì=bā/*
	yādɪgí=mᵃ	*yādɪgídī=mᵃ/* ipfv	*yādɪgí=bā/*
With overlay:	*bɔ̀dɪgī=mᵃ/*	*bɔ̀dɪgìdī=mᵃ/*	*bɔ̀dɪgī=bá*
	yàdɪgī=mᵃ/	*yàdɪgìdī=mᵃ/*	*yàgɪdī=bá*

Before a liaison word with initial fixed-L toneme, M must change to H 4.4:

Bà kʊ̀ʊdī=bá. "They kill them."
3PL kill:IPFV=3PL.

vs *Bà kʊ̀ʊdí‿bà bʊ̄ʊs.* "They kill their goats."
3PL kill:IPFV 3PL goat:PL.

Bà gòsō=ø. "They looked at her."
3PL look.at =3AN.

vs *Bà gòsú◡ ò bḭ̄ig.* "They looked at her child."
3PL look.at 3AN child:SG.

M spreading after bound personal pronoun subjects is affected by independency marking. Bound pronoun subjects are normally followed by M spreading despite their own fixed L tonemes: however, the *third* persons *ò lì bà* are never followed by M spreading when the following VP has independency marking.

Thus, with no independency marking after coordinating *kà*:

Kà ***m̀ záb*** *nà'ab lā.* "And I've fought the chief."
Kà ***ò záb*** *nà'ab lā.* "And he's fought the chief."

but ***M̀ záb*** *nâ'ab lā.* "I've fought the chief."
Ò zàb *nâ'ab lā.* "He's fought the chief."

The first and second person pronouns *are* followed by M spreading unless the VP has independency marking *and* they are immediately preceded by *yɛ̄* "that" 22.2:

Ò tɛ̌ň'ɛs kà ***ò zàb*** *nâ'ab lā.* "He thinks he's fought the chief." WK
3AN think and 3AN fight chief:SG ART.

Ò tɛ̌ň'ɛs kà ***m̀ záb*** *nâ'ab lā.* "He thinks I've fought the chief."
3AN think and 1SG fight chief:SG ART.

but *Ò yɛ̀l yɛ́* ***ò zàb*** *nâ'ab lā.* "He says he's fought the chief."
3AN say that 3AN fight chief:SG ART.

and *Ò yɛ̀l yɛ́* ***m̀ zàb*** *nâ'ab lā.* "He says I've fought the chief."
3AN say that 1SG fight chief:SG ART.

Absence of M spreading after bound subject pronouns is independent of tone overlay and is still seen when tone overlay is absent, e.g. when the VP has irrealis mood, or there is a preverbal particle carrying a M toneme:

Ò kʊ̀ *zāb nâ'ab láa=ø.* "He will not fight the chief."
3AN NEG.IRR fight chief:SG ART=NEG.

Ò lɛ̀ɛ *dāa záb nà'ab lā.* "But he did fight the chief."
3AN but TNS fight chief:SG ART.

Ò yɛ̀l ***yɛ́ m̀ nà*** *zāb nâ'ab lā.* "He says I'll fight the chief."
3AN say that 1SG IRR fight chief:SG ART.

16.6.2 Segmental

There are two segmental features of independency marking. They occur when and *only* when the verb word itself has undergone *tone* overlay. Verbs which have intrinsic L tonemes have unchanged stem tonemes after overlay, but these segmental features and the following M spreading reveal its presence.

The flexion -*ma* 7.1 marks imperatives of dual-aspect verbs whenever they carry the independency-marking tone overlay:

Gɔ̀sì́m! "Look!"

Gɔ̀sɪmī=ní=bā! "Look ye at them!"
Look:IMP=2PL.SUB=3PL!

But *Dā gɔ̄sɛ̄=ø!* "Don't look!" (negative)
NEG.IMP look=NEG!

Kɛ̀l kà ò gɔ̄s! "Let her look!"
Cause:IMP and 3AN look! (No independency marking: subordinate)

Dɔ̀llī=ní=bā! "Follow ye !" (single-aspect verb)
Follow=2PL.SUB=3PL!

The particle *yā* follows any perfective verb form carrying the tone overlay which would otherwise be phrase-final. Texts write *ya* solid with the verb; prior to 2016 it usually appears as *-eya* after consonants. *Yā* may be connected historically with the perfective flexion *-ra* of one conjugation of Nawdm verbs. Phrase constituents can only follow *yā* by right dislocation 24.4. Examples:

Ò zàb yā. "She's fought."
3AN fight PFV.

Ò gɔ̀s yā. "She's looked."
3AN look PFV.

Ò sà gɔ̀s yā. "She looked (yesterday.)"
3AN TNS look PFV.

Sāa nį́ yā. "It has rained."
Rain:SG rain PFV.

Mɔ̀ tɛ̂ň'ɛs kà lì lù yā. "I think it's fallen down." (content clause)
1SG think and 3IN fall PFV.

But *Ò gɔ̀sī=m.* "He's looked at me." (not final)
3AN look.at=1SG.

Sāa dāa nį́. "It rained." (M preverbal particle)
Rain:SG TNS rain.

Ò dāa gɔ̄s . "He looked." (M preverbal particle)
3AN TNS look.

Ò nà gɔ̄s. "She'll look." (irrealis)
3AN IRR look.

Kà ò gɔ̄s. "And he looked." (no independency marking)
And 3AN look.

Ò pʊ̄ gɔ̄sɛ̄=ø. "He's not looked." (negative)
3AN NEG.IND look=NEG.

Ò gį̀m. "She's short." (stative)
Ò mį̀'. "She knows." (stative)
Ò nɔ̀ŋ. "She loves him." (stative)

Before interrogative prosodic clitics the toneme of *yā* becomes L, not H:

Lì bɔ̀dì̀g yā. "It's got lost."
3IN get.lost PFV.

Lì bɔ̀dì̀g yàa=ø? "Has it got lost?"
3IN get.lost PFV=PQ?

16.7 *Lèɛ* "but"

Lèɛ "but" precedes even tense particles, but like a preverb, and unlike a post-subject particle, it prevents the independency-marking tone overlay from falling on the verb, and is then itself followed by M spreading:

Kà ò lɛ́ɛ dāa záb nà'ab lā.
And 3AN but TNS fight chief:SG ART.
"But he fought the chief."

Bà lèɛ záb nà'ab lā. "But they've fought the chief." WK
3PL but fight chief:SG ART.

Kà bà lɛ́ɛ zàb nà'ab lā. "But they've fought the chief." WK
And 3PL but fight chief:SG ART.

Lèɛ záb nà'ab lā! "But fight the chief!" WK
But fight chief:SG ART!

Ka man pian'ad la lee ku gaade.
Kà mān pi̱âǎ'ad lā lɛ́ɛ kù gāadɛ̄=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 *ma*-imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la...
Lèɛ i̱əmī=ní◡ ò nā'am sú'ʋlì̀m lā...
But seek:IMP=2PL.SUB 3AN kingship possession ART...
"But seek ye his kingdom ..." (Lk 12:31, 1976)

WK does not accept this; he corrected e.g. **Lèɛ gɔ́sì̀m nâ'ab lā!* to

Lèɛ gɔ̄s nâ'ab lā! "But look at the chief!"
But look.at chief:SG ART.

16.8 Preverbs

Preverbs follow all other preverbal particles. All carry the independency-marking tone overlay in place of the following main verb (cf *lèɛ* "but" 16.7.)

Pòn "previously, already":

Ò pòn záb nà'ab lā. "He's already fought the chief."
3AN already fight chief:SG ART.

Kà ò pón zàb nà'ab lā.
And 3AN already fight chief:SG ART.
"And he's already fought the chief."

Lèm "again" (cf *lèbᵋ* "return"):

M̀ nīf lém zábìd nɛ̄. "My eye is hurting again."
1SG eye:SG again fight FOC.

Kà ò lém zàb nà'ab lā. "And he's fought the chief again."
And 3AN again fight chief:SG ART.

Ò pɔ̄ lém zàb nà'ab láa=ø.
3AN NEG.IND again fight chief:SG ART=NEG.
"He hasn't fought the chief again."

Ò nà lɛ̄m záb nà'ab lā. "He'll fight the chief again."
3AN IRR again fight chief:SG ART.

Ka so' kudin ku len nyee li ya'asa.
Kà sɔ̄' kɔ̄dīm kú lɛ̄m ǹyɛ́ɛ=lī yá'asā=ø.
And INDF.AN ever NEG.IRR again see=3IN again=NEG.
"Nobody will ever see it again." (Rev 18:21, 1996)

Kpèlìm is "still" before an ipfv, but "immediately afterwards" before a pfv. It occurs also as a main verb "remain, still be." KB has the reduced form *kpèn*.

Ka o kpelim zu'om. "Immediately he went blind."
Kà ò kpélìm zū'ɵm. (Acts 13:11, 1996: KB *Ka o kpɛn zu'om.*)
And 3AN immediately go.blind.

m biig Josef nan kpɛn vve.
m̀ bīig Josef nán kpɛ̀n vūe̱.
1SG child:SG Joseph still still be.alive.
"My child Joseph is still alive." (Genesis 45:28)

Là'am "together" (cf *là'as*$^{\varepsilon}$ "gather"); as a main verb *là'am*^{m} is "associate with."

ka nidib wvsa da la'am kpi nɛ o.
kà nīdīb wūsā dá là'am kpì né ò.
and person:PL all TNS together die with 3AN.
"so all people died together with him." (2 Cor 5:14)

Dɛŋ̀m "beforehand" (cf *dɛŋ*$^{\varepsilon}$ "go, do first": *m̀ déŋī=f* "I've got there before you"; *dɛŋ*$^{\varepsilon}$ is used with the same meaning in *n*-catenation 19.1.)

Pin'ilvgvn sa ka Pian'ad la da pvn dɛŋim bɛ.
Pī̱ǐ̱'ilúgū=n sá kà Pi̱àǐ̱'ad lā dá pùn dɛ̀ŋ̀m bɛ̀.
Beginning:SG=LOC hence and word:SG ART TNS already beforehand EXIST.
"In the beginning, the Word already existed beforehand." (Jn 1:1)

Màlıgìm "again" (cf Toende Kusaal *malig* "do again"):

Amaa man pian'ad la kv maligim gaadɛ.
Àmáa mān pi̱âǐ̱'ad lā kú mālıgīm gáadɛ̄=ø.
But 1SG.CNTR speech ART NEG.IRR again pass=NEG.
"But my words will not pass away. (Mt 24:35)

Tì "after" occurs often in *n*-catenation; for *hālí tì pāa …* "up until" see 17.2.1. If the *next* VP is perfective, *tì* corresponds instead to English "before."

hali ka Herod ti kpi. "Until Herod had died." (Mt 2:15)
hālí kà Herod tí kpì.
Until and Herod after die.

Kɛ̀m◡ ø tí ǹyɛ̄ dú'atà. "Go to see the doctor." SB
Go:IMP CAT after see doctor:SG.

Bɛogv ti nied la ka ba gaad!
Bɛ̄ogú=ø tì nì̱əd lá kà bà gâad!
Morning=NZ after appear:IPFV ART and 3PL pass.
"Before morning appears they have passed!" (Isaiah 17:14)

16.9 Complements

"Complement" will be used below for all verb core arguments other than the subject. Complements may be NPs, AdvPs, prepositional phrases or clauses.

Verbs vary in the kind of complement they take and in whether the complements are obligatory; "obligatory" complements need not in fact be explicitly present, but when they are absent, the gap functions as an anaphoric pronoun.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

16.9.1 Objects

Indirect objects precede direct, and objects precede other complements. A bound pronoun before a noun object therefore cannot be the direct object:

M̀ dāa tísì=lī nâˈab lā. "I gave the chief to it." *sic*
1SG TNS give=3IN chief:SG ART.

Transitive verbs vary in whether they require a direct object/complement. When obligatorily transitive verbs appear without any expressed object, the meaning is anaphoric. Among others, transitive single-aspect verbs which do not take locative complements are all of this kind.

Mid ka ya kʋ ***nid****.* "Do not kill [a person.]" (Exodus 20:13)
Mìt kà yà kʋ̄ nīd.
NEG.LET and 2PL kill person:SG.

Mānī◡ ø áň dúˈatà kà fʋ̄n mén áe̯ň.
1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.
"I'm a doctor and you are too."

For null anaphora for preposed objects see 24.3; in adnominal *kà*-catenation, see 19.2. In conversation, the antecedent may be in the previous speaker's words:

Q. *Fʋ̀ mór gbāu̯ŋ láa=ø?* "Do you have the letter?"
2SG have letter:SG ART=PQ?

A. *Ɛ̄ɛň, m̀ mór.* "Yes, I have it."
Yes, 1SG have.

Q. *Fʋ̀ bɔ́ɔdó=o=ø?* "Do you love her?"
2SG want=3AN=PQ?

A. *Áyìı, m̀ pʊ̄ bɔ́ɔdā=ø.* "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:

banɛ zuud nidibi gban'ad
bànì zūud nịdıbī‿ ø gbāň'ad
REL.PL steal:IPFV person:PL CAT seize:IPFV
"those who steal people by force" (1 Tim 1:10)

onɛ daa zuud "he who used to steal" (Eph 4:28)
ɔ̀nì dāa zūud
REL.AN TNS steal:IPFV

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. Many express a change of state. Examples include *yɔ̀* "close", *nāe*/ "finish", *zàmìs*ɛ "learn/teach", *nāmīs*ɛ/ "suffer/make suffer", *bɔ̀dìg*ɛ "lose, get lost", *bàs*ɛ "go/send away", *dūe*/ "raise/rise", *mā'e*/ "get cool."

M̀ náa tʊ̄ʊmā lā. "I've finished the work."
1SG finish work ART.

Tʊ̄ʊmā lā náa nɛ̄. "The work is finished."
Work ART finish FOC.

Direct objects of most other dynamic verbs can also be transferred to subject position, resulting in a passive sense. (For passive meaning expressed by an empty *bà* "they" as subject see 12.4.1.) An agent cannot also be expressed.

M̀ nú dāam lā. "I've drunk the beer."
1SG drink beer ART.

Dāam lā nú yā. "The beer has got drunk."
Beer ART drink PFV.

Gbàu̯ŋ lā sɔ́b nɛ̄. "The letter is written."
Letter:SG ART write FOC.

Gbànà sɔ́bìd zīná. "Letters get written today." WK
Letter:PL write:IPFV today.

Gbàu̯ŋ lā sɔ́bìd sʊ́ŋā. "The letter is writing well (i.e. easily.)" WK
Letter:SG ART write:IPFV good:ADV.

The assume-stance verbs 9.1.1 are used transitively for parts of one's own body more often than the make-assume-stance series:

Lìgɪním‿ fʊ̀ nīf nɛ́ fʊ̀ nû'ug.
Cover:IMP 2SG eye:SG with 2SG hand:SG.
"Cover your eye with your hand."

Dìgɪním‿ fʊ̀ nû'ug. "Put your hand down."
Lie.down:IMP 2SG hand:SG.

Similarly *nìe* "appear" is usually intransitive, corresponding to transitive *nɛ̀ɛlᵋ* "reveal", but *nìe* is much more frequent than *nɛ̀ɛlᵋ* before *ò mɛ̄ŋ*[a/] "him/herself" etc.

Ka o nie o mɛŋ Jemes san'an ...
Kà ò níe ò mɛ̄ŋ Jemes sâ'an ...
And 3AN appear 3AN self James among ...
And he revealed himself to James (1 Cor 15:7)

Some verbs only take direct objects of a very limited type, often expressed with a noun formed from the same stem:

Fʊ̀ tʊ́m bɔ́-tʊ̀ʊmà=ø? "What work do you do?"
2SG work:IPFV what-work=CQ?

Ka ya ninkʊda zaansim zaansima.
Kà yà nīn-kʊ́dà zàaňsìm záaňsímà.
And 2PL person-old:PL dream:IPFV dream:PL.
"And your old people dream dreams." (Acts 2:17)

Almost any verb can take an indirect object expressing benefit, interest etc:

Ò dʊ̀gʊ̄=m. "He cooked (for) me."
3AN cook=1SG.

Lì màlısī=m. "I like it." ("It's sweet for me.")
3IN be.sweet=1SG.

Àláafù bɛ́ɛ=bá. "They are well." ("Health exists for them.")
Health EXIST=3PL.

Some verbs *require* an indirect object, which cannot be ellipted unless any direct object is too, with a necessarily anaphoric sense; *tìs*$^{\varepsilon}$ "give" is the prototypical example, along with causatives like *dìıs*$^{\varepsilon}$ "feed", *nūlʊ̄s*$^{\varepsilon/}$ "give to drink."

M̀ tís nâ'ab lā dāká. "I've given the chief a box."
1SG give chief:SG ART box:SG.

M̀ tís nâ'ab lā. "I've given it to the chief."
1SG give chief:SG ART.

M̀ tísō=ø dāká. "I've given him a box." Not **M̀ tís dāká.*
1SG give=3AN box:SG.

Dā tísò=ø sı̰'əlā=ø. "Don't give her anything!"
NEG.IMP give=3AN INDF.IN=NEG.

Dā tísɛ̄=ø! "Don't give it to her!"
NEG.IMP give=NEG.

M̀ tís yā. "I've given it to him."
1SG give PFV.

Certain verbs take a fixed direct object as a set idiom after an indirect object which expresses the functional object, e.g. *kàd* X *sàríyà* "judge X", *mɔ̄r* X *nı̰̄n-báalìg* or *zɔ̀* X *nı̰̄n-báalìg* "have pity on X", *nı̀ŋ* X *yàddā* "believe X, believe in X", *zɔ̀* X *dàbḭ̄əm* "fear X", *sı̰̀ak* X *nɔ̄ɔr* "obey X", *ǹwɛ̀'* X *nû'ug* "make an agreement with X."

Bà zɔ̀tō=ø dábḭ̄əm. "They are afraid of him."
3PL feel:IPFV=3AN fear.

Wina'am na kad nidib poten'esua'ada saria.
Wínà'am ná kād nı̰̄dīb pú-tɛ̀ň'-sʊ̄'adá sàríyà.
God IRR drive person:PL mind-secret:PL judgment.
"God will judge people's secret thoughts." (Rom 2:16, 1996)

Bà nị̀ŋō=ø yáddā. "They believed her."
3PL do=3AN assent.

Ò ǹwɛ̀' nâ'ab lā nû'ug. "He made an agreement with the king."
3AN strike king:SG ART hand:SG.

It is not possible to transfer indirect objects to the subject position:

Nà'ab lā tís yā. *only* "The chief was given [to someone.]"
Chief:SG ART give PFV.

16.9.2 Predicatives

Predicative complements are resultative or depictive:

Kɛl ka m liebi fʋ tʋmtʋm yinne.
Kɛ̀l kà m̀ lí̤əbì◡ fʋ̀ tʋ̀m-tʋ̄m yīnní.
Cause:IMP and 1SG become 2SG worker:SG one.
"Make me one of your servants" (Lk 15:19)

M̀ á né fʋ̀ tʋ̀m-tʋ̄m. "I am your servant."
1SG COP FOC 2SG worker:SG.

For *kà*-catenations as resultative predicates see 19.2.
Adjectives may appear as NP heads in predicative complements:

Lì à nɛ̄ pí̤əlì◡g. "It's white, a white one."
Lì à nɛ̄ pí̤əlì◡g fáss. "It's very white."
Bà à nɛ̄ pí̤əlà. "They're white."

Mam anɛ pielug amaa m ya'a paae bugumin asɛɛ ka m lɛb zin'a.
Mām á nɛ̄ pí̤əlʋ̀g àmáa m̀ yá' pāe búgʊ́mī=n, àsɛ́ɛ kà m̀ lɛ́b zi̤ǹ'a.
1SG COP FOC white:SG but 1SG if reach fire=LOC, except and 1SG turn red:SG.
"I am white, but when I reach the fire I turn red." [a crayfish] (BNY p16)

si'el zie sabili wuu nidne.
sī'əl zí̤'e sābíllì◡ ø wʋ̄ʋ nī̤d nɛ̄.
INDF.IN stand black:SG CAT like person:SG like.
"something stood, black like a person." KSS p16

Only adjectives without corresponding stative verbs permit this. More often, compounds with *nịn-* "person" or *bʊ̄n-* "thing" + adjective are used instead. This is required for *all* adjectives before dependent pronouns:

Lì à nɛ̄ bʊ̄n-pịəl-kàŋā. "It is this white one."

Some transitive verbs may have a predicative complement after the direct object. With verbs are used in the relevant senses, this complement is compulsory.

The verb *pʊ̀d*ᵋ "name, dub" takes a NP object with the head *yʊ̄'ʊr*ᵋ/ "name", and the name itself as predicative complement optionally introduced by *yɛ̄* "that."

Ka fʊ na pʊd o yʊ'ʊr ye Yesu.
Kà fʊ̀ ná pʊ́d ò yʊ̄'ʊr yɛ̄ Yesu.
And 2SG IRR dub 3AN name:SG that Jesus.
"And you will call him Jesus." (Mt 1:21)

Ka o pʊd biig la yʊ'ʊr Yesu.
Kà ò pʊ́d bịig lā yʊ̂'ʊr Yesu.
And 3AN dub child:SG ART name:SG Jesus.
"And he called the child Jesus. " (Mt 1:25)

*Bʊ̀ɵl*ᵋ "call, call out, summon" can be used in the ipfv with an object expressing the person and the name as a complement optionally introduced by *yɛ̄*, or with *yʊ̄'ʊr*ᵋ/ "name" as the subject:

on ka ba buon ye Pita la
ɔ̀n kà bà bûɵn yɛ̄ Pita lā
REL.AN and 3PL call:IPFV that Peter ART
"who was called Peter" (Mt 10:2)

dau sɔ' ka o yʊ'ʊr buon Joon.
dàu̯-sɔ́' kà ò yʊ̄'ʊr bûɵn Joon.
man-INDF.AN and 3AN name:SG call:IPFV John.
"a man [habitually] called John." (Jn 1:6)

*Màal*ᵋ "make" is used with object and resultative predicative complement in

Ka o maal o meŋ nintita'ar.
Kà ò mâal ò mɛ̄ŋ nịn-títā'ar.
And 3AN make 3AN self person-great:SG.
"He made himself out to be a great man." (Acts 8:9. 1976)

16.9.3 Locatives

Locative AdvPs occur as complements after verbs of position and movement.

Ò kèŋ Bɔ́k. "She's gone to Bawku."
3AN go Bawku.

Ò pō tūn̆'ɵ◡ ø kɛ̄nná=ø.
3AN NEG.IND be.able CAT go:IPFV=NEG.
"She can't walk."

Dìgɪnìm kpɛ̄! "Lie down here!"
Lie.down:IMP here!

Ò dìgìn yā. "He's lain down."
3AN lie.down PFV.

Ò dìgìl gbáu̯ŋ lā tɛ́ɛbʊ̀l lā zúg.
3AN lay.down book:SG ART table:SG ART upon.
"She's put the book on the table."

Ò dìgìl gbáu̯ŋ lā. "She's put the book down."
3AN lay.down book:SG ART.

Dāu̯ lā bɛ́ nɛ̄ dɔ́-kàŋā lā pʊ́ʋgʊ̄=n.
Man:SG ART EXIST FOC hut-DEMST.SG ART inside:SG=LOC.
"The man is inside that hut."

Àláafʊ̀ bɛ́o=ø. "He's well." ("Health exists for him.")
Health EXIST=3AN. Indirect object, no complement.

16.9.4 Prepositional phrases

Wɛ̄n[na/] "resemble" usually takes a phrase introduced by *nɛ̄* or *wʊ̄ʋ* 15.

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

Lāl[la/] "be far" usually takes a phrase introduced by *nɛ̄*:

Amaa o pʋ lal nɛ tii.
Àmáa ò pū lāl né tīɪ=ø.
But 3SG NEG.IND be.far with 1PL=NEG.
"But he is not far from us." (Acts 17:27)

Dɔ̄l[la/] "accompany" with the preposition *nɛ̄* means "be in accordance with":

Li dɔlnɛ lin sɔb Wina'am gbauŋʋn si'em la ye ...
Lì dɔ̀l nɛ̄ lín sɔ̄b Wínà'am gbáu̱ŋʋ̄=n sḭ'əm lā yɛ̄ ...
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 *nɛ̄* can be distinguished from focus-*nɛ̄*[/] 24.1.2 by contexts where focus is prohibited. *Yḭ̄* "emerge" does not take a prepositional phrase:

Ǹ yí nɛ̄ Bɔ́k. "I come from Bawku." SB
1SG emerge FOC Bawku.

but *Meeri one yi Magdala* "Mary who came from Magdala"
Meeri ɔ́nì yḭ̄ Magdala (Mk 16:9, 1996)
Mary REL.AN emerge Magdala

16.9.5 Clauses

Kɛ̄ "let" and *mḭ̀t* in the sense "let not" always take a *kà*-catenation. *Nār*[a/] "be obliged to" and *bɔ̀ɔd*[a] in the sense "want to" take purpose clauses, and the meaning is anaphoric if it is absent. *Gūr*[a/] in the sense "wait for (an event)" takes a NP headed by a gerund or a purpose-clause. *Àe̯ň*[ya] "be something/somehow", uniquely flexible in its variety of argument types, may also take a content-clause complement.

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with *sḭ'əm*, or a postpositional AdvP with *yɛ̄lá* "about." Most such verbs have an anaphoric sense without such an object.

16.10 Adjuncts

Adjuncts, typically AdvPs, occur as the last element in the VP. Several VP adjuncts may occur together. Clause-final adjuncts are always taken as VP adjuncts in this grammar; clause-level adjuncts precede the subject 17.2.1.

Bà dìt nɛ̄ sā'ab dɔ́-kàŋā lā pʋ́ʋgʋ̄=n.
3PL eat:IPFV FOC porridge hut-DEMST.SG ART inside:SG=LOC.
"They're eating porridge in that hut."

16.11 Verb-phrase-final particles

For the independent-perfective marker *yā* see 16.6.2.

The particles *nā/* "hither" and *sà* "hence; ago" follow any complements. The verb *kɛ̄ň* "come" is invariably used with *nā/*; the imperative SF *kɛ̀m*, which coincides for *kɛ̄ň* "come" and *kɛ̄ŋɛ/* "go", is always disambiguated by the fact that it is followed by *nā/* or *sà* respectively: *kɛ̀m nā!* "come" *kɛ̀m sá!* "go!"

M̀ mór kû'ɵm náa=ø? "Shall I bring water?" SB
1SG have water hither=PQ?

Bùgʊ́m lā yít yáa ní ná=ø?
Fire ART emerge:IPFV where LOC hither=CQ?
"Where is the light coming from?" SB

Fʊ̀ yí yáa ní ná=ø?
2SG emerge where LOC hither=CQ?
"Where have you come from?" WK

Sà is often used temporally, for "since" or "ago":

Fu na baŋ li nya'aŋ sa. "You will come to understand afterwards."
Fʊ̀ ná báŋ lì ňyá'aŋ sá. (Jn 13:7, 1976)
2SG IRR realise 3IN behind since.

Lazarus pʋn bɛ yaʋgʋn la daba anaasi sa.
Lazarus pʋ́n bɛ̀ yáʋgʋ̄=n lā dābá◡ànāasí sà.
Lazarus previously EXIST grave:SG=LOC ART day:PL NUM:four since.
"Lazarus had already been in the grave four days." (Jn 11:17)

The particles are VP-final, not clause-final:

Kɛ̀m nā n gʊ̄s. "Come and look!" SB
Come:IMP hither CAT look.

Nā/ and *sà* often follow any article *lā/* ending an *ǹ*-clause containing them; closely parallel constructions may show either *nā lā* or *lā nā*:

ňwādɪ̄g-kánì kɛ̄n ***nā lā***
month REL.SG come:IPFV hither ART
"next month" SB

dunia kanɛ ken ***la na***
dūnıyá-kànì kɛ̄n lā nā
world-REL.SG come:IPFV ART hither
"the world which is coming" (Lk 20:35)

ti tʊm onɛ tʊm man ***na la*** *tʊʊma.*
tì tʊ́m ɔ̀nì tʊ̀m mān nā lā tʊ́ʊmà
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 anɛ ye m tʊm onɛ tʊmi m ***la na*** *bɔɔdim naae.*
M̀ dīıb á nɛ̄ yé m̀ tʊ́m ɔ̀nì tʊ̀mì=m lā nā bɔ́ɔdì͡mø nāe.
1SG food COP FOC that 1SG work REL.AN send=1SG ART hither will CAT finish.
My food is that I do the will of him who sent me completely. (Jn 4:34)

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:

Ninsaal Biig la lɛbʊg la na
Nīn-sâal Bîıg lā lɛ́bʊ̀g lā nā
Human:SG child:SG ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)

16.12 "Be" verbs

Existence is expressed with the verb *bɛ̀*; with a focussed or foregrounded locative, it expresses **location**.

Wínà'am bɛ́. "God exists." (Calque of the West African Pidgin
God EXIST. *God dey*, implying "It'll all work out.")

Àláafʊ̀ bɛ́o=ø. "She's well." ("Health exists for her.")
Health EXIST=3AN.

Wāad bɛ́. "It's cold."
Cold.weather EXIST.

Mam bene moogin. "I'm in the bush." BNY p8
Mām bɛ́ nɛ̄ mɔ̄ɔgʊ̄=n.
1SG.CNTR EXIST FOC grass:SG=LOC.

Moogin ka mam bɛ. "I'm in the bush." BNY p10
Mɔ̄ɔgú=n kà mām bɛ́.
Grass:SG=LOC and 1SG.CNTR EXIST.

Dāu̯ lā bɛ́ nɛ̄ dɔ́-kàŋā lā pʊ́vgʊ̄=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?")

Dàu̯-sɔ̄' bɛ́ dɔ́-kàŋā lā pʊ́vgʊ̄=n.
Man-INDF.AN EXIST hut-DEMST.SG ART inside:SG=LOC.
"There's a certain man in that hut."

For the corresponding negative *kā'e̯* see 16.5; **pʊ̄ bɛ́* is not used.
Bɛ̀ plays a role analogous to a "passive" to *mɔ̄r*[a/] "have" in constructions like:

M̀ bīig bɛ́. "I have a child." Equivalent to *M̀ mór bīig.*
1SG child:SG EXIST.

M̀ bīig kā'e=ø. "I have no child." Equivalent to *M̀ kā' bīigā.*
1SG child:SG NEG.BE=NEG.

Bɛ̀ can be used in direct commands:

Bɛ́ɛ̰ ànínā. "Be (i.e. stay) there!" SB
EXIST ADV:there.

The **copula** is the verb *àe̯ň*[ya]. On the loss of *e̯* and nasalisation see 4.3.

Mānḭ̄ ø áň dʊ́'atà kà fʊ̄n mɛ́n áe̯ň.
1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.
"I'm a doctor and you are too."

Ò à nɛ̄ bīig. "She is a child."
3AN COP FOC child:SG.

The usual negative is *kā'e̯*, but *pʊ̄ áe̯ň* does occur, e.g. in expressing contrasts:

M̀ kā' dʊ́'atāa=ø. "I'm not a doctor."
1SG NEG.BE doctor:SG=NEG.

Mānī‿ ø áň dʊ́'atà àmáa fʊ̄n pʊ̄ áňyā=ø.
1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP=NEG.
"I'm a doctor but you aren't."

*Àe̯ň*ya can be used in direct commands:

Āa=ní‿ àlá bāaňlím! "Be (ye) quiet!"
COP=2PL.SUB ADV:thus quiet:ABSTR!

The sense may be ascriptive or specifying (cf CGEL p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with *nɛ̄*/ if permitted 24.1.2:

Ò à nɛ̄ bị̄ig. "She is a child."
3AN COP FOC child:SG.

In **specifying** constructions the subject usually has *n*-focus 24.1.1:

Manɛ an kɔnbkem sʊŋ la.
Mānī‿ ø áň kɔ́ňb-kìm-sʊ̀ŋ lā.
1SG.CNTR CAT COP animal-tender-good:SG ART.
"I am the good shepherd." (Jn 10:11)

Nɔbibisi a mam disuŋ.
Nɔ̄-bị̄bɪsì‿ ø áň mām dí-sʊ̀ŋ.
Hen-small:PL CAT COP 1SG.CNTR food-good:SG.
"Chicks are my favourite food." BNY p13

When the complement of *àe̯ň*ya is definite, the construction is usually specifying, with the subject in focus (although definite complements may be focussed due to their internal structure 24.1.2):

M̀ á nɛ̄ dʊ́'atà. "I'm a doctor." ("What do you do?")
1SG COP FOC doctor:SG. Ascriptive.

but *Mānī‿ ø áň dʊ́'atà lā.* "I'm the doctor." ("Which one is the doctor?")
1SG.CNTR CAT COP doctor:SG ART. Specifying.

*Àe̯ň*ya allows a wide range of different types of NP as arguments. It can take an AdvP of any type as subject 13.1:

Yiŋ venl, ka poogin ka'a su'um.
Yi̱ŋ vɛ́ňl kà pʊ̄vgʊ̄=n kā' sʊ́mm=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)

Zi̱ná à nɛ̄ dá'a. "Today [time] is market."
Today COP FOC market:SG.

Man noŋi ya si'em la ane bedego.
Mán nɔ̀ŋī=yá si̱'əm lā á nɛ̄ bɛ́dʊgʊ̄.
1SG:NZ love=2PL INDF.ADV ART COP FOC much.
"How much I love you [manner], is a lot." (2 Cor 7:3, 1976)

Àe̱ňya takes a predicative complement. Some adjectives can appear as NP heads as predicative complements after *àe̱ňya* and other verbs 16.9.2, but typically *àe̱ňya* has a derived manner-adverb or abstract noun as complement instead. In any case, such constructions are ascriptive, and use *nɛ̄/* where syntactically permissible:

Mam anɛ sabilig, la'am nɛ wala m vɛnl hali.
Mām á nɛ̄ sābɪlíg, là'am nɛ̄ wālá m̀ vɛ́ňl hālí.
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 nɛ̄ ná'anā. "It's easy."
3IN COP FOC easily.

Lì à nɛ̄ bʊ̄gʊsígā. "It's soft."
3IN COP FOC soft:ADV.

Lì à nɛ̄ zāalím. "It's empty."
3IN COP FOC empty:ABSTR.

Lì àň sʊ́ŋā. "It's good." 24.1.2
3IN COP good:ADV.

Absolute clauses and even content clauses may be complements of *àe̱ňya*:

M diib anɛ ye m tʊm onɛ tʊmi m la na bɔɔdim naae.
M̀ dīɪb á nɛ̄ yɛ́ m̀ tʊ́m ɔ̀nì tʊ̀mì=m lā nā bɔ́ɔdì̀m◡ø nāe.
1SG food COP FOC that 1SG work REL.AN send=1SG ART hither will CAT finish.
"My food is that I do the will of him who sent me completely." (Jn 4:34)

17 Clauses

Typical clauses consist of a subject NP followed by a VP. Clause-linker particles and clause adjuncts may precede the subject position; post-subject particles may intervene between NP and VP.

17.1 Clause types

Criteria for describing a clause as main or subordinate do not always neatly align. Independency marking of VPs 16.6 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 18	main without *kà*	main with initial *kà*
complementised 22	*yɛ̄*/*kà* content	*yɛ̄*/*kà* purpose
catenated 19		*n*/*kà* catenation
nominalised		*ǹ* absolute/relative 21 *yà'* conditional 20

Main and content clauses can be statements, questions or commands. Only main and content clauses may lack VPs.

Complementised clauses are introduced by *yɛ̄* "that", less often *kà*. 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:

M̀ pʊ̄ bɔ̂ɔd ***yɛ́*** *fʊ̀ kɛ̄ŋ Bɔ́kɔ̄*=ø.
1SG NEG.IND want that 2SG go Bawku=NEG.
"I don't want you to go to Bawku."

Ka o ba' nɛ o ma pʊ baŋ ***ye*** *o kpɛlim yaa.*
Kà ò bā' né ò mà pʊ̄ báŋ yé ò kpɛ̀lɪ̀m 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 *kà* 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 *ǹ* and *yà'* are nominalised. They have independent tense-marking. They are coordinated with *nɛ̄*, not *kà*:

... pa'ali ba [*on daa nyɛ Zugsɔb la suorin,* ***ka*** *o pian' tis o si'em*],
nɛ [*Saul n mɔɔl Yesu yɛla nɛ sʋnkpi'euŋ Damaskus teŋin si'em.*]
... pá'alì=bā ɔ́n dāa ǎnyɛ̄ Zūg-sɔ́b lā sūʊrí=n, kà ò pi̱āǎ'◡ø
... teach=3PL 3AN:NZ TNS see Lord ART road:SG=LOC and 3AN speak CAT
tísò=ø sḭ'əm, nɛ̄ Saul=n mɔ̄ɔl Yesu yélà nɛ̄ sūǎ-kpḭ̂'oŋ
give=3AN INDF.ADV with Saul=NZ proclaim Jesus about with heart-strength
Damaskus téŋī=n sḭ'əm.
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 pʋ nar ***ka*** *ba buolim ye* ***Tʋmtʋmma****.*
kà pʋ̄ nár kà bà búʊlì=m yɛ̄ Tʋ́m-tʋ̄mmā=ø.
and NEG.IND must and 3PL call=1SG that worker:SG=NEG.
"and I ought not to be called an apostle" (1 Cor 15:9)

Structures can be obscured by dislocation 24.4.

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 pʋ bɔɔd [*ye fʋ ti yɛl bɛog daar* [*ye fʋnɛ kɛ* [*ka mam Abram lieb bʋmmɔra.*]]]
M̀ pʋ̄ bɔ̂ɔd yé fʋ̀ tí yèl bɛ̄og dāar yɛ̄
1SG NEG.IND want that 2SG after say tomorrow day.after.tomorrow that
fʋ̄nī◡ ø ké kà mām Abram lḭ̂əb bʋ̄n-mɔ́rā=ø.
2SG.CNTR CAT 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 mi̱' yɛ̄ bi̱ig lā kpí nɛ̄ lā zúg
3PL:NZ know that child:SG ART die FOC ART upon
"because they knew that the child was dead" (Lk 8:53)

17.2 Structure

Except in special circumstances, clauses require a subject NP, which is followed by a VP, with any post-subject particles intervening. Kusaal is SVO 16.9; deviations occur only by preposing or dislocation.

The **clause-linker particles** *kà* "and" and *yɛ̄* "that" precede the subject (which may be ellipted after *kà*.) *Yɛ̄* is invariably subordinating, but *kà* may be coordinating or subordinating: it appears in a great variety of constructions and meanings. Clause-level adjuncts may precede, follow, or occupy the clause-linker position.

Emphatics 24.7 are clause-level particles associated with top-level NPs/AdvPs.

Main and content clauses have similar structures. Both display independency marking on the first VP, unless preceded by coordinating *kà* 16.6, and have structural possibilities not permitted to other clauses, including lacking VPs altogether.

17.2.1 Clause adjuncts

Clause-level adjuncts precede the subject position. They fall into three groups: prelinker adjuncts, linker adjuncts and postlinker adjuncts, which respectively precede, occupy, or follow the clause linker position. English conjunctions largely correspond to clause linkers, prelinker adjuncts and linker adjuncts.

Linker adjuncts do not occur along with linker particles at all. They include

kʊ̄ʊ	"or"	*bɛ̄ɛ*	"or"
dìn zúgɔ̄	"therefore"	*lìn zúgɔ̄*	"therefore"
àlá zùgɔ̄	"thus"	*bɔ̄ zúgɔ̄*	"because"

Ya pʊn mi' nɛ'ɛŋa, bɔzugɔ li daa maalnɛ ya san'an.
Yà pʊ́n mi̱' nɛ̄'ŋá, bɔ̄ zúgɔ̄ lì dāa mâal né yà sā'an.
2PL already know DEMST.IN, because 3IN TNS make FOC 2PL among.
"You already know this, because it was done in your presence." (Acts 2:22)

Bɔ̄ zúgɔ̄ may also appear after an absolute clause, like *zūgᵓ/* alone.

Prelinker adjuncts precede any linkers. *Hālí àsɛ́ɛ* are also prepositions 15.

àmáa	"but"	*hālí*	"until"
àsɛ́ɛ	"unless"	*àlá zùg*	"thus"

KB has no examples of *kà àmáa* to 365 of *àmáa kà*, one of *kà àsέε* to 247 of *àsέε kà* and 436 examples of *hālí kà* but none of *kà hālí* as a clause adjunct. Prelinker adjuncts also precede *yɛ̄*, both as linker and "resumptive" *yɛ̄* 22.2.1. Thus

Ka sieba la' o. ***Amaa ka*** *sieba yɛl ye …*
Kà sɪ̣əbā lá'o=ø. Àmáa kà sɪ̣əbā yél yɛ̄ …
And INDF.PL laugh=3AN. But and INDF.PL say that…
"Some laughed at him, but others said…" (Acts 17:32)

Wina'am daa pʊ gaŋi ti ye ti tʊm dian'ad tʊʊma, ***amaa ye*** *ti bɛ nyain.*
Wínà'am dāa pʊ̄ gāŋí=tī yé tì tʊ́m dɪ̣ā'ad tʊ́ʊmà=ø,
God TNS NEG.IND choose=1PL that 1PL work dirt work=NEG,
àmáa yé tì bέ ňyāe.
but that 1PL EXIST brightly.
"God did not choose us so that we would do the work of impurity, but so that we would be in cleanliness." (1 Thess 4:7)

Postlinker adjuncts follow any clause-linker particle or other clause adjunct but precede all other clause constituents, including preposed elements:

Amaa ***on sadigim kpi la****, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ?*
Àmáa ɔ́n sādɪgím kpɪ́ lā, bɔ́ kà m̀ lɛ́m lɔ̄ɔd nɔ̄ɔr yá'asɛ̀=ø=ø?
But 3AN:NZ since die ART, what and 1SG again tie:IPFV mouth:SG again=NEG=CQ?
"But since he has died, why should I still be fasting?" (2 Samuel 12:23)

Some constituents occur *exclusively* as postlinker adjuncts: *yà*'-clauses "if/when …" 20.1, *sādɪgím*-clauses 21.1, *bɛ̄ogɔ́* "tomorrow" and *dāa-sɪ́'ɛrɛ̄* "perhaps." *Yà*'-clauses and *sādɪgím*-clauses can only appear after main clauses by dislocation.

In addition, AdvPs referring to time, circumstance or reason may be either be used as postlinker adjuncts or as VP adjuncts. *All* VP adjunct AdvPs, including those referring to place or manner as well, may be placed before the clause subject by preposing with *kà* 24.3. This means that AdvPs referring to time, circumstance or reason can potentially occur before the subject alone, preceded by *kà*, followed by *kà*, or both preceded and followed by *kà*, whereas other types of AdvP *must* be followed by *kà* when they appear before the subject. Thus

Nānná-ná m̀ á nɛ̄ nâ'ab. "Now I am a chief."
Now-hither 1SG COP FOC chief:SG.

is grammatical, but **Mɔ̄ogʊ́=n mām bέ* was corrected by WK to

Mɔ̄ɔgú=n kà mām bɛ́. "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 ǹyá'aŋ* "afterwards", *lín à sḭ̀'əm lā* "as things stand", *àsīdā* "truly."

In KB *nannanna nānná-nā/* "now" appears without preceding or following *kà* much more often than not (394/437 cases) and is thus usually a clause adjunct. WK *requires kà* after *kà nānná-nā*, showing that that for him *nānná-nā/* is a *prelinker* adjunct but can be a preposed VP adjunct; this rule is not followed in KB.

***Kà** nānná-ná **kà** m̀ áǹ 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 *-ɔ* appear very often before *kà* (177/371 cases), i.e. as preposed VP adjuncts. Constructions without *kà* probably arose by original VP-only *dìn zúg* and *lìn zúg* encroaching on the function of the corresponding linker adjuncts *dìn zúgɔ̄* and *lìn zúgɔ̄*.

Bɔ̄ zúg without *-ɔ* appears in KB only as preposed *bɔ̄ zúg kà ...?* "why ...?"

Bɔzug ka li aan ala? "Why is it so?" (Haggai 1:9)
Bɔ̄ zúg kà lì áaǹ àlá=ø?
What on and 3IN COP thus=CQ?

Hālí can be a prelinker adjunct before a *n*-catenated clause:

Ti nwa'ae li hali paae Nofa.
Tì ǹwá'a=lī hālí◡ø pāe Nofa.
1PL strike=3IN 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 *kà*-clauses are not subordinate in e.g.

*O pʋ yɛɛd **fuugɔ**, hali ka li yuug.*
Ò pʋ̄ yêɛd fūugɔ́=ø, hālí kà lì yûug.
3AN NEG.IND wear:IPFV shirt:SG=NEG, even and 3IN take.long.
"He had not worn clothes for a long time." (Lk 8:27)

M kʊ basif ka fʊ ***keŋɛ*** *asɛɛ ka fʊ niŋi m ʒug bareka.*
Ǹ kʊ́ bāsí=f kà fʊ̀ kɛ̄ŋɛ́=ø àsɛ́ɛ kà fʊ̀ nḭ́ŋì◡m̀ ʒūg bárɪkà.
1SG NEG.IRR leave=2SG and 2SG go=NEG unless and 2SG do 1SG head:SG blessing.
"I will not let you go unless you bless me." (Genesis 32:26)

Wʊ̄ʊ "like" 15 appears as a linker adjunct before content clauses:

ka tuumbe'ed ***ku*** *len so'e ti wuu ti aa li* ***yamugo****.*
kà tʊ̀ʊm-bɛ̄'ɛd kʊ́ lɛ̄m sʊ́'ʊ=tī wʊ̄ʊ tì áaň◡lì yàmmʊ̀gɔ̄=ø.
and work-bad:PL NEG.IRR again own=1PL like 1PL COP 3IN slave:SG=NEG.
"and that sin will not again own us as if we were its slave." (Rom 6:6, 1996)

*M pian'adi tisidi ya wʊʊ ya a****nɛ*** *m biis nɛ.*
Ǹ pi̱áň'adī◡ ø tísɪdī=yá wʊ̄ʊ yà á né m̀ bī̱is nɛ̄.
1SG speak:IPFV CAT give:IPFV=2PL like 2PL COP FOC 1SG child:PL like.
"I talk to you as if you were my children." (2 Cor 6:13)

17.2.2 Subjects

Kusaal is not a pro-drop language. A dummy subject pronoun *lì* (never *ò*) is required in impersonal constructions:

Lì tʊ̀l. "It [weather] is hot."
3IN be.hot.

Lì àň sʊ́ŋā. "It's good."
3IN COP good:ADV. Contrast Mooré *yaa sõama*, with no pronoun.

Lì nàr kà fʊ̀ kūl. "It's necessary for you to go home."
3IN must and 2SG go.home.

Lì may be omitted in *yà*'-clauses:

Ya'a ka'anɛ alaa, m naan kʊ yɛlinɛ ya ye ...
Yà' kā'a=ní◡ àlá, m̀ nāan kʊ́ yɛ̄lī=ní=yā yɛ̄ ...
If NEG.BE=DP ADV:thus, 1SG then NEG.IRR say=DP=2PL that...
"If it were not so, I would not have told you that ..." (Jn 14:2)

See 18.3 for omission and movement of subject pronouns in commands.

Subject pronouns are regularly ellipted after *kà* when they would have the same reference as the subject of the preceding clause, except when *kà* introduces a content clause; M spreading still follows *kà*. As *kà*-catenation typically involves a change of subject, this is characteristic of coordination, where a retained pronoun after *kà* usually signals a change of subject. Conversations may be reported *Kà ò yɛ́l … kà ò yɛ́l …* with each *ò* marking a switch of speaker. The implication of subject change can override gender agreement (which is no longer robust 12.4.1) even in the face of semantic inappropriateness, though it cannot override number:

Pu̱'ā lā dá' dāká kà kɛ̄ŋ Bɔ́k.
Woman:SG ART buy box:SG and go Bawku.
"The woman bought a box and went to Bawku." WK

Pu̱'āb lā dá' dāká kà bà kɛ̄ŋ Bɔ́k.
Woman:PL ART buy box:SG and 3PL go Bawku.
"The women bought a box and they went to Bawku." WK
(Possible, though unusual, with "they" referring to "the women.")

but *Pu̱'ā lā dá' dāká kà* ***ò*** *kɛ̄ŋ Bɔ́k.*
Woman:SG ART buy box:SG and 3AN go Bawku.
"The woman bought a box and **it** went to Bawku." WK

The pronoun after *kà* may be ellipted as referring to the subject of a preceding preposed absolute clause:

Ban wɔm nɛ'ɛŋa la ka sin.
Bán wɔ̀m nɛ̄'ŋá 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 *informal* ellipsis. M spreading after pronouns again remains:

Náe yàa=ø? "[Have you] finished?"
Finish PFV=PQ?

Such ellipsis may be declared incorrect by speakers if their attention is drawn to it; it does not affect meaning. It can become standardised in greetings or proverbs. *Zi'isigɛ* 16.5 appears without a subject in the meaning "unbeknownst."

17.2.3 Post-subject particles

For *yà'* "if" 20.1; nominaliser-*ǹ* 21; *sādɪgím* "since" 21.1; *nāan(ī)* 20.1.

Sìd "truly":

Ò sìd dāa á nɛ̄ nâ'ab. "Truly, he was a chief." WK
3AN truly TNS COP FOC chief:SG.

Kʊ̄līm or *kʊ̄dīm* "always" (← Hausa) is most often found with negatives:

Ka so' kudin ku len nyee li ya'asa.
Kà sɔ̄' kʊ̄dīm kʊ́ lɛ̄m ǹyɛ́ɛ=lì yá'asā=ø.
And INDF.AN ever NEG.IRR again see=3IN again=NEG.
"Nobody will ever see it again." (Rev 18:21, 1996)

Ǹyāan or *nāan* "next, afterwards":

Ka Yesu tans nɛ kʊkɔtita'ar ka nyaan kpi.
Kà Yesu táǹs nɛ̄ kʊ́kɔ̄-títā'ar kà ǹyāan 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":

Onɛ pa'ati an Kristo la bɛɛ?
Ɔ̄nī◡ ø pá' tì àǹ Kristo lā bɛ́ɛ=ø?
3AN.CNTR CAT perhaps COP Christ ART or=PQ?
"Perhaps he is the Christ?" (Jn 4:29)

Yʊ̄'ʊn "then, next"

Manoa yʊ'ʊn da baŋ ye o anɛ Zugsɔb maliak.
Manoa yʊ̄'ʊn dá bàŋ yɛ́ ò à nɛ̄ Zūg-sɔ́b málı̣āk.
Manoah then TNS realise that 3AN COP FOC Lord angel:SG.
"Then Manoah realised that he was an angel of the Lord." (Judges 13:12)

18 Main clauses

Main clauses show structural possibilities shared only with content clauses, which are downranked main clauses 22.2. For independency marking see 16.6. They may be declarative (the unmarked default), content or polar questions, commands, or types lacking VPs. They are coordinated with *kà* "and", *kʊ̄ʊ* "or", *bɛ̄ɛ* "or"; *kʊ̄ʊ* and *bɛ̄ɛ* are synonyms in this use. For *kà* before *lɛ̀ɛ* see 16.7; in narrative, see 16.3.4.

18.1 Content questions

Content questions (except those with *lìa* 18.4) contain an interrogative pronoun; the final word of the question appears as a LF with a tone perturbation due to the following content-question prosodic clitic 4.1. *Nɛ̄*/ may not appear 24.1.2.

There is no special word order, but if the subject contains the interrogative pronoun it must be *n*-focussed 24.1.1, and non-subjects are very often preposed 24.3. Preposing is obligatory for *bɔ̄ zúg*, "why?" and for *bɔ̄* when used for "why?"

Fʊ̀ bɔ̂ɔd bɔ́=ø? "What do you want?"
2SG want what=CQ?

Fʊ̀ bɔ̂ɔd línɛ̀=ø? "Which do you want?"
2SG want DEM.IN=CQ?

Dāu̱ lā ǹyɛ́ ànɔ́'ɔnɛ̀=ø? "Whom did the man see?"
Man:SG ART see who=CQ?

Bɔɔ maalɛ? "What has been done?" (Lk 24:19)
Bɔ̄ɔ◡ ø máalɛ̀=ø?
What CAT make=CQ?

Ànɔ́'ɔnì◡ ø ǹyɛ̄ bíigà=ø? "Who has seen a child?"
Who CAT see child:SG=CQ?

Ànɔ̂'ɔn bíigì◡ ø ǹwá=ø? "Whose child is this?"
Who child:SG CAT this=CQ?

Ànɔ̂'ɔn kà dāu̱ lā ǹyɛ́ɛ=ø? "Whom did the man see?"
Who and man:SG ART see=CQ?

Bɔ́ kà fʊ̀ kʊ́mmà=ø? "Why are you crying?"
What and 2SG weep:IPFV=CQ?

18.2 Polar questions

Polar questions are of two types. One is exactly like a statement but ending in a LF showing final vowel lengthening and tone changes imposed by the polar-question clitic 4.1. *Nɛ̄*/ appears as in statements. The answer expected is *ɛ̄ɛň* 18.4.

Dāu̯ lā ňyɛ́ bı́igàa=ø? "Has the man seen a child?"
Man:SG ART see child:SG=PQ?

M̀ á nɛ̄ dáùʋ=ø? "Am I a man?"
1SG COP FOC man:SG=PQ?

Bà kùʋd nɛ̄ bʋ́ʋsɛ̀ɛ=ø? "Are they killing goats?"
3PL kill:IPFV FOC goat:PL=PQ?

Fù pʋ̄ wʋ́mmàa=ø=ø? "Don't you understand?"
2SG NEG.IND hear:IPFV=NEG=PQ? (expects *ɛ̄ɛň*, here "no")

The second type follows the ordinary statement form with either *bɛ́ɛ* "or" (expecting disagreement) or *kʋ́ʋ* "or" (expecting agreement; rare in NT/KB):

Dāu̯ lā ňyɛ́ bı̄ig kʋ́ʋ=ø?
Man:SG ART see child:SG or=PQ?
"Has the man seen a child?" (I expect so.)

Dāu̯ lā ňyɛ́ bı̄ig bɛ́ɛ=ø?
Man:SG ART see child:SG or=PQ?
"Has the man seen a child?" (I expect not.)

18.3 Commands

For indirect commands, see 22.1 22.2.1. In direct commands the subject is 2nd person: 2sg pronouns are deleted, and 2pl pronouns moved to immediately after the verb, assuming the liaison-word form ya 4.2. Thus

Fù gɔ́s bı̄ig lā. "You (sg) have looked at the child."
2SG look.at child:SG ART.

Yà gɔ́s bı̄ig lā. "You (pl) have looked at the child."
2PL look.at child:SG ART.

but *Gɔ̀sìm bi̱ig lā!* "Look (sg) at the child!"
Look.at:IMP child:SG ART!

Gɔ̀sɪmī=ø bi̱ig lā! "Look (pl) at the child!"
Look.at:IMP=2PL.SUB child:SG ART!

Dā gɔ̄s bi̱ig láa=ø! "Don't (sg) look at the child!"
NEG.IMP look child:SG ART=NEG!

Dā gɔ̄sī=ø bi̱ig láa=ø!
NEG.IMP look=2PL.SUB child:SG ART=NEG!
"Don't (pl) look down!"

Dā gɔ̄sɛ̄=ø! "Don't (sg) look."
NEG.IMP look=NEG!

Dā gɔ̄sī=yá=ø! "Don't (pl) look."
NEG.IMP look=2PL.SUB=NEG!

2sg/2pl subject pronouns are not changed after *yà*'-clauses:

Fʋ ya'a mɔr pu'a, fʋn da mɔɔd ye fʋ bas oo.
Fʋ̀ yá' mɔ̄r pu̱'ā, fʋ̄n dā mɔ̄ɔd yɛ́ fʋ̀ básō=o=ø.
2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon=3AN=NEG.
"If you have a wife, don't try to leave her." (1 Cor 7:27)

They also remain in quoted direct commands within indirect speech 22.2.1, even when the addressee is the same as in the original utterance:

Ò yɛ̀l yɛ́ bà gɔ̀sìm tɛ̄ŋī=n.
3AN say that 3PL look:IMP ground:SG=LOC.
"She said to them: Look down!" WK

Ò yɛ̀l yɛ́ fʋ̀ gɔ̀sìm tɛ̄ŋī=n.
3AN say that 2SG look:IMP ground:SG=LOC.
"She said to you SG: Look down!"

Ò yɛ̀l yɛ́ yà gɔ̀sìm tɛ̄ŋī=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.

Ò yèl yé bà gɔ̀sɪmī=ø tɛ̄ŋī=n.
3AN say that 3PL look:IMP=2PL.SUB ground:SG=LOC.
"He said to them: Look down!"

Kɛ̀mī=ø nā n gɔ̄sī=ø!
Come:IMP=2PL.SUB hither CAT look=2PL.SUB!
"Come (ye) and look!" (WK *Kɛ̀mī nā n gɔ̄s!*)

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:

Gɔ̀sɪmā!	"Look!"
Gɔ̀sɪmī-yá!	"Look! (plural)

18.4 Verbless clauses

Identificational clauses have the form NP + catenator-*n* + deictic particle or *wà nā* "this here." The NP may be an interrogative pronoun.

Kʊ̀lì ŋì◡ ø lā. "That is a door."
Door:SG CAT that.

Kʊ̀lì ŋì◡ ø wá nā. "This here is a door."
Door:SG CAT this hither.

Bɛ̄ogʊ̄◡ ø lā. "See you tomorrow" ("That's tomorrow.")
Tomorrow CAT that.

Bɔ̄ɔ◡ ø lá=ø? "What's that?"
What CAT that=CQ?

Ňwāamīs◡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 tʋʋmbɛ'ɛdi basida?
Ànɔ̂'ɔn◡ø ǹwáa◡ ø yīsīd nīdīb tʋ̂ʋm-bɛ̄'ɛdī◡ø básıdà=ø?
Who CAT this CAT expel:IPFV person:PL deed-bad:PL CAT throw.out:IPFV=CQ?
"Who is this who drives people's sins out?" (Lk 7:49)

Yɛl bɔɔ nwa ka Wina'am kɛ ka li paae ti?
Yɛ̄l-bɔ́ɔ◡ ø ǹwá kà Wínà'am kɛ́ kà lì páa=tì=ø?
Matter-what CAT this and God cause and 3IN arrive=1PL=CQ?
"What is this that God has made to come to us?" (Genesis 42:28)

Indentificational clauses can be embedded in verbal clauses:

Ya ningid bɔɔ nwa?
Yà nɪ́ŋ̀ìd bɔ́ɔ◡ ø ǹwá=ø?
2PL do:IPFV what CAT this=CQ?
"What is this you are doing?" (Nehemiah 2:19)

Fʋ maal bɔɔ la tis mam?
Fʋ̀ mâal bɔ́ɔ◡ ø lā◡ ø tís màm=ø?
2SG make what CAT that CAT give me=CQ?
"What is this that you have done to me?" (Numbers 23:11)

***Lịa* clauses** have the form X + *lịa*, meaning "where is X?" Although I often heard *lịa* in spontaneous conversation in the 1990's, no examples appear in the 1996 or 2016 Bible versions.

Fʋ̀ mà lā lía=ø? "Where is your mother?"
2SG mother:SG ART be.where=CQ? (WK to a child in the outpatient clinic.)

Ka awai la dia [*sic*]*?* "But where are the nine?" (Lk 17:17, 1976)
Kà àwāę̀ lā lía=ø?
And NUM:nine ART be.where=CQ?

Vocative clauses usually either precede a main clause, or stand alone. They take the form of NPs followed by the vocative prosodic clitic 4.1:

M̀ pu̱'ā né m̀ bīisɛ̄=ø!
1SG wife:SG with 1SG child:PL=VOC!
"My wife and my children!"

M̀ dịəmmā=ø, bɔ́ kà fʊ̀ kúɵsìdà=ø?
1SG parent.in.law:SG=VOC, what and 2SG sell:IPFV=CQ?
"Madam, what are you selling?"

Vocatives do not take the article *lā*/, but often end in *ňwà* "this":

Bịīs ňwá!	"Children!"	[bi:sa]
Pu̯'ā ňwá!	"Woman!"	[pʊ̯a̯wã]
Zɔ̄n ňwá	"Fools!"	[zɔn:a]

Some **particles** occur characteristically as complete utterances. Some are onomatopoeic; others are widely shared among local languages.

Tɔ̀.	"OK." (= Hausa *tôo*)
Báp.	"Wallop!"
Ǹfá!	"Well done!"

"Yes" is *ɛ̄ɛň*; "No" is *áyìɪ*. As in many languages, the reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

Lì nàa nɛ́ɛ=ø?	"Is it finished?"
3IN finish FOC=PQ?	
Ɛ̄ɛň.	"Yes."
Áyìɪ.	"No"
Lì pʊ̄ nāée=ø=ø?	"Isn't it finished?"
3IN NEG.IND finish=NEG=PQ?	
Ɛ̄ɛň.	"No."
Áyìɪ.	"Yes."

19 Catenated clauses

A clause may be followed by one or more VPs, each introduced by catenator-*n*; for the realisation of this particle see 4.2. Complements, VP adjuncts, and even other clauses introduced by *kà* may be incorporated within such chains.

Amaa ka Zugsob malek daa keŋ n yo'og sarega doog za'anoor la ***yu'uŋ kan****, n more ba n yiis yiŋ.*
Àmáa kà Zūg-sób mál̰iāk dāa kɛ̄ŋ n yô'ɔg sārɪgá dôɔg
But and Lord angel:SG TNS go CAT open prison:SG house:SG
zá'-nɔ̄ɔr lā yū'ʊŋ-kán, n mɔ̄rí=bā n yīis yíŋ.
compound-mouth:SG ART night-DEM.SG, CAT have=3PL CAT extract outside.
"But an angel of the Lord came and opened the gate of the prison **that night** and took them outside ..." (Acts 5:19, 1996)

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 dàu̱-sɔ̄' dūe n zí'e lá'asʊ̀g lā nī̤dīb sísʊ̀ʊgū=n, n áň
And man-INDF.AN rise CAT stand assembly:SG ART person:PL among=LOC, CAT COP
Parisee nī̤d kà ò yū'ʊr bûɵn Gamaliel, n áň ɔ́nì pà'an
Pharisee person:SG and 3AN name:SG call:IPFV Gamaliel, CAT COP REL.AN teach:IPFV
Wínà'am wádà lā yɛ́là, kà lɛ́m àň yū'ʊr dâan nī̤dīb 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 *kà* for catenator-*n* makes it impossible to interpret "auxiliary" verbs in the specialised senses associated with *n*-catenation:

M̀ záŋ́◡ m̀ nú'ugʊ̀◡ ø sī'ɪs dāká lā.
1SG pick.up 1SG hand:SG CAT touch box:SG ART.
"I touched the box with my hand."

?? *M̀ záŋí m̀ nû'ug kà sī'ɪs dāká lā.*
"I picked up my hand and touched the box."

M̀ dāa kûɵs bʊ̀ŋʊ̀◡ ø tís dʊ́'atà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to the doctor."

?? *M̀ dāa kûɵs bʊ̀ŋ kà tís dʊ́'atà.*
"I sold a donkey and gave it to the doctor."

However, *n*-catenation shows much greater flexibility than typical serial verb constructions, and in particular VPs can be catenated to verbless clauses 18.4:

Anɔ'ɔn nwaa yisid nidib tʊʊmbɛ'ɛdi basida?
Ànɔ̂'ɔn◡ø ǹwáa◡ ø yīsīd nīdīb tʊ̂ʊm-bɛ̄'ɛdī◡ø básɪdà=ø?
Who CAT this CAT expel:IPFV person:PL deed-bad:PL CAT throw.out:IPFV=CQ?
"Who is this who drives people's sins out?" (Lk 7:49)

Catenator-*n* thus attaches a VP to the preceding clause, not VP. In fact, the catenated VP itself will be considered to be a *clause*, which shares its subject with the main clause. This analysis is supported by the existence of clearly parallel catenation constructions using *kà* in place of catenator-*n* 19.2. Catenation is a closer relationship than complementisation; mood and aspect are mostly determined by the first VP, and the catenation behaves as one unit with regard to focus 24.1.2.

There are similarities with "catenative" constructions in English. CGEL pp1176ff reanalyses many traditional auxiliary verbs as taking non-finite clauses (with or without their own subjects) as "catenative complements." There is evidence for catenator-*n* originating as a non-finite marker. Olawsky describes the Dagbani structure *n*+verb as an "infinitive", presumably meaning that it is used as the citation form, though he gives no examples of usage. Niggli calls the same construction in Mooré *infinitif*, and Canu, who calls it the "*état neutre*" (p272), confirms that it is used in citation and in one-word answers to questions (p175) and in constructions like *ēm dátā ndī* "*je désire manger*."

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 *tì* is often found with non-initial VPs in *n*-catenation.

Catenation seems always to involve semantic subordination. However, it may be the *first* component which is semantically subordinate; many verbs have characteristic "auxiliary" roles in catenation, preceding or following the "main" verb depending on their own semantics. Furthermore, the order of perfectives expressing events must mirror the order of the events.

N-catenations are sometimes attached to the *object* of *ňyɛ̄* "see, find"; I have no examples of this construction with other verbs.

ka na nye Ninsaal Biig la n kenna ne o na'am.
kà ná ňyɛ̄ Nn̩-sâal Bi̩ig lā n kɛ̄n nā né ò nā'am.
and IRR see human:SG child:SG ART CAT come:IPFV hither with 3AN kingdom.
"...will see the Son of Man coming with his kingdom."
(Mt 16:28, 1996: *lā* not *lá*)

19.1 *N*-catenation

Common *n*-catenation patterns with verbs without specialised roles are (a) main VP + imperfective VP expressing accompanying events:

Ka Ninsaal Biig la kena dit ka nuud...
Kà Nn̩-sâal Bi̩ig kɛ̄n nā◡ ø dɪ́t kà nūud ...
And human:SG child:SG come:IPFV hither CAT eat:IPFV and drink:IPFV...
"And the Son of Man comes eating and drinking ..." (Mt 11:19)

(b) perfective VP expressing prior event + main VP

Ka dapa ayi' yɛ fupiela zi'e ba san'an.
Kà dāpá◡àyi̩' yɛ́ fū-pi̩ə̀là◡ ø zi̩'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 *tì* is commonly seen in the second VP.

Amaa m pʋ mɔr antu'a zugʋ o yɛla na sɔbi tis na'atita'ar laa.
Àmáa m̀ pū mɔ̄r ántù'a zúgú◡ò yɛ̄lá◡ ø nà sɔ̄bī◡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 ňyɛ̄ dʊ́'atà. "Go and see the doctor."
Go:IMP CAT after see doctor:SG.

Man ya'a pʋ kɛɛn na tu'asini ba ...
Mān yá' pʋ̄ kɛ̄ɛ=n nā◡ ø tʊ́'asī=ní=bā...
1SG.CNTR if NEG.IND come=DP hither CAT talk=DP=3PL ...
"If I had not come to talk to them ..." (Jn 15:22): Note DP on both verbs.

(d) *Hālí* "until" can precede *n*-catenated clauses as a prelinker adjunct 17.2.1.
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 kɛ̄ŋ ... n i̱āň'asíd kà pi̱āň'ad n dū'ɵsíd Wínà'am yʊ̂'ʋr sʊ́ŋā.
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.
Sɔ́gi̱à-sɔ̄' kā'e n tʊ́m kà yɔ̄ɔd ò mɛ̄ŋá=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)

Certain verbs have characteristic specialised meanings in *n*-catenation. Dual-aspect verbs agree in aspect with the main VP verb.
The following *precede* the (semantically) main VP:

Bɛ̀ "exist, be somewhere" + *àníná* "there" + imperfective "be in the process of ..."

Ò bɛ̀ àníná n ňwɛ̂'ɛd bi̱ig lā.
3AN EXIST ADV: there CAT beat:IPFV child:SG ART.
"He's currently beating the child."

Àe̱ňya "be something/somehow" can be used in clefting 24.2:

Li anɛ o sidi sʋ'oe li.
Lì á né ò sīdī◡ ø sʊ́'ʋ=lī.
3IN COP FOC 3AN husband:SG CAT own=3IN.
"It's her husband who owns it." (1 Cor 7:4)

Mi̱' "know" and *zī'* "not know": *nàm mi̱'* *n* + perfective "always have X-ed", *nàm zī' n* + perfective "never have X-ed":

Makir banɛ buudi paadi ya la nan mi' paae sieba mɛn.
Mākír bànì būudī pāadí=yā lā nám mị̄' ‿ ø pāe sị̄əbā mɛ́n.
Testing REL.PL sort reach:IPFV=2PL ART still know CAT reach INDF.PL also.
"Trials of the kind that have reached you have always reached others too."
(1 Cor 10:13)

M̀ nám zī'‿ ø ňyɛ̄ gbīgīmnɛ̄=ø.
1SG still NEG.KNOW CAT see lion:SG=NEG.
"I've never seen a lion." SB

*Zàŋ*ᵋ and *nɔ̄k*ᵋ/ "pick up, take" with object "using" (of a literal object as instrument)

M̀ nɔ́k sʊ́'ʊgʊ̀‿ ø ki̯á nị̄m lā.
1SG pick.up knife:SG CAT cut meat:SG ART.
"I cut the meat with a knife."

M̀ záŋí‿ m̀ nú'ugʊ̀‿ ø sī'ɪs dāká lā.
1SG pick.up 1SG hand:SG CAT touch box:SG ART.
"I touched the box with my hand."

*Mɔ̄r*ᵃ/ "have" + object "bringing" with motion verbs:

Dābá‿àyɔ́pɔ̀e̯ kà fʊ̀ mɔ̄ró=ø‿ø kɛ̄ nā.
Day:PL NUM:seven and 2SG have=3AN CAT come hither.
"Bring her here in a week." WK

*Dɔ̄l*ˡᵃ/ "accompany in subordinate role, attend"

Bà dɔ̀llō=ø‿ ø kɛ̄ŋ Bɔ́k. "They went to Bawku with him."
3PL follow=3AN CAT go Bawku.

"Beginning" verbs naturally precede:

Ka Pita pin'ili pa'ali ba ...
Kà Pita pị̄ň'il‿ø pá'alì=bā ...
And Peter begin CAT teach=3PL ...
"Peter began to tell them." (Acts 11:4)

Tì dɛ́ŋì‿ ø tísò=ø lɔ́r.
1PL precede CAT give=3AN car.
"We previously gave him a car."

Ka dau sɔ' duoe zi'en la'asʊg la sʊʊgin ...
Kà dàu̱-sɔ̄' dūe◡ø zi̱'ən là'asʊ̀g lā sʊ́ʊgʊ̄=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)

Kɛ̄ň "come" and *kɛ̄ŋ*$^{ɛ/}$ "go" can be used similarly as initiators:

M̀ kɛ́ŋì◡ø pi̱ə nû'us. "I went and washed my hands."
1SG go CAT wash hand:PL.

Su̱'ā^{a} "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baŋidib la ...
Kà Nà'ab Herod su̱'ā◡ ø bûʊl bāŋīdīb lā ...
And king:SG Herod conceal CAT call understander:PL ART...
"Herod secretly called for the wise men ..." (Mt 2:7)

Nị̀ŋ wālá literally "do how?" is used in catenation for "how can ...?" (see also 19.2):

Ninsaal na niŋ wala an pʊpiel Wina'am tuonnɛ? Ninsaal biig na niŋ wala pʊ mɔr taal Wina'am tuonnɛ?
Nị̄n-sâal ná nị̄ŋ wālá◡ø àň pú-pi̱əl Wínà'am tûʊnnɛ̀=ø?
Human:SG IRR do how CAT COP holy:SG God before=CQ?
Nị̄n-sâal bi̱ig nà nị̄ŋ wālá◡ø pʊ̄ mɔ̄r tâal Wínà'am tûʊnnɛ̀=ø?
Human:SG child:SG IRR do how CAT NEG.IND have fault:SG God before=CQ?
"How can a human being be pure before God? How can the child of a human being not have sin before God?" (Job 25:4)

Ňyāŋ$^{ɛ/}$ means "overcome" as a main verb; as an auxiliary it means "carry out successfully, prevail in":

Ka m nyaŋ dunia. "I have overcome the world." (Jn 16:33)
Kà m̀ ňyāŋ dūnɪyā.
And 1SG overcome world:SG.

M̀ pʊ̄ ňyāŋī◡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", *ňyāŋ*$^{ɛ/}$ 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.

M̀ kó ňyāŋī◡ø záb nà'ab láa=ø.
1SG NEG.IRR prevail CAT fight chief:SG ART=NEG.
"I can't fight the chief." ("I won't succeed in fighting the chief.")

wad line nyaŋedin ketin ka nidib voen
wād-línì ňyāŋídī=n◡ ø kɛ̄tí=n kà nị̄dīb vʊ̄ʊ=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:

ba daa tis ka li zemisi ba paŋi na tun'e si'em
bà dāa tís kà lì zɛ̄mísì◡ bà pàŋ̀=ø nà tūň'ɵ sị̄'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 *tūň'e* is used as a *n*-catenation auxiliary both indicative and irrealis moods can express present ability or inability.

ka li kʊ tun'e su'a.
kà lì kʊ́ tūň'ɵ◡ ø sʊ̱'āa=ø.
and 3IN NEG.IRR be.able CAT hide=NEG.
"which cannot be hidden" (Mt 5:14)

Ya na tun'e zin' teŋin la nɛ ti.
Yà ná tūň'ɵ◡ ø zíň'i tɛ̄ŋī=n lā né tì.
2PL IRR be.able CAT be.sitting land:SG=LOC ART with 1PL.
"You can dwell in the land with us." (Genesis 34:10)

Fʊ tun'e nyɛt si'ela?
Fʊ̀ túň'ɵ◡ ø ňyɛ̄t sí'əlàa=ø?
2SG be.able CAT see:IPFV INDF.IN=PQ?
"Can you see anything?" (Mk 8:23)

O pʋ tun'e pian'ada.
Ò pō tūň'ɵ◡ ø pi̱āň'adá=ø.
3AN NEG.IND be.able CAT speak:IPFV=NEG.
"He could not speak." (Lk 1:22)

With *ňyāŋ*$^{ɛ/}$ as the main verb in the sense "overcome":

bozugo ba ku tun'e nyaŋe ba meŋa.
bō zúgō bà kù tūň'ɵ◡ 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)

The following verbs *follow* the main VP:

Tì̀s^{ɛ} "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 nī̱n-sáalā=ø, àmáa fù má'
2SG NEG.IND lie CAT give human:SG=NEG but 2SG lie
n tís nɛ̄ Wínà'am Sí-sʊ̀ŋ.
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)

M̀ dāa kûɵs bʊ̀ŋʊ̀◡ ø tís dʊ́'atà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to the doctor."

Gàad^{ɛ} "pass, surpass" is used in comparisons:

Isaac kárì̀m◡ ø gát John.
Isaac read:IPFV CAT pass:IPFV John.
"Isaac reads better than John." SB

À-Wīn gi̱m◡ ø gát À-Bʊ̄gʊ̄r.
PERS-Awini be.short CAT pass:IPFV PERS-Abugri.
"Awini is shorter than Abugri." SB

Fʊ sid nɔŋ mam gat bamaa?
Fʊ̀ síd nɔ̀ŋ mām◡ ø gát bámmáa=ø?
2SG truly love 1SG CAT pass:IPFV DEMST.PL=PQ?
"Do you really love me more than these?" (Jn 21:15)

Gàlìs$^{\varepsilon}$ "get to be too much" (*Sāa gálìs yā* "There's too much rain"):

Ò dì n gálìs. "She's eaten too much."
3AN eat CAT exceed.

Dā kárìm gbánà◡ø gálɪsìdā=ø.
NEG.IMP read:IPFV book:PL CAT exceed:IPFV=NEG.
"Don't read books too much."

Bàs$^{\varepsilon}$ "send/go away" is used for "away, off, out":

Anɔˈɔn nwaa yisid nidib tʊʊmbɛˈɛdi basida?
Ànɔ̂ˈɔn◡ø ǹwáa◡ø yīsīd nīdīb tûʊm-bɛ̄ˈɛdī◡ø básɪdà=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 dìɪ◡ ø nāe. "He's finished eating."
3AN eat CAT finish.

Ò dìɪ◡ ø tīg. "She's eaten to satiety."
3AN eat CAT get.sated.

Verbs of motion occur in *n*-catenation with meanings like local prepositions e.g.

Ò kàt kíkīr-bɛ̂ˈɛd-nàm n yīisíd nīdīb.
3AN drive:IPFV fairy-bad-PL CAT expel:IPFV person:PL.
"He drives evil spirits out of people."

Ɛ̀ǹrɪgìm◡ ø páa=m. "Shift along up to me." (*pāe*/ "reach")
Shift.along:IMP CAT reach=1SG.

Wɛ̄n$^{na/}$ "be like" is very common in *n*-catenation. It takes a prepositional phrase with *wʊ̄ʊ* "like" or *nɛ̄* "with" as complement. Any object without the article *lā*/, even a pronoun or proper name, is followed by a meaningless *nɛ̄*. As a main verb:

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

Wɛ̄n nɛ̄ and *wɛ̄n wʊ̄ʊ* behave as unitary prepositions to the extent that *wɛ̄n* + preposition + complement can be preposed with *kà*, or dislocated as in

Da lo ya nindaase, wenne foosug dim la niŋid si'em la.
Dā lɔ́ yà nīn-dáasɛ̄=ø, wɛ̄n nɛ̄ fɔ̄ɔsúg dím lá=ø
NEG.IMP tie 2PL eye-face:PL=NEG, resemble with puff:GER NULL.PL ART=NZ
nìŋìd sī'əm lā.
do:IPFV INDF.ADV ART.
"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

Là'am^{m} "together" is also found as a preverb 16.8 and in the compound preposition *là'am nɛ̄* "together with" 15. As a main verb it means "associate with":

... ye labasuŋ moolug la ket ka buudi wusa la'amid ne taaba pudugid Wina'am piini.
... yɛ̄ lábà-sʊ̀ŋ mɔ́ɔlʊ̀g lā kɛ́t kà būudī wʊ̄sā lá'amìd
... that news-good:SG proclamation ART cause:IPFV and tribe all gather:IPFV
nɛ̄ tāabā◡ ø pʊ̄dɪgíd Wínà'am pɪ́ɪnì.
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)

Yà'as^{ɛ} or *yà'as*^{a} "again" is rarely preceded by liaison (never in KB) and has now effectively simply become an adverb; it is even preposable with *kà* 24.3. ILK glosses it "repeat", but I have no examples as a main verb.

ka m lem yeti ya'as ... "and I say again ..." (Gal 1:9, 1996)
kà m̀ lɛ́m yètì◡ ø yâ'as
and 1SG again say:IPFV CAT again

Ya'as ka m gos ... "Again I looked ..." (Rev 5:11, 1976)
Yà'as kà m̀ gɔ̄s ...
Again and 1SG look ...

19.2 *Kà*-catenation

Certain constructions with a clause introduced by *kà* have clear affinities with catenation using *n*. They never have alternate forms with the linker *yɛ̄*. 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.

Kɛ̄ "let, leave off" is used with *kà*-catenation in the sense "let, cause that." The subject of the catenation cannot be the same as the main clause subject (in the whole KB, the only counterexample is Titus 2:7 *kɛl ka fʊ mɛŋ an zanbinnɛ tisi ba* "Let you yourself be a sign to them", where the pronoun *fʊ* is formally a predependent.) The mood of the catenation matches the VP containing *kɛ̄*, though imperative often replaces irrealis mood.

Li da kɛ ka ba ***pʊ*** *nyaŋi kʊʊ o.*
Lì dà kɛ̀ kà bà pʊ̄ ǹyāŋī◡ ø kʊ́o=ø=ø.
3IN TNS cause and 3PL NEG.IND prevail CAT kill=3AN=NEG.
"This caused them not to be able to kill him." (2 Kings 11:2)

Ba kʊdim niŋidi lin ye li kɛ ka ba ***da*** *nyɛ Kristo kum dapuudir namisʊg laa.*
Bà kʊ̄dīm níŋìdī=lí yé lì ké kà bà dā ǹyɛ̄ Kristo kúm
3PL ever do:IPFV=3IN that 3IN cause and 3PL NEG.IMP see Christ death
dà-pʊ̄ʊdír námısʊ̀g 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)

dinɛ ***na*** *kɛ ka ba* ***da*** *kpi'ilim.*
Dīnī◡ ø ná ké kà bà dā kpī'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 *kɛ́ɛ=n kà*, 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 anɛ wada la kɛt ka tʊʊmbɛ'ɛd nyɛt paŋ.
Kà lì à né wādá lā◡ø kɛ́t kà tʊ̀ʊm-bɛ̄'ɛd ǹyɛ̄t páŋ.
And 3IN COP FOC law ART CAT cause:IPFV and deed-bad see:IPFV power:SG.
"It is the law which makes sin find power." (1 Cor 15:56)

The irregular imperative *kɛ̀l*[a], followed by a *kà*-clause with imperative mood, creates a way of expressing commands to third or first persons:

Kɛ̀l kà ò gɔ̄s tɛ̄ŋī=n.
Cause:IMP and 3AN look ground:SG=LOC.
"Let him look down."

Dā kɛ́ kà dàbi̱əm bɛ́ɛ=ø!
NEG.IMP cause and fear EXIST=NEG.
"Don't be afraid." ("Let fear not exist.")

Kɛ̀l [or *Kɛ̀lí=ø*] *kà tì pʊ̂'ʊs Wínà'am.*
Cause:IMP cause:IMP=2PL.SUB and 1PL greet God.
"Let us praise God."

Kɛ̀l kà ... is often ellipted informally, leaving the lack of independency marking as the only sign that the clause is a command:

M̀ gɔ́s nī̱f lā. "I've looked at the eye."
1SG look.at eye:SG ART. Independency marked: tone overlay on *gɔ́s*

but *M̀ gɔ̄s nī̱f lā.* "Let me look at the eye." (Overheard in clinic)
1SG look.at eye:SG ART. No tone overlay on *gɔ̄s*

M̀ dígɪnɛ̀ɛ=ø? "Am I to lie down?" (Overheard in clinic)
1SG lie.down=PQ? No independency imperative *-ma*

Ò záb nà'ab lā. "He should fight the chief."
3AN fight chief:SG ART. M spreading after *ò,* not *záb* 16.6.1

Mi̱t is a defective verb used only in the imperative 16.5. Much its most common use is with *kà*-catenation as "see that it doesn't happen that ...". In this sense it never appears with the postposed 2pl subject [ya], suggesting that it is impersonal.

Mid ka ya maali ya tʊʊm sʊma nidib tuon ye ba gɔs.
Mi̱t kà yà máalì◡ yà tʊ̀ʊm-sʊ̀mà nī̱dīb tûɐn yɛ́ 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 *nì̱ŋ wēlá n...?* "how can X ...?" has an impersonal variant using a dummy subject in the main clause and the effective subject in *kà*-catenation.

Li niŋ wala ka o an David yaaŋa?
Lì nìŋ wɛ̄lá kà ò áň David yâaŋà=ø?
3IN do how and 3AN COP David descendant:SG=CQ?
"How can he be David's descendant?" (Mt 22:45)

Where there is no change of subject, *n*-catenation is overwhelmingly more common, but a few cases of the personal type do appear with *kà*:

M na niŋ wala ka nyɛ faangirɛ?
M̀ ná nīŋ wɛ̄lá kà ňyɛ̄ fāaňgírɛ̀=ø?
1SG IRR do how and find salvation=CQ?
"How can I find salvation?" (Acts 16:30)

Kà usually replaces *n* when there is a change of polarity in catenation:

Ka dau daa zin'i Listra ni ka pu tun'e kenna.
Kà dāu̱ dāa zíň'i Listra ní kà pʊ̄ tūň'ɵ◡ ø kɛ̄nná=ø.
And man:SG TNS sit Lystra LOC and NEG.IND be.able CAT go:IPFV=NEG.
"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Ka Joon kena lɔɔd nɔɔr ka pʊ nuud daam
Kà Joon kɛ̄ nā◡ ø lɔ̄ɔd nɔ̄ɔr kà pʊ̄ nūud dáamm=ø.
And John come hither CAT tie:IPFV mouth:SG and NEG.IND drink:IPFV beer=NEG.
"John came, fasting and not drinking beer." (Mt 11:18)

Change from positive to negative can nevertheless occur with *n*:

Ya sieba bɛ kpɛla kʊ kpii …
Yà sīəbā bɛ́ kpɛ̄lá◡ø kʊ́ kpī̱i=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** *kà*-catenated clause follows, usually directly, a NP anchor other than the main clause subject, and contains a pronoun referring to it, which is ellipted if it is an object 16.9.1. The sense resembles a non-restrictive relative clause:

Anina ka o nyɛ dau ka o yʊ'ʊr buon Aneas.
Àníná kà ò ňyɛ̄ dáu̱ kà ò yʊ̄'ʊr bûɵn Aneas.
ADV:there and 3AN see man:SG and 3AN name:SG call:IPFV Aeneas.
"There he found a man whose name was Aeneas." (Acts 9:33)

Li anɛ ya taaba banɛ pʊ'ʊsid Wina'am ka li nar ka ya kad saria.
Lì à né yà tāabā bánì pʊ̀'ʊsìd 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 18.4, the NP of the main clause can be the anchor:

Yɛl bɔɔ nwa ka Wina'am kɛ ka li paae ti?
Yɛ̄l-bɔ́ɔ◡ ø ňwá kà Wínà'am kɛ́ kà lì páa=tì=ø?
Matter-what CAT this and God cause and 3IN arrive=1PL=CQ?
"What is this that God has made to come to us?" (Genesis 42:28)

Adnominal *kà*-catenation underlies *kà*-clefting and preposing.

The subject of the catenated clause does not normally refer to the anchor; if it does, the *kà*-catenation is a resultative predicate 16.9.2:

...ka la'am maan gigis ka ba wum ka pia'ad.
...kà lâ'am màan gígìs kà bà wʊ́m kà pi̱āň'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 *ňyɛ̄* "see", this construction has the predicative sense "see *as*":

M̀ dāa ňyɛ̄ dāu̱ lá kà ò áň 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"

M̀ dāa pʊ̄ ňyɛ̄ dāu̱ lá kà ò áň ná'abā=ø.
1SG TNS NEG.IND see man:SG ART and 3AN COP chief:SG=NEG.
"I didn't see the man as a chief." KT

As expected, KT rejected constructions with tense marking in the *kà*-catenation. He also rejected focus-*nɛ̄*/ in the catenated clause:

**M̀ dāa pʊ̄ ňyɛ̄ dāu̱ lá kà ò á nɛ̄ ná'abā=ø.*
1SG TNS NEG.IND see man:SG ART and 3AN COP FOC chief:SG=NEG.

20 Conditional clauses

20.1 Structure

Conditional clauses have a *yà*'-clause as postlinker adjunct, after any other adjuncts. The main clause can be of any type, including a command or a question.

Fù yá' gɔ̄s kpɛ̄lá, bó kà fù ňyɛ̄tá=ø?
2SG if look here, what and 2SG see:IPFV=CQ?
"If you look here, what do you see?"

Yà'-clauses cannot be coordinated, but there may be several in a main clause:

Ka ligidi la ya'a pɔ'ɔg, m ya'a ti lɛb na, m na yɔɔf.
Kà lī̱gɪdī lā yá' pɔ̀'ɔg, m̀ yá' tì lɛ̀b nā, m̀ ná yɔ́ɔ=f.
And money ART if get.small, 1SG if then return hither, 1SG IRR pay=2SG.
"If the money runs short, when I return I will repay you." (Lk 10:35)

The main clause must have an unellipted subject. Direct commands keep a subject pronoun in place; some speakers require a free pronoun form in such cases:

Fʋ ya'a mɔr pu'a, fʋn da mɔɔd ye fʋ bas oo.
Fù yá' mɔ̄r pu̱'ā, fūn dā mɔ̄ɔd yɛ́ fù básō=o=ø.
2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon=3AN=NEG.
"If you have a wife, don't try to leave her." (1 Cor 7:27)

Yà'-clauses can appear clause-finally because of dislocation due to weight:

Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa.
Dìn-zúg lì nāan áň sʋ́m bà yá' pʋ̄ dʋ̂'a=n dáu̱-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)

Yà'-clauses express tense independently. They can have irrealis mood, but an indicative event-perfective need not have past reference:

Fʋ ya'a na dɔllimi keŋ, m na keŋ.
Fù yá' nà dɔ̄llí=mī‿ ø kɛ̄ŋ, m̀ ná kɛ̄ŋ.
2SG if IRR accompany=1SG CAT go, 1SG IRR go.
"If you will go with me, I will go." (Judges 4:8)

M ya'a pʊ keŋɛ, Sʊŋid la kʊ kɛɛn ya ni naa.
M̀ yá' pū kɛ̄ŋɛ́=ø, sʊ̄ŋīd lā kʊ́ kɛ́ɛn̆‿yà nī náa=ø.
1SG if NEG.IND go=NEG, helper:SG ART NEG.IRR come 2PL LOC hither=NEG.
"If I do not go, the Helper will not come here to you." (Jn 16:7)

The **discontinuous-past marker** *n*$^{\varepsilon}$ 16.3.2, beside tense, is used to express *modal remoteness* (cf CGEL pp148ff), describing a hypothetical or unlikely state of affairs. If it is accompanied by post-subject *nāan(ī)*, the sense is contrary-to-fact. It can attach to any verb form apart from imperatives. In catenation, *n*$^{\varepsilon}$ in the first VP is usually repeated in all. It appears most often in *yà'*-clauses, but can occur both with and without *nāan(ī)* elsewhere:

Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tʊʊliga.
Mān bɔ́ɔdī=n nɛ̄ yānámì nāan âa=n mā'asígā bɛ̄ɛ
1SG.CNTR want=DP that 2PL:NZ then COP=DP cold:ADV or
yānámì nāan âa=n tʊ̄ʊlígā.
2PL:NZ then COP=DP hot:ADV.
"I might wish you had been cold or you had been hot." (Rev 3:15)

Post-subject *nāan(ī)* "in that case, matters being so" is distinct from *n̆yāan* "next, then" (← *n̆yá'aŋ*^{a} "behind"), but before 2016 *n̆yāan* often appears as *nāan*. Thus, in parallel NT passages:

Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.
Fʊ̀ ná kī'ɪs nɔ́ɔr àtáń' yɛ́ fʊ̀ zí'ɪ=mā=ø,
2SG IRR deny occasion:SG NUM:three that 2SG NEG.KNOW=1SG=NEG,
kà nɔ̄-dâʊg n̆yāan kāas.
and hen-male:SG next cry.
"You will thrice deny you know me before the cock crows." (Mt 26:75, 1996)

Fu na ki'is man noor atan' ka noraug naan [KB *nyaan*] *kaas noor ayi.*
Fʊ̀ ná kī'ɪs mān nɔ́ɔr àtáń' kà nɔ̄-dâʊg
2SG IRR deny 1SG.CNTR occasion:SG NUM:three and hen-male:SG
nāan kāas nɔ́ɔr àyɪ́'.
next cry occasion:SG NUM:two.
"You will thrice deny me before the cock crows twice." (Mk 14:30, 1996)

Nāan(ī) originates from the verb *nāan*$^{\varepsilon/}$ "be there", which typically appears as an auxiliary with its own locative complement before a *n*-catenated clause:

Ka nwadbibis na naan agɔla lit teŋin na.
Kà ǹwād-bíbìs ná nāan àgɔ́là◡ ø lít tɛ̄ŋ̄=n nā.
And moon-small:PL IRR be.there ADV:above CAT fall:IPFV ground:SG=LOC hither.
"And the stars [being] above will fall to earth." (Mk 13:25)

Fʊ ya'a sid anɛ Wina'am Biig fʊn naanim dapuudir la zugʊ sig na.
Fʊ̀ yá' sìd à nɛ̄ Wínà'am Bíig, fʊ̄n náanìm dá-pʊ̄dír lā
2SG if truly COP FOC God child:SG, 2SG.CNTR be.there:IMP wood-cross:SG ART
zùgʊ̀◡ø sīg nā.
upon CAT descend hither.
"If you are truly the Son of God, come down here from the cross." (Mt 27:40)

I will omit CAT in interlinear glossing after *nāanī*.

In subordinate clauses KB usually simply has irrealis *nà* where older versions had *nāan*. Modal *nāan(ī)* most often appears in conditional main clauses; in other main clauses *nāan* without *n*$^{\varepsilon}$ often represents *ǹyāan*, as above.

Nāan(ī) without *n*$^{\varepsilon}$ is often effectively equivalent to *yà'* "if/when."

Li an sʊm ye dau yinne naan kpi nidib la yɛla gaad ...
Lì àǹ sʊ́m yɛ̄ dāu̱ yīnní nāan kpí nīdīb lā yélà◡ ø gàad ...
3IN COP good that man:SG one then die person:PL ART about CAT pass ...
"It is better if one man should die for the people than ..." (Jn 11:50)

Fun naani tum be'ed ka ba sigis uf ne kpisiŋkpil ka fu sin ka mor suguru, li su'um a bo?
Fʊ́n nāanī tʊ́m bɛ̄'ɛd kà bà sīgɪsʊ́=f nɛ̄ kpísìnkpì̱l
2SG:NZ then do bad and 3PL put.down =2SG with fist:SG
kà fʊ̀ sín kà mōr sūgʊrʊ́, lì sʊ̀m áǹ bɔ́=ø?
and 2SG be.silent and have forbearance, 3IN good:ABSTR COP what=CQ?
"If you do evil and they down you with fists and you are silent and forbear, what is the good of it?" (1 Pet 2:20, 1996)

Noŋir lem kae' gaad nidi naan kpi o zuanam zugo.
Nɔ̀ŋ̀ir lɛ́m kā'e◡ ø gâad nīdí=ø nāan kpí ò zu̱à-nàm zúgɔ̄=ø.
Love again NEG.BE CAT pass person:SG=NZ then die 3AN friend-PL upon=NEG.
"There is no love greater than if a person dies for his friends." (Jn 15:13, 1996)

Ba wenne zunzoŋ naani ve'ed zunzoŋ ne.
Bà wɛ̄n nɛ̄ zʊ́nzɔ̀ŋ=ø nāanī vɛ̄'ɛd zʊ́nzɔ̀ŋ nɛ̄.
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)

Nāan(ī) with *nᵋ* expresses contrary-to-fact, as in conditional clauses:

Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni.
Lì sù'm kà fù dāa nāan záŋí=n◡ m̀ lī̩gıdī n sū'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(ī) means "if only":

M zugdaan la ya'a naan siaki keŋ nyɛɛn nɔdi'es la bɛ Samaria la!
M̀ zūg-dâan lā yá' nāan si̩ákì◡ø kɛ̄ŋ◡ø ňyɛ̄ɛ=n
1SG head-owner:SG ART if then agree CAT go CAT see=DP
nɔ́-dī̩'əs lá◡ø bɛ̀ Samaria lā!
mouth-transmitter:SG ART CAT EXIST Samaria ART!
"If only my lord would agree to go to see the prophet in Samaria!" (2 Kings 5:3)

20.2 Open

Conditional clauses without discontinuous-past *nᵋ* or *nāan(ī)* express "if", and also "when" with a main clause with present or future reference (cf Hausa *ìdan*, Jaggar p608.) With main clauses with past reference, *yà'* is only used for conditionals; for the meaning "when", absolute clauses are used 21.1.

Nid ya'a tʊm tʊʊma, o di'ed yɔɔd.
Nī̩d yá' tʊ̀m tʊ̄ʊmā, ò dī̩'əd yɔ̄ɔd.
Person:SG if work:IPFV work, 3AN receive:IPFV pay.
"If a person works, he gets pay." (Rom 4:4)

Ka Kristo ya'a da pʊ vʊ'ʊg kuminɛ, alaa ti labasʊŋ la mɔɔlʊg la anɛ zaalim.
Kà Kristo yá' dà pʊ̄ vʊ̄'ʊg kūmī=né=ø, àláa◡ tì làbà-sʊ̀ŋ
And Christ if TNS NEG.IND come.alive death=LOC=NEG, ADV:thus 1PL news-good:SG
lā mɔ́ɔlʊ̀g lā á nɛ̄ zāalím.
ART proclamation ART COP FOC empty:ABSTR.
"If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)

Fʊ̀ yá' si̩àk, tì ná dīgılí=f.
2SG if agree, 1PL IRR lay.down=2SG.
"If you agree, we'll put you to bed [i.e. admit you to hospital.]"

Bɛog ya'a nie fʊ na wʊm o pian'ad.
Bɛ̄og yá' nìe, fʊ̀ ná wʊ́m ò pi̯àǎ'ad.
Tomorrow if appear, 2SG IRR hear 3AN speech.
"When tomorrow comes, you will hear his words." (Acts 25:22)

20.3 Hypothetical

If discontinuous-past *n*$^{\varepsilon}$ occurs in the *yà'*-clause and the main clause has irrealis mood without *nāan(ī)*, the meaning is hypothetical. In the 1976 NT the main clause also has *n*$^{\varepsilon}$, but not in later versions. KB sometimes uses constructions identical to open conditionals with irrealis in the main clause in this meaning.

Wief ya'a sigin li ni, li zuluŋ na paaen o salabir.
Wi̯əf yá' sị̄gí=n lì nī, lì zùlʊ̀ŋ ná páa=n ò sàlɪbìr.
Horse:SG if descend=DP 3IN LOC, 3IN depth IRR reach=DP 3AN bridle:SG.
"If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)
KB: *Ka wief ya'a sigi li ni, li zulʊŋ na paae o salibir.*

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' niŋgbiŋ nii, lin ku nyaŋin keen ka o ka' niŋgbiŋ nii.
Nɔ́bìr yá' yèlī=n yɛ̄, ɔ́n pʊ̄ áǹ nû'ug lā zúg,
Leg:SG if say=DP that 3AN:NZ NEG.IND COP hand:SG ART upon,
ò kā' nị́n-gbi̯ŋ níɪ=ø, lī̱n kʊ́ ǹ̆yāŋī=n◡ ø
3AN NEG.BE body:SG LOC=NEG, DEM.IN NEG.IRR accomplish=DP CAT
kɛ́ɛ=n kà ò kā' nị́n-gbi̯ŋ níɪ=ø.
cause=DP and 3AN NEG.BE body:SG LOC=NEG.
"If the leg said, because it is not a hand, it is not in the body, that would not cause it not to be in the body." (1 Cor 12:15, 1976)
KB: *Nɔbir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋbiŋ la nii," lin kʊ nyaŋi kɛ ka o ka' niŋgbiŋ la nii.*

20.4 Contrary-to-fact

If the main clause has *nāan(ī)*, there is a contrary-to-fact implication. Both main and *yà'*-clause have discontinuous-past *n*$^{\varepsilon}$:

Man ya'a pʊ kɛɛn na tu'asini ba, ba naan kʊ mɔrin taalɛ.
Mān yá' pʊ̄ kɛ̄ɛ=n nā◡ ø tʊ́'asī=ní=bā, bà nāan kʊ́
1SG.CNTR if NEG.IND come=DP hither CAT talk=DP=3PL, 3PL then NEG.IRR
mɔ̄rī=n tâallɛ̄=ø.
have=DP fault:SG=NEG.
"Had I not come to speak to them, they would not have been guilty." (Jn 15:22)

M ya'a mɔrin sʊ'ʊgʊ m nu'ugin m naan kʊʊnif nannanna.
M̀ yá' mɔ̄rī=n sʊ́'ʊgʊ̀◡m̀ nú'ugī=n, m̀ nāan kʊ̄ʊ=ní=f nānná-nā.
1SG if have=DP knife:SG 1SG hand:SG=LOC, 1SG then kill=DP=2SG now.
"If I'd had a sword in my hand, I'd have killed you right now." (Numbers 22:29)

Ba ya'a daa mi'inɛ li, ba naan kʊ kpa'an Zugsɔb onɛ an na'atita'ar la dapuudir zugɔ.
Bà yá' dāa mi̱'i=ní=lī, bà nāan kʊ́ kpā'a=n Zūg-sɔ́b ɔ́nì
3PL if TNS know=DP=3IN, 3PL then NEG.IRR fasten=DP Lord REL:AN
àn̆ ná'-tītā'ar lā dá-pʊ̄vdá zùgɔ̄=ø.
COP king-great:SG ART wood-cross:PL upon=NEG.
"If they had known it, they would not have fastened the Lord, who was a great king, to a cross." (1 Cor 2:8)

Contrary-to-fact conditions in the past are also sometimes marked with irrealis mood along with past tense markers in the main clause; WK specifically confirmed that the sense of this combination is contrary-to-fact, not future-in-the-past.

Bɔzugɔ Josua ya'a da tisini ba vʊ'ʊsʊm zin'ig, Wina'am da kʊ lɛm pian' dabis-si'a yɛla ya'asɛ.
Bɔ̄ zúgɔ̄ Josua yá' dà tìsī=ní=bā vʊ̄'ʊsím zî̱n̆'ig, Wínà'am dá kʊ̀
Because Joshua if TNS give=DP=3PL resting place:SG, God TNS NEG.IRR
lɛ̄m pi̱ān̆' dábìs-si̱'a yɛ́là yà'asɛ̄=ø.
again speak day-INDF.IN about again=NEG.
"For if Joshua had given them a resting place, God would not subsequently have spoken of a certain day." (Heb 4:8)

Without a *yà'*-clause:

Ò dāa ná zāb nâ'ab lā.
3AN TNS IRR fight chief:SG ART.
"He would have fought the chief (but didn't.)" WK

21 *Ǹ*-clauses

Clauses are nominalised by inserting the post-subject particle *ǹ* NZ 4.2, which turns an original clause "X" into an *absolute* clause signifying "it being the fact that X." *Ǹ*-clauses are also the basis of relative clauses, but *ǹ* often fuses with a preceding demonstrative to create what is synchronically simply a relative pronoun.

Ǹ-clauses have independent tense marking (but relative to the *narrative* timeline within narrative 16.3.4.) Irrealis mood replaces imperative:

Yanamɛ na mɔr sam si'a anɛ ye ya nɔŋ taaba.
Yānámì nà mɔ̄r sām-sḭ́'a á nɛ̄ yɛ́ yà nɔ́ŋ tāabā.
2PL:NZ IRR have debt-INDF.IN COP FOC that 2PL love each.other.
"The debt which you are to have is to love each other." (Rom 13:8)

Ǹ-clauses cannot contain focus particles, but relative pronouns are often preposed with *kà*. Contrastive pronouns can be subjects of *ǹ*-clauses:

*wuu **mane** a si'em la.* "as I am." (1 Cor 7:7, 1996)
wʊ̄ʊ mánì=ø àn̆ sḭ̄'əm lā.
like 1SG.CNTR=NZ COP INDF.ADV ART.

Ǹ-clauses take no dependents themselves except predependent NPs or articles. Absolute *ǹ*-clauses normally take the article *lā/*. After relative clauses *lā/* has its usual function; clauses without *lā/* are usually indefinite but specific.

... amaa o di'enɛ onɛ tʋmi m la na
... àmáa ò dḭ̀ə nɛ̄ ɔ́nì tʊ̀mì=m lā nā
... but 3AN receive FOC REL.AN send=1SG ART hither
"... but he receives him who sent me hither." (Mk 9:37)

Onɛ du'a nɛ Siig mɛ anɛ ala.
Ɔ̀nì du̱'à nɛ̄ Sīɪg mɛ́ á nɛ́ àlà.
REL.AN bear with spirit:SG also COP FOC thus.
"Someone born of the Spirit is like that too." (Jn 3:8)

The article is not repeated a second time after an *ǹ*-clause which ends in a NP with *lā/*. If the clause contains the VP-final particles *nā/* "hither" or *sà* "hence", these may *follow* an article belonging to the *ǹ*-clause 16.11.

If a *ǹ*-clause has a negative VP, the negative prosodic clitic is dropped unless the *ǹ*-clause lacks *lā/* and is itself clause-final in the superordinate clause 23.

21.1 Absolute clauses

Ǹ-clauses without relative pronouns or indefinite pronouns used as relatives are **absolute clauses**, meaning "it being the fact that ...":

Dāu̯ lā záb nâ'ab lā. "The man has fought the chief."
Man:SG ART fight chief:SG ART.

dāu̯ lá=ø zàb nà'ab lā "the man having fought the chief"
Man:SG ART=NZ fight chief:SG ART

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 17.2.1 or as VP adjuncts, generally preposed with *kà* 24.3. As Kusaal is stricter than English in requiring constituent order to reflect event order, the VP-final adjunct position is usually confined to cases where the absolute clause expresses a state of affairs rather than a single event:

Ɔ̄n dāa ňyɛ̄t sʊ́ŋā, ɔ́n dāa áň bí-lī̩a láa=ø?
3AN.CNTR TNS see:IPFV good:ADV, 3AN:NZ TNS COP child-baby:SG ART=PQ?
"Did she see well when she was a baby?"

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 dɪ̀t lā, Yesu yɛ́lɪ̀=bā ...
And 3PL:NZ eat:IPFV ART, Jesus say=3PL ...
"As they were eating, Jesus said to them ..." (Mt 26:21)

Ka ban yi la, ka Zugsob malek nie o meŋ ...
Kà bán yī̩ lā, kà Zūg-sób málī̩āk nī́e ò mɛ̄ŋ ...
And 3PL:NZ emerge ART and Lord angel:SG appear 3AN self
"After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Like other AdvPs, absolute clauses have limited uses as verb arguments 13.1:

Dine kɛ ka m a saalbiis zua la anɛ
mam pu sa'amidi ba la'ad ka mɛ pu diti ba ki la.
Dìnì kɛ́ kà m̀ áň sâal-bi̱is zu̱á lā á nɛ̄ mán
REL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:NZ
pɔ̄ sáň'amìdí◡bà lā'ad kà mɛ́ pɔ̄ dítí◡ bà kɪ̱ 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.

Absolute clauses with *sādɪgím* "since, because" immediately following nominaliser-*ǹ* occur as postlinker adjuncts expressing "reason why":

Amaa on sadigim kpi la, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ?
Àmáa ɔ́n sādɪgím kpɪ́ lā, bɔ́ kà m̀ lɛ́m lɔ̄ɔd nɔ̄ɔr yá'asɛ̀=ø=ø?
But 3AN:NZ since die ART, what and 1SG again tie:IPFV mouth:SG again=NEG=CQ?
"But since he has died, why should I still be fasting?" (2 Samuel 12:23)

Tinamɛ sagidim aan o biis la, ti da tɛn'ɛs ...
Tɪ̄námì sādɪgím áaň◡ò bi̱is lā, tì dā tɛ̄ň'ɛs ...
1PL:NZ since COP 3AN child:PL ART, 1PL NEG.IMP think ...
"Since we are his children, we should not think ..." (Acts 17:29)

For absolute clauses with post-subject *nāan(ī)* see 20.1.

Absolute clauses occur after *hālí nɛ̄* or *hālí là'am nɛ̄* "although, even as" 15, and *hālí n tì pāa ...*"up until the time when ..." 17.2.1.

Before the postposition *zūgɔ/* "on account of", or *bɔ̄ zúgɔ̄* "because", absolute clauses form reason-why AdvPs used as adjuncts:

Ban mɔr dɛŋ la zug, ba kʊ di'e baa.
Bán mɔ̄r dɛ̄ŋ lā zúg, bà kʊ̀ dɪ́'ə=báa=ø.
3PL:NZ have wound:SG ART upon, 3PL NEG.IRR receive=3PL=NEG.
"Because they have a defect, they will not be accepted." (Leviticus 22:25)

Mán ňwɛ̀' dāu̱ lā zúg kà pɔ̄lī̱s gbáň'a=m.
1SG:NZ strike man:SG ART upon and police seize=1SG.
"The police arrested me because I struck the man." ILK

It is commoner for causation to be simply implied by an absolute clause as postlinker adjunct or preposed VP adjunct, or just by coordination with *kà*.

Yɛ̄lá "concerning" appears after absolute clauses in NT section headings, and absolute clauses alone are used as picture captions:

Jesus n kpen' Jerusalem la yela
Jesus=ǹ kpɛ̀ň' Jerusalem lā yɛ́là
Jesus=NZ enter Jerusalem ART about
"[about] Jesus entering into Jerusalem."

Ban meed yir "A house being built"
Bán mɛ̀ɛd yi̱r
3PL:NZ build:IPFV house:SG

21.2 Relative clauses

Relative clauses are of two structural types: those which use relative pronouns, and those which use indefinite pronouns in the role of relatives. The relative clause subject is followed by *ǹ* in the indefinite-pronoun type; unitary relative pronouns have arisen from fusion of a clause-initial short demonstrative pronoun with a following *ǹ*.

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 *kanɛ kànì* as a relative for human reference (invariably so after proper names), substituting *onɛ ɔ̀nì*, which cannot be preceded by a cb; the resulting construction is appositional:

o sid onɛ da bɛ nɛ o la
ò sī̱d ɔ́nì dà bɛ̀ né ò lā
3AN husband:SG REL.AN TNS EXIST with 3AN ART
"her husband, who was there with her" (Genesis 3:6) [clearly non-restrictive]

Uncompounded pronouns are obviously necessary with heads that lack cbs or have a coordinate structure:

nimbanɛ yʊda sɔb ***Pɛbil la gbauŋʊn linɛ*** *an nyɔvʊpaal dim gbauŋ la*
nı̱n-bánì yʊ̄dá sɔ̄b Pɛ̄'-bı́l lā gbá̱u̱ŋʊ̄=n línì
person-REL.PL name:PL write sheep-small:SG ART book:SG=LOC REL.IN
àň ňyɔ́-vʊ̄-pâal dím gbá̱u̱ŋ 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)

kokor kaŋa lini *yi arazana ni la na*
kʊ̀kɔ̄r-káŋā línì yí̤ àràzánà ní lā nā
voice-DEMST.SG REL.IN emerge sky:SG LOC ART hither
"this voice which came from heaven" (2 Pet 1:18, 1976)

Mam Paul nɛ Timoti banɛ *an Yesu Kristo tʊmtʊmnib la*
Mām Paul nɛ̄ Timoti bánì àn̆ Yesu Kristo tʊ́m-tʊ̄mníb lā
1SG.CNTR Paul with Timothy REL.PL COP Jesus Christ worker:PL ART
"I, Paul, and Timothy, the servants of Jesus Christ" (Phil 1:1)

A relative clause introduced by a relative pronoun may contain indefinite pronouns with their normal meaning, and a relative clause with an indefinite pronoun as relative may contain other indefinite pronouns in their normal function so long as they precede the pronoun with relative meaning. Short demonstrative pronouns are never relatives when non-initial, and long demonstratives are never relatives at all:

Wina'am onɛ gaad ***si'el*** *wʊsa la*
Wínà'am ónì gàad sḭ̄'əl wʊ̄sā lā
God REL.AN pass INDF.IN all ART
"God who surpasses everything." (Lk 1:35)

wʊʊ baŋi gban'ad ***si'el*** *si'em la*
wʊ̄ʊ bāŋí=ø gbān̆'ad sḭ̄'əl sḭ̄'əm lā
like trap:SG=NZ seize:IPFV INDF.IN INDF.ADV ART
"like a trap seizes something" (Lk 21:35)

*O pa'al nɛ'ɛnam nyain tis sɔ' wʊsa on vʊ'ʊg nin****kan*** *kumin la zug.*
Ò pà'al nɛ̄'-nám n̆yāe◡ ø tís sɔ̄' wʊ̄sā ɔ́n vʊ̄'ʊg nḭ̄n-kán
3AN show DEM.IN-PL clearly CAT give INDF.AN all 3AN:NZ revive person-DEM.SG
kūmī=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 tʊm tʊʊmnyalima gaad dau ***kaŋa*** *tʊm si'el laa?*
ò nà tʊ̄m tʊ̂ʊm-n̆yālɪmá◡ ø gàad dàu̱-kàŋá=ø tʊ̀m sḭ̄'əl láa=ø?
3AN IRR work work-grand:PL CAT pass man-DEMST.SG=NZ work INDF.IN ART=PQ?
"Will he do miracles greater than this man has?" (Jn 7:31)

21.2.1 With indefinite pronouns

Relative clauses using indefinite pronouns as relatives are **internally headed**. The pronoun may be a head, as clause antecedent, or a dependent after a cb which is then the clause antecedent; in either case it remains *in situ* within the relative clause. It need not follow the verb directly.

*Wina'am nodi'esidib n daa yel **si'el** n sob Wina'am gbauŋin la, ane ameŋa.*
Wínà'am nɔ́-dí'əsìdìb=n dāa yél sɪ̄'əl n sɔ̄b
God mouth-receiver:PL=NZ TNS say INDF.IN CAT write
Wínà'am gbáu̱ŋɔ̄=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)

... fɔn yɛlim fɔn niŋ li si'el.
... fɔ̄n yélìm fɔ́n nìŋì=lī sɪ̄'əl.
... 2SG.CNTR say:IMP 2SG:NZ do=3IN INDF.IN.
"... that you say where you have put it." (Jn 20:15)

The antecedent of a relative clause using an indefinite pronoun cannot be the subject in the relative clause, but may be a verb complement or adjunct. It may be a predependent in such constituents, or belong to a subordinate clause within the relative clause: elements following the pronoun thus cannot be taken as dependents of the entire relative clause.

Uncompounded pronouns which are not part of an AdvP usually remain specific-indefinite (exceptions in KB are Rev 2-3 of *man nyɛ sɔ' la* "the one I saw"):

*Ka ban tɔm **sɔ'** la kɔ gaad onɛ tɔm o la.*
Kà bán tɔ̀m sɔ̄' lā kɔ́ gāad ɔ́nì tɔ̀mò=ø láa=ø.
And 3PL:NZ send INDF.AN ART NEG.IRR surpass REL.AN send=3AN ART=NEG.
"**One** who was sent does not surpass the one who sent him." (Jn 13:16)

*M na tisif fɔn bɔɔd **si'el** wɔsa.*
M̀ ná tīsī=f fɔ́n bɔ̀ɔd sɪ̄'əl wɔ̄sā.
1SG IRR give=2SG 2SG:NZ want INDF.AN all.
"I will give you **anything** you want." (Mk 6:23)

Typically the pronoun is the complement of a verb of cognition, reporting, or perception, and/or the whole relative clause is, corresponding to an English "subordinate interrogative clause" (CGEL pp1070ff, pp972ff.) 20/33 examples of relative clauses with *sɔ̄'* in the 1996 NT are of this kind.

m na pa'ali ya on nwɛnɛ ***sɔ'***.
m̀ ná pā'alī=yá ɔ́n wɛ̄n nɛ̄ sɔ̄'.
1SG IRR teach=2PL 3AN:NZ resemble with INDF.AN.
"I will teach you **what** he is like." (Lk 6:47)

David da tʋm sɔ' ye o bu'osi baŋ pu'a la an ***sɔ'***.
David dá tʋ̀m sɔ̄' yé ò bū'ʊsī◡ø báŋ pu̱'ā lá=ø àn̆ sɔ̄'.
David TNS send INDF.AN that 3AN ask CAT discover woman:SG ART=NZ COP INDF.AN.
"David sent someone to ask and find out **who** the woman was." (2 Samuel 11:3)

ya na baŋ man yɛl ye m an ***sɔ'*** *la.*
yà ná bāŋ mán yɛ̀l yé m̀ àn̆ sɔ̄' lā.
2PL IRR understand 1SG:NZ say that 1SG COP INDF.AN ART.
"you will understand **who** I say that I am." (Jn 8:28)

Gɔsim ye fʋ na baŋ la'abama an ***sɔ'*** *bʋnnɛɛ?*
Gɔ̀sì̀m yé fʋ̀ ná bāŋ lá'-bàmmá=ø àn̆ sɔ̄' bʋ́nnɛ̀ɛ=ø?
Look:IMP that 2SG IRR understand item-DEMST.PL=NZ COP INDF.AN thing:SG=PQ?
"Can you look and find out **whose** property these things are?" (Genesis 38:25)

Alaa mam mɛ kʋ yɛli ya mam nyɛ nɔɔr la ***sɔ'*** *san'anɛ.*
Àláa mām mɛ́ kʋ̀ yɛ̄lī=yá mán n̆yɛ̄ nɔ̄ɔr lā sɔ̄' sá'anɛ̄=ø.
Thus 1SG.CNTR also NEG.IRR say=2PL 1SG:NZ see mouth:SG ART INDF.AN among=NEG.
"Thus I too will not tell you from **whom** I derived the authority." (Mt 21:27)

M na tʋmi m Ba' zi'el nɔɔr ***sɔ'*** *yɛla la tisi ya*
M̀ ná tʋ̄mí◡m̀ Bá'=ø zi̱'əl nɔ̄ɔr sɔ̄' yɛ́là◡ø tísì=yā.
1SG IRR send 1SG father:SG=NZ stand mouth:SG INDF.AN about CAT give=2PL.
"I will send **whom** my Father made a promise about to you." (Lk 24:49)

... baŋi ba yaanamɛ an ***sieba***
... báŋì◡ bà yāa-námì=ø àn̆ sḭəbā
... understand 3PL ancestor-PL=NZ COP INDF.PL
"... discover **who** their ancestors were." (Ezra 2:61)

M mi' man gaŋ ***sieba*** *la.*
M̀ mḭ́' mán gāŋ sḭəbā lā.
1SG know 1SG:NZ choose INDF.PL ART.
"I know **those** whom I have chosen." (Jn 13:18)

*Man mi' **si'el** nan anɛ bi'ela.*
Mán mī' sī'əl nān á nɛ̄ bī'əlá.
1SG:NZ know INDF.IN now COP FOC small.ADV.
"**What** I know now is small." (1 Cor 13:12)

*Ɔ́n yèl **sī'əl** lā kā' sídāa=ø.*
3AN:NZ say INDF.IN ART NEG.BE truth=NEG.
"**What** he says is not true" SB

*Kem yɛli Joon yanamɛ wʊm ka nyɛ **si'el**.*
Kèm◡ ø yɛ̄lī=ø Joon yānámì wʊ̀m kà ǹyɛ̄ sī'əl.
Go:IMP CAT say=2PL.SUB John 2PL:NZ hear and see INDF.IN.
"Go and tell John **what** you have heard and seen." (Mt 11:4)

*Ya baŋ man niŋ **si'el** la gbinnɛɛ?*
Yà báŋ mán nìŋ sī'əl lā gbī́nnɛ̀ɛ=ø?
2PL understand 1SG:NZ do INDF.IN ART meaning:SG=CQ?
"Do you understand the meaning of **what** I have done?" (Jn 13:12)

Most occurrences of *sī'əl*[a] in the 1996 NT are as relatives. 75/130 cases in Matthew, Mark, Luke and John show *sī'əl*[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 *sī'əl*[a] consistently has an abstract uncountable meaning, shading into "whatever", often with *wʊ̄sā* "all"; in the other 22 *sī'əl*[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.*
Bɔ̄ zúgó yà àràzà'así=ø bɛ̀ sī'əl lā, yà pù-tɛ̀ǹdà mɛ́ bɛ̀ nɛ́ ànī́ nā.
Because 2PL treasure=NZ EXIST INDF.IN ART, 2PL mind:PL too EXIST FOC there.
"For **where** your treasure is, your mind is too." (Mt 6:21, 1996)

*One keŋ likin zi' on ken **si'ela**.*
Ɔ̀nì kɛ̄ŋ lī̱kī=n zī' ɔ́n kɛ̄n sī'əlā=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 yɛla la kɛ ka ti baŋ nɔŋilim an si'em.
Kristo=ø *dà kpì͡i tì yɛ̄lá lā kɛ́ kà tì báŋ nɔ̀ŋìlím*=ø *àǹ sı̣'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 *lā*/ has its usual function with *sı̣'əm*-relative clauses:

M̀ mı́' mán nà nı̄ŋ sı̣'əm. "I know what to do."
1SG know 1SG:NZ IRR do INDF.ADV.

M̀ mı́' mán nà nı̄ŋ sı̣'əm lā.
1SG know 1SG:NZ IRR do INDF.ADV ART.
"I know what I'm to do" (WK: "You explained the plan earlier; this is my reply when you ask if I remember it")

In the 1976 NT almost all relative clauses with *sı̣'əm* and past tense marking have *lā*/; 75% lacking *lā*/ have irrealis mood. Cf the two standing expressions

ɔ́n bɔ̀ɔd sı̣'əm "as he wishes"
3AN:NZ want INDF.ADV

lín àǹ sı̣'əm lā "as things are"
3IN:NZ COP INDF.ADV ART

*Yɛ̀l*ɛ "say, tell" tends to take a *sı̣'əm*-relative clause with *lā* in its sense of "say, tell how something is" and without *lā* in the sense "say how to do something":

Bà yɛ̀lō=ø *bán nı̣ŋ sı̣'əm lā.*
3PL say=3AN 3PL:NZ do INDF.ADV ART.
"They told him what they'd done"

Bà nà yɛ̄lī=f fɔ́n nà nı̄ŋ sı̣'əm.
3PL IRR tell=2SG 2SG:NZ IRR do INDF.ADV.
"They'll tell you what to do."

*Pà'al*ɛ "teach, inform" nevertheless takes a relative clause object without *lā*:

Bà pà'alō=ø *bán nı̣ŋ sı̣'əm.* "They informed him of what they'd done."
3PL inform=3AN 3PL:NZ do INDF.ADV.

*Gàad*ɛ "pass, surpass" is used with a *sı̣'əm*-clause for comparing actions:

Mam tʊm bɛdegʊ gaad ban tʊm si'em la.
Mām tʊ́m bɛ́dʊgʊ̄◡ø gâad bán tʊ̀m sɪ̣'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 *sɪ̣'əm*-clause for "decide what to do":

M̀ gbáň'e mán nà nɪ̣ŋ sɪ̣'əm.
1SG seize 1SG:NZ IRR do INDF.ADV.
"I've decided what to do."

With verbs of doing, a *sɪ̣'əm*-relative clause can be a manner-adverb:

Bà nɪ̣ŋ ón yɛ̀lɪ̀=bā sɪ̣'əm lā.
3PL do 3AN:NZ tell=3PL INDF.ADV ART.
"They did as he'd told them."

Sɪ̣'əm-relative clauses occur often as objects of *wʊ̄ʊ* "like", *wɛ̄n*na/ "resemble"

...ka ya na kɛ ka nidib dɔl man wʊʊ ziiŋgba'adibi gban'ad zimi si'em la.
...kà yà ná ké kà nɪ̣dīb dɔ̄l mān wʊ̄ʊ zɪ̣̄iŋ-gbáň'adɪ̀b=ø
...and 3PL IRR cause and person:PL follow 1SG.CNTR like fish-catcher:PL=NZ
gbāň'ad zɪ̣̄mí sɪ̣'əm lā.
catch:IPFV fish:PL INDF.ADV ART
"... you will make people follow me like fishermen catch fish." (Mt 4:19)

Hālí (*là'am*) *nɛ̄* "although" can take a *sɪ̣'əm*-clause for "despite how..." 15.

Relative clauses with an indefinite pronoun after a cb are uncommon; most cases involve *sɪ̣'a* with cbs expressing place or time. Where they do occur, they are not confined to specific indefinite meanings or subordinate interrogative types:

*Fʊn bɔɔd ye fʊ kʊ **dau sɔ'** la ya'a kpi...*
Fʊ́n bɔ̀ɔd yɛ́ fʊ̀ kʊ̄ dáu̱-sɔ̄' lā yá' kpì...
2SG:NZ want that 2SG kill man-INDF.AN ART if die...
"If the man **whom** you are seeking to kill dies ..." (2 Samuel 17:3)

*Nidib la da wum Yesu n tum **tuum sieba** ...*
Nɪ̣dīb lā dá wʊ̀m Yesu=n tʊ̀m tʊ̀ʊm-sɪ̣əbā ...
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 kʊ **ninsieba** da ka' bi'elaa.*
Bán dà kʊ̄ nɪ̣n-sɪ́əbà dá kā' bɪ̣'əláa=ø.
3PL:NZ TNS kill person-INDF.PL TNS NEG.BE few=NEG.
"Those they had killed were not few." (1 Samuel 4:10)

*Kem tʊ'ʊs Samaria na'abi tʊm **ninsieba** la na ...*
Kèm◡ ø tʊ̄'ʊs Samaria ná'abí=ø tʊ̀m nɪ̣n-sɪ́əbà lā nā ...
Go:IMP CAT meet Samaria king:SG=NZ send person-INDF.PL ART hither ...
"Go and meet the men sent by the king of Samaria ..." (2 Kings 1:3)

*Tiig walaa bigisid lin an **tisi'a**.*
Tɪ̀ɪg wɛ́là◡ ø bɪ̀gɪsɪ̀d lín àn̆ tí-sɪ̣'a.
Tree:SG fruit:PL CAT show:IMPF 3IN:NZ COP tree-INDF.IN.
"It's the fruit of the tree that shows **what tree** it is." (Mt 12:33)

*Ka bugum dit **teŋ tita'asi'a** la nyɔ'ɔs dʊt nɛ agɔl saŋa dinɛ ka' bɛnnɛ.*
Kà bùgúm=ø dɪ̀t tɛ́ŋ-tɪ̄tá'-sɪ̣'a lā n̆yɔ̂'ɔs dʊ̀t né
And fire=NZ eat:IPFV land-big-INDF.IN ART smoke ascend:IPFV FOC
àgɔ́l sāŋá dɪ̀nɪ̀ kā' bɛ̄nnɛ̄=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)

*Nannanna, yanamɛ daa sɔb **gbauŋ si'a** la ka m sɔbidi lɛbisidi ya.*
Nānná-nā, yānámì dāa sɔ̄b gbáu̯ŋ-sɪ̣'a lá kà
Now, 2PL:NZ TNS write letter-INDF.IN ART and
m̀ sɔ̄bɪdī◡ ø lɛ́bɪsɪ̀dī=yá.
1SG write:IPFV CAT answer:IPFV=2PL.
"Now, it's the letter you wrote that I'm writing back to you about." (1 Cor 7:1)

42/56 of relative *sɪ̣'a* in the 1996 NT follow cbs referring to times or places:

*M Zugsoba, ti zi' fun ken **zin'isi'a** la.*
M̀ Zūg-sɔ́bā=ø, tì zī' fún kɛ̄n zɪ́ñ'-sɪ̣'a láa=ø.
1SG Lord=VOC, 1PL NEG.KNOW 2SG:NZ go:IPFV place-INDF.IN ART=NEG.
"My Lord, we don't know where you are going." (Jn 14:5, 1996)

*Ka bugum nie on be **doog si'a** la ni.*
Kà bùgúm nɪ́e ɔ́n bɛ̀ dɔ́-sɪ̣'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'ę̱ sān-sį'a lā, kà mān pún bè.
Abraham TNS still NEG.BE time-INDF.IN ART, and 1SG.CNTR already EXIST.
"When Abraham still did not exist, I already existed." (Jn 8:58, 1996)

Indefinite pronouns as relatives may be omitted before ordinal expressions:

*ka fɒn gban'e **ziiŋ si'a yiiga** la, fɒn ya'am o nɔɔr ...*
kà fɒ́n gbāň'e zīŋ-sį'a yīigá lā, fɒ̄n 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=ǹ sɔ̄b gbáu̱ŋ yīigá dāan n tís Korint dím lā◡ ø ňwá.
Paul=NZ write letter:SG firstly owner:SG CAT give Corinth one.PL ART CAT this.
"This is **the first letter** which Paul wrote to the Corinthians." (NT heading)

21.2.2 With relative pronouns

The commonest type of relative clause begins with a relative pronoun as NP or NP predependent. In origin, these pronouns are short demonstrative pronouns followed by *ǹ*. When the head is the subject of the relative clause, this produces the forms *ɔ̀nì kànì lɪ̀nì bànì* (always written *onɛ kanɛ linɛ banɛ* in KB) where the final *-ɪ* is due to liaison before the nominaliser, which is itself invariably realised *ø* in this case.

M̀ ňyɛ́ dáu̱-kànɪ̀=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 *ǹ* to be absent and the pronoun to have the normal SF form. This indeed the case for WK, and commonly in the older NT versions too:

bàn kà nà'ab lā záb lā "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 bɛ́ lā
house-DEM.SG and 1SG.CNTR Paul EXIST ART
"the house where I, Paul, am" (Rom 16:23, 1976)

on buudi ka Jew dim kis
ɔ̀n būudí kà Jew dím kī̩s
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:

gbauŋ kanɛ ka dau la sɔb la
gbàu̯ŋ-kàn kà dāu̯ lā sɔ̄b lā
letter-DEM.SG and man:SG ART write ART
"the letter which the man has written"

dau ***kanɛ*** *yadda* ***niŋiri*** *pʋ zu'oe*
dàu̯-kànì yàddā-nḭ́ŋìrì=ø pʋ̄ zú'e
man-DEM.SG assent-doing:SG=NZ NEG.IND become.great
"a man whose faith is not great..." (Mt 14:31), with the nominaliser *twice*

It is thus best to regard *ɔ̀nì kànì lìnì bànì* synchronically simply as subordinating relative pronouns. Where *ɔ̀n kàn lìn bàn* do appear as heads of relative clauses they will be regarded as allomorphs of these relative pronouns:

M̀ ňyɛ́ dáu̯-kànì zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw the man who fought the chief."

bàn kà nà'ab lā záb lā "those whom the chief fought."
REL.PL and chief:SG ART fight ART

Toende Kusaal shows the same development (nominaliser-*ǹ* is *ne* in Toende):

N sa nye buraa ***kanne*** *da da'a gbana la.*
"I saw the man who bought the book." (Abubakari 2011)

N sa nye buraa ***kanne ka*** *Ayi da nye la.*
"I saw the man that Ayi saw." *ibid*

If the antecedent is the subject within a relative clause, or a predependent of the subject, a relative pronoun must be used:

bànì *zàb nà'ab lā* "**those** who fought the chief"
REL.PL fight chief:SG ART

M̀ ňyɛ́ ***dáu̱-kànì*** *zàb nà'ab lā.*
1SG see man-REL.SG fight chief:SG ART
"I saw **the man who** fought the chief."

nimbanɛ *yɔda sɔb Pɛbil la gbauŋɔn linɛ an nyɔvɔpaal dim gbauŋ la*
nn̩-bánì yɔ̄dá sɔ̄b Pɛ̄'-bi̱l lā gbáu̱ŋɔ̄=n línì
person-REL.PL name:PL write sheep-small:SG ART book:SG=LOC REL.IN
àň ňyɔ́-vɔ̄-pâal dím gbáu̱ŋ 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 antecedent extracted from a prepositional phrase or subordinate clause. The antecedent is preposed with *kà* with a resumptive pronoun in any gap left by extraction, for an indirect object, or occasionally for a human-reference direct object. There is no foregrounding sense. Such constructions are commoner than indefinite pronouns as relatives, except with clauses used adverbially or of subordinate interrogative type.

Gbauŋ kane *ka Jerusalem kpeenmnam daa sob la nwa.*
Gbàu̱ŋ-kànì kà Jerusalem kpêɛňm-nàm dāa sɔ̄b lā◡ø ňwá.
Letter-REL.SG and Jerusalem elder-PL TNS write ART CAT this.
"This is the letter that the elders of Jerusalem wrote." (Acts 15:23, 1996)

m antu'a linɛ [1996 *lin*] *ka ba mɔr na*
m̀ àntù'a lìnì kà bà mɔ̄r nā
1SG case REL.IN and 3PL have hither
"the charge they are bringing against me" (Acts 25:11)

yɛltɔɔd ayɔpɔi banɛ *ka maliaknama ayɔpɔi mɔr la*
yɛ̄l-tɔ̂ɔd àyɔ́pɔ̀e̱ bánì kà màli̱āk-námá◡àyɔ́pɔ̀e̱ mɔ̄r lā
matter-bitter:PL NUM:seven REL.PL and angel-PL NUM:seven have ART
"the seven plagues which the seven angels have" (Rev 15:8)

niŋkanɛ [1996 *niŋkan*] *ka ba gban'e* ***o*** *la*
nn̩-kánì kà bà gbáň'o=ø lā
person-REL.SG and 3PL seize=3AN ART
"a person **whom** they have seized" (Acts 25:16) (human VP object)

Bʊ̄rá-sɔ̄' dāa bɛ́ ànı̣́nā, ***ɔ̀n*** *kà mān nɛ̄* ***ɔ̄n*** *dāa tʊ́m lā.*
Man-INDF.AN TNS EXIST ADV:there, REL.AN and 1SG with 3AN TNS work:IPFV ART.
"There was a man there **whom** I used to work **with**." ILK

Onɛ *ka ba tis* ***o*** *ka li zu'oe, ba mɛ mɔr pʊtɛn'ɛr ye o na lɛbis linɛ zu'oe.*
Ɔ̀nì kà bà tísò=ø kà lì zú'e, bà mɛ̀ mɔ̀r
REL.AN and 3PL give=3AN and 3IN become.much, 3PL also have
pʊ́-tɛ̀ň'ɛr yɛ́ ò nà lɛ̄bīs línì zù'e.
mind:SG that 3AN IRR return REL.IN become.much.
"**Whom** they have given much **to**, they expect he will return much." (Lk 12:48)

nimbanɛ *ka ya tɛn'ɛs ye* ***ba*** *anɛ tuongatib la*
nı̣̄n-bánì kà yà tɛ̄ň'ɛs yɛ́ bà à nɛ̄ tûɵn-gātíb lā
person-REL.PL and 2PL think that 3PL COP FOC ahead-passer:PL ART
"those **whom** you consider to be leaders" (Gal 2:6)

linɛ [1996 *lin*] *ka Kristo bɔɔd ye ti pian' la*
lìnì kà Kristo bɔ̂ɔd yɛ́ tì pi̯āň' lā
REL.IN and Christ want that 1PL speak ART
"**what** Christ wishes us to say" (2 Cor 12:19)

If the antecedent is a predependent in an NP which is not the subject, that entire NP is preposed, but obviously no resumptive pronoun is needed:

*Samaritan nid (**on** buudi ka Jew dim kis)*
Samaritan nı̣́d, ɔ̀n būudí kà Jew dím kı̣̄s
Samaritan person:SG REL.AN tribe:SG and Jew NULL.PL hate
"a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

bikanɛ [1996 *biig kan*] *pʊʊg ka o mɔr la*
bı̣̀-kànì pʊ̂ʊg kà ò mɔ̄r lā
child-REL.SG belly:SG and 3AN have ART
"the child **which** she is pregnant with [whose belly she has]" (Mt 1:20)

Relative clauses with locative reference do not take the locative *nī*/:

yikan ka mam Paul be la yidaan
yı̣̄-kán kà mām Paul bɛ́ lā yı̣́-dâan
house-REL.SG and 1SG.CNTR Paul EXIST ART house-owner:SG
"the owner of the house where I, Paul, am" (Rom 16:23, 1976)

22 Complementised clauses

Complementised clauses are usually introduced by the clause linker *yɛ̄*. They also appear with *kà*, but much less often, and never exclusively; constructions which only permit *kà* and never *yɛ̄* must be coordination or catenation. Complementised clauses follow any catenated clauses. They can be coordinated with *kà*:

ka lin anɛ ***ye*** *fʋ kʋ maali ti bɛ'ɛdɛ nwɛnɛ tinamɛ daa pʋ maalif bɛ'ɛd si'em la asɛɛ sʋ'ʋm ma'aa,* ***ka ye*** *fʋ yim nɛ sumbʋgʋsʋm la.*
kà līn á nɛ̄ yé fʋ̀ kʋ̀ māalī=tí bɛ̄'ɛdī◡ø wɛ̄n nɛ̄
and 3IN.CNTR COP FOC that 2SG NEG.IRR make=1PL bad CAT resemble with
tīnámì dāa pʋ̄ máalì=f bɛ̄'ɛd sḭ'ə̀m lá àsɛ́ɛ sʋ̀m má'àa,
1PL:NZ TNS NEG.IND make=2SG bad INDF.ADV ART except good only
kà yé fʋ̀ yīm nɛ̄ súmbʋ̄gʋsím 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)

22.1 Purpose clauses

Purpose clauses lack independency marking and have imperative mood. As there is no *-ma* flexion, the mood is apparent only in the use of *dā* as the negation particle. The term "purpose clause" is convenient but such clauses are also used as complements of verbs expressing necessity and permission, and the meaning is sometimes attenuated from "so that" to merely "until."

Purpose clauses may be VP adjuncts:

Bà tìsō=ø kû'ə̀m yé ò nū.
3PL give=3AN water that 3AN drink.
"They gave him water to drink. ("So that he might drink it.")

M̀ ná tī=f tîɪm yé fʋ̀ nḭ̄f dā zábɛ̄=ø.
1SG IRR give=2SG medicine that 2SG eye:SG NEG.IMP fight=NEG.
"I'll give you medicine so your eye won't hurt."

Ò vʋ̀l tîɪm kà ò nɔ́bìr dā zábɛ̄=ø.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight=NEG.
"She took medicine so her leg wouldn't hurt." WK

Ka ba gban'e ba kpɛn'ɛs sanrega ni ye bɛog nie.
Kà bà gbáň'a=bā◡ø kpɛ̂ň'ɛs sārɪgá nì yɛ̄ bɛ̄og nɪ́e.
And 3PL seize=3PL CAT put.in prison:SG LOC that morning appear.
"They seized them and put them in prison until tomorrow came." (Acts 4:3)

Purpose clauses can be coordinated without repetition of *yɛ̄*:

M̀ bɔ̂ɔd yɛ̄ dāu̱ lā kɛ̄ŋ dâ'a=n, kà pu̱'ā lā dʊ̄g dīɪb.
1SG want that man:SG ART go market:SG=LOC, and woman:SG ART cook food.
"I want the man to go to market and the woman to cook food." WK

Purpose clauses appear as complements of particular verbs, e.g *bɔ̀ɔd*[a] "want"; or *yɛ̀l*[ɛ] "tell." Negative raising occurs with *bɔ̀ɔd*[a] but not with *yɛ̀l*[ɛ].

M̀ bɔ̂ɔd yɛ́ ò kūl. "I want her to go home."
1SG want that 3AN go.home.

M̀ pʊ̄ bɔ̂ɔd yɛ́ m̀ kūlɛ̄=ø.
1SG NEG.IND want that 1SG go.home=NEG.
"I don't want [me] to go home."

M̀ yɛ́lī=f yɛ́ fʊ̀ dā kūlɛ̄=ø.
1SG tell=2SG that 2SG NEG.IMP go.home=NEG.
"I've told you not to go home."

The verb *gūr*[a/] "be on guard, watch, wait for" in the sense of "waiting for an event" may take as complement either a NP headed by gerund, or a purpose clause introduced by *yɛ̄*, again with an attenuated sense:

Nidib la daa gur Zakaria yiib na.
Nɪ̣dīb lā dāa gūr Zakaria yɪ̣́ib 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 yɛ̄ pu̱'ā lā du̱'á kà ò ɔ́ňb bɪ̄ig 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 *nār*[a/] "be obliged to" (negated "be obliged not to"); *mɔ̄r sūɵr* "be allowed to"; *lì à* [*nɛ̄*] *tịlás* "it is necessary":

Fù pʊ̄ nār yɛ́ fù nịŋ àláa=ø.
2SG NEG.IND must that 2SG do ADV:thus=NEG.
"You're not allowed to do that."

Lì nàr yɛ́/kà fù kūl. "You must go home."
3IN must that/and 2SG go.home.

In KB there are 258 examples of *nar ye* to 45 of *nar ka*.

Yà mɔ́r sūɵr yɛ́ yà kūl. "You may go home."
2PL have way:SG that 2PL go.home.

Sūɵr bɛ́ yɛ́/kà tì kūl. "We may go home."
Way:SG EXIST that/and 1PL go.home. (" There's a way that we go home.")

Li anɛ tilas ye m keŋ Jerusalem.
Lì à nɛ̄ tịlás yɛ́ m̀ kɛ̄ŋ Jerusalem.
3IN COP FOC necessity that 1SG go Jerusalem.
"I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka m niŋid ala.
Lì à nɛ̄ tịlás kà m̀ nịŋìd 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

Nār[a/] is occasionally used in a personal construction "deserve that":

babayi' la nar ye ba kʊʊ ba
bà bàyị́' lā nár yɛ́ bà kʊ́ʊ=bā
3PL NUM:two ART must that 3PL kill=3PL
"both of them must be killed" (Leviticus 20:12)

Anɔ'ɔnɛ nar ka na nyaŋi lak titabir la ...
Ànɔ́'ɔnì‿ø nár kà ná ňyāŋī‿ø lāk tītābīr lā ...?
Who CAT must and IRR prevail CAT unstick glue ART ...?
"Who is worthy to open the seal ...?" (Rev 5:2)

22.2 Content clauses

Complementised clauses with independency marking 16.6 on the VP are content clauses. They are downranked main clauses, and show all the structural features possible for main clauses. They occur very frequently representing passages of indirect speech, but are also found much more generally after verbs of cognition, reporting, and perception, such as *yèl*$^{\varepsilon}$ "say", *wòm*^{m} "hear", *ňyɛ̄* "see", *tɛ̄ň'ɛs*$^{\varepsilon/}$ "think", *mi̱'* "know", *zī'* "not know", *bàŋ*$^{\varepsilon}$ "come to know", *pà'al*$^{\varepsilon}$ "teach, show", *kàrì*^{m} "read", *si̱àk*$^{\varepsilon}$ "agree." Various main-clause features appear in e.g.

ban mi' ye biig la kpinɛ la zug
bán mi̱' yɛ̄ bi̱ig lā kpi̱ nɛ̄ lā zúg
3PL:NZ know that child:SG ART die FOC ART upon
"because they knew that the child was dead" (Lk 8:53): focus-*nɛ̄*$^{/}$

Bùŋ-bāň'ad zī' yɛ̄ tɛ̄ŋ tʊ́llā=ø.
Donkey-rider:SG NEG.KNOW that ground:SG be.hot=NEG.
"The donkey-rider doesn't know the ground is hot."
Tone overlay: *Tɛ̄ŋ tʊ́l.* "The ground is hot." cf *tʊ̄l*$^{la/}$ "be hot"

Fʊnɛ siak ye fʊ ya'a ti kae, o na zin'ini fʊ na'am gbauŋ la zugɔɔ?
Fʊ̄nı◡ ø si̱ák yé fʊ̀ yá' tì kā'e̱, ò nà zi̱ň'iní◡ fʊ̀ nā'am
2SG.CNTR CAT agree that 2SG if after NEG.BE, 3AN IRR sit 2SG chieftaincy
gbáu̱ŋ lā zúgɔ́ɔ=ø?
skin:SG ART upon=PQ?
"Did *you* agree that when you are no more, he will sit on your throne?"
(1 Kings 1:24): *yá'*-clause postlinker adjunct

Absolute clauses 21.1 cannot be used as objects of such verbs, but another possibility apart from content clauses is NP + *yɛ̄lá* "about."

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 tɛ̂ň'ɛs kà m̀ áaň ànɔ́'ɔnɛ̀=ø?
2PL think and 1SG COP who=CQ?
"Who do you think I am?" (Acts 13:25)

WK usually has *yɛ̄* before content clauses, but prefers *kà* after *tɛ̄ň'ɛs*$^{\varepsilon/}$ "think." KB has 219 examples of *tɛnɛs ye* to 31 of *tɛnɛs ka* and shows *kà* after other verbs too:

Ya pʊn wʊm ka ba da yɛl ye...
Yà pʊ́n wʊ̀m kà bà dá yɛ̀l yɛ̄ ...
2PL previously hear and 3PL TNS say that...
"You previously heard that they had said ..." (Mt 5:43)

Kà + content clause is the only context where *kà* is followed by independency marking, and where *kà* does not delete a following subject pronoun with the same reference as the preceding subject:

M̀ tɛ̂ɛ̌'ɛs kà m̀ lú yā. "I think I've fallen" WK
1SG think and 1SG fall PFV.

There are a few examples in KB of *nɛ* for *yɛ yɛ̄* "that" (cf Mampruli *ni id*):

Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tʊʊliga.
Mān bɔ́ɔdī=n nɛ̄ yānámì nāan âa=n mā'asígā bɛ̄ɛ
1SG.CNTR want=DP that 2PL:NZ then COP=DP cold:ADV or
yānámì nāan âa=n tʊ̄ʊlígā.
2PL:NZ then COP=DP hot:ADV.
"I might wish you had been cold or you had been hot." (Rev 3:15)

The verb *yɛ̀l* is frequently ellipted before *yɛ̄*:

Ka Zugsɔb la ye ... "And the Lord said: ..." (Genesis 18:28)
Kà Zūg-sɔ́b lā yɛ̄ ...
And Lord 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 yɛ́ ò gɛ̀ɛňm nɛ̄ ... kà Paul lɛ́bìs
Festus shout Paul that 3AN go.mad FOC ... and Paul reply
yɛ̄ ɔ̄n pʊ̄ gɛ́ɛňmm=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

Ò yèl yɛ̄ ɔ̄n ná kʊ́ʊ=bā.
3AN say that 3AN.CNTR IRR kill=3PL.

It is possible to say *Ò yèl yɛ́ ò nà kʊ́ʊ bā*, but this is much more likely to mean "He₁ said he₂ would kill them."

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

Ò dāa yɛ́l yɛ́ bà dāa kūl.
3AN TNS say that 3PL TNS go.home.
"She said that they had gone home."

Tì dāa tɛ̄ň'ɛs yɛ́ ò nà zāb nâ'ab lā.
1PL TNS think that 3AN IRR fight chief:SG ART.
"We thought he was going to fight the chief."

22.2.1 Reported speech

After a speech-verb *yɛ̄* may introduce the words of the speech itself, unaltered except for "resumptive" *yɛ̄* 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'ɵsó=ø yɛ̄ Ananias, yɛ̄ bó kà ò kɛ́ kà Sūtáanà
And Peter ask=3AN that Ananias, that what and 3AN cause and Satan
kpɛ̀ň' ò sūuňrí=n ... ?
enter 3AN heart:SG=LOC ... ?
"Peter asked him: Ananias, why did you let Satan enter your heart ...?"
(Acts 5:3, 1976)

In indirect commands the usual deletion of a 2nd sg subject and change of 2pl subject to postposed ya does not occur, even if the addressee is the same as in the original utterance and the pronoun remains 2nd person. Some speakers keep the postposed ya after the verb even when there is a preceding pronoun subject.

Indirect speech is an alternative to catenation with *kɛ̄* 19.2 for expressing third/first person commands; main clause and linker may again be ellipted informally:

[*M̀ yɛ́l yɛ́*] *ò gɔ̀sì̀m tɛ̄ŋī=n.*
1SG say that 3AN look:IMP ground:SG=LOC.
"[I said] she should look down."

[*M̀ tɛ̂ñ'ɛs kà*] *tì pʊ́'ʊsì̀m 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:

Ò yɛ̀l yɛ̄ Báp. "She said *Bap*!"
3AN say that Bap.

Pronouns are changed even within a vocative:

Ka m wum Wina'am kokor ka li yi arazana ni na ye,
***o** nidiba, ye ba yimi teng la ni na.*
Kà m̀ wʊ́m Wínà'am kʊ́kɔ́r kà lì yī̤ áràzánà ní nā yɛ̄,
And 1SG hear God voice:SG and 3IN emerge heaven LOC hither that
ò nī̤dɪbá=ø, yɛ́ bà yì̤mī=ø tɛ̄ŋ lā ní nā.
3AN person:PL=VOC, that 3PL emerge:IMP=2PL.SUB land:SG ART LOC hither.
"And I heard God's voice coming from heaven, saying
'**My** people, come out of the land!'" (Rev 18:4, 1976)

Passages of direct or indirect speech longer than two or three clauses insert **resumptive *yɛ̄*** at intervals of roughly every third clause, after any prelinker adjuncts but before clause-linker *kà*:

*amaa **ye** ba yaanam da pu bood ye ba siak o noore*
àmáa yɛ́ bà yāa-nám dá pʊ̄ bɔ̂ɔd yɛ́ bà si̤ákò=ø nɔ̄ɔrɛ́=ø.
but that 3PL ancestor-PL TNS NEG.IND want that 3PL agree=3AN 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.*
Yɛ́ kà Paul yɛ́l yɛ́ ò bɔ̀ɔd yɛ́ ò kpɛ́lìm sārɪgá 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 yɛ́ kà ɔ̄n yɛ́lì=bā yɛ̄...
But that and 3AN.CNTR say=3PL 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 yɛ́ kà ɔ̄n kɛ́ kà bà mɔ̄ró=ø bà sā'an nā ...
Thus that and 3AN.CNTR let and 3PL have=3AN 3PL before hither...
"So he [the speaker] had made them bring him [Paul] into their presence..."
(Acts 25:26, 1976)

Resumptive *yɛ̄* 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 yɛ́ ò nìŋī=bá Wínà'am né ò pʊ̀-pìəlìm
And now-hither that 3AN do=3PL God with 3AN holiness
pi̯âă̰'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 zu̯à-nàm né ò sàam-nàmā=ø, yɛ́ bà kɛ̀lɪsìm!
3AN friend-PL with 3AN father-PL=VOC that 3PL listen:IMP!
"His friends and his fathers should listen." (Acts 7:2, 1976)

23 Negation

Negation is marked in the VP 16.5, inducing a clause-final negative clitic 4.1. The negative prosodic clitic follows all subordinate clauses:

*Ti **pʊ** bɔɔd ye dau kaŋa aan ti **na'aba**.*
Tì pʊ̄ bɔ̂ɔd yɛ̄ dáu̯-kàŋā áaň tì nà'abā=ø.
1PL NEG.IND want that man-DEMST.SG COP 1PL king:SG=NEG.
"We don't want this man to be our king." (Lk 19:14)

I have no unequivocal examples of negative clitics preceding subordinate clauses to exclude them from the scope of negation. Thus the adjunct *yɛ̄*-clause has probably been dislocated in:

*Nidib be ka **pu** tum **si'ela** ye ba a popielim dim...*
Nịdīb bɛ́ kà pʊ̄ tʊ́m sị'əlā=ø yɛ́ bà áň pʊ́-pịəlìm dím
person:PL EXIST and NEG.IND work:IPFV INDF.IN=NEG that 3PL COP holiness NULL.PL.
"There are people who haven't done anything that they become blessed" (Rom 4:5, 1976); revised completely in the 1996 version.

Here the *kà*-clause can be taken as coordinate, carrying on the narrative:

*Ka li **pʊ yuugɛ** ka o pu'a mɛ kena.*
Kà lì pʊ̄ yúugɛ̄=ø, kà ò pu̯'ā mɛ́ kɛ̄ nā.
And 3IN NEG.IND delay=NEG, and 3AN wife:SG also come hither.
"Not much later, his wife came too." (Acts 5:7)

Negative clitics are omitted after *ǹ*-clauses containing a negative unless they both lack articles and are clause-final within the main clause, and likewise with VPs nominalised by the personifier particle:

Nịn-bánì pʊ̄ dít ná kpị.
Person-REL.PL NEG.IND eat:IPFV IRR die.
"People who don't eat will die." WK

M̀ ňyɛ́ nịn-bánì pʊ̄ dítā=ø.
1SG see person-REL.PL NEG.IND eat:IPFV=NEG.
"I've seen some people who don't eat." WK

Apozotyel da ane o saam biig ma'aa.
À-Pʊ̄-zɔ́t-yɛ̄l dá à nɛ́ ò sàam bɪ̂ig mà'àa.
PERS-NEG.IND-run:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only
"Fears-nothing was his father's only child." KSS p35

Clauses with *yà'* "if" keep their own negative clitics:

Ba ya'a ***pʊ*** *niŋ* ***si'ela****, o pʊ'ʊsim dɔɔg la na lieb zaalim.*
Bà yá' pʊ̄ nɪ́ŋ sɪ̣̄'əlā=ø, ò pʊ̀'ʊsìm dɔ̂ɔg lā ná lɪ̣̄əb zāalím.
3PL if NEG.IND do INDF.IN=NEG 3AN worship house:SG ART IRR become empty:ABSTR.
"If they don't do anything, her temple will become of no account." (Acts 19:27)

Negative raising takes place with complement clauses after verbs expressing opinions or judgments, but not verbs of knowing or informing:

Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì pʊ̄ nār yɛ́ fʊ̀ dí fʊ̀ bā'-bɪ̂ig pu̯'á Herodiasɛ=ø.
3IN NEG.IND must that 2SG take 2SG father-child:SG wife:SG Herodias=NEG.
"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

Ti pʊ bɔɔd ye dau kaŋa aan ti na'aba.
Tì pʊ̄ bɔ̂ɔd yɛ̄ dáu̯-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)

mam pʊ tɛn'ɛs ye o na kɛligi m pian'adɛ.
Mām pʊ̄ tɛ̄ň'ɛs yɛ́ ò nà kɛ̄lɪgí‿m̀ pi̯àň'adɛ̄=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)

vs *linzug ka ti baŋ ye o pʊ yi Wina'am san'an naa.*
Lìn-zúg kà tì báŋ yɛ́ ò pʊ̄ yɪ̣̄ Wínà'am sâ'an náa=ø.
Therefore and 1PL realise that 3AN NEG.IND emerge God with hither=NEG.
"Therefore we realise he has not come from God." (Jn 9:16)

ka o lɛɛ pʊ baŋ ye li anɛ onɛ.
kà ò lɛ́ɛ pʊ̄ báŋ yɛ́ lì à nɛ̄ ɔ̄nɛ̄=ø.
And 3AN but NEG.IND realise that 3IN COP FOC 3AN.CNTR=NEG.
"but she didn't realise it was him." (Jn 20:14)

Constituent negation can be achieved by clefting, using *Lì kā'* X *kà/n …* "It's not X that …" or X *ká'ę̱ kà/n …* "There's no X that …", or with relative clauses:

Sogia so' kae' n tum ka yood o meŋa.
Sógi̱à-sɔ̄' kā'e n tʊ́m kà yɔ̄ɔd ò mɛ̄ŋá=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' fʋn yɛl si'el la zug, ka ti niŋ o yadda.
Lì lɛ̀m kā' fʋ́n yèl sḭ'əl lā zúg kà tì nḭ́ŋò=ø yáddáa=ø.
3IN again NEG.BE 2SG:NZ say INDF.IN ART upon and 1PL do=3AN assent=NEG.
"It is no longer because of what you said that we believe in him." (Jn 4:42)

… ka zan'as banɛ ka' Kristo nidib la sʋŋir.
… kà zâň'as bánì kā' Kristo nḭ́dìb lā sʋ́ŋìr.
… and refuse REL.PL NEG.BE Christ person:PL ART help:GER.
"… and refused the help of non-Christians." (3 Jn 1:7)

The AdvP *báa bḭ'əlá* "not at all" and the NP postdependent *báa yīnní* "not one" (Hausa *bâa* "not exist") are used along with negative VPs:

Da tʋmi si'el baa bi'elaa.
Dā tʊ́mī=ø sḭ'əl báa bḭ'əláa=ø.
NEG.IMP work=2PL.SUB INDF.IN at.all=NEG.
"Do no work at all." (Leviticus 23:31)

Amaa ba pʋ nyaŋi nyɛ linɛ tu'al baa yinne.
Àmáa bà pʋ̄ ňyāŋī◡ ø ňyɛ̄ línì tʊ̀'al 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 pʋ yɛl ye …
Kà nḭ̄d báa yīnní pʋ̄ yɛ́l yɛ̄ …
and person:SG not one NEG.IND say that …
"Not one person said …" (Acts 4:32)

Fʋ du'adib baa yinne kae ka o yʋ'ʋr buon alaa.
Fʋ̀ dʋ̄'adīb báa yīnní ká'e kà ò yʋ̄'ʋr bûʊn àláa=ø.
2SG relative:PL not one NEG.BE and 3AN name:SG call:IPFV ADV:thus=NEG.
"Not one of your relatives is named thus." (Lk 1:61)

24 Information packaging

24.1 Focus

According to Lambrecht 1994: "[Focus] is the UNPREDICTABLE or pragmatically NON-RECOVERABLE element in an utterance. The focus is what makes the utterance into an assertion." A further distinction will be made between **ordinary** and **contrastive focus**. Main clauses without any special syntactic marking of focus have ordinary focus on the predicate by default.

Focus is distinct from **foregrounding**, the usual function of it-clefting in English; foregrounded elements need not be focussed (CGEL p1424.)

24.1.1 Subjects

In subject focussing the subject stands first, with the rest of the clause introduced by catenator-*n*. The clause lacks independency marking but has independent tense marking. The construction presumably arose by ellipsis from *n*-clefting 24.2, but the meaning is *focus* rather than foregrounding:

Wáafʊ̀◡ ø dúmō=ø. "A snake bit him." WK
Snake:SG CAT bite=3AN.

would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"

Focus-*nɛ̄*/ in all its roles is excluded from clauses which are *n*-focussed, with the corresponding VP aspect distinctions present but unmarked:

M̀ zūgʊ̄◡ø zábìd. "My head is hurting."
1SG head CAT fight:IPFV. (Reply to "Where is the pain?")

cf *M̀ zūg lā pʊ́'alìm nɛ̄.* "My head is hurting."
1SG head ART damage:IPFV FOC. (Reply to "What's the matter with you?")

Interrogative pronouns as subjects are always *n*-focussed:

Ànʊ́'ɔnì◡ø kābɪrídà=ø?
Who CAT ask.for.entry:IPFV=CQ?
"Who is asking permission to enter?"

As clauses containing interrogative pronouns may not contain focus-*nɛ̄*/, this is most readily explained by taking interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

24.1.2 Verb phrases

Preceding a VP constituent, the particle *nɛ̄*/ focusses that constituent, while VP-final *nɛ̄*/ focusses the entire VP contrastively.

On distinguishing constituent-focus *nɛ̄*/ from the preposition *nɛ̄* "with, and" see 16.9.4. Confusion with the *nɛ̄* following objects of comparison is unlikely 15.

The aspect particle *nɛ̄*/ bound to the verb 16.2.1 represents a specialised use of the same particle for temporal focus. The aspectual interpretation normally prevails over constituent focus. When *nɛ̄*/ 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.

Nɛ̄/ 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.*
Fʊ̀ pʊ̄ má' n tìs nịn-sáalā=ø, àmáa fʊ̀ má'
2SG NEG.IND lie CAT give human:SG=NEG but 2SG lie
n tís nɛ̄ Wínà'am Sí-sʊ̀ŋ.
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)

Nɛ̄/ cannot appear in either constituent-focus or aspectual senses if the subject is focussed, or in nominalised clauses, or in content questions.

N-focussing of the subject:

M̀ zūgʊ̄‿ø zábìd. "My head is hurting/hurts." (No aspectual *nɛ̄*/)
1SG head CAT fight:IPFV. Reply to "Where is the pain?"

Ànɔ́'ɔnì‿ø dít sá'abɔ̀=ø?
Who CAT eat:IPFV porridge=CQ?
"Who eats/is eating millet porridge?" (No aspectual *nɛ̄*/)

Nominalised clauses:

Ò dāa á nɛ̄ bịig. "She was a child."
3AN TNS COP FOC child:SG.

but *ɔ́n àň bịig lā zúg* "because she's a child"
3AN:NZ COP child:SG ART upon

M̀ yí nɛ̄ Bɔ́k. "I come from Bawku." SB
1SG emerge FOC Bawku.

but *Meeri one yi Magdala* "Mary who came from Magdala"
Meeri ónì yī Magdala (Mk 16:9, 1996)
Mary REL.AN emerge Magdala

Focus-*nɛ̄/* *can* occur in complementised clauses, including purpose clauses:

*Pian'am ka m bɔɔd ye fʊ nyɛ**nɛ** bʊʊd.*
Pi̯àn̆'am kà m̀ bɔ̂ɔd yé fʊ̀ n̆yɛ̄ nɛ̄ bʊ̄ʊd.
Speak:IMP and 1SG want that 2SG see FOC innocence.
"Speak, for I want you to be vindicated." (Job 33:32)

Content questions:

Bɔ́ kà fʊ̀ kʊ́mmà=ø? "Why are you crying/do you cry?
What and 2SG cry:IPFV=CQ?

Fʊ̀ nɪ́ŋ̀ìd bɔ́=ø? "What are you doing/do you do?"
2SG do:IPFV what=CQ?

Fʊ̀ wá'e yáa=ø? "Where are you going/do you go?"
2SG go where=CQ?

Bùgʊ́m lā yɪ́t yáa ní ná=ø?
Fire ART emerge:IPFV where LOC hither=CQ?
"Where is the light coming from?" SB

M̀ á nɛ̄ dāu̯. "I am a man."
1SG COP FOC man:SG.

but *Mām áǹ bɔ́=ø?* "What am I?"
1SG.CNTR COP what=CQ?

Fʊ̀ áaǹ‿ànɔ́'ɔnɛ̀=ø? "Who are you?"
2SG COP who=CQ?

Fʊ̀ bɔ̂ɔd bɔ́=ø? "What do you want?"
2SG want what=CQ?

but *Fù bôɔd nɛ̄ bɔ́=ø?* "What do you want it with?"
2SG want with what=CQ? *Nɛ̄ must* be interpreted as preposition (WK)

Certain words do not prevent focus-*nɛ̄*/ from being used in the clause but cannot themselves be focussed. They include *sʊ̀ŋā*/ "good", *sʊ̀m*^{m} "good", *bɛ̄'ɛd*^{ɛ} "bad", *sìdà* "truth" when used as adverbs, and the "two, three exactly" quantifier forms *àyíŋā*/ *àtáŋā*/. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

Lì àǎ sʊ́ŋā. "It's good."
3IN COP good:ADV.

Lì àǎ bɛ̄'ɛd. "It's bad."
3IN COP bad:ABSTR.

[*ye ka*] *o sariakadib a sum ne sida.*
ò sàríyà-kādīb áǎ sʊ́m nɛ̄ sídà.
3AN law-drive:GER COP good:ABSTR with truth.
"His judgment is good and true. (Rev 19:2, 1976)

If *nɛ̄*/ 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 16.2.3.

VP constituent focus with *nɛ̄*/, as opposed to focus on the entire VP, is possible only in statements and polar questions. The aspectual sense of *nɛ̄*/ must be impossible and the constituent in question must permit *nɛ̄*/-focus.

Focus on an **indefinite object** represents it as "unpredictable or pragmatically non-recoverable" information, as for example in supplying an answer to a content question; this is **ordinary** focus:

M̀ dá' bʊ́ŋ. "I've bought a donkey."
1SG buy donkey:SG. ("What have you done?")

M̀ dá' nɛ̄ bʊ́ŋ. "I've bought a *donkey*."
1SG buy FOC donkey:SG. ("What have you bought?")

Nɪ̄igí ɔ̀ǎbìd nɛ̄ mɔ̄ɔd. "Cows eat *grass*."
Cow:PL chew:IPFV FOC grass:PL. ("What do [generic] cows eat?")

However, under the scope of a negative, focus is likely to be **contrastive**:

M̀ pʊ̄ dá' bʊ̀ŋā=ø. "I haven't bought a donkey."
1SG NEG.IND buy donkey:SG=NEG.

M̀ pʊ̄ dá' nɛ̄ bʊ́ŋā=ø. "I haven't bought a *donkey*."
1SG NEG.IND buy FOC donkey:SG=NEG. ("I bought something else.")

Definite objects/predicative complements normally have old-information status, making the ordinary-focus sense of "unpredictable or pragmatically non-recoverable" unlikely; hence *nɛ̄*/ before a definite object is usually aspectual:

Nɪ̣̄igí lā ɔ́ňbìd nɛ̄ mɔ̄ɔd lā.
Cow:PL ART chew:IPFV FOC grass:PL ART.
"The cows are eating the grass."

Nā'-sɪ́əbà ɔ́ňbìd nɛ̄ mɔ̄ɔd lā.
Cow-INDF.PL chew:IPFV FOC grass:PL ART.
"Some cows are eating the grass."

If focus does occur with old-information arguments, it is **contrastive**.

*Linɛ ka ba'amaannib maannɛ tisid bada la, ba maannɛ tisid**nɛ** kikiris, ka pʊ maannɛ tisid Wina'am.*
Lìnì kà bà'-māannīb mâannì‿ ø tísìd bádà lā, bà màannī‿
REL.IN and idol-sacrificer:PL sacrifice:IPFV CAT give:IPFV idol:PL ART 3PL sacrifice:IPFV
ø tísìd nɛ̄ kíkɪ̣̄rīs kà pʊ̄ mâannì‿ ø tísìd Wínā'amm=ø.
CAT give:IPFV FOC fairy:PL and NEG.IND sacrifice:IPFV CAT give:IPFV God=NEG.
"That which idol-worshippers sacrifice to an idol, they sacrifice to *demons* and they don't sacrifice to God." (1 Cor 10:20)

The predicative complement of *àe̯ň*ya "be something/somehow" in its ascriptive sense 16.12 is non-referring and prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by *nɛ̄*/ for **ordinary** focus:

Ò à nɛ̄ bɪ̣̄ig. "She is a child."
3AN COP FOC child:SG.

Ò dāa á nɛ̄ bɪ̣̄ig. "She was a child."
3AN TNS COP FOC child:SG.

Dīɪb á nɛ̄ bʊ̄n-sʊ́ŋ. "Food is a good thing."
Food COP FOC thing-good:SG.

Ò à nɛ̄ bāaǎnlím. "She is quiet."
3AN COP FOC quiet:ABSTR.

Lì à nɛ̄ bʊ̄gʊsígā. "It's soft."
3IN COP FOC soft:ADV.

While such complements are characteristically indefinite, this is not invariable; the non-recoverability may instead lie in the internal structure of the complement:

Ka bʊmbʊʊda banɛ lu gɔn'ɔs sʊʊgin la anɛ banɛ wʊm pian'ad la ...
Kà bʊ̄n-bʊ́ʊdà bànì lù gɔ̀ǹ'ɔs sʊ́ʊgʊ̄=n lā á nɛ̄
And thing-planting:PL REL.PL fall thorn:PL among=LOC ART COP FOC
bánì wʊ̀m pi̱àǹ'ad lā ...
REL.PL hear speech ART ...
"And the seeds which fell among thorns are those who heard the word ..."
(Lk 8:14, explaining the meaning of the parable)

Biis la diemid nɛ dua gbinin. Ba zamisid nɛ bula wa'ab. Ba anɛ Apam biis.
Bi̱is lā di̱'əmìd nɛ̄ dúaǹ gbi̱nnī=n. Bà zàmɪsìd nɛ̄
Child:PL ART play:IPFV FOC dawadawa:SG base:SG=LOC. 3PL learn:IPFV FOC
būlā wâ'ab. Bà à né À-Pām bi̱is.
shoot:PL dance:SG. 3PL COP FOC PERS-Apam child:PL.
"The children are playing under a dawadawa tree. They are learning the dance of the young shoots. They are Apam's children." KKY p6
(The *relationship* between Apam and the children is new information.)

In this context proper names are not referential:

O yʊ'ʊr na anɛ Joon. "His name will be John." (Lk 1:60)
Ò yʊ̄'ʊr ná ā nɛ̄ Joon.
3AN name:SG IRR COP FOC John.

Focus under the scope of a negative is again usually **contrastive**:

M̀ kā' dʊ́'atāa=ø. "I'm not a doctor."
1SG NEG.BE doctor:SG=NEG.

M̀ kā' nɛ̄ dʊ́'atāa=ø. "I'm not a *doctor*." ("I'm a nurse.")
1SG NEG.BE FOC doctor:SG=NEG.

Focus on a **locative complement** typically involves either a place name or a definite predependent with a postposition. The fact that a referent is at a known place is new information.

Dāu̯ lā bɛ́ nɛ̄ dɔ́-kàŋā lā púʋgū=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 bɛ́ nɛ̄ mɔ̄ɔgū=n.
1SG.CNTR EXIST FOC grass:SG=LOC.

M̀ yí nɛ̄ Bɔ́k. "I come from Bawku." SB
1SG emerge FOC Bawku.

Yadda niŋir yitnɛ labaar la wʋmmʋg ni.
Yàddā-níŋìr yít nɛ̄ lábāar lā wúmmʋ̀g ní.
Assent-doing emerge:IPFV FOC news ART hearing LOC.
"Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of *bɛ̀*, where the locative is an adjunct:

Dàu̯-sɔ̄' bɛ́ dɔ́-kàŋā lā púʋgū=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 *nɛ̄/*-focus on an adjunct in my data; one is

Tì dít sā'ab nɛ̄ zâam. "We eat millet porridge *in the evening*."
1PL eat:IPFV porridge FOC evening. ("When do you eat porridge?")

Focus on the entire VP, which uses VP-final *nɛ̄/*, 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 *nɛ̄/*:

Ò kùɵsìd sūmmā lā nɛ̄. "She *sells*/is *selling* the groundnuts."
3AN sell:IPFV groundnut:PL ART FOC. ("They're not free.")

Aspectual sense ruled out by mood:

Gɔ̀sìm nɛ̄. "*Look*!" ("Don't *touch*." WK)
Look:IMP FOC.

Imperfectives with subjects which are neither agents, nor changing state, nor moving without external agency, and where there is no explicit time limitation:

Ò gìm nɛ̄. "He's *short*." ("I was expecting someone taller.")
3AN be.short FOC.

M̀ bɔ́ɔdī=f nɛ̄. "I really *love* you." WK
1SG want=2SG FOC.

Dāam lā nûud nɛ̄. "The beer is for *drinking*."
Beer ART drink:IPFV FOC. ("Not washing with!")

Dāká lā záňl nɛ̄. "The box gets carried *in the hands*."
Box:SG ART carry.in.hands FOC. ("Not on your head.")

Dāká lā zı̂id nɛ̄. "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 dìgìl nɛ̄. "He's *laid it down*." ("I thought he'd pick it up.")
3AN lay.down FOC.

Kà lì bɔ́dìg nɛ̄. "It's *lost*."
And 3IN get.lost FOC. Contradicting "someone hid it." 16.3.4

Ò dìgìn nɛ̄. "He's *lain down.*" DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed." WK: "You've said: the child looks filthy. I'm replying: He's been lying down."
3AN lie.down FOC.

Ò zı̀'ən nɛ̄. "She's pregnant." (Not "She has stood still.")
3AN stand.still FOC. An idiomatic use.

24.2 Clefting

Clefting uses a main clause like *Lì à nɛ̄* "It is ..." or a verbless identificational clause 18.4 followed by a *n*-catenation when it is the subject of the catenated clause which appears in the main clause, adnominal *kà*-catenation otherwise. The sense resembles English "it-clefting" (CGEL p1416), *foregrounding* the clefted element and backgrounding the rest, with an implicature of exhaustiveness and exclusiveness:

Ka dau mɛ pʋ sʋ'oe o mɛŋ niŋgbinaa. Li anɛ o pu'a sʋ'oe li.
Kà dāu̱ mɛ́ pʋ̄ sʋ́'ʋ ò mɛ̄ŋ nı̣́n-gbı̣́náa=ø.
And man:SG also NEG.IND own 3AN self body:PL=NEG.
Lì á né ò pu̱'ā◡ø sʋ́'ʋ=lī.
3IN COP FOC 3AN wife CAT own=3IN.
"And a husband, too, does not own his own body. It is his wife who owns it." (1 Cor 7:4)

Anɔ'ɔn nwaa yisid nidib tʋʋmbɛ'ɛdi basida?
Ànɔ̂'ɔn◡ø ǹwáa◡ø yı̣̄sīd nı̣dīb tʋ̂ʋm-bɛ̄'ɛdī◡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)

Ɔ̄nī◡ ø lá kà fʋ̀ dāa ǹyɛ̄t.
3AN.CNTR CAT that and 2SG TNS see:IPFV.
"This is he whom you saw." WK

Bɔ̄ɔ◡ ø lá kà m̀ ǹyɛ̄tá=ø?
What CAT that and 1SG see:IPFV=CQ?
"What is that that I can see?"

With *kà*, the foregrounded element may be extracted from a subordinate clause or prepositional phrase; direct objects leave a null-anaphora gap:

Li anɛ ya taaba banɛ pʋ'ʋsid Wina'am ka li nar ka ya kad saria.
Lì à né yà tāabā bánì pʋ̀'ʋsìd 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)

24.3 Preposing

A preposed clause element is followed a *kà*-catenation with independent tense marking. Preposed elements cannot be clause subjects. Unlike the formally similar *n*-focus, the default meaning is *foregrounding*, not focus, and the construction is compatible both with *n*-focus and with focus-*nɛ̄*/:

Asɛɛ linɛ an bɛ'ɛd ma'aa ka m na tun'e niŋ.
Àsɛ́ɛ línì àň bɛ̄'ɛd má'àa kà m̀ ná tūň'ɵ◡ ø 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)

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.
Dìn-zúg kà mām Paul n bɛ́ sārıgá nì Yesu Kiristo zúg yānám
That-upon and 1SG.CNTR Paul CAT EXIST prison:SG LOC Jesus Christ upon 2PL.CNTR
bûud-bànì kā' Jew dím lā yɛ́là.
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)

Bī̤'əl bī́'əl kà kɔ̄līg pɛ̂'ɛl nɛ̄.
Little little and river:SG get.full FOC.
"Little by little, and a river is full." (Proverb)

There is no syntactic movement rule for interrogative pronouns/proforms:

Bùgʊ́m lā yī̤t yáa ní ná=ø?
Fire ART emerge:IPFV where LOC hither=CQ?
"Where is the light coming from?" SB

However, preposing of objects containing interrogative pronouns is common; if they are extracted from prepositional phrases, resumptive pronouns are used.

Bɔ ka ti na niŋɛ? "What are we going to do?" (Acts 21:22)
Bɔ́ kà tì ná nì̤ŋɛ̀=ø?
What and 1PL IRR do=CQ?

Nū'-bī́bısá◡ àlá kà fʊ̀ ňyɛ̄tá=ø?
Hand-small:PL NUM:how.many and 2SG see:IPFV=CQ?
"How many fingers can you see?" SB

Ka anɔ'ɔnam ka Wina'am sʊnf da pɛlig nɛ ba yʊma piisnaasi la?
Kà ànɔ̂'ɔn-nàm kà Wínà'am súňf dá pɛ̀lì̀g né bà
And who-PL and God heart:SG TNS whiten with 3PL
yʊ̀mà pīs nāasí lá=ø?
year:PL forty ART=CQ?
"And who was God angry with for forty years?" (Heb 3:17)

Preposing is *required* for *bɔ̄* in the sense "why?":

Bɔ́ kà fʊ̀ kʊ́mmà? "Why are you crying?"
cf **Fʊ̀ kʊ́m bɔ́?* *"What are you crying?"

Bɔ́ kà... is much the most frequent way of rendering "Why?"
Complements of single-aspect verbs usually remain *in situ*, perhaps necessarily so in the case of *àe̯ňʸᵃ* "be something":

Niŋgbiŋ bɔ buudi ka ba na ti mɔra?
Nì̩n-gbī̩ŋ bɔ́-būudí kà bà ná tī mɔ̄rá=ø?
Body:SG what-sort and 3PL IRR afterwards have=CQ?
"What kind of body will they have?" (1 Cor 15:35)

but *Fʊ̀ bɔ̂ɔd bɔ́=ø?* "What do you want?"
2SG want what=CQ?

Mām áň bɔ́=ø? "What am I?"
1SG.CNTR COP what=CQ?

Kà fʊ̀ áaň‿ànɔ́'ɔnɛ̀=ø? "Then who are you?"
And 2SG COP who=CQ?

VP adjuncts are often preposed; there is probably a contrast between foregrounding by preposing and focussing with *nɛ̄/*:

Ňwādɪsá‿àtáň' kà fʊ̀ ná lɛ̄b 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 nɛ̄ zâam.
1PL eat:IPFV porridge FOC evening.
"We eat millet porridge in the evening." ("When do you eat porridge?")

The only structure other than a NP (including *ǹ*-clauses) or AdvP that I have found preposed is *wʊ̄ʊ* "like" + object:

Wʊ̄ʊ bʊ́ŋ nɛ́ kà ò zɔ́t.
Like donkey:SG like and 3AN run:IPFV.
"It's like a donkey that he runs."

**Nɛ́ m̀ nû'ug kà m̀ sī'ɪs.*
*With 1SG hand:SG and 1SG touch.
attempted for "With my hand, I touched it."

Preposing has **no implication of foregrounding** in relative clauses 21.2.2, with manner, place and reason adjuncts (which may *only* precede the subject by preposing), and when absolute clauses in adjuncts precede the main clause because of the requirement for constituent order to parallel event order 21.1:

Mán ňwɛ̀' dāu̱ lā zúg kà pɔ̄līs gbáň'a=m.
1SG:NZ hit man:SG ART upon and police seize=1SG.
"The police arrested me because I hit the man." ILK

24.4 Dislocation

A clause element placed after a distinctively phrase-final verb form has been dislocated. Manner-adverbs are thereby intensified:

M̀ pʊ̂'ʊs yā bɛ́dʊgʊ̄. "Thank you very much."
1SG greet PFV much.

Ya yidigya bɛdegʊ. "You are very much mistaken." (Mk 12:27)
Yà yi̱dì̱g yā bɛ́dʊgʊ̄.
2PL go.astray PFV much.

Non-pronoun objects can be dislocated; the sense is "against expectation":

Ò dà' yā mú̱i̱. "She's bought rice." ("of all things!")
3AN buy PFV rice.

vs *Ò dà' nɛ̄ mú̱i̱.* "She's bought rice." ("What did she buy?")
3AN buy FOC rice.

Yà'-clauses 20.1 can be dislocated. So is even a catenated clause in

Amaa Wina'am kɛya ka ya an nɔɔr yinne nɛ Yesu Kristo.
Àmáa Wínà'am kɛ́ yá kà yà áň nɔ̄ɔr yīnní nɛ̄ Yesu Kristo.
But God cause PFV and 2PL COP mouth:SG one with Jesus Christ.
"But God has caused you to be in agreement with Jesus Christ." (1 Cor 1:30)

Left-dislocation of objects and complements may occur on the basis of **weight**, without preposing *kà* or foregrounding. A resumptive pronoun must appear.

Wilkanɛ bɛɛ m ni ka pʋ wanna, m Ba' nwaadi li nɛ [*sic*: 1996 *n*] *basid.*
Wị̀l-kànì bɛ̀ɛ◡m̀ ní kà pʋ̄ wɛ́nnā=ø,
Branch-REL.SG EXIST 1SG LOC and NEG.IND bear.fruit:IPVF=NEG.
m̀ Bā' ňwá'adī=lí n básìd.
1SG father:SG cut:IPFV=3IN CAT throw.out:IPFV.
"A branch which is in me and does not bear fruit, my father cuts out." (Jn 15:2)

Onɛ ka ba tis o ka li zu'oe, ba mɛ mɔr pʋtɛn'ɛr ye o na lɛbis linɛ zu'oe.
Ɔ̀nì kà bà tísò=ø kà lì zú'e, bà mɛ̀ mɔ̀r
REL.AN and 3PL give=3AN and 3IN become.much, 3PL also have
pʋ́-tɛ̀ň'ɛr yɛ́ ò nà lɛ̄bīs línì zù'e.
mind:SG that 3AN IRR return REL.IN become.much.
"Whom they have given much to, they expect he will return much." (Lk 12:48)

24.5 Presentational constructions

Presentational constructions introduce new entities into discourse using indefinite NPs; here, absence of *lā*/ implies *indefinite specific* reference, not generic 12.8.5. Dependent indefinite pronouns or quantifiers are possible but not required.

Bɛ̀ "be somewhere/exist" is frequent in presentational clauses, often with a following *n*-catenation or adnominal *kà*-catenation 19.

Farisee dim nid yinne da bɛ
Farisee dím nị̀d yīnní dà bɛ̀ ...
Pharisee NULL.PL person:SG one TNS EXIST ...
"There was one man of the Pharisees ..." (Jn 3:1)

Dapa atan' n da be. "There were once three men." KSS p16
Dāpá◡àtáň' n dá bɛ̀.
Man:PL NUM:three CAT TNS EXIST.

Dau da be mori o po'a yimmir
Dāu̯ dá bɛ̀‿ø mɔ̄rí‿ò pu̯'à-yīmmír
Man:SG TNS EXIST CAT have 3AN wife-single:SG
"There was a man who had one wife." KSS p26

Pu'a sɔ' da bɛ mɔr o bipuŋ ka kikirig dɔl o.
Kà pu̯'à-sɔ̄' dá bɛ̀‿ø mɔ́r ò bị̄-pʊ́ŋ kà kìkị̄rīg dɔ̄lló=ø.
And woman-INDF.AN TNS EXIST CAT have 3AN child-girl:SG and fairy:SG follow=3AN.
"There was a woman whose daughter was oppressed by a devil." (Mk 7:25)

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 dāu̯ dāa zị́ň'i Listra ní kà pʊ̄ tūň'ɵ‿ø kɛ̄nná=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 nyɛ dau ka o yʊ'ʊr buon Aneas.
Ànị́ná kà ò ňyɛ̄ dáu̯ kà ò yʊ̄'ʊr bûɵn Aneas.
ADV: there and 3AN see man:SG and 3AN name:SG call:IPFV Aeneas.
"There he found a man whose name was Aeneas." (Acts 9:33)

24.6 Free personal pronouns

Only free pronoun forms are possible in isolation, apposition, coordination, before relative pronouns, and (for some speakers) with 2nd persons before direct commands after a *yà'*-clause 20:

Mánɛ̀?	"Me?"	*mān Paul*	"I, Paul"
tīnám nɛ̄ fʊ̄n	"us and you"	*fʊ̄n-kánì ...*	"you, who ..."

Where a bound pronoun is permitted, the choice of a free pronoun implies *contrast*. For the special case of **logophoric** use see 22.2.

Focussed pronouns must be contrastive, and contrastive pronouns are normally focussed if syntactically permissible:

Manɛ an kɔnbkem sʊŋ la.
Mānī‿ø áň kɔ́ňb-kìm-sʊ̀ŋ lā.
1SG.CNTR CAT COP animal-tender-good:SG ART.
"I am the good shepherd." (Jn 10:11)

24.7 Emphatics

I have borrowed the term "emphatic" from Jeffrey Heath's Songhay grammars (Heath pp202ff.) Emphatics relate NPs or AdvPs to the discourse context. They follow top-level NPs/AdvPs, except for *hālí*, which precedes.

mɛ̀ DK KT SB NT *mèn* WK; clause finally (all sources) *mèn*$^{\varepsilon}$ "also, too." The particle may follow *kà* + ellipted subject pronoun.

bɔzugɔ o anɛ fʊ biig mɛn.
bɔ̄ zúgɔ́ ò à né fʊ̀ bi̱ig mén.
Because 3AN COP FOC 2SG child:SG also.
"Because he is your child too." (Genesis 21:13)

O pu'a mɛ kena. "His wife also came." (Acts 5:7)
Ò pu̱'ā mé kɛ̀ nā.
3AN wife:SG also come hither.

Wina'am tisid ... ka mɛ tisid ...
Wínà'am tísìd ... kà mé tìsìd ...
God give:IPVF ... and also give:IPFV ...
"God gives ... and [God] also gives ..." (1 Cor 15:38)

nɔ̄ɔ "just, exactly"

dàa-kàn lā nɔ̄ɔ "that very day"

Fʊ ya'a mɔr ya'am, fʊn nɔɔ na dii li malisim.
Fʊ̀ yá' mɔ̄r yā'am, fʊ̄n nɔ̄ɔ ná díı◡ 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)

mà'àa (LF *mà'anɛ̀*) "only"

Asɛɛ linɛ an bɛ'ɛd ma'aa ka m na tun'e niŋ.
Àsɛ́ɛ línì àn̆ bɛ̄'ɛd má'àa kà m̀ ná tūn̆'ɵ◡ ø nı́ŋ.
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)

kɔ̀tàa$^{n\varepsilon}$ "at all"

Áyìı kɔ̀tàa. "Not at all."

gùllīmm (LF *gùllìmnɛ̀*) "only"

Li ka'anɛ Wina'am gʊllim nɛ?
Lì kā' nɛ̄ Wínà'am gʊ́llìmnɛ̀ɛ=ø=ø?
3IN NEG.BE FOC God only=NEG=PQ?
"Is it not God alone?" (Lk 5:21)

hālí can be used as an emphatic, preceding a NP or AdvP with the meaning "even":

Hali tʊʊmbɛ'ɛd dim niŋid ala.
Hālí tʊ̀ʊm-bɛ̄'ɛd dím nı̨́ŋìd àlá.
Even deed-bad:PL NULL.PL do:IPFV ADV:thus.
"Even sinners do that." (Lk 6:33)

Before a manner-adverb it means "very"; the adverb itself may be ellipted.

Lì tɔ̀e̯ hālí [*bɛ́dʊgʊ̄*]. "It's very difficult."
3IN be.bitter until much.

Hālí can be preposed with *kà*:

Hali ka nidib mɔr ban'adnam na.
Hālí kà nı̣̄dīb mɔ̄r bâň'ad-nàm nā.
Even and person:PL have sick.person-PL hither.
"People even brought the sick" (Acts 5:15)

Hālí báa is also used for "even" before a NP:

Hali baa lampɔdi'esidib mɛ niŋid ala.
Hālí báa làmpɔ̄-dı̨́'əsìdìb mɛ́ nı̨̀ŋìd àlá.
Even tax-receiver:PL also do:IPFV ADV:thus.
"Even tax-collectors do that." (Mt 5:46)

Hali baa bama wʊsa ya'a na zɔ ka basif, man kʊ basi fɔ.
Hālí báa bàmmā wʊ̄sā yá' nà zɔ́ kà básì=f,
Even DEMST.PL all if IRR run and abandon=2SG,
mān kʊ́ bāsī=fɔ́=ø.
1SG.CNTR NEG.IRR abandon=2SG=NEG.
"If even they all run away and leave you, *I* will not leave you." (Mt 26:33)

25 Greetings and other formulae

(a) Enquiries after health.

Gbís wēlá?	"How did you sleep?" or
Dúɵ wēlá?	"How did you get up?"
	(morning greetings at first meeting)
Nīntāŋ á wēlá?	"How is the day/afternoon?"
Yú'ʊŋ 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 sìdàa?	"[How is] your husband?"
Pu̱'ā nɛ̄ bíisèɛ?	"[How are your] wife and children?"

... and so on, often at great length. Replies may be

Àláafù bé.	literally "There is health."
	(Also a general purpose greeting in itself.)
Àláafù béo.	... for him/her.
Àláafù béɛ=bá.	... for them.

(b) Blessings follow the pattern *Bárɪkà né fù/yà ...* "Blessing with your ..." with the introductory words usually ellipted; the reply to all of these is *Náa*.

Kɛ̄n kɛ̄n.	"Welcome!" *Kɛ̄n*, gerund of *kɛ̄ň* "come"
	cf Hausa: *Barkà dà zuwàa.*
Nɛ̄ zâam zâam.	"Good evening."
Tʊ̄ʊmā! or *Tʊ̄ʊmā tʊ̄ʊmā!*	"(Blessing on your) work!"; includes practically anything which could be regarded as work, making this the commonest daytime greeting.
Nɛ̄ sɔ́ňsɪgā.	"(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 *wīn*$^{nɛ/}$.
Né fù bʊ̄rɪyá-sʊ̀ŋ.	"Merry Christmas."
Né fù yʊ̀ʊm-pāalíg.	"Happy New Year."

(c) Prayers. Reply *Àmí!* "Amen!"

Wīn ná lēbısī=f nɛ̄ láafıyà.	"Safe journey!" literally "[I pray that] God will bring you back in health."
Wīn ná sʊ̄ŋī=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 *Tɔ̀* "OK", or as appropriate.

Bɛ̄ogʊ̄ lā.	"See you tomorrow!" ("That's tomorrow.")
Àtínì dáarì lā.	"See you on Monday."
Gbịsìm sʊ́ŋā.	"Sleep well."
Kpèlımī sʊ́m.	"Remain well"; Goodbye, to those remaining.
Pʊ̀'ʊsìm yı́n.	"Greet (those) at home"; Goodbye, to leaver. Reply *Tɔ̀* "OK", or *Bà nà wʊ̄m* "They will hear."

(e) Miscellaneous formulae

Mɔ̀ pʊ̂'ʊs yā [*bɛ́dʊgʊ̄*].	"Thankyou [very much]." Reply *Tɔ̀*, or *Pʊ̀'ʊsʊ̀g kā'e.* "No thanks [needed]."
Gáafàrà.	"Sorry." Like Ghanaian English "sorry", may be just an expression of sympathy.
Kābīr 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.)
Dịm sūgʊrʊ́.	"Please forgive me."
Mɔ̀ bélìm nɛ̄.	"I beg you." Not "please"; Kusaasi etiquette needs no spoken equivalent of "please."
X *lábāar á wɛ̄lá?*	"What is the news of X?" A common initial reply is *Dīıb má'àa.* "Only food." i.e. "good."
Mɔ̀ mɔ̄r kû'ɵm náa?	"Shall I bring water?" Traditional first words to guest. "No, thank you" is *Kù'ɵm á sʊ́m.* ("Water is good.")
Wīn yɛ́l sídà.	"Bless you!" Literally "God speaks truth"; WK explained: "If you sneeze, it means someone elsewhere is praising you."
Fʊ̀ wʊ́m Kʊ̄sáalɛ̀ɛ?	"Do you understand ['hear'] Kusaal?"
Ɛ̄ɛň, m̀ wʊ́m.	"Yes, I do."
Áyìı, m̀ pʊ̄ wʊ́mmā.	"No, I don't."

26 Selected lexical fields

26.1 Kinship terms

Pervading the whole system is the importance of birth order among same-sex siblings, and its irrelevance between siblings of opposite sex. Many basic terms do not in themselves distinguish sex. Seniority goes by family branch, so I am senior to you if my parent is senior to your parent of the same sex, regardless of our own ages. Seniority among wives is determined by marriage order and is also independent of actual age. Age, as opposed to seniority, is in itself of little significance and many people do not know their own ages exactly.

My	father	is my	*sàam*^{ma} or less formally *bā*$'^{/}$
	father's elder brother		*sàam-kpɛ̄ɛ̆m*^{m}
	father's younger brother		*sàam-pɪ̣̄t*$^{a/}$
	father's sister		*pʊ̀gʊdʊ̀b*^{a}
My	mother	is my	*mà*
	mother's elder sister or senior co-wife		*mà-kpɛ̄ɛ̆m*^{m}
	mother's younger sister or junior co-wife		*mà-bɪ̣̄l*^{a} or *mà-pɪ̣̄t*$^{a/}$
	mother's co-wives	are my	*mà nám*^{a}
	mother's brother	is my	*áɲ̆sʊ̀b*^{a}

I am my mother's brother's *āɲ̆sɪ́ŋ*^{a}; to all the other relatives above I am *bɪ̣̄ig*^{a} "child" or specifically *dà-kɔ̀ɔɲ̆r*^{ɛ} "son" or *pʊ̱'à-yùa* "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent role towards his sister's child.

There are no special terms for aunts or uncles by marriage.

My	grandparent	is my	*yáab*^{a} (♂ *yāa-dáʊ̱*, ♀ *yāa-pʊ̱'á*^{a})
	grandchild		*yáaŋ*^{a}

These words are also used for ancestor/descendant.

My	elder sibling of my own sex is my	*bɪ̣̄ər*$^{ɛ/}$
	younger sibling of my own sex is my	*pɪ̣̄tʊ́*
	sibling of opposite sex is my	*tāʊ̱ɲ̆*$^{/}$

These words are also used for cousins, with seniority, as always, going by family branch.

My	wife	is my	*yī-pu̱'á*[a] or simply *pu̱'ā*[a]
	wife's parent		*dìəm*[ma] (♂ *dìəm-dāu̱*, ♀ *dìəm-pu̱āk*[a])
	wife's sibling		*dàkī̱ig*[a] (♂ *dàkì-dāu̱*, ♀ *dàkì-pu̱āk*[a])

Dìəm[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 *m̀ mà* "my mother" or *m̀ bā'* "my father." Parents-in-law are greatly respected, but with siblings-in-law there is a traditional reciprocal joking relationship; certain whole ethnic groups are said to bear this relationship to each other, called "playmate" in local English. At *Bùgʊ́m-tɔ̄ɔ̌ñr*[ɛ], the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' *bī̱ig*[a] "child" and my wife's siblings' *dàkī̱ig*[a].

My	husband	is my	*sīd*[a]
	husband's parent		*dàyáam*[ma] (♂ *dàyāam-dáu̱*, ♀ *dàyāam-pu̱ák*[a])
	husband's elder brother		*sìd-kpɛ̄ɛ̌m*[m]
	husband's younger brother		*sìd-bī̱l*[a]
	husband's sister		*sìd-pu̱āk*[a]

I am my husband's parents' *bī̱ig*[a] "child"; all my husband's siblings (of both sexes) call me *pu̱'ā*[a] "wife."

My co-wife is my *nì̱n-tāa*, "rival" in Ghanaian English. In traditional stories the role of the "wicked stepmother" in European folklore is assumed by one of the father's other wives.

Two men married to sisters are *dàkì-tùʊs*[ɛ]; two women married to brothers are *nì̱n-tāas*[ɛ], "co-wives." "Fiancée" is *pu̱'à-ɛ̄líŋ*[a].

26.2 Personal names

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices.

Personal names are preceded by the personifier particle, *À-* by default but *Ǹ-* before adjective stems, where *Ǹ-* is a syllabic nasal assimilated to the point of articulation of a following consonant. Most names are based on common nouns, but a few are based on adjectives, and some on whole VPs, or even clauses.

On Kusaal personal names in English-language contexts see 1.1.

The Kusaasi do not use surnames traditionally. Christians use English (or French) baptismal names in speaking European languages, and in official contexts use their Kusaal personal names as "surnames."

Many names allude to a guardian spirit (*sīgīr*$^{ɛ/}$) assigned to a newborn child through the father's consultation with a diviner (*bā'a*); this may be the *wīn*$^{nɛ/}$ 1.1 of an ancestor, or of a spiritually powerful tree:

À-Wīn$^{nɛ/}$	Awini	person with a *sīgīr*$^{ɛ/}$ from father's family
À-Bōgōr^{ɛ}	Abugri	person with a *sīgīr*$^{ɛ/}$ from mother's family
À-Tʼɪg^{a}	Atiga	"tree" as *sīgīr*$^{ɛ/}$
À-Kūdōg^{ɔ}	Akudugu	"piece of iron" (sc. as a marker on a tree-*sīgīr*$^{ɛ/}$); displaced as a common noun by the pl-as-sg *kūt*^{ɛ}

A younger sibling of *À-Wīn*$^{nɛ/}$ with the same *sīgīr*$^{ɛ/}$ is called *À-Wīn-bíl*^{a} "Awimbillah", of *À-Kūdōg*^{ɔ}, *À-Kùd-bīl*^{a} "Akudibillah" etc. Names for girls may follow the pattern *À-Wīn-pu̱ák*^{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^{lɛ}	Atuli	(*tùlìg*^{ɛ} "invert"): breech-delivered child

A whole clause is seen as a birth-circumstance personal name in

À-Tʼɪm bódìg yā	"The medicine has got lost."

Many names relate to customs intended to break a cycle of stillbirths. One such custom is the apotropaic practice of throwing away the dead child or just burying it in a pot; the next surviving child may then be called e.g.

À-Tàmpʊ̄vr^{ɛ}	Tampuri	"ashpit, rubbish tip"
À-Dʊ̄k$^{ɔ/}$	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-dú	Sandow	"guest" + *dāu̱* "man"
À-Zàngbɛ̀og^{ɔ}	Azangbego	"Hausa person"
À-Nàsà-pu̱āk^{a}	Anasapoaka	"European woman"; also "child delivered by a European midwife"

Names based on adjectives:

Ǹ-Dāvgᵓ	Ndago	"male"
*Ǹ-Pu̱āk*ᵃ	Mpoaka	"female"
*Ǹ-Bi̱l*ᵃ	Mbillah	"little"

Muslims often use day-of-the-week names depending on birth. The system does not cover all weekdays; examples are *À-Tínì* "Girl born on Monday", *À-Tàláatà* "Girl born on Tuesday", *Àrzúmà* "Boy born on Friday", *À-Síbì* "Boy born on Saturday."

Muslims also have formal Arabic names, sometimes adapted into Kusaal, like *Dàhàmáanì*/*Dàsmáanì* ʕ*Abdu-r-Raħma:n*. KKY p6 has the interesting girl's name *Amɔryam*, ?Arabic *Maryam* "Mary", interpreted as *À-Mɔ̄r Yām* "Has Common Sense."

26.3 Places

For Kusaal place names in English-language contexts see 1.1.

This section has been improved by consultation with John Turl, who maintains an extensive website dedicated to Ghanaian toponymy (see References.)

Many Kusaal place names have transparent meanings.

Place names include:

*Bɔ̀k*ᵓ	Bawku	"pit, geographical depression"
*Kūk*ᵃ/	Koka	"mahogany tree"
*Kʋ̀kpàrì g*ᵃ	Kokpariga	"palm tree"
*Tɛ̀mpáan*ⁿᵋ	Tempane	perhaps "new villages"
*Mu̱'à-nɔ̄ɔr*ᵋ/	Mogonori	"lakeside" ("lake-mouth")
*Bàs-yɔ̄n*ⁿᵋ/	Basyonde	"abandon sacks" ?reason for name
*Kūgʋ̄r*ᵋ/	Kugri	"stone"
*Bʋ̄gʋ̄r*ᵋ	Bugri	*bʋ̄gʋ̄r*ᵋ, object housing a *wīn*ⁿᵋ/
*Wìdì-ňyá'aŋ*ᵃ	Woriyanga	archaic for *wìd-ňyá'aŋ*ᵃ "mare"
*Bi̱-nà'ab*ᵃ	Binaba	"prince"
Gàarʋ̀	Garu	Hausa *gàaruu* "wall around a town or compound"
*Wi̱id-nà'ab*ᵃ	Widinaba	"chief of the clan *Wi̱id*ᵃ"
*Pūsīg*ᵃ/	Pusiga	"tamarind"
*Tī̱l*ˡᵋ/	Tilli	"tree trunk" cf Toende Kusaal *tíl id* (Hasiyatu Abubakari, p.c.)
*Dɛ̀nʋ̀g*ᵓ	Denugu	No known meaning
*Pùlɪmà Kû'ɵm*ᵐ	Pulimakom	"water by *pùlɪmà* (grass sp)"

*Wìdāan*ᵃ	Widana	for *Wìd-dāan*ᵃ "Horse-Owner", title of a chief's *nɔ̄-dḭ̀ˈəs*ᵃ "linguist."
*Mḭ̀ˈisìg*ᵃ	Missiga	Explained locally as "mission", i.e. of the Assemblies of God; perhaps influenced by *mḭ̀ˈisʊ̀g*ɔ "baptism"
*Sā-bḭ́l*ᵃ	Zebilla	"*Sporobolus subglobosus*"
*Sā-pḭ́əlìg*ᵃ	Sapeliga	"*Isoberlinia Doka*"
*Kɔ̀l-tāˈamís*ᵋ	Kultamse	"dog almonds, *Andira inermis*"

WK thought that the *sā-* of *Sā-bḭ́l*ᵃ was a plant used in making brooms. No **sāa*/ occurs in my data, but Farefare *sáagá*, Dagbani *saa* are *Sporobolus subglobosus*, which is indeed so used (Blench.) The meanings for "Sapeliga" and "Kultamse" are based on a 1935 agricultural report on the Farefare/Nabit area located by John Turl.

For *Kʊ̀lʊgʊ́ŋ*ɔ "Kulungungu", Turl cites a Bisa-speaking informant who suggests Bisa *Kuurgongu*, "Crooked Sheanut Tree."

*Àgɔ̀l*ˡᵋ	Agolle	cf *àgɔ́l*ˡᵋ "upwards"
*Tùʊn*ⁿᵋ	Toende	cf *tùʊn*ⁿᵋ "in front", "West"
*Bārʊ̄g*ɔ/	North	"Bisa country"
*Ňyáˈaŋ*ᵃ	East	"behind"
Zu̱ēyā	South	"hills", i.e. the Gambaga Escarpment
*Tùʊn*ⁿᵋ	West	"in front"

The forms above were given by WK; KB has *ya-dagɔbʊg yà dàgɔ̀bìg*ᵃ ("your left hand") for "south" and *ya-datiuŋ yà dàtìu̱ŋ*ɔ ("your right hand") for "north," along with *ya-nyaˈaŋ* "east", *ya-tuona* "west."

Stems referring to ethnic groups and clans create place names by adding the suffix *-gɔ*: *Kʊ̄sâʊg*ɔ "Kusaasiland", *Mɔ̀ɔg*ɔ "Mossi country." They need not always be established settlements: *Kʊ̀tāu̱ŋ*ɔ/ "any place inhabited by clan Kotamba."

Places outside *Kʊ̄sâʊg*ɔ generally do not have Kusaal names (an exception is *Sānkâañs*ᵋ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived *Ankara* is usual. Toende has *Waˈarʊk* for "Ouagadougou", but I could not elicit any Agolle equivalent.

There seems to be no Agolle Kusaal proper name for the White Volta, which is simply *kɔ̄lʊ̄g*ᵃ "river", presumably as the only real river within *Kʊ̄sâʊg*ɔ.

26.4 Ethnic groups and clans

The great majority of ethnic group names are *ga*|*sɛ* or *a*|*ba*. The corresponding languages belong to the *lɛ* subgroup of *rɛ*|*aa*, and the place inhabited has sg *gɔ*.

Ethnic group (pl)	Language	Place	
Kʊ̄sâas^{ɛ}	*Kʊ̄sâal*^{ɛ}	*Kʊ̄sâʊg*^{ɔ}	Kusaasi
Ǹwāmpūrīs$^{ɛ/}$	*Ǹwāmpūrīl*$^{ɛ/}$	*Ǹwāmpūrʊ̄g*$^{ɔ/}$	Mamprussi
Bārīs$^{ɛ/}$	*Bāt*$^{ɛ/}$	*Bārʊ̄g*$^{ɔ/}$	Bisa
Mɔ̀ɔs^{ɛ}	*Mɔ̀ɔl*^{ɛ}	*Mɔ̀ɔg*^{ɔ}	Mossi
Dàgbām$^{ma/}$	*Dàgbān*$^{nɛ/}$	*Dàgbāu̯ŋ*$^{ɔ/}$	Dagomba
Bìm^{ma}	*Bìn*^{nɛ}	*Bìu̯ŋ*^{ɔ}	Moba
Sìmī̩is^{ɛ}	*Sìmī̩il*^{ɛ}	*Sìmī̩ug*^{ɔ}	Fulɓe
Yàaǹs^{ɛ}	*Yàan*^{nɛ}		Yansi
Gʊ̄rís^{ɛ}	*Gʊ̄rín*^{nɛ}		Farefare
Yārīs$^{ɛ/}$	*Yāt*$^{ɛ/}$		Yarsi
Zàngbɛ̀ɛd^{ɛ}	*Zàngbɛ̀ɛl*^{ɛ}		Hausa
Bùlìs^{ɛ}	*Bùl*^{lɛ}		Bulsa
Tàlìs^{ɛ}	*Tàlìn*^{nɛ}		Tallensi
Nàbɪdìb^{a}	*Nàbìr*^{ɛ}		Nabdema
Bʊ̀sâaǹs^{ɛ}	*Bʊ̀sâaǹl*^{ɛ}		Bisa
Nàsàa(r)-nàm^{a}	*Nàsāal*^{ɛ}		European
Kàmbʊ̀mìs^{ɛ}	*Kàmbʊ̀nìr*^{ɛ}		Ashanti

Bārīs$^{ɛ/}$ means "Bisa", not just Bareka; *Bìm*^{ma} is "Moba", not just Bemba (WK.)

Note *Tʊ̀ɒn*^{nɛ} "Toende area", *Tʊ̀ɒnnìr*^{ɛ} "Toende dialect of Kusaal", *Àgɔ̀l*^{lɛ} "Agolle area", *Àgɔ̀l*^{lɛ} "Agolle dialect of Kusaal": *Ò pi̩àǹ'ad Àgɔ̀l.* "She speaks Agolle Kusaal."

Kusaasi clan names include, among many others:

Clan (pl)	Place	
Kʊ̀tām$^{ma/}$	*Kʊ̀tāu̯ŋ*$^{ɔ/}$	WK's clan
Zʊ̀ɒs^{ɛ}		
Wi̩id-nàm^{a}	*Wi̩idʊ̀g*^{ɔ}	
Nàbɪdìb^{a}	*Nàbɪdʊ̀g*^{ɔ}	
Gɔ̀ɔs^{ɛ}	*Gɔ̀ɔg*^{ɔ}	
Sà'dàbʊ̀ɒs^{ɛ} *-bʊ̀ɒb*^{a}	*Sà'dàbɔ̀ɔg*^{ɔ}	
Nà'dàm^{ma}	*Nà'dàu̯ŋ*^{ɔ}	
Gʊ̀m-dìm^{a}	*Gʊ̀m*^{mɛ}	

Subclans of *Zʊ̀ɒs*^{ɛ} include *Zu̯à-sābɪlís*^{ɛ} "Black Zoose" and *Zu̯à-wi̩ib*^{a} or *Zu̯à-wi̩is*^{ɛ} "Red Zoose." Clan *Nàbɪdìb*^{a} is distinct from the ethnic group "Nabdema" (WK.)

26.5 Trees and fruits

Tree names are almost all *ga*|*sɛ* class, like *tìɪgᵃ* "tree"; their fruits belong to classes *rɛ*|*aa* or *gɔ*|*dɛ*.

Tree	Fruit	
āaǎndīgᵃ	*āaǎndīrᵋ*	*Vitex doniana*
dùaǎ	*dɔ̀ɔǎgᵓ*	dawadawa
gāaǎ/	*gāǎrᵋ/*	Nigerian ebony
gʊ̀ŋᵃ	*gʊ̀mᵐᵋ*	kapok
kìkàŋᵃ	*kìkàmᵐᵋ*	fig tree
kpʊ̀kpàrìgᵃ	*kpʊ̀kpàrᵋ*	palm
lḭ́ˈəŋᵃ	*lḭ́ˈəmᵐᵋ*	*Ximenia americana*
pūsīgᵃ/	*pūsīrᵋ/*	tamarind
sīsḭ́bìgᵃ	*sīsḭ́bìrᵋ*	neem
táˈaŋᵃ	*táˈamᵐᵋ*	shea butter
tɛ̀ˈɛgᵃ	*tɛ̀ˈogᵓ*	baobab
vúɵŋᵃ	*vúɵrᵋ*	red kapok

26.6 Colours

Kusaal, like many local languages, has a basic three-colour system: *zɛ̀ǎˈogᵓ* "red", for all reddish shades, *sābɪlígᵃ* "black" for all darker shades, and *pḭ̀əlìgᵃ* "white" for all lighter shades. *Wḭ̀ugᵓ* is synonymous with *zɛ̀ǎˈogᵓ*. Kusaal has many other standard expressions for colour (e.g. *wʊ̄ʊ támpʊ̄ʊr nɛ̄* "like ash", i.e. "grey"), often with parallels in other West African languages: "three-colour" means that any colour can be allocated to one of only three terms, not that only three colour terms exist.

26.7 Time

The day begins at sunrise. Answers to *bɔ̀-wḭ̀nⁿᵋ* "what time of day?" may be

bɛ̄ogʊ̄=nᵋ/	"morning"	*bɛ̀kɛ̀kɛ̀oǎgᵓ*	"very early morning"
zàamᵐ	"evening"	*àsùbá*	"dawn" (← Arabic)
wḭ̀n-lḭ̄irᵋ	"sunset"	*yʊ́ˈʊŋᵓ*	"night"
wḭ̀n-kɔ̀ɔǎrᵋ	"sunset"	*nḭ̄ntāŋᵃ/*	"heat of the day"

Wḭ̀nⁿᵋ "time of day" (cf *wḭ̀nnìgᵃ* "sun") always has a predependent.

Clock times are calqued from Hausa: *kɛ́rɪfà àtáǎˈ* "three o'clock" = *ƙarfèe ukù*.

The deictic particle *ǎwà* "this" is commonly attached to time words, e.g. *zàam ǎwá* [za:ma] "this evening", *yʊ́ˈʊŋ ǎwá* [yʊ̯:ŋ:a] "tonight."

Answers to *bʊ̄n-dâar*ɛ "which day?" may be

zī̩ná	"today"	*sù'ɵs*a	"yesterday"
*bɛ̄og*ɔ	"tomorrow"	*dāar*ɛ	"day after tomorrow/ day before yesterday"

Weekday names are of Arabic origin. Many older speakers count in days, not weeks; the traditional "week" is a three day market cycle, differing from village to village and carrying on regardless of any weekdays or festivals.

*Àláasìd dâar*ɛ	"Sunday"	*Àtínì dâar*ɛ	"Monday"
*Àtàláatà dâar*ɛ	"Tuesday"	*Àlárıbà dâar*ɛ	"Wednesday"
*Àlàmī̩isì dâar*ɛ	"Thursday"	*À(r)zúmà dâar*ɛ	"Friday"
*Àsī̩bıtì dâar*ɛ	"Saturday"		

*Dāar*ɛ "day" is "twenty-four hour period" (*nī̩ntāŋ* "day as opposed to night") and is used with predependents to specify a particular day; the word *dàbısìr*ɛ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyɔ́pɔ̀ɲ dâar kà fʊ̀ ná lɛ̄b nā.	"You'll come back in a week."
Dābá àyɔ́pɔ̀ɲ kà fʊ̀ ná lɛ̄b nā.	"You'll come back for a week."
Àláasìd dâar kà fʊ̀ ná lɛ̄b nā.	"You'll come back on Sunday."
Tì kpɛ́lìm ànī̩nā dábısà bī̩'ələ́.	"We stayed there a few days."

Longer periods of time:

dābá àyɔ́pɔ̀ɲ	"week"	*bákpàɲ*	"week"
*ňwādīg*a/	"moon, month"		
*sɛ̄oňg*ɔ	"rainy season"	*ʊ́vn*nɛ	"dry season"
*sāpál*lɛ	"Harmattan"	*dàwàlìg*a	"hot humid time just before the rains"
*yʊ̀vm*mɛ	"year"	*dūnná*	"this year"

Ňwād-kánì gàad lā "last month", *ňwād-kánì kɛ̄n nā lā* "next month."
"Time" in general is *sāŋá* pl *sānsá* cb *sān-*:

sān-kánɛ̀?	"when?"	*sān-kán lā*	"at that time"
sāŋá kám	"all the time"	*sāŋá bɛ̀dʊgʊ̄*	"a long time"
sānsá bɛ̀dʊgʊ̄	"many times"	*sāŋá bī̩'ələ́*	"for/in a short time"

27 Texts

27.1 Balaam's Donkey

Numbers 22:21-35, KB.

Balaam da duoe bɛogʊn lɔɔ o bʊŋʊ dɔl Moab na'ayikpɛm la keŋ. Amaa Wina'am sʊnf da duoe nɛ on keŋ la, ka Zugsɔb maliak kidigi zi'en suor la zug ye o geŋ o. Balaam da ban'adnɛ o bʊŋ, ka o yammis ayi' dɔl o. Bʊŋ la da nyɛ Zugsɔb maliak la ka o zi'e suor la zug ka fuoe sʊ'ʊgʊ zanl o nu'ugin, ka o buŋi kpɛn' mɔɔgi gaad. Ka Balaam pin'ili bʊ'ʊd bʊŋ la ye o lɛb suor pʊʊg.

Zugsɔb maliak la da tɔlisi zi'en lɔmbɔn'ɔd ayi' banɛ ka ba mɛ' zaŋguoma ayi' bɛŋ, ka suobaanlig bɛɛ li teŋsʊk la. Bʊŋ la n da nyɛ Zugsɔb maliak la, o da miee labin zaŋguom la urig Balaam nɔbir. Ka o lɛm bʊ' o ya'as.

Zugsɔb maliak la da lɛn vurigi tɔlis zi'en tuon zin'ikanɛ ka sɔ' kʊ nyaŋi fɛndig datiuŋ bɛɛ dagɔbʊga. Bʊŋ la da lɛn nyɛ Zugsɔb maliak la, o da digin nɛ Balaam wʊsa teŋin, ka Balaam sʊnf duoe hali ka o vɔb bʊŋ la nɛ o dansaar. Ka Zugsɔb kɛ ka bʊŋ la ya'ae o nɔɔri pian' Balaam ye, "Bɔ kimm ka m maalif ka li kɛ ka fʊ bʊ'ʊm nɔɔr atan' sa?" Balaam da lɛbis o ye, "Fʊ mɔrim nɛ maan galim! M ya'a mɔrin sʊ'ʊgʊ m nu'ugin m naan kʊʊnif nannanna." Bʊŋ la da lɛbis Balaam ye, "Man ka'anɛ fʊ mɛŋ bʊŋ onɛ ka fʊ ban'ad saŋa wʊsa ti paae zinaa? Fʊ nam mi' nyɛ ka m maal anwa tisi fɔɔ?" Ka o lɛbis ye, "Ayei!"

Ka Zugsɔb yɔ'ɔg Balaam nini ka o nyɛ maliak la zi'e suor la teŋsʊk ka fuoe sʊ'ʊgʊ zanl. Ka o igin ka vanbin teŋin. Zugsɔb maliak la da bu'os o ye, "Bɔ ka fʊ bʊ' bʊŋ la nɔɔr atan' sa? M kena ye m giŋif bɔzugɔ ken la ka' sʊ'ʊm m nini nii. Nɔɔr atan' ka bʊŋ la nyɛɛm ka yuk. Bʊŋ la ya'a pʊ yukinɛ, anwaa m kʊʊnif ka basin bʊŋ la." Balaam da lɛbisi yɛl Zugsɔb maliak la ye, "M tʊm taal, m pa'a pʊ baŋ ye fʊ zi'enɛ suorin la ye fʊ geŋi ma. Nannanna li ya'a pʊ malisi fɔ m na lɛbi kul." Ka maliak la lɛbisi yɛl Balaam ye, "Dɔl nidib la keŋ, amaa yɛlim nɛ man ye fʊ yɛl si'el ma'aa." Ka Balaam dɔl Balak na'ayikpɛm la keŋ.

Balaam dá dùe bɛ̄ogʊ̄=n◡ ø lɔ́ɔ◡ò bʊ̀ŋʊ̀◡ ø dɔ̄l Moab
Balaam TNS rise morning=LOC CAT tie 3AN donkey:SG CAT accompany Moab
ná'-yī̩-kpɛ́m lā◡ ø kɛ́ŋ.
chief-house-elder:PL ART CAT go.
"Balaam got up in the morning, saddled his donkey and went with the courtiers of the king of Moab."

Àmáa Wínà'am súňf dà dùe nɛ̄ ón kɛ̄ŋ lā, kà Zūg-sɔ́b mál̩āk
But God heart:SG TNS rise with 3AN:NZ go ART, and Lord angel:SG
kī̩dɪgī◡ø zî'ən sūər lā zúg yɛ́ ò gī̩ŋɔ́=ø.
meet CAT stand road:SG ART upon that 3AN obstruct=3AN.
"But God was angry that he went, and an angel of the Lord met him and stood in the road to obstruct him."

Balaam dá bàň'ad né ò bʊ̀ŋ, kà ò yàmmìs àyī̩' dɔ̄llɔ́=ø.
Balaam TNS ride:IPFV FOC 3AN donkey:SG, and 3AN slave:PL NUM:two accompany=3AN.
"Balaam was riding his donkey, and his two slaves accompanied him."

Bʊ̀ŋ lā dá ňyɛ̀ Zūg-sɔ́b mál̩āk lá kà ò zî'e sūər lā zúg
Donkey:SG ART TNS see Lord angel:SG ART and 3AN be.standing road:SG ART upon
kà fúe sʊ̀'ʊgʊ̀◡ ø záňl ò nú'ugī=n, kà ò bʊ́ŋì◡ ø kpɛ̀ň'
and draw knife:SG CAT have.in.hand 3AN hand:SG=LOC, and 3AN cut.across CAT enter
mɔ̄ɔgī◡ 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 pī̩ň'ilī◡ø bʊ̄'ʊd bʊ́ŋ lā yɛ́ ò lɛ́b sūər pʊ̂ʊg.
And Balaam begin CAT beat:IPFV donkey:SG ART that 3AN return road:SG inside.
"Balaam started beating the donkey to make it return to the road."

Zūg-sɔ́b mál̩āk lā dá tɔ̀lɪsì◡ ø zî'ən lɔ̀mbɔ̀'ɔd àyī̩' bánì kà bà mɛ́
Lord angel:SG ART TNS do.next CAT stand orchard:PL NUM:two REL.PL and 3PL build
zàngʊəmà àyī̩'◡ ø bɛ̄ŋ, kà sʊ̩ā-báaňlìg bɛ́ɛ◡lì tɛ̀ŋ-sʊ̄k lā.
wall:PL NUM:two CAT demarcate, and road-narrow:SG EXIST 3IN middle:SG ART.
"The angel of the Lord then stood where dividing walls had been built between two orchards and there was a narrow path between them."

Bʊ̀ŋ lá=ǹ dà ňyɛ̄ Zūg-sɔ́b mál̩āk lā, ò dà mìe◡ ø làbìn
Donkey:SG ART=NZ TNS see Lord angel:SG ART, 3AN TNS squeeze CAT hide.behind
zàngùəm lā◡ ø ūrī̩g Balaam nɔ́bìr. Kà ò lɛ́m bʊ́'o=ø yâ'as.
wall:SG ART CAT scrape Balaam leg:SG. And 3AN again beat=3AN again.
"When the donkey saw the angel of the Lord, it squeezed against the wall and scraped Balaam's leg. And he beat it again."

Zūg-sɔ́b máli̯āk lā dá lɛ̀m vūrɪgī‿ ø tɔ̄līs‿ ø zị̂'ən tùən
Lord angel:SG ART TNS again shift.along CAT do.next CAT stand in.front
zị́ň'-kànì kà sɔ̄' kʊ́ ňyāŋī‿ ø fɛ̄ňdīg dátìu̯ŋ bɛ̄ɛ dágɔ̀bɪgā=ø.
place-REL.SG and INDF.AN NEG.IRR prevail CAT turn right or left=NEG.
"Then the angel of the Lord moved along to stand in front of a place where nobody could turn to the right or the left."

Bʊ̀ŋ lá=ø dà lɛ̀m ňyɛ̄ Zūg-sɔ́b máli̯āk lā, ò dà dìgìn nɛ̄
Donkey:SG ART=NZ TNS again see Lord angel:SG ART, 3AN TNS lie.down with
Balaam wʊ̄sā tɛ̄ŋī=n, kà Balaam súňf dūe hālí kà ò vɔ̄b
Balaam all ground:SG=LOC, and Balaam heart:SG rise so.far and 3AN strike
bʊ́ŋ lā nɛ́ ò dànsàar.
donkey:SG ART with 3AN staff:SG.
"When the donkey again saw the angel of the Lord, it lay down along with Balaam on the ground, and Balaam was so angry he beat the donkey with his staff."

Kà Zūg-sɔ́b kɛ́ kà bʊ̀ŋ lā yá'e ò nɔ̄ɔrī‿ ø pi̯āň' Balaam yɛ̄,
And Lord let and donkey:SG ART open 3AN mouth:SG CAT speak Balaam that
Bɔ̄ kị́mm kà m̀ máalì=f kà lì kɛ́ kà fʊ̀ bʊ́'ʊ=m nɔ̄ɔr átáň' sá=ø?
what IDEO and 1SG make=2SG and 3IN let and 2SG beat=1SG time:SG NUM:three hence=CQ?
"Then the Lord caused the donkey to open its mouth to speak to Balaam: 'Just what have I done to you to make you beat me these three times?'"

Balaam dá lɛ̀bɪsō=ø yɛ̄, Fʊ̀ mɔ́rī=m nɛ̄‿ ø mâan‿ ø gálìm! M̀ yá'
Balaam TNS reply=3AN that, 2SG have=1SG FOC CAT make:IPFV CAT joke:IPFV! 1SG if
mɔ̄rī=n sʊ́'ʊgʊ̀‿m̀ nú'ugī=n, m̀ nāan kʊ̄ʊ=ní=f nānná-nā.
have=DP knife:SG 1SG hand:SG=LOC, 1SG then kill=DP=2SG now.
"Balaam replied: 'You are holding me in contempt! If I'd had a sword in my hand, I would have killed you right now.'"

Bʊ̀ŋ lā dá lɛ̀bìs Balaam yɛ̄, Mān kā' nɛ́ fʊ̀ mɛ̄ŋ bʊ́ŋ ɔ́nì kà
Donkey:SG ART TNS reply Balaam that, 1SG.CNTR NEG.BE FOC 2SG self donkey:SG REL.AN and
fʊ̀ bāň'ad sāŋá wʊ̄sā‿ ø tí pāe zị̄náa=ø=ø? Fʊ̀ nám mị̄'‿ ø ňyɛ́ kà
2SG ride:IPFV time all CAT after reach today=NEG=PQ? 2SG already know CAT see and
m̀ mâal àňwá‿ ø tísì=fɔ̀=ø? Kà ò lɛ́bìs yɛ̄, Áyìɪ!
1SG make thus CAT give 2SG=CQ? And 3AN reply that No.
"The donkey replied to Balaam: 'Am I not your own donkey that you have always been riding up until today? Have you ever known me to behave like this to you?' He replied, 'No.'"

Kà Zūg-sɔ́b yɔ̂'ɔg Balaam nı̨́nì kà ò ňyɛ̄ máli̯āk lā ‿ø zı̨́'e sūər
And Lord open Balaam eye:PL and 3AN see angel:SG ART CAT be.standing road:SG
lā tɛ́ŋ-sʊ̄k, kà fúe sʊ̀'ʊgʊ̀ ‿ø zāňl. Kà ò ı̨́gìn kà vábìn tɛ̄ŋī=n.
ART centre:SG and draw knife:SG CAT hold. And 3AN kneel and lie.prone ground:SG=LOC.
"Then the Lord opened Balaam's eyes so he could see the angel standing in the middle of the road with a drawn sword in his hand, and he knelt and lay face down."

Zūg-sɔ́b máli̯āk lā dá bù'əsō=ø yɛ̄, Bɔ́ kà fʊ̀ bʊ̄' bʊ́ŋ lā
Lord angel:SG ART TNS ask=3AN that, What and 2SG beat donkey:SG ART
nɔ̄ɔr átáň' sá=ø? M̀ kɛ́ nā yɛ́ m̀ gı̨̄ŋı́=f bɔ̄ zúgɔ̄ kɛ̄n lā
time:SG NUM:three hence=CQ? 1SG come hither that 1SG obstruct=2SG because go:GER ART
kā' sʊ́m m̀ nı̨̄nı́ nīı=ø. Nɔ̄ɔr átáň' kà bʊ̀ŋ lā ňyɛ́ɛ=m
NEG.BE good:ABSTR 1SG eye:PL LOC=NEG. Time:SG NUM:three and donkey:SG ART see=1SG
kà yūk. Bʊ̀ŋ lā yá' pʊ̄ yūkī=nı́‿ àňwáa=ø m̀ kʊ̄ʊ=nı́=f kà
and deviate. Donkey:SG ART if NEG.IND deviate=DP thus=NEG 1SG kill=DP=2SG and
básī=n bʊ́ŋ lā.
release=DP donkey:SG ART.
"The angel of the Lord asked him: 'Why have you beaten the donkey these three times? I came here to obstruct you because your journey is not good in my eyes. Three times the donkey saw me and turned aside. If the donkey had not turned aside, I would have killed you and spared the donkey."

Balaam dá lɛ̀bısì‿ø yɛ́l Zūg-sɔ́b máli̯āk lā yɛ̄, M̀ tʊ́m tâal, m̀ pá'
Balaam TNS reply CAT say Lord angel:SG ART that, 1SG work fault:SG, 1SG TNS
pʊ̄ báŋ yɛ́ fʊ̀ zı̨́'e nɛ̄ sūərí=n lā yɛ́ fʊ̀ gı̨̄ŋı́=mā=ø.
NEG.IND realise that 2SG be.standing FOC road:SG=LOC ART that 2SG obstruct=1SG=NEG.
Nānná-nā, lì yá' pʊ̄ mālısí=fɔ̄=ø, m̀ ná lɛ̄bī‿ø kūl.
Now, 3IN if NEG.IND be.pleasing=2SG=NEG, 1SG IRR return CAT go.home.
"Balaam replied to the angel of the Lord: 'I have transgressed. I did not realise that you were standiing in the road to obstruct me. Now, if it is not pleasing to you, I will return home.'"

Kà màli̯āk lā lɛ́bısì‿ø yɛ̀l Balaam yɛ̄, Dɔ̀l nı̨̄dīb lā‿ø kɛ̄ŋ,
And angel:SG ART reply CAT say Balaam that, Accompany person:PL ART CAT go,
àmáa yɛ̀lìm nɛ̄ mán yɛ́ fʊ̀ yɛ́l sı̨̄'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 dɔ̄l Balak ná'-yı̨̄-kpɛ́m lā‿ø kɛ́ŋ.
And Balaam accompany Balak chief-house-elder:PL ART CAT go.
"So Balaam went with Balak's courtiers."

27.2 Three Murderers

From *Kusaal Solima ne Siilima* p16. The story is clearly related to Chaucer's *Pardoner's Tale*; the fable is familiar throughout Europe, Asia and Africa, and is probably ultimately derived from a Buddhist *Jātaka* story. (Hamel and Merrill 1991.)

The style is much less formal than in the passage from KB above.

NING KUUDIBA ATAN'

Dapa atan' n da be. Ba da ane dap kanda su'unga. Ka daar yinni ka ba la'asi zin'ini gban'e ye ba duom ia budaalim la'ad n ginni kuum nidib ma'aa ka da lem tum si'ela. Ba sid due ia su'us ne zan'ana ne tiraad ne piima ne lu'ad, ne kpana ne mali su'unga n pin'ili ginni ied nidib ye ba ya'a nye so' ban ku.

Ba giligi ala ne nwadisa atan' ne dabisa atan' ba po nye nidii na kuu. Ka kpelim mor ken ne ken ne ken. Daba anu daar ba nye ne lallisa ka si'el zie sabili wuu nidne, ka ba kpeem la ye ba kem kuu o, ye o sob ya'a pun ton'e ka morne lauksia'a wusa ba na nyangi kuu o. Ka onga gingid kpe, ka onga gingid kpe, ba ti keng paae nye ka li ka'a nida, ka ane boto ka ligidi pe'el ma'aa ma'aa ma. Ka ba ye, Ato, ka nannanna nwa, ti ye ti ning ligidi nwa walla? Ka ba ye, ba na pudigne. Amaa ba ye li nar ka ba yis ligidi la n keng da'a daam na nu yiiga ka nyaan pudig ligidi la. Ka yis ligidi la bi'ela ye biig la kem da' yoor na ka ba nu.

Biig la ken la o ten'esidne on na nnig [sic] si'em ku bane kpelim anniga [sic] la ka vaae ligidi la wusa wusa n su'e, o yeli o meng ye, o na da' ne daam ka bo tikuudim n los daamin la n paae tii ba ka ba nuu kpi ka o su'e ligidi la wusa. Ka sid da' daam la ka bo tikuudim n los.

Ziisige, ka baba yi'i la kpellim la, me gban'e ne ye ba ku biig la keng daam la da'ab la ka me su'e ligidi la. Biig la n mor daam la paa na la, ka onga kiak [sic] kpe, ka on kiak [sic] kpe, n kia o ku ka yu'un zang daam la nu wan wan, li pu yuuge, ka ba wusa wusa me kpelim kpi zin'i kan la noo ka ba so'o so' pu nyangi paam la'af la baa yinni mori kule ba yaane.

Din ka Kusaas ye fu ya'a ten'es bee tumbe'ed ye fu tisi fu tiraan, fu maane fu meng ya'as la.

Nīn-kʋ́ʋdìbá‿ àtáň'. "Three murderers."
Person-kill:AGT:PL NUM:three.

Dāpá‿àtáň' n dá bɛ̀. Bà dà à nɛ̄ dáp-kāňdā sʋ́ŋā.
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 dûəm◡ ø ịā bʊ́dàalìm
And day:SG one and 3PL gather CAT sit CAT grab that 3PL rise:IMP CAT seek courage
lâ'ad n gịnnī◡ ø kʊ̄ nịdīb má'àa kà dā lɛ́m tʊ̀m sị'ələ̄=ø.
goods:PL CAT roam:IPFV CAT kill person:PL only and NEG.IMP again work INDF.IN=NEG.
"One day they sat down to meet and decided to go and find some weaponry and go round looking to kill people so as never to have to work again."

Bà sìd dùe◡ ø ịā sʊ̂'ʊs nɛ̄ záň'anà nɛ̄ tí-dāad nɛ̄ pịmá nɛ̄
3PL truly rise CAT seek knife:PL with bludgeon:PL with bow:PL with arrow:PL with
lʊ̂'ad, nɛ̄ kpānā nɛ̄ málì súŋā n pịň'ilī◡ ø gịnnī◡ ø ịəd
quiver:PL with spear:PL with gun:PL well CAT begin CAT wander:IPFV CAT seek:IPFV
nịdīb yé bà yá' ňyɛ̄ sɔ̄' bān kʊ̄.
person:PL that 3PL if find INDF.AN 3PL.CNTR kill.
"So indeed they went and sought lots of swords, bludgeons, bows, arrows, quivers, spears and guns and began looking round for people to find someone to kill."

Bà gìlɪgí◡ àlá nɛ̄ ňwādɪsá◡ àtáň' nɛ̄ dábɪsà◡ àtáň'. Bà pʊ̄ ňyɛ̄
3PL go.round thus with month:PL NUM:three with day:PL NUM:three. 3PL NEG.IND find
nịdī◡ ø ná kʊ̄ʊ=ø. Kà kpélìm mɔ̄r kɛ̄n nɛ̄ kɛ̄n nɛ̄ kɛ̄n.
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 ňyɛ̄ nɛ̄ lāllí sà kà sị'əl zí'e sābíllì◡ ø
Day:PL NUM:five day:SG 3PL find with far hence and INDF.IN stand black:SG CAT
wʊ̄ʊ nịd nɛ̄, kà bà kpɛ̄ɛňm lā yé bà kém◡ ø kʊ́o=ø, yé ò sɔ̄b
like person:SG like, and 3PL elder:SG ART that 3PL go:IMP CAT kill=3AN, that 3AN NULL.AN
yá' pʊ̀n túň'e kà mɔ̄r nɛ̄ láu̱k-sị'a wʊ̄sā, bà nà ňyāŋī◡ø kʊ́o=ø.
if already be.able and have FOC item-INDF.IN all, 3PL IRR prevail CAT kill=3AN.
"On the fifth day they saw something standing in the distance, black like a human being, and the eldest of them said that they should go and kill him; when he himself was ready and had every piece of equipment, they would be able to kill him."

Kà ɔ̀ŋā gīŋīd kpɛ̄, kà ɔ̀ŋā gīŋīd kpɛ̄, bà tì kɛ̄ŋ◡ ø
And DEMST.AN intercept:IPFV there, and DEMST.AN intercept:IPFV there, 3PL after go CAT
pāe◡ ø ňyé kà lì kā' nịdá=ø, kà á nɛ̄ bɔ̄tʊ́ kà lịgɪdī pê'ɛl
reach CAT see and 3IN NEG.BE person:SG=NEG, and COP FOC sack:SG and money fill
mà'àa má'àa má.
only only IDEO.
"And this one blocked this way, and that one blocked that way, but after they got there they saw that it wasn't a person but a bag chock full of money."

Kà bà yɛ̄, Àtɔ̀, kà nānná-nā ǹwá, tì yɛ́ tì níŋ līgıdī ǹwá wālá=ø?
And 3PL say, So.then, and now this, 1PL that after do money this how=CQ?
"They said: 'Well, now! What are we going to do with this money?'"

Kà bà yɛ̄, bà nà pūdīg nɛ̄. Àmáa bà yɛ́ lì nár kà bà yīs līgıdī lā n
And 3PL say, 3PL IRR share FOC. But 3PL that 3IN must and 3PL extract money ART CAT
kɛ̄ŋ◡ ø dá' dāam◡ ø ná nū yīigá kà ǹyāan pūdīg līgıdī 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 līgıdī lā bī'ələ́ yɛ̄ bīig lā kɛ́m◡ ø dá' yʊ̄vr 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 lá=ø kɛ̄n lā, ò tɛ̀ǹ'ɛsìd nɛ̄ ɔ́n nà níŋ sī'əm◡ ø kū bánì kpɛ̀lìm
Child:SG ART=NZ go:IPFV ART, 3AN think:IPFV FOC 3AN:NZ IRR do INDF.ADV CAT kill REL.PL remain
ànī nā lā, kà váe līgıdī lā wūsā wūsā n sū'e, ò yɛ̀lí◡ò mɛ̄ŋ yɛ̄,
there ART, and gather money ART all all CAT own, 3AN say 3AN self that,
ò nà dā' nɛ̄ dāam, kà bɔ́ tì-kʊ̄vdím n lɔ́s dāamí=n lā
3AN IRR buy FOC beer, and seek medicine-killing CAT immerse beer=LOC ART
n pāe◡ ø tíı=bá kà bà nūu◡ ø kpī kà ò sū'e līgıdī lā wūsā.
CAT reach CAT give=3PL and 3PL drink CAT die and 3AN own money ART all.
"As the youngest was travelling, he was thinking how he might kill those who stayed in that place and take absolutely all of the money as his own; he said to himself that he would buy the beer, and look for a poison to put into the beer and go and give it to them to drink and die so he'd possess all of the money."

Kà síd dà' dāam lā, kà bɔ́ tì-kʊ̄vdím n lɔ́s.
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'isígɛ̄=ø, kà bà bàyī' lá=ø kpɛ̀lìm lā mɛ́ gbāǹ'e nɛ̄ yɛ́ bà kū
NEG.KNOW=NEG, and 3PL NUM:two ART=NZ remain ART also grab FOC that 3PL kill
bīig lá=ø kɛ̄ŋ dāam lā dâ'ab lā, kà mɛ́ sū'e līgıdī lā.
child:SG ART=NZ go beer ART buy:GER ART, and also own money ART.
"Unbeknownst, the two who had stayed behind had also decided to kill the youth who had gone to buy the beer and themselves keep the money."

Bi̱ig lá=ǹ mɔ̄r dāam lā◡ ø pāa nā lā, kà ɔ̀ŋā ki̱á kpɛ̄,
Child:SG ART=NZ have beer ART CAT reach hither ART, and DEMST.AN cut here,
kà ɔ̄n ki̱á kpɛ̄, n ki̱o=ø ø kū, kà yū'ʊn záŋ dāam lā◡ø
and 3AN.CNTR cut here, CAT cut=3AN CAT kill, and then take beer ART CAT
nū wán wán, lì pū yúugɛ̄=ø, kà bà wʊ̄sā wʊ̄sā mɛ́ kpɛ́lì̀m kpi̱
drink IDEO IDEO, 3IN NEG.IND delay=NEG and 3PL all all also immediately die
zì̀ň-kàn lā nɔ́ɔ kà bà sɔ̄' sɔ̄' pū ňyāŋī◡ ø pâam lā'af lā
place-DEM.SG ART exactly and 3PL INDF.AN INDF.AN NEG.IND prevail CAT receive cowry:SG ART
báa yīnní◡ ø mɔ̄rī◡ ø kūlí◡ bà yáa=nɛ̄=ø.
not.one CAT have CAT go.home 3PL house:PL=LOC=NEG.
"When the youth arrived back with the beer, this one cut him here and that one cut him there, cutting him to death, and they then picked up the beer and drank it in gulps; before long both of them died immediately in the exact same place, and none of them was able to take even a single coin home."

Dì̀n kà Kʊ̄sâas yɛ́ fʊ̀ yá' tɛ̄ň'ɛs bɛ̄ɛ tʊ́m bɛ̄'ɛd yɛ́ fʊ̀ tísì◡
3IN.CNTR and Kusaasi:PL that 2SG if think or act bad that 2SG give
fʊ̀ tīrâan, fʊ̀ mâanní◡ fʊ̀ mɛ̄ŋ 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."

27.3 Proverbs

Kusaal Solima ne Siilima pp38ff.; other proverbs appear in the grammar above.

Ku'om kaadi lebisne m geegun.
Kù'ɵm káadì◡ ø lɛ́bìs né m̀ gɛ̄ogʊ̄=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'ɵm zɔ́t nɛ̄ bi̱āň'ar zúg.
Water run:IPFV FOC riverbed:SG upon.
"Water runs on mud." (i.e. what's in it for me?)

Kuga la'asidne zuorin.
Kūgá là'asì̀d nɛ̄ zūɵrī=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-wi̱āk sɛ̄oňg zī' sínnɛ̄=ø.
PERS-hatch rainy.season NEG.KNOW hawk:PL=NEG.
"One hatched in the rainy season doesn't know about hawks." (Fool's paradise.)

Po nye saa kuubo, ka nye saa niib.
Pō ňyɛ̄ sāa kʊ́ʊbɔ̄=ø, kà ňyɛ̄ sāa nı̰́ib.
NEG.IND see rain threaten:GER=NEG, and see rain rain:GER.
"Didn't see the rain coming, but did see the rain." (Wise after the event.)

Ba pu nokid na'ambinni lobigid naafo.
Bà pū nɔ̄kíd nā'-bı̰́nnì◡ ø lɔ̄bıgíd náafɔ̄=ø.
3PL NEG.IND take:IPFV cow-dung:SG CAT throw.at:IPFV cow:SG=NEG.
"They don't take cow dung and throw it at the cow." (Coals to Newcastle.)

Zu'om ya'a ye o na lobug, bangim ka o none kugir.
Zū'ɵm yá' yɛ́ ò nà lɔ̄bīg, bàŋìm kà ò nɔ̀ nɛ̄ kūgīr.
Blind.person:SG if that 3AN IRR throw.at, realise:IMP and 3AN stand.on FOC stone:SG.
"If a blind man says he'll stone you, know that he's got a stone under his foot."

Nong daan fuug tigidne gum ka li po tigid ki'ibo.
Nɔ̄ŋ-dâan fûug tìgìd nɛ̄ gʊ́m, kà lì pū tīgīd kī'ıbɔ́=ø.
Poverty-owner:SG shirt:SG sate:IPFV FOC cotton, and 3IN NEG.IND sate:IPFV soap=NEG.
"A poor man's shirt has a lot of material but not a lot of soap." (Waste not, want not.)

Balerigu zi' ye o a balerigu, ka tadim mi' ye o [a] tadim.
Bālɛ̄rʊgū◡ ø zī' yɛ́ ò à bālɛ̄rʊgɔ́=ø, kà tādīm mı̰̄' yɛ́ ò à tādīm.
Ugly:SG CAT NEG.KNOW that 3AN COP ugly:SG=NEG, and poor:SG know that 3AN COP poor:SG.
"The ugly man doesn't know he's ugly, but the poor man knows he's poor."
(i.e. self-delusion about poverty is not possible.)

Fu ya'a bood tampiing siind, fu po lem zot lieng daug nyoogo.
Fù yá' bɔ̄ɔd támpı̀iňg sı̰̂iňd, fù pū lɛ́m zɔ̀t lı́əŋ dâʊg ňyɔ̄ɔgɔ̄=ø.
2SG if want rock:SG honey, 2SG NEG.IND again run:IPFV axe:SG wood:SG sympathy=NEG.
"If you want honey out of a stone, you don't feel sorry for the axeshaft."

Moodi pilig ka yu'ada be.
Mɔ̄ɔdī◡ ø pı́lìg kà yū'adā bɛ́.
Grass:PL CAT strip.off and rafter:PL EXIST.
"The thatch has come off but the rafters remain." (Where there's life there's hope.)

Buribig kunni o ba' yirne nobkoog daar.
Bù-dìbìg kúnní◡ ò bā' yír nɛ̄ nɔ̄b-kɔ̂ɔg dâar.
Goat-young.male:SG go.home:IPFV 3AN father:SG house:SG with leg-break:GER day:SG.
"The kid goes back to his father's house on the day he breaks his leg."

Adi'e buud po zin'i na'ayiree.
À-dḭ'e bʊ̄ʊd pʊ̄ zḭ́ñ'i ná'-yīrɛ́=ø.
PERS-receive innocence NEG.IND be.sitting chief-house:SG=NEG.
"He who has been declared innocent doesn't hang around the courthouse."

Ba ye balerug ka fu ye zumauk.
Bà yɛ̄ bālɛ̄rʊ̄g, kà fù yɛ̄ zūg-máu̯k.
3PL that ugly:SG, and 2SG that head-crumpled:SG.
"They say 'ugly' and you say 'funnyface.'" (Six of one, half a dozen of the other.)

Bungdaug po kaasidi o tiraan tengine.
Bʊ̀ŋ-dāʊg pʊ̄ kāasídí◡ ò tīrâan tɛ́ŋī=nɛ́=ø.
Donkey-male:SG NEG.IND cry.out:IPFV 3AN neighbour:SG land:SG=LOC=NEG.
"The jackass doesn't bray in his neighbour's territory."

Kpeem ane te'eg, o tigidne balaya.
Kpɛ̄ɛňm á nɛ̄ tɛ̂'ɛg, ò tìgìd nɛ̄ bálàyà.
Elder:SG COP FOC baobab:SG, 3AN sate:IPFV FOC stick:PL.
"An elder is like a baobab - no shortage of sticks." (Uneasy lies the head ...)

A proverb related to me by KT:

Sāan-sʊ́ŋ á nɛ̄ yḭ̄-dâan áňsìb.
Stranger-good:SG COP FOC house-owner:SG mother's.brother:SG.
"A good guest is a householder's uncle."

KT explained: Entertaining a guest gives the householder a reason to bring out all his best food and drink and enjoy himself. (The mother's brother is traditionally a generous benefactor to his sister's child.)

28 Vocabulary

Words are ordered by Short Forms. Vowel glottalisation and the distinctions *n*/*ň*, *ə*/*e*/*e̯*/*ɛ*, *i*/*ɪ*/*i̯*, *ɵ*/*o*/*ɔ* and *u*/*ʊ*/*u̯* are ignored in the ordering; *ŋ* follows *n*.

The abbreviations *n adj adv ideo q sv dv* stand respectively for noun, adjective, adverb, ideophone, quantifier, single-aspect verb and dual-aspect verb.

Nouns are listed under the sg. Adjectives are listed under the *ga*|*sɛ* class form if extant; if not, *gɔ*|*dɛ* or *rɛ*|*aa*. Dual-aspect verbs are listed under the perfective; other forms are listed only if irregular. Regular deverbal nominals are not listed. Compounds are not listed if they are regularly formed and have transparent meanings. Those that *are* listed are included under the entry for the first element. For compound adjectives see 12.8.1.1.

Personal and place names are not listed: see 26 for examples.

Binomial names of plants are mostly taken from Haaf (see References); he checked the identifications carefully with botanical experts.

Arabic words have probably all been transmitted via other languages.

A

à- personifier particle (default allomorph) 12.6
*āaňdīg*ᵃ *pl āaňdīs*ᵋ *cb àaňd- n.* black plum tree, *Vitex doniana*
*āaňdīr*ᵋ *pl āaňdā n.* black plum fruit
*àaňs*ᵋ *dv.* tear
àbʊ̀lá q. adv. how many-fold?
àbʊ̀yɪ́' àbʊ̀táň' àbʊ̀nāasí q. adv. twice, three times etc
*à-dàalʊ́ŋ*ɔ *pl à-dàalís*ᵋ *à-dàalímìs*ᵋ *cb à-dàalʊ́ŋ- n.* stork
àe̯ňʸᵃ ger àaňlímᵐ sv. be something/somehow 16.12
àeň dv. get torn; *resultative adj àaňlʊ́ŋ*ɔ torn
*à-gâʊňg*ɔ *pl à-gâaňd*ᵋ *cb à-gāň- n.* pied crow
*àgɔ́l*ˡᵋ *àgɔ̄lá adv.* upwards
*Àgɔ̀l*ˡᵋ *n.* Agolle district of Kusaasi territory; *n.* Agolle Kusaal dialect
*à-kɔ̄rā-dɪ̂əm*ᵐᵃ *pl à-kɔ̄rā-dɪ̂əm-nàm*ᵃ *n.* praying mantis
àlá adv. thus
àlá q. so many; how many?
àláafʊ̀ n. health; in greetings 25; cf *láafɪyà* ← Arabic *ʔal-ʕa:fiya*
*Àláasìd dâar*ᵋ *n.* Sunday ← Arabic
*Àlàmɪ́isì dâar*ᵋ *n.* Thursday ← Arabic
*Àlárɪbà dâar*ᵋ *n.* Wednesday ← Arabic
*àlá zùg*ɔ therefore 17.2.1
*àlɔ́pìr*ᵋ *pl àlɔ́pìyà n.* aeroplane ← English
àmáa but 17.2.1 ← Hausa ← Arabic

àmɛ̄ŋá adv. really, truly
àmḭ́ amen ← Arabic *ʔaːmiːn*; in replies to greetings 25
*à-mús*ᴱ *pl à-mús-nàm*ᴬ *n.* cat; cf Hausa *mussàa id*
ànāasí q. four
ànḭ́ adv. there
ànḭ́i q. eight
ànḭ́ nāˡ adv. there
ànḭ́ŋà adv. promptly
*ànɔ̂ˈɔn*ᴱ who? 12.4.4
*àn̆rʊ̀ŋ*ᴐ *pl àn̆rımà cb àn̆rʊ̀ŋ- n.* boat (written *aaruŋ* in the 1976/1996 NT)
*ān̆s*ᴱ *dv*. pluck (leaves)
*án̆sìb*ᴬ *pl ān̆s-nám*ᴬ *cb ān̆s- n.* mother's brother
*ān̆sīg*ᴱˡ *dv*. break at an angle
*ān̆síŋ*ᴬ *pl ān̆sís*ᴱ *cb ān̆sīŋ- n.* (man's) sister's child
*àntù'a pl àntù'ɵs*ᴱ *cb àntu̱'à- n.* lawsuit
ànū q. five
àn̆wá adv. like this
ānzúrıfà n. silver ← Hausa *azùrfaa*
àràkɔ́n̆' q. one
*àràzàk*ᴬ *pl àràzà'as*ᴱ *cb àràzà'- generally pl: n*. wealth, riches ← Arabic *ʔar-rizq*
àràzánà n. heaven ← Arabic *ʔal-ɟanna*
*Àrzúmà dâar*ᴱ *n.* Friday ← Arabic
àsɛ́ɛ except, unless 15 17.2.1 ← Hausa *sai*
*Àsḭ́bıtì dâar*ᴱ *n.* Saturday ← Arabic
àsīdā adv. truly
àsùbá n. dawn ← Arabic *ʔasˁ-sˁaba:ħ*
àtán̆' q. three
*Àtàláatà dâar*ᴱ *n.* Tuesday ← Arabic
àtáŋāˡ q. three exactly
*Àtínì dâar*ᴱ *n.* Monday ← Arabic
*àtìu̱k*ᴐ *n.* sea ← Hausa *tèeku*
àwánāˡ adv. like this
àwāe̱ q. nine
àyḭ́' q. two
áyìı no 18.4
àyḭ́ŋāˡ q. two exactly
àyópɔ̀e̱ q. seven
àyúɵbʊ̀ q. six

B

bà they, their *(right-bound)*; *ba* them *(enclitic)* 12.4.1
bā'$^{/}$ *pl* *bā'-nám*^{a} *cb* *bā'-* *n.* father 5.4
bāa *pl* *bāas*^{ɛ} *cb* *bà-* *n.* dog
báa (← Hausa *bâa* "not exist") *in constituent negation* 23
bā'a *pl* *bā'ab*^{a} *cb* *bà'-* *n.* traditional diviner; *bà'-kɔ̀lʊ̀g*^{ɔ} *pl* *bà'-kɔ̀n*^{nɛ} *cb* *bà'-kɔ̀l-* *n.* diviner's bag
bā'a *pl* *bā'as*^{ɛ} *cb* *bà'-* *n.* peg to hang things on
bà'an^{nɛ} *pl* *bà'anà* *cb* *bà'an-* *n.* stocks (punishment)
bàaňlìg^{a} *pl* *bàaňlìs*^{ɛ} *adj.* narrow, slender
bāaňlíg^{a} *adj.* quiet
bāaňlím^{m} *adv.* quietly
bà'ar^{ɛ} *pl* *bàdà* *bà'a* *cb* *bà'-* *n.* idol
bābá beside *postposition* 13.5; cf *bābīr*$^{ɛ/}$ sphere of activity
bàbɪgā$^{/}$ *q.* many
bákpàe̱ *n.* week ← Hausa *bakwài* "seven"
bàlàar^{ɛ} *pl* *bàlàyà* *cb* *bàlà-* *n.* stick, staff, club
bàlàŋìr^{ɛ} *pl* *bàlàŋà* *cb* *bàlàŋ-* *n.* hat
bālērʊ̄g$^{ɔ/}$ *pl* *bālērīd*$^{ɛ/}$ *bālērīs*$^{ɛ/}$ *cb* *bālér-* *n.* ugly person; cf *lēr*^{ɛ} get ugly
bàmmā$^{/}$ these, those *demonstrative* 12.4.2
bàn^{ɛ} these, those *demonstrative* 12.4.2
bán they *(subject of ǹ-clause)*; *bān*^{ɛ} they, them *(contrastive)* 12.4.1
bāň' *dv.* ride
bānāa *pl* *bānāas*^{ɛ} *cb* *bànà-* *(tone* sic *in my materials)* *n.* traditional "fugu" smock
bàň'ad^{a} *pl* *bàň'ad-nàm*^{a} *n.* ill person
bāň'al$^{ɛ/}$ *dv.* make to ride (horse, bicycle)
bāň'as^{ɛ} *cb* *bàň'-* *n. pl as sg* disease
bàn-dāʊg^{ɔ} *pl* *bàn-dāad*^{ɛ} *cb* *bàn-dà-* *n.* crocodile
bān-kʊ́sɛ́l^{lɛ} *pl* *bān-kʊ́sɛ̄lá* *cb* *bān-kʊ́sɛ̄l-* *n.* lizard
bāŋ^{a} *pl* *bāaňs*^{ɛ} *cb* *bàŋ-* *n.* ring, chain, fetter
bàŋ^{a} *n.* agama lizard
bàŋ^{ɛ} *dv.* come to know
báp wallop!
Bārīg$^{a/}$ *pl* *Bārīs*$^{ɛ/}$ *cb* *Bār-* *n.* Bisa person (not only the Bareka, WK)
bárɪkà *n.* blessing; in greetings 25 ← Arabic *baraka*
Bārʊ̄g$^{ɔ/}$ *n.* Bisa country; North 26.3
bàs^{ɛ} *dv.* go away; abandon; throw out
Bāt$^{ɛ/}$ *n.* Bisa language
bàtáň' *q.* three *(after a personal pronoun)*
bàu̱ŋʊ̀ *n. found only as in* *Ò kpɛ̀ň' báu̱ŋʊ̀.* He was circumcised. ← Songhay "pool"
bàyɛ̄og$^{ɔ/}$ betrayer of secrets (*cf* *yɛ̄ɛs*$^{ɛ/}$)

bàyị́' *q*. two *(after a personal pronoun)*
bàyɔ́pɔ̀e̯ *q*. seven *(after a personal pronoun)*
bɛ̀ *ger* *bɛ̀lím*^{m} *(sic)* *sv*. exist; be in a place 16.12
bɛ̄dīg$^{ɛ/}$ *dv*. go rotten
bɛ̀dʊ̀g^{ɔ} *bɛ̀dìr*^{ɛ} *pl* *bɛ̀dà* *cb* *bɛ̀d-* *adj*. great
bɛ̀dʊgʊ̄$^{/}$ *q*. much, a lot
bɛ̄ɛ or 17.2.1 18.2
bɛ̀kɛ̀kɛ̀oňg^{ɔ} or *bɛ̀kɛ̀oňg*^{ɔ} *n*. very early morning
bɛ̀lìm^{m} *dv*. beg
bɛ̀lìs^{ɛ} *dv*. comfort
bɛ̄n^{nɛ} *pl* *bɛ̄nā* *cb* *bɛ̀n-* *n*. end
bɛ̀ň' *ger* *bɛ̄ň'ɛs*^{ɛ} *dv*. fall ill
bɛ̀ňsìg^{ɛ} *dv*. serve soup
bɛ̀ŋ^{ɛ} *dv*. mark out a boundary
bɛ̄ŋíd^{ɛ} *cb* *bɛ̄ŋ-* *n*. *pl* bean leaves, *Vigna unguiculata*; *bɛ̄ŋíd nɛ̄ kị̄*$^{/}$ *n*. beanleaf-and-millet, a traditional snack
bɛ̄ŋír^{ɛ} *pl* *bɛ̄ŋá* *cb* *bɛ̄ŋ-* *n*. brown bean
bɛ̄og^{ɔ} *n*. tomorrow; *Kà bɛ̄og nị́e kà ...* The next day ...
bɛ̄'og^{ɔ} *bị̄'a* *pl* *bɛ̄'ɛd*^{ɛ} *bị̄'əs*^{ɛ} *cb* *bɛ̀'-* *bi̯à'-* *adj*. bad
bɛ̄ogɔ́ *adv*. tomorrow 17.2.1
bɛ̄ogʊ̄=n$^{ɛ/}$ *n*. morning
bɛ̀rìŋ^{a} *pl* *bɛ̀rɪgìs*^{ɛ} *sic* *n*. a plant used for fibre (KED), *Hibiscus cannabinus*
bɛ̄rɪgā *cb* *bɛ̀rìg-* *pl* leaves of *bɛ̀rìŋ* used for soup (KED)
bɛ̄sʊ̄g^{ɔ} *pl* *bɛ̄sīd*^{ɛ} *cb* *bɛ̀s-* *n*. a kind of wide-mouthed pot
bi̯āň'ar$^{ɛ/}$ *pl* *bi̯āň'adá* *bi̯áň'a* *cb* *bi̯āň'-* *n*. wet mud, black mud; riverbed
bi̯āu̯ňk^{ɔ} *pl* *bi̯āň'ad*^{ɛ} *cb* *bi̯àň'-* *n*. shoulder
bị̄ə́l^{lɛ} *pl* *bị̄əlá* *adj*. naked
bị̀əl^{ɛ} *dv*. accompany
bị̄'əlá *q*. a little; *bị̄'əl* *bị̄'əl* *q. and adv.* a very little; little by little
bị̄'əm^{m} *pl* *bị̀'əm-nàm*^{a} *bị̄'əmmā* LF *cb* *bị̀'əm-* *n*. enemy
bị̄ən^{nɛ} *pl* *bị̄ənā* *cb* *bị̀ən-* *n*. shin
bị̄ər$^{ɛ/}$ *pl* *bi̯ēyá* *cb* *bi̯ā-* *n*. elder sibling of the same sex
bị̀'əs^{ɛ} *dv*. doubt
bị̀gìs^{ɛ} *dv*. show, teach
bị̄ig^{a} *pl* *bị̄is*^{ɛ} *cb* *bị̀-* *bị̄-* *n*. child; *bị̄-díbìŋ*^{a} *n*. boy; *bị̀-lị̄a* *n*. baby; *bị̀-nà'ab*^{a} *n*. prince; *bị̀-pị̄t*$^{a/}$ *pl* *bị̀-pị̄tíb*^{a} *cb* *bị̀-pị̄t-* *n*. father's younger brother; *bị̄-pʊ́ŋ*^{a} *n*. girl
bị̀'ig^{ɛ} *dv*. ripen, become pregnant
bị̄ilíf^{ɔ} *pl* *bị̄ilí* *cb* *bị̄il-* *n*. seed
bị̀ilím^{m} *n*. childhood
bīɪm$^{m/}$ *cb* *bī-* *n*. soup, stew
bị̀'isím^{m} *n*. milk (human or animal)

bị̀'isìr$^{\varepsilon}$ *pl* *bị̀'isà* *cb* *bị̀'is-* *n.* woman's breast
bị̀l^{a} *pl* *bị̀bīs*$^{\varepsilon}$ *cb* *bị̀l-* or *bị̀-* *adj.* little, small
bị̀lìg$^{\varepsilon}$ *dv.* roll *(transitive)*
bị̀lìm^{m} *dv.* roll *(intransitive)*
bìmbìm$^{m\varepsilon}$ *pl* *bìmbìmà* *cb* *bìmbìm-* *n.* altar NT (KED: mound or pillar of earth)
Bìn$^{n\varepsilon}$ *pl* *Bìm*^{ma} *cb* *Bìn-* *n.* Moba, Bimoba person (not only Bemba, WK)
Bìn$^{n\varepsilon}$ *n.* Moba language
bị̄n$^{n\varepsilon}$ *n.* excrement
Bìu̱ŋ^{ɔ} *n.* Moba country
bɔ̀ *dv.* seek; *bɔ̀ɔd*^{a} *ipfv* used for: want, like, love (sexual, romantic)*; ipfv ger* *bɔ̀ɔdìm*^{m} will 9.2.1.4
bɔ̄ *cb* *bɔ̀-* what? why? 12.4.4; *bɔ̀-būudī* what sort of ..?; *bɔ̄-zúgɔ̄* because 17.2.1, why? 13.6; *bɔ̀-wị̀n*$^{n\varepsilon}$ what time of day?; *bɔ̄ kḭ́mm* "exactly what?"
bɔ̀bìg$^{\varepsilon}$ *dv.* wrap round, tie round
bɔ̀dìg$^{\varepsilon}$ *dv.* lose, become lost
bɔ̀dɔ̀bɔ̀dɔ̀ *n.* bread (? ultimately ← English)
bɔ̀k^{ɔ} *pl* *bù'ad*$^{\varepsilon}$ *cb* *bu̱'à-* *n.* pit
bɔ̄sīr$^{\varepsilon}$ *pl* *bɔ̄sā* *cb* *bɔ̀s-* *n.* puff adder
bɔ̄tū *n.* sack
bū' *dv.* beat
bu̱àk$^{\varepsilon}$ *dv.* split
bù'ar$^{\varepsilon}$ *pl* *bu̱'àa* *cb* *bu̱'à-* *n.* hole
bū'ar$^{\varepsilon/}$ *pl* *bu̱'áa* *cb* *bu̱'ā-* *n.* skin bottle
bùd$^{\varepsilon}$ *ger* *būdīg*^{a} *būdūg*^{ɔ} *dv.* plant seeds
bùdàalìm^{m} *n.* manhood, courage
bùdìm^{m} *dv.* get confused
bùdɪmís$^{\varepsilon}$ *n.* confusion
bù'e *dv.* pour out
bùg$^{\varepsilon}$ *dv.* get drunk ← Hausa *bùgu*
būgūd^{a} *n.* client of a *bā'a* traditional diviner
bùgʊlìm^{m} *dv.* cast lots
būgūr$^{\varepsilon}$ *pl* *būgā* *cb* *bùg-* *n.* dwelling-place of a *wīn*$^{n\varepsilon/}$ localised spirit; also a *wīn*$^{n\varepsilon/}$ as a *sīgīr*$^{\varepsilon/}$ 26.2 inherited from one's mother's family
bùgʊ́m^{m} *cb* *bùgūm-* *bùgʊ́m-* *n.* fire; *Bùgʊ́m-tɔ̄ɔ̌ñr*$^{\varepsilon}$ *n.* Fire Festival
būgūs$^{a/}$ *sv.* be soft
būgʊsíg^{a} *būgʊsír*$^{\varepsilon}$ *pl* *būgʊsá* *cb* *būgūs-* *adj.* soft, weak
būgʊsígā$^{/}$ *adv.* softly
būgʊsím^{m} *n.* softness, weakness
būk$^{\varepsilon/}$ *dv.* weaken
bùk$^{\varepsilon}$ *dv.* cast lots
bùl$^{\varepsilon}$ *dv.* germinate, ooze

būl[lɛ] *pl būlā n.* shoot, sprout
bʊ̀l[ɛ] *dv.* astonish
Bùl[lɛ] *n.* Buli language
Bùlìg[a] *pl Bùlìs*[ɛ] *cb Bùl- n.* Bulsa person
bùlìg[a] *pl bùlìs*[ɛ] *cb bùl- n.* well, pond
bʊ̀mbàrìg[a] *pl bʊ̀mbàrìs*[ɛ] *cb bʊ̀mbàr- n.* ant
bʊ̀n[ɛ] *dv.* reap, harvest
bʊ̄n[nɛ/] *pl bʊ̄ná bʊ̄n-nám*[a] *cb bʊ̄n- n.* thing (concrete or abstract); *bʊ̄n-bʊ́ʊdìf*[ɔ] *n.* plant; *bʊ̄n-gíŋ*[a] *n.* short chap (informal, joking); *bʊ̄n-kɔ́ňbʊ̀g*[ɔ] *pl bʊ̄n-kɔ́ňbʊ̀d*[ɛ] *cb kɔ̀ňb-* (*sic*) *n.* animal; *bʊ̄n-kʊ́dʊ̀g*[ɔ] *n.* old man
bʊ̄n-dâar[ɛ] which day? 13.6
bʊ̀ŋ[a] *pl bʊ̀mìs*[ɛ] *cb bʊ̀ŋ- n.* donkey
bʊ̀ŋ[ɛ] *dv.* take a short cut
bʊ̀ɵl[ɛ] *dv.* call, summon; *Ò yʊ̄'ʊr bûɵn* X. She is called X. 16.9.2
bʊ̀ɵr[ɛ] *pl bʊ̰èyà cb bʊ̰à- n.* grain store, silo
bʊ̄'ɵs[ɛ] *dv.* ask; *ger bʊ̄'ɵsʊ́g*[ɔ] *n.* question; *bu'oskaŋa* this question (Jn 18:34)
bʊ̀-pʊ̄ìgā q. adv. ten times
bʊ̄ráa n. man, male adult (in ILK, but characteristically *Toende* Kusaal; see *dāʊ̰*)
bʊ̄rıyá n. Christmas ← Twi/Fante *bronya*
bʊ̀rkìn[a] *pl bʊ̀rkìn-nàm*[a] *cb bʊ̀rkìn- n.* free person; honourable person ← Songhay
Bʊ̀sâaňl[ɛ] *n.* Bisa language
Bʊ̀sáŋ[a] *pl Bʊ̀sâaňs*[ɛ] *cb Bʊ̀sāŋ- n.* Bisa person
bʊ̄tīŋ[a] *pl bʊ̄tīıs*[ɛ] 2.3; *cb bʊ̀tìŋ- n.* cup *(in general; originally "seed-planting [cup]")*
bʊ̄ʊd[ɛ] *n. pl as sg* innocence
būudī cb bùud- n. kind, sort, ethnic group
bʊ̄ʊg[a] *pl bʊ̄ʊs*[ɛ] *cb bʊ̀- n.* goat; *bʊ̀-dìbìg*[a] *n.* male kid

D

dà before two days ago, *tense particle* 16.3.1
dā not *with imperative mood* 16.5
dàa day after tomorrow, *tense particle* 16.3.1
dāa before yesterday, *tense particle* 16.3.1
dà' dv. buy
dà'a pl dà'as[ɛ] *cb dà'- n.* market
dà'abìr[ɛ] *n.* slave
dàalìm[m] *n.* masculinity
dàalím[m] *pl dàalímìs*[ɛ] *n.* male organs
dāam[m/] *cb dā- n.* millet beer, "pito"; *dā-nûur*[ɛ] *n.* beer-drinking; *dā-bʊ́n*[nɛ] *cb dā-bʊ́n- n.* beer residue; NT yeast (cf *bʊ̄n*[nɛ])
dàam[m] *dv.* disturb, trouble ← Hausa *dàamaa*
dāan[a] *pl dàan-nàm*[a] *cb dàan- n.* owner of ... 12.7.2

dāar$^{\varepsilon}$ *pl dābá cb dà- n.* day (24-hour period); *dà-pīigā n.* ten days
dāa-sí'ɛrɛ̄ perhaps 17.2.1
dàbīəm^{m} *tone sic n.* fear
dàbīog^{ɔ} *pl dàbīəd*$^{\varepsilon}$ *cb dàbi̱à- n.* coward
dàbısìr$^{\varepsilon}$ *pl dàbısà cb dàbìs- n.* day (as one of several)
dādʊ́k^{ɔ} *n.* a kind of large pot
dā'e$^{/}$ *dv.* push; blow (of wind)
Dàgâad^{a} *pl Dàgáadìb*^{a} *Dàgâad-nàm*^{a} *cb Dàgâad- n.* Dagaaba person (L prefix *sic*)
Dàgbān$^{nɛ/}$ *pl Dàgbām*$^{ma/}$ *cb Dàgbān- n.* Dagomba person
Dàgbān$^{nɛ/}$ *n.* Dagbani language
Dàgbāu̱ŋ$^{ɔ/}$ *n.* Dagomba country, Dagbon
dàgɔ̀bìg^{a} *n.* left-hand; *yà dàgɔ̀bìg*^{a} South KB 26.3
dāká pl dāká-nàm^{a} *cb dāká- n.* box ← Hausa *àdakàa*
dàkīig^{a} *pl dàkīis*$^{\varepsilon}$ *cb dàkì- n.* wife's sibling; *dàkì-dāu̱ n.* wife's brother; *dàkì-pu̱āk*^{a} *n.* wife's sister; *dàkì-tùa n.* wife's sister's husband
dà-kɔ̀ɔ̌nr$^{\varepsilon}$ *pl dà-kɔ̀ǹyà cb dà-kɔ̀ǹ- n.* unmarried son 26.1
dàm^{m} *ipfv dàmmìd*^{a} *dv.* shake
dàmà'a n. liar cf *mà'*
dàmà'am^{m} *n.* lie, untruth, lying
dàmà'ar$^{\varepsilon}$ *n.* lie, untruth
dāmpʊ̄sāar$^{\varepsilon}$ *n.* stick
dànkɔ̀ŋ^{ɔ} *n.* measles
dànsàar$^{\varepsilon}$ *n.* staff, club
dà-pāal$^{a/}$ *n.* young man, son
dà-sāŋ^{a} *pl dà-sāaǹs*$^{\varepsilon}$ *dà-sām*^{ma} *cb dà-sàŋ- n.* young man
dà-tāa pl dà-tāas$^{\varepsilon}$ *cb dà-tà- n.* enemy
dàtìu̱ŋ^{ɔ} *n.* right-hand; *yà dàtìu̱ŋ*^{ɔ} North KB 26.3
dāu̱ pl dāp^{a} *cb dàu̱- dàp-* 5.2 *n.* man (as opposed to woman)
dàʊgɔ *pl dàad*$^{\varepsilon}$ *cb dà- n.* piece of wood, log; *pl also:* wood (material); *dà-kīəd*^{a} *n.* wood-cutter; *dà-kpī'əd*^{a} *n.* carpenter; *dà-pʊ̄ʊdír*$^{\varepsilon}$ *n.* cross-piece, *pl dà-pʊ̄ʊdá n. used as sg* cross NT
dāʊgɔ *pl dāad*$^{\varepsilon}$ *cb dà- adj.* male
dàwàlìg^{a} *n.* hot humid season before the rains
dàwān$^{nɛ/}$ *pl dàwānáa cb dàwān- n.* pigeon
dàyáam^{ma} *pl dàyāam-nám*^{a} *cb dàyāam- n.* husband's parent; *dàyāam-dáu̱ n.* husband's father; *dàyāam-pu̱ák*^{a} *n.* husband's mother
dàyūug$^{ɔ/}$ *pl dàyūud*$^{ɛ/}$ *cb dàyū- n.* rat
dɛ̀bìr$^{\varepsilon}$ *pl dɛ̀bà n.* mat, pallet, bed
dɛ̀ɛg^{a} *pl dɛ̀ɛs*$^{\varepsilon}$ *n.* warthog
dɛ̄ɛŋ^{a} *pl dɛ̄ɛǹs*$^{\varepsilon}$ *dɛ̄ɛmīs*$^{\varepsilon}$ *dɛ̄ɛnā cb dɛ̀ɛŋ- q.* first
dɛ̄l$^{la/}$ *ger dɛ̄llʊ́gɔ* *dɛ̄llím*^{m} *sv.* be leaning on something (of a person)

dɛ̀lìm^{m} *dv*. begin to lean on something (of a person)
dɛ̄ŋ^{a} *pl* *dɛ̄mīs*^{ɛ} *cb* *dɛ̀ŋ-* *n.* accidental bruise; defect
dɛ̀ŋ^{ɛ} *dv*. go, do first
dɛ̀ŋìm beforehand, *preverb* 16.8
dì it, its *(right-bound)* 12.4.1 = *lì*
dì ipfv *dìt*^{a} *imp* *dìm*^{a} *dv*. eat, receive; *ger* *dīɪb*^{ɔ} *n.* food; *Ò dì pu̱'ā.* He's married a wife. *Ò dì ňyán.* She's ashamed.
di̱ā'^{a} *dv*. get dirty
di̱ā'ad$^{ɛ/}$ *n.* dirt
dī'e$^{/}$ *dv*. receive, get
dìəm^{ma} *pl* *dìəm-nàm*^{a}*cb* *dìəm-* *n.* wife's parent; *also in polite address to an unrelated person of opposite sex and similar or greater age than onself; dìəm-dāu̱* *n.* wife's father; *dìəm-pu̱āk*^{a} *n.* wife's mother
dì'əm^{m} *dv*. play, not be serious
dì'əmà *n.* festival
dī'əs$^{ɛ/}$ *dv*. receive (many things)
dīgī$^{ya/}$ *ger* *dīk*$^{a/}$ KT *dīgīr*$^{ɛ/}$ WK *sv*. be lying down
dīgɪsá *n. pl* lairs
dīgīl$^{ɛ/}$ *dv*. lay down
dìgìn^{ɛ} *dv*. lie down
dìgìr^{ɛ} *pl* *dìgà* *cb* *dìg-* *n.* dwarf
dìɪs^{ɛ} *dv*. feed; *agt* *dìɪs*^{a} *n.* glutton
dìɪsʊ́ŋ^{ɔ} *pl* *dìɪsímà* *dìɪsís*^{ɛ} *cb* *dìɪsʊ́ŋ-* *n.* spoon
dìm^{a} *dummy head pronoun, animate pl*; *dìn*^{nɛ} *inanimate sg* 12.4.7
dín it *(subject of ǹ-clause)* 12.4.1
dīn^{ɛ} it *(contrastive)* 12.4.1 = *līn*^{ɛ}
dìndɛ̄og$^{ɔ/}$ *pl* *dìndɛ̄ɛd*$^{ɛ/}$ *cb* *dìndɛ̄-* *n.* chameleon
dìndìɪs^{a} *n.* glutton
dìn zúg^{ɔ} therefore 13.6
dìtʊ́ŋ^{ɔ} *n.* right-hand (see *dàtìu̱ŋ*^{ɔ})
dì-zɔ̄rʊ̄g$^{ɔ/}$ *pl* *dì-zɔ̄rá* *cb* *dì-zɔ̄r-* *n.* crumb
dɔ̄l$^{la/}$ *ger* *dɔ̄llím*^{m} *sv*. accompany in a subordinate role; *Ànɔ́'ɔnì dɔ̄llí fɔ̀?* Who has come with you? (to an elderly patient.) *Bà dɔ̀l nɛ̄ tāabā.* They went together.
dɔ̄līg$^{ɛ/}$ *dv*. make accompany, send along with
dɔ̄līs$^{ɛ/}$ *dv*. investigate, trace
dɔ̄ňlīg$^{ɛ/}$ *dv*. stretch oneself
dɔ̀ň'ɔs^{ɛ} *dv*. water plants
dɔ̀ɔg^{ɔ} *pl* *dɔ̀ɔd*^{ɛ} *dɔ̀t*^{ɛ} *cb* *dɔ̀-* *n.* house, hut; clan; *dɔ̀ɔg bi̱ig*^{a} *n.* housecat
dɔ̀ɔňg^{ɔ} *pl* *dɔ̀ɔňd*^{ɛ} *cb* *dɔ̀ň-* *n.* dawadawa fruit
dʊ̄ ipfv *dʊ̄t*$^{a/}$ *imp* *dʊ̀m*^{a} *dv*. go up
du̱'à^{a} *dv*. bear, give birth, beget; *agt* *dʊ̄'ad*^{a} *n.* elder relation

dʋ̀'al^{ɛ} *dv*. make interest (of a loan)
dʊ̄'am^{m} *n*. birth
dùaň pl dɔ̀ɔňs^{ɛ} *cb dɔ̀ň- n.* dawadawa *Parkia clappertoniana* [*biglobosa*]
dʊ́'atà n. doctor ← English
dūe$^{/}$ *dv*. raise, rise
dʊ̄g^{ɛ} *dv*. cook
dʊ̄k$^{ɔ/}$ *pl dʊ̄gʊ̄d*$^{ɛ/}$ *cb dʊ̄g- n.* cooking pot; *dʊ̄g-pɛ́'ɛlà n.* full pots; *dʊ̄gʊ̄b dʊ́t* cooking pots
dùm^{m} *dv*. bite
dūm^{mɛ} *dūm*^{nɛ} *pl dūmā cb dùm- n.* knee
dʋ̀ndùug^{ɔ} *pl dʋ̀ndùud*^{ɛ} *cb dʋ̀ndù- n.* cobra
dūnɪyā cb dūnɪyá- 5.5 *n.* world ← Arabic *dunya:*
dūnná adv. this year
dūŋ^{a} *pl dūmīs*^{ɛ} *cb dùŋ- n.* mosquito
dūɵr$^{ɛ/}$ *pl du̯ēyá cb du̯ā- n.* stick
dū'ɵs$^{ɛ/}$ *dv*. lift up, honour
dùr^{a} *sv*. be many
dū'un$^{ɛ/}$ *dv*. pass water
dū'uním^{m} *cb dū'un- n.* urine
dʊ̄ʋsá n. pl. steps

E

ɛ̄ɛň yes 18.4
ɛ̄ɛň or *ɛ̄ɛň tí* see *ňyɛ̄ɛ*, *ňyɛ̄ɛ tí* habitually *auxiliary tense marker* 16.3.1
ɛ̄ɛňb$^{ɛ/}$ *dv*. lay a foundation
ɛ̄ɛňbír^{ɛ} *n.* foundation 8.1.2
ɛ̀ňbìs^{ɛ} *dv*. scratch
ɛ̀ňd^{ɛ} *dv*. block up, plug up
ɛ̀ňdìg^{ɛ} *dv*. unblock, unplug
ɛ̄ňrīg$^{ɛ/}$ *dv*. shift along (e.g. a bench)

F

f^{ɔ} you *sg (enclitic)* 12.4.1
fāaň q. every
fāeň$^{/}$ *dv*. save; *agt fāaňd*$^{a/}$ *fāaňgíd*^{a} *n.* saviour 11.1
fāň dv. grab, rob
fáss ideo. for pị̀əlìg^{a} white
fɛ̄ɛg$^{ɛ/}$ *dv*. (of food) get old, cold
fɛ̄ňdīg$^{ɛ/}$ *dv*. turn round *(tone uncertain)*
fɛ̄ň'og$^{ɔ/}$ *pl fɛ̄ň'ɛd*$^{ɛ/}$ *cb fɛ̄ň'- n.* ulcer
fị̀əb^{ɛ} *dv*. beat
fị̀'ig^{ɛ} *dv*. cut off

fi̱iň q. a little (liquid)
fi̱tlá n. lamp ← Hausa *fi̱tilàa*; *in KB adapted to the rɛ|aa class*: *sg fitir pl fita*
fɔ̄ɔs$^{ɛ/}$ *dv*. blow, puff (wind); *ger fɔ̄ɔsʊ́g*^{ɔ} *n.* hypocrisy NT
fʊ̀ you, your *sg (right-bound)* 12.4.1
fùe dv. draw out
fʊ̄fʊ̄m^{mɛ} *pl fʊ̄fʊ̄mā cb fʊ̄fʊ́m- n*. envy; stye (believed to result from envy)
fʊ́n you *sg (as subject of ǹ-clause)*; *fʊ̄n* SF *fʊ́nɛ̀* LF you *sg (contrastive)* 12.4.1
fūug$^{ɔ/}$ *pl fūud*$^{ɛ/}$ *fūt*$^{ɛ/}$ *cb fū- n.* shirt, clothing; *pl also:* cloth

G

gàad^{ɛ} *dv*. pass, surpass 19.1
gáafàrà sorry *formula* 25 (Hausa *gaafaràa*, ultimately ← Arabic)
gà'al^{ɛ} *dv*. button up
gà'am^{m} *dv*. grind teeth
gāaň$^{/}$ *pl gāaňs*$^{ɛ/}$ *cb gāň- n.* Nigerian ebony *Diospyros mespilliformis*
gàas^{ɛ} *dv*. pass by
gādʊ̄ gādʊ̄g$^{ɔ/}$ *pl gādʊ̄-nám*^{a} *gāt*$^{ɛ/}$ *cb gād- gādʊ̄- n.* bed ← Hausa *gadoo*
gàlìm^{m} *dv*. joke
gàlìs^{ɛ} *dv*. exceed, get to be too much
gāňr$^{ɛ/}$ *pl gāňyá cb gāňr- n.* fruit of Nigerian ebony
gàŋ^{ɛ} *dv*. step over
gāŋ$^{ɛ/}$ *dv*. choose
gbāň'e$^{/}$ *dv*. catch
gbáňyà'a n. lazy person 11
gbáňyà'am^{m} *n.* laziness; 1976 NT *gonya'am*
gbàu̱ŋ^{ɔ} *pl gbànà cb gbàn- gbàu̱ŋ- n.* book WK
gbāu̱ŋ$^{ɔ/}$ *pl gbāná cb gbān- gbāu̱ŋ- n.* animal skin WK; animal skin, book DK
gbêɛňm^{m} *cb gbɛ̄ň- n.* sleep
gbè'og^{ɔ} *pl gbè'ɛd*^{ɛ} *gbèdà cb gbè'- n.* forehead; shore of a lake
gbɛ̄r$^{ɛ/}$ *pl gbɛ̄yá cb gbɛ̄r- n.* thigh
gbīgīm^{nɛ} *pl gbīgımā cb gbìgìm- n.* lion
gbi̱n^{nɛ} *pl gbi̱nà cb gbi̱n- n.* buttock; base (e.g. of a mountain); *postposition* 13.5
gbi̱n-vɔ̀ɔňr^{ɛ} *n.* anus
gbī̱s^{ɛ} *dv*. sleep
gɛ̄ɛl$^{ɛ/}$ *dv*. place between one's legs (Pattern H)
gɛ̄ɛňm$^{m/}$ *dv*. go mad, madden
gɛ̄ɛňmís^{ɛ} *n. pl as sg* madness
gɛ́ɛňŋ^{a} *pl gɛ̄ɛňmís*^{ɛ} *n.* madman
gɛ́l^{lɛ} *pl gɛ̄lá cb gɛ̄l- n*. egg
gɛ̄ň dv. get tired; *resultative adj gɛ̄ɛňlʊ́ŋ*^{ɔ} tired
gɛ̄ň' dv. get angry

*gɛ̄og*ɔ *n.* place between one's legs (Pattern A *sic*)
*gi̱ĭnlím*m *n.* shortness
*gìk*a *pl* *gìgìs*ɛ *cb* *gìg-* *n.* dumb person
*gìgılìm*m *dv.* become dumb
*gi̱līg*ɛ/ *ipfv* *gi̱n*na/ *dv.* go around 7.1
*gi̱m*ma/ *sv.* be short
*gi̱ŋ*a *pl* *gi̱mā* *cb* *gìŋ-* *adj.* short
*gìŋ*ɛ *dv.* scrimp
*gi̱ŋ*ɛ/ *dv.* surround, intercept, obstruct
gi̱ŋā *adv.* shortly
*gi̱ŋīlím*m *n.* shortness
*gɔ̄dīg*ɛ/ *gɔ̀'ɔn*ɛ *dv.* look up
*gɔ̄l*la/ *gɔ̄r*a/ *gɔ̄'e*ya/ *sv.* be looking up
gɔ̀ŏ *dv.* hunt; *ipfv* *gɔ̀ɔŏd*a wander, *ger* *gɔ̀ɔŏdìm*m wandering 9.2.1.4
*Gɔ̀ɔg*a *pl* *Gɔ̀ɔs*ɛ *n.* clan name
*Gɔ̀ɔg*ɔ *n.* place of the *Gɔ̀ɔs*ɛ Goosi clan
*gɔ̀'ɔn*ɛ *dv.* look up
*gɔ̄r*a/ *sv.* be looking up
*gɔ̄s*ɛ *ipfv* *gɔ̄sīd*a/ *gɔ̄t*a/ *imp* *gɔ̀sìm*a *gɔ̀m*a *ger* *gɔ́sìg*a *dv.* look; *agt* *gɔ̄t*a/ *n.* seer, prophet
gū' *dv.* guard, protect
*gʉ̀l*ɛ *ipfv* *gʉ̀n*na *dv.* suspend
*gʉ̀l*la *ger* *gʉ̄līb*ɔ *sv.* be suspended
gʉ̀llīmm SF *gʉ̀llìmnɛ̀* LF only; *emphatic* 24.7
*gʉ̀m*mɛ *pl* *gʉ̀mà* *n.* kapok fruit; *also* thread WK
*Gʉ̀m*mɛ *n.* place of the clan *Gʉ̀m-dìm*a
*gʉ̄mpʉ̄zɛ̄r*ɛ/ *pl* *gʉ̄mpʉ̄zɛ̄yá* *cb* *gʉ̄mpʉ̄zɛ́r-* *n.* duck
gʉ̀ŏ'a *pl* *gɔ̀ŏ'ɔs*ɛ *cb* *gɔ̀ŏ'-* *n.* thorn; Acacia; *gɔ̀ŏ'-sābılíg*a *Acacia hockii*
*gʉ̀ngʉ̄m*mɛ *n.* kapok material
*gʉ̀ŋ*a *pl* *gʉ̀mìs*ɛ *cb* *gʉ̀ŋ-* *n.* kapok tree *Ceiba pentandra*
*gūr*a/ *ger* *gūrím*m *sv.* be on guard, watch for 22.1
*Gʉ̄rín*nɛ *n.* Farefare language
*Gʉ̄ríŋ*a *pl* *Gʉ̄rís*ɛ *n.* Farefare person
*gū'ul*ɛ/ *dv.* put on guard
*gʉ̀'ʊlìm*m *dv.* become half-ripe
*gʉ̀ʊr*ɛ *pl* *gʉ̀yà* *cb* *gʉ̀-* *n.* upland; bank of river
*gʉ̄ʊr*ɛ *pl* *gʉ̄yā* *cb* *gʉ̀-* *n.* ridge of back
*gū'us*ɛ/ *dv.* take care, watch out
*gʉ̄'ʊs*ɛ *n. pl* half-ripe fruit

H

hālí until, up to, even 15 17.2.1 19 24.7; ? ← Arabic *ħatta:*; *hālí báa* even

I

i̯ā *dv*. seek
i̯āň'as$^{ɛ/}$ *dv*. leap
i̯āňk$^{ɛ/}$ *ger i̯āň'ad*$^{a/}$ *agt i̯āň'ad*$^{a/}$ *dv*. leap, fly 7.1
ịgī$^{ya/}$ *ger ịk*$^{a/}$ KT *ịgīr*$^{ɛ/}$ WK *sv*. be kneeling
ịgīl$^{ɛ/}$ *dv*. make to kneel
ỳgìn^{ɛ} *dv*. kneel down
íɪl^{lɛ} *pl īɪlá cb īɪl- n.* horn
ịsīr^{ɛ} *pl ịsā cb ỳs- n.* scar
ỳsìg^{ɛ} *dv*. get up early

K

kà and, that 17.2
kā *dv*. bail (water)
kāab$^{ɛ/}$ *dv*. offer, invite
kāal$^{ɛ/}$ *dv*. count
kāas$^{ɛ/}$ *dv*. cry out, weep; (cock) crow
kà'asìgɛ̀ LF *only*; *sv*. not exist 16.5
kābīg$^{ɛ/}$ *dv*. ladle out (liquid)
kābīr$^{ɛ/}$ *ger kābɪrí dv*. call out asking for admission 25
kàd^{ɛ} *dv*. drive away; *kàd sàrịyà dv.* judge 16.9.1; *agt sàrịyà-kāt*^{a} *n.* judge NT
kā'e̯ ger kā'alím^{m} *sv.* not exist, not be, not have 16.5 4.3
kāl$^{lɛ/}$ *pl kālá cb kāl- n.* number
kàlɪgā$^{/}$ *q*. few
kàm^{a} *q*. every
Kàmbʊ̀nìr^{ɛ} *n.* Twi language
Kàmbʊ̀ŋ^{a} *pl Kàmbʊ̀mìs*^{ɛ} *cb Kàmbʊ̀ŋ- n.* Ashanti person
kàn^{ɛ} this, that *demonstrative* 12.4.2
kàňb^{ɛ} *ger kāňbīr*^{ɛ} *dv*. scorch
kāňdʊ̄g^{ɔ} *adj*. fat, tough (person)
kàŋā$^{/}$ this, that *demonstrative* 12.4.2
kàr^{a} *sv*. be few
kàrìm^{m} *dv*. read
kàsɛ̄t$^{a/}$ *n*. witness; testimony (Mooré *kàsétò* "proof, testimony"; probably ultimately ← French *cachet*; *pl kàsɛ̄tíb*^{a} witnesses)
kɛ̄ ipfv kɛ̄t$^{a/}$ *imp kɛ̀l*^{a} *dv*. let, cause to ... 7.1 19.2
kɛ̀ɛkɛ̀ pl kɛ̀ɛkɛ̀-nàm^{a} *cb kɛ̀ɛkɛ̀- n.* bicycle ← Hausa *kèekè*
kɛ̀ɛs^{ɛ} *dv*. say farewell to
kɛ̀lìg^{ɛ} *or kɛ̀lìs*^{ɛ} *dv*. listen

kɛ̄ň ipfv kɛ̄n$^{a/}$ *imp kɛ̀m*^{a} *ger kɛ̄n*$^{nɛ/}$ *dv*. come 7.1; *always with nā* 16.11; *kɛ̄n kɛ̄n* welcome! 25

kɛ̄ŋ$^{ɛ/}$ *ipfv kɛ̄n*$^{na/}$ *imp kɛ̀m*^{a} *(disambiguated with sà* 16.11*) dv*. go; walk 7.1; *agt kɛ̄n*$^{na/}$ *n.* traveller

kɛ́rɪfà or *kárɪfà* ← Hausa *ƙarfèe*; *in telling time, e.g. kɛ́rɪfà àtáň'* three o'clock

kị̄$^{/}$ *cb kị̄- kā- n.* cereal, millet; *kị̀-dà'ar*^{ɛ} *pl kị̀-dà'adà n.* purchased millet; *kā-wɛ̄nnīr*^{ɛ} *pl kā-wɛ̄nnā cb kā-wɛ́n- n.* corn

kịà dv. cut

kị̄dīg$^{ɛ/}$ *dv*. cross over, meet; *À-Kị̄dɪgī Bū'ɵs n.* the constellation Orion

kī'ɪb$^{ɔ/}$ *n*. soap; WK has instead the Mampruli loan *kị̄ibʊ́ cb kị̄ib-*

kị́iňf^{ɔ} *pl kị̄iní n.* millet seed

kìɪs^{ɛ} *dv*. listen

kī'ɪs$^{ɛ/}$ *dv*. deny

kìkàm^{mɛ} *pl kìkàmà n.* fig

kìkàŋ^{a} *kìnkàŋ*^{a} *pl kìkàmìs*^{ɛ} *cb kìkàŋ- n.* fig tree *Ficus capensis*

kìkị̄rīg$^{a/}$ *pl kìkị̄rīs*$^{ɛ/}$ *cb kìkị̄r- 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 *kìkị̄rīs*$^{ɛ/}$ hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; *kìkị̄r-bɛ̂'ɛd*^{ɛ} *n.* NT evil spirit, demon (KB just uses *kìkị̄rīg*$^{a/}$)

kị̄līm$^{m/}$ *dv.* become, change into

kìm^{m} *dv*. tend flock, herd; *agt kɔ̀ňb-kīm*^{na} *n.* herdsman, shepherd

kị̄r^{ɛ} *ger kìkị́rʊ̀g*^{ɔ} *kị̄rīb*^{ɔ} *dv*. hurry, tremble

kị̄s$^{a/}$ *ger kị́sʊ̀g*^{ɔ} *agt kị̄s*$^{a/}$ *kị̄sīd*$^{a/}$ *sv*. hate

kị́sʊ̀g^{ɔ} *adj*. hateful, taboo

kɔ̀ dv. get broken, break *(intransitive)*; *resultative adj kɔ̀ɔlʊ́ŋ*^{ɔ} broken

kɔ̀bɪgā (SF and LF identical) q. one hundred; *kɔ̀bɪsị́* two hundred

kɔ̄bīr^{ɛ} *pl kɔ̄bā cb kɔ̀b- n.* bone

kɔ̄dīg$^{ɛ/}$ *dv*. slaughter (one animal) by cutting its throat

kɔ̄dʊ́ n. banana ← Twi *kwadu*

kɔ̀l^{ɛ} *dv*. put something around the neck

kɔ̀lɪbìr^{ɛ} *pl kɔ̀lɪbà n.* bottle

kɔ̄līg^{a} *pl kɔ̄līs*^{ɛ} *cb kɔ̀l- n.* river; *kɔ̄lʊgʊ̄=n nɔ́-dâʊg*^{ɔ} *n.* crayfish

kɔ̀lʊ̀g^{ɔ} *pl kɔ̀n*^{nɛ} *cb kɔ̀lʊ̀g-* 5.2 *n.* sack, bag

kɔ̄m$^{m/}$ *cb kɔ̄m- n.* hunger

kɔ̄ňbʊ̄g^{ɔ} *pl kɔ̄ňbīd*^{ɛ} *cb kɔ̀ňb- (also used as cb of bʊ̄n-kɔ́ňbʊ̀g*^{ɔ} animal*) n.* animal hair or human body hair; cf *zūɵbʊ́g*^{ɔ}; *kɔ̀ňb-kīm*^{na} *pl kɔ̀ňb-kīmmīb*^{a} *n.* shepherd, herdsman

kɔ̄ň'ɔkɔ̄ adv. alone, by oneself

kɔ̀ňs^{ɛ} *dv*. cough

kɔ̀ňsìm^{m} *dv*. cough

kɔ̀'ɔg$^{\varepsilon}$ *dv*. break *(transitive or intransitive)*
kɔ̀'ɔs$^{\varepsilon}$ *dv*. break several times
kɔ̄t$^{\varepsilon/}$ *dv*. slaughter (several animals) by cutting their throats
kɔ̀tàa$^{n\varepsilon}$ at all; *emphatic* 24.7
kɔ́tɔ̀ n. lawcourt ← English, probably via Hausa
kpà' dv. nail, fasten
kpà'a pl kpà'a-nàm^{a} *n*. rich person
kpāad$^{a/}$ *pl kpāadíb*^{a} *cb kpāad- n.* farmer, cultivator
kpà'am^{m} *n*. riches
kpāaňm$^{m/}$ *cb kpāň- n.* grease, ointment; *kpāň-sɔ́ň'ɔdìm*^{m} *n.* anointing oil
kpàkʊ̄r$^{\varepsilon/}$ *pl kpàkʊ̄yá cb kpàkʊ̄r- n.* tortoise
kpān$^{n\varepsilon}$ *pl kpānā cb kpàn- n.* spear
kpàňdìr$^{\varepsilon}$ *pl kpàňdà cb kpàňd- n.* baboon
kpàr$^{\varepsilon}$ *dv*. lock
kpār-kêoňg^{ɔ} *pl kpār-kêɛňd*$^{\varepsilon}$ *cb kpār-kɛ́ň- n.* rag
kpá'ʊŋ^{ɔ} *pl kpī'iní cb kpā'- n.* guinea fowl
kpɛ̄ adv. here
kpɛ̄ɛňm^{m} *pl kpèɛňm-nàm*^{a} *cb kpèɛňm- n.* elder
kpɛ̄ɛňm$^{ma/}$ *sv*. be older than
kpɛ̄lá adv. here
kpèlìm still; immediately after, *preverb* 16.8
kpèlìm^{m} *dv*. remain
kpèn reduced form of the preverb kpèlìm
kpèň' dv. enter
kpɛ̄ňdīr$^{\varepsilon/}$ *pl kpɛ̄ňdá cb kpɛ̄ňd- n.* cheek
kpèň'ɛs$^{\varepsilon}$ *dv*. make enter
kpè'ŋ$^{\varepsilon}$ *dv*. strengthen
kpɛ̄oňŋ^{ɔ} *n.* seniority
kpì dv. die; *resultative adj kpìilʊ́ŋ*^{ɔ} dead
kpì'a pl kpì'əs$^{\varepsilon}$ *cb kpi̱à'- n.* neighbour
kpi̱à' dv. shape wood with axe etc
kpì'e dv. approach
kpī'əm$^{ma/}$ *sv*. be strong, hard
kpìibìg^{a} *pl kpìibìs*$^{\varepsilon}$ *cb kpìib- n.* orphan
kpìig$^{\varepsilon}$ *dv*. go out (fire)
kpī'ılím^{m} *dv*. finish, come to an end
kpī'im$^{m/}$ *pl kpī'imís*$^{\varepsilon}$ *cb kpī'im- n.* dead person, corpse
kpìis$^{\varepsilon}$ *dv*. quench (fire)
kpīkpī̱n$^{na/}$ *pl kpīkpī̱nníb*^{a} *cb kpīkpí̱n- n.* merchant
kpī'oŋ^{ɔ} *pl kpī'əmā cb kpì'oŋ- adj*. strong, hard
kpìsìnkpìl$^{l\varepsilon}$ *pl kpìsìnkpìlà cb kpìsìnkpìl- n.* fist

kpìsʊ̀kpi̱lˡᵋ n. fist
kpʊ̀kpàrᵋ pl kpʊ̀kpàrà n. palm tree fruit
kpʊ̀kpàrìgᵃ pl kpʊ̀kpàrìsᵋ cb kpʊ̀kpàr- n. palm tree, *Borassus akeassii/aethiopum*
kpʊ̀kpàu̱ŋᵓ pl kpʊ̀kpàmà cb kpʊ̀kpàu̱ŋ- n. arm, wing
kʊ̀ not; *negates irrealis mood* 16.5
kʊ̄ dv. kill (= Mooré *kʊ́*)
kʊ̄ dv. gather, threaten (of rain): *Sāa kʊ́ yā.* It looks like rain (= Mooré *kʊ́ɪ*)
ku̱ā dv. hoe, farm
kʊ̄'alíŋᵃ pl kʊ̄'alímìsᵋ kʊ̄'alísᵋ cb kʊ̄'alíŋ- n. sleeveless traditional smock
kʊ̀dᵋ dv. work iron
kʊ̀dìgᵋ dv. shrivel up, dry out, age
kʊ̄dīmᵐ n. the olden days; *also for kʊ̄līm qv*
kʊ̄dʊ̄gᵓ kʊ̄dīrᵋ pl kʊ̄dā kʊ̄tᵋ cb kʊ̀d- adj. old
kūdʊ̄gᵓ pl kūtᵋ (used as sg 12.2) *cb kùt- n.* iron, nail; *sg only in names* 26.2
kūgʊ̄rᵋ/ pl kūgá cb kūg- n. stone
kʊ̄kᵃ pl kʊ̄gʊ̄sᵋ cb kʊ̀g- n. chair
kʊ̀kᵃ n. ghost
kʊ̄kᵃ/ n. mahogany tree, *Khaya senegalensis*; cf Hausa *kuukàa*
kʊ̀kɔ̀mᵐᵋ pl kʊ̀kɔ̀mà cb kʊ̀kɔ̀m- n. leper
kʊ̀kɔ̄rᵋ/ pl kʊ̀kɔ̄yá cb kʊ̀kɔ̄r- n. voice
kʊ̀kpàrìgᵃ see *kpʊ̀kpàrìgᵃ id*
kūlᵋ ger kūlīgᵃ/ dv. return home; *transitive* marry *(woman subject, man object)*
kʊ̄līm always, *post-subject particle* 17.2.3
kʊ̀lìŋᵃ pl kʊ̀lɪmìsᵋ kʊ̀lìsᵋ cb kʊ̀lìŋ- n. door
kʊ̀mᵐ dv. cry, weep
kūmᵐ cb kùm- n. death; *kùm-vʊ̄'ʊgírᵋ n.* resurrection NT
kʊ̀ndʊ̀'arᵋ pl kʊ̀ndʊ̀'adà cb kʊ̀ndu̱'à- n. barren woman
kʊ̀ndʊ̀ŋᵃ pl kʊ̀ndʊ̀mìsᵋ kʊ̀ndʊ̀nà n. jackal, hyena
kʊ̀'ɵmᵐ cb ku̱'à- n. water; *ku̱'à-nūudᵋ/ n.* thirst; *ku̱'à-ňwi̱ígᵃ/ pl ku̱'à-ňwi̱ísᵋ/ n.* current in a river
kʊ̀ɵsᵋ dv. sell
kʊ̀rkʊ̄rᵋ/ pl kʊ̀rkʊ̄yá cb kʊ̀rkʊ̄r- n. pig
Kʊ̄sáa pl Kʊ̄sâasᵋ cb Kʊ̄sá- n. Kusaasi person
Kʊ̄sâalᵋ n. Kusaal language
Kʊ̄sâʊgᵓ n. Kusaasi country
Kʊ̀tānⁿᵋ/ pl Kʊ̀tāmᵐᵃ/ cb Kʊ̀tān- n. member of WK's clan
Kʊ̀tāu̱ŋᵓ/ n. country of clan *Kʊ̀tāmᵐᵃ/* Kutamba
kʊ̄ʊ or 17.2 18.2 ← Hausa *koo*
kūugᵃ/ kūugᵓ/ pl kūusᵋ/ cb kū- n. mouse
kʊ̀ʊlᵋ dv. get drunk

L

lā/ *definite article* 12.8.5
là' *dv*. laugh
*lā'af*ɔ *n.* cowrie; *pl* *līgıdī* *n.* cowries, money; *cb* *lìg-* *là'-*; *là'-bīəlífɔ* *n.* small coin
láafìyà *n.* health ← Arabic *ʔal-ʕa:fiya*; *replaced by laafe* *láafì* *in 1996 NT and KB*
là'am together, *preverb* 16.8
*là'am*m *dv*. associate with; together with 19.1
*là'as*ɛ *dv*. gather together *(transitive)*; *Bà là'as tāabā* They gathered together.
*làbāar*ɛ *cb* *làbà-* *n.* news ← Arabic *ʔal-ʔaxba:r*
*làbì*ya *sv*. be crouching, hiding behind something (cf Hausa *laɓèe* "crouch behind something to eavesdrop" 11.1)
*làbìl*ɛ *dv*. make crouch behind something
*làbìn*ɛ *dv*. crouch behind something
*làbìs*ɛ *dv*. walk stealthily
*lābīs*a/ *sv*. be wide
*lābısíg*a *lābısír*ɛ *pl* *lābısá* *cb* *lābīs-* *adj*. wide
*lābısím*m *n.* width
*lāk*ɛ/ *dv*. open (eye, book)
*lāl*la/ *sv*. be distant
*lālīg*ɛ/ *dv*. get to be far, make far
lāllí *adv*. far off
*lāllíŋ*a *pl* *lāllís*ɛ *cb* *lāllíŋ-* *adj*. distant
*lāllúg*ɔ *pl* *lāllá* *cb* *lāl-* *adj*. distant
*lām*mɛ/ *pl* *lāmá* *cb* *lām-* *n.* gum (of tooth); *lām-fɔ̂ɔg*ɔ *pl* *lām-fɔ̂ɔd*ɛ *adj*. toothless
*làmpɔ̄-dʃ̂'əs*a *n.* tax collector 11 ← French *l'impôt*
*lān*nɛ *pl* *lānā* *cb* *làn-* *n.* testicle
*làngávŋ*ɔ *pl* *làngáam*mɛ *làngāamá* *cb* *làngāvŋ-* *n.* crab (cf *màngávŋ*ɔ *id*)
*lànnìg*a *pl* *lànnìs*ɛ *cb* *lànnìg-* 5.2 *n.* squirrel
*lā'ŋ*ɛ/ *dv*. set alight
*lāŋ́ím*m *dv*. wander around searching
*lāu̱k*ɔ *pl* *lā'ad*ɛ *cb* *là'-* *n.* item of goods *pl* goods
*là'vŋ*ɔ *pl* *là'amà* *n.* fishing net
*lèb*ɛ *ger* *lēbīg*a *dv*. return *(intrans)*
*lèbìg*ɛ *dv*. turn over; return
*lèbìs*ɛ *dv*. answer; send back; divorce (wife)
lèɛ but, *VP particle* 16.7
lèm again, *preverb* 16.8
*lèm*m *ipfv* *lèmmìd*a *dv*. sip, taste
*lēr*ɛ *dv*. get ugly
lì it, its *(right-bound)*; *lı* it *(enclitic)* 12.4.1
lị̀ *ipfv* *lị̀t*a *imp* *lị̀m*a *ger* *lī̤ig*a *dv*. fall

lī dv. block up
lịa where is ...? 18.4
lịdìg$^{\varepsilon}$ *dv*. turn a shirt WK
lìdìg$^{\varepsilon}$ *dv*. astonish, be amazed
lịəb$^{\varepsilon}$ *dv*. become
lị'əl$^{\varepsilon}$ *dv*. approach, come near
lí'əm$^{\mathrm{m}\varepsilon}$ *pl lī'əmá n*. fruit of yellow plum tree
líəŋ^{a} *pl līəmís*$^{\varepsilon}$ *cb līəŋ- n*. axe
lí'əŋ^{a} *pl lī'əmís*$^{\varepsilon}$ *n*. yellow plum tree, *Ximenia americana*
lịg$^{\varepsilon}$ *dv*. patch
lịgìl$^{\varepsilon}$ *dv*. cover
lịgìn$^{\varepsilon}$ *dv*. cover oneself
līɪbīr$^{\varepsilon}$ *pl līɪbā cb lìɪb- n*. twin
līk^{a} *pl līgīs*$^{\varepsilon}$ *n*. darkness
lìlāalíŋ^{a} *pl lìlāalís*$^{\varepsilon}$ *lìlāalímìs*$^{\varepsilon}$ *cb lìlāalíŋ- n*. swallow
lín it *(subject of ǹ-clause)*; *līn*$^{\varepsilon}$ it *(contrastive)* 12.4.1
lìn$^{\varepsilon}$ that *demonstrative* 12.4.2
lìná that *demonstrative* 12.4.2
lɔ̄ dv. tie
lɔ̄b$^{\varepsilon}$ *or lɔ̄bīg*$^{\varepsilon/}$ *dv*. throw stones at
lɔ̄bɪdíg^{a} *pl lɔ̄bɪdís*$^{\varepsilon}$ *n*. water drawing vessel
lɔ̄dīg$^{\mathrm{a}/}$ *pl lɔ̄dīs*$^{\varepsilon/}$ *cb lɔ̄d- n*. corner; *lɔ̄dɪgín kúg-sʊ́ŋ*^{ɔ} cornerstone NT
lɔ̄dīg$^{\varepsilon/}$ *dv*. untie
lɔ̀k^{ɔ} *pl lʊ̀'ad*$^{\varepsilon}$ *cb lu̱'à- n*. quiver (for arrows)
lɔ̀mbɔ̀'ɔg^{ɔ} *pl lɔ̀mbɔ̀'ɔd*$^{\varepsilon}$ *cb lɔ̀mbɔ̀'- n*. garden ← Hausa *làmbuu*
lɔ̄ŋ^{a} *pl lɔ̄mīs*$^{\varepsilon}$ *cb lɔ̀ŋ- n*. a kind of frog
lɔ̄'ŋ$^{\varepsilon/}$ *dv*. go across river, road etc
lór$^{\varepsilon}$ *pl lóyà lɔ́ɔm*^{ma} *cb lór- n*. car, lorry ← English
lɔ̀s$^{\varepsilon}$ *dv*. dip, immerse in liquid
lù ipfv lùt^{a} *imp lùm*^{a} *dv*. fall
lūb$^{\varepsilon}$ *ger lūbīr*$^{\varepsilon/}$ *dv*. buck, kick, struggle, throw off rider
lūg$^{\varepsilon}$ *dv*. swim
lʊ̄gʊ̄r$^{\varepsilon}$ *n*. organ, member

M

m̀ I, my *(right-bound)*; *m*^{a} me *(enclitic)* 12.4.1
mà cb mà- n. mother; *pl mà nám*^{a} *(tone sic)* mother's sisters/co-wives; *mà-bīig*^{a} *n*. sibling with same mother; *mà-bīl*^{a} *n*. mother's younger sister or junior co-wife; *mà-kpɛ̄ɛn̆m*^{m} *n*. mother's elder sister or senior co-wife; *mà-pīt*$^{\mathrm{a}/}$ *n*. mother's younger sister
mà' dv. lie, deceive

mà'àa SF *mà'anɛ̀* LF only; *emphatic* 24.7
màal^{ɛ} *dv*. prepare, sacrifice; *agt màal-māan*^{na} *n.* sacrificer; priest NT; traditionally just a worker who conducts the actual slaying for the *tɛ̀ŋ-dāan*^{a} earth-priest
mā'al$^{ɛ/}$ *dv*. make cool, wet
māan^{nɛ} *pl māanā cb màan- n.* sacrifice 8.1.2
má'an^{nɛ} *pl mā'aná cb mā'an- n.* okra
mā'as$^{a/}$ *sv*. be cool, wet
mā'asíg^{a} *mā'asír*^{ɛ} *pl mā'asá cb mā'as- adj*. cool, wet
mā'asígā$^{/}$ *adv*. coolly
mā'asím^{m} *n.* coolness, wetness
mādīg$^{ɛ/}$ *dv*. overflow, abound
mā'e$^{/}$ *dv*. cool down
màk^{ɛ} *dv*. crumple up
māk$^{ɛ/}$ *dv*. measure, judge
màl̰āk$^{a/}$ *pl màl̰ā'as*$^{ɛ/}$ *màl̰āk-nám*^{a} *cb màl̰ā'- n.* angel ← Arabic *mal?ak*; *written malek in NT versions before 2016*
màlìf^{ɔ} *pl màlì n*. gun, rifle (ultimately ← Arabic)
màlıgìm again; *preverb* 16.8
mālīs$^{a/}$ *sv*. be sweet, pleasant
mālısíg^{a} *mālısír*^{ɛ} *pl mālısá cb mālīs- adj*. sweet, pleasant
mālısím^{m} *n.* sweetness
mālısíŋ^{a} *pl mālısís*^{ɛ} *cb mālısíŋ- adj*. sweet, pleasant
mālʊ̄ŋ^{ɔ} *pl mālımā cb màlʊ̀ŋ- n.* sacrifice
mām I, me 12.4.1
mán I *(as subject of ǹ-clause)*; *mān* SF *mánɛ̀* LF I, me *(contrastive)* 12.4.1
màngávŋ^{ɔ} *pl màngáam*^{mɛ} *màngāamá cb màngāvŋ- n.* crab (cf *làngávŋ*^{ɔ} *id*)
màl̰ak^{ɔ} *pl mà'ad*^{ɛ} *adj*. crumpled up
mɛ̀ dv. build
mɛ̀ mɛ̀n^{ɛ} too, also; *emphatic* 24.7; *mɛ̀-kàmà* -soever 12.4.3
mɛ̄d^{ɛ} *dv*. mash up
mɛ̀ɛŋ^{a} *pl mɛ̀ɛmìs*^{ɛ} *cb mɛ̀ɛŋ- n*. turtle
mɛ̀lıgìm^{m} *n.* dew
mɛ̄ŋ$^{a/}$ self 12.4.6
mɛ̄ŋír^{ɛ} *adj*. genuine
mɛ̄t$^{ɛ/}$ *cb mɛ̄t- n. pl as sg* pus
mī' ger mī'ilím^{m} *sv*. know; *agt gbàn-mī'id*$^{a/}$ *n.* scribe ("book-knower") NT
mɪ̀e dv. squeeze(?) 27.1; *uncertain meaning and tones*
mɪ́if^{ɔ} *pl mī̀iní n.* okra seed
mɪ̀'ig^{ɛ} *dv*. become sour
mɪ̀'is^{a} *sv*. be sour
mɪ̀'isʊ̀g^{ɔ} *pl mɪ̀'isà cb mɪ̀'is- adj*. sour

mịlīg$^{ɛ/}$ *dv*. get dirty
mìmịilím^{m} *mìmịilúg*^{ɔ} *n*. sweetness
mịt see that it doesn't happen that... 16.5; *always mid in KB*
mɔ̄ *dv*. strive, struggle
mɔ̄d^{ɛ} *dv*. swell
mɔ̄dīg$^{ɛ/}$ *dv*. be patient, endure
mɔ̀lì'f^{ɔ} *pl* *mɔ̀lì* *cb* *mɔ̀l-* *n*. gazelle
mɔ̄n^{ɛ} *dv*. grind millet to make *sā'ab*^{ɔ} porridge
mɔ̄ŋ$^{ɛ/}$ *dv*. refuse to lend
mɔ̄ɔg^{ɔ} *pl* *mɔ̄ɔd*^{ɛ} *cb* *mɔ̀-* *n*. grass, "bush"; *mɔ̀-pīl*^{lɛ} *n*. grass thatch
Mɔ̀ɔg^{ɔ} *n*. Mossi realm; *Mɔ̀ɔg Nâ'ab*^{a} *n*. the Moro Naba, King of the Mossi
mɔ̄ɔl$^{ɛ/}$ *dv*. proclaim; *agt* *mɔ̄ɔl-mɔ̂ɔn*^{na} *n*. proclaimer
Mɔ̀ɔl^{ɛ} *n*. Mooré language
Mɔ̄r$^{ɛ/}$ *pl* *Mɔ́ɔm*^{ma} *cb* *Mɔ̄r-* *n*. Muslim
mɔ̄r$^{a/}$ *ger* *mɔ̄rím*^{m} *sv*. have, possess; *mɔ̄r nā* bring 16.11
Mùa *pl* *Mɔ̀ɔs*^{ɛ} *cb* *Mɔ̀-* *n*. Mossi person
mụ'à^{a} *dv*. suck (of a baby)
mụàk^{a} *pl* *mɔ̀'as*^{ɛ} *cb* *mụ'à-* *n*. maggot
mɔ̀'ar^{ɛ} *pl* *mụ'àa* *mɔ̀'adà* *cb* *mụ'à-* *n*. dam; reservoir
mɔ̀'as^{ɛ} *dv*. give (to baby) to suck
mù'e *dv*. redden; catch fire/ignite; become intense, severe
mùị *cb* *mùị-* *n*. *pl as sg* rice
mùl^{ɛ} *dv*. itch
mùm^{m} *dv*. bury

N

ǹ *clause nominaliser particle* 21
n *clause catenator particle* 19
ǹ- *personifier particle (allomorph used before an adjective)* 12.6
n^{ɛ} *discontinuous-past marker* 16.3.2
n^{ɛ} *nī*$^{/}$ *locative particle* 13.3
nà *positive irrealis mood marker* 16.4
nā$^{/}$ hither; *VP-final particle* 16.11
nā *dv*. join
náa reply to greetings invoking blessings 25
nà'ab^{a} *pl* *nà'-nàm*^{a} *cb* *nà'-* *n*. chief, king; *nà'-bịig*^{a} *n*. prince/princess; *nà'-yịr*$^{ɛ/}$ *n*. palace; *nà'-yị-kpɛ́m*^{ma} *n*. *pl* king/chief's retainers
náaf^{ɔ} *pl* *nị̀igí* *cb* *nā'-* *n*. cow; *nā'-lór*^{ɛ} *n*. place in compound for tying up cows; *nā'-dâʋg*^{ɔ} *pl* *nā'-dâad*^{ɛ} *cb* *nā'-dá-* *n*. ox; *nā'-dá-kūɵdír*^{ɛ} *n*. ox for ploughing
nàam^{m} *dv*. happen
nā'am^{m} *cb* *nà'am-* *n*. chieftaincy, kingdom

nāan next, afterwards = *ňyāan*
nāan or nāanī then, in that case, being thus/there 20.1
nà'anā$^{/}$ *adv*. easily
nà'as^{ɛ} *dv*. honour; *ger nà'asì n.* honour
Nàbìd^{a} *pl Nàbıdìb*^{a} *cb Nàbìd- n.* Nabdema person
Nàbıdʊ̀g^{ɔ} *n.* Nabdema country
Nàbìr^{ɛ} *n.* Nabit language
Nà'dàm^{ma} *n.* clan name
Nà'dàu̯ŋ^{ɔ} *n.* place of clan Nadamba
nà'-dàwān$^{nɛ/}$ *n.* pigeon KED (= *dàwān*$^{nɛ/}$)
nāe$^{/}$ *dv*. finish
nàm still, yet; *auxiliary tense particle* 16.3.1
nàm^{a} *pluraliser* 5.4
nāmīs$^{ɛ/}$ *dv*. persecute, suffer
nān^{ɛ} *dv*. love, respect, appreciate
nà'-nɛ̄sīnnɛ̄og$^{ɔ/}$ *n.* centipede WK
nānná adv. now
nānná-nā$^{/}$ *adv*. now
nānzū'us$^{ɛ/}$ *n.* pepper *tones uncertain*
nāŋ^{a} *pl nāmīs*^{ɛ} *cb nàŋ- n.* scorpion
nār$^{a/}$ *ger nārím*^{m} *sv*. be obliged to; impersonal: to be necessary; *with following purpose clause* 22.1; *negated:* be obliged not to
nàrʊ̀ŋ^{ɔ} *pl nàrımà cb nàrʊ̀ŋ- adj*. necessary
Nàsāal^{ɛ} *n.* English/French language
Nàsāara pl Nàsàa-nàm^{a} *Nàsàar-nàm*^{a} *cb Nàsàa- Nàsàar- n.* European person
← Arabic *Nasˁa:ra:* "Christians"; *Nàsàa-bī̯ig*^{a} *n.* European child
nàyī̯ig^{a} *pl nàyi̯ig-nàm*^{a} *nàyi̯is*^{ɛ} *n.* thief
nàyī̯igìm^{m} *n.* thievery
nà'-zɔ̀m^{mɛ} *n.* locust
nɛ̄ preposition: with 15; *linking NPs and AdvPs:* and 12.1
nɛ̄ uncommon variant of yɛ̄ that 22.2 (cf Mampruli *ni id*)
nɛ̄$^{/}$ *focus particle* 24.1.2; *aspectual marker* 16.2.1
nɛ̄$^{/}$ *meaningless particle after objects of wʊ̄ʊ and wɛ̄n*$^{na/}$ 15
nɛ̄$^{'/}$ this *(pronoun)* 12.4.2
nɛ̀ɛl^{ɛ} *dv*. reveal
nɛ̀ɛm^{m} *adv*. for free
nɛ̄ɛm$^{m/}$ *dv*. grind with a millstone
nɛ̄ɛr$^{ɛ/}$ *n.* millstone
nɛ̀ɛs^{ɛ} *dv*. reveal
nɛ̀ɛsìm^{m} *n*. light
nɛ̄m-nɛ̂ɛr^{ɛ} *pl nɛ̄m-nɛ́yà n*. someone who grinds

nɛ̄n$^{na/}$ *ger nɛ̄nnímᵐ sv*. envy; *nịn-nɛ́n*^{na} *agt* envious person
nɛ̄'ŋá this *(pronoun)* 12.4.2
nɛ̀ogᵓ nɛ̀ɛrᵋ pl nɛ̀ɛdᵋ nɛ̀yà cb nɛ̀- adj. empty
nɛ̄sīnnɛ̄ogᵓ/ pl nɛ̄sīnnɛ̄ɛdᵋ/ cb nɛ̄sīnnɛ́- n. envious person WK; *others:* centipede
ǹfá! Well done! 18.4
nī/ locative particle 13.3 *see nᵋ*
nị̀ dv. rain
nịd$^{a/}$ *pl nịdīb*$^{a/}$ *cb nịn- n*. person; *nịn-sâal*^{a} *pl nịn-sáalìb*^{a} *cb nịn-sâal- n*. human being; *nịnpʊ̄nān*$^{na/}$ *pl nịnpʊ̄nānníb*^{a} *cb nịnpʊ̄nán- n*. disrespectful person; *nịn-sábɪlìs*^{ɛ} *n*. Africans
nị̀e dv. appear, reveal
nịfᵓ/ pl nịní cb nịn- nịf- n. eye; *nịf-gbáu̯ŋᵓ n*. eyelid; *nịf-sɔ́b*^{a} *n*. miser; *nịf-ňyáu̯kᵓ adj*. one-eyed; *nịn-dáa pl nịn-dâas*^{ɛ} *cb nịn-dá- n*. face; *nịn-gɔ́tìŋ*^{a} *n*. mirror *pl nịn-gɔ́tìs*^{ɛ} *n*. spectacles, glasses; *nịn-kʊ́gʊdìg*^{a} *pl nịn-kʊ́gʊdìs*^{ɛ} *n*. eyebrow; *nịn-tâ'am*^{m} *n*. tear(s); *nịn-múa n*. concentration ("eye-redness"); *m̀ nịní mù'e nɛ̄* ... I'm concentrating on ... (KB "zealous for ...")
nịíŋ^{a} *pl nịimís*^{ɛ} *nịís*^{ɛ} *cb nịiŋ- n*. bird
nịm$^{nɛ/}$ *nị'm*$^{nɛ/}$ *pl nịmá cb nịm- n*. meat
nịn-báalìg^{a} *n*. pity; *nịn-bâal-zɔ̄ɔr*^{ɛ} *n*. pity; *Ò zɔ̀tō nịn-báalìg.* He has pity on him.
nịŋ^{a} *pl nịis*^{ɛ} *cb nị̀ŋ- nị̀n- n*. body *(uncommon)*; *nị̀n-tʊ̄llím*^{m} *n*. fever; *nị̀n-tāa pl nị̀n-tāas*^{ɛ} *cb nị̀n-tà- n*. co-wife (Ghanaian English: "rival"); husband's brother's wife; *nị̀n-gbịŋᵓ/ pl nị̀n-gbịná cb nị̀n-gbịŋ- n*. body *(pl often as sg)*; *nị̀n-gɔ̀ɔrᵋ n*. neck
nịn-pʊ̂ʊdᵋ n. pl as sg pus
nịntāŋ$^{a/}$ *pl nịntāaňs*$^{ɛ/}$ *cb nịntáŋ- n*. heat of the day, early afternoon
nị̀ŋᵋ dv. do
n lā that is ... 18.4
ǹnāas q. four, *in counting*
ǹnịí q. eight, *in counting*
ǹnū q. five, *in counting*
n ňwà this is ...; *n ňwà nā* this here is ... 18.4
nɔ̄ dv. tread
nɔ̄bᵋ dv. get fat
nɔ̄bīg$^{ɛ/}$ *dv*. grow (e.g. child, plant)
nɔ́bìrᵋ pl nɔ̄bá cb nɔ̄b- n. leg, foot; *nɔ̄b-bịl*^{a} *n*. toe; *nɔ̄b-yíu̯ŋᵓ adj*. one-legged; *nɔ̄b-ịň'a n*. toenail; *nɔ̄b-pʊ́mpàu̯ŋᵓ n*. foot
nɔ̄kᵋ/ dv. pick up, take up
nɔ̀ŋᵋ agt nɔ̀ŋìd^{a} *(irregularly Pattern L) sv*. love (family, spiritual); *irregularly has the ma-imperative form nɔ̀ŋìm*^{a} 7.2
nɔ̄ŋᵓ/ cb nɔ̄ŋ- n. poverty; *nɔ̄ŋ-dâan*^{a} *n*. poor person
nɔ̀ŋìlím^{m} *n*. love
nɔ̄ɔ exactly, just; *emphatic* 24.7

nɔ̄ɔr$^{ɛ/}$ *pl nɔ̄yá cb nɔ̄- n.* mouth; command, message, opinion; *nɔ̄-dị̀'əs*^{a} *n.* "linguist", a councillor who speaks on a chief's behalf on all official occasions (not only in the region of the old Mossi-Dagomba states 1.1: "linguist" in Ghana typically refers to an Akan chief's herald and spokesman, the *okyeame*); *Wínà'am nɔ́-dị̀'əs*^{a} ("God's linguist") prophet NT/KB; *nɔ̄-lɔ̂ɔr*^{ɛ} *n.* fasting ("mouth-tying", as throughout West Africa); *nɔ̄-nâar*^{ɛ} *n.* covenant; *nɔ̄-pɔ̂ɔr*^{ɛ} *n.* oath; *nɔ̄-gbáu̱ŋ*^{ɔ} *pl nɔ̄-gbánà n.* lip

nɔ̄ɔr$^{ɛ/}$ *nɔ̄ɔrím*^{m} times 12.5.1

ǹpɔ̀ẹ̀ q. seven, *in counting*

ǹtáň' q. three, *in counting*

nū dv. drink

nūa$^{/}$ *pl nɔ̄ɔs*$^{ɛ/}$ *cb nɔ̄- n.* hen; *nɔ̄-dâʋg*^{ɔ} *n.* cock; *nɔ̄-ňyâ'aŋ*^{a} *n.* (specifically female) hen; *Nɔ̄-ňyâ'aŋ-né-ò-Bī̩is* the Pleiades

nūlīg$^{ɛ/}$ *dv.* make drink

nūlīs$^{ɛ/}$ *dv.* make drink

nû'ug^{ɔ} *pl nû'us*^{ɛ} *cb nū'- n.* hand, arm; *nū'-bị́l*^{a} *pl nū'-bị́bìs*^{ɛ} *n.* finger; *nū'-dâʋg*^{ɔ} *n.* thumb; *nū'-yíu̱ŋ*^{ɔ} *adj.* one-armed; *nū'-ị́ň'a pl nū'-ê̌ň'ɛs*^{ɛ} *cb nū'-ɛ́ň'- n.* fingernail; *nū'-wê̌ň'ɛd*^{a} *n.* mediator

ňwà this 12.8.5

ňwā' dv. smash, break up

ňwāaŋ^{a} *pl ňwāamīs*^{ɛ} *cb ňwàaŋ- n.* monkey

ňwādīg$^{a/}$ *pl ňwādīs*$^{ɛ/}$ *cb ňwād- n.* moon, month; *ňwād-bị́l*^{a} *pl ňwād-bị́bìs*^{ɛ} *n.* star; *Ňwād-dár*^{ɛ} *n.* Venus

ňwà'e dv. cut wood

ňwā'e$^{/}$ *dv.* strike, break

ǹwāẹ̀ q. nine, in counting

ňwām^{mɛ} *ňwān*^{nɛ} *pl ňwāmā ňwānā cb ňwàm- ňwàn- n.* calabash

Ňwāmpūrīg$^{a/}$ *pl Ňwāmpūrīs*$^{ɛ/}$ *cb Ňwāmpúr- n.* Mamprussi person

Ňwāmpūrīl$^{ɛ/}$ *n.* Mampruli language

Ňwāmpūrʋ̄g$^{ɔ/}$ *n.* Mamprussi country

ňwɛ̀' dv. beat; *ňwɛ̀'* X *nû'ug* make an agreement with X; *ňwɛ̀' ňyɔ̄'ɔg* boast

ňwi̱ig$^{a/}$ *pl ňwi̱is*$^{ɛ/}$ *cb ňwi̱- n.* rope; *ňwi̱-tɛ́k*^{a} *pl ňwi̱-tɛ́kìdìb*^{a} *cb ňwi̱-tɛ́k- n.* rope-puller; *ňwi̱-tɛ́kìr*^{ɛ} *pl ňwi̱-tɛ́kà n.* rope for pulling

ňwi̱ig$^{ɛ/}$ *dv.* make a rope

ňyā'al$^{ɛ/}$ *dv.* leave behind

ňyāan next, afterwards; *post-subject particle* 17.2.3

ňyá'aŋ^{a} *pl ňyá'as*^{ɛ} *ňyā'amís*^{ɛ} *cb ňyā'aŋ- adj.* female (animal)

ňyá'aŋ^{a} behind, *postposition* 13.5; East 26.3; *ňyà'an-dɔ̀l*^{la} *ňyà'an-dɔ̀l*^{lɛ} *pl ňyà'an-dɔ̀llà ňyà'an-dɔ̀llìb*^{a} *cb ňyà'an-dɔ̀l- n.* disciple NT; *tones unexpected, Pattern L*

ňyā'ar^{ɛ} *pl ňyā'a cb ňyà'- n.* root

ňyāe$^{nɛ/}$ *adv.* in the light, brightly, clearly

*ňyālʊ́ŋ*ɔ *pl ňyālımá cb ňyālʊ̄ŋ- adj*. wonderful
*ňyàn*nɛ *n*. shame; *Ò dì ňyán.* He's ashamed.
*ňyāŋ*ɛ/ *dv*. overcome 19.1
*ňyàu̱k*ɔ *pl ňyà'ad*ɛ *adj*. only (eye) 12.8.1.1
*ňyē ipfv ňyēt*a/ *imp ňyèm*a *dv*. see, find; *ňyē láafıya* get well
ňyēɛ, ňyēɛ tí habitually, *auxiliary tense marker* 16.3.1
*ňyē'ɛr*ɛ/ *pl ňyēdá cb ňyē'- n*. next-younger sibling
*ňyèɛs*a *sv*. be self-confident
*ňyèɛsìm*m *n*. self-confidence
*ňyèɛsíŋ*a *pl ňyèɛsís*ɛ *cb ňyèɛsíŋ- adj*. self-confident
ňyèɛsíŋā/ *adv*. self-confidently
ǹyį́' q. two, *in counting*
*ňyīn*nɛ/ *pl ňyīná cb ňyīn- n*. tooth
*ňyīríf*ɔ *pl ňyīrí n*. a kind of edible seed, egusi: *Colocynthis citrullus*
*ňyɔ̄ɔd*ɛ *n*. intestines
*ňyɔ̄'ɔg*ɔ/ *n*. chest
*ňyɔ̄ɔg*ɔ *n*. sympathy: *Ò zòtō ňyɔ̄ɔg.* She sympathises with him.
*ňyɔ̄ɔr*ɛ *pl ňyɔ̄yā cb ňyɔ̀- n*. nose; breath; *ňyɔ̀-vʊ̄r*ɛ/ *pl ňyɔ̀-vʊ̄yá cb ňyɔ̀-vʊ̄r- n*. life;
*ňyɔ̀-vʊ̄r-pâal*lɛ *n*. new life NT
*ňyɔ̄'ɔs*ɛ/ *n*. smoke
ǹyûɵb q. six, *in counting*
*ňyūur*ɛ/ *pl ňyūyá cb ňyū- n*. yam

O

ò [ʊ] he, she, his, her *(right-bound)*; ᵒ LF [ʊ] him, her *(enclitic)* 12.4.1
ɔ́n he, she *(subject of ǹ-clause)*; *ɔ̄n*ɛ he, she *(contrastive)* 12.4.1
*ɔ̀n*ɛ this, that *(animate sg demonstrative)* 12.4.2
*ɔ̀ňb*ɛ *ger ɔ̄ňbīr*ɛ *dv*. chew
ɔ̀ŋā/ this, that *(animate sg demonstrative)* 12.4.2
*ɔ̄ɔs*ɛ/ *dv*. warm oneself; *Ò ɔ̀ɔsìd nɛ̄ búgúm lā.* She's warming herself at the fire.

P

pà' earlier today, *tense particle* 16.3.1
*pà'al*ɛ *dv*. teach, inform; *agt pā'an*na *pl pā'annīb*a *cb pà'an- n*. teacher
*pà'al*ɛ *dv*. put on top of something
*pāalíg*a *páal*lɛ *pl pāalís*ɛ *pāalá cb pāal- adj*. new
*pāalím*m *adv*. recently
pāalʊ́ adv. openly
*pàaňlʊ́ŋ*ɔ *pl pàaňlímìs*ɛ *n*. spider's web
*pàam*m *dv*. receive a gift
*pàas*ɛ *dv*. add up to, amount to

pāe$^{/}$ *dv*. reach
pàk$^{\varepsilon}$ *dv*. surprise
pàk$^{\varepsilon}$ *dv*. take off from the top
pāmm SF *pāmné* LF *q*. much, a lot
pàň'alìm^{m} *dv*. dedicate
pàňsìg$^{\varepsilon}$ *dv*. lack
pàŋ^{a} *pl* *pàaňs*$^{\varepsilon}$ *cb* *pàŋ-* *n.* power
pà' tì perhaps; *post-subject particle* 17.2.3
pèbìs$^{\varepsilon}$ *dv*. blow (of wind)
pèbɪsìm^{m} *pèbɪsùg*^{ɔ} *n.* wind
pè'ɛl$^{\varepsilon}$ *dv*. fill; *resultative adj* *pè'ɛlúŋ*^{ɔ} full
pɛɛlʊg^{ɔ} in *zū-péɛlùg*^{ɔ} bald; cf *pie* "go bald" (Leviticus 13:40), Mooré *pẽoogè*
pè'ɛs$^{\varepsilon}$ *dv*. add up to, amount to
pèlìg$^{\varepsilon}$ *dv*. whiten, go white
pèlìs$^{\varepsilon}$ *dv*. sharpen
pèn$^{n\varepsilon}$ *n.* vagina
pē'ŋ$^{\varepsilon/}$ *dv*. borrow; knock over WK
pèog^{ɔ} *pl* *pèɛd*$^{\varepsilon}$ *cb* *pè-* *n.* basket
pē'og$^{ɔ/}$ *pl* *pē'ɛs*$^{\varepsilon/}$ *cb* *pē'-* *n.* sheep; *pē'-sá'a* *n.* ewe lamb
pɛ̄sɪ̄g$^{\varepsilon/}$ *dv*. sacrifice
pi̱ā *dv*. dig up
pi̱ā̀ň'^{a} *dv*. speak, praise; *ger* *pi̱àu̱ňk*^{ɔ} *n.* word *pl* *pi̱àň'ad*$^{\varepsilon}$ language *cb* *pi̱àň'-*; *pi̱àň'-zʊ̀nà* *n.* foreign language
pi̱bìg$^{\varepsilon}$ *dv*. uncover
pi̱bìl$^{\varepsilon}$ *dv*. cover up
pi̱bīn$^{n\varepsilon}$ *pl* *pi̱bɪnā* *cb* *pi̱bìn-* *n.* covering 8.1.2
pi̱d$^{\varepsilon}$ *dv*. put on (hat, shoes, rings); *clothing item as object; with indirect object* put (hat, shoes, rings) on someone else
pī̱d$^{\varepsilon}$ *dv*. get bloated
pi̱dìg$^{\varepsilon}$ *dv*. take off (hat, shoes, rings)
pi̱e$^{/}$ *dv*. wash (part of one's own body)
pi̱əb$^{\varepsilon}$ *dv*. blow (e.g. flute)
pi̱əlìg^{a} *pi̱əl*$^{l\varepsilon}$ *pl* *pi̱əlà* *pi̱əlìs*$^{\varepsilon}$ *cb* *pi̱əl-* *adj*. white
pi̱əlìm^{m} *n.* whiteness
pi̱əs$^{\varepsilon}$ *dv*. fool someone
pī̱əs$^{\varepsilon/}$ *dv*. wash
pī̱igā *q*. ten
pī̱im$^{m/}$ *pl* *pī̱má* *cb* *pī̱m-* *n.* arrow
píɪňf^{ɔ} *pl* *pīɪní* *cb* *pīɪn-* *n.* genet
pī̱inī *cb* *pì̱in-* *pl* as sg (?) *n.* gift
pì̱l$^{\varepsilon}$ *dv*. cover

pịlìg$^{\varepsilon}$ *dv*. uncover
pịň'il$^{\varepsilon/}$ *dv*. begin
pīpịrīg$^{a/}$ *pl pīpịrīs*$^{\varepsilon/}$ *cb pīpịr- n.* desert
pịsị́ q. twenty
pịtύ pl pịtíb^{a} *cb pịt- n.* younger sibling of the same sex
pɔ̄ dv. swear
pɔ̀ňd$^{\varepsilon}$ *dv*. crouch down
pɔ̄ň'ɔl$^{\varepsilon/}$ *dv*. cause to rot
pɔ̀ň'ɔlìm^{m} *dv*. cripple, get crippled
pɔ̀ň'ɔr$^{\varepsilon}$ *pl pɔ̀ňdà cb pɔ̀ň'- n.* cripple
pɔ̀ňr^{a} *ger pɔ̄ňrʊ̄b*^{ɔ} *sv*. be near
pɔ̀ɔd^{a} *sv*. be few, small
pɔ̀ɔdìg^{a} *pɔ̀ɔdìr*$^{\varepsilon}$ *pl pɔ̀ɔdà cb pɔ̀ɔd- adj*. few, small
pɔ̀ɔdìm^{m} *n.* fewness
pɔ̄ɔg$^{ɔ/}$ *pl pɔ̄ɔd*$^{\varepsilon/}$ *pɔ̄t*$^{\varepsilon/}$ *cb pɔ̄- n.* field, farm
pɔ̀'ɔg$^{\varepsilon}$ *dv*. diminish, belittle
pɔ̄ɔr$^{\varepsilon/}$ *n.* "slogan" of a clan, part of its traditional genealogy WK; ← *pɔ̄* swear (cf Farefare *pɔtɛ, pɔrɛ* "*nom de famille, nom par lequel on jure*", also "oath")
pʊ̄ not: *negates indicative mood* 16.5
pʊ̄ dv. divide
pu̯'ā^{a} *pl pʊ̄'ab*^{a} *cb pu̯'à- n.* woman, wife; *Ò dì pu̯'ā.* He's married a wife; *pu̯'à-dīɪr*$^{\varepsilon}$ *n.* marriage; *pu̯'à-ɛ̄líŋ*^{a} *n*. fiancée; *pu̯'à-gịnníg*^{a}, *pu̯'à-gɔ̄ɔňdīr*$^{\varepsilon}$ *n.* prostitute; *pu̯'à-ňyá'aŋ*^{a} *pl pu̯'à-ňyá'as*$^{\varepsilon}$ *n*. old woman; *pu̯'à-pāal*$^{a/}$ *n.* bride; *pu̯'à-sādīr*$^{\varepsilon/}$ *n.* young woman; *pu̯'à-sāň'am*^{na} *n.* adulterer; *pu̯'à-yùa n.* daughter
pu̯āk^{a} *pl pʊ̄'as*$^{\varepsilon}$ *adj*. female (human only)
pʊ̀'alìm^{m} *dv*. cook
pʊ̀'alìm^{m} *dv*. harm, damage; *resultative adj pʊ̀'alύŋ*^{ɔ} damaged
pʊ̀'alìm^{m} *n.* femininity
pʊ̀'alím^{m} *pl pʊ̀'alímìs*$^{\varepsilon}$ *cb pʊ̀'alím- n.* female sex organs
pʊ̀d$^{\varepsilon}$ *dv*. name
pʊ̄dīg$^{\varepsilon/}$ *dv*. divide, share out
pʊ̀gʊdìb^{a} *pl pʊ̀gʊ̀d-nàm*^{a} *cb pʊ̀gʊ̀d- n.* father's sister
pʊ̀-kɔ̀ɔňr$^{\varepsilon}$ *pl pʊ̀-kɔ̀ňyà cb pʊ̀-kɔ̀ň- n.* widow
pʊ̄-kpāad$^{a/}$ *pl pʊ̄-kpāadíb*^{a} *cb irreg pʊ̄-kpá- n.* farmer
pùlɪmà n. a species of grass, *Imperata cylindrica*
pʊ̀mpɔ̄ɔg^{ɔ} *n.* housefly
pʊ̀n previously, already; *preverb* 16.8
pūň'e$^{/}$ *dv*. rot
pūsīg$^{a/}$ *pl pūsīs*$^{\varepsilon/}$ *cb pūs- n.* tamarind
pūsīr$^{\varepsilon/}$ *pl pūsá n.* tamarind fruit
pʊ̄-sύk^{a} *pl pʊ̄-sύgʊ̀s*$^{\varepsilon}$ *n.* half 12.5.1

pʊ̄t$^{ɛ/}$ *n. pl as sg* contents of stomach WK
pūum$^{m/}$ *cb pūum- n.* flowers
pʊ̄ʋg^{a} *cb pʊ̀- n.* inside, belly; *Pu̱'ā lā mór pʊ̄ʋg* The woman is pregnant; *pʊ̄ʋgʊ̄=n*$^{ɛ/}$ inside 13.5; *pʊ̀-pi̱əlìm*^{m} *n.* holiness; *pʊ̀-tɛ̀ň'ɛr*^{ɛ} *pl pʊ̀-tɛ̀ňdà cb pʊ̀-tɛ̀ň'-* mind
pʊ̄ʋr$^{ɛ/}$ *n.* stomach
pʊ̀'ʋs^{ɛ} *dv.* greet, worship, thank; *ger pʊ̀'ʋsìm*^{m} *n.* worship; *ger pʊ̀'ʋsʊ̀g*^{ɔ} *n.* thanks; *pʊ̀'ʋsʊ̀g dɔ̂ɔg*^{ɔ} NT temple

S

sà yesterday, *tense particle* 16.3.1
sà hence, ago, *VP-final particle* 16.11
sā' dv. be in distress
sàa tomorrow, *tense particle* 16.3.1
sāa pl sāas^{ɛ} *cb sà- n.* rain; sky; *as subject of i̱ānk*$^{ɛ/}$ "leap": lightning; *sāa díndɛ̄og*$^{ɔ/}$ rainbow ("rain chameleon"); *sāa zúg*^{ɔ} *n.* sky 13.5
sā'ab^{ɔ} *cb sà'- n.* millet porridge, "TZ", the staple food of the Kusaasi
sāafĩ (?*tones*) *n.* lock, key ← Twi *safẽ*
sàal^{a} *pl sàalìb*^{a} *cb sàal- n.* human (perhaps ← "hairless" cf *bʊ̄n-kɔ́ňbʊ̀g*^{ɔ}); *sàal-bi̱ig*^{a} *pl sàal-bi̱is*^{ɛ} *n.* human being
sàalíŋā$^{/}$ *adv.* smoothly
sàam^{ma} *pl sàam-nàm*^{a} *cb sàam- n.* father; *sàam-kpɛ̄ɛňm*^{m} *n.* father's elder brother; *sàam-pi̱t*$^{a/}$ *pl sàam-pi̱tíb*^{a} *cb sàam-pi̱t- n.* father's younger brother
sāam$^{m/}$ *dv.* mash, crumble
sā'an$^{ɛ/}$ in the presence of, in the opinion of; *postposition* 13.5
sāan$^{a/}$ *pl sáam*^{ma} *cb sāan- n.* guest, stranger
sáannìm^{m} *n.* strangerhood
sàbɛ̄og^{ɔ} *pl sàbɛ̄ɛd*^{ɛ} *cb sàbɛ̀- n.* wind, storm
sābɪlíg^{a} *sābíl*^{lɛ} *pl sābɪlís*^{ɛ} *sābɪlá cb sābīl- adj.* black
sàbùa pl sàbùʊs^{ɛ} *cb sàbu̱à- n.* lover, girlfriend
Sà'dàbɔ̀ɔg^{ɔ} *n.* place of the clan Sarabose
Sà'dàbùa pl Sà'dàbùʊs^{ɛ} *Sà'dàbùʊb*^{a} *n.* clan name
sādɪgím since, because 21.1
sāe̱ň or *sāe̱ňʸ*^{a} *pl sāaňb*^{a} *cb sàň- n.* blacksmith
sākárʊ̀g^{ɔ} *pl sākárìd*^{ɛ} *cb sākár- n.* fox
sàlɪbìr^{ɛ} *n.* bridle
sālɪmā cb sàlìm- n. pl as sg gold; *sàlìm-kùʊs*^{a} *n.* gold merchant
sām$^{nɛ/}$ *pl sāmá cb sām- n.* debt; *sām-kpâ'as*^{a} *n.* household servant
sāmán^{nɛ} *pl sāmánà cb sāmán- n.* open space in front of a *zàk*^{a} compound; *Sāmán-pí̱ər*^{ɛ} *n.* traditional New Year ceremony
sàň'am^{m} *dv.* spoil, get spoiled, get broken; destroy
sāngʊ́nnìr^{ɛ} *pl sāngʊ́nnà cb sāngʊ́n- n.* millipede

sāŋá pl sānsá cb sān- n. time 26.7 5.3.2; *sān-kán*^{ɛ} *adv*. then; when?
sān-sị̂'ə=n lā adv. at one time, once ... 17.2.1
sàŋ-gbàu̯ŋ^{ɔ} *n*. sky, heaven; cf *sāa*
sāpál^{lɛ} *n.* Harmattan part of the dry season *ύυn*^{nɛ}
sāpī ideo. straight (LF *sāpīι* or *sāpīnɛ́*)
sārιgá n. prison ← Hausa *sarƙàa* "chain"
sàrị́yà or *sɛ̀rị́yà n.* law ← Arabic *ʃari:ʕa*; *sàrị́yà-kāt*^{a} *n.* judge NT
sāυg$^{ɔ/}$ *pl sāad*$^{ɛ/}$ *cb sā- n.* broom, brush
sàυk^{ɔ} *pl sà'ad*^{ɛ} *n.* mote of dust
sáυŋ^{ɔ} *n.* hospitality
sɛ̀ ipfv sɛ̀ɛd^{a} *dv*. transplant
sɛ̄oňg^{ɔ} *n.* rainy season
sì dv. skin, flay
sị̄'a some, any *(sg)* 12.4.3
sị̄a pl sị̄əs^{ɛ} *cb si̯à- n.* waist; *si̯à-lɔ̄ɔdíŋ*^{a} *n.* belt ("waist-tying-thing"); *si̯à-nị̄f*$^{ɔ/}$*n.* kidney
si̯ā'al$^{ɛ/}$ *dv*. get to be enough
si̯à'ar^{ɛ} *pl si̯à'a cb si̯à'- n.* forest (WK), wilderness
si̯àk^{ɛ} *dv*. agree (Mooré *sàke*, Buli *siagi*)
si̯āk$^{ɛ/}$ *dv*. suffice (Mooré *sékè*, Buli *chagi*)
sị̄bīg$^{a/}$ *pl sị̄bí cb sị̄b- n.* a kind of termite
sìd truly, *post-subject particle* 17.2.3
sìdà pl sìd- n. pl as sg truth
sīd^{a} *pl sīdīb*^{a} *cb sìd- n.* husband; *sìd-bị̄l*^{a} *n.* husband's younger brother;
sìd-kpɛ̄ɛňm^{m} *n.* husband's elder brother; *sìd-pu̯āk*^{a} *n.* husband's sister
sị̄e$^{/}$ *dv*. descend, be humbled
sị̄əbā some(ones), any (ones) 12.4.3
sị̄'əl^{a} something, anything 12.4.3
sị̄'əm^{m} somehow, anyhow 12.4.3 13.6
sị̄g^{ɛ} *dv*. descend
sīgīr$^{ɛ/}$ *n*. guardian spirit; often the *wīn*$^{nɛ/}$ of an ancestor 26.2
sị̄gīs$^{ɛ/}$ *dv*. lower
sị̄gιsír^{ɛ} *pl sị̄gιsá n.* stopping-place
sīιg^{a} *pl sīιs*^{ɛ} *cb sì- n.* shade, personal spirit (KED); used in NT for "spirit"; in traditional belief *Lebenskraft* (Haaf) "vital energy", identified with a person's tutelary *kìkị̄rīs*$^{ɛ/}$ (qv); *Sì-sὺŋ*^{ɔ} *n.* Holy Spirit NT; cf Buli *chíik*
sīιg^{a} *pl sīιs*^{ɛ} *n*. African birch, *Anogeissus leiocarpa*; cf Buli *sīik*
sị̀ilìm^{m} *dv*. cite proverbs
sị̀ilíŋ^{a} *sị̀ilύŋ*^{ɔ} *pl sị̀ilís*^{ɛ} *sị̀ilímìs*^{ɛ} *sị̀ilímà cb sị̀ilíŋ- n.* proverb
sị̄iňd$^{ɛ/}$ *n.* honey
sị̄iňf$^{ɔ/}$ *sị̄iňg*$^{a/}$ *pl sị̄iňs*$^{ɛ/}$ *cb sị̄ň- n.* bee
sī'ιs$^{ɛ/}$ *dv*. touch

sīlīnsi̱ugɔ pl sīlīnsi̱isɛ n. ghost
sīlīnsi̱uŋ̆gɔ pl sīlīnsi̱iŋ̆dɛ n. spider
sìlʊ̀gɔ pl sìnnɛ sìlìsɛ cb sìl- n. hawk
sị̀mm dv. sink in a liquid
Sìmi̱igª pl Sìmi̱isɛ cb Sìmi̱- n. Fulɓe person, Fulani
Sìmi̱ilɛ n. Fulfulde language
Sìmi̱ugɔ n. place of the Fulɓe
si̱nna/ ger si̱nnímm sv. be silent
sīnsáaŋ̆ n. a kind of tiny ant
sīŋª pl sīɪŋ̆sɛ cb sìŋ- n. a kind of very big pot
sī'ŋɛ/ dv. begin
sīsíbìgª pl sīsíbìsɛ cb sīsíb- n. neem tree *Azadirachta indica*
sīsíbìrɛ pl sīsíbà n. fruit of neem tree
sìsi̱'əmm n. wind, storm
sìsʊ̀ʊgʊ̄=nɛ/ between, *postposition* 13.5 KB *sʊʊgʊn*
sí'uŋɔ pl si̱'imísɛ cb si̱'uŋ- n. a kind of large dish
sɔ̄' some(one), any(one), *animate sg* 12.4.3
sɔ̄bª dummy head pronoun, animate sg 12.4.7
sɔ̄bɛ dv. go/make dark; *usually* write; *sɔ̄bīrɛ/ n.* piece of writing
sɔ̄bīgɛ/ dv. blacken
sɔ̄e̱ŋ̆ or *sɔ̄e̱ŋ̆ya pl sɔ̄ɔŋ̆bª cb sɔ̀ŋ̆- n.* witch
sógi̱àª n. soldier ← English
sɔ̄lʊ̄ŋɔ/ pl sɔ̄lɪmá n. story
sɔ̄ŋ̆ dv. rub
sɔ̄ŋ̆'eya/ sv. be better than; *agt sɔ̄ŋ̆'ɔdª/ pl sɔ̄ŋ̆'ɔbª/ cb sɔ̄ŋ̆'ɔd-*
sɔ̄nnīrɛ pl sɔ̄nnā cb sɔ̀n- n. courtyard dividing wall
sɔ̄ŋ̆sɛ ger sɔ́ŋ̆sìgª dv. converse, talk with
sɔ̄ɔŋ̆gɔ n. witchcraft
sɔ̄ɔŋ̆rɛ pl sɔ̄ŋ̆yā cb sɔ̀ŋ̆- n. liver
sɔ̀sɛ ger sɔ̄sīgª dv. ask; *agt sɔ̀sª n.* beggar
sʊ̀ dv. take a bath
su̱'āª dv. do secretly, hide
su̱āka/ n. hiding place
sūeŋ̆/ dv. anoint
sʊ̄'eya/ sv. own; *ger sʊ̄'ʊlímm n.* property, country, realm
sūgʊ̄rɛ/ dv. show forbearance, be patient with; *sūgʊrʊ́ n.* forbearance
sʊ̀mm n. goodness; well
sʊ̀mma sv. be good
sùmbʊ̄gʊsímm n. peace
sūmmīrɛ pl sūmmā cb sùm- n. groundnuts; *sùm-dʊ̄gʊdá n.* cooked groundnuts

sùn^{nɛ} *ger sùnnìr*^{ɛ} or *sùnnʊ̀g*^{ɔ} *dv*. bow one's head; *agt sūn*^{na} *n.* ("someone who goes about with bowed head") deep thinker, close observer WK

sūn̆'e$^{/}$ *dv*. become better than

sūn̆f$^{ɔ/}$ *sūun̆r*$^{ɛ/}$ *pl sūn̆yá cb sūn̆- n.* heart; *sūn̆-kpi̱'oŋ*^{ɔ} *n.* boldness 12.7.1; *sūn̆-má'asìm*^{m} *n.* joy (*Ḿ sūn̆f má'e yā.* "My heart has cooled"= I'm joyful); *sūn̆-málɪsìm*^{m} *cb sūn̆-málìs- n.* joy; *sūn̆-pêɛn*^{nɛ} *n.* anger (*Ḿ sūn̆f pélìg nɛ̄.* "My heart is whitened"= I'm angry); *sūn̆-sân̆'ʊŋ*^{ɔ} *n.* sorrow (*Ḿ sūn̆f sân̆'am nɛ̄.* "My heart is spoilt" = I'm sad)

sʊ̀ŋ^{ɛ} *dv*. help

sʊ̀ŋ^{ɔ} *sʊ̀m*^{mɛ} *pl sʊ̀mà cb sʊ̀ŋ- adj*. good

sʊ̀ŋā$^{/}$ *adv*. well, much

sú'ɵŋ^{a} *pl sū'ɵmís*^{ɛ} *cb sū'ɵŋ- n.* rabbit

sūɵr$^{ɛ/}$ *pl sụ̄yá cb sụ̄ā- n.* road; permission *in sūɵr bɛ́*, *mɔ̄r sūɵr* 22.1

sù'ɵs^{a} *n.* yesterday

sù'ɵs^{ɛ} *dv.* trick

sùr^{a} *sv*. have one's head bowed

sʊ̀sɔ̀m^{mɛ} *n.* grasshopper

Sʊ̄táanà n. Satan

sʊ̄ʊg$^{ɛ/}$ *dv*. wither (leaves) WK

sʊ̀'ʊg^{a} *sʊ̀'ʊg*^{ɔ} *pl sʊ̀'ʊs*^{ɛ} *cb sʊ̀'- n.* knife

T

tāa tāas^{ɛ} fellow- *as second part of compound* 9.2.1.4

tāabā tāab each other 12.4.5

tā'adīr^{ɛ} *pl tā'adā cb tà'ad- n*. sandal

tàal^{lɛ} *pl tàalà cb tàal- n.* fault, sin

tá'am^{mɛ} *pl tā'amá n*. shea tree fruit

tá'aŋ^{a} *pl tā'amís*^{ɛ} *cb tā'aŋ- n.* shea butter tree *Butyrospermum parkii*

tā'as$^{ɛ/}$ *dv*. help someone to walk; *in greetings* 25

tàb^{ɛ} *dv*. get stuck to

tàbì^{ya} *sv*. be stuck to

tàbìg^{ɛ} *dv*. get unstuck from

tàbìl^{ɛ} *dv*. stick to *(transitive)*

tàdìg^{ɛ} *n.* become weak

tādīm$^{m/}$ *pl tàdìm-nàm*^{a} *cb tàdìm- n.* weak person

tàdɪmís^{ɛ} *n.* weakness

Tàlìn^{nɛ} *n.* Talni language

Tàlìŋ^{a} *pl Tàlìs*^{ɛ} *cb Tàlìŋ- n.* Tallensi person

tàm^{m} *ipfv tàmmìd*^{a} *dv*. forget

tàmpi̱iŋ̆g^{a} *n*. rock

tàmpūa pl tàmpɔ̄ɔs^{ɛ} *cb tàmpɔ̀- n.* housefly 5.3.2

tàmpʊ̄vr$^{\varepsilon}$ *cb tàmpʊ̀-* *n.* ashpit, rubbish tip
tān$^{n\varepsilon}$ *pl tānā cb tàn-* *n.* earth; *tàn-mɛ̄ɛd*^{a} *n.* builder
tāňp^{ɔ} *n.* war; *tàňp-sɔ̄b*^{a} *n.* warrior
tàňs$^{\varepsilon}$ *ger tàňsʊ̀g*^{ɔ} *dv.* shout; *Wịnnìg táňsìd nɛ̄.* The sun is shining.
tār$^{a/}$ *ger tārím*^{m} *sv.* have; *more typical of Toende Kusaal*; *NT/KB always mɔ̄r*$^{a/}$
tàsìntàl$^{l\varepsilon}$ *n.* palm of hand
tàtàl$^{l\varepsilon}$ *n.* palm of hand
tāu̱ň$^{/}$ *pl tāňp*$^{a/}$ *cb tāu̱ň- tāňp-* *n.* sibling of opposite sex
tɛ̀b$^{\varepsilon}$ *ger tɛ̄bīg*^{a} *dv.* carry in both hands
tɛ̄bīg$^{\varepsilon/}$ *dv.* get heavy
tɛ̄bīs$^{a/}$ *sv.* be heavy
tɛ̄bɪsíg^{a} *tɛ̄bɪsír*$^{\varepsilon}$ *pl tɛ̄bɪsá cb tɛ̄bīs-* *adj.* heavy
tɛ̄bɪsím^{m} *n.* heaviness
tɛ́ɛbʊ̀l$^{\varepsilon}$ *pl tɛ́ɛbʊ̀l-nàm*^{a} *n.* table ← English
tɛ̄ɛg$^{\varepsilon/}$ *dv.* drag, draw; *tɛ̄ɛg* X *tʊ̀bʊ̀r* punish X
tɛ̀'ɛg^{a} *pl tɛ̀'ɛs*$^{\varepsilon}$ *cb tɛ̀'-* *n.* baobab *Adansonia digitata*
tɛ̄k$^{\varepsilon/}$ *dv.* pull
tɛ̀ňb$^{\varepsilon}$ *ger tɛ̀ňbʊ̀g*^{ɔ} *dv.* tremble, struggle
tɛ̀ň'ɛs$^{\varepsilon}$ *dv.* remind
tɛ̄ň'ɛs$^{\varepsilon/}$ *dv.* think; *ger tɛ̄ň'ɛsá* *n.* thought
tɛ̀ňr^{a} *ger tɛ̄ňrīb*^{ɔ} *sv.* remember
tɛ̄ŋ^{a} *pl tɛ̄ɛňs*$^{\varepsilon}$ *cb tɛ̀ŋ-* *n.* land; *tɛ̀ŋ-bi̱ig*^{a} *n.* native; *tɛ̀ŋ-dāan*^{a} *n.* traditional earth-priest; *tɛ̀ŋ-dʊ̄'adīg*^{a} *n.* native land; *tɛ̀ŋ-gbàu̱ŋ*^{ɔ} *n.* earth, land; *tɛ̀ŋ-pʊ̄vg*$^{ɔ/}$ *pl tɛ̀ŋ-pʊ̄vd*$^{\varepsilon/}$ *cb tɛ̀ŋ-pʊ̄-* *n.* village, town; *tɛ̀ŋ-zʊ̀ŋ*^{ɔ} *pl tɛ̀ŋ-zʊ̀vňs*$^{\varepsilon}$ *n.* foreign country; *tɛ̀ŋ-sʊ̄k*^{a} *n.* centre
tɛ̄ŋī=n$^{\varepsilon/}$ *or tɛ̄ŋír*$^{\varepsilon}$ downward; *as postposition* under 13.5
tɛ̀og^{ɔ} *pl tɛ̀ɛd*$^{\varepsilon}$ *n.* nest
tɛ̀'og^{ɔ} *pl tɛ̀'ɛd*$^{\varepsilon}$ *n.* baobab fruit
tì we, our *(right-bound)*; *tɪ* us *(enclitic)* 12.4.1
tì preverb conveying completion or purpose 16.8
tị̀à'al$^{\varepsilon}$ *dv.* come next
tị̀àk$^{\varepsilon}$ *dv.* change
tị̄'əb$^{\varepsilon}$ *dv.* prepare, get ready; heal *in this sense perhaps influenced by Arabic tʿibb* "medicinal art"; *tị̄'əb*^{a} *n.* healer
tị̀eň *dv.* inform WK (KED remember)
tị̀eň *dv.* stretch out
tị̀əŋ^{a} *pl tị̀əmìs*$^{\varepsilon}$ *cb tị̀əŋ-* *n.* beard; *tị̀əŋ-gʊ̄vr*$^{\varepsilon}$ *n.* chin
tīg$^{\varepsilon}$ *dv.* become sated, have too much/many; *ger tīgīr*$^{\varepsilon/}$ *n.* glut
tị̄'i$^{ya/}$ *ger tị̄'ib*$^{ɔ/}$ *sv.* be leaning (object)
tìɪg^{a} *pl tìɪs*$^{\varepsilon}$ *cb tì-* *n.* tree; *tì-dāvg*^{ɔ} *pl tì-dāad*$^{\varepsilon}$ *cb tì-dà-* *n.* bow (for arrows)
tị̄'il$^{\varepsilon/}$ *dv.* lean something

tìɪm^{m} *cb tì- n.* medicine; *tì-kʊ̄ʊdím*^{m} *n.* poison (killing-medicine); *tì-sābɪlím*^{m} *n.* "black medicine" (a particular traditional remedy); *tì-vʊ̄nním*^{m} *n.* oral medication

tị̀'in^{ɛ} *dv.* begin to lean

tị̀lás^{ɛ} *n.* necessity ← Hausa *tiilàs* 22.1

tìlìg^{ɛ} *dv.* survive, be saved

tīnám^{a} we, us *(contrastive)*; *tīnámì* we *(subject of ǹ-clause)* 12.4.1

tīntɔ̄ňrígᵃ pl tīntɔ̄ňrísᵋ cb tīntɔ́ňr- n. mole (animal)

tìp^{a} *pl tìp-nàm*^{a} *cb tìp- n.* healer (see *tị̄'əb*^{a} *id*)

tīrâan^{a} *pl tīrâan-nàm*^{a} *cb tīrâan- n.* neighbour, peer

tīrâannìm^{m} *n.* neighbourliness

tị́rɪgà ideo. for gīŋ^{a} short

tìs^{ɛ} *ipfv tìsìd*^{a} *tìt*^{a} *agt tìs*^{a} *dv.* give; *also tì before bound pronouns: tì=f* gave you

tītā'al^{lɛ} *n.* proud person

tītā'alīm^{m} *n.* pride

tītā'am^{m} *n.* multitude

tītā'ʊgᵓ tītā'arᵋ pl tītādā cb tītá'- adj. big, great

tɔ̀ OK 18.4 (= Hausa *tôo*)

tɔ̀d^{ɛ} *dv.* give to the poor, share

tɔ̄e̱$^{ya/}$ *sv.* be bitter, difficult

tɔ́klàe n. torch ← English "torchlight"

tɔ́lìb ideo.

tɔ̄līs$^{ɛ/}$ *dv.* do next, advance, carry on

tɔ́lɪlìlì ideo. for wɔ̄kᵓ/ tall

tɔ̀ňᵈᵛ. shoot

tɔ̀ň'ɔsᵋ dv. hunt

tɔ̄ɔgᵓ pl tɔ̄ɔdᵋ cb tɔ̀- adj. bitter, difficult

tɔ̄ɔm$^{m/}$ *dv.* depart, disappear

tɔ̀'ɔtɔ̄/ adv. straight away

tu̱à dv. grind in a mortar; *tu̱à-bī̱l*^{a} *n.* pestle

tu̱'à^{a} *dv.* speak, plead in court

tʊ̀'al^{ɛ} *dv.* condemn in court

tʊ̀'as^{ɛ} *dv.* talk

tʊ̀bʊ̀r^{ɛ} *pl tʊ̀bà cb tʊ̀b- n.* ear; *tʊ̀b-kpị̀r*^{ɛ} *n.* half of jaw; *tʊ̀b-yīu̱ŋᵓ/ adj.* one-eared

tʊ̄l$^{la/}$ *sv.* be hot

tùlìg^{ɛ} *dv.* invert

tʊ̄līg$^{ɛ/}$ *dv.* heat up

tʊ̀m^{m} *dv.* work; *ger tʊ̄ʊm*^{mɛ} *n.* deed *pl tʊ̄ʊmā n.* deeds; work *cb tʊ̀ʊm-*; *tʊ̀ʊm-bɛ̄'ɛd*^{ɛ} *n.* bad deeds; *tʊ̀ʊm-bɛ̄'ɛd-dím*^{a} *n.* sinners NT; *agt tʊ̀m-tʊ̄m*^{na} *n.* worker

tʊ̀m^{m} *ger tìtʊ̄mīs*^{ɛ} *dv.* send; *compare Hausa àikaa "send", aikàtaa "work"*

tūň'e sv. be able 19.1

tūɵedīr$^{\varepsilon}$ *pl tūɵedā cb tùɵd- n.* mortar
tùɵn$^{n\varepsilon}$ in front; *as postposition* 13.5; West (KB *yà tùɵnà*) 26.3; *tùɵn-gāt*^{a} *n.* leader
Tùɵn$^{n\varepsilon}$ *n.* Toende, western part of Kusaasiland
Tùɵnnìr$^{\varepsilon}$ *n.* Toende dialect of Kusaal
tūsīr$^{\varepsilon/}$ *n.* thousand 12.5.1
tʊ̀tūl$^{l\varepsilon}$ *n.* upside-down thing, *cf tùlìg*$^{\varepsilon}$
tʊ̄vlígā$^{/}$ *adv.* hotly
tʊ̄vlʊ́g^{ɔ} *pl tʊ̄vlá cb tʊ̄vl- adj.* hot
tʊ̄'ʊs$^{\varepsilon/}$ *dv.* meet

U
ùdʊ̀g^{ɔ} *pl ùt*$^{\varepsilon}$ *cb ùd- n.* (piece of) chaff
ūgʊ̄s$^{\varepsilon/}$ *dv.* bring up a child
ʊ̀k$^{\varepsilon}$ *dv.* vomit
ūk$^{\varepsilon}$ *dv.* bloat
ʊ̀m^{m} *dv.* close eyes
ūrīg$^{\varepsilon/}$ *dv.* scrape
ʊ́vn$^{n\varepsilon}$ *n.* dry season

V
vābī$^{ya/}$ *ger vāp*$^{ɔ/}$ KT *vābīr*$^{\varepsilon/}$ WK *sv.* be lying prone
vābīl$^{\varepsilon/}$ *dv.* make lie prone
vàbìn$^{\varepsilon}$ *dv.* lie prone
vàe dv. gather up
vāvňg$^{ɔ/}$ *pl vāaňd*$^{\varepsilon/}$ *cb vāň- n.* leaf
vɛ̄' dv. lead
vɛ̄'ɛg$^{\varepsilon/}$ *dv.* drag
vɛ̀n^{na} *or vɛ̀ňl*^{la} *sv.* be beautiful
vɛ̀ňllìg^{a} *pl vɛ̀ňllìs*$^{\varepsilon}$ *vɛ̀ňllà cb vɛ̀ňl- adj.* beautiful
vɛ̀ňllíŋ^{a} *pl vɛ̀ňllís*$^{\varepsilon}$ *cb vɛ̀ňllíŋ- adj.* beautiful
vɛ̀nnìg^{a} *vɛ̀nnìr*$^{\varepsilon}$ *pl vɛ̀nnìs*$^{\varepsilon}$ *vɛ̀nnà cb vɛ̀n- adj.* beautiful
vɛ̀nnìm^{m} *n.* beauty
vɪ̄' *dv.* uproot
vɪ̄k$^{\varepsilon/}$ *dv.* uproot
vɪ̣ug$^{ɔ/}$ *pl vɪ̣̄id*$^{\varepsilon/}$ *cb vɪ̣̄- n.* owl
vɔ̄b$^{\varepsilon/}$ *dv.* thrash *(tones uncertain)*
vū ger vūug$^{ɔ/}$ *dv.* make a noise; *vūud*$^{\varepsilon/}$ *n.* noise
vʊ̄e̱$^{ya/}$ *sv.* be alive
vʊ̄l$^{\varepsilon}$ *dv.* swallow
vʊ̀lìnvùuňl$^{l\varepsilon}$ *n.* mason wasp
vʊ̄m$^{m/}$ *cb vʊ̄m- n.* life; *vʊ̄m-pâal*$^{l\varepsilon}$ *n.* new life

vúɵŋ[a] *pl* *vūɵmís*[ɛ] *n.* red kapok *Bombax buonopozense*
vúɵr[ɛ] *pl* *vūáa* *cb* *vūɵ-* *n.* fruit of red kapok
vɔ̄r[ɛ/] *pl* *vɔ̄yá* *cb* *vɔ̄r-* *adj.* alive
vūrīg[ɛ/] *dv.* shift along, move over *(tones uncertain)*
vɔ̄'ʊg[ɛ/] *dv.* come, make alive
vɔ̄'ʊs[ɛ/] *dv.* breathe, rest
vɔ̄'ʊsím[m] *n.* resting

W

wā' *dv.* dance
wāad[ɛ/] *n.* cold weather
wáaf[ɔ] *pl* *wīigí* *cb* *wā'-* *n.* snake
wāal[ɛ/] *dv.* sow, scatter seed
wā'alím[m] *n.* length
wā'am[a/] *sv.* be long, tall
wàbìg[a] *wàbìr*[ɛ] *pl* *wàbìs*[ɛ] *wàbà* *cb* *wàb-* *n.* lame person
wàbılìm[m] *dv.* make, go lame
wābʊ̄g[ɔ/] *pl* *wābīd*[ɛ/] *cb* *wāb-* *n.* elephant
wādīr[ɛ/] *pl* *wādá* *cb* *wād-* *n.* law (← English "order" via Hausa) *plural as sg*: law
wād-tís[a] *n.* lawgiver NT
wà'e[ya] *sv.* be travelling
wālīg[a] *pl* *wālīs*[ɛ] *wālí* *(tone sic) cb* *wàl-* *n.* a kind of gazelle
wàŋìm[m] *dv.* waste away
wàsìnwàl[lɛ] *n.* a parasitic gall on trees, called "mistletoe" in local English
wàu̱ŋ[ɔ] *pl* *wànà* *cb* *wàu̱ŋ-* *adj.* wasted, thin
wèɛd[a] see *wìıd*[a]
wɛ̄ɛl[ɛ/] *dv.* be left unsold (KED) *but see* *wɛ̄og*[ɔ/]
wɛ̄l[ɛ] *dv.* bear fruit
wɛ̄l[lɛ/] *pl* *wɛ̄lá* *cb* *wɛ̄l-* *n.* fruit
wɛ̄lá or *wālá* how? 13.6; *nìŋ* *wɛ̄lá* *n*/*kà* how can ...? 19.1
wɛ̄n[na/] *sv.* resemble; *in KB* *wɛ̄n* *nɛ̄* *appears as* nwɛnɛ; *ger* *wɛ̄nnímm*
wɛ̄nnīr[ɛ] *adj.* resembling *(Pattern A, specifically confirmed with WK)*
wèog[ɔ] *n.* deep bush
wɛ̄og[ɔ/] *pl* *wɛ̄ɛd*[ɛ/] *n.* cheap thing sold in abundance WK
wi̱āk[ɛ/] *dv.* hatch (from an egg)
wìdìg[ɛ] *dv.* scatter
wi̱əf[ɔ] *pl* *wi̱dì* *cb* *wìd-* *n.* horse; *wìd-lɔ̄r*[ɛ/] *n.* place for tying up horses in a compound;
wìd-dāʊg[ɔ] *n.* stallion; *wìd-ňyá'aŋ*[a] *n.* mare; *wìd-zʊ̄ʊr*[ɛ] *n.* horsetail
wìıd[a] or *wèɛd*[a] *pl* *wìıb*[a] *cb* *wìıd-* *n.* hunter
Wi̱id[a] *pl* *Wi̱id-nàm*[a] *cb* *Wi̱id-* *n.* member of the clan Wiid
Wi̱idʊ̀g[ɔ] *n.* place of the clan Wiid

wi̱ig$^{a/}$ *n.* whistle
wìɪm^{m} *n.* sickness, disease ("worse than *bāǎ'as*^{ɛ}" WK)
wi̱k^{ɛ} *ipfv wi̱id*^{a} *dv.* fetch water 7.1
wi̱l^{lɛ} *pl wi̱là cb wi̱l-* *n.* branch
wīlɪsúŋ^{ɔ} *pl wīlɪmís*^{ɛ} *cb wīlɪsúŋ-* *n.* a kind of snail 5.3.2
wím ideo. for zi̱ǎ'a red
wīn$^{nɛ/}$ *pl wīná cb wīn-* *n.* God; god; spiritual double, *genius*; destiny; *wīn-tôɔg*^{ɔ} *n.* misfortune
Wínà'am^{m} *n.* God 11.1
wi̱nnìg^{a} *cb wi̱n-* *n.* sun; talent; *wi̱n-li̱ir*^{ɛ} *n.* sunset; *wi̱n-kɔ̀ɔǎr*^{ɛ} *n.* sunset
wi̱ug^{ɔ} *wi̱ir*^{ɛ} *pl wi̱yà wi̱id*^{ɛ} *cb wi̱-* *adj.* red
wɔ̄k$^{ɔ/}$ *wā'ar*$^{ɛ/}$ *pl wá'a wā'ad*$^{ɛ/}$ *cb wɔ̄k- wā'-* *adj.* long, tall
wɔ̀m^{m} *dv.* hear; understand (a language); smell
wʊ̄sā q. all
wʊ̄ʊ q. all
wʊ̄ʊ like, resembling 15
wʊ̄'ʊg$^{ɛ/}$ *dv.* get wet
wʊ̄'ʊl$^{ɛ/}$ *dv.* make wet

Y

yà you, your *pl (right-bound)*; *ya* you *pl (enclitic)* 12.4.1
^{ya} you *pl, enclitic subject after imperative* 4.2 12.4.1 18.3
yā independent-perfective particle 16.6.2
yà' if, when 20
yáa adv. whither?
yáab^{a} *pl yāa-nám*^{a} *cb yāa-* *n.* grandparent, ancestor; *yāa-dáu̱* *n.* grandfather; *yāa-pu̱'á*^{a} *n.* grandmother
yà'ab^{ɛ} *dv.* mould clay
yā'ad^{ɛ} *cb yà'-* *n.* clay
yà'al^{ɛ} *dv.* hang up; make perch (bird)
yà'an^{ɛ} *dv.* perch (of a bird)
Yàan^{nɛ} *n.* Yansi language (apparently Mooré now)
yáa ní adv. where?
yáaŋ^{a} *pl irr yáas*^{ɛ} *(consistently without nasalisation) cb yāaŋ-* *n.* grandchild, descendant 26.1
Yàaŋ^{a} *pl Yàam*^{ma} *Yàamìs*^{ɛ} *Yàaǎs*^{ɛ} *cb Yàaŋ-* *n.* Yansi person
yāar$^{ɛ/}$ *dv.* scatter
yàarìm^{m} *cb yàar-* *n.* salt
yà'as^{a} *yà'as*^{ɛ} again 19.1
yā'as$^{ɛ/}$ *dv.* open repeatedly

yàddā or *yàdā* *n.* faith, trust 16.9.1 ← Hausa *yàrda*; *probably* ← Arabic *yardʿa:*; *yàddā-níŋìr*$^{\varepsilon}$ *n.* belief

yādīg$^{\varepsilon/}$ *dv.* scatter; *agt* *yāt*$^{a/}$ *irreg. agt:* participant in a housebuilding ritual

yā'e$^{/}$ *dv.* widen, open (mouth)

yàk$^{\varepsilon}$ *dv.* unhang, unhook

yàlìm^{ma} *sv.* be wide

yālīm$^{m/}$ *pl* *yālīm-nám*^{a} *n.* worthless person

yālısúŋ^{ɔ} *pl* *yālımís*$^{\varepsilon}$ *cb* *yālısúŋ-* *n.* quail 5.3.2

yàlùŋ^{ɔ} *pl* *yàlımà* *cb* *yàlùŋ-* *adj.* wide

yām$^{m\varepsilon}$ *pl* *yàmà* *cb* *yàm-* *n.* hay WK

yām$^{m/}$ *cb* *yām-* *n.* gall; gall bladder; common sense. WK *yā'am*$^{m/}$; probably originally two distinct words 2.2

yàmmìg^{a} *yàmmùg*^{a} *yàmmùg*^{ɔ} *pl* *yàmmìs*$^{\varepsilon}$ *cb* *yàm-* *n.* slave

yānám^{a} you *pl (contrastive)*; *yānámì* you *pl (subject of ǹ-clause)* 12.4.1

Yārīg$^{a/}$ *pl* *Yārīs*$^{\varepsilon/}$ *cb* *Yār-* *n.* Yarsi person; also called Kantonsi; said to have been originally of Manding/Dyula origin

Yāt$^{\varepsilon/}$ *n.* Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)

yàʋg^{ɔ} *pl* *yàad*$^{\varepsilon}$ *n.* grave, tomb

yɛ̄ that 22; be about to ... 16.3.3

yè *dv.* dress oneself; *resultative adj* *yèɛlúŋ*^{ɔ} worn (e.g. of a shirt)

yèɛg$^{\varepsilon}$ *dv.* undress oneself

yèɛl$^{\varepsilon}$ *dv.* dress someone

yɛ̄ɛs$^{\varepsilon/}$ *dv.* betray a secret

yèl$^{\varepsilon}$ *ipfv* *yèt*^{a} *ger* *yèlùg*^{ɔ} *dv.* say, tell

yɛ̄l$^{l\varepsilon/}$ *pl* *yɛ̄lá* (*as postposition:* about 13.5) *cb* *yɛ̄l-* *n.* matter, affair; *yɛ̄l-méŋìr*$^{\varepsilon}$ *n.* truth; *yɛ̄l-nárùŋ*^{ɔ} *n.* necessity; *yɛ̄l-pákìr*$^{\varepsilon}$ *n.* disaster; *yɛ̄l-sú'adìr*$^{\varepsilon}$ *n.* confidential matter; *yɛ̄l-súm*$^{m\varepsilon}$ *n.* blessing

yɛ̄ŋím^{m} *dv.* oscillate (like waves)

yèog^{ɔ} *pl* *yèɛd*$^{\varepsilon}$ *n.* bird's crop; person displaced from family (KED)

yéoŋ *q.* one, *in counting*

yī *ipfv* *yīt*$^{a/}$ *imp* *yìm*^{a} *dv.* go, come out

yìdìg$^{\varepsilon}$ *dv.* go astray

yīdīg$^{\varepsilon/}$ *dv.* untie

yìər$^{\varepsilon}$ *n.* jaw

yīigá *q.* firstly; former 12.1; *yīig-sób*^{a} *n.* first person 12.4.7

yīis$^{\varepsilon/}$ *ger* *yīisíb*^{ɔ} *dv.* make go/come out, extract

yīmmír$^{\varepsilon}$ *pl* *yīmmá* *cb* *yīm-* *adj.* solitary, lone 12.5.1

yīmmú *q. adv.* straight away, at once

yīnní *q.* one

yìŋ^{a} *adv.* outside

yīr$^{ɛ/}$ *pl yā*$^{/}$ *cb yī- n.* house; *yī-dâan*^{a} *n.* householder; *yī-sɔ́b*^{a} *pl yī-sɔ́b-nàm*^{a} *n.* householder; *yī-dím*^{a} *n.* members of the household; *yī-pɔ́ňrʊ̀g*^{ɔ} *pl yī-pɔ́ňrà n.* neighbouring house; *yī-sígɪdɪ̀r*^{ɛ} *n.* lodging-house; *yín*^{nɛ} at home *pl yáa=n*^{ɛ}

yīs^{ɛ} *dv.* make go/come out, extract

yīu̱ŋ$^{ɔ/}$ *pl yīná adj.* single- 12.8.1.1

yɔ̀ dv. close; *resultative adj yɔ̀ɔlʊ́ŋ*^{ɔ} closed

yɔ̄^{n}*vv.* pay; *ger yɔ̄ɔd*$^{ɛ/}$ *n.* pay

yɔ̄līs$^{ɛ/}$ *dv.* untie

yɔ̄lɪsím^{m} *n.* freedom

yɔ̄lʊ̄g$^{ɔ/}$ *pl yɔ̄n*$^{nɛ/}$ *cb yɔ̄l- n.* sack, moneybag; (like Hausa *jàkaa*) £100, ¢200 (cedis)

yɔ̀'ɔg^{ɛ} *dv.* open

yɔ̀ɔr^{ɛ} *pl yɔ̀yà cb yɔ̀- n.* soldier ant

yu̱à dv. bleed; *also* fornicate WK

yʊ̄'adīr^{ɛ} *pl yʊ̄'adā n.* rafter

yùbìg^{a} *pl yùbìs*^{ɛ} *cb yùb- n.* small bottle-like pot

yūgʊdīr^{ɛ} *pl yūgʊdā cb yùgʊ̀d- n.* hedgehog

yʊ̄gʊ́m^{mɛ} *yʊ̄gʊ́m*^{nɛ} *pl yʊ̄gʊmá cb yʊ̄gʊ̄m- n.* camel

yùlìg^{ɛ} *dv.* swing *(transitive)*

yūň'e$^{/}$ *dv.* set alight

yū'ɵr^{ɛ} *pl yu̱ādā cb yù'ɵr- n.* penis

yùug^{ɛ} *dv.* get to be a long time, delay; *Tɪ̀ yûug nɛ̄ tāabā.* It's long since we met.

yùul^{ɛ} *dv.* swing *(intransitive)*

yʊ̄'ʊm$^{m/}$ *dv.* sing; *agt yʊ̄ʊm-yʊ̂'ʊm*^{na} *pl yʊ̄ʊm-yʊ̂'ʊmnìb*^{a} *n.* singer

yʊ́'ʊm^{nɛ} *pl yʊ̄'ʊmá cb yʊ̄'ʊm-* or *yʊ̄ʊm- n.* song

yʊ̀ʊm^{mɛ} *pl yʊ̀mà cb yʊ̀ʊm- n.* year; *yʊ̀ʊm-pāalíg*^{a} *n.* new year

yʊ̄'ʊn then, next 17.2.3

yʊ́'ʊŋ^{ɔ} *pl yʊ̄'ʊmís*^{ɛ} *cb yʊ̄'ʊŋ- n.* night

yʊ̄'ʊr$^{ɛ/}$ *pl yʊ̄dá cb yʊ̄'- n.* name

yʊ̄ʊr^{ɛ} *pl yʊ̄yā cb yʊ̀- n.* water pot

Z

zā$^{/}$ *cb zā- n.* millet

zāalíg^{a} *záal*^{lɛ} *pl zāalís*^{ɛ} *zāalá cb zāal- adj.* empty

zāalím^{m} *adv.* emptily

zàam^{m} *cb zà- n.* evening; *zà-sìsɔ̄bīr*$^{ɛ/}$ *n.* evening

zàň'an^{nɛ} *pl zàň'anà n.* metal hammer, iron-tipped weapon, bludgeon

zàaňsìm^{m} *dv.* dream

zāaňsím^{m} *cb zāaňs- n.* soup; *soup in general, not "fish soup" despite Mampruli zaasim "fish"; cf Toende zã̂asím "meat soup" (Niggli)*

zàaňsʊ́ŋ^{ɔ} *pl zàaňsímà cb zàaňsʊ́ŋ- n.* dream

zàb$^{\varepsilon}$ *ger* *zàbìr*$^{\varepsilon}$ *dv*. fight; hurt (of body part); *agt* *zàb-zàb*^{a} *n.* warrior;
agt *gbān-záb*^{a} *n.* leather-beater, leather-worker
zàbìl$^{\varepsilon}$ *dv*. cause to fight
zàk^{a} *pl* *zà'as*$^{\varepsilon}$ *cb* *zà'-* *n.* compound; *zà'-nɔ̄r*$^{\varepsilon/}$ *n.* gate; *zà'-nɔ̄-gúr*^{a} *n.* gatekeeper
zàkìm^{m} *dv*. itch
zàlìŋ^{a} *pl* *zàlımìs*$^{\varepsilon}$ *cb* *zàlìŋ-* *n.* electric eel
zàm^{m} *ipfv* *zàmmìd*^{a} *dv*. cheat; *agt* *zàm-zām*^{na} *n.* cheat
zàmìs$^{\varepsilon}$ *dv*. learn, teach
zāǎ'a *q*. every
zàǎ'as$^{\varepsilon}$ *dv*. refuse
zàǎbìl$^{\varepsilon}$ *dv*. tattoo, mark skin
zāǎbīn$^{n\varepsilon}$ *pl* *zāǎbınā* *cb* *zàǎbìn-* *n.* tattoo; NT sign 8.1.2
Zàngbèɛl$^{\varepsilon}$ *n.* Hausa language
Zàngbèog^{ɔ} *pl* *Zàngbèɛd*$^{\varepsilon}$ *n.* Hausa person
zàngùɵm$^{m\varepsilon}$ *pl* *zàngùɵmà* *cb* *zàngùɵm-* *n.* wall
zànkʊ̀'ar$^{\varepsilon}$ *pl* *zànkʊ̱'àa* *zànkʊ̀'adà* *cb* *zànkʊ̱'à-* *n.* jackal
zāǎl$^{la/}$ *ger* *zāǎllím*^{m} *sv*. be holding, carrying in hands
zàǎl$^{l\varepsilon}$ *n.* umbilicus
zàŋ$^{\varepsilon}$ *dv*. pick up, take up
zɛ̄m$^{ma/}$ *ger* *zɛ̄mmʊ́g*^{ɔ} *sv*. be equal
zɛ̄mīs$^{\varepsilon/}$ *dv*. make equal
zɛ̄mmʊ́g^{ɔ} *pl* *zɛ̄mmá* *cb* *zɛ̄m-* *adj*. equal
zı̱̄ *ger* *zı̱̄ìd*$^{\varepsilon/}$ *dv*. carry on one's head; *agt* *zı̱̄-zı̱̂id*^{a} *n.* carrier on the head
zī' *ger* *zī'ılím*^{m} *sv*. not know 16.5; *agt* *zī'ıd*$^{a/}$ *n.* ignorant person
zı̱̀'e^{ya} *ger* *zı̱̀'a* KED; DK KT *zı̱̀'əg*^{a} *(exceptional phonology* 11 8.1.1*) sv*. be standing
zı̱̀'əl$^{\varepsilon}$ *dv*. make to stand; *zı̱̀'əl nɔ̄r*$^{\varepsilon/}$ promise, command; *with* *n tìs* X: promise to X
zı̱̀'ən$^{\varepsilon}$ *dv*. stand still; *Ò zı̱̀'ən nɛ̄.* She's pregnant.
zīım$^{m/}$ *cb* *zī-* *n.* blood
zı́ıŋ^{a} *pl* *zı̱̄mí* *cb* *zı̱̄m-* *n.* fish; *zı̱̄m-gbâǎ'ad*^{a} *n.* fisherman
zìlìm$^{m\varepsilon}$ *pl* *zìlımà* *cb* *zìlìm-* *n.* tongue
zīlīnzî̂og^{ɔ} *adj*. unknown
zı́m *ideo. for* *sābılíg*^{a} black
zı̱̄ná today
zı̱̀ǎ'a *zɛ̀ǎ'ʊg*^{ɔ} *pl* *zɛ̀ǎ'ɛd*$^{\varepsilon}$ *zɛ̀ǎ'ɛs*$^{\varepsilon}$ *zɛ̀ǎdà* *cb* *zɛ̀ǎ'-* *adj*. red
zı̱̀ǎ'ı^{ya} *sv*. be sitting; *ger* *zı̱̄ǎ'ig*^{a} *pl* *zı̱̄ǎ'is*$^{\varepsilon}$ *cb* *zìǎ-* *(also* place*)*
zı̱̀ǎ'il$^{\varepsilon}$ *dv*. make sit, seat
zı̱̀ǎ'in$^{\varepsilon}$ *dv*. sit down
zīnzāʊ̱ŋ$^{ɔ/}$ *pl* *zīnzāná* *cb* *zīnzáʊ̱ŋ-* *n.* bat
zīrí *n*. lie, untruth
zɔ̀ *ipfv* *zɔ̀t*^{a} *imp* *zɔ̀m*^{a} *dv*. run; fear; experience emotion; *ger* *zūa* *zɔ̄ɔg*^{ɔ} run;
ipfv ger *zɔ̀tìm*^{m} fear 9.2.1.4 *Ò zɔ̀tō nı̱̄n-báalìg.* He has pity on him,

zɔ̄l^{ɛ} *dv*. castrate
zɔ̄lɪmís^{ɛ} *n.* foolishness
zɔ̄lʊ̄g$^{ɔ/}$ *pl* *zɔ̄n*$^{nɛ/}$ *cb* *zɔ̄l-* *n.* fool
zɔ̄m$^{m/}$ *cb* *zɔ̄m-* *n.* flour
zɔ̄ɔm^{mɛ} *zɔ̄ɔm*^{nɛ} *pl* *zɔ̄ɔmā* *cb* *zɔ̀ɔm-* *n.* refugee, fugitive
zɔ̄rī̱g$^{a/}$ *n.* small child WK
zɔ̄rʊ̄g$^{ɔ/}$ *pl* *zɔ̄rá* *n.* piece
zū *dv*. steal
zu̱à *pl* *zu̱à-nàm*^{a} *cb* *zu̱à-* *n.* friend
Zùa *pl* *Zùɵs*^{ɛ} *n.* member of clan Zoose; *subclans pl* *Zu̱à-wị̀is*^{ɛ}/*-wị̀ib*^{a}, *pl* *Zu̱à-sābɪlís*^{ɛ}
zù'e *dv*. get higher, more
zùe *dv*. perch, get on top *(? variant of zù'e)*
zūg$^{ɔ/}$ *pl* *zūt*$^{ɛ/}$ *cb* *zūg-* *zū-* 5.2 *n.* head; *as postposition* 13.5; *zūgʊ́=n*^{ɛ} *is also used as a postposition*; *zūg-dâan*^{a} *n*. boss, master (replaces *zūg-sɔ́b*^{a} in KB for meanings other than "the Lord"); *zūg-kʊ̄gʊ̄r*^{ɛ} *pl* *zūg-kʊ̄gā* *cb* *zūg-kʊ́g-* *n.* pillow; *zūg-máu̱k*^{ɔ} *pl* *zūg-mâ'ad*^{ɛ} *adj*. crushed-headed; *zūg-sɔ́b*^{a} *n.* boss; NT Lord; *zū-pɛ́ɛlʊ̀g*^{ɔ} *pl* *zū-pɛ́ɛlà* *adj*. bald; *zū-pí̱bʊ̀g*^{a} *n.* hat
zùlʊ̀g^{ɛ} *dv*. deepen
zùlʊ̀m^{ma} *sv*. be deep
zùlʊ̀ŋ^{ɔ} *pl* *zùlɪmà* *cb* *zùlʊ̀ŋ-* *adj*. deep
zùlʊ̀ŋ^{ɔ} *n.* depth
zʊ̀nzɔ̀ŋ^{a} *zʊ̀nzɔ̀ŋ*^{ɔ} *pl* *zʊ̀nzɔ̀ɔ̌ns*^{ɛ} *cb* *zʊ̀nzɔ̀ŋ-* *n*. blind person
zūɵbʊ́g^{ɔ} *pl* *zūɵbíd*^{ɛ} *cb* *zūɵb-* *n.* hair (of human head); see *kɔ̄ɲ̌bʊ̄g*^{ɔ}
zùɵd^{ɛ} *n*. friendship
zùɵl^{ɛ} *dv*. make to perch
zū'ɵm$^{m/}$ *pl* *zū'ɵmís*^{ɛ} *cb* *zū'ɵm-* *n.* blind person
zū'ɵm$^{m/}$ *dv*. go blind, make blind
zùɵn^{ɛ} *dv*. begin to perch
zūɵr^{ɛ} *pl* *zu̱ēyā* *cb* *zu̱à-* *n.* hill
zùɵs^{ɛ} *dv*. befriend
zūrífʊ^{ɔ} *pl* *zūrí* *cb* *zūr-* *n.* dawadawa seed
zʊ́'ʊɲ̌f^{ɔ} *pl* *zʊ̄'ʊní* *n*. dawadawa seed
zùuɲ̌g^{ɔ} *pl* *zùuɲ̌s*^{ɛ} *zùuɲ̌d*^{ɛ} *cb* *zùɲ̌-* *n.* vulture
zʊ̄ʊr^{ɛ} *pl* *zʊ̄yā* *cb* *zʊ̀-* *n.* tail; *zʊ̀-wɔ̄k*$^{ɔ/}$ *adj*. long-tailed