

A Grammar of Agolle Kusaal

Revised Version

David Eddyshaw



Contents

Preface.....	ix
Preface to the Revised Version.....	xi
Introduction to the Grammar.....	xii
Other Studies of Kusaal.....	xiv
Abbreviations.....	xvi
Interlinear Glossing.....	xvii
Transcription Conventions.....	xix
Sources.....	xx
References/Bibliography.....	xxi
1 Introduction to Kusaal and the Kusaasi.....	1
1.1 The Kusaasi People.....	2
1.2 The Kusaal Language.....	4
1.2.1 Language Status.....	4
1.2.2 Dialects.....	5
1.2.3 Related Languages.....	6
1.2.4 External Influences.....	15
1.3 Orthography.....	17
1.3.1 Written Materials.....	19
1.4 Outline of Kusaal Grammar.....	23
Morphophonemics.....	38
2 Words, Morae and Syllables.....	38
2.1 Word Classes.....	38
2.2 Apocope.....	38
2.2.1 Superscript Notation.....	42
2.2.2 Predictability of Long Forms.....	45
2.3 Word Division.....	47
2.3.1 Compound Noun Phrases.....	48
2.3.2 Liaison.....	49
2.4 Morae, Syllables and Stress.....	53
2.5 Ordering of Morphophonemic Rules.....	54
3 Consonants.....	55
3.1 Inventory and Symbols.....	55
3.2 Consonant Clusters.....	60
4 Vowels.....	63
4.1 Inventory and Symbols.....	63
4.1.1 Agolle Vowel Breaking.....	64
4.2 Root Vowels.....	66
4.2.1 Nasalisation.....	66
4.2.2 Glottalisation.....	67
4.2.3 Diphthongs.....	68
4.3 Epenthetic Vowels.....	71
4.4 Affix Vowels.....	72

5	Tones.....	74
5.1	Tonemes.....	74
5.2	Levelling within Syllables.....	75
5.3	Realisation Rules.....	75
5.3.1	H Spreading.....	75
5.3.2	Downstepping before H.....	79
6	Word Segmental Structure.....	82
6.1	Roots, Prefixes and Suffixes.....	82
6.1.1	Root Alternations.....	85
6.1.1.1	CVV~CV~CVC.....	85
6.1.1.2	CVVC~CVC.....	91
6.1.1.3	Glottalisation before Derivational Suffixes.....	92
6.2	Consonant Changes.....	93
6.2.1	Consonant Clusters and Epenthetic Vowels.....	93
6.2.1.1	Consonant Changes in Derivation.....	98
6.3	Vowel Changes.....	101
6.3.1	Consonant Deletion and Vowel Fusion.....	101
6.3.2	Before *-ya *-gv *-kkv *-ηηv.....	104
6.3.3	Length Constraints.....	106
6.4	Apocope Blocking.....	107
7	Word Tonal Structure.....	108
7.1	Tone Patterns.....	108
7.2	Nominals.....	111
7.2.1	Pattern H.....	111
7.2.1.1	Tonal Effects of Deleted Morae.....	112
7.2.1.2	Subpattern HL.....	113
7.2.2	Pattern L.....	114
7.2.3	Pattern O.....	115
7.2.4	Nominals with Prefixes.....	117
7.3	Verbs.....	118
7.3.1	Pattern H.....	119
7.3.2	Pattern LO.....	120
7.3.3	Descriptive Verbs.....	122
7.4	Quantifiers, Adverbs and Particles.....	122
7.5	Tone in Derivation.....	123
7.5.1	Tones of Deverbal Nominals.....	125

8 External Sandhi.....	126
8.1 Prosodic Clitics.....	127
8.1.1 Presubject Long Forms.....	131
8.2 Liaison.....	132
8.2.1 Liaison Enclitics.....	132
8.2.1.1 Fronting and Rounding before Liaison Enclitics.....	136
8.2.1.2 Allomorphy of the Subject Pronoun ^{ya}	139
8.2.2 Non-Enclitic Liaison Words.....	140
8.2.2.1 Particles of the Form <i>n</i>	143
8.2.2.1.1 Complementiser <i>ṇ</i>	144
8.2.2.1.2 Serialiser <i>n</i>	145
8.2.3 Tonemes before Liaison.....	146
8.3 Initial L Raising.....	149
8.3.1 Fixed L Tonemes.....	151
8.4 Initial M Raising.....	152
8.4.1 Tone Raising after Words with M Raising.....	155
8.5 Segmental Contact Phenomena.....	157
8.5.1 Consonant Assimilation.....	157
8.5.2 Loss of Nasalisation.....	158
8.5.3 Loss of Fronting.....	159
Morphology.....	161
9 Noun Flexion.....	161
9.1 Noun Classes.....	161
9.1.1 Noun Class and Meaning.....	163
9.2 Stem Levelling.....	164
9.2.1 Singulars and Plurals.....	164
9.2.2 Combining Forms.....	165
9.3 Noun Paradigms.....	167
9.3.1 ^a ^b ^a Class.....	167
9.3.1.1 ^r ^ε ^b ^a Subclass.....	171
9.3.1.2 ^b ^a as Singular.....	172
9.3.2 ^g ^a ^s ^ε Class.....	172
9.3.2.1 ^g ^o ^s ^ε Subclass.....	174
9.3.3 ^g ^o ^d ^ε Class.....	175
9.3.3.1 ^g ^o ^a ⁺ Subclass.....	177
9.3.4 ^r ^ε ^a ⁺ Class.....	178
9.3.4.1 ^l ^ε Subclass.....	181
9.3.5 ^f ^o ⁱ ⁺ Class.....	182
9.3.6 ^b ^o Class.....	184
9.3.7 ^m ^m Class.....	185
9.4 <i>ṇām</i> ^a Plurals.....	186
9.5 Plurals used as Singulars.....	187
9.6 Nouns with Apocope Blocking.....	189
9.7 Loanwords.....	190
10 Adjective Flexion.....	191
10.1 Primary.....	191
10.2 Deverbal.....	194

11	Verb Flexion.....	196
11.1	Variable Verbs.....	196
11.1.1	Irregular.....	199
11.2	Invariable Verbs.....	200
11.2.1	Dynamic.....	201
11.2.2	Descriptive.....	203
11.2.2.1	Relational.....	204
11.2.2.2	Adjectival.....	204
12	Stem Conversion.....	206
12.1	Nominals from Verbs.....	206
12.1.1	Perfective Gerunds.....	206
12.1.1.1	From Variable Verbs.....	206
12.1.1.1.1	Irregular Formations.....	207
12.1.1.2	From Dynamic Invariable Verbs.....	209
12.1.2	Concrete Nouns.....	209
12.2	Nominals from Nominals.....	211
13	Derivational Suffixes.....	213
13.1	Nominals.....	213
13.1.1	From Verbs.....	213
13.1.1.1	Agent Nouns.....	214
13.1.1.2	Deverbal Adjectives.....	218
13.1.1.2.1	Dynamic.....	218
13.1.1.2.2	Resultative.....	221
13.1.1.3	Instrument Nouns.....	221
13.1.1.4	Imperfective Gerunds.....	222
13.1.1.5	Other Deverbal Formations.....	224
13.1.2	From Nominals.....	225
13.2	Verbs.....	228
13.2.1	From Verbs.....	228
13.2.1.1	From Stance Verbs.....	228
13.2.1.2	Causatives.....	229
13.2.1.3	Reverse Action.....	230
13.2.1.4	Other Deverbal Formations.....	231
13.2.2	From Nominals.....	232
14	Derivational Prefixes.....	234
14.1	Reduplication-Prefixes.....	235
14.2	<i>Da(n) ba(n) sa(n)</i>	236
14.3	<i>P̄ k̄(n)</i>	238
14.4	Stranded Combining Forms.....	238
15	Pronouns.....	240
15.1	Personal.....	240
15.2	Demonstrative.....	241
15.3	Indefinite.....	242
15.4	Interrogative.....	244
15.5	Reciprocal.....	244

16	Quantifiers.....	245
16.1	Quantifiers: Overview.....	245
16.2	Number Words.....	246
16.2.1	Numbers: Overview.....	246
16.2.2	Quantifiers.....	248
16.2.3	Counting Forms.....	249
16.2.4	Adjectives and Ordinal Constructions.....	250
16.2.5	Adverbs.....	251
16.3	Proquantifiers.....	252
17	Adverbs.....	253
17.1	Proadverbs.....	256
18	Unanalysable Complex Stems.....	257
18.1	Loanwords.....	257
	Syntax.....	263
19	Noun Phrases.....	263
19.1	Noun Phrases: Overview.....	263
19.2	Noun Phrase Categories.....	263
19.2.1	Number.....	263
19.2.2	Gender.....	265
19.2.3	Person.....	267
19.3	The Article <i>lā^{+/}</i>	268
19.4	Coordination.....	273
19.5	Apposition.....	276
19.6	Compounding.....	277
19.6.1	Complex Compounds.....	278
19.7	Dependents Preceding the Head.....	280
19.7.1	Generic Arguments to Deverbal Nouns.....	280
19.7.2	Modifiers.....	283
19.7.2.1	Generic Count Nouns.....	283
19.7.2.2	Generic Non-count NPs.....	284
19.7.2.3	Adverbial Phrases.....	286
19.7.3	Determiners.....	287
19.8	Dependents Following the Head.....	288
19.8.1	Adjectives.....	289
19.8.1.1	Class Agreement.....	290
19.8.1.2	Downtoning.....	291
19.8.1.3	Ideophones.....	291
19.8.1.4	Bahuvrihis.....	293
19.8.1.5	Nouns as Adjectives.....	294
19.8.2	Determiners.....	296
19.8.2.1	Pronouns.....	296
19.8.2.2	Quantifiers.....	296
19.8.2.3	Adverbial Phrases.....	297
19.9	Specialised NP Heads.....	297
19.9.1	Determiners.....	297
19.9.2	Gerunds and Deverbal Abstract Nouns.....	299
19.9.3	<i>Mēṇ^a/ dāan^a sōb^a bōn^{ne}/</i>	300
19.10	Personifier Clitics.....	304
19.10.1	With VPs and Clauses.....	306

20	Adverbial Phrases.....	308
20.1	Adverbial Phrases: Overview.....	308
20.2	Time and Circumstance.....	308
20.3	Place.....	309
20.4	Manner.....	313
20.5	AdvPs as Verb Arguments.....	314
20.6	Postpositions.....	316
21	Prepositions.....	319
21.1	Core Prepositions.....	319
21.2	Loanwords.....	321
21.3	Compound Prepositions.....	322
22	Verbal Predicators.....	324
22.1	Structure.....	324
22.2	Aspect.....	325
22.2.1	Perfective.....	326
22.2.2	Imperfective.....	328
22.2.2.1	Stative.....	328
22.2.2.2	Dynamic.....	331
22.3	Tense.....	332
22.3.1	Tense Particles.....	332
22.3.2	Other Constructions for Tense.....	333
22.3.3	Implicit Tense Marking.....	334
22.4	Mood.....	336
22.5	Polarity.....	339
22.6	Independency Marking.....	340
22.6.1	Tonal Features.....	341
22.6.1.1	Tone Overlay.....	341
22.6.1.2	Absent L Raising after Subject Pronouns.....	343
22.6.2	Segmental Features.....	344
22.6.2.1	Perfective $yā^+$	345
22.6.2.2	Imperative $-m^a$	347
22.7	Clitics Bound to the Predicator.....	348
22.7.1	$L\bar{e}\bar{e}$ "but".....	348
22.7.2	Particle-Verbs.....	349
22.7.3	Liaison Enclitics.....	352
23	Verb Phrases.....	353
23.1	Transitivity and Objects.....	353
23.1.1	Passives.....	357
23.1.2	Middle Uses of Intransitives.....	358
23.2	Predicative Complements.....	359
23.2.1	Manner-adverbs.....	361
23.3	Locative Complements.....	362
23.4	Prepositional Phrases as Complements.....	363
23.5	Clausal Complements.....	364
23.6	Adjuncts.....	365
23.7	Verb-Phrase-Final Particles.....	365
24	The Verbs "to be".....	368
24.1	$B\bar{e}^+$ "be somewhere, exist".....	368
24.2	$\bar{A}e\eta^a$ "be something/somehow".....	369

25	Non-Verbal Predicators.....	373
26	Serial Verb Phrases.....	375
26.1	Serial Verb Phrases: Overview.....	375
26.2	Coordination.....	378
26.3	Auxiliary Verbs in Serial VPs.....	378
26.3.1	Preceding the Main VP.....	378
26.3.2	Following the Main VP.....	382
26.4	Serial VPs Introduced by <i>hālí</i> ⁺	385
27	Clauses.....	386
27.1	Structure.....	386
27.1.1	Subjects.....	386
27.1.2	Clause-linker Particles.....	387
27.1.3	Conjunctions.....	388
27.1.4	Post-Subject Particles.....	392
27.1.5	Ellipsis.....	393
27.1.5.1	Coordination and Ellipsis.....	393
27.1.5.2	Null Anaphora of Subjects.....	394
27.2	Downranking, Insubordination and Independency Marking.....	395
28	Main Clauses.....	399
28.1	Structure.....	399
28.1.1	Clause-Level Adjuncts Preceding the Subject.....	399
28.2	Clause Types.....	400
28.2.1	Content Questions.....	400
28.2.2	Polar Questions.....	403
28.2.3	Commands.....	404
28.2.4	Clauses without Predicators.....	406
28.3	Insubordinate <i>kà</i> -Clauses.....	407
28.3.1	Coordination of Main Clauses.....	407
28.3.2	Narrative and Sequential Clauses.....	408
28.3.2.1	Aspect.....	411
29	Subordinate Clauses after <i>kà</i> and <i>yē</i>	413
29.1	Purpose Clauses.....	413
29.2	Supplement Clauses.....	418
29.3	Content Clauses.....	421
29.3.1	Direct and Indirect Speech.....	424
29.3.2	Logophoric Pronouns.....	426
29.3.3	Resumptive <i>yē</i>	427
30	Conditional Clauses.....	429
30.1	Conditional Clauses: Overview.....	429
30.1.1	Remoteness Marker <i>n^ε</i>	431
30.1.2	<i>Nāan</i> (ι) "in that/which case".....	432
30.2	Open.....	437
30.3	Hypothetical.....	438
30.4	Contrary-to-Fact.....	439

31	N-Clauses.....	441
31.1	Absolute Clauses.....	444
31.1.1	Time/Circumstance Adjuncts.....	445
31.1.2	With Prepositions and Postpositions.....	446
31.2	Relative Clauses.....	448
31.2.1	Non-Initial Antecedents.....	448
31.2.2	Initial Antecedents.....	453
31.2.3	Appositional Relative Clauses.....	458
31.2.4	Article with Relative Clauses.....	459
32	Negation.....	460
32.1	Negation of Clauses.....	460
32.1.1	Negative Verbs.....	460
32.2	Negative Raising.....	462
32.3	Position of the Negative Prosodic Clitic.....	464
32.4	Constituent Negation.....	466
33	Information Packaging.....	468
33.1	Focus: Overview.....	468
33.1.1	Subject Focus: Serialiser- <i>n</i>	468
33.1.2	VP Constituent and VP Focus: <i>nē^{+/}</i>	470
33.1.2.1	Contexts where <i>nē^{+/}</i> cannot Appear.....	470
33.1.2.2	Words which cannot be Focussed with <i>nē^{+/}</i>	473
33.1.2.3	Contexts where <i>nē^{+/}</i> cannot be Aspectual.....	475
33.1.2.4	VP Constituent Focus.....	480
33.1.2.5	VP Focus.....	484
33.2	Clefting and Preposing with <i>kà</i>	486
33.3	Extraposition and Dislocation.....	489
33.4	Presentational Constructions.....	491
33.5	Free and Bound Personal Pronouns.....	492
33.6	Emphatics.....	493
	Lexicon.....	495
34	Greetings and Other Formulae.....	495
35	Structured Semantic Fields.....	498
35.1	Kinship Terms.....	498
35.2	Personal Names.....	500
35.3	Place Names.....	502
35.3.1	Kusaal Personal and Place Names in English.....	505
35.4	Ethnic Group and Clan Names.....	506
35.5	Trees and Fruits.....	507
35.6	Body Parts.....	508
35.7	Colour Terms.....	509
35.8	Time Expressions.....	509
36	Minimal Pairs.....	511
36.1	Tense and Lax Vowels.....	511
36.2	Tones.....	512
37	General Vocabulary.....	513

Preface

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

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

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

This grammar began as an attempt on my part to understand Kusaal morphophonemics, an origin which the reader will find reflected in the relative fullness of the treatment. It grew into areas where I was even less sure-footed, and I am very conscious of its deficiencies. A more accurate name for the work would probably be "Some Aspects of Kusaal Morphophonemics with Brief Notes on Syntax." In the course of working up my old notes after many years many questions have occurred to me which I lacked the experience to ask when I had daily contact with Kusaal speakers. If my description provokes others to ask some of those questions I will be very happy, especially if they share the answers with me. Experts will soon notice that I have worked a small corpus very hard; many of my generalisations are greatly in need of testing against further data, especially in the treatment of syntax.

The customary disclaimer that the work is not written in accordance with the principles of any particular theoretical framework will rapidly be seen to be entirely superfluous. *J'ai pris mon bien là où je l'ai trouvé.*

Until recently, there were almost no linguistic works available on Kusaal. Happily, the situation is changing; in the References and Bibliography below I list, notably, numerous works by Urs Niggli on the Toende Kusaal of Burkina Faso, and more encouragingly still, an account of aspects of the language by Hasiyatu

Abubakari, a native speaker. Most of this recent work is on the Toende dialect, and describes a language different in a good many respects from the Agolle dialect treated here; this has made it less useful for my immediate purposes than I might have hoped, but opens up fascinating avenues for future investigation.

Among the various helpful accounts of Western Oti-Volta languages that I have been able to consult I have found Knut Olawsky's careful study of Dagbani particularly useful, both because of its intrinsic merits and because the language is one of those most closely related to Kusaal.

My very brief account of the Kusaasi people themselves in my Introduction is merely a short list of points I found especially interesting, and is in no way even the beginning of an adequate account of a deep and intricate culture. I am even less of an anthropologist than a professional linguist; it is much to be hoped that Kusaasi culture finds worthy students and investigators, ideally Kusaasi themselves, who can portray it as it deserves. Until then I would recommend Ernst Haaf's work "Die Kusase" (see Bibliography.) Haaf was a doctor in Bawku Presbyterian Hospital from 1959 to 1962; he was still remembered with affection thirty years later. The work concentrates especially on Kusaasi traditional medicine, but contains a great deal of other interesting material.

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

I am particularly grateful to Brian McLemore, Executive Director of Global Translation Services at Bible League International, for consulting the original translators of the Kusaal New Testament versions and granting permission for me to cite verses from those versions, which are copyright to Bible League International along with the Ghana Institute of Linguistics, Literacy and Bible Translation. My debt to these works and their creators is discussed further in the following pages.

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, December 2016
david.eddyshaw@btinternet.com

Preface to the Revised Version

Citius emergit veritas ex errore quam ex confusione.

Truth will sooner come out from error than from confusion.

Francis Bacon, *Novum Organum*, Book II, Aphorism XX

Since December 2016 I have made substantial revisions to this grammar.

The orthography now conforms more closely to existing Kusaal written sources; the price of a slight increase in complexity of spelling rules is worth paying for the benefit of Ghanaian readers already familiar with such materials. I have included most of the revisions seen in the 2016 Kusaal Bible, which are improvements in almost all cases, except for an increased ambiguity in the marking of nasalisation [1.3.1](#). Many previous orthographic inconsistencies have been eliminated in the new Bible version.

Interlinear glosses now appear throughout.

I have tried to clarify the presentation of numerous points, and corrected a good many errors, some minor, others involving more systematic problems. I have abandoned the strategy of rigorous separation of description from internal reconstruction and comparative material, which all too often led to explanatory matter being unhelpfully separated from the description it was meant to illuminate.

The unsatisfactory term "Tight Clitic" has been dropped; instead, the familiar name "Liaison" has been pressed into service in an appropriate technical sense.

Tonal nomenclature and notation previously reflected the close structural parallels with the tone systems of other Western Oti-Volta languages, but from a strictly language-internal standpoint it is more natural to describe the system in terms of high, mid and low tonemes. Altering the tone marking to reflect this, I have also made the notation much less abstract: the domain of tone marking is now the word rather than the punctuation group, and low tonemes are marked explicitly.

Reconsideration of the rôle of the focus particle *nɛ̃⁺* following the morphologically unmarked bare-stem form of the verb [22.2.2.1](#) has led to fairly extensive changes in the description of aspect, with greater stress on the dynamic/stative opposition in the verbal system, and (I hope) a clearer appreciation of the distinction between form and function in this complex area.

David Eddyshaw

Swansea, April 2018

Introduction to the Grammar

Full understanding of any single part of a grammatical system may depend on also understanding the whole. I have tried to mitigate this problem by starting with a fairly extensive *précis* of the language in the Introduction before presenting a standard bottom-up account.

I have included a vocabulary intended to list all words used in the text, along with as many others as possible for which I could adequately determine vowel contrasts and tones. This may be of some independent value in view of the unavailability of David Spratt's short dictionary of Agolle Kusaal; for the Toende dialect of Burkina Faso there is the much more copious "Dictionnaire kusaal-français-anglais" of Urs Niggli, which is readily available online. Tony Naden is working on a full-scale dictionary of Agolle Kusaal.

I have gleaned many helpful ideas from the Cambridge Grammar of the English Language (Huddleston and Pullum 2002), a valuable guide to the kinds of question it is helpful to ask about the syntax even of languages very different from English.

Kusaal lends itself readily to internal reconstruction. Illuminating comparative work is also feasible, given that there are quite extensive materials in and about several closely related languages. I have incorporated material of this kind where it seemed likely to be helpful or interesting.

A particular challenge to description is posed by **Apocope**, the deletion of underlying word-final vowels in most but not *all* contexts 2.2. Apocope removes the conditioning factors for phonological alternations which would otherwise have been non-contrastive. It affects morphology, rendering word forms which would result from the usual morphononemic rules ambiguous; rule operation is often disrupted to avoid this 6.2.1, sometimes so systematically that new regular subpatterns have been created 9.1. Apocope greatly complicates questions of phrase-level segmental and tone sandhi 8.5 8.2. It causes a number of short clitics to lose segmental representation altogether in most contexts, so that their presence is recognisable only from segmental and/or tonal effects on preceding words 8. Non-Africanists may find Kusaal interesting particularly because of these wide-ranging effects.

My working orthography 1.3 is close to the revised orthography of the 2016 Bible; as far as Agolle Kusaal is concerned, the revisions seem unlikely to cause much difficulty for readers familiar with older materials.

The missing *ɪ* is added for [ɪ], *ɲ* is used for *n* when it is not a consonant but a nasalisation mark, and the writing of diphthongs is systematised by always using *ẽ ĩ ũ* instead of *e i u* for non-moraic segments and *iə uə* rather than *ie uo* for the phonemic monophthongs realised [iə] [uə] 4.1.1. Word division accords more closely with the analysis of wordhood adopted in this grammar, and tones are marked.

All written sources are cited in their original orthography, with an accompanying transliteration into the working orthography of this grammar. The tone marking of written examples was supplied by me and rarely checked in detail with informants.

This grammar is the outcome of circumstances very different from the systematic fieldwork of a trained linguist. The morphology and such parts of the phonology as are original (essentially all the treatment of tone) derive from elicitation work with informants, for whose extraordinary patience in supplying and endlessly repeating forms I am very grateful. The treatment of phrase-level syntactic phenomena is largely based on work with these informants in elicitation and in exploring puzzling constructions I had encountered while attempting to communicate at work. All, especially WK, were alert to nuances and quick to see where I was going with enquiries; they readily came up with analogous or contrasting forms to help me. All four of my regular informants were first-language speakers of Agolle Kusaal, with essentially first-language level competence in English also. All were male, and around forty years old. I noted examples of conversation from many speakers, but recorded few examples of the usage of younger speakers specifically, though I noticed a few comments about the incorrect grammar of the young from my informants (surely a cultural universal.) I found no evidence of significant differences between the speech of men and women but made no systematic enquiries on this point. My informants showed a number of minor speech differences from one another, which were probably dialectal, but I have not explored the question of subdialects within Agolle Kusaal.

My materials drawn from conversation were limited as to genre. More informal settings would have rounded out the picture in many respects. For example, features like ideophones [19.8.1.3](#) are sparsely represented my data, and this has probably led to underestimation of their importance in the language as a whole.

Neither I nor my informants had the time to investigate syntactic issues at clausal or higher level adequately together, and I had in any case little understanding of the issues involved at that point. I compensated as far as I could by private study of written materials, storing up problems to discuss later with my teachers. It will be seen below that in these matters I have relied very heavily on the NT versions. I have also drawn on the collection of stories and proverbs *Kusaal Solima ne Siilima*, and to a lesser 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 written materials would not exist.

The Bible versions are regarded by Kusaal speakers as being in good and idiomatic (if sometimes difficult) Kusaal. As translations, they nevertheless cannot be fully representative of the language.

The data on which this account is based are now twenty years old. The New Testament version available then was that of 1976; the 1996 revision adapted most foreign names to accord more closely with ordinary Kusaal spelling, but otherwise made no systematic orthographic changes. A decision was evidently made to replace all instances of the previously common indirect speech construction [29.3.2](#) with direct speech, and many other changes were made to improve the accuracy and clarity of the translation. The 2016 complete Kusaal Bible makes significant orthographic changes and shows considerable improvements in orthographic accuracy. There is some evidence of actual language change over this forty-year period [8.2.2](#), but some divergences between the spelling especially of older sources and the speech of my informants in the 1990's are probably simply matters of orthographic convention [8.5.3](#).

The 1996 Kusaal New Testament is available as [audio and searchable text](#) provided by the organisation "Faith Comes By Hearing." The format is naturally intended for evangelism and Bible study rather than linguistic research; the audio includes distracting background music, and the readers vary noticeably in the naturalness and fluency of their delivery. Nevertheless, this allows interested readers outside Ghana some access to spoken materials which can be used to criticise and improve on my work. The spoken forms consistently agree with my informants' usage against the orthography when differences arise.

The complete 2016 Kusaal Bible is now available as an [Android application](#).

There is no standard or prestige form of Agolle Kusaal [1.2.2](#), and as a natural consequence the language is not entirely uniform in any of the Bible versions.

Other Studies of Kusaal

The pioneers of Kusaal grammatical study were **David** and **Nancy Spratt**. I owe a great deal to their work in identifying the segmental phonemes of the language and creating a practical orthography. This standard orthography is not adequate for the needs of foreign learners or for scientific description, but its deficiencies are largely remedied with diacritics in David Spratt's "Introduction to Learning Kusaal." I found this work much the most useful previous account of Kusaal, despite its brevity (forty-two pages.) It was especially helpful in getting me started with the tonal system; although the description does not claim to be more than a preliminary sketch, it was invaluable in pointing me in the right direction, particularly as I had no previous experience with tone languages; at the time I first obtained a copy of Spratt's work I had got little farther than determining that tone was lexically contrastive in Kusaal. David Spratt's work has also been helpful in matters of lexicon. His Kusaal vocabulary uses the 1976 New Testament orthography, with its underdifferentiation of vowels, and does not mark tones, but it provided useful data for morphological study, especially of gerund formation.

Aside from this, virtually all of the analysis behind this grammar is original, almost exclusively so in the case of the morphology and syntax, and in all but the most basic aspects of the tonal system. As far as I know, there have been no other attempts to describe the morphology of Agolle Kusaal to the extent attempted here. Previous studies of Kusaal syntax are either very brief or concerned with limited subsystems treated from a theory-intensive standpoint. Almost all of these studies describe the Toende dialect, and there are significant differences from Agolle Kusaal. Here too, my analyses are thus essentially all original. They are far from profound or definitive, and to a great extent are simply derived from study of the New Testament versions, but I hope will at least be useful as a basis for the work of more expert investigators in future.

More recently, numerous wide-ranging grammatical and lexical studies of the Toende Kusaal of Burkina Faso have been produced by **Urs Niggli**, who has also done considerable work with Kassem and Farefare, and edited a very useful dictionary of Mooré. I have found his Kusaal materials of great comparative interest, but the language itself differs significantly from the Agolle dialect described here, and I have not borrowed from his grammatical analyses. Niggli's account also suggests that the tonal system of Toende Kusaal is surprisingly dissimilar to that of Agolle, especially in matters of tone sandhi. Niggli's "Dictionnaire" has been an excellent resource for Toende comparative material; it marks all vowel contrasts, and the most recent update also marks tone in many headwords. However, the tones are sometimes at variance with those given in Niggli's other works; comparison with Agolle Kusaal and with other Western Oti-Volta languages suggests that this may be because the effects of external tone sandhi have not always been allowed for.

Tony Naden is currently working on a dictionary of Agolle Kusaal, which will be much the most extensive lexicographic work on the language so far when it is complete. The work is based on written sources and accordingly will not mark distinctions (such as tone) which are not reflected in the standard orthography.

There have been several publications on aspects of Kusaal grammar by **Hasiyatu Abubakari**, a mother-tongue Toende Kusaal speaker currently conducting postgraduate studies in linguistics at the University of Vienna. She has plans to publish more, including further studies of the phonological structure of the language, including the tonal system, and the difficult area of focus particles. Her work seems likely to advance the understanding of the structure of the language significantly: Kusaal may well come to take a place as one of the best described of all Gur languages.

Abbreviations

(See also Interlinear Glossing Conventions below.)

AdvP	Adverbial Phrase
an	animate gender
ATR	Advanced Tongue Root
BNY	<i>Bunkonbid ne Niis ne ba yela</i> (see Sources)
C	Consonant
cb	combining form (of nominal)
dipf	dynamic imperfective (not stative)
DK	Informant (see Sources)
ger	gerund
H	High toneme
ILK	"An Introduction to Learning Kusaal" (David Spratt)
inan	inanimate gender
irreg	irregular
KB	Kusaal Bible of 2016 (see Sources)
KED	"A Short Kusaal-English Dictionary" (David Spratt)
KKY	<i>Kusaas Kuob ne Yir yela Gbauŋ</i> (see Sources)
KSS	<i>Kusaal Solima ne Siilima</i> (see Sources)
KT	Informant (see Sources)
L	Low toneme
LF	Long Form (of word capable of standing clause-finally)
M	Mid toneme
NP	Noun Phrase
NT	Kusaal New Testament Versions of 1976 and 1996 (see Sources)
pl	plural
rem	Remoteness Marker
SB	Informant (see Sources)
SF	Short Form (of word capable of standing clause-finally)
sg	singular
V	Vowel
VP	Verb Phrase (not "Verbal Predicator" 22)
WK	Informant (see Sources)
1sg 2pl ...	First Person Singular, Second Person Plural etc

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

Interlinear Glossing

Abbreviations:

ABSTR	Abstract	9.1.1
ADV	Adverbial	17
AN	Animate Gender	19.2.2
CNTR	Contrastive (Personal Pronouns)	33.5
COMP	Complementiser (underlyingly <i>h̃</i>)	8.2.2.1.1 31
COP	Copula <i>àɛŋ</i> ^a	24.2
CQ	Content Question Prosodic Clitic	2.2.1 8.1
DEM	(Short) Demonstrative Pronoun	15.2
DEM.DEI	Deictic (Long) Demonstrative Pronoun	15.2
DIPF	Dynamic Imperfective Verb Form	11.1
EXIST	Existence/Location Verb <i>bɛ̃</i> ⁺	24.1
FOC	Focus Particle <i>nɛ̃</i> ^{+/}	33.1.2 22.2
GER	Gerund	12.1.1
IMP	Independent Imperative Verb Form	11.1
INAN	Inanimate Gender	19.2.2
INDF	Indefinite Pronoun	15.3
IRR	(alone) Positive Irrealis Mood Marker	22.4
LOC	Locative Postposition (<i>nĩ</i> ^{+/} ~ <i>nɛ̃</i>)	20.3
NEG	(alone) Negative Prosodic Clitic	2.2.1 8.1
NEG.BE	Negative Verb to and COP and EXIST	32.1.1
NEG.HAVE	(Another use of the same verb)	32.1.1
NEG.IMP	Negative Imperative Marker	22.4
NEG.IND	Negative Indicative Marker	22.4
NEG.IRR	Negative Irrealis Marker	22.4
NEG.KNOW	Negative Verb <i>zĩ</i> ⁺	32.1.1
NEG.LET	Negative Verb <i>mìt</i>	32.1.1
NUM	Number Prefix <i>à- bà- h̃- bù-</i>	16.2.1
OB	Object (Liaison Enclitic Pronouns)	8.2.1
PERS	Personifier Clitic <i>à-</i>	19.10
PFV	Independent Perfective Marker <i>yā</i> ⁺	22.6.2.1
PL	Plural	19.2.1
PQ	Polar Question Prosodic Clitic	2.2.1 8.1
REL	Relative Pronoun	31.2.2
REM	Remoteness Marker	30.1.1
SER	Serialiser (underlyingly <i>n</i>)	8.2.2.1.2 26.1
SG	Singular	19.2.1
TNS	Tense Marker	22.3.1
VOC	Vocative Prosodic Clitic	2.2.1 8.1

Personal Pronouns:

1SG 1PL	1st sg/pl	15.1
2SG 2PL	2nd sg/pl	15.1
3AN 3INAN	3rd sg Animate/Inanimate	15.1 19.2.2
3PL	3rd pl	15.1
2PL.SUB	Postposed 2nd pl Subject	28.2.3

The linker particles *kà* and *yē* are conventionally glossed "and" and "that" respectively throughout, though this very often does not reflect the true meaning in context [27.1.2](#).; similarly *yà* [30.1](#) is glossed "if" in all cases. The empty particle *nē* which follows objects of comparison which lack the article [21.1](#) is glossed "like."

Mass nouns [19.2.1](#) are not specified as **SG** or **PL** in the glossing; similarly, Invariable Verbs [11.2](#) are not labelled for aspect. The Base Form of Variable Verbs is also unlabelled.

The symbol \emptyset in the glossing represents words with no surface segmental representation at all, which are detectable only from tonal and segmental effects on preceding words [8](#). Prosodic Clitics [8.1](#) are represented by $^+\emptyset$, and Liaison [2.3.2](#) is marked by $_$.

For the purposes of interlinear glossing, I have adopted the concept of wordhood reflected in the traditional orthography. This entails a deviation from the Leipzig Glossing Rules for clitics. Clitics which the traditional orthography writes solid with their hosts, as if they were word fragments, are in both the working orthography of this grammar and in glossing joined to their hosts by *hyphens* (not =): these comprise Nominal combining forms, the Personifier particle *À-*, and the Liaison Enclitics *n^ε LOC n^ε REM ^{ya} 2PL.SUB* along with the LF of o **3AN.OB** [2.3](#). All other clitics are written as separate words throughout. Polysyllabic words ending in a vowel symbol before a hyphen are always followed by Liaison, and as this is predictable, the $_$ symbol is then omitted: *pōvɔv-n* "inside", not *pōvɔv_n*.

Transcription Conventions

For the working orthography used for Agolle Kusaal in this grammar see [1.3](#).

Phonetic transcriptions are written in square brackets; they are quite broad, and ignore a good deal of allophony, as explained in [3.1 4.1](#).

Starred forms representing the input of morphophonemic rules do not represent a single underlying form of the language but are given *ad hoc* to illustrate the particular rule in question.

Hausa words are cited in the orthography of Jaggar 2001, except that long vowels are written with double letters rather than macrons, as in Caron 1991. High tone is unmarked, low tone is marked with a grave, and a circumflex represents falling tone. Standard Kano forms are given, although the actual source of the loanwords in Kusaal is the *Gaanancii* lingua franca. Dialect variation in Hausa is surprisingly small, however, considering the wide area over which the language is spoken and its extensive use as a second language.

Mooré words are cited as in Niggli 2016, along with his tone marking. Acute accents represent high tone, grave low; tone marks seem to apply to all following unmarked morae, and a second acute after a first within a single word seems usually to represent a downstepped H tone. The Mooré sources reflect Ouagadougou Mooré, which differs somewhat from the dialect with which Kusaal has been in contact.

Arabic transcriptions use IPA symbols, except that *y* is used for *j*; classical forms are given, with brackets around the segments omitted in pause.

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

Words from other languages are cited as given in the sources from which they are drawn, except for tones, which are transcribed using acute for H, grave for L, macron for mid tone and ↓ for emic downstep. Absent tone marks in these languages represent lack of tonal information.

This colour is used for words cited in foreign languages, including Agolle Kusaal in the original orthography of written sources; *this* colour is reserved for words and word fragments written in the working orthography of this Grammar.

Internal and external hyperlinks appear like [this](#).

Sources

Informants

With great reluctance I have omitted the names of my four principal informants, as I am not currently able to confirm that they would be happy to be identified. I am very grateful to all of them. If any of the four would like to see his name included in its rightful place of honour, I would be delighted to comply.

These abbreviations are not the initials of the informants' names.

WK	(from Koka)	KT	(from Tempene)
DK	(from Kukpariga)	SB	(from Bawku)

Texts

From GILLBT (Ghana Institute of Linguistics, Literacy and Bible Translation), Tamale:

Bunkonbid ne Niis ne ba yela
Bŭn-kɔ̃nbìd nē Níis né bà yēlá

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

Kusaal Solima ne Siilima
Kōsáàl Sólumà nē Síílímà

"Kusaal Stories and Proverbs"
Samuel Akon, Joe Anabah

Kusaas Kuob ne Yir yela Gbaun
Kōsáàs Kùèb nē Yīr yēlá Gbàun

"A book on Kusaasi farming and housing"
William A. Sandow, Joseph A.H. Anaba

Bible Translations:

Wina'am Gbaun
Wínà'am Gbáun

Kusaal Bible
1976 NT © World Home Bible League
1996 NT © The Bible League/GILLBT
2016 Complete Bible © GILLBT

References/Bibliography

Abubakari, Hasiyatu

Object-sharing as symmetric sharing: Predicate Clefting and Serial Verb
Constructions in Kusaal
Master's Thesis, University of Tromsø, 2011

Ideophones in Kusaal

Journal of West African Languages, Vol 44.1 (2017)

Adouna, Gbandi

Description phonologique et grammaticale du Konkomba

Université Rennes 2; Université de Lomé (TOGO), 2009.

Akanlig-Pare, George and Kenstowicz, Michael

Tone in Buli

Studies in African Linguistics, Volume 31, Numbers 1/2, 2002

Albro, Daniel

Nawdm-English Dictionary with Examples (1998)

Anttila, Arto and Bodomo, Adams

Stress and Tone in Dagaare

Ashton, Ethel O

Swahili Grammar (Including Intonation)

Longmans 1947

Balima, Adama et al

More Basic Course

Foreign Service Institute. Undated

Bendor-Samuel, John (Editor)

The Niger-Congo Languages

University Press of America 1989

Berthelette, John

Sociolinguistic Survey Report for the Kusaal Language

SIL International 2001

Bloomfield, Leonard

A Set of Postulates for the Science of Language

Language 2. 153-164 (1926)

Bodomo, Adams

The structure of Dagaare

Stanford Monographs in African Languages.

CSLI, Stanford, California 1997

Brindle, Jonathan

A dictionary and grammatical outline of Chakali

Language Science Press, 23 Jun. 2017

Campbell, Lyle

Historical Linguistics: an Introduction
Edinburgh University Press 2013

Canu, Gaston

La Langue Mò:rê; Dialecte de Ouagadougou (Haute-Volta)
Société d'Études Linguistiques et Anthropologiques de France 1976

Caron, Bernard

Le Haoussa de l'Ader
Dietrich Reimer Verlag, Berlin 1991

Chitoran, Ioana

A perception-production study of Romanian diphthongs and glide-vowel
sequences
Journal of the International Phonetic Association
Volume 32, Issue 02 (December 2002) pp 203-222

Dimmendaal, Gerrit J

Historical Linguistics and the Comparative Study of African Languages
John Benjamins 2011

Fiedler, Ines

Nawdm
In: Noun Class Systems in Gur Languages. Vol. 2: Oti-Volta Languages.
Gudrun Miehe, Brigitte Reineke & Kerstin Winkelmann (eds.), 566-601.
Köln: Köppe. (Generously shared by the author via Researchgate)

Giffen, Robyn

[We begin to write: creating and using the first Nabit orthography](#)
MA Thesis, University of British Columbia 2015

Güldemann, Tom

The Macro-Sudan Belt: towards identifying a linguistic area in northern
sub-Saharan Africa; in A Linguistic Geography of Africa, Eds.
Bernd Heine, Derek Nurse, Cambridge University Press, 2007

Guthrie, Malcolm

Grammaire et Dictionnaire de Lingala
Librairie Évangélique au Congo, Léopoldville, 1951

[Proto-Bantu reconstructions](#)

Haaf, Ernst

Die Kusase
Gießener Beiträge zur Entwicklungsforschung, Reihe II, Band 1
Gustav Fischer Verlag, Stuttgart 1967

Heath, Jeffrey

Tondi Songway Kiini (Songhay, Mali)
Stanford Monographs in African Languages 2005

[Dictionary Humburi Senni \(Songhay of Hombori, Mali\) - English - French](#)

- Huddleston, Rodney and Pullum, Geoffrey
The Cambridge Grammar of the English Language
Cambridge University Press 2002
- Hunt, Geoffrey
A Phonology of the Hanga Language
Institute of African Studies, University of Ghana 1981
- Hyman, Larry M
Niger-Congo Verb Extensions: Overview and Discussion
Selected Proceedings of the 37th Annual Conference on African Linguistics, ed. Doris L. Payne and Jaime Peña, 149-163. (2007)
- Iliasu, A A
The Origins of the Mossi-Dagomba States
Institute of African Studies: Research Review, 1971
- Inkelas, Sharon
The Interaction Between Morphology and Phonology
in The Handbook of Phonological Theory
Second Edition, edited John Goldsmith et al
Blackwell Publishing Ltd 2011
- Jaggar, Philip
Hausa
Benamins 2001
- Jungraithmayr, Hermann and Abu-Manga, Al-Amin
Einführung in die Ful-Sprache
Dietrich Reimer Verlag, Berlin 1989
- Kiparsky, Paul
How Abstract is Phonology?
in Kiparsky, Paul: "Explanation in Phonology"
Walter de Gruyter 1982
- Kleinewillinghöfer, Ulrich
Relationship between Adamawa and Gur Languages:
the Case of Waja and Tula.
Cahiers Voltaïques / Gur Papers I (1996), 25-45
- Kröger, Frantz
Buli-English Dictionary
LIT Verlag 1992
- Kropp Dakubu, Mary Esther
Parlons farefari (gurenè) : Langue et culture de Bolgatanga (Ghana) et ses environs
L'Harmattan, 2009

Lambrecht, Knud

Information Structure and Sentence Form: Topic, Focus, and the Mental
Representations of Discourse Referents
Cambridge University Press, 1994

Lébikaza, Kézié

Grammaire kabiyè: une analyse systématique
Rüdiger Köppe Verlag, Köln, 1999

Lefebvre, Claire and Brousseau, Anne-Marie

A Grammar of Fongbe
Mouton de Gruyter, 2002

Lund, Christian

'Bawku is still volatile': ethno-political conflict and state recognition in
Northern Ghana
Journal of Modern African Studies, 41, 4 (2003), pp. 587-610. 2003
Cambridge University Press (available via Researchgate)

Manessy, Gabriel

Contribution à la Classification Généalogique des Langues Voltaïques
Société d'Études Linguistiques et Anthropologiques de France 1979

Naden, Tony

The Gur Languages
in The Languages of Ghana, Ed. M E Kropp Dakubu
Kegan Paul International 1988

[Dictionaries](#) of Mampruli (very comprehensive), Nabit and Talni (much less so)

Newman, Paul and Roxana Ma

"Modern Hausa-English Dictionary"
University Press PLC Ibadan 1979

Niggli, Urs

Participant Reference in Kusaal Discourse
MA Degree in Field Linguistics,
Centre for Linguistics, Translation & Literacy, Redcliffe College 2014

La phonologie du kusaal 2012

Grammaire élémentaire du kusaal 2012

Dictionnaire kusaal-français-anglais sans images 2014

Esquisse Grammaticale du ninkãɛ 2007

Dictionnaire Ninkãɛ-Français 2013

[Dictionnaire mooré-français-anglais](#) 2016 © SIL International

and much other interesting material on [Toende Kusaal](#), [Farefare and Kassem](#)

Nurse, Derek and Phillipson, Gérard (eds)

The Bantu Languages
Routledge, 2003

- Olawsky, Knut
Aspects of Dagbani grammar
LINCOM Europa 1999
- Olson, Kenneth S
[An Evaluation of Niger-Congo Classification](#)
SIL International, 2004
- Ouaba, Bénôit Bendi
Dictionnaire Bilingue Gulimancéma-Français
Sous-Commission Nationale du Gulimancéma, BP 164 Fada N'Gourma
- Painter, Colin
Gonja: a Phonological and Grammatical Study
Indiana University Publications, 1970
- Prost, André
La Langue Bisa
Centre IFAN, Ouagadougou; republished by Gregg Press Ltd, 1968
- Reinhard, Pierre
Description de la Langue Moba
SIL Togo 1984
- Rennison, John R
Koromfe
Routledge 1997
- Sambiéni, Coffi
Le Proto-Oti-Volta-Oriental
Rüdiger Köppe Verlag, Köln, 2005
- Smits, Heleen
[A Grammar of Lumun: a Kordofanian Language of Sudan](#)
LOT (Netherlands Graduate School of Linguistics) 2017
- Somé, Penou-Achille
Dàgàrà-ʔyèrbíé ou proverbes dagara
L'Harmattan 1992
- Souag, Lameen
[Language Contact in the Sahara](#)
Oxford Research Encyclopaedias, Linguistics (online), June 2016
- Spencer, Andrew and Luís, Ana
Clitics: An Introduction
Cambridge University Press 2012

Spratt, David

A Short Kusaal-English Dictionary

Ghana Institute of Linguistics, Tamale. Undated photocopy

An Introduction to Learning Kusaal

Ghana Institute of Linguistics, Tamale. Undated photocopy

Kusal Syntax

Institute of African Studies, University of Ghana 1972

Stewart, John M

The potential of Proto-Potou-Akanic-Bantu as a pilot

Proto-Niger-Congo, and the reconstructions updated

Journal of African Languages and Linguistics 23 (2002), 197-224

Swanson, Alan

Gourma Grammar

SIM, Fada N'Gourma. Burkina Faso;

undated typescript distributed by ESSOR Rural

Trimingham, J. Spencer

Islam in West Africa

Clarendon Press 1959

Vance, Timothy J

'Canadian Raising' in Some Dialects of the Northern United States

American Speech, Vol 63, no 3. (1987) pp 195-210

Zongo, Bernard

Parlons Mooré

L'Harmattan 2010

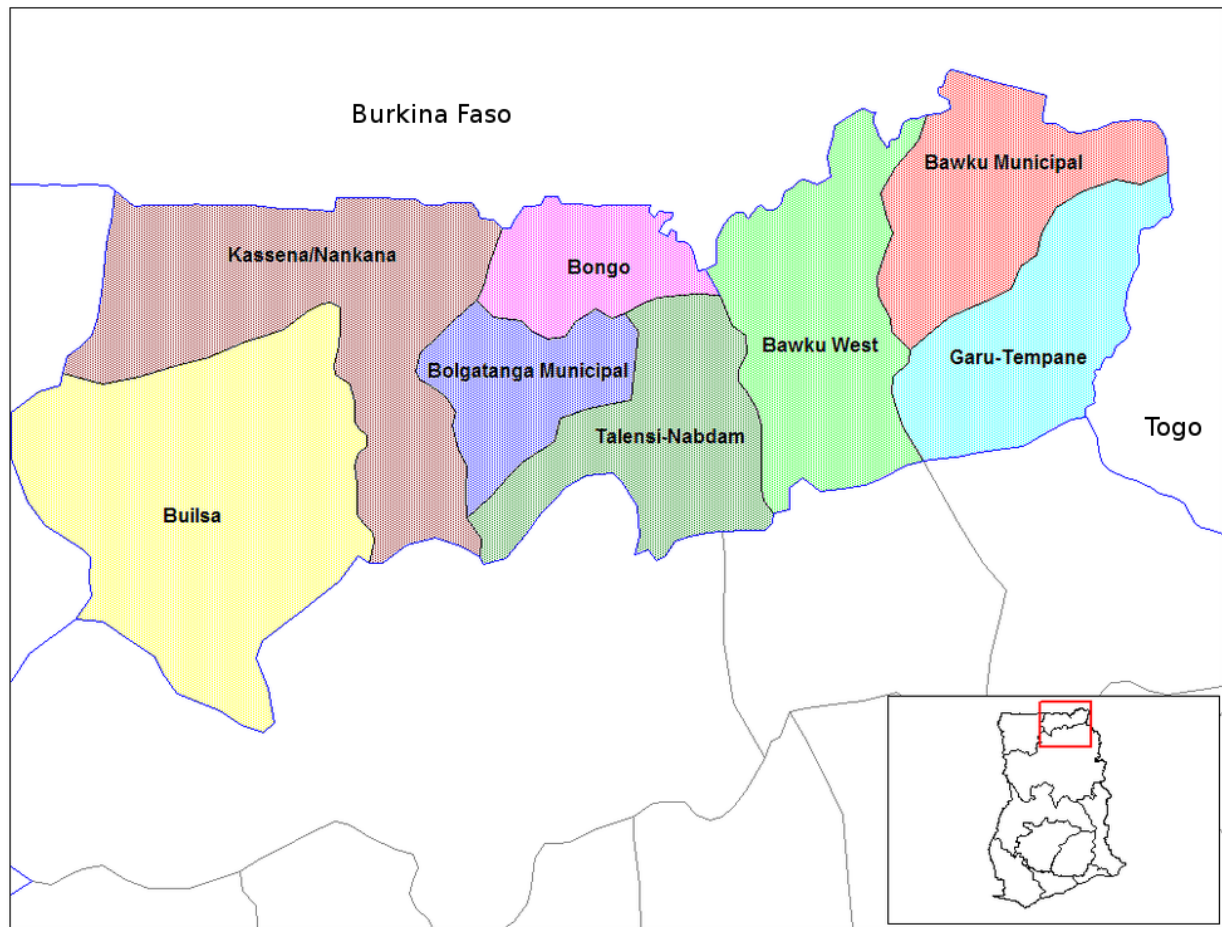
Zwicky, Arnold M and Pullum, Geoffrey K

Cliticization vs. Inflection: English N'T

Language, Vol 59 no 3 (Sept 1983) 502-513

1 Introduction to Kusaal and the Kusaasi

Upper East Region of Ghana (Public Domain, created by [Rarelibra](#))



Kusaal is the language of the Kusaasi, the majority ethnic group of the Bawku Municipal, Bawku West and Garu-Tempane Districts of the Upper East Region in the far northeast of Ghana, extending from the Red Volta river and the Gambaga Escarpment to the national borders with Burkina Faso and Togo. The smaller area west of the White Volta river, coinciding largely with Bawku West District, is called **Toende** in Ghanaian English (less often spelt "Tonde", and in French contexts "Tondé"), Toende Kusaal *Tóŋn* "in front, West", Agolle Kusaal *Tùen*^{NE}. The larger eastern part is **Agolle** (less accurately spelt "Agole"), Kusaal *Agòl*^{LE} "Upper." The Ghanaian districts comprise most of *kūsáùg*³ "Kusaasiland", but there are also a good number of Kusaasi settlements in the neighbouring part of Burkina Faso, west of the White Volta and south of Zabré, and a few over the border in Togo.

1) Superscript letters represent the parts of Kusaal words deleted in most contexts by Apocope [2.2](#). They play no part in the pronunciation of citation forms, and may be ignored in this section, along with the / tone mark which follows some superscripts.

1.1 The Kusaasi People

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

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

Most Kusaasi are cultivators, living in widely scattered compounds, each one the domain of a single family head with his wives, sons, daughters-in-law and grandchildren. Cattle-raising is common but is mostly the preserve of Fulbe and Mossi. There is one rainy season, lasting unpredictably from May to October. The main crop is millet of various kinds, along with rice to a lesser extent. Millet is used to make the Kusaasi staple millet porridge *sā'ab*^ɔ, called "TZ" /ti:'zɛd/ in local English (from Hausa *tuwon zaafi*, literally "hot porridge"), and the traditional millet beer, *dāam*^{m/}, called "pito" (Hausa *fitoo*) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans (*dɔɔg*^ɔ, "house") which tend to be associated with particular areas. (The clans being both exogamous and area-based, I was once told: "The first thing a young man looking for a wife needs to do is to get a bicycle.") A Kusaasi person knows his or her clan, and often its *pɔɔr*^{ε/} "slogan", part of its traditional lineage, but unlike the Mossi, the Kusaasi do not use clan names as surnames. Clans have taboos associated with them (for example, against eating particular animals) and have their own cults, but no administrative function; the Kusaasi originally had no chiefs. In religious matters the leading man of the area is the *tɛŋ-dāan*^a or earth-priest, who is supposed to be the descendant and heir of the original oikist or first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the remarkably durable continuations and offshoots of polities founded, probably around the fourteenth century, by incoming conquerors traditionally held to be from the region of Lake Chad. The invaders created hereditary chiefdoms among previously acephalous Gur- and Mande-speaking peoples, who nevertheless continued to provide the *tɛŋ-dāan-nām*^a. The founder of these kingdoms was Na Gbewa, whose seat was at Pusiga (Kusaal *Pūsɪg*^{a/}) 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 have much in common culturally with their neighbours, especially the Mossi and Mamprussi. Traditional Kusaasi dress resembles that of the Mamprussi, Dagomba and Mossi, including the characteristic long-sleeved baggy smock *bānāa*⁺, called a "fugu shirt" in English (cf Kusaal *fūug*^{ɔ̃} "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 southern Ghana; similarly, of the roughly 5% Muslims, most belonged to other ethnic groups.

Traditional belief includes a creator God, *Wīn*^{nɛ/}, invoked in proverbs and greetings but remote from everyday life and not to be approached in prayer or worship. A characteristic proverb enjoins gratitude to the Creator, saying:

Dīm nē Wīn, dā tɔ́'às nē Wīnné ⁺∅.

Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG.

"Eat with God, don't talk with God."

Another warns against evildoing, but in these terms:

Wīn nyé kà sīn.

God:SG see and be.silent.

"God sees and is silent."

Everyday religious practice is concerned rather with local non-anthropomorphic spirits, also called *wīn*^{nɛ/}. A *wīn*^{nɛ/} resides in an object such as a stone or horn, which is a *būgur*^ɛ, often called a "fetish" in old ethnographic accounts; the implications of this term are however very misleading, as it is the *wīn*^{nɛ/} that is significant, not its place of attachment.

An important rôle is played by the diviner, *bā'a*⁺, who can seek guidance for a client (*būgud*^a) on all matters by casting lots. This rôle is distinct from that of the traditional healer; such healers themselves show considerable variation in approach from essentially herbalist to frankly occult.

A human being is understood as having four components: *nīn-gbīn*^{ɔ̃} "body"; *nyò-vōr*^{ɛ/} "life" as opposed to death, possessed by all living animals; *wīn*^{nɛ/} (in this sense) "genius, spirit, a person's own spiritual self or double"; and *kīkīrs*^{ɛ/}, protective

spirits (called "fairies" in local English.) Men have three *kikiris*^{ε/}, women a fourth, because of the dangers of childbirth. (Throughout the cultural zone, three is the man's number, and four is the woman's.) There are thought to be wild *kikiris*^{ε/} in the bush which are hostile and try to lead travellers astray. The term *sīg*^a "life force", used to render "spirit" in Christian materials, is in traditional belief intimately associated with the individual's tutelary *kikiris*^{ε/}.

The key term *wīn*^{nε/} has yet further senses, overlapping with the European concepts of fate or destiny: *wīn-tóòg*^ɔ, literally "bitterness of *wīn*^{nε/}" is "misfortune." This kind of *wīn*^{nε/} as "pattern of one's life" may be hereditary, as part of a complex of ideas reminiscent partly of reincarnation, partly of what modern European culture might attribute to family resemblance or genetics. (The word *bōgur*^ε may also mean "a *wīn*^{nε/} inherited from one's mother.")

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

1.2 The Kusaal Language

1.2.1 Language Status

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

Although there is an established orthography for the language, written materials are few and not widely available, apart from the Bible translation, which is far and away the most extensive written work in Kusaal. Few Kusaal speakers were proficient in reading or writing the language in the 1990's. On several occasions when I was learning to communicate with patients in Kusaal, my colleagues would interrupt me with the information that the patient was "literate", meaning that he or she knew English.

Despite the fact that Kusaal is thus currently excluded from domains involving Western-style education and technical activity, it shows no sign of ceding ground as the language not only of the home but of all everyday interaction. The language is the normal medium of communication among Kusaasi of all ages, most of whom are monolingual, and is also used by other local ethnic groups, notably the Bisa, as an areal lingua franca. It is not currently endangered.

1.2.2 Dialects

There is no standard dialect of Kusaal; every district has local peculiarities and my informants themselves show numerous small differences in speech. Bawku itself does not serve as a centre for the Kusaal language; as is typical for the zone, it is a multiethnic trading centre around a Muslim quarter or "zongo" (Hausa *zangò* "camping ground, lodging place") where the main common language is Hausa. The independent spirit of traditional Kusaasi society also militates against the acceptance of any one standard form.

The major dialect division in Kusaal is between Agolle and Toende. The differences are striking, considering the size of the Kusaasi area. The occurrence of Agolle Vowel Breaking [4.1.1](#) correlates with numerous other isoglosses, resulting in a sharp discontinuity between Agolle and Toende Kusaal, probably attributable to the depopulation of the border zone along the White Volta caused by the river blindness (onchocerciasis) prevalent in the region until quite recent times.

My informants, all first-language speakers of Agolle Kusaal, reported no difficulty communicating with Toende speakers, though they are all sophisticated multilinguals who may not be altogether typical. Berthelette 2001 studied the degree to which Burkina Faso Toende speakers understand Agolle Kusaal, with somewhat equivocal results. Of thirteen respondents, ten self-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." Casad-style Recorded Text Tests administered to Burkina Faso Toende speakers showed scores of 93% for comprehension of Ghanaian Toende compared with 80.5% for Agolle, but Ghanaian Toende speakers achieved 94.5% with Agolle, presumably reflecting their greater exposure to the dialect. There is some suggestion in the paper that the situation is asymmetrical, with Agolle speakers finding Toende easier than vice versa, but this was not looked into in detail, as the focus of the paper is on the question of whether Agolle Bible translations and literacy materials would suffice for Toende speakers. The conclusion was that Toende materials would be valuable, though perhaps not on strictly linguistic grounds but because of speaker attitudes; though fewer in number, Toende speakers apparently feel their own dialect is "purer." This may affect attitudes to comprehensibility.

The same paper reports a rate of apparent lexical cognates between Toende and Agolle of 84%. Judging by the extensive vocabulary of Toende Kusaal given in Niggli 2014, which shows great resemblance to Agolle Kusaal aside from the regular phonological differences, this figure seems surprisingly low; the explanation is perhaps that the divergence is most marked among the commonest words.

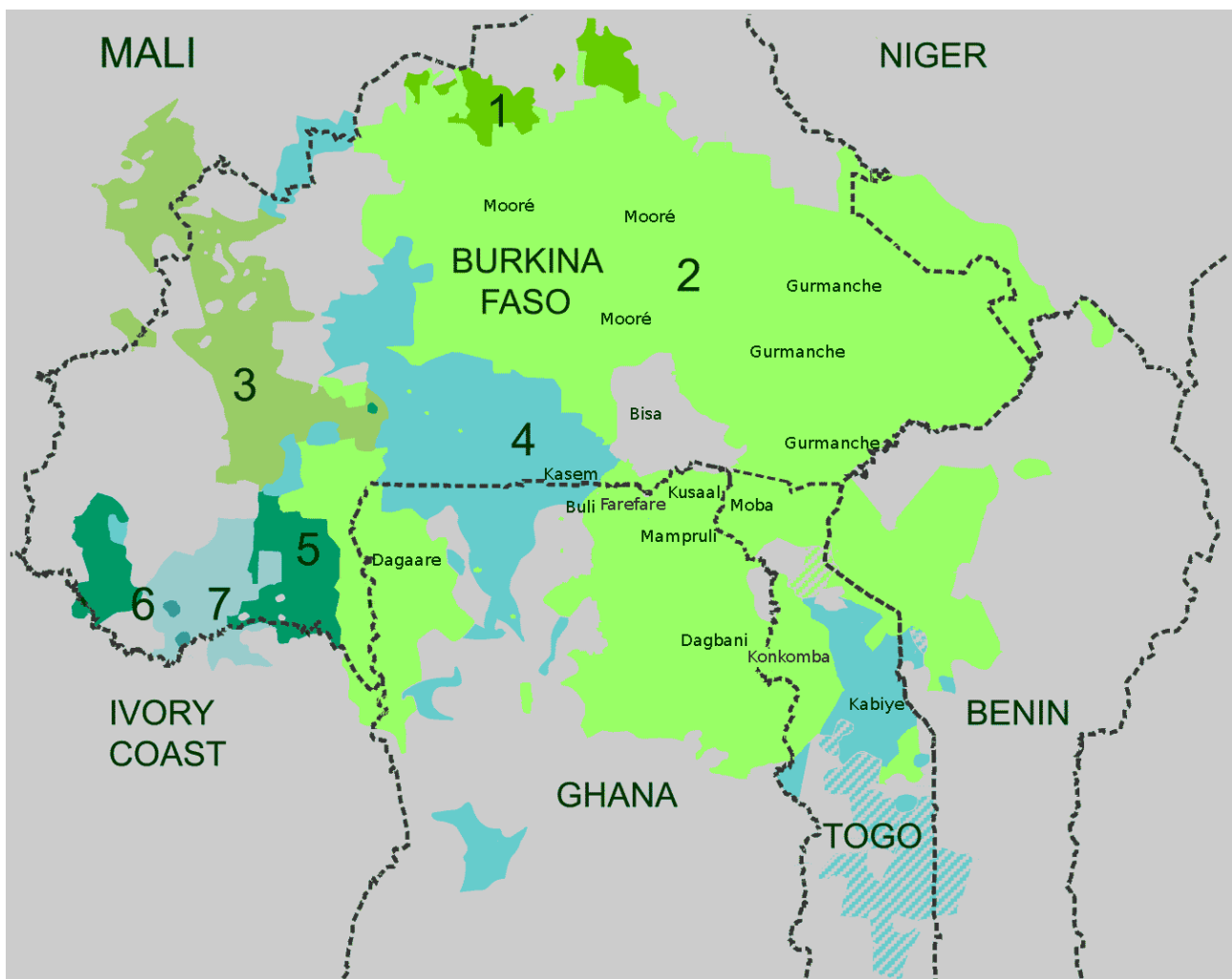
Agolle and Toende Kusaasi themselves agree that they constitute a single ethnic group, and that they speak dialects of a single language; this is perhaps

reinforced by a strong local folk-linguistic tendency to equate language and ethnicity (note the language names formed from ethnonyms in [35.4](#).) Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

This account describes Agolle Kusaal, the language of the majority of Kusaasi, including those of the vicinity of Bawku. This is the basis of most written materials, including the Bible versions. As a matter of convenience, 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.

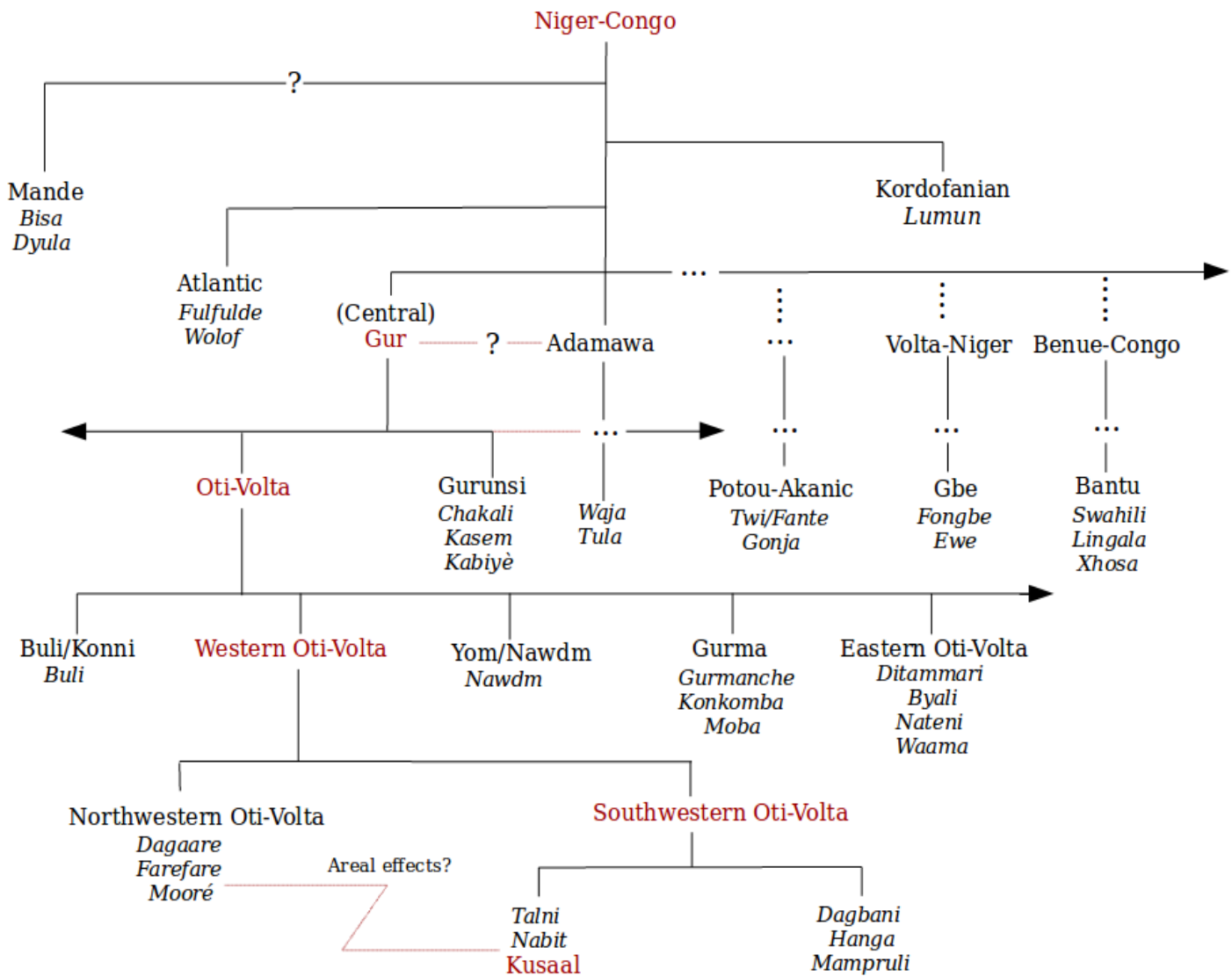
1.2.3 Related Languages

The Gur Languages (Public Domain, created by [Davius](#))



- | | | | |
|--------------|-----------------------|---------------|-----------|
| 1 Koromfé | 2 Oti-Volta languages | 3 Bwamu | 4 Gurunsi |
| 5 Kirma-Lobi | 6 Dogoso-Khe | 7 Doghose-Gan | |

Kusaal belongs to the **Gur** or **Voltaic** language family within the huge and diverse **Niger-Congo** phylum which comprises most of the languages of Africa south of the Sahara.



This chart shows approximate relationships between some of the Niger-Congo languages mentioned in this account, omitting all but a few branches and individual languages. Precise subclassifications are often uncertain. For example, the Mande languages are the most divergent group, and may well not truly belong to the Niger-Congo phylum at all; neither "Atlantic" nor "Kordofanian" seems to be a real unity; Twi has been said to belong to a "Kwa" branch of Niger-Congo, but the evidence that this is a valid node is weak; the relationship between Gur and Adamawa is unclear; Eastern Oti-Volta shows much more internal diversity than Western Oti-Volta, and its validity is harder to establish. Much existing work on the phylum is vulnerable to the methodological criticisms expressed in e.g. Campbell 2013. The inclusion in Niger-

Congo of groups like Mande and Kordofanian is at this point a long-range hypothesis, rather than a well-established linguistic grouping like Indo-European or Uto-Aztecan; to some extent, this is true even of Atlantic. Individual Niger-Congo branches can show comparable internal diversity to Indo-European; moreover, West Africa has probably always been characterised by widespread multilingualism and borrowing between languages, not only of lexicon but also of morphology and syntax. For West Africa (and beyond) as a *Sprachbund* see especially Güldemann 2007.

Nevertheless, there is uncontroversial evidence that at least the core of Niger-Congo (Ethnologue's "Volta-Congo", corresponding to the branches after "Atlantic" in the chart above) is a true genetic grouping. Basic lexical items recur frequently, such as the roots seen in Kusaal *bīg*^a "child", *dì*⁺ "eat", *nū*⁺ "drink", *kpi*⁺ "die", *tùg*^a "tree", *àtán*⁺ "three", *tùbur*^ε "ear", corresponding respectively to e.g. Fongbe *ví*, *dù*, *nù*, *kú*, *átín*, *àtòn*, *tó* (Lefebvre 2002.) Guthrie's Proto-Bantu reconstructions parallel all of these except "child": *-dí* "eat", *-nú* "drink", *kú* "die", *-tí* "tree", *-tátò* "three", *-tò* "ear"; his Proto-Bantu *-tóm* "send" corresponds to Kusaal *tùm*^m. The Potou-Akanic language group, which includes Twi/Fante and Gonja, here shows a regular sound correspondence *t* ~ *s*: Twi *esã* "three", *asõ* "ear", *soma* "send", Gonja *à-sá* "three", *kò-sówé* "ear."

In morphology, the most salient feature of Niger-Congo is the widespread presence of noun class systems, with frequent congruences in both form and meaning between the various core branches. The Kusaal human-plural noun suffix *-b*^a, for example, seen in *nīdib*^{a/} "people", plural of *nīd*^{a/}, matches the Gonja human-plural prefix in *bá-sà* "people", plural of *é-sà* (Painter 1970), and the *ba* of Lingala *bato* "people", plural of *moto*, and of Xhosa *abantu* "people", plural of *umntu*.

Particular singular/plural pairings of noun class affixes, like the suffixes *r^ε|a*⁺ seen in Kusaal *tùbur*^ε "ear", *tùba*⁺ "ears", recur not only throughout Gur but much more widely; cognates of this particular pair appear as prefixes in Bantu, labelled 5/6 in the Bleek-Meinhof system (Nurse and Phillipson 2003.) Lingala has the cognate of Kusaal *tùbur*^ε in this very class: *litói* "ear", plural *matói*. In Swahili, the verbal subject prefixes for the corresponding class are singular *li* and plural *ya*; as in Kusaal, names of fruits (for example) usually belong to this class.

This particular correspondence of form and meaning is (so to speak) "cherry-picked"; although certain semantic categories are characteristically found in particular noun classes across Niger-Congo, the classes do not always correspond formally. Tree names in Kusaal nearly all belong to the particular class exemplified in the word for "tree" itself: sg *tùg*^a pl *tùs*^ε, but this does not correspond to the Bantu **mu/*mi* class 3/4 which typically contains tree names: Swahili *mti* "tree", plural *miti*. However, Kusaal, like its close relatives in the Western Oti-Volta subgroup (see below), has lost a class characteristically containing tree names, which is still preserved in other Oti-Volta branches, with the singular suffix **-bu*: Buli *tīb*, Gurmanche *tībū* "tree"; this class probably is related to Bantu 3/4. The Eastern Oti-

Volta language Ditammari has *mu-* for the affixes of this class (*mūtiē* "tree"), and although its close relative Nateni has *-bu* (*tēēbu* "tree"), the corresponding pronoun is *mu* (Sambiéni p219.)

Among unpaired Kusaal flexional suffixes, the *-m^m* characteristically seen with mass and abstract nouns like *kù'em^m* "water" is probably cognate with the Bantu Class 6 prefix **ma-* when used for mass terms and liquids, e.g. Swahili *maji* "water", (Gurmanche *ñíma*) and the *-l^ɛ* of language names like *Kūsáàl^ɛ* matches Bantu Class 11 **lo-* in the same meaning; cf *Luganda*, the language of the *Baganda* people.

Similarities may also be seen in verbal derivation by suffixes, in this context usually called "verbal extensions", after the term used in the study of Bantu languages, in which such processes are typically highly productive. However, at the level of Niger-Congo, there can be problems with correlating the form and function of these suffixes, and some processes may be areal phenomena, found even in Afro-Asiatic and Nilo-Saharan (see Hyman 2007.²)

Mande shows no trace of noun class affixes or Niger-Congo-type verbal extensions, nor much in the way of vocabulary unequivocally cognate to core Niger-Congo. Some Kordofanian languages (e.g. Lumun, well described in Smits 2017) bear a striking typological similarity to core Niger-Congo, with robust noun class systems marked by often-paired prefixes and extensive agreement, and with a similar system of verbal extensions, but there is little correspondence in form, and once again, little lexical correspondence. Even with the Atlantic languages, typological resemblances are much more apparent than lexical, and affixes of similar meaning to those of core Niger-Congo often show dissimilar forms. On the other hand, the Potou-Akanic family to which Twi/Fante and Gonja belong is a well-established part of the core, preserving both cognate vocabulary and clearly related noun class affixes.

Many proposals for Niger-Congo subclassification rely heavily on lexicostatistics, a technique which is the more problematic as so many of the relevant languages are poorly documented; only detailed comparative work can provide a basis for accurate subclassification. In the case of some lower-level groupings much has been achieved already, very notably with Bantu; among languages closer to Kusaal, there is the work of Sambiéni 2005 on Eastern Oti-Volta. At a higher level, comparative work is generally at an early stage; see, however, numerous publications by Gabriel Manessy on Gur, and especially the publications of John Stewart on Potou-Akanic and its relationships with Bantu and Atlantic.

2) For Gur, Hyman cites only Canu 1976 (pp180ff). Some of Canu's extensions involve segmentation of CVC roots as CV+C, where the CV- component is not attested as a root; others involve CVV~CVC alternations of the type described in 6.1.1.1, where CVV allomorphs probably arose by lenition of the final consonant. However, Canu's *second*-position suffixes are true verb-deriving suffixes, with numerous cognates in other Western Oti-Volta languages; Kusaal is representative of the group 13.2.

At the lowest level Kusaal belongs to a clear-cut language family called **Western Oti-Volta** by Manessy, for which Adams Bodomo has suggested "Mabia" (cf Kusaal *mà-bīig*^a "sibling") as an alternative name. (This term, though attractive, is not a "shibboleth" word delineating the Western Oti-Volta group: cf Buli *mà-bīik id.*) Many lexical items *are* specifically Western Oti-Volta, such as that exemplified by Kusaal *kù'əm*^m "water"; other Oti-Volta languages show forms cognate to e.g. Gurmanche *ñíma* Buli *nyíam* (cf the Kusaal verb *nì*⁺ "rain.") Morphologically, the Western Oti-Volta languages all share a strikingly simple and regular system of verbal inflection, with almost all inflecting verbs using the bare stem for the perfective aspect and adding a suffix **-da* for the dynamic imperfective.

A **Northwestern** subgroup of Western Oti-Volta includes Mooré (much the largest of all Gur languages with millions of speakers), Safaliba, the dialect continuum Dagaare/Waale/Birifor, and Farefare/Gurenne/Ninkare. I will gloss over some complex issues regarding the naming of the latter two languages and their speakers, referring to them simply as Dagaare and Farefare below.

Kusaal belongs to a **Southwestern** group which includes Nabit and Talni along with Mampruli, Dagbani, Hanga, Kamara and some similar smaller languages.

One feature distinguishing these languages from the Northwestern group is the presence of a specific verbal inflection **-ma* for positive imperatives. Various isoglosses cut across the Northwestern/Southwestern division, but most involve shared retentions, such as the preservation of noun-class based grammatical gender in Talni, Mampruli and Farefare but not Kusaal, Dagbani and Mooré [10](#), the retention of contrastive vowel glottalisation in Kusaal, Nabit, Talni and Farefare only [4.2.2](#), and the preservation of the contrast between non-initial /r/ and /d/ in Mooré, Agolle Kusaal (but not Toende), Talni and Nabit. The form of the singular pronoun "you" also cuts across the division, Kusaal going with the Northwestern languages:

Dagbani	<i>a</i>	Mampruli	<i>i</i>
Nabit	<i>i</i>	Talni	<i>i</i>
Kusaal	<i>fù</i>	Mooré	<i>fò</i>
Farefare	<i>fu</i>	Dagaare	<i>fu</i>

Judging by Buli *fī* the Kusaal and Northwestern forms seem conservative; Nawdm too has sg *bé* pl *né*. However, Gurmanche has 2nd singular *à*, plural *ì*, Konkomba has singular *i*, plural *ni*, and Moba has singular *ā*, plural *ī* for the non-contrastive pronouns but *fī*, *yīm* for contrastive. (In these plural forms, the *y-/ø* and the *n-* both derive from **ŋ-* [8.2.1.2](#).) The Moba pronouns suggest that other languages may have independently levelled and remodelled an original system with distinct contrastive and non-contrastive forms.

Many other points of likeness between Kusaal, Nabit and Talni and the Northwestern group are probably due to extensive contact; there is evidence for this particularly with Farefare and Nabit and with Mooré and Kusaal.

A subdivision of Southwestern Oti-Volta itself seems justifiable. Mampruli, Dagbani and Hanga share a considerable simplification of the inherited vowel system, with loss of glottalisation, contrastive nasalisation and the high vowel distinctions *i/ɪ* *u/ʊ*, along with a lowering of original short *e* in closed syllables to *a*, resulting in the development of a series of contrastively palatalised velars. On the other hand, Nabit and Talni are probably the closest relatives of Kusaal. Material on Nabit and Talni is collected in the dictionaries on Tony Naden's website (see sources); the Nabit data show a particularly close resemblance to Toende Kusaal. Giffen 2015 is an account of the creation of a Nabit orthography; her interesting discussion of the social and cultural setting suggests that Nabit has been swept up into the cultural and political orbit of the more distantly related Farefare. She mentions Talni in passing, and implies that Talni speakers understand Nabit to some extent. Nabit and Talni resemble Kusaal in having lost inherited final short vowels in citation forms. This is of course very common cross-linguistically (and seen also in Moba, the neighbouring Gurma language), but there are example sentences in the dictionaries on Tony Naden's website which suggest that Nabit and Talni may retain the final vowel at the end of negated clauses and of questions, just as with Kusaal Apocope [2.2](#):

Nabit	<i>La bi'imε.</i>	"It is ripe"
Toende	<i>La bi'ɪ me.</i>	
Agolle	<i>Lì bì'ig nē.</i>	
	3INAN ripen FOC	
Nabit	<i>La na bu biigε.</i>	"It is not yet ripe."
Toende	<i>La nan bu bi'ɪge.</i>	
Agolle	<i>Lì nàm pū bí'igē +∅.</i>	
	3INAN still NEG.IND ripen NEG.	

Talni *Bunpɔk dɔɣam pu bɔkəra, buraɔ dɔɣam m bɔkət.*
 "A woman's kindred is not divided, a man's kindred is divided."
 Toende *Bunpɔk dɔɣum bu bɔkɪra, buraɔ dɔɣum bɔkɪt.*
 Agolle [Pɥ'ā] dú'àm pū byákìdā ⁺∅, [dāy] dú'amì_∅ byákìd.
 Woman:SG kindred NEG.IND split:DIPF NEG, man:SG kindred SER split:DIPF.

The Toende forms are from Niggli's dictionary, with the inflected forms *bɔkɪra* and *bɪ'ɪge* constructed on the basis of his grammatical works.

There are few examples, and the Talni data in particular seem equivocal, but if this unusual behaviour is indeed common to all three languages it would be

compelling evidence for a Kusaal-Nabit-Talni subgroup. There may be lexical isoglosses: for example, the common Kusaal verb *nɔ̃k*^{ε/} "pick up" (Toende *nòk*) has a cognate in Nabit *nok* but not, as far as I have been able to discover, in any other Western Oti-Volta language. However, as with the loss of vowel distinctions in Mampruli-Dagbani-Hanga, the family tree model may misrepresent a historical reality where similarities may often be due to intensive contact between distinct languages in a milieu in which many people are multilingual.

All the Western Oti-Volta languages are in any case closely related (as is evident to the speakers themselves), to roughly the same degree as the various Romance languages. Claims of mutual comprehension between the languages are frequently overstated or outright wrong, however; misunderstanding probably arises from underappreciation of the prevalence of multilingualism. A Kusaal speaker cannot, for example, follow a conversation in Mampruli unless he or she has learnt the language, close relation to Kusaal though it is. (I had abundant opportunity to observe degrees of mutual intelligibility in our highly polyglot outpatient clinics.)

Other groups within the broader Oti-Volta family are less close, but can still be seen to be related even on fairly superficial examination. Buli, in particular, though placed quite far from Western Oti-Volta in some classifications, is shown by the detailed materials in Kröger 1992 to be much closer to Western Oti-Volta than are the Gurma languages (including Gurmanche, Konkonba and Moba); there are numerous obvious cognates in vocabulary and many parallels in morphology.

Both Buli and Gurmanche have three-tone systems, and the three basically distinct Western Oti-Volta Tone Patterns can be systematically matched with these [7.1](#). However, although Western Oti-Volta Tone Pattern H corresponds to *high* tone in Buli, it corresponds to *low* in the Gurma languages:

<u>Kusaal</u>		<u>Gurmanche</u>	<u>Buli</u>
<i>sāan</i> ^{a/}	"stranger"	<i>càanō</i>	<i>nícháanoā</i> (<i>ní</i> - "person")
<i>wáaf</i> ^p	"snake"	<i>wà</i>	<i>wáab</i>
<i>nīf</i> [/]	"eye"	<i>nùnbū</i>	<i>núm</i>

Western Oti-Volta Pattern O matches Gurmanche high and Buli mid, while Pattern L corresponds to Gurmanche mid and Buli low:

<i>mɔ̃ɔg</i> ^ɔ	"grass"	<i>múagū</i>	<i>mūub</i> ("blade of grass")
<i>pɔ̃'ā</i> ^a	"woman"	<i>púa</i>	<i>nípōk</i> (<i>ní</i> - "person")
<i>tìig</i> ^a	"tree"	<i>tībū</i>	<i>tìib</i>
<i>dòɔg</i> ^ɔ	"room"	<i>dīelī</i>	<i>dòk</i>
(<i>dèegò</i>)	Farefare <i>id</i>)		

Exceptions occur; tonal mismatches are bolded in

<i>sā'ab</i> ^ɔ	"TZ"	<i>sāābū</i>	<i>sāāb</i>
<i>bīig</i> ^a	"child"	<i>bīgā</i>	<i>bíik</i>
<i>tùbur</i> ^ɛ	"ear"	<i>tūbīlī</i>	<i>tūrī</i>
<i>ṇwāaṇ</i> ^a	"monkey"	<i>ṇmāāmō</i>	<i>wàaung</i>

Evidence from outside Oti-Volta suggests that it is languages with H tone corresponding to Pattern H (like Buli, Nawdm, and Western Oti-Volta) which have innovated: cf Chakali (Gurunsi) *tɸùòmó* "hare" = Kusaal *sú'əṇ*^a (Pattern H), *váà* "dog" = Kusaal *bāa*⁼ (Pattern O); Proto-Bantu *-nùà* "mouth" = Kusaal *nṵɔr*^{ɛ/} (Pattern H), *-tú* "ear" = Kusaal *tùbur*^ɛ (Pattern L). If other innovations could be shown to correlate with this tonal inversion, it might form the basis of subgrouping within Oti-Volta, but a single phonological change seems insufficient. Moreover, it is not clear how the threefold tone pattern distinctions characteristic of Oti-Volta arose from a presumed Niger-Congo binary H/L opposition (for speculations see 7.1.)

Like Gurma, the Eastern Oti-Volta languages are distinctly different from Western Oti-Volta in both morphology and lexicon. Sambiéni 2005 provides considerable detail on the language group, which evidently shows much greater internal diversity than Western Oti-Volta. His work assumes that Eastern Oti-Volta is a valid node and attempts to reconstruct a protolanguage on that basis; it takes as given the validity of Manessy's subgrouping, which is apparently based on the shared initial-consonant developments **g → k*, **gb → kp* and **ɟ → y* along with **v → f* (also seen in Gurma.) The Eastern Oti-Volta languages in fact lack *v gb ɟ* altogether, while *g* occurs only word-internally as an allophone of /k/; this might suggest an areal development. Manessy has **gb → kw* for the neighbouring language Bulba/Nõõtre, which he classifies with *Western* Oti-Volta.

Of the four Eastern Oti-Volta languages Ditammari, Nateni, Byali and Waama, Ditammari resembles Gurmanche and Konkomba in that nouns usually appear with noun class prefixes and suffixes together. Apart from this, all four languages have noun class systems which seem conservative rather than marked by common innovations.

Ditammari and Nateni probably form a subgroup: like Gurma, they show L tone corresponding to Kusaal Pattern H, and in verb flexion they resemble each other closely, with some verbs opposing a perfective ending *-a* to an imperfective ending which is *-i* after alveolar consonants but *-u* otherwise, other verbs changing the stem tones, or dropping a derivational suffix from the perfective to make the imperfective, and many individual verbs behaving alike in both languages.

Byali seems to show mid tones for the most part where Western Oti-Volta has Pattern H; in verb flexion it opposes a perfective ending *-sə* to imperfective *-u* (including after alveolars.)

Waama has H tone corresponding to Western Oti-Volta Pattern H. In verb flexion it shows a small group of verbs opposing final *-i* for perfective to *-u* for imperfective, but most verbs form the imperfective by adding a suffix of the form *-ri -di* or *-ti* to the perfective form, again resembling Western Oti-Volta. (However, similar suffixes appear even in the Gurma languages as one of many ways of forming the imperfective, e.g. Konkomba *-de*.) There are also some lexical isoglosses uniting Waama with Western Oti-Volta and Buli over against the other Eastern languages and Gurma, e.g. Waama *wōmmā* "entendre" (= Kusaal *wùm^m*, Buli *wom*) as against Byali *cèsì* or *yō*, Ditammari *kèè* or *yō*, Nateni *yēkà*, Gurmanche *céngì* "écouter"; Waama *cáárō* "forgeron" (= Kusaal *sāḡ⁺*, Buli *chò-a-bíik* [*chùōk* "forge"]), versus Byali *má-máárāū*, Ditammari *ōmáátà*, Nateni *málō*, Gurmanche *mááno*; Waama *yété* pl *yéyā* "maison" (= Kusaal *yīr^{el}*, Buli *yérí*), versus Byali *tápúú*, Ditammari *tācīētà*, Nateni *hǒǒtā*. Waama also shares the change **ɿ → y* with Western Oti-Volta and Buli over against Gurma and Nawdm: Waam *yění* "deux" (= Kusaal *[à]yí⁺*, Buli *[ngà]yè*), versus Byali *dyā*, Ditammari *dīání*, Nateni *déń*, Gurmanche *lé*, Nawdm *[ʔé]ré*.

There is much less similarity between Oti-Volta as a whole and the other main group of Central Gur languages, the Gurunsi languages like Chakali, Kasem and Kabiye. The division between Gur in a broader sense and the Adamawa languages has been called into question, with suggestions that Oti-Volta and Gurunsi may even be essentially coordinate members of a continuum of families including at least some "Adamawa" subgroups: see e.g. Kleinewillinghöfer 1996, which references studies suggesting that the Adamawa languages Waja and Tula are closer to the Gurunsi languages than to other parts of "Central Gur." This supposed Gur-Adamawa group is sometimes called "Savannas"; most accounts still retain Central Gur as a node, comprising at least Oti-Volta and Gurunsi. Further progress on this issue will probably only come about after more descriptive work on Adamawa languages.

A few languages are usually classified as belonging to Central Gur, but not included in either Oti-Volta or Gurunsi. For the most part they are poorly documented; an exception is the Koromfe language of Burkina Faso (Rennison 1997), which is usually said to be closer to Oti-Volta as a whole than to Gurunsi, though Manessy's work often shows lexical correspondences between Koromfe and Gurunsi rather than Koromfe and Oti-Volta; he himself makes it a coordinate branch of Central Gur alongside Oti-Volta and Gurunsi.

Various other languages have been previously taken as Gur on the basis of relatively nonspecific typological criteria, especially the use of noun class suffixes rather than prefixes. This is notably the case with the Senoufo languages, which are now usually held to constitute a distinct branch of core Niger-Congo.

1.2.4 External Influences

In general, the languages of neighbouring regions have not obviously influenced Kusaal. Moba, for example, the neighbouring eastern language, has had no evident effect on Kusaal. The northern neighbours of the Kusaasi are the Bisa; indeed the Kusaal word for "north" is literally "Bisa Country" [35.3](#). Bisa territory is largely in Burkina Faso but extends just over the Ghanaian border, and many Bisa people have also settled in the villages among the Kusaasi, and in Bawku. However, Bisa people in Ghana use Kusaal as the areal lingua franca, and few others can communicate in their Mande language, which is at most remotely related to its Gur neighbours; once again, there seems to be no evidence of influence on Kusaal. In the west, Nabit and Talni resemble Kusaal closely enough that it is difficult to distinguish borrowing from common inheritance, but there is reason to suspect **Farefare** influence on Nabit and perhaps on Toende Kusaal too [1.2.3](#). With the neighbouring southern language, **Mampruli**, the issue is further complicated by the political history of the area [1.1](#), and by the fact that many local Mamprussi speak Kusaal rather than Mampruli, but some likely loanwords are identifiable. However, most loanwords in Kusaal [18.1](#) come from the two other languages most widely spoken within the Kusaasi area itself: Mooré and Hausa.

Mooré is the language of the Mossi, the largest single ethnic group of Burkina Faso. Many Mossi are found in the Kusaasi area, and many Kusaasi themselves speak Mooré well; they often attribute local or individual peculiarities of Kusaal speech to Mooré influence. Early Christian missionary work among the Kusaasi used Mooré materials, leading to some borrowing and calquing. Examples include *Wínà'am*^m "God" and *fāāngíd*^a "saviour", where the forms may be borrowed via Toende Kusaal rather than from Mooré directly. A number of West African *Wanderwörter* have probably also reached Kusaal via Mooré rather than Hausa.

Most identifiable loanwords in Kusaal come from **Hausa**. The major centres of Hausa are in northern Nigeria and in Niger; it is the largest African language after Arabic by number of first-language speakers and is used by millions more as a lingua franca in the savanna zone of West Africa. In northern Ghana it has strong associations with Islam and with trade; it is usually a good guess to use Hausa to greet a stranger wearing Muslim dress. Hausa is an Afro-Asiatic language of the Chadic family, and is thus remotely related to Arabic and Hebrew but completely unrelated genetically to Kusaal; nevertheless, in matters of idiom, semantic range and even the kinds of distinctions encoded in its syntax and morphology, it shows numerous resemblances to its Niger-Congo neighbours. There are many ethnic *Hàusàawaa* in the Kusaasi area, especially in Bawku, but the language which has influenced Kusaal is the vehicular *Gaanancii* of northern Ghana. Though mutually intelligible with Standard (Kano) Hausa, *Gaanancii* among other differences lacks

gender, uses [z] for [d͡ʒ], monophthongises diphthongs, and drops the distinction between the glottalic consonants and their plain counterparts: for example, Standard Hausa *Kin jì kôo?* "Do you understand?" (addressing a woman) becomes *Kaa zì kôo?* Such features are largely the result of simplification by second-language speakers, rather than characteristic of Western Hausa dialects.³ Kusaal has far fewer Hausa loans than Dagbani or Mampruli, probably due to a much slighter exposure to Islam. (The Dagomba royal clan has been Muslim for centuries, though most Dagomba people are still, like the Kusaasi, adherents of traditional African beliefs and customs.) The use of Mooré alongside Hausa as an interethnic language in the far north of Ghana is probably also a factor.

The other major lingua francas of Ghana, Twi/Fante ("Akan") and English, have contributed comparatively little to Kusaal to date. In the mid 1990's few people outside Bawku were very proficient in either language unless they had been to school or lived in the south of the country, and very few native speakers of those languages can speak Kusaal. 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 rather than mother tongues.⁴

As throughout the West African savanna, there are nomadic Fulbe in the Kusaasi area, chiefly engaged in cattle-raising. Traditional cataract surgery ("couching") is a Fulbe speciality in this region; the payment asked for is often a cow. There seems to be no evidence of borrowing from Fulfulde; *nagge*, plural *na'i* "cow" strikingly resembles Kusaal *náaɸ* (← **nāágfū*) plural *nīgí*⁺, but this cannot be a loan into Kusaal itself, because the word and its distinctive flexion can be reconstructed to a stage prior to the Western Oti-Volta protolanguage (cf Buli *nááb* pl *nígā*.)

3) The far-western dialect of Ader in Niger (Caron 1991) has grammatical gender, though this is lacking in the eastern Hausa of Zaria and Bauchi (Caron 2013) which nevertheless still use feminine pronouns for female persons. Even in Nigeria, Hausa as an interethnic language lacks grammatical gender: I was once actually corrected by a Hausa mother-tongue speaker in Nigeria for using grammatical gender, on the grounds that it sounded unnatural in the speech of a foreigner.

4) I once communicated (after a fashion) with a patient via three intermediaries, the last of whom, a colleague, translated between Mooré and English for me. None of my colleagues could even identify the patient's language. The "middle" language was Dyula, a Mande language which is itself an important West African lingua franca; it is part of a dialect continuum which also includes Bambara, Maninka and Mandinka.

1.3 Orthography

Except as specified otherwise below, symbols represent sounds similar to their IPA values; for more specific details see [3.1](#) [4.1](#). Acute, grave and macron signs mark tone [5.1](#); for word division conventions see [2.3](#).

y represents [j]; *kp gb* represent [k͡p] [g͡b].

Between vowels within a word *k t p ŋ* are realised as [k:] [t:] [p:] [ŋ:] in very deliberate speech.

The vowel symbols *a ɛ ɔ i u* have IPA values, while *ɪ ʊ* represent [ɪ] [ʊ] respectively. The allophony [ɪ]~[i] and [ʊ]~[u] seen in non-root syllables [4.3](#) is ignored, only *ɪ ʊ* being used. The symbols *e o* always represent [ɪ] [ʊ]; they are used instead of *ɪ ʊ* only as non-initial elements of diphthongs [4.2.3](#) and for the 3sg animate pronoun *o* [ʊ] along with the [ʊ] mora which precedes it in Liaison, which is written *·o* [2.3.2](#).

	<i>dīe</i>	"receive"	[d̥i̯ɪ]
	<i>pāe</i>	"reach"	[pʰaɪ]
	<i>bēog</i>	"tomorrow"	[bɛʊg]
	<i>kpīoŋ</i>	"strong"	[k͡p̥i̯oŋ]
but	<i>dāuv</i>	"male"	[daʊg]
	<i>ò bīg</i>	"her child"	[ʊbi:g]
	<i>zū·ó</i>	"steal him"	[zuʊ]
	<i>dà'·ò</i>	"bought for him"	[d̥aʊʊ]

ɛ j both represent [ɪ]; *j* is used before vowel symbols and after *u*. The symbol *ɥ* is used for [ʊ̯].

<i>gbàɥŋ</i>	"book"	[g͡baʊŋ]
<i>sɔ̃ɛŋ</i>	"witch"	[sɔ̃ɪ]
<i>mùj</i>	"rice"	[mũɪ]

Long vowels are written by doubling the vowel symbol.

<i>bāa</i>	"dog"	[ba:]
------------	-------	-------

Glottalisation of vowels and diphthongs is marked by the symbol ' following the first/only vowel symbol (including *ɥ*) other than *j*:

<i>dà'</i>	"buy"	[d̥a]
<i>dà'a</i>	"market"	[d̥a:]
<i>kù'əm</i>	"water"	[kʰuəm]
<i>pɸ'ā</i>	"woman"	[pʰɸ̥a]
<i>dīā'</i>	"get dirty"	[d̥i̯a]

Nasalisation of vowels and diphthongs is marked by *̃* following the entire vowel or diphthong unless it is also glottalised, in which case the *̃* precedes the ' mark; *̃* also precedes the raised dot of *·o*.

<i>tē̃ɛ̃ŋs</i>	"lands"	[tʰē̃:s]
<i>á̃ŋsìb</i>	"mother's brother"	[ã̃sɪb]
<i>gē̃ŋ</i>	"get tired"	[gē̃]
<i>gē̃ŋ'</i>	"get angry"	[gē̃]
<i>gē̃ŋ'ɛd</i>	<i>id</i> (dipf)	[gē̃:d]
<i>à̃ŋ·ō̃</i>	"be him/her"	[ã̃ũ]

After initial *y* or *w* nasalisation is instead marked with *̃* before the *y* or *w*:

<i>̃ŋwām</i>	"calabash"	[w̃ãm]
--------------	------------	--------

The sequences [i̯a] [u̯a] [i̯ə] [u̯ə], with their nasalised and glottalised counterparts, arise from **Agolle Vowel Breaking**. *̃ia ̃ua i̯ə u̯ə* are digraphs for *phonemic* monophthongs, though realised *phonetically* as diphthongs [4.1.1](#).

<i>p̃iəli̯g</i>	"white"	[pʰi̯əli̯g]
<i>b̃u̯'əs</i>	"ask"	[b̃u̯əs]
<i>t̃i̯àk</i>	"change"	[tʰi̯ak]
<i>p̃u̯āk</i>	"female"	[pʰu̯ak]
<i>k̃p̃i̯à'</i>	"shape wood"	[k̃p̃i̯a]
<i>k̃i̯à</i>	"cut"	[kʰi̯a]

Contrast the *phonemic* diphthongs in e.g.

<i>k̃p̃i̯'a</i>	"neighbour"	[k̃p̃i̯a]
<i>s̃i̯a</i>	"waist"	[sia]

1.3.1 Written Materials

Written materials are cited in their original orthography; differences from the working orthography of this grammar are discussed below.

Tone is not marked. Groups of words hyphenated in this grammar are written solid, and the raised dot symbol · is replaced by word division [2.3](#).

The clusters *ll mm nn* are very often written single prior to 2016.

KSS uses *ng* throughout for *ŋ*.

Older orthography writes *e o* for *ɛ ɔ*, *i* for both *i* and *ɪ*, *u* for both *u* and *ʊ*; *e o* are sometimes also used unsystematically for *ɪ ʊ* as root vowels. The 2016 Bible uses the same basic conventions as this grammar except that it does not distinguish [i]~[ɪ]: *tiig* = *tɪɪg* "tree", *biig* = *bɪɪg* "child."

Word-final short *-ɪ* after *m n* is usually written *ɛ* in KB: *pɛbanɛ* for *pɛ'-báɪnɪ* "sheep which ..." Mk 6:34; so in all cases with the relative pronouns *onɛ kanɛ linɛ banɛ* [31.2.2](#) and with *anɔ'ɔnɛ* "who?" before Liaison.

The root-vowel is consistently written as *e* in KB in the words *ye* "that" *ten* "land" *ken* "go" (base) *ken* "go" (dipf) for *yɛ tɛŋ kɛŋ kɛn*, where my informants have [ɛ]. The form *ye* is probably due to the unstressed nature of the particle, but the other words may reflect actual variants with *ɪ* [ɪ]: compare Toende *tɪŋ* "land", Mampruli *tiŋŋa* "land" versus Toende *men*, Mampruli *maŋŋa* = *mɛŋ* "self."

The demonstrative and pronoun forms *ɔn/ɔn/ɔn ɔŋā* are written *on oŋa*.

As in this grammar, *e o* are used non-initially in diphthongs for [ɪ] [ʊ].

The phonemic monophthongs *ia uə* are written respectively as *ie uo*:

<i>pielig</i>	<i>pɪəlɪg</i>	"white"	[pʰiəlɪg]
<i>bu'os</i>	<i>bū'əs</i>	"ask"	[bʊəs]

ie uo are also used to write the phonemic diphthongs *ie uo* [ɪɪ] [ʊʊ] but the ambiguity is marginal, because *ie uo* only appear word-finally and in *-iey-*, while *ia uə* only appear word-internally before consonants, and in external sandhi [8.5.3](#):

<i>di'e</i>	<i>dɪ'e</i>	"receive"	[dɪɪ]
<i>zu o</i>	<i>zū-ó</i>	"steal him"	[zʊʊ]

The 2016 orthography writes *-ue* [ʊɪ] as *-uoe* and *-ve* [ʊɪ] as *-voe* (similarly when nasalised and/or glottalised): *duoe* = *dūe* "raise, rise", *su'oe* = *sū'e* "own."

The diphthong *io* [ɪʊ] is written *io* in the 1976 NT but *ieu* later: thus *kpɪ'ɔŋ* "strong" [kpɪɪŋ] is *kpi'ɔŋ* in the 1976 NT, *kpi'eun* in the 1996 NT and KB.

Traditional orthography uses *e i u* for non-moraic *ɛ ɪ ʊ* and thus does not mark length in diphthongs consistently, but this is largely predictable 4.2.3, and the most important distinction is expressed by writing *aae* (or *aaɛ*) for *ae* versus *ae* for *aɛ*:

<i>paae</i>	<i>pāe</i>	"reach"	[pʰaɪ]
-------------	------------	---------	--------

Word-medially, ambiguity remains only with *auŋ* ~ *avŋ*

<i>gbauŋ</i>	<i>gbāuŋ</i>	"skin"	[g̃baʊŋ]
<i>mangaŋ</i>	<i>màngáŋ</i>	"crab"	[maŋgaʊŋ]

KB uses both *au* and *av*, spelling each individual word consistently, but not as marking any length distinction: thus *yauŋ* "grave" for *yàvŋ*, but *na'arauŋ* "ox" for *nā'-dáuŋ*; *dau* for *dāu* "man" but *taun* for *tāuŋ* "sibling of opposite sex."

ia ua do not occur medially, but ambiguity with *ja ɥa* is possible word-finally:

<i>kia</i>	<i>kjà</i>	"cut"	[kʰɪ̯a]
<i>sia</i>	<i>sīa</i>	"waist"	[sia]
<i>kua</i>	<i>kɥā</i>	"hoe"	[kʰɥa]
<i>sabua</i>	<i>sàbùa</i>	"lover"	[sabua]

These are the only examples in my data of unglottalised final *ja ɥa*, and the convention that ' is not written after *i* when it represents *j* disambiguates e.g

<i>kpi'a</i>	<i>kpi'a</i> ⁺	"neighbour"	[k̚pi̯a]
<i>kpi'a'</i>	<i>kpi'à</i> ⁺	"shape wood"	[k̚pi̯a̯]

Before 2016, *ɥ'a* [ɥ̥a] was usually written *o'a*, but did not even then contrast consistently with *u'a* representing *u'a* [u̯a]. All *u'a ɥ'a* and *u'a* are now written *u'a*.

<i>po'a</i> or <i>pu'a</i>	<i>pɥā</i>	"woman"	[pʰɥ̥a]
<i>po'ab</i> or <i>pu'ab</i>	<i>pū'ab</i>	"women"	[pʰɥ̥ab]

NT/KB write *-ey-* in Long Forms 2.2 corresponding to Short Forms where final *-y* has become *-ɛ*: *vveya* = *vōyá* Long Form of *vōɛ* "be alive." Older NT versions also write *bōn-vúyà* "living things" as *bunvoeya*, but KB has the expected *bunvuya*.

After the low root vowels *a* and *ɔ*, epenthetic *ɪ* is quite often written *e*:

<i>sa(n)rega</i>	<i>sāɪgá</i>	"prison"	[sarɪga]
------------------	--------------	----------	----------

The 2016 orthography writes *bieya* for *bĭēyá* "elder same-sex siblings" etc, but *suoya* for *sūēyá* "roads", *zuoya* for *zūēyá* "hills" etc by analogy with the singulars. *suor sūēr* and *zuor zūēr*. Older sources write *sueya*, *zueya*.

For nasalisation, plain *n* is used for the *ṇ* of this grammar:

<i>tɛɛns</i>	<i>tĕɛṇs</i>	"lands"	[tʰɛ:s]
<i>gɛn'</i>	<i>gĕṇ'</i>	"get angry"	[gĕ]
<i>gɛn'ɛd</i>	<i>gĕṇ'ɛd</i>	<i>id</i> (dipf)	[gĕ:d]
<i>nwam</i>	<i>ṇwām</i>	"calabash"	[wām]

As prefix [14](#) vowels show no contrastive nasalisation [4.4](#), *n* ending a prefix (not a combining form) in traditional orthography must represent the consonant *n*:

<i>dunduug</i>	<i>dùndùug</i>	"cobra"	[dundu:g]
----------------	----------------	---------	-----------

Elsewhere, the constraints on word-internal consonant clusters usually prevent ambiguity, except when the *n* would be word-final without even a following glottalisation mark. Here the orthography formerly wrote *nn* to mark nasalisation, but the 2016 system unfortunately uses an ambiguous single *n*:

<i>kɛn</i> (older <i>kenn</i>)	<i>kĕṇ</i>	"come" (base)	[kʰĕ]
<i>kɛn</i> (older <i>ken</i>)	<i>kĕn</i>	"coming" (gerund)	[kʰɛn]

Some NT/KB spellings represent **variant forms** different from those used by my informants; the words in question are probably loans from Toende Kusaal [18.1](#).

<u>NT/KB</u>	<u>WK's forms</u>	<u>Toende Kusaal</u>	
<i>Wina'am</i>	<i>Wínnà'am</i>	<i>Wínā'am</i>	"God"
<i>faangid</i>	<i>fāṇḍ</i>	<i>fāagıt</i>	"saviour"
<i>faangir</i>	<i>fāṇr</i>	<i>fāagıt</i>	"salvation"

Wínà'am fāṇḍíd fāṇḍír are used when transliterating Bible verses. *Fāṇḍíd fāṇḍír* have become independent words, used to avoid the homophony with *fāṇḍ* "robber" and *fāṇr* "robbery."

NT versions prior to 2016 write *aarun* for *àṇrun* "boat" (cf Toende *āarùṇ*), and *malek* for *màlĭāk* "angel" (Toende *màlék*); KB has the expected *anrun* and *maliak* throughout, corresponding to the consistent usage of all my informants and of the audio 1996 version.

The spelling *nyain* appears for *nyāe* "brightly" even in texts prior to 2016, where *nyainn* would be expected. The 1992 audio NT renders it [jǎĩ].

Traditional **word division** differs somewhat from that adopted in this grammar. Beside the issues discussed in [2.3](#), focus-*nē*⁺ is always written solid after *à(ŋ)* from *àɛŋ*^a "be", and aspectual *nē*⁺ is usually written solid with a preceding verb:

O anɛ biig. "He/she's a child."

Ò à nē bīig.

3AN COP FOC child:SG.

Bipuŋ la pu kpīi, o gbisidɛ.

Bī-púŋ lā pū kpīi⁺∅, ò gbìsɪd nē.

Child-girl:SG ART NEG.IND die NEG, 3AN sleep:DIPF FOC.

"The girl is not dead, she is sleeping." (Mt 9:24)

Nē "with" is written solid after *wēn*^{na} "resemble":

Ka o nindaa wenne nintan ne.

Kà ò nīn-dáa wēn nē nīntāŋ nē.

And 3AN eye-face:SG resemble with sun:SG like.

"His face is like the sun." (Rev 10:1, 1996)

In KB *wēn nē* appears as *nwɛnɛ*: *Ka o nindaa nwɛnɛ winnig nɛ.*

Texts sometimes mistake the stressed [2.4](#) final syllable of a Long Form [2.2](#) for a segmentally homophonous particle; this is rare in KB, however.

O ku nyange liebi m nya'andol la.

Ò kù nyāŋɿ_∅ líəbì_ m̃ nyà'an-dòllā⁺∅.

3AN NEG.IRR prevail **SER** become **1SG** after-follower:SG NEG.

"He cannot become my disciple." (Lk 14:26, 1996; 2016 *nya'andolla*.)

Arezana nɛ dunia gaadug pu tɔi yaa

Àrazánà nē dūnɿya gáadùg pū tōyá⁺∅.

Heaven with world passing NEG.IND be.difficult NEG.

"The passing of heaven and earth is not difficult" (Lk 16:17, 2016)

Foreign proper names in the Bible are adapted to ordinary Kusaal spelling conventions to a variable degree, with familiar names being most prone to alteration; such adaptation is much commoner in later versions than in the 1976 New Testament. There is no systematic relationship between the English pronunciation and the Kusaal renderings, and the 1996 audio NT varies in how far the spellings are read with English rather than Kusaal conventions. In transliterating verses I have simply reproduced the orthography of the originals.

word form. There are three different Prosodic Clitics, Negative **NEG**, Vocative **VOC** and Interrogative (**PQ/CQ**), with different effects on preceding vowel length and tone. With interlinear glossing they are represented by ⁺∅, as above.

In citing word forms, superscripts [2.2.1](#) will be used to write the parts of words which are dropped everywhere except before Prosodic Clitics and Liaison: *bīig*^a "child", *gbīgim*^{nɛ} "lion", *kōk*^a "chair", *dōk*^{ɔ̃} "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 two series of diphthongs, along with emic contrasts among epenthetic vowels. Thus

vīdɛ́ "owls"

usually appears with Apocope as the Short Form *vīd* with the same long vowel as *bīs* "children", shortened from *bīisɛ*, while the singular Long Form

vīugɔ́ "owl"

has *iu* for *ii* because of the rounding effect of the final vowel, to which the velar *-g-* is transparent; after Apocope this becomes the Short Form

vīug "owl"

After the deletion of the final *-ɔ̃*, the diphthong itself now contrasts with the vowel of *bīig* "child", shortened from *bīiga* as seen above. Similarly

āāndɪga "black plum tree"

has the default epenthetic vowel *ɪ* before the flexion, and appears as *āāndɪg* after Apocope, whereas

gàadugɔ́ "passing" (gerund)

has rounding of the vowel to *u* before the flexion *-gɔ̃*, and after the loss of the final vowel this rounding itself becomes contrastive in the usual Short Form *gàadug*.

Certain **Liaison** Words [8.2.1](#) cause a preceding word to appear, not as the usual clause-medial Short Form, but as a Long Form modified by the loss of all original vowel quality contrasts in the final mora. All non-contrastive personal pronouns fall into this category, for example:

<i>M̃ p̄ b́ɔɔdā</i> ⁺ ∅.	"I don't want to."
1SG NEG.IND want NEG.	Long Form <i>b́ɔɔdā</i> preceding Negative Clitic.
<i>M̃ b́ɔɔdī́ b́á.</i>	"I love them."
1SG want 3PL.OB.	Modified Long Form <i>b́ɔɔdī́</i> before Liaison.
<i>M̃ p̄ źábē</i> ⁺ ∅.	"I haven't fought."
1SG NEG.IND fight NEG.	Long Form <i>źábē</i> preceding Negative Clitic.
<i>M̃ źábī́ b́á.</i>	"I've fought them."
1SG fight 3PL.OB.	Modified Long Form <i>źábī́</i> before Liaison.

With interlinear glossing, Liaison is marked by *┘*, as above.

Apocope reduces several Liaison Words of the underlying form CV to a single consonant. Thus with *b́ɔɔd*^a "wants, loves" and *f*^p "you (sg)":

<i>M̃ p̄ b́ɔɔdī́ f</i> ⁺ ∅.	"I don't love you."
1SG NEG.IND want 2SG.OB NEG.	Long Form <i>f</i> of the pronoun "you (sg)"
<i>M̃ b́ɔɔdī́ f.</i>	"I love you."
1SG want 2SG.OB.	Short Form <i>f</i> of the pronoun "you (sg)"

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

<i>Lì k̄ā' k̄ōka</i> ⁺ ∅.	"It's not a chair."
3INAN NEG.BE chair:SG NEG.	
<i>Lì k̄ā' k̄ōkí-né</i> ⁺ ∅.	"It's not in a chair."
3INAN NEG.BE chair:SG-LOC NEG.	
<i>k̄ōkí-n</i>	"in a chair"
chair:SG-LOC	
<i>Lì k̄ā' d̄ōkó</i> ⁺ ∅.	"It's not a pot."
3INAN NEG.BE pot:SG NEG.	
<i>Lì k̄ā' d̄ōkí-nē</i> ⁺ ∅.	"It's not in a pot."
3INAN NEG.BE pot:SG-LOC NEG.	

dōkí-n

"in a pot"

pot:SG-LOC

The 3sg animate object pronoun ^o "him/her" has the Long Form *o* [ʊ] which is deleted entirely by Apocope, producing a Short Form which is segmentally *zero*. Its presence is still shown by the rounding of the preceding host-word-final vowel mora from [ɪ] to [ʊ], which is always written (with a preceding raised point) as *·o*.

Compare the forms with *f* "you (sg)"

M̃ pō bɔ́ɔdī f̃ ⁺∅. "I don't love you."

1SG NEG.IND want 2SG.OB NEG.

M̃ bɔ́ɔdī f̃. "I love you"

1SG want 2SG.OB.

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

M̃ pō bɔ́ɔd·ó·o ⁺∅. "I don't love him/her." [ɱpʰɔ́ɔbɔ́:ɔ:]

1SG NEG.IND want-3AN.OB NEG. Long Form *o* of the pronoun "him/her"

M̃ bɔ́ɔd·ō ∅. "I love him/her." [ɱbɔ́:ɔ]

1SG want 3AN.OB. Short Form ∅ 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 Short form, because *y* left word-final after front vowels by Apocope is deleted [2.2](#):

Gòsim!

"Look!"

Look:IMP!

Gòsimī ∅!"Look ye!" by Apocope from *gòsimī-yá*

Look:IMP 2PL.SUB!

Liaison words are not all enclitic. Personal pronouns used as subjects or as proclitic determiners of a following noun or postposition also cause this inhibition of Apocope in the *preceding* word, as does one proclitic particle of the form *à* and all words beginning with certain derivational prefixes [8.2.2](#).

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

ṁ zūgú_ ø zàbìd lā zúg

1SG head:SG COMP fight:DIPF ART upon

"because my head hurts" (Complementiser ṁ)

Ṁ zūgu_ ø zábìd.

"My head hurts." (Serialiser n)

1SG head:SG SER fight:DIPF.

These various "disappearing" Liaison Words have unsurprisingly resulted in considerable confusion in word division in the traditional orthography, and are largely responsible for the many cases where clause-medial words acquire a mysterious short-vowel "ending." Sometimes such words are mistaken for clause-final type Long Forms and written accordingly.

Apocope has not only complicated Kusaal phonology, but has also affected morphology, as various strategies are adopted to avoid ambiguities that would otherwise result from final vowel loss and consonant cluster reduction. Expected flexions may be replaced by others of the same meaning but originally from different paradigms, or regular consonant assimilation processes may be blocked. In other cases, new untruncated forms have been created as the shortened form of one flexion has been reinterpreted as the homophonous shortened form of a different flexion.

Kusaal differs from most local languages in showing contrastive **glottalisation** of vowels; however, this feature is shared among Western-Oti Volta languages with neighbouring Nabit, Talni and Farefare [4.2.2](#).

Agolle Kusaal shows a systematic mismatch between phonetics and phonemics in the vowel system, because of **Agolle Vowel Breaking** [4.1.1](#) of earlier short and long ϵ υ vowels, still preserved as phonetic monophthongs in the Toende Dialect. This has produced four monophthongal phonemes *ja ya iə uə* which are realised phonetically as diphthongs; as in the traditional orthography they are written in accordance with the realisation, but the orthography is to be regarded for phonemic purposes as using *digraphs* to write monophthongs. On top of these complications, Kusaal has developed an elaborate and asymmetrical system of phonemic diphthongs from fusion of vowels following deletion of intervocalic *g and from the final fronting and rounding effects already mentioned; these processes all remain active in the morphophonemics.

Kusaal is **tonal**, like its relatives and neighbours, and indeed the vast majority of African languages south of the Sahara. The tone system is structurally very like that of Dagbani (a typical terracing system with H and L tones and emic downsteps) but is rather different in realisation because original H before L or downstep has become a new toneme, higher than original H. Thus, original H has become M (Mid), and the new toneme takes the place of H.

There is a frequent **tone overlay** [22.6.1.1](#) affecting Verbal Predicators in main clauses, and pervasive **tone sandhi** phenomena, one only affecting nominals and

adverbs in certain Noun Phrase or postpositional constructions [8.4](#), and one which occurs regardless of syntax after most unbound words [8.3](#).

Acute, macron and grave mark H, M and L respectively. The macron and grave apply not only to the mora on which they are placed, but to all following morae within the same word up to another tone mark. An unmarked mora after an acute mark is, however, toneless, and the preceding H toneme is realised over both morae [5.3.1](#).

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

<i>dī̃əsídìb</i>	"receivers"
<i>bā̃ŋɪdɪb</i>	"wise men"
<i>gbī̃gɪmnɛ</i>	"lion" (longer form, as above)
<i>á̃ŋsìb</i>	"mother's brother"

The only consonant clusters possible within stems following the root are *kk tt pp ŋŋ nn mm ll mn*, of which *kk tt pp ŋŋ* are written and usually realised as single. Consonant clusters cannot occur word-initially or finally, except for final geminate *-mm* in Long Forms [8.1](#) (including "Apocope-Blocked" [6.4](#) forms like the quantifier *pā̃mm* "a lot") where there has been loss of syllabicity in an originally syllabic final *m*. (On *kp gb ŋ* ' see the note on orthography above.)

Many nominal words have a **nominal prefix** beginning a stem which in other respects has just the same structure as an unprefixed stem. Nominal prefixes take the forms CV- or CV*n*-, less often CV*l**n*- or CV*s**n*-. Nominals with prefixes can thus contain *-nC-* clusters at the junction between the prefix and the rest of the stem:

<i>pī̃pī̃rɪg</i>	"desert"
<i>dī̃ndē̃og</i>	"chameleon"

Other word-internal clusters are confined to loanwords, though two-member consonant clusters occur freely within compounds, reflecting the fact that these are formed of component words with Apocope after each one.

Flexional **suffixes** have only a three-way vowel contrast *a/ɪ/ʊ*; this is also true of prefixes. Flexional suffix vowels are lost by Apocope in the surface Short Forms; when they are retained before Prosodic Clitics, *ɪ ʊ* appear lowered to *ɛ ɔ*. Many different two-member consonant clusters may occur across word division because of the deletion of word-final short vowels by Apocope:

Gbīgum lā dāa kūvd búŋ lā.

Lion:SG ART TNS kill:DIPF donkey:SG ART.

"The lion (*gbīgum*^{nɛ}) was killing (*kūvd*^{a/}) the donkey (*bùŋ*^a) ."

Most common **particles** are short clitics, like the postposed article *lā* and the preverbal tense marker *dāa* in this example.

Flexion is entirely by suffixing. Productive stem derivation is also effectively all suffixal. Nominal stem prefixes do not usually have identifiable meanings and are not involved in regular derivational processes, but derivational prefixes derived from older flexions do occur in some quantifiers and adverbs [16.2.1 17](#).

Kusaal flexional morphology is underlyingly fairly straightforward, but there are numerous surface complications due to word-internal consonant deletions, cluster simplifications, and to the pervasive effects of final vowel deletion. These words, given in the usual Short Forms, all belong to the same *g^a|s^ɛ* Noun Class:

<i>bīig</i>	"child"	<i>bīs</i>	"children"
<i>būvg</i>	"goat"	<i>būvs</i>	"goats"
<i>sàbùa</i>	"lover"	<i>sàbùəs</i>	"lovers"
<i>nūa</i>	"hen"	<i>nōvs</i>	"hens"
<i>kūk</i>	"chair"	<i>kūgvs</i>	"chairs"
<i>zàk</i>	"compound"	<i>zà'as</i>	"compounds"
<i>dà'a</i>	"market"	<i>dà'as</i>	"markets"
<i>bùŋ</i>	"donkey"	<i>bùmɪs</i>	"donkeys"
<i>tēŋ</i>	"land"	<i>tēɛŋs</i>	"lands"

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

<i>būvg^a</i> "goat"	+ <i>pìəlɪg^a</i> "white"	→ <i>bù-pìəlɪg^a</i>	"white goat"
<i>būvg^a</i> "goat"	+ <i>sī'a⁺</i> "another"	→ <i>bù-sī'a⁺</i>	"another goat"
<i>kūk^a</i> "chair"	+ <i>pìəlɪg^a</i> "white"	→ <i>kùg-pìəlɪg^a</i>	"white chair"
<i>kūk^a</i> "chair"	+ <i>kàŋā^{+/}</i> "this"	→ <i>kùg-kàŋā^{+/}</i>	"this chair"

In this grammar compounds are hyphenated, as above.

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

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

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

<i>kō⁺</i>	perfective	"kill" (+ means that the vowel is long in the LF)
<i>kōvd^a/</i>	imperfective	
<i>nyē⁺</i>	perfective	"see"
<i>nyēt^a/</i>	imperfective	
<i>vōl^ε</i>	perfective	"swallow"
<i>vōn^{na}/</i>	imperfective	

Variable Verbs also have an imperative flexion *-m^a*, appearing only in positive polarity when the verb carries the tone overlay of Independency Marking (see below.)

"Invariable Verbs" typically express body positions, relationships, or predicative adjectival senses. They have only a single finite form, which has either **descriptive** stative or dynamic imperfective aspect depending on the verb:

<i>Ò dīgɪ</i>	<i>nē.</i>	"She's lying down."
3AN be.lying.down FOC.		
<i>Ò mər búj.</i>		"She has a donkey."
3AN have donkey:SG.		
<i>Ò gīm.</i>		"She's short."
3AN be.short.		

There are two **verbs "to be"**: *bē* "exist, be in a place" and *àɛɛ* "be something/somehow." The latter verb is usually followed by the focus particle *nē* (in this case focussing the complement) whenever this is syntactically permitted, and then loses both the final *ɛ* and the nasalisation:

Ò à nē bīg. "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' bīga +∅. "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:

<i>kōvb^ɔ</i>	"killing"
<i>kōvd^a</i>	"killer"
<i>kōvdíŋ^a</i>	"killing implement"

Compound formation, besides being the regular way of adding adjectives to nouns, is common in Noun Phrase formation generally; there are many set expressions, but compounds of all kinds can be created freely:

gbìgim-kōvd^a "lion-killer"

Syntactically, Kusaal is quite representative of Gur in general. It is strictly **SVO**, with indirect objects preceding direct objects:

Ì tís dɔ'átà búŋ lā.
1SG give doctor:SG donkey:SG ART.
 "I've given Doctor the donkey."

As seen above, an adjective follows its noun and forms a compound with it. There are two native **prepositions**, *nē* "with" and *wōv* "like" (*nē* also links NPs and some AdvPs in the sense "and", but *kā* is "and" when linking VPs and clauses.) However, in other respects Kusaal prefers head-final structures, with **possessors**, for example, always preceding their heads:

<i>m̄ bīg</i>	"my child"
<i>dāy lā bīg</i>	"the man's child"

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

téɛbùl lā zūg

"onto the table" (*zūg* "head")

The Liaison Word *n*^ɛ mentioned above is a very general locative postposition. It too is here hyphenated to the preceding word, and in its Short Form is reduced to *n*:

mù'arī-n

"in a lake" (*mù'arɛ* "lake", Long Form)

lake:SG-LOC

The verb is preceded by proclitic particles expressing tense, mood and polarity. There is no agreement with any Noun Phrase, whether for person or number [see [28.2.3](#) for a marginal exception for some speakers]:

Gbīgum lā dāa kō búŋ lā.

Lion:SG ART TNS kill donkey:SG ART.

"The lion killed the donkey."

Gbīgum lā dāa pō kō búŋ láa +∅.

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

"The lion didn't kill the donkey."

Gbīguma lā dāa kō búŋ lā.

Lion:PL ART TNS kill donkey:SG ART.

"The lions killed the donkey."

Gbīgum lā sá kō búŋ lā.

Lion:SG ART TNS kill donkey:SG ART.

"The lion killed the donkey yesterday."

M̃ dāa nyē gbīgum lā.

"I saw the lion."

1SG TNS see lion:SG ART.

Bà dāa nyē gbīgum lā.

"They saw the lion."

3PL TNS see lion:SG ART.

The **focus** particle *nē* appears frequently after a verb to focus *aspect*; it limits the aspect temporally, implying "at the time referred to in particular.":

Nīdɪb kpîd.

"People die."

Person:PL die:DIPF.

Nīdɪb kpîd nē.

"People are dying."

Person:PL die:DIPF FOC.

The particle generally has this meaning when the verb allows it and no unbound words intervene between verb and particle, but with Descriptive Verbs, which by default express an abiding state, like *àɛn* "be something/somehow" above, the aspect-focus sense is usually not possible, and the particle must be interpreted as focussing a verb phrase constituent.

As with many West African languages, many clauses join more than one verb phrase to form **serial constructions**. Kusaal uses the linker particle *n* **SER** to introduce an additional verb phrase; in this example *tīs* "give" is used, as very often, simply as means of adding an indirect object:

Ṁ dāa kùès bònɔ_ ø tīs dɥ'átà.

1SG TNS sell donkey:SG SER give doctor:SG.

"I sold a donkey to Doctor."

Kusaal is interesting in that the Verbal Predicate is specifically marked not for subordination but for its absence. Main clauses and Content Clauses have **Independency Marking** 22.6 of the first Verbal Predicator, marked by a **tone overlay** affecting the first word of the Predicator, by the tonal behaviour of subject pronouns, a special imperative flexion and a particle *yā* which follows clause-final perfectives. The tone overlay marker is absent in negative polarity or Irrealis Mood and with various preverbal particles. Independency Marking itself is completely absent after the clause linker particle *kà* even in *coordinating* function in narrative:

Ò zàb dɥ'átà.

3AN fight doctor:SG.

"He's fought the doctor."

Ò gòs dɥ'átà.

3AN look.at doctor:SG.

"He's looked at the doctor."

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

Kà ò záb dɥ'átà.

And 3AN fight doctor:SG.

"And he's fought the doctor."

Kà ò gōs dɥ'átà.

And 3AN look.at doctor:SG.

"And he's looked at the doctor."

If tone overlay is present, it may be accompanied by segmental effects; for example, imperatives of inflecting verbs then take a special flexional ending *-m^a*:

Dā gōs dɔ'átāa +∅!

NEG.IMP look.at doctor:**SG NEG!**

"Don't look at the doctor!" (Overlay absent with the negative)

but *Gòsim dɔ'átà!* "Look at the doctor!"
Look.at:**IMP** doctor:**SG!**

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

Fù yá' bòɔd, m̃ ná tĩsɪ_f búŋ.

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

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

Manner or place adjuncts can only be placed before the subject by preposing them with *kà* via an elliptical clefting construction (see below.)

Clauses are often downranked by insertion of the complementiser particle *ñ* (realised often as segmental *∅*) after the subject:

gbīgim lá_∅ kō búŋ "the lion having killed the donkey"

lion:**SG ART COMP** kill donkey:**SG ART**

Relative clauses show a number of interesting features. They are internally-headed; one type has the incorporated antecedent non-initially, e.g.

[Paul ñ sōb gbàŋ-sī'a n tĩs Efesus dí'm lā]_∅ ñwá.

Paul **COMP** write letter-**INDF.INAN SER** give Ephesus one.**PL ART SER** this.

"This is [the letter Paul wrote to the Ephesians]." (NT heading)

where *gbàŋ-sī'a* is *gbàŋ* "book" compounded with the post-determining pronoun *sī'a* which marks it as antecedent, and the entire sequence *Paul ... lā* is the relative clause. The "complementiser" is not the pronoun but the particle *ñ* (tonally distinct from Serialiser *n*) which follows the subject, so that the functions of a relative pronoun are here formally divided into two separate parts. Kusaal has, however, also developed an antecedent-initial relative clause type where the complementiser has fused with a preceding demonstrative to form a relative pronoun:

dà̀y-kà̀nɪ pɹ'ā kpí lā "the man whose wife has died"
 man-REL.SG wife:SG die ART

Subordinate clauses may also be introduced by linker particles. The clause linker *kà*, which often means "and", is also frequently formally subordinating. The sense is often that of a non-restrictive relative clause:

Lì à nē gbīgum lá kà m̀ nyēt.
 3INAN COP FOC lion:SG ART and 1SG see:DIPF.
 "It's the lion I see."

Even when *kà* is coordinating, it has effects on clause structure which resemble those seen in subordination, with Independency Marking absent.

Kusaal **narrative** links clause after clause with *kà* in a way somewhat reminiscent of Biblical Hebrew, regularly omitting tense marking so long as the action is preceding in sequence, but including it when there are descriptive passages or "flashbacks." In this passage the past-tense marker *dà* occurs only in the first clause. The second *kà* is preposing the time expression *dāar yīnní*, part of an elliptical clefting construction (see below), while the first and third are carrying on the narrative:

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-Pō-zót-yēl dá à né ò sàam bìg mà'aa.

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

Kà dāar yīnní kà bìg lā né ò sàam zín'i_ø sōnsid.

And day:SG one and child:SG ART with 3AN father:SG sit SER converse:DIPF.

Kà bìg lā tí yèl ò sàam yē ...

And child:SG ART afterwards 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

Kusaal **Content Clauses** are formally identical to main clauses, including Independency Marking, but they contain personal pronouns altered as in indirect speech. Content Clauses are used not only for reporting speech but very generally with verbs expressing communication or thought. Most often they are introduced by *yē* "that." There are special **logophoric** uses of the contrastive free personal pronouns within Content Clauses.

Ò yèl yē 5n nyé gbīgim.

3AN say that 3AN.CNTR see lion:SG.

"He said that he (himself) saw a lion."

Ò yèl yé ò nyé gbīgim.

3AN say that 3AN see lion:SG.

"He said that he (someone else) saw a lion."

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

Dāu dá bē_ø mārí_ò pɔ̀'à-yīmmír, kà pɔ̀'ā lā yé

Man:SG TNS EXIST SER have 3AN wife-single:SG and wife:SG ART say

5n pō lém bōd yé ò sīd lā dí pɔ̀'ā yá'asē +ø.

3AN.CNTR NEG.IND again want that 3AN husband:SG ART take wife:SG again NEG.

"There was a man who had only one wife. [And] the wife said that **she** did not want her husband to take another wife." KSS p26

Clefting constructions are common; they have given rise to ellipted structures using *n* for focussing subjects and *kà* for foregrounding other elements:

Gbīgim_ø kōvd búŋ lā.

Lion:SG SER kill:DIPF donkey:SG ART.

"A lion is killing the donkey."

M zūgv_ø zábìd.

1SG head SER fight:DIPF.

"My head is hurting."

(Reply to "Where is the pain?")

Gbīgim kà m dāa nyē.

Lion:SG and 1SG TNS see.

"It was a lion that I saw."

These patterns derive by ellipsis of *Lì à nē* "It is ..." before a serial-verb construction or before a Supplement Clause respectively.

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

Fù bōd b́ +ø?

2SG want what CQ?

"What do you want?"

B́ kà fù nyētá +ø?

What and 2SG see:DIPF CQ?

"What can you see?"

Gbīgıma_á *álá* *kà fù nyētá* ^{+ø?}

Lion:PL NUM:how.many and 2SG see:IPVF CQ?

"How many lions can you see?"

Ànó'ɔnì_ø *kū búŋ* *lā* ^{+ø?}

Who SER kill donkey:SG ART CQ?

"Who has killed the donkey?"

Place and manner adjuncts can only precede the subject by preposing with *kà*:

Mām *bé* *nē* *mōɔgɔ-n*. "I'm in the bush." BNY p8

1SG.CNTR EXIST FOC grass:SG-LOC.

or *Mōɔgɔ-n* *kà mām* *bé*. "I'm in the bush." BNY p10

Grass:SG-LOC and 1SG.CNTR EXIST.

not **Mōɔgɔ-n mām* *bé*. "I'm in the bush."

The particle *nē* seen in several of the above examples interacts with verb Aspect, but may also focus either VP constituents or the entire VP 33.1.2. The rules determining its rôle in each case admit some ambiguity, but the aspectual meaning is normally preferred whenever it is syntactically and semantically possible 22.2.

Morphophonemics

2 Words, Morae and Syllables

2.1 Word Classes

The open word classes comprise **Verbs** and **Nominals**, the latter subdivided into **Nouns** and **Adjectives**. There are closed classes of **Quantifiers** and **Adverbs**, along with **Pronouns**, **Proquantifiers** and **Proadverbs**. Pronouns used as post-determiners behave like Adjectives, following a head noun which appears as a Combining Form, forming a compound in which the last element inflects to show the number of the head [19.6](#). **Ideophones** are treated in [19.8.1.3](#).

All other words are **Particles**. Most particles are bound words; exceptions include *ēēŋ* "yes" and *áyìlì* "no." Particles include the article *lā*^{+/} and the deictic *ŋwà*⁺ "this", the locative marker *nī*^{+/} ~ *n^ε*, the prepositions *nē* "with" and *wōv* "like" [21](#), particle-verbs and markers of tense, aspect and mood in Verbal Predicators [22](#), the focus particle *nē*^{+/}, the clause linkers *kà* and *yē*, the complementiser *ñ*, the serial-VP linker *n*, VP-final *nā*^{+/} "hither" and *sà*⁺ "hence", and a number of clause-level words such as Conjunctions [27.1.3](#) and Emphatics [33.6](#).

2.2 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" appears as the Short Form *bīg* in isolation and in most contexts, including clause finally for the most part, and clause medially everywhere except when followed by a particular set of "Liaison Words" [8.2](#):

<i>Ò à nē bīg.</i> 3AN COP FOC child:SG.	"She's a child."
<i>Ò dāa nyē bīg.</i> 3AN TNS see child:SG.	"She saw a child."
<i>bīg lā nú'ùg</i> child:SG ART hand:SG	"the child's hand"

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

Clauses with a **negation** (negative particle or negative verb)
Questions, both content and polar
 Phrases used as **vocatives**

Ò *kā' bīga* ^{+∅.} "He/she is not a child."
3AN NEG.BE child:**SG NEG.**

Ò *dāa pō nyē bīga* ^{+∅.}
3AN TNS NEG.IND see child:**SG NEG.**
 "He/she did not see a child."

Ànó'wòì_ ∅ *dāa nyē bígà* ^{+∅?}
 Who **SER TNS** see child:**SG CQ?**
 "Who saw a child?"

Ì *bīga* ^{+∅!} "My child!"
1SG child:**SG VOC!**

The Long Form also appears as a **derivational** feature in the *citation* form of some words [6.4](#). In proverbs and other archaic materials, a LF may be found ending a *yà'*-clause [8.1.1 30](#). Direct commands sometimes end in a LF [28.2.3](#).

The LF is not predictable in general from the shape of the SF alone (but see [2.2.2](#)); however, the SF is always deducible from the LF by **Apocope**:

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

Subsequently

Word-final consonant clusters drop the second consonant
 (*kk tt pp ηη* become *k t p η* but are *written* single in any case [1.3](#))

Word-final *y* becomes *ɛ* after short back vowels and zero elsewhere

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

<i>ia</i> → <i>ja</i>	<i>ua</i> → <i>ɥa</i>	<i>ja'a</i> → <i>ja'</i>	<i>ɥ'aa</i> → <i>ɥ'a</i>
<i>ae</i> → <i>aɛ</i>	<i>av</i> → <i>aɥ</i>	<i>ui</i> → <i>uj</i>	
<i>Vaa</i> → <i>Va</i>	<i>Vee</i> → <i>Ve</i>	<i>Vuv</i> → <i>Vv</i>	

The term "Apocope" will be used throughout this grammar to refer exclusively to this specific phenomenon. It is treated descriptively as a single process, but historically the matter was certainly more complex; comparison with other Western Oti-Volta languages and internal evidence both suggest that loss of final vowel quality contrasts preceded complete vowel deletion clause-internally. Clause-internal total deletion (seen also in Mooré) was probably itself a stress-related process distinct from the clause-final Apocope characteristic of Kusaal, Nabit and Talni.

Examples:

<i>Lì à nē kōk.</i>	"It's a chair."
3INAN COP FOC chair:SG.	
<i>Kōk lā bódìg yā.</i>	"The chair has got lost."
Chair:SG ART get.lost PFV.	
<i>Lì kā' kōka. +∅.</i>	"It's not a chair."
3INAN NEG.BE chair:SG NEG.	
<i>Lì à nē kúkàa +∅?</i>	"Is it a chair?"
3INAN COP FOC chair:SG PQ?	
<i>Ànó'ɔnì_∅ nyē kúkà +∅?</i>	"Who saw a chair?"
Who SER see chair:SG CQ?	

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

<i>Lì à nē dūk.</i>	"It's a cooking pot."
<i>Dūk lā bódìg yā.</i>	"The pot's got lost."
<i>Lì kā' dūkó.</i>	"It's not a pot." /kk/
<i>Lì à nē dūkóʋ?</i>	"Is it a pot?"
<i>Ànó'ɔnì nyē dūkóʋ?</i>	"Who saw a pot?"
<i>Lì à nē gbīgim.</i>	"It's a lion."
<i>Lì kā' gbīgimne.</i>	"It's not a lion."
<i>Lì à nē gbīgimne?</i>	"Is it a lion?"
<i>Ànó'ɔnì nyē gbīgimne?</i>	"Who saw a lion?"
<i>Lì à nē yáarim.</i>	"It's salt."
<i>Lì kā' yáarimm.</i>	"It's not salt."
<i>Lì à nē yáarimm?</i>	"Is it salt?"
<i>Ànó'ɔnì nyē yáarimm?</i>	"Who saw salt?"

<i>Bà à nē gbīgıma.</i>	"They're lions."
<i>Bà k̄ā' gbīgımaa.</i>	"They're not lions."
<i>Bà à nē gbígımàa?</i>	"Are they lions?"
<i>Ànó'ɔ̀nì nyē gbígımà?</i>	"Who saw lions?"
<i>Ò à nē dāu.</i>	"He's a man."
<i>Ò k̄ā' dāu.</i>	"He's not a man."
<i>Ò à nē dáuù?</i>	"Is he a man?"
<i>Ànó'ɔ̀nì nyē dáu?</i>	"Who saw a man?"
<i>Ò à nē sāeɲ.</i>	"He's a blacksmith."
<i>Ò k̄ā' sāeɲ.</i>	"He's not a blacksmith."
<i>Ò à nē sáèeɲ?</i>	"Is he a blacksmith?"
<i>Ànó'ɔ̀nì nyē sáeɲ?</i>	"Who saw a blacksmith?"
<i>Lì à nē múj.</i>	"It's rice."
<i>Lì k̄ā' múj.</i>	"It's not rice."
<i>Lì à nē mújì?</i>	"Is it rice?"
<i>Ànó'ɔ̀nì nyē múj?</i>	"Who saw rice?"
With verbal forms:	
<i>Kà ò sják.</i>	"And he agreed."
And 3AN agree.	
<i>Ò pū sjákē +∅.</i>	"He didn't agree."
3AN NEG.IND agree NEG.	
<i>Kà ò dīgı.</i>	"And she's lying down."
And 3AN be.lying.	
<i>Ò pū dīgıyá +∅.</i>	"She isn't lying down."
3AN NEG.IND be.lying NEG.	
<i>Kà ò vūɛ.</i>	"And she's alive."
<i>Ò pū vūyá.</i>	"She's not alive."
<i>Kà ò kuyā.</i>	"And he farmed."
<i>Ò pū kūa.</i>	"He hasn't farmed."

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

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

The derivational type of Long Form appears in many adverbs and quantifiers. Thus with the Adjective *bédug* "big" and the Adverb *bédugū* "a lot":

Lì à nē bōn-bédug. "It's a big thing."
3INAN COP FOC thing-big:SG.

Lì kǎ' bōn-bédug̃ +∅. "It's not a big thing."
3INAN NEG.BE thing-big:SG **NEG.**

M̃ pú'ùs yā bédugū. "Thank you very much."
1SG greet **PFV** much.

2.2.1 Superscript Notation

The exact shape of a surface Long Form differs in different contexts: final vowel length may be neutralised; there may be tonal changes; lowering of final short *ɪ ʊ* to *ɛ ɔ* is not seen in LF's used as derived forms, and so on.

Such differences are regarded as changes produced in the form of the Long Form by following particles. Clause-final LF types will be regarded as induced by following **Prosodic Clitics** 8.1, which have no segmental form of their own but cause the preceding word to appear as a LF rather than the default SF. The derivational LF types are taken as showing **Apocope Blocking** 6.4.

The Long Form is thus an abstraction, representing the underlying word-form which produces the surface SF through Apocope, and the various surface LF's through application of the rules for each type of clitic. For convenience, the LF form preceding the Negative Prosodic Clitic 8.1 will be taken as canonical. It shows underlying LF-final short *-ɪ -ʊ* as *-ɛ -ɔ*, **-mʊ *-mɪ* as *-mm -mm* and *-iə -uə* as *-ia -ua* 4.1.1; see below on tonemes.

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.

<i>bīg^a</i>	"child"	<i>kōk^a</i>	"chair"
<i>dōk^{ɔ/}</i>	"pot"	<i>sjàk^ɛ</i>	"agree"
<i>gbīgim^{nɛ}</i>	"lion"	<i>yàarim^m</i>	"salt"
<i>dīgɪ^{ya/}</i>	"be lying down"	<i>zì'e^{ya}</i>	"be standing"

When the LF ends in a long vowel or diphthong, Superscript Notation writes the SF followed by the mark ⁺:

<i>gbīgıma</i> ⁺	"lions"	SF <i>gbīgıma</i>	LF <i>gbīgımaa</i>
<i>mòlı</i> ⁺	"gazelles"	SF <i>mòlı</i>	LF <i>mòlıı</i>
<i>gòŋ</i> ⁺	"hunt"	SF <i>gòŋ</i>	LF <i>gòɔŋ</i>
<i>tìeŋ</i> ⁺	"inform"	SF <i>tìeŋ</i>	LF <i>tìēeŋ</i>
<i>kjà</i> ⁺	"cut"	SF <i>kjà</i>	LF <i>kīa</i>
<i>kɥā</i> ⁺	"hoe"	SF <i>kɥā</i>	LF <i>kūa</i>
<i>dāɥ</i> ⁺	"man"	SF <i>dāɥ</i>	LF <i>dāu</i>
<i>sāeŋ</i> ⁺	"blacksmith"	SF <i>sāeŋ</i>	LF <i>sāeŋ</i>

(This use of ⁺ exploits the extent to which LFs can be predicted synchronically from SFs 2.2.2. More radical simplifications could be made: ⁺ ε m = ° are in complementary distribution, as are ^a ʏ^a. Separate symbols are used for clarity.)

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

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

	<i>kpià</i> ⁺	"shape wood"	SF <i>kpià</i> '	LF <i>kpĩ'a</i>
but	<i>djā</i> ^a	"get dirty"	SF <i>djā</i> '	LF <i>djā'a</i>
	<i>kɥā</i> ⁺	"hoe"	SF <i>kɥā</i>	LF <i>kūa</i>
but	<i>pɥ'ā</i> ^a	"woman"	SF <i>pɥ'ā</i>	LF <i>pɥ'āa</i>

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

<i>vōɛ</i> ^{a/}	"be alive"	SF <i>vōɛ</i>	LF <i>vōyá</i>
<i>tōɛ</i> ^{a/}	"be bitter"	SF <i>tōɛ</i>	LF <i>tōyá</i>

Words with segmentally identical SF and LF and are written with ⁼:

<i>dà'a</i> ⁼	"market"
--------------------------	----------

In a few cases where Superscript Notation is impractical, the forms will be written out separately, e.g. *pāmm* SF *pāmné* LF "a lot."

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

The final M or H tone is realised on the rightmost vocalic mora of the LF; however, if a pitch rise would otherwise result within a single syllable, the first mora is delinked and the second toneme links to both morae 5.2; this process is tacitly assumed in Superscript Notation:

<i>fūug</i> ^{ɔ/}	"shirt, clothes"	SF <i>fūug</i>	LF <i>fūugó</i>
<i>pāe</i> ^{+/}	"reach"	SF <i>pāe</i>	LF <i>pāée</i>
<i>nūa</i> ^{+/}	"hen"	SF <i>nūa</i>	LF <i>nūáa</i>
<i>yā</i> ^{+/}	"houses"	SF <i>yā</i>	LF <i>yáa</i>
<i>lā</i> ^{+/}	article 19.3	SF <i>lā</i>	LF <i>láa</i>
<i>bèdugū</i> ^{+/}	"a lot"	SF <i>bèdugū</i>	LF <i>bèdugúu</i>
<i>gāaŋ</i> ^{=/}	"Nigerian ebony"	SF <i>gāaŋ</i>	LF <i>gáaŋ</i>
<i>dāam</i> ^{m/}	"millet beer"	SF <i>dāam</i>	LF <i>dáamm</i>
<i>tāuŋ</i> ^{+/}	"opposite-sex sib"	SF <i>tāuŋ</i>	LF <i>táuŋ</i>
<i>mòli</i> ⁺	"gazelles"	SF <i>mòli</i>	LF <i>mòlĩ</i>

If the sequence HM would result in one syllable, the M is delinked:

	<i>Lì kā' yáarĩmm.</i>	"It's not salt (<i>yàarĩm</i> ^m)."
	<i>Lì ká' ò tĩmm.</i>	"It's not her medicine."
but	<i>Lì kā' tĩmm.</i>	"It's not medicine (<i>tĩm</i> ^m)."
	<i>Lì ká' bà dā'a.</i>	"It's not their market."
but	<i>Lì kā' dá'a.</i>	"It's not a market (<i>dà'a</i> ⁼)."

Similarly, when the Liaison enclitic ^o "him/her" is attached to a verb Base Form ending in a root vowel, the first mora in the SF is delinked when a pitch rise would otherwise occur within the syllable; such forms are written with LF tones:

<i>nyē·ó</i> ^o	"see him/her"	SF <i>nyé·o</i>	LF <i>nyē·ó-o</i>
---------------------------	---------------	-----------------	-------------------

Note that *kū·ó*⁼ "kill him/her" represents the identical SF and LF *kú·o*.

Words like *náaf*^ɔ and *nú'ùg*^ɔ coincide tonally in the surface LF because of H Spreading 5.3.1; such words are written in Superscript Notation with the SF tonemes.

<i>Lì kā' nú'ugō</i> ^{+∅.}	"It's not a hand."
3INAN NEG.BE hand:SG NEG.	
<i>Lì kā' náafō</i> ^{+∅.}	"It's not a cow."
3INAN NEG.BE COW:SG NEG.	

2.2.2 Predictability of Long Forms

The LF can usually be predicted from the SF given the aspect of a verb, or whether a noun has human reference [9.1](#). Historically expected forms may be replaced by such predicted forms, either as variants or throughout. Apocope frequently does *not* lead to loss of segmental contrasts despite deleting segments which condition preceding sound changes [6.3.2](#), and working in reverse, such features can often accurately predict LFs from SFs; even words completely deleted by Apocope remain recognisable from their effects on preceding words [8](#).

This raises questions about the psychological reality of LFs as underlying word forms. The LF will be treated as synchronically primary, as it certainly is historically, but the matter merits discussion.

Apocope abolishes the contrast between Tone Patterns H and O in nominals with 2-mora stems, and where LFs lack contrasts present in SFs this is due to a late tone realisation rule [5.3.1](#). However, Tone Patterns are best described synchronically as suprasegmental stem features [7.1](#), so this does not establish the primacy of the LF.

With **SFs ending in consonants**, it is not possible in principle to predict the LF from the SF alone. The LF may end in *a* *ε* or *ɔ*; preceding SF-final *m* *n* or *l* may or may not be geminated; *-m* may become *-mn-* instead of *-mm-*. However, given whether a noun has human reference, it is usually possible to identify its Noun Class and thus the correct LF [9.1](#). Variable Verb Base Forms end in *-mm* if the SF ends in *-m* and in *-ε* otherwise; Dynamic Imperfectives and Invariable Verbs end in *-a* with gemination of preceding *n* *l* *m*. Dynamic Imperfectives with SFs ending in *-m* formerly had LFs in *-mna*, though not for my informants nor in KB:

...kà pū túmnā.

"...and does not work." (2 Thess 3:11, 1996, written *ka pu tum na* [1.3.1](#); KB *ka pu tumma*.)

The default LF ending corresponding to SFs ending in a consonant is *-ε*. Thus with loans like *tílás^ε* "necessity", cf Hausa *tíilàs id*, and in e.g.

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì pū nār yé fù dí fù bā'-bîg pɔ'á Herodiase^{+∅}.

3INAN NEG.IND must that **2SG** take **2SG** father-child:**SG** wife:**SG** Herodias **NEG**.

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

Almost all **SFs ending in vowels** have LFs which can be obtained simply by lengthening the final vowel/diphthong, including all that do not end in *ja ja'*, short *ɪ*, or a fronting diphthong, and many that do:

<i>sīa</i> ⁺	"waist"	<i>sàbùa</i> ⁺	"girlfriend"
<i>bāa</i> ⁼	"dog" 8.1	<i>pāe</i> ^{+/}	"reach"
<i>nìe</i> ⁺	"appear"	<i>dūe</i> ^{+/}	"raise/rise"
<i>kūgá</i> ⁺	"stones"	<i>wìdɪ</i> ⁺	"horses"
<i>kū</i> ⁺	"kill"	<i>mà</i> ⁺	"mother"
<i>bèdvugū</i> ^{+/}	"a lot" 6.4		

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

<i>dīā</i> ^a	"get dirty"	← * <i>dīagi</i> 6.1.1.1	Farefare	<i>dēgè</i>
<i>pīān</i> ^a	"speak, praise"	← * <i>pīāgi</i>	Farefare	<i>pěgě</i>
<i>dū</i> ^a	"bear, beget"	← * <i>dūagi</i>	Farefare	<i>dògè</i>
<i>zò</i> ⁺	"run"	6.1.1.1	Farefare	<i>zòè</i>
<i>dāu</i> ⁺ LF <i>dāu</i>	"man"	← * <i>dawa</i>	Mooré	<i>ráo</i> <i>a</i>
<i>tāu</i> ^{+/} LF <i>tāu</i>	"opposite-sex sib"	← * <i>tāwa</i>	Mooré	<i>tǎo</i> <i>a</i>

A marginal exception to predictability is the fact that words ending in *ja*['] may have LFs in *ja*^{'a} like *dīā*^a "get dirty" or in *ia* like *kpià*⁺ "shape wood with an axe."

The major exception is SFs ending in a fronting diphthong or short *ɪ*, where the LF may prolong the diphthong or instead add *-ya*. Two irregular nouns have variant sg LFs:

<i>sāen</i>	"blacksmith"	LF <i>sāen</i> or <i>sānya</i>
<i>sōen</i>	"witch"	LF <i>sōen</i> or <i>sōnya</i>

All other cases involve **Invariable Verbs** [11.2](#), where LF *-ya* is regular except for a handful of bare root forms:

<i>dīgi</i> ^{ya/}	"be lying down"	<i>wà'e</i> ^{ya}	"be en route for"
<i>vūe</i> ^{a/}	"be alive"	<i>sū'e</i> ^{ya/}	"own"

Before Liaison, Invariable Verbs follow the *general* rule, prolonging any final short diphthong and then applying phrase-medial loss of fronting [8.5.3](#):

<i>sū'e</i> ^{ya/}	"own"	+ <i>ɪ</i> ⁺ "it"	→	<i>sú'v</i> <i>lī</i> ^{+/}
<i>vūe</i> ^{a/}	"live"	+ <i>n</i> ^ε rem	→	<i>vūv-n</i> ^{ε/}

Before Liaison [8.2.1](#) [8.2.2](#) final affix-vowel quality is neutralised, but the same issues arise with verbs like *dīā*^a versus *kpià*⁺, gemination of *l m n*, and *mn* ~ *mm*:

*ya zuobid wusa **kalli** an si'em*

yà zūəbíd wūsa kállì_ ∅ àŋ sī'əm

2PL hair:PL all number:SG COMP COP INDF.ADV

"how much the number of all your hairs is" (Lk 12:7)

*nwenε tinameε ket banε **tummi** ti taali [sic] basid si'em la.*

wēn nē tīnámì_ ∅ kēt bání tūmmī_ tí tàallì_ ∅

resemble with 1PL COMP let:DIPF REL.PL work:DIPF 1PL fault:SG SER

básìd sī'əm lā.

throw.out:DIPF INDF.ADV ART.

"like we forgive the sin of those who do it to us." (Lk 11:4)

*ka ban ka kikirbe'ednam **daamne** ba daa nye laafiya*

kà bàn kà kīkīr-bé'éd-nàm dáàmnī_ bá dāa nyē láafiya

and REL.PL and fairy-bad-PL trouble:DIPF 3PL.OB TNS see health

"And people who were afflicted by evil spirits became well."

(Lk 6:18, 1976; KB: *ka banε ka kikiris **daamidi** ba daa nye laafi*)

2.3 Word Division

Free words fulfil the concept of "word" expressed in Bloomfield 1926: "A minimum free form is a word. A word is thus a form which may be uttered alone (with meaning) but cannot be analyzed into parts that may (all of them) be uttered alone (with meaning.)" This definition excludes words like the English "the" and the Kusaal article *lā*^{+/}. In this grammar the term **clitic word** includes every minimal bound form other than a flexion that is *meaningful at a level higher than the derivational*. This grants clitic status to the article, to the bound pronouns and particles seen in the VP, NP, AdvP and clause, and also to the *open* class of nominal combining forms, but denies it to prefixes. The distinction between clitics and flexions is made along the lines suggested in Zwicky and Pullum 1983.

Traditional word-division conventions do not correspond to the grammatical analysis adopted here in all cases. Problematic areas relate to compound Noun Phrases and to Liaison Enclitics.

Traditional word division can be obtained from the orthography of this grammar by writing all hyphenated groups solid, and by replacing the raised dot symbol · by word division. (See also on the object pronouns *m f 2.3.2.*)

2.3.1 Compound Noun Phrases

Kusaal is typical of the Oti-Volta languages in constantly using compounds within NP structure, often where most languages would employ independent nominals [19.6](#). The first element is a nominal "Combining Form" (cb [9.1](#)), part of the regular paradigm of the open class of nominals, and typically a bare stem which has undergone word-final Apocope. Such Combining Forms occur freely and productively as pre-modifiers of following nouns, producing compounds of a type familiar in Indoeuropean languages, such as

<i>zīm-gbáŋ'àd</i>	"fisherman"	(<i>zíŋ</i> "fish")
<i>wāb-kúùd</i>	"elephant-killer"	(<i>wābug</i> "elephant")
<i>bì-fūug</i>	"children's shirt"	(<i>bīŋ</i> "child")
	(i.e. suitable for children, child-sized)	

Specialised meanings are common:

<i>pɔ̀'à-sāŋ'am</i>	"adulterer", literally "wife-spoiler"
---------------------	---------------------------------------

Besides this, Kusaal forms with complete freedom compounds where the preceding combining form is the head, and the following nominal is a dependent. This is the normal construction for both adjectives and post-determining pronouns:

<i>būug</i>	"goat"
<i>bù-pìəlìg</i>	"white goat"
<i>bù-kàŋā</i>	"this goat"
<i>bù-pìəl-kàŋā</i>	"this white goat"
<i>wāb-pìəlìg</i>	"white elephant"
<i>wāb-títā'ar</i>	"big elephant"

There is no phonological difference between head-initial and modifier-initial compounds (the tonal sandhi rules, for example, are identical [8.4](#) [8.3](#)).

Compounds are **hyphenated** in this grammar; traditionally, they are written solid, whether the first element is dependent or head, unless a cb as head is segmentally identical with the singular, when it is written as a separate word:

<i>zingban'ad</i>	<i>zīm-gbáŋ'àd</i>	"fisherman"
<i>bukaŋa</i>	<i>bù-kàŋā</i>	"this goat"
<i>yamug bipuŋ</i>	<i>yàmmug-bī-púŋ</i>	"slave girl"
		(Acts 16:16, 1976) 9.2.2

Combining forms are, however, not word fragments but clitic words, and compounds are not single words but a particular type of noun *phrase*. This accords with the structure of the language, in which compounding occurs continually where other languages would use uncompounded phrases. Compounds may even incorporate uncompounded elements [19.6.1](#):

[ānzúru fà lá'-]māan "silversmith" ("[silver goods]-maker")

Nominals with prefixes, loanwords, and unanalysable stems are written solid:

kpòkpàrig	"palm tree"	tītā'ar	"big"
wāb-tītā'ar	"big elephant"	ŋwāmpūrɪ	"Mampruli"
bòrkìn	"honest person"		

Distinguishing between a combining form and a prefix is not always straightforward, and the decision whether to spell with a hyphen can turn on no more than etymological ingenuity in some cases [14.4](#).

2.3.2 Liaison

A number of Kusaal words, including all the non-contrastive personal pronouns, share the common phonological peculiarity that whether they are themselves bound or free, they prevent Apocope from applying to the *preceding* word, which appears as a Long Form but with loss of all original vowel quality distinctions in the final vowel mora, like a word-internal epenthetic vowel [8.2](#).

When such words have a SF which has a vowel of its own, they are written as separate words both in the traditional orthography and in this grammar:

Fv bɔɔdi ti.	"You love us."	[fɔbɔ:ditʰɪ]
Fù bɔɔdī tí.		
2SG want 1PL.OB.		

Ò yɛlɪ àmēŋá.	"She spoke truly."
3AN say ADV:self:ADV.	

tì bàtán'	"we three"
1PL NUM:three	

bīisá àyí	"two children"
child:PL NUM:two	

So are all proclitic pronouns:

Bà gòsì_ bà bīis. "They looked at their children."
3PL look.at **3PL** child:**PL**.

The Personifier Clitic *à*, which is traditionally written solid with the following word, will here be hyphenated, as it is a particle capable of being attached to entire phrases, like English possessive clitic "'s" [19.10](#).

Awin "Awini" (personal name)
À-Wīn
PERS-personal.spirit:**SG**

The Serial VP linker *n* [8.2.2.1.2](#) and the complementiser *ḥ* [8.2.2.1.1](#) are in some texts usually written *n*, sometimes preceded by a modified LF. For my informants, and in most texts, they are segmentally zero, with the preceding modified LF as the only sign of their presence apart from tone. In such cases the particles are represented by \emptyset in interlinear glossing.

tīnámì_ ∅ zàb nà'ab lā "our having fought the chief" (*ḥ*-Clause)
1PL **COMP** fight chief:**SG** **ART**

Tīnámì_ ∅ záb nà'ab lā. "We fought the chief." (*n*-focus)
1PL **SER** fight chief:**SG** **ART**

m̃ zūgú_ ∅ zàbìd lā zúg
1SG head:**SG** **COMP** fight:**DIPF** **ART** upon
 "because my head hurts"

M̃ zūgú_ ∅ zàbìd. "My head hurts."
1SG head:**SG** **SER** fight:**DIPF**.

Three clitic object pronouns are reduced by Apocope to forms without any vowel. The 1sg pronoun SF is realised as consonantal [m]. In KB it is written solid with the preceding word, but in the orthography of this grammar it is written separately, as in the traditional orthography prior to 2016.

Fv bɔɔdim. "You love me." [fɔbɔ:dim]
Fù bɔɔdī_m.
2SG want **1SG.OB**.

The 1sg Liaison Enclitic pronoun itself occurs before Liaison in

Fu nonji mi n gat bamaa?

Fù nójī_mī_ n gát bámmáa +ø?

2SG love 1SG.OB SER pass:IPFV DEM.DEI.PL PQ?

"Do you love me more than these?" (Jn 21:15, 1976)

The LF of the 2sg pronoun is written as a separate word:

M pu bɔɔdi fɔ.

"I don't love you."

M̃ pū bɔɔdī_fɔ +ø.

1SG NEG.IND want 2SG.OB NEG.

I write the SF separate as well, but 2016 orthography writes it solid with the preceding verb. Traditional orthography previously separated the final mora of the verb and joined it to the pronoun, creating spurious pronouns *if uf*.

2016 *M bɔɔdif.*

"I love you."

[ɱbɔ:ɔɔɔf]

1996 *M bood if.*

M̃ bɔɔdī_f.

1SG want 2SG.OB.

1996 *M nye uf.*

"I've seen you."

[ɱjẽõf]

M̃ nyéó_f.

1SG see 2SG.OB.

1996 *M gban'e uf.*

"I've grabbed you."

[ɱgbãõf]

M̃ gbán'v_f.

1SG seize 2SG.OB.

(See [8.5.3](#) for the -e)

The 3sg animate object pronoun ° [ʊ] "him/her" loses its entire segmental form when subject to Apocope [2.2](#), after causing the host final vowel mora to become [ʊ]; this rounded final mora remains to signal the silent presence of the pronoun. This LF-final vowel has traditionally been mistaken for the pronoun itself and written as a separate word. As a concession to tradition, the final vowel mora will be separated from the rest of the host by a raised point ·o. This always represents [ʊ] in the Short Form; in the Long Form the rounded LF-final mora unites with the [ʊ] of the pronoun to form long [ʊ:]. The LF will be written as ending in ·o-o.

The pronoun ^{ya} loses its entire segmental form in the SF [2.2](#), and its presence is revealed only by the word-final *-l* on the preceding LF:

	<i>gòsim^a</i>		"look!"	
SF	<i>gòsimī</i> _— <i>ø</i>		"look ye!"	Traditional: <i>gosimi</i>
LF	<i>gòsimī</i> _— <i>yá</i>		28.2.3	Traditional: <i>gosimiya</i>
	Look.at:IMP 2PL.SUB			

2.4 Morae, Syllables and Stress

All segments constitute **morae**, except for consonants immediately followed by vowels within the same word; other consonants represent **non-vocalic** morae. Written *k p t ŋ* between vowels represent *kk pp tt ŋŋ*, where the first element is a non-vocalic mora, e.g. *sú'əŋ* SF "rabbit" has three morae, while the LF *sú'əŋā* has four.

A vocalic mora followed by a non-vocalic mora in the same word is **closed**; all others are vocalic **open morae**. Vocalic morae are the domain of **tone**, but not all vocalic morae bear a toneme [5.2 5.3.1](#).

Stress operates with **syllables**; all vocalic morae form syllables, except for the second morae of 2-mora vowels and diphthongs. Extra-long "diphthongs" are actually disyllabic, with syllable division following the first mora: LF *nū-áa* "hen."

Word stress falls on the root, except in LFs before a Prosodic Clitic, where it falls on the final affix vowel (unless this has been deleted in the surface LF [8.1](#).) Prefixes and combining forms are not stressed.

Monosyllabic words with a short vowel do not have intrinsic stress. This applies not only to clitics, but even to monosyllabic verbal and nominal forms with a short vowel, like *mè* "build" (perfective) *bùŋ* "donkey" *ān* "he/she." Monosyllables with a long vowel, like *mèéd* "build" (dynamic imperfective) do have intrinsic stress.

Before pause, all intrinsically unstressed words acquire stress, including clitics like the article *lā^{+/}*. Even Liaison Enclitics [8.2.1](#) acquire stress, independent of their host, which retains its own stress.

Stress is important in allotony; downstepping before H tonemes is dependent on syllable structure and stress. See [5.3.2](#) for examples.

In a few cases stress may have shifted from a root to an original epenthetic vowel, with the root being reinterpreted as a prefix:

<i>dìtúŋ^ɔ</i>	[ˈdɪt:ʊŋ]	"right hand", probably a derivative of <i>dī⁺</i> "eat"
<i>dàtìŋ^ɔ</i>	[daˈtʰɪʊŋ]	"right hand"

	<i>bōtɪŋ</i> ^a	['bɔt:ɪŋ]	"cup" (from <i>būd</i> ^ε "plant seeds" via the semantic development "planting implement" → "seed cup" → "cup in general")
pl	<i>bōtɪs</i> ^ε	[bɔ'tɪ:s]	with a wholly exceptional apparent lengthening of an epenthetic vowel 6.2.1 ; probably reanalysis of the sg as prefix <i>bō</i> + stem <i>tɪŋ</i> ^a

2.5 Ordering of Morphophonemic Rules

Agolle Vowel Breaking [4.1.1](#) and Primary Diphthongs [4.2.3](#) are part of the underlying word form prior to the application of any rules.

Consonant Assimilation/Epenthetic Vowel Insertion [6.2.1](#), Vowel Fusion [6.3.1](#), and Fronting/Rounding of vowel morae [6.3.2](#) all precede Apocope. Fronting/Rounding can be taken as following Epenthetic Vowel Insertion for simplicity.

Comparative material shows that Consonant Assimilation preceded deletion of **g* and Vowel Fusion historically, but synchronically there is no need for ordering. After **CVVg*- roots, flexions beginning with **g* are systematically avoided [12.1.1.1](#) [9.1](#), and before other suffixes former **g* is reflected only in toneme allocation [7.2.1.1](#). Deletion of **g* after *short* vowels, resulting in cases like sg *zàk*^a ← **zagga* "compound" pl *zà'as*^ε ← **zagsi*, can be regarded synchronically as a subtype of CVV~CV~CVC allomorphy [6.1.1.1](#). Internal evidence still shows its recent origin, however: stems in *a'a ja'a u'a aŋ'a jaŋ'a uŋ'a* in the *r^ε|a⁺* Class may still behave as consonant-final [9.3.4](#): *bà'ar*^ε "idol" (Farefare *bàgrè*), plural *bà'a⁺* or *bàda⁺*; glottalisation is found in affix vowels only in *pà'* ← **pag* "earlier today" [4.4](#); and LF-final long vowels can be predicted from the SF everywhere except where *i'a u'a* fall together in Apocope with the *ja'a u'a* resulting from historical **g* loss [2.2.2](#). The lateness of this change is supported by Haaf 1967, which has *baga* for *bā'a* "diviner" and *winbagr* for *wīn-bá'àr* "altar", alongside *bab* for the plural *bā'ab*^a "diviners."

External Sandhi of all types [8](#) naturally follows Apocope.

Tone Patterns [7.1](#) are described by allocating tonemes before Consonant Assimilation/Epenthetic Vowel Insertion and Vowel Fusion. The tonal overlay of Independency Marking [22.6.1.1](#) creates a new set of intrinsic tones; this needs only to precede external tone sandhi.

The tonal effects produced by Prosodic Clitics [8.1](#) and Liaison Enclitics [8.2.3](#) occur *prior* to L/M Raising and the effects of Fixed-L words, as is shown by the fact that the all-L tonemes resulting from the effect of the Interrogative Clitic on an all-M word are subject to L Raising [8.1](#). Tone Levelling within syllables [5.2](#) is the last in order of toneme-altering rules; it precedes the tone *realisation* rule H Spreading [5.3.1](#), which itself precedes the insertion of downsteps before H tonemes [5.3.2](#).

3 Consonants

3.1 Inventory and Symbols

The following consonant symbols are used:

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

These symbols correspond to the consonant phonemes of the language, except that *kp gb* are digraphs for the labiovelar double-closure stops [k͡p] [g͡b]. The symbols stand for values like the corresponding IPA symbols, except as discussed below.

t d n s z l r represent alveolars in general, but *s z* are often dental, and even interdental for some speakers. Before *u*, *s* and *z* are sometimes heard as [ʃ] [ʒ]. The consonant *l* is never velarised. For other variants of *s r* see below.

k t p represent [kʰ] [tʰ] [pʰ] word-initially and after prefixes and [k] [t] [p] elsewhere. Between vowels word-internally the symbols represent geminate /kk/ /tt/ /pp/. They are only *realised* double in very slow speech. The aspiration is comparable to that of English initial voiceless stops. Word-final *g d b* are often partly devoiced, but in Agolle Kusaal (unlike Toende) still contrast with the unaspirated word-final *k t p*.

k g ŋ The symbol *ŋ* is realised [ŋ] word-finally and [ŋ:] elsewhere. Original **ŋ*, preserved in related languages, has disappeared in all positions, and existing Kusaal *ŋ* is always the result of the cluster assimilations **mg* **ng* → *ŋŋ* with simplification to *ŋ* word-finally. As with *k t p*, *ŋŋ* is realised single except in very slow speech, and is written with single *ŋ*.

The velars show considerable **allophony**, which will be ignored even in narrow transcription elsewhere.

Before front vowels, they are palatalised, for some speakers even becoming palatal stops or affricates.

Velars may represent original palatal stops or affricates in loanwords:

<i>tóklàe</i> ⁺	"torch"	← English "torchlight"
<i>sógjà</i> ^a	"soldier"	(probably via Hausa <i>soojà</i>)

Before rounded vowels, the velars are labialised. Synchronically, there is never a contrast between labialised and unlabialised velars, but velars are transparent to vowel rounding processes [6.3.2](#) [4.3](#).

Before *a* and *ɔ* velars are pronounced further back, with some speakers even as uvulars:

<i>kòbɪgā</i> ⁼	"hundred"	[q ^{wh} ɔbɪga]
----------------------------	-----------	-------------------------

Underlying **g* is deleted after *aa iə uə aən ɛɛn ɔɔn* and their glottalised counterparts unless it stands before a rounded vowel; diphthongs may result [6.3.1](#). The effect of this **g* is still apparent in stem tone patterns [7.2.1.1](#). Historically, **g* has also been deleted after short oral or nasal *a ja ɤa*, which then became glottalised [6.1.1.1](#).

f v are labiodental fricatives, found only word initially, after prefixes, and in the noun class suffix *-f*:

<i>fūfūm</i> ^{mɛ}	"envy"
<i>náaf</i> ^f	"cow"

z is only found word initially and after prefixes.

s is often realised as [h] word-internally. It sometimes represents *h* in loanwords:

<i>Áláasìd</i> (<i>dáar</i> ^ɛ)	"Sunday"	← Hausa <i>Lahàdì</i> (← Arabic)
<i>Dàsmáanì</i> ⁺	عبد الرحمن	ʔAbdu-r-Raḥma:n(i)

h as a phoneme *h* itself is marginal, occurring only syllable-initially in loanwords; however these include the very common word *hālì*⁺ "as far as." In the personal name *Dàhamáanì*⁺ عبد الرحمن ʔAbdu-r-Raḥma:n(i) there is alternation with *-s-* but particular individuals with the name seem to choose one alternant only.

d

as a word-initial is frequently realised as a flapped [ɾ] when the preceding word in a phrase ends in a vowel (including glottalised vowels); within compounds this is invariable:

	<i>nō-dáùg^ɔ</i>	"cock"	[nɔɾaʊg]
	<i>nā'-dáàd^ɛ</i>	"oxen"	[nɔ̃ra:d]
but	<i>wìd-dāvg^ɔ</i>	"stallion"	[wɪd:aʊg]

In rapid speech non-initial *d* may also resemble [ɾ], but there are minimal and near-minimal pairs following root and epenthetic vowels:

<i>èṇdɪg^ɛ</i>	"unplug"
<i>èṇrɪg^ɛ</i>	"shift along"
<i>mōd^ɛ</i>	"swell"
<i>mōr^{a/}</i>	"have"
<i>yàad^ɛ</i>	"graves"
<i>yāar^{ɛ/}</i>	"scatter"

r

itself is the alveolar flap [ɾ], except after an epenthetic vowel (e.g. in the *r^ɛ* Noun Class singular suffix) where it is realised as a retroflex lateral [ɭ]. It does not contrast with *d* as a root-initial consonant or in prefixes, and only [d] occurs after a consonant or pause. I write *d* always except in a few words following a prefix vowel where *r* is traditional:

<i>tīráàn^a</i>	"neighbour"
<i>àrazàk^a</i>	"riches"
<i>àrazánà⁺</i>	"heaven, sky"

The allophony of both *d* and *r* will be ignored even in narrow transcription elsewhere, where they will be written [d] [ɾ].

m

is syllabic when standing alone as the proclitic 1st sg pronoun "I, my." It shows no tendency to assimilate its position of articulation to following consonants when it is syllabic. Following unstressed *ɪ*-vowels can be absorbed because of the potentially syllabic character of *m*:

<i>Gòsɪmī m!</i>	"Look at me!"
<i>Gòsīm.</i>	"Look at me!" contrasting with
<i>Gòsɪm!</i>	"Look!"
<i>Gòsɪmí fù nú'ùg!</i>	"Look at your hand!"
<i>Gòsím fù nú'ùg!</i>	<i>id</i>

Word-initial *y w* followed by contrastive nasalisation reflect earlier initial *ɲ ɲ̃* respectively, and similarly word-initial contrastively nasalised vowels are historically derived from initial *ɲ*:

Dagbani	Kusaal	
<i>ɲariɲ</i>	<i>àɲruɲ^ɔ</i>	"boat"
<i>nyá</i> [ɲa]	<i>ɲyɛ⁺</i>	"see"
<i>ɲme</i> [ɲ̃me]	<i>ɲwɛ⁺</i>	"beat"

Mooré shows the same developments as Kusaal. Niggli 2012 reports that some Toende speakers still have consonantal [ɲ] [ɲ̃] phonetically in these cases, although he regards these as allophones of *y w* before nasalised vowels. Before *ɹ/i* original *ɲ* has often become *n*; see on the allomorphy of ^{ya} [8.2.1.2](#).

Y and *w* occur only syllable-initially. They are in complementary distribution with the glides *j/ɟ* and *ɹ* respectively, which do not form syllable boundaries but appear only after vowel symbols to mark short diphthongs [4.2.3](#) and before vowel symbols as part of the digraphs *ja ɹa* (*je ɹe* before *y*) which are realised as written but represent single vowels phonemically [4.1.1](#).

Consonantal *w* occurs only root-initially, i.e. word-initially and after prefixes: *wìəf^ɔ* "horse", *dàwān^{nɛ/}* "pigeon", but consonantal *y* occurs not only root-initially (*yáan^a* "grandchild", *dàyūug^{ɔ/}* "rat") but also word-medially, before the vowel *a*: *nōyá⁺* "mouths."

When Apocope leaves *-y-* as word-final after a short back vowel, it is replaced by *ɟ* [2.2](#), and a short fronting diphthong results [6.3.2](#).

Synchronically, it is possible to regard all non-root-initial *-y-* as epenthetic. Historically, *-y-* probably reflects an original root-final palatal in *r^ɛ|a⁺* Class plurals and *a^ɪ|b^a* Class singulars [6.1.1.1](#), *ʎ in the suffix *-ya* of Invariable Verbs [11.2](#), and original *ɲ in the initial of the postposed 2pl subject pronoun ^{ya} [8.2.1.2](#).

Traditional orthography omits word-internal *y* after *i*, except with Long Forms ending in *-ya*; thus *dūnɪya⁺* "world" and *láafɪya⁺* "health" are written *dunia* and *laafia* although they end in [ɪja], not in the diphthong *ia*.

3.2 Consonant Clusters

Consonant clusters consist of at most two consonants (except in the very marginal case of *-mm* followed by a consonant across word division.) No word may begin or end with a consonant cluster, except for Long Forms and forms with Apocope Blocking which show final *-mm*:

<i>pāmm</i>	"a lot"
<i>dāamm</i>	"millet beer", Long Form

Across word division, including within compounds, any combination of consonants may occur where the first is a possible word-final consonant.

<i>ḡwād-bíl^a</i>	"star"
-----------------------------	--------

Within phrases, there may be partial assimilation of the word-final consonant to the following word-initial consonant [8.5.1](#).

Within words, the range of permitted clusters is very limited.

At the junction between a nominal prefix and the following stem, combinations of nasal and any possible word-initial consonant may occur, with assimilation of the position of articulation of the nasal to a following consonant other than *s* or *z*, before which the nasal is realised as [ŋ].

<i>kùndùḡ^a</i>	"jackal"	
<i>ḡūmpōzēr^{ε/}</i>	"duck"	
<i>dànkòḡ^ɔ</i>	"measles"	[daŋkʰɔŋ]
<i>zùnzòḡ^a</i>	"blind"	[zʊŋzɔŋ]

Loanwords may include clusters not found elsewhere.

<i>bòrkìn^a</i>	"honourable/free/honest person"
---------------------------	---------------------------------

Apart from this, the only word-internal clusters permitted are *kk tt pp ḡḡ nn mm ll mn*. Of these *kk tt pp ḡḡ* are only realised as geminates in very slow speech, and are written as single *k t p ḡ*; nevertheless intervocalic *k t p ḡ* always pattern as clusters not only structurally but in toneme allocation and realisation [5.3.1](#) [7.2.1](#) [7.3.1](#).

Gemination of *mm nn ll* before LF affix vowels is clearly audible, even where the LF-final vowel has been downranked before Liaison [8.2.1](#); the audio version of the 1996 NT for example provides numerous examples of *d̥ʌll·ó* "follow him" (written

dol o) clearly read as [dɔl:ɔ]. It is harder to hear length contrasts with *mm nn ll* preceding an epenthetic vowel. Written materials prior to 2016 rarely mark gemination in such cases, but KB is generally reliable. The tones of Pattern H stems can also confirm the presence of clusters. Urs Niggli's Toende materials never show geminate consonants except before LF flexions preceding Prosodic Clitics; this may be a genuine difference from Agolle Kusaal.

The only cluster which is not simply a geminate, *mn*, is unstable. Some speakers replace it entirely with *mm*. All my informants show *mm* in place of *mn* in verb Dynamic Imperfectives:

kàrum^m "read" → *kàrum*^{ma} cf Dagbani *karimda*

There are a few examples of *mn* in the NT prior to 2016:

ka ba li' ba toba ka pu wum na [sic 1.3.1]

kà bà lí bà tùba kà pū wúmnā +∅.

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)

ka ban ka kikirbe'ednam daamne [sic 1.3.1] *ba daa nye laafiya*

kà bàn kà kīkīr-bé'èd-nàm dáàmni *bá dāa nyē láafiya*

and REL.PL and fairy-bad-PL trouble:DIPF 3PL.OB TNS see health

"And people who were afflicted by evil spirits became well." (Lk 6:18, 1976)

Informants differ with regard to the singular forms of *r^ε|a⁺* Class *m*-stems:

<i>gbīgim</i> ^{nε}	SB	<i>gbīgim</i> ^{mε}	WK	"lion"
<i>dūm</i> ^{nε}	SB	<i>dūm</i> ^{mε}	WK	"knee"

Exceptionally with *-nn-* for *-mn-* and a plural remodelled on the singular:

<i>ṇwān</i> ^{nε}	SB	pl <i>ṇwāna</i> ⁺	(Lk 11:39, 1976) "calabash"
<i>ṇwām</i> ^{mε}	WK	pl <i>ṇwāma</i> ⁺	SB WK

Cf 1976 NT *kobkennib* = *kòṇb-kīmmb^a* ← **kǝb-kımdıba* "herdsmen."

There is variation also with the agent nouns of *m*-stem verbs:

pe'es bane ka' konbkemma

pē'εs bānì kā' kóṇb-kīmmba +∅

sheep:PL REL.PL NEG.BE animal-tender:SG NEG

"sheep without a shepherd" (Mt 9:36, 1996)

m naan ku aan Kiristo tumtum na [sic [1.3.1](#)].

m̃ nāan kú āa-n Kiristo túm-tūmna ⁺∅.

1SG then **NEG.IRR COP-REM** Christ work-worker:**SG** **NEG**.

"I would not have been Christ's servant." (Gal 1:10, 1996; KB *tumtumma*)

The plurals usually show *-mn-*:

O tumtumnib pii ne ayi' la yuda nwa.

Ò tò-m-tūmnib pīi né àyí lā yúdà_ ∅ ŋwà.

3AN work-worker:**PL** ten with **NUM:two** **ART** name:**PL** **SER** this.

"These are the names of his twelve servants." (Mt 10:2)

All examples of Dynamic Deverbal Adjectives from *m*-stem verbs in my data show *-mm-* before epenthetic vowels:

bōn-túmmir^ε "useful thing"; plural *tūmna⁺* is cited by some informants.

bò-sāŋ'ammir^ε "goat for destruction, scapegoat" WK

The great majority of cases *-mn-* within words precede high front vowels; compare Focus-*nē^{+/l}*, corresponding to *me* in Toende Kusaal, Mooré etc [33.1.2](#). KB has no word-internal or word-final *-mna-* or *-mnε-* at all; all examples so written involve separate words by the criteria of this grammar. Word-internal *-mni-* is common, however, in plurals like *tumtumnib* = *tòm-tūmnib* "servants."

The consonants *r f s* are sometimes shown by Tone Pattern allocation rules or by morphophonemics [6.2.1](#) to reflect underlying clusters [7.2.1.1](#), but unlike *k t p ŋ* they are never actually realised as geminates.

tītōŋríg^a "mole" (animal) ← **tītōŋrrígā*

píŋf^o "genet" ← **pīínfō*

nís^ε "birds" ← **nīínsī*

4 Vowels

4.1 Inventory and Symbols

There are great differences in the range of vowel contrasts possible in different positions within a full word. Correlation with stress [2.4](#) is only partial, so the system is best regarded as involving **positional prominence**.

The main distinction is between **Root Vowels**, appearing in the roots of non-clitic words, and all others. Root vowels show the full range of vowel contrasts, with contrastive length, nasalisation, glottalisation and a wide range of diphthongs.

Epenthetic Vowels show a contrast only of unrounded versus rounded high vowels, written *ɪ* and *ʊ* respectively; considering LFs alone even this distinction would be predictable.

Affix Vowels have a three-way contrast in quality *a ɪ ʊ* and also distinguish short and long vowels. Prosodic Clitics lower short *ɪ ʊ* to *ɛ ɔ*, which are here realised slightly closer than as root vowels [4.4](#).

a ɛ ɔ i u represent [a] [ɛ] [ɔ] [i] [u].

ɪ ʊ represent [ɪ] [ʊ]. Because ATR harmony is non-contrastive and is ignored in the orthography, *ɪ ʊ* may also represent [i] [u] in epenthetic and affix vowels [4.3](#).

e o always represent [ɪ] [ʊ]. They replace *ɪ ʊ* as non-initial components of diphthongs [4.2.3](#), except that [ʊ] is written *ʊ* after *a*. In addition, the 3sg animate pronoun [ʊ] is always written *o* [15.1](#). The sequence *·o* represents [ʊ] when it is a vowel mora rounded before the enclitic pronoun ^o [8.2.1.1](#).

Long vowels are written with double symbols.

The symbol *ɲ* represents emic nasalisation [4.2.1](#), while ' represents glottalisation [4.2.2](#).

ɛ̃ j̃ ʊ̃ represent non-moraic glides; *ɛ̃* and *j̃* are equivalent symbols for [ɪ̃], and *ʊ̃* represents [ʊ̃].

The vowel system shows a **systematic mismatch between phonetics and phonemics**.

ia uə are *phonemic monophthongs* but are realised phonetically as [iə] [uə]. Similarly, *ja ʊa* represent short *monophthongs*, realised [ɪa] [ʊa], which appear as *je ʊe* [ɪɪ] [ʊɪ] before *y* word-internally. The orthography of this grammar follows the traditional system in representing these segments according to their *phonetic* realisation, but the symbols *ia uə ja ʊa je ʊe* are regarded throughout as **digraphs representing monophthongs** [4.1.1](#). The letters *ə ɐ* are used only in these digraphs.

4.1.1 Agolle Vowel Breaking

The sequences *ia ue*, realised with the corresponding IPA values, pattern throughout as long *monophthongs*, with *ja ya* as the corresponding short vowels. They may be nasalised or glottalised, and are subject to the fronting and rounding processes described below 6.3.2 just like other monophthongs. They will be described as monophthongs throughout this grammar.

Toende Kusaal preserves these vowels as *phonetic* monophthongs, more open than the Toende *close* vowels corresponding to Agolle vowels which have expanded into the phonetic space vacated by Breaking to become *open* *ε ɔ εε ɔɔ*:

	Toende	Agolle	
	<i>déém</i>	<i>dīəm</i> ^{ma}	"man's parent-in-law"
	<i>sēēs</i>	<i>sīəs</i> ^ε	"waists"
but	<i>té'ét</i>	<i>tè'əd</i> ^ε	"baobab fruits"
	<i>pē'ēs</i>	<i>pē'əs</i> ^{ε/}	"sheep" plural
	<i>bó'ɔs</i>	<i>bū'əs</i> ^{ε/}	"ask"
	<i>tɔɔn</i>	<i>tūən</i> ^{nε}	"before, in front"
	<i>kɔ'ɔm</i>	<i>kū'əm</i> ^m	"water"
	<i>sábɔɔ</i>	<i>sàbùə</i> ⁺	"lover, girlfriend"
but	<i>póók</i>	<i>pɔɔg</i> ^{ɔ/}	"farm, field"
	<i>tōom</i>	<i>tɔɔm</i> ^{m/}	"depart, disappear"
	<i>zò</i>	<i>zɔ</i> ⁺	"run" (Mooré <i>zòe</i>)

The original Common Kusaal system probably preserved older diphthongs, like Mooré. While the *ɔɔ/ua* sets usually correspond to Mooré *oo*, there is a different Toende/Agolle pairing when the Mooré cognates have *ao*:

<i>bòòt</i>	<i>bòɔd</i> ^a	"want, wish" (Mooré <i>bàoda</i>)
-------------	--------------------------	------------------------------------

There are gaps in the distribution of Agolle long oral *εε ɔɔ* probably connected with their diphthongal origins. Some occurrences of *εε ɔɔ* seem, however, to be due to levelling within paradigms which feature a suffix ending in *ɔ*. The short vowels *ε ɔ* do not contrast underlyingly with *ja ya*, as explained below.

ia ue only occur word-finally as the result of monophthongisation of word-final *ia ua ie ue* within a phrase before another closely connected word 8.5.3; this is not marked in writing in the case of *ia ua*:

<i>pīé tī</i> ^{+/}	"wash us"	(<i>pīe</i> ^{+/} "wash")
<i>dūé tī</i> ^{+/}	"raise us"	(<i>dūe</i> ^{+/} "raise")

<i>sīa lā</i>	"the waist"	[siəla]
<i>sàbùà lā</i>	"the girlfriend"	[sabueəla]

All other sequences beginning with written *i u* are *diphthongs* both phonetically and phonemically.

Word-final *iə uə* diphthongise to *ia ua* before Prosodic Clitics (not Liaison):

LF	<i>kīa</i>	"cut" base form	[k ^h ia]	cf <i>kìəd^a</i>	dipf
LF	<i>kūa</i>	"hoe" base form	[k ^h ua]	cf <i>kūəd^{a/}</i>	dipf

Nasalised *iə̃ uə̃* occur only in the inflexion and gerund formation of Fusion Verbs [6.3.1](#). In all other contexts *iə̃ uə̃* and *ɛɛ̃ ɔɔ̃* have fallen together; this applies also to long vowels automatically nasalised after *m n* [4.2.1](#). The vowels were distinct historically: compare *nɔ̃ɔ̃r* "times" (Moore *náooré*) with *nɔ̃ɔ̃r* "mouth" (Moore *nóorè*) [16.2.5](#).

The 1-mora vowels corresponding to 2-mora *iə uə* are *ja ɥa* [ɪa] [ʊa].

These, too, pattern as simple vowels throughout: *sjàk^ɛ* "agree" and *byàk^ɛ* "split" do not violate the constraint that full words begin with at most one consonant.

Apocope shortens final *iə uə* to *ja ɥa*:

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

Short *ɛ ɔ* appear instead of *ja ɥa* everywhere except before *k* (and historical underlying **g*, which has been deleted with lengthening and glottalisation of the preceding vowel [6.1.1.1](#).)

Almost all short *ɛ ɔ* are either of this origin, or derive from Apocope of *ɛɛ ɔɔ*.

bɔ̀k^ɔ "pit" contrasting with *byàk^ɛ* "split" is due to the rounding change **ɥakku* → *ɔkku*, see [6.3.2](#), while *tēk^{ɛ/}* "pull", contrasting with *tjàk^ɛ* "change" is due to shortening of a long vowel before an original plosive cluster (**tɛɛkkɪ*), see [6.3.3](#). Presumably *nɔ̃k^{ɛ/}* "pick up" is similarly derived by shortening of **nɔ̃ɔ̃kkɪ*; Toende Kusaal has *nɔ̀k*, with a variant form *nɔ̀'ɔ* (for **nɔ̀'ɔg*.)

je ɥe [ɪ] [ʊ] appear in place of *ja ɥa* before *-y-*, which can occur only in the context of *r^ɛ|a⁺* Class plurals of nominals with stems in *iə* and *uə* [6.1.1.1](#):

<i>bīər^{ɛ/}</i>	"elder same-sex sib"	pl <i>bjēyá⁺</i>
<i>sūər^{ɛ/}</i>	"road"	pl <i>sɥēyá⁺</i> KB <i>suoya</i> 1.3.1

4.2 Root Vowels

In root syllables the symbols *a* *ε* *ɔ* *ɪ* *ʊ* *i* *u* have their default values of [a] [ε] [ɔ] [ɪ] [ʊ] [i] [u] respectively.

ɪ is more central after velars and labials, and *ʊ* is slightly more front after alveolars and *y*; *u* in turn is noticeably fronted after alveolar consonants, which themselves may be realised as palato-alveolars before *u*. This is particularly common with *z*: [ʒyɡ] for *zūg* "head" [3.1](#).

Long Vowels contrast with short in length alone, with no difference in vowel quality. They are written by doubling the vowel symbol [1.3](#).

4.2.1 Nasalisation

Nasalisation is automatic on long vowels preceded by a nasal consonant:

mɛ̃ɛd^a "build" dipf [mɛ̃:d]

Contrastive nasalisation is confined to root vowels. For the marking of nasalisation by the symbol *̃* in the working orthography of this grammar see [1.3](#).

Nasalisation is lost on short vowels followed by nasal consonants.

(See also [8.5.2](#).) Historically, this accounts for the oral vowels in

<i>wīn</i> ^{nɛ/}	"god, spirit"	Dagaare <i>ɲmen</i>
<i>wēn</i> ^{na/}	"resemble"	Dagbani <i>ɲmani</i>
<i>ɔ̃n</i> ^ɛ	"he/she" contrastive	Dagbani <i>ɲuna</i>

All exceptions begin with *ɲy* or *ɲw*: *ɲyīn*^{nɛ/} "tooth" *ɲwām*^{nɛ} "calabash."

Many cases of nasalisation which are not automatic are explicable either as representing originally automatic nasalisation following earlier *ɲ* *ɲm*, or as the result of simplification of the clusters **ns* **nf* [6.2.1](#).

Long vowels show the contrasts *ĩĩ/ɪ̃ĩ* *ũũ/ʊ̃ʊ̃* exclusively as a consequence of the change of **nf* **ns* to *f* *s* with nasalisation of the preceding vowel [6.2.1](#):

	<i>níĩ</i> ^a	"bird"		
but	<i>píĩɲ</i> ^ɔ	"genet"	cf plural	<i>pīĩnɪ</i> ⁺
	<i>zùũɲ</i> ^ɛ	"vultures"		
but	<i>zúbɲ</i> ^ɔ	"dawadawa seed"	cf plural	<i>zūũnɪ</i> ⁺
	<i>tè̃ɲ-zùũɲs</i> ^ɛ	"foreign lands"	cf singular	<i>tè̃ɲ-zù̃</i> ^ɔ

Nasalised *ĩɲ* *ũɲ* occur only in Fusion Verbs [6.3.1](#).

The vast majority of short nasalised vowels are *añ ɛ̃ jã ɔ̃ ɥã* (see below [4.1.1](#) on the alternations *ɛ/ja* and *ɔ/ɥa*.) Short *ĩ ʊ̃* arise only from shortening of *iĩ ʊ̃* by Apocope:

<i>sĩĩŋʔ</i>	"bee"	cb	<i>sĩĩ-</i>
<i>zũũŋɔ̃</i>	"vulture"	cb	<i>zũũ-</i>

High nasalised vowels left word-initial by the loss of historical initial **ŋ* have been lowered to *ɛ̃ ɔ̃*: cf *ɔ̃ŋb*^ɛ "chew" and Dagbani *ɔ̃bi id*.

4.2.2 Glottalisation

Glottalisation is confined to root vowels and the proclitic tense marker *pà'* "earlier today." It does not affect vowel quality. For the marking of glottalisation by the symbol ' in the working orthography of this grammar see [1.3](#).

Glottalisation may be realised as a creaky-voiced glottal approximant [ʔ] after the first vocalic mora, or the creakiness may be more widely spread within the vowel; but in *either* case, it behaves as a vowel feature and not a consonant (cf *ɛ̃/j ʊ* versus *y w* below [4.2.3](#).) The flapping of initial *d* mentioned above [3.1](#) occurs after *V'* as well as after *V*; and in general glottalised vowels pattern exactly like unglottalised vowels. The glottalisation which arises from deletion of **g* after *a ja ɥa* [6.3.1](#) does not differ phonetically from other types.

Tonal considerations confirm that ' is not a consonant. Thus

	<i>Lì kã' mólɪf̃.</i>	"It's not a gazelle."
but	<i>Lì kã' ↓nú'ug̃.</i>	"It's not a hand."
like	<i>Lì kã' ↓tíg̃.</i>	"It's not a tree."

differ in whether the H toneme is realised with a preceding downstep, because the sequence *-li-* in *mólɪf̃* is a separate unstressed syllable preceding the final stress on *-f̃*, whereas the ' in *nú'ug̃* is not a consonant and does not begin a syllable [5.3.2](#).

An unwritten [ʔ] follows short vowels and diphthongs ending statements and commands, but not questions. Phrase-final *dāɥ* "man", for example, is realised [daʔʔ]. Before this [ʔ], vowel glottalisation is lost:

	<i>Kà bà gē̃.</i>	"and they got tired"	is homophonous with
	<i>Kà bà gē̃'.</i>	"and they got angry"	
but	<i>Bà gè̃ nē̃.</i>	"they're tired"	differs in realisation from
	<i>Bà gè̃' nē̃.</i>	"they're angry"	

Glottalised short vowels are almost all the result of Apocope. Besides *kā'ɛ*⁺ "not be" (← **kagɪ*) all other cases precede *m* or *ŋ* in some words for some informants.

<i>kpɛ'ŋ</i> ^ɛ	"strengthen"	<i>lā'ŋ</i> ^{ɛ/}	"set alight"
<i>nā'mɪs</i> ^{ɛ/}	"suffer"	<i>zē'mɪs</i> ^{ɛ/}	"make equal"
<i>zà'mɪs</i> ^ɛ	"learn, teach"	<i>nī'm</i> ^{nɛ/}	"meat"
<i>kɔ̃'m</i> ^{m/}	"hunger"	<i>yā'm</i> ^{m/}	"gall bladder; sense"
<i>sù'ŋā</i> ⁺	"well"	<i>sù'm</i> ^m	"goodness"

The adjective *sù'ŋ*^{ɔ̃} (pl *sù'ma*⁺) "good" itself never has ' in my materials.

Tonal and structural considerations confirm that the vowels are short, but they are written long in the traditional orthography: *kpɛ'ɛŋ la'aŋ nī'im kɔ̃'m ya'am su'ʊŋa* etc. In the 1996 NT and KB such cases are almost entirely confined to closed syllables: always *namis zamis* etc.

There is nothing corresponding to Kusaal vowel glottalisation in Mooré, Dagaare, Mampruli, Hanga or Dagbani, but Farefare, Talni and Nabit share it:

	Farefare	<i>yú'úrɛ</i>	"name"	Kusaal	<i>yū'ur</i> ^{ɛ/}
	Farefare	<i>kó'óm</i>			
and	Talni	<i>kwoʔm</i>	"water"	Kusaal	<i>kù'əm</i> ^m
	Nabit	<i>kpa'uŋ</i>	"guinea fowl"	Kusaal	<i>kpā'úŋ</i> ^{ɔ̃}
	Nabit	<i>nɔ̃nya'aŋ</i>	"hen"	Kusaal	<i>nɔ̃-ŋyá'àŋ</i> ^a

Nawdm, too, has *ʔ* in a number of words with Kusaal cognates showing glottalised vowels, e.g. *mì-tâʔ* "three" (in counting) = Kusaal *ntáŋ*^{ɔ̃}; *núʔ* "arm, hand" = *nú'ùŋ*^{ɔ̃}. Vowel glottalisation is not predictable in these languages. In Kusaal it has interesting segmental effects in root-stems before a flexion beginning with a vowel [6.1.1.1](#). Manessy reconstructs implosive or glottalised consonants for the Oti-Volta protolanguage; vowel glottalisation might be a reflex of former glottalised consonants lenited after a root vowel.

4.2.3 Diphthongs

Kusaal has diphthongs of one or two morae, and also three-mora vowel sequences which, though realised as disyllabic with syllable division after the first mora [2.4](#), are structurally extra-long diphthongs; they always have identical second and third mora vowel qualities.

[ɪ] is written *e* (not *ɪ*) after *a ɔ̃ ʊ*, and [ʊ] is written *o* (not *ʊ*) after *i ɪ ɛ*.

i and *e* are both realised [ɪ] except in *ui* and in the monophthong *je*, where the realisation is [i]; [ʊ] is always written *u*.

<u>1-Mora</u>	<u>2-Mora</u>	<u>3-Mora</u>
	<i>ia</i> [ia]	<i>iaa</i> [ia:]
	<i>ja'a</i> [ja̠:]	
	<i>ua</i> [ua]	<i>uaa</i> [ua:]
	<i>ɥ'aa</i> [ɥ̠a:] word-finally	
	≡ <i>ʊ'a</i> [ʊ̠a] before consonants	
<i>aɛ</i> [aɪ̠]	<i>ae</i> [aɪ]	<i>aeē</i> [aɪ:]
<i>ɔɛ</i> [ɔɪ̠]		
<i>ʊɛ</i> [ʊɪ̠]	<i>ue</i> [ʊɪ]	
<i>ui</i> [ui̠]	<i>ui</i> [ui]	<i>uii</i> [ui:]
	<i>ie</i> [iɪ]	<i>iee</i> [iɪ:]
	<i>ue</i> [uɪ]	<i>uee</i> [uɪ:]
<i>aʊ</i> [aʊ̠]	<i>av</i> [aʊ]	<i>avv</i> [aʊ:]
	<i>iu</i> [iu]	
<i>ɪʊ</i> [ɪʊ̠]	<i>ɪo</i> [ɪʊ]	
<i>ɛʊ</i> [ɛʊ̠]	<i>ɛo</i> [ɛʊ]	
<i>jaʊ</i> [jaʊ̠]		
	<i>io</i> [iʊ̠]	

All diphthongs also occur nasalised; 2- and 3-mora diphthongs also occur glottalised. *ja'a* *ɥa'a* *ʊ'a* are always glottalised; Apocope shortens them to *ja* *ɥa*.

The diphthongs *ʊ'a* *ʊŋ'a* appear as *ɥ'aa* *ɥŋ'aa* respectively when LF-final.

The digraphs *ja* *ɥa* represent single segments phonemically, but are *realised* as written. Written *iə* [iə] and *uə* [uə], and their nasalised/glottalised forms, are the corresponding *phonemically monophthongal* long vowels [4.1.1](#), realised as falling diphthongs. All other sequences of dissimilar vowels are both phonetic and phonemic diphthongs; 3-mora sequences are rising, and all others falling.

Apart from the Primary Diphthongs (*av avŋ ui ja'a jaŋ'a ʊ'a ʊŋ'a* [6.1.1.1](#)), all diphthongs are the result of active morphophonemic processes: Fusion [6.3.1](#), and Fronting and Rounding both word-internally [6.3.2](#) and before Liaison Enclitics [8.2.1.1](#). Rounding diphthongs occur only word-finally and before velars; fronting diphthongs only word-finally and before *y*.

There is agreement in ATR between the morae of a diphthong, except with diphthongs resulting from fusion, fronting and rounding of *iə* *uə*, where second and third morae always remain [-ATR], and with the **additional diphthongs** which arise as the result of the attachment of Liaison Enclitics after a word ending in a root vowel [8.2.1](#). The enclitic ^o [ʊ] "him/her" causes the preceding vowel mora to assimilate totally to [ʊ], never [u]; the rounded mora is written *·o* [4.1](#) [8.2.1.1](#):

<i>zū·ó-o</i>	[zuʊ:]	"steal him"	LF
<i>zū·ó</i>	[zuʊ]	"steal him"	SF

When the 2pl subject enclitic *y^a* is added to verb forms ending in *-ε* like *bē⁺* "be somewhere, exist", it creates the diphthong *εɪ*, found only in this context:

<i>bēɪyá</i>	[bεɪja]	"be ye!"	LF
<i>bēɪ</i>	[bεɪ]	"be ye!"	SF

ɛɪ *ɪ* *ɪ* contrast with *y w* in not forming syllable boundaries or consonant clusters, either as components of the digraphs *ja* *ya* representing single short vowel phonemes, or as the final glide components of short diphthongs:

<i>bjāuŋk^ɔ</i>	[bɿǎŋk]	"shoulder"	CVC
<i>bɪàk^ε</i>	[bɪak]	"split"	CVC
<i>dāu⁺</i>	[daʊ]	"man"	CV
<i>gbàuŋ^ɔ</i>	[ɡbǎŋ]	"book"	CVC
<i>sɔ̃ɛŋ</i>	[sɔ̃ɪ]	"blacksmith"	SF CV
<i>tɔ̃ɛ</i>	[tʰɔ̃ɪ]	"be bitter"	SF CV
<i>mùj⁺</i>	[mũj]	"rice"	CVCV

Word-final *-Vɛ* *-Vɪ* *-Vɪ* behave exactly like word-final short root vowels in being followed by [ʔ] before pause in statements [4.2.2](#):

<i>Ò à nē dāu.</i>	[ʊanɛdaʊʔ]	"He is a man"
--------------------	------------	---------------

Word-initial *ya* [ja] contrasts with *ja* [ɿa] in the tenseness of the semivowel, and probably in timing features:

<i>jā⁺</i>	[ɿa]	"seek"
<i>yā^{+/}</i>	[ja]	"houses"

The contrast is not [ʔja] vs [ja]: stressed syllables with no initial consonant are sometimes realised with an initial [ʔ], but this is a prosodic feature, not a consonant.

Chitoran 2002, discussing the Romanian contrast *ia/ea*, finds that a contrast *ua/oa* has no phonetic basis in Romanian, and hypothesises that this is not merely a language-specific matter but due to the cross-linguistic difficulty of maintaining a contrast between two back rounded glides [w] and [ɔ]. Kusaal, too, has no contrast of initial *wa/ya*; historical initial *uo* has become *waa* in *wāad^{ε/}* "cold" = Toende Kusaal *ṣṣt*, Farefare *ṣṣrṣ* and *wā⁺* "dance" = Toende Kusaal *wó⁺*, for which Agolle **wɪ'ā⁺* would be expected.

Length in diphthongs is predictable, except with word-final *ae/aɛ* and with *au/ay* before *ŋ*. All SF-final *unglottalised closing* diphthongs are 1-mora except *ae* (*àɛŋ* "be something", *pāe* "reach"); all glottalised and/or opening SF-final diphthongs are 2-mora; LFs have one more mora than the SF, but no more than two before Liaison. Word-internally, all glottalised diphthongs are 2-mora; non-glottalised diphthongs are 1-mora before *y* or *k*, and 2-mora elsewhere, except that 1-mora rounding diphthongs may occur before *ŋ*:

gbāyŋ "skin" *màngáuyŋ* "crab"

4.3 Epenthetic Vowels

As with the second morae of long vowels, the quality of epenthetic vowels would be predictable if it were not for Apocope deleting final rounded vowels.

The default epenthetic vowel is *ɪ*.

Before LF *-g^ɔ -ŋ^ɔ* the epenthetic vowel is *ʊ*, remaining as such in the SF.

	<i>āaŋɪg^a</i>	← <i>*āāɪga</i>	"black plum tree"
but	<i>gàadug^ɔ</i>	← <i>*gaadɪgʊ</i>	"(sur)passing" (gerund)
pl	<i>mālɪma⁺</i>	← <i>*malɪmaa</i>	"sacrifices"
but	<i>mālʊŋ^ɔ</i>	← <i>*malɪŋgʊ</i>	"sacrifice"

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

<i>gbīgɪm^{nɛ}</i>	[gʙīgɪm]	"lion"
<i>yūgúm^{nɛ}</i>	[jʊgʊm]	"camel"
<i>kūgʊr^{ɛ/}</i>	[kʰugur]	"stone" (ATR harmony, see below)
<i>wābɪd^{ɛ/}</i>	[wabɪd]	"elephants"
<i>dūgʊd^{ɛ/}</i>	[dʊgʊd]	"cooking pots"
<i>dūgʊdɪb^a</i>	[dʊgʊdɪb]	"people who cook"
<i>pūvgʊ-n^{ɛ/}</i>	[pʰʊ:gʊn]	"belly" (<i>pūvg^a</i>) + <i>n^ɛ</i> locative

WK also has rounding before velars after short root rounded vowels with intervening *b m l*, and after *mm* even when the preceding vowel is not rounded:

	<i>nóbɪr^ɛ</i>	"leg"
	<i>kōlvug^a</i>	"river"
	<i>yàmmug^a</i>	"slave"
or	<i>yàmmug^ɔ</i>	

There is significant variation between speakers with rounding of epenthetic vowels after rounded root vowels. NT, ILK and KED have *poogin* for *pūvuv-n^ε* "inside", KB *puugin*. The variation is not contrastive, and is significant only before word-final velars, where it can lead to reanalysis of the *g^a* sg suffix as *g^ɔ* 9.3.2.1.

Nasalisation is absent on epenthetic vowels where parallel morphological processes would have caused contrastive nasalisation of a root vowel:

	<i>tēŋ^a</i>	"land"	pl <i>tēŋs^ε</i>	← * <i>tɛnsɪ</i>
but	<i>kòlŋ^a</i>	"door"	pl <i>kòlɪs^ε</i>	← * <i>kulɪnsɪ</i>

ATR harmony appears between a short root vowel and a following epenthetic vowel; it is not contrastive and is ignored in the orthography:

	<i>tìsɪd^a</i>	[tʰɪsɪd]	"gives"
but	<i>sīgɪd^{a/}</i>	[sigɪd]	"lowers"
	<i>būgʊr^ε</i>	[bʊgʊr]	"spirit's dwelling"
but	<i>kūgʊr^{ε/}</i>	[kʰugur]	"stone"
	<i>yūgʊdɪr^ε</i>	[jugudɪr]	"hedgehog"
	<i>yūgʊm^{nε}</i>	[jʊgʊm]	"camel"

4.4 Affix Vowels

Except for nominal combining forms, and some Particle-Verbs 22.7.2, Post-Subject Particles 27.1.4, and Emphatics 33.6, clitics have vowels showing the same set of vowel contrasts as the *flexions* of full words, as do prefixes 13.2.2; collectively, these are Affix Vowels.

There are three short affix vowels *a ɪ ʊ*, and three long *aa ɪɪ ʊʊ*.

Prosodic Clitics cause short LF-final *ɪ ʊ* to be lowered to *ε ɔ*, here realised somewhat closer than as root vowels; the only context in which underlying LF-final short *ɪ ʊ* appear as such is with Apocope Blocking 6.4.

When the long affix vowels *ɪɪ ʊʊ* are shortened by Apocope the resulting *ɪ ʊ* are realised exactly like epenthetic vowels. Both short and long affix *ɪ ʊ ɪɪ ʊʊ* are subject to **ATR harmony** under the same conditions as epenthetic vowels:

	<i>mòlɪ</i>	[mɔ̃lɪ:] LF	"gazelles"
	<i>mòlɪ</i>	[mɔ̃lɪ] SF	
	<i>wìdɪ</i>	[wɪdɪ:] LF	"horses"
	<i>wìdɪ</i>	[wɪdɪ] SF	
but	<i>nīgɪ</i>	[nĩ:gɪ:] LF	"cows"
	<i>nīgɪ</i>	[nĩ:gɪ] SF	(long root vowel)

Harmony also occurs with *ɪ* *ʊ* in prefixes, which are realised [i] [u] when the first mora of the root is *i* or *u*:

<i>tītā'ar</i> ^ε		"big"
<i>kùkōr</i> ^{ε/}		"voice"
<i>kìkīrig</i> ^{a/}	[kʰikʰirig]	"protective spirit"
<i>sìsì'əm</i> ^m	[sisjəm]	"wind"
<i>dòndùug</i> ^ɔ	[dundu:g]	"cobra"
<i>sīlinsīūng</i> ^ɔ	[silinsĩüŋ]	"spider"
<i>vòlɪnvùun</i> ^{lε}	[vulimvũ:l]	"mason wasp"

In *nìn-tāa* = "co-wife" [nintʰa:] the tense vowel probably reflects ATR harmony not crossing word division with the "bleached" prefix/cb *nin* 14.4.

ATR harmony is not contrastive (except in *iu/io* 6.3.2) and is ignored in the orthography, with *ɪ* *ʊ* used throughout.

The vowel *ε* appears for expected *ɪ* in various particles realised *nē*, with *nī*^{+/} found only as the non-Liaison Word allomorph of the locative marker. This may be due to phonetic nasalisation following *n*; nasalisation of affix vowels is never phonemic.

Glottalisation occurs in proclitic particles only in *pà*' ← **pag* "earlier today."

LF-final *aa* *u* appear in the *r*^ε|*a*⁺ and *ʃ*|*ɪ*⁺ Class plural flexions. The SF-final vowels *-a* *-ɪ* in these plural forms behave like Apocope-Blocked forms before Liaison, with no prolongation of the vowel, except in the case of the form *yáan*^ε, plural of *yín*^{nε} "(at) home", the irregular locative of *yīr*^{ε/} "house" 20.3.

LF-final *aa* *u* *uu* also arise from secondary prolongation in the LF of forms with Apocope Blocking 6.4, and LF-final *uu* by Liaison with the enclitic pronoun ^o 8.2.1. All other cases are probably loanwords, like *sūgvrú*⁺ "forbearance."

The affix vowels *ɪ* and *ʊ* contrast consistently only after velars and word-initially: *ɪ* is the default after alveolars, and *ʊ* after labials, labiodentals and labiovelars. Prefixes, however, show *ʊ* rather than *ɪ* before root *u/ʊ* (*dòndùug*^ɔ "cobra") and *ɪ* instead of *ʊ* before root *i/ɪ* (*kpīkpīn*^{na/} "merchant.") In flexions *-mm* appears in place of *-*mʊ*; *ɪ* appears after labial consonants only in the base forms of Variable Verbs like *zàb*^ε "fight" where it is probably analogical. Velars followed by affix-vowel *ʊ* could be internally reconstructed throughout as labiovelars (with 3sg *ò* ← **ɣmò* 15.1 fn), but comparative evidence is against a historical origin of the Class suffix *-g*^ɔ as *-*gb*^ɔ. In any case, contrasts of rounded and unrounded affix vowels are found after alveolars outside Southwestern Oti-Volta. In Mooré and Farefare the plural suffix corresponding to singular *-go* is *-do*; *-u* appears as an imperfective verbal flexion after alveolars in Byali and Waama and so on. The 1pl pronoun *tì* "we" has the contrastive form *tun* in Toende Kusaal; compare e.g. Swahili *tu*-.

5 Tones

The tone system of Kusaal is structurally very similar to the two-tone terracing systems with emic downsteps seen very frequently among the neighbouring and related languages. The realisation is complicated by the fact that historical H tone followed by either L or downstep has become a new H toneme, higher than the original H, which is now the M (mid) toneme in a three-toneme system. The sequence ML cannot occur word-internally, but must become either HL or MH.

There are great constraints on tone patterns for single words, with nominals showing only three distinct basic patterns, and verbs only two. Intrinsic tone patterns are frequently changed by tone sandhi [8.3](#) [8.4](#) and tone overlay [22.6.1.1](#).

5.1 Tonemes

There are three tonemes:

H	High, marked with an acute:	<i>gél</i> ^É	"egg"
M	Mid, marked with a macron:	<i>bāŋ</i> ^ā	"ring"
L	Low, marked with a grave:	<i>bàk</i> ^ˋ	"pit"

Every vocalic mora carries a toneme, except when this is delinked by Levelling [5.2](#) or H Spreading [5.3.1](#). When syllabic, *m n* bear L toneme, except for Serialiser-*n*, which is toneless.

Toneless morae are realised by extension of the toneme of the preceding mora to cover both morae.

Within a word, macrons (for M) and and graves (for L) apply not only to the mora they are written on, but to all following unmarked morae until the next tone mark or until the end of the word, e.g. *bēogv-n* for *bēōgū-n*, *púkàṅr* for *púkàṅr*. After an acute mark, however, an unmarked mora is *toneless*, and the H toneme extends over both morae [5.3.1](#):

Lì kâ' mólíṯ +∅. "It's not a gazelle."
 3INAN NEG.BE gazelle:SG NEG.

Nominals with prefixes [14](#) are written with a tone mark on the root even if it is identical to that on the prefix: *zīnzāyŋ* "bat", *kùkpàrɪg* "palm tree."

The H toneme is in certain circumstances realised with a preceding *phonetic* downstep, lowering it to M level [5.3.2](#), but this is entirely a question of surface realisation, and does not affect the relationship of the H to following tonemes.

The mid toneme M is always realised level; L and H are level except before pause, where they are realised as falling tones, beginning at their usual pitch.

H toneme when attached to both morae of a long vowel before pause shows the fall in pitch on the second mora, differing from the sequence HL on a long vowel in a closed syllable, where the fall in pitch occurs from the first mora to the second:

m̃ sáam "my guests"
 but *m̃ gbéèŋm* "my sleep"

5.2 Levelling within Syllables

Only closed syllables may carry two different tonemes. Before word-final *-mm*, a syllable behaves as *open* tonally [7.2.1](#).

A pitch rise is not permitted within a syllable; the first toneme is delinked and the second applies to both morae. This process follows all external tone sandhi processes. It occurs constantly with words with long root vowels which would be expected to have the tonemes MH in Tone Pattern H [7.2.1](#), and with the allocation of final M and H tones in LFs [2.2.1](#); it applies also when the Remoteness Marker Liaison Enclitic *n^ε* imposes M toneme on the second mora of a LL root vowel [8.2.3](#).

	<i>sáam</i> ^{ma}	← * <i>sāámmā</i>	"guests"
LF	<i>dáamm</i>	← * <i>dāámm</i>	"beer"
LF	<i>tīumm</i>	← * <i>tīīmm</i>	"medicine"
	<i>mēε-n^ε/</i>	← <i>mēē-n^ε/</i>	"build" <i>mē⁺</i> + rem <i>n^ε</i>

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

Dāy lā mēε-n (← *mēē-n*) "The man built (earlier today.)"
 Man:SG ART build-REM

5.3 Realisation Rules

These realisation rules apply after all toneme allocation by Tone Patterns [7.1](#), Insubordination Marking [22.6.1.1](#), external tone sandhi [8.3](#) [8.4](#), and Levelling [5.2](#). H Spreading precedes the insertion of downsteps before H tonemes.

5.3.1 H Spreading

If two successive open morae [2.4](#) carry the tonemes HL, and the L mora is either the second mora of a root vowel or an epenthetic vowel, the L is delinked, and the H is realised across both morae, *unless* the L mora precedes Liaison.

Lì kā' mólɪf̃ +∅. "It's not a gazelle."
 3INAN NEG.BE gazelle:SG NEG.

Bà k̄ā' dīəsídībā +∅. "They are not receivers."
3PL NEG.BE receiver:PL NEG.

The rule does not apply if either mora is closed:

Lì à nē mólíf. "It's a gazelle."
3INAN COP FOC gazelle:SG.

Bà à nē dīəsídīb. "They are receivers."
3PL COP FOC receiver:PL.

Lì k̄ā' bōn-sábìllē +∅. "It's not a black thing."
3INAN NEG.BE thing-black:SG NEG.

Written intervocalic *k p t* represent the clusters *kk tt pp*; thus

Ka ya pu siakida. "But you did not agree." (Lk 13:34)
Kà yà pū s̄jákìdā +∅.
 And **2PL NEG.IND agree:DIPF NEG.**

Intervocalic *ŋ* is sometimes treated as single; so in the 1996 NT of Rom 1:28

dine ka ba pu nar ye ba niŋida. "things they should not be doing"
lìnì kà bà pū nār yé bà níŋìdā +∅
 or *lìnì kà bà pū nār yé bà níŋɪdā* +∅
REL.INAN and 3PL NEG.IND must that 3PL do:DIPF NEG

H Spreading does not occur if the L mora falls on a root vowel or an affix vowel; thus with the word *dàgòbìg*^a "left hand", where the *dà-* is a derivational prefix before the root *gòb-* 14:

Lì k̄ā' dágòbìgā +∅. "It's not a left hand."
3INAN NEG.BE left.hand:SG NEG.

With *dìga*⁺ "dwarfs", where the *-a* is an affix vowel:

Bà à nē dígà. "They are dwarfs."
3PL COP FOC dwarf:PL.

H Spreading does not apply to a L mora preceding Liaison; thus

Kà 5n zábì f. "And he fought you."
 And 3AN.CNTR fight 2SG.OB.

shows the same final tones as

Lì à nē mólìf. "It's a gazelle."
 3INAN COP FOC gazelle:SG.

but *Ò pū zábì f̄* +∅. "He didn't fight you."
 3AN NEG.IND fight 2SG.OB NEG.

Lì k̄ā' mólif̄ +∅. "It's not a gazelle."
 3INAN NEG.BE gazelle:SG NEG.

As a consequence of H Spreading, the LF tones of words like *nú'ùg̃* "hand" coincide completely with those of words with H toneme over a long vowel because of 3-Mora Reduction 7.2.1.1 like *náaf̃* "cow."

Lì k̄ā' nú'ug̃ +∅. "It's not a hand."
 3INAN NEG.BE hand:SG NEG.

Lì k̄ā' náaf̃ +∅. "It's not a cow."
 3INAN NEG.BE COW:SG NEG.

Superscript Notation 2.2.1 writes such words with the SF tones: *náaf̃ nú'ùg̃*. The syllable-based nature of the rule for downstepping before H 5.3.2 means there is no downstep when the H and L do not fall in the same syllable:

Lì k̄ā' nóbir̄ +∅. "It's not a leg."
 3INAN NEG.BE leg:SG NEG.

Thus *nú'ùg̃* matches *nóbir̄* tonally in the SF but *náaf̃* in the LF:

<i>Lì à nē nóbir̄.</i>	"It's a leg."
<i>Lì à nē nú'ùg̃.</i>	"It's a hand."
<i>Lì à nē náaf̃.</i>	"It's a cow."
<i>Lì k̄ā' nóbir̄.</i>	"It's not a leg."
<i>Lì k̄ā' ↓nú'ug̃.</i>	"It's not a hand."
<i>Lì k̄ā' ↓náaf̃.</i>	"It's not a cow."

The rule for H Spreading given above raises certain theoretical problems.

The clusters *kk tt pp ŋŋ* are in fact realised as single except in very slow speech, yet close the preceding syllable for the purposes of the rule. This could be encompassed by setting up a rule of degemination applying later than H Spreading, or by adding the condition that the HL morae should not be separated by an unvoiced plosive. The fluctuation in behaviour of *ŋ* may reflect that the rule is in fact changing in this way. In Tone Patterns *kk tt pp ŋŋ* also behave as clusters [7.2.1](#) [7.3.1](#) but this can be explained in the same way as the tonal anomalies due to the simplification of impermissible consonant clusters [7.2.1.1](#).

A more serious difficulty is that H Spreading is sensitive to word division even in cases where this involves Liaison:

Ò p̄ zábì f̄ +∅. "He didn't fight you."
 3AN NEG.IND fight 2SG.OB NEG.

but Lì k̄á' mólí f̄ +∅. "It's not a gazelle."
 3INAN NEG.BE gazelle:SG NEG.

There is no phonological marker of word division in such cases *apart* from tones. The simplest approach is to accept that the tone system is sensitive to word divisions for which there is no segmental correlate. The division is in any case justifiable morphologically and syntactically [2.3.2](#).

A more natural analysis dispenses with H spreading, and regards the mora following H in such cases not as L but as *intrinsically* toneless. A mora is intrinsically toneless if its vowel is *epenthetic*, open in the LF and preceded by a mora with an intrinsic tone (L, M or H), which is then realised over both morae. Medial *kk tt pp ŋŋ* are again treated as clusters. Second morae may unexpectedly carry H tonemes, when underlying segments have been deleted [7.2.1.1](#). When Tone Patterns are overridden by Independency Marking [22.6.1.1](#) or M Raising [8.4](#), new tonemes are allocated on the basis of the surface segmental shape. After Apocope, a toneme is allocated to the last vocalic mora of a SF if it was toneless, with M following preceding M, and L following H or L, *except* with words like *náaf*³ "cow" where the final vocalic mora remains toneless (as opposed to e.g. *nú'ùg*³ "hand.")

Even in this scheme, no actual contrast in *realisation* between toneless morae and those with marked M or L can ever occur except after H, where the contrast is already marked in the orthography by the convention that any unmarked mora after H is toneless [5.1](#). These two analyses are thus descriptively equivalent, and the tonal orthography of this grammar is compatible with either.

5.3.2 Downstepping before H

Downstep insertion applies after Levelling and H Spreading.

Downstep is inserted before H after:

H: always

M: if the next syllable is stressed and no L toneme intervenes

Downstep is not inserted after M before the last H toneme in a question, due to the interrogative intonation pattern [8.1](#).

Downstep lowers H to the level of the last preceding M: thus, in MHM the final M has the pitch of the first, but M↓HM is realised [MM↓M].

These predictable downsteps are not marked in the normal orthography of this grammar, but in this section will be written as ↓.

Examples for downstep after M before H immediately preceding stress [2.4](#). Where relevant, **bold** type marks stressed and *green* marks unstressed syllables.

Kà m̃ gōs ↓búŋ lā.

And **1SG** look.at donkey:**SG ART**.

"And I looked at the donkey."

but *Kà m̃ gōs búŋ lā bēogv-n.*

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

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

Bīig lā ↓sá mēəd yīr lā.

Child:**SG ART** **TNS** build:**DIPF** house:**SG ART**.

"The child was building the house yesterday."

but *Bīig lā sá mē yīr lā.*

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

"The child built the house yesterday."

Mān ↓bú-pìəl kā'e +ø.

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

"My white goat isn't there."

but *Mān bú-sùŋ k̄ā'e* ⁺∅.
1SG.CNTR goat-good:SG **NEG.BE NEG.**
 "My good goat isn't there."

Yō↓gúm k̄ā'e ⁺∅. "There's no camel."
 Camel:SG **NEG.BE NEG.**

but *Yōgúm lā k̄ā'e* ⁺∅. "The camel's not there."
 Camel:SG **ART NEG.BE NEG.**

No downstep when L toneme intervenes before the stressed syllable:

Lì à nē ↓náaf lā. "It's the cow."
3INAN COP FOC COW:SG ART.

but *Lì à nē dɔ̀ɔ̀g lā.* "It's the hut."
3INAN COP FOC hut:SG ART.

The tonemes of the following syllable itself are not relevant:

Mān kúkò̄m k̄ā'e ⁺∅. "My leper isn't there."
1SG.CNTR leper:SG **NEG.BE NEG.**

Mān kúkɔ̄r k̄ā'e ⁺∅. "My voice isn't there." (WK tone)
1SG.CNTR voice:SG **NEG.BE NEG.**

LFs before pause transfer stress from the root to the affix:

Lì k̄ā' nyī↓ríf̃ ⁺∅. "It's not an egusi seed."
3INAN NEG.BE egusi:SG NEG.

Lì k̄ā' púkò̀̀nrē ⁺∅. "It's not a widow."
3INAN NEG.BE widow:SG NEG.

Ànɔ́'ɔ̀nì_∅ nyē púkò̀̀nrē ⁺∅?
 Who **SER** see widow:SG **CQ?**
 "Who saw a widow?"

but *Lì à nē ↓púkò̀̀nr lā.* "It's the widow."
3INAN COP FOC widow:SG ART.

The **interrogative intonation pattern 8.1** prevents downstep preceding a H syllable even though the next syllable is stressed:

Ò p̄ yādi ↓gídā +∅. "He isn't scattering."
 3AN NEG.IND scatter:DIPF NEG.

but Ànó'ɔ̀ni_∅ yādi gídā +∅? "Who is scattering?"
 Who SER scatter:DIPF CQ?

Lì k̄ā' bī-↓púḡā +∅. "It's not a girl."
 3INAN NEG.BE child-girl:SG NEG.

but Lì k̄ā' bī-púḡāa +∅? "Isn't it a girl?"
 3INAN NEG.BE child-girl:SG PQ?

Ò p̄ ḡyē ↓sú'ugā +∅. "She didn't find a knife."
 3AN NEG.IND see knife:SG NEG.

but Ànó'ɔ̀ni_∅ ḡyē sú'ugā +∅? "Who found a knife?"
 Who SER see knife:SG CQ.

and Ò p̄ dúḡè +∅ +∅? "Didn't she cook?"
 3AN NEG.IND cook NEG PQ.

Downstep is inserted between any two adjacent H tonemes:

Kà m̄ gōs gél lā bēogv-n.
 And 1SG look.at egg:SG ART morning-LOC.
 "And I looked at the egg in the morning."

but M̄ gós ↓gél lā bēogv-n.
 1SG look.at egg:SG ART morning-LOC.
 "I looked at the egg in the morning."

Kà m̄ gōs náaf lā bēogv-n.
 And 1SG look.at donkey:SG ART morning-LOC.
 "And I looked at the cow in the morning."

but M̄ gós ↓náaf lā bēogv-n.
 1SG look.at cow:SG ART morning-LOC.
 "I looked at the cow in the morning."

6 Word Segmental Structure

This section treats the structure of free words, along with bound words [2.3](#) which have the same segmental and tonal form as free nominals. These comprise Combining Forms, and also some Emphatics [33.6](#), Conjunctions [27.1.3](#), particle-verbs [22.7.2](#) and Post-Subject Particles [27.1.4](#).

Clause linker particles, Verbal Predicator particles, the article, prepositions, the locative marker, and the bound pronouns resemble affixes of full words, with the same much-reduced "affix vowel" contrasts; for their tonal behaviour see [7.4](#). Enclitics of this type are subject to Apocope; in some cases this results in a SF consisting of a single consonant [2.3.2](#), or even a SF with no segmental form at all [8](#). Enclitics with SFs of the form CV behave as words with Apocope Blocking [6.4](#). Most proclitics other than nominal cbs have not undergone Apocope; some end in long vowels impossible for SFs: *lèɛ* "but" [22.7.1](#) *nyēɛ* "habitually" [22.7.2](#). However, some do have forms implying Apocope, like *pà* "earlier today": glottalised short vowels occur only in closed syllables before *m* or *ŋ*, or by Apocope [4.2.2](#).

6.1 Roots, Prefixes and Suffixes

Word structure is based on **roots**. Roots have the forms (C)V(C) or (C)VV(C). Stressed syllables with no initial consonant may be realised with an initial glottal stop [ʔ] but this is synchronically not a consonant but simply a prosodic feature:

<i>sāan</i> ^{a/}	"stranger"	[sa:n]
<i>úun</i> ^{nɛ}	"dry season"	[ʔu:n], [u:n]

For simplicity, possible root shapes will be given as CV(C) CVV(C) elsewhere.

Root vowels show the full range of possible Kusaal vowels, including contrastive length, nasalisation and glottalisation. The basic *underlying* vowels are

<i>a</i>	<i>ja/ɛ</i>	<i>ya/ɔ</i>		<i>i</i>	<i>u</i>	<i>ɪ</i>	<i>ʊ</i>
<i>aa</i>	<i>iə</i>	<i>uə</i>	<i>ɛɛ</i>	<i>ɔɔ</i>	<i>ii</i>	<i>uu</i>	<i>ɪɪ</i>

The digraphs represent *monophthongs*, short or long, affected by Agolle Vowel Breaking [4.1.1](#). At this underlying level, short *ja ya* are in complementary distribution with *ɛ ɔ* respectively [4.1.1](#), all long vowels have glottalised counterparts, and all vowels have contrastively nasalised counterparts except for *iə uə ɪ ʊ ɪɪ ʊʊ*. Short *i u* only occur nasalised after *m n* and *ny nw* ← *n ŋm*, however [4.2.1](#).

A few words contain the **Primary Diphthongs** *av avŋ uj* [4.2.3](#). Additional primary diphthongs *ja'a u'a jaŋ'a vŋ'a* have arisen by a historical lenition of root-final *g [6.1.1.1](#).

Long vowels frequently undergo fronting or rounding of their second morae before fronted or rounded segments [6.3.2](#) [8.2.1.1](#); deletion of final vowels by Apocope may then remove conditioning factors, creating contrastive diphthongs:

vīid^{ɛ/} "owls" but sg *vīug*^{ɔ/} "owl"

Only *b d g l m n s r* occur as second consonants of roots.

Stems are derived from roots by adding up to three **derivational suffixes** [13](#) of the form C; nominals may add optional **prefixes** [14](#).

Derivational suffixes comprise the consonants *g s n l d m*, with *r* only in a few words which are probably loans. *G s n* cannot follow another suffix at all, and *l* only does so in the combination *-lm* which derives abstract nouns from other nouns. The suffix *d* occurs almost exclusively in nominal derivatives from verb stems and frequently supplants a preceding derivational suffix or is itself omitted. If there are three derivational suffixes the last two can only be *-dm* or *-lm*. CVVC roots assume the allomorph CVC before a suffix of a type which cannot follow another [6.1.1.2](#).

Prefixes are of the forms *V CV CVn CVsin CVlin*. They only occur in nominal stems. Their vowels are limited to the short **affix vowels** *a ɪ ʊ* and show no contrastive glottalisation or nasalisation. A few stems have two successive prefixes.

tītā'ar^ɛ "big" *bùmbàrig*^a "ant"
sīlinsiùng^ɔ "spider" *tàsintàl*^ɛ "palm of hand"

A stem may constitute a word by itself, or may add a single **flexional suffix**. The flexional suffixes are *a ba ga si fu ɪ rɪ lɪ aa gu dɪ mm bu da ma na la*. These draw their vowels from the set of **affix vowels** *a ɪ ʊ* which here may be short or long:

a *ɪ* *ʊ*
aa *ɪɪ* *ʊʊ*

Affix vowels show no contrastive nasalisation or glottalisation.

Final *-mm* represents *-mʊ*; it is realised as geminate consonantal [m:] but still patterns in most respects as if the final *m* were syllabic.

LF-final short *ɪ ʊ* appear before Prosodic Clitics lowered to *ɛ ɔ*.

Stem	<i>bīi-</i>	"child"	sg <i>bīig</i> ^a	pl <i>bīis</i> ^ɛ
	<i>dòɔ-</i>	"hut"	sg <i>dòɔg</i> ^ɔ	pl <i>dòɔd</i> ^ɛ
	<i>kù'ə-</i>	"water"	sg <i>kù'əm</i> ^m	

Before vowel-initial flexions CVV root-stems become CVC; in productive forms always CVy or CVd [6.1.1.1](#):

Stem	<i>n̄ɔ̄-</i>	"mouth"	sg <i>n̄ɔ̄r^{ε/}</i>	pl <i>n̄yá⁺</i>
	<i>yū'v-</i>	"name"	sg <i>yū'vr^{ε/}</i>	pl <i>yūdá⁺</i>

No consonant clusters may occur word-initially, and only *-mm* (derived from *-mv*, as noted above) word-finally.

Clusters of homorganic nasal + C may occur where nominal prefixes attach to the root or to another nominal prefix.

<i>kùndùŋ^a</i>	"jackal"
<i>gūmpūzēr^{ε/}</i>	"duck"

Consonant clusters following the root vowel may only be *kk tt pp ŋŋ nn mm ll* or *mn*. Other two-member consonant clusters only occur between words (including between the members of compounds) and word-internally in loanwords:

<i>ŋwād-bíl^a</i>	"star" (for the hyphen see above 2.3)
<i>bùrkìn^a</i>	"honourable/free/honest person" (← Songhay)

All other pairs of consonants within words are separated by **epenthetic vowels**. Adjacent pairs of consonants either assimilate to a permitted cluster or a single consonant, or insert an epenthetic vowel, which is *ɪ* by default but may be rounded to *ʊ* by adjacent consonants or after a short rounded root vowel 4.3.

Stem	<i>ŋwād-</i> "month"	+ sg <i>-ga</i>	→	<i>ŋwādɪgá</i>	LF <i>ŋwādɪg</i>	SF
		+ pl <i>-sɪ</i>	→	<i>ŋwādɪsé</i>	LF <i>ŋwādɪs</i>	SF
Stem	<i>kūg-</i> "chair"	+ sg <i>-ga</i>	→	<i>kūka</i>	LF <i>kūk</i>	SF
		+ pl <i>-sɪ</i>	→	<i>kūgʊsɛ</i>	LF <i>kūgʊs</i>	SF
Stem	<i>nób-</i> "leg"	+ sg <i>-rɪ</i>	→	<i>nóbɪrē</i>	LF <i>nóbɪr</i>	SF
Stem	<i>dūm-</i> "knee"	+ pl <i>-aa</i>	→	<i>dūmaa</i>	LF <i>dūma</i>	SF
Stem	<i>dūm-</i> "knee"	+ sg <i>-rɪ</i>	→	<i>dūmnɛ</i>	LF <i>dūm</i>	SF

Deletion of word-final *-ɔ̄* after velars by Apocope may lead to a contrast between round and unrounded epenthetic vowels 6.3.2:

	<i>āṇdɪg^a</i>	← *āāḍɪga	"black plum tree"
but	<i>gàadvug^{ɔ̄}</i>	← *gaadvɪgʊ	"(sur)passing" (gerund)

6.1.1 Root Alternations

6.1.1.1 CVV~CV~CVC

The majority of roots ending in a root vowel show a long vowel before all consonant-initial flexional and derivational suffixes: *kō*⁺ "kill" dipf *kōud*^{a/}.

Some root-stems with short CV- throughout are probably single-mora roots:

<i>yīr</i> ^{ε/}	"house"	<i>yā</i> ^{+/}	plural
<i>zā</i> ^{+/}	"millet"		
<i>kī</i> ^{+/}	"cereal, millet"		
<i>mùj</i> ⁺	"rice"		
<i>bīl</i> ^a	"little"	<i>bībīs</i> ^ε	plural
<i>zūg</i> ^{ɔ/}	"head"	<i>zūt</i> ^{ε/}	plural

The cbs of such words may behave tonally like nominal prefixes [7.2.4](#), probably because, unlike all other cbs, they have not undergone Apocope.

Various words showing short CV- stems throughout have most likely levelled the short vowel which has arisen by phonological rule in one form [9.2.1](#).

Some roots ending in a vowel show short vowels before some consonant-initial suffixes and long vowels before others. Such roots fall into two categories.

When the long-vowel variant is **glottalised**, the vowel is always one of *a'a* *ja'a* *u'a* or *a'an* *jan'a* *u'n'a* (*u'a* *u'n'a* appear as *u'aa* *u'naa* word-finally [4.2.3](#).)

Before flexional and derivational suffixes beginning with *g, the vowel is shortened and loses its glottalisation, while the *g becomes *kk*:

<i>zàk</i> ^a	"compound"	<i>zà'as</i> ^ε	plural	(<i>g^a s^ε</i> Class)
<i>lāuk</i> ^ɔ	"item of goods"	<i>lā'ad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)
<i>yàk</i> ^ε	"unhang"	<i>yà'al</i> ^ε	"hang up"	
<i>pjàun</i> ^{kɔ}	"word"	<i>pjàn'ad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)
<i>pūāk</i> ^a	"female" (adj)	<i>pū'as</i> ^ε	plural	(<i>g^a s^ε</i> Class)
<i>pū'ā</i> ^a	"woman"	<i>pū'ab</i> ^a	plural	(<i>a^a b^a</i> Class)
<i>bòk</i> ^ɔ	"pit"	<i>bù'ad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)

With roots in *ja'a* *u'a* *jan'a* *u'n'a* this is invariable. These vowels contrast with long *i'a* *u'a*, though not with the corresponding short vowels created from *i'a* *u'a* by Apocope [2.2.2](#). However, root-stems in *a'a* or *an'a* may either pattern like this or show the same behaviour as regular *aa* *aan* roots, as a lexical matter in each case:

<i>dà'a</i> ⁼	"market"	<i>dà'as</i> ^ε	plural	(<i>g^a s^ε</i> Class)
--------------------------	----------	---------------------------	--------	---

Comparative evidence shows that the glottalisation in these stems is secondary to the deletion of an underlying historical root-final **g*, and the *kk* forms are the outcome of the regular consonant assimilation **gg* → *kk* 6.2.1; compare the deletion of **g* after *aa iə uə aaŋ eɛŋ ɔɔŋ* (and their glottalised counterparts) treated in 6.3.1, where the process of deletion is regarded as a synchronic rule. The deletion of **g* after short vowels is probably quite recent historically (see the end of 6.3.1.)

The LFs of Base Forms of verbs of this type end in a long vowel as usual:

piāŋ^a "speak" base form *piāŋ*^a*ad*^{a/} dipf

The sole verbal form which is not a Variable Verb shows a fronting diphthong:

kā'e⁺ "not be"

Non-glottalised roots of this kind show the long vowel before suffixes beginning with **g* and the short vowel elsewhere. The explanation is probably again to be sought in deletion of root-final consonants, but in this case the process has occurred much earlier in the history of the Western Oti-Volta family, and the forms have been subject to considerable analogical levelling within paradigms.

Suffixes beginning with **d* change this to *tt*, and **b* changes to *pp*, but before suffixes beginning with **g* the long vowel remains:

<i>fūug</i> ^{ɔ/}	"clothing"		pl <i>fūt</i> ^{ɛ/}	
<i>pōɔg</i> ^{ɔ/}	"field"		pl <i>pōt</i> ^{ɛ/}	
<i>dòɔg</i> ^ɔ	"hut"		pl <i>dòt</i> ^ɛ	
<i>dāuv</i> ^ɔ	"male"	cf	<i>dāp</i> ^a	"men"
<i>tōɔg</i> ^ɔ	"bitter"	cf	<i>tōe</i> ^{a/}	"be bitter"
<i>gāaŋ</i> ^{=/}	"ebony tree"	cf	<i>gāŋr</i> ^{ɛ/}	"ebony fruit"
	(← * <i>gāãga</i>)			

Idiosyncratic singular forms are seen in the two ^a*|b*^a Class nouns 2.2.2

<i>dāu</i> ⁺	"man"	pl <i>dāp</i> ^a
<i>tāuŋ</i> ^{+/}	"opposite-sex sib"	pl <i>tāŋp</i> ^{a/}

The long vowel before a nominal singular suffix *-g*^a or *-g*^ɔ is usually generalised throughout the flexional paradigm. Thus the alternative plural forms occur

<i>fūug</i> ^{ɔ/}	"clothing"	pl <i>fūud</i> ^{ɛ/}
<i>pōɔg</i> ^{ɔ/}	"field"	pl <i>pōɔd</i> ^{ɛ/}
<i>dòɔg</i> ^ɔ	"hut"	pl <i>dòɔd</i> ^ɛ

and the plurals *always* show long vowels in

<i>dāv</i> ^ɔ	"male"	pl <i>dāad</i> ^ε
<i>tōg</i> ^ɔ	"bitter"	pl <i>tōd</i> ^ε
<i>gāaṇ</i> ^{=/}	"ebony tree"	pl <i>gāaṇs</i> ^{ε/}

Variable Verbs which show a short vowel before dynamic imperfective *-t^a* invariably introduce it into the *-m^a* imperative, with gemination of the *m*; from a historical point of view this too is due to analogical levelling:

<i>nyē</i> ⁺	"see"	dipf <i>nyēt</i> ^{a/}	imp <i>nyèm</i> ^a
<i>dō</i> ⁺	"rise"	dipf <i>dōt</i> ^{a/}	imp <i>dòm</i> ^a
<i>lù</i> ⁺ or <i>lì</i> ⁺	"fall"	dipf <i>lùt</i> ^a or <i>lìt</i> ^a	imp <i>lùm</i> ^a or <i>lìm</i> ^a
<i>zò</i> ⁺	"run"	dipf <i>zòt</i> ^a	imp <i>zòm</i> ^a
<i>dì</i> ⁺	"eat"	dipf <i>dìt</i> ^a	imp <i>dìm</i> ^a
<i>yī</i> ⁺	"emerge"	dipf <i>yīt</i> ^{a/}	imp <i>yìm</i> ^a

The irregular verb

<i>kē</i> ⁺	"allow"	dipf <i>kēt</i> ^{a/}	imp <i>kèl</i> ^a
------------------------	---------	-------------------------------	-----------------------------

does not show gemination of the initial of the unique suffix *-l^a*.

Before *derivational* suffixes the vowel is usually long:

<i>dìs</i> ^ε	"feed"	cf	<i>dì</i> ⁺	"eat"
<i>vō'ug</i> ^{ε/}	"come alive"	cf	<i>vōr</i> ^{ε/}	"alive"
			<i>vōḡ</i> ^{a/}	"be alive"
			<i>vōm</i> ^{m/}	"life"
<i>dàalum</i> ^m	"masculinity"	cf	<i>dāp</i> ^a	"men"

There are exceptions with *-s-*:

<i>gōs</i> ^ε	"look"	dipf <i>gōt</i> ^{a/} or <i>gōsɪd</i> ^{a/}	imp <i>gòm</i> ^{ma} or <i>gòsɪm</i> ^a
<i>tìs</i> ^ε	"give"	dipf <i>tìt</i> ^a or <i>tìsɪd</i> ^a	
<i>yīs</i> ^ε	"make go/come out"	<i>yī</i> ⁺	"emerge"

The causative *yīs*^ε has a by-form *yīis*^{ε/}; this is clearly shown to be analogical by its gerund *yīisí*^b, the unique 3-mora stem in the *b*^ɔ Class.

Regularly formed *gerunds* show long vowels: *dīib*^ɔ "food", *nyēeb*^ɔ "seeing."

n̄-íṣṣr^ε "fasting" ("mouth-tying")
fū-yéēr^ε "shirt-wearing" (WK, nonce-form)

There are two instances of a short vowel before *-r*^ε:

nā'-lṣr^ε "place in the compound for tying up cows" WK
wìd-lṣr^ε "place in the compound for tying up horses" WK

As with *glottalised* alternating CVV~CV types, the explanation of these phenomena probably lies in the deletion or assimilation of historical root-final consonants, but any such consonants have been lost in the related languages too, in most cases without trace. Nevertheless, Mooré evidence suggests that such roots originally had the form *CV λ or *CV β , where * λ * β represent palatal and labial (or labiovelar) consonants of some kind. (This * λ may be identifiable with the * λ of 6.2.1.1; the symbol * β is suggested by Manessy's demonstration that two distinct initial consonants have fallen together as Oti-Volta initial **b*: cf Chakali *bǔǔŋ* "goat" = Kusaal *būvg*^a, *bìé* "child" = *bīg*^a, but *vàà* "dog" = *bāa*⁼, *vóg* "shrine" = *bōgv*^ε.)

<u>Mooré</u>	<u>Kusaal</u>	
<i>zòe</i>	<i>zò</i> ⁺	"run"
<i>kóεεgà</i>	<i>kùkṣr</i> ^ε /	"voice"
<i>lùì</i>	<i>lù</i> ⁺ or <i>lì</i> ⁺	"fall"
<i>ráoa</i>	<i>dāṽ</i> ⁺	"man"
<i>rāpa</i>	<i>dāp</i> ^a	"men"
<i>tāo</i>	<i>tṇ</i> ⁺	"shoot"
<i>tǎpo</i> ["bow"]	<i>tāṇp</i> ^ɔ	"war"

Allomorphs with a short vowel and a following geminate consonant may have originated from assimilation of root-final * λ with following alveolars and root-final * β with following labials. The CVV allomorphs seen before velars would result via a sequence of epenthetic vowel insertion, lenition of * λ /* β and development of a long vowel by Fusion. The monophthongs in verb base forms can be accounted for by levelling: SFs ending in a vowel correspond to LF with the vowel lengthened in all cases except Invariable Verbs 2.2.2. Plurals corresponding to singulars with suffixes beginning with velars have generally acquired long vowels by levelling, and Variable Verbs with a short vowel preceding *-t*^a in the dipf also show a short vowel in the *-m*^a imperative (with gemination of *m*) in accordance with the strongly marked tendency to levelling within verb paradigms.

Roots ending in $*\lambda/*\beta$ may preserve the final consonant as /y/ or /w/ before a vowel-initial suffix. Thus in the singulars of the $a|b^a$ nouns

$dāu^+$	"man" 2.2.2	pl $dāp^a$
$tāuŋ^+ /$	"sib of opposite sex"	pl $tāŋp^a /$
$sāeŋ^+$	"blacksmith"	pl $sāaŋb^a$
or $sāeŋ^a$		
$sōeŋ^+$	"witch"	pl $sōōŋb^a$
or $sōeŋ^a$		

Similarly, root-final $*-\lambda-$ is preserved as y before the flexion $-a$ of the Invariable Verbs $tōe^a /$ "be bitter" and $vōe^a /$ "be alive, $àeŋ^a$ "be something/somehow" [11.2](#).

Preservation of root-final $*-\lambda-$ as y probably underlies the regular formation with root-stems in CVV or CV before the Noun Class plural suffix $-a^+$:

$kùkōr^ε /$	"voice"	pl $kùkōyá^+$
$gāŋr^ε /$	"fruit of Nigerian ebony"	pl $gāŋyá^+$
$bàlāar^ε$	"stick, club"	pl $bàlāya^+$
$nōōr^ε /$	"mouth"	pl $nōyá^+$
$zōōr^ε$	"tail"	pl $zōya^+$

The words with sg $CVr^ε$ show the expected assimilation of $*\lambda r \rightarrow *rr \rightarrow r$. The singulars in $CVVr^ε$ would represent the expected outcome for $*CV\beta$ root-stems; this would imply that the plurals would have to be the result of levelling of $*CVwa^+$ to $*CVya^+$; there is comparative evidence that this has in fact taken place historically (see on Mooré *náooré* "leg", plural *náoa* below.) In current Kusaal, consonantal /w/ only occurs root-initially.

Synchronically, all these are simply CVV stems, and the rule is for the vowel to be shortened in the plural; this is clear from the changes in

$bīar^ε /$	"elder same-sex sibling"	pl $bīēyá^+$
$sūar^ε /$	"road"	pl $sūēyá^+$
$zūar^ε$	"hill"	pl $zūēyá^+$

where the plurals show $je\ ye$ vowels $[i]$ $[y]$ found only in this one context.

Taking the $-y-$ of these $r^ε|a^+$ Class plurals as arising from root-final $*\lambda$ accounts for its different patterning from the $-y-$ of Invariable Verbs, which is probably derived from the *initial* $*\lambda$ of a suffix [11.2](#); before that, glottalised vowels remain long and the $-y-$ is not replaced by d : $sū'e^{ya}$ "own", cf $sū'ulím^m$ "possession" [13.1.1.4](#).

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

<i>yō'ur^ε</i>	"name"	pl <i>yōdá⁺</i>
<i>pòŋ'ɔr^ε</i>	"cripple"	pl <i>pòŋda⁺</i>
<i>tītā'ar^ε</i>	"big"	pl <i>tītāda⁺</i>
<i>yū'er^ε</i>	"penis"	pl <i>yūāda⁺</i>

Stems in historical **-ag-* **-jag-* **-uag-* (see above) may still inflect as CVC-stems, or may show analogical forms with *-d-*:

<i>sjà'ar^ε</i>	"forest"	pl <i>sjà'a⁺</i>
<i>bà'ar^ε</i>	"idol"	pl <i>bà'a⁺</i> or <i>bàda⁺</i> * <i>bagrɪ</i> ; Farefare <i>bàgrè</i>
<i>bjāŋ'ar^ε</i>	"mud, riverbed"	pl <i>bjāŋ'a⁺</i>
<i>mù'ar^ε</i>	"reservoir, dam"	pl <i>mɯ'aa⁺</i> or <i>mù'ada⁺</i>
<i>zànkù'ar^ε</i>	"jackal"	pl <i>zànkɯ'aa⁺</i> or <i>zànkù'ada⁺</i>

In derivation, *-r-* is regularly deleted before alveolar suffixes, with glottalisation of the preceding root vowel [6.2.1.1](#). Accordingly, one hypothesis for this "epenthetic *d*" might be that it represents the regular reflex of root-final **r* after a short root vowel, with **Vrr* → *V'Vr* in *flexion* and remodelling of the cb on the basis of the sg:

<i>*yurri</i>		<i>*yuraa</i>
→ <i>yō'ur^ε</i>	"name"	→ pl <i>yōdá⁺</i>

The few current *CVR-* stems in the *r^ε|a⁺* Class may all reflect **rr*: they comprise deverbal nominals from Invariable Verbs in *-r^a* [13.1.1.1](#), along with the adjective in *yī-póŋrà⁺* "nearby houses" and the noun *kùkpàr^ε* "palm fruit."

However, cognates in languages without glottalised vowels show no *-d-* or *-r-*: Mooré pl *yóyà* = Kusaal *yōdá⁺* "names"; Mooré pl *pōyá* = Kusaal *pòŋda⁺* "cripples." An explanation is suggested by Mooré *náooré* "leg", plural *náoa*. The plural can be explained as showing retention of a root-final *w* before *-a*, the *-y-* of original roots ending in **y* having not yet spread to *náooré*. The corresponding Toende Kusaal word *nō'ōt* has plural *nɔba* (Agolle has remodelled sg *nóbìr^ε* "leg" on pl *nōbá⁺*.) The parallel

<i>pó'ot</i>	"cripple"	pl <i>póra</i> (= Agolle <i>pòŋda⁺</i>)
<i>nō'ōt</i>	"leg"	pl <i>nɔba</i>

suggests that Kusaal *r/d* and *b* may sometimes be reflexes of glottalised equivalents of the **ɣ* **β* posited above.

Other cases of *CVV* roots alternating with *CVC* are unsystematic. Most seem to represent alternations between *d* and *b* respectively and the root-final palatal **ɣ* and labial **β* hypothesised above:

ʎ/d:	<i>l̥̥</i> ⁺	"tie"		<i>l̥̥dɪg</i> ^{ε/}	"untie"	
cf	<i>l̥̥</i>	"tie"	(Dagbani)	<i>l̥̥rgi</i>	"untie"	(Dagbani)
	<i>l̥̥e</i>	"tie"	(Mooré)	<i>l̥̥kè</i> or <i>l̥̥dgè</i>	"untie"	(Mooré)
ʎ/d:	<i>p̥̥</i> ⁺	"divide"		<i>p̥̥dɪg</i> ^{ε/}	"divide"	
cf	<i>p̥̥i</i>	"divide"	(Mooré)			
ʎ/d:	<i>p̥̥-<i>sá'a</i></i> ⁼	"ewe lamb"		<i>p̥̥-à-sādl̥̥</i> ^{ε/}	"young woman"	
cf	<i>p̥̥'ɔ-sa'a</i>	"young woman"		<i>p̥̥g-sarga</i>	"young woman"	
pl	<i>p̥̥'ɔ-sa'as</i>	(Toende)	pl	<i>p̥̥g-sarsɪ</i>	(Farefare)	
				<i>p̥̥gsádà</i>	"young woman"	
			pl	<i>p̥̥gsádbà</i>	(Mooré)	
ʎ/d:				<i>b̥̥dɪg</i> ^ε	"lose, get lost":	
cf	<i>b̥̥i</i>	"perdre, disparaître"		<i>b̥̥ríg</i>	"fondre, disparaître"	
		(Toende)			(Toende)	
β/b:	<i>dāy</i> ⁺	"man"		<i>b̥̥-díɪg</i> ^a	"boy"	
			cf	<i>b̥̥ríblá</i>	"boy" (Mooré)	
			with	<i>b̥̥púglá</i>	"girl" (Mooré)	
			and	<i>p̥̥-ā</i>	"woman" (* <i>p̥̥ag-</i>)	
β/b:	<i>n̥̥</i> ⁺	"tread"		<i>n̥̥b̥̥r</i> ^ε	"foot"	
cf	<i>nao</i>	"tread" (Mooré)				
	<i>náooré</i>	"foot" (Mooré)				
-/g:	<i>w̥̥id</i> ^a	"draw water" dipf		<i>w̥̥ik</i> ^ε	base form (← * <i>wiggɪ</i>)	
	<i>v̥̥</i> ⁺	"uproot"		<i>v̥̥ik</i> ^{ε/}	"uproot" (← * <i>viggɪ</i>)	

6.1.1.2 CVVC~CVC

Roots of the form CVVC are confirmed by cases where they alternate with CVC. This happens in flexion with a few very common nouns:

<i>z̥̥íŋ</i> ^a (← * <i>z̥̥ímgā</i>)	<i>z̥̥ím</i> ⁺	<i>z̥̥ím-</i>	"fish"
<i>n̥̥áaf</i> ^ɔ (← * <i>n̥̥āágfū</i>)	<i>n̥̥īg</i> ⁺	<i>n̥̥ā'-</i> (← * <i>n̥̥āg-</i>)	"cow"
<i>w̥̥áaf</i> ^ɔ (← * <i>w̥̥āágfū</i>)	<i>w̥̥īg</i> ⁺	<i>w̥̥ā'-</i> (← * <i>w̥̥āg-</i>)	"snake"
<i>p̥̥īm</i> ^{m/}	<i>p̥̥īmá</i> ⁺		"arrow"
<i>y̥̥ùum</i> ^{mε}	<i>y̥̥ùma</i> ⁺		"year"

In derivation the alternation appears too:

<i>tūuma</i> ⁺	"work" noun	<i>tùm</i> ^m	"work" verb
<i>yēóŋ</i>	"one"	<i>yīuŋ</i> ^{ɔ̃/}	"single"
<i>kāa</i> ^{ε/}	"count"	<i>kāl</i> ^{ε/}	"number"
<i>māa</i> ^ε	"sacrifice" verb	<i>māluŋ</i> ^{ɔ̃}	"sacrifice" noun
<i>tūulúŋ</i> ^{ɔ̃}	"hot"	<i>tūl</i> ^{la/}	"be hot"

The alternation in *yīs*^{ε/}/*yīs*^ε "make go/come out" is of a different origin [6.1.1.1](#).

There is no obvious rule governing this alternation in flexion or in zero-derivation. Before verb-deriving suffixes, however, the short allomorph always appears:

<i>pìalig</i> ^a	"white"	<i>pèlig</i> ^ε	"whiten"
<i>kp̄oŋ</i> ^{ɔ̃}	"strong"	<i>kp̄'ŋ</i> ^ε	"strengthen"
<i>lìab</i> ^ε	"become"	<i>lèbíg</i> ^ε	"turn over"
<i>tūulúŋ</i> ^{ɔ̃}	"hot"	<i>tūlig</i> ^{ε/}	"heat"
<i>yāa</i> ^{ε/}	"scatter"	<i>yādíg</i> ^{ε/}	"scatter"
<i>dēēŋ</i> ^a	"first"	<i>dēŋ</i> ^ε	"go first"
<i>pìab</i> ^ε	"blow" (flute)	<i>pèbís</i> ^ε	"blow" (wind)
<i>yùul</i> ^ε	"swing" intrans	<i>yùlig</i> ^ε	"swing" transitive
cf <i>ēēŋb</i> ^{ε/}	"lay a foundation"		cf Mooré <i>yěbgè id</i>

The only derivational suffix found after a CVVC allomorph is *-l-* in *-lím-* "-ness/-hood" [13.1.2](#):

<i>sáannìm</i> ^m	"strangerhood"	(* <i>saanlìmmu</i>)
-----------------------------	----------------	-----------------------

CVVC roots shorten the vowel if *k t* or *p* results from the combination of the final consonant and a following suffix, but this is a phonological constraint rather than a morphological rule [6.3.3](#).

6.1.1.3 Glottalisation before Derivational Suffixes

Vowel-final roots become glottalised before derivational **g* and **s* in

<i>kò</i> ⁺	"break" intrans	<i>kò'ɔŋ</i> ^ε	"break" trans/intrans
<i>kòɔ́lúŋ</i> ^{ɔ̃}	"broken"	<i>kò'ɔs</i> ^ε	"break several times"
<i>pòɔ́d</i> ^a	"be few"	<i>pò'ɔŋ</i> ^ε	"diminish"
<i>vūe</i> ^{a/}	"be alive"	<i>vū'vŋ</i> ^{ε/}	"make, come alive"

6.2 Consonant Changes

For deletion of underlying **g* after *aa iə uə aən ɛɛn ɔɔn* see [6.3.1](#); for a historical process of deletion of **g* after *a ɪa ɥa ən ɪən ɥən* see [6.1.1.1](#).

6.2.1 Consonant Clusters and Epenthetic Vowels

Adjacent consonants within a word must either assimilate to one of the clusters *kk pp tt ŋŋ mm nn ll mn* or insert an **epenthetic vowel** (ɪ by default.) The clusters *kk pp tt ŋŋ* are written with single symbols: *k p t ŋ*.

Roots can end only in vowels or in *g d b m n r s l*; stems may also end in consonant clusters or *k t p ŋ*; flexional suffixes begin with vowels or *g d b m r s l f*.

Nasals usually take up the position of articulation of a following consonant, and then homorganic consonants mostly form clusters, with exceptions among alveolars, where changes attested in derivation have apparently been levelled in flexion [6.2.1.1](#).

The treatment of the possible pairs is as follows, with ə representing the insertion of an epenthetic vowel. Suffixes beginning with *l f* do not occur in productive paradigms, so there are gaps in the table.

1 st ↓ 2 nd →	<i>g</i>	<i>d</i>	<i>b</i>	<i>m</i>	<i>r</i>	<i>s</i>	<i>l</i>	<i>f</i>
<i>g</i>	<i>kk</i>	ə	ə	ə	ə	ə		
<i>d</i>	ə	<i>tt</i>	ə	ə	ə	ə		
<i>b</i>	ə	ə	<i>pp</i>	[<i>mm</i>]	ə	ə		
<i>m</i>	<i>ŋŋ</i>	<i>mn</i>	<i>mm</i>	<i>mm</i>	<i>mn</i>	[<i>ʃs</i>]	<i>nn</i>	
<i>n</i>	<i>ŋŋ</i>	<i>nn</i>	<i>mm</i>	ə	<i>nn</i>	<i>ʃs</i>	<i>nn</i>	<i>~f</i>
<i>r</i>	ə	ə	ə	ə	<i>r</i>	ə	<i>tt</i>	ə
<i>s</i>	ə	ə	ə	ə	ə	ə		
<i>l</i>	ə	<i>nn</i>	ə	ə	<i>ll</i>	ə	<i>ll</i>	ə

Potential pairs with **y* (**ʌ*) as the second consonant are an issue only with Invariable Verbs [11.2](#) and effectively belong to derivation rather than flexion.

The unusual change *ld* → *nn* is carried out completely regularly; Dagbani and Mooré have similar assimilation rules.

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

bm → *mm* only occurs after a short root vowel

ms → *ʃs* never occurs after a short root vowel; elsewhere it is optional.

Assimilation and epenthesis occur side by side in many words.

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

<i>tēŋ^a</i>	"land"	pl	<i>tēɛŋs^ɛ</i>	← <i>*tɛnsɪ</i>
<i>kòlŋ^a</i>	"door"	pl	<i>kòlɪs^ɛ</i>	← <i>*kʊlɪnsɪ</i>

Exceptionally, an *epenthetic* vowel becomes long before ***ns** in

<i>bōtŋ^a</i>	"cup"	pl	<i>bōtɪs^ɛ</i>
-------------------------	-------	----	--------------------------

This probably reflects a reanalysis of the form as nominal prefix *bō* + *tŋ^a* [2.4](#).

***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:

<i>nīf^ɪ</i>	"eye"	pl	<i>nīnɪ⁺</i>
<i>píŋf^ɪ</i>	"genet"	pl	<i>pīnɪ⁺</i>

***rr** becomes *r* in e.g.

<i>kòkpàr^ɛ</i>	"palm fruit"	pl	<i>kòkpàra⁺</i>
---------------------------	--------------	----	----------------------------

The few stems in *-r-* in the *r^ɛ|a⁺* Class may all be derived from ***rr** [6.2.1.1](#).

***rr** → *r* is an active process in phrase-level sandhi [8.5.1](#).

***ss** inserts an epenthetic vowel in

<i>pūsɪg^a/</i>	<i>pūsɪs^ɛ/</i>	<i>pūs-</i>	"tamarind"
---------------------------	---------------------------	-------------	------------

However, all other examples of *g^a|s^ɛ* plurals ending in *-sɪs^ɛ* in my materials are for **-sɪnsɪ*, from stems in ***m**. A plural **pūs^ɛ/* would have appeared to show no ending in SF; nouns usually avoid such ambiguity by selecting a different flexion [9.1](#), but there is a very strong association of tree names with the *g^a|s^ɛ* Class and of their fruits with the *r^ɛ|a⁺* and *g^ɔ|d^ɛ* [35.5](#); *pūsá⁺* in fact means "tamarind fruits."

Derivation precedes flexion in cluster development.

The **-mm-** and **-nn-** clusters derived from ***md-** ***nd** in Agent Nouns [13.1.1.1](#) and Dynamic Deverbal Adjectives [13.1.1.2.1](#) never undergo assimilation with the following initial consonant of a suffix:

<i>kìmm^m</i>	"tend flock"	→	<i>kòŋb-kīm^{na}</i>	"shepherd"
			<i>kòŋb-kīmmɪb^a</i>	
			or <i>kòŋb-kīmnɪb^a</i>	

<i>bùn</i> ^ε	"reap"	→	<i>būn-búnnìr</i> ^ε	"thing for reaping"
<i>tùm</i> ^m	"work"	→	<i>būn-túmmìr</i> ^ε	"useful thing"
			<i>tūmmìr</i> ^ε DK WK	"useful"
		pl	<i>tūmna</i> ⁺ DK	
			<i>tūmma</i> ⁺ WK	
<i>gīlɪg</i> ^{ε/}	"go around"	→	<i>pɹ'à-gīnníg</i> ^a	"prostitute"
<i>kēŋ</i> ^{ε/}	"go"	→	<i>bùŋ-kēnnìr</i> ^ε	"moving donkey"
<i>vūl</i> ^ε	"swallow"	→	<i>tì-vūnním</i> ^m	"oral medication"
<i>tùm</i> ^m	"work"	→	<i>tūmmím-tāa</i> ⁼	"co-worker"

Undersived nominals which do not show assimilation probably also contain *d:

<i>sōnnìr</i> ^ε	<i>sōnna</i> ⁺	<i>sòŋ-</i>	"inner <i>zàk</i> wall"
<i>sāngúnnìr</i> ^ε	<i>sāngúnnà</i> ⁺	<i>sāngún-</i>	"millipede"
<i>sūmmìr</i> ^ε	<i>sūmma</i> ⁺	<i>sùm-</i>	"groundnut"
<i>yīmmìr</i> ^ε	<i>yīmmá</i> ⁺	<i>yīm-</i>	"solitary" (note tones)

Stem-internal *kk pp tt ŋŋ nn* and *mn/mm* ← **md* never assimilate further.

Tàm^m "forget", *zàm*^m "cheat, betray", *dàm*^m "shake" and *lèm*^m "sip, taste" are -*mm*- stems: in KB their dipfs are always written *tammɪd zammɪd dammɪd lemmɪd*, and they form 3-mora-stem type gerunds: *tàmmug*^ɔ *zàmmug*^ɔ *dàmmug*^ɔ *lèmmug*^ɔ. The *mm* has probably arisen by assimilation of **bm* → *mm*. Mooré has -*mb*-: *zāmbe* "tricher", *rāmbe* "remuer", *lèmbe* "goûter". These verbs do assimilate **mmm* → *mm* in the imperative 11.1.

Verbs with stems in *mm nn ll r* (← **rr*) drop the **d* formant in deverbal nominals 13.1.1.1, so the question of assimilation does not there arise. However, unlike stems in *nn* and in *mn/mm* ← **md*, stems in *ll r* and in *mm* of other origin than **md* probably completely assimilate the following initial of the Noun Class suffix -*r*^ε. This has led to reanalysis of the SF forms with the sg suffix ^a as being the result of attachment of *r*^ε, with new LFs and analogical plurals in -*a*⁺ 9.3.1.1. The sg tones of the deverbal adjective in *kùg-dēl*^{lε} "chair for leaning on" (not **kùg-dél*^{lε}) are probably analogical.

Single *m n* forms may be followed by unexpected epenthesis as a strategy to avoid ambiguous SFs in Dynamic Imperfectives. The suffix suppletion used for this purpose in nominals 9.1 is not possible because there is only one regular dipf suffix.

3-mora *n*-stems always show epenthesis, but this case may actually reflect underlying gemination of the suffix 6.2.1.1.

<i>dìgɪn</i> ^ε	<i>dìgɪnɪd</i> ^a	<i>dìgɪnɪm</i> ^a	"lie down"
<i>dìgɪnug</i> ^ɔ			gerund
<i>gò'ɔn</i> ^ε	<i>gò'ɔnɪd</i> ^a	<i>gò'ɔnɪm</i> ^a	"extend neck"

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

<i>bùn^ε</i>	<i>bùn^{na}</i>	<i>bùnım^a</i>	"reap"
<i>būnıb^ɔ</i>			gerund

3-mora *m*-stems show epenthesis *optionally*:

<i>tɔɔm^{m/}</i>	<i>tɔɔm^{ma}</i>	<i>tòɔm^{ma}</i>	"depart"
	or <i>tɔɔmíd^a</i>		
<i>tɔɔŋ^ɔ</i>			gerund
or <i>tɔɔmúg^ɔ</i>			
<i>kàɾım^m</i>	<i>kàɾım^m</i>	<i>kàɾım^{ma}</i>	"read"
	or <i>kàɾımíd^a</i>		
<i>kàɾıŋ^ɔ</i>			gerund
or <i>kàɾımıg^ɔ</i>			

In a clear demonstration of epenthesis motivated by the avoidance of ambiguity, both WK and DK use assimilated forms only for clause-final LFs and before the focus particle *nē^{+/}*, and require forms with epenthesis everywhere else:

<i>M̄ pō kárımmā.</i>	"I'm not reading."
<i>M̄ kárım nē.</i>	"I'm reading."
<i>Kà bà kárımíd.</i>	"And they were reading."
<i>Kà bà kárım.</i>	only "And they read."

2-mora *m*-stems regularly assimilate in the dynamic imperfective [11.1](#):

<i>tùm^m</i>	<i>tùm^{ma}</i>	<i>tùm^{ma}</i>	"work"
<i>wùm^m</i>	<i>wùm^{ma}</i>	<i>wùm^{ma}</i>	"hear"

Even here, NT/KB may have unassimilated forms to avoid ambiguity:

Lın wusa ka ya tumid, tumi li ...
Lın wōsa kà yà tùmıd, tūmmī_ ∅...
DEM.INAN all and **2PL** do:DIPF, do:IMP **2PL.SUB** ...
 "Everything you do, do it..." (Col 3:23, 1996)

ka nan kpən wumid ye m bæ li puugin nannanna la.
kà nán kpèn wùmıd yé m bæ_ lı pūvgu-n nānná-nā lā.
 and still still hear:DIPF that **1SG** EXIST **3INAN** inside:SG-LOC now **ART.**
 "and are still hearing that I am in it now." (Phil 1:30)

Examples of assimilation (for many others see [9](#) [10](#) [11.1](#)):

<i>*gg</i> → <i>kk</i>	<i>gìgɪs</i> ^ε	"dumb people"	sg	<i>gìk</i> ^a
cf	<i>kɔ̃lɪs</i> ^ε	"river"	sg	<i>kɔ̃lɪg</i> ^a
<i>*dd</i> → <i>tt</i>	<i>bùd</i> ^ε	"plant"	dipf	<i>bùt</i> ^a
cf	<i>dūg</i> ^ε	"cook"	dipf	<i>dūgʊd</i> ^{a/}
<i>*bb</i> → <i>pp</i>	<i>sɔ̃b</i> ^ε	"write"	ger	<i>sɔ̃p</i> ^{ɔ̃/}
cf	<i>kɔ̃pàr</i> ^ε	"lock"	ger	<i>kɔ̃pàrɪb</i> ^{ɔ̃}
<i>*ld</i> → <i>nn</i>	<i>kòlvɔg</i> ^{ɔ̃}	"bag"	pl	<i>kònn</i> ^{nε}
cf	<i>zūəbúg</i> ^{ɔ̃}	"hair"	pl	<i>zūəbíd</i> ^ε
<i>*mg</i> → <i>ŋŋ</i>	<i>bùmɪs</i> ^ε	"donkeys"	sg	<i>bùŋ</i> ^a
cf	<i>ŋwādɪs</i> ^{ε/}	"months"	sg	<i>ŋwādɪg</i> ^{a/}
<i>*ng</i> → <i>ŋŋ</i>	<i>gbàna</i> ⁺	"books"	sg	<i>gbàŋ</i> ^{ɔ̃}
cf	<i>wābɪd</i> ^{ε/}	"elephants"	sg	<i>wābʊg</i> ^{ɔ̃/}
<i>*nr</i> → <i>nn</i>	<i>tāna</i> ⁺	"earths"	sg	<i>tān</i> ^{nε}
cf	<i>dìga</i> ⁺	"dwarfs"	sg	<i>dìgɪr</i> ^ε
<i>*mr</i> → <i>mn</i>	<i>dūma</i> ⁺	"knees"	sg	<i>dūm</i> ^{nε}
cf	<i>nɔ̃bá</i> ⁺	"legs"	sg	<i>nɔ̃bìr</i> ^ε
<i>*lr</i> → <i>ll</i>	<i>gēlá</i> ⁺	"eggs"	sg	<i>gél</i> ^{lε}
cf	<i>kūgá</i> ⁺	"stones"	sg	<i>kūgʊr</i> ^{ε/}
<i>*nb</i> → <i>mm</i>	<i>sāan</i> ^{a/}	"stranger"	pl	<i>sáam</i> ^{ma}
cf	<i>nīd</i> ^{a/}	"person"	pl	<i>nīdɪb</i> ^{a/}
<i>*mb</i> → <i>mm</i>	<i>kìmm</i> ^m	"tend flock"	ger	<i>kīm</i> ^{mɔ̃}
cf	<i>kàd</i> ^ε	"drive away"	ger	<i>kādɪb</i> ^{ɔ̃}

Language names [9.3.4.1](#):

<i>*ll</i> → <i>ll</i>	<i>Bùl</i> ^{lε}	"Buli"	cf	<i>Bùlɪs</i> ^ε	"Bulsa"
	<i>Àgòl</i> ^{lε}	"Agolle Kusaal"	cf	<i>Àgòl</i> ^{lε}	"Agolle area"

$*r/ \rightarrow tt$	<i>Bāt</i> ^{ε/}	"Bisa language"	cf	<i>Bāris</i> ^{ε/}	"Bisa people"
	<i>Yāt</i> ^{ε/}	"Yarsi language"	cf	<i>Yāris</i> ^{ε/}	"Yarsi people"
$*m/ \rightarrow nn$	<i>Dàgbān</i> ^{nε/}	"Dagbani"	cf	<i>Dàgbām</i> ^{ma/}	"Dagomba"
	<i>Yàan</i> ^{nε}	"Yansi language"	cf	<i>Yàamis</i> ^ε	"Yansi people"
$*n/ \rightarrow nn$	<i>Gōrín</i> ^{nε}	"Farefare language"	cf	<i>Gōrís</i> ^ε	"Farefare people"

Unexpected epenthesis is seen in

<i>Nwāmpūri</i> ^{ε/}	"Mampruli"	cf	<i>Nwāmpūris</i> ^{ε/}	"Mamprussi"
<i>Kàmbònr</i> ^ε	"Twi"	cf	<i>Kàmbòm</i> ^ε	"Ashanti"

6.2.1.1 Consonant Changes in Derivation

Consonant assimilation in derivation differs from flexion mostly with pairs of alveolars which only undergo assimilation in derivation, and with underlying clusters having been reduced to *single* alveolar consonants. In addition, assimilation involving probable original $*C\chi$ clusters appears only in derivation.

In derivation $*VrC \rightarrow V'VC$ where C is *s l d or n*:

<i>gūr</i> ^{a/}	"guard"
<i>gūr'ul</i> ^{ε/}	"put on guard"
<i>gūr'us</i> ^{ε/}	"take care, watch out"
<i>gūr'ud</i> ^{a/}	agent noun

In *sùn*^{nε} "bow the head" *-nn-* may be the result of assimilation of $*rn$ $*ln$ or $*ld$: cf *sūr*^a "have head bowed", Mooré *sùri* "être courbé, être penché", Toende *sulug* Mooré *sùlgi* "baisser la tête." KB has *su'un*.

The sequence *-rld-* does occur with Agent Nouns involving the suffix *-d-* but there is vacillation in some cases, suggesting that the *-rld-* forms are analogical; Agent Noun formation is the most regular and flexion-like among derivational processes by suffix [13.1.1](#), and hence the most exposed to analogy:

<i>kpārd</i> ^a	"lock-er"
<i>gūrld</i> ^{a/}	"guard"
<i>gūr'ud</i> ^{a/}	"guard"

*Vrr → V'Vr may have formerly applied before the Noun Class suffix -r^ε [6.1.1.1](#), but this rule has been replaced by *Vrr → r in the few r^ε|a⁺ Class stems in -r, which may all be original stems in geminate *rr (from *rʎ, see below.)

Tones often reveal that surface r represents an underlying cluster [7.2.1.1](#) e.g. m̄rím^m, gerund of m̄r^{a/} "have." The verb kīr^ε "hurry" makes a Pattern HL gerund [12.1.1.1.1](#), which may reflect loss of a mora from *kīrr-. Original single *r may have become *d after short root vowels [6.1.1.1](#):

ḡr ^{a/}	DK	"have neck extended"
ḡdɪg ^{ε/}	DK	"look up, extend neck"
yāar ^{ε/}		"scatter"
yādɪg ^{ε/}		"scatter" (for the shortening see 6.1.1.2)

If so, -r- has been restored by analogy in e.g. the gerund kīrb^{ɔ/} "hurrying"; it is also seen in the ethnonyms Yāris^{ε/} Bāris^{ε/} [35.4](#) and in ènrɪg^ε "shift along."

Single -l- apparently results from *d/ in pìl^ε "put (hat etc) on someone":

pìd ^ε	"put (hat etc) on"
pìdɪg ^ε	"take (hat etc) off"
pìl ^ε	"put (hat etc) on someone"
pìlɪg ^ε	"take (hat etc) off someone"
cf yè ⁺	"dress oneself"
yèɛg ^ε	"undress oneself"
yèɛl ^ε	"dress another"

Single -s- may also represent an earlier cluster in some words. The Agent Nouns s̄s^a "beggar" and t̄s^a "giver" drop the formant -d- in the sg and have Tone Pattern L like 3-mora stems [9.3.1](#); in t̄s^ε "give" the -s- may have resulted from a root-final *ʎ assimilated to a following derivational -s- [6.1.1.1](#). The similarly formed Pattern H verb ḡs^ε "look" makes a Pattern HL gerund [12.1.1.1.1](#) like kīr^ε "hurry" above; so too does s̄s̄ɪs^ε "converse" [12.1.1.1.1](#).

Single -n- may represent an original cluster after an epenthetic vowel within a stem. The word p̄bɪn^{nε} pl p̄bɪna⁺ "covering" [12.1.2](#) has single -n- for my informants, but the corresponding Mooré word has -nd-: p̄b̄índgà "couverture." The Mooré equivalent of the assume-stance suffix -n- [13.2.1.1](#) is -nd-: z̄í "être assis", z̄índi "s'asseoir"; ḡǎe "être couché", ḡǎandè "se coucher"; v̄ábè "être à plat ventre", v̄ábende "se mettre à plat ventre"; tàbe "être collé aux parois de", tàbende "se coller à." An original geminate origin for Kusaal -n- may explain the fact that the suffix never assimilates to a following consonant.

Consonant changes occur in the formation of Invariable Verbs [11.2](#) before a consonant which appears as *-y-* when not assimilated.

If the Verb SF ends in vowel, the LF ends in *-ya*; stem-final root vowels become fronting diphthongs before the *-y-* [6.3.2](#) and CVV roots adopt the allomorph CYy before *-a* [6.1.1.1](#):

<i>sū'e</i> ^{ya/}	"own"	cf <i>sū'ulím</i> ^m	"possession"
<i>t̃ɛ</i> ^{a/}	"be bitter"	cf <i>t̃ɔg</i> ^ɔ	"bitter"

After stem-final *g b*, an epenthetic vowel is inserted before *-ya*:

<i>dīg</i> ^{ya/}	"be lying down"
<i>vābi</i> ^{ya/}	"be lying prone"

If the SF ends in *l m n r s*, *-a* is added to form the LF, with gemination of *l m n*; tonal evidence shows that *r* was also originally geminated:

<i>d̃ɔ</i> ^{la/}	"be with someone in a subordinate rôle"
<i>nēn</i> ^{na/}	"envy"
<i>m̃r</i> ^{a/}	"have" cf gerund <i>m̃rím</i> ^m showing *rr

These forms probably arose historically from a suffix **-ʎa*, with **ʎ* becoming *-l-* in derived nominals (cf **n* [8.2.1.2](#).) In Imperfective Gerunds of Relational Verbs [13.1.1.4](#), verbs with SFs ending in vowels show *-l-*, parallel to *-d-* in Variable Verbs:

<i>sū'e</i> ^{ya/}	"own"	→	<i>sū'ulím</i> ^m
<i>b̃ɔɔd</i> ^a	"like, want"	→	<i>b̃ɔɔdɪm</i> ^m

Proto-Oti-Volta had palatal **c* **ɟ* **ɲ*, which appear in Kusaal as *s z ɲy* respectively. Evidence for palatal **ʎ* is provided by the Gurma correspondences of Western Oti-Volta *y-*, which may be either *y-* or *l-*; thus with the Moba words

<i>yommg</i>	"slave"	Kusaal: <i>yàmmɪg</i> ^a
<i>yaalim</i>	"salt"	<i>yàarɪm</i> ^m
<i>nlwob</i>	"six"	<i>ɲyúèb</i>
<i>nle</i>	"two"	<i>ɲyí</i>
<i>lwot</i>	"open"	<i>ỵɔ'ɔg</i> ^ɛ
<i>lwo</i>	"close"	<i>ỵɔ</i> ⁺

Cf also the ancient loanword *yūgúm*^{nɛ} "camel" (Farefare *yúgné*, pl *yugma*, Mooré *yúgémde*) ultimately from Berber **a-ləqəm* (Souag 2016); Koromfe *logomde*.

(Many languages have borrowed the word via Hausa *ràakumii* instead.)

If the primary adjective formant *-l-* [13.1.2](#) represents this same **ʎ*, it would explain the absence of any Adjectival Verbs like **sābɪ*^{a/}, because **sabɪ**ʎa* would result instead in **sābɪ*^{ya/}; Manessy's Dagbani *sabla* "be black" seems to be a ghost form.

No cases of stem-final *d* occur in Invariable Verbs, probably due to a rule **Vd**ʎa* → *V*^ʎ*Vya*:

<i>gɔ̃'e</i> ^{ya/}	WK	"have neck extended"
<i>gɔ̃dɪg</i> ^{ɛ/}		"extend neck"

6.3 Vowel Changes

The vowel changes described in this section apply before Apocope, being often conditioned by elements which are deleted by Apocope.

6.3.1 Consonant Deletion and Vowel Fusion

Kusaal makes no distinction between word-internal sequences of adjacent vowels and diphthongs, though three-mora diphthongs are realised as disyllabic [2.4](#).

Some diphthongs probably arose historically by fusion of adjacent vowels following the loss of intervocalic **β* **ʎ*, but this leads to no significant synchronic alternations. For historical deletion of **g* after *a* *ɪa* *uə* *aɪ* *ɪaŋ* *uəŋ* see [6.1.1.1](#). With deletion of **g* after long vowels, there are numerous parallels with forms which preserve *g*, and in these cases it is therefore reasonable to treat the deletion and vowel fusion as synchronic processes.

Underlying **g* is deleted after *aa* *ɪə* *uə* *aɪ* *ɪəŋ* *ɛɪŋ* *ɔɔŋ*, along with their glottalised counterparts, whenever an affix vowel *a* or *ɪ* (not an epenthetic vowel or *ʊ*) follows the **g*. Vowel Fusion then creates three-mora vowel sequences:

* <i>aaga</i>	→ <i>aa</i> 8.1	* <i>aagi</i>	→ <i>aee</i>
* <i>ɪəga</i>	→ <i>iaa</i>	* <i>ɪəgi</i>	→ <i>iee</i>
* <i>uəga</i>	→ <i>uaa</i>	* <i>uəgi</i>	→ <i>uee</i>

and likewise with the glottalised vowels. (See below for the nasalised equivalents.)

The diphthongs *iaa* *uaa* arise from deletion of the **g* in *g*^a|*s*^ɛ Class singulars:

	<i>bōv</i> ^a		"goat"	pl <i>bōv</i> ^ɛ
but	<i>bāa</i> ⁼	← * <i>baaga</i>	"dog" 8.1	pl <i>bāa</i> ^ɛ
	<i>sīa</i> ⁺	← * <i>siəga</i>	"waist"	pl <i>sīa</i> ^ɛ
	<i>sàbùà</i> ⁺	← * <i>sabuəga</i>	"lover"	pl <i>sàbùə</i> ^ɛ

The diphthongs *ae ie ue* appear in Variable Verbs with stems in **Caag* **Ciag* **Cuөг* and their glottalised counterparts (see below on the nasalised equivalents); compare the forms with the suffix *-*g*- "become, make" seen in

	<i>kpi'e</i> ⁺	← * <i>kpi'əgi</i>	"approach"
	<i>kpi'əs</i> ^ε	← * <i>kpi'əsɪ</i>	"neighbours"
cf	<i>tēbiɡ</i> ^{ε/}		"get/make heavy"
	<i>tēbiśir</i> ^ε		"heavy"

There are many such "Fusion Verbs", showing base forms ending in the diphthongs *-ae -ie -ue* [11.1](#), e.g.

<i>pāe</i> ^{+/}	← * <i>paagi</i>	"reach"
<i>dūe</i> ^{+/}	← * <i>duөгi</i>	"raise, rise"

The LF *ae ie ue* reduce to the two-mora diphthongs *ae ie ue* after Apocope.

There are no underlying nasalised *iəŋ uəŋ*; instead *εεŋ ɔɔŋ* appear [6.1](#).

However, **g* is deleted after nasal *εεŋ ɔɔŋ* (unlike their oral equivalents *εε ɔɔ*) in the same contexts as after *iə uə* (i.e. before an affix vowel *a* or *ɪ*), and the resulting diphthongs coincide in vowel quality with those produced with *iə uə*:

* <i>āāga</i>	→ <i>aaŋ</i> 8.1	* <i>āāgi</i>	→ <i>aeen</i>
* <i>ēēga</i>	→ <i>iaaŋ</i>	* <i>ēēgi</i>	→ <i>ieen</i>
* <i>ōōga</i>	→ <i>uaaŋ</i>	* <i>ōōgi</i>	→ <i>ueen</i>

and likewise with the corresponding glottalised vowels.

The rule gives rise to alternations in nominals from the *g^a|s^ε* Class between SF-final *iaŋ uaŋ* and word-internal *εεŋ ɔɔŋ* before a consonant:

<i>zìŋ'a</i> ⁺	← * <i>zē'ēga</i>	"red" <i>g^a s^ε</i> Class sg
<i>zèŋ'əs</i> ^ε	← * <i>zē'ēsɪ</i>	"red" <i>g^a s^ε</i> Class pl
<i>zèŋ'əd</i> ^ε	← * <i>zē'ēdɪ</i>	"red" <i>g^ɔ d^ε</i> Class pl
<i>dùaŋ</i> ⁺	← * <i>dōōga</i>	"dawadawa" sg
<i>dòɔŋs</i> ^ε	← * <i>dōōsɪ</i>	"dawadawa" pl
<i>nūa</i> ^{+/}	← * <i>nōōga</i>	"hen"
<i>nōɔs</i> ^{ε/}	← * <i>nōōsɪ</i>	"hens"
<i>Mùa</i> ⁺	← * <i>Mōōga</i>	"Mossi person"
<i>Mòɔs</i> ^ε	← * <i>Mōōsɪ</i>	"Mossi people"
<i>Mòɔɡ</i> ^ɔ	← * <i>Mōōɡu</i>	"Mossi country"
<i>Mòɔl</i> ^ε	← * <i>Mōōlɪ</i>	"Mooré language"

In derivation the rule causes alternation between Fusion Verb forms from historical **-gɪ*, ending in SF *ieŋ ueŋ*, and cognate forms with *εεŋ ɔɔŋ*:

<i>nìe</i> ⁺	← <i>*nēĩgɪ</i>	"appear"
<i>nèeɪ</i> ^ε	← <i>*nēĩlɪ</i>	"reveal"
<i>pūŋ'e</i> ^{+/}	← <i>*pĩ'ĩgɪ</i>	"rot"
<i>pōŋ'ɔɪ</i> ^{ε/}	← <i>*pĩ'ĩlɪ</i>	"cause to rot"
<i>nyū'e</i> ^{+/}	← <i>*yĩ'ĩgɪ</i>	"set alight"
<i>nyō'ɔs</i> ^{ε/}	← <i>*yĩ'ĩsɪ</i>	"smoke" (noun)
<i>sūeŋ</i> ^{+/}	← <i>*sĩĩgɪ</i>	"anoint"
<i>sōŋ</i> ⁺	← <i>*sĩĩ</i>	"rub"
<i>zìŋ'a</i> ⁺	← <i>*zē'ĩga</i>	"red" <i>g</i> ^a <i>s</i> ^ε Class sg
<i>zèŋ'og</i> ^ɔ	← <i>*zē'ĩgɔ</i> 6.3.2	"red" <i>g</i> ^ɔ <i>d</i> ^ε Class sg

The fronting effect of **-gɪ* differs from the fronting caused by **-y-* [6.3.2](#):

<i>sūŋ'e</i> ^{+/}	← <i>*sĩĩgɪ</i>	"become better than" WK
<i>sōŋ'e</i> ^{ya/}	← <i>*sĩĩya</i>	"be better than"

When *aa iə uə aaŋ* precede a **g* which is *not* followed by an affix vowel, they remain unchanged. The only remaining sign of the former presence of **g* is the resulting disturbance of toneme allocation in Tone Pattern H words [7.2.1.1](#).

<i>náaf</i> ^ɔ	← <i>*nāágfū</i>	"cow"	pl <i>nīigí</i> ⁺	cb <i>nā'</i> -
<i>dí'ər</i> ^ε	← <i>*dī'ágrī</i>	"receiving"	cf <i>dī'e</i> ^{+/}	"get" ← <i>*dī'əgí</i>
<i>vúər</i> ^ε	← <i>*vūégrī</i>	fruit of <i>vúeŋ</i> ^a tree	pl <i>vūáá</i> ⁼	

Surface *ieŋ ueŋ* appear in just one context: Fusion Verbs with nasal vowels introduce *ieŋ ueŋ* into the Dynamic Imperfective, imperative and gerund forms:

	<i>nèeɪ</i> ^ε		"empty" (← "clear")
but	<i>nìər</i> ^ε		gerund of <i>nìe</i> ⁺ "appear"
	<i>pōŋ'ɔɪ</i> ^{ε/}	← * <i>põ'õlɪ</i>	"cause to rot"
but	<i>púŋ'ər</i> ^ε		gerund of <i>pūŋ'e</i> ^{+/} "rot"
	<i>pūŋ'əd</i> ^{a/}		dipf

This is readily attributable to the analogy of verbs with oral vowels:

	<i>pūŋ'e</i> ^{+/}	base <i>pūŋ'əd</i> ^{a/}	dipf <i>púŋ'ər</i> ^ε	ger "rot"
cf	<i>dūe</i> ^{+/}	base <i>dūəd</i> ^{a/}	dipf <i>dúər</i> ^ε	ger "raise"

Levelling in Variable Verb flexion and gerund formation is common, but the *gerund* vowels were probably not analogical historically. Gerunds like **pon'or* or **neer* are never found for *pún̄'ər*^ε "rotting" or *nìər*^ε "appearing", but dipfs like *pon'od* *p̄n̄'ɔd* do occur in texts. It would be surprising for gerunds to be subject to levelling before finite forms (cf 7.3) and the tonal evidence suggests a different analysis.

Fusion verbs lack any tonal evidence of a lost mora in the dipf 7.3.1: *pūn̄'əd*^{a/} not **pún̄'əd*^a "rot." This too might be the result of levelling; however, comparative evidence and irregularities in Variable Verbs 11.1.1 suggest that the dropping of a derivational suffix before the imperfective flexion may once have been common. Fusion Verbs may preserve this pattern, with **g* absent in the dipf by *morphological* rule; forms like *pon'od* *p̄n̄'ɔd*^{a/} also reflect this. The *iən̄ uən̄* of gerunds correlate with *tones* showing underlying **g*: *pún̄'ər*^ε "rotting." Historically, **g* deletion probably followed insertion of an epenthetic vowel between the **g* and any following consonant; absorption of this vowel by the preceding *iən̄ uən̄* resulted in sequences which, unlike other *iən̄ uən̄*, did not merge with *ɛən̄ ɔɔn̄*, either as extra-long, or as already diphthongised *phonologically*.

6.3.2 Before *-ya *-gu *-kku *-ηηυ

In the LF, vowels are subject to fronting before *y* and to rounding before a following rounded vowel if a velar intervenes.

The affected second morae are always high [i] [ɪ] [u] or [ʊ].

Fronting: Short fronting diphthongs result when word-medial *-y-* of a LF would become syllable-closing after a short back vowel as a result of Apocope and is instead changed to *ɛ* 2.2:

SF	<i>vūɛ</i>	LF	<i>vūyá</i>	"be alive"
SF	<i>t̄ɛ</i>	LF	<i>t̄yá</i>	"be bitter"
SF	<i>sāɛn̄</i>	LF	<i>sānyá</i>	"blacksmith"
SF	<i>s̄ɛn̄</i>	LF	<i>s̄nyá</i>	"witch"

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

SF	<i>sū'e</i>	LF	<i>sū'eyá</i>	"own" <i>sū'e</i> ^{ya/}
cf	<i>sū'ulím^m</i>			"property"
SF	<i>s̄n̄'e</i>	LF	<i>s̄n̄'eyá</i>	"be better than" <i>s̄n̄'e</i> ^{ya/}

Rounding: Short unrounded root vowels become diphthongs in *y* before LF
**kku* **ηηυ*:

<i>gbàṽṽ</i> ^ɔ	← * <i>gbāṽṽ</i>	"book"	pl <i>gbàna</i> ⁺
<i>lāṽk</i> ^ɔ	← * <i>lakku</i>	"goods item"	pl <i>lā'ad</i> ^ε
<i>yīṽṽ</i> ^{ɔ/}	← * <i>yīṽṽ</i>	"single"	pl <i>yīná</i> ⁺
<i>sàbùà</i> ⁺	← * <i>sabuəga</i>	"lover"	pl <i>sàbùəs</i> ^ε

Tense *i* does not become a diphthong in the only case in my materials:

<i>nìn-gbīṽ</i> ^{ɔ/}	"body"	pl <i>nìn-gbīná</i> ⁺
-------------------------------	--------	----------------------------------

The vowel may simply be taken from the alternative singular *nìn-gbīn*^{ε/}.

Short *ia* becomes the short diphthong *iaṽ*:

<i>bjāṽṽk</i> ^ɔ	← * <i>bjākkv</i>	"shoulder"	pl <i>bjāṽ'ad</i> ^ε
----------------------------	-------------------	------------	--------------------------------

Short *ya* becomes *ɔ*: **yakkv* → *ɔkkv*

<i>bòk</i> ^ɔ	← * <i>bɔakkv</i>	"pit"	pl <i>bò'ad</i> ^ε
-------------------------	-------------------	-------	------------------------------

Long vowels undergo rounding of a back second mora before LF **gv* **ṽṽ*. The second mora is always high.

	<i>dàad</i> ^ε	"logs"
but	<i>dàvg</i> ^ɔ ← * <i>daagv</i>	"log"
	<i>fēṽ'əd</i> ^{ε/}	"ulcers"
but	<i>fēṽ'og</i> ^{ɔ/} ← * <i>fē'ṽgv</i>	"ulcer"

The second mora of the long vowel *ii* becomes tense *u*, giving *iu*; this contrasts with the second mora of the long vowel *iə*, which becomes [ʊ], giving *io* [iʊ]:

	<i>vīug</i> ^{ɔ/} ← * <i>viigv</i>	"owl"	pl <i>vīid</i> ^{ε/}
but	<i>dàbīog</i> ^ɔ ← * <i>dabiəgv</i>	"coward"	pl <i>dàbīəd</i> ^ε
	<i>kpī'og</i> ^ɔ ← * <i>kpi'əṽṽ</i>	"strong"	pl <i>kpī'əma</i> ⁺

A parallel case with *uu/uv* does not occur, because of the rule **uəgv* → *ɔɔgv*:

	<i>Sà'dàbòòg</i> ^ɔ ← * <i>Sa'dabuəgv</i>	"place of the Sarabose clan"
cf	<i>Sà'dàbùəs</i> ^ε	"Sarabose clan members"
	<i>lām-fóòg</i> ^ɔ ← * <i>lam-fuəgv</i>	"toothless"
		(<i>lām</i> ^{mε/} "gum" <i>fùe</i> ⁺ "draw out")

The **epenthetic vowel** *i* is rounded to *u* before LF **-gυ* **-ŋυ*:

	<i>āṇḍiḡ^a</i>	← <i>*āāḍiḡa</i>	"black plum tree"
but	<i>gàadug^ɔ</i>	← <i>*gaadigυ</i>	"(sur)passing" (gerund)
pl	<i>mālīma⁺</i>	← <i>*malīmaa</i>	"sacrifices"
but	<i>mālūṇ^ɔ</i>	← <i>*malūṇυ</i>	"sacrifice"

This multiplication of diphthongs and epenthetic vowels might be avoided by ascribing phonemic labialisation to word-final velars and positing abstract word-final /w/ or /j/ segments. However, there is no phonetic basis for such a contrast in velars, and word-final [j] or [w] do not behave as consonants: words like *dāy* "man" are followed by [ʔ] before pause in statements, just like words ending in short vowels [4.2.2](#). It is preferable to make word-internal fronting and rounding rules precede Apocope [2.5](#). (A similar issue arises with so-called "Canadian Raising" in American English dialects which also show neutralisation by flapping of *t* and *d* after the vowel, where "writer" contrasts with "rider" in the vowels but with no phonetic contrast in the consonants themselves: Vance 1987.)

6.3.3 Length Constraints

See also on CVV ~ CVC root alternations [6.1.1.1](#).

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

<i>gàad^ε</i>	"pass"	<i>gàt^a</i>	"pass" dipf
<i>tēεg^{ε/}</i>	"drag" ILK	<i>tēk^{ε/}</i>	"pull" (<i>*tεεkkl</i>)

Hausa loanwords show this to be phonological, not morphophonemic:

<i>àtiy^ɔ</i>	"sea"	←	<i>tèeku</i>	"sea"
<i>kótù⁺</i>	"court"	←	<i>kootù</i>	"court" (← English)

3-mora vowel sequences [4.2.3 2.4](#) arise by Vowel Fusion [6.3.1](#) or by Liaison before the pronoun ^o [8.2.1](#). They are reduced by Apocope to 2-mora diphthongs in the SF. 3-mora diphthongs mostly occur word-finally in LFs, but can appear in SFs:

<i>vūáa⁼</i>	← <i>*vuεgaa</i>	"fruits of the <i>vúεṇ^a</i> tree"
-------------------------	------------------	--

A 3-mora *monophthong* appears with Apocope Blocking in *mà'aa* "only" (but LF *mà'anē* [6.4](#)); everywhere else, 3-mora monophthongs reduce to two morae [8.1](#).

Before Liaison, word-final 3-mora diphthongs are reduced to two morae and then monophthongised before all consonants except *y* [8.2.1](#); for the tones see [8.2.3](#).

6.4 Apocope Blocking

Certain full words have citation forms without Apocope. The form is like a LF, without the lowering of postconsonantal final ι υ to ε \mathfrak{C} seen before Prosodic Clitics. Words with Apocope Blocking ending in SF M toneme have LF-final H [7.1](#).

This is a derivational feature seen in many adverbs and quantifiers (including number words), and as a downtoning measure with adjectives [19.8.1.2](#):

<i>bédvǫ̃</i>	"a lot"	$g^{\mathfrak{C}} d^{\varepsilon}$ Class sg
<i>sùṅā</i>	"well"	$g^a s^{\varepsilon}$ Class sg
<i>yīnní</i>	"one"	$r^{\varepsilon} a^+$ Class sg
<i>ànāasí</i>	"four"	$g^a s^{\varepsilon}$ Class pl
<i>pāmm</i>	"a lot"	m^m Class

A number of nouns ending in $-i^+$ or $-u^+$ [9.6](#) also display Apocope Blocking.

Words of one underlying mora also do not show Apocope, e.g. *yā*^{+/} "houses", (SF *yā* LF *yáa*) and numerous enclitic particles.

Words with Apocope Blocking may display final extra-long simple vowels: *mà'aa* "only." They change final $-mu$ to $-mm$: *pāmm* "a lot."

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

<i>Lì à nē dǫ̀g.</i>	"It's a hut."
<i>Lì kā' dǫ̀gō.</i>	"It's not a hut."
with <i>Lì à nē bédvǫ̃.</i>	"It's a lot."
<i>Lì kā' bédvǫ̀v.</i>	"It's not a lot."

Before Prosodic Clitics which neutralise preceding length distinctions, the final vowels of such LFs contrast in quality alone with ε \mathfrak{C} [8.1](#).

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

<i>pāmm</i> SF <i>pāmnē</i> LF	"a lot"	<i>mà'aa</i> SF <i>mà'anē</i> LF	"only"
<i>gòllim</i> ^{nε}	"only"	<i>kòtāa</i> ^{nε}	"at all"

The LF of *nyāe*^{nε}/ "brightly, clearly" [20.4](#) is *nyāenē* [jǎĩnē].

Cf also *mē* DK KT SB NT *mèn* WK; clause finally (all sources) *mèn*^ε "also, too."

7 Word Tonal Structure

7.1 Tone Patterns

There are great constraints on the free occurrence of tonemes within words. Nominals show only three basic distinct overall patterns (labelled H, L and O), and verbs only two (H and LO.) Compounds have more tonal possibilities, being *phrases* composed of words with partly independent tones [8.4](#).

The distribution of tonemes on a word, prior to any effects of external tone sandhi or tone overlay, is specified by a **Tone Pattern**.

Regularities in derivation establish that roots themselves have identifiable tone patterns, which may be altered by derivational suffixes [7.5](#).

Synchronically, Tone Patterns are suprasegmental features of word *stems*, allocating tonemes mora-by-mora over the segmental structure of each complete word belonging to a flexional paradigm, with the precise instantiation changing as the segmental form changes. Allocation precedes Apocope, and furthermore precedes the application of segmental rules which delete morae (reduction of consonant clusters to single consonants [6.2.1](#) and deletion of *g [6.3.1](#)) and which disrupt the surface distribution of tonemes [7.2.1.1](#). For example, these two Pattern H nouns show different tonemes in the singular:

<i>sīṇ^P/</i> sg	<i>sīṇs^E/</i> pl	<i>sīṇ-</i> cb	"bee"
<i>píṇ^P</i>	<i>pīn⁺</i>	<i>pīn-</i>	"genet"

The difference is due to the fact that "bee" has a 2-mora CVV stem *sīṇ-*, whereas "genet" has a 3-mora CVVC stem *pīn-*, and in the singular has lost a mora from simplification of the consonant cluster **nf* to *f*.

A single paradigm only shows more than one Tone Pattern in the case of Agent Nouns which drop the derivational suffix *-d-* in the sg and cb; as Agent Nouns of Pattern LO verbs are Pattern O if they contain *-d-* and L otherwise, this produces a tonal alternation:

<i>pò'us^a</i>	<i>pō'usidib^a</i>	<i>pò'us-</i>	"worshipper"
--------------------------	------------------------------	---------------	--------------

Only with 2-mora Pattern H and O stems are the SF tonemes alone insufficient to predict LF-final tonemes:

O	<i>Lì à nē kūk.</i>	"It's a chair."
O	<i>Lì kā' kūka.</i>	"It's not a chair."
H	<i>Lì à nē dūk.</i>	"It's a cooking pot."
H	<i>Lì kā' dūkó.</i>	"It's not a cooking pot."

With SFs like *kōk* "chair" and *dōk* "pot" there are just too few segments for a difference between Patterns H and O to be expressed in the surface form, but the Patterns remain distinguishable in the LF. There are words which show tonal distinctions in the SF which are lost in the LF, like *náaP* "cow" versus *nú'ùg*³ "hand", but this can be accounted for by a late tone realisation rule 5.3.1. However, if the surface distribution of LF tonemes were adopted as a less abstract substitute for suprasegmental Tone Patterns, the alternation of the all-M sg/pl with the all-L cb in Pattern O 7.2.3 would still need simply to be declared part of the Pattern.

Synchronically, intrinsic LF-final tonemes are underspecified whenever the last stem toneme is L or H. For descriptive convenience, LF-final intrinsic tonemes are taken as

M	after H and L
M	in nouns and verbs of Tone Patterns O/LO whenever the stem is all-M
H	after M in all other cases

Words with Apocope Blocking 6.4 with SFs ending in M toneme change to final H in the LF:

SF <i>yā</i>	LF <i>yáa</i>	"houses"	<i>yā</i> ^{+/}
SF <i>bèdugū</i>	LF <i>bèdugúu</i>	"a lot"	<i>bèdugū</i> ^{+/}

Superscript Notation writes *yā*^{+/} *bèdugū*^{+/} by the usual convention 2.2.1. The only exception among free words is *kòbīgā*⁼ "one hundred."

Surface Tone Patterns can be analysed as the outcome of **internal tone sandhi** acting on an underlying allocation of M or L to every underlying mora, vocalic or not. (Historically, all morae may in fact have once been vocalic, with *deletion* of non-root vowels between homorganic consonants and after nasals, but all that is necessary for this purpose is for all morae be underlying tone-bearing units.) This allocation precedes Apocope, and in particular precedes the deletion of *g 6.3.1 and development of consonant clusters 6.2.1. Forms which lose a mora by these processes show aberrant tonal patterns 7.2.1.1.

Roots may carry MM, ML, LM or LL tonemes. A derivational suffix may carry M or L, but may carry M only if there are no preceding M tonemes already. Before a derivational suffix ML roots become MM and LM roots become LL 7.5.

Flexional suffixes bear M toneme unless preceded by stem-final M, when they dissimilate to L. The plural suffixes *-a*⁺ and *-i*⁺ bear the last *stem* toneme on the first mora, with the second mora showing the suffix toneme. The singular suffix *-a* displays the last stem toneme.

Three internal tone sandhi rules then produce the surface tonemes.

Rightward **M Spreading** causes ML to become MH, unless the consonants before and after the L mora have assimilated to form a consonant cluster, or the L mora is the second in a syllable, in which cases ML instead becomes HL. A stem mora beginning with **m* after a *non-root* M toneme is also not affected by M spreading: again, the M toneme becomes H instead.

Pattern **O Raising** is triggered by the attachment of any flexional suffix (including ^a) to a stem with no intrinsic M tonemes; all tonemes in the entire word become M. It precedes L Spreading, but need not be ordered with respect to M spreading.

Rightward **L Spreading** applies after M spreading and Pattern O Raising. It causes all remaining LM to become LL, after which word-final LH becomes LM.

Following the application of internal tone sandhi, tone Levelling occurs within syllables 5.2 and all tonemes on non-vocalic morae are deleted.

Three basic Tone Patterns are distinguished, according to whether the stem has underlying initial M, underlying non-initial M, or no underlying M toneme at all:

<u>Pattern Name</u>	<u>Intrinsic Stem Tonemes</u>	<u>Surface Tonemes in Nominals</u>
Pattern H	MM... or ML...	initial M or H
Pattern L	L...M	initial L
Pattern O	L...	all-M in sg/pl; all-L in cb

All Western Oti-Volta languages for which I have adequate tonal information have analogues of Patterns H, L and O; furthermore, the noun tone patterns of Buli correspond systematically to these, showing respectively H, L and mid tone stems:

<i>nááb</i>	"cow"	cf Kusaal <i>náaP</i>	<i>id</i>
<i>tììb</i>	"tree"	cf Kusaal <i>tììg^a</i>	<i>id</i>
<i>būūk</i>	"goat"	cf Kusaal <i>būūg^a</i>	<i>id</i>

In the other Western Oti-Volta languages, Pattern O shows a regular alternation between all-H free forms and all-L cbs; in Buli, between all-mid free forms and all-L cbs, tonally identical to the cbs of the Buli equivalent of Pattern L.

Akanlig-Pare and Kenstowicz 2002 regard Mooré Pattern O stems as intrinsically tonally unmarked; they copy the H tone (= Kusaal M) of a flexional suffix but otherwise default to all-L. Olawsky 1999 similarly takes Dagbani Pattern O stems as intrinsically toneless, but he follows Anttila and Bodomo (on Dagaare) in attributing O Raising to *stress*. This is not workable with surface stress 2.4 in Kusaal. Even in Dagbani, stressed verb forms may have all-L tonemes. O Raising is in fact

triggered by the addition of any flexional suffix; as all flexional suffixes have intrinsic M tone after all-L stems this is essentially equivalent to the tone-copying proposal. Note, however, that M *derivational* suffixes do not trigger the change.

These previous analyses require an underlying three-way contrast between M, L and unmarked tone-bearing units. (This distinction differs from that suggested in [5.3.1](#); all tone-bearing units in these unmarked stems would surface with either L or M tonemes.) The nominal Subpattern HL [7.2.1.2](#) demonstrates that roots can carry two tonemes, prompting the alternative analysis adopted here: Pattern O and L roots are LL and LM respectively, and O Raising is blocked by non-initial M tonemes⁵.

7.2 Nominals

Prefixed nominals differ in tones only in that the cbs of nominals with M nominal prefixes always have H toneme; sg and pl are unchanged. L nominal prefixes do not affect the stem tone pattern at all [7.2.4](#).

The tones of compounds are determined by external tone sandhi [8.4](#) [8.3](#).

Nominals have three flexional forms [9.1](#). The combining form, which is the bare stem, is always affected by Apocope because it cannot be clause final.

Nominal examples will be given as sg, pl, cb.

Stem morae are counted exclusive of nominal prefixes.

7.2.1 Pattern H

Regular Pattern H displays H on the first, second or third mora of the LF (disregarding any prefix.) All tonemes before the H are M, and all following the H are L. This H falls on a third mora if it exists and is vocalic. If not, it falls on the second mora, unless this is the second mora of a long vowel [5.2](#), in which case the H appears written on the *first* mora, and the toneme covers both morae of the long vowel. Cbs have M tonemes up until any third toneme, which is H.

<i>vōr</i> ^{ε/}	<i>vōyá</i> ⁺	<i>vōr-</i>	"alive"
<i>yīr</i> ^{ε/}	<i>yā</i> ^{+/}	<i>yī-</i>	"house"
<i>fūug</i> ^{ɔ/}	<i>fūud</i> ^{ε/}	<i>fū-</i>	"shirt, clothes"
<i>dōk</i> ^{ɔ/}	<i>dōgud</i> ^{ε/}	<i>dōg-</i>	"cooking pot"
<i>nīd</i> ^{a/}	<i>nīdɪb</i> ^{a/}	<i>nīn-</i>	"person"
<i>nīf</i> ^{ɔ/}	<i>nīnɪ</i> ⁺	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>kūgur</i> ^{ε/}	<i>kūgá</i> ⁺	<i>kūg-</i>	"stone"

5) Toende Kusaal shows word-internal H after L in words where Agolle does not, such as *zìlím* "langue", Agolle SF *zìlum* versus the Variable Verb *sìbìg* "punir" (Niggli, "La phonologie du Kusaal" pp 134ff), but this is probably leftward docking of a following H tone left floating by Apocope [8.3](#) rather than a survival of an earlier stem tone pattern; cf SF *bùrj* LF *bùṇá* "âne", Agolle LF *bùṇā*.

<i>gṣ̄t^a/</i>	<i>gṣ̄tíb^a /tt/</i>	<i>gṣ̄t-</i>	"seer, prophet"
<i>sābílíg^a</i>	<i>sābílís^ε</i>	<i>sābíl-</i>	"black"
<i>yūgúm^{mε}</i>	<i>yūgumá⁺</i>	<i>yūgum-</i>	"camel"
<i>sābíl^{lε}</i>	<i>sābílá⁺</i>	<i>sābíl-</i>	"black"
<i>sú'əṅ^a /ṅṅ/</i>	<i>sū'əmís^ε</i>	<i>sū'əṅ-</i>	"rabbit"
<i>sāan^a/</i>	<i>sāam^{ma}</i>	<i>sāan-</i>	"stranger, guest"
<i>dī'əs^a/</i>	<i>dī'əsídìb^a</i>	<i>dī'əs-</i>	"receiver"
<i>sūgvríd^a</i>	<i>sūgvrídìb^a</i>	<i>sūgvríd-</i>	"forgiver, forbearer"
<i>kū'alíg^a</i>	<i>kū'alís^ε</i>	<i>kū'alíg-</i>	traditional smock
<i>sáannìm^m</i>			"strangerhood"

LFs ending in long vowels or diphthongs, or in *-mm* (where the second *m* was historically syllabic but is now consonantal) cannot carry a toneme on the final mora. The SF forms are regular, but if the LF final mora would have carried H toneme by the usual rules, the H is transferred to the next preceding vocalic mora which is *not* the last of a long vowel/diphthong [5.2](#), replacing the previous toneme, which is always M. Superscript Notation still writes the acute tone mark at the end [2.2.1](#); such marks are interpreted as falling on the nearest preceding vocalic mora which is not the last in a long vowel or diphthong:

<i>nūa⁺/</i>	SF <i>nūa</i>	LF <i>nūáa</i>	"hen"
<i>dāam^m/</i>	SF <i>dāam</i>	LF <i>dáamm</i>	"millet beer"
<i>vūm^m/</i>	SF <i>vūm</i>	LF <i>vúmm</i>	"life"
<i>tāuṅ⁺/</i>	SF <i>tāuṅ</i>	LF <i>távṅ</i>	"opposite-sex sibling"

7.2.1.1 Tonal Effects of Deleted Morae

Pattern H forms which have lost an underlying mora display the H toneme one place to the left of its expected position [7.2.1.1](#), prior to Levelling [5.2](#) within syllables. So when clusters are reduced to single consonants by assimilation [6.2.1](#)

<i>nīṅ^a /ṅṅ/</i>	<i>nīs^ε *ns</i>	<i>nīṅ-</i>	"bird"
<i>pīṅ^ɸ *nf</i>	<i>pīn⁺</i>	<i>pīn-</i>	"genet"
<i>ṅyīr^ɸ *rr</i>	<i>ṅyīr⁺</i>		"egusi seed"

With a nominal prefix [7.2.4](#) *tīn-*:

<i>tīntōṅríg^a *rr</i>	<i>tīntōṅrís^ε</i>	<i>tīntōṅr-</i>	"mole" (animal)
----------------------------------	------------------------------	-----------------	-----------------

So too with deletion of *g when no affix vowel follows [6.3.1](#):

<i>náaf</i> ^p 5.2	← * <i>nāágfū</i>	(cf pl <i>nīigí</i> ⁺)	"cow"
<i>wáaf</i> ^p	← * <i>wāágfū</i>	(cf pl <i>wīigí</i> ⁺)	"snake"
<i>yáab</i> ^a	← * <i>yāágbā</i>		"grandparent"
<i>vúor</i> ^ε	← * <i>vūégrī</i>		fruit of the <i>vúor</i> ^a tree

Here belong all regular gerunds in *-r*^ε formed from Pattern H Fusion Verbs [11.1](#) which have phonologically-deleted **g* in the base form:

<i>náar</i> ^ε 5.2	← * <i>nāágrī</i>	"end"
from <i>nāe</i> ^{+/}	← * <i>nāagí</i>	"finish"
<i>dí'ar</i> ^ε	← * <i>dī'égrī</i>	"receiving"
from <i>dī'e</i> ^{+/}	← * <i>dī'əgí</i>	"get"
<i>pún'or</i> ^ε	← * <i>pṣ'ǵgrī</i> 6.3.1	"rotting"
from <i>pūn'e</i> ^{+/}	← * <i>pṣ'ǵgí</i>	"rot"

Fusion Verbs show evidence of **g* only in base forms and in gerunds; in dynamic imperfectives and in derived agent nouns **g* is absent:

<i>nāad</i> ^{a/}	"finish" dipf
<i>nāad</i> ^{a/}	"finisher"

7.2.1.2 Subpattern HL

Subpattern HL represents stems with intrinsic initial ML. Few words belong here, but several are very common. Sg/pl forms with consonant-initial flexions show root-initial H falling on a *short* vowel, or on a long vowel with L on the second mora in the SF; otherwise Subpattern HL coincides with regular Pattern H.

<i>nú'ùg</i> ^ᵈ	<i>nú'ùs</i> ^ε	<i>nū'-</i>	"hand, arm"
<i>à-gáùṅg</i> ^ᵈ	<i>à-gáàṅd</i> ^ε	<i>à-gāṅ-</i>	"pied crow"
<i>nóbìr</i> ^ε	<i>nōbá</i> ⁺	<i>nōb-</i>	"foot, leg"
<i>gél</i> ^ε	<i>gēlá</i> ⁺	<i>gēl-</i>	"egg"
<i>gbéèṅm</i> ^m	no pl	<i>gbēṅ-</i>	"sleep"
<i>kísùg</i> ^ᵈ	<i>kīsá</i> ⁺	<i>kīs-</i>	"hateful, taboo" (adj)
<i>āṅsìb</i> ^a	<i>āṅs-nám</i> ^a	<i>āṅs-</i>	"mother's brother"

Here belong the irregularly formed gerunds [12.1.1.1.1](#):

<i>sóṅsìg</i> ^a	"conversing"
<i>gósìg</i> ^a	"looking"
<i>kìkírùg</i> ^ᵈ	"hurrying" (L prefix)

Olawsky treats words like Dagbani *gállì* "egg" (Kusaal *gél^{lɛ}*) as regular Pattern H, and cognates of regular Kusaal 2-mora Pattern H stems as a separate tone class.

Several HL words may have lost a stem mora historically; *-s-* *-r-* may represent older *-ss-* *-rr-*; cf also Mooré *náooré* "leg" *gǎoobgó* "pied crow", *góóém* "sleep."

7.2.2 Pattern L

Pattern L comprises all nominals beginning with L in sg/pl. All stem tonemes are L, except for non-root (third or fourth) morae preceding stem **-m-* (including cases where the *m* has undergone assimilation to *ŋ*), which are H.

<i>sù'ug^a</i>	<i>sù'us^ɛ</i>	<i>sù'-</i>	"knife"
<i>zàk^a</i>	<i>zà'as^ɛ</i>	<i>zà'-</i>	"dwelling-compound"
<i>dìgɪr^ɛ</i>	<i>dìga⁺</i>	<i>dìg-</i>	"dwarf"
<i>mòlɪ^ɸ</i>	<i>mòlɪ⁺</i>	<i>mòl-</i>	"gazelle"
<i>kù'əm^m</i>	no pl	<i>kɪ'à-</i>	"water"
<i>mà⁺</i>	<i>mà nám^a</i>	<i>mà-</i>	"mother"
<i>mɛɛŋ^a</i>	<i>mɛɛmɪs^ɛ</i>	<i>mɛɛŋ-</i>	"turtle"
<i>pùgudɪb^a</i>	<i>pùgud-nàm^a</i>	<i>pùgud-</i>	"father's sister"
<i>sàam^{ma}</i>	<i>sàam-nàm^a</i>	<i>sàam-</i>	"father"
<i>dìəm^{ma}</i>	<i>dìəm-nàm^a</i>	<i>dìəm-</i>	"man's parent-in-law"
<i>àŋrɪŋ^ɔ</i>	<i>àŋrɪma⁺</i>	<i>àŋrɪŋ-</i>	"boat"
<i>kàrɪŋ^ɔ</i> or <i>kàrɪmɪŋ^ɔ</i>			"reading" (gerund)
<i>zùlɪŋ^ɔ</i>	<i>zùlɪma⁺</i>	<i>zùlɪŋ-</i>	"deep"
<i>yàlɪŋ^ɔ</i>	<i>yàlɪma⁺</i>	<i>yàlɪŋ-</i>	"wide"
<i>zìlɪm^{mɛ}</i>	<i>zìlɪma⁺</i>	<i>zìlɪm-</i>	"tongue"
<i>nòŋɪd^a</i>			"lover"
<i>siilíŋ^a</i>	<i>siilímɪs^ɛ</i>		
	<i>siilís^ɛ</i>		
	<i>siilímà⁺</i>	<i>siilíŋ-</i>	"proverb"
<i>zàaŋsúŋ^ɔ</i>	<i>zàaŋsíma⁺</i>	<i>zàaŋsúŋ-</i>	"dream"
<i>nòŋɪlɪm^m</i>		<i>nòŋɪlɪm-</i>	"love"
<i>nòŋɪdɪm-tāa⁼</i>	<u>13.1.1.4</u>		"fellow lover" WK
<i>sùŋɪdɪm-tāa⁼</i>			"fellow-helper"
<i>dàalɪm^m</i>	<i>dàalímɪs^ɛ</i>	<i>dàalɪm-</i>	"male sex organs"
<i>pù'alɪm^m</i>	<i>pù'alímɪs^ɛ</i>	<i>pù'alɪm-</i>	"female sex organs"
<i>bì'isɪm^m</i>			"milk"

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

<i>bòɔdɪm</i> ^m	no pl	<i>bòɔdɪm-</i> 9.2.2	"will"
<i>zòtɪm</i> ^m	no pl		"fear"
<i>dàalɪm</i> ^m	no pl		"maleness"
<i>pù'alɪm</i> ^m	no pl		"femininity"

Note that the sg Noun Class suffix ^a does not prevent a stem-final underlying M toneme from preventing O Raising (cf verbal dipf suffixes [7.3](#)):

<i>sàal</i> ^a	<i>sàalɪb</i> ^a	<i>sàal-</i>	"human"
--------------------------	----------------------------	--------------	---------

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

<i>bùgúm</i> ^m	no pl	<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
---------------------------	-------	--------------------------------	--------

These forms in *-mís*^ε perhaps derive from **-mɪmsɪ*:

no sg	<i>tàdɪmís</i> ^ε	"weakness"
no sg	<i>bùdɪmís</i> ^ε	"confusion"

7.2.3 Pattern O

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

<i>bōvɔg</i> ^a	<i>bōvs</i> ^ε	<i>bù-</i>	"goat"
<i>tān</i> ^{nε}	<i>tāna</i> ⁺	<i>tàn-</i>	"earth"
<i>sīd</i> ^a	<i>sīdɪb</i> ^a	<i>sìd-</i>	"husband"
<i>pɸ'ā</i> ^a	<i>pō'ab</i> ^a	<i>pɸ'à-</i>	"woman, wife"
<i>sā'ab</i> ^ɔ	no pl	<i>sà'-</i>	"millet porridge"
<i>gbīgɪm</i> ^{nε}	<i>gbīgɪma</i> ⁺	<i>gbìgɪm-</i>	"lion"
<i>ɲwāaŋ</i> ^a	<i>ɲwāamɪs</i> ^ε	<i>ɲwàaŋ-</i>	"monkey"
<i>mēɛd</i> ^a	<i>mēɛdɪb</i> ^a	<i>mèɛd-</i>	"builder"
<i>sīākɪd</i> ^a	<i>sīākɪdɪb</i> ^a	<i>sìākɪd-</i>	"believer"
<i>būtɪŋ</i> ^a	<i>būtɪs</i> ^ε	<i>bùtɪŋ-</i>	"cup"
<i>mēɛdɪŋ</i> ^a	<i>mēɛdɪs</i> ^ε	<i>mèɛdɪŋ-</i>	"building tool"

Agent nouns of the types which have *-d-* only in the plural when derived from from Pattern LO verbs are tonally heteroclite, consistently showing Pattern L sg and Pattern O pl (the cb would have had L tonemes in either case) [7.5.1](#):

<i>pò'ʊs^a</i>	<i>pō'ʊsɪdɪb^a</i>	<i>pò'ʊs-</i>	"worshipper"
<i>kùəs^a</i>	<i>kūəsɪdɪb^a</i>	<i>kùəs-</i>	"seller"

Pattern O nominals are all either root-stems or stems in *m n* or *d* (including stems where the *d* has been assimilated into a consonant cluster or *t*); however, all three suffixes are also seen in Pattern L words.

The word *gīŋɪlɪm^m* "shortness" is derived from the Pattern O adjective *gīŋ^a* "short"; it is the only potential five-mora-stem Pattern O word in my data, so this may be the regular toneme assignment in such cases. Cf however *gīŋɪlɪm^m id.*

Pattern O all-M LFs become all-L at the end of questions [8.1](#):

<i>Lì kâ' gbígìmmɛɛ?</i>	"Isn't it a lion?"
--------------------------	--------------------

Certain Pattern O words show **LF-final H** instead of the expected M toneme before Prosodic Clitics, but not before Liaison Words. For WK this occurs when the LF has > 3 *vocalic* morae and ends in -VCV, where *C* is a *single* consonant (i.e. not *ŋ*):

<i>yūɡʊdɪr^{ɛ/}</i>	<i>yūɡʊdɪr⁺</i>	<i>yùɡʊd-</i>	"hedgehog"
<i>ŋwāaŋ^a</i>	<i>ŋwāamɪs^{ɛ/}</i>	<i>ŋwàaŋ-</i>	"monkey"
<i>bāŋɪd^a</i>	<i>bāŋɪdɪb^{a/}</i>	<i>bàŋɪd-</i>	"wise man"
<i>kpārɪdɪŋ^a</i>	<i>kpārɪdɪs^{ɛ/}</i>	<i>kpàrɪdɪŋ-</i>	"thing for locking"

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

<i>gbīgɪm^{mɛ/}</i>	<i>gbīgɪmɪr⁺</i>	<i>gbīgɪm-</i>	"lion"
<i>zɔɔm^{mɛ/}</i>	<i>zɔɔmɪr⁺</i>	<i>zòɔm-</i>	"fugitive"
<i>tādɪm^{m/}</i>	<i>tādɪmɪs^{ɛ/}</i>	<i>tàdɪm-</i>	"weak person"

For some speakers, words of this type also have alternative forms with the final H in questions, alongside those displaying the usual change to all-L:

<i>Lì à nē gbīgɪmméɛ?</i>	"Is it a lion?" WK only; rejected by DK
<i>Lì à nē gbígìmmɛɛ?</i>	"Is it a lion?" both WK and DK

7.2.4 Nominals with Prefixes

On nominal prefixes generally see [14](#). Tonally they are either M or L.

L nominal prefixes do not affect the rest of the tone pattern of the prefixed nominal:

H	<i>dàyūug</i> ^{ɔ/}	<i>dàyūud</i> ^{ε/}	<i>dàyū-</i>	"rat"
H	<i>Bùsán</i> ^a	<i>Bùsààns</i> ^ε	<i>Bùsān-</i>	"Bisa person" 7.2.1.2
L	<i>kùkpàrig</i> ^a	<i>kùkpàris</i> ^ε	<i>kùkpàr-</i>	"palm tree"
O	<i>dàkīig</i> ^a	<i>dàkīs</i> ^ε	<i>dàkì-</i>	"sib-in-law via wife"

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

H	<i>zīnzāuη</i> ^{ɔ/}	<i>zīnzāná</i> ⁺	<i>zīnzáuη-</i>	"bat"
H	<i>Ṽwāmpūrig</i> ^{a/}	<i>Ṽwāmpūris</i> ^{ε/}	<i>Ṽwāmpúr-</i>	"Mamprussi person"
H	<i>gūmpūzēr</i> ^{ε/}	<i>gūmpūzēyá</i> ⁺	<i>gūmpūzér-</i>	"duck"
H	<i>tīntōnrīg</i> ^a	<i>tīntōnrís</i> ^ε	<i>tīntōnr-</i>	"mole" 6.2.1
H	<i>pīpīrig</i> ^{a/}	<i>pīpīris</i> ^{ε/}	<i>pīpír-</i>	"desert"
H	<i>bālērvg</i> ^{ɔ/}	<i>bālērɪd</i> ^{ε/}	<i>bālér-</i>	"ugly person"
H	<i>pūkpāad</i> ^{a/}	<i>pūkpāadíb</i> ^a	<i>pūkpá-</i>	"farmer" 14.4
O	<i>fūfūm</i> ^{mε}	<i>fūfūma</i> ⁺	<i>fūfúm-</i>	"envy; sty in the eye"
L	<i>sāmán</i> ^{nε}	<i>sāmánà</i> ⁺	<i>sāmán-</i>	"courtyard"

The examples labelled "H" might be Pattern O: the cb tonemes are as expected for Pattern O, and the LF-final sg/pl H tonemes might reflect a similar process to that resulting in LF-final H in other Pattern O words [7.2.3](#). There may be a limit on how many successive M morae can be tolerated within a word; cf [8.4](#) fn. With *zīnzāná*⁺ *gūmpūzēyá*⁺ compare WK's forms sg *wālīg*^a, pl *wālís*^ε beside *wālí*⁺ "a kind of gazelle."

M Raising only follows forms which have undergone Apocope. One or two compounds behave tonally as if the first element were a prefix, with no neutralisation of stem tones in the sg/pl, but only in the cb. All cases involve cbs as pre-modifiers rather than heads, and the cb stems are all probably originally of one mora:

<i>zūg-kūgur</i> ^{ε/}	<i>zūg-kūga</i> ⁺	<i>zūg-kúg-</i>	"pillow" 9.2.2
<i>kā-wēnnir</i> ^{ε/}	<i>kā-wēnna</i> ⁺	<i>kā-wén-</i>	"corn"

7.3 Verbs

Variable and Dynamic Invariable Verbs show just two Tone Patterns:

Pattern H	initial M or H
Pattern LO	L throughout in the Indicative and Imperative Moods M throughout in the Irrealis Mood

Variable Verbs have three finite forms [11.1](#). The *-m^a* imperative is found only (and always) with tone overlay [22.6.1.1](#) so it is unnecessary to treat it further here; Base and Dynamic Imperfective forms will be cited in that order. Dynamic Invariable Verbs have a single finite form which behaves tonally like the dipf of a Variable Verb.

The Tone Patterns of all regular deverbal nominals are predictable [7.5.1](#).

Variable Verbs show levelling of variant subpatterns in Pattern H and conflation of Patterns O and L. This was probably driven by regular falling together of the tone patterns in Base Forms. Nominal cbs show a collapse of Subpattern HL with regular Pattern H, and of Pattern O with L everywhere except with four-mora Pattern L stems. A similar process with Base Forms would create analogical pressure to level gerund tones. Tonally anomalous 2-mora stem gerunds survive with Subpattern HL and with Pattern L [12.1.1.1.1](#), testifying to a once more complicated picture: segmental and tonal levelling are seen proceeding in tandem in the two gerunds of *kīr^ε* "hurry, tremble": *kìkírùg^ɔ* and *kīrb^ɔ/*.

Pattern LO Dynamic Imperfectives have all-L stem tonemes, but the mora before Liaison is M, and the SFs are followed by the L Raising tone sandhi [8.3](#). Such stems have not become all-M, unlike Pattern O nominals with a M noun class suffix [7.2.3](#), because **the flexions *-d^a* and *-y^a* are composite**, the result of adding ^a to stems with suffixed *-d-* or *-y-* (**-ʎ-*), which have an intrinsic M toneme unless M already precedes, creating *Pattern L* type stems; this is parallel to the behaviour of Pattern L nouns with the Noun Class suffix ^a, e.g. *sàal^a* "human being" [7.2.2](#). This M toneme causes falling together of Patterns O and L in Dynamic Imperfectives; significantly, the Patterns remain distinct in Descriptive Verbs [7.3.3](#).

The different tonemes of 4-mora stem Pattern LO base forms like *zàaŋsim^m* and dipfs like *zàaŋsim^{ma}* "dream" from Pattern L nouns like *zàaŋsúŋ^ɔ* "dream" cb *zàaŋsúŋ-* must be attributed to levelling of the verbal forms on the analogy of 2- and 3-mora Pattern LO stems.

Irrealis Mood triggers O Raising, presumably by treating the stem-final vowel of a Pattern LO Base Form as an affix, instead of part of the stem as in the Indicative. By analogy, the much less common Irrealis forms of Pattern LO Dynamic Imperfectives and Pattern L Descriptive Verbs also change all L tonemes to M.

7.3.1 Pattern H

Pattern H resembles Pattern H in nominals. Again, it allocates H to one of the first three morae, with all preceding tonemes M and all following tonemes L. The H is placed on a third mora if it exists and is vocalic, and otherwise on the second, unless this is the second within a long vowel, when the H falls on the first mora.

Unlike nominals, verbs show no anomalous patterns due to mora deletion (see on Fusion Verbs below), and no Subpattern HL.

However, the final vowel of the base form of 2-mora-stem verbs only shows the expected H toneme before Liaison Words; before Prosodic Clitics it carries M:

<i>dōgí lī</i>	"cooked it"
<i>Ò pō dōgε.</i>	"He didn't cook."

The form before the Interrogative Clitic confirms that the pattern there is intrinsically MM, because it becomes LL like all other all-M sequences in this context:

<i>Ò pō gōsε.</i>	"She didn't look"
<i>Ò pō gósεε?</i>	"Didn't she look?"
<i>Ò pō dōgε.</i>	"She didn't cook."
<i>Ò pō dúgεε?</i>	"Didn't she cook?"
<i>Ò pō zábē.</i>	"She didn't fight."
<i>Ò pō zábεε?</i>	"Didn't she fight?"

In Superscript Notation these LFs will be written as MM rather than MH. Examples for Pattern H:

<i>nyē⁺</i>	<i>nyēt^{a/}</i>	"see"
<i>kō⁺</i>	<i>kōvd^{a/}</i>	"kill"
<i>dōg^ε</i>	<i>dōgvd^{a/}</i>	"cook"
<i>pīāñ^a</i>	<i>pīāñ^aad^{a/}</i>	"speak", "praise"
<i>kūl^ε</i>	<i>kūn^{na/}</i>	"go home"
<i>yādıg^{ε/}</i>	<i>yādıgıd^a</i>	"scatter"
<i>mōɔl^{ε/}</i>	<i>móɔn^{na}</i>	"proclaim"
<i>dīgı^{ε/}</i>	<i>dīgın^{na}</i>	"lay down"
<i>nōk^{ε/} /kk/</i>	<i>nōkıd^a /kk/</i>	"take"
<i>lāñım^m /ηη/</i>	<i>lāñım^{ma} /ηη/</i>	"wander searching"
	<i>dīgı^{ya/}</i>	"be lying down"
	<i>tī^{jya/}</i>	"be leaning" (objects)
	<i>zāñı^{la/}</i>	"be holding"
	<i>gōı^{la/}</i>	"have neck extended"

As with nominals [7.2.1](#), complications arise with LF's ending in long vowels or diphthongs or in *-mm*, where the final mora cannot bear a toneme. Again, the SFs are regular, but H allocated to a LF final mora is transferred to the next preceding mora which is not the last in a long vowel or diphthong, replacing its previous M toneme.

tōw^m/ *tōw^{ma}* or *tōwí^a* "disappear"
SF *tōw* LF *tōwmm*

pāe^{+/} "reach"
SF *pāe* LF *pāée*

As always, Superscript Notation writes the acute mark at the end [2.2.1](#).
Fusion Verbs show no sign of *g in the dynamic imperfective tonally:

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

Contrast the corresponding gerunds in *-r^ε*: *páar^ε* *dí'ər^ε* *púŋ'ər^ε*.

7.3.2 Pattern LO

All stem tonemes are L in the Indicative and Imperative, and M in the Irrealis.

<i>bùd^ε</i>	<i>bùt^a</i>	"plant"
<i>dì⁺</i>	<i>dìt^a</i>	"eat"
<i>mè⁺</i>	<i>mèəd^a</i>	"build"
<i>zàb^ε</i>	<i>zàbíd^a</i>	"fight, hurt"
<i>bùə^ε</i>	<i>bùən^{na}</i>	"call"
<i>bòdíg^ε</i>	<i>bòdígíd^a</i>	"get lost, lose"
<i>nìŋ^ε</i>	<i>nìŋíd^a</i>	"do"
<i>màa^ε</i>	<i>màan^{na}</i>	"sacrifice"
<i>dìgín^ε</i>	<i>dìgíníd^a</i>	"lie down"
<i>wàŋım^m</i>	<i>wàŋım^{ma}</i>	"waste away"
<i>sìilım^m</i>	<i>sìilım^{ma}</i>	"cite proverbs"
<i>zàaŋsım^m</i>	<i>zàaŋsım^{ma}</i>	"dream"
	<i>zìŋ'i^{ya}</i>	"be sitting down"
	<i>tàbı^{ya}</i>	"be stuck to"
	<i>tèŋr^a</i>	"remember"

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

	<i>Ò nà b̄dɪg.</i>	"He'll get lost."
	<i>Ò kù zābɛ.</i>	"She won't fight."
	<i>Ò kù b̄dɪgɛ.</i>	"He won't get lost."
	<i>Ò kù b̄dɪgɪd̄a.</i>	"She won't be getting lost."
	<i>Ò kù b̄uənn̄a.</i>	"She won't be calling."
	<i>Ò nà b̄dɪgɪ m.</i>	"He will lose me."
	<i>Ò kù b̄dɪgɪ m̄á.</i>	"He will not lose me."
	<i>Ò nà b̄dɪgɪ bá.</i>	"She will lose them."
	<i>Ò kù b̄dɪgɪ báa.</i>	"She won't lose them."
	<i>Ò kù b̄dɪgɪd̄ɪ m̄á.</i>	"He won't be losing me."
	<i>Ò kù zābɪd̄ɪ m̄á.</i>	"He won't be fighting me."
	<i>Ò kù zābɪd̄ɪn̄ɛ.</i>	"He wouldn't have been fighting."
	<i>Ò kù s̄ilɪmm.</i>	"She won't cite proverbs" WK
but	<i>Ò kù lāŋɪmm.</i>	"She won't wander about searching (<i>lāŋɪm^m</i>)."

Such forms always cause L Raising:

<i>Ò nà zāb n̄á'àb lā.</i>	"He'll fight the chief."
<i>Ò nà ḡɔs n̄á'àb lā.</i>	"He'll look at the chief."

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

	<i>Ò kù zāb·ó-o.</i>	"He won't fight him."
or	<i>Ò kù zāb·o-o.</i>	"He won't fight him."
	<i>Ò kù kād·ó-o.</i>	"He won't drive him away."
or	<i>Ò kù kād·o-o.</i>	"He won't drive him away."

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

<i>Ṁ n̄á b̄dɪgɛɛ?</i>	"Will I get lost?"
-----------------------	--------------------

7.3.3 Descriptive Verbs

Because their stems do not contain an intrinsically M suffix before the ^a flexion, Descriptive Verbs maintain distinct Patterns O and L. Where consonant gemination occurs before ^a, it is either part of an adjectival stem or due to analogy (so with all *m*-stems for WK [11.2](#).) Adjectives correspond to Descriptive Verbs with the same surface SF tones as the sg/pl of the adjective, HL being conflated with H:

H	<i>wōk</i> ^{ɔ/}	"long, tall"	<i>wā'am</i> ^{ma/}	"be long, tall"
	<i>būgusír</i> ^ɛ	"soft"	<i>būgus</i> ^{a/}	"be soft"
	<i>vūr</i> ^{ɛ/}	"alive"	<i>vūɛ</i> ^{a/}	"be alive"
	<i>zēm̄múg</i> ^ɔ	"equal"	<i>zēm</i> ^{ma/}	"be equal"
	<i>kísùg</i> ^ɔ	"hateful, taboo"	<i>kīs</i> ^{a/}	"hate"
L	<i>vènnig</i> ^a	"beautiful"	<i>vèn</i> ^{na}	"be beautiful"
	<i>zùlɔg</i> ^ɔ	"deep"	<i>zùlɔm</i> ^{ma}	"be deep"
	<i>pòɔdig</i> ^a	"small"	<i>pòɔd</i> ^a	"be few, small"
O	<i>tōɔg</i> ^ɔ	"bitter"	<i>tōɛ</i> ^{a/}	"be bitter"
	<i>gīg</i> ^a	"short"	<i>gīm</i> ^{ma/}	"be short"
	<i>kpī'ɔg</i> ^ɔ	"strong"	<i>kpī'əm</i> ^{ma/}	"be strong"
	<i>kpēɛŋm</i> ^m	"elder"	<i>kpēɛŋm</i> ^{ma/}	"be older than"
	<i>wēnnir</i> ^ɛ	"resembling"	<i>wēn</i> ^{na/}	"resemble"

However, the all-M tones of verbs corresponding to Pattern O adjectives have been reanalysed as verbal Pattern H, with LF-final H toneme. They never become all-L before the Interrogative Prosodic Clitic (specifically checked with WK and DK.)

All-L SFs become all-M in the Irrealis Mood, by analogy with dipfs [7.3](#):

Ò nà vēn.

"She'll be beautiful."

7.4 Quantifiers, Adverbs and Particles

Quantifiers and Adverbs resemble nominals in segmental and tonal structure, often with Apocope Blocking [6.4](#). Some particles also have the segmental and tonal structure of nominals [6](#).

Proclitic Liaison Words all have a single mora with a Fixed L toneme [8.3.1](#). Serialiser *n* is toneless and "transparent" to L Raising. Liaison Enclitics bear H after a host-final M toneme vowel and M otherwise; this M becomes H in the LF [8.2.3](#).

Enclitic particles with the Short Form CV which are *not* Liaison Words have three possible Tone Patterns, corresponding to the H, L and O Patterns of nominals.

Most are Pattern H. Pattern L are *ŋwà*⁺ "this" [19.3](#) and *sà*⁺ "hence, ago" [23.7](#); Pattern O is the Independent Perfective marker *yā*⁺ [22.6.2.1](#).

Patterns H and O fall together in the SF, where both appear with a M toneme.

Pattern H enclitics change the M tone to H in the Long Form (compare the tonal behaviour of words with Apocope Blocking 7.1.) Before the Negative Prosodic Clitic 8.1 the Pattern H LFs thus end in H, while the Pattern O clitic ends in M; so with the article *lā*^{+/} versus the Independent/Perfective particle *yā*⁺:

<i>Lì à nē dódòg lā.</i>	"It's the hut."
<i>Lì kā' dódòg lāa.</i>	"It's not the hut."

but *Ka o ba' nē o ma pu baŋ ye o kpelim yaa.*
Kà ò bā' né ò mà pū báy yé ò kpèlɪm yāa ⁺∅.
 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)

As usual before the Interrogative Prosodic Clitic 8.1, Pattern O becomes all-L; thus focus-*nē*^{+/} contrasts with *yā*⁺ in

<i>Lì bòdíg nē.</i>	"It's lost."
<i>Lì bòdíg néɛ?</i>	"Is it lost?"
but <i>Lì bòdíg yā.</i>	"It's got lost."
<i>Lì bòdíg yàa?</i>	"Has it got lost?"

7.5 Tone in Derivation

Root tone patterns can be deduced from the tone patterns of words with stems lacking any derivational suffix, and from common patterns in stems with different derivational suffixes but the same root.

Roots showing Subpattern HL in nominals 7.2.1.2 fall together with regular Pattern H in all other derived or cognate words:

<i>āṅsìb</i> ^a	"maternal uncle"	<i>āṅsín</i> ^a	"sister's child"
<i>kísùg</i> ^ɔ	"hateful"	<i>kīs</i> ^{a/}	"hate"
<i>gósìg</i> ^a	"looking"	<i>gōs</i> ^ɛ	"look"

Pattern L roots also fall together with Pattern O. Pattern L roots can give rise to derived Pattern O stems (*nā'am*^m "chiefship" ← *nà'ab*^a "chief"), suggesting that these mergers are not due to tone spreading rules, but to roots simply losing second-mora tonal contrasts before derivational suffixes.

After O/L roots, but not H roots, derivational suffixes themselves differ in tonal behaviour, implying that derivational suffixes can be M or L, but that M is only permitted when the root has no M toneme.

Most derivational suffixes added to O/L roots produce Pattern L/LO stems. No stem with **g* **/* or **s* as the final derivational suffix [13.1](#) is Pattern O: these suffixes therefore carry an underlying M toneme unless the preceding root does. This explains the regular assignment of 3- and 4-mora stem Pattern LO verb gerunds to Pattern L; most such stems would have always have been Pattern L.

Quite different is the **d* of agent nouns, deverbal adjectives and instrument nouns [7.5.1](#): forms from Pattern LO verbs are Pattern O, but stems where the *-d-* is absent (not just assimilated) are Pattern L, with a change of Tone Pattern possible even within a single noun paradigm: *pù'us*^a "worshipper", plural *pù'usidib*^a. This implies that the L toneme of **d* has *replaced* the M of any preceding suffix, which seems tonologically implausible. However, formations with **d* [13.1.1.2.1](#) either omit any preceding derivational suffix or omit the **d* itself in the most "derivational" forms, with retention of both suffixes becoming commoner as the formations become more productive and "flexional" [13.1.1.1](#): forms with a suffix restored before *-d-* probably preserve their original tone patterns despite segmental remodelling.

Imperfective Gerunds [13.1.1.4](#) with **d* from Pattern LO verbs are Pattern L, as in *bòɔdɪm*^m "will" and *mèédím-tāa*⁼ "fellow-builder" versus Pattern O *bōɔdir*^ε "desirable" and *mēédɪŋ*^a "building implement." Here **d* must have M toneme, as it does in the finite forms [7.3](#).

Considerations like these, along with the levelling of Tone Patterns that has taken place in Variable Verbs [7.3](#), and the segmental, but not tonal, remodelling of cbs [9.2.2](#), show that it is not possible to describe synchronic Tone Patterns purely as the outcome of tonemes associated with particular segments.

It is exceptional for forms derived from H roots to show L, O or LO Patterns, or vice versa; this happens systematically only with "assume-stance" verbs [13.2.1.1](#).

There is little evidence for change of Tone Pattern alone, without any segmental stem alteration, as a derivational process, but a possible case might be

<i>gbāuŋ</i> ^{ɔ/}	"skin", "book" DK	<i>gbàuŋ</i> ^ɔ	"book" WK
----------------------------	-------------------	---------------------------	-----------

7.5.1 Tones of Deverbal Nominals

All segmentally regular gerunds have predictable Tone Patterns:

from Pattern H verbs		Pattern H
from Pattern LO verbs		
2-mora stem Perfective		Pattern O
otherwise		Pattern L
<i>dūg^ε</i>	"cook"	→ <i>dūgub^{ɔ̃}</i>
<i>nōk^{ε/}</i>	"take"	→ <i>nōkír^ε</i>
<i>dīgɪl^{ε/}</i>	"lay down"	→ <i>dīgɪlóg^{ɔ̃}</i>
<i>mē⁺</i>	"build"	→ <i>mēēb^{ɔ̃}</i>
		→ <i>mēēdíṁ-tāa⁼</i> "fellow-builder"
<i>sùŋ^ε</i>	"help"	→ <i>sùŋír^ε</i>
<i>dìgɪn^ε</i>	"lie down"	→ <i>dìgɪnug^{ɔ̃}</i>
<i>zàaŋsɪm^m</i>	"dream"	→ <i>zàaŋsúŋ^{ɔ̃}</i>

Most segmentally irregular gerunds formed from root verbs are tonally regular. Agent nouns and deverbal adjectives also have predictable Tone Patterns:

from Pattern H verbs	Pattern H
from Pattern LO verbs	
containing derivational <i>-d-</i>	Pattern O
otherwise	Pattern L

-d- is not always present, being omitted regularly after certain longer verb stems. With nominals derived from Pattern LO verbs, forms with retained *d* (even when it is assimilated into a cluster as *-mn-* or *-nn-*) are Pattern O whereas those without it are Pattern L. The *-d-* is dropped in the sg and the cb, but not the pl, of agent nouns derived from 3-mora *s*-stem verbs, resulting in a regular change of tone Pattern within a single flexional paradigm:

<i>pù'us^a</i>	<i>pū'usɪdɪb^a</i>	<i>pù'us-</i>	"worshipper"
--------------------------	------------------------------	---------------	--------------

8 External Sandhi

Kusaal shows a range of intricate external sandhi phenomena, comprising not only straightforward segmental contact phenomena [8.5](#), but also tone sandhi of two types, one which applies across phrase boundaries [8.3](#) and one limited to certain NP and AdvP constructions [8.4](#), and several processes related to Apocope [2.2](#), with its complete suppression before certain particles ("Prosodic Clitics"), which have zero segmental form themselves [8.1](#), and partial suppression before several other particles and pronouns ("Liaison Words") [8.2](#), some of which also have no segmental form of their own in most contexts (see below.)

There is some evidence of a closer juncture between proclitic words and following hosts than between word-forms capable of ending a phrase and following dependents, including enclitics *other* than Liaison Words; however, finite verb forms often behave in this regard as if they were proclitic.

Thus, in segmental sandhi, proclitics and finite verb forms ending in a fronting diphthong show monophthongisation phrase internally, whereas this change does not take place with noun singular forms before uncompounded modifiers, or even before the article *lā*⁺:

<i>sāŋ lā</i>	"the blacksmith"	
<i>sàŋ-kàŋā</i>	"this blacksmith"	
<i>Ò sù'v lór.</i>	"She owns a lorry."	<i>sū'e</i> ^{ya} "own"
<i>Lì nàa nē.</i>	"It is finished."	<i>nāe</i> ⁺ "finish"

Tone sandhi in a number of respects suggests a similar distinction [8.3](#) [8.4](#), but the tonal phenomena cannot be accounted for in purely phonological terms and probably reflect historical developments connected with Apocope rather than any synchronic differences in juncture.

Two groups of very common words lack all segmental realisation, with their presence only detectable through segmental and/or tonal effects on preceding words. Prosodic Clitics [8.1](#) cause the preceding word to appear as a LF instead of the usual SF. Four Liaison Enclitics [8.2.1](#) are reduced to zero by Apocope. The 3sg animate object pronoun ^o and the post-imperative 2pl *subject* pronoun ^{ya} remain detectable after Apocope only by the changes induced by the Liaison preceding them. Complementiser *ŋ* and Serialiser *n* may be realised as [ŋ], but more often also appear only as segmental zero preceded by Liaison [8.2.2.1](#). In interlinear glosses Prosodic Clitics are written as ⁺∅, while these Liaison Enclitics are written _—∅.

8.1 Prosodic Clitics

All three Prosodic Clitics⁶ 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 the current realisation of *-mm* is [m:].

<i>tɪm^m</i>	"medicine"	SF <i>tɪm</i>	LF <i>tɪmm</i>	← * <i>tɪmʊ</i>
<i>dāam^{m/}</i>	"millet beer"	SF <i>dāam</i>	LF <i>dāamm</i>	← * <i>dāamʊ</i>
<i>vūm^{m/}</i>	"life"	SF <i>vūm</i>	LF <i>vúmm</i>	← * <i>vūmmʊ</i>

Word-final *ia ue* diphthongise to *ia ua* before Prosodic Clitics [4.1.1](#).

None of these changes occur before Liaison [8.2.1](#) [8.2.2](#).

Extra-long simple vowels, unlike diphthongs, are not permitted before Prosodic Clitics; they reduce to two morae. This results in a few words which have segmentally identical SF and LF, as for example:

	<i>sīa⁺</i>	"waist"	SF <i>sīa</i>	LF <i>sīaa</i>	← * <i>sīaga</i>
but	<i>dà'a⁼</i>	"market"	SF <i>dà'a</i>	LF <i>dā'a</i>	← * <i>dà'agā</i>
	<i>bāa⁼</i>	"dog"	SF <i>bāa</i>	LF <i>bāa</i>	← * <i>bāaga</i>
	<i>kū-ó⁼</i>	"kill him"	←	<i>kū⁺</i> "kill" + <i>°</i> "him/her"	SF/LF [k ^h ʊ:]

6) The concept of Prosodic Clitics is also useful in describing the syntax of negation [32.3](#) and in determining the structure of complex clauses [27.2](#). The Negative Clitic corresponds to an actual segmental clitic in Mooré, which uses *ka* as negative particle before the verb along with clause-final *ye*. Similarly, segmental vocative and interrogative clitics are common in West Africa.

The term "Prosodic Clitic" admittedly begs the question as to the origin of this behaviour. However, for clitic-like elements cross-linguistically which lack segmental form of their own see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent." Rotuman ([Temathesis in Rotuman](#), Hans Schmidt 2003) has a much discussed system with some analogies to Apocope. The unusual Cameroonian Bantu language Nen (Nurse and Phillipson pp283ff) deletes word-final vowels unless the word has the underlying final tones LH, not only before vowel-initial words, but also before pause.

The **Negative Prosodic Clitic** appears at the end of a clause containing a negated or negative verb [22.5](#). Superscript Notation [2.2.1](#) represents LFs as they appear before the Negative Prosodic Clitic, both segmentally and tonally.

Lì à nē nóbìr. "It's a leg."
3INAN COP FOC leg:SG.

Lì kǎ' nóbìrē +∅. "It's not a leg."
3INAN NEG.BE leg:SG NEG.

Lì à nē dūk. "It's a cooking pot."
3INAN COP FOC pot:SG.

Lì kǎ' dūkó +∅. "It's not a pot."
3INAN NEG.BE pot:SG NEG.

Unlike short *ɪ ʊ*, long final *ɪɪ ʊʊ* are not lowered:

Bà à nē mólì. "They are gazelles."
3PL COP FOC gazelle:PL.

Bà kǎ' mólì +∅. "They are not gazelles."
3PL NEG.BE gazelle:PL NEG.

The **Vocative Prosodic Clitic** ends a NP used as a vocative. It has identical tonal and segmental effects to the Negative Clitic, except that it neutralises preceding LF-final vowel length as short. The audio NT version sometimes shows a change of final H tone to falling (found also with some Hausa speakers, Jaggar p18.)

M̃ bīga +∅! "My child!"
1SG child:SG VOC!

M̃ bīse +∅! "My children!"
1SG child:PL VOC!

Dauu, mam pu baŋ fun pian'ad si'el la gbin ne. [sic [1.3.1](#)]

Dāu +∅, mām pō bǎŋ fún pǎŋ'ad sī'əl lā
 Man:SG VOC 1SG.CNTR NEG.IND understand 2SG:COMP speak:DIPF INDF.INAN ART
gbínnē +∅.
 base:SG NEG.

"Man, I don't understand the meaning of what you're saying." (Lk 22:60, 1996)

This is not a vocative noun form, but a particle following the entire NP:

dau one an yadda niñida

dāu ɔ̀nì àṇ yàddā-níṇìdā +∅

man:SG REL.SG COP faith-doer:SG VOC

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

The **Interrogative Prosodic Clitic** ends questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions:

Lì à nē nóbìr.

"It's a leg (*nóbìr^ε*)."

3INAN COP FOC leg:SG.

Ànó'ɔ̀nì ∅ nyē nóbìrè +∅?

"Who saw a leg?"

Who SER see leg:SG CQ?

Lì à nē nóbìrèè +∅?

"Is it a leg?"

3INAN COP FOC leg:SG PQ?

Lì à nē dūk.

"It's a cooking pot (*dūk^{ɔ̄}*)."

Ànó'ɔ̀nì nyē dūkó?

"Who saw a pot?"

Lì à nē dūkóò?

"Is it a pot?"

Lì à nē kūk.

"It's a chair (*kūk^a*)."

Ànó'ɔ̀nì nyē kúkà?

"Who saw a chair?"

Lì à nē kúkàa?

"Is it a chair?"

Lì à nē gbīgim.

"It's a lion (*gbīgim^{nε}*)."

Ànó'ɔ̀nì nyē gbígìmnε?

"Who saw a lion?"

Lì à nē gbígìmnεε?

"Is it a lion?"

The length neutralisation results in a five-way *a ɛ ɔ ɪ u* contrast in LF-final vowels by quality alone in this context:

Ànó'ɔ̀nì nyē kúkà?

"Who saw a chair(*kūk^a*)?"

Ànó'ɔ̀nì nyē yīré?

"Who saw a house(*yīr^{ε/}*)?"

Ànó'ɔ̀nì nyē dɔ̀ɔ̀gò?

"Who saw a hut (*dɔ̀ɔ̀g^{ɔ̄}*)?"

Ànó'ɔ̀nì nyē mólì?

"Who saw gazelles(*mòl⁺*)?"

Ànó'ɔ̀nì nyē bèdugú?

"Who saw a lot (*bèdugū^{+/}*)?"

The Interrogative Prosodic Clitic induces a tonal change in the preceding LF. Kusaal is cross-linguistically unusual⁷ in signalling questions with a final *falling intonation*. All questions, polar or content, end with a L or H toneme.

Word-final M changes to L. Words with all-M tonemes change to all-L.

This is an actual change of tonemes, not just a matter of intonation; the new L tonemes are subject to L Raising 8.3. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

As part of the falling intonation, **the last H tone syllable in the question is not preceded by downstep after a preceding M toneme even if the next syllable is stressed 5.3.2.**

Ànɔ́'ɔ̀nì_ø nyé bà bìiga ⁺ø?
Who SER see 3PL child:SG CQ?
"Who saw their child (bīg^a)?"

Ànɔ́'ɔ̀nì nyē bíigà?	"Who saw a child?" tonally identical to
Ànɔ́'ɔ̀nì nyē sú'ugà?	"Who saw a knife (sù'ug ^a)?"
Fù bɔ́ɔ̀d bɔ́?	"What (bɔ́ ⁺) do you want?"
Ànɔ́'ɔ̀nì nyē zúéyà?	"Who saw hills (zúéya ⁺)?"

Similarly with Pattern LO verbs in the Irrealis Mood:

M ná bɔ́dɪg.	"I will get lost."
M ná bɔ́dɪgɛɛ?	"Will I get lost?"

With 2-mora stem Pattern H verb base forms:

Ò pō gɔ́sɛ.	"She didn't look"
Ò pō gɔ́sɛɛ?	"Didn't she look?"
Ò pō dūgɛ.	"She didn't cook."
Ò pō dūgɛɛ?	"Didn't she cook?"

7) This is not uncommon in West Africa, however: see, for example, Jaggar pp513, 525 on Hausa. Hausa also shows raising of the pitch of the last H tone preceding the fall in polar questions.

8.1.1 Presubject Long Forms

There is often a pause after any element which precedes a clitic subject pronoun. Nevertheless, examples occur which are probably to be explained as Liaison before subject pronouns:

Fù ná kũl bēog. "You'll go home tomorrow."
2SG IRR go.home tomorrow.

but *Bēogú fù ná kũl.* "You're going home tomorrow." SB
 Tomorrow **2SG IRR** go.home.

All the examples in my materials of a LF ending a *yà'*-clause [30.1](#) seem potentially explicable as Liaison before a subject pronoun:

Buŋ ya'a kpi be'ede, ba siido ne be'ed.
Bùŋ yá' kpi bē'ede [ʔbē'edi], bà sìid·ō ∅ nē bē'ed.
 Donkey:SG if die bad:PL, **3PL** flay:DIPF **3AN.OB** FOC bad:PL.
 "When a donkey dies wrongly, they skin it wrongly." KSS p42

However, several conjunctions [27.1.3](#) have forms ending in LFs which resemble LFs preceding the Negative Prosodic Clitic rather than Liaison; thus KB consistently shows final -v in the Apocope-blocked [6.4](#) form *bēdegv* for *bēdugv̄*⁺ "a lot", and equally consistently has final -ɔ̄ in *bɔzugɔ̄* for *bɔ zúgɔ̄* "because", *dinzugɔ̄* for *dìn zúgɔ̄* "therefore" and *alazugɔ̄* for *àlál zùgɔ̄* "therefore." This phenomenon is thus best regarded as an idiosyncratic derivational formation for conjunctions.

Ka o kaas bēdegv. "And he wept greatly." (Genesis 27:38)
Kà ò kās bēdugv̄.
 And **3AN** weep great:ADV.

bɔzugɔ̄ ba zi' onɛ tumi m la naa.
bɔ zúgɔ̄, bà zī' ɔ̀nì tùmí m lā náa +∅.
 because **3PL** NEG.KNOW REL.AN send **1SG.OB** ART hither NEG.
 "Because they do not know him who sent me here." (Jn 15:21)

8.2 Liaison

Certain words cause a preceding word to appear, not in the usual clause-medial Short Form, but in the Long Form, modified by loss of vowel quality contrasts in the final mora. These **Liaison Words** may or may not be enclitic. Non-enclitic Liaison Words furthermore all share the distinctive tonal property of having an initial fixed L toneme not susceptible to change by tone sandhi [8.3.1](#), with the exception of the Serialiser *n*, which is toneless.

8.2.1 Liaison Enclitics

Certain enclitics cause the preceding host word to appear as a modified LF instead of a SF.

They comprise two sets:

Position 1:

Locative enclitic	<i>n</i> ^ε	20.3
Remoteness Marker	<i>n</i> ^ε	30.1.1
Postposed 2pl subject pronoun	<i>ya</i>	28.2.3

The Locative enclitic attaches directly to nominal words; the Remoteness Marker and the enclitic 2pl subject pronoun attach directly to verb words.

In this grammar, the Position 1 type words are hyphenated to the preceding host word.

Position 2:

all bound personal pronoun objects	15.1
------------------------------------	----------------------

	<u>Singular</u>	<u>Plural</u>
1st	<i>m</i> ^a	<i>ti</i> ⁺
2nd	<i>p</i>	<i>ya</i> ⁺
3rd an	^o [ʊ]	<i>ba</i> ⁺
3rd inan	<i>li</i> ⁺	

The pronouns either attach directly to a verb word or after either of the Position 1 clitics, Remoteness Marker *n*^ε or enclitic 2pl subject *ya*. They are written as separate words, except with the 3sg animate pronoun, which is altogether deleted by Apocope; the preceding host-final rounded vowel mora is written *o* [1.3](#).

These words prevent Apocope applying to the preceding word, which retains its final affix vowel in **downranked** form with loss of quality contrasts. (See further [2.2.2](#).)

The downranked vowel is not epenthetic and occurs where epenthesis does not:

<i>dùm^m</i>	"bite"				
	+ <i>ba</i> ⁺ "them"	→	<i>dùml̩ bā</i>	"bite them"	
but	+ suffix <i>-b</i> ^{ɔ̃}	→	<i>dūm^{mɔ̃}</i>	gerund "biting"	

If the host word LF ends in a short vowel, this is downranked to *ɪ* by default, rounded to *ʊ* after *g* preceded by a rounded vowel unless the clitic begins with *y*, and always rounded to *·o* [ʊ] before ^o "him/her" with which it fuses to create a long vowel *·o-o* [ʊ:] in the LF 8.2.1.1. There is no ATR harmony; the added vowel is always lax.

LFs ending in *-mm* behave as *-mV* before Liaison:

<i>tùm^m</i>	"send"	+ <i>ti</i> ⁺ "us"	→	<i>tùml̩ tī⁺</i>
		+ ^o "him/her"	→	<i>tùm·o^{-o}</i>
<i>dāam^{m/}</i>	"beer"	+ <i>n</i> ^ɛ "at, in"	→	<i>dāamín^ɛ</i>

LF-final *-ia -ue* remain as such before Liaison, not becoming *-ia -ua* 4.1.1.

If the host LF ends in a three-mora vowel sequence it is reduced to two, and fronting diphthongs are simplified to monophthongs just as in sandhi between closely connected words within a phrase 8.5.3.

A back second mora of a long vowel is fronted to *e* [ɪ] before Liaison Words beginning with *y*, and *any* second mora is rounded to *·o* [ʊ] before the object pronoun ^o "him/her." In the LF, the 3sg animate object pronoun *o* combines with this preceding *o* to create long *·o-o* [ʊ:] after a consonant and three-mora diphthongs *V·o-o* [Vʊ:] after vowels 8.2.1.1.

Examples with host LFs ending in short vowels:

<i>kūk^a</i>	"chair"	+ <i>n</i> ^ɛ "at, in"	→	<i>kūkl̩-n^{ɛ/}</i>
<i>dūk^{ɔ̃/}</i>	"pot"	+ <i>n</i> ^ɛ "at, in"	→	<i>dūkl̩-n^ɛ</i>
<i>bòɔ̃d^a</i>	"want"	+ <i>ti</i> ⁺ "us"	→	<i>bòɔ̃dī tī⁺</i>
		+ <i>f</i> ^{ɔ̃} "you"	→	<i>bòɔ̃dī f[/]</i>
		+ ^o "him/her"	→	<i>bòɔ̃d·ō^{-o/}</i>
<i>gòsɪm^a</i>	"look!"	+ <i>ya</i> "ye"	→	<i>gòsɪmī-ya[/]</i>
<i>pōvg^a</i>	"inside"	+ <i>n</i> ^ɛ "at"	→	<i>pōvgv-n^{ɛ/}</i>
<i>pōɔ̃g^{ɔ̃/}</i>	"field"	+ <i>n</i> ^ɛ "at"	→	<i>pōɔ̃gú-n^ɛ</i>
<i>yàvg^{ɔ̃}</i>	"grave"	+ <i>n</i> ^ɛ "at"	→	<i>yàvgv-n^{ɛ/}</i>
<i>kù'əm^m</i>	"water"	+ <i>n</i> ^ɛ "in"	→	<i>kù'əmī-n^{ɛ/}</i>
<i>tùm^m</i>	"send"	+ <i>li</i> ⁺ "it"	→	<i>tùml̩ lī⁺</i>
<i>tùm^m</i>	"send"	+ ^o "him/her"	→	<i>tùm·o^{-o}</i>

<i>Kà bà kía lĩ.</i>		"And they cut it."
<i>Kà bà pũ kía líl.</i>		"And they didn't cut it."
<i>Kà bà kío.</i>	[kʰiʊ]	"And they cut him."
<i>Kà bà pũ kío-ó.</i>	[kʰiʊ:]	"And they didn't cut him."
<i>Kà bà kía tĩ.</i>		"And they cut us."
<i>Kà bà pũ kía tíl.</i>		"And they didn't cut us."

nyē⁺ "see"

<i>Kà bà nyéε m.</i>	"And they saw me."
<i>Kà bà pũ nyéε mǎ.</i>	"And they didn't see me."
<i>Kà bà nyéε f.</i>	"And they saw you."
<i>Kà bà pũ nyéε fǔ.</i>	"And they didn't see you."
<i>Kà bà nyé-ó.</i>	"And they saw her."
<i>Kà bà pũ nyé-ó-ó.</i>	"And they didn't see her."
<i>Kà bà nyéε bǎ.</i>	"And they saw them."
<i>Kà bà pũ nyéε báa.</i>	"And they didn't see them."

There is no ATR harmony when ^o "him/her" causes complete assimilation of the final mora of the preceding LF:

<i>zú-ó</i>	"steal him"	SF	[zuʊ]
<i>zũ-ó-ó</i>	"steal him"	LF	[zuʊ:]

Three-mora vowel sequences reduce to two before Liaison:

dà'a⁼ "market" + *n^ε* "at, in" → *dǎ'an^{ε/}* [2.2.1](#)

Fusion Verbs also monophthongise the LF final to a long vowel (showing the same loss of fronting as in phrase-level sandhi [8.5.3](#)):

<i>pāe^{+/}</i>	"reach"	+ <i>ti⁺</i> "us"	→	<i>páa tĩ^{+/}</i>
		+ <i>f^o</i> "you"	→	<i>páa f^o</i>
		+ ^o "him/her"	→	<i>pā-ó^o</i>
		+ <i>ya</i> "ye"	→	<i>pāe-ya/</i>
<i>pīe^{+/}</i>	"wash"	+ <i>ti⁺</i> "us"	→	<i>pía tĩ^{+/}</i>
		+ <i>f^o</i> "you"	→	<i>pía f^o</i>
		+ ^o "him/her"	→	<i>pī-ó^o</i>
		+ <i>ya</i> "ye"	→	<i>pīe-ya/</i>

<i>dūe</i> ^{+/}	"raise"	+ <i>ti</i> ⁺ "us"	→	<i>dúe</i> <i>tī</i> ^{+/}
		+ <i>f</i> ^o "you"	→	<i>dúe</i> <i>f</i> ^o
		+ <i>o</i> "him/her"	→	<i>dū·ó</i> ^{-o}
		+ <i>ya</i> "ye"	→	<i>dūe</i> ^{-ya/}

Invariable Verbs with LFs ending in *-ya* make forms analogous to those of Fusion Verb base forms. They drop the *ya*, monophthongise diphthongs and prolong preceding short vowels (see further [2.2.2](#)):

<i>sū'e</i> ^{ya/}	"own"	+ <i>li</i> ⁺ "it"	→	<i>sú'v</i> <i>lī</i> ^{+/}
<i>vūe</i> ^{a/}	"live"	+ <i>n</i> ^ε rem	→	<i>vūv-n</i> ^{ε/}

Similarly, the form

<i>àeŋ</i> ^a	"be"	+ <i>o</i> "him/her"	→	<i>àŋ·o</i> ^{-o}
-------------------------	------	----------------------	---	---------------------------

occurs in

<i>Mane a o.</i>	"I am he." (Jn 18:5, 1976)
<i>Māni</i> _— <i>ø</i> <i>áŋ·o</i> _— <i>ø</i> .	
1SG.CNTR SER COP 3AN.OB.	

8.2.1.1 Fronting and Rounding before Liaison Enclitics

LF-final vowels before Liaison Enclitics are subject to fronting and rounding changes analogous to those which arise word-internally in Long Forms and are often left contrastive by Apocope [6.3.2](#).

Despite the similarities, these changes arise from a different set of rules. The input is the synchronic LF resulting from the application of all the vowel changes which precede Apocope [6.3](#). The outcome is also different; for example, ATR harmony never applies within the diphthongs which result from Liaison.

The default is for LFs ending in root vowels before Liaison to show the same segmental form as before the Negative Prosodic Clitic, and for all short affix vowels to become *ɪ*.

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun *ya*⁺ and before the enclitic 2pl subject pronoun *ya*.

The object pronoun induces exactly the same fronting changes as are seen word-internally before *y* [6.3.2](#) with any back second mora becoming *e* [ɪ] but no change with front second morae:

<i>kū</i> ⁺		"kill"
<i>Kà bà kúe yā.</i>	[kʰʊɪja]	"And they killed you (pl)."
<i>Kà bà pū kúe yáa.</i>		"And they didn't kill you (pl)."
<i>kjà</i> ⁺		"cut"
<i>Kà bà kíe yā.</i>	[kʰiɪja]	"And they cut you (pl)."
<i>Kà bà pū kíe yáa.</i>		"And they didn't cut you (pl)."
<i>nyē</i> ⁺		"see"
<i>Kà bà nyée yā.</i>		"And they saw you (pl)."
<i>Kà bà pū nyée yáa.</i>		"And they didn't see you (pl)."
<i>pāe</i> ^{+/}		"reach"
<i>Kà bà páe yā.</i>		"And they reached you (pl)."
<i>Kà bà pū páe yáa.</i>		"And they didn't reach you (pl)."

Fronting before the enclitic 2pl subject pronoun ^{ya} is subject to a different rule: the preceding mora is invariably replaced by [ɪ], usually written *e* as normal. In most cases this has the same outcome as other fronting rules:

<i>kū</i> ⁺	"kill"	+ <i>ya</i>	"ye"	→	<i>kūe</i> ^{-ya/}	[kʰʊɪ]
<i>kjà</i> ⁺	"cut"	+ <i>ya</i>	"ye"	→	<i>kīe</i> ^{-ya/}	[kʰiɪ]
<i>pāe</i> ^{+/}	"reach"	+ <i>ya</i>	"ye"	→	<i>pāe</i> ^{-ya/}	

However, the replacement also affects front vowels:

<i>bē</i> ⁺	"be"	+ <i>ya</i>	"ye"	→	<i>bēe</i> ^{-ya/}	[bɛɪ] written <i>bei</i>
------------------------	------	-------------	------	---	----------------------------	--------------------------

Rounding of the second mora of the second mora of a LF-final long vowel occurs before the 3sg animate object pronoun ^o [ʊ] him/her", before which the default LF-final short *ɪ* also becomes [ʊ], written *o* [2.3](#).

The rule for second morae differs from the word-internal rounding rule operative in the LF before **kkv* **ηηv* [6.3.2](#): the second mora is invariably replaced by [ʊ], even if it was rounded and/or tense: there is no ATR harmony.

<i>zū</i> ⁺	"steal"	+ °	"him/her"	→	<i>zū·ó</i> ^{-°}	SF [zuʊ]	LF [zuʊ:]
<i>nyē</i> ⁺	"see"	+ °	"him/her"	→	<i>nyē·ó</i> ^{-°}	SF [ɲẽʊ]	LF [ɲẽʊ:]
<i>dì</i> ⁺	"eat"	+ °	"him/her"	→	<i>dì·ó</i> ^{-°}	SF [dɪʊ]	LF [dɪʊ:]
<i>kjà</i> ⁺	"cut"	+ °	"him/her"	→	<i>kì·ó</i> ^{-°}	SF [kʰiʊ]	LF [kʰiʊ:]
<i>pāe</i> ^{+/}	"reach"	+ °	"him/her"	→	<i>pā·ó</i> ^{-°}		
<i>pīe</i> ^{+/}	"wash"	+ °	"him/her"	→	<i>pī·ó</i> ^{-°}		
<i>dūe</i> ^{+/}	"raise"	+ °	"him/her"	→	<i>dū·ó</i> ^{-°}		

After a consonant a LF-final short *ɪ* becomes [ʊ], also written *·ó*, before °; when the pronoun itself appears in its LF the two [ʊ] vowels combine as long [ʊ:]

bòɔd^a "want"

The LF long vowel behaves as one syllable tonally with regard to Levelling [5.2](#):

Ṁ bɔɔd·ō. "I love him/her." [ɱbɔɔ:dʊ]
Ṁ pō bɔɔd·ó-ó. "I don't love him/her." [ɱpʰɔbɔɔ:dʊ:]

Thus the SFs of both ^{ya} and °, like Prosodic Clitics, have segmental effects on the form of the preceding word despite having zero as their own Short Forms [8](#).

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

Kà bà kíā f. "And they cut you (sg)."
 or *Kà bà kíó f.*

Kà bà nyéé f. "And they saw you (sg)."
 or *Kà bà nyéo f.*

Kà bà páa f. "And they reached you (sg)."
 or *Kà bà páv f.*

Ṁ gbáñ'a f. "I've grabbed you (sg)."
 or *Ṁ gbáñ'v f.*

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

There is never rounding word-internally before the *Ṁ*^ɪ Class singular suffix.

8.2.1.2 Allomorphy of the Subject Pronoun *ya*^a

The enclitic 2nd Person Plural Subject pronoun *ya*^a adopts the allomorph *-ní-* before Liaison, both before pronoun objects and before *àlá*⁺ "thus" 22.4. The pronoun was historically **na*, which regularly became **yã* 3.1 with subsequent loss of emic nasalisation, as always with affix vowels 4.4. When the *-a* is deleted by Apocope, *y* is also deleted 2.2. When followed by a Liaison word, the vowel *a* was not deleted but became *ɪ*, before which *n* became *n-*. (A similar development has occurred with the initial consonants of *nìŋ*^ε "do" = Toende Kusaal *ěŋ*, the locative enclitic *n*^ε ~ *nĩ*^{+/} = Toende *-ɪ*, and *nìe*⁺ "appear" = Toende *yěe*.)

Dā dõllɪ_ yá ⁺ø! "Follow ye not!"
NEG.IMP follow 2PL.SUB NEG!

Dì'amĩ_ ø! "Receive ye!"
receive:IMP 2PL.SUB!

Dì'amĩ-nĩ_ *bā!* "Receive ye them!"
receive:IMP-2PL.SUB 3PL.OB

Dì'amĩ-n-ó_ ø! "Receive ye her!"
receive:IMP-2PL.SUB 3AN.OB.

Sidiba, nɔngimini ya pu'ab.
Sīdɪbā ⁺ø, *nòŋɪmĩ-nĩ_* *yà pū'ab.*
Husband:PL VOC, love:IMP-2PL.SUB 2PL wife:PL.
"Husbands, love your wives!" (Eph 5:25)

Biise, siakimini ya du'adib nɔya.
Bīise ⁺ø, *sɪàkɪmĩ-nĩ_* *yà dū'adɪb nóyà.*
Child:PL VOC, agree:IMP-2PL.SUB 2PL parent:PL mouth:PL.
"Children, obey your parents." (Eph 6:1)

Dìgĩ-nĩ_ *àlá!* "Keep ye on lying down!"
Be.lying-2PL.SUB ADV:thus!

Dì'amĩ-nĩ_ *àlá!* "keep ye on receiving!"
receive:IMP-2PL.SUB ADV:thus!

Dì'amĩ-nĩ lá /dì'amĩ-n álá! "keep ye on receiving!" See 8.2.2

8.2.2 Non-Enclitic Liaison Words

Non-enclitic Liaison Words comprise

proclitic personal pronouns	<i>m̐ fù ò lì tì yà bà</i>	15.1
personifier clitics	<i>à ñ m̐</i>	19.10
<i>ànó'òñ</i> ^ε "who?"		15.4

along with all words beginning with

number prefixes	<i>à bà bù</i>	16.2.1
manner-adverb prefix	<i>à</i>	20.4

All these words have an initial Fixed L Toneme [8.3.1](#).

Two other particles of the underlying form *n* are also Liaison Words:

Complementiser	<i>ñ</i>	31
Serialiser	<i>n</i>	26.1

Clause Complementiser *ñ* is Fixed-L, but VP Serialiser *n* has no toneme. The Complementiser is bound to the left as well as right, but Serialiser *n* may follow a pause, though even so it cannot be utterance-initial.

Even when proclitic, these words are like Liaison Enclitics in that the *preceding* word may appear as a modified LF with loss of quality distinctions in the **downranked** final affix vowel. Evidence for this is found in the allomorphy shown by the postposed 2pl pronoun ^{ya} equally before all Liaison Words [8.2.1.2](#), and in the *lack* of vowel lengthening before non-enclitic Liaison Words of words which have not undergone Apocope, such as *kà*, *yē* and the proclitic pronouns; this demonstrates that the phenomenon is due to inhibition of Apocope.

After a consonant, the quality of the downranked vowel preceding Liaison is determined by the Liaison Word, but is generally *ɪ*, rounding to *ʊ* when the word ends in a velar preceded by a rounded vowel mora. (Many cases where in traditional orthography a word has seemingly gained a mysterious final *-i* or *-u* are due to this.)

Non-clitic words ending in a short *root* vowel prolong the vowel before Liaison.

Except with the clause Complementiser *ñ* and with the VP Serialiser *n* (see below), this phenomenon is very limited in my informants' speech. It is only invariable in the case of a personal pronoun immediately preceded by a verb within the same verb phrase:

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

Older written sources show the phenomenon more widely, though always within a phrase:

bane na yel Zugso bi ba tuuma a si'em la
bàni nà yēl Zūg-sób_ bà tūmá_ø àṇ sī'em lā
REL.PL **IRR** say head-one:**SG** **3PL** deed:**PL** **COMP** **COP** **INDF.ADV** **ART**
 "Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)
 (as read by WK, with a SF before *bà tūma*.)
 The [audio version](#) has ...*Zūg-sóbí bà*...

Words which do not have Apocope Blocking and which end in short root vowels prolong them before Liaison:

... [n] *loo Abaa zuur* "... tying Dog's tail" [19.10](#) KSS p20
 ... *n ló_ À-Bāa zùr*
 ...**SER** tie **PERS-dog:SG** tail:**SG**

Before Liaison Words beginning with *à*- the quality of the final vowel mora of the preceding word is not predictable from the phonology alone.

Before *àṇ'òṇ^ε* "who?" [15.4](#), the Manner-Adverb prefix and the Personifier Clitic the LF-final vowel is *ɪ* (*ʊ* after a velar preceded by a rounded vowel):

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

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

Fusion Verbs [11.1](#) show forms in final *e* [ɪ] in these two cases, instead of the monophthongs *aa iə uə* usual before another word in the VP [8.5.3](#):

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

However, the verb *àṇ^a* "be something" always appears as *àaṇ*, not *àeṇ*.

Ka fù aan anɔ'ɔnɛ? "And who are you?" (Jn 1:19)
Kà fù áaŋ ànɔ'ɔnɛ ^{+ø?}
 And **2SG COP** who **CQ?**

Before the Number Prefix *a-* the pre-Liaison vowel is instead *-a*:

M mór nē bīisá_ àtán'. "I have three children."
1SG have **FOC** child:**PL** **NUM**:three.

Pèédá_ àlá ^{+ø?} "How many baskets?"
 basket:**PL** **NUM**:how.many **CQ?** (contrast *àlá* "thus" above)

These rules are consistent in written materials. However my informants contract *-á à-* to *á-* with the number prefix (effectively just treating it as having an ordinary L toneme susceptible to L Raising):

Nū'-bíbìs álá kà fù nyētá ^{+ø?}
 hand-small:**PL** **NUM**:how.many and **2SG** see:**DIPF** **CQ?**
 "How many fingers do you see?"

With other words beginning with *a-* my informants generally do not show Liaison at all, except with *àlá* after Imperatives, where the *-í à-* is contracted to either *-á-* or *-í-* depending on the speaker.

gòsɪmí lá or *gòsɪm álá* "Keep on looking!"

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

Bà gòsú_ ò bīig. "They've looked at her child."
3PL look:at **3AN** child:**SG**.

All my written sources, the NT, literacy materials and ILK, consistently show *-i* (i.e. *-ɪ* [ɪ]), which is presumably the original older form.

This distinctive sandhi behaviour before the Number Prefix *a-* as opposed to all other vowel-initial Liaison Words (even *ò*) can be explained historically. The number prefix originated as **ŋa*, the old *r^ɛ|a⁺* Class agreement [16.2.1](#). Original word-internal **ŋ* has disappeared completely throughout Western Oti-Volta (synchronic non-initial *ŋ* resulting always from **mg* or **ng* → *ŋŋ*), whereas word-medial *y w* survive in many contexts. Initial **ŋ* preceding unstressed vowels might be expected likewise to have disappeared early historically; and indeed in Dagbani, the number prefix is *a-* even though root-initial *ŋ* is preserved in full words (*ŋariŋ* "boat", Kusaal *àŋruŋ*².) Sandhi

effects may outlive complete phonetic disappearance of a consonant, as with the French "*H aspiré*." The data could be thus accounted for by supposing that **ɲa* lost its initial consonant earlier than the Personifier Clitic or the manner-adverb prefix, representing (as it were) the "*H muet*" corresponding to the "*H aspiré*" left by later deletion of initials such as *y* or *w*. However, putting this in synchronic phonological terms would be methodologically suspect in view of the absolute neutralisation (Kiparsky 1982) that has taken place, and would add nothing descriptively.

8.2.2.1 Particles of the Form *n*

There are two extremely common particles with the underlying form *n* which are always bound to the right: the Complementiser within *ñ*-Clauses 31, and the VP Serialiser particle 26.1. Both particles are Liaison Words, but appear in the form *n* preceded by a modified long form only in a minority of written materials, and even then, not consistently. My informants drop the *n* itself, so that the form of the preceding word alone signals the presence of these particles, except in the very common special case where they follow proclitic personal pronouns, where special fused forms result. This is also the commonest pattern in texts, and in KB the vast majority of instances of *n* follow foreign proper names, with most of the remainder following forms with Apocope Blocking. However, some older materials show *n* frequently in other contexts also, with or without a preceding LF-final reduced affix vowel. Segmentally, the two particles behave in a very similar way in Agolle Kusaal, but they differ tonally, and Toende Kusaal has *segmentally* different forms, using *ne* for the Complementiser and zero for the Serialiser.

Even texts which use *n* frequently nearly always show *e* or *i* after preceding nasal consonants, presumably by dissimilation. This may indicate that the varying spellings of the particles after consonants originally all represented high nasalised vowels, with syllabic nasals as allophones, but the vowels are not now nasalised in my informants' speech.

Complementiser *ñ* is bound to the left as well as right, but Serialiser *n* can follow a pause, so that it is not always preceded by a modified Long Form. In such cases it always appears as a syllabic nasal assimilated to the position of articulation of the following consonant, and is written *n*.

I will follow my informants' usage and the texts throughout; the position of the particles is marked \emptyset in interlinear glossing in cases where they lack any surface segmental realisation.

Written materials confirm that these particles are Liaison Words, as preceding forms preserve LF geminate consonants before the affix vowel, e.g.

*ya zuobid wusa **kalli** an si'em*

yà zūébíd wūsa kállì_ ∅ àŋ sī'em

2PL hair:**PL** all number:**SG COMP COP INDF.ADV**

"how much the number of all your hairs is" (Lk 12:7)

*tuum kanε ka m **tummi** tisid Wina'am la.*

tùum-kànì kà m̄ túmmī_ ∅ tísìd Wínà'am lā

work-**REL.SG** and **1SG** work:**DIPF SER** give:**DIPF** God **ART**

"The work which I do for God" (Rom 15:17)

8.2.2.1.1 Complementiser *ṇ*

The post-subject complementiser *ṇ* always has a L toneme not subject to L Raising 7.4, causing a preceding M toneme to become H even when the particle has no segmental realisation itself. The marker combines with a preceding pronoun subject to produce a special set of pronouns 15.1.

Note the contrasts in

mán zàb nà'ab lā "I having fought the chief." (*ṇ*-Clause)

1SG:COMP fight chief:**SG ART**

Mānì_ ∅ záb nà'ab lā. "I have fought the chief." (*n*-focus)

1SG.CNTR SER fight chief:**SG ART**

tīnámì_ ∅ zàb nà'ab lā "we having fought the chief" (*ṇ*-Clause)

1PL COMP fight chief:**SG ART**

Tīnámì_ ∅ záb nà'ab lā. "We have fought the chief." (*n*-focus)

1PL SER fight chief:**SG ART**

After words with Apocope Blocking, dropping of the /n/ segment leaves the tonal change of preceding M to H as the only sign of the presence of the particle:

Dāy lā záb ná'àb lā. "The man has fought the chief."

man:**SG ART** fight chief:**SG ART**

Dāy lā gós ná'àb lā. "The man has looked at the chief."

man:**SG ART** look.at chief:**SG ART**

but *dāy lá_ø zàb nà'ab lā*
 man:SG ART COMP fight chief:SG ART
 "the man having fought the chief"

dāy lá_ø gōs ná'àb lā
 man:SG ART COMP look.at chief:SG ART
 "the man having looked at the chief"

8.2.2.1.2 Serialiser *n*

After pause WK realises this particle as a syllabic nasal assimilated to the position of the following consonant. Elsewhere, he has preceding LFs with the loss of final vowel contrast, while the particle itself has no segmental realisation:

Kà ò zó_ø kēŋ nā. "And he came running"
 And 3AN run SER come hither.

After a final short vowel which is not a non-clitic word root vowel, WK has a consonantal nasal, assimilated to the position of the following consonant.

This pattern is the commonest in texts also, but forms also appear with the *n* preserved after the modified LF, and with *n* after a SF.

Zero also occurs as a realisation of this particle (as always in Toende Kusaal), particularly after verbs often used as "auxiliaries"; probably some or all "particle-verbs" originated in this way. In other cases, the zero realisation is significantly more frequent in the NT text after words ending in *-m -n -l*, perhaps reflecting complete assimilation to the preceding consonant, and also after words ending in vowels other than non-clitic short root vowels, i.e. after words ending in long vowels or with Apocope Blocking.

The *n* particle of Non-verbal Predicators 25 is identical to the VP Serialiser *n* phonologically, and will be regarded as a specialised use of the same particle:

Bō_ø lá +ø? "What's that?"
 What SER that CQ?

This particle *n* has no toneme itself; the LF-final toneme before it is M after a M toneme and L otherwise.

Dāy lā méε-n "The man built (earlier today)."
 Man:SG ART build-REM

Before enclitic object pronouns, all Indicative Base Forms without the Independency Marking tone overlay [22.6.1.1](#) change LF-final LM to LL and LF-final MM to MH.

Verb base forms without tone overlay:

<i>b̀̀dɪg^ε</i>	"lose"	+ <i>m^a</i> "me"	→ <i>b̀̀dɪgɪ m^a</i>
<i>dɪ⁺</i>	"eat"	+ <i>ɪ⁺</i> "it"	→ <i>dɪɪ ɪ̃^{+/}</i>
<i>yāɪgɪ^{ε/}</i>	"scatter"	+ <i>m^a</i> "me"	→ <i>yāɪgɪ́ m^a</i>
<i>dūg^ε</i>	"cook"	+ <i>ɪ⁺</i> "it"	→ <i>dūgɪ ɪ̃^{+/}</i>
<i>gɔ̃s^ε</i>	"look"	+ ^o "him/her"	→ <i>gɔ̃s·ó^{-o}</i>
<i>kū⁺</i>	"kill"	+ <i>m^a</i> "me"	→ <i>kúv m^a</i> for <i>kūv m^a</i> 5.2

Pattern H Fusion verb Base Forms behave exactly like CVV-stems:

<i>pāe^{+/}</i>	"reach"	+ <i>m^a</i> "me"	→ <i>pāa m^a</i>
<i>dīe^{+/}</i>	"get"	+ <i>ba⁺</i> "them"	→ <i>dī̃ə bā^{+/}</i>

After other verb forms, the object pronouns do not alter the host tonemes:

<i>zàbɪd^a</i>	"fights"	+ <i>m^a</i> "me"	→ <i>zàbɪdī m^{a/}</i>
<i>dɪt^a</i>	"eats"	+ <i>ɪ⁺</i> "it"	→ <i>dɪtī ɪ́⁺</i>
<i>yāɪgɪ́d^a</i>	"scatters"	+ <i>ba⁺</i> "them"	→ <i>yāɪgɪ́dī bá⁺</i>
<i>kūvd^{a/}</i>	"kills"	+ <i>m^a</i> "me"	→ <i>kūvdí m^a</i>
<i>sū'e^{ya/}</i>	"own"	+ <i>ɪ⁺</i> "it"	→ <i>sū'ú ɪ̃^{+/}</i>

The sequence *·o·o* resulting from the LF of the 3sg animate pronoun ^o fusing with the vowel before Liaison behaves as one syllable tonally in Levelling [5.2](#):

<i>Ṁ b́ɔ́ɔd·ō.</i>	"I love him/her."	[ṁbɔ́:ɔ̃]
<i>Ṁ pū b́ɔ́ɔd·ó-o.</i>	"I don't love him/her."	[ṁpʰʊbɔ́:ɔ̃]

Irrealis Mood forms of Pattern LO Verbs:

<i>Ò nà b̃ɔ́ɔɪgɪ m.</i>	"He will lose me."
<i>Ò kù b̃ɔ́ɔɪgɪ má.</i>	"He will not lose me."
<i>Ò nà b̃ɔ́ɔɪgɪ bá.</i>	"She will lose them."
<i>Ò kù b̃ɔ́ɔɪgɪ báa.</i>	"She won't lose them."
<i>Ò kù b̃ɔ́ɔɪgɪdɪ má.</i>	"He won't be losing me."
<i>Ò kù zābɪdɪ má.</i>	"He won't be fighting me."
<i>Ò kù zāb·ó-o.</i>	"He won't fight him."
or <i>Ò kù zāb·o-o.</i>	"He won't fight him."

Irrealis Mood Pattern LO and Indicative Pattern H thus contrast before object pronouns in 2-mora stems:

zābe + *m*^a → *zābɪ m*^{a/} "...will fight me"
dōge + *m*^a → *dōgí m*^a "...cook for me"

All non-enclitic Liaison Words begin with a Fixed-L toneme [8.3.1](#) except for Serialiser *n*, which has no toneme.

Verbs before the Fixed-L Clitics show the same final tonemes as with Liaison Enclitics, except that M tonemes necessarily change to H [5.3.2](#).

Base forms without tone overlay:

Kà tì díɿ_ bà dīɿb. "And we ate their food."
 And 1PL eat 3PL food.

Kà ò bódɿgì_ bà bùmɿs. "And he lost their donkeys."
 And 3AN lose 3PL donkey:PL.

Kà ò dōgí_ bà dīɿb. "And he cooked their food."
 And 3AN cook 3PL food.

Dynamic Imperfective without tone overlay:

Kà tì díɿí_ bà dīɿb. "And we were eating their food."
 And 1PL eat:DIPF 3PL food.

Nominal forms before Fixed-L Liaison Words end in H toneme as expected; I was not able to elicit such forms easily from informants, but there are a few examples in the 1996 audio NT.

bane na yel Zugsobi ba tuuma a si'em la
bànɪ nà yēɿ Zūg-sóbí_ bà tūmá_ø àŋ sī'əm lā
REL.PL IRR say head-one:SG 3PL deed:PL COMP COP INDF.ADV ART
 "Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

Before complementiser-*ŋ* a final M tone becomes H:

dāy lā_ø dāa záb nà'ab lā
man:SG ART COMP TNS fight chief:SG ART
 "the man's having fought the chief"

Before Serialiser-*n* the final toneme of a modified LF is M after M toneme and L otherwise. L Raising follows if and only if the *preceding* word would induce it [8.3](#).

M nók sú'ugò_ø kǎ́ nīm lā.

1SG pick.up knife:**SG** **SER** cut meat:**SG** **ART**.

"I cut the meat with a knife."

amaa o kena ye o tum tisi ba

àmáa_ò kē nā yé_ò túm_ø tìsì_bā

but **3AN** come hither that **3AN** work **SER** give **3PL.OB**

"but he came to serve them" (Mt 20:28)

8.3 Initial L Raising

Most words other than proclitics ending in L or H tonemes cause an initial L toneme in a following word to change to H toneme. The change cannot take place if the L toneme is Fixed-L [8.3.1](#); in that case any preceding M toneme necessarily becomes H instead [5.3.2](#).

L Raising follows

all words, clitic or free, ending in M toneme

all other words which are not proclitic *except*

Verb Base Forms without the Independency tone overlay [22.6.1.1](#)

Words with less than three tonemes, affected by M Raising [8.4.1](#)

Words ending in an affix vowel with H toneme

bound subject pronouns [22.6.1.2](#) (including ellipted subjects [27.1.5.2](#))

ò lì bà *except* preceding Independency Marking

m̀ fù tì yà *except* preceding Independency Marking after *yē*

The Serialiser *n* is transparent to L Raising [8.2.3](#).

The Number and the Manner-adverb prefixes *à-* [16.2.1](#) [17](#) are followed by L Raising of the stem, probably reflecting an origin in noun class agreement flexions with M toneme, like the bound subject pronouns.

L Raising crosses phrase boundaries if there is no intervening pause, but it does not occur after conjunctions [27.1.3](#) or pre-subject adjuncts [28.1.1](#).

Bà tìs ná'àb lā búŋ.

3PL give chief:**SG** **ART** donkey:**SG**.

"They gave the chief a donkey (*bùŋ*^a)."

Bà ɲwè' ná'àb lā súṅā. "They beat the chief well (*sùṅā*^{+/})."
3PL beat chief:**SG ART** good:**ADV**.

Raising is absent after words ending in an affix vowel with H toneme:

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

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

L Raising examples, with *zàb*^ε "fight" *gōs*^ε "look at" *nà'ab*^a "chief":

Kà-clause, without Independency Marking tone overlay; all subject pronouns are followed by raising; Base Forms are followed by raising only if ending in M:

Kà m̀ záb ná'ab lā. "And I've fought the chief."
Kà ò záb ná'ab lā. "And he's fought the chief."
Kà m̀ gōs ná'ab lā. "And I've looked at the chief."
Kà ò gōs ná'ab lā. "And he's looked at the chief."

Main Clause, with Independency Marking; the verbs have tone overlay and are now both followed by L Raising; 3rd person pronouns are not followed by Raising:

M̀ záb ná'ab lā. "I've fought the chief."
Ò záb ná'ab lā. "He's fought the chief."
M̀ gōs ná'ab lā. "I've looked at the chief."
Ò gōs ná'ab lā. "He's looked at the chief."

A tonal minimal pair with a contrast between the object enclitic *ba* "them", which is followed by L Raising, and the proclitic *bà* "they, their", which is not:

Ò gòsī bá bédugū. "She looked at them a lot." (*ba* object)
Ò gòsí bà bédugū. "She looked at a lot of them." (*bà* possessive)

L Raising has arisen from **rightward M spreading** (H representing ML on a single mora [5.1](#).) With proclitics the only difficulty is with pronouns, which even when followed by L Raising are always L for my informants, though written with M in ILK and in Urs Niggli's materials. In current Agolle, they could here be regarded as followed by a **floating M toneme**. Floating tones could also account for SFs ending in H or L which are followed by L Raising; when an *affix* vowel is deleted by Apocope, its M toneme is left floating, while tonemes of stem-final morae (as in cbs or verb

Base Forms) are deleted altogether. However, it is more straightforward to specify the conditions for L Raising directly. Synchronically, L Raising after word-final L/H is primarily determined by grammatical category⁸. Flexionless singulars ending in L like *mà* "mother" *zùà* "friend" *dù'átà* "doctor", and words with cbs remodelled on a L-final sg, like *lànnig* "squirrel" [9.2.2](#) distinguish a sg followed by L Raising from a cb which is not [9.7](#). The only Pattern LO Invariable Verb with no suffix, *bè* "be somewhere/exist", is followed by raising. *Lèè* "but" is followed by raising when affected by Independency-Marking [22.6.1.1](#) but it is not a verb, has no flexion, and has not undergone Apocope.

8.3.1 Fixed L Tonemes

Certain words carry an initial (or sole) toneme which is invariably L, and is never subject to L Raising.

The Fixed-L words comprise all non-enclitic Liaison Words [8.2.2](#) except for Serialiser *n* [8.2.2.1.2](#), which is toneless, along with the linker particle *kà* "and":

proclitic personal pronouns	<i>m fù ò lì tì yà bà</i>
personifier clitics	<i>à- ò- m-</i>
<i>ànó'òh^ε</i> "who?"	
Complementiser	<i>ò</i> 8.2.2.1.1
all words with number prefixes	<i>à- bà- bù-</i>
manner-adverb prefix	<i>à-</i>
linker particle	<i>kà</i>

Initial *à-* in loanwords may be treated as Fixed-L by analogy [18.1](#).

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

Bà kòvdi_ bá. "They kill them."
3PL kill:DIPF 3PL.OB.

but *Bà kòvdi_ bà bōvs.* "They kill their goats."
3PL kill:DIPF 3PL goat:PL.

Lì à né à-dàalú. "It's a stork"
3INAN COP FOC PERS-stork:SG.

8) This is analogous to the "Consonant Mutations" of the Insular Celtic languages, where loss of word-final segments has caused what were once sandhi phenomena to become purely morphosyntactic processes. A similar but phonologically simpler development has occurred in South-Western Mande (Babaev, Kirill, "Zialo: the Newly-Discovered Mande Language of Guinea" LINCOM 2010, pp39ff.)

ba diib n yit na'ateŋ la na zug

bà díib ñ yīt ná'-tēŋ lā nā zúg

3PL food COMP emerge:DIPF king-land:SG ART hither upon

"because their food came from the king's land" (Acts 12:20, 1996)

wuu saa naani iank ya nya'an n ti paae ya tuona la.

wūu sáa_ ∅ nāani jánk yà nyá'an n tí páe_ yà tùona lā

like rain:SG COMP then jump 2PL behind SER afterwards reach 2PL before.ADV ART

"like when lightning leaps from East to West" (Mt 24:27, 1996)

8.4 Initial M Raising

M Raising takes place exclusively within NPs and AdvPs. It occurs wherever L Raising would, with two exceptions: it does not follow contrastive pronouns (like *mān* "my") and it only follows free forms when they are dependents preceding the head.

Words beginning with M toneme are changed to a H-initial pattern, with any subsequent tonemes L throughout⁹. Uncompounded words *changed* by M Raising are only followed by L Raising or M Raising if they have more than two tonemes [8.4.1](#).

Pattern L and Subpattern HL words are not changed at all (except that L undergoes L Raising); Pattern H words beginning with H on a long vowel fluctuate.

M Raising follows any combining form ending in M toneme, regardless of whether the cb is pre-modifier or head.

Cb as head:

<i>bù-pìəlìg^a</i>	"white goat"	<i>bù-pāalìg^a</i>	"new goat"
<i>bī-púŋ-pìəlìg^a</i>	"white girl"	<i>bī-púŋ-pāalìg^a</i>	"new girl"
<i>n̄-pìəlìg^a</i>	"white hen"	<i>n̄-pāalìg^a</i>	"new hen"

Cb pre-modifier (*n̄ɔr^ε* "mouth" cb *n̄-*, and *dīəs^a* "receiver" pl *dīəsídìb^a*):

<i>n̄-dí'əs^a</i>	"chief's interpreter"
pl <i>n̄-dí'əsídìb^a</i>	

9) Unfortunately I did not think to check how words with M nominal prefixes behave with M Raising. e.g *dāu lā tíntòŋríg* (?*tíntòŋrìg*) "the man's mole (*tíntòŋríg^a*)."

Nothing like M Raising seems to be described in other Western Oti-Volta languages. Historically, it perhaps arose from dissimilation in overlong strings of H (Kusaal M) tones, like Meeussen's Rule in Bantu; the initial H of affected words would result from L Raising of original L. As with L Raising [8.3](#), Apocope has complicated the picture; M Raising *only* occurs after forms which have undergone Apocope [7.2.4](#).

M Raising follows any *dependent* free form which would be followed by L Raising, except for a contrastive personal pronoun.

It applies to *one* word only; this may be a cb.

Examples:

No M Raising after personal pronouns:

<i>m̃ bīg</i>	"my child" (<i>bīg</i> ^a)
<i>m̃ t̃ɪg</i>	"my tree" (<i>t̃ɪg</i> ^a)
<i>mān bīg</i>	"my child"
<i>mān t̃ɪg</i>	"my tree"
<i>m̃ gbīgim</i>	"my lion" (<i>gbīgim</i> ^{nɛ})
<i>m̃ yūgúm</i>	"my camel" (<i>yūgúm</i> ^{nɛ})

No M Raising after words which are not followed by L Raising:

<i>m̃ b̃jēyá bīs</i>	"my elder same-sex siblings' children" (<i>bīs</i> ^ɛ)
<i>m̃ b̃jēyá fūud</i>	"my elder same-sex siblings' clothes" (<i>fūud</i> ^{ɛ/})

M Raising after all other dependent free Nominal Phrases:

<i>dāy b̃ɪg</i>	"a man's child" (vs <i>dāy-bīg</i> ^a "male child")
<i>dāy t̃ɪg</i>	"a man's tree"
<i>nà'ab b̃ɪg</i>	"a chief's child"
<i>dāy lā gbīgim</i>	"the man's lion"
<i>dāy lā yūgúm</i>	"the man's camel"

Unlike L Raising, M Raising occurs only *within* NPs and AdvPs; there is thus a tonal minimal pair between

<i>Bà t̃ɪs ná'àb lā b̃ɪg.</i>	"They've given (it) to the chief's child."
3PL give chief: SG ART child: SG .	(M raising applied to <i>bīg</i> ^a "child")

<i>Bà t̃ɪs ná'àb lā bīg.</i>	"They've given the chief a child."
3PL give chief: SG ART child: SG .	(No M raising applied to <i>bīg</i> ^a)

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

<i>m̃ɔɔgu-n wábùg lā</i>	"the wild (in-the-bush) elephant" (<i>wābug</i> ^{ɔ/})
--------------------------	--

M Raising does follow any free head before a dependent:

	<i>kūg-yínnì</i>	"one stone" with <i>yínnì</i> as adjective 16.2.2
but	<i>kūgʊr yīnní</i>	"one stone"
	<i>wābug lā</i>	"the elephant"
	<i>wābɪs pīga</i>	"ten elephants"
	<i>wābɪs pīga lā</i>	"the ten elephants"

M Raising applies sequentially, reflecting the substructure of NPs and AdvPs.

If a head + adjective compound becomes a cb before another adjective or a post-determining pronoun, M Raising applies after the first adjective on the basis of whether the preceding cb now ends in M, regardless of its intrinsic tonemes:

<i>bù-wōk</i>	"tall goat"
<i>nō-wók</i>	"tall hen"
<i>bù-wōk-píəlìg</i>	"tall white goat"
<i>bù-wōk-páalìg</i>	"tall new goat"
<i>nō-wók-píəlìg</i>	"tall white hen"
<i>nō-wók-pāalíg</i>	"tall new hen"

When M Raising applies to a the first component of an existing compound, the second component retains its M-Raising-induced pattern of initial H toneme followed by L tonemes even though the first element no longer ends in M toneme:

<i>bù-píəlìg</i>	"white goat"
<i>bù-pāalíg</i>	"new goat"
<i>nō-píəlìg</i>	"white hen"
<i>nō-pāalíg</i>	"new hen"
<i>dāy lā bú-píəlìg</i>	"the man's white goat"
<i>dāy lā bú-pāalíg</i>	"the man's new goat"
<i>dāy lā nō-píəlìg</i>	"the man's white hen"
<i>dāy lā nō-pāalíg</i>	"the man's new hen"

Contrast

<i>dōg-kánā</i>	"this pot" (<i>dōk</i> ^{ɔ̄} cb <i>dōg</i> - "pot")
[<i>sālɪma dúg</i> -] <i>kànā</i>	"this [golden pot]"

The order of successive applications of M Raising may also be revealed by the fact that uncompounded words with less than three tonemes affected by M Raising are not themselves followed by L or M Raising [8.4.1](#). Thus

[*fūug* *dóòg*] "tent" (*fūug*^ɔ "cloth", *dóòg*^ɔ "house")
pò'usug [*fúùg* *dóòg*] (not *[*pò'usug* *fúùg*] *dóòg*)
 "tabernacle" (*pò'usug*^ɔ "worship")

In *Lì kā'* [[[*dāy* *lā* *bīg*] *bīār*] *náàf*] *zōvre*.
 "It's not the man's child's elder-same-sex-sibling's cow's tail." WK
 (*bīig*^a "child" *bīār*^ε "elder sib of same sex" *náàf*^ɔ "cow" *zōvr*^ε "tail")

the nesting results in alternating absence of M Raising; the two-toneme words *bīig* *náàf*, having been themselves affected by M Raising, are not *followed* by it.

The final vowel mora before the Locative Enclitic *n*^ε always has M toneme, even when there is no Initial L Raising after the corresponding SF (see below):

dāy *lā* *póogū-n* "in the man's field (*póog*^ɔ)"
dāy *lā* *púugū-n* "inside the man" (*púug*^a "inside")
 like *dāy* *lā* *dóogū-n* "in the man's hut (*dóog*^ɔ)"

8.4.1 Tone Raising after Words with M Raising

Regardless of whether it has been subject to M Raising, the final element of a compound induces following L and M raising in accordance with the general rule [8.3](#), i.e. after all sg or pl forms except those ending *-í* or *-á* and after cbs ending in M:

nō-wók *dīb* "a tall hen's food" (*dīb*^ɔ "food")
 like *bò-wók* *dīb* "a tall goat's food"

An uncompounded word *affected* by M Raising is not followed by L or M Raising unless it has three tonemes or more.¹⁰

There is thus a difference in the tone sandhi following such words from that after Subpattern HL words [7.2.1.2](#) and Pattern L words changed to HL by L Raising.

Examples, using the frames "the man's (*dāy* *lā*) X has got lost (*bòdīg* *yā*)" and "my elder same-sex siblings' (*m̃* *bīēyá*) X has got lost":

Pattern L and Subpattern HL, not subject to M Raising:

10) If L raising after sg/pl SFs is attributed to a following floating M tone [8.3](#), this could be restated as M Raising changing a following sequence of three tonemes beginning with M (including floating tonemes) to HLL. 3- and 4-mora stems would then retain the following floating tone. The rule would apply prior to the tonal changes induced by a following locative Liaison Enclitic.

<i>bùŋ^a</i>	"donkey"	<i>Dāy lā búŋ bódìg yā.</i>
<i>àŋrvŋ^ɔ</i>	"boat"	<i>Dāy lā áŋrvŋ bódìg yā.</i>
<i>dòɔg^ɔ</i>	"house"	<i>Dāy lā dóɔg bódìg yā.</i>
<i>à-gáùŋg^ɔ</i>	"pied crow"	<i>Dāy lā gáùŋg bódìg yā.</i>

Pattern H and O Nominals which have not undergone M Raising:

<i>wābug^{ɔ/}</i>	"elephant"	<i>M bìēyá wābug bódìg yā.</i>
<i>bāŋ^a</i>	"ring"	<i>M bìēyá bāŋ bódìg yā.</i>
<i>yūgvɔɖɪr^ɛ</i>	"hedgehog"	<i>M bìēyá yūgvɔɖɪr bódìg yā.</i>

Pattern H and O Nominals which have undergone M Raising; two tonemes:

<i>wābug^{ɔ/}</i>	"elephant"	<i>Dāy lā wábùg bòdɪg yā.</i>
<i>pɔɔg^{ɔ/}</i>	"field"	<i>Dāy lā póɔg bòdɪg yā.</i>
<i>bāŋ^a</i>	"ring"	<i>Dāy lā bán bòdɪg yā.</i>
<i>pūvg^a</i>	"inside"	<i>Dāy lā púùg bòdɪg yā.</i>

With more than two tonemes:

<i>yūgvɔɖɪr^ɛ</i>	"hedgehog"	<i>Dāy lā yúgvɔɖɪr bódìg yā.</i>
-----------------------------	------------	----------------------------------

Words with initial H like *náaf^ɔ* "cow" fluctuate, probably by analogy with words with Subpattern HL like *à-gáùŋg^ɔ*, which are not subject to M Raising:

<i>náaf^ɔ</i>	"cow"	<i>Dāy lā náàf bódìg yā.</i>
		<i>Dāy lā náàf bòdɪg yā.</i>

8.5 Segmental Contact Phenomena

8.5.1 Consonant Assimilation

Both the initial consonant and the emic nasalisation of the deictic *ɲwà*⁺ "this" are lost when it appears as an enclitic after a word ending in a consonant:

<i>bīis ɲwá</i>	"these children"	[bi:sa]
<i>zàam ɲwá</i>	"this evening"	[za:ma]
but <i>pɥ'ā ɲwá</i>	"this woman" (e.g. as vocative)	[p ^h ɥāwǎ]

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

<i>yīr lā</i>	"the house"	[jira]
<i>pòkòɲr lā</i>	"the widow"	[p ^h ɔk ^h ɔ:ra]

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 New Testament translation (especially Mark) occasionally shows forms like *nidiba* for *nīdɪb lā* "the people."

Initial *n* of the focus particle *nē*⁺ 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]:

<i>Bà kpìid nē.</i>	"They're dying."	[ba k̑pi:dɛ]
<i>M̄ zót nē.</i>	"I'm afraid."	[m̄ zɔt:ɛ]
<i>M̄ mór nē bīisá àyí.</i>	"I have two children with me."	[m̄ mɔɾɛ bi:sa:ji]
<i>Lì pè'el nē.</i>	"It's full."	[lɪ p ^h ɛ:l:ɛ]
<i>Lì sàɲ'am nē.</i>	"It's spoilt."	[lɪ sǎ:m:ɛ]

Other accounts of Kusaal have taken this as a "progressive" flexion *-dɛ/tɛ*; in Toende Kusaal the assimilation of the equivalent particle *mɛ* is invariable after consonants (Niggli 2012), making this interpretation natural enough.

Final nasal consonants of proclitics, cbs and nominal prefixes assimilate to the place of articulation of a following stop:

<i>dànkòɲ</i>	"measles"	[daŋk ^h ɔɲ]
<i>nīn-bámmā</i>	"these people"	[nimbam:a]

Before *s z* such word-final nasals are realised as [ŋ]:

<i>bōn-zíídìr</i>	"thing for carrying on head"	[bɔŋzi:dir]
<i>nām zī'</i>	"still not know"	[naŋzɪ]

In the case of nominal prefixes, where no unassimilated forms are available for control, I follow the traditional orthography in writing these nasals as *n* everywhere except before *p b m*, where I write *m*.

8.5.2 Loss of Nasalisation

Word-final nasalised short vowels denasalise before a clitic with an initial nasal consonant (see on similar changes word-internally, [4.2.1](#)):

	<i>àŋwá</i>	"like this"
but	<i>àwá nā</i>	"like this here"
	<i>kēŋ⁺</i>	"come"
but	<i>kē nā</i>	"come hither"

Some unstressed CVŋ- elements lose nasalisation even when the following consonant is not a nasal. Thus with the compounds of *sūŋ^f* "heart":

<i>sū-málsim^m</i>	"joy"
<i>sūŋ-kpí'òŋ^ɔ</i>	"boldness"

the NT and other sources write *sukpi'orŋ* or *sukpi'eurŋ* for the second word; similarly *supeen* "anger" for *sūŋ-péén^{ne}*. The loss of nasalisation here probably reflects the process of bleaching and phonological simplification which has created nominal prefixes from some original Combining Forms [14.4](#). KB has restored the nasalisation in writing: *sunkpí'eurŋ* "boldness", *sunpéén* "anger."

In the case of the verb *àŋ^a* "be something/somehow" there is loss of nasalisation before the focus particle *nē^{+/}* (for the loss of the ɛ in this verb see below [8.5.3](#)):

	<i>M á nē dāy.</i>	"I'm a man."
but	<i>Lì àŋ súŋā.</i>	"It's fine."

Older written materials almost invariably write *àŋ* when it occurs directly before a complement as *a* not *ann*, but KB consistently has *an* [ã] whenever the form is not followed by *nē^{+/}*.

8.5.3 Loss of Fronting

Fronting diphthongs arise from the fronting effect of *y on the second mora of a short or long vowel [6.3.2](#), or from vowel fusion before underlying final *gɪ [6.3.1](#).

Regardless of origin, fronting diphthongs occur only word-finally and before y.

Nominal combining forms, and verb forms which are not phrase final, may not end in fronting diphthongs unless the next word begins with y. Otherwise, the fronting diphthongs are replaced by the corresponding monophthongs [4.1.1](#):

aɛ	→ a	oɛ	→ o	uɛ	→ u
ae	→ aa			ue	→ uu
	ie	→ iə		ue	→ uə

	sāɛŋ	"blacksmith"
	sāɛŋ lā	"the blacksmith"
but	sàŋ-kàŋā	"this blacksmith"

Ò sù'u lór.	"She owns a lorry."	sū'e ^{ya/}	"own"
Lì àŋ súŋā.	"It's good."	àɛŋ ^a	"be" 24.2

Ti ya'a vve, ti vune tis Zugsoɓ la.

Tì yá' vūɛ, tì vú nē_ø tís Zūg-sóɓ lā.

1PL if be.alive, **1PL** be.alive **FOC SER** give head-one:**SG ART**.

"If we live, we live to the Lord." (Rom 14:8): vūɛ^{a/} "be alive"

Èŋrɪgɪm_ ø pāa dɪ'átà.

Shift.along:**IMP SER** reach doctor:**SG**.

"Shift along up to the doctor." (pāe^{+/} "reach")

Lì nàa nē.	"It is finished."	nāe ^{+/} "finish"
Dúə wēlá?	"[You] arose how?"	dūe ^{+/} "arise"
	(A morning greeting)	

See also the examples with Fusion Verb Base Forms before Liaison at [8.2.1](#).

The SF of the negative verb *kā'e*⁺ "not be" loses the final *ɛ* before the particle *nē* or an object; *kā'e* only occurs VP-finally:

Sɔ' kae na nyanɪ dɔl zugdaannam ayi'...

Sɔ' kā'e_ø ná nyāŋɪ_ø dɔl zūg-dáàn-nàm àyí...

INDEF.AN NEG.BE SER IRR prevail **SER** follow head-owner:**PL NUM:two** ...

"Nobody can serve two masters." (Mt 6:24)

Dāy k̄ā'ē dɔ́ɔgū-n lāa ⁺∅.

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

"There's no man in the room." (*dɔ́ɔgū-n lā* is a clause adjunct 24.1)

Ò k̄ā' bīiga ⁺∅. "She is not a child."

3AN NEG.BE child:SG NEG.

Word-final *ia ua* are also realised as [iə] [uə] within phrases 4.1.1, but the orthography does not reflect this:

<i>sīa lā</i>	"the waist"	[siəla]
<i>sàbùà lā</i>	"the girlfriend"	[sabuela]

This fronting loss is regular in my informants' speech, but NT orthography very frequently writes fronting diphthongs:

<i>voen</i>	for	<i>vōun</i>	"would live" (Gal 3:21, 1996)
<i>Kristo da faaen ti</i>	for	<i>Kristo dá fāaṇ tí</i>	Christ TNS save 1PL.OB "Christ saved us." (Gal 5:1)

ILK too has several instances of *m wa'e ne* "I'm going" for *m wá'a nē*. However, the audio version of the NT consistently shows monophthongisation. Even in the NT, *àeṇ*^a "be something" always appears as *aa* and not *aae* before Liaison; while this might be due to lack of stress 2.4, the rarity of the verb phrase-finally 24.2 would much reduce any analogical pressure to introduce phrase-final spellings into phrase-medial contexts. Many examples of apparent preservation of word-final fronting diphthongs involve *fāeṇ*⁺ "save", perhaps written *faaenn* specifically to distinguish the forms from those of *fāṇ*⁺ "grab, rob"; the 1996 NT has two instances of the certainly spurious *faaennm* for imperative *faanm*; contrast KB *Fu yadda ningir la faanf* "Your faith has saved you." (Lk 7:50.) (Cf *faangid* "saviour" *faangir* "salvation" 18.1.)

Unequivocal orthographic errors in the 1996 NT, like *Noṇilim pu naae da* for KB *Noṇilim pu naada* "Love does not come to an end." (1 Cor 13:8) confirm that the orthographic tradition has encompassed the writing of fronting diphthongs for undoubted monophthongs.

Accordingly, it seems probable that the absence of fronting loss in written materials is simply a graphic convention, writing words as they appear before pause.

For LF *nyaine* "brightly, clearly" (*nyāenē* in the audio version) see 6.4.

Morphology

9 Noun Flexion

9.1 Noun Classes

Nouns inflect for singular and plural by adding Noun Class Suffixes to the stem; the bare stem is used as a Combining Form (cb) in composition with a following nominal. This is a regular and frequent occurrence, being for example the regular method of construing a noun with a following adjective or demonstrative. The cb is always subject to Apocope, as it can never appear clause-finally or before Liaison. Archaisms like the place name *Wìd-nyá'an*^a "Woriyanga" (*wìd-nyá'an*^a "mare") and *nwadibil* (Mt 2:2, 1996) for *nwā-d-bíl*^a "star" (KB *nwadbil*) suggest that consonant-final cbs once ended in an epenthetic vowel, but this is no longer the case.

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

Each noun class suffix has a basic singular, plural or non-count meaning. Count nouns pair a singular and a plural suffix. Five pairings account for the majority of count nouns: these are labelled using Superscript Notation forms of the suffixes, as the ^a|b^a, g^a|s^ε, g^ɔ|d^ε, r^ε|a⁺ and f^ɪ|t⁺ **Noun Classes**. Two unpaired non-count suffixes -b^ɔ -m^m form two more Noun Classes mostly containing mass nouns.

The Noun Classes were once grammatical genders, with separate 3rd person pronouns and agreement of adjectives and numerals. Kusaal, like Dagbani and Mooré, now has a natural gender system opposing persons and non-persons, with pronouns based respectively on the original ^a|b^a and r^ε|a⁺ Classes [19.2.2](#). A few isolated remnants of agreement will be pointed out as they occur.

The deletion of final vowels by Apocope can make the flexional forms that would be expected from straightforward application of phonological rules ambiguous, coinciding with another form from the same paradigm or from another word, or resembling it closely enough that confusion would be likely. This ambiguity may be avoided by **substitution** of a different flexional suffix for that expected for the Class¹¹. (For Adjectives see [10.1](#).)

Such substitution has become *regular* in the case of Class g^ɔ|d^ε stems ending in *m n* following a short vowel, which always use the plural suffix -a⁺ instead of -d^ε, creating a g^ɔ|a⁺ **Subclass** [9.3.3.1](#).

Two further Subclasses have arisen by **reinterpretation** of SFs of one flexional suffix as the SF of a different suffix and remodelling of the LF [2.2.2](#). The r^ε|b^a Subclass of ^a|b^a has reinterpreted SFs ending in *m n r l* as m^{mε} n^{nε} r^ε l^ε instead of m^a n^a r^a l^a [9.3.1.1](#), and the g^ɔ|s^ε Subclass of g^a|s^ε [9.3.2.1](#) has reinterpreted SFs ending in *g* after a rounded vowel mora as g^ɔ instead of g^a.

11) cf Polish locatives, which show -u for regular -e in exactly those cases where -e would cause the loss of stem-final coronal plain/palatal contrasts (Inkelas, 3.1)

Two remaining Subclasses are **semantically** motivated: a Subclass of $a|b^a$ referring to older/important people uses b^a as the *singular* suffix [9.3.1.2](#), and names of languages belong to a Subclass of $r^\varepsilon|a^+$ with the singular suffix $/^\varepsilon$ [9.3.4.1](#).

The regular Classes and Subclasses are thus as follows:

$a b^a$	$s\bar{i}d^a$	$s\bar{i}d\bar{i}b^a$	$s\bar{i}d-$	"husband"
$r^\varepsilon b^a$	$B\bar{i}n^{n\varepsilon}$	$B\bar{i}m^{ma}$	$B\bar{i}n-$	"Moba person"
b^a (sg)	$n\grave{a}'ab^a$	$n\grave{a}'-n\grave{a}m^a$	$n\grave{a}'-$	"chief"
$g^a s^\varepsilon$	$b\bar{u}v\bar{g}^a$	$b\bar{u}vs^\varepsilon$	$b\bar{u}-$	"goat"
$g^\gamma s^\varepsilon$	$n\acute{u}'\grave{u}g^\gamma$	$n\acute{u}'\grave{u}s^\varepsilon$	$n\bar{u}'-$	"hand"
$g^\gamma d^\varepsilon$	$d\bar{u}v\bar{g}^\gamma$	$d\bar{u}vd^\varepsilon$	$d\bar{u}-$	"hut"
$g^\gamma a^+$	$gb\grave{a}v\eta^\gamma$	$gb\grave{a}na^+$	$gb\grave{a}n-$	"book"
$r^\varepsilon a^+$	$n\bar{u}v\bar{r}^\varepsilon/$	$n\bar{u}y\acute{a}^+$	$n\bar{u}-$	"mouth"
$/^\varepsilon$	$K\bar{u}s\acute{a}\grave{a}l^\varepsilon$			"Kusaal"
$f l^+$	$m\grave{o}l\bar{i}f$	$m\grave{o}l\bar{i}^+$	$m\grave{o}l-$	"gazelle"
b^γ	$s\bar{a}'ab^\gamma$		$s\grave{a}'-$	"porridge"
m^m	$t\bar{i}lm^m$		$t\bar{i}-$	"medicine"

M-stems with *long* root vowels in the $a|b^a$ Class avoid the plural suffix b^a [9.3.1](#). Some $g^a|s^\varepsilon$ Class nouns with human reference have alternative plurals with b^a [9.3.2](#). Countable nouns in the m^m Class form plurals with $-a^+$ or $-s^\varepsilon$ or $n\grave{a}m^a$ [9.4](#) [9.3.7](#). The small $f|l^+$ Class has a few members with $f|l^+$ suffixes in only one number [9.3.5](#). The diminutive sg suffix $-l^a$ is found in Kusaal only in the adjective $b\bar{i}l^a$ "little", (plural $b\bar{i}b\bar{i}s^\varepsilon$); it is more widespread in other Western Oti-Volta languages.

There are few other cases of irregular sg/pl pairing with nouns; examples are

$p\bar{e}'og^\gamma/$	$p\bar{e}'\varepsilon s^\varepsilon/$	$p\bar{e}'-$	"sheep"
$gb\bar{e}'og^\gamma$	$gb\bar{e}'\varepsilon d^\varepsilon$	$gb\bar{e}'-$	"forehead"
	$gb\bar{e}da^+$		
$b\bar{i}\bar{a}\eta^\gamma k^\gamma$	$b\bar{i}\bar{a}\eta^\gamma ad^\varepsilon$	WK $b\bar{i}\bar{a}\eta^\gamma-$	"shoulder"
	$b\bar{i}\bar{a}\eta^\gamma ada^+$	SB	

The form of the sg suffix remains sufficiently clear in most SFs to identify the Noun Class correctly from this form alone, if it is known whether the word has human reference [19.2.2](#). Where this is not the case, there is often vacillation between

classes, suggesting that speakers do use these criteria to determine class membership; compare the Noun Class membership assignment of loanwords [9.7](#).

Nouns with sg SF ending in a long vowel, or in an unrounded vowel mora followed by a velar, belong to $g^a|s^\varepsilon$; nouns ending in a rounding diphthong followed by a velar belong to $g^\gamma|d^\varepsilon$ or its $g^\gamma|a^+$ Subclass, except for a few in the $g^\gamma|s^\varepsilon$ Subclass of $g^a|s^\varepsilon$ [9.3.2.1](#). All nouns in SF *-f* belong to $f|t^+$.

Human-reference nouns otherwise default to $a|b^a$ and its $r^\varepsilon|b^a$ Subclass, except for stems ending in a long vowel, which have been transferred to $r^\varepsilon|a^+$ in Agolle Kusaal [9.3.1](#). The only $a|b^a$ sg SF ending in a long vowel is *bā'a* = "traditional diviner." *Ẓɔ̃m*^{nɛ} "fugitive" is $r^\varepsilon|a^+$. The b^a -singular Subclass of $a|b^a$ is responsible for most human-reference nouns ending in *-b* in the sg SF, and also for *sàam*^{ma} "father", *dìam*^{ma} "man's parent-in-law", *dàyáam*^{ma} "woman's parent-in-law."

Mass nouns ending in SF *m* belong to the m^m Class, and *b/p* to the b^γ Class. 2-mora stem gerunds in *-m* belong to b^γ rather than m^m .

Names of languages belong to the l^ε Subclass of $r^\varepsilon|a^+$.

Non-human-reference count nouns ending in *l n r* belong to the $r^\varepsilon|a^+$ Class, as do those ending in *m* apart from a few m^m Class count nouns like *yām*^{m/} "gall, common sense" and hence "gall bladder", *pūum*^{m/} "flower(s), flora", *dàalím*^m "male sex organs", *pò'alím*^m "female sex organs." *Pīim*^{m/} "arrow" is a relic of a lost $^\gamma|^\varepsilon$ Class.

9.1.1 Noun Class and Meaning

As usual with noun class systems, there are correlations between class membership and meaning; exceptions are frequent, however. Phonologically motivated Subclasses have the same correlations with meaning as their main Classes.

The association of Noun Class and meaning can be exploited to change the significance of a stem [12.2](#).

The $a|b^a$ Class has exclusively human-reference membership, though many nouns referring to people belong to other classes. There is a subclass of nouns for elders and other important people which use the plural b^a as singular [9.3.1.2](#).

The $g^a|s^\varepsilon$ Class has general membership but notably includes the great majority of tree names [35.5](#), many larger animals, and tools. Almost all ethnic group names belong to $a|b^a$ or $g^a|s^\varepsilon$ (*Zàngbèog*^γ "Hausa" and *Nàsāara*⁺ "European" are the only exceptions in my materials); the place inhabited by the group has sg *-g*^γ [35.4](#).

The $g^\gamma|d^\varepsilon$ and $r^\varepsilon|a^+$ Classes are the default non-human countable classes. They include all names of fruits [35.5](#), and most names of body parts [35.6](#). Human-reference nouns in $g^\gamma|d^\varepsilon$ seem to be pejorative (*bālērug*^γ "ugly person", *dàbīog*^γ "coward", *ẓɔ̃lvg*^γ "fool.") Some nouns which historically belonged to $a|b^a$ have been reallocated to $r^\varepsilon|a^+$ for phonological reasons e.g. *bīār*^{ε/} "elder same-sex sibling"; the process is less complete in Toende Kusaal [9.3.1](#).

The Subclass in *-l^ε* includes all names of languages [9.3.4.1](#).

The small $\mathcal{P}|\iota^+$ Class includes two groups of meanings: animals, and small round things. It contains all names of seeds. No $\mathcal{P}|\iota^+$ noun refers to people.

The $b^\mathcal{D}$ Class has only two members in my own materials that are not gerunds: $sā'ab^\mathcal{D}$ "millet porridge, TZ" and $tāṇp^\mathcal{D}$ "war." There is also a word $ki'ib^\mathcal{D}$ "soap" in written materials; WK has instead $kīibú^+$ with cb $kīib-$ which is probably a loan from the cognate Mampruli word [18.1](#). Niggli's "Dictionnaire" has Toende $ki'ip$.

The m^m Class includes names of liquids and substances and abstract nouns. There are few count nouns, and none referring to people or animals. Names of liquids are all m^m or $b^\mathcal{D}$ or formally plural.

Deverbal nouns have predictable class membership: agent nouns belong to $a|b^a$, instrument nouns to $g^a|s^\epsilon$, and gerunds take $g^\mathcal{D} r^\epsilon b^\mathcal{D}$ or m^m by rule [12.1.1.1](#).

9.2 Stem Levelling

9.2.1 Singulars and Plurals

Sometimes a morphophonemic rule is triggered only by the singular or plural noun suffix in a paradigm. In such cases the resulting stem allomorphy is often levelled in favour of the form shown in the more frequently used number.

Thus the vowel length changes seen in CV- root-stems [6.1.1.1](#) are levelled in favour of the singular in e.g.

$fūug^\mathcal{D}/$	"clothing"	pl $fūt^\epsilon/$ or $fūud^\epsilon/$
---------------------	------------	--

and the short root vowel regularly seen before $-y-$ in the plural of the $r^\epsilon|a^+$ Class has probably been carried over into the singular in e.g.

	$gbēr^\epsilon/$	"thigh"	$gbēyá^+$	"thighs"
	$gāṇr^\epsilon/$	"ebony fruit"	$gāṇyá^+$	"ebony fruits"
cf	$gāaṇs^\epsilon/$	"ebony trees"		

Quality changes between singular and plural stem forms occur in the $g^a|s^\epsilon$ Class as a result of the merger of $iāṇ uāṇ$ with $εεṇ ɔɔṇ$ [6.3.1](#):

$nūa^+ /$	"hen"	$nōɔs^\epsilon /$	"hens"
-----------	-------	-------------------	--------

Such alternations are never levelled. However, the distribution of oral $iā uā$ versus $εε ɔɔ$ is strikingly different between the $g^a|s^\epsilon$ and the $g^\mathcal{D}|d^\epsilon$ Classes. There are only a few stems with the root vowel $iā$ (and none with $uā$) before singular $g^\mathcal{D}$, such as $dābīog^\mathcal{D}$ "coward" (pl $dābīəd^\epsilon$) and $kṗīoṇ^\mathcal{D}$ "strong" (pl $kṗīəma^+$), and only a few with root-final oral $εε$ or $ɔɔ$ before the singular g^a : $Gōɔg^a$ sg of $Gōɔs^\epsilon$ "Goosi clan" along

with $t\acute{e}'\acute{e}g^a$ "baobab". Moreover, there is an actual alternation in the stems used before $g^a|s^\epsilon$ and $g^\gamma|d^\epsilon$ suffixes with the adjective

$b\bar{r}^+a$	$b\bar{r}\acute{a}s^\epsilon$	$b\grave{r}\acute{a}'-$	"bad"
$b\bar{e}'og^\gamma$	$b\bar{e}'\acute{e}d^\epsilon$	$b\bar{e}'-$	

This suggests that the sequences $*\epsilon\epsilon ga$ and $*\gamma\gamma ga$ might be subject to $*g$ -deletion and vowel Fusion like $*i\acute{a}ga$ $*u\acute{e}ga$ $*\acute{e}\acute{e}ga$ $*\gamma\gamma ga$ 6.3.1, but if so, the vowels of $G\gamma\gamma g^a$ and $t\acute{e}'\acute{e}g^a$ would have to be due to levelling on the basis of the plural. This is very plausible with "member of the Goosi Clan", though less so with "baobab."

Another possible instance might be $s\grave{a}b\grave{u}a^+$ "lover, girlfriend" (pl $s\grave{a}b\grave{u}\acute{e}s^\epsilon$) if this is connected with $b\gamma\gamma d^a$ "want, love", and here levelling of the plural on the basis of the singular would be natural enough.

An alternative proposal would be a rule $*i\acute{a}Cv \rightarrow \epsilon\epsilon Cv$ (cf $*u\acute{e}gv \rightarrow \gamma\gamma gv$ 6.3.2) which might not only apply before the flexion g^γ but also account for the odd by-form of $p\grave{i}\acute{a}l\acute{u}g^a$ "white" seen in $z\bar{u}-p\acute{e}\acute{e}l\grave{u}g^\gamma$ "bald", literally "white-headed." In this case, it would be $d\grave{a}b\bar{i}og^\gamma$ "coward" which would have to be explained as exceptional.

Levelling may account for the lack of any clear pattern in the CVVC~CVC root alternation in flexion 6.1.1.2; when length alternations do occur, it is plurals and cbs that have short-vowel allomorphs, and this may have been the original rule.

9.2.2 Combining Forms

Nominal Combining Forms, lacking a flexional suffix and always subject to Apocope 9.1, would be often reduced by the usual rules to ambiguous forms. Often the expected cb has been replaced by a form which is segmentally **but not tonally** that of the singular. Again, this is regular with certain stem types.

$n\bar{i}f^\gamma$	$n\bar{i}n\acute{i}^+$	$n\bar{i}n-$ or $n\bar{i}f-$	"eye"
$z\grave{i}\eta'a^+$	$z\grave{e}\eta'\acute{e}s^\epsilon$	$z\grave{i}\eta'a'-$ or $z\grave{e}\eta'a'-$	"red" (adjective)
$w\bar{\omega}k^\gamma$	$w\bar{a}'ad^\epsilon$	$w\bar{a}'-$ or $w\bar{\omega}k-$	"long, tall" (adjective)
$t\bar{a}\eta p^\gamma$		$t\bar{a}\eta p-$	"war" 6.1.1.1
$z\bar{u}g^\gamma$	$z\bar{u}t^\epsilon$	$z\bar{u}-$ or $z\bar{u}g-$	"head"

Mooré and Toende both show $zu-$ consistently in cases where Agolle has $z\bar{u}g-$:

<u>Mooré</u>	<u>Toende</u>	<u>Agolle</u>	
$zusoaba$	$z\grave{u}s\acute{o}p$	$z\bar{u}g-s\acute{ó}b^a$	"boss"
$z\acute{u}k\acute{u}ká$	$z\grave{u}k\acute{u}k$	$z\bar{u}g-k\bar{u}gv^\epsilon$	"pillow"

Zūg-sób^a "Lord" is very frequently read *Zū-sób^a* in the audio version of the NT. The cb of *zūg* behaves tonally like a nominal prefix and the original form *zū-* is probably a one-mora form that has not undergone Apocope 7.2.4.

The "regular" cb of *nīf^l* "eye" is *nīn-*, but as a head it appears as *nīf-*: (the form *nīn-* is homophonous with the cb of *nīd^a* "person"):

nīf-kánā

"this eye"

Nīn- still predominates as a pre-modifier: *nīn-dáa⁼* "face", *nīn-tám^m* "tears", *nīn-gótis^ε* "spectacles." *Gbàṽṽ^ɔ* "letter, book" now has the cb *gbàṽṽ-*, but the "regular" cb *gbàn-* still occurred as a generic argument in the 1976 NT e.g. *gbanmī'id gbàn-mī'id* "scribe" ("book-knower") where later versions have *gbaṽṽmī'id*. Similarly, the 1976 NT *ziṅṅban'ad zīm-gbáṽ'ad* "fisherman" has been replaced by KB *ziṅṅban'ad*.

With *m* and *n* stems, the remodelled forms have become the regular cbs:

zīnzāṽṽ^ɔ
àṅrṽṽ^ɔ

zīnzāná⁺
àṅrṽṽma⁺

zīnzáṽṽ-
àṅrṽṽ-

"bat"

"boat"

So too with CV-stems in the *r^ε|a⁺* and *m^m* Classes:

gbēr^ε
kùkōr^ε

gbēyá⁺
kùkōyá⁺

gbēr-
kùkōr-

"thigh"

"voice"

(but *kùkō-títā'ar* "loud voice" NT)

Words like *vūm^m* cb *vūm-* "life", *kūm^m* cb *kùm-* "death" probably do not belong to this type, but are most likely *CVm-* stems.

The cb may be remodelled after the *plural* if there is no sg extant:

no sg

kī⁺

kī- or *kā-*

"cereal, millet"

This may reflect a plural form with a distinct specialised meaning:

lā'a^l

līgṽṽ⁺

là'- or *līg-*

"cowrie" pl "money"

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

dāṽṽ⁺
tāṽṽ⁺

dāp^a
tāṽṽp^a

dāṽṽ- sg *dāp-* pl
tāṽṽ- sg *tāṽṽp-* pl

"man, male person"

"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

<i>kòlɔg^ɔ</i>	<i>kòŋ^{nɛ}</i>	<i>kòlɔg-</i>	"bag"
<i>lànnɔg^a</i>	<i>lànnɪs^ɛ</i>	<i>lànnɔg-</i>	"squirrel"
<i>kòlɔg-kàŋā</i>	"this bag"	cf cb <i>kòl-</i> from	<i>kòlɔg^a</i> "river"
<i>lànnɔg-pìəlɔg</i>	"white squirrel"	cf cb <i>làŋ-</i> from	<i>làŋ^{nɛ}</i> "testicle"

Remodelling of cbs after sg/pl forms never affects tones, revealing that cases where a sg/pl seems to precede an adjective or modifier pronoun in fact show cbs:

<i>dàŋ-sùŋ</i>	"good man"	cf <i>dāŋ</i>	"man"
<i>dàp-sùma</i>	"good men"	cf <i>dāp</i>	"men"

Remodelled cbs are traditionally written as separate words; as the orthography does not mark tone, this can lead to ambiguous forms. e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmug-bī-púŋ* "slave girl" not *yàmmug bí-púŋ* "slave's girl" [19.8.1.5](#).

9.3 Noun Paradigms

For tones see [7.2](#). Combining forms are frequently remodelled segmentally after the singular [9.2.2](#), regularly so with stems in *m* and *n*.

The default for sg and pl is for Class Suffixes simply to attach after a stem-final epenthetic vowel or root vowel. Complications arise from rounding of stem-final vowels before the suffix *g^ɔ* in singulars in *-g^ɔ -k^ɔ -ŋ^ɔ*, deletion of **g* after *aa iə uə aaŋ ɛɛŋ ɔɔŋ* with the *g^a|s^ɛ* Class sg, consonant assimilation instead of epenthesis in all classes, and the combination of root-vowel-final stems with the flexions ^a sg, ⁺ pl and ^{a+} pl [6.1.1.1](#) [9.3.1](#).

9.3.1 *a|b^a* Class

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

<i>sīd^a</i>	<i>sīdɪb^a</i>	<i>sīd-</i>	"husband"
<i>sàa^a</i>	<i>sàaɪb^a</i>	<i>sàaɪ-</i>	"human being"
<i>kpāad^{a/}</i>	<i>kpāadí^a</i>	<i>kpāad-</i>	"farmer"
<i>kpīkpīn^{na/}</i>	<i>kpīkpīnní^a</i>	<i>kpīkpín-</i>	"merchant"
<i>sàam-pīt^{a/}</i>	<i>sàam-pītí^a</i>	<i>sàam-pīt-</i>	"father's younger brother"
<i>bì-pīt^{a/}</i>	<i>bì-pītí^a</i>	<i>bì-pīt-</i>	"younger child"
<i>wād-tís^a</i>	<i>wād-tísì^a</i>	<i>wād-tís-</i>	"lawgiver" NT
<i>zà'-nō-gúr^a</i>	<i>zà'-nō-gúrì^a</i>	<i>zà'-nō-gúr-</i>	"gatekeeper" NT
<i>nīd^{a/}</i>	<i>nīdɪb^{a/}</i>	<i>nīn-</i> irreg	"person"

Most deverbal agent nouns are completely regular:

<i>kūvd^a</i>	<i>kūvdíb^a</i>	<i>kūvd-</i>	"killer"
-------------------------	---------------------------	--------------	----------

Agent nouns from 3-mora stems in *s* regularly drop the *d* formant in sg and cb; they show a regular shift between Tone Pattern L in the sg and Pattern O in the plural for agent nouns from Pattern LO verbs [7.2.3](#). Many also have *nàm^a* plurals [9.4](#).

<i>kùəs^a</i>	<i>kūəsıdıb^a</i>	<i>kùəs-</i>	"seller"
<i>pù'us^a</i>	<i>pū'usıdıb^a</i>	<i>pù'us-</i>	"worshipper"
<i>dì'əs^a</i>	<i>dī'əsıdıb^a</i>	<i>dì'əs-</i>	"receiver"
<i>tù'as-tù'as^a</i>	<i>tù'as-tū'asıdıb^a</i>	<i>tù'as-tù'as-</i>	"talker"
<i>sīgıś^a</i>	<i>sīgıśıdıb^a</i>	<i>sīgıś-</i>	"lowerer"
<i>dııs^a</i>	<i>dııs-nàm^a</i>	<i>dııs-</i>	"glutton"

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

<i>sòs^a</i>	<i>sōsıdıb^a</i>	<i>sòs-</i>	"beggar"
<i>tıs^a</i>	<i>tīsıdıb^a</i>	<i>tıs-</i>	"giver" WK
<i>kīs^a</i> or <i>kīsıd^a</i>	<i>kīsıdıb^a</i>	<i>kīsıd-</i> (only)	"hater"

These may be original 3-mora stem verbs with **ss* → *s*. There are also

<i>zàb-zàb^a</i>	<i>zàb-zàb-nàm^a</i>	<i>zàb-zàb-</i>	"warrior"
	<i>zàb-zābıdıb^a</i>		
<i>gbān-záb^a</i>	<i>gbān-záb-nàm^a</i>	<i>gbān-záb-</i>	"leatherbeater"
<i>ṇwī-ték^a</i>	<i>ṇwī-tékıdıb^a</i>		"rope-puller"

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

	<i>pı'à-sāṇ'am^{ma}</i>	<i>pı'à-sāṇ'amıdıb^a</i>	<i>pı'à-sàṇ'am-</i>	"adulterer"
(cf	<i>yūm-yú'ùm^{na}</i>	<i>yūm-yú'ùmnıb^a</i>	<i>yūm-yú'ùm-</i>	"singer")

Stems ending in vowels in this Class are problematic because of the vowel-initial sg suffix. There is no single systematic rule for the outcome.

Four highly irregular nouns end in diphthongs in the sg [2.2.2](#):

<i>dāu⁺</i>	<i>dāp^a</i>	<i>dàu-, dàp-</i>	6.1.1.1 "man" (<i>vir</i>)
<i>tāuṇ^{+/}</i>	<i>tāṇp^a</i>	<i>tāuṇ-, tāṇp-</i>	6.1.1.1 "sib of opposite sex"
<i>sāṇ⁺</i>	WK <i>sāaṇb^a</i>	<i>sàṇ-</i>	"blacksmith"

<i>sāḡḡ^a</i>	DK			
<i>sōḡḡ⁺</i>	WK	<i>sōḡḡ^a</i>	<i>sōḡ-</i>	"witch"
<i>sōḡḡ^a</i>	DK			

There are also the two original **g*-stems

<i>pṽ'ā^a</i> ← * <i>pṽaga</i>	<i>pō'ab^a</i>	<i>pṽ'ā-</i>	"woman, wife"
<i>bā'a⁼</i> ← * <i>bā'aga</i>	<i>bā'ab^a</i>	<i>bā'a-</i>	"traditional diviner"

Some CVV stems introduce *-d-* in some forms but not others:

<i>wìḡ^a</i>	<i>wìḡ^a</i>	<i>wìḡ-</i>	"hunter"
<i>sōḡ'ḡ^a/</i>	<i>sōḡ'ḡ^a/</i>	<i>sōḡ'ḡ-</i>	agent noun of <i>sōḡ'e⁺</i> / "be better than"
<i>pūkṽā^a/</i>	<i>pūkṽādí^a</i>	<i>pūkṽá-</i>	"farmer" (but <i>kṽā^a</i> <i>id</i> is regular)

Sg final *-v* is dropped elsewhere in the paradigm of

<i>pītú⁺</i>	<i>pītí^a</i>	<i>pīt-</i>	"younger sibling of same sex"
-------------------------	-------------------------	-------------	----------------------------------

Sàam-pīt^a "father's younger brother" and *bì-pīt^a* "younger child" are regular.

Historically, a solution to the problem of adding sg ^a to stems ending in a long vowel was to use the suffix *r^ε* in place of ^a; related languages, including Toende Kusaal, still keep the *-b^a* plural forms, but in Agolle Kusaal such words have acquired *-a⁺* plurals and thus passed over entirely into the *r^ε|a⁺* Class:

Agolle	<i>pùkḡḡ^ε</i>	<i>pùkḡḡ^a</i>	<i>r^ε a⁺</i>	"widow"
Toende	<i>pókóót</i>	<i>pókōp</i>	<i>r^ε b^a</i>	
Farefare	<i>pókōorē</i>	<i>pókōpa</i>	<i>r^ε b^a</i>	
Mooreé	<i>pùgkōoré</i>	<i>pugkōapa</i>	<i>r^ε b^a</i>	
Agolle	<i>dà-kḡḡ^ε</i>	<i>dà-kḡḡ^a</i>	<i>r^ε a⁺</i>	"bachelor"
Toende	<i>dákóót</i>	<i>dakōp</i>	<i>r^ε b^a</i>	
Farefare	<i>dàkōorē</i>	<i>dakōpa</i>	<i>r^ε b^a</i>	

Such transfers may account for several human-reference nouns found unexpectedly in *r^ε|a⁺*, e.g. *bīār^ε* "elder sibling of the same sex", *pḡḡ'ḡ^ε* "cripple", *ḡyē'ēr^ε* "next-younger sibling" (but Toende sg *yě'et* pl *yěra id*) and maybe even *pṽ'ā-sāḡ^ε* "young woman", where the sg *d* might be introduced from the plural *pṽ'ā-sāḡ^a*, where it would be due to CV'V ~ CV*d* allomorphy [6.1.1.1](#) (cf *pē'-sá'a⁼* "ewe

lamb.") However, cognate forms suggest that levelling has taken place in different directions in the different languages with this word:

Toende	<i>pɔ'ɔ-sa'a</i>	<i>pɔ'ɔ-sa'as</i>	<i>g^a s^ɛ</i>	"young woman"
Farefare	<i>pug-sarga</i>	<i>pug-sarsɪ</i>	<i>g^a s^ɛ</i>	
Mooré	<i>pùgsádà</i>	<i>pùgsádbà</i>	<i>a b^a</i>	

Stems in a short root vowel followed by single *m n l* regularly adopt a sg form resembling that of the the *r^ɛ|a⁺* Class 9.3.1.1. All other stems in *-m* have sg - *m^m* instead of *-m^a*: *zū'əm^m*/ "blind person" etc.

Stems in *n* undergo consonant assimilation in the pl: **nb* → *mm*:

<i>sāan^a</i> /	<i>sáam^{ma}</i>	<i>sāan-</i>	"guest, stranger"
---------------------------	--------------------------	--------------	-------------------

With *m*-stems the assimilation **mb* → *mm* would cause SF sg and pl to coincide segmentally, and also tonally except with Pattern H words. The homophony is avoided by using the plural suffix *s^ɛ* instead of *b^a* or by pluralising with the word *nàm^a* 9.4:

<i>kpī'im^m</i> /	<i>kpī'imís^ɛ</i>	<i>kpī'im-</i>	"dead person, corpse"
<i>zū'əm^m</i> /	<i>zū'amís^ɛ</i>	<i>zū'əm-</i>	"blind person"
<i>tādım^m</i> /	<i>tādımıs^ɛ</i>	<i>tādım-</i>	"weak person"
	<i>tādım-nàm^a</i>		

In two words WK freely accepted *-b^a* pl forms as LFs but not SFs, clearly showing that avoidance of ambiguity drives the variations:

<i>kpēɛŋm^m</i>	<i>kpēɛŋmma</i>	LF-only WK	
	<i>kpēɛŋm-nàm^a</i>	<i>kpēɛŋm-</i>	"elder"
<i>bī'əm^m</i>	<i>bī'emma</i>	LF-only WK	
	<i>bī'əm-nàm^a</i>	<i>bī'əm-</i>	"enemy"

Ambiguity between sg and pl may instead be avoided by replacing the sg suffix *a* with *g^a*; such words may then develop *g^a|s^ɛ* plurals as well:

<i>dàsāŋ^a</i>	<i>dàsām^{ma}</i>	<i>dàsàŋ-</i>	"young man"
	or <i>dàsāŋs^ɛ</i>		
<i>Yàaŋ^a</i>	<i>Yàam^{ma}</i>	<i>Yàaŋ-</i>	"Yanga, Yansi person"
	or <i>Yàamıs^ɛ</i>		
	or <i>Yàaŋs^ɛ</i>		

9.3.1.1 $r^\varepsilon|b^a$ Subclass

Stems in *l n m r* following a *short* root vowel show forms in LF $-\varepsilon$ with the preceding consonant doubled. This probably remodelled from the SF [2.2.2](#), which seems to show no flexion and could be the regular outcome of adding either $-^a$ or $-r^\varepsilon$. Wherever the SF could *not* be the regular phonological result of the attachment of a sg $-r^\varepsilon$ suffix, ethnonyms with b^a plurals always show sg $-^a$.

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

<i>Dàgbān</i> ^{ne/}	<i>Dàgbām</i> ^{ma/}	<i>Dàgbān-</i>	"Dagomba person"
<i>Bìn</i> ^{ne}	<i>Bìm</i> ^{ma}	<i>Bìn-</i>	"Moba person"
<i>Kùtān</i> ^{ne/}	<i>Kùtām</i> ^{ma/}	<i>Kùtān-</i>	member of EW's clan

An *r*-stem with an irregular stem change in the plural is seen in

<i>Mōr</i> ^{ε/}	<i>Móom</i> ^{ma}	<i>Mōr-</i>	"Muslim"
--------------------------	---------------------------	-------------	----------

All other words in this Subclass are Agent Nouns with stems in $-mm$ $-ll$ or $-r(r)$, from Variable Verb stems in $-mm$ and Invariable Verb stems in $-ll$ $-r(r)$. Not only do these show $-\varepsilon$ LF sg forms but also analogical $-a^+$ plurals.

or	<i>lēm-lēm</i> ^{ma}	<i>lēm-lēmmb</i> ^a	<i>lēm-lēm-</i>	NT	"taster"
	<i>lēm-lēm</i> ^{mε}	<i>lēm-lēmma</i> ⁺			
	<i>nyà'an-dòl</i> ^{la}	<i>nyà'an-dòllb</i> ^a	<i>nyà'an-dòl-</i>		"disciple" tones: WK
	<i>nyā'an-dól</i> ^{lε}	<i>nyā'an-dóllá</i> ⁺	<i>nyā'an-dól-</i>		WK's own forms
or	<i>gbàn-zānl</i> ^{la/}	<i>gbàn-zānlb</i> ^a	<i>gbàn-zānl-</i>	DK	"one with a book in hand" KT WK
	<i>bù-zānl</i> ^{lε/}	<i>bù-zānlá</i> ⁺			"goat-carrier"
	<i>gbàn-mōr</i> ^{a/}	<i>gbàn-mōrb</i> ^a	<i>gbàn-mōr-</i>		"one who has a book"
	<i>gbàn-tār</i> ^{a/}	<i>gbàn-tārb</i> ^a	<i>gbàn-tār-</i>		<i>id</i>
or	<i>bù-mōr</i> ^{a/}	<i>bù-mōrb</i> ^a	<i>bù-mōr-</i>	DK	"goat-owner"
	<i>bù-mōr</i> ^{ε/}	<i>bù-mōrá</i> ⁺			

Agent Nouns with stems in *nn* or in *mm/mn* derived from $*md$, like *tùm-tūm*^{na} "servant", do *not* show $r^\varepsilon|a^+$ forms, because such stems do not show assimilation between the stem-final cluster and r^ε [6.2.1](#) and the SFs of the Agent Nouns and corresponding Dynamic Deverbal Adjectives therefore remain distinct.

9.3.1.2 *b^a* as Singular

A subclass of nouns referring to older/important people has *-b^a* in the sg, and makes the plural with *nàm^a* [9.4](#):

<i>nà'ab^a</i>	<i>nà'-nàm^a</i>	<i>nà'-</i>	"chief"
<i>yáab^a</i>	<i>yāa-nám^a</i>	<i>yāa-</i>	"grandparent, ancestor" (* <i>yāágbā</i>)
<i>pùgvɔɖib^a</i>	<i>pùgvɔɖ-nàm^a</i>	<i>pùgvɔɖ-</i>	"father's sister"
<i>āṇsìb^a</i>	<i>āṇs-nám^a</i>	<i>āṇs-</i>	"mother's brother"

With the consonant assimilation **mb* → *mm*:

<i>sàam^{ma}</i>	<i>sàam-nàm^a</i>	<i>sàam-</i>	"father"
<i>dìam^{ma}</i>	<i>dìam-nàm^a</i>	<i>dìam-</i>	"man's parent-in-law"
<i>dàyáam^{ma}</i>	<i>dàyāam-nám^a</i>	<i>dàyāam-</i>	"woman's parent-in-law"

9.3.2 *g^a|s^ε* Class

Straightforward examples include:

<i>būvg^a</i>	<i>būvs^ε</i>	<i>bù-</i>	"goat"
<i>tè'εg^a</i>	<i>tè'εs^ε</i>	<i>tè'-</i>	"baobab"
<i>tìlg^a</i>	<i>tìls^ε</i>	<i>tì-</i>	"tree"
<i>ṇwāɖlg^{a/}</i>	<i>ṇwāɖls^{ε/}</i>	<i>ṇwād-</i>	"moon, month"
<i>lōɖlg^{a/}</i>	<i>lōɖls^{ε/}</i>	<i>lōd-</i>	"corner"
<i>āaṇɖlg^a</i>	<i>āaṇɖls^ε</i>	<i>āaṇɖ-</i>	"Vitex doniana"
<i>bù-dìbɪg^a</i>	<i>bù-dìbɪs^ε</i>	<i>bù-dìb-</i>	"male kid"
<i>kpiibɪg^a</i>	<i>kpiibɪs^ε</i>	<i>kpiib-</i>	"orphan"
<i>yàmmɪg^a</i>	<i>yàmmɪs^ε</i>	<i>yàm-</i>	"slave"
<i>kōlg^a</i>	<i>kōls^ε</i>	<i>kòl-</i>	"river"
<i>kpòkpàrig^a</i>	<i>kpòkpàris^ε</i>	<i>kpòkpàr-</i>	"palm tree"
<i>pūsɪg^{a/}</i>	<i>pūsɪs^{ε/}</i>	<i>pūs-</i>	"tamarind"
<i>zōɔg^a</i>	<i>zōɔs^ε</i>		"run, race" 12.1.1.1.1
<i>būdɪg^a</i>			"planting" 12.1.1.1.1

Root-stems in *Caa Cìə Cuə* delete the **g* of the sg suffix *-g^a* [6.3.1](#):

<i>bāa⁼</i> 8.1	<i>bāas^ε</i>	<i>bà-</i>	"dog"
<i>sīa⁺</i>	<i>sīəs^ε</i>	<i>sjà-</i>	"waist"
<i>sàbùa⁺</i>	<i>sàbùəs^ε</i>	<i>sàbɔ̀à-</i>	"lover, girlfriend"

Nasal *iaŋ uaŋ* here alternates with *εεŋ ɔɔŋ* [6.3.1](#)

<i>zìŋ'a⁺</i>	<i>zèŋ'εs^ε</i>	<i>zìàŋ'-</i> or <i>zèŋ'-</i>	"red" (adjective)
<i>nū'-íŋ'a⁺</i>	<i>nū'-éŋ'ès^ε</i>	<i>nū'-éŋ'-</i>	"fingernail"
<i>Mùa⁺</i>	<i>Mòɔs^ε</i>	<i>Mò-</i>	"Mossi person"
<i>nūa^{+/}</i>	<i>nòɔs^{ε/}</i>	<i>nò-</i>	"hen"

Historical *Cag- *Cɪag- *Cɹag- stems [6.1.1.1](#) show singulars with -*k^a*:

<i>zàk^a</i>	<i>zà'as^ε</i>	<i>zà'-</i>	"compound"
<i>pɹāk^a</i>	<i>pū'as^ε</i>	<i>pɹ'à-</i>	"female" (adjective)

Stems in *CVg- display consonant assimilation in the sg via *gg → *kk*:

<i>gìk^a</i>	<i>gìgis^ε</i>	<i>gìg-</i>	"dumb person"
<i>kūk^a</i>	<i>kūgus^ε</i>	<i>kùg-</i>	"chair"

Stems in -*m*- and -*n*- show -*ŋ*- in the sg, via *mg → *ŋŋ* and *ng → *ŋŋ*, and the cbs adopt the sg form; in the pl *ns → *ĩs* [6.2.1](#) whereas -*ms*- remains with 2-mora-stems, but is frequently assimilated in longer stems. There are, however, no unequivocal three- of four-mora *n*-stems in this Class in any case.

<i>bāŋ^a</i>	<i>bāaŋs^ε</i>	<i>bàŋ-</i>	"ring, chain, fetter"
<i>tēŋ^a</i>	<i>tēeŋs^ε</i>	<i>tèŋ-</i>	"land"
<i>pàŋ^a</i>	<i>pàaŋs^ε</i>	<i>pàŋ-</i>	"power"
<i>bùŋ^a</i>	<i>bùmɪs^ε</i>	<i>bùŋ-</i>	"donkey"
<i>nāŋ^a</i>	<i>nāmɪs^ε</i>	<i>nàŋ-</i>	"scorpion"
<i>sú'əŋ^a</i>	<i>sū'əmɪs^ε</i>	<i>sū'əŋ-</i>	"rabbit"
<i>ŋwāaŋ^a</i>	<i>ŋwāamɪs^ε</i>	<i>ŋwàaŋ-</i>	"monkey"
<i>níŋ^a</i>	<i>níis^ε</i>	<i>nīiŋ-</i>	"bird"
	<i>nīimɪs^ε</i>		
<i>kùlŋ^a</i>	<i>kùlɪs^ε</i>	<i>kùlŋ-</i>	"door"
	<i>kùlɪmɪs^ε</i>		
<i>kū'alíŋ^a</i>	<i>kū'alɪs^ε</i>	<i>kū'alíŋ-</i>	sleeveless traditional
	<i>kū'alímɪs^ε</i>		smock

So too with all deverbal instrument nouns:

<i>mēēdɪŋ^a</i>	<i>mēēdɪs^ε</i>	<i>mēēdɪŋ-</i>	"building tool"
	<i>mēēdɪmɪs^ε</i>		

<i>pīəsíŋ</i> ^a	<i>pīəsís</i> ^ε <i>pīəsímis</i> ^ε	<i>pīəsíŋ-</i>	"sponge" ← <i>pīe</i> ^{+/} "wash (self)"
----------------------------	--	----------------	--

Various irregular stem alternations are seen in

<i>bīig</i> ^a	<i>bīs</i> ^ε	<i>bī-</i> or <i>bì-</i>	"child"
<i>bèrɪŋ</i> ^a	<i>bèrɪgis</i> ^ε		a plant used for fibre
<i>tàmpūa</i> ⁺	<i>tàmpōɔs</i> ^ε	<i>tàmpò-</i>	"housefly" DK (no <i>ŋ</i>)
<i>būtɪŋ</i> ^a	<i>būtɪs</i> ^ε	<i>bùtɪŋ-</i>	"cup" 2.4

Very irregular in both flexion and phonology, though apparently *g*^a|*s*^ε Class, is

<i>sāŋá</i> ⁺	<i>sānsá</i> ⁺ [saŋsa]	<i>sān-</i>	"time"
--------------------------	-----------------------------------	-------------	--------

These human-reference nouns have alternative plurals with the suffix *-b*^a:

<i>dàsāŋ</i> ^a	<i>dàsām</i> ^{ma} or <i>dàsāaŋs</i> ^ε	<i>dàsàŋ-</i>	"young man"
<i>Yàaŋ</i> ^a	<i>Yàam</i> ^{ma} or <i>Yàamɪs</i> ^ε or <i>Yàaŋs</i> ^ε	<i>Yàaŋ-</i>	"Yanga, Yansi person"
<i>Sà'dàbùa</i> ⁺	<i>Sà'dàbùəb</i> ^a or <i>Sà'dàbùəs</i> ^ε		clan name 35.4

9.3.2.1 *g*^ɔ|*s*^ε Subclass

Several *s*^ε-plural stems with rounded vowels have sg *g*^ɔ, by reinterpretation of *g*^a|*s*^ε Class sg as *g*^ɔ when the SF forms coincide [2.2.2 9.1](#). WK avoids the change to *-g*^ɔ with human-reference nouns. No regular Deverbal Instrument Noun takes *-g*^ɔ.

Some *g*^ɔ|*s*^ε words have also acquired *g*^ɔ|*d*^ε plurals by analogy, and some words originally of this type have probably passed entirely into the *g*^ɔ|*d*^ε Class.

<i>kūug</i> ^{a/} or <i>kūug</i> ^{ɔ/}	<i>kūs</i> ^{ε/}	<i>kū-</i>	"mouse"
<i>sù'ug</i> ^a or <i>sù'ug</i> ^ɔ	<i>sù'us</i> ^ε	<i>sù'-</i>	"knife"
<i>nú'ùg</i> ^ɔ	<i>nú'ùs</i> ^ε	<i>nū'-</i>	"hand"
<i>zùnzòŋ</i> ^a or <i>zùnzòŋ</i> ^ɔ	<i>zùnzòɔŋs</i> ^ε	<i>zùnzòŋ-</i>	"blind" (adjective)
<i>tèŋ-zùŋ</i> ^ɔ	<i>tèŋ-zùus</i> ^ε		"foreign land"
but	<i>pjàŋ'-zùna</i> ⁺		"foreign language"

<i>yó'vŋ</i> ^ɔ	<i>yō'vɪ́s</i> ^ɛ	<i>yō'vŋ-</i>	"night"
<i>zùvŋ</i> ^ɔ	<i>zùvŋs</i> ^ɛ	<i>zùŋ-</i>	"vulture"
	or <i>zùvŋd</i> ^ɛ		

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yunŋu* pl *yunsi* "night.")

Some *m*-stems belong to this type despite not having rounded root vowels, because the epenthetic vowel before the flexion was rounded by the *-m-* and the resulting SF reinterpreted as ending in *g*^ɔ:

<i>yàmmug</i> ^a WK	<i>yàmmis</i> ^ɛ	<i>yàm-</i>	"slave"
or <i>yàmmug</i> ^ɔ			

Some *g*^ɔ|*s*^ɛ *m*-stems were probably originally *g*^ɔ|*d*^ɛ, but have disambiguated the plural by substituting pl *-s*^ɛ for *-d*^ɛ instead of the usual *-a*⁺ [9.3.3.1](#):

	<i>à-dàalúŋ</i> ^ɔ	<i>à-dàalís</i> ^ɛ WK	<i>à-dàalúŋ-</i>	"stork"
		<i>à-dàalímís</i> ^ɛ		
	<i>sī'úŋ</i> ^ɔ	<i>sī'imís</i> ^ɛ	<i>sī'vŋ-</i>	a kind of big dish
cf	<i>dì'isúŋ</i> ^ɔ	<i>dì'isís</i> ^ɛ	<i>dì'isúŋ-</i>	"spoon"
		<i>dì'isímà</i> ⁺		

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

<i>wī'isúŋ</i> ^ɔ	<i>wī'imís</i> ^ɛ	<i>wī'isúŋ-</i>	a kind of snail
<i>yā'isúŋ</i> ^ɔ	<i>yā'imís</i> ^ɛ	<i>yā'isúŋ-</i>	"quail"

9.3.3 *g*^ɔ|*d*^ɛ Class

Before the sg *-g*^ɔ *-k*^ɔ *-ŋ*^ɔ stem-final vowels are rounded, changing epenthetic vowels to *u* and creating rounding diphthongs from root vowels [6.3.2](#) [4.3](#).

All stems in *m n* following a short vowel belong to the *g*^ɔ|*a*⁺ Subclass instead, along with all stems which include a derivational suffix [9.3.3.1](#).

<i>dàvug</i> ^ɔ	<i>dàad</i> ^ɛ	<i>dà-</i>	"piece of wood"
<i>fēŋ'og</i> ^ɔ /	<i>fēŋ'ɛd</i> ^ɛ /	<i>fēŋ'-</i>	"ulcer"
<i>vīug</i> ^ɔ /	<i>vīid</i> ^ɛ /	<i>vī-</i>	"owl"
<i>vāvŋg</i> ^ɔ /	<i>vāaŋd</i> ^ɛ /	<i>vāŋ-</i>	"leaf"
<i>mōvɔg</i> ^ɔ	<i>mōvd</i> ^ɛ	<i>mò-</i>	"grass, bush"
<i>dùndùug</i> ^ɔ	<i>dùndùud</i> ^ɛ	<i>dùndù-</i>	"cobra"
<i>dàbīog</i> ^ɔ	<i>dàbīad</i> ^ɛ	<i>dàbīà-</i>	"coward"

	<i>zùəd^ε</i>		"friendship"
<i>wābug^{ɔ̃/}</i>	<i>wābɪd^{ε/}</i>	<i>wāb-</i>	"elephant"
<i>zūəbúg^{ɔ̃}</i>	<i>zūəbíd^ε</i>	<i>zūəb-</i>	"(human head) hair"
<i>bālērúg^{ɔ̃/}</i>	<i>bālērɪd^{ε/}</i>	<i>bālér-</i>	"ugly person"
	or <i>bālērɪs^{ε/}</i>		
<i>bēsúg^{ɔ̃}</i>	<i>bēsɪd^ε</i>	<i>bès-</i>	kind of pot
<i>Dènnúg^{ɔ̃}</i>			Denugu (place name)

Some stems ending in root vowels have plurals of the form CV^{t^ε} [6.1.1.1](#):

<i>dòɔg^{ɔ̃}</i>	<i>dòɔd^ε</i> or <i>dòt^ε</i>	<i>dò-</i>	"hut, room; clan"
--------------------------	---	------------	-------------------

So too *pɔ̃ɔg^{ɔ̃/}* "farm, field", *fūug^{ɔ̃/}* "clothing, shirt"; exceptionally, the *singular* also shows a short vowel in the following word, probably a true 1-mora stem:

<i>zūg^{ɔ̃/}</i>	<i>zūt^{ε/}</i>	<i>zū-</i> or <i>zūg-</i>	"head"
--------------------------	-------------------------	---------------------------	--------

Historical *Cag- *C̣iag- *C̣uag- stems [6.1.1.1](#) show singular -k^{ɔ̃}, and *ya* becomes *ɔ̃* before -k^{ɔ̃} [6.3.2](#):

<i>bòk^{ɔ̃}</i>	<i>bù'ad^ε</i>	<i>bɸ'à-</i>	"hole, pit"
<i>lòk^{ɔ̃}</i>	<i>lù'ad^ε</i>	<i>lɸ'à-</i>	"quiver (for arrows)"
<i>lāɸk^{ɔ̃}</i>	<i>lā'ad^ε</i>	<i>là'-</i>	"(item of) goods"
<i>bḷāḷḷnk^{ɔ̃}</i>	<i>bḷāḷḷ'ad^ε</i>	WK <i>bḷàḷḷ'-</i>	"shoulder"
	<i>bḷāḷḷ'ada⁺</i>	SB	

Stems in CVd show -t- in the pl [6.2.1](#) via *dd → tt:

<i>ùdug^{ɔ̃}</i>	<i>ùt^ε</i>	<i>ùd-</i>	"(piece of) chaff"
<i>gādug^{ɔ̃/}</i>	<i>gāt^{ε/}</i>	<i>gād-</i>	"bed" (Hausa <i>gadoo</i>)

Stems in CVg develop *kk* in the singular via *gg → *kk*:

<i>dūk^{ɔ̃/}</i>	<i>dūgud^{ε/}</i>	<i>dūg-</i>	"cooking pot"
	<i>dūgub dút^ε</i>		"cooking pots" SB

Stems in / develop the cluster *nn* in the pl via */d → *nn*:

<i>yɔ̃lúg^{ɔ̃/}</i>	<i>yɔ̃n^{nε/}</i>	<i>yɔ̃l-</i>	"sack; 200 cedis"
<i>zɔ̃lúg^{ɔ̃/}</i>	<i>zɔ̃n^{nε/}</i>	<i>zɔ̃l-</i>	"fool"
<i>sìlúg^{ɔ̃}</i>	<i>sìn^{nε}</i> or <i>sìlɪs^ε</i>	<i>sìl-</i>	"hawk"

The only *m n* stems making plurals with *-d^ε* are CVVC root-stems [6.1.1.2](#):

<i>làngáuv^ɔ</i>	<i>làngāamá⁺</i> or <i>làngáám^{mε}</i>	<i>làngāuv-</i>	"crab"
----------------------------	---	-----------------	--------

and the synonymous *màngāúv^ɔ*, the plural-only *sūŋ-péèn^{nε}* "anger" and perhaps the placename *Tèmpáan^{nε}* "Tempane" [35.3](#).

9.3.3.1 *g^ɔ|a⁺* Subclass

All stems in *n m* following a short vowel use the plural suffix *a⁺* instead of *d^ε*.

They show *-ŋ-* in the sg, via **ng* → *ŋŋ* and **mg* → *ŋŋ*, and normally use the sg segmental (but not tonal) form as cb [9.2.2](#).

<i>gbàuv^ɔ</i>	<i>gbàna⁺</i>	<i>gbàn-</i> or <i>gbàuv-</i>	"letter, book"
<i>zīnzāuv^ɔ/</i>	<i>zīnzāná⁺</i>	<i>zīnzáuv-</i>	"bat"
<i>àŋrvuv^ɔ</i>	<i>àŋrīma⁺</i>	<i>àŋrvuv-</i>	"boat"
<i>māluv^ɔ</i>	<i>mālīma⁺</i>	<i>màlvuv-</i>	"sacrifice"

The expected *u*-glide is absent in the sg and cb of

<i>nìn-gbīŋ^ɔ/</i>	<i>nìn-gbīná⁺</i>	<i>nìn-gbīŋ-</i>	"body"
------------------------------	------------------------------	------------------	--------

This may represent the influence of the alternate sg form *nìn-gbīn^{nε}/*. The formal plural *nìn-gbīná⁺* is often used for singular "body."

All regular gerunds of 3-mora and 4-mora stem Variable Verbs belong to the *g^ɔ|a⁺* Subclass except for those with stems in velars and Fusion Verbs [11.1](#), which have the singular suffix *r^ε* [12.1.1.1](#).

<i>gàadvuv^ɔ</i>	←	<i>gàad^ε</i>	"(sur)pass"
<i>lìəbvuv^ɔ</i>	←	<i>lìəb^ε</i>	"become"
<i>dīgīlúvuv^ɔ</i>	←	<i>dīgīl^ε/</i>	"lay down"
<i>yāarúvuv^ɔ</i>	←	<i>yāar^ε/</i>	"scatter"
<i>sīgīlúvuv^ɔ</i>	←	<i>sīgīl^ε/</i>	"lower"

Only stems in *-s-* and *-sim-* have plurals, always with *-a⁺*:

<i>bū'əsúvuv^ɔ</i>	<i>bū'əsá⁺</i>	<i>bū'əs-</i>	"question"
<i>zàaŋsúvuv^ɔ</i>	<i>zàaŋsíma⁺</i>	<i>zàaŋsúvuv-</i>	"dream"

Gerunds of 3-mora *n*-stem verbs, uniquely, never assimilate **ng* → *ŋ* (just as they never assimilate **nd* in their Dynamic Imperfectives [11.1](#) [6.2.1.1](#))

<i>dìgɪnʊg</i> ^{ɔ̃}	←	<i>dìgɪn</i> ^ɛ	"lie down"
<i>zìŋ'inʊg</i> ^{ɔ̃}	←	<i>zìŋ'in</i> ^ɛ	"sit down"

Gerunds of 3-mora *m*-stems may optionally not assimilate **mg* → *ŋ*:

<i>tɔ̃ŋ</i> ^{ɔ̃}	←	<i>tɔ̃m</i> ^{m/}	"depart, disappear"
or <i>tɔ̃múg</i> ^{ɔ̃}			
<i>sàŋ'ʊŋ</i> ^{ɔ̃}	←	<i>sàŋ'am</i> ^m	"destroy"
or <i>sàŋ'amʊg</i> ^{ɔ̃}			
<i>kàrʊŋ</i> ^{ɔ̃}	←	<i>kàrɪm</i> ^m	"read"
or <i>kàrɪmʊg</i> ^{ɔ̃}			

Gerunds of 4-mora *m*-stems always assimilate:

<i>zàaŋsúŋ</i> ^{ɔ̃}	←	<i>zàaŋsɪm</i> ^m	"dream"
------------------------------	---	-----------------------------	---------

9.3.4 *r^ɛ|a⁺* Class

Straightforward examples include:

<i>kūgʊr</i> ^{ɛ/}	<i>kūgá</i> ⁺	<i>kūg-</i>	"stone"
<i>dìgɪr</i> ^ɛ	<i>dìgá</i> ⁺	<i>dìg-</i>	"dwarf"
<i>bōgʊr</i> ^ɛ	<i>bōgá</i> ⁺	<i>bōg-</i>	"abode of a <i>wīn</i> ^{nɛ} (spirit, god)"
<i>bàlàŋɪr</i> ^ɛ	<i>bàlàŋá</i> ⁺	<i>bàlàŋ-</i>	"hat"
<i>yūgʊdɪr</i> ^ɛ	<i>yūgʊdá</i> ⁺	<i>yūgʊd-</i>	"hedgehog"
<i>pɔ̃'à-sāɪr</i> ^{ɛ/}	<i>pɔ̃'à-sāɪá</i> ⁺	<i>pɔ̃'à-sāɪ-</i>	"young woman"
<i>nɔ̃bɪr</i> ^ɛ	<i>nɔ̃bá</i> ⁺	<i>nɔ̃b-</i>	"leg"
<i>lɪɪbɪr</i> ^ɛ	<i>lɪɪbá</i> ⁺	<i>lɪɪb-</i>	"twin"
<i>sōnnɪr</i> ^ɛ	<i>sōnná</i> ⁺	<i>sōn-</i>	"inner compound wall"
<i>sāngúnɪr</i> ^ɛ	<i>sāngúná</i> ⁺	<i>sāngún-</i>	"millipede"
<i>bì'isɪr</i> ^ɛ	<i>bì'isá</i> ⁺	<i>bì'is-</i>	"woman's breast"
<i>sūmmɪr</i> ^ɛ	<i>sūmma</i> ⁺	<i>sùm-</i>	"groundnut"
<i>yīmmɪr</i> ^ɛ	<i>yīmmá</i> ⁺	<i>yīm-</i>	"solitary" (adjective)

along with all gerunds of 3-mora stem verbs in *-k^ɛ -ŋ^ɛ* and undeleted *-g^ɛ* like:

<i>yùugur^ε</i>	"delay"
<i>nṣkír^ε</i>	"taking"
<i>nìṇír^ε</i>	"doing"

For the allomorphy in CVV root-stems before the plural *-a⁺* see [6.1.1.1](#).

Unglottalised vowel stems:

<i>zūur^ε</i>	<i>zūya⁺</i>	<i>zù-</i>	"tail"
<i>bīār^ε/</i>	<i>bīēyá⁺</i>	<i>bīā-</i>	"elder same-sex sib"
<i>zūōr^ε</i>	<i>zūēya⁺</i>	<i>zūà-</i>	"hill"
<i>nṣṣr^ε/</i>	<i>nṣyá⁺</i>	<i>nṣ-</i>	"mouth"
<i>yṣṣr^ε</i>	<i>yṣya⁺</i>	<i>yṣ-</i>	"soldier ant"

Glottalised vowel stems:

<i>yū'ur^ε/</i>	<i>yūdá⁺</i>	<i>yū'-</i>	"name"
<i>tītā'ar^ε</i>	<i>tītāda⁺</i>	<i>tītā'-</i>	"big" (adjective)
<i>pṣṣ'ar^ε</i>	<i>pṣṣda⁺</i>	<i>pṣṣ'-</i>	"cripple"
<i>nyē'ar^ε/</i>	<i>nyēdā⁺</i>	<i>nyē'-</i>	"next-younger sibling"
<i>pṣ-tēṣ'ar^ε</i>	<i>pṣ-tēṣda⁺</i>	<i>pṣ-tēṣ'-</i>	"mind"
<i>yū'ōr^ε</i>	<i>yūāda⁺</i>	<i>yū'ōr- 9.2.2</i>	"penis"

Stems in historical **g* deleted after a short vowel which then becomes glottalised [6.1.1.1](#) may have forms made by analogy with these original glottalised-vowel stems:

<i>bà'ar^ε</i>	<i>bà'a⁺</i> or <i>bàda⁺</i>	<i>bà'-</i>	"idol" (Farefare <i>bàgrè</i>)
<i>sṣà'ar^ε</i>	<i>sṣà'a⁺</i>	<i>sṣà'-</i>	"forest"
<i>bṣāṣ'ar^ε/</i>	<i>bṣāṣá⁺</i>	<i>bṣāṣ'-</i>	"wet mud, riverbed"
<i>mù'ar^ε</i>	<i>mṣàa⁺</i>	<i>mṣà-</i>	"reservoir, dam"
	or <i>mù'ada⁺</i>		
<i>zànkù'ar^ε</i>	<i>zànkṣàa⁺</i>	<i>zànkṣà-</i>	"jackal"
	or <i>zànkù'ada⁺</i>		

similarly *kùndù'ar^ε* "barren woman".

<i>nyā'ar^ε</i>	<i>nyā'a⁺</i>	<i>nyā'-</i>	"root" (← <i>*nɛg-</i>)
---------------------------	--------------------------	--------------	--------------------------

So too, despite the derivation from *dà'⁺* "buy", where the glottalisation is not derived from **g* historically:

kì-dà'ar^ε *kì-dà'ada⁺* WK "bought-in millet"

Stems in deleted **g* after a long vowel include

vúer^ε *vūáá⁼* *vūø-* "fruit of *vúøŋ^a* tree"

and all Fusion Verb gerunds [11.1](#) like

<i>gbán'ar^ε</i>	←	<i>gbāŋ'e^{+/}</i>	"grab"
<i>dí'ar^ε</i>	←	<i>dī'e^{+/}</i>	"get"
<i>dúer^ε</i>	←	<i>dūe^{+/}</i>	"rise"

Some root-stems show CV with a short vowel before the *r^ε|a⁺* sg [9.2.1](#). They regularly use the segmental form of the sg for cb.

<i>gbēr^{ε/}</i>	<i>gbēyá⁺</i>	<i>gbēr-</i>	"thigh"
<i>kùkōr^{ε/}</i>	<i>kùkōyá⁺</i>	<i>kùkōr-</i>	"voice"

Similarly *kpàkūr^{ε/}* "tortoise" *gāŋr^{ε/}* "ebony fruit" *gūmpūzēr^{ε/}* "duck" *ŋyò-vūr^{ε/}* "life".

2-mora stem verbs make gerunds in *-r^ε* instead of *-b^ɔ* after a noun cb:

<i>nō-lóŋr^ε</i>	"fasting" ("mouth-tying")
<i>fū-yéēr^ε</i>	"shirt-wearing"

These set expressions show shortening of the vowel, but this is not productive:

<i>nā'-lór^ε</i>	"place in the compound for tying up cows"
<i>wìd-lōr^{ε/}</i>	"place in the compound 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 [3.2](#).

<i>kùkpàr^ε</i>	<i>kùkpàra⁺</i>	<i>kùkpàr-</i>	"palm fruit"
<i>Ŋwād-dár^ε</i>			"Venus"
<i>tān^{nε}</i>	<i>tāna⁺</i>	<i>tàn-</i>	"earth"
<i>kpān^{nε}</i>	<i>kpāna⁺</i>	<i>kpàn-</i>	"spear"
<i>mā'an^{nε}</i>	<i>mā'aná⁺</i>	<i>mā'an-</i>	"okra"
<i>pībɪn^{nε}</i>	<i>pībɪna⁺</i>	<i>pìbɪn-</i>	"covering"
<i>dūm^{nε}</i>	<i>dūma⁺</i>	<i>dùm-</i>	"knee"
<i>zɔɔm^{nε}</i>	<i>zɔɔma⁺</i>	<i>zòɔm-</i>	"fugitive"
<i>yùum^{nε}</i>	<i>yùma⁺</i>	<i>yùum-</i>	"year" 6.1.1.2

<i>gbīgum</i> ^{nɛ}	<i>gbīguma</i> ⁺	<i>gbìgum-</i>	"lion"
<i>yūgúm</i> ^{nɛ}	<i>yūgumá</i> ⁺	<i>yūgum-</i>	"camel"
<i>gél</i> ^ɛ	<i>gēlá</i> ⁺	<i>gēl-</i>	"egg"
<i>íl</i> ^ɛ	<i>īlá</i> ⁺	<i>īl-</i>	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

<i>ṅwān</i> ^{nɛ} SB	<i>ṅwāna</i> ⁺ NT	<i>ṅwàn-</i>	"calabash"
<i>ṅwām</i> ^{mɛ} WK	<i>ṅwāma</i> ⁺ SB WK NT	<i>ṅwàm-</i>	

An exceptional suppletive plural, segmentally and tonally, is seen in

<i>dāar</i> ^ɛ	<i>dābá</i> ⁺	<i>dà-</i>	"day"
--------------------------	--------------------------	------------	-------

These two *r*^ɛ|*a*⁺ Class words probably have 1-mora stems:

[Mampruli <i>zari</i>]	<i>zā</i> ^{+/}	<i>zā-</i>	"millet"
<i>yīr</i> ^{ɛ/}	<i>yā</i> ^{+/}	<i>yī-</i>	"house"

Yīr^{ɛ/} also has the irregular locative forms sg *yín*^{nɛ} pl *yáan*^ɛ [20.3](#).

9.3.4.1 /^ɛ Subclass

Language names [35.4](#) all belong to a *r*^ɛ|*a*⁺ Subclass partly formed with the suffix *-/ɛ*. The suffix is always *-/ɛ* after stems ending in a root vowel:

Language		Speakers	
<i>Kūsáàl</i> ^ɛ	Kusaal	<i>Kūsáàs</i> ^ɛ	Kusaasi
<i>Bùsáàṅl</i> ^ɛ	Bisa	<i>Bùsáàṅs</i> ^ɛ	Bisa
<i>Mòɔl</i> ^ɛ	Mooré	<i>Mòɔs</i> ^ɛ	Mossi
<i>Sìmīl</i> ^ɛ	Fulfulde	<i>Sìmīs</i> ^ɛ	Fulbe
<i>Zàngbèɛl</i> ^ɛ	Hausa	<i>Zàngbèɛd</i> ^ɛ	Hausa
<i>Nàsāal</i> ^ɛ	English/French	<i>Nàsàa-nàm</i> ^a	Europeans

After stems ending in a consonant other than *-r-* the suffix is either replaced by *r*^ɛ, or assimilates to the stem final in a way which is indistinguishable from *r*^ɛ:

<i>Nàbır</i> ^ɛ	Nabit	<i>Nàbıdɪb</i> ^a	Nabdema
<i>Tùənnır</i> ^ɛ	Toende Kusaal	<i>Tùəñ</i> ^{nɛ}	Toende area
<i>Dàgbān</i> ^{nɛ/}	Dagbani	<i>Dàgbām</i> ^{ma/}	Dagomba

<i>Bìn^{ne}</i>	Moba	<i>Bìm^{ma}</i>	Moba
<i>Yàan^{ne}</i>	Yansi	<i>Yàaŋs^ε</i>	Yansi
<i>Gūrín^{ne}</i>	Farefare	<i>Gūrís^ε</i>	Farefare
<i>Tàlín^{ne}</i>	Talni	<i>Tàlís^ε</i>	Tallensi
<i>Bùl^{lε}</i>	Buli	<i>Bùlís^ε</i>	Bulsa
<i>Àgòl^{lε}</i>	Agolle Kusaal	<i>Àgòl^{lε}</i>	Agolle area

However, stems in *-r-* show the distinctive assimilation **r/* → *tt* [6.2.1](#):

<i>Yāt^{ε/}</i>	Yarsi	<i>Yāris^{ε/}</i>	Yarsi
<i>Bāt^{ε/}</i>	Bisa	<i>Bāris^{ε/}</i>	Bisa

Unexpected epenthesis [6.2.1](#) occurs in:

<i>Kàmbònɪr^ε</i>	Twi	<i>Kàmbòmɪs^ε</i>	Ashanti
<i>Nwāmpūrɪl^{ε/}</i>	Mampruli	<i>Nwāmpūris^{ε/}</i>	Mamprussi

9.3.5 *P|ɪ*⁺ Class

The plural *-ɪ*⁺ causes the stem vowels *aa iə εε* to undergo "umlaut" to *ii*.
Straightforward examples for the *P|ɪ*⁺ Class are

<i>mòlɪP</i>	<i>mòlɪ⁺</i>	<i>mòl-</i>	"gazelle"
<i>bīlɪP</i>	<i>bīlɪ⁺</i>	<i>bīl-</i>	"seed"
<i>nyīrɪP</i>	<i>nyīrɪ⁺</i>	<i>nyīr-</i>	"egusi"
<i>zūrɪP</i>	<i>zūrɪ⁺</i>	<i>zūr-</i>	"dawadawa seed"
<i>bōn-búvdɪP</i>			"plant"

Two 1-mora stem *P|ɪ*⁺ nouns are

no sg	<i>kī^{+/}</i>	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
cf Mampruli sg <i>kaafu</i> pl <i>kyi id.</i>			

no sg	<i>mùj⁺</i>	<i>mùj-</i>	"rice"
cf Mooré sg <i>muiifu</i> pl <i>mùí id.</i>			

Two words have stems in **Caag-* with deletion of **g* [6.3.1](#) and also show root vowel length allomorphy [6.1.1.2](#):

<i>náafP</i>	<i>nīigɪ⁺</i>	<i>nā'-</i>	"cow"
<i>wáafP</i>	<i>wīigɪ⁺</i>	<i>wā'-</i>	"snake"

Stems in *-n-* show consonant assimilation in the sg **nf* → *ṽf* [6.2.1](#):

<i>nīṽ</i> ^l	<i>nīn</i> ^{l+}	<i>nīn-</i> or <i>nīṽ-</i>	"eye"
<i>pīṽṽ</i> ^ṽ	<i>pīn</i> ^{l+}	<i>pīn-</i>	"genet"
<i>kīṽṽ</i> ^ṽ	<i>kīn</i> ^{l+}		"millet seed"
<i>zūṽṽ</i> ^ṽ	<i>zūn</i> ^{l+}		"dawadawa seed"

In the word

<i>mīṽ</i> ^ṽ	<i>mīn</i> ^{l+}	"okra seed"
-------------------------	--------------------------	-------------

the singular is probably remodelled after an umlauted pl: cf *má'an*^{nɛ} "okra."

In two words stem *-d-* is lost in the sg:

<i>wīṽ</i> ^ṽ	<i>wīd</i> ^{l+}	<i>wīd-</i>	"horse"
<i>lā'aṽ</i> ^ṽ	<i>līgīd</i> ^{l+}	<i>lā'-</i> or <i>līg-</i>	"cowrie" pl "money"

Some words only have *ṽ|l*⁺ Class suffixes in one number. This may reflect the obsolescence of the class as a whole (which has few members and many stem irregularities), but some cases may be relics of an older, more complex class system.

<i>zīṽ</i> ^a	<i>zīm</i> ^{l+}	<i>zīm-</i>	"fish"
<i>wālṽ</i> ^a	<i>wāl</i> ^{lɛ}	<i>wāl-</i>	a kind of gazelle
	or <i>wāl</i> ^{l+} tones sic WK		
<i>sībṽ</i> ^{a/}	<i>sīb</i> ^{l+}	<i>sīb-</i>	a kind of termite
<i>sīṽṽ</i> ^{ṽ/}	<i>sīṽ</i> ^{lɛ/}	<i>sīṽ-</i>	"bee"
or <i>sīṽṽ</i> ^{a/}			
<i>sūṽṽ</i> ^{ṽ/}	<i>sūṽyá</i> ^{l+}	<i>sūṽ-</i>	"heart"
or <i>sūṽṽ</i> ^{lɛ/}			

One such word also irregularly deletes the final stem consonant of the cb:

<i>kpā'ṽṽ</i> ^ṽ	<i>kpā'in</i> ^{l+}	<i>kpā'-</i>	"guinea fowl"
----------------------------	-----------------------------	--------------	---------------

9.3.6 *b*^ɔ Class

In my materials there are only two *b*^ɔ Class nouns which are not gerunds:

<i>sā'ab</i> ^ɔ	<i>sà'-</i>	"millet porridge, TZ"
<i>tānp</i> ^ɔ	<i>tānp-</i>	"war" 6.1.1.1

Written sources also have *kī'ib*^ɔ, probably *kī'ib*^ɔ "soap", cf Toende *kí'ip* in Niggli's "Dictionnaire." WK has instead *kīibú*⁺, most likely a Mampruli loan [18.1](#).

However, all regular gerund forms of 2-mora stem Variable Verbs belong here:

<i>kōub</i> ^ɔ	←	<i>kō</i> ⁺	"kill"
<i>dōgub</i> ^ɔ	←	<i>dōg</i> ^ε	"cook"
<i>dō'ab</i> ^ɔ	←	<i>dū'ā</i> ^a	"bear, beget"
<i>kādib</i> ^ɔ	←	<i>kād</i> ^ε	"drive away"
<i>pīlib</i> ^ɔ	←	<i>pīl</i> ^ε	"cover"
<i>kpārīb</i> ^ɔ	←	<i>kpār</i> ^ε	"lock"
<i>bāsib</i> ^ɔ	←	<i>bàs</i> ^ε	"abandon, go away"

Stems in *b* show -p- via *bb → *pp*

<i>sōp</i> ^ɔ	←	<i>sōb</i> ^ε	"write"
<i>lōp</i> ^ɔ	←	<i>lōb</i> ^ε	"throw stones at"

Stems in *m* show the consonant assimilation *mb → *mm*

<i>kīm</i> ^{mɔ}	←	<i>kīm</i> ^m	"tend a flock/herd"
<i>wūm</i> ^{mɔ}	←	<i>wùm</i> ^m	"hear"

Stems in *n* do not assimilate, however (cf 3-mora *n*-stem gerunds [9.3.3.1](#))

<i>būnib</i> ^ɔ	←	<i>bùn</i> ^ε	"reap"
---------------------------	---	-------------------------	--------

The verb *yīs*^ε "make go/come out" has the expected gerund *yīsib*^ɔ; exceptionally the alternate form *yīs*^{ε/} also makes its gerund in the *b*^ɔ Class: *yīsib*^ɔ, probably the only noun in the *b*^ɔ Class which does not have a 2-mora stem.

9.3.7 *m^m* Class

Countable nouns in *m^m* Class form plurals with *-a⁺* or *-s^ε*, or use *nàm^a* [9.4](#).
Straightforward forms include:

<i>dāam^m/</i>	<i>dā-</i>	"millet beer, pito"
<i>zīum^m/</i>	<i>zī-</i>	"blood"
<i>kù'əm^m</i>	<i>kų'à-</i>	"water"
<i>mèlɨɨm^m</i>		"dew"
<i>kūdum^m</i>		"olden days"
<i>dū'uním^m</i>	<i>dū'un-</i>	"urine"
<i>zàam^m</i>	<i>zà-</i>	"evening"
<i>dàalum^m</i>		"masculinity"
<i>pò'alum^m</i>		"femininity"
<i>yàarum^m</i>	<i>yàar-</i>	"salt"
<i>zāaṇsím^m</i>	<i>zāaṇs-</i>	"soup"

The few words with short stem vowels all use the segmental form of the sg for the cb, and are probably *m*-stems:

<i>vōm^m/</i>	<i>vōm-</i>	"life"
<i>kūm^m</i>	<i>kùm-</i>	"death"
<i>zōm^m/</i>	<i>zōm-</i>	"flour"
<i>yām^m/</i>	<i>yām-</i>	"gall; gall bladder"

m^m Class stems in *-m-* can be securely identified when the cb ends in *m* after at least two stem morae, or when there is a plural form with another class suffix, or when there is a Pattern L four-mora stem toneme allocation [7.2.2](#).

<i>bùgúm^m</i>	<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
<i>pūum^m/</i>	<i>pūum-</i>	"flowers, flora"
<i>bīlím^m</i>		"childhood"
<i>bì'isím^m</i>		"milk"
<i>dàalím^m</i>	<i>dàalím^s</i>	"male sex organs"
<i>pò'alím^m</i>	<i>pò'alím^s</i>	"female sex organs"
<i>pīim^m/</i>	<i>pīmá⁺</i>	"arrow" 6.1.1.2

Pīim^m/ "arrow" is a remnant of an old ɔ|^ε Class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm *fí:mú* "arrow", plural *fí:mí*.

9.4 *nàm*^a Plurals

There is an alternative way of making plural nouns, with the word *nàm*^a, used to pluralise any word which does not make a plural through the class system.

The word is not a suffix. It is construed as the NP head with the preceding noun as a pre-modifier; the modifier appears as cb if it is a count noun and as a formal sg/pl if it is a mass noun [19.2.1](#) [19.7](#). Plurals with *nàm*^a are made for:

(a) a few human-reference nouns which have a sg consisting of a bare stem alone:

<i>mà</i> ⁺	<i>mà nám</i> ^a	<i>mà-</i>	"mother"
	(tone <i>sic</i> , behaving as uncompounded)		
<i>bā</i> ^{+/}	<i>bā'-nám</i> ^a	<i>bā'-</i>	"father"
<i>zụà</i> ⁺	<i>zụà-nàm</i> ^a	<i>zụà-</i>	"friend"

(b) Nouns which use the suffix *-b*^a as singular, and those where the usual plural stem differs from the sg or where the regular plural would be ambiguous [9.3.1](#).

(c) loanwords, unless they have been fitted into the Class system by analogy:

<i>tìp</i> ^a	<i>tìp-nàm</i> ^a	<i>tìp-</i>	"healer"
<i>bùrkìn</i> ^a	<i>bùrkìn-nàm</i> ^a	<i>bùrkìn-</i>	"honourable person"

(d) several pronouns

<i>ànó'òn</i>	"who" asking for a plural answer "what people?"
<i>nē</i> [']	inanimate pronoun "this" in the New Testament ; but my informants use animate pl <i>bàn</i> rather than <i>nē'-nám</i> .

<i>dāan</i> ^a	<i>dāan-nàm</i> ^a	<i>dāan-</i>	"owner of ..." 19.9.3
<i>tīrààn</i> ^a	<i>tīrààn-nàm</i> ^a	<i>tīrààn-</i>	"neighbour, peer"

(e) quantifiers used as Noun Phrase heads, e.g.

<i>pīiga nám</i> ^a	"tens"
-------------------------------	--------

<i>Àyí</i>	<i>námá</i>	<i>àyí</i>	<i>á</i>	<i>nē</i>	<i>nāasí</i> .
NUM:two	PL	NUM:two	COP	FOC	four.
"Two two's are four."					

(f) plural forms with singular meaning:

<i>dà-pūvdá nám^a</i>	"crosses"
<i>kūt nám^a</i>	"nails"; sg also "iron"
<i>bē'ed nám^a</i>	"evils"

(g) mass nouns used with count meanings:

<i>bùgúm nám^a</i>	"fires, lights"
<i>sā'ab nám^a</i>	"portions of millet porridge"
<i>dāam nám^a</i>	"beers"

(h) forms with the Personifier particle *À-* [19.10](#):

À-zī' _ *∅ kpí nám kpîd né kà ténbìd.*

PERS-NEG.KNOW SER die PL die:DIPF FOC and tremble:DIPF

"Those who don't know death, are dying with a struggle." (Proverb)

(i.e. "It's a storm in a teacup.")

9.5 Plurals used as Singulars

A number of words referring to uncountables or abstracts are plural in form:

<i>bāṇ'as^ε</i>	<i>bāṇ'-</i>	"disease"
<i>ṇyṵ'ṵs^{ε/}</i>	<i>ṇyṵ'-</i>	"smoke"
<i>tàḍimís^ε</i>		"weakness"
<i>zṵḍimís^ε</i>		"foolishness"
<i>mēt^{ε/}</i>	<i>mēt- 9.2.2</i>	"pus"
<i>kūt^ε</i>	<i>kūt- 9.2.2</i>	"iron"
<i>zùød^ε</i>		"friendship"
<i>bōvd^ε</i>		"innocence"
<i>sīṇd^{ε/}</i>		"honey"
<i>nīn-púòd^ε</i>		"pus"
<i>wāad^{ε/}</i>		"cold weather"
<i>sōṇ-péén^{nε}</i>		"anger"
<i>kṷ'à-nūud^{ε/}</i>		"thirst"
<i>sālma⁺</i>	<i>sàḷm-</i>	"gold"
<i>sìda⁺</i>	<i>sìd-</i>	"truth"

Kūt^ε is used not only as "iron" but also for "nail"; the original singular *kūdug^ɔ* appears in the personal name *À-Kūdug^ɔ* 35.2.

So too with a number of irregularly formed abstract nouns from verbs:

<i>gēɛŋmís^ε</i>	"madness"	← <i>gēɛŋm^{m/}</i>	"madden, go mad"
<i>bùdımıs^ε</i>	"confusion"	← <i>bùdım^m</i>	"confuse"
<i>tītōmıs^ε</i>	"sending"	← <i>tòm^m</i>	"send"
<i>zīd^{ε/}</i>	"carrying on head"	← <i>zī⁺</i>	"carry on head"
<i>vūud^{ε/}</i>	"noise"	← <i>vū⁺</i>	"make a noise"
<i>kēn^{nε/}</i>	"arrival"	← <i>kēŋ⁺</i>	"come"
<i>pḷàŋ'ad^ε</i>	"word, speech"	← <i>pḷāŋ^a</i>	"speak" (irreg. tones)

[sg *pḷàŋk^ɔ* exists, but the pl is generally used for "speech"]

<i>tēŋ'εsá⁺</i>	"thought"	cf <i>tēŋ'εsá yīnní</i>	"one thought" (Acts 4:32)
<i>dì'əma⁺</i>	"festival"	← <i>dì'am^m</i>	"play, not be serious"
<i>tōuma⁺</i>	"work"	← <i>tòm^m</i>	"work"
[sg <i>tōum^{mε}</i>	"deed"]		

For *nà'así⁺* "honour", *kābírí⁺* "permission to enter" and *sūgurú⁺* "forbearance" see 9.6.

A single object may be referred to by the name of its parts:

	<i>dà-pōvdá⁺</i>	"cross"
pl	<i>dà-pōvdá nàm^a</i>	
cf	<i>dà-pōvdír^ε</i>	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

	<i>lāuk^ɔ</i>	"piece of goods"
pl	<i>lā'ad^ε</i>	"goods"

A piece of West African history underlies

	<i>līgıdı⁺</i>	"money"
sg	<i>lā'aŋ^ɔ</i>	"cowrie"

See also on the ^a|*b^a* Subclass with *-b^a* as a sg suffix 9.3.1.2.

9.6 Nouns with Apocope Blocking

A number of nouns ending in $-l^+$ or $-u^+$ seem to display Apocope Blocking [6.4](#):

<i>būudl⁺</i>	<i>būud-</i>	"tribe"
<i>pīinl⁺</i>	<i>pīin-</i>	"gift"

along with the (apparently) deverbal abstract nouns:

<i>nà'asl⁺</i>	"honour"	←	<i>nà'as^ε</i>	"honour"
<i>kābirí⁺</i>	"entry permission"	←	<i>kābir^{ε/}</i>	"ask to enter"
<i>sūgurú⁺</i>	"forbearance"	←	<i>sūgur^{ε/}</i>	"show forbearance"

This final $-l^+$ is unlikely to represent the $\mathcal{P}|l^+$ Class plural: no singular $\mathcal{P}|l^+$ Class word has an abstract meaning. Cognates of *būudl⁺* in related languages suggest that the $-dl$ component represents the equivalent of the $g^3|d^ε$ Class plural: Farefare (Niggli's dictionary):

<i>búúrí</i>	"race, sort, espèce, clan"
<i>bu-zǎŋka</i>	"race étrangère"

Mooré (Niggli):

	<i>búudu</i>	"famille, espèce"
sg	<i>búugu</i>	

Nà'asl⁺ may similarly represent a $g^a|s^ε$ Class pl with Apocope Blocking.

Other words in final $-l^+$ or $-u^+$ are probably loanwords from related languages where citation forms do not undergo Apocope, e.g. WK's *kīibú⁺* "soap" [18.1](#). Both *kābirí⁺* and *sūgurú⁺* are also unusual in having an apparent $-r-$ derivational suffix, which is probably to be accounted for by their being loans [13.2.1.4](#).

9.7 Loanwords

Some loanwords [18.1](#) are fitted into Noun Classes by analogy (cf [9.1](#)):

<i>àrazà^a</i>	<i>àrazà'as^ε</i>	<i>àrazà'-</i>	"riches" Hausa <i>arzikii</i>
<i>màlġāk^{a/}</i>	<i>màlġā'as^{ε/}</i>	<i>màlġā'-</i>	"angel" DK (Arabic)
<i>gādvu^{ɔ/}</i>	<i>gāt^{ε/}</i>	<i>gād-</i>	"bed" Hausa <i>gadoo</i>
<i>lòmbò'ɔɔ^ɔ</i>	<i>lòmbò'ɔd^ε</i>	<i>lòmbò'-</i>	"garden" Hausa <i>lambu</i>
<i>lór^ε</i>	<i>lòyà⁺ tones sic</i> or <i>lóm^{ma}</i>	<i>lór-</i>	"car, lorry" cf <i>M̄r^ε</i> 9.3.1.1
<i>àlópìr^ε</i>	<i>àlópìya⁺</i>		"aeroplane" SB
<i>wādır^{ε/}</i>	<i>wādá⁺</i>	<i>wād-</i>	pl "customs, law"

(English "order", via Hausa, with sg and cb back-formations)

Others make *nàm^a* plurals [9.4](#):

<i>gādv⁺</i>	<i>gādv-nám^a</i>	<i>gādv-</i>	"bed" WK
<i>kèékè⁺</i>	<i>kèékè-nàm^a</i>	<i>kèékè-</i>	"bicycle" Hausa <i>kèekè</i>
<i>dāká⁺</i>	<i>dāká-nàm^a</i>	<i>dāká-</i>	"box" Hausa <i>àdakàa</i>
<i>téébùl^ε</i>	<i>téébùl-nàm^a</i>	<i>téébùl-</i>	"table"
<i>Nàsāara⁺</i>	<i>Nàsāar-nàm^a</i> or <i>Nàsāa-nàm^a</i>	<i>Nàsāar-</i> <i>Nàsāa-</i>	"white person, European" 35.4 ; ultimately from Arabic <i>نصارى Nas'a:ra</i> ; "Christians"; cf Hausa <i>Nàsaara</i>

Loanwords ending in L or H toneme distinguish sg from cb by the fact that L Raising only follows the sg, conforming to the usual rule [8.3](#):

<i>dù'átà ná'àb</i>	"a doctor's chief"
<i>dù'átà-nà'ab</i>	"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 nominal prefixes [7.2.4](#):

<i>dūnġya⁺</i>	"world" (Arabic دنيا <i>dunya:</i>)
<i>dūnġyá-kàṇā</i>	"this world"

10 Adjective Flexion

10.1 Primary

Kusaal adjectives differ from nouns in having a marked tendency to occur with suffixes from more than one noun class. This reflects the prehistory of the language, in which the noun classes triggered agreement and adjectives took the suffix of the head noun, which preceded as a combining form (effectively, the adjective stem was infixed between the noun stem and its suffix.) Kusaal, like most of its close relations, has lost the agreement system, but adjectives commonly remain extant with suffixes from more than one class, now usually in free variation:

From *būvg*^a "goat"

<i>bù-pìəlīg</i> ^a	<i>bù-pìəls</i> ^ε	<i>bù-pìəl-</i> (<i>g</i> ^a <i>s</i> ^ε)	"white goat"
<i>bù-pìəl</i> ^{lε}	<i>bù-pìəla</i> ⁺	<i>bù-pìəl-</i> (<i>r</i> ^ε <i>a</i> ⁺)	<i>id</i>

WK claims a meaning difference in intensity in gradable adjectives with suffixes of different classes, consistently ranking the singular suffixes *g*^a *r*^ε *g*^ɔ in decreasing order, so that for example *fū-pìəlīg* "white shirt" is whiter than *fū-pìəl id*. However, DK specifically denied any difference of meaning.

A few traces of the agreement system remain [19.8.1.1](#). Some speakers still require the *m*^m suffix for agreement with mass or abstract nouns. This is probably driven by the strong association of the *m*^m Class with meaning; there is similarly a notable preference for plural *s*^ε over *a*⁺ for human reference:

<i>nīn-sábils</i> ^ε	"Africans"
<i>nīn-sábilà</i> ⁺	accepted by informants but much less common
<i>Zuà-wiis</i> ^ε	"Red Zoose Clan"
	though <i>wiug</i> ^ɔ "red" is usually <i>r</i> ^ε <i>a</i> ⁺ ~ <i>g</i> ^ɔ <i>d</i> ^ε type

The *a*|*b*^a and *ɸ*|*l*⁺ suffixes are found only in set expressions and *b*^ɔ never occurs. Most often, *r*^ε|*a*⁺ Class suffixes occur along with either *g*^a|*s*^ε or *g*^ɔ|*d*^ε but not both. Historically, this may reflect an intermediate stage in the collapse of the old agreement system where *g*^a|*s*^ε and *g*^ɔ|*d*^ε had fallen together. Some Mampruli dialects show a four-class agreement system, human (= *a*|*b*^a), mass (= *m*^m) and two others.

There are constraints on the occurrence of particular suffixes with particular stem finals, explicable by the tendency to avoid forms which would give rise to unclear or ambiguous SFs; compare Noun Flexion [9.1](#). Just as with nouns, plural *d*^ε is not used with *m n* stems or with stems over two morae long; in addition, neither *s*-stems nor 2-mora *m n* stems use the plural suffix *s*^ε, and deverbal adjective stems in *g k ŋ* do not use the sg suffixes *g*^a *g*^ɔ [10.2](#).

Examples of adjectives with suffixes from more than one Noun Class:

<i>zìŋ'a⁺</i>	<i>zèŋ'εs^ε</i>	<i>zèŋ'-</i>	"red"
<i>zèŋ'og^ɔ</i>	<i>zèŋ'εd^ε</i>		
	<i>zèŋda⁺</i>		
<i>bī'a⁺</i>	<i>bī'əs^ε</i>	<i>bī'à'-</i>	"bad"
<i>bē'og^ɔ</i>	<i>bē'εd^ε</i>	<i>bē'-</i>	
<i>bē'εd^ε</i> is often used as sg, with a <i>nàm^a</i> plural			

Other primary adjectives use either *g^a|s^ε* or *g^ɔ|d^ε* suffixes but not both:

<i>wàbıg^a</i>	<i>wàbıs^ε</i>	<i>wàb-</i>	"lame"
<i>wàbır^ε</i>	<i>wàba⁺</i>		
<i>vèŋllıg^a</i>	<i>vèŋllıs^ε</i>		"beautiful"
	<i>vèŋlla⁺</i>		
<i>vènnıg^a</i>	<i>vènnıs^ε</i>	<i>vèŋ-</i>	"beautiful"
<i>vènnır^ε</i> rare	<i>vèнна⁺</i>		

and similarly *wēnnır^ε* "resembling."

<i>sābılıg^a</i>	<i>sābılıs^ε</i>	<i>sābıl-</i>	"black"
<i>sābılı^{lε}</i>	<i>sābılá⁺</i>		

and similarly *pāalıg^a* "new" *záalı^{lε}* "empty" *bàaŋlıg^a* "slim" *pìəlıg^a* "white"

<i>tītā'ug^ɔ</i> rare	<i>tītāda⁺</i>	<i>tītá'-</i>	"big"
<i>tītā'ar^ε</i>			
<i>nèog^ɔ</i>	<i>nèεd^ε</i>	<i>nè-</i>	"empty"
<i>nèεr^ε</i>	<i>nèya⁺</i>		
<i>wìug^ɔ</i>	<i>wìid^ε</i>	<i>wì-</i>	"red"
<i>wìir^ε</i>	<i>wìya⁺</i>		
<i>wōk^{ɔ/}</i>	<i>wā'ad^{ε/}</i>	<i>wā'-</i> or <i>wōk-</i>	"long, tall"
<i>wā'ar^{ε/}</i> rare	<i>wā'á⁺</i>		

<i>bèdvug</i> ^ɔ		<i>bèd-</i>	"great"
<i>bèdɪr</i> ^ɛ rare	<i>bèda</i> ⁺		

<i>kōdvug</i> ^ɔ	<i>kūt</i> ^ɛ rare	<i>kūd-</i>	"old"
<i>kōdɪr</i> ^ɛ	<i>kōda</i> ⁺		

S-stems do not use pl *s*^ɛ:

<i>būgvusíg</i> ^a		<i>būgvus-</i>	"soft"
<i>būgvusír</i> ^ɛ	<i>būgvusá</i> ⁺		

Similarly *mā'asír*^ɛ "cold, wet" *mālísír*^ɛ "sweet" *tēbísír*^ɛ "heavy" *lābísír*^ɛ "wide", and also

<i>pòɔdɪg</i> ^a		<i>pòɔd-</i>	"few, small"
<i>pòɔdɪr</i> ^ɛ	<i>pòɔda</i> ⁺		

Stems in *m n* do not use sg *r*^ɛ, except for

<i>sùŋ</i> ^ɔ		<i>sùŋ-</i>	"good"
<i>sùm</i> ^{mɛ}	<i>sùma</i> ⁺		

As usual with adjectives, the singular may show either *g*^a or *g*^ɔ but not both.

<i>gīŋ</i> ^a	<i>gīma</i> ⁺	<i>gìŋ-</i>	"short"
<i>dēɛŋ</i> ^a	<i>dēɛŋs</i> ^ɛ		"first"
	<i>dēɛmɪs</i> ^ɛ	<i>dèɛŋ-</i>	
	<i>dēɛna</i> ⁺		

As with nouns, stems in *m n*, and all 3-mora stems, use pl *-a*⁺ instead of *-d*^ɛ. A number of adjectives with such stems can be regarded as simply belonging to the single *g*^ɔ|*a*⁺ Subclass (compare [9.3.3.1](#)):

<i>dà-zēm̄múg</i> ^ɔ	<i>dà-zēm̄má</i> ⁺	<i>dà-zēm-</i>	"equal piece of wood"
<i>tōvlúg</i> ^ɔ	<i>tōvlá</i> ⁺	<i>tōvl-</i>	"hot"
<i>lāl̄lúg</i> ^ɔ	<i>lāl̄lá</i> ⁺	<i>lāl-</i>	"distant"
<i>mì'isug</i> ^ɔ	<i>mì'isa</i> ⁺	<i>mì'is-</i>	"sour"
<i>wàuxŋ</i> ^ɔ	<i>wàna</i> ⁺	<i>wàuxŋ-</i>	"wasted, thin"
<i>kpɪ'orŋ</i> ^ɔ	<i>kpɪ'əma</i> ⁺	<i>kpɪ'orŋ-</i>	"hard, strong"
<i>zùlvŋ</i> ^ɔ	<i>zùlvma</i> ⁺	<i>zùlvŋ-</i>	"deep"

and so also *yàlɔŋ*^ɔ "wide" *nyālɔŋ*^ɔ "wonderful" *yēl-nárɔŋ*^ɔ "necessary thing", along with the probably originally 3-mora stems (via *rr → r, *ss → s 6.2.1):

<i>yī-pɔŋrɔŋ</i> ^ɔ	<i>yī-pɔŋrà</i> ⁺		"nearby house"
<i>kísùg</i> ^ɔ	<i>kīsá</i> ⁺	<i>kīs-</i>	"hateful, taboo"

Other single-class adjectives are:

<i>pṽāk</i> ^a	<i>pṽ'as</i> ^ε	<i>pṽ'à-</i>	"female" (human)
<i>nyá'an</i> ^a	<i>nyá'as</i> ^ε	<i>nyā'an-</i>	"female" (animal)
	or <i>nyā'amís</i> ^ε		
<i>nyèəsíŋ</i> ^a	<i>nyèənsís</i> ^ε	<i>nyèəsíŋ-</i>	"self-confident"
<i>vūr</i> ^{ε/}	<i>vūyá</i> ⁺	<i>vūr-</i>	"alive"
<i>dāvɔŋ</i> ^ɔ	<i>dāad</i> ^ε	<i>dà-</i>	"male"
<i>tɔɔg</i> ^ɔ	<i>tɔɔd</i> ^ε	<i>tò-</i>	"bitter"

and other derivatives in -m-: *vèŋllíŋ*^a "beautiful" *mālisíŋ*^a "pleasant" *lālílíŋ*^a "distant."

Extremely **irregular** is

<i>bīl</i> ^a	<i>bībīs</i> ^ε	<i>bìl-</i> or <i>bì-</i>	"little"
-------------------------	---------------------------	---------------------------	----------

The sg flexion *-la* is found more widely in other Western Oti-Volta languages, where it seems often to have a diminutive sense: thus Farefare (Niggli) *níílá* "chick", *pìlilà* "lamb", *bùdíblá* "boy", *púglá* "girl", *kíílá* "young guinea fowl"; Mooré *bìríblá* "boy", *bìpúglá* "girl." The plural stem *bib-* is presumably reduplicated.

10.2 Deverbal

Dynamic Deverbal Adjectives are derived with *d*, the same formant as found in agent nouns (though the stems occasionally differ.) However the *d* in these forms may be assimilated or dropped by morphophonemic rule 13.1.1.2.1, so that not all Dynamic Deverbal Adjectives are current *d*-stems.

Dynamic Deverbal Adjectives take *r^ε|a⁺* Class sg and pl. In addition, they may take another sg suffix; this is *g^a* for WK, but *g^ɔ* for KT:

<i>kōvdír</i> ^ε	<i>kōvdá</i> ⁺	<i>kōvd-</i>	"murderous;
<i>kōvdíg</i> ^a WK			liable to be killed"
<i>kōvdúg</i> ^ɔ KT			

<i>tūmmur</i> ^ε	<i>tūmma</i> ⁺ WK <i>tūmna</i> ⁺ KT	<i>tùm-</i>	"working, helpful"
----------------------------	--	-------------	--------------------

Invariable verbs:

<i>sīnnír</i> ^ε rare <i>sīnníg</i> ^a	<i>sīnná</i> ⁺	<i>sīn-</i>	"silent"
<i>dēl</i> ^{ε/} <i>mōr</i> ^{ε/}	<i>dēllá</i> ⁺ <i>mōrá</i> ⁺	<i>dēl-</i> <i>mōr-</i>	"leaning" "having"

Stems in *g k ŋ* do not use the sg suffixes *g*^a *g*^ɔ:

<i>bōn-túlīgir</i> ^ε	<i>bōn-túlīgà</i> ⁺		"heating thing"
<i>ŋwī-tékir</i> ^ε	<i>ŋwī-tékà</i> ⁺	<i>ŋwī-ték-</i>	"pulling-rope"
<i>bōn-súgír</i> ^ε	<i>bōn-súgà</i> ⁺		"helpful thing"
<i>bì-nògír</i> ^ε	<i>bì-nògà</i> ⁺		"beloved child"

Adjectives derived from 4-mora stem verbs in *-m* in KT's speech take *g*^a or *g*^ɔ sg and *-a*⁺ pl; they may drop the *-m-* in the plural:

<i>nīn-pú'alīg</i> ^a	<i>nīn-pú'alíma</i> ⁺	"harmful person"
<i>nīn-záaŋsùg</i> ^ɔ	<i>nīn-záaŋsà</i> ⁺	"dreamy person"

Resultative Adjectives are derived with **-lum-*. They inflect regularly as *g*^ɔ|*a*⁺ Subclass *m*-stems. KT (not WK) also has forms without *-m-* in both sg and pl:

<i>kpiilóg</i> ^ɔ	<i>kpiilímà</i> ⁺	<i>kpiilóg-</i>	"dead"	WK
<i>nīn-kpiilòg</i> ^ɔ	<i>nīn-kpiilìma</i> ⁺		"dead person"	KT
<i>gēēŋlóg</i> ^ɔ	<i>gēēŋlímà</i> ⁺	<i>gēēŋlóg-</i>	"tired"	WK
<i>nīn-gēēŋlòg</i> ^ɔ	<i>nīn-gēēŋlìma</i> ⁺		"tired person"	KT
<i>pè'elóg</i> ^ɔ	<i>pè'elímà</i> ⁺	<i>pè'elóg-</i>	"full"	WK KT
	<i>dūg-pé'elà</i> ⁺		"full pots"	KT

11 Verb Flexion

On the Remoteness Marker n^{ϵ} see [30.1.1](#); for the enclitic subject pronoun ya see [22.7.3](#). Both words have been taken as flexions in other accounts, and are traditionally written solid with the preceding verb.

11.1 Variable Verbs

About 90% of the verbs in my materials are Variable Verbs: prototypical verbs expressing activities, accomplishments and achievements, and inflecting for aspect.

The unmarked Base Form is used for the Perfective and Resultative aspects, and the Dynamic Imperfective aspect adds a flexional suffix $-d^a$. The suffix $-m^a$ marks Imperative Mood when and only when the verb word itself has tone overlay due to Independency Marking [22.6.2.2](#).

Tonal considerations show that $-d^a$ is historically composite, the result of adding a flexion $-a$ to a derived stem in $-d-$ [7.3](#), but synchronically verb conjugation is very regular, and there has presumably been considerable levelling.

Examples cite the unmarked Perfective/Resultative Base form, the Dynamic Imperfective and $-m^a$ imperative in order. The $-m^a$ imperative always shows tone overlay due to Independency Marking. [22.6.1.1](#).

Straightforward examples of verb inflexion include:

$k\bar{u}^+$	$k\bar{u}vd^a/$	$k\bar{u}vm^a$	"kill"
$kp\grave{e}\eta'^+$	$kp\grave{e}\eta'\epsilon d^a$	$kp\grave{e}\eta'\epsilon m^a$	"enter"
$k\grave{i}\grave{a}^+$	$k\grave{i}\epsilon d^a$	$k\grave{i}\epsilon m^a$	"cut"
$k\bar{u}\bar{a}^+$	$k\bar{u}\epsilon d^a/$	$k\bar{u}\epsilon m^a$	"hoe"
$g\grave{\omega}\eta^+$	$g\grave{\omega}\eta d^a$	$g\grave{\omega}\eta m^a$	"hunt"
$d\bar{u}g^{\epsilon}$	$d\bar{u}gv d^a/$	$d\bar{u}gv m^a$	"cook"
$y\grave{u}ug^{\epsilon}$	$y\grave{u}ug\epsilon d^a$	$y\grave{u}ug\epsilon m^a$	"delay, get late"
$y\bar{a}d\iota g^{\epsilon}/$	$y\bar{a}d\iota g\epsilon d^a$	$y\bar{a}d\iota g\epsilon m^a$	"scatter"
$p\grave{i}\bar{a}\eta'^a$	$p\grave{i}\bar{a}\eta'ad^a/$	$p\grave{i}\bar{a}\eta'am^a$	"speak; praise"
$d\bar{u}'\grave{a}^a$	$d\bar{u}'ad^a$	$d\bar{u}'am^a$	"bear, beget"
$n\bar{\omega}k^{\epsilon}/$	$n\bar{\omega}k\epsilon d^a$	$n\bar{\omega}k\epsilon m^a$	"take"
$s\grave{i}\grave{a}k^{\epsilon}$	$s\grave{i}\grave{a}k\epsilon d^a$	$s\grave{i}\grave{a}k\epsilon m^a$	"believe, agree"
$g\bar{a}\eta^{\epsilon}/$	$g\bar{a}\eta\epsilon d^a$	$g\bar{a}\eta\epsilon m^a$	"choose"
$kp\grave{e}'\eta^{\epsilon}$	$kp\grave{e}'\eta\epsilon d^a$	$kp\grave{e}'\eta\epsilon m^a$	"strengthen"
$kp\grave{a}r^{\epsilon}$	$kp\grave{a}r\epsilon d^a$	$kp\grave{a}r\epsilon m^a$	"lock"
$s\bar{u}gv r^{\epsilon}/$	$s\bar{u}gv r\epsilon d^a$	$s\bar{u}gv r\epsilon m^a$	"forgive"
$b\grave{a}s^{\epsilon}$	$b\grave{a}s\epsilon d^a$	$b\grave{a}s\epsilon m^a$	"go/send away"
$s\bar{i}g\iota s^{\epsilon}/$	$s\bar{i}g\iota s\epsilon d^a$	$s\bar{i}g\iota s\epsilon m^a$	"lower"
$n\bar{a}'m\iota s^{\epsilon}/$	$n\bar{a}'m\iota s\epsilon d^a$	$n\bar{a}'m\iota s\epsilon m^a$	"(make) suffer"

Some root-stems in CVV- show a CV- allomorph in both Dynamic Imperfective and imperative, with *-t-* for *-d-* and *-mm-* for *-m-* [6.1.1.1](#):

<i>dì⁺</i>	<i>dìt^a</i>	<i>dìm^{ma}</i>	"eat"
<i>nyē⁺</i>	<i>nyēt^{a/}</i>	<i>nyèm^{ma}</i>	"see"

and so also *lì⁺*, *lù⁺* "fall" *dū⁺* "go up" *yī⁺* "go/come out" *zò⁺* "run, fear."

Stems in *-d-* show *-t-* in the dipf via **dd* → *tt*:

<i>bùd^ε</i>	<i>bùt^a</i>	<i>bùdım^a</i>	"plant"
<i>gàad^ε</i>	<i>gàt^a</i> 6.3.3	<i>gàadım^a</i>	"pass, surpass"

Stems in */* generate a cluster in the dipf via **ld* → *nn* [6.2.1](#):

<i>vōl^ε</i>	<i>vōn^{na/}</i>	<i>vòlım^a</i>	"swallow"
<i>màal^ε</i>	<i>màan^{na}</i>	<i>màalım^a</i>	"make; sacrifice"
<i>dīgıl^{ε/}</i>	<i>dīgín^{na}</i>	<i>dīgılım^a</i>	"lay down"

Only 2-mora stems assimilate **bm* → *mm*:

<i>lèb^ε</i>	<i>lèbıd^a</i>	<i>lèm^{ma}</i>	"return"
<i>sōb^ε</i>	<i>sōbıd^{a/}</i>	<i>sòm^{ma}</i>	"write"
<i>lìəb^ε</i>	<i>lìəbıd^a</i>	<i>lìəbım^a</i>	"become"
<i>ēēŋb^{ε/}</i>	<i>ēēŋbıd^a</i>	<i>ēēŋbım^a</i>	"lay a foundation"

Only 2-mora *n*-stems show **nd* → *nn*; only *kēŋ^{ε/}* (below) shows **nm* → *mm*:

<i>bùn^ε</i>	<i>bùn^{na}</i>	<i>bùnım^a</i>	"reap"
<i>mōn^ε</i>	<i>mōn^{na/}</i>	<i>mònım^a</i>	"make porridge"
<i>gò'ɔn^ε</i>	<i>gò'ɔnıd^a</i>	<i>gò'ɔnım^a</i>	"extend neck"
<i>dìgın^ε</i>	<i>dìgınıd^a</i>	<i>dìgınım^a</i>	"lie down"

The *nn*-stem *sùn^ε* [6.2.1](#) does not assimilate at all:

<i>sùn^{ne}</i>	<i>sùnnıd^a</i>	<i>sùnnım^a</i>	"bow head"
-------------------------	---------------------------	---------------------------	------------

4-mora *m*-stems always assimilate **md* → *mn*, *mm*:

<i>sìilım^m</i>	<i>sìilım^{ma}</i>	<i>sìilım^{ma}</i>	"quote proverbs"
<i>lāŋım^m</i>	<i>lāŋım^{ma}</i>	<i>lāŋım^{ma}</i>	"wander searching"

3-mora *m*-stems assimilate optionally [6.2.1](#):

<i>kàɾɪm^m</i>	<i>kàɾɪm^m</i>	<i>kàɾɪm^{ma}</i>	"read"
	or <i>kàɾɪmɪd^a</i>		
<i>tɔ̃ɔm^{m/}</i>	<i>tɔ̃ɔm^{ma}</i>	<i>tòɔm^{ma}</i>	"depart"
	or <i>tɔ̃ɔmɪd^a</i>		

Stems in *-mm-* never assimilate in the Dynamic Imperfective, but simplify **mmm* → *mm* in the imperative:

<i>tàm^m</i>	<i>tàmmɪd^a</i>	<i>tàm^{ma}</i>	"forget"
<i>zàm^m</i>	<i>zàmmɪd^a</i>	<i>zàm^{ma}</i>	"cheat, betray"
<i>dàm^m</i>	<i>dàmmɪd^a</i>	<i>dàm^{ma}</i>	"shake"
<i>lèm^m</i>	<i>lèmmɪd^a</i>	<i>lèm^{ma}</i>	"sip, taste"

There are no verb stems of the form **CVbim*, so these *-mm* stems can probably be ascribed to the assimilation **bm* → *mm* at derivational level [6.2.1](#).

2-mora stems normally assimilate:

<i>tùm^m</i>	<i>tùm^{ma}</i>	<i>tùm^{ma}</i>	"work"
<i>wùm^m</i>	<i>wùm^{ma}</i>	<i>wùm^{ma}</i>	"hear"
<i>kìm^m</i>	<i>kìm^{ma}</i>	<i>kìm^{ma}</i>	"tend flock/herd"
<i>dùm^m</i>	<i>dùm^{ma}</i>	<i>dùm^{ma}</i>	"bite"

but the NT/KB sometimes have unassimilated forms to avoid ambiguity [6.2.1](#).

Fusion Verbs are 3-mora stems with deleted **g* after *aa iə uə aaŋ ɛɛŋ ɔɔŋ* [6.3.1](#). They show the stem with **g* only in the Base Form and gerund, with all other forms dropping the **g* by *morphological* rule; this has implications for the toneme distribution of Pattern H stems [7.3.1](#). Base Forms before Liaison likewise drop the **g*.

<i>fāeŋ^{+/}</i>	<i>fāaŋd^{a/}</i>	<i>fàaŋm^a</i>	"save"
<i>dīe^{+/}</i>	<i>dīəd^{a/}</i>	<i>dì'əm^a</i>	"get, receive"
<i>dūe^{+/}</i>	<i>dūəd^{a/}</i>	<i>dùəm^a</i>	"rise, raise"
<i>pūŋ'e^{+/}</i>	<i>pūŋ'əd^{a/}</i>	<i>pùŋ'əm^a</i>	"rot" WK

Contrast the tonemes of the Gerunds *fāaŋr^ɛ dī'ər^ɛ dú'ər^ɛ pūŋ'ər^ɛ*.

For the forms taken by Fusion Verb Base Forms before Liaison see [8.2.1](#).

11.1.1 Irregular

Most irregularities involve the stem showing a derivational suffix in the Base Form which is dropped in the Dynamic Imperfective. A preceding derivational suffix is often dropped before derivational *d*, so this may represent an older pattern which has been levelled out elsewhere. In some cases two distinct verbs may be involved, each associated by its precise meaning with particular aspects.

Kusaal has few irregular verbs; I list all that I have encountered below.

<i>gōs</i> ^ε	<i>gōsɪd</i> ^{a/}	<i>gòsɪm</i> ^a	"look"
	or <i>gōt</i> ^{a/}	<i>gòm</i> ^{ma}	
<i>tìs</i> ^ε	<i>tìsɪd</i> ^a	<i>tìsɪm</i> ^a	"give"
	or <i>tìt</i> ^a		

Before Liaison Word objects the Base Form may also be *tì-*, e.g. *tì f* "give you."

<i>yèl</i> ^ε	<i>yèt</i> ^a	<i>yèlɪm</i> ^a	"say"
<i>wìk</i> ^ε	<i>wìid</i> ^a 6.1.1.1	<i>wìkɪm</i> ^a	"fetch water"
<i>jāṅk</i> ^{ε/}	<i>jāṅ'ad</i> ^{a/}	<i>jāṅkɪm</i> ^a	"leap, fly"
<i>gīlɪg</i> ^{ε/}	<i>gīn</i> ^{na/}	<i>gīlɪgɪm</i> ^a	"go around"
<i>kēṅ</i> ^{ε/}	<i>kēn</i> ^{na/}	<i>kēm</i> ^{ma}	"go"

The verb

<i>dèlɪm</i> ^m	[<i>dēl</i> ^{la/}]	<i>dèlɪm</i> ^{ma}
---------------------------	-------------------------------	----------------------------

is used as inchoative to *dēl*^{la/} "be leaning (of a person);" compare *gùl*^ε dipf *gùn*^{na} "suspend" beside the Stance Verb *gùl*^{la} "be hanging."

Only two Variable Verbs are irregular in the actual flexional suffixes taken:

<i>kē</i> ⁺	<i>kēt</i> ^{a/}	<i>kèl</i> ^a	"let, allow"
------------------------	--------------------------	-------------------------	--------------

has *-l*^a not *-m*^a, for the Imperative form with Independency Marking.

The verb

<i>kēṅ</i> ⁺	<i>kēn</i> ^{a/}	<i>kēm</i> ^a	"come"
-------------------------	--------------------------	-------------------------	--------

has Dynamic Imperfective *-n*^a for *-d*^a; this verb is also remarkable in always being immediately followed by *nā*^{+/} "hither" [23.7](#) which disambiguates the forms which are homophonous with those of *kēṅ*^{ε/} "go" above:

Kèm nā!

"Come!"

Kèm sá!

"Go!"

The verb

*nòŋ^ε**nòŋɪm^a*

"love"

is morphologically regular, but is remarkable in that the base form always has Descriptive Aspect [11.2.2.1](#):

M̃ nójī f.

"I love you."

(Family, spiritual.)

M̃ bójódī f.

"I love you."

(Romantic, sexual.)

In WK's speech, the verb aligns with other imperfective forms in not being followed by the particle *yā*⁺ when it is phrase-final and has undergone tone overlay due to Independency Marking [22.6.2.1](#).

M̃ nój.

"I like it." WK

(e.g. In reply to a question)

WK specifically stated that **M̃ nój yā* was an impossible form.

The agent noun *nòŋɪd^a* is tonally aberrant, with Pattern L instead of O. It is also remarkable as the only Pattern L 4-mora stem which is not a *m*-stem and does not have the stem tonemes LH.

Ò nòŋɪd kā'e.

"Nobody loves him." WK

("His lover does not exist.")

11.2 Invariable Verbs

About 10% of the verbs in my materials have only one finite form. As a lexical matter in each case, this may be Dynamic Imperfective or Descriptive Stative.

Four Descriptive Verbs consist of bare roots with no suffix:

mī⁺

"know"

zī⁺

"not know"

bē⁺

"be somewhere/exist"

kā'ē⁺ (← **kagɪ*)

"not be"

Though they resemble Variable Verb perfectives, the particle *yā*⁺ does not occur after them [22.6.2.1](#) and the Tone Pattern LO word *bē⁺* "be somewhere, exist" is

followed by L Raising 8.3. (The irregular Variable Verb *nòŋ*^ε "love" also behaves in these respects as Descriptive 11.1.1.)

All other Invariable Verbs have a flexional suffix showing LF-final *-a*.

Before this suffix, Dynamic Invariable Verbs historically showed a *derivational* suffix *ʎ; for its combination with the preceding root see 6.2.1.1. Forms without *ʎ appear in Perfective Gerunds, Agent Nouns and Dynamic Deverbal Adjectives. In Descriptive Verbs *ʎ is either absent or has fused with the preceding root in all related words. (The *-y-* in the LFs of *àɛŋ*^a "be something/somehow", *vōɛ*^a "be alive" and *tōɛ*^a "be bitter" is root-final *-y-* preserved before the *-a* 6.1.1.1.)

This difference is reflected in Tone Patterns 7.3.3, but segmentally, there has been levelling. Dynamic Invariable verbs with roots ending in *n / r* have generalised the form with gemination due to *ʎ to all related stems. For WK, Descriptive Verbs with roots in *m* have acquired a secondary gemination of the *m*; this is not seen in written sources or found with other informants, and even for WK, Tone Pattern H 3-mora-stem verbs have the tonemes which would be expected *without* gemination:

<i>kpī'am</i> ^{ma/}	not	* <i>kpī'am</i> ^{ma}	"be strong, hard"
<i>wā'am</i> ^{ma/}	not	* <i>wā'am</i> ^{ma}	"be long, tall" KT

The Dagbani cognate of *kpī'am*^{ma/} "be hard" is *kpema*, confirming an original single *-m-*: Dagbani preserves long vowels always and only in originally closed syllables. (Dagbani *maani* sg *mana* pl = Kusaal *má'an*^{nε} sg *mā'aná*⁺ pl "okra.")

11.2.1 Dynamic

Most Dynamic Invariable Verbs are **Stance Verbs**:

<i>īgɪ</i> ^{ya/}		"be kneeling down"
<i>dīgɪ</i> ^{ya/}		"be lying down"
<i>vābɪ</i> ^{ya/}		"be lying prone"
<i>lābɪ</i> ^{ya}		"crouch hidden behind something"
<i>tābɪ</i> ^{ya}		"be stuck to something"
<i>zì'e</i> ^{ya}		"be standing still"
<i>zìŋ'i</i> ^{ya}		"be sitting down"
<i>tī'i</i> ^{ya/}		"be leaning" (of an object)
<i>sùr</i> ^a		"have head bowed"
<i>dēl</i> ^{la/}		"be leaning" (of a person)
<i>gùl</i> ^{la}		"be hanging"
<i>gō'e</i> ^{ya/}	WK ← * <i>gɔdya</i>	"have neck extended" 6.2.1.1
<i>gōr</i> ^{a/}	DK ← * <i>gɔrya</i>	
<i>gōl</i> ^{la/}	KT ← * <i>gɔlya</i>	

Other Dynamic Invariable Verbs are

<i>wà'e^{ya}</i>	"travel to"
<i>sīn^{na/}</i>	"be silent"
<i>d̥l̥^{la/}</i>	"attend on, be with in a subordinate rôle"
<i>zāŋ^{la/}</i>	"carry in one's hands"
<i>gūr^{a/}</i>	"guard"
<i>tēŋr^a</i>	"remember"

Stance Verbs are *dynamic*. They distinguish a continuous/progressive sense from a habitual/propensity sense with the focus particle *nē^{+/}* just like Dynamic Imperfectives of Variable Verbs [22.2.2.2](#), the derived Assume-Stance Verbs [13.2.1.1](#) cannot use the Base Form as a Resultative, as verbs expressing a change of state in the subject can [33.1.2.3](#), and it is not possible to form a Resultative Adjective [13.1.1.2.2](#) from a Stance Verb. With the non-stance Dynamic Invariable Verbs a stative interpretation would in any case seem forced.

For some informants, Stance Verb stems also occur with the Variable Verb dipf suffix *-d^a*, here confined to the habitual/propensity meaning; other informants use the dipf of the derived Assume-Stance Variable Verb instead:

	<i>Ò zìŋ'i nē.</i>	"She's sitting down." WK KT
	<i>Ò pō zìŋ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò pō zìŋ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò zìŋ'i nē.</i>	"She's sitting down."
	<i>Ò pō zìŋ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò pō zìŋ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò vābɪ nē.</i>	"He's lying prone."
	<i>Ò pō vābɪdā.</i>	"He doesn't lie prone." WK
but	<i>Ò pō vābɪnìdā.</i>	"He doesn't lie prone." KT
	<i>Ò d̥l̥gɪ nē.</i>	"She's lying down."
	<i>Ò pō d̥l̥gɪdā.</i>	"She doesn't lie down" WK
	<i>Lì zì'ə nē.</i>	"It's standing up."
	<i>Lì pō zì'idā.</i>	"It (a defective tripod) doesn't stand up." WK
	<i>Lì tì'i nē.</i>	"It's leaning against something."
	<i>Lì tì'id.</i>	"It can be leant against something." WK

Lì pō tī'iyá.

"It's not leaning against something."

Lì pō tī'idá.

"It's not for leaning against something." WK

Other Dynamic Invariable verbs, like Variable Verbs, show no flexional distinction between the two Dynamic Imperfective meanings:

Ò sìn.

"She's silent."

Ò sìn nē.

"She's keeping silent."

Ò zàŋl nē kólùg.

"He's holding a bag."

Ò zàŋl kólùg.

"He holds a bag."

Ò pō zāŋllá.

"He isn't holding/doesn't hold it."

Non-stance Dynamic Invariable Verbs have no separate derived inchoative Variable Verbs, but use the same Invariable Verb form in such senses:

Sìn!

"Be quiet!"

Dòllī m.

"Follow me!"

Kà bà sìn.

"And they fell silent."

And **3PL** be.silent.

Dynamic Invariable Verbs make gerunds (whether Perfective or Imperfective) capable of expressing events, which can be used in the immediate-future construction with *bòɔɔ*^a "want" + gerund [22.3.2](#). They make deverbal nominal derivatives by adding *-d-* to the stem, like Variable Verbs. Unlike Descriptive Verbs, they form not only agent nouns [13.1.1.1](#) but also Dynamic Deverbal adjectives [13.1.1.2.1](#), and Instrument Nouns [13.1.1.3](#). Stems in *ll nn r(r)* drop the *-d-* formant in derivation, including in Agent nouns, with the exception of *tēŋrɪd*^a "remember-er" and the variant *gūrɪd*^a/ "guard" beside *gū'ud*^a/ and *-gúr*^a.

11.2.2 Descriptive

Descriptive Verbs divide into two groups on the basis of **agency**. Agentive verbs, like Dynamic Invariable Verbs and most Variable Verbs, can be used in direct commands and are capable of forming derived Agent Nouns [13.1.1.1](#). All these are transitive Relational Verbs. Non-agentive Descriptive Verbs are Adjectival Verbs, expressing predicative adjective meanings.

11.2.2.1 Relational

Relational Verbs include

<i>àɛŋ^a</i>	"be something/somehow" 6.1.1.1
<i>bɛ⁺</i>	"be somewhere/exist" (no Agent Noun)
<i>kā'ɛ⁺</i> (← * <i>kagɪ</i>)	"not be" (negative to both <i>àɛŋ^a</i> and <i>bɛ⁺</i>)
<i>mār^{a/}</i>	"have"
<i>tār^{a/}</i>	"have"
<i>sū'e^{ya/}</i>	"own"
<i>sōŋ'e^{ya/}</i>	"be better than"
<i>mī⁺</i>	"know"
<i>zī⁺</i>	"not know"
<i>nēn^{na/}</i>	"envy"
<i>kīs^{a/}</i>	"hate"
<i>zēm^{ma/}</i>	"be equal to"
<i>kpēɛŋm^{ma/}</i>	"be older than"
<i>wēn^{na/}</i>	"resemble" 23.4

The verb *bòɔd^a* "want, like" is formally the dipf of *bò⁺* "seek", but has become an independent Relational Verb. Similarly the dipf of *zò⁺* "run" is used as a Relational Verb "fear; experience emotion" with a direct object expressing the emotion and an indirect object expressing the cause of the emotion [23.1](#). The irregular Variable Verb *nòŋ^ɛ* "love" has a finite form which is syntactically Relational [11.1.1](#) [22.6.2.1](#).

11.2.2.2 Adjectival

Adjectival Verbs express predicative adjectival meanings. They are intransitive, cannot be used in direct commands, and do not form Agent Nouns or gerunds.

<i>vōɛ^{a/}</i>	"be alive"	<i>vūr^{ɛ/}</i>	"alive"
<i>tōɛ^{a/}</i>	"be bitter"	<i>tōɔɔ^ɔ</i>	"bitter"
<i>mā'as^{a/}</i>	"be cool"	<i>mā'asír^ɛ</i>	"cool"
<i>bōɔɔs^{a/}</i>	"be soft"	<i>bōɔɔsír^ɛ</i>	"soft"
<i>tēbɪs^{a/}</i>	"be heavy"	<i>tēbɪsír^ɛ</i>	"heavy"
<i>mālɪs^{a/}</i>	"be sweet"	<i>mālɪsír^ɛ</i>	"sweet"
<i>lābɪs^{a/}</i>	"be wide"	<i>lābɪsír^ɛ</i>	"wide"
<i>mì'is^a</i>	"be sour"	<i>mì'isɔɔ^ɔ</i>	"sour"
<i>vèn^{na}</i>	"be beautiful"	<i>vènnɪɔ^a</i>	"beautiful"
<i>vèŋl^{la}</i>	"be beautiful"	<i>vèŋllɪɔ^a</i>	"beautiful"
<i>lāl^{la/}</i>	"be far"	<i>lāllɔɔ^ɔ</i>	"far"
<i>pòɔɔd^a</i>	"be few"	<i>pòɔɔdɪɔ^a</i>	"few"

<i>sùṃ</i> ^{ma}	"be good"	<i>sùŋ</i> ^ɔ	"good"
<i>kpī'əm</i> ^{ma/}	"be strong"	<i>kpī'orŋ</i> ^ɔ	"strong"
<i>yàlɪm</i> ^{ma}	"be wide"	<i>yàlɪŋ</i> ^ɔ	"wide"
<i>zùlɪm</i> ^{ma}	"be deep"	<i>zùlɪŋ</i> ^ɔ	"deep"
<i>tàdɪm</i> ^{ma}	"be weak"	<i>tādɪm</i> ^{m/}	"weak person"
<i>gīm</i> ^{ma/}	"be short"	<i>gīŋ</i> ^a	"short"
<i>dùr</i> ^a	"be many"		(no adjective)
<i>kàr</i> ^a	"be few"		(no adjective)

With stem changes between adjective and verb:

<i>tōl</i> ^{la/}	"be hot"	<i>tōvlóg</i> ^ɔ	"hot"
<i>nyèɛs</i> ^a	"be self-confident"	<i>nyèɛsíŋ</i> ^a	"self-confident"
<i>wā'am</i> ^{ma/}	"be long"	<i>wōk</i> ^ɔ	"long"

The verb *nār*^{a/} "be necessary" has a related adjective *nàrɪŋ*^ɔ "necessary" (??tone) but the verb is probably primary; it is much commoner than the adjective. The verb *pòŋr*^a "be near (to)" has an adjectival form seen in WK's *yī-póŋrà*⁺ "nearby houses" but makes the Perfective Gerund *pōŋrɪb*^ɔ. The verb *tūŋ'e* "be able" occurs almost exclusively as an auxiliary verb in the Serial VP construction [26.3.1](#); it has no extant Long Form in my materials.

Gerunds differ in flexion from other substantives in frequently resisting the assimilations **mg* → *ŋŋ* **ng* → *ŋŋ* [6.2.1](#). They rarely shorten a CVV- stem before *-r^ε*. 4-mora stems in *-sim -lim* follow the rule and use *-g^{ɔ̃}*:

<i>siilim^m</i>	"cite proverbs"	→	<i>siilúŋ^{ɔ̃}</i>
<i>zàaŋsim^m</i>	"dream"	→	<i>zàaŋsúŋ^{ɔ̃}</i>

but stems in **-gim* drop the *-m-* and use *-r^ε*:

<i>wàŋim^m</i>	"waste away"	→	<i>wàŋir^ε</i>
<i>lāŋím^m</i>	"wander"	→	<i>lāŋír^ε</i>
<i>zàkím^m</i>	"itch"	→	<i>zàkír^ε</i>

For examples of regular gerunds see [9.3](#) under Noun Flexion.

2-mora stems regularly use *-r^ε* not *b^{ɔ̃}* in compounds; see [19.7.1](#).

<i>pɥ'à-dīr^ε</i>	"marriage"
<i>nīn-kúòr^ε</i>	"murder"
<i>dā-núòr^ε</i>	"beer-drinking"
<i>mò-pīl^{lε}</i>	"grass roof"
<i>fū-yéér^ε</i>	"shirt-wearing" WK

12.1.1.1.1 Irregular Formations

All of these have been verified as occurring in the *bòɔd* "want" + gerund construction above.

Irregular 2-mora stem verbs [11.1.1](#) may have regular gerunds:

<i>tìs^ε</i>	"give"	→	<i>tīsib^{ɔ̃}</i>
<i>kē⁺</i>	"let"	→	<i>kēɛb^{ɔ̃}/</i>
<i>gùl^ε</i>	"suspend"	→	<i>gūlib^{ɔ̃}</i>

However, with 2-mora stems almost 20% of the regular verbs in KED use suffixes other than *b^{ɔ̃}*. A smaller number of these are also tonally irregular. No segmentally regular gerund in *-b^{ɔ̃}* shows tonal irregularity. Forms with the suffix *-g^{ɔ̃}* are Pattern L from Pattern LO verbs unless there are variant forms with *g^a* or *s^ε* and the formation is thus shown to belong in fact to the *g^{ɔ̃}|s^ε* Subclass [9.3.2.1](#).

A high proportion of these verbs have stems in *m* or *b*; the regular formation with *-b^{ɔ̃}* has probably been avoided because it would create ambiguous SFs [9.1](#).

Examples:

<i>lì</i> ⁺	"fall"	→	<i>līg</i> ^a	
<i>zī</i> ⁺	"carry on head"	→	<i>zīd</i> ^{ε/}	
<i>bēŋ</i> ⁺	"fall ill"	→	<i>bēŋ'εs</i> ^ε	
<i>kēŋ</i> ⁺	"come"	→	<i>kēŋ</i> ^{nε/}	
<i>zò</i> ⁺	"run"	→	<i>zūa</i> ⁺	also <i>zōg</i> ^ɔ
<i>vū</i> ⁺	"make noise"	→	<i>vūug</i> ^{ɔ/}	
<i>pīāŋ</i> ^a	"speak"	→	<i>pīàŋk</i> ^ɔ	(unexpected tone)
<i>bòd</i> ^ε	"plant"	→	<i>būd</i> ^{ɪg} ^a	also <i>būdug</i> ^ɔ
<i>yèl</i> ^ε	"say, tell"	→	<i>yèl</i> ^{ug} ^ɔ	
<i>kūl</i> ^ε	"go home"	→	<i>kūl</i> ^{ɪg} ^{a/}	also <i>kūlug</i> ^{ɔ/}
<i>tāŋs</i> ^ε	"shout"	→	<i>tāŋsug</i> ^ɔ	
<i>sōŋs</i> ^ε	"converse"	→	<i>sōŋsìg</i> ^a	
<i>gōs</i> ^ε	"look"	→	<i>gōsìg</i> ^a	
<i>sòs</i> ^ε	"pray, beg"	→	<i>sōsɪg</i> ^a	
<i>kīr</i> ^ε	"hurry"	→	<i>kìkírùg</i> ^ɔ	or <i>kīrɪb</i> ^{ɔ/}
<i>lèb</i> ^ε	"return"	→	<i>lēbɪg</i> ^a	
<i>tèb</i> ^ε	"carry in both hands"	→	<i>tēbɪg</i> ^a	
<i>kāŋb</i> ^ε	"scorch"	→	<i>kāŋbɪr</i> ^ε	
<i>òŋb</i> ^ε	"chew"	→	<i>ōŋbɪr</i> ^ε	
<i>lūb</i> ^ε	"buck"	→	<i>lūbɪr</i> ^{ε/}	
<i>zàb</i> ^ε	"fight"	→	<i>zàbɪr</i> ^ε	
<i>tēŋb</i> ^ε	"tremble"	→	<i>tēŋbug</i> ^ɔ	
<i>tùm</i> ^m	"work"	→	<i>tūuma</i> ⁺	
<i>tùm</i> ^m	"send"	→	<i>tìtūmɪs</i> ^ε	
<i>wòm</i> ^m	"hear"	→	<i>wōm</i> ^{mɔ}	or <i>wòmmug</i> ^ɔ 13.1.1.4

With 3-mora and 4-mora stem verbs there are very few irregularities in gerund formation. A few have plural-as-singular forms [9.5](#). The verb *yīis*^{ε/} "make go/come out" has *yīisíb*^ɔ, like the alternate form *yīs*^ε with regular *yīsɪb*^{ɔ/}.

There are a number of abstract verbal nouns in the *m*^m Class formed from 3-mora verb stems in *-s-* which resemble gerunds in tone. They may owe their *m*^m Class membership to being Imperfective forms: for the dropping of the *-d-* formant compare Agent Nouns and Deverbal Adjectives [13.1.1.1](#) [13.1.1.2.1](#):

<i>pò'us</i> ^ε	"greet, thank"	→	<i>pò'usɪm</i> ^m	"worship"
		or	<i>pò'usug</i> ^ɔ	
<i>kō</i> ⁺	"kill"	→	<i>nīn-kúusìm</i> ^m	"murderousness"
<i>yōlɪs</i> ^{ε/}	"untie"	→	<i>yōlɪsɪm</i> ^m	"freedom"

12.1.1.2 From Dynamic Invariable Verbs

Dynamic Invariable Verbs mostly form Perfective Gerunds, adding class suffixes to the stem in a similar way to Variable Verbs and following the same tone pattern allocation rules [7.5.1](#). They are idiosyncratic with regard to the class suffix selected, however.

<i>zìŋ'i^{ya}</i>	"be sitting"	→	<i>zīŋ'ig^a</i>	also "place", regular <i>g^a s^ε</i> Class
<i>zì'e^{ya}</i>	"be standing"	→	<i>zī'a⁺</i> KED <i>zī'əg^a</i> DK KT	(wholly exceptional undeleted <i>g</i> 6.3.1)
<i>dīgɪ^{ya/}</i>	"be lying"	→	<i>dīk^{a/}</i> KT <i>dīgɪr^{ε/}</i> WK	
<i>īgɪ^{ya/}</i>	"be kneeling"	→	<i>īk^{a/}</i> KT <i>īgɪr^{ε/}</i> WK	
<i>vābɪ^{ya/}</i>	"be lying prone"	→	<i>vāp^{ɔ/}</i> KT <i>vābɪr^{ε/}</i> WK	
<i>tī'j^{ya/}</i>	"be leaning"	→	<i>tī'ib^{ɔ/}</i>	
	(of an object)			
<i>gùl^{la}</i>	"be hanging"	→	<i>gūlb^ɔ</i>	

The Adjectival Verb *pòŋr^a* also makes a Perfective Gerund:

<i>pòŋr^a</i>	"be near"	→	<i>pōŋrɪb^ɔ</i>
-------------------------	-----------	---	---------------------------

However, most Invariable Verbs, including the Dynamic type, with stems in *// nn r(r)* form Imperfective Gerunds [13.1.1.4](#).

12.1.2 Concrete Nouns

Verb stems with noun class suffixes which deviate from the usual allocation rules are often not abstract gerunds but have **concrete** senses, such as the product of the action, the instrument used, or the place at which the action occurs.

<i>ēŋbír^ε</i>	"(physical) foundation"	<i>ēŋbúb^ɔ</i>	"laying a foundation"
<i>dūk^{ɔ/}</i>	"cooking pot"	<i>dūgub^{ɔ/}</i>	"cooking"
<i>dà'a⁼</i>	"market"	<i>dā'ab^ɔ</i>	"buying"
<i>kūk^a</i>	"chair"	<i>kūgub^ɔ</i>	"resting on something"
<i>zūg-kūgur^ε</i>	"pillow"		
<i>sūāk^{a/}</i>	"hiding place"	<i>sū'ab^{ɔ/}</i>	"hiding"
<i>sōbɪr^{ε/}</i>	"piece of writing"	<i>sōp^{ɔ/}</i>	"writing, orthography"
<i>kūt^ε</i>	"iron, nail" 9.5	<i>kūdub^ɔ</i>	"working iron"
<i>kùəsɪm^m</i>	"merchandise"	<i>kùəsug^ɔ</i>	"selling"
<i>pèbɪsɪm^m</i>	"wind"	<i>pèbɪsug^ɔ</i>	"blowing of the wind; wind"

See also on *pù'alím^m* *dàalím^m* [13.1.2](#).

The forms *vābir*^ε/ *lābir*^ε/ *dīgir*^ε/ *īgir*^ε/ used by WK as gerunds of Stance Verbs [12.1.1.2](#) are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting for him with gerunds *vāp*^ɔ/ etc.

Three concrete deverbal nouns, from *pìbil*^ε "cover", *zàṅbil*^ε "tattoo", *màal*^ε "sacrifice" show single *-n-* in place of *-l-*:

<i>pībīn</i> ^{nε}	<i>pībīna</i> ⁺	<i>pìbīn-</i>	"covering"
<i>zāṅbīn</i> ^{nε}	<i>zāṅbīna</i> ⁺	<i>zàṅbīn-</i>	"tattoo" (NT "sign")
<i>māan</i> ^{nε}	<i>māana</i> ⁺	<i>màan-</i>	"sacrifice"

Although my informants definitely had single *-n-* in these words, it is possible that this represents a secondary simplification of **nn*; compare Mooré *pìbīndgà* "couvercle" [6.2.1.1](#). Toende, like Mooré, has Pattern L for these words: *zābín*, *màan*. As *nn* is the regular reflex of **ld* [6.2.1](#), these forms may be derivatives with **d* in a sense related to its appearance in Instrument Nouns [13.1.1.3](#); compare *tūēdir*^ε "mortar", from *tūà*⁺ "grind in a mortar." The Tone Pattern O is consistent with this.

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is

<i>dīl</i> ^{bɔ}	"food"
--------------------------	--------

Gerund forms may be abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals:

<i>zōɔg</i> ^ɔ	<i>zōɔs</i> ^ε	"race"
<i>bū'əsúg</i> ^ɔ	<i>bū'əsá</i> ⁺	"question"
<i>zàaṅsúg</i> ^ɔ	<i>zàaṅsíma</i> ⁺	"dream"

Such words may be formally plural but construed as singular [9.5](#)

<i>dì'əma</i> ⁺	"festival"
<i>pìàṅ'ad</i> ^ε	"word, language"
<i>tēṅ'əsá</i> ⁺	"thought"

Thus *tēṅ'əsá yīnní* "one thought" (Acts 4:32).

12.2 Nominals from Nominals

The partial association of Noun Class and meaning [9.1.1](#) can be exploited to change the meaning of a stem.

Examples are the regular relationship between names of ethnic groups, which belong to the $^a|b^a$ or $g^a|s^e$ Classes, their languages, which belong to the $-l^e$ Subclass of $r^e|a^+$ [9.3.4.1](#) and the associated place, which has the suffix $-g^o$:

<i>Kūsáa</i> ⁼ sg	<i>Kūsáàs</i> ^e pl	Kusaasi person
<i>Kūsáàl</i> ^e		Kusaal language
<i>Kūsáùg</i> ^o		Kusaasi territory

See many examples in [35.4](#).

A further example of sg $-g^o$ deriving associated place names is:

<i>wèɛd</i> ^a or <i>wìd</i> ^a	"hunter"
<i>wèog</i> ^o	"deep bush"

The suffix $-d^e$ is found with some names of liquids which are not m^m Class [9.5](#); hence also

<i>sīīŋ</i> ^o	"bee"
<i>sīīŋd</i> ^e	"honey"

Names of trees are almost all $g^a|s^e$ Class, while their fruits belong to either the $r^e|a^+$ or the $g^o|d^e$ Class [35.5](#).

The strong association of the m^m Class with abstracts may lead to conversion of adjective stems to abstract nouns when used with $-m^m$ or, less commonly, the sg suffix $-g^o$. When there is an associated Adjectival Verb, these abstracts bear a somewhat analogous relationship to the verb as gerunds do to Variable and Dynamic Invariable Verbs, and can, for example, be preceded by Combining Forms in senses resembling generic arguments before gerunds [19.7.1](#) [19.7.2.1](#). However, such abstract nouns cannot be used in the immediate future construction with *bòòd*^a "want" [12.1.1](#), and unlike Imperfective Gerunds derived from Dynamic Invariable Verbs and Relational Verbs [13.1.1.4](#), which show the expected Tone Patterns for gerunds, they show the **same tone pattern as the adjective**.

Examples of Adjectival Verbs with corresponding abstract nouns:

<i>vōɛ^{a/}</i>	"be alive"	<i>vōm^{m/}</i>	"life"
<i>sùm^{ma}</i>	"be good"	<i>sùm^m</i>	"goodness"
<i>pòɔd^a</i>	"be few"	<i>pòɔdɪm^m</i>	"scarcity"
<i>vèn^{na}</i>	"be beautiful"	<i>vènnɪm^m</i>	"beauty"
<i>vèŋ^{la}</i>	"be beautiful"	<i>vèŋllɪm^m</i>	"beauty"
<i>bōgʊs^{a/}</i>	"be soft"	<i>bōgʊsɪm^m</i>	"softness"
<i>tēbɪs^{a/}</i>	"be heavy"	<i>tēbɪsɪm^m</i>	"weight"
<i>mā'as^{a/}</i>	"be cool, wet"	<i>mā'asɪm^m</i>	"coolness, damp"
<i>māɪs^{a/}</i>	"be sweet"	<i>māɪsɪm^m</i>	"sweetness"
<i>lābɪs^{a/}</i>	"be wide"	<i>lābɪsɪm^m</i>	"width"
<i>nyēs^a</i>	"be confident"	<i>nyēsɪm^m</i>	"self-confidence"
<i>lāl^{la/}</i>	"be far"	<i>lālɔg^ɔ</i>	"distance"
<i>kpīəm^{ma/}</i>	"be strong, hard"	<i>kpīoŋ^ɔ</i>	"hardness, strength"
<i>yàɪm^{ma}</i>	"be wide"	<i>yàɪŋ^ɔ</i>	"width"
<i>mì'is^a</i>	"be sour"	<i>mì'isʊg^ɔ</i>	"sourness"
<i>tōɛ^{a/}</i>	"be bitter"	<i>tōɔg^ɔ</i>	"bitterness"
<i>zùɪm^{ma}</i>	"be deep"	<i>zùɪŋ^ɔ</i>	"depth"
<i>tōl^{la/}</i>	"be hot"	<i>tōɪɪɔg^ɔ or tōllɪm^m</i>	"heat"

Abstract nouns derived from other adjectives (often used as adverbs) include

<i>pìəlɪg^a</i>	"white"	→	<i>pìəlɪm^m</i>	"brightness"
<i>tītā'ar^ɛ</i>	"big"	→	<i>tītā'am^m</i>	"multitude"
<i>pāalíg^a</i>	"new"	→	<i>pāalím^m</i>	"recently"
<i>bāaŋlíg^a</i>	"quiet"	→	<i>bāaŋlím^m</i>	"quietly"
<i>záal^{lɛ}</i>	"empty"	→	<i>zāalím^m</i>	"emptily"
<i>kōdʊg^ɔ</i>	"old"	→	<i>kōdɪm^m</i>	"old times"
<i>nèɛr^ɛ</i>	"empty"	→	<i>nèɛm^m</i>	"for free"
<i>zēmɪmúg^ɔ</i>	"equal"	→	<i>zēmɪmúg^ɔ</i>	"equality"

Some nouns referring to people form similarly derived abstract nouns:

<i>sāan^{a/}</i>	"guest"	→	<i>sāúŋ^ɔ</i>	"hospitality"
<i>kpēɛŋm^m</i>	"elder"	→	<i>kpēoŋŋ^ɔ</i>	"eldership"
<i>sōɛŋ^a</i>	"witch"	→	<i>sōɔŋg^ɔ</i>	"witchcraft"
<i>zʊà⁺</i>	"friend"	→	<i>zùəd^ɛ</i>	"friendship"
<i>gbányà'a⁼</i>	"lazy person"	→	<i>gbányà'am^m</i>	"laziness"
<i>dàmà'a⁼</i>	"liar"	→	<i>dàmà'am^m</i>	"lying"

Human-reference noun stems may also form abstract *m^m* Class derivatives with the derivational suffix *-ɪm* [13.1.2](#).

13 Derivational Suffixes

The statement of underlying full word structure made in 6 implies that roots are only of the shapes *CV(V)(C)*, so that any stem consonant which does not immediately follow the root vowel is not part of the root; neither is any consonant following a *long* root vowel unless the root shows *CVC~CVVC* allomorphy.

For simplicity, all such consonants will be called "derivational suffixes", though there may not always be parallel stems lacking the suffix or with different suffixes. Nevertheless, many such consonants are clearly identifiable as derivational. Regular highly productive suffixing processes derive Agent Nouns, Deverbal Adjectives and Instrument Nouns from verbs, and there are several less systematic processes deriving nominals from other nominals. Cognate stems make it possible to recognise many suffixes involved in verb derivation from roots; there are clear patterns, but no completely consistent correlations of suffix and meaning.

There are only six unequivocal derivational suffixes: *-g -s -n -l -d -m*. A suffix *-r* occurs only in a few words, which are probably loans.

-g -s -n never follow another derivational suffix. *-g* and *-s* cause a preceding *CVVC* to become *CVC*, and a preceding oral *ɔɔ* to become glottalised.

-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. It does not derive verb stems.

No stem has more than three derivational suffixes, or more than five morae apart from prefixes. All four-mora verb stems have *-m* as the second suffix, and all five-mora stems are formed with *-lm*.

The rules for consonant assimilation differ slightly from the rules operative in flexion, probably because they are less subject to analogical remodelling 6.2.1.1.

For Tone Patterns in derivation see 7.5.

13.1 Nominals

13.1.1 From Verbs

The deverbal derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality, though this is less true of Deverbal Adjective formation. Deverbal nominal derivation generally shows more analogical levelling than derivational processes elsewhere, in keeping with the strong Kusaal tendency to regularity and transparency in verb morphology.

The Tone Patterns of deverbal nominals are predictable 7.5.1.

13.1.1.1 Agent Nouns

Agent nouns can be freely made from almost any verb whose semantics permit it. Informants readily supply isolated forms on demand, but in conversation and texts alike agent nouns usually occur as the second element of compounds. All belong to the ^a|b^a Class (though Agent nouns derived from Variable Verbs with stems in *-mm* and from Invariable Verbs with stems in *-ll -r(r)* may also have *r^ε|a⁺* Class forms [9.3.1.1](#).) Despite the regularity of formation, it is not unusual for agent nouns to have specialised meanings, as will be seen in some of the examples. The name "Agent Noun" is not altogether felicitous, as the form is often made from verbs whose subject is not an "agent", including transitive Descriptive Verbs; it is more nearly analogous to English deverbal derivatives in "-er". Whether the form is available for Descriptive Verbs correlates closely with whether the verb can be used in direct commands [11.2.2](#), both cases probably representing dynamic *use* of the verb in question.

The formant of Agent Nouns is the derivational suffix *-d*, found also in Dynamic Deverbal Adjectives and probably historically related to the *-d* of the Dynamic Imperfective flexion *-d^a*. However, the tonemes differ, and derivational *-d* shows much less regularity in its mode of attachment, with some differences in this regard among different types of derived word.

These differences arise from a tendency in derivation to limit stem length, which may result in either the *-d* itself or the suffix preceding it being deleted. The absence or presence of the suffix affects the Tone Pattern of the stem in forms derived from Pattern LO verbs, with words having *-d* being Pattern O and those without it being L [7.5.1](#). Agent Nouns show more "regularisation" in this regard than Dynamic Deverbal Adjectives do.

Most **Variable Verbs** have an agent noun with a singular form segmentally identical with the dynamic imperfective. For tones see [7.5.1](#). If there are alternate forms, the less "regular" form appears as the agent noun.

<i>kū⁺</i>	"kill"	→	<i>kūd^a</i>	"killer"
<i>mē⁺</i>	"build"	→	<i>mēd^a</i>	"builder"
<i>dì⁺</i>	"eat"	→	<i>dīt^a</i>	"eater"
<i>gōs^ε</i>	"look"	→	<i>gōt^a</i>	"seer, prophet"
<i>dūg^ε</i>	"cook"	→	<i>dūgd^a</i>	"cook"
<i>du'ā^a</i>	"bear, beget"	→	<i>dū'ad^a</i>	"elder relation"
<i>kād^ε</i>	"drive away"	→	<i>saríyà-kāt^a</i>	"judge" 23.1
<i>sōb^ε</i>	"write"	→	<i>sōbd^a</i>	"writer"
<i>bùn^ε</i>	"reap"	→	<i>būn^{na}</i>	"reaper"
<i>tùm^m</i>	"work"	→	<i>tùm-tūm^{na}</i>	"worker"
<i>kìm^m</i>	"tend flock"	→	<i>kòṅb-kīm^{na}</i>	"herdsman, shepherd"

<i>kpàr</i> ^ε	"lock"	→	<i>kpārɪd</i> ^a	"lock-er"	
<i>gbīs</i> ^ε	"sleep"	→	<i>gbīsɪd</i> ^{a/}	"sleeper"	
<i>sjàk</i> ^ε	"believe"	→	<i>sjàkɪd</i> ^a	"believer"	
<i>jāṅk</i> ^{ε/}	"jump, fly"	→	<i>jāṅ'ad</i> ^{a/}	"flier"	11.1.1
<i>sùṅ</i> ^ε	"help"	→	<i>sūṅɪd</i> ^a	"helper"	
<i>bàṅ</i> ^ε	"understand"	→	<i>bāṅɪd</i> ^a	"wise man"	
<i>kēṅ</i> ^{ε/}	"go"	→	<i>kēṅ</i> ^{na/}	"traveller"	11.1.1
<i>gàad</i> ^ε	"pass"	→	<i>tùen-gāt</i> ^a	"leader"	
<i>mɔɔl</i> ^{ε/}	"proclaim"	→	<i>mɔɔl-móòn</i> ^{na}	"proclaimer"	
<i>màal</i> ^ε	"sacrifice"	→	<i>màal-māan</i> ^{na}	"sacrificer"	
<i>pà'al</i> ^ε	"teach"	→	<i>pā'an</i> ^{na}	"teacher"	
<i>sūgur</i> ^{ε/}	"forbear"	→	<i>sūgurɪd</i> ^a	"forgiver"	
<i>yū'um</i> ^{m/}	"sing"	→	<i>yūum-yú'ùm</i> ^{na}	"singer"	
			pl <i>yūum-yú'ùmnɪb</i> ^a		
<i>sàṅ'am</i> ^m	"spoil"	→	<i>pɸ'à-sāṅ'am</i> ^{na}	"adulterer"	
			pl <i>pɸ'à-sāṅ'amɪdɪb</i> ^a		

Pattern H Fusion Verbs [7.3.1](#) [11.1](#), which delete the H toneme of the stem in the Dynamic Imperfective, show the same form for the agent noun:

<i>nāe</i> ^{+/}	"finish"	→	<i>nāad</i> ^{a/}	"someone who doesn't give up easily" WK
<i>dī'e</i> ^{+/}	"receive"	→	<i>dī'əd</i> ^{a/}	"receiver"
<i>ṅwà'e</i> ⁺	"cut wood"	→	<i>ṅwā'ad</i> ^a	"woodcutter"
<i>gbāṅ'e</i> ^{+/}	"catch"	→	<i>zīm-gbáṅ'àd</i> ^a	"fisherman"
<i>pīe</i> ^{+/}	"wash"	→	<i>pīəd</i> ^{a/}	"washer"
<i>fāeṅ</i> ^{+/}	"save"	→	<i>fāaṅd</i> ^{a/}	"saviour" WK

The NT/KB have *faangid* for "saviour"; see [18](#).

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

<i>sīgɪs</i> ^{ε/}	"lower"	→	<i>sīgɪs</i> ^{a/}	"lowerer"
			pl <i>sīgɪsɪdɪb</i> ^a	
<i>kùəs</i> ^ε	"sell"	→	<i>kùəs</i> ^a	"seller"
			pl <i>kùəsɪdɪb</i> ^a	
<i>pù'us</i> ^ε	"worship"	→	<i>pù'us</i> ^a	"worshipper"
			pl <i>pù'usɪdɪb</i> ^a	
<i>tù'as</i> ^ε	"talk"	→	<i>tù'as-tù'as</i> ^a	"talker"
			pl <i>tù'as-tù'asɪdɪb</i> ^a	
<i>dī'əs</i> ^{ε/}	"receive"	→	<i>nɔ̄-dí'əs</i> ^a	"chief's spokesman"
			pl <i>nɔ̄-dí'əsɪdɪb</i> ^a	

Nɔ̃-dí'əs^a represents the Ghanaian English "linguist." A chief does not directly address his people on formal occasions; the "linguist" speaks on his behalf. The custom is by no means confined to the region of the old Mossi-Dagomba states, where the chiefs were originally foreign invaders who may once have actually needed interpreters [1.1](#), but is a well-known feature of Akan culture. In Ghana, "linguist" typically refers to an Akan chief's spokesman or herald, the *okyeame*. The NT/KB use *Wínà'am nɔ̃-dí'əs^a* "God's linguist" for "prophet."

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

<i>zàb^ε</i>	"fight"	→	<i>zàb-zàb^a</i> <i>gbān-záb^a</i>	"warrior" "leather-beater, leather-worker"
<i>tìs^ε</i>	"give"	→	<i>tìs^a</i>	"giver"
<i>sòs^ε</i>	"beg"	→	<i>sòs^a</i>	"beggar"

Stems in *-mm-* drop the *-d-* throughout; such nouns may use *r^ε|a⁺* Class suffixes instead of ^a|*b^a* [9.3.1.1](#) (cf Invariable Verbs in *nn ll r(r)* below):

<i>dàm^m</i>	"shake"	→	<i>dàm-dām^{ma}</i> <i>dàm-dām^{mε}</i>	"shaker" (dipf <i>dàmmɪd^a</i>)
------------------------	---------	---	--	---

The *nn*-stem *sùn^{nε}* "bow the head" [6.2.1](#) likewise drops *-d-*:

<i>sùn^{nε}</i>	"bow head"	→	<i>sūn^{na}</i> pl <i>sūnnɪb^a</i> cb <i>sùn-</i>	"someone who goes about with head bowed" "deep thinker, close observer" WK Contrast dipf <i>sūnnɪd^a</i> .
-------------------------	------------	---	---	---

It does not seem possible to form agent nouns from 3-mora verb stems in *-*g-* unless the consonant is either deleted or has assimilated with the root final consonant as *-k-* or *-ŋ-*. All exceptions I have discovered show forms with irregularly deleted *-*g-*:

<i>yādɪg^{ε/}</i>	"scatter"	→	<i>yāt^{a/}</i>	technical term for a particular participant in a housebuilding ritual
---------------------------	-----------	---	-------------------------	--

Various irregular formations in my materials include:

<i>tēk</i> ^{ε/}	"pull"	→	<i>ṇwī-ték</i> ^a	"rope-puller"
			pl <i>ṇwī-tékìdɪb</i> ^a	
<i>nòŋ</i> ^ε	"love"	→	<i>nòŋɪd</i> ^a	"lover" Tones aberrant
<i>tì'əb</i> ^ε	"heal"	→	<i>tì'əb</i> ^a	"healer"
Tones aberrant; the noun is probably primary, and is a loanword (cf Hausa <i>dībbù</i> "magic, sorcery"; ultimately from Arabic طب <i>t'ibb(un)</i> "art of medicine")				

For 4-mora stems: KT has no agent nouns; WK drops the final *-m* and proceeds as for 3-mora stems:

<i>sīlum</i> ^m	"cite proverbs"	→	<i>sīin</i> ^{na}	"speaker of proverbs"
			pl <i>sīinnɪb</i> ^a	
<i>pù'alum</i> ^m	"harm"	→	<i>pū'an</i> ^{na}	"harmer"
<i>zàaŋsɪm</i> ^m	"dream"	→	<i>zàaŋs</i> ^a	"dreamer"
			pl <i>zāaŋsɪdɪb</i> ^a	

Invariable Verbs with stems ending in vowels or in the plosives *g b* add *-d* to form the agent noun stem:

<i>zìŋ'i</i> ^{ya}	"be sitting down"	→	<i>zīŋ'id</i> ^a	"sitter"
<i>zì'e</i> ^{ya}	"be standing still"	→	<i>zī'əd</i> ^a	"stander"
<i>mī</i> ⁺	"know"	→	<i>mī'id</i> ^{a/}	"knower"
			<i>gbàn-mī'id</i> ^{a/}	"scribe" NT ("book-knower")
<i>zī</i> ⁺	"not know"	→	<i>zī'ɪd</i> ^{a/}	"ignorant person"
<i>sū'e</i> ^{ya/}	"own"	→	<i>sū'ud</i> ^{a/}	"owner"
<i>sōŋ'e</i> ^{ya/}	"be better than"	→	<i>sōŋ'ɔd</i> ^{a/} pl <i>sōŋ'ɔb</i> ^{a/}	9.3.1
<i>dīgɪ</i> ^{ya/}	"be lying down"	→	<i>dīgɪd</i> ^{a/}	"lier-down"
<i>īgɪ</i> ^{ya/}	"be kneeling"	→	<i>īgɪd</i> ^{a/}	"kneeler"
<i>vābɪ</i> ^{ya/}	"be lying prone"	→	<i>vābɪd</i> ^{a/}	"lier prone"
<i>làbɪ</i> ^{ya}	"be crouching"	→	<i>lābɪd</i> ^a	"croucher in hiding"

Those with stems in *nn ll r(r)* drop the *-d* formant throughout, and thus show the same stem as the finite verb, with gemination as in the verb:

<i>sīn</i> ^{na/}	"be silent"	→	<i>nīn-sīn</i> ^{na}	"silent person"
<i>nēn</i> ^{na/}	"envy"	→	<i>nīn-nēn</i> ^{na}	"envious person"
<i>dō</i> ^{la/}	"be with"	→	<i>nyà'an-dò</i> ^{la}	"disciple" (irreg. tone)
			or <i>nyà'an-dò</i> ^{lɛ}	
<i>zāŋ</i> ^{la/}	"be holding"	→	<i>nō-zāŋ</i> ^{la}	"holder of hens"
			or <i>nō-zāŋ</i> ^{lɛ}	
			(<i>zāŋ</i> ^{lɛ/} pl <i>zāŋllá</i> ⁺ cb <i>zāŋ</i> "holder" WK)	
<i>dē</i> ^{la/}	"be leaning"	→	<i>nīn-dē</i> ^{la}	"person prone to lean"
<i>mōr</i> ^{a/}	"have"	→	<i>bù-mōr</i> ^{a/}	"owner of goats"
			or <i>bù-mōr</i> ^{ɛ/}	
<i>tār</i> ^{a/}	"have"	→	<i>bù-tār</i> ^{a/}	"owner of goats"
			or <i>bù-tār</i> ^{ɛ/}	

Agent nouns from stems in */r* may use *r^ɛ|a⁺* Class suffixes, thus falling together with the forms of the Dynamic Deverbal Adjectives [9.3.1.1](#).

There are variant formations with

<i>kīs</i> ^{a/}	"hate"	→	<i>kīs</i> ^{a/} or <i>kīsɪd</i> ^{a/}	"hater"
<i>tēŋr</i> ^a	"remember"	→	<i>tēŋrɪd</i> ^a	"rememberer"
<i>gūr</i> ^{a/}	"be on guard"	→	<i>gūrɪd</i> ^{a/}	"guard"
			<i>gūr'ud</i> ^{a/}	"guard"
			<i>zà'-nō-gúr</i> ^a	"gatekeeper"

13.1.1.2 Deverbal Adjectives

13.1.1.2.1 Dynamic

In principle these adjectives have the same stem as the Agent Noun but with different class suffixes; however, Dynamic Deverbal Adjectives drop the *-d* formant more readily, probably because they are not made as freely as Agent Nouns and are correspondingly not as far along the axis from derivational to flexional.

The sense may be active or passive, essentially "habitually connected with the verbal action", like the range of meaning of an English gerund as a noun pre-modifier.

When used without a preceding noun cb, Dynamic Deverbal Adjective forms have the meaning of Agent Nouns:

kōvdír^ɛ pl *kōvdá*⁺ "killer" = *kōvd*^{a/} pl *kōvdíb*^a

With a preceding cb the meanings differ:

pū'à-kōvd^{a/} "woman-killer, killer of women"
pū'à-kōvdír^ɛ "woman killer, murderous woman"

It is thus not useful to cite Deverbal Adjectives in isolation, but only in combination with a preceding modified noun combining form.

With **Variable Verbs**:

2-mora stems all retain the **d*.

<i>gòŋ</i> ⁺	"hunt"	→	<i>pɸ'à-gɔ̃ɔŋdɪr</i> ^ε	"prostitute" ("wandering woman")
<i>là</i> ⁺	"laugh"	→	<i>pɸ'à-lā'adɪr</i> ^ε	"woman prone to laughter/ woman to be laughed at"
<i>ŋyē</i> ⁺	"see"	→	<i>būn-ŋyétɪr</i> ^ε	"visible object"
<i>kɸā</i> ⁺	"hoe"	→	<i>nā'-dā-kūədɪr</i> ^ε	"ox for ploughing"
<i>yē</i> ⁺	"don clothes"	→	<i>fū-yéɛdɪr</i> ^ε	"shirt for wearing" WK
			<i>fū-yéɛdùg</i> ^{ɔ̃}	KT
<i>kō</i> ⁺	"kill"	→	<i>tì-kūvdɪm</i> ^m	"poison" ("killing medicine")
<i>dɸ'à</i> ^a	"bear/beget"	→	<i>tèŋ-dɸ'adɪg</i> ^a	"native land"
<i>dōg</i> ^ε	"cook"	→	<i>sūm-dúgudà</i> ⁺	"cooked groundnuts" WK
<i>sīg</i> ^ε	"descend"	→	<i>yī-sígɪdɪr</i> ^ε	"lodging-house"
<i>sɸ'ā</i> ^a	"hide"	→	<i>yēl-sú'adɪr</i> ^ε	"confidential matter"
<i>òŋb</i> ^ε	"chew"	→	<i>būn-òŋbɪdà</i> ⁺	"solid food"
<i>bùn</i> ^ε	"reap"	→	<i>būn-búnnɪr</i> ^ε	"thing for reaping"
<i>tùm</i> ^m	"work"	→	<i>būn-túmmɪr</i> ^ε	"useful thing"
<i>vō</i> ^ε	"swallow"	→	<i>tì-vōnnɪm</i> ^m	"oral medication"
<i>gbīs</i> ^ε	"sleep"	→	<i>pɸ'à-gbīsɪdɪr</i> ^ε	"woman who is always sleeping"

3-mora stems in **g* drop *-d* in all cases except where the **g* derivational suffix is deleted in the Dynamic Imperfective, whether by regular rule [6.3.1](#) or otherwise [11.1.1](#). The dropping of *-d* is thus much more consistent than in agent nouns.

<i>gīlɪg</i> ^{ε/}	"go around"	→	<i>pɸ'à-gīnníg</i> ^a	"prostitute"
<i>sūeŋ</i> ^{+/}	"anoint"	→	<i>kpā-sóɔŋdɪm</i> ^m	"anointing oil"
<i>tōlɪg</i> ^{ε/}	"heat up"	→	<i>būn-túlɪgɪr</i> ^ε	"heater, thing for heating"
<i>pèlɪg</i> ^ε	"whiten"	→	<i>būn-pélɪgɪr</i> ^ε	"whitening thing, whitener"
<i>yādɪg</i> ^{ε/}	"scatter"	→	<i>būn-yátɪr</i> ^ε	"thing for scattering" cf agent noun <i>yāt</i> ^{a/} (above)
<i>jāŋk</i> ^{ε/}	"fly, jump"	→	<i>būn-jāŋ'adɪr</i> ^ε	"flying creature"
<i>pàk</i> ^ε	"surprise"	→	<i>yēl-pákɪr</i> ^ε	"disaster"
<i>tēk</i> ^{ε/}	"pull"	→	<i>ŋwī-tékɪr</i> ^ε	"rope for pulling with"
<i>kēŋ</i> ^{ε/}	"go"	→	<i>bùŋ-kēnnɪr</i> ^ε	"donkey that doesn't sit still"

<i>sùŋ</i> ^ε	"help"	→	<i>būn-sùŋìr</i> ^ε	"helpful thing"
<i>nòŋ</i> ^ε	"love"	→	<i>bì-nòŋìr</i> ^ε	"beloved child"

3-mora stems in *-m* retain the *-d*, forming the consonant cluster *-mm-*:

<i>sàŋ'am</i> ^m	"destroy"	→	<i>bù-sāŋ'ammìr</i> ^ε	"goat for destruction, scapegoat" WK
----------------------------	-----------	---	----------------------------------	---

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

<i>pèlìs</i> ^ε	"sharpen"	→	<i>būn-pélìsìr</i> ^ε	"sharpening thing"
<i>kùəs</i> ^ε	"sell"	→	<i>būn-kúəsìr</i> ^ε	"item for sale"

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

<i>siilum</i> ^m	"cite proverbs"	→	<i>būn-síilúŋ</i> ^ɔ	"thing relating to proverbs"
<i>pù'alum</i> ^m	"harm"	→	<i>nīn-pú'alìŋ</i> ^a	"harmful person"
			<i>pɸ'à-pù'alíŋ</i> ^a	"harmful woman"
<i>zàaŋsum</i> ^m	"dream"	→	<i>nīn-záaŋsùŋ</i> ^ɔ	"dreamy person"
			<i>pɸ'à-zàaŋsúŋ</i> ^ɔ	"dreamy woman"

The adjectives associated with Adjectival Verbs are not deverbal; Dynamic Deverbal Adjectives from **Dynamic Invariable Verbs** show the same stem as the Agent Noun [13.1.1.1](#):

<i>dīŋi</i> ^{ya/}	"be lying"	→	<i>bùŋ-dīŋídír</i> ^ε	"donkey that lies down all the time"
<i>vābi</i> ^{ya/}	"be prone"	→	<i>bùŋ-vābídír</i> ^ε	"donkey that always lies prone"
<i>zìŋi</i> ^{ya}	"be sitting"	→	<i>kūg-zíŋ'idìr</i> ^ε	"stone for sitting on" (i.e. not a <i>būgvr</i> ^ε WK)
<i>zāŋi</i> ^{la/}	"be holding"	→	<i>nō-záŋi</i> ^{lε}	"hen for holding"
			pl <i>nō-záŋlla</i> ⁺	
<i>dēi</i> ^{la/}	"be leaning"	→	<i>nīn-déi</i> ^{lε}	"person you can lean on" WK
			<i>nīn-délla</i> ⁺	
		→	<i>kùg-dēi</i> ^{lε/}	"chair for leaning on"
			pl <i>kùg-dēlla</i> ⁺	
<i>gù</i> ^{la}	"be hanging"	→	<i>būn-gù</i> ^{lε}	"thing for suspending"
			pl <i>būn-gùlla</i> ⁺	

13.1.1.2.2 Resultative

Resultative Deverbal Adjectives are only derived from Variable Verbs with finite Resultative forms [22.2.2.1](#). Almost all such verbs are either intransitive or Patientive Ambitransitive [23.1](#), and the adjectives are not passive participles, but express resulting states.

There are no Resultative Adjectives from Stance Verb roots meaning e.g. "seated", "standing" or from Variable Verbs used passively e.g. "eaten."

It is not clear how far the formation is productive. All my examples are from primary verbs, with no pairs like "whitened" beside "white."

The formant is *-lum-*. It either deletes a preceding derivational suffix or is a formation made from roots alone; all examples show *-lum* after a CVV root. For the flexion see [10.2](#).

<i>kpi</i> ⁺	"die"	→	<i>kpiilúŋ</i> ^ɔ	"dead"
<i>gēŋ</i> ⁺	"get tired"	→	<i>gēēŋlúŋ</i> ^ɔ	"tired"
<i>pè'el</i> ^ε	"fill"	→	<i>pè'elúŋ</i> ^ɔ	"full"
<i>kɔ</i> ⁺	"break"	→	<i>kɔɔlúŋ</i> ^ɔ	"broken"
<i>yè</i> ⁺	"wear"	→	<i>yèelúŋ</i> ^ɔ	"worn" (of a shirt)
<i>yɔ</i> ⁺	"close"	→	<i>yɔɔlúŋ</i> ^ɔ	"closed"
<i>pù'alum</i> ^m	"harm"	→	<i>pù'alúŋ</i> ^ɔ	"damaged"
<i>àeŋ</i> ⁺	"tear"	→	<i>àaŋlúŋ</i> ^ɔ	"torn"

13.1.1.3 Instrument Nouns

Instrument Nouns can be created at will by my informants whenever semantically appropriate from Variable and Dynamic Invariable Verbs, so long as the Dynamic Deverbal Adjective stem ends in *d t* or *s*; a further *-m* is then added. All these *m*-stems then inflect in the *g^a|s^ε* Class. In a few cases the meaning overlaps with that of agent nouns.

<i>kō</i> ⁺	"kill"	→	<i>kōvdíŋ</i> ^a	"thing for killing with"
<i>lō</i> ⁺	"tie"	→	<i>sɔ̀à-lōɔ́díŋ</i> ^a	"belt" ("waist-tying thing")
<i>dōg</i> ^ε	"cook"	→	<i>dōgvdíŋ</i> ^a	"cooking utensil"
<i>sōb</i> ^ε	"write"	→	<i>sōbídíŋ</i> ^a	"writing implement"
<i>kpàr</i> ^ε	"lock"	→	<i>kpārídíŋ</i> ^a	"thing for locking"
<i>ŋwà'e</i> ⁺	"cut wood"	→	<i>ŋwā'adíŋ</i> ^a	"axe"
<i>pīe</i> ^{+/}	"wash self"	→	<i>pīədíŋ</i> ^a	"thing for washing oneself"
<i>sù</i> ⁺	"bathe"	→	<i>sōvdíŋ</i> ^a	"sponge"
<i>gōs</i> ^ε	"look"	→	<i>nīn-gótíŋ</i> ^a	"mirror"
			<i>nīn-gótis</i> ^ε	"spectacles" [<i>nīn-</i> "eye"]

<i>bòd</i> ^ε	"plant"	→	<i>bōtɪŋ</i> ^a 2.4	"cup" (in general; originally just "seed cup")
<i>pīəs</i> ^{ε/}	"clean"	→	<i>pīəsɪŋ</i> ^a	"cleaning implement"
<i>kùəs</i> ^ε	"sell"	→	<i>kūəsɪŋ</i> ^a	"professional salesperson"
<i>dā'e</i> ^{+/}	"push"	→	<i>dā'adɪŋ</i> ^a	"pusher (person or thing)"
<i>zìŋ'i</i> ^{ya}	"be sitting"	→	<i>zìŋ'idɪŋ</i> ^a	"thing for sitting on"

13.1.1.4 Imperfective Gerunds

Relational Verbs along with those Dynamic Invariable Verbs with stems in *-ll -nn -r(r)* [11.2.1](#) make derived abstract nominals by adding the suffix *-m-* to the stem. These forms almost all belong to the *m*^m Class. **Vowel-stems add *-lɪm-***, where the *-l-* may represent historical *ʎ already assimilated to the preceding consonant in the stems in *-ll -nn -r(r)* and otherwise appearing as *-y-* before *-a* [11.2](#).

<i>sū'e</i> ^{ya/}	"own"	→	<i>sū'vlɪm</i> ^m
<i>mī</i> ⁺	"know"	→	<i>mī'ilɪm</i> ^m
<i>zī</i> ⁺	"not know"	→	<i>zī'ilɪm</i> ^m
<i>àɛŋ</i> ^a	"be something"	→	<i>àaŋlɪm</i> ^m
<i>bè</i> ⁺	"be somewhere"	→	<i>bèllɪm</i> ^m
<i>kā'e</i> ⁺	"not be"	→	<i>kā'alɪm</i> ^m
<i>sōŋ'e</i> ^{ya/}	"be better than"		has no gerund
<i>mōr</i> ^{a/}	"have"	→	<i>mōrɪm</i> ^m
<i>tār</i> ^{a/}	"have"	→	<i>tārɪm</i> ^m
<i>nār</i> ^{a/}	"be necessary"	→	<i>nārɪm</i> ^m
<i>nēn</i> ^{na/}	"envy"	→	<i>nēnnɪm</i> ^m
<i>wēn</i> ^{na/}	"resemble"	→	<i>wēnnɪm</i> ^m [?? misheard for <i>wēnnɪm</i> ^m]
<i>sīn</i> ^{na/}	"be silent"	→	<i>sīnnɪm</i> ^m
<i>dōl</i> ^{la/}	"accompany"	→	<i>dōllɪm</i> ^m
<i>zāŋl</i> ^{la/}	"hold in the hand"	→	<i>zāŋllɪm</i> ^m
<i>dēl</i> ^{la/}	"be leaning"	→	<i>dēllúg</i> ^ɔ or <i>dēllɪm</i> ^m
	(of a person)		
<i>gūr</i> ^{a/}	"guard"	→	<i>gūrɪm</i> ^m
<i>tēŋr</i> ^a	"remember"	→	<i>tēŋrɪb</i> ^ɔ
			or <i>tēŋrɪm</i> ^m [?? misheard for <i>tēŋrɪm</i> ^m]
But <i>kīs</i> ^{a/}	"hate"	→	<i>kísùg</i> ^ɔ

Unlike the adjectives associated with Adjectival Verbs, these forms obey the tonal rules for gerund formation, and are Pattern L when derived from Pattern L verbs; the third-mora L tone confirms that these are in fact *m*-stems [7.2.2](#).

Variable Verbs which have a Dynamic Imperfective form which has become an independent Descriptive Verb lexeme may also form Imperfective Gerunds; however, when formed from Pattern L verbs they do not show the third-mora H toneme:

<i>bə̀ɔ́ɔ́ɔ́ɔ́ɔ́m</i> ^m	"will" (Pattern L, unlike <i>bə̀ɔ́ɔ́ɔ́ɔ́ɔ́r</i> ^ε "desirable")
	contrast the Perfective Gerund <i>bə̀ɔ́ɔ́ɔ́ɔ́ɔ́</i> ^ɔ "seeking"
<i>gə̀ɔ́ɔ́ɔ́ɔ́ɔ́ɔ́m</i> ^m	"wandering" (<i>gə̀ɔ́ɔ́ɔ́ɔ́ɔ́</i> ⁺ "hunt")
<i>zə̀ɔ́ɔ́ɔ́ɔ́ɔ́m</i> ^m	"fear" [<i>Ṁ zə̀ɔ́ɔ́ɔ́ɔ́ɔ́ nē</i> "I'm afraid."]]
	contrast <i>zə̀ɔ́ɔ́ɔ́ɔ́ɔ́</i> ^ɔ "running"

The gerund *wummug* of *wùṁ*^m "hear" (written *wumug* in pre-2016 orthography, but read with *-mm-* in the 1996 audio NT) is perhaps a formation of this kind, representing **wumdugɔ*.

-tāa= **-tāas**^ε **-tā-** or **-tā-** "companion in ..."

<i>mī</i> ⁺	"know"	→	<i>mī'ilīm-tāa</i> ⁼	"partner in knowledge"	WK
<i>zī</i> ⁺	"not know"	→	<i>zī'ulīm-tāa</i> ⁼	"partner in ignorance"	
<i>bē</i> ⁺	"exist"	→	<i>bē'llīm-tāa</i> ⁼	"partner in existence"	
<i>dōl</i> ^{la/}	"be with"	→	<i>dō'llīm-tāa</i> ⁼	"fellow-companion"	

<i>mè</i> ⁺	"build"	→	<i>mèɛdíṃ-tāa</i> ⁼	"fellow-builder"
<i>dì</i> ⁺	"eat"	→	<i>dìtíṃ-tāa</i> ⁼	"messmate"
<i>pū</i> ⁺	"share"	→	<i>pūvdiṃ-tāa</i> ⁼	"fellow-sharer"
<i>kpèn'</i> ⁺	"enter"	→	<i>kpèn'ɛdíṃ-tāa</i> ⁼	"fellow-resident"

<i>zàb</i> ^ε	"fight"	→	<i>zàbɪdíṃ-tāa</i> ⁼	"enemy"
<i>dōg</i> ^ε	"cook"	→	<i>dōgɔdíṃ-tāa</i> ⁼	"fellow-cook"
<i>fāṇ</i> ⁺	"snatch"	→	<i>fāṇdíṃ-tāa</i> ⁼	"fellow-robber"
<i>tùm</i> ^m	"work"	→	<i>tùmmíṃ-tāa</i> ⁼	"co-worker"
<i>pù'us</i> ^ε	"worship"	→	<i>pù'usíṃ-tāa</i> ⁼	"fellow-worshipper"
<i>dìɪs</i> ^ε	"feed"	→	<i>dìɪsíṃ-tāa</i> ⁼	"fellow-feeder"
<i>sùṇ</i> ^ε	"help"	→	<i>sùṇíṃ-tāa</i> ⁼	"fellow-helper"
			or <i>sùṇɪdíṃ-tāa</i> ⁼	
<i>sjàk</i> ^ε	"agree"	→	<i>sjàkíṃ-tāa</i> ⁼	"fellow in agreement"

Stance Verbs may use *-dīm-* or *-līm-* or even *-nīm-*; the forms with *-n-* at least probably belong rather to the derived assume-stance Variable Verbs [13.2.1.1](#) with the usual loss of the formant *-d-* when a preceding derivational suffix is retained.

<i>īḡɪ</i> ^{ya/}	"be kneeling"	→	<i>īḡɪlíṃ-tāa</i> ⁼	"fellow-kneeler"	
			or <i>īḡɪdíṃ-tāa</i> ⁼	"fellow-kneeler"	WK
<i>zìṇ'i</i> ^{ya}	"be sitting"	→	<i>zìṇ'íṃ-tāa</i> ⁼	"fellow-sitter"	
			or <i>zìṇ'idíṃ-tāa</i> ⁼	"fellow-sitter"	WK
<i>vābɪ</i> ^{ya/}	"lie prone"	→	<i>vābɪlíṃ-tāa</i> ⁼	"fellow lier-prone"	
			or <i>vābɪdíṃ-tāa</i> ⁼	"fellow lier-prone"	WK
<i>làbɪ</i> ^{ya}	"be crouched"	→	<i>làbɪlíṃ-tāa</i> ⁼	"fellow croucher in hiding"	
<i>zì'e</i> ^{ya}	"be stood"	→	<i>zì'əlíṃ-tāa</i> ⁼	"fellow-stander"	
			or <i>zì'ədíṃ-tāa</i> ⁼	"fellow-stander"	WK
<i>dīḡɪ</i> ^{ya/}	"be lying"	→	<i>dīḡɪlíṃ-tāa</i> ⁼	"fellow-lier"	
			or <i>dīḡɪnı́ṃ-tāa</i> ⁼	"fellow-lier"	WK

For the irregular verb *nəṇ*^ε WK has two forms with different nuances [11.1.1](#)

<i>nəṇ</i> ^ε	"love"	→	<i>nəṇɪlíṃ-tāa</i> ⁼	"fellow liker"
			or <i>nəṇɪdíṃ-tāa</i> ⁼	"fellow lover"

13.1.1.5 Other Deverbal Formations

-s- appears in a few concrete nouns derived from verbs:

<i>dīḡɪsá</i> ⁺	"lairs"	←	<i>dīḡɪ</i> ^{ya/}	"be lying down"
<i>dōvsá</i> ⁺	"steps"	←	<i>dōv</i> ⁺	"go up"

-m- derives nouns from verbal roots in

<i>zɔɔm</i> ^{mɛ}	"refugee"	cf	<i>zò</i> ⁺	"run"
<i>kpɪ̃im</i> ^{m/}	"corpse"	cf	<i>kpì</i> ⁺	"die"

-d- appears as an instrument noun formant instead of the usual *-dim-* in

<i>tūədɪr</i> ^ɛ	"mortar"	←	<i>tuà</i> ⁺	"grind in a mortar"
----------------------------	----------	---	-------------------------	---------------------

-b- possibly derives nouns from verbal roots in

<i>kpɪibɪg</i> ^a	"orphan"	cf	<i>kpì</i> ⁺	"die"
<i>dà'abɪr</i> ^ɛ	"slave"	cf	<i>dà'</i> ⁺	"buy"

This **-b** may historically be connected with the stem of *bīg*^a "child"; cf Gurmanche *kpēbígā* "orphan" with *kpé* "die" and *bígā* "child". Kusaal has no synchronic process to turn a root into a suffix, and both *kpīb-* and *dà'ab-* would be possible root shapes themselves. However, there may be relics of such processes in

<i>bī-díbìŋ</i> ^a	"boy"	cf	Mooré <i>bìríblá</i>	"boy"
			Kusaal <i>dāy</i> ⁺	"man"
<i>bī-púj</i> ^a	"girl"		Mooré <i>bìpúglá</i>	"girl"
			Kusaal <i>py'ā</i> ^a	"woman" (← * <i>pyaga</i>)
<i>bībɪs</i> ^ɛ	"small" plural		<i>bīl</i> ^a	"small" singular
<i>À-Sāan-dú</i> ⁺	personal name	cf	<i>sāan</i> ^{a/}	"stranger"
			<i>dāy</i> ⁺	"man"

13.1.2 From Nominals

-s- forms adjectives and cognate Adjectival Verbs.

<i>mā'asír</i> ^ɛ	"cold, wet"	cf	<i>mā'e</i> ^{+/}	"cool down"
<i>mā'as</i> ^{a/}	"be cold, wet"			
<i>bōgusír</i> ^ɛ	"soft"	cf	<i>būk</i> ^{ɛ/}	"weaken"
<i>bōgus</i> ^{a/}	"be soft"			
<i>tēbɪsír</i> ^ɛ	"heavy"	cf	<i>tēbɪg</i> ^{ɛ/}	"get heavy"
<i>tēbɪs</i> ^{a/}	"be heavy"			

<i>mì'isug</i> ^ɔ	"sour"	cf	<i>mì'ig</i> ^ε	"get sour"
<i>mì'is</i> ^a	"be sour"			

-d- (apart from its use to form deverbal nominals) features in a number of words where it has no evident derivational meaning:

<i>yūgudır</i> ^ε	"hedgehog"
<i>lā'aɸ</i>	"cowrie"
pl <i>līgıdɪ</i> ⁺	"money" * <i>lagıd-</i>
<i>pùgudıɪb</i> ^a	"father's sister"

It appears in a number of ^a|^b Class words where it is not found throughout the paradigm; so regularly in agent nouns from 3-mora stems in **-s-** [13.1.1.1](#), but irregularly also in some words [9.3.1](#). In derivation compare

<i>Nàɪɪd</i> ^a	"Nabdema"	but	<i>Nàɪɪr</i> ^ε	"Nabit language"
<i>Dàgáàd</i> ^a	"Dagaaba person"	=	Dagaare <i>Dagao</i>	
<i>nīdɪɪb</i> ^{a/}	"people"	=	Mooré <i>nébà</i>	

-m- appears in both concrete and abstract nouns, with no single common meaning:

<i>bɪ'əm</i> ^m	"enemy"	=	Mooré <i>béεga</i>	"bad, hostile"
<i>tāɪɪm</i> ^{m/}	"weak person"	cf	<i>tàɪɪg</i> ^ε	"become weak"
<i>āɪsɪŋ</i> ^a	"sister's child"	cf	<i>āɪsɪb</i> ^a	"mother's brother"
<i>yáaŋ</i> ^a	"grandchild"	cf	<i>yáab</i> ^a	"grandparent"
← * <i>yāámgā</i>			← * <i>yāágbā</i>	
<i>vúeŋ</i> ^a	"red kapok"	cf	<i>vúeɸ</i> ^ε	"red kapok fruit"
← * <i>vūémgā</i>			← * <i>vūégrī</i>	
<i>bì'isim</i> ^m	"milk"	cf	<i>bì'isur</i> ^ε	"breast"
<i>yūgúm</i> ^{nε}	"camel"		[ultimately ← Berber * <i>a-ləqəm</i> (Souag)]	
<i>gbīgım</i> ^{nε}	"lion"			
<i>zìlım</i> ^{mε}	"tongue"			
<i>àɪrɪŋ</i> ^ɔ	"boat"			
<i>nā'am</i> ^m	"chiefship"	cf	<i>nà'ab</i> ^a	"chief"
cb <i>nà'am-</i>				
<i>zōlımís</i> ^ε	"foolishness"	cf	<i>zōlɪg</i> ^{ɔ/}	"fool"

Abstract *-mís*^ε forms seem always to have H toneme; cf *bùɪmís*^ε "confusion", where, however, the *-m-* is part of the verb stem *bùɪm*^m "get confused"; cf also

tàdımıs^ε "weakness" cf *tādım*^{m/} "weak person"

-m- is seen also in the adjectives

zùlvɔ^ɔ "deep" *nyālúvɔ*^ɔ "wonderful"
yàlvɔ^ɔ "wide" *nàrvɔ*^ɔ "necessary"

As a *second* suffix added to adjectival stems *-m-* produces no change of meaning:

nyèesíg^a "self-confident" cf *nyèes*^a "be self-confident"
vèṅlíg^a "beautiful" cf *vèṅllig*^a "beautiful"
mālsíg^a "pleasant" cf *mālsig*^a "pleasant"
lāllíg^a "distant" cf *lāllúvɔ*^ɔ "distant"

-lum- derives abstract nouns from nominals. The *-l-* is perhaps the **ʕ* formant of Invariable Verbs [11.2](#) and may occur in some primary adjectives like

sābılıg^a "black" cf *sōb*^ε "get dark"

However, there are no adjectives in *-l-* alongside these abstract nouns; this is true even in the case of parallel formations in simple *-l-* rather than *-lum-*, like

dāy⁺ "man" → *dàalum*^m "masculinity"
pu'ā^a "woman" → *pù'alum*^m "femininity"

versus *dàalim*^m "male sex organs", *pù'alim*^m "female sex organs", where the concrete meaning is presumably a metaphorical development from an original abstract sense, as with *yām*^{m/} "gall, common sense" → "gall bladder" [9.1](#); cf the abstract sense of the parallel 4-mora stem formation *biilim*^m "childhood"; WK did not accept **biilum*.

The suffix *-lum-* constitutes the only exception to the rule that CVVC roots must appear as CVC allomorphs before a derivational suffix [6.1.1.2](#), and it can follow a preceding derivational suffix, even creating five-mora stems.

tītā'al^{lε} "proud person" → *tītā'alum*^m "pride"
gīṅ^a "short" → *gīṅlím*^m "shortness"
wōk^{ɔ/} "long, tall" → *wā'alím*^m "tallness"
sāan^{a/} "guest, stranger" → *sāannim*^m "strangerhood"
tīràan^a "neighbour" → *tīràannim*^m "neighbourliness"
gīṅ^a "short" → *gīṅulím*^m "shortness"

13.2 Verbs

Verbs have no derivational prefixes. All verb derivation is by suffixes, probably always added to roots rather than word stems. Clear meanings can often be recognised in suffixes, but there is no straightforward match of form and meaning.

Possible verb shapes are very constrained. Only two, three and four-mora stems occur. All four-mora stems end in *m*, and *CVVCm* only occurs as *CVV* root + *sim* or *lim*, never *CVVC* root + *m*. Some Adjectival Verbs have stems including the nominal derivational suffix seen in the corresponding adjective.

13.2.1 From Verbs

13.2.1.1 From Stance Verbs

Stance Verbs have derived Variable Verbs in *-n^ε* [6.2.1.1](#) signifying "assume the stance" and in *-l^ε* "make assume the stance"; all the *-n^ε* verbs are Pattern LO regardless, but the *-l^ε* verbs have the same pattern as the base Stance Verb.

	<u>Stance Verb</u>	<u>Assume Stance</u>	<u>Make Assume Stance</u>
	<i>dīgɪ^{ya/}</i> be lying	<i>digin^ε</i>	<i>dīgɪl^{ε/}</i>
	<i>vābɪ^{ya/}</i> be lying prone	<i>vābin^ε</i>	<i>vābɪl^{ε/}</i>
	<i>īgɪ^{ya/}</i> be kneeling	<i>igin^ε</i>	<i>īgɪl^{ε/}</i>
	<i>làbɪ^{ya}</i> be crouching hidden	<i>làbin^ε</i>	<i>làbɪl^ε</i>
	<i>zìŋ'ɪ^{ya}</i> be sitting	<i>zìŋ'in^ε</i>	<i>zìŋ'il^ε</i>
	<i>zì'e^{ya}</i> be standing	<i>zì'an^ε</i>	<i>zì'al^ε</i>
	<i>tī'ɪ^{ya/}</i> be leaning (of thing)	<i>tì'in^ε</i>	<i>tī'il^{ε/}</i>
WK	<i>gō'e^{ya/}</i> be looking up	<i>gò'ɔn^ε</i>	
	<i>sùr^a</i> have bowed head	<i>sùn^{nε}</i>	<i>sùn^{nε}</i> [sic]
	- cover oneself	<i>ligin^ε</i>	<i>lìgɪl^ε</i>
	- perch (of bird)	<i>zùən^ε</i>	<i>zùəl^ε</i>
	- perch (of bird)	<i>yà'an^ε</i>	<i>yà'al^ε</i>

The Resultative [22.2.2.1](#) of *zùe+* is used for "be perching":

Níŋ lā zúə nē.

"The bird is perching." KT

Bird:SG ART perch FOC.

Other derivational relationships involving Stance Verbs are seen in

<i>gùl^{la}</i>	be suspended	<i>gùl^ε</i>	<i>gùl^ε</i>
<i>tàbɪ^{ya}</i>	be stuck to	<i>tàb^ε</i>	<i>tàbɪl^ε</i>
<i>dēl^{la/}</i>	"be leaning" (person)	<i>dēlim^m</i>	

13.2.1.2 Causatives

Several derivational suffixes are found with a causative sense.

Patientive Ambitransitive verbs [23.1](#) frequently describe entry into a state. Such verbs frequently have no causative derivative.

-l- has been seen above as the causative suffix for Stance Verb roots; Verbs derived with **-g-** from nominal roots are usually Patientive Ambitransitives but may have separate causatives in **-l-** (see below [13.2.2](#).) Other roots forming causatives in **-l-** are

<i>gūr^{a/}</i>	"guard"	<i>gūr'ul^{ε/}</i>	"put someone on guard"
<i>bāṇ⁺</i>	"ride"	<i>bāṇ'al^{ε/}</i>	"put someone on a horse/bicycle etc"
<i>zàb^ε</i>	"fight"	<i>zàbl^ε</i>	"cause to fight"
<i>dṽ'à^a</i>	"bear, beget"	<i>dù'al^ε</i>	"make interest (of a loan)"
<i>yè⁺</i>	"dress oneself"	<i>yèl^ε</i>	"dress another person"
<i>pìd^ε</i>	"don hat/shoes/rings"	<i>pìl^ε</i>	"put hat/shoes/rings on another person"

-g- can be a causative or inchoative suffix with roots forming Invariable Verbs or intransitive Variable Verbs:

<i>dṽ^{la/}</i>	"accompany"	<i>dṽlg^{ε/}</i>	"make accompany"
<i>gṽ^{a/}</i>	"look up" DK	<i>gṽdlg^{ε/}</i>	"make look up" DK
<i>zāṇ^{la/}</i>	"be holding"	<i>zāṇ^ε</i>	"pick up"
<i>tèṇ^a</i>	"remember"	<i>tèṇ⁺</i>	"bring to mind, remind"
<i>yùul^ε</i>	"swing" intransitive	<i>yùlg^ε</i>	"swing" transitive
<i>kò⁺</i>	"break" intransitive	<i>kò'ɔg^ε</i>	"break" Pat. Ambitransitive

-s- is the usual causative suffix for Variable Verbs

<i>kpèṇ⁺</i>	"enter"	<i>kpèṇ'es^ε</i>	"make enter"
<i>niè⁺</i>	"appear"	<i>nèes^ε</i>	"reveal"
<i>yī⁺</i>	"go/come out"	<i>yīis^{ε/}</i> or <i>yīs^ε</i>	"make go/come out"
<i>dī⁺</i>	"eat"	<i>dīs^ε</i>	"feed"
<i>nū⁺</i>	"drink"	<i>nūls^{ε/}</i>	"make drink"; also <i>nūlg^{ε/}</i>
<i>sīg^ε</i>	"go down"	<i>sīgs^{ε/}</i>	"lower"
<i>lèb^ε</i>	"return"	<i>lèbs^ε</i>	"make return; answer"
<i>mṽ'à^a</i>	"suck" (of a baby)	<i>mù'as^ε</i>	"give to suck"
[Mooré <i>tá</i>]	"arrive"]	<i>tā'as^{ε/}</i>	"help to travel, walk"

It is also seen in

<i>zēm^{ma/}</i>	"be equal"	<i>zē'mis^{ε/}</i>	"make equal"
<i>kpiig^ε</i>	"go out (fire)"	<i>kpiis^ε</i>	"quench"

gūr^{a/} "guard" has the causative *gū'ul^{ε/}* (cf *gū'ud^{a/}*, agent noun) but also has the derivative *gū'us^{ε/}* "take care, watch out"

13.2.1.3 Reverse Action

-g- attached to dynamic verbal roots implies reversal:

<i>yè⁺</i>	"dress oneself"	<i>yèεg^ε</i>	"undress oneself"
<i>pìd^ε</i>	"put (hat etc) on"	<i>pìdīg^ε</i>	"take (hat etc) off"
<i>pìl^ε</i>	"put (hat etc) on s'one"	<i>pìlīg^ε</i>	"take (hat etc) off someone"
<i>l̥⁺</i>	"tie up"	<i>l̥dīg^{ε/}</i>	"untie"
<i>yò⁺</i>	"close"	<i>yò'ɔg^ε</i>	"open"
<i>èṇd^ε</i>	"block up"	<i>èṇdīg^ε</i>	"unblock"
<i>yà'al^ε</i>	"hang up"	<i>yàk^ε</i>	"unhang"
<i>pà'al^ε</i>	"put on top"	<i>pàk^ε</i>	"take off top"
<i>pìbìl^ε</i>	"cover up"	<i>pìbīg^ε</i>	"uncover"
<i>(zū-píbìg^a</i>	"hat")		
<i>tàbì^{ya}</i>	"be stuck to"	<i>tàbīg^ε</i>	"unstick, get unstuck"
<i>là'as^ε</i>	"gather together"	<i>lāk^{ε/}</i>	"open" (eye, book)
		Mooré	<i>lákè</i> "un-stick together"
		Farefare	<i>làkè</i> "enlever, ouvrir"

Reversive **-g-** seems to be a peculiarity of the Western group within Oti-Volta; other Oti-Volta languages show alveolars in suffixes having this meaning: Konkomba *pì:ⁿ* "close" *pì:rì* "open", Moba *lwo* "close" *lwot* "open", Byali *byá* "close" *byēŕá* "open", Nawdm *rów* "has closed" *rɔd* "open." Proto-Bantu probably had both **-ɔl-** and **-ɔk-**, perhaps respectively transitive and intransitive. If there were two such suffixes in Oti-Volta, it would be natural for the alveolar variant to be disfavoured in Western Oti-Volta because of the adoption in that subgroup of **-da** as the regular Dynamic Imperfective flexion for almost all verbs capable of aspect flexion.

13.2.1.4 Other Deverbal Formations

-s- may have a plural action sense:

<i>kò⁺</i>	"break"	<i>kò'ɔs^ε</i>	"break several times"
<i>tòŋ⁺</i>	"shoot"	<i>tòŋ'ɔs^ε</i>	"hunt"
<i>pìəb^ε</i>	"blow (flute etc)"	<i>pèbɪs^ε</i>	"blow (wind)"
		<i>pèbɪsɪm^m</i>	"wind"
<i>làbɪ^{ya}</i>	"crouch in hiding"	<i>làbɪs^ε</i>	"walk stealthily"
<i>vūɛ^{a/}</i>	"be alive"	<i>vū'us^{ε/}</i>	"breathe, rest"
<i>jàŋk^{ε/}</i>	"fly, jump"	<i>jàŋ'as^{ε/}</i>	"leap, jump repeatedly"
<i>yā'e^{+/}</i>	"open mouth"	<i>yā'as^{ε/}</i>	"open repeatedly" WK
<i>dī'e^{+/}</i>	"receive"	<i>dī'əs^{ε/}</i>	"receive (many things)"

-g- probably occurs with an inchoative meaning in the Base Forms of several irregular verbs [11.1.1](#), and also in

<i>sōŋ'e^{ya/}</i>	"be better than"	<i>sūŋ'e^{+/}</i>	"become better than" WK
----------------------------	------------------	---------------------------	-------------------------

-m- derives some Particle-Verbs [22.7.2](#):

<i>lèm</i>	"again"	cf	<i>lèb^ε</i>	"return"
<i>là'am</i>	"together"	cf	<i>là'as^ε</i>	"gather together"
		also	<i>là'am^m</i>	"associate with", main verb
<i>dèŋum</i>	"first"	cf	<i>dèŋ^ε</i>	"go first"
<i>màlɪgum</i>	"again"	cf		Toende <i>maliɡ</i> "do again"

-g- and **-m-** occur with no clear meaning in

<i>fāŋ⁺</i>	"rob, snatch"	<i>fāeŋ^{+/}</i>	"save" (? "snatch back")
<i>lìəb^ε</i>	"become"	<i>lèbɪg^ε</i>	"turn over"
			Mooré <i>lèbge</i> "become"
<i>sōŋ⁺</i>	"rub"	<i>sūeŋ^{+/}</i>	"anoint"
<i>nōb^ε</i>	"get fat"	<i>nōbɪg^{ε/}</i>	"grow" (child, plant)
<i>nā⁺</i>	"join"	<i>nāe^{+/}</i>	"finish"; compare
			Hausa <i>gamàa</i> "join, finish"
<i>kòŋs^ε</i>	"cough"	<i>kòŋsɪm^m</i>	"cough"

-r- appears in

<i>kābir</i> ^{ε/}	"ask for admission"
<i>sūgur</i> ^{ε/}	"forbear, be patient with"

Kābir^{ε/} is probably connected with *kāab*^{ε/} "offer, invite", and Toende Kusaal has *kábis* "frapper à la porte, informer, signaler." There seems to be no root **sūg-*. Both words appear frequently in formulaic expressions 34 of a type which are often pan-regional and they may well be loanwords. The Agolle Kusaal verbs may be back-formations from the nouns *kābirí*⁺ and *sūgurú*⁺, in which the *ri/ru* possibly originated in the equivalent of *r^ε|a⁺* Class singular flexions 9.6.

13.2.2 From Nominals

-g- derives many verbs from nominal roots, with the meaning "make/become ..." The same suffix occurs with verbal roots, where it is inchoative 13.2.1.4.

<i>nyō'ɔs</i> ^{ε/}	"smoke"	<i>nyū'e</i> ^{+/}	"set alight"
<i>ñwīig</i> ^{a/}	"rope"	<i>ñwīig</i> ^{ε/}	"make a rope"
<i>tādım</i> ^{m/}	"weak person"	<i>tàdɪg</i> ^ε	"become weak"
<i>kpi'a</i> ⁺	"neighbour"	<i>kpi'e</i> ⁺	"approach"
<i>zūər</i> ^ε	"hill"	<i>zùe</i> ⁺	"get higher, more"
<i>À-Tūl</i> ^ε	"Breech-Delivered" 35.2	<i>tùlɪg</i> ^ε	"invert"
<i>mā'asír</i> ^ε	"cool, wet"	<i>mā'e</i> ^{+/}	"get cool, wet"
		<i>(mā'al</i> ^{ε/}	"make cool, wet")
<i>bōgvsír</i> ^ε	"soft"	<i>būk</i> ^{ε/}	"soften"
<i>tēbısír</i> ^ε	"heavy"	<i>tēbɪg</i> ^{ε/}	"get/make heavy"
<i>gīŋ</i> ^a	"short"	<i>gìŋ</i> ^ε	"scrimp"
<i>kpɪ'ɔŋ</i> ^ɔ	"strong"	<i>kpè'ŋ</i> ^ε	"strengthen"
<i>vūr</i> ^{ε/}	"alive"	<i>vū'vɔg</i> ^{ε/}	"make/come alive"
<i>pòɔdɪg</i> ^a	"few"	<i>pò'ɔg</i> ^ε	"diminish; denigrate"
<i>pìlɪg</i> ^a	"white"	<i>pèlɪg</i> ^ε	"whiten"
<i>sābɪlɪg</i> ^a	"black"	<i>sōbɪg</i> ^{ε/}	"blacken"
<i>nīn-múa</i> ⁺	"concentration"	<i>mu'e</i> ⁺	"redden"
	("red eye")		
<i>kōdɔg</i> ^ɔ	"old"	<i>kùdɪg</i> ^ε	"shrivel up, dry out, age"
<i>sùŋ</i> ^ɔ	"good"	<i>sùŋ</i> ^ε	"help"
<i>tōvɪlɔg</i> ^ɔ	"hot"	<i>tōlɪg</i> ^{ε/}	"heat up"
<i>mì'isvɔg</i> ^ɔ	"sour"	<i>mì'ig</i> ^ε	"turn sour"
<i>zùlɔŋ</i> ^ɔ	"deep"	<i>zùlɪg</i> ^ε	"deepen"
<i>lālɪlɔg</i> ^ɔ	"far"	<i>lālɪg</i> ^{ε/}	"get to be far, make far"

<i>màɣk</i> ^ɔ	"crumpled up"	<i>màk</i> ^ɛ	"crumple up"
<i>dɛɛŋ</i> ^a	"first"	<i>dɛŋ</i> ^ɛ	"precede"
<i>nɛɛr</i> ^ɛ	"clear, empty"	<i>nìe</i> ⁺	"appear"

With the addition of *-m* as a second derivational suffix:

<i>wàɣŋ</i> ^ɔ	"wasted"	<i>wàɣɪm</i> ^m	"waste away"
--------------------------	----------	---------------------------	--------------

-l- can make causatives from nominal roots, often corresponding to an intransitive or Patientive Ambitransitive verb with derivational *-g-*:

<i>mā'e</i> ^{+/}	"get cool"	<i>mā'al</i> ^{ɛ/}	"make cool"
<i>pūŋ'e</i> ^{+/}	"rot"	<i>pōŋ'ɔl</i> ^{ɛ/}	"cause to rot"
<i>nìe</i> ⁺	"appear"	<i>nɛɛl</i> ^ɛ	"reveal"
<i>wū'vɔ</i> ^{ɛ/}	"get wet"	<i>wū'vɔl</i> ^{ɛ/}	"make wet"
<i>ŋyá'aŋ</i> ^a	"behind"	<i>ŋyā'al</i> ^{ɛ/}	"leave behind"
<i>gɛog</i> ^ɔ	"space between legs"	<i>gɛɛl</i> ^{ɛ/}	"put between legs" Tones <i>sic</i>
<i>līk</i> ^a	"darkness"	<i>līgɪl</i> ^ɛ	"cover up"

-lum- derives verbs from nominal roots, meaning "act as ..." or "make/become ...":

<i>pɣ'ā</i> ^a	"woman"	<i>pù'alɪm</i> ^m	"cook"
<i>pòŋ'ɔr</i> ^ɛ	"cripple"	<i>pòŋ'ɔlɪm</i> ^m	"cripple, get crippled"
<i>wàbɪr</i> ^ɛ	"lame"	<i>wàbɪlɪm</i> ^m	"make, go lame"
<i>gū'vɔ</i> ^ɛ	"semi-ripe things"	<i>gù'vɪlɪm</i> ^m	"become semi-ripe"
<i>bōgvɔd</i> ^a	"client of diviner"	<i>bògvɪlɪm</i> ^m	"cast lots"
		cf <i>bùk</i> ^ɛ	"cast lots"

-m- appears deriving a verb from a nominal root in

<i>nɛɛr</i> ^{ɛ/}	"millstone"	<i>nɛɛm</i> ^{m/}	"grind with a millstone"
---------------------------	-------------	---------------------------	--------------------------

-s- has a factitive sense in

<i>zɣà</i> ⁺	"friend"	<i>zùes</i> ^ɛ	"befriend"
-------------------------	----------	--------------------------	------------

14 Derivational Prefixes

Kusaal freely forms **compounds**. In a compound, the non-final element is itself part of the paradigm of a nominal word, the "combining form." There is Apocope between the combining form and the following stem, so that many different two-member consonant clusters may occur across the junction. In this grammar combining forms are regarded as words rather than word fragments, and accordingly compounds are further treated under Syntax [19.6](#).

There are also many noun and a few adjective stems which have an element preceding the root which does not form part of the paradigm of any nominal. Such elements will be called **nominal prefixes**. No finite verb form shows a prefix. Morphologically, nominal prefixes are simply part of a complex stem, and have no identifiable meaning of their own. Most fall into a relatively few phonological types, with limited possibilities for vowel distinctions and for tones. Thus

<i>tītā'ar^ε</i>	"big"
<i>tītā'am^m</i>	"multitude"
<i>bò-tītā'ar^ε</i>	"big goat"

Nominal prefixes have either M or L tonemes throughout. As a group, they differ in tonal behaviour from Combining Forms [7.2.4](#). Segmentally they are mostly of the shape CV(*n*), where *V* shows only the three-way *a ɪ u* vowel distinction of affix vowels; *ɪ u* become *i u* by ATR harmony before *i u* of an initial root mora. There is also a complex reduplicated type CV*sin* or CV*ln*. Stems with nominal prefixes are generally otherwise simple in structure, without derivational suffixes.

Nominal prefixes are derivational, in the sense that they are part of the stem, but even where parallel stems without prefixes or with different prefixes exist, there are no regular processes relating the various forms, unlike the cases of the manner-adverb deriving prefix *à-* [20.4](#) and the number prefixes [16.2.1](#). Nominal prefixes are, however, notably common with words falling into particular semantic fields, such as words for small animals, reptiles and insects.

The line of demarcation between nominal prefixes and combining forms is not absolute, and a few prefixes evidently did originate as cbs [14.4](#). Others are apparently related to verbal negative particles [14.3](#). The decision as to whether to write a hyphen between the components of a complex word is not always straightforward, but nevertheless cbs and nominal prefixes are distinct in principle, with most cases also clearly distinguishable in practice. Thus, an element is a combining form if it is part of a nominal paradigm, if it ends in a consonant other than a nasal, if it has a vowel other than short *a ɪ u* without glottalisation or contrastive nasalisation, or if it has M toneme and is followed by M Raising affecting

singular and plural forms. On the other hand, an element is a nominal prefix if it is formed by reduplication of the stem-initial consonant, or if it has M toneme and is not followed by M Raising affecting singular and plural forms.

Another piece of evidence for a basic distinction between combining forms and nominal prefixes is provided by cases like *pùkòòŋr^ε* "widow", where the first element differs from the current combining form *pɥ'à-* "woman" in loss of glottalisation and replacement of the vowel by an allowable prefix vowel, but cognate Mooré and parallel Kusaal forms confirm that the resemblance of the prefix to the cb is not accidental [14.4](#). It is only possible to describe a combining form *becoming* a prefix because the two categories are distinguishable in principle.

Further complicating the picture are a good many stems with elements of no discoverable meaning preceding the final root which do not fit into any common segmental phonological prefix patterns, although tonally they do behave as nominal prefixes. Many such words can be identified as **loanwords**, but not all: in particular, many names of ethnic groups and of Kusaasi clans are of this type [18](#).

For the Personifier Clitic *à-* as part of some common nouns referring to living creatures see [19.10](#); it is not a prefix but a proclitic particle.

As prefix vowels, *ɪ* and *ʊ* are subject to ATR harmony [4.4](#), which is ignored in writing as it is non-contrastive.

14.1 Reduplication-Prefixes

The simplest type of nominal prefix copies the initial C of the root, followed by a vowel which is most often *ɪ*, but rounded to *ʊ* by neighbouring labial consonants. No cases occur with voiced stops or voiced fricatives.

<i>kùkōr^ε/</i>	"voice"
<i>kùkòm^{mε}</i>	"leper"
<i>kìkàŋ^a</i>	"fig tree"
<i>kìkīrɪg^a/</i>	"tutelary spirit"
<i>k[p]ùkpàrɪg^a</i>	"palm tree"
<i>kpīkpīn^{na}/</i>	"merchant"
<i>kpàkūr^ε/</i>	"tortoise"
<i>tītā'ar^ε</i>	"big"
<i>tītōmɪs^ε</i>	"sending" (<i>tòm^m</i> "send")
<i>tàtəl^{lε}</i>	"palm of hand"
<i>pīpīrɪg^a/</i>	"desert"
<i>fūfūm^{mε}</i>	"envy"; "stye" (believed to result from envy)
<i>sìsì'am^m</i>	"wind"
<i>zà-sìsōbɪr^ε/</i>	"evening"
	(<i>zà-</i> cb of <i>zàam^m</i> "evening", <i>sōb^ε</i> "get dark")

<i>lìlāalíg^a</i>	"swallow"
<i>mìmīlím^m</i>	"sweetness"
<i>mìmīlúg^{ɔ̃}</i>	<i>id</i>

More complex is a similar type with a final nasal consonant; voiced stops and fricatives may occur with this type:

<i>gòngūm^{mɛ}</i>	"kapok material" (<i>gùm^{mɛ}</i> "kapok fruit")
<i>dòndùug^{ɔ̃}</i>	"cobra"
<i>dìndēog^{ɔ̃/}</i>	"chameleon"
<i>bìmbìm^{mɛ}</i>	"altar"
<i>bùmbàrig^a</i>	"ant"
<i>zùnzòg^a</i>	"blind" (<i>zū'əm^m</i> "go/make blind")
<i>zīnzāug^{ɔ̃/}</i>	"bat"
<i>kìnkàg^a</i>	"fig"
<i>tīntōríg^a</i>	"mole"
<i>pùmpwōg^{ɔ̃}</i>	"housefly" (cf <i>tàmpūa⁺</i> <i>id</i> 9.3.2)
<i>sīnsáag⁼</i>	a kind of tiny ant
<i>nōb-púmpàug^{ɔ̃}</i>	"foot"

An even more complex type follows the reduplicated CV with *-sɪn* or *-lɪn*:

<i>kpìsɪnkpìl^{lɛ}</i>	"fist"
<i>tàsɪntàl^{lɛ}</i>	"palm of hand"
<i>sīlɪnsìùg^{ɔ̃}</i>	"spider" pl <i>sīlɪnsîṅd^ɛ</i>
<i>sīlɪnsìùg^{ɔ̃}</i>	"ghost" pl <i>sīlɪnsîs^ɛ</i>
<i>zīlɪnzìòg^{ɔ̃}</i>	"unknown" cf <i>zī⁺</i> "not know"
<i>vòlɪnvùug^{lɛ}</i>	"mason wasp"
<i>wàsɪnwàl^{lɛ}</i>	a parasitic gall on trees, called "mistletoe" in local English
<i>nēsɪnnēog^{ɔ̃/}</i>	"envious person" cf <i>nēn^{na/}</i> "envy" WK others "centipede" = WK <i>nà'-nēsɪnnēog^{ɔ̃/}</i>

14.2 *Da(n) ba(n) sa(n)*

<i>dàwàlig^a</i>	"hot, humid period just before the rainy season"
<i>dàyūug^{ɔ̃/}</i>	"rat"
<i>dàyáam^{ma}</i>	"woman's parent-in-law"
<i>dàtāa⁼</i>	"enemy" cf <i>nìn-tāa⁼</i> "co-wife", Ghanaian "rival"
<i>dàmà'a⁼</i>	"liar" cf <i>mà⁺</i> "lie"
<i>dàkīig^a</i>	"sibling-in-law via wife"

<i>dàwān</i> ^{nɛ/}	"pigeon"
<i>dādúk</i> ^ɔ	a kind of large pot, cf <i>dōk</i> ^ɔ "pot"
<i>dàtìɲ</i> ^ɔ	"right hand"
<i>dàgòbɪ</i> ^a	"left hand"
<i>bānāa</i> ⁼	traditional long-sleeved smock
<i>bàlànɪr</i> ^ɛ	"hat"
<i>bàlàar</i> ^ɛ	"stick, staff"
<i>bālērɔg</i> ^ɔ	"ugly" cf <i>lēr</i> ^ɛ "get ugly"
<i>bàyēog</i> ^ɔ	"betrayal of secrets"
	cf <i>yēs</i> ^ɛ "betray a secret"
<i>sākárɔg</i> ^ɔ	"fox"
<i>sàbùà</i> ⁺	"lover, girlfriend" ? <i>bòɔd</i> ^a "want, love"
<i>sāmán</i> ^{nɛ}	clear space in front of a <i>zàk</i> ^a "compound"

Various forms show prefixes of the form *Can-*; those with initial consonants other than *d b s* are probably best classified with the unanalysable residue of complex stems which includes loanwords [18](#):

<i>dànkòɲ</i> ^ɔ	"measles"
<i>sāngúnnìr</i> ^ɛ	"millipede"
<i>zànkù'ar</i> ^ɛ	"jackal"
<i>Zàngbèog</i> ^ɔ	"Hausa person"
<i>màngáɔɲ</i> ^ɔ	"crab"
<i>làngáɔɲ</i> ^ɔ	"crab"
<i>nànzù'us</i> ^ɛ	"pepper"

The interesting word

<i>nàyiig</i> ^a	"thief"
----------------------------	---------

is written *na'ayiig* in NT/KB as if it were a compound with the cb *nā'* "cow", but it has a L toneme initially and the vowel is definitely not glottalised in WK's speech. Moreover, the sense is not confined to "cattle thief." The word is ^a|*b*^a Class and the *-g-* belongs to the stem: pl *nàyiig-nàm*^a, though there is also an analogical *g*^a|*s*^ɛ pl *nàyiis*^ɛ. There is a derived abstract noun *nàyiigum*^m "thievery." Farefare has *nàyìgà*, pl *nayigba* or *nayigsi*; Dagbani has *nayiɣa* pl *nayiɣsi* and also *tayiɣa id*.

14.3 *Pō kù(n)*

In some words these prefixes have a negative meaning, and they are then presumably connected with the verb negative particles *pō kù*:

<i>kòndù'ar</i> ^ε	"barren woman"
	cf <i>dɥ'à</i> ^a "bear, beget"
<i>nīn-pō-nān</i> ^{na/}	"disrespectful person"
	cf <i>nān</i> ^ε "love, respect"
<i>tùb-pō-wómni</i> ^b	"deaf people" (Rom 11:7)
	cf <i>tùbur</i> ^ε "ear", <i>wòm</i> ^m "hear."

However, most cases are not analysable in this way; they may be loanwords, or petrified forms whose origins are no longer transparent.

<i>kòndùŋ</i> ^a	"jackal"
<i>gōmpōzēr</i> ^{ε/}	"duck"
<i>dāmpōsāar</i> ^ε	"stick"

The word

<i>bān-kúsél</i> ^{lε}	<i>bān-kúsēlá</i> ⁺	<i>bān-kúsēl-</i>	"lizard" 7.2.1.2
--------------------------------	--------------------------------	-------------------	----------------------------------

has a first component which looks as if it is related to *bàŋ*^a "agama lizard" though the tone is unexpected if so.

14.4 Stranded Combining Forms

Some original cbs have become partly bleached of their original meaning and/or simplified phonologically, and have consequently become detached from their regular paradigms after being ousted by new cbs based on analogy with sg forms [9.2.2](#). Here I list a few instances where an obvious similarity to a noun cb can be identified; some other non-reduplicating nominal prefixes may have originated in a similar way historically.

nìn "body" is accepted by WK as cb of *nīŋ*^a *nīs*^ε [= Mooré *ninga*] but the word is rare; as a nominal prefix cf

<i>nìn-gbīŋ</i> ^{ɔ/}	"human skin; body"
<i>nìn-tāa</i> ⁼	"co-wife"

15 Pronouns

Pronouns occur as NP heads. Demonstrative, Indefinite and Interrogative pronouns may occur as post-determiners after a head, which is reduced to a cb, while the pronoun inflects to show the number of the head, as with adjectives.

15.1 Personal

		<u>Proclitic</u>	<u>Enclitic</u>	<u>Free</u>	<u>Subject+<i>h</i></u>
Sg	1st	<i>m̃</i>	<i>m^a</i>	<i>mān</i> SF <i>mánē</i> LF	<i>mán</i>
	2nd	<i>fù</i>	<i>f^o</i>	<i>fōn</i> SF <i>fúnē</i> LF	<i>fún</i>
	3rd an	<i>ò¹²</i> [ʊ]	<i>°</i> [ʊ]	<i>ōn^ε</i>	<i>ón</i>
	3rd inan	<i>lì</i> or <i>dì</i>	<i>l⁺</i>	<i>līn^ε</i> or <i>dīn^ε</i>	<i>lín</i> or <i>dín</i>
Pl	1st	<i>tì</i>	<i>tl⁺</i>	<i>tīnám^{a 13}</i>	<i>tīnámì</i> _— ∅
	2nd	<i>yà</i>	<i>ya⁺</i>	<i>yānám^a</i>	<i>yānámì</i> _— ∅
	3rd	<i>bà</i>	<i>ba⁺</i>	<i>bān^ε</i>	<i>bán</i>

"an"= animate, "inan" = inanimate: on gender see [19.2.2](#).

The clitic pronouns are all Liaison Words [8.2 7.4](#). The proclitics are used as non-contrastive subjects and as pre-determiners in NPs and AdvPs, and the enclitics as non-contrastive verb objects. For the realisation of the 3sg animate ^o see [8.2.1.1](#).

My informants all use *l-* forms throughout for 3sg inan; for bound objects, all speakers have only *l-* forms.

The "+*n*" forms are those used as subjects in *h*-Clauses [31](#).

The alternate form *mām* also occurs for 1st sg in any rôle.

The 2nd pl subject has an enclitic form ^y*a* used *after* imperatives addressing more than one person [28.2.3](#) with the allomorph *-ní-* before Liaison [8.2.1.2](#).

Personal pronouns do not take modifiers and have no cb forms, but free forms may be used before relative pronouns (for which, see [31.2.2](#)):

Fun kanε buoli fū mēŋ ... "You who call yourself ... (Rom 2:17)
Fōn kání b̀ùəli f̀ù mēŋ ...
 2SG REL.SG call 2SG self ...

Number is sg/pl; Kusaal has no honorific usages of plural for singular like Mooré. For the interaction of number and gender see [19.2.2](#).

12) Toende Kusaal has *ō*. The original form was probably **ŋm̃v*, with later **ŋm̃* → **ŋ* before the rounded vowel. Cf also the Dagbani free pronoun *ɲuna* = Kusaal *ōn^ε*.

13) Toende has 1pl *tun* 2pl *nam* for the free pronouns; the *nam* component of the Agolle forms is presumably the element seen in the pluraliser *nām^a* [9.4](#).

15.2 Demonstrative

Some forms of Demonstrative pronouns are limited to usage either as NP heads or as post-determiners, while other forms may appear in both uses.

Head or Dependent:

	<u>Animate sg</u>	<u>Inanimate sg</u>		<u>Plural</u>
Long	<i>òṅā^{+/}</i>	<i>lìnā^{+/}</i>	far	<i>bàmmā^{+/}</i>
Short	<i>òn^ε</i>	<i>lìn^ε</i>	far	<i>bàn^ε</i>

Head only:

Long		<i>nē'ṅá⁺</i>	near	
Short		<i>nē'^{+/}</i>	near	<i>nē'-nám^a</i> NT

Post-determining only:

Long	<i>kàṅā^{+/}</i>	<i>kàṅā^{+/}</i>
Short	<i>kàn^ε</i>	<i>kàn^ε</i>

Note the tone difference in the short series from the free 3rd person pronouns. The post-determining-only series is based on an obsolete *g^a|s^ε* Class pronoun *kà*, parallel to *lì*, originally *r^ε|a⁺* Class. My informants use these forms for animate reference as well as inanimate, but NT prefers *òṅā^{+/}* *òn^ε*.

Post-determining pronouns follow a noun cb. Some speakers allow sg and pl noun forms, but these probably have the tones of combining forms [19.5](#). After forms lacking cbs, like quantifiers and free pronouns the construction is formally appositional, cf [31.2.3](#) [19.5](#).

Examples after combining forms:

<i>dụ'átà lā lór-kàṅā</i>	"this car of the doctor's"
<i>bù-kàṅā lā</i>	"that goat"

After a quantifier:

<i>bèdugū kánā</i>	"this multitude"
--------------------	------------------

After a free pronoun:

<i>fūn kání bùèl ...</i>	"you who call ..."
--------------------------	--------------------

Post-determining pronouns follow any adjectives:

n̄-píàl-kàṅā

"this white hen"

The "short" series are used for referents not in view, as interrogatives in the sense "which?" and (much the most commonly) as the basis of **Relative Pronouns** [31.2.2](#). The demonstratives do not distinguish near and far except with sg inanimate heads; elsewhere "that" can be specified by following the demonstrative with *lā*^{+/} (in other contexts the definite article) and "this" by following *n̄wà*⁺ (cf French *ça ci*.) This deictic use of *lā*^{+/} is enabled by the fact that Demonstratives automatically make the NP definite [19.3](#).

dàṽ-kàṅā sáàm

"this/that man's father"

dàṽ-kàn sáàm

"that (not visible) man's father"

dàṽ-kàṅā lā sáàm

"that man's father"

dàṽ-kàṅā n̄wá sáàm

"this man's father"

tèṅ-kàn lā ná'àb

"the king of that country" (from a story)

sān-kán lā

"at that time"

15.3 Indefinite

	<u>Animate sg</u>	<u>Inanimate sg</u>	<u>Plural</u>
	<i>s̄</i> ⁺	<i>s̄ə</i> ^a	<i>s̄əba</i> ⁺
Dependent-only	<i>s̄a</i> ⁺	<i>s̄a</i> ⁺	

The vowel is *not* glottalised in the plural. For NT WK, but not KT, the dependent-only inanimate sg is much commoner than *s̄ə*^a used as a dependent. WK feels that for people *s̄a*⁺ is pejorative; NT occasionally has *s̄*⁺ for inanimate: *tèṅ-s̄*⁺ "a certain land." For indefinite pronouns in Relative Clauses see [31.2.1](#).

The sense is "some, someone, something", "a certain", indefinite but *specific*:

yà bì-s̄⁺

"a certain child of yours"

2PL child-INDF.AN

The meaning is often contrastive, "another, a different" (compare Hausa *wani*, which has very similar usage in general to this pronoun, Jaggar p314, Caron pp102ff):

*ka man ti ye m sig la, ka s̄' pun dēṅi sig sa.**kà mán tì yé m̄ s̄g lā,*

and 1SG:COMP afterward say 1SG descend ART,

kà s̄' pún dēṅi_ ∅ s̄g sá.

and INDF.AN already before SER descend thither.

"when I'm then about to go down, someone else goes down first." (Jn 5:7)

Mεeri one an Magdalen ne Meeri sɔ'

Meeri ɔ̀nì àṅ Magdalen nē Meeri sɔ'

Mary **REL.AN COP** Magdalen with Mary **INDF.AN**

"Mary who was Magdalen and another Mary" (Mt 28:1)

Winnig mɔr o meṅ venlim, ka nwadig me mɔr venlim si'a.

Winnig mór ò mēṅ véṅllìm kà ṅwādig mé mɔr véṅllìm-si'a.

Sun:**SG** have **3AN** self beauty and moon:**SG** also have beauty-**INDF.INAN**.

"The sun has its own beauty and the moon, too, has another beauty."

(1 Cor 15:41)

Ṁ ná tī f tí-si'a.

1SG IRR give **2SG.OB** medicine-**INDF.INAN**.

"I'll give you a different medicine." WK

The indefinite pronouns can be used to introduce new information:

Dàṽ-sɔ' dāa bé ...

"There was a certain man ..."

Man-**INDF.AN TNS EXIST** ...

but this is likely to mean "There was another man ..."; it is commoner just to use an indefinite NP [19.3](#) [33.4](#):

Dāṽ dāa bé ...

"Once there was a man ..."

Man:**SG TNS EXIST** ...

Sɔ'/sɔ'al mé-kàma means "anyone, anything, everyone, everything":

O niṅid si'el mekama su'vṅa.

Ò niṅid sɔ'al mé-kàma súṅā.

3AN do:**DIPF INDF.INAN** also-whatever good:**ADV**.

"He does everything well." (Mk 7:37)

The particle is widespread in West Africa: cf Humburi Senni *-kámâ* "each."

In negative clauses the indefinites mean "(not) ... anything", "(not) ... anybody":

Ka so' kudin ku len nyee li ya'asa.

Kà sɔ' kūdɪm kú lēm ṅyées lī yá'asā +∅.

And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG**.

"Nobody will ever see it again." (Rev 18:21, 1996)

S̄' k̄a'e +∅. "There's nobody there."
INDF.AN NEG.BE NEG.

M̄ p̄ yél s̄əla +∅. "I didn't say anything."
1SG NEG.IND say INDF.INAN NEG.

15.4 Interrogative

Animate

àń'òń^ε "who?"

Inanimate

b̄⁺ "what?"

Plurals with *nàm*^a may be used if a specifically plural answer is being sought.

The initial *à-* of *àń'òń*^ε is Fixed-L and behaves like the Manner-Adverb prefix with regard to Liaison [8.2.2](#):

Nidib ayi' nwa, ya b̄w̄d ye m bas an'òń^ε?

N̄idib áyí ńwà, yà b̄w̄d yé m̄ bás àń'òń^ε +∅?

Person:**PL NUM**:two this, **2PL** want that **1SG** release who **CQ**?

"Which of these two people do you want me to release?" (Mt 27:21)

15.5 Reciprocal

Tāaba⁺ "one another" appears as *tāab* clause-medially for some speakers.

Sòḡimī ∅ *tāaba*. "Help one another."

Help:**IMP 2PL.SUB** each.other.

Tì yúùg nē tāaba. "It's been a long time." KT

1PL delay with each.other.

Bà d̄l nē tāaba. "They went together." (*d̄l*^{la}/ "accompany")

3PL follow with each.other.

It occurs as an adjective in the meaning "fellow-"

ò tùm-tùm-tāaba "His fellow-workers."

The stem also occurs as an always-bound *g^a|s^ε* Class noun in the same sense, seen after Imperfective Gerunds [13.1.1.4](#), and with nominal prefixes in *nìn-tāa*⁼ "co-wife" and *dātāa*⁼ "enemy."

16 Quantifiers

16.1 Quantifiers: Overview

Formally, quantifiers resemble noun sg or pl forms, very frequently with Apocope Blocking [6.4](#); Numbers [16.2.1](#) are preceded by number prefixes.

Quantifiers can be classified as **count** or **mass**, but the distinction is only of significance when the quantified noun is mass type, in which case a count quantifier is ungrammatical; with count nouns there is no restriction and either type of quantifier is acceptable:

	<i>nīdɪb bédʊgū</i>	"a lot of people"
	<i>nīdɪb báɪgā</i>	"many people"
	<i>kù'əm bédʊgū</i>	"a lot of water"
not	* <i>kù'əm báɪgā</i>	*"many water"

Mass quantifiers are

<i>bédʊgū</i> ^{+/}	"a lot"
<i>pāmm</i> SF <i>pāmné</i> LF	"a lot" (on the LF see 6.4)
<i>fīŋ</i> ⁼	"a little (liquid)"
<i>bī'əlá</i> ⁺	"a little"
<i>wūv</i> ⁼	"all"
<i>wūsa</i> ⁺	"all"

Count quantifiers include the **numbers**, and also

<i>báɪgā</i> ^{+/}	"many"
<i>kàɪgā</i> ^{+/}	"few"
<i>fāŋ</i> ⁼	"every"
<i>zāŋ'a</i> ⁼	"every"
<i>kām</i> ^a	"every"

Kām^a "every" occurs by itself as a quantifier and also before others:

sāŋá kám = *sāŋá kám zāŋ'a* "all the time"

Quantifiers lack combining forms; when they appear as heads before post-determining pronouns the usual free form is used.

16.2 Number Words

16.2.1 Numbers: Overview

Number words function as quantifiers, and also have forms used as adverbs; for "one", there are also post-determiners meaning "first."

Many number words show Apocope Blocking [6.4](#).

In all uses, the numbers 2 to 9 begin with an inseparable **number prefix**. Forms with number prefixes are all Liaison Words [8.2.2](#). Although unprefixated forms are not available for comparison, the number prefixes are probably followed by L Raising on the root of the number word.

The number prefixes represent **fossilised noun class agreement prefixes**. With the collapse of noun-class based grammatical gender [9.1](#) in favour of a system of natural gender [19.2.2](#) the old $^a|b^a$ Class agreement pronouns \grave{o} $b\grave{a}$ have been generalised for animate while the old $r^e|a^+$ Class singular pronoun \grave{l} has been adopted for inanimate gender. In Dagbani, where there has been a very similar change, the inanimate singular pronouns are similarly based on the equivalent of the $r^e|a^+$ Class, with the old plural pronoun ηa still extant in older materials for inanimate plural (Olawsky 1999.) Number words originally agreed with the counted noun with a prefix similar in form to the corresponding plural pronoun, and the \grave{a} - of the Kusaal numbers 2-9 used as quantifiers [16.2.2](#) represents original $*\eta a$.

Because of its origin from $*\eta a$, the \grave{a} - number prefix, unlike all other a - particles and prefixes, causes a preceding LF-final vowel following a consonant to appear as $-a$ rather than $-i$ [8.2.2](#):

$b\grave{i}s\grave{a}$ $\grave{a}t\grave{a}\eta'$ "three children"
child:PL NUM:three

This same \grave{a} - is also seen in $\grave{a}l\acute{a}^+$ "how many?" contrasting with $\grave{a}l\acute{a}^+$ "thus", which has the manner-adverb \grave{a} -:

$P\grave{e}\acute{e}d\acute{a}$ $\grave{a}l\acute{a}$ $^+\emptyset?$ "How many baskets?"
Basket:PL NUM:how.many CQ?

$n\grave{i}\eta i$ $\grave{a}l\acute{a}$ "did thus"
do ADV:thus

The expected corresponding number prefix $b\grave{a}$ - is not now found after nouns with animate gender, but is still preserved after personal pronouns:

<i>tì bàtán'</i>	"we three"
<i>yà bàyápòḡ</i>	"you seven"
<i>bà bàyí</i>	"they two"

The forms of the number words 2-9 used for counting [16.2.3](#) represent the old *m^m* Class agreement, in the "abstract" sense of *m^m* [9.1.1](#):

<i>hétán'</i>	"three"	(in counting)
<i>hñāas</i>	"four"	(in counting)
<i>hñū</i>	"five"	(in counting)

Compare Nawdm *mì-tâ?* "three" *mì-ná:* "four" *mì-nû?* "five" etc in counting. When referring to a specific noun Nawdm numbers have a prefix agreeing with the noun class *nídbá bà-tâ?* "three people"; *mi* marks the abstract/mass class cognate to the Kusaal *m^m* Class (Fiedler 2012.)

The number prefix *bù-* appears in various adverbial number words [16.2.5](#). It probably represents either an old *b^ɔ* or *m^m* Class agreement.

<i>àbùyí⁺</i>	"twice"
<i>àbùtán'⁺</i>	"three times"
<i>àbùñāasí⁺</i>	"four times"
<i>bùpīiga⁺</i>	"ten times"
<i>nɔ́rím bùtán'⁺</i>	"three times"

Numbers without prefixes show that, like all quantifiers, numbers are not subject to M Raising:

<i>būvg yīnní</i>	"one goat"
<i>kūgvr yīnní</i>	"one stone"
<i>būvs pīiga</i>	"ten goats"

The noun, as here, is plural (except of course with *yīnní⁺*) with the exception of units of measure which generally remain sg:

<i>yɔ́lvagá àtán'</i>	"¢600 [cedis]"
	(<i>yɔ́lvag^ɔ</i> "sack" for £100/¢200; Hausa <i>jàkaa</i> .)

16.2.2 Quantifiers

The numbers in their core rôle as quantifiers take the forms

1	<i>yīnní</i> ⁺	10	<i>pīga</i> ⁺	100	<i>kòbīgā</i> ⁼
2	<i>àí</i> ⁺	20	<i>pīsí</i> ⁺ [p ^h isi]	200	<i>kòbísí</i> ⁺ [k ^h ɔbisi]
3	<i>àtán</i> ⁺	30	<i>pīs tán</i> ⁺	300	<i>kòbís tán</i> ⁺
4	<i>ànāasí</i> ⁺	40	<i>pīs nāasí</i> ⁺	400	<i>kòbís nāasí</i> ⁺
5	<i>ànū</i> ⁺	50	<i>pīs nū</i> ⁺	500	<i>kòbís nū</i> ⁺
6	<i>àyúèbù</i> ⁺	60	<i>pīs yúèbù</i> ⁺	600	<i>kòbís yúèbù</i> ⁺
7	<i>àyópè</i> ⁺	70	<i>pīs yópè</i> ⁺	700	<i>kòbís yópè</i> ⁺
8	<i>àní</i> ⁼	80	<i>pīs ní</i> ⁼	800	<i>kòbís ní</i> ⁼
9	<i>àwā</i> ⁺	90	<i>pīs wā</i> ⁺	900	<i>kòbís wā</i> ⁺

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 *àí*⁺.

kòbīgā⁼ has LF like the SF, not **kòbígāa*, contrary to the usual rule for forms with Apocope Blocking.

"Thousand" is a regular *r*^ε|*a*⁺ Class noun, *tūsí*^ε/: *tūsá àtán*['] "3000."

"Half" is *pū-súk*^a pl *pū-súgùs*^ε.

Other numbers are formed with *nē* "with, and":

kòbís tán['] *nē pīs yúèbù nē nū* "three hundred and sixty-five"

11 to 19 have the special contracted forms

pī nē yīnní, *pī nē yí*, *pī nē tán*['] ... *pī nē wā* or alternatively
pī nā yīnní, *pī nā yí*, *pī nā tán*['] ... *pī nā wā*

The clitic *à-* is omitted after *nē* "with", and sometimes also after focus *nē*^{+/}:

Lì à nē nāasí. / *Lì à né ànāasí*. "They're four."

The forms *àyínā*^{+/} *àtánā*^{+/} mean "two, three exactly." If I have four children

M mór bīsá *àtán*['].

"I have three children."

1SG have child:**PL NUM**:three.

is true, though misleading

but *M mór bīsá àtánā*.

"I have exactly three children." is false.

These forms can also be used after *nē* "and", as in *pīi nē yíḡā* "twelve exactly." They are exceptional in not permitting focus with the particle *nē*⁺/ [33.1.2.2](#).

Yīnní⁺ can also be construed with a preceding noun cb:

	<i>kūg-yínní</i> ⁺	"one stone" (M Raising	8.4)
cf	<i>kūgvr yīnní</i> ⁺	"one stone" (no M Raising	19.9.1)

In Dagbani both "one" and "ten" can be used after a combining form, but Kusaal has only a few isolated forms like *dà-pīga* "ten days".

After personal pronouns the number prefix is *bà-* instead of *à-* [16.2.1](#):

<i>tì bàtán'</i>	"we three"
<i>yà bàyópòḡ</i>	"you seven"
<i>bà bàyí</i>	"they two"

16.2.3 Counting Forms

1 to 9 have different forms used in counting, lacking Apocope Blocking and using the number prefix *ḡ-* instead of *à-* [16.2.1](#). The *ḡ* is syllabic, and assimilates its position of articulation to the following consonant.

1	<i>yēóḡ</i> or <i>àdàkóḡ'</i>	6	<i>ḡyúèb</i>
2	<i>ḡyí</i>	7	<i>ḡpòḡ</i> [tone sic]
3	<i>ḡtán'</i>	8	<i>ḡnīí</i>
4	<i>ḡnāas</i>	9	<i>ḡwāḡ</i>
5	<i>ḡnū</i>	continuing <i>pīga</i> , <i>pīi nē yí</i> as with quantifiers	

Àdàkóḡ' can also be used as a quantifier:

<i>náaf àdàkóḡ'</i>	"one cow"
<i>būvg àdàkóḡ'</i>	"one goat"

Lì ká' àdàkóḡ'ḡ ⁺∅. "It's not one."

3INAN NEG.BE NUM:one NEG.

Referring to the numbers in the abstract, as in performing arithmetic, the quantifier forms are used, not the counting forms:

Àyí námá_ àyí á nē nāasí.

NUM:two PL NUM:two COP FOC four.

"Two two's are four."

16.2.4 Adjectives and Ordinal Constructions

yīmmír^ε *yīmmá*⁺ *yīm-* "single, alone"

e.g. *bì-yīmmír* "only child"
wāb-yīmmír "solitary elephant"

There are two words meaning "one of a pair."

nyàuk^ɔ pl *nyà'ad*^ε is only used for eyes:

nīf-nyáuk "one eye"
bà-nīf-nyáuk "one-eyed dog"

yīuŋ^ɔ pl *yīná*⁺ is used for other normally paired body parts:

tùb-yīuŋ "one ear"
bì-tùb-yīná "one-eared children"

The only single-word ordinal is

dēɛŋ^a *dēɛŋs*^ε *dēɛŋ-* "first"
 or *dēɛmɪs*^ε
 or *dēɛna*⁺

as in *sōb-dēɛŋ* "first census" (Lk 2:2, 1976.)

The concept "first" can also be expressed by using *yīgá*⁺ "firstly" as a pre-determiner:

yīgá kùm-vō'ugír "first resurrection" NT.

For other ordinals two constructions occur.

One is to use a periphrasis with *pàas*^ε or *pè'εs*^ε "add up to":

dàu-kànɪ pè'εsa_ àyí lā
 man-REL.SG add.up.to NUM:two ART
 "the second man" ("man who has added up to two")

lìnɪ pàasa_ àtán' lā
 REL.INAN add.up.to NUM:three ART
 "the third one"

Another is to use numbers as pre-dependents before *dāan*^a "owner of ..."; such phrases are then themselves used either as NP heads or as post-determiners:

<i>àyí dāan lā</i>	"the second one"
<i>būugá àtán' dāan lā</i>	"the third goat"

Yīgá dāan may be used for "first."

In a story in "*Kusaal Solima ne Siilima*" ordinal forms used in counting "first, second, third ..." appear without Apocope Blocking:

kɔŋ' daan, ayi daan, ataŋ' daan, anaas daan, anu daan, ayuɛb daan, apɔɛ daan, anii daan, awaɛ daan, piig daan

My informants use the ordinary quantifier forms here.

16.2.5 Adverbs

Multiplicatives (answering *àbùláy?* "how many-fold?") are expressed

<i>yīmmú</i> ⁺	"straight away, at once"
<i>àbùyí</i> ⁺	"twice"
<i>àbùtán'</i> ⁺	"three times"
<i>àbùnāasí</i> ⁺	"four times"

and so on, with the same stems after the prefixes as for the quantifiers, up to

<i>bùpīga</i> ⁺	"ten times"
----------------------------	-------------

The *à-* of these forms is not the number prefix but the manner-adverb formant, and a LF-final vowel mora before it is *-ɪ* not *-a*; its attachment only to 2-9 is presumably therefore analogical.

Answers to *nɔ́crá àláy* "how many times?" have forms of the pattern

<i>nɔ́cr yīnní</i> ⁺	"once"
<i>nɔ́crá àtán'</i> ⁺	"three times"
or <i>nɔ́crím bùtán'</i> ⁺	"three times" NT

This *nɔ́cr* is not "mouth" (= Mooré *nóorè*) but corresponds to Mooré *náooré* "times", homophonous with Mooré *náooré* "leg"; cf Toende Kusaal *nɔ́ʔt* = Agolle *nóbìr* "leg". Original open and closed *oo* fall together when nasalised 4.1.1. For the semantics cf Hausa *sàu ukù* "three times" *sau* "foot(print)." Niggli's Dictionnaire

gives Toende *nɔ'ɔt* (tone *sic*) in the sense "fois" and even has *nɔba ayi* beside *nɔ'ɔt ayi* "deux fois." Agolle *nɔɔr* "times" does not have a glottalised vowel, however.

Distributives ("two by two" etc) are reduplicated forms without Apocope Blocking; there is no M Raising of the second part except with 10, 100, 1000:

1	<i>yīn yīn</i>	10	<i>pīi pīg</i>	100	<i>kòbɪg kóbìg</i>
2	<i>àyí yí</i>	20	<i>pīsí pīsí</i>	200	<i>kòbɪsí kóbɪsí</i> or <i>kòbɪs yí yí</i>
3	<i>àtán' tán'</i>	30	<i>pīs tán' tán'</i>	300	<i>kòbɪs tán' tán'</i>
4	<i>ànāas nāas</i>	40	<i>pīs nāas nāas</i>		<i>etc</i>
5	<i>ànū nū</i>	50	<i>pīs nū nū</i>	1000	<i>tūsɪr túsìr</i>
6	<i>àyúèb yúèb</i>	60	<i>pīs yúèb yúèb</i>		
7	<i>àyópɔ̀ɔ̀ pɔ̀ɔ̀</i>	70	<i>pīs yópɔ̀ɔ̀ pɔ̀ɔ̀</i>		
8	<i>àníi níi</i>	80	<i>pīs níi níi</i>		
9	<i>àwāɛ wāɛ</i>	90	<i>pīs wāɛ wāɛ</i>		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive:

pīs nū nē nāas nāas "by fifty-fours"

The distributives can have a preceding NP as a determiner:

dābá àyópɔ̀ɔ̀ pɔ̀ɔ̀ "weekly" ("by sevens of days")

16.3 Proquantifiers

Quantifiers have corresponding proforms; the *à-* is the *number* prefix, and induces preceding LF-final *-a* not *-ɪ* 8.2.2; contrast the Proadverbs 17.1.

Demonstrative

àlá⁺

"so much/many"

Indefinite

sɪ'əm^m

"some amount"

Interrogative

àlá⁺

"how much/many?"

17 Adverbs

Adverbs can be broadly categorised as adverbs of time, place or manner.

Many adverbs are formally identical to nouns, and the question may arise in such cases as to whether they should be regarded as simply adverbial uses of words which are in fact primarily nouns; the matter is rendered more complicated by the fact that AdvPs can be arguments of verbs in some circumstances [20.5](#), and that adverbs other than proforms may also appear as modifiers and determiners within NPs [19.7.2.3](#) [19.8.2.3](#).

Unequivocal adverbs include the proadverbs listed in [17.1](#), along with various types which do not conform to ordinary noun structure.

Among time adverbs, these include

<i>zīná</i> ⁺	"today"
<i>sù'əs</i> ^a	"yesterday"
<i>dūnná</i> ⁺	"this year"

Various time words which resemble nouns in form nevertheless are distinguishable morphologically from nouns by the fact that they lack cb or pl forms, and syntactically in that they cannot be referred to by pronouns; these include

<i>bēog</i> ^ɔ	"tomorrow"
--------------------------	------------

The word

<i>dāar</i> ^ε	"day after tomorrow/day before yesterday"
--------------------------	---

behaves similarly in this sense, but is homophonous with *dāar*^ε "day", which is a noun. Other words usable as time adverbs are also capable of being employed as full-fledged nouns [35.8](#):

<i>yú'vŋ</i> ^ɔ	"night"
<i>nīntāŋ</i> ^{a/}	"heat of the day, early afternoon"
<i>úun</i> ^{nε}	"dry season"

On the whole, such nouns are likely to appear with dependents of their own when used in time AdvPs, and words of this type can be treated as special instances of the general principle that any NP with reference to a time may be used as a time AdvP. Categorisation as true time adverbs can be restricted to those which (like manner adverbs) do not accept any dependents.

Locative adverbs comprise proforms along with Kusaasi place names; other locative AdvPs use the locative particle *nĩ*^{+/~} *n*^ε [20.3](#). It is not possible to use a noun other than a place name by itself as a place adverb, except for a limited set of nouns which are also used as postpositions [20.6](#), most notably *zūg*^{ɔ/} "head" in the sense "on, onto, owing to." Although the origin of such postpositions is transparent, synchronically the postpositions are separate lexical items from the homophonous nouns, and the process of zero-derivation that created them is no longer active.

Manner adverbs again include proforms; besides these there are several distinctive formations. Although various NP types can be used as manner AdvPs, as with time adverbs, true manner-adverbs cannot take any dependents.

Several adjective stems form manner-adverbs with an ending *-ga*⁺, i.e. *g*^a|*s*^ε Class sg along with Apocope Blocking [6.4](#):

<i>sùṇā</i> ^{+/}	"well; very much"
<i>mā'asígā</i> ^{+/}	"coolly"
<i>tūlígā</i> ^{+/}	"hotly"
<i>gīṇa</i> ⁺	"shortly"
<i>bōgusígā</i> ^{+/}	"softly"
<i>sàalígā</i> ^{+/}	"smoothly"
<i>nyèesígā</i> ^{+/}	"self-confidently"

Cf also *yīgá*⁺ "firstly" see [16.2.4](#).

Other manner-adverbs with Apocope Blocking include *pāalú*⁺ "openly", and

<i>nyāe</i> ^{nε/}	"brightly, clearly"
----------------------------	---------------------

Even prior to 2016, the NT always writes the SF of *nyāe*^{nε/} as *nyain*. This is probably simply a traditional orthographic anomaly; if it represents an actual variant, it might be a form containing the locative particle: *nyāen*^{ε/}, but not only my informants but also the [audio version of the NT](#) always have [jãĩ]; cf Toende *yǎí id* (though *ɪ* actually is the usual Toende equivalent of Agolle Locative *n*^ε.) The LF *nyāen*^ε is an instance of the addition of *-nε* to make secondary LFs, as in words with Apocope Blocking which do not end in short vowels [6.4](#).

The word shows the characteristic distribution of a manner-adverb rather than a noun, appearing as complement of *àṇ*^a "be something" and as an adjunct:

Wina'am a su'um nyain.
Wínà'am áṇ súm nyāe.
 God COP good:ABSTR brightly.
 "God is light." (1 Jn 1:5, 1996)

... *kɛ ka ti lieb nyain*.

... *ké kà tì líàb nyāe*.

... cause and **1PL** become brightly.

"... make us light." (1 Jn 1:7)

... *na nye lini nie nyain pamm*

... *nà nyē línì nìe nyāe pāmm*

... **IRR** see **REL.INAN** appear brightly much

"...will see a great light" ["what appears very brightly"] (Mt 4:16, 1976)

The **manner-adverb prefix à-** appears before some nominal stems which are also followed by Apocope Blocking [20.4](#):

àmēŋá⁺

"truly"

àsīda⁺

"truly"

àníŋà⁺

"promptly"

The same prefix is also seen in a number of proadverbs and in the locative *àgól*^{lɛ} "upwards" [20.3](#). Words with this prefix are all Liaison Words. The prefix is followed by L raising, like the number prefix, but differs from it in that it does not cause a preceding LF-final vowel mora to appear as *-a* [8.2.2](#).

A number of manner-adverbs are formed by **reduplication of roots**.

nà'anā^{+/}

"easily"

tò'ɔtɔ^{+/}

"straight away" (Mooré *taotao id*)

kɔŋ'ɔkɔ⁺

"solely, by oneself"

Conversion of abstract non-count nouns can produce Manner adverbs; so particularly with *m*^m Class abstracts. Some Adverbial Phrases of manner are formed by conversion of abstract nouns:

pāalím^m

"recently" (*pāalíg*^a "new")

When noun forms are used as manner-adverbs in this way, they are like basic manner-adverbs in not accepting dependents. It thus seems reasonable to regard this process as word-level zero-derivation.

Even concrete count nouns employed in an abstract generic sense can be used adverbially [20.4](#) but this is a syntactic rather than morphological process.

17.1 Proadverbs

Adverbs have corresponding proforms.

	<u>Demonstrative</u>		<u>Indefinite</u>		<u>Interrogative</u>
Place	<i>kpē</i> ⁺	"here"	<i>zìŋ'-sī'a</i> ⁺	<i>yáa ní</i> ⁺	"where?"
	<i>kpēlá</i> ⁺	"there"	"somewhere"	<i>yáa</i>	"whither
	<i>àní</i> ⁺	"there"			/whence?"
	<i>àníná</i> ^{+/}	"there"			
Time	<i>nānná</i> ⁺	"now"	<i>sān-sí'a</i> ⁺	<i>sān-kán</i> ^ε	"when?"
	<i>nānná-nā</i> ^{+/}	"now"	"sometime"	<i>būn-dáàr</i> ^ε	"which day?"
	<i>sān-kán</i> ^ε	"then"		<i>bò-wìn</i> ^{nε}	"what time
					of day?"
Manner	<i>àŋwá</i> ⁺	"like this"	<i>sī'am</i> ^m	<i>wēlá</i> ⁺	"how?"
	<i>àwá nā</i> ^{+/}	"like this"	"somehow"		
	<i>àlá</i> ⁺	"like that"			

The indefinites are used in Relative Clauses [31.2.1](#).

The *à-* of the Manner forms is the manner-adverb prefix and is preceded by the LF-final vowel *-i*, while the *à-* of proquantifiers is the *number* prefix, and induces preceding LF-final *-a* not *-i* [8.2.2](#) [16.3](#).

Proforms expressing reason are formed with the postposition *zūg*^{ɔ/} [20.6](#):
àlá zùg^ɔ "because of that", *bōzúgò?* "why?" (cf *bō zúgō* "because" [27.1.3](#).)

18 Unanalysable Complex Stems

There are numerous words in Kusaal (not least the very name of the language, *Kūsáàl*^ε) which are more complex structurally than simple unprefixing stem types but are simply en bloc unanalysable units. Tonally, they most often resemble forms with nominal prefixes, though examples occur with an initial H toneme. They are often aberrant segmentally, for example in containing unusual consonant clusters, or showing contrastive nasalisation in the "prefix." By no means all of these are identifiable loanwords; in particular, many names of ethnic groups and clans fall into this category.

Examples of such complex stems include

<i>Kūsáàs</i> ^ε	"Kusaasi"
<i>Nwāmpūris</i> ^{ε/}	"Mamprussi"
<i>Kòtām</i> ^{ma/}	WK's clan
<i>gbányà'a</i> ⁼	"lazy person" <i>gonya'am</i> "idleness" 1976 NT cf Dagbani <i>gbinyayli</i> "laziness"

18.1 Loanwords

As usual cross-linguistically, nouns form by far the largest group of identifiable loanwords. They are sometimes fitted into the noun class system by analogy [9.7](#). Analogy may also cause the initial à- of loanwords like *àrazánà*⁺ *àrazàk*^a below to be treated tonally as Fixed-L [8.3.1](#).

Most loanwords were probably borrowed from **Hausa** in the first instance. Many such loans stand out prominently as foreign elements by their deviation from the typical structure of Kusaal words, with its limitation of possible vowel contrasts by position within the word and its restrictions on consonant distributions.

Among nouns borrowed from Hausa are

<i>dāká</i> ⁺	"box"	← <i>àdakàa</i>
<i>gādu</i> ⁺	"bed"	← <i>gadoo</i>
<i>kèèkè</i> ⁺	"bicycle"	← <i>kèèkè</i>
<i>bákpàɛ</i> ⁺	"week"	← <i>bakwài</i> (Hausa "seven")

Identifiable verb loanwords are much less common, but there are examples:

<i>dàam</i> ^m	"disturb, trouble"	← <i>dàamaa</i>
<i>bùg</i> ^ε	"get drunk"	← <i>bùgu</i>
Hausa idiom: literally "get thoroughly beaten"		

Quite a few function words are certainly loans, and probably from Hausa:

<i>àsée</i>	"except"	← <i>sai</i>
<i>kōv</i>	"or"	← <i>koo</i>

With *báa* "not a..." [32.4](#) ← *bâa*

bâa is part of the core Hausa system of negation, so Hausa is almost certainly the origin of the loan (though even here, compare Humburi Senni *bá:y-à*: "nothing.")

The existence of the same words in the Hausa even of Nigeria confirms that these are loanwords in Kusaal, but the actual immediate source of the borrowing is frequently not certain, because Hausa (like English) is not only a great lender of words to other languages but also a great borrower. Sometimes such words also occur in many other languages of the Sahel and Savanna: *hālí*⁺ "until", Hausa *har*, Kikara Songhay *hálì id*, possibly from Arabic حتى *hatta*: (etymology suggested in Heath 2005); *lâmbò*^ʔ "garden", Hausa *lâmbuu*, but also e.g. Humburi Senni *lâmbò* "enclosed vegetable garden", where Heath speculates on a Songhay-internal connexion with *lâmbà*, "lurk, hide (e.g. behind a wall or tree)", a word which in turn seems to be connected with the Kusaal Invariable Verb *lâbi*^{ya} "be crouching, hiding behind something", Hausa *laɓɛɛ id*; cf also Kikara Songhay *lá:bú* "hide behind or under something." In the case of Kusaal *lâbi*^{ya} and Hausa *laɓɛɛ*, the coincidence of highly specific meanings with very similar forms is striking. However, if the Kusaal word is a loan, it has been remarkably well integrated into the language, with an Invariable Verb type Long Form in *-ya* [2.2.2](#) and Variable Verb assume-stance and make-assume-stance derivatives [13.2.1.1](#).

Hausa loans have travelled far in West Africa, with an entry point into Songhay via the Zarma and Kaado languages of Niger, e.g. Humburi *tílásò* "duty", Zarma, Kaado *tílàs* ← Hausa *tiilàs*. Accordingly, wide distribution does not in itself rule out Hausa origin or transmission.

Words of **Arabic** origin are frequent throughout the languages of the Sahel and Savanna; thus, among many others

<i>Tàláatà</i> ⁺	"Tuesday"	Hausa	<i>Tàlaatàa</i>	
		Arabic	الثلاثاء	<i>ʔaθ-θala:θa:ʔ(i)</i>
<i>láafiya</i> ⁺	"health"	Hausa	<i>laafiyàa</i>	<i>id</i>
		Mooré	<i>làafí</i>	<i>id</i>
		Kikara Songhay	<i>ʔàlà:fíyà</i>	<i>id</i>
		Arabic	العافية	<i>ʔal-ʕa:fiya(tu)</i>
				"(the) wellness"

<i>àrazàk</i> ^a	"riches"	Hausa	<i>arzìkii</i>	<i>id</i>
		Mooré	<i>àrzéká</i>	<i>id</i>
		Kikara Songhay	<i>ʔárzúkù</i>	"good luck"
		Arabic	الرزق <i>ʔar-rizq(u)</i>	"(the) livelihood"
		cf plural ارزاق <i>ʔarza:q(un)</i>		
<i>àrazánà</i> ⁺	"heaven, sky"	Hausa	<i>àljannàa</i>	"heaven, paradise"
		Mooré	<i>àrzǎnà</i>	<i>id</i>
		Kikara Songhay	<i>ʔàljánnà</i>	<i>id</i>
		Arabic	الجنة <i>ʔal-janna(tu)</i>	"(the) garden, paradise"
<i>yàddā</i> ^{+/} <i>yàdā</i> WK	"assent"	Hausa	<i>yàrda</i>	(verb) "consent"
		Gao Songhay	<i>yarda/yadda</i>	<i>id</i>
		Kikara Songhay	<i>yárrè</i>	<i>id</i>
		probably Arabic	يرضى <i>yardʿa</i> :	3sg m ipfv of
			رضى <i>radʿiy(a)</i>	"be satisfied"

Given the importance of *Gaanancii* as the lingua franca of northern Ghana, it is likely that such Arabic words have normally entered Kusaal via Hausa. In most cases this is impossible to prove or disprove, but occasionally there is a suggestive mismatch between the Hausa and the Kusaal forms, which more nearly resemble those of some other language. Mooré is a possible alternative intermediary for Arabic loanwords in Kusaal; Hausa influence in Mooré is, at least, certainly less than in Kusaal, and such words may have reached Mooré from other West African languages widely used by Muslims, such as Dyula or the various Songhay languages.

Thus *màljāk*^{a/} "angel" (always *malek* in NT versions prior to 2016) is undoubtedly ultimately from the Arabic ملاك *malʔak(un)* (itself, of course, a loanword.) The vocalism suggests an origin in Mooré *màlékà*, perhaps via Toende *màlék*. The word is usually found in Christian materials, which would be consistent with an immediate source in Mooré and/or Toende Kusaal (see below.) None of these forms seems likely to be borrowed from the Hausa *màlaa'ikàa*, which is itself from the Arabic plural ملائكة *mala:ʔika(tu)*. A similar case in the realm of religion is *Sūtānà*⁺ "Satan", corresponding to Mooré *Sutāana* (cf Bambara *sitanε*) rather than Hausa *shàidān*, which is a learned form close to the Arabic شيطان *ʔaytʿa:n(u)*. Again, *dūniya*⁺ "world" has the short *u* vowel of the Arabic دنيا *dunya:* rather than the long *uu* of Hausa *duuniyàa*; Niggle has Mooré *dūniya*. The all-M tonemes of *dūniya*⁺ are surprising, but the limited possibilities for different word-internal tone contrasts in

Kusaal prevent straightforward copying of the tones of source languages and presumably result in analogy playing a great rôle in Tone Pattern assignment.

Loanwords from **Songhay** languages, probably borrowed via Mooré, include

<i>bùrkìn</i> ^a	"honest person" Dagbani <i>bilchina</i> "free, not slave" Mooré <i>bùrkĩná</i> "free, noble" (as in "Burkina Faso") even Yoruba <i>bòròkinní</i> "gentleman" cf Kikara Songhay <i>bòrkĩn</i> "noble (caste)"; the first component is probably <i>bòrò</i> "person."
<i>bàṽṽ</i> ⁺	only as in e.g. <i>ò kpèṽ' báṽṽ</i> . (<i>kpèṽ</i> ⁺ "enter") "He was circumcised." cf Kikara Songhay <i>bàngù</i> "pool, spring" in the idiom <i>à húró bàṽṽ</i> , literally "He entered the pool." (not "forest", as in some sources: Trimingham 1959) Mooré <i>kě bãongó</i> (<i>kě</i> "enter" = <i>kpèṽ</i> ⁺)

Loans from other **Western Oti-Volta languages** are difficult to distinguish from cognates; the vast majority of similar words are due to common inheritance and not borrowing. It is notable, however, that Kusaal speakers themselves very often ascribe forms which are not part of their own usage to **Mooré** influence.

As an illustration of the difficulties, a word shown to be a loan by its phonology is *Wínnà'am*^m or *Wínà'am*^m "God" (realised with *-nn-* by WK, but consistently *Wina'am* in the NT/KB and other written materials.) The word refers particularly to the Christian God; the Creator of traditional religion appears simply as *Wīn*^{nɛ/} in proverbs etc. *Wínnà'am* looks analysable as a compound of *wīn*^{nɛ/} "god" and the stem of *nà'ab*^a "chief" or *nā'am*^m "chieftaincy", but the tonal structure is unparalleled for an Agolle Kusaal compound (one would expect **Wīn-ná'àm*), and the prevalence of the form *Wínà'am* with single *-n-* also shows that the form is not a synchronic compound within Agolle Kusaal. The earliest Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso), using Mooré materials, so one possible source might be the corresponding Mooré word *Wěnnàám*. This would not account for the glottalised *-a'a-*; and while conceivably that might be due to the analogy of *nà'ab*^a, it probably rather shows that the immediate source of the loan is not Mooré but the **Toende Kusaal** of Burkina/Haute Volta. Niggli's Dictionnaire has *Wínā'am*, which shows a tonal fall like the Agolle *Wínà'am*. Furthermore, all instances of the word in Niggli's materials show single *-n-*; Niggli's account implies (though it does not explicitly state) that contrastive gemination in Toende Kusaal is preserved only before the affix vowels of Long Forms.

A similar case is the odd form *faangid* used for "saviour" in the New Testament versions. Informants read it as [fã:gɪd]; the preservation of *g* in this position 6.3.1 is almost completely isolated within Agolle Kusaal (the sole other example I have found is the strange gerund form *zī'əg*^a of *zī'e*^{ya} "be standing" used by DK KT instead of KED *zī'a*⁺ 12.1.1.2.) The expected agent noun from *fāeŋ*^{+/} "save" is *fāaŋd*^{a/}, which was probably avoided for the meaning "saviour" as it is identical to the agent noun of *fāŋ*⁺ "rob, snatch", itself found in the NT as *faand* "robber." WK uses the identical agent noun form *fāaŋd*^{a/} for both verbs, specifically confirming both meanings.

As with *Wínà'am*, the forms may be loans from Toende Kusaal, where the deletion of **g* seems to be partial, with the details varying between speakers (Niggli, "La phonologie du kusaal.") Loss of **g* is consistent word-finally after *all* long vowels (*bíi* "child" = *bīig*^a, *bōō* "goat" = *bōovg*^a), and optional or absent otherwise:

<i>páa</i>	"arriver" (Agolle <i>pāe</i> ⁺ "reach")
<i>Õ bu paage.</i>	"Il n'est pas arrivé." (Agolle <i>Ò pū pāée.</i>)

Niggli's "Dictionnaire" has both *fāagit* and *fāat* for "*sauveur*", with *fāat* also glossed as "*voleur, brigand*."

A more everyday example is WK's form *kīibú*⁺ cb *kīb-* "soap." Written sources have *kī'ib*, probably *kī'ib*^{3/} "soap", cf Toende *kí'ip* in Niggli's "Dictionnaire" (Farefare *kí'ib*^{3/}.) The final *-u* of *kīibú* suggests borrowing from a related language which does not delete final short vowels in citation forms. The tense stem vowel further suggests that the source was the **Mampruli** *kyiibu*, as loss of the tense/lax distinction in the high vowels is characteristic of the subgroup of languages which includes Mampruli, Hanga and Dagbani, and in particular is not seen in Mooré.

Other words with singulars ending in *-ɪ*⁺ or *-u*⁺ 9.6 like *kābirí*⁺ "permission for entry" and *sūgurú*⁺ "forbearance" may similarly have originated as loans from other Western Oti-Volta languages.

A few loans from **English** are found. English is in most respects even less like Kusaal in phonological structure than Hausa is, and those loanwords which are sufficiently naturalised that they are used even by speakers unfamiliar with English have often undergone considerable changes:

<i>àlópìr</i> ^ε	"aeroplane"; perhaps a back-formation from [alɔpɪlɪn] taken as a locative <i>àlópìrɪn</i> ^{ε/}
<i>dɔ'átà</i> ⁺	"doctor" (cf Dagbani <i>dóyté id</i>)
<i>tóklàe</i> ⁺	"torch" ← "torchlight"
<i>lór</i> ^ε	"car, lorry"
	(often borrowed even in Francophone Africa: cf Kabiye <i>lɔrɪye</i> , Mooré <i>lórè</i>)

The word *pootum* "complain about officially" found in the 1976 NT version is ultimately from the English "report"; cf Mampruli, Buli *pooti id*.

English stress may be represented by a H toneme which remains fixed throughout the paradigm: *lǎyà* "cars", not **lǎyá* 9.7.

Several loanwords of English origin have probably been transmitted via Hausa:

<i>kǎtù</i> ⁺	"court"	Hausa <i>kootù</i>
<i>sǎgǎ</i> ^a	"soldier"	Hausa <i>soojà</i>
<i>tǎɛbùl</i> ^ɛ	"table"	Hausa <i>teebùr</i>
<i>wādá</i> ⁺	"law"	Hausa <i>oodà</i> (← English "order")
		sg <i>wādir</i> ^{ɛ/}
		cb <i>wād-</i> by back-formation

The only **French** loan identified in my materials is *làmpǎ* (i.e. *l'impôt*) "tax", as in *làmpǎ-dí'ǎs*^a "tax gatherer", which is perhaps a legacy of early Bible translation activity by workers coming from Haute Volta (though it is found also in Dagbani.) There are naturally many more French loans in Burkina Faso Toende (Niggli 2014.)

I have identified few loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana; in part, this probably reflects my own lack of knowledge of that language. However, as of 1995, knowledge of Twi was certainly less common among the Kusaasi than knowledge of Hausa or Mooré.

Loans include

<i>kǎdú</i> ⁺	"banana"	← <i>kwadu</i>	
<i>sāafi</i> ⁺ (?tones)	"lock, key"	← <i>safě</i>	"key"
<i>būrɪyá</i> ⁺	"Christmas"	← <i>bronya</i>	
		(itself of unclear origin)	

Syntax

19 Noun Phrases

19.1 Noun Phrases: Overview

A Noun Phrase has a noun, pronoun or quantifier as head. If present, the **article** /ā⁺/ occurs last in a NP [19.3](#). (For the sole exception, see [23.7](#).)

Dependent Nominal Phrases may precede the head, possibly recursively, as **Pre-determiners**. The meaning depends on the nature of the head: some heads have specialised rôles [19.9.3](#); with Quantifiers or pronoun heads the sense is **partitive** [19.9.1](#); pre-determiners of gerunds and similar nouns are subjects [19.9.2](#); pre-determiners of all other heads are **possessors** [19.7.3](#).

A Nominal Phrase may be a Relative Clause [31.2](#). No dependents may occur with a Relative Clause apart from the article or a pre-determiner. Nominal Phrases may be formed by **Coordination** [19.4](#) or by **Apposition** [19.5](#).

As is characteristic of Oti-Volta, **compounding** [19.6](#) is pervasive in NP formation, often where most languages use uncompounded constructions. Closeness of syntactic binding need not be reflected in whether the components are compounded or not [19.6.1](#). Adjectives and post-determining pronouns regularly compound with the preceding head; accordingly the combining form is a regular part of the noun paradigm. Combining forms also function as **Pre-modifiers**, particularly before deverbal nouns in the rôle of arguments.

Uncombined NPs of various kinds also appear within NPs as pre-modifiers, and uncombined Quantifier and Adverbial Phrases may follow heads as post-determiners.

Personal pronouns accept only post-determining pronouns as dependents.

19.2 Noun Phrase Categories

19.2.1 Number

Number is a category only of nouns and pronouns, along with quantifiers when heading Quantifier Phrases. Agreement is confined to pronouns. Verbal Predicators show no agreement with any argument (on plural-subject imperatives see [28.2.3](#).) However, in noun + adjective and noun + post-determining pronoun compounds, it is the dependent which inflects to show the number of the head noun cf [19.8.1](#).

Kusaal resembles English in distinguishing between **count** nouns, with singular and plural, and **mass** nouns which normally make no such distinction, and characteristically refer to liquids or substances or abstractions. Abstract nouns may be count nouns; so, for example with gerund forms which can be interpreted as referring to particular instances of the action of the verb:

<i>zōɔg</i> ^ɔ	<i>zōɔs</i> ^ɛ		"race"
<i>bū'əsúg</i> ^ɔ	<i>bū'əsá</i> ⁺	<i>bū'əs-</i>	"question"
<i>zàaŋsúg</i> ^ɔ	<i>zàaŋsíma</i> ⁺	<i>zàaŋsúg-</i>	"dream"

Some abstract count nouns are formally plural but construed as singular [9.5](#)

<i>dì'əma</i> ⁺	"festival"
<i>pjàŋ'ad</i> ^ɛ	"word, language"
<i>tēŋ'əsá</i> ⁺	"thought"

Cf *tēŋ'əsá yīnní* "one thought" (Acts 4:32).

Typical underived mass nouns belong to the *b*^ɔ and *m*^m Noun Classes, which do not have paired sg/pl suffixes [9.1](#), but some are formally plural [9.5](#), and gerunds of 3-mora stem verbs regularly show sg *r*^ɛ or *g*^ɔ suffixes [12.1.1.1](#).

The count/mass distinction is significant in the choice of quantifiers [16.1](#) and when plurals are formed with *nám*^a [9.4](#), and it affects the meaning of constructions with preceding NPs as dependents [19.7](#).

Mass nouns can be used in count senses [9.4](#) (as in English):

<i>dāam nám</i>	"beers"
-----------------	---------

Count nouns can be used in mass senses, where number distinctions are irrelevant [19.7.2.2](#):

<i>fūug dɔ́ɔg</i>	"tent" (cloth hut)
cf <i>fūug</i>	"item of clothing, shirt"
<i>dàad bún-nám</i>	"wooden things"
cf <i>dàad</i>	"pieces of wood"

Manner-adverbs resemble mass nouns syntactically. Mass nouns may occur as manner adverbs, as may count nouns used where number is irrelevant [20.4](#):

<i>M kēj nōbá.</i>	"I went on foot." SB
1SG go leg:PL.	WK corrected this to
	<i>M kēj nē nōbá, (nē "with")</i>

19.2.2 Gender

Gender is marked only in pronouns. It is natural, distinguishing **animate** from **inanimate**. Not only human beings, but also supernatural beings, "fairies" and the like have "animate" gender. Without a context, my informants all rejected

*Ò à nē náaf. attempted "It is a cow."
3AN COP FOC COW:SG.

Nevertheless, the Bible versions and other written materials often do use the animate pronouns for higher animals:

Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.

Bòŋ yá' bòòd yé ò lūbú f,

Donkey:SG if want that 3AN throw.off 2SG.OB,

fù pō nyētí ò túbāa⁺∅.

2SG NEG.IND see:DIPF 3AN ear:PL NEG.

"If a donkey wants to throw you off, you don't see his ears." KSS p44
 (i.e. "If there's a will, there's a way.")

Ka wief ya'a sigi li ni, li zuluŋ na paae o salibir.

Kà wíəf yá' sīgí lì nī, lì zùluŋ ná pāe ò sàlɪbɪr.

And horse:SG if descend 3INAN LOC, 3INAN depth IRR reach 3AN bridle:SG.

"If a horse goes down in it, its depth will reach its bridle." (Rev 14:20)

In stories where animals speak, they are naturally assigned animate gender. Trees, which are animate in the traditional Kusaasi world view, may also have animate gender:

Tiig wela bigisid on a si'em.

Tìg wélà bìgɪsɪd ɔn àŋ sɪ'əm.

Tree:SG fruit:PL show:DIPF 3AN:COMP COP INDF.ADV.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

In the 1996 version the gender has been changed to inanimate:

Tiig wela bigisid lin a tisi'a.

Tìg wélà bìgɪsɪd lín àŋ tí-sɪ'a.

Tree:SG fruit:PL show:IMP 3INAN:COMP COP tree-INDF.INAN.

"The fruit of the tree shows what tree it is." (Mt 12:33, 1996)

When body parts are metaphorically represented as having opinions in this New Testament passage, they have animate gender:

*Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbiŋ nii, lin ku nyanjin
keen ka o ka' ningbiŋ nii.*

Nóbìr yá' yèlī-n yē, ón pō áŋ nú'ùg lā zúg,

Leg:SG if say-REM that 3AN:COMP NEG.IND COP hand:SG ART upon,

ò kā' nín-gbīŋ níú +ø, līn kú nyāŋi-n_ ø

3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-REM SER

kēē-n kà ò kā' nín-gbīŋ níú +ø.

cause-REM and 3AN NEG.BE body-skin:SG LOC NEG.

"If the leg were to say, 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)

(In the 1996 version the indirect speech is changed to direct, as throughout.)

Babies may be counted as animate or inanimate gender:

Ò/Lì à nē bí-līa.

"He/she/it is a baby."

3AN/3INAN COP FOC child-baby:SG.

The relevant distinction thus appears to be whether the referent is being regarded as a potential thinking agent or "person"; if a first or second person pronoun could in principle apply, the gender is "animate."

At some points the language does make a clear distinction specifically between human and non-human. It is this distinction which is useful for predicting noun class membership on the basis of a SF [9.1 2.2.2](#), reflecting the fact that the ^a|^b^a Class has exclusively human reference. Only human-reference nouns can be used as modifiers after a head cb like adjectives [19.8.1.5](#); except for morphological reasons, probably only human-reference heads can be used with appositional Relative Clauses [31.2.3](#).

There has been a change, apparent to some extent already in the NT versions but complete in the speech of my informants, in the **alignment of gender and number**. An earlier opposition of an animate gender which distinguished singular from plural over against an inanimate gender which used the same forms for both numbers (resembling that described for modern Dagbani by Olawsky) has been replaced by a system which distinguishes animate/inanimate in the singular but has no gender distinction in the plural. In older sources inanimate pronoun forms are used indifferently for sg or pl, occasionally with *nām^a* plurals to avoid ambiguity. Although the 1976 NT uses the independent inanimate gender demonstrative pronoun *nē⁺/* as sg and pl, with *nē'-nām^a* also as a plural form, it already consistently uses the animate plurals *bāmmā⁺/* *bàn^ε* of the *dependent* pronouns for inanimate, and my informants use all animate plural forms freely for both genders:

Bà à nē kūgá.

"They are stones."

3PL COP FOC stone:PL.

In my informants' unselfconscious utterances there seem to be signs of gender distinctions breaking down altogether:

Nīf-káŋā, ōn sáŋ'àm nē.

Eye-**DEM.DEI.SG**, **3AN.CNTR** spoil **FOC**.

"This eye, it's spoilt." KT

M̃ pū nyē-ó-o ⁺∅.

"I can't find it [a stethoscope]" (Overheard)

1SG NEG.IND see-**3AN.OB NEG**.

sālima lá'àd nē ò bōtɪs "gold stuff and (gold) cups" WK

gold item:**PL** with **3AN** cup:**PL**

Speakers correct the gender to inanimate if their attention is drawn to it.

The dummy subject pronoun "it" is always *lì*, never *ò*.

The inanimate sg pronoun subject *lì* is not changed to animate *ò* to agree with an animate complement of *àŋ*^a "be something":

Li ane Zugsoɓ la.

"It is the Lord." (Jn 21:7)

Lì à nē Zūg-sóɓ lā.

3INAN COP FOC head-one:**SG ART**.

19.2.3 Person

Person is a category confined to personal pronouns. The Verbal Predicator shows no agreement with any argument [22.1](#) (with a marginal exception for some speakers with plural commands [28.2.3](#).) Person is straightforward, with no inclusive/exclusive distinctions and no honorific uses. 2sg is used in proverbs for a generic "one":

Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.

Bòŋ yá' bòɔd yé ò lūbú f,

Donkey:**SG** if want that **3AN** throw.off **2SG.OB**,

fù pū nyḗtí ò túbāa ⁺∅.

2SG NEG.IND see:**DIPF 3AN** ear:**PL NEG**.

"If a donkey wants to throw you off, you don't see his ears." KSS p44
(i.e. "If there's a will, there's a way.")

The 3rd Person plural is used as a non-specific "they" for turning passive constructions actively, much as in English:

Bà yòɔdĩ f súŋàa +ø?

3PL pay:**DIPF** **2SG.OB** good:**ADV** **PQ?**

"Are you well paid?" "Do they [never mentioned] pay you well?" SB

This construction has become grammaticalised so far that the the object can be construed as the grammatical subject in a Serial VP construction [26.1](#), e.g.

Diib wusa nari ba di.

"All foods may be eaten." (Rom 14:20)

Dĩb wōsa nári ø bà dí.

Food all must **SER 3PL** eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis [27.1.5.2](#) and logophoric use of the free pronouns [29.3.2](#).

19.3 The Article *lā*^{+/}

The two words *lā*^{+/} and *ŋwà*⁺ presumably originated as corresponding deictics "that" and "this." Although *ŋwà* retains this sense, *lā*^{+/} in the great majority of its occurrences is a definite article. It retains a deictic sense, in opposition to *ŋwà*⁺, in the Non-verbal Predicators *n lā*, *n ŋwà* [25](#) and after demonstratives [15.2](#).

Unlike *lā*^{+/}, *ŋwà*⁺ can stand alone as a NP:

Ŋwà á nē bīg.

"This is a child." WK; tones *sic*.

This **COP FOC** child:**SG**.

Both *lā*^{+/} and *ŋwà*⁺ always stand finally in the NP (though this entire phrase may be a pre-determiner within another NP) except for the marginal case where a VP-final particle occurs in an *h*-Clause, when it may follow the article attached to the clause [23.7](#).

As the definite 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", unless there was an explicit prior mention of the referent:

Winnig lí yā.

"The sun has set."

Sun:**SG** fall **PFV**.

It is not used with pronouns, or with proper names of people or places, which are inherently definite:

<i>mān</i>	"me"
<i>À-Wīn</i>	"Awini"
<i>Bòk</i>	"Bawku"

Nor is it used with abstract mass nouns, which do not distinguish definite from indefinite (compare the neutralisation of the referring/non-referring distinction implied in their construction when they appear as pre-modifiers [19.7.2.2](#)):

Nɔŋilim pu naada.
Nòŋulím pō nāadá +∅.
 Love NEG.IND finish:DIPF NEG.
 "Love does not come to an end." (1 Cor 13:8)

Lā^{+/} is not used in vocatives:

Bīga +∅! "Child!"
 Child:SG voc!

This contrasts with *ŋwà*⁺, which is common in vocatives [28.2.4](#):

Bīs ŋwá! "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 like *bīg* "child" in

M bīg kā'e +∅. "I've no child" WK
 1SG child:SG NEG.BE NEG.

and with the complement of *àɛŋ*^a "be something" when used ascriptively [24.2](#):

Ò à nē bīg. "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, such as the introduction of a new character in a story [33.4](#):

Dau da be mori o biribing

Dāy dá bē_ ∅ mōrí_ ò bī-díbiŋ

Man:SG TNS EXIST SER have 3AN child-boy:SG

"Once there was a man who had a son ..." KSS p35

Anina ka o nye dau ka o yu'ur buon Aneas.

Àníná kà ò nyē dāy kà ò yū'ur búèn Aneas.

ADV:there and 3AN see man:SG and 3AN name:SG call:DIPF Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

Outside such contexts, a referential indefinite NP is usually *generic*; unlike English "the", *lā*^{+/} is not used with generic reference:

Tumtum pu gat o zugdaana.

Tùm-tùm pū gát ò zūg-dáanā +∅.

Work-worker:SG NEG.IND pass:DIPF 3AN head-owner:SG NEG.

"The servant does not surpass his master." (Jn 15:20)

Tiig walaa bigisid lin an tisi'a.

Tìg wélàa_ ∅ bìgisid lín àŋ tí-sī'a.

Tree:SG fruit:PL SER show:IMPF 3INAN:COMP COP tree-INDF.INAN.

"It's the fruit of the tree that shows what tree it is." (Mt 12:33)

Kusaas ye ...

"The Kusaasi say ..." KSS p16
drawing the moral of a story.

Generic reference core arguments are incompatible with a Verbal Predicator with the particle *nē*^{+/} in its aspectual sense [33.1.2.3](#).

A possessive pre-determining NP ending in *lā*^{+/} makes the following head definite, and the head does not itself take the article:

dụ'átà lā bîg

"the doctor's child"

not **dụ'átà lā bîg lā*

Pronouns and personal names as possessive pre-determiners do *not* have this effect; only pre-determiners *with the article*, and demonstrative pronouns [15.2](#), automatically make their NPs definite:

Wínà'am máljāk

"an angel of God"

Wínà'am máljāk lā

"the angel of God"

m̃ bīig

"my child" (at first mention)

m̃ bīig lā

"my child" (previously mentioned)

In the passage

Pu'a sɔ' da bɛ mɔr o bīpuŋ ka kikirig dɔl o. Ka o wum Yesu yɛla, ka kɛŋ igin o tuon. Ka sɔs Yesu ye o kadim kikirig la yis o bīig la ni.

Pu' à-s̃' dá bɛ̃ ø mór ò bī-púŋ kà kíkírɪg

Woman-INDF.AN TNS EXIST SER have 3AN child-girl:SG and fairy:SG

d̃ɔll-ó̃ ø. Kà ò wúm Yesu yéla, kà kɛ̃ŋ ø ígìn

follow 3AN.OB. And 3AN hear Jesus about, and go SER kneel.down

ò tùən. Kà sɔs Yesu yé ò kàdɪm kíkírɪg lā ø yís

3AN in.front. And beg Jesus that 3AN drive.out:IMP fairy:SG ART SER expel

ò bīig lā ní.

3AN child:SG ART LOC.

"There was a woman whose daughter was oppressed by a devil. She heard about Jesus and came and knelt down before him. She asked Jesus to cast the devil out of her child." (Mk 7:25-26)

the article does not occur in *ò bī-púŋ* "her daughter" on first introduction, but does occur in *ò bīig lā* "her child" after the reference is established, just as with nouns without possessive pre-determiners.

Compare

M̃ bīig kā'e +ø.

"I've no child" WK

1SG child:SG NEG.BE NEG.

M̃ bīig lā kā'e +ø.

"My child's not there" WK

1SG child:SG ART NEG.BE NEG.

Note also the characteristic idiom at first introduction of a new possessed referent seen in two of the examples above:

Pu'a sɔ' da bɛ mɔr o bīpuŋ

Pu' à-s̃' dá bɛ̃ ø mór ò bī-púŋ

Woman-INDF.AN TNS EXIST SER have 3AN child-girl:SG

"There was a woman who had a [literally "her"] daughter..." (Mk 7:25)

Dau da be mori o biribing

Dāy dá bē̃ ∅ mōrí ò bī-díbiŋ

Man:SG TNS EXIST SER have 3AN child-boy:SG

"Once there was a man who had a son ..." KSS p35

further demonstrating that pronoun possessors do not automatically entail definiteness of the head.

Compare the use of *yēlá*⁺ "about" of as a pre-modifier in NPs even when it has a definite pre-determiner itself [19.7.2.3](#), and the fact that postpositions (including the null allomorph of the locative marker [20.3](#)) may function for focus purposes as pragmatically non-recoverable despite following a definite pre-determiner [33.1.2.4](#).

Certain words consistently lack the article after a pronoun possessor even if they are specific old information, however; this may be a question of uniqueness within the particular context, occurring for example with words like *bā*^{+/} or *sàam*^{ma} "father." (It is possibly a feature characteristic of kinship terms or words that rarely appear without a possessor [35.1](#).)

An opposition between forms with and without the article, rather than definite versus indefinite, is seen in the distribution of the empty particle *nē* which follows complements of comparisons [21.1](#) when they lack the article, even if they are proper names or other NPs which do not normally appear with *lā*^{+/}.

For an unambiguously indefinite specific meaning like "some, another" the Indefinite pronouns are used [15.3](#).

Nā'-síabà ńgbìd nē mōɔd.

Cow **INDF.PL** chew:**DIPF FOC** grass:**PL**.

"Some cows are eating grass."

An Indefinite pronoun is necessary to make the head indefinite after a pre-determiner with the article:

dū'átà lā bí-sō'

"a child of the doctor's"

doctor:SG ART child **INDF.AN**

The number *yīnní*⁺ "one" is sometimes used to introduce a new referent:

Farisee dim nid yinne da be

Farisee dím nid yīnní dà bē ...

Pharisee individual.**PL** person:SG one TNS EXIST ...

"There was one man of the Pharisees ..." (Jn 3:1)

However, *yīnní* here is not bleached to the simple sense of an indefinite article; rather, the construction is parallel to e.g.

Dapa atan' n da be.

"There were once three men." KSS p16

Dāpá_ àtán' n dá bè.

Man:PL NUM:three SER TNS EXIST

19.4 Coordination

Coordination is characteristically a feature of NPs, but also occurs with AdvPs, with the exception of those headed by manner adverbs.

The coordinating particles for "or" are *bēē* or the Hausa loanword *kūu*. Here the two words are synonymous; the only place where they consistently have different senses is in the formation of polar questions 28.2.2. Both, like English "or", are by default taken as exclusive "or" but admit the inclusive interpretation "or both." This can be spelt out explicitly:

Bīig lā kūu dāu lā kūu bà wōsa

child:SG ART or man:SG ART or 3PL all

"The man, or the child, or both" WK

The particle for "and" for Nominal Phrases is *nē*. This *nē* is fundamentally the same word as the preposition "with" 21.1; the conjunctions *bēē* and *kūu* can be used in a parallel way, but the categories of (true) Conjunction and Preposition could probably in any case be conflated 27.1.3. *Nē* links only nominal words and phrases, and never clauses unless they are first nominalised, so it is not possible to merge Conjunctions-Prepositions with Clause Linker Particles (*kà yē*.)

Consistent with this analysis of *nē* "and", it is not possible to omit coordinating particles in a series of three or more items

À-Wīn né À-Bōgur né À-Nà'ab "Awini, Abugri and Anaba"

Nor can *nē* be used to join two words with the same referent: *dū'átà nē ná'àb* cannot be "someone who is a doctor and a chief."

Coordinated dependents within compounds are not permitted:

*[*bēŋíd nē kī*] *kúèš*

not possible for "seller of *bēŋíd nē kī*"

(beanleaf-and-millet, a standard conceptual unity like "fish and chips", "lox and bagels")

However, free NPs with coordinated components may be dependents:

o nya'andɔlib pii nɛ yi "his twelve disciples" (Mt 26:20)

ò nyà'an-dòllɪb pīi nē yí
 3AN after-follower:PL ten with two

dɔ'átà nē ná'àb lā lóyà "Doctor's and the chief's cars"
 doctor:SG with chief:SG ART car:PL

sāluma nē ānzúrɪfà lá'àd "gold and silver goods"
 gold with silver item:PL

The latter two cases are ambiguous, as in English: this is because of an alternative interpretation as ellipsis of the first of two repeated heads within a coordination of two parallel dependent + head NPs (cf [27.1.5.1](#)):

<i>[dɔ'átà nē ná'àb lā] lóyà</i>	"the cars of [Doctor-and-the-chief]"
<i>[dɔ'átà lóyà] nē [ná'àb lā lóyà]</i>	"[Doctor's cars] and [the chief's cars]"
<i>[sāluma nē ānzúrɪfà] lá'àd</i>	"[gold-and-silver] goods"
<i>[sāluma lá'àd] nē [ānzúrɪfà lá'àd]</i>	"[gold goods] and [silver goods]"

Not all such cases involve ellipsis, however; apart from the possibility of two distinct meanings in the examples above, one of which excludes ellipsis, this is also clear from cases like

ānzúrɪfà nē sāluma lá'-māan "silver- and goldsmith"
 silver with gold item-maker:SG

This cannot be a case of ellipsis, because it is not possible to coordinate dependent combining forms, and *nē* cannot join two NPs with the same reference.

**ānzúrɪfà lá'- nē sāluma lá'-māan*
 (impossible)
ānzúrɪfà lá'-māan nē sāluma lá'-māan
 (necessarily two different people)

Coordinated heads may not share articles or determiners.

Both articles are necessary in:

pɔ'ā lā nē dāy lā "the woman and the man"
 woman:SG ART with man:SG ART

Both instances of *m̃* "my" are needed in

m ba'abiis nɛ m saamnama

m̃ bā'-bîs nɛ̃ m̃ sàam-nàmā ⁺∅

1SG father-child:**PL** with **1SG** father-**PL** **VOC**

"my siblings and [my] fathers!" (Acts 7:2)

Yīigá⁺ "firstly" [19.7.3](#) is an exception:

yīiga sangbauŋ nɛ tɛŋbauŋ nɛ atɛuk

yīigá sàŋ-gbàŋ nɛ̃ tɛŋ-gbàŋ nɛ̃ àtìuk

firstly heaven-skin:**SG** with earth-skin:**SG** with sea:**SG**

"the first heaven and earth and sea" (Rev 21:1)

Coordinated heads may share modifiers; even coordination of cb heads before an adjective appears in

Ka m nye sangbauŋ nɛ tɛŋbaung paal.

Kà m̃ nyɛ sàŋ-gbàŋ- nɛ̃ tɛŋ-gbàŋ-páal

And **1SG** see heaven-skin- with earth-skin-new:**SG**.

"And I saw a new heaven and a new earth." (Rev 21:1)

Pre-modifiers can be shared so long as they are not cbs:

Kūsáàl sólímà nɛ̃ sílímà

"Kusaasi stories and proverbs"

Kusaal story:**PL** with proverb:**PL**

Kūsáàs kúèb nɛ̃ yīr

"Kusaasi agriculture and housing"

Kusaasi:**PL** hoeing with house:**SG**

sālma bûtɪs nɛ̃ dísílmà

"gold cups and spoons"

gold cup:**PL** with spoon:**PL**

("all of them gold", KT)

However, KT WK both agreed that

sālma lá'àd nɛ̃ bûtɪs

must mean "gold goods and [not gold] cups", WK offering the correction

sālma lá'àd nɛ̃ ò bûtɪs

"gold goods and (gold) cups" WK

gold item:**PL** with **3AN** cup:**PL**

where *ò* refers to *sālīma*. (See [19.2.2](#) on the unexpected gender of the pronoun.) The difference from *sālīma bútīis nē díísímà* (above) is probably that "cups" are a subtype of "goods", impairing the parallel between the coordinated units and making it less natural to supply the ellipsis than in *sālīma bútīis nē [sālīma] díísímà* "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

19.5 Apposition

Titles and other NPs may precede personal names in apposition:

Na'ab Agrippa

"King Agrippa." (Acts 25:13)

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì pū nār yé fù dí fù bā'-bîg pɔ'á Herodiase ⁺∅.

3INAN NEG.IND must that **2SG** take **2SG** father-child:**SG** wife:**SG** Herodias **NEG**.

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

... lebis ye, eenn, o zua Asibigi n kabirid.

... ∅ lèbīs yē, ēēn, ò zɔà À-Sībīgí n kábíríd.

...SER reply that, Yes, **3AN** friend:**SG** **PERS**-termite:**SG** **SER** ask.admission:**DIPF**.

"...replying that, Yes, it was his friend Termite asking for admission." KSS p12

It is unclear whether the second element is subject to M Raising. However, the fact that the Personifier Clitic *À*- is not omitted in these cases shows that the relationship is not dependent-head [19.10](#).

Personal pronouns in apposition use free forms [33.5](#):

Man Paul [...] *pɔ'usidi ya.*

"I, Paul ... greet you." (2 Thess 3:17)

Mān Paul [...] *pó'usìdī yá.*

1SG Paul greet:**DIPF** **2PL.OB**.

Two compounded noun stems with the same referent seem necessarily to have human reference; this is regarded as adjectival use of the second noun [19.8.1.5](#). "Appositional" Relative Clauses again probably always have human reference, and again the second element has adjectival function [31.2.3](#). I have no other examples where the second component is not a personal name.

Apposition is to be distinguished from constructions before post-determining pronouns when the head has no combining form, as with quantifiers, or has a coordinated structure [19.4](#), and from cases where the Combining Form has the segmental, but not tonal, form of the singular [9.2.2](#) [15.2](#). A number of compounds

found in the 1976 NT version are systematically replaced by forms written with the initial component as a singular in the 1996 revision:

<i>Nonaar Paal</i> for <i>Nonapaal</i>	<i>N̄-ná-pāal</i>	"New Testament"
<i>Siig Sun</i> for <i>Sisun</i>	<i>Sì-sùŋ</i>	"Holy Spirit"

The tonal evidence from similar cases in my informants' speech shows that this reflects segmental remodelling of combining forms, not expansion of the rôle of apposition at the expense of compounding:

<i>lànnɪg-kàŋā</i>	"this squirrel"	WK
<i>dàp-bàmmā</i>	"these men"	WK

The many examples of *Siig Sun* in the [1996 NT audio version](#) are likewise clearly read as *Sìɪg-sùŋ* (or *Sìɪg-sùŋ* with L Raising) or *Sì-sùŋ*, not **Sìɪg-sùŋ*.

Among my informants, SB showed a much greater tendency to produce segmental sg forms before post-determining pronouns, and even adjectives, than my other informants, who generally rejected such formations.

19.6 Compounding

Like other Oti-Volta languages, Kusaal shows abundant productive formation of compound nominals. Kusaal compounds fall into two basic types, depending on whether the combining form is the head or a pre-modifier. Compounding is the standard construction for head nouns with following dependent adjectives and Determiners [19.8.1](#) [19.8.2.1](#):

<i>b̄v̄g^a</i>	"goat"
<i>b̄-p̄ɛlɪg^a</i>	"white goat"
<i>b̄-kàŋā^{+/}</i>	"this goat"
<i>b̄-p̄ɛl-kàŋā^{+/}</i>	"this white goat"

It is also the normal construction for a generic concrete noun when preceding a head as a modifier [19.7.2.1](#) or as a generic argument to a deverbal noun [19.7.1](#):

<i>nà'ab lā wíðf z̄v̄r</i>	"the chief's horse's tail"
but <i>nà'ab lā wíd-z̄v̄r</i>	"the chief's horse-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, characteristically in the shape of bare stems which have undergone Apocope,

though analogical remodelling based on the form of the singular is common, and indeed regular with some stem types [9.2.2](#). Compounding is so productive that the combining form is a regular part of noun and adjective flexion [9.1](#), treated under nominal morphology.

For the tone sandhi rules which affect the component following the combining form see [8.3](#) [8.4](#). They are not sensitive to whether the cb is head or modifier.

19.6.1 Complex Compounds

Compounds may have compounds as components, most commonly as a result of the addition of an adjective or post-determining pronoun to an existing compound, in which case the binding to the new element is weaker than that within the existing compound:

<i>[bù-pìəl-]kàṅā</i>	"this [white goat]"
<i>[nīn-wók-]pìəlɪg</i>	"white [tall person]"
<i>[zà'-nō-]píəlɪg</i>	"white gate" ("white [compound-mouth]")

A compound may appear as a generic argument to a following deverbal noun:

<i>[zà'-nō-]gúr</i>	"gate-keeper"
<i>[[zà'-nō-]gúr-]kàṅā</i>	"this [gate-keeper]"

Kusaal also possesses bahuvrihi adjectives [19.8.1.4](#) formed by zero-derivation of a noun-adjective compound to an adjective:

<i>nīf-nyáyuk</i>	"one eye"
<i>bù-[nīf-nyáyuk]</i>	"[one-eyed] goat"
<i>nōb-wók</i>	"long leg"
<i>kùg-[nōb-wók]</i>	"[long-legged] stool"

The bahuvrihi meaning is also possible when the compound is used as the complement of àḡṇ^a "be something":

Kùg-kàṅā á nē nōb-wók.
 Chair-DEM.DEI.SG COP FOC leg-long:SG.
 "This chair is long-legged." WK

Adjectival combining forms can only be used before another adjective or before a post-determining pronoun. If a noun + adjective compound is used as a generic argument it must adopt a sg or pl form:

fū-zéṇḁà kùəs "seller of red (i.e. dyed) cloth"
 not **fū-zéṇ'-kùəs*

Compounds may contain uncompound elements within their structure, because regardless of whether compounded or not **modifiers bind tighter than generic arguments, which bind tighter than determiners**. Generic non-count NPs referring to substances appear as pre-modifiers within other NPs [19.7.2.2](#):

sālīma bútìṇ "gold cup"
ānzúrìfà nē sālīma lá'àd "silver and gold goods"

Even if they consist of phrases rather than single words, they therefore bind more tightly to a following cb used as a generic argument than the cb does to a following deverbal noun:

[*ānzúrìfà lá'-*]*māan* "silversmith" ("[silver goods]-maker")
 [*ānzúrìfà nē sālīma lá'-*]*māan* "silver- and goldsmith"

cf [*fū-zéṇḁà*] *kùəs* "[dyed cloth]-seller"
 with an adjective post-modifier (see above)

If the cb is itself a pre-modifier, the the construction is nested, with the cb binding to the following head and the preceding unbound pre-modifier applying to the whole resulting compound:

sālīma [*zá'-nōɔr*] "golden gate" ("golden [compound-mouth]")
zūgú-n [*níf-gbáɔṇ*] "upper eyelid" ("upper [eye-skin]")

Determiners, whether preceding or following the head, and whether compounded or uncompound, have the loosest binding:

[*sālīma bútìṇ-*]*kàṇā* "this [gold cup]"
 [[*sālīma lá'-*]*māan-*]*kàṇā* "this [[gold-item]-maker]"
 ò [[*sālīma lá'-*]*māan*] "her [[gold-item]-maker]"

19.7 Dependents Preceding the Head

The head of a NP may be preceded by dependents, which may be nominal combining forms, thus creating compounds, or may be free NPs or AdvPs. Only one preceding dependent is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another preceding dependent. Combining forms come last in such a sequence, and pre-determiners precede pre-modifiers:

Wínà'am [*pú'vsùg* [*fúùg dǒǒg*]]

"tabernacle" (God's [worship [cloth hut]])

The structure reflects the nature of the preceding dependent: all generic count nouns appear as combining forms, and generic mass nouns also do but only as arguments to deverbal nouns; all other pre-dependents appear uncompounded. With most head nouns, a preceding dependent NP with definite and/or count reference is a possessor, while AdvPs or indefinite mass NP are pre-modifiers expressing either qualities or the material of which the head consists. AdvPs of various kinds also occur as pre-modifiers, and one quantifier as a pre-determiner. With certain types of head the pre-determiner + head construction has specialised meanings [19.9](#).

Preceding uncompounded dependents induce M Raising in the following word if they are followed by L Raising; if M Raising is absent, it demonstrates that the construction is in fact head + dependent not dependent + head. Combining Forms in all rôles are followed by M Raising if they end in M toneme [8.4](#).

19.7.1 Generic Arguments to Deverbal Nouns

If the head is a deverbal noun, it may be preceded by a Combining Form representing a **generic argument**. The argument is a cb irrespective of whether the argument is a count or mass noun.

dā-núùr^ε

"beer-drinking"

gēl-kùès^a

"egg-seller"

With agent nouns of transitive verbs the cb almost always represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb argument:

bùl-sīgíd^{a/}

"well-diver" (*bùlīg^a* "well")

tùen-gāt^a

"leader" (*Ò gàad túèn* "He's gone ahead")

nyà'an-dòl^{la}

"disciple" (*nyá'an^a* "behind")

(*dǒl^{la/}* "accompany")

pū'à-lā'ad^a

"laugher at women" WK

(*Ò là'ad pū'ab* "He laughs at women")

These compounds can be freely coined, and their meanings are generally transparent:

<i>nīn-kúùd^a</i>	"murderer"
<i>bù-kūvd^{a/}</i>	"goat-killer"
<i>nō-kúùd^a</i>	"hen-killer"
<i>pɥ' à-kūvd^{a/}</i>	"woman-killer"
<i>nō-záŋ^{lɛ}</i>	"holder of hens"
<i>wìd-kùəs^a</i>	"horse-seller"
<i>bù-kùəs^a</i>	"goat-seller"
<i>sàlɪm-kùəs^a</i>	"gold-seller"
<i>dā-núùd^a</i>	"beer-drinker"

However, there are many idiomatic or set expressions. Further examples:

<i>zīm-gbáŋ' àd^a</i>	"fisherman" ("fish-catcher")
<i>nō-dí' əs^a</i>	"chief's spokesman" ("command-receiver")
	Ghanaian English "linguist"
<i>tàn-mēəd^a</i>	"builder" (<i>tān^{nɛ}</i> "earth")
<i>làmpō-dí' əs^a</i>	"tax collector" (French <i>l'impôt</i>)
<i>gbàn-mī' id^{a/}</i>	"scribe" NT ("book-knower")
<i>pɥ' à-sāŋ' am^{ma}</i>	"adulterer" ("woman-spoiler")
<i>zà' -nō-gúr^a</i>	"gate-keeper" (<i>zà' -nōɔr^{ɛ/}</i> "gate")
<i>dà-kīəd^a</i>	"wood-cutter"
<i>kòŋb-kīm^{na}</i>	"herdsman"
	(<i>kòŋb-</i> as cb of <i>būn-kóŋbùg^ɔ</i> "tame animal")

My informants freely create and cite agent nouns in isolation, but it is unusual in practice for agent nouns to appear without a pre-dependent cb; in my materials only *bāŋɪd^a* "wise man", *sġākɪd^a* "believer", *sūŋɪd^a* "helper" (of the Holy Spirit, NT), *fāaŋd^{a/}* "robber" "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate stem as cb. This is perhaps a cognate object in:

<i>màal-māan^{na}</i>	"sacrificer"
<i>zī-zīd^a</i>	"carrier-on-head"

but generally it seems to be simply a reduplication of the agent noun stem:

<i>tù'as-tù'as^a</i>	"talker"
<i>zàb-zàb^a</i>	"warrior" (tone <i>sic</i>)

<i>zòt-zōt^a</i>	"racer, athlete"
<i>tùm-tūm^{na}</i>	"worker"
<i>lēm-lēm^{ma}</i>	"taster, sipper"
<i>zàm-zām^{ma}</i>	"cheat"
<i>dàm-dām^{ma}</i>	"shaker"
<i>tàm-tām^{ma}</i>	"forgetful person"

Cb pre-dependents occur with deverbal instrument nouns, in object or adverbial senses:

<i>sjà-lōd(ɿ)^a</i>	"belt" (waist-tying thing)
<i>nīn-gót(ɿ)^a</i>	"mirror" (eye-looking thing)
<i>nīn-gót(ɿ)^ε</i>	"spectacles"

If the head is a gerund, a cb pre-dependent may represent a subject or complement. For the *-r^ε* (not *-b^ɔ*) suffix of these 2-mora stem gerunds see [12.1.1.1](#).

If the underlying verb is transitive, a cb pre-dependent cannot be a subject. It is most often an object:

<i>pɿ'ā-dīr^ε</i>	"marriage" (<i>Ò dī pɿ'ā</i> "He's married a wife")
<i>nīn-kùr^ε</i>	"murder"
<i>dā-núr^ε</i>	"beer-drinking"
<i>Sāmán-pīr^ε</i>	Traditional New Year ("Courtyard Cleaning")
<i>bùgúm-tōr^ε</i>	Fire Festival ("Fire Throwing")
<i>nō-lōr^ε</i>	"fasting" ("mouth-tying")
<i>nō-pōr^ε</i>	"oath" (<i>pō⁺</i> "swear")
<i>nō-nār^ε</i>	"covenant" (<i>nā⁺</i> "join")
<i>nīn-bāal-zōr^ε</i>	"pity" (<i>Ò zòt-ō nīn-bāalìg</i> . "He has pity on him")

It may represent an AdvP:

<i>mò-pīl^{le}</i>	"grass roof" ("covering with grass")
<i>kùm-vū'vgr^ε</i>	"resurrection"
	(<i>Ò vò'vgr kūmin</i> . "He came alive from death.")

Although many of these are set forms, free creation of nonce-forms is possible:

<i>fū-yéér^ε</i>	"shirt-wearing" WK
----------------------------	--------------------

Cbs as subjects are thus confined to verbs which can be used intransitively:

<i>n̄b-kòr^ε</i>	"breaking a leg" (<i>kò⁺</i> is intransitive)
<i>nū'-módìr^ε</i>	"swelling of the hand"
<i>wìn-līr^ε</i>	"sunset"
	(<i>Winnig lí yā</i> . "The sun has set/fallen.")
<i>sūŋ-sáŋ'ùŋ^ɔ</i>	"sorrow"
	(<i>Ṁ sūŋf sáŋ'àm nē</i> . "My heart is spoilt"
	= "I'm sad.")
<i>sūŋ-péèn^{nε}</i>	"anger" (<i>Ṁ sūŋf pélìg nē</i> . "My heart is white.")

19.7.2 Modifiers

Nominal pre-modifiers cannot be specific. They vary in form depending on the nature of the dependent. AdvP pre-modifiers may contain *constituents* with specific reference, but as AdvPs they do not themselves refer.

19.7.2.1 Generic Count Nouns

A count noun as a pre-modifier must appear as a Combining Form.

Compounds with a count noun pre-modifier are freely created, but resemble the compounds seen in other languages more closely than the type with Combining Form heads preceding adjectives and post-determining pronouns [19.8](#). Set forms with individualised lexical meanings often occur when the Combining Form is dependent, but rarely when it is a head before an adjective and, naturally, never with post-determining pronouns.

Note the contrast between a generic pre-modifier and a pre-determiner in e.g.

<i>bīg fúùg</i>	"a child's shirt" (belonging to some child)
<i>bì-fūug</i>	"a children's shirt" (perhaps a small woman's)
<i>nà'ab lā wíàf zūur</i>	"the chief's horse's tail" (the chief has a horse)
<i>nà'ab lā wíd-zūur</i>	"the chief's horse-tail" (the chief may not own a complete horse at all)

Cb pre-modifiers have a very general quasi-adjectival sense. The resulting compounds are very liable to develop specialised lexical meanings:

<i>wāb-mócgū-n</i> WK	"in elephant-bush, where there are elephants"
<i>zà'-nōor</i>	"gate" ("compound-mouth")
<i>mà-bīg</i>	"sibling" ("child by [same] mother")
<i>bā'-bīg</i>	"half-sibling" ("child by [same] father")
<i>tèŋ-bīg</i>	"native" ("child of a country")
<i>nàsàa-sìlvug</i>	"aeroplane" (European hawk) ILK

kɥ'à-ɲwīg

"current" ("water-rope")
[cb from a mass noun, see below]

WK has the exceptional forms

náaf-bì'isím

"cow's milk"

bōvg-bí'isím

"goat's milk"

where the modifier has singular form and tone, but the tone sandhi is that of a compound (note the lack of L Raising after *náaf-*.)

A cb pre-modifier of a deadjectival abstract noun may have a sense much like a generic argument:

sōŋ-kpí'òŋ^ɔ

"boldness" ("heart-strength")

sōŋ-má'asím^m

"joy" ("heart-coolness")
(*M sōŋf má'e yā*. "I'm joyful.")

nìn-tōllím^m

"fever" ("body-heat")

wīn-tóŋg^ɔ

"ill fate" ("fate-bitterness")

Cases like these resemble those where the second element is a gerund [19.7.1](#), but deadjectival nouns are not gerunds [12.2](#), and such constructions are not limited to cases where corresponding Adjectival Verbs exist:

pò-pìəlim^m

"holiness" ("inside-whiteness")

19.7.2.2 Generic Non-count NPs

Pre-modifiers may also consist of Nominal Phrases with generic non-count reference. If they have *abstract* senses, they ascribe a quality to the head:

nā'am kúk

"throne" ("chieftaincy chair")

nā'am sú'ulim

"kingdom" ("chieftaincy possession")

pò'usug dóŋg

"temple" ("worship house")

tōlígír bún

"heater" ("heating thing" = *bōn-tōlígír^ε*)

dōgub dút

"cooking pots"

līgidi túmà

"expensive work" (*līgidi* + "money")

Language names may appear as abstract nouns describing an ethnic group:

Kūsáàl yír nē kūəb

"Kusaasi houses and agriculture"

Nàsāal búgúm

"electricity" ("European fire")

NPs with *concrete* mass sense express the material of which the head consists. Most often the pre-modifier is a single noun:

sālīma bŭtìŋ "golden cup"

Count nouns may appear if used in a mass sense [19.2.1](#):

fūug dŏŋg "tent" (cloth hut)

dàad bŭn-nám "wooden things" (*dàug*³ "piece of wood")

NPs formed by coordination may occur in this use:

sālīma nē ānzúrìfà lá'àd "gold and silver goods"

Such pre-modifiers are referential, and can be the antecedents of pronouns:

sālīma lá'àd né ò bŭtŭs "gold goods and [gold] cups" WK [19.4](#)

Contrast the non-referential use of mass nouns as generic arguments to deverbal nouns:

sàlīm-kùəs "gold-seller"

dā-núùd "beer-drinker"

Cb forms of abstract non-count nouns do sometimes occur as pre-modifiers:

tāŋp-sŏb^a "warrior" (*tāŋp*³ "war")

pŭè-pìəl-nīd^{a/} "holy person" (Rom 5:7, 1996)

pŭè-pìəl-sŏb^a "holy person" (Rom 3:10, 1996)

but *pŭè-pìəlīm sŏb*^a "holy person" (Mt 10:41, 1996) etc

pŭè-pìəl-tŭvma⁺ "holy actions" (Rom 6:13, 1996)

but *pŭè-pìəlīm tŭvmà*⁺ "holy actions" (Mt 5:10, 1996)

An interesting case involving a concrete mass noun is the compound *kŭ'à-ŋwīg* "current" ("water" + "rope.") This perhaps represents "aquatic rope" in contrast to **kù'əm ŋwīg* "a rope made of water"; the construction with concrete mass pre-modifiers may be limited to the specific sense "made of ..."

19.7.2.3 Adverbial Phrases

Like indefinite mass nouns, AdvPs as pre-dependents are pre-modifiers (contrast the determiner sense of AdvPs *following* the head [19.8.2.3](#).)

AdvPs as pre-modifiers may not be proadverbs. I do not have any examples of time AdvPs used as NP pre-modifiers.

Examples of AdvP pre-modifiers:

<i>bōgusígā dáàn</i>	"softly-softly sort of person"
<i>dūnɪya ní nìn-gbīŋ</i>	"earthly body"
<i>kù'əmī-n bún</i>	"water creature"
<i>kù'əmī-n dín</i>	"aquatic one"
<i>kǒlɔgɔ-n nó-dáùg</i>	"crayfish" ("in-the-river cock")

Although the AdvPs in cases like

<i>dàtìɹŋ níf</i>	"right eye"
<i>dàgòbɪg níf</i>	"left eye"
<i>zūgú-n níf-gbáɹŋ</i>	"upper eyelid"
<i>tēŋɪ-n níf-gbáɹŋ</i>	"lower eyelid"

seem to answer "which?" rather than "what kind of?", the possibility of indefinite plurals like *dàtìɹŋ níni* "right eyes" or *tēŋɪ-n níf-gbánà* "lower eyelids" shows that the construction is actually modifying, not determining.

Postpositional phrases with *yēlá*⁺ "about" [20.6](#) appears as pre-modifiers, not pre-determiners. Adverbs, including postpositions, behave as generic non-count NPs syntactically; they are not made specific by a definite pre-determiner:

<i>Kūsáàs kùèb nē yīr yélà gbàɹŋ</i>	"A book about Kusaasi houses and agriculture"
<i>dàɹ-kàŋā lā yélà gbàɹŋ</i>	"a book about that man" WK

In the same way, locative AdvPs, including Kusaal place names with no locative particle [20.3](#), may occur as uncompounded pre-modifiers:

<i>Bòk díŋ</i>	"Bawku people"
----------------	----------------

The head of locative AdvPs is the locative particle itself, with a zero allomorph in the case of locative AdvPs such as Kusaal place names which are "intrinsically locative" [20.3](#); like other postpositions, this is never itself referential and is not itself rendered specific even though it has a specific pre-determiner. See also on locative complements and their focus behaviour [33.1.2.4](#).

19.7.3 Determiners

The **quantifier** *yīgá*⁺ "firstly" appears as a pre-determiner "first", e.g.

yīgá sāa zúg nē tēŋ "the first heaven and earth"

Count and/or definite reference NPs as preceding dependents before noun heads are also **determiners**.

If the head itself is a determiner (i.e. a pronoun or quantifier) the construction is **partitive** [19.9.1](#).

NP pre-determiners before **gerunds** and other abstract nouns describing events or processes are interpreted as **subjects**:

Dāy lā kúlòg dāa mālsí m.
 Man:SG ART return.home:GER TNS be.sweet 1SG.OB.
 "The man's return home pleased me."

Jesus kúm dá-pūvdá zug "Jesus' death on the cross"
 Jesus death cross:SG upon

Further expansion of such NPs is possible [19.9.2](#).

The words *mēŋ*^{a/} "self", *dāan*^a "owner", *sōb*^a "individual" and *būn*^{nε/} "thing" as heads have specialised senses with pre-determiners [19.9.3](#).

In all other cases, pre-determiners express **possessors**.

<i>nē bīg</i>	"my child"
<i>dāy lā bīg</i>	"the man's child"
<i>dāy lā bíèr bīg náàf zōv</i>	"the man's elder brother's child's cow's tail"
<i>Kūsáàs wádà</i>	"customs of the Kusaasi"

Such determiners do *not* automatically make a NP definite even when themselves definite [19.3](#).

The partitive sense with determiner heads is not possible with noun heads:

nīdīb lā gígìs "the dumb ones of
 [i.e. belonging to] the people"
 Not possible as "among the people" WK.

19.8 Dependents Following the Head

Dependents follow a head noun in the order adjective(s), Quantifier, determining pronoun or AdvP, Article.

It is characteristic of Kusaal and of other Oti-Volta languages that the normal construction with both adjectives [19.8.1](#) and post-determining pronouns is that they follow the head noun, which is itself reduced to a Combining Form, while the dependent inflects to show the number of the head. **Quantifiers** do not have combining forms, and so are not compounded with a following post-determining pronoun. (See further on apposition parallel to compounding [19.5](#).) For Quantifiers as post-determiners see [19.9.1](#).

Compounds where the combining form is the head are formed absolutely freely with completely transparent meaning, and correspond to uncompounded constructions in most other languages. It is largely because of such head-first compounds that the combining form needs to be treated as a standard part of the nominal paradigm, and it is in these cases particularly that cbs remodelled segmentally on the basis of the singular form (or even the plural) [9.2.2](#) are frequent.

<i>būvg^a</i>	"goat"
<i>bù-pìəlɪg^a</i>	"white goat"
<i>bù-kàŋā^{+/}</i>	"this goat"
<i>bù-pìəl-kàŋā^{+/}</i>	"this white goat"

Compounds with post-determining pronouns naturally cannot be lexicalised; compounds with adjectives do occasionally develop specialised individual lexical meanings, though much less often than modifier-first compounds.

For my informants WK and DK, a noun preceding a post-determining pronoun must appear as a combining form, but SB accepts preceding sg/pl forms; I did not record the tones of such forms and therefore do not know if the change is merely segmental remodelling or reflects a different construction (compare [9.2.2](#) and also *náaf-bì'isím* "cow's milk" [19.7.2.1](#).) Thus for SB:

<i>?náaf-kàŋā</i>	"this cow"	like <i>náaf-bì'isím</i>
<i>?nāaf-káŋā</i>		segmental remodelling
<i>?náaf káŋā</i>		construed like a quantifier

cf *nā'-káŋā* "this cow" WK DK SB

19.8.1 Adjectives

Adjectives as modifiers always follow the head.

Adjectives do not appear without a preceding noun head, except to a very limited extent as complements to *àɛŋ*^a "be something/somehow" [24.2](#).

The combination noun + adjective is almost invariably rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun. My informants can sometimes be induced to accept sg + adjective but never produce such forms spontaneously.

<i>būvg</i> ^a	"goat"	<i>būvs</i> ^ε	"goats"
<i>bù-pìəlɪg</i> ^a	"white goat"	<i>bù-pìəlɪs</i> ^ε	"white goats"
<i>bù-sùŋ</i> ^ɔ	"good goat"	<i>bù-sùma</i> ⁺	"good goats"
<i>nūa</i> ^{+/}	"hen"	<i>nōvs</i> ^{ε/}	"hens"
<i>nō-píəlɪg</i> ^a	"white hen"	<i>nō-píəlɪs</i> ^ε	"white hens"
<i>nō-súŋ</i> ^ɔ	"good hen"	<i>nō-súma</i> ⁺	"good hens"

A second adjective or a post-determining pronoun can follow a first adjective, which thus itself appears as a cb:

<i>nīn-wók-pìəlɪg</i> ^a	"white tall person"
<i>nō-píəl-kàŋā</i> ^{+/}	"this white hen"

However, a noun + adjective compound cannot form a cb to be used as the generic argument of a deverbal noun; a sg/pl form appears instead:

<i>fū-zéŋdà kùəs</i> ^a	"seller of red (i.e. dyed) cloth"
not * <i>fū-zéŋ'-kùəs</i> ^a	

i.e. adjective cbs may only precede other adjectives or post-determining pronouns.

Compounds with adjectives occasionally develop specialised lexical meanings:

<i>nū'-bíl</i> ^a	"finger" ("small hand")
<i>tì-sābílím</i> ^m	a traditional remedy ("black medicine")

Several names of plant and tree species are formed in this way:

<i>gòŋ'-sābílíg</i> ^a	Haaf <i>gosablíga</i> "Acacia Hockii" ("black thorn")
----------------------------------	---

19.8.1.1 Class Agreement

There are isolated set forms showing traces of the old agreement system:

	<i>là'-bīəlíʔ</i>	NT	"small coin"
cf	<i>lā'aʔ</i>		"cowrie"
	<i>bī'əlá⁺</i>		"a little"
	<i>dà-sī'ər^ε</i>		"some day; perhaps"
cf	<i>dāar^ε</i>		"day"
	<i>sī'a⁺</i>		"some"
	<i>dàbɪs-sī'ər^ε</i>		"some day"
cf	<i>dàbɪsɪr^ε</i>		"day"
	<i>sī'a⁺</i>		"some"
	<i>pɥ'à-pāal^{a/}</i>		"bride"
cf	<i>pɥ'ā^a</i>		"wife"
	<i>pāalíg^a</i>		"new"
	<i>dà-pāal^{a/}</i>		"young man, son"
cf	<i>dāɥ⁺</i>		"man"
	<i>pāalíg^a</i>		"new"

where the adjectives do not normally occur with these class suffixes.

There remains a rule in WK's speech (not DK's) and in written materials requiring *m^m* Class agreement in adjectives modifying *m^m* Class mass nouns, and also after *būn* "thing" when it has abstract rather than concrete sense:

	<i>dā-pāalim^m</i>	"new millet beer"
	<i>tì-sābulim^m</i>	WK does not accept * <i>dā-pāàl</i> , * <i>dā-pāalìg</i> . literally "black medicine", a specific traditional remedy
	<i>tì-vōnnim^m</i>	"oral medication" ("swallowing medicine")
	<i>tì-kōvdim^m</i>	"poison" ("killing medicine")
	<i>kpāŋ-sóɔŋdìm^m</i>	"anointing oil" (<i>kpāaŋm^m</i> "oil, grease")
	<i>būn-bóɔdìm^m</i>	"desirable thing"
		(1 Cor 14:1, referring to <i>nòŋulim^m</i> "love")
but	<i>būn-bóɔdìr^ε</i>	"desirable thing" BNY p17, referring to a sheep
	<i>būn-nyétim^m</i>	"the visible world"
but	<i>būn-nyétìr^ε</i>	"a visible object"

The exceptional character of the *m*^m Class in this matter is presumably due to its strong semantic association with the meanings "liquid" and "abstract."

19.8.1.2 Downtoning

Adjectives may show Apocope Blocking 6.4 as a downtoner (all examples KT):

<i>Lì à nē fū-píə̀lìgā.</i>	"It's a whitish shirt."
<i>Lì à nē fū-píə̀lìgā lā.</i>	"It's the whitish shirt."
<i>Lì à nē wíùg.</i>	"It's red."
<i>Lì à nē wíugō.</i>	"It's reddish."
<i>fū-wíugō lā</i>	"the reddish shirt"
<i>Lì à nē tītā'arɿ.</i>	"It's biggish."

This seems to be possible only with singular forms.

19.8.1.3 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

<i>Lì à nē píə̀lìg pāmm.</i>	"It's very white"
------------------------------	-------------------

the adverb *pāmm* must be taken with the copula verb rather than the adjective; it is not possible to say

<i>*fū-píə̀lìg pāmm lā</i>	attempted "the very white shirt"
----------------------------	----------------------------------

However, in any syntactic rôle an adjective may be immediately followed by an ideophone with intensifying force. As is common cross-linguistically, ideophones often display unusual phonological features. An ideophone is specific to a particular adjective, along with any cognate Adjectival Verb.

<i>Lì à nē píə̀lìg fáss fáss.</i>	"It's very white."
<i>Lì à nē sābɿ́líg zím zím.</i>	"It's deep black."
<i>Lì à nē zíg'a wím wím.</i>	"It's deep red."

Ideophones are not limited to use with adjectives as complements of *àɛŋ*^a "be something/somehow" but occur with adjectives in their normal modifier rôle:

<i>Lì à nē fū-zíg'a wím wím.</i>	"It's a deep red shirt."	WK
<i>M̃ ɲyé fū-zíg'a wím wím.</i>	"I've seen a deep red shirt."	WK

<i>Fū-zíŋ'a wím wím bé.</i>	"There's a deep red shirt."	WK
<i>M bɔ̀ɔ̀d fū-zíŋ'a wím wím lā.</i>	"I want the deep red shirt."	WK

Adjectival Verbs may take ideophones as intensifiers; they share the ideophone of the corresponding adjective:

<i>Ò à nē wōk tólùlìlì.</i>	"She's very tall."
<i>Ò à nē gīŋ tírugà.</i>	"She's very short."
<i>Ò wà'am tólùlìlì.</i>	"She's very tall."
<i>Ò gīm nē tírugà.</i>	"She's very short."

I could not elicit ideophones for all adjectives by any means, not even those with gradable senses; thus WK has only

<i>Lì à súnā pāmm.</i>	"It's very good."
<i>Lì à nē bē'ed pāmm.</i>	"It's very bad."
<i>Lì zùlùm pāmm.</i>	"It's very deep."
<i>Lì mà'as pāmm.</i>	"It's very damp."

Apart from Adjectival Verbs, I have found no unequivocal ideophones in use with verbs; thus only

<i>Ò tùm pāmm.</i>	"She's worked hard."
<i>Ò tùm hālì.</i>	"She's worked hard." 21.2
<i>Ò zò pāmm.</i>	"She's run a lot."
<i>Ò zò hālì.</i>	"She's run a lot."

However, many verbs can be followed by "onomatopoeic" words which resemble ideophones at least in phonology:

<i>Ò zòt nē tólìb tólìb.</i>	"He [a rabbit] is running lollop-lollop." WK
------------------------------	--

Such words occur very frequently in the collection of traditional stories "*Kusaal Solima ne Siilima*." They are evidently stereotyped and often show phonological features not found in the regular vocabulary, but they do not seem to be uniquely associated with particular verbs and are perhaps more of the nature of the "rat-tat-tat" onomatopoeic words familiar in European languages.

For more detail on Kusaal ideophones see Abubakari 2017.

19.8.1.4 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

<i>Lì à nē nū'-kpíílúŋ.</i>	"It's a dead hand."
<i>Bīig lā á nē nū'-kpíílúŋ.</i>	"The child is dead-handed."
<i>Ò à nē bí-[nū'-kpíílúŋ].</i>	"He's a dead-handed child."

In constructions 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'-kpîm*^m, and in such constructions the adjective may even be plural despite singular reference of the whole noun + adjective compound:

<i>bì-tùb-kpīda</i> ⁺	"deaf child" (<i>tùbur</i> ^ε "ear", <i>kpi</i> ⁺ "die")
plural <i>bì-tùb-kpīda nám</i> ^a	
or <i>bì-tùb-kpīdis</i> ^ε	
<i>bì-tùb-līd</i> ^ε	"child/children with blocked ears"
	(<i>lī</i> ⁺ "block up")

Accordingly, the construction is zero-derivation of a noun-adjective compound to an adjective, and not modification of an adjective by a cb.

Other examples of bahuvrihis:

<i>kùg-nōb-wák</i> ^ɔ	"long-legged stool"
<i>kùg-nōb-wá'àd</i> ^ε	"long-legged stools"
<i>zūg-máuk</i> ^ɔ	
plural <i>zūg-má'àd</i> ^ε	"crushed-headed"
<i>zù-wōk</i> ^ɔ	"long-tailed"
<i>nōb-gíŋ</i> ^a	"short-legged"
<i>zū-péélùg</i> ^ɔ	
plural <i>zū-péélà</i> ⁺	"bald; grey haired"; etymologically "white headed" with <i>péélug</i> ^ɔ for <i>pàlīg</i> ^a
<i>lām-fòg</i> ^ɔ	
plural <i>lām-fòd</i> ^ε	"toothless" (<i>lām</i> ^{mε} "gum" <i>fùe</i> ⁺ "draw out") (Plural analogical from sg, which shows the regular change <i>*uəgu</i> → <i>ɔɔgu</i>)

The two adjectives "one of a pair" [16.2.4](#) are often used in bahuvrihis: *nyàuk*^ɔ pl *nyà'ad*^ɛ for eyes:

<i>nīf-nyáuk</i> ^ɔ	"one eye"
<i>bà-nīf-nyáuk</i> ^ɔ	"one-eyed dog"

yīuŋ^ɔ/ pl *yīná*⁺ of other paired body parts:

<i>tùb-yīuŋ</i> ^ɔ /	"one ear"
<i>bì-tùb-yīná</i> ⁺	"one-eared children"
<i>nɔ̃b-yíuŋ</i> ^ɔ	"one-legged"
<i>nū'-yíuŋ</i> ^ɔ	"one-handed"

19.8.1.5 Nouns as Adjectives

Human-reference nouns may be used as adjectives modifying other human-reference nouns. This is particularly common with ^a|*b*^a Class words:

	<i>bì-sāan</i> ^a / or <i>bì-sáaŋ</i> ^a	"stranger-child"
only	<i>bù-sáaŋ</i> ^a	"stranger goat"

	<i>bì-kpī'im</i> ^m /	
or	<i>bì-kpīilúŋ</i> ^ɔ	"dead child"
only	<i>bù-kpīilúŋ</i> ^ɔ	"dead goat"

	<i>bì-dāu</i> ⁺	
or	<i>bì-dāuŋ</i> ^ɔ	"male child"
only	<i>bù-dāuŋ</i> ^ɔ	"male goat"

	<i>bì-pu'ā</i> ^a or <i>bì-puāk</i> ^a	"female child"
--	--	----------------

	<i>bì-zū'əm</i> ^m /	
or	<i>bì-zùnzòŋ</i> ^a	"blind child"

The same behaviour is also seen with some Agent Nouns:

	<i>pu'à-zàaŋs</i> ^a	"dreamy woman" KT
	<i>nīn-nén</i> ^{na}	"envious person"
	<i>bì-sīn</i> ^{na} / or <i>bì-sīnníg</i> ^a	"silent child"
only	<i>bù-sīnníg</i> ^a or <i>bù-sīnnúŋ</i> ^ɔ	"silent goat"

However, WK usually reports a contrast between Agent Nouns/Deverbal Adjectives with head-second compounds in ^a|*b*^a Class and head-first compounds in *g*^a|*s*^ε or *r*^ε|*a*⁺ Class:

<i>pɥ'à-kūvd(g)</i> ^a	"murderous woman, murderess"
<i>pɥ'à-kūvd</i> ^{a/}	only "killer of women"

This is true also of forms derived from verbs which are usually intransitive:

<i>pɥ'à-lā'ad(g)</i> ^a	"woman given to laughing"
<i>pɥ'à-lā'ad</i> ^a	"laugher at women"

Nouns not in the ^a|*b*^a Class are used adjectivally express bodily defects:

<i>bì-zùnzòŋ</i> ^a	"blind child"
<i>bì-gìk</i> ^a	"dumb child"
<i>bì-wàbɪr</i> ^ε	"lame child"
<i>bì-bālērɔg</i> ^ɔ	"ugly child"
<i>bì-pòŋ'ɔr</i> ^ε	"crippled child"

Other examples include:

<i>nàsàa-bīg</i> ^a	"European child"
<i>yàmmug-bī-púŋ</i> ^a	"girl slave"
	(written <i>yamug bipuŋ</i> Acts 16:16, 1976 9.2.2)
<i>yàm-bī-púŋ</i> ^a	"girl slave" (WK's preferred form)
cf <i>yàmmug bí-púŋ</i> ^a	"slave's girl"
<i>bī-púŋ-yàmmug</i> ^a	"slave girl"
<i>nà'-bīg</i> ^a	"prince" ("royal child" not "boy king")
<i>bì-nà'ab</i> ^a	<i>id</i>
<i>dàɥ-bīg</i> ^a	"male child"
cf <i>bì-dāɥ</i> ⁺	<i>id</i> (above)

Except with deverbal nouns as second elements, there seem to be no grounds for choosing either the first or second element of these compounds as the head, and these structures are essentially appositional. However, rather than set up a third basic type of compound, it seems simplest to regard these cases as reflecting adjectival use of human-reference nouns. Such nouns also resemble adjectives in that they can form the basis of derived abstract nouns, though in most cases they do so by adding derivational suffixes rather than simply being used directly in the *m*^m Class like adjective stems [12.2](#).

19.8.2 Determiners

19.8.2.1 Pronouns

Pronouns may follow a NP head as post-determining pronouns. The head then normally appears as a combining form. Demonstrative, Indefinite and Interrogative pronouns occur in this construction.

Like Quantifiers, pronouns also occur as NP heads. Some pronouns have forms used only as heads or only as post-determiners [15.2](#) [15.3](#).

19.8.2.2 Quantifiers

Quantifiers as NP dependents follow the head, except for *yīgá*⁺ "firstly" [19.7.3](#). The head only appears as a cb, optionally, with in a few cases with *yīnní*⁺ "one" and in a few fixed expressions [16.2.2](#); uncompounded post-dependents are not subject to M Raising [16.2.2](#):

	<i>kūgvr yīnní</i> ⁺	"one stone"
but	<i>kūg-yīnní</i> ⁺	"one stone"

I do not have any examples of co-occurrence with adjectives; when quantifiers precede post-determining pronouns the construction is probably always to be taken as a quantifier head with a pre-determiner, not a post-determining quantifier.

<i>nīdɪb bédugū</i>	"a lot of people"
<i>nīdɪb bédugū lā</i>	"the lot of people, the crowd"
<i>nīdɪbá àyí</i>	"two people"
<i>nīdɪbá àyí lā</i>	"the two people"

The head + post-dependent quantifier construction contrasts in meaning with the *partitive* sense of a pre-determiner + Quantifier Phrase head [19.9.1](#).

Quantifiers as post-dependents can be coordinated: this is the mechanism for the creation of numbers other than simple digits, tens or hundreds [16.2.2](#).

o nya'andɔlib pii nɛ yi
ò nyà'an-dòllɪb pīi nē yí
3AN after-follower:**PL** ten with two
 "his twelve disciples" (Mt 26:20)

19.8.2.3 Adverbial Phrases

AdvPs following a NP head are post-determiners. Proadverbs do not occur in this use. There is no compounding or M Raising.

Contrast the pre-modifying use with the post-determining in

	<i>mōɔɔɔv-n wábùg lā</i>	"the wild elephant" ("What kind of elephant?")
but	<i>wābug mōɔɔv-n lā</i>	"the elephant in the bush" ("Which elephant?")

I do not have any unequivocal examples of time adverbs in this position; in

<i>ɲwāɗɗɗɗ yúùm lā púvɔɔ-n</i>	"months in the year" SB
--------------------------------	-------------------------

the postposition phrase is formally locative, though used in a metaphorical temporal sense.

The manner-adverb *amēɲá* "really, truly" occurs meaning "genuine, real":

Ńn sōb á nē dɔ́'átà amēɲá lā.

3AN.CNTR individual.AN COP FOC doctor:SG ADV:real:ADV ART

"That one's the real doctor."

When an abstract noun with verbal sense has a preceding NP functioning as subject, resulting in a type of clause nominalisation [19.7.3](#), a following AdvP may occur which represents an adjunct in the corresponding clause structure, but such adjuncts may also even be prepositional phrases, which are not found elsewhere as NP dependents, and even VP-final particles may occur. Accordingly, this is best regarded as a distinct clause nominalisation process rather than part of NP structure as such; see further [19.9.2](#).

ya antu'a morim koto ni ne taaba la

yà àntɔ́'á-mōríɲm kótù ní nē tāaba lā

2PL case-have:GER court:SG LOC with each.other ART

"your going to law with each other in court" (1 Cor 6:7, 1976)

19.9 Specialised NP Heads

19.9.1 Determiners

Pronouns and quantifiers are determiners. They occur as post-dependents [19.8.2](#), but also frequently as NP heads.

NPs headed by determiners are equivalent syntactically to other NPs in their abilities to form arguments of VPs:

<i>Ōṇā lā ké nā.</i>	"That one came."
<i>Bāmmā lā ké nā</i>	"Those ones came."
<i>Pāmm ké nā.</i>	"Many came."
<i>Bèdugū ké nā.</i>	"Many came."
<i>Bèdugū lā ké nā.</i>	"The crowd came"
<i>Àyí ké nā.</i>	"Two came."
<i>Àyí lā ké nā.</i>	"The two came."

They manifest the NP category of number.

Quantifier heads pluralise with *nām*^a:

màljāk-nām túsà pīga nám "tens of thousands of angels"

Àyí námá_ àyí á nē nāasí.

NUM:two PL NUM:two COP FOC four.

"Two two's are four."

NPs headed by Quantifiers may have post-determining 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 nyē dīib yáa ní mōogv-n ṇwá

And 3PL say 3PL find food where LOC grass:SG-LOC this

ø dīis nīdīb bédugū bāmā ṇwá +ø?

SER feed person:PL many DEM.DEI.PL this CQ?

"Where are we going to find food in this wilderness to feed this crowd of people?" (Mt 15:33, 1996: KB *nimbama nwa wusa* "all these people")

nīdīb bédugū bānì kē nā lā

person:PL much REL.PL come hither ART

"the crowd of people who have come"

All cases where quantifiers are followed by post-determining pronouns are probably quantifier-headed, not NPs with quantifiers as dependents.

There is a contrast between a NP with a noun head and a post-determiner (pronoun or quantifier) as a dependent [19.8.2](#), and a NP with a determiner head which is itself preceded by a NP pre-determiner; the latter construction is **partitive**. The position of the article *lā*^{+/} may distinguish the two constructions.

NP with a post-determiner:

<i>nīdɪb bédugū</i>	"a lot of people"	<i>bédugū</i>	dependent
<i>nīdɪb bédugū lā</i>	"the lot of people, the crowd"	<i>bédugū</i>	dependent
<i>nīdɪbá àyí</i>	"two people"	<i>àyí</i>	dependent
<i>nīdɪbá àyí lā</i>	"the two people"	<i>àyí</i>	dependent
<i>nīn-síabà</i>	"certain people"	<i>síabà</i>	dependent

NP with a determiner head and a NP pre-determiner:

<i>nīdɪb lā bédugū</i>	"a lot of the people"	<i>bédugū</i>	head
<i>nīdɪb lá àyí</i>	"two of the people"	<i>àyí</i>	head
<i>yà sō'</i>	"some one among you"	<i>sō'</i>	head
<i>nīdɪb lā síabà</i>	"certain of the people"	<i>síabà</i>	head
<i>nīdɪb síabà</i>	"certain ones among people"	<i>síabà</i>	head

nīdɪbá_ àtán' lá ànó'òn ...

person:PL NUM:three ART who ...

"who, among the three people ...?"

The determiner head can be a *ñ*-Clause:

Pa'alimi ti nidiba ayi' nwa fun gan sō'

Pà'alīmī tí nīdɪbá_ àyí ṇwá fún gāṇ sō'

Teach:IMP 1PL.OB person:PL NUM:two this 2SG:COMP choose INDF.AN

"Tell us which of these two people you have chosen" (Acts 1:24)

19.9.2 Gerunds and Deverbal Abstract Nouns

Gerunds can take NP pre-determiners as subjects [19.7.3](#).

Dāy lā kúlòg dāa mālísí_ m.

Man:SG ART return.home:GER TNS be.pleasing 1SG.OB.

"The man's return home pleased me."

A generic object argument may also occur as a Combining Form, and adjunct AdvPs may follow the head:

ninsaalib yadda niṇir Wina'am ni

nīn-sáalib yáddā-níṇir Wínà'am ní

Person-smooth:PL assent-do:GER God LOC

"People's faith in God." (Rom 4:14)

ya antu'a morim koto ni ne taaba la

yà àntu'à-mōríim kótù ní nē tāaba lā

2PL case-have:**GER** court:**SG LOC** with each.other **ART**

"your going to law with each other in court" (1 Cor 6:7, 1976)

VP-final particles may occur too [23.7](#):

Ninsaal Biig la lēbug la na

Nīn-sààl Bîg lā lēbùg lā nā

Person-smooth:**SG** Child:**SG ART** return:**GER ART** hither

"the return of the Son of Man" (Mt 24:27)

Other deverbal abstract nouns may also be used in this way:

Kristo kum dapuudir zug "Christ's death on the cross" (1 Cor 1:18)

Kristo kúm dá-pūvdír zúg

Christ death wood-cross:**SG** upon

Constructions of this type are rarely used in place of content clauses or as adjuncts, but most often as subjects or with postpositions.

19.9.3 *Mēŋ^a/ dāan^a sōb^a bŭn^{nε}/*

Certain nouns occur exclusively as heads with a dependent. There is characteristically a specialised sense in the dependent/head relationship. (For *Adverbs* as heads of AdvPs with preceding dependents see Postpositions [20.6](#).)

Mēŋ^a "self" is used indifferently for sg/pl, always with a pre-determiner:

m̄ mēŋ

"myself"

yà mēŋ

"yourselves"

nà'ab lā mēŋ

"the chief himself"

chief:**SG ART** self

Bà nyéε_ bà mēŋ.

"They've seen for themselves."

3PL see **3PL** self.

"Self" forms must be used for verb arguments referring back to the clause subject :

M̐ ɲwɛ'ɛ m mɛŋ. "I hit myself."
1SG hit **1SG** self.

not **M̐ ɲwɛ'ɛ m* or **M̐ ɲwɛ' m̐n̐.*

Kusaal resembles English, as opposed to (say) French, in using a pronoun possessor with body parts acted on by their owner, e.g.

Ba pu piesidi ba nu'us wuv lin nar si'em la ka ditta.
Bà pū pīəsídí_ bà nú'ùs wūv lín nār sī'əm lá
3PL NEG.IND clean:**DIPF** **3PL** hand:**PL** like **3INAN:COMP** be.proper **INDEF.ADV ART**
kà dítā + \emptyset .
 and eat:**DIPF** **NEG**.

"They don't wash their hands properly before they eat." (Mt 15:1)

When ordinary pronouns are permissible, using *mɛŋ* implies contrast:

M̐ píə_ m̐ mɛŋ nú'ùs. "I washed my own hands."
1SG wash **1SG** self hand:**PL**.

Fù mɛŋ kūv bí-líaa + \emptyset ? "Yourself or the baby?"
2SG self or child-baby:**SG** **CQ**? ("Which of you needs the doctor?")

The derived manner-adverb *amɛŋá*⁺ "really, truly" can be used after a sg or pl to mean "genuine, real" and there is an adjectival form *mɛŋír*^ε seen in e.g.

yēl-mɛŋír^ε "truth" ("genuine matter")

Dāan^a "owner of ...", *nām*^a pl, always has a preceding dependent NP or AdvP. In a few set forms this is a generic count noun cb:

yī-dāan^a "householder" = *yī-sób*^a Hausa *màì gidaa*
tèŋ-dāan^a literally "land-owner": traditional earth-priest

Normally, the possession is expressed by a free NP, definite or indefinite:

lór dāan^a "car owner"
būvg dāan^a "goat owner"
kù'əm dāan^a "water owner"
tìəŋ dāan^a "bearded man" Hausa *màì geemu*
dāam dāan^a "beer owner"
pōɔŋ lā dāan^a "the owner of the field" (Mt 21:40)

Zu-wok daan po gangid bugum.

Zù-wōk dáàn pō gánìd búgúmm ⁺∅.

Tail-long:SG owner:SG NEG.IND step.over:DIPF 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

An abstract possession refers to a quality, as with Hausa *màì*, or Arabic ذو

pù-pìəlɪm dáàn^a "holy person"

Manner-adverbs can appear in the same sense as abstracts before *dāan*^a:

bōgusígā dáàn^a "softly-softly sort of person" WK

See [16.2.4](#) on the use of *dāan*^a with numbers to make ordinal expressions.

S5b^a "the one of ..." is a dummy head for a preceding NP or AdvP dependent; it specifies only number and gender and is otherwise semantically empty.

Animate	sg	<i>s5b</i> ^a
Animate	pl	<i>dìm</i> ^a
Inanimate	sg/pl	<i>dìn</i> ^{nɛ}

With noun or pronoun pre-determiners [19.7.3](#) the meaning is possessive:

<i>mān dín</i> ^{nɛ}	"my one, mine"
<i>À-Wīn díḿ</i>	"Awini's family"

Fōn pǎ́ǎ̀'ád nē tīnám dín.

2SG.CNTR speak:DIPF **FOC 1PL.CNTR** individual.INAN.

("We can't speak your language but ...") "You're speaking ours."

Abstract NPs and AdvPs [19.7.2.2](#) [19.7.2.3](#) preceding *s5b*^a are pre-modifiers:

<i>pù-pìəlɪm s5b</i> ^a	
pl <i>pù-pìəlɪm díḿ</i> ^a	"holy person" (<i>pù-pìəlɪm</i> ^m "holiness")

<i>dūnɪya ní dìn</i> ^{nɛ}	"earthly one" (1 Cor 15:44)
<i>Bòk díḿ</i>	"Bawku people"

The quantifier *yīgá*⁺ "first" is a pre-determiner, as always [19.7.3](#):

yīgá sōb^a "first (person)" beside *yīg-sōb*^a *id*

Specialised senses may be found with cb pre-modifiers:

<i>yī-sōb</i> ^a	"householder"	(<i>yīr</i> ^ε / "house")
pl <i>yī-sōb-nàm</i> ^a		
<i>yī-dím</i> ^a	"members of the household"	
<i>nīf-sōb</i> ^a	"miser"	(<i>nīf</i> ^ρ / "eye")
<i>tānp-sōb</i> ^a	"warrior"	(<i>tānp</i> ^ρ "war")
<i>zūg-sōb</i> ^a	"boss" NT "Lord"	(<i>zūg</i> ^ρ / "head")
pl <i>zūg-sōb-nàm</i> ^a		

The expression *ōn sōb*^a means "the person we were just talking about."

Būn^{ne}/ "thing" is probably derived from the old gender agreement pronoun for abstracts. It is used in many constructions as a dummy placeholder. It can make a regular *r^ε|a*⁺ Class plural *būná*⁺, but in placeholder use it is found indifferently as sg and pl, or pluralises with *nàm*^a like inanimate pronouns:

Būn-námá_ àlá *kà fù nyētá* ⁺∅?
 Thing-PL NUM:how.many and 2SG see:DIPF CQ?
 "How many things do you see?" SB

It is used (beside *nīn*- "person" for human) as a dummy non-human cb before adjectives, avoiding the use of an adjective as complement of *àḡḡ*^a "be" [24.2](#).

Dīlb á nē būn-súḡ. "Food is good." ("Food is a good thing.")
 Food COP FOC thing-good:SG.

Some adjectives cannot be used as NP heads at all, so *būn*- is necessary in:

būn-vúr^ε "living thing"

Even those that can, cannot have any dependents apart from ideophones or articles, so *būn*- is also necessary in:

būn-píàl-kàḡā^{+/} "this white one"

Deverbal Adjectives cannot be used as NP heads while retaining adjectival meaning; with no preceding cb they are interpreted as Agent Nouns [13.1.1.2.1](#). Thus

	<i>bōn-kúvdîr^ε</i>	"thing to do with killing"
but	<i>kōvdîr^ε</i>	"killer"

WK requires an adjective to take the *m^m* Class suffix if the sense is abstract [19.8.1.1](#).

Note the idioms

<i>bōn-gíŋ^a</i>	"short chap" (informal, humorous)
<i>bōn-kúdùg^ɔ</i>	"old man" (the normal expression)
	(but <i>pɥ'à-ŋyá'aŋ^a</i> "old woman")

Bōn also occurs with abstract [19.7.2.2](#) pre-modifiers:

<i>tōlígír bún^{nε}</i>	"heating thing, heater" = <i>bōn-tōlígír^ε</i>
---------------------------------	--

With an AdvP pre-modifier:

<i>kù'əmīn bún^{nε}</i>	"water creature"
---------------------------------	------------------

Note that while *bōn* is a "thing", tangible or abstract, *dín* is purely a semantically empty head, with only number and gender specified:

<i>kù'əmīn dín^{nε}</i>	"the (non-human) one in the water, aquatic one"
---------------------------------	---

19.10 Personifier Clitics

Indigenous Kusaasi personal names are always preceded by the personifier clitics *À-* or *Ñ-/M̃-*; *À-* is the default, with *Ñ-/M̃-* appearing before adjective stems. *M̃-* is found before labial consonants. These are all Liaison Words. This *À-*, like the manner-adverb prefix *à-*, is preceded by word-final *-l*, not *-a* as with the number prefix.

Personal names do not take the article or modifiers, but may take pre- or post-determiners. *À-*, but not *Ñ-/M̃-*, are deleted after a pre-determiner.

Personal names can pluralise with *nàm^a*; such plurals can certainly mean e.g. "more than one (person called) Awini"; I do not know if they can also bear the *cum suis* meaning "Awini and his companions (etc.)."

<i>À-Wīn</i>	"Awini"
<i>tì Wīn</i>	"our Awini"

<i>M̃ Wīn</i>	"my Awini"
<i>À-Wīn-kánā</i>	"this Awini"
<i>À-Wīn nám</i>	"Awinis"
<i>Ñ-Dāṽg</i>	"Ndago"
<i>tì Ñ-Dāṽg</i>	"our Ndago"

In speech, *À-* is used before most foreign names also, though the NT (unlike the Mooré Bible) uses the names without the proclitic (and often in English spelling.)

<i>À-Mūusa</i>	"Moses"
<i>À-Yīisa</i>	"Jesus"
<i>À-Sīimóòn</i>	"Simon"

For examples of Kusaasi names see [35.2](#).

NT has some personifications of abstractions: *À-Sàṇ'ṽṇ* "Destruction, Abaddon."

In stories where animals are characters, animal names take *À-*:

<i>À-Bāa</i>	"Mr Dog"
--------------	----------

A number of animal and bird names incorporate the clitic as part of the common noun, without any implication of personification; among such nouns are *à-dàalúṇ*^ᵟ "stork" *à-gáùṇḡ*^ᵟ "pied crow" *à-kṵra-díàm*^{ma} "praying mantis" and the loanword *à-mús*^ε "cat."

Examples:

<i>à-dàalúṇ</i>	"a stork"
<i>m̃/mān</i> <i>dáalúṇ</i> 1SG/1SG.CNTR stork: SG	"my stork"
<i>dāy</i> <i>lā</i> <i>dáalúṇ</i> man: SG ART stork: SG	"the man's stork"
<i>Lì</i> <i>à</i> <i>né à-dàalúṇ.</i> 3INAN COP FOC PERS -stork: SG.	"It's a stork"
<i>M̃</i> <i>ṇyḗ à-dàalúṇ.</i> 1SG see PERS -stork: SG.	"I've seen a stork."

The à- clitic is not simply elided after a pre-determiner but is completely *replaced*, as is apparent from the L Raising affecting the stem. The clitic à- thus behaves in its formal syntax like a pre-determining personal pronoun, and when nominalising a whole phrase or clause, it is analogous to a non-contrastive subject pronoun [19.10.1](#). À- is also *phonologically* similar to the clitic pronouns [15.1](#) [7.4](#) [8.2.2](#). All this may reflect a historical origin as an indefinite third-person pronoun "someone", perhaps related to the Mooré 3rd person singular pronoun *yě~a*.

19.10.1 With VPs and Clauses

Verb Phrases can be nominalised by the Personifier Clitic À- [19.10](#), which takes the place of a subject pronoun, in the sense "someone who ...":

Atum sɔ'

À-tòm sɔ'

PERS-send INDF.AN

"Siloam" ("Someone sent someone else") [23.1](#) (Jn 9:7)

Apv-kpen'-banv dim

À-pv kpen' bànv dív

PERS-NEG.IND enter circumcision individual:PL

"the Uncircumcised" [18.1](#) (Eph 2:11)

This is common in proverbs and similar set expressions:

À-dāa yél kâ' tímm +∅.

PERS-TNS say NEG.HAVE medicine NEG.

"Did-say has no remedy." (No use crying over spilt milk.)

À-nyē nē nīf sɔŋ'ɔ̃ À-wòm tùba.

PERS-see with eye:SG be.better.than PERS-hear ear:PL

"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

À-Kīdɪɔ̃ ∅ Bū'əs

PERS-cross SER ask

"Crossed over and asked" (name of the constellation Orion.)

Apozotyel

"Doesn't-fear-trouble", character in KSS p35.

À-Pv-zót-yēl

PERS-NEG.IND-run:DIPF-thing:SG

The expected final LF in this expression, induced by the Negative Clitic paired with *pū*, is seen only when the name is clause-final:

Apozotyel da ane o saam biig ma'aa.

À-Pū-zót-yēl dá à né ò sàam bîg mà'aa.

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

"Fears-nothing was his father's only child." KSS p35

In some cases, *À-* appears before the subject of an entire clause, as a pre-determiner with the meaning "someone whose ...":

Bà kèn né À-nà kúv_ m̃ nūa yír, kà bà pū kén

3PL go:DIPF FOC PERS-IRR kill 1SG chicken:SG house:SG and 3PL NEG.IND go:DIPF

À-nōs bē yírē +∅.

PERS-chicken:PL EXIST house:SG NEG.

"They go to Will-kill-my-chicken's house, but not to Got-chickens' house."

("The rich are not always hospitable.")

[Cf *Nōs bē*. "There are chickens, chickens exist."]

À-Tīm bódìg yā

PERS-medicine get.lost PFV

Personal name [35.2](#), literally "Someone's medicine has got lost."

Nominalisations with *à-* can pluralise with *nām^a*:

À-zī'_ ∅ kpí nām kpîd né kà ténbîd.

PERS -NEG.KNOW SER die PL die:DIPF FOC and tremble:DIPF.

"Those who don't know death, are dying with a struggle." (Proverb)

(i.e "It's a storm in a teacup.")

20 Adverbial Phrases

20.1 Adverbial Phrases: Overview

Adverbial Phrases characteristically appear as Adjuncts within clauses and VPs. To a more limited extent they may appear as arguments of verbs [20.5](#), or (with the exception of proadverbs) within NPs as determiners or modifiers [19.7.2.3](#) [19.8.2.3](#).

Adverbial Phrases may have morphologically distinctive Adverbs as heads, or may represent adverbial uses of NPs; such NPs have the usual structural possibilities for NPs. Otherwise, the range of structures for AdvPs is more limited. Adverbs with a preceding NP determiner are limited to specialised Postpositions [20.6](#). Absolute Clauses occur as Adverbs of Time/Circumstance [31.1](#), while Relative Clauses with pronouns expressing place or manner occur as corresponding types of AdvP. Coordination of AdvPs is possible only for those expressing time and place.

There is a basic syntactic distinction between AdvPs expressing Time, Circumstance or Reason on the one hand, and AdvPs expressing Place or Manner on the other. AdvPs expressing time, circumstance or reason usually appear as Clause adjuncts [28.1.1](#) before the clause subject, or as VP Adjuncts [23.6](#). while AdvPs expressing place or manner may appear as VP Adjuncts but not as Clause Adjuncts; they may only precede the clause subject by preposing with *kà* [33.2](#).

Thus **M̄ɔ́gú-n mām bɛ́.* for "I'm in the bush."

Grass:SG-LOC 1SG.CNTR EXIST.

is corrected by WK to

M̄ɔ́gú-n kà mām bɛ́. "I'm in the bush."

Grass:SG-LOC and 1SG.CNTR EXIST.

20.2 Time and Circumstance

Adverbial Phrases expressing **time** may be instantiated by time Adverbs [17](#), but are very often simply nouns or NPs with temporal meanings, and no special marking; for examples see [35.8](#).

No formal distinction is made between a point in time and a period over which a state of affairs persists:

Fù ná kūl bēog.

2SG IRR return.home tomorrow.

"You'll go home tomorrow."

Tì kpélìm ànínā dábɪsà bí'ə̀là.

1PL remain **ADV:**there day:**PL** few.

"We stayed there a few days."

Time AdvPs can be **coordinated**:

Bēogv-n nē záàm kà fù ná nīŋ tí-kàŋā.

Morning-**LOC** with evening and **2SG IRR** do medicine-**DEM.DEL.SG**.

"You'll use this medicine morning and evening."

Adverbial Phrases expressing **circumstances** are typically Absolute Clauses; such clauses are also frequently used to express time [31.1.1](#).

20.3 Place

The core adverb of place is Locative Particle, which has two allomorphs. Strictly speaking, the head of locative AdvPs is the locative particle itself, with a third **zero allomorph** accompanying the "intrinsically locative" forms discussed below; like other postpositions, this is never itself referential even though it has a pre-determiner. This analysis is supported by the use of locatives as NP pre-modifiers [19.7.2.3](#) and by the behaviour of focus marking with locative complements in the verb phrase [33.1.2.4](#).

The form *nī*⁺ is used after words ending in a vowel in SF, after pronouns and after loanwords; the Liaison Enclitic *n^ε* is used elsewhere:

mù'arī-n

"in a lake"

yōdā nī

"among names"

nē nī

"in me"

mān nī

"in me"

la'asvɔ dɔɔdin nε suoya nī

la'asvɔ dɔɔdī-n nē sūēyá nī

assembly:**SG** house:**PL-LOC** with road:**PL LOC**

"in the synagogues and in the streets" (Mt 6:2)

Yīr^ε "house" has the exceptional sg and pl locative forms *yín^{nε}* *yáa-n^ε* which have the particular nuance "home", as in the parting formula [34](#):

Pù'usim yín.

"Greet (those) at home." i.e. "Goodbye."

Note also the locative adverb *yìŋ^a* "outside."

The article *lā*⁺ may precede or follow the locative particle:

or *mù'arīn lā*
mù'ar lā ní "in the lake"

Quantifiers may also follow the locative particle:

m gbana ni wusa "in all my letters" (2 Thess 3:17, 1996)
m̀ gbàna ní wōsa
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 fu nini.
Kèm Siloam búlgū-ni_ø píə_ fù nīnī.
 Go:**IMP** Siloam well:**SG-LOC SER** wash **2SG** eye:**PL**.
 "Go to the well of Siloam and wash your eyes." (Jn 9:7)

Ka Suntaana kpen' Judas [...] sunfun.
Kà Sūtáanà kpén' Judas [...] súṅfī-n.
 And Satan enter Judas [...] heart:**SG-LOC**.
 "Satan entered Judas' heart." (Lk 22:3)

Ka Paillet len yi nidibin la na ya'asi yeli ba ye...
Kà Paillet léṃ yī nīdībī-n lā nā yá'àsī_ø yélì_ bā yē...
 And Pilate again emerge person:**PL-LOC ART** hither again **SER** say **3PL.OB** that ...
 "Pilate came out to the people again and said to them ..." (Jn 19:4)

ILK has, transposed into the orthography of this grammar:

<i>Ò bè dá'ā-n.</i>	"He's at market."
<i>Ò bè sɔ́á'arī-n.</i>	"He's at the bush."
<i>Ò bè pɔ́ɔ́gú-n.</i>	"He's at the farm."
<i>Ò bè yín.</i>	"He's at home."
<i>Ò bè sākulí-n.</i>	"He's at school."
<i>Ò bè mɔ́ɔ́gú-n.</i>	"He's in the grasslands."
<i>Ò bè kɔ́lɔ́gɪ-n</i>	"He's at the stream."
<i>Ò bè tūumɪ-n.</i>	"He's at work."

More precise locative meanings are expressed with postpositions, many of which themselves include the locative particle [20.6](#).

Ò dìgɪl gbáɥŋ lā tɛɛbùl lā zúg.

3AN lay.down book:**SG ART** table:**SG ART** upon.

"She's put the book on the table."

Dāy lā bé nē dɔ́-kàŋā lā púvǵō-n.

Man:SG ART EXIST FOC hut-**DEM.DEI.SG ART** inside:**SG-LOC**.

"The man is inside that hut."

My informants tend to use postpositions in cases where the NT versions have the locative particle alone.

Kusaasi place names, many postpositions, and a number of other adverbs and proadverbs [17.1](#) are "intrinsically locative." Syntactic considerations [19.7.2.3](#) [33.1.2.4](#) suggest such words should in fact be regarded as accompanied by a zero allomorph of the locative particle:

Ò bè Bók.

"He's at Bawku." ILK

Ò bè Tɛ́mpáan.

"He's at Tempane." ILK

Ò kɛŋ Bók.

"He's gone to Bawku."

Ò dìgɪl gbáɥŋ lā tɛɛbùl lā zúg.

"She's put the book on the table." (above)

dàtɪɥŋ^ɔ or dítúŋ^ɔ

"righthand"

dàgòbɪg^a

"lefthand"

àgɔ́l^{lɛ} or àgɔ́l^a

"upwards"

lālɪ⁺

"far off" (? *lāl nɪ⁺*)

Place names often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement towards or away:

M ná kɛŋ Bók.

"I'm going to Bawku."

Fò yúùg Bók kpɛ́lǵáa?

"Have you been long in Bawku (here)?"

Fò yúùg Bókàa? SB

(rejected by WK as "Mooré")

In the speech of my informants, foreign place names share the syntactic behaviour of Kusaal place names as intrinsically locative, but especially in the sense of rest at a place, the NT often either uses the postposition *nɪ⁺* or paraphrases like

Jerusalem tɛ́ŋɪ-n

"in Jerusalem-land"

For examples of Kusaasi place names see [35.3](#).

Proforms used in locative heads of Relative Clauses are intrinsically locative, and consequently so is the Relative Clause as a whole [31.2](#):

biig la n be si'el la

bīig lá ñ bè sī'əl lā

child:SG ART COMP EXIST INDF.INAN ART

"the place where the child was" (Mt 2:9, 1976)

ka mɔri fu keŋ zin'ikanɛ ka fu pu bɔɔda.

kà mɔrí_ fù_ ø kēŋ zín'-kànɪ kà fù pū bɔɔdā +ø.

and have 2SG.OB SER go place-REL.SG and 2SG NEG.IND want NEG.

"and take you where you do not want." (Jn 21:18)

Some words incorporate *n*^ε always, whether used as locatives or not:

	<i>tèŋ-pūugv-n^ε/</i>	"village"
pl	<i>tèŋ-pūvdi-n^ε/</i>	

Note also the *time* expressions:

<i>bēog^ɔ</i>	"tomorrow"
<i>bēogv-n^ε/</i>	"morning"
<i>sān-sī'ā-n lā</i>	"at one time, once..." 27.1.3
<i>yīigí-n^ε</i>	"at first"

Locative forms with or without the locative particle may appear as modifiers or determiners within a NP [19.7.2.3](#) [19.8.2.3](#).

Locative AdvPs can be coordinated:

Nyalima na be winnigin ne nwadigin ne nwadbibisin.

Ŋyālɪmá nà bē wínnìgī-n nē ɲwādɪgí-n nē ɲwād-bíbɪsī-n.

Wonder:PL IRR EXIST sun:SG-LOC with moon:SG-LOC with moon-small:PL-LOC.

"There will be wonders in the sun, moon and stars." (Lk 21:25)

Reason-why AdvPs are construed like Place AdvPs, with a metaphorical extension of the sense of the postposition *zūg* "upon" [20.6](#); similarly for proforms:

<i>àlá zùg^ɔ</i>	"therefore"	<i>bō zúg^ɔ</i>	"why?"
<i>dìn zúg^ɔ</i>	"therefore"		

20.4 Manner

Adverbial Phrases expressing manner may again be instantiated by proforms; there are also morphologically distinctive manner-adverb word types [17](#).

Manner AdvPs cannot be coordinated.

Reduplication of nouns forms a number of **distributive** Manner AdvPs:

dàbɪsɪr dàbɪsɪr

"day by day"

zĩŋ'ig zĩŋ'ig

"place by place"

Reduplication of number words is similarly distributive [16.2.5](#).

Reduplication of manner-adverb *words* themselves is intensifying:

àmēŋá mēŋá

"very truly"

àsídà sídà

"very truly"

Ì wúm Kūsáàl bĩ'elá.

"I know Kusaal a little."

1SG hear:**DIPF** Kusaal slightly,

Ì wúm bĩ'el bĩ'el.

"I understand a very little."

1SG hear:**DIPF** little little.

A very common form of Manner AdvP is a Relative Clause using the proform *sĩ'am*^m "somehow" as head: see [31.2.1](#).

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in some respects, and conversely some *m*^m Class abstract nouns derived from adjective stems are zero-derived to manner adverbs [17](#). On a syntactic level, even count nouns used in generic senses are encountered as AdvPs:

Ì kēj nōbá.

1SG go leg:**PL**.

"I went on foot." SB; WK corrected this to *Ì kēj nē nōbá*, using *nē* "with."

A prepositional phrase with *nē* occurs parallel to a count plural used adverbially in

À-ŋyē nē nĩf sɔŋ'ɔ̃ À-wòm túbá.

PERS-see with eye:**SG** be.better.than **PERS**-hear ear:**PL**

"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

Mass quantifiers, like abstract mass nouns, are frequently used adverbially:

Ò tùm bédugū.

"She's worked a lot."

Ò tùm pāmm.

"She's worked a lot."

Wūsa "all" readily switches from quantifying an object to adverbial use:

Bà gòsī tí wūsa.

3PL look.at **1PL.OB** all.

"They've looked at us all." WK (for: *Bà gòsī tì wūsa. 3PL* look.at **1PL** all.)

This is not a universal property of quantifiers:

Bà gòsī tí bédugū.

"They've looked at us a lot." WK

Bà gòsī tì bédugū.

"They've looked at a lot of us." WK

Numbers have specific forms for the adverbial meaning "so many times" [16.2.5](#); the other count quantifiers sometimes appear similarly as adverbs:

Bà gòsī tí bábīgā.

"They've looked at us many times." WK

Bà gòsī tì bábīgā.

"They've looked at many of us." WK

20.5 AdvPs as Verb Arguments

The prototypical use of AdvPs is as adjuncts within the VP, or for Time or Circumstance AdvPs, as Clause Adjuncts:

Fù dúə wēlá +ø?

2SG rise how **CQ?**

literally "How did you rise?"; morning greeting.

(The form *dúə* of the verb *dūe* "rise" shows that the following word is part of the same phrase [8.5.3](#).)

Bēogú fù ná kūl.

Tomorrow **2SG IRR** return.home.

"You're going home tomorrow." SB

However, AdvPs also occur as verb arguments.

AdvPs of all types can appear as subjects of the verb *àɛŋ*^a "be something /somehow" [24.2](#). Adjectival verbs may also have an AdvP subject:

Yiŋ venl, ka poogin ka'a su'um.

Yiŋ véŋl kà pūvgu-n kā' súmm +∅.

Outside be.beautiful and inside:SG-LOC NEG.BE good:ABSTR NEG.

"Outside is beautiful but inside is not good." (Acts 23:3, 1996)

Absolute Clauses may appear as subjects:

Kristo da kp̄ii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.

Kristo_∅ dà kp̄ii_ ti yɛlá lā kɛ kà ti báŋ

Christ COMP TNS die 1PL about ART cause and 1PL realise

nòŋilim_∅ àŋ sīəm.

love COMP COP INDF.ADV

"Christ dying for us makes us understand what love is like." (1 Jn 3:16)

Apart from this AdvPs do not usually appear as subjects: the sentence

Sùŋā bɛ́.

"OK it is." WK

Good:ADV EXIST.

is probably to be analysed as involving a metalinguistic use of *sùŋā*.

The verb *àɛŋ*^a characteristically takes a manner-adverb or derived abstract noun complement in preference to an adjective [24.2](#).

Kusaal frequently uses manner-adverb proforms instead of pronouns with abstract reference as verb objects:

Ò nìŋí_ àlá.

"She did that." ("thus")

3AN do ADV:thus.

Dā níŋì_ àláa +∅!

"Don't do that!" ("thus")

NEG.IMP do ADV:thus NEG!

Relative Clauses with the proform *sīəm*^m "somehow" as head are accordingly used after verbs of cognition, reporting and perception of the type that take Content Clause complements [29.3](#), to express the sense "say [etc] what ...":

Fu wum ban yɛt si'em laa?

Fù wúm bán yèt sīəm láa +∅?

2SG hear:DIPF 3PL:COMP say:DIPF INDF.ADV ART PQ?

"Do you hear what they are saying?" (Mt 21:16)

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

"There's no man in the room."

Zūg^{3/} is frequently used metaphorically to express a **reason** "because of ..."

<i>mān zūg</i>	"on account of me"
<i>dāy lā zúg</i>	"on account of the man"
<i>bō-zúgò?</i>	"why?" (cf <i>bō zúgō</i> "because" 27.1.3)

With an Absolute Clause as pre-determiner:

<i>Mān n̄wè' dāy lā zúg kà police gbán'a_m.</i>	
1SG:COMP strike man: SG ART upon and police seize 1SG.OB.	
"Because I struck the man the police arrested me."	

Although Reason AdvPs are, as here, frequently preposed with *kà* [33.2](#), they may occur as clause-level presubject adjuncts [28.1.1](#):

<i>Pian'akanε ka m pian' tisi ya la zug, ya anε nyain.</i>	
<i>Pìān'-kànı kà m̄ pìān'_∅ tísì yā lā zúg, yà á nē nyāe.</i>	
Word- REL.SG and 1SG speak SER give 2PL.OB ART upon, 2PL COP FOC brightly.	
"Because of the the words I have spoken to you, you are clean." (Jn 15:3)	

<i>zūgū-n^ε</i>	"on"
<i>téεbùl lā zúgū-n</i>	"on the table"
<i>tēŋír^ε</i>	"under" (<i>tēŋ^a</i> "ground")
<i>téεbùl lā tēŋír</i>	"under the table"

Also as a locative adverb by itself:

<i>Gòsım tēŋír!</i>	"Look down!", more commonly <i>Gòsım tēŋı-n!</i>
---------------------	--

<i>pūvgū-n^{ε/}</i>	"inside" (<i>pūvg^a</i> "belly, inside")
<i>dūk lā pūvgū-n</i>	"in the pot"

Metaphorical:

<i>n̄wādıs yúòm lā pūvgū-n</i>	"months in the year"
--------------------------------	----------------------

<i>bābá⁺</i>	"beside" (<i>bābır^{ε/}</i> "sphere of activity")
<i>m̄ nōbá bàba</i>	"beside my feet"

<i>sìsùvgū-n^{ε/}</i>	"between"
	replaced by <i>sùvgū-n^{ε/}</i> in KB
<i>tīnám nē fūn sí-sùvgū-n</i>	"between us and you"

tùè^{nɛ}

dāká lā túèⁿ

"in front of"

"in front of the box"

As an adverb with no pre-determiner:

Gòsɪm túèⁿ!

"Look to the front"

gbìn^{nɛ}

zūər lā gbín

"at the bottom of" (gbìn^{nɛ} "buttock")

"at the foot of the mountain"

nyá'an^a

lì nyá'an^a

"behind; after (time)" (nyá'an^a "back")

"afterwards" as a presubject adjunct [28.1.1](#)

NĒ'ηá nyá'àη kà ò kūl.

DEM.DEI.INAN after and **3AN** return.home.

"After this she went home."

sā'an^{ɛ/}

Wínà'am sá'àn

"into/in the presence of" "in the opinion of"

"in the sight of God"

Fò ná dī'e tìim pɹ'á-bàmmā lā sá'àn.

2SG IRR receive medicine woman-**DEM.DEI.PL ART** among.

"You'll get the medicine from those women."

yēlá⁺

Bà yēl-ō_ ∅ mān yēlá wōsa.

3PL say **3AN.OB 1SG.CNTR** about all

"They told him all about me."

"about, concerning" (pl of yēl^{ɛ/} "matter, affair")

kōŋ'ɔkō

cf àdàkóŋ' "one" [16.2.3](#)

m̄ kōŋ'ɔkō

1SG by.self

"by myself"

21 Prepositions

There are two basic prepositions: *nē* "with" and *wōv* "like"; others are either loanwords or originated from serial-verb constructions. Prepositional phrases function as clause adjuncts. They do not form components of Noun Phrases (except for *báa yīnní* 21.2.)

Neither prepositions, nor their objects, can be coordinated.

For prepositional phrases as verb complements see 23.4.

21.1 Core Prepositions

nē is "with" in both the "accompanying" and instrumental senses. The *nē* "and" which coordinates NPs and AdvPs 19.4 is presumably fundamentally the same word, although in that sense it is parallel in usage to *bēē* and *kōv* "or", which do not behave as prepositions.

WK has forms of *nē* with bound personal pronouns:

<i>ní m^a</i>	<i>ní tī^{+/}</i>
<i>ní p</i>	<i>ní yā^{+/}</i>
<i>n-ó^{-o}</i> [nǒ(:)]	<i>ní bā^{+/}</i>
<i>ní lī^{+/}</i>	

The *ne o* of the 1996 NT version is frequently read [nǒ] in the audio version.

Other speakers only use *nē* with free pronouns; WK has alternative forms also with *né* before those clitic pronouns which have a vowel in SF: *né lì*, *né tì*, *né yà*, *né bà*, with the pronouns having L toneme throughout; SB has the same forms. The H toneme on the preposition in WK's forms with *ní* is difficult to explain; compare perhaps the tonemes of Pattern H 2-mora stem verbs before object pronouns 7.3.1.

Examples for *nē*:

Lìgíním_ fù nīf né fù nú'ùg.

Cover:IMP 2SG eye:SG with 2SG hand:SG.

"Cover your eye with your hand."

Bà kèŋ nē nōbá.

"They've gone on foot." WK

3PL go with leg:PL.

Dìm nē Wīn, dā tú'às nē Wīnné ⁺∅.

Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG.

"Eat with God, don't talk with God."

(Proverb. Be grateful for God's generosity and don't complain.)

Kulim ne sumbugusum.

Kùlɪm nē sùmbūgusím.

Return.home:IMP with peace.

"Go home in peace." (Mk 5:34)

[Bárikà né fù] kēn kēn.

[Blessing with **2SG**] arrival arrival.

"Welcome!" (a greeting template [34](#))

M géŋ' né fù. "I'm angry with you." SB

1SG get.angry:PRV with **2SG**.

wōv "like" occurs often after *wēn*^{na/} "resemble" introducing its complement; the preposition *nē* also frequently occurs instead of **wōv**.

The object of comparison, whether introduced by **wōv** or by *nē* after *wēn*^{na/}, is followed by an empty particle *nē* after any object which does not already have the article *lā*^{+/}, even if it is a pronoun, or is specific:

wōv mān nē "like me"

wōv búŋ nē "like a donkey"

Ka o nindaa wenne nintaŋ ne.

Kà ò nīn-dáa wēn nē nīntāŋ nē.

And **3AN** eye-face:SG resemble with sun:SG like.

"His face is like the sun." (Rev 10:1, 1996)

Alazugɔ mɔri ya'am wov wiigi ne...

Àlá zùgɔ, m̀rī yā'm wōv wīigí nē...

Therefore, have sense like snake:PL like...

"Therefore, be wise as serpents ..." (Mt 10:16)

Wōv, *wēn wōv*, and *wēn nē* can also be used for "about" with numbers. The object is not followed by the redundant *nē* in this case:

wōv tūsá àyí "about 2000"

like thousand:PL NUM:two

The object of a comparison is often a *sī'am* Relative Clause:

Ò zòt wōv búŋ ò zòt sī'am lā.

3AN run:**DIPF** like donkey:**SG** **COMP** run:**DIPF** **INDF.ADV** **ART**.

"He runs like a donkey runs."

With pronoun objects WK has

wōv mān LF *mánē*

wúv tì

wōv fūn LF *fúnē*

wúv yà

wōv ɔn^ε

wúv bà

wúv lì

H toneme again appears before the Fixed-L pronouns.

WK permits phrases introduced by *wōv* to be preposed with *kà* [33.2](#), but rejects this construction for *nē* + NP:

Wōv búŋ nē kà ò zòt.

Like donkey:**SG** like and **3AN** run:**DIPF**.

"Like a donkey, he runs."

But **Nē m̀ nú'ùg kà m̀ sī'ɪs.*

With **1SG** hand:**SG** and **1SG** touch.

is not possible for "With my hand, I touched it."

A clausal object of *wōv* is typically a relative clause with *sī'am* [31.2.1](#), but *wōv* can also be construed with a following Content Clause [29.3](#):

M pian'adi tisidi ya wuv ya anε m biis nε.

M̀ pɪ́ǎŋ'adī_ø tísìdī_ yá wōv yà á nē m̀ bīs nē.

1SG speak:**DIPF** **SER** give:**DIPF** **2PL.OB** like **2PL COP** **FOC** **1SG** child:**PL** like.

"I talk to you as if you were my children." (2 Cor 6:13)

21.2 Loanwords

Báa (Hausa *bāa* "not exist") is used to express constituent negation. It takes an object like a preposition; see further [32.4](#).

Two Hausa loanwords which are used as conjunctions [27.1.3](#) are also used as prepositions. For pronoun objects they use the free forms.

àséε = "except for" (← Hausa *sai*)

àséε Wínà'am

"except for God" (calquing the Twi *gye Nyame*)

hālí⁺ "up to and including"; cf Hausa *har*, but this is a word found extremely widely in the savanna and Sahel; it may ultimately derive from Arabic حتى *ḥatta*: (Heath 2005.)

O daa pun anε ninkuud hali pin'ilugun sa.

Ò dāa pún à nē nīn-kúùd hālí pīṅ'ilúgū-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)

Before a manner-adverb *hālí* means "even" or just "very"

Lì tẹ hālí bédugū. "It's very difficult."

3INAN be.bitter until much.

The adverb itself may be ellipted:

Lì tẹ hālí. "It's very difficult."

Hālí in the adverbial sense "even" may be preposed with *kà* [33.2](#):

Hali ka nidib mɔr ban'adnam na.

Hālí kà nīdīb mōr bāṅ'ad-nām nā.

Even and person:**PL** have sick.person-**PL** hither.

"People even brought the sick" (Acts 5:15)

21.3 Compound Prepositions

Expressions deriving from Serial VP constructions with an auxiliary following the main VP [26.3.2](#) have given rise to compound prepositions:

Wēn nē *X* and **wēn wūu** *X* have become prepositional phrases, to the extent that the entire sequence *wēn* + preposition + object can be preposed with *kà* [33.2](#), and a change of polarity can occur before it:

Da lo ya nindaase, wenne foosug dim la niṅid si'em la.

Dā ló yà nīn-dáasē ⁺∅, wēn nē fōwsúg díṃ lá_ ∅

NEG.IMP tie **2PL** eye-face:**PL** **NEG**, resemble with puff:**GER** individual.**PL** **ART** **COMP**

niṅid sī'am lā.

do:**DIPF** **INDF.ADV** **ART**.

"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

The compound preposition **là'am nē** "together with" likewise derives from a serial-verb construction:

...mōr ya'am yinne la'am nē tēn'esa yinne.

... mōr yā'm yīnní là'am nē tēn'ésá yīnní.

... have sense one together with thought one.

"... had one mind together with one thought." (Acts 4:32)

Hālí also forms compound prepositions:

Hālí nē and **hālí là'am nē** are found before *h*-Clauses with the meaning "despite, even though":

hali nē man daa sōbi tisi ya si'em la, m daa pu sōbi li

hālí nē mán dāa sōbi_ø tísì_yā sī'am lā

even with **1SG:COMP TNS** write **SER** give **2PL.OB INDF.ADV ART**

m̃ dāa pū sōbì_lī ...

1SG TNS NEG.IND write **3INAN.OB** ...

"Though I wrote to you like that, I did not write it ..." (2 Cor 7:12)

Hali la'am nē on daa an yelsum wusa daan la, o da lieb nōṅdaan...

Hālí là'am nē ón dāa áṅ yēl-súm wūsa dáàn lā,

Even together with **3AN:COMP TNS COP** matter-goodness all owner:**SG ART**,

ò dà liəb nōṅ-dáàn...

3AN TNS become poverty-owner:**SG**...

"Although he possessed every blessing, he became poor.." (2 Cor 8:9)

Hālí báa means "even":

Hali baa lampōdi'esidib mē niṅid ala.

Hālí báa làmpō-dí'əsìdib mé nìṅid àlá.

Even tax-receiver:**PL** also do:**DIPF ADV**:thus.

"Even tax-collectors do that." (Mt 5:46)

Hali baa bama wusa ya'a na zo ka basif, man ku basi f.

Hālí báa bàmmā wūsa yá' nà zó kà básì_ f,

Even **DEM.DEI.PL** all if **IRR** run and abandon **2SG.OB**,

mān kú bāsì_ f_ +ø.

1SG.CNTR NEG.IRR abandon **2SG.OB NEG**.

"Even if they all run away and leave you, I will not leave you." (Mt 26:33)

22 Verbal Predicators

22.1 Structure

The core of the Kusaal verb phrase is a Verbal Predicator, consisting of a verb word along with clitics which, along with verb flexion, mark tense, aspect, mood and polarity. Other clitics are also phonologically dependent on the Verbal Predicator; as they may intervene between the verb and the predicator category particles, they are also described in this section [22.7](#), although they are not part of the Verbal Predicator syntactically. They comprise "Particle-Verbs", a heterogeneous group of words expressing notions like repetition and sequence of events, which immediately precede the verb itself, and enclitic pronouns following the verb, comprising the enclitic 2pl subject pronoun and all the non-contrastive personal pronoun objects.

The Verbal Predicator is subject to Independency Marking [22.6](#). This is primarily a tone overlay [22.6.1.1](#), but there are associated segmental features: the particle *yā*⁺ after phrase-final Perfective forms [22.6.2.1](#) and the Variable Verb Imperative flexion *-m*^a appear only when the tone overlay is present.

The system cleanly separates tense, marked by proclitic particles, from aspect, primarily marked by verb flexion. 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 verb flexion *-m*^a of Variable Verbs is a portmanteau marker of Imperative Mood along with positive polarity and Independency [22.6.2.2 11.1](#).

The Verbal Predicator shows no agreement. Apparent number agreement in imperatives is due to the incorporation of the postposed 2nd pl subject pronoun *yā*.

The Verbal Predicator thus consists of a single verb word, along with proclitic and enclitic particles which occur in a fixed order:

	Tense		Mood	P/Vb		LE1	LE2
<i>lèε</i>	<i>dàa</i>	<i>nàm</i>	$\emptyset \leftrightarrow p\bar{u}$	<i>pùn</i>	VERB	<i>n</i> ^ε	<i>m</i> ^a
	<i>sàa</i>		$\emptyset \leftrightarrow d\bar{a}$	<i>lèm</i>		<i>ya</i>	<i>f</i> ^ɔ
	\emptyset		<i>nà \leftrightarrow k\bar{u}</i>	<i>tì</i>			<i>o</i>
	<i>pà'</i>			<i>kpèlɪm</i>			<i>l</i> ⁺
	<i>sà</i>			<i>là'am</i>			<i>t</i> ⁺
	<i>dāa</i>			<i>dèŋɪm</i>			<i>ya</i> ⁺
	<i>dà</i>			<i>nyēε(tɪ)</i>			<i>ba</i> ⁺
				...			

All elements other than the verb are optional; however, the \emptyset marks places where the absence of any particle from a particular column can be contrastive.

The particles in the column "Mood" also mark polarity: Positive \leftrightarrow Negative.

P/Vb "Particle-Verbs" [22.7.2](#); LE1, LE2 are Liaison Enclitic slots [22.7.3](#).

For *lèè* "but" see [22.7.1](#); for *nàm* "still" see [22.3](#).

Aspect-focussing *nē^{+/}* is formally a Verb Phrase particle which immediately follows the Verbal Predicator [33.1.2.1](#).

Verbs of the majority Variable type mark aspect by flexion [11.1](#).

Tone Pattern LO verbs have all-M tones in the Irrealis Mood [7.3](#).

22.2 Aspect

Like a great many West African languages, Kusaal has a verbal system dominated by aspect rather than tense. The basic distinction is **Perfective** versus **Imperfective**, with imperfective further subdivided into **Dynamic** and **Stative**. Variable Verbs distinguish aspects by flexion: the unmarked Base Form is perfective or (resultative) stative, the form marked with the suffix **-da* is *dynamic* (not stative) imperfective, and the form with **-ma* is used for imperative when the verb word itself has the Independency tone overlay [11.1](#) [22.6.1.1](#). Invariable Verbs have a single form which is either dynamic imperfective or (descriptive) stative by default.

Directly following a verb with stative or dynamic imperfective aspect, with no words other than Liaison Enclitics intervening, the **VP focus particle** *nē^{+/}* [33.1.2](#) applies to the *aspect*, limiting its time reference or marking a contrast with another time at which the state of affairs expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." With Dynamic Imperfective forms this marks a distinction which is analogous to the difference between English "progressive" (with *nē^{+/}*) and "habitual" (without *nē^{+/}*) aspects; for Stative Imperfectives see [22.2.2.1](#).

This aspectual use of *nē^{+/}* is possible only with positive polarity and indicative mood; in other cases although the corresponding meaning differences may occur, they are unmarked. In Passive constructions the actual meanings signalled by the aspectual use of *nē^{+/}* may not occur [33.1.2.3](#).

The focus particle *nē^{+/}* is not permitted at all in certain syntactic contexts, and may not appear a second time in aspectual sense if it is already present focussing a constituent; again the corresponding aspectual distinctions are unmarked [33.1.2.1](#).

22.2.1 Perfective

The unmarked Base Form of Variable verbs has Perfective Aspect by default. With Variable Verbs which express a change of state in subject or object *only*, the Base Form may have Resultative Stative Aspect [22.2.2.1](#).

The Perfective is the least marked and most neutral of the aspects, being appropriate whenever there is no progressive, habitual or stative sense. It is thus not comparable to the marked perfective aspect of Russian, and in particular it is not incompatible with a present tense interpretation. It may correspond to the English "simple present" (when this is not habitual), which is likewise unmarked over against the progressive form. It is the usual aspect found with the Irrealis Mood to express future events. Nevertheless, in contexts where there is no tense marking Perfective often does have an implication of *completion*, in contrast with the imperfective.

In fact, the Perfective often does occur without tense marking, either explicit or implicit from context [22.3.3](#). With most verbs this straightforwardly expresses a completed event or process where the time is unspecified, resembling the English "present perfect." As with the English tense/aspect, this very absence of time specification creates the implication that the event is still currently relevant:

Ò k̀p̀ì yā.

3AN die PFV.

"She's died."

Sāa dāa ní.

Rain TNS rain.

"It rained." (before yesterday.)

Sāa pá' nì yā.

Rain TNS rain PFV.

"It rained." (earlier today.)

but Sāa ní yā.

Rain rain PFV.

"It has rained."

The time is unspecified: "Perhaps the grass is still wet, or I am explaining that the area is not really a desert." (WK)

Other events and processes can be conceptualised as being simultaneous with the moment of utterance, so that the Perfective is appropriate. This resembles the English use of the simple present as an **instantaneous present**:

Ò yèl yē ...

3AN say that ...

"He says" (translating for the foreign doctor)

Performatives naturally fall into this category:

M̐ pú'ùs yā.

1SG greet **PFV**.

"Thankyou", "I thank you."

(cf Hausa *Naa goodèe*, also perfective)

M̐ sják yā.

1SG agree **PFV**.

"I agree."

Verbs of perception and cognition (often corresponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

M̐ nyé nū'-bíbɪsá_ àtán'.

1SG see hand-small:**PL NUM**:three.

"I can see three fingers."

M̐ tén'ès kà ...

1SG think and ...

"I think that ..."

In Serial VP constructions and in complex clauses, the choice of Perfective over Imperfective implies that the event is complete. Consequently, with Serial VPs the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order [26.1](#). Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

Ka dapa ayi' yε fupielā zì'e ba san'an.

Kà dāpá_ àyí yé fū-píə̀lā_ ø zì'e bà sā'an.

And man:**PL NUM**:two dress shirt-white:**PL SER** 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:

Nwāɖɪsá_ àtán' kà fù ná mōr bīg lā n kē nā.

Month **NUM**:three and **2SG IRR** have child:**SG ART SER** come hither.

"Bring the child here in three months." ("having the child, come here.")

With Absolute Clauses as presubject adverbs expressing past "when" the temporal relationship to the main clause is determined by aspect, with a perfective in the Absolute Clause implying priority and an imperfective simultaneity [31.1.1](#). In the same way, narrative generally features chains of tense-unmarked Sequential Clauses

[28.3.2](#) with Perfectives describing events strictly in order, but Imperfectives can occur with no implication of succession [28.3.2.1](#).

22.2.2 Imperfective

22.2.2.1 Stative

Stative Aspect in Kusaal divides into **Descriptive** and **Resultative** aspects.

The single imperfective finite form of an **Invariable Verb** may have Descriptive Aspect as a lexical matter [11.2](#).

Ò gìm. "She's short."
3AN be.short.

Lì zùlɪm. "It's deep."
3INAN be.deep.

M mór pɸ'ā. "I have a wife."
1SG have wife:SG.

M bɔ́ɔdī f. "I love you."
1SG want 2SG.OB.

In English, "stative" verbs characteristically do not use the progressive aspect: "I have a car", not *"I am having a car." Kusaal Descriptive Verbs similarly do not usually appear with the particle *nē^{+/}* in its aspectual sense:

M mór lór. "I have a car."
1SG have car:SG.
not *M mór nē lór.

However, this is not a dynamic/stative distinction in Kusaal, but a distinction between processes *and* states which are presented as temporary/contingent or as abiding/intrinsic. Descriptive Verbs express abiding/intrinsic relationships or predicative adjectival senses, and by default if the particle *nē^{+/}* follows such a verb it is interpreted as *focussing* either a VP constituent or the VP as a whole; *nē^{+/}* can only be aspectual if there is an explicit time reference in the clause itself [33.1.2.3](#) or if the following constituent does not permit focussing with *nē^{+/}* [33.1.2.2](#).

With **Variable Verbs** which express a change of state in the subject the unmarked Base Form may have either a perfective or a Resultative Stative meaning:

The Resultative Stative meaning arises from the nature of the verb rather than being imposed by the particle, which has its normal sense "at the time referred to in particular." However, aspectual *nē*^{+/} is not compatible with the Perfective Aspect, so a Variable Verb Base Form followed by aspectual *nē*^{+/} must be taken as Resultative.

It is not always clear that there is an implied contrast with a time at which the state of affairs expressed was not in force, e.g.

Ò lèr nē. "He's ugly."
3AN get.ugly **FOC**.

Lì pèlɪg nē. "It's white."
3INAN whiten **FOC**.

Lì sòbɪg nē. "It's black."
3INAN blacken **FOC**.

Lì mùə nē. "It's red."
3INAN redden **FOC**.

The translations as supplied by WK above do not seem to imply a change from any previous state; the matter needs further investigation.

Most verbs expressing a change of state in the subject are intransitives like *kpi*⁺ "die" or Patientive Ambitransitives [23.1](#) like *bòdɪg*^ε "lose, get lost." The only other transitive verbs I have found in this category express putting on clothing:

M̃ yé fūug. "I've put a shirt on."
1SG put.on shirt:**SG**.

M̃ yé nē fūug. "I'm wearing a shirt."
1SG put.on **FOC** shirt:**SG**.

With Variable Verbs, only those expressing a change of state in the subject can have Resultative aspect, with the sole exception of the irregular verb *nòŋ*^ε "love", which has a Base Form with Descriptive Aspect [11.1.1](#). After all other Variable Verb Base Forms, *nē*^{+/} cannot be aspectual and must be interpreted as focussing either a VP constituent or the entire VP [33.1.2.3](#).

22.2.2.2 Dynamic

The Dynamic Imperfective is marked morphologically in Variable Verbs with the flexion **-da* [11.1](#). The single imperfective finite form of Invariable Verbs may be Dynamic, as a lexical matter [11.2](#).

Like the Stative, the Dynamic Imperfective can be followed by the particle *nē^{+/}* in its aspectual sense "at the time referred to in particular."

Without *nē^{+/}*, this aspect implies that the subject has a propensity to the achievement, accomplishment or activity expressed by the verb (often called "habitual aspect"):

Ò ɔ̀nbɪd. "He chews."
3AN chew:DIPF.

Nīdɪb kpîd. "People die."
Person:PL die:DIPF.

Nīgí ɔ̀nbɪd mɔ̌ɔd. "Cows eat grass."
Cow:PL chew:DIPF grass:PL.

Nīgí ɔ̀nbɪd nē mɔ̌ɔd. "Cows eat grass." ("What do cows eat?")
Cow:PL chew:DIPF FOC grass:PL. Aspectual *nē^{+/}* is not possible with a generic subject: Constituent focus [33.1.2.4](#).

Nīgí lā ɔ̀nbɪd mɔ̌ɔd. "The cows eat grass."
Cow:PL ART chew:DIPF grass:PL.

Nīgí lā ɔ̀nbɪd mɔ̌ɔd lā.
Cow:PL ART chew:DIPF grass:PL ART.
"The cows eat the grass."

Nā'-síbà ɔ̀nbɪd mɔ̌ɔd. "Some cows eat grass."
Cow-INDF.PL chew:IPF grass:PL.

Nā'-síbà ɔ̀nbɪd mɔ̌ɔd lā.
Cow-INDF.PL chew:DIPF grass:PL ART.
"Some cows eat the grass."

M̌ zíg'i. "I sit."
1SG be.sitting.

M zánl dāká lā. "I carry the box in my hands."
1SG carry.in.hands box:**SG ART**.

With *nē*^{+/}, Dynamic Imperfective typically has a meaning analogous to the English "progressive" or "continuous."

Ò òṅbɪd nē. "He's chewing."
3AN chew:**DIPF FOC**.

M zín'i nē. "I'm sitting."
1SG be.sitting **FOC**.

M zánl nē dāká lā.
1SG carry.in.hands **FOC** box:**SG ART**.
 "I'm carrying the box in my hands."

As with the English progressive, the sense with verbs describing events rather than processes is typically "time-limited habitual." The plural subject without *lā* [19.3](#) contributes to making this the natural interpretation in

Nīdɪb kpîd nē. "People are dying."
 Person:**PL** die:**DIPF FOC**.

22.3 Tense

22.3.1 Tense Particles

Tense particles come first in the Verbal Predicator, preceded only by *lɛɛ* "but." They are mutually exclusive. The markers are

<i>dàa</i>	"day after tomorrow"
<i>sàa</i>	"tomorrow"
∅	present, or unmarked 22.3.3
<i>pà'</i>	"earlier today"
<i>sà</i>	"yesterday"
<i>dāa</i>	before yesterday
<i>dà</i>	before the time marked by <i>dāa</i>

The day begins at sunrise. Thus the common morning greeting:

Fù sá gbìs wēlá⁺∅? "How did you sleep yesterday?" i.e. "last night"
2SG TNS sleep how **CQ?**

The future tense markers require Irrealis Mood, except for cases where the main clause has been ellipited before a subordinate clause of purpose; in this case the verb may have future tense marking with the Imperative Mood:

Ò sáa zàb nà'ab lā. "Let him fight the chief tomorrow."
3AN TNS fight chief:**SG ART**.

The tense particle *dāa* means "before yesterday" but can be used freely for even remote past. Some speakers seem not to use *dā* at all; the NT has numerous parallel passages where the same events are narrated in one passage with *dāa* and in another with *dā*. However when both markers occur, *dā* always expresses a time prior to *dāa*; this is one way the language can express a "pluperfect." (Others are the preservation of original tense markers in indirect speech [29.3.2](#), relative tense marking in *ñ*-Clauses within Sequential Clauses [28.3.2](#) and the use of the particle-verb *tì* [22.7.2](#).)

The auxiliary tense particle *nām* means "still" or with a negative "yet." It can occur after the tense marker \emptyset :

Tìim lā nām bēε + \emptyset ? "Is there any medicine left?"
 Medicine **ART** still **EXIST PQ?** ("Does the medicine still exist?")

dunia nam pū pin'il la
 dūnı́á_ \emptyset nām pū pīñ'il lā
 world:**SG COMP** still **NEG.IND** begin **ART**
 "before the world began" (Mt 25:34) ("The world having not yet begun.")

M̃ nām zī' \emptyset nyē gbīgı̄mne + \emptyset .
1SG still **NEG.KNOW SER** see lion:**SG** **NEG**.
 "I've never seen a lion." SB (see [26.3](#) on serial-verb idioms)

22.3.2 Other Constructions for Tense

My informants use the Remoteness Marker *n^ε* [30.1.1](#) to make an earlier-today past with indicative meaning:

M̃ ́ngbı̄dī-n sūmma. "I was eating groundnuts."
1SG chew:**DIPF-REM** groundnut:**PL**.

This implies "and now I'm not"; a sort of anti-current-relevance which may be the link with the typical hypothetical use. No examples seem to occur in the NT.

Kusaal does not use tense-unmarked Indicative imperfectives for immediate future (like English "I'm going home.") The common expression at leave-taking

M̃ kúl yā. equivalent in usage to "I'm going home."
1SG return.home **PFV**.

instead uses a perfective verb form as an instantaneous present [22.2.1](#).

There are two periphrastic Indicative constructions for "to be about to ...":

(a) *bɔ̀ɔd*^a "want" + gerund. The subject need not be animate.

Tìg lā bɔ̀ɔd līg. "The tree is about to fall."
 Tree:**SG** ART want fall:**GER**.

Yú'ɔ̃ bɔ̀ɔd gaadug, ka bɛog bɔ̀ɔd nier.

Yú'ɔ̃ bɔ̀ɔd gáadùg kà bɛog bɔ̀ɔd níàr.

Night want pass:**GER** and morning want appear:**GER**.

"The night is about to pass and tomorrow is about to appear." (Rom 13:12)

This construction is only possible with gerunds from Variable and Dynamic Invariable Verbs, which can be interpreted as expressing an event or process.

(b) using the construction subject + *yē*-Purpose Clause. (Compare subject + *yē*-Content Clause [29.3](#).) This construction does require an animate subject.

M̃ yé m̃ kɔ̃ā sūmma. "I'm going to hoe groundnuts."
1SG say **1SG** hoe groundnut:**PL**.

M̃ yé m̃ kɔ̃á nīm. "I'm going to cut meat"
1SG say **1SG** cut meat:**SG**.

22.3.3 Implicit Tense Marking

Tense markers are frequently absent. As a basic principle, explicit marking is not needed when the time reference is recoverable from the linguistic context. However, the occurrence of tense markers is not arbitrary, and in some contexts the past tense markers contrast with \emptyset .

Real-world context does not in itself licence omission of tense markers. If there is no other time-referring element in the clause, the absence of any tense particle is meaningful. By default, it naturally simply means that the tense is present:

Nīdɪb kpîd nē. "People are dying."
 Person:PL die:DIPF FOC.

Nīdɪb kpîd. "People die."
 Person:PL die:DIPF.

M̃ zín'i nē. "I'm sitting down."
 1SG be.sitting FOC.

Ò gìm. "She's short."
 3AN be.short.

M̃ mór pɹā̃. "I have a wife."
 1SG have wife:SG.

Ò kpì nē. "She's dead."
 3AN die FOC.

In isolation, it is not possible to construe expressions like these as e.g. "People were dying." With Perfective aspect, similarly, the sense without an explicit context must be perfective-present or instantaneous present [22.2.1](#):

Ò kpì yā. "She's died."
 3AN die PFV.

Ò yèl yē ... "He says" (translating for the foreign doctor)
 3AN say that ...

M̃ pú'ùs yā. "(I) thank you." cf Hausa *Naa goodèe*.
 1SG greet PFV.

M̃ sɹák yā. "I agree."
 1SG agree PFV.

M̃ nyé nū'-bíbɪsá_ àtán'. "I can see three fingers."
 1SG see hand-small:PL NUM:three.

M̃ tén'ès kà ... "I think that ..."
 1SG think and ...

Tense-markers can, however, be omitted if there is another time reference in the clause itself, such as a time adverb, or with the Irrealis Mood, or with the today-past usage of the Remoteness Marker:

M̃ sá zàb ná'àb lā sú'ès.

1SG TNS fight chief:**SG ART** yesterday.

and *M̃ záb ná'àb lā sú'ès.*

1SG fight chief:**SG ART** yesterday.

both acceptable as "I fought the chief yesterday."

Fù sáa nà kūl.

2SG TNS IRR return.home.

and *Fù sáa nà kūl bēog.*

2SG TNS IRR return.home tomorrow.

and *Fù nà kūl bēog.*

2SG IRR return.home tomorrow.

... all acceptable for "You'll go home tomorrow."

cf *Fù ná kūl.*

2SG IRR return.home.

"You will go home." (later today, tomorrow, next week ...)

M̃ pá' òṅbɪdĩ-n sūmma.

1SG TNS chew:**DIPF-REM** groundnut:**PL**.

and *M̃ ɔṅbɪdĩ-n sūmma.*

1SG chew:**DIPF-REM** groundnut:**PL**.

"I was eating groundnuts earlier today."

(today-past sense of the Remoteness Marker)

Systematic meaningful omission of past tense markers occurs in the Sequential Clauses characteristic of narrative. In narrative clauses with Perfective aspect preceded by *kà*, omission of past tense marking signifies that the event described in the clause follows in temporal sequence from what precedes, and explicit tense marking signals an interruption for asides, flashbacks, descriptions etc [28.3.2](#).

22.4 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. For the Remoteness Marker *n^ε* see [30.1.1](#).

Indicative is the unmarked mood. It uses the negative particle *pō*. It is used for statements and questions about the present and past, and timeless events and states. It can express immediate future in the periphrastic constructions described under Tense [22.3.2](#). It is used instead of the Irrealis in clauses with *yà* 'if', though with some exceptions in negative polarity [30.1](#). It is the only mood which permits the use of the particle *nē*^{+/} in aspectual meaning.

Imperative Mood is negated by *dā*. In Variable Verbs with tone overlay due to Independency Marking it shows a special inflection *-m^a* [22.6.2.2](#) [11.1](#) but otherwise the verb word coincides in form with the Indicative.

Ò vùl tìlm kà ò nóbìr pō zábē ⁺∅.

3AN swallow medicine and **3AN** leg:SG **NEG.IND** fight **NEG**.

"She took medicine and her leg didn't hurt." WK

Ò vùl tìlm kà ò nóbìr dā zábē ⁺∅.

3AN swallow medicine and **3AN** leg:SG **NEG.IMP** fight **NEG**.

"She took medicine so her leg wouldn't hurt." WK

Note that the clause introducer particle *kà* permits either construction [27.1.2](#). The *-m^a* imperative of Variable Verbs is Perfective by default:

Kòṣim!

"Cough!"

Imperatives without tone overlay from Independency Marking make perfective/dynamic imperfective distinctions in the usual way by verb flexion:

Dā kóṣē ⁺∅!

"Don't cough!"

NEG.IMP cough **NEG**!

(To a patient during an eye operation under local anaesthetic, who just has coughed.)

Dā kóṣidā ⁺∅!

"Don't cough!"

NEG.IMP cough:**DIPF** **NEG**!

(Explaining before the operation what to avoid throughout)

Whether or not it carries the distinctive flexion *-m^a*, Imperative Mood is followed by the enclitic 2pl subject pronoun *y^a* in direct commands to several people [28.2.3](#).

The particle *nē*^{+/} cannot appear in its aspectual sense with the Imperative, but *àlá* "thus" after Imperatives imposes continuous/progressive meaning:

Dìm! "Eat!"
Dìmí àlá! "Carry on eating!"

Informants contract the *-í-à-* in these forms to either *-í-* or *-á-* [dímíla] [dímala]

Dìmī-ní_ àlá! "Keep ye on eating!" [dímíníla] [dímínala]
 Eat:IMP-2PL.SUB ADV:thus!

Kùəsimī-ní_ àlá kī n tísídī_ bá.
 Sell:IMP-2PL.SUB ADV:thus millet SER give:DIPF 3PL.OB.
 "Keep ye on selling millet to them."

Invariable Verbs used as imperatives frequently add *àlá*:

Dìgí àlá! "Keep on lying down!" [dígíla] [dígala]
Zì'é àlá! text *zi'ela* "Be still!" (Jesus to the storm, Mk 4:39, 1976)

Dìgī-ní_ àlá! "Keep (ye) on lying down." [dígíníla] [dígínala]
 Be.lying.down-2PL.SUB ADV:thus!

Āa-ní_ àlá bāaṇlím! "Be (ye) quiet!"
 COP-2PL.SUB ADV:thus quiet:ABSTR!

Bēe-ní_ àlá ànínā! "Be ye there!"
 EXIST-2PL.SUB ADV:thus ADV:there!

Imperative Mood is used in direct commands and prohibitions and in subordinate clauses expressing purpose. Imperative Mood also follows another Imperative in the serial-verb construction.

Gòsım! "Look!"
 Look:IMP!

Gòsımī_ø! "Look ye!"
 Look:IMP 2PL.SUB!

Dā gōsɛ +ø! "Don't look!"
 NEG.IMP look NEG!

Kèl kà ò gōs! "Let her look!"
 Cause:IMP and 3AN look!

Kèm nā n gōs! "Come and look!"
Come:IMP hither SER look!

Dò! "Follow!"
Follow!

Dòllī_ ø! "Follow ye!"
Follow 2PL.SUB!

Dòllī_ m! "Follow me!"
Follow 1SG.OB!

Dòllī-ní_ m! "Follow ye me!"
Follow-2PL.SUB 1SG.OB!

Mòr nīn-báalìg! "Have pity!"
Have eye-pity!

Irrealis Mood expresses future statements and questions and has the preverbal mood markers *nà* (positive) *kù* (negative.) Tone Pattern LO verbs show a tone perturbation to all-M tonemes in this mood. [7.3](#).

The Irrealis Mood distinguishes aspects by verb flexion like the Indicative, but *nē*^{+/} cannot occur in aspect marking function. Perfective aspect occurs much more often than Imperfective.

Irrealis Mood with past tense markers is *conditional* (not future-in-the-past.)

Ò dāa ná zāb ná'àb lā.
3AN TNS IRR fight chief:SG ART.
"He would have fought the chief" (but didn't)

For the use of this form in clauses with *yà*' "if" see [30.1](#).

22.5 Polarity

Verbal Predicator negation markers are preverbal particles which combine this function with mood marking. They appear after tense markers but before Particle-Verbs. The negation markers induce the appearance of a clause final Negative Prosodic Clitic which causes the clause-final word to appear in Long Form [8.1](#); on the position of the clitic see further [32.3](#).

Aspectual use of *nē*^{+/} is not possible with Negative Polarity [33.1.2.3](#).

Indicative Mood is negated by *p̄* (for some speakers *b̄*, as in Toende Kusaal.) Imperative Mood is negated by *d̄*; conversely, forms which are negated by *d̄* are Imperative. Irrealis Mood is negated by *k̄*, which *replaces* the positive Irrealis marker *n̄*. Younger speakers sometimes use *k̄* for *p̄*, but none of my informants accepts this.

Ò zàb ná'àb lā. "He's fought the chief."
3AN fight chief:SG ART.

Ò p̄ záb nà'ab láa +∅.
3AN NEG.IND fight chief:SG ART NEG.
"He hasn't fought the chief."

Zàm ná'àb lā! "Fight the chief!"
Fight:IMP chief:SG ART!

Dā záb nà'ab láa +∅! "Don't fight the chief!"
NEG.IMP fight chief:SG ART NEG!

Ò nà zāb ná'àb lā. "He'll fight the chief."
3AN IRR fight chief:SG ART.

Ò k̄ zāb ná'àb láa +∅.
3AN NEG.IRR fight chief:SG ART NEG.
"He won't fight the chief."

There are four Negative Verbs, which are equivalent to negative particle + positive verb [32.1.1](#) *m̄t* "see that it doesn't happen that...", *z̄t*⁺ "not know", *kā'ē*⁺ "not be, not have", and *kà'asigē* (LF only) "not exist."

22.6 Independency Marking

The Verbal Predicator of a main clause [28.1](#) or Content Clause [29.3](#) is marked as Independent. The marking is absent in all subordinate clause types other than Content Clauses, and all VPs in a Serial VP chain after the first. It is also absent in all clauses introduced by *kà* other than Content Clauses, regardless of whether they are subordinate or insubordinate [27.2](#) [28.3.2](#). The marker is primarily a tonal overlay, but has associated segmental manifestations.

22.6.1 Tonal Features

22.6.1.1 Tone Overlay

The tone overlay of Independency Marking is manifested only on Verbal Predicators in Positive Polarity and Indicative or Imperative Mood. It affects only the *first* word in the Predicator capable of carrying it: first the preverbal particle *lɛɛ* "but" [22.7.1](#), next any Particle-Verb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker *dāa*, Particle-Verb *nyɛɛ*) 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 L Raising, and show M toneme on the final vowel mora before Liaison (changed as usual to H before Liaison Words beginning with a Fixed-L toneme [8.3.1](#).)

Intrinsic tones after *kà* (with *zàb*^ɛ "fight" *gōs*^ɛ "look at" *nà'ab*^a "chief"):

<i>Kà m̄ záb nà'ab lā.</i>	"And I've fought the chief."
<i>Kà ò záb nà'ab lā.</i>	"And he's fought the chief."
<i>Kà m̄ gōs ná'àb lā.</i>	"And I've looked at the chief."
<i>Kà ò gōs ná'àb lā.</i>	"And he's looked at the chief."

Intrinsic tones with preverbal particles having intrinsic M tonemes:

<i>Ò dāa záb nà'ab lā.</i>	"He didn't fight the chief."
<i>Ò dāa gōs ná'àb lā.</i>	"He didn't look at the chief."

Intrinsic tones with Negative Polarity:

<i>Ò pū záb nà'ab lāa.</i>	"He hasn't fought the chief."
<i>Ò pū gōs ná'àb lāa.</i>	"He hasn't looked at the chief."

This is not simply another case of blocking of the overlay by a preverbal particle with M toneme, because it is also seen for example with the M negative verbs *kā'ɛ*⁺ "not be, not have" and *zī'*⁺ "not know":

Dāy lā kā' ná'abā ⁺∅. "The man isn't a chief."
 Man:SG ART NEG.BE chief:SG NEG.

Bòŋ-bāŋ'ad zī' yē tēŋ túllā ⁺∅.
 Donkey-rider:SG NEG.KNOW that ground:SG be.hot NEG.
 "He who rides a donkey does not know the ground is hot." (Proverb)

Intrinsic tones in subordinate clauses, without Independency Marking:

<i>Ò yá' zàb nà'ab lā.</i>	"If he fights the chief."
<i>Ò yá' gōs ná'àb lā.</i>	"If he looks at the chief."
<i>Ón zàb nà'ab lā.</i>	"He having fought the chief"
<i>Ón gōs ná'àb lā.</i>	"He having looked at the chief."

Tone overlay manifesting Independency Marking in main clauses:

<i>M záb ná'àb lā.</i>	"I've fought the chief."
<i>Ò zàb ná'àb lā.</i>	"He's fought the chief."
<i>M gōs ná'àb lā.</i>	"I've looked at the chief."
<i>Ò gōs ná'àb lā.</i>	"He's looked at the chief."
<i>Ò sà zàb ná'àb lā.</i>	"He fought the chief yesterday."
<i>Ò sà gōs ná'àb lā.</i>	"He looked at the chief yesterday."

Tone overlay in Content Clauses, which have Independency Marking [29.3](#):

Bà yèl yé ò zàb ná'àb lā.
3PL say that **3AN** fight chief:**SG ART.**
 "They say he's fought the chief."

Bùŋ-bāŋ'ad zī' yē tēŋ túllā +∅.
 Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG.**
 "The donkey-rider doesn't know the ground is hot."
 (*Tēŋ túl.* "The ground is hot." *tūl*^{la/} "be hot")

Examples for the M of the final host mora before Liaison, using the verbs *bòdɪg*^ε "lose", *yādɪg*^{ε/} "scatter" and the clitics *m*^a "me" *bā*⁺ "them":
 Intrinsic tones:

<i>bòdɪgɪ m^a</i>	<i>bòdɪgɪdī m^{a/}</i> (dipf)	<i>bòdɪgɪ bā^{+/}</i>
<i>yādɪgɪ m^a</i>	<i>yādɪgɪdī m^{a/}</i> (dipf)	<i>yādɪgɪ bā^{+/}</i>

After tone overlay:

<i>bòdɪgī m^{a/}</i>	<i>bòdɪgɪdī m^{a/}</i>	<i>bòdɪgī bā⁺</i>
<i>yàdɪgī m^{a/}</i>	<i>yàdɪgɪdī m^{a/}</i>	<i>yàdɪgī bā⁺</i>

Before a Liaison Word with initial Fixed-L toneme [8.3.1](#): contrast

Bà kùvdĩ_ bá.

"They kill them."

3PL kill:DIPF 3PL.OB.

with *Bà kùvdĩ_ bà bōvs.*

"They kill their goats."

3PL kill:DIPF 3PL goat:PL.

and *Bà gòs-ō_ ø.*

"They looked at her."

3PL look.at 3AN.OB.

with *Bà gòsú_ ò bīig.*

"They looked at her child."

3PL look.at 3AN child:SG.

with ML necessarily changed to HL before the Fixed-L proclitic pronouns.

22.6.1.2 Absent L Raising after Subject Pronouns

Bound pronoun subjects are normally followed by L Raising despite their own fixed L tonemes [8.3](#) [8.3.1](#).

However, the *third* persons *ò lì bà* are never followed by L Raising when the following Verbal Predicator has Independency Marking.

Examples with *zàb*^ε "fight" *gōs*^ε "look at" *nà'ab*^a "chief":

Without Independency Marking (Sequential Clause [28.3.2](#)):

Kà m záb ná'àb lā.

"And I've fought the chief."

Kà ò záb ná'àb lā.

"And he's fought the chief."

Kà m gōs ná'àb lā.

"And I've looked at the chief."

Kà ò gōs ná'àb lā.

"And he's looked at the chief."

With Independency Marking:

M záb ná'àb lā.

"I've fought the chief."

Ò záb ná'àb lā.

"He's fought the chief."

M gōs ná'àb lā.

"I've looked at the chief."

Ò gōs ná'àb lā.

"He's looked at the chief."

The first and second person bound subject pronouns *are* followed by L Raising before a Verbal Predicator with Independency Marking, *unless* they are immediately preceded by *yē* "that" (here introducing a Content Clause [29.3](#)):

Ò tèŋ'ɛs kà ò zàb ná'àb lā.

3AN think and 3AN fight chief:SG ART.

"He thinks he's fought the chief." WK

Ò tèŋ'ɛs kà m záb ná'àb lā.

3AN think and 1SG fight chief:SG ART.

"He thinks I've fought the chief."

but Ò yèl yé ò zàb ná'àb lā.

3AN say that 3AN fight chief:SG ART.

"He says he's fought the chief."

and Ò yèl yé m zàb ná'àb lā.

3AN say that 1SG fight chief:SG ART.

"He says I've fought the chief."

Absence of L Raising after bound subject pronouns is independent of tone overlay and is still seen when tone overlay is absent, e.g. when the Verbal Predicator has Irrealis Mood, or there is a preverbal particle carrying a M toneme:

Ò kù zāb ná'àb lāa +∅.

3AN NEG.IRR fight chief:SG ART NEG.

"He will not fight the chief."

Ò lɛɛ dāa zāb nà'ab lā.

3AN but TNS fight chief:SG ART.

"But he did fight the chief."

Ò yèl yé m nà zāb ná'àb lā.

3AN say that 1SG IRR fight chief:SG ART.

"He says I'll fight the chief."

22.6.2 Segmental Features

There are two segmental features of Independency Marking. They occur when and only when the verb word itself has undergone *tonal* overlay, and are therefore absent whenever the verb is preceded by the preverbal particle *lɛɛ* "but", by a particle verb, or by a preverbal particle with M toneme. Similarly, they are absent when the predicator has Irrealis Mood or Negative Polarity. Verbs which have intrinsic L tonemes have unchanged stem tonemes after overlay, but these segmental features and the following L Raising show its presence.

22.6.2.1 Perfective *yā*⁺

Any perfective verb form affected by the tone overlay of Independency Marking which would otherwise be phrase-final (without even an enclitic following) is followed by the enclitic particle *yā*⁺.

This particle is tonally unique among enclitic Particles bearing M toneme as being Pattern O: when the LF occurs in questions, the toneme is L not H [7.4](#).

Lì b̀̀d̀ıg yā. "It's got lost."
3INAN get.lost **PFV**.

Lì b̀̀d̀ıg yàa⁺∅? "Has it got lost?"
3INAN get.lost **PFV PQ?**

The phrase-final constraint on the appearance of *yā*⁺ may reveal that a final element is a clause adjunct rather than a VP complement [33.3](#):

Ya yidıgıa b̀̀degũ. "You are very much mistaken." (Mk 12:27)
Yà yıd̀ıg yā b̀̀degũ.
2PL go astray **PFV** much.

M̀ pú'ùs yā b̀̀degũ. "Thank you very much."
1SG greet **PFV** much.

NT usually writes this particle as *-eya*, but informants show no trace of Liaison, and KB writes *ya* solid with a preceding normal Base Form. Further examples:

Sāa ní yā. "It has rained."
 Rain:**SG** rain **PFV**.

Ò zàb yā. "She's fought."
3AN fight **PFV**.

Ò g̀̀s yā. "She's looked."
3AN look **PFV**.

Ò sà zàb yā. "She fought (yesterday)."
3AN TNS fight **PFV**.

M̃ tɛŋ'ɛs kà lì lù yā. "I think it's fallen down." (content clause)
1SG think and **3INAN** fall **PFV**.

Non-final:

Ò zàbī m. "He's fought me."
3AN fight **1SG.OB**.

Ò gòsī m. "He's looked at me."
3AN look.at **1SG.OB**.

When the tone overlay of Independency Marking is absent, so is the particle:

Sāa dāa ní. "It rained." (M preverbal particle)
 Rain:**SG TNS** rain.

Ò nà zāb. "She'll fight." (Irrealis Mood)
3AN IRR fight.

Ò dāa zāb. "He fought." (M preverbal particle)
3AN TNS fight.

Kà ò zāb. "And he fought." (No Independency Marking)
 And **3AN** fight.

Kà ò gōs. "And he looked." (No Independency Marking)
 And **3AN** look.

Ò pū zābē +∅. "He's not fought." (Negative Polarity)
3AN NEG.IND fight **NEG**.

Ò pū gōsē +∅. "He's not looked." (Negative Polarity)
3AN NEG.IND look **NEG**.

Descriptive Stative, not perfective:

Ò gīm. "She's short."
Ò mī'. "She knows."
Ò nòŋ. "She loves him." [11.1.1](#)

22.6.2.2 Imperative -*m*^a

Imperatives of Variable Verbs which are affected by the tone overlay of Independency Marking adopt the flexion -*m*^a [11.1](#).

Gòsım!

"Look!"

Gòsımī m!

"Look at me!"

Look:IMP 1SG.OB!

Gòsīm.

"Look at me!" vowel absorbed [3](#)

Gòsımí fù nú'ùg!

"Look at your hand!"

Look:IMP 2SG hand:SG!

Gòsím fù nú'ùg!

id with *ɪ*-vowel absorbed [3](#)

Without tone overlay on the verb word:

Dā gōsɛ +ø!

"Don't look!" (Negative Polarity)

NEG.IMP look NEG!

Kèl kà ò gōs!

"Let her look!"

Cause:IMP and 3AN look!

(No Independency Marking: subordinate)

Kèm nā n gōs!

"Come and look!"

Come:IMP hither SER look!

(No Independency Marking after SER)

With overlay, but not a Variable Verb:

Dòllī m!

"Follow me!"

Follow 1SG.OB!

Dòllī-ní m!

"Follow ye me!"

Follow-2PL.SUB 1SG.OB!

(-*ní*- for -*ya* **ɲa* before Liaison [8.2.1.2](#))

Dì'am!

"Receive!"

Dì'amī ø!

"Receive ye!"

Receive:IMP 2PL.SUB!

Dì'amī-ní *bā!* "Receive ye them!"
 Receive:IMP-2PL.SUB 3PL.OB!

Dì'amī-n-ó *ø!* "Receive ye her!"
 Receive:IMP-2PL.SUB 3AN.OB!

Dì'amī-ní *àlá!* "Keep ye on receiving!" [22.4](#)
 Receive:IMP-2PL.SUB ADV:thus!

22.7 Clitics Bound to the Predicator

Clitic Subject Pronouns [15.1](#) are bound to the predicator, and linked with it to the extent that they are involved in the tonal manifestations of Independency Marking [22.6.1.2](#). Post-subject particles [27.1.4](#) capable of following clitic subject pronouns are phonologically bound to the predicator.

In this section I will treat *lèε* "but", along with Particle-Verbs, on the grounds that they intervene between tense/aspect markers and the verb, and Liaison Enclitics, which precede the focus particle *nē⁺* when it is an enclitic aspect marker.

22.7.1 *Lèε* "but"

lèε "but", like a particle-verb, prevents the tone overlay of Independency Marking from falling on the verb, and is then itself followed by L Raising. *Lèε* precedes even tense particles.

Kà ò léε dāa zāb nà'ab lā.

And 3AN but TNS fight chief:SG ART.

"But he fought the chief."

Ka man pian'ad la lee ku gaade.

Kà m̀ pjàn'ad lā léε kù gāade⁺ø.

And 1SG speech ART but NEG.IRR pass NEG.

"But my words will not pass away. (Mt 24:35, 1996)

Bà lèε zāb nà'ab lā.

3PL but fight chief:SG ART.

"But they've fought the chief." WK

Kà bà léε zāb nà'ab lā.

And 3PL but fight chief:SG ART.

"But they've fought the chief." WK

Lèε zāb nà'ab lā!

But fight chief:SG ART!

"But fight the chief!" WK

NT has the *-m^a*-imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la...

Lèè ìəmī-ní_ ò nā'am sù'ulìm lā...

But seek:**IMP-2PL.SUB 3AN** kingship possession **ART...**

"But seek ye his kingdom ..." (Lk 12:31, 1976)

WK does not accept this, and corrected e.g.

**Lèè gósìm ná'àb lā!* attempted: "But look at the chief!"

But look.at:**IMP** chief:**SG ART!**

to *Lèè gōs ná'àb lā.*

But look.at chief:**SG ART.**

22.7.2 Particle-Verbs

Particle-verbs are of varied character, united only by their position immediately before the verb. Some, at least, originated from older serial-verb constructions. All carry the Independency Marking tone overlay in place of the following main verb (cf *lèè* "but" [22.7.1](#).) A derivational suffix *-m-* is present in several Particle-Verbs [13.2.1.4](#).

pùn "previously, already"

Ò pùn záb nà'ab lā. "He's already fought the chief."

3AN already fight chief:**SG ART.**

Kà ò pún zàb nà'ab lā.

And **3AN** already fight chief:**SG ART.**

"And he's already fought the chief."

lèm "again" (cf *lèb^ε* "return")

Ò lèm záb nà'ab lā. "He's fought the chief again"

3AN again fight chief:**SG ART.**

Kà ò lém zàb nà'ab lā. "And he's fought the chief again."

And **3AN** again fight chief:**SG ART.**

Ò pū lém zàb nà'ab láa +ø.

3AN NEG.IND again fight chief:**SG ART NEG**.

"He hasn't fought the chief again."

Ò nà lēm záb nà'ab lā. "He'll fight the chief again."

3AN IRR again fight chief:**SG ART**.

Ì nīf lém zábìd nē. "My eye is hurting again."

1SG eye:SG again fight **FOC**.

Ka so' kudin ku len nyee li ya'asa.

Kà sō' kūdum kú lēm nyée_lī yá'asā +ø.

And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG**.

"Nobody will ever see it again." (Rev 18:21, 1996)

kpèlim "still" with a following imperfective; "immediately afterwards" before a perfective (compare the Latin *continuo* "immediately.") It occurs also as a main verb "remain, still be." KB has the reduced form **kpèn**.

Ka o kpelim zu'om.

Kà ò kpélìm zū'om.

And **3AN** immediately go.blind.

"Immediately he went blind." (Acts 13:11, 1996: KB *Ka o kpèn zu'om*.)

m biig Josef nan kpen vve.

ṁ bīg Josef nán kpèn vūḡ.

1SG child:SG Joseph still still be.alive.

"My child Joseph is still alive." (Genesis 45:28)

là'am "together" (cf **là'as**^ε "gather"); as a main verb **là'am**^m is "associate with."

ka nidib wusa da la'am kpi ne o.

kà nīdɪb wūsa 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)

dèŋim "beforehand" (cf **dèŋ**^ε "go, do first": ṁ dēŋī f "I've got there before you."

Dèŋ^ε is used with the same meaning in serial-verb constructions [26.3](#).)

Ka Wina'am pun denjim nye bunsuma ye o tisi ti.

Kà Wínà'am pún dènjim nyē bōn-súmà yé ò tísì tī.

And God already beforehand see thing-good:PL that 3AN give 1PL.OB.

"God previously found good things in advance to give us" (Heb 11:40, 1976)

màlɨgum "again" (cf Toende Kusaal *malig* "do again")

Amaa man pian'ad la ku maligim gaade.

Àmáa m̀ pìàṇ'ad lā kú mālɨgim gáadē +∅.

But 1SG speech ART NEG.IRR again pass NEG.

"But my words will not pass away. (Mt 24:35)

nyēε or **nyēε tí** "habitually" NT *nyii ti* KT *ēεṇ, ēεṇ tí*. The main verb is imperfective and displays no tone overlay from Independency Marking.

Ò nyēε zàbɨd ná'àb lā.

3AN usually fight:DIPF chief:SG ART.

"He's accustomed to fight the chief." WK

Ò nyēε gɔsɨd ná'àb lā.

3AN usually look.at:DIPF chief:SG ART.

"He's accustomed to look at the chief." WK

Ò dāa nyēε zàbɨd ná'àb lā.

3AN TNS usually fight:DIPF chief:SG ART.

"He was accustomed to fight the chief." WK

Ò ēεṇ tí zàbɨd nē ná'àb lā.

3AN usually fight:DIPF FOC chief:SG ART.

"He's accustomed to fight the chief." KT

Ò ēεṇ tí zìṇ'i kpēlá.

3AN usually be.sitting there.

"She's accustomed to sit there." KT

Ò ēεṇ tí dīgɨ kpēlá.

3AN usually be.lying there.

"She's accustomed to lie there."

KT

tì "afterwards" conveys accomplishment or completion; the main verb is perfective. It occurs often in serial VPs; for *hālì tì pāa ...* "up until" see 31.1.2. It is common with the Irrealis, perhaps in a "future perfect" sense.

hali ka Herod ti kpi.

hālí kà Herod tí kpi.

Until and Herod afterwards die.

"Until Herod had died." (Mt 2:15)

Kèm_ ø tí nyē dɔ'átà.

Go:IMP SER afterwards see doctor:SG.

"Go to see the doctor." SB

Noraug ku ti kaas zina nwaa, ka fu na ki'isim nɔɔra atan'.

Nō-dáùg kú tī kāas zīnā ɲwāa⁺ø

Hen-male:SG NEG.IRR afterwards cry.out today this NEG

kà fù ná kī'ɪsɪ_m nɔɔrá_ àtán'.

and 2SG IRR deny 1SG.OB occasion:SG NUM:three.

"The cock will not have crowed this day before you deny me three times."

(Lk 22:61)

22.7.3 Liaison Enclitics

Liaison Enclitics precede all other Verb Phrase complements and also precede the focus particle *nē^{+/}* in all its senses. There are two slots, and a Predicator may have two successive Liaison Enclitics.

The first slot may be occupied by one of the two clitics ^{ya} "2pl subject of direct command" or *n^ε* the Remoteness Marker [30.1.1](#); there are no circumstances in which they might occur together, as the Remoteness Marker is only found with Indicative and Irrealis Moods. For my informants, the 2pl subject enclitic is an allomorph of the normal proclitic subject pronoun *yà*, but for some speakers it has become a plural imperative marker [28.2.3](#).

These two clitics are tonally alike; both always change the toneme of the last preceding host vowel mora to M, and themselves have H toneme.

The second slot for Liaison Enclitics is for bound object pronouns. There is no formal distinction between direct and indirect objects. Only one clitic object pronoun may occur; cases where a verb has a non-contrastive direct and indirect object pronoun are expressed by ellipsis of a pronoun [23.1](#) or by periphrasis with a serial-verb construction using *tìs^ε* "give" [26.3](#).

23 Verb Phrases

A Verb Phrase consists of a Verbal Predicator followed by complements and adjuncts.

There is no recursive embedding as with the NP, but Verb Phrases are frequently concatenated within a single clause in the Serial VP construction [26](#).

"Complement" will be used below to describe all verb core arguments other than the subject. Complements may be NPs, AdvPs, prepositional phrases or clauses.

Verbs vary in the kind of complement they take and in whether the complements are obligatory; the matter is complicated in Kusaal by the fact that "obligatory" complements in fact need not be explicitly present: if they are absent, the gap then represents an anaphoric pronoun [23.1](#).

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

23.1 Transitivity and Objects

Indirect objects precede direct, and objects precede other complements, except in cases of extraposition or dislocation due to weight [33.3](#). A clitic pronoun before a noun object therefore cannot be the direct object:

**M̃ dāa tísì lī ná'àb lā.*

1SG TNS give **3INAN.OB** chief:**SG ART**.

Not possible with the intended meaning "I gave it to the chief."

There is otherwise no formal difference between direct and indirect objects. Transitive verbs vary in whether they require a direct object:

da ku nidaa, da zuuda

dā kō nīdā +∅, dā zūudā +∅...

NEG.IMP kill person:**SG NEG**, **NEG.IMP** steal:**DIPF NEG...**

"Do not kill [a person] ... do not steal ..." (Lk 18:20, 1996)

Obligatorily Transitive verbs may appear without any expressed object, but in such cases the meaning is necessarily **anaphoric**:

Ò pū zāmm +∅.

3AN NEG.IND cheat **NEG**.

"She didn't cheat him/her."

Transitive Invariable Verbs always require a complement, and again there is necessarily an anaphoric sense if none is explicitly present. Thus with *àɛ̃n*^a "be something/somehow":

Māni _┐ *∅ áɲ dɥ'átà àmáa fūn pū áɲyā* ⁺*∅*.
1SG.CNTR SER COP doctor:SG but 2SG.CNTR NEG.IND COP NEG.
 "I'm a doctor but you aren't."

Māni _┐ *∅ áɲ dɥ'átà kà fūn mén áɛ̃n*.
1SG.CNTR SER COP doctor:SG and 2SG.CNTR also COP.
 "I'm a doctor and you are too."

Particular cases of null anaphora appear with direct objects preposed with *kà* [33.2](#) [31.2.2](#) and with Supplement Clauses [29.2](#).

In replies to questions and responses to commands, null anaphora of complements may refer to an antecedent in the previous speaker's words:

Q. *Fù mór gbāɲ lāa* ⁺*∅*? "Do you have the letter?"
2SG have letter:SG ART PQ?

A. *Ēɛ̃n, m mór*. "Yes, I have it."
 Yes, **1SG** have.

Q. *Fù bɔ́ɔd-ó-o* ⁺*∅*? "Do you love her?"
2SG want-3AN.OB PQ?

A. *Áyìl, m pū bɔ́ɔdā* ⁺*∅*. "No, I don't love her."
 No, **1SG NEG.IND want NEG.**

Agentive Ambitransitive verbs appear both with and without an object, with no change in the rôle of the subject, and no anaphoric implication if the object is absent; thus

banɛ zuud nidibi gban'ad
bàni zūud nīdibɪ _┐ *∅ gbāɲ'ad*
REL.PL steal:DIPF person:PL SER seize:DIPF
 "those who steal people by force" (1 Tim 1:10)

onɛ daa zuud "he who used to steal" (Eph 4:28)
òni dāa zūud
REL.AN TNS steal:DIPF

Some verbs only take objects of a very limited type, often expressed with a "cognate accusative" noun formed from the same stem. They may be obligatorily transitive or agentive ambitransitive:

Fù túm bó-tùuma ⁺ø? "What (work) are you doing?"
2SG work:**DIPF** what-work **CQ**?

Ka ya ninkuda zaansim zaansima.

Kà yà nīn-kúdà zàansim záansímà.

And **2PL** person-old:**PL** dream:**DIPF** dream:**PL**.

"And your old people dream dreams." (Acts 2:17)

Patientive Ambitransitive verbs can appear transitively with an expressed object, but if there is no object they are normally interpreted as intransitive, with the object of the transitive appearing as the subject. Examples include

<i>yò⁺</i>	"close"	<i>nāe^{+/}</i>	"finish"
<i>zà'mis^ε</i>	"learn/teach"	<i>nā'mis^{ε/}</i>	"suffer/make suffer"
<i>bòdɪg^ε</i>	"lose, get lost"	<i>bàs^ε</i>	"go/send away"
<i>dūe^{+/}</i>	"raise/rise"	<i>mā'e^{+/}</i>	"get cool"

Many, though not all, Patientive Ambitransitive verbs express a change of state and can use the base stem form as a Resultative Stative [22.2.2.1](#):

Kòlɪŋ lā yó nē. "The door is closed."
 Door:**SG** ART close **FOC**.

M̃ náa tūuma lā. "I've finished the work."
1SG finish work **ART**.

Tūuma lā náa nē. "The work is finished."
 Work **ART** finish **FOC**.

Conversely, most Variable Verbs capable of forming a Resultative are Patientive Ambitransitive, though there are also some intransitive-only verbs like *kpi⁺* "die."

Almost any verb can potentially take an indirect object expressing benefit, interest etc (this could lead to ambiguity in principle):

Ò dùgō m. "He cooked (for) me."
3AN cook **1SG.OB**.

Lì màlĩ_ m.

"I like it." ("It's sweet for me.")

3INAN be.sweet **1SG.OB**.

Àláafù bée_ bá.

"They are well." ("Health exists for them.")

Health **EXIST** **3PL.OB**.

Ditransitive verbs, however, *require* an indirect object, which cannot be ellipted unless any direct object is also ellipted, and in which case there is necessarily an anaphoric sense; *tĩs*^ε "give" is the prototypical example, along with causatives from transitive verbs like *dĩs*^ε "feed" *nũlvs*^{ε/} "give to drink."

M̃ tĩs ná'àb lā dāká.

"I've given the chief a box."

1SG give chief:**SG** ART box:**SG**.

M̃ tĩs ná'àb lā.

"I've given it to the chief."

1SG give chief:**SG** ART.

**M̃ tĩs dāká.*

impossible as "I've given him a box", which is

M̃ tĩs·ō_ dāká.

1SG give **3AN.OB** box:**SG**.

Dā tĩs·ō_ sī'əla +_.

NEG.IMP give **3AN.OB** **INDF.INAN** **NEG**.

"Don't give her anything!"

Dā tĩsē +_!

"Don't give it to her!"

NEG.IMP give **NEG**.

M̃ tĩs 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. *kād* X *sàríyà* "judge X", *m̃r* X *nĩn-báalìg* or *zò* X *nĩn-báalìg* "have pity on X", *nìŋ* X *yàddā* "believe X, believe in X", *zò* X *dābíàm* "fear X" [11.2.2.1](#), *sjàk* X *nōɔr* "obey X", *ŋwè* X *nú'ùg* "make an agreement with X."

Wina'am na kad nidib poten'esua'ada saria.

Wínà'am ná kād nīdīb pú-tèŋ'-sū'adá sàríyà.

God **IRR** drive person:**PL** inside-mind-secret:**PL** judgment.

"God will judge people's secret thoughts." (Rom 2:16, 1996)

Biise, siakimini ya du'adib nɔya.

Bīse ⁺∅, *sjàkɪmī-ní* _— *yà dō'adɪb nɔyà.*

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

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

Ò zòt-ō _— ∅ *nīn-báalìg.*

3AN feel.emotion:DIPF 3AN.OB eye-pity.

"She has pity on him."

Bà zòt-ō _— ∅ *dābíè̃m.*

3PL feel.emotion:DIPF 3AN.OB fear.

"They are afraid of him."

Bà nìŋ-ō _— ∅ *yáddā.* "They believed her."

3PL do 3AN.OB assent.

Ò ɲwè' ná'àb lā nù'ùg. "He made an agreement with the king."

3AN strike king:SG ART hand:SG.

23.1.1 Passives

For passive meaning expressed by an empty *bà* "they" as subject see [19.2.3](#).

Transitive verbs expressing a change of state are usually Patientive Ambitransitives, and thus appear in the same form whether the argument which changes state is subject or object. It is also possible for other transitive verbs, whether obligatory transitives or Agentive Ambitransitives like *nū*⁺ "drink", to be used passively with no formal change:

M nù dāam lā. "I've drunk the beer."

1SG drink beer ART.

Dāam lā nù yā. "The beer has got drunk."

Beer ART drink PFV.

It is not possible to express an agent with passives.

Indirect objects cannot become passive subjects:

Dāká lā tís yā. "The box was given."

Box:SG ART give PFV.

but **Nà'ab lā tís yā.* not possible in sense "The chief was given (it.)"
 Chief:SG ART give PFV.

With Invariable Verbs, only the Dynamic group may be used as Passives.

Passives are limited aspectually to expressing punctual events [33.1.2.3](#).

The verb *sōb*^ε "write" is a specialised usage of *sōb*^ε "make/go dark", and is Patientive Ambitransitive despite the English translation. It can form a Resultative:

Gbàṽṽ lā sōb yā. "The letter has been written."
 Letter:SG ART write PFV.

Gbàṽṽ lā sōb nē. "The letter is written."
 Letter:SG ART write FOC.

The Dynamic Imperfective *sōbìd*^{a/} seems to accept intransitive use only when some adverbial modification is present:

Gbàna sōbìd zīnā. "Letters get written today." WK
 Letter:PL write:DIPF today.

Gbàṽṽ lā sōbìd súṽā. "The letter is writing well (i.e. easily.)" WK
 Letter:SG ART write:DIPF good:ADV.

23.1.2 Middle Uses of Intransitives

The assume-stance verbs [13.2.1.1](#), rather than the make-assume-stance series, are often used transitively for parts of one's own body:

Lìgíním_ fù nīf né fù nú'ùg.
 Cover:IMP 2SG eye:SG with 2SG hand:SG.
 "Cover your eye with your hand."

Thus *Dìgíním_ fù nú'ùg.* "Put your hand down."
 Lie.down:IMP 2SG hand:SG.

is commoner than

Dìgíním_ fù nú'ùg. "Put your hand down."
 Lay.down:IMP 2SG hand:SG.

Similarly *nìe*⁺ "appear" is usually intransitive, corresponding to transitive *nèɛ*^ɛ "reveal", but *nìe*⁺ is much more frequent than *nèɛ*^ɛ before *ò mēŋ*^{a/} "him/herself" etc.

Ka o nie o mēŋ Jemes san'an ...

Kà ò níe ò mēŋ Jemes sá'àn ...

And **3AN** appear **3AN** self James among

And he revealed himself to James (1 Cor 15:7)

23.2 Predicative Complements

Predicative complements may occur after intransitive or transitive verbs; like objects, they may or not be required, in the sense of surface omission necessarily implying anaphora.

As with similar English constructions, predicative complements can have depictive or resultative meaning; the distinction in Kusaal falls out naturally from the stative or dynamic nature of the verb:

Kɛl ka m liebi fù tũmtũm yinne.

Kèl kà m líàbì fù tũm-tũm yĩnní.

Cause:IMP and **1SG** become **2SG** work-worker:SG one.

"Make me [become] one of your servants" (Lk 15:19); dynamic *liàb*^ɛ

M á né fù tũm-tũm.

"I am your servant."; stative *àɛŋ*^a

1SG COP FOC 2SG work-worker:SG.

Àɛŋ^a "be something/somehow" [24.2](#) takes a predicative complement:

Ò à nē bīg.

"She is a child."

3AN COP FOC child:SG.

M kā' dɥ'átāa +∅.

"I'm not a doctor."

1SG NEG.BE doctor:SG **NEG.**

As with other transitive Invariable Verbs, the complement is obligatory [23.1](#).

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 *pùd*^ɛ "name, dub" has as first object a NP with the head *yō'ur*^{ɛ/} "name", and the name itself as second object; this may be introduced by *yē* "that."

Ka fū na pūd o yū'ur ye Yesu.

Kà fù ná púd ò yū'ur yē Yesu.

And **2SG IRR** dub **3AN** name:**SG** that Jesus.

"And you will call him Jesus." (Mt 1:21)

Ka o pūd biig la yū'ur Yesu.

Kà ò púd bīg lā yū'ùr Yesu.

And **3AN** dub child:**SG ART** name:**SG** Jesus.

"And he called the child Jesus. " (Mt 1:25)

The verb *bùel*^ε "call, call out, summon" can be used in the Dynamic Imperfective with an object expressing the person named and the name as a complement, again possibly introduced by *yē*:

on ka ba buon ye Pita la

òn kà bà búèn yē Pita lā

REL.AN and **3PL** call:**DIPF** that Peter **ART**

"who was called Peter" (Mt 10:2)

The verb is often used passively [23.1.1](#) with *yū'ur*^{ε/} "name" as subject and the name itself as complement:

dau sɔ' ka o yū'ur buon Joon.

dàù-sɔ' kà ò yū'ur búèn Joon.

man-**INDF.AN** and **3AN** name:**SG** call:**DIPF** John.

"a man called John." (Jn 1:6)

The verb *màal*^ε "make" is used with an object and a resultative predicative complement in the 1976 NT in Acts 8:9

Ka o maal o meŋ nintita'ar.

Kà ò máal ò mēŋ nīn-títā'ar.

And **3AN** make **3AN** self person-great:**SG**.

"He made himself out to be a great man."

The 1996 NT version has instead

Ka o du'osi o meŋ ye o ane nintita'ar.

Kà ò dū'əsí ò mēŋ yé ò à nē nīn-títā'ar.

And **3AN** elevate **3AN** self that **3AN COP FOC** person-great:**SG**.

"He made himself up that he was a great man."

A resultative predicative *kà*-clause:

...ka la'am maan gígìs ka ba wum ka pia'ad.

...kà lá'àm mään gígìs kà bà wúm kà piān'ad.

...and together make:**DIPF** dumb:**PL** and **3PL** hear:**DIPF** and speak:**DIPF**.

"...and even makes the dumb hear and speak." (Mk 7:37, 1976)

The verb *nyē*⁺ "see, find" can take a Supplement *kà*-clause as a predicative complement [29.2](#):

M̄ dāa nyē dāy lá kà ò áṇ ná'àb.

1SG TNS see man:**SG** **ART** and **3AN COP** chief:**SG**.

"I saw the man as a chief."

M̄ dāa pō nyē dāy lá kà ò áṇ ná'abā +∅.

1SG TNS **NEG.IND** see man:**SG** **ART** and **3AN COP** chief:**SG** **NEG**.

"I didn't see the man as a chief."

23.2.1 Manner-adverbs

Manner-adverbs behave syntactically in many respects like abstract mass nouns, and indeed may arise from such noun usages [20.4](#). One such instance is in their common usage as predicative complements.

Kusaal characteristically uses proadverbs of manner [17.1](#) as predicative complements in place of pronouns with abstract reference. i.e. the language says "be/do *how*" rather than "be/do *what*."

Dā níṇì àlāa +∅! "Don't do that!" ("thus")

NEG.IMP do **ADV:thus** **NEG**.

Fu wum ban yet si'em laa?

Fù wúm bán yèt sī'em láa +∅?

2SG hear:**DIPF** **3PL:COMP** say:**DIPF** **INDEF.ADV** **ART** **PQ?**

"Do you hear what they are saying?" (Mt 21:16)

Tiig wela bigisid on a si'em.

Tìg wélà bìgìsid ón àṇ sī'em.

Tree:SG fruit:**PL** show:**DIPF** **3AN:COMP** **COP** **INDEF.ADV**.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

The Indefinite proadverb *sīəm^m* is particularly commonly used in this way as head of a Relative Clause [31.2.1](#).

Transitive verbs like *nīŋ^ε* "do, make" *màal^ε* "make" may be followed by *àlá⁺* "thus" or *wēlá⁺* "how?" with following subordinate clause of purpose:

M na nīŋ wala ka nɛ faangirɛ?

M̃ ná nīŋ wēlá kà nɛ fāangírè +ø?

1SG IRR do how and find salvation **CQ?**

"What must I do to get saved?" (Acts 16:30)

The verb *àɛŋ^a* "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head [24.2](#):

Lì à nē zāalím.

"It's empty."

Lì à nē būgusígā.

"It's soft."

Lì à súŋā.

"It's good."

23.3 Locative Complements

Locative AdvPs [20.3](#) occur as complements after verbs of position and movement. Some verbs *require* a locative complement, and its absence is anaphoric.

M̃ yí Bòk.

"I left Bawku."

1SG emerge Bawku.

M̃ yí yā.

"I've left [there]."

1SG emerge **PFV**.

Others do not; so with *kēŋ^ε* "go, walk" *dìŋɪn^ε* "lie down" *dīŋɪ^ε* "lay down":

...ka pɔ tun'e kenna..

...kà pō tūŋ'e_ ø kēnná +ø.

3AN NEG.IND be.able **SER** go:**DIPF** **NEG**.

"who couldn't walk." (Acts 14:8)

but *Ò kēŋ Bók.*

"She's gone to Bawku."

3AN go Bawku.

Ò dìŋɪn yā.

"He's lain down."

3AN lie.down **PFV**.

but *Dìgɪnim kpē!* "Lie down here!"
Lie.down:IMP here!

Ò dìgɪl gbáyɛ lā. "She's put the book down."
3AN lay.down book:SG ART.

but *Ò dìgɪl gbáyɛ lā tɛɛbùl lā zúg.*
3AN lay.down book:SG ART table:SG ART upon.
"She's put the book on the table."

The verb *bè*⁺ [24.1](#) without a complement is "exist":

Wínà'am bé. "God exists."
God EXIST.

Àláafù bé·o_ø. "He's well." ("Health exists for him.")
Health EXIST 3AN.OB.
(Indirect object but no complement.)

With a locative complement, *bè*⁺ means "be in a place":

Dāy lā bé nē dɔ́-kàṅā lā púvgū-n.
Man:SG ART EXIST FOC hut-DEM.DEI.SG ART inside:SG-LOC.
"The man is inside that hut."

23.4 Prepositional Phrases as Complements

Wēn^{na/} "resemble" usually takes a phrase introduced by *nē* or *wōv* [21.1](#).

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

With other verbs it can be difficult to distinguish phrases with *nē* as complements from NP objects or complements preceded by Focus-*nē*^{+/} [33.1.2](#), unless the *nē* occurs in contexts where focus is prohibited like *ḥ*-Clauses. Thus *yī nē* X occurs in the sense "come from X" and the metaphorical sense "arise from X":

M̃ yí nē Bók. "I come from Bawku." SB
1SG emerge FOC Bawku.

Yadda niḡir yitne labaar la wummuḡ ni.

Yàddā-niḡir yít nē lābāar lā wúmmùḡ ní.

Assent-doing emerge:**DIPF FOC** news **ART** hearing **LOC**.

"Faith comes from hearing the news." (Rom 10:17)

However, constructions with the same meaning but within a *ḡ*-Clause lack *nē*:

Meeri one yi Magdala

"Mary who came from Magdala"

Meeri ɔ̀nì yī Magdala

(Mk 16:9, 1996)

Mary **REL.AN** emerge Magdala

A probable case of a verb taking a prepositional phrase as complement in a metaphorical sense is *d̥ɔ̃*^{la}/ "accompany a person in subordinate rôle", which with *nē* means rather "be in accordance with":

Li d̥ɔ̃lne lin s̥ɔb Wina'am gbaun̄un si'em la ye ...

Lì d̥ɔ̃l nē lín s̥ɔb Wínà'am gbáun̄ū-n sī'em lā yē ...

3INAN follow with **3INAN:COMP** 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)

23.5 Clausal Complements

Certain verbs require a following clause with a Verbal Predicator in Imperative Mood introduced by a linker particle *kà* or *yē* 29.1. They include like *kē*⁺ "let", *mìt* "let not", *nār*^a/ "be obliged to." Of these, *kē*⁺ does not appear at all without a following *kà*-clause, while if *nār*^a/ appears without there is a necessarily anaphoric sense; *mìt* appears with a NP object in the sense "beware of..." 32.1.1.

The verb *b̥ɔ̃ɔ̃d*^a "want, love" takes a *yē*-purpose clause in the sense "want to ..."; without any object it has an anaphoric meaning in either sense.

The verb *gūr*^a/ "be on guard, watch, wait for" takes a NP headed by a gerund or a *yē*-purpose clause complement to express "waiting for an event"; both in this case and elsewhere the "purpose" sense is reduced to mere expectation.

Verbs of cognition, reporting, and perception have as complement a Content Clause, a Relative Clause with *sī'em*, or a postpositional AdvP with *yēlá* "about." Most such verbs have an anaphoric sense without such an object.

The verb *àɛɛ*^a "be something/somehow", which is uniquely flexible in the variety of different types of argument it may appear with, may take a clause introduced by *yē* as a complement too 24.2.

Supplement Clauses 29.2 may appear as predicative clausal complements.

23.6 Adjuncts

Adjuncts of all types occur as the last element in the VP. Several VP adjuncts may occur together. Main Clauses and Content Clauses with a Verbal Predicator may contain clause-level adjuncts preceding the subject [28.1.1](#).

VP Adjuncts may be AdvPs, prepositional phrases, or subordinate clauses.

Bà dìt nē sā'ab dɔ́-kàṅā lā púvǫ-n.
3PL eat:DIPF FOC porridge hut-DEM.DEI.SG ART inside:SG-LOC.
 "They're eating porridge in that hut."

A subordinate clause after a verb is most often a complement:

Fù bɔ́dɔ́d bɔ́ +∅? "What do you want?"
2SG want what CQ?

M̃ bɔ́dɔ́d yé fù kūl. "I want you to go home."
1SG want that 2SG return.home.

Content clauses [29.3](#) are always complements:

Bùṅ-bāṅ'ad zī' yē tēṅ túllā +∅.
Donkey-rider:SG NEG.KNOW that ground:SG be.hot NEG.
 "The donkey-rider doesn't know the ground is hot."

23.7 Verb-Phrase-Final Particles

The particles *nā* "hither" and *sà* "hence; ago" follow any complements. The verb *kēṅ*⁺ "come" is invariably used with *nā*; the imperative SF *kēm*, which coincides for *kēṅ*⁺ "come" and *kēṅ*^ε "go", is always disambiguated by the fact that it is followed by *nā* or *sà* respectively: *kēm nā!* "come" *kēm sá!* "go!"

Examples:

M̃ mór kú'èṁ náa +∅? "Shall I bring water?" SB
1SG have water hither PQ?

bùgúm lā yít yáa ní ná +∅?
Fire ART emerge:DIPF where LOC hither CQ?
 "Where is the light coming from?"

Fù yí yáa ní ná +∅?

2SG emerge where **LOC** hither **CQ**?

"Where have you come from?" WK

Sà is often used temporally, for "since" or "ago":

O daa pun anε ninkuud hali pin'ilugun sa.

Ò dāa pún à nē nīn-kúùd hālí pīŋ'ilúgū-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)

Fu na ban li nya'an sa.

Fù ná bán lì nyá'an sá.

2SG IRR realise **3INAN** behind since.

"You will come to understand afterwards." (Jn 13:7, 1976)

Lazarus pun be yaugun la daba anaasi sa.

Lazarus pún bè yáugū-n lā dābá_ànāasí sà.

Lazarus previously **EXIST** grave:**SG-LOC ART** day:**PL NUM**:four since.

"Lazarus had already been in the grave four days." (Jn 11:17)

The particles are VP-final, not clause-final:

Kēm nā n gōs. "Come and look!" SB

Come:**IMP** hither **SER** look.

Man ya'a pu kεen na tu'asini ba ...

Mān yá' pū kēε-n nā_ ∅ tú'asī-ní_bā...

1SG.CNTR if **NEG.IND** come-**REM** hither **SER** talk-**REM** **3PL.OB**...

"If I had not come to talk to them ..." (Jn 15:22)

Nā^{+/} and *sà*⁺ often follow any article *lā*^{+/} ending an *ñ*-Clause containing them:

ba diib n yit na'ateŋ la na zug

bà dīib ñ yīt ná'-tēŋ lā nā zúg

3PL food **COMP** emerge:**DIPF** king-land:**SG ART** hither upon

"because their food came from the king's land" (Acts 12:20, 1996)

Closely parallel constructions may show either *nā lā* or *lā nā*:

ŋwādıg kání kēn nā lā

month **REL.SG** come:**DIPF** hither **ART**
 "next month" SB

*dunia kanε ken **la na***

dūnı́yá-kànı́ kēn lā nā

world-**REL.SG** come:**DIPF** **ART** hither

"the world which is coming" (Lk 20:35)

*M diib anε ye m tum onε tumi m **la na** bɔɔdim naae.*

M̄ dīı́b á nē yé m̄ túm ònı́ tùmı́ m lā nā bɔɔdım̄ ∅ nāe.

1SG food **COP** **FOC** that **1SG** work **REL.AN** send **1SG.OB** **ART** hither will **SER** finish.

My food is that I do the will of him who sent me completely. (Jn 4:34)

*tı́ tum onε tum man **na la** tūuma.*

tı́ túm ònı́ tòm mān nā lā tūuma

1PL work **REL.AN** send **1SG.CNTR** hither **ART** work

"Let us do the work of him who sent me." (Jn 9:4)

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:

Nı́dı́b la daa gur Zakaria yiı́b na.

Nīdı́b lā dāa gūr Zakaria yīı́b nā.

Person:**PL** **ART** **TNS** watch Zechariah emerge:**GER** hither.

The people were watching for Zechariah's coming out. (Lk 1:21)

Nı́nsaal Biig la lεbug la na

Nīn-sáal Bīg lā lεbùg lā nā

Person-smooth:**SG** Child:**SG** **ART** return:**GER** **ART** hither

"the return of the Son of Man" (Mt 24:27)

24 The Verbs "to be"

24.1 *Bɛ̃*⁺ "be somewhere, exist"

Bɛ̃⁺ is followed by L Raising even when not subjected to tone overlay by Independency Marking; it is formally as well as semantically imperfective.

With no associated locative *bɛ̃*⁺ means simply "exist":

Wínà'am bɛ́.

God **EXIST.**

"God exists."

(Calque of the West African Pidgin *God dey*, implying "It'll all work out in the end.")

Àláafù bɛ́·o_∅.

Health **EXIST 3AN.OB.**

"She's well." ("Health exists for her.")

Wāad bɛ́.

Cold.weather **EXIST.**

"It's cold."

Before a locative *bɛ̃*⁺ means "be located in a place" if the locative is a complement [33.1.2.4](#), but "exist in a place" if the locative is a clause adjunct:

Mam bene moogin.

Mām bɛ́ nē mɔ́ɔgū-n.

1SG.CNTR EXIST FOC grass:SG-LOC.

"I'm in the bush." BNY p8

(focus on the locative)

Moogin ka mam bɛ́.

Mɔ́ɔgū-n kà mām bɛ́.

Grass:**SG-LOC** and **1SG.CNTR EXIST.**

"I'm in the bush." BNY p10

(*kà*-preposed locative)

Dāy lā bɛ́ nē dɔ́-kàṅā lā púvɔgū-n.

Man:**SG ART EXIST FOC** hut:**DEM.DEI.SG ART** inside:**SG-LOC.**

"The man is inside that hut." (Reply to "Where is that man?"; focus on locative)

Dày-s̄' bɛ́ dɔ́-kàṅā lā púvɔgū-n.

Man:**INDF.AN EXIST** hut:**DEM.DEI.SG ART** inside:**SG-LOC.**

"There's a certain man in that hut." (focus on subject)

Bɛ̃⁺ is common in Presentational Constructions [33.4](#).

For the corresponding negative *kā'ɛ*⁺ see [32.1.1](#). **pū bɛ́* is not used.

Bɛ̃⁺ plays a rôle analogous to a "passive" to *m̄r*^a "have" in constructions like:

M̃ bīg bē. "I have a child."; equivalent to
1SG child:SG EXIST.

M̃ mór bīg.
1SG have child:SG.

M̃ bīg kā'e +∅. "I have no child."; equivalent to
1SG child:SG NEG.BE NEG.

M̃ kā' bīga +∅.
1SG NEG.HAVE child:SG NEG.

Bē⁺ can be used in direct commands:

Bēε_ ànínā. "Be (i.e. stay) there!" SB
EXIST ADV:there.

Bēε-ní_ àlá ànínā. "Be ye there!" [bɛ:nala anina]
EXIST-2PL.SUB ADV:thus ADV:there.

24.2 *Àɛ̃*^a "be something/somehow"

The *ɛ̃* of the SF of *àɛ̃*^a is always lost except on the rare occurrence of the word phrase finally [8.5.3](#).

Ò à nē bīg. "She is a child."
3AN COP FOC child:SG.

Lì àɛ̃ súnā. "It's good."
3INAN COP good:ADV.

but *Mānι_ ∅ áɛ̃ dɹ'átà kà fūn mén áɛ̃.*
1SG.CNTR SER COP doctor:SG and 2SG.CNTR also COP.
 "I'm a doctor and you are too."

The usual negative uses the negative verb *kā'ε̃*⁺ "not be":

M̃ kā' dɹ'átā +∅. "I'm not a doctor."
1SG NEG.BE doctor:SG NEG.

However, *pū áɛ̃* can occur, for example in contrasts:

Mānɪ _┐ *∅* *áŋ du'átà àmáa fūn pū áŋyā* ⁺*∅* .
1SG.CNTR SER COP doctor:SG but **2SG.CNTR NEG.IND COP** **NEG.**
 "I'm a doctor but you aren't."

Àŋ^a can be used in direct commands:

Àŋ bāaŋlím! "Be quiet!"
COP quiet:ABSTR!

Āa-ní _┐ *àlá bāaŋlím!* "Be (ye) quiet!"
COP-2PL.SUB ADV:thus quiet:ABSTR!

As with English copular clauses, the sense may be ascriptive or specifying (cf Huddlestons and Pullum p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with *nē*⁺/ [33.1.2.4](#) if permitted [33.1.2.1](#) [33.1.2.2](#):

Ò à nē bīig. "She is a child."
3AN COP FOC child:SG.

Ò à nē bīigàa ⁺*∅?* "Is she a child?"
3AN COP FOC child:SG **PQ?**

In **specifying** constructions focus frequently falls on the subject, which usually then has *n*-focus [33.1.1](#):

Manε an kɔnbkem suŋ la.
Mānɪ _┐ *∅* *áŋ kɔŋb-kì-m-sùŋ lā.*
1SG.CNTR SER COP animal-tender-good:SG **ART.**
 "I am the good shepherd." (Jn 10:11)

Manε a o. "I am he." (Jn 18:5, 1976) [8.2.1](#).
Mānɪ _┐ *∅* *áŋ·o* _┐ *∅.*
1SG.CNTR SER COP **3AN.OB.**

Nɔbibisi a mam disuŋ.
N5-bíbɪsì _┐ *∅* *áŋ mām dí-sùŋ.*
Hen-small:PL SER COP 1SG.CNTR food-good:SG.
 "Chicks are my favourite food." BNY p13

Nε'εηα an Yesu [...] yaanam yεla.

Nē'ηά àη Yesu [...] yáa-nám yélà.

DEM.DEI.INAN COP Jesus [...] ancestor-**PL** about.

"This is the account of Jesus' ancestors." (Mt 1:1)

When the complement of *àη*^a is definite, the construction is usually specifying, with the subject in focus:

M á nē dṽ'átà.

1SG COP FOC doctor:**SG**.

"I'm a doctor." ("What do you do?")

Ascriptive.

but *Mānι_ ø áη dṽ'átà lā.*

1SG.CNTR SER COP doctor:**SG ART**.

"I'm the doctor." ("Which one is the doctor?")

Specifying.

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors: see [33.1.2.4](#).

Àη^a allows a wide range of different types of NP as arguments. It shares with Adjectival Verbs the ability to take an AdvP of any type as subject [20.5](#):

Zīnā a nē dá'a.

Today **COP FOC** market:**SG**.

"Today [time] is market."

Yīη venl, ka poogin ka'a su'um.

Yīη véηl kà pūvuv-n kā' súmm +ø.

Outside be.beautiful and inside:**SG-LOC NEG.BE** good:**ABSTR NEG**.

"Outside is beautiful but inside [place] is not good." (Acts 23:3, 1996)

Man nonji ya si'em la ane bedego.

Mán nòηι_ yā sī'əm lā á nē bédugū.

1SG:COMP love **2PL.OB INDF.ADV ART COP FOC** much.

"How much I love you [manner], is a lot." (2 Cor 7:3, 1976)

Àη^a is remarkable in being able to take a complement consisting of an adjective without any noun head. The article *lā*^{+/} is permitted, but no other dependents apart from ideophones [19.8.1.3](#).

Lì à nē píəlig.

"It's white, a white one."

Lì à nē píəlig fáss.

"It's very white."

Bà à nē píəlà.

"They're white."

Most adjectives do not permit this. All examples in my materials involve adjectives without corresponding Adjectival Verbs, or having human reference (cf the adjectival use of human-reference nouns [19.8.1.5](#).) More often, compounds with *nīn-* "person" or *būn-* "thing" + adjective [19.9.3](#) are used:

Ò à nē nīn-súŋ. "She's a good person."
3AN COP FOC person-good:**SG**.

Dīlb á nē būn-súŋ. "Food is a good thing."
 Food **COP FOC** thing-good:**SG**.

Even adjectives which may appear without a noun head cannot do so before a post-determining pronoun; thus only

Lì à nē būn-píàl-kàŋā. "It is this white one."

Àeŋ^a often takes a manner-adverb or deadjectival abstract noun as complement [23.2.1](#). Such constructions are ascriptive, using *nē*^{+/} where syntactically permissible:

Lì à nē ná'anā. "It's easy."
3INAN COP FOC easily.

Lì à nē zāalím. "It's empty."
3INAN COP FOC empty:**ABSTR**.

Lì à nē bōgusígā. "It's soft."
3INAN COP FOC soft:**ADV**.

Lì àŋ súŋā. "It's good." [33.1.2.2](#)
3INAN COP good:**ADV**.

Possible complements of *àeŋ*^a also include Circumstance AdvPs [31.1](#) and Complement Clauses:

M diib anε ye m tum onε tumi m la na bōcōdim naae.

M̄ dīlb á nē yé m̄ túm ònɿ tùmɿ m lā nā bōcōdīm ∅ nāe.
1SG food **COP FOC** that **1SG** work **REL.AN** send **1SG.OB ART** hither will **SER** finish.
 My food is that I do the will of him who sent me completely. (Jn 4:34)

25 Non-Verbal Predicators

Non-verbal Predicators may only occur in Main Clauses and Content Clauses. There are four types (X standing for a NP):

X <i>n lā</i> .	"That is X."
X <i>n ṇwá</i> .	"This is X."
X <i>n wá nā</i> .	"This here is X."
X <i>lía?</i>	"Where is X?"

The particle *n* in these forms is the same phonologically as VP Serialiser *n* [8.2.2.1.2](#) and is here regarded as a special use of the same particle.

The three forms which are not in themselves questions can be used to make content questions with an interrogative pronoun as "X."

Clauses with a Non-verbal Predicator cannot include any pre-subject elements other than linker particles, nor any post-subject particles, nor be focussed.

Examples:

Kòlɪŋɪ_ \emptyset *lā*. "That's a door."
Door:SG SER that.

Bēogu_ \emptyset *lā*. "See you tomorrow" ("That's tomorrow.")
Tomorrow SER that.

Fù mà lā lía ^{+ \emptyset ?}
2SG mother:SG ART be.where CQ?
"Where is your mother?" WK

Ka awai la dia [sic]? "But where are the nine?" (Lk 17:17, 1976)
Kà àwāḡ lā lía ^{+ \emptyset ?}
And NUM:nine ART be.where CQ?

Bṣṣ_ \emptyset *lā* ^{+ \emptyset ?} "What's that?"
What SER that CQ?

Non-verbal Predicators may have a serial-verb construction appended to them, or there may be a Supplement *kà*-clause [29.2](#) modifying X; *kà* is used to introduce a subject different from X, the serial-verb construction otherwise. The resulting constructions are variants of *n*-clefting and *kà*-clefting [33.1.1](#) [33.2](#).

Anɔ'ɔn nwaa yisid nidib tuumbɛ'edi basida?

Ànɔ'ɔn_ø nwáa_ø yísɪd nīdɪb túùm-bē'edi_ø básɪdà +ø?

Who **SER** this **SER** expel:DIPF person:PL deed-bad:PL **SER** throw.out:DIPF **CQ?**

"Who is this who drives people's sins out?" (Lk 7:49)

Ōni_ø lá kà fù dāa nyēt.

3AN.CNTR **SER** that and **2SG TNS** see:DIPF.

"This is he whom you saw." WK

Ànɔ'ɔni_ø nwá kà tì nyētá +ø?

Who **SER** this and **1PL** see:DIPF **CQ?**

"Who is this that we can see?"

Bɔɔ_ø lá kà m̃ nyētá +ø?

What **SER** that and **1SG** see:DIPF **CQ?**

"What is that that I can see?"

26 Serial Verb Phrases

26.1 Serial Verb Phrases: Overview

Kusaal makes extensive use of serial verb constructions. A clause may contain a single verb phrase or Non-verbal Predicator, or may add potentially any number of further verb phrases each preceded by the Serialiser particle *n*¹⁴. (For the realisation of this particle, see 8.2.2.1.2.) Complements and VP adjuncts (even clauses) may be incorporated within such chains of VPs.

*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 málīāk dāa kēŋ n yó'òg sārīgá dǒòg

But and head-one:SG angel:SG TNS go SER open prison:SG house:SG

zá'-nōɔr lā yō'vŋ-kán, n mōrí bā n yīs yīŋ.

compound-mouth:SG ART night-DEM.SG, SER have 3PL.OB SER 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 dàɔ-sō' dūe n zí'e lá'asùg lā nīdɪb sísùvɔgū-n,

And man-INDF.AN rise SER stand assembly:SG ART person:PL among-LOC,

n áŋ Parisee níd kà ò yō'vɔr búèn Gamaliel, n áŋ ónì

SER COP Pharisee person:SG and 3AN name:SG call:DIPF Gamaliel, SER COP REL.AN

pà'an Wínà'am wádà lā yélà, kà lém àŋ yō'vɔr dáàn

teach:DIPF God law ART about, and again COP name:SG owner:SG

nīdɪb sá'àn.

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)

Verb phrases within such a chain may be coordinations of component verb phrases linked by *kà* "and" or *bēɛ/kōv* "or" 26.2.

14) Many accounts of serial verb constructions specify that there must be *no* linking element by definition. However, in exactly parallel cases Toende Kusaal has zero for this Agolle particle *n*, and it seems arbitrary to deny the label to the Agolle construction because of a mere phonological difference. Other Western Oti-Volta languages mostly show *n* at least in slow speech; Dagaare (Bodomo 1997) has zero.

Normally only the first Verbal Predicator carries tense and polarity particles, which apply to the entire chain, but verbs each retain the Remoteness Marker n^E , and while initial Irrealis Mood marking applies to the whole chain, a predicator following an Indicative may be in the Irrealis, in which case it will be marked itself.

The particle-verb *tì* is often found with non-initial VPs.

Change in polarity within a chain is rare; if there is a change of polarity the construction is normally replaced by coordination of Serial VPs [26.2](#) or a Supplement Clause (the only case where a Supplement Clause can have the same subject as the main clause before it [29.2](#)):

Ka dau daa zin'i Listra ni ka pu tun'e kenna.

Kà dāy dāa zín'i Listra ní kà pū tūŋ'e_ ∅ kēnná +∅.

And man:SG TNS sit Lystra LOC and NEG.IND be.able SER go:DIPF NEG.

"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Ka Joon kena lɔɔd nɔɔr ka pu nuud daam

Kà Joon kē nā_ ∅ lɔɔd nɔɔr kà pū nūud dáamm +∅.

And John come hither SER tie:DIPF mouth:SG and NEG.IND drink:DIPF beer NEG.

"John came, fasting and not drinking beer." (Mt 11:18)

A change from positive to negative polarity is possible, however:

Ya sieba be kpela ku kpil asɛɛ ba ti nyɛ Wina'am na'am la.

Yà sība bɛ kpēlá_ ∅ kú kpīl +∅, àséɛ bà nà tì

2PL INDF.PL EXIST here SER NEG.IRR die NEG, except 3PL IRR afterwards

nyɛ Wínà'am ná'àm lā.

see God kingdom ART.

There are some of you here who will not die before they see the kingdom of God." (Lk 9:27)

This is probably licensed by the presentational character of the main VP [33.4](#).

Verbal Predicators in a chain each have their own aspect marking, which need not necessarily be the same throughout.

In all serial-verb chains the order of events, if they are not simultaneous, is iconic; it must be reflected in the order of the VPs [22.2.1](#).

Which VP in a chain is semantically the "principal" verb phrase is not determinable from the order; many verbs have characteristic "auxiliary" or subordinate rôles in chains and whether they precede or follow the "main" verb depends on their own semantics.

A Serial VP can be attached after a Non-verbal Predicator [25](#):

Ano'ɔn nwaa yisid nidib tuumbɛ'edi basida?

Ànó'òñ_ø ɲwáa_ø yīsɪd nīdɪb túùm-bē'edi_ø básɪdà +ø?

Who **SER** this **SER** expel:**DIPF** person:**PL** deed-bad:**PL** **SER** throw.out:**DIPF** **CQ?**
 "Who is this who drives people's sins out?" (Lk 7:49)

Common patterns with verbs without specialised Serial-VP uses include

(a) main VP + imperfective VP expressing accompanying events:

Ka Ninsaal Biig la kena dit ka nuud...

Kà Nīn-sáàl Bīig kēn nā_ø díť kà nūud ...

And Person-smooth:**SG** child:**SG** come:**DIPF** hither **SER** eat:**DIPF** and drink:**DIPF**...
 "And the Son of Man comes eating and drinking ..." (Mt 11:19)

(b) perfective VP expressing prior event + main VP

Ka dapa ayi' yɛ fupielā zì'e ba san'an.

Kà dāpá_àýí yé fū-píə̀lā_ø zì'e bà sā'an.

And man:**PL** **NUM**:two dress shirt-white:**PL** **SER** stand **3PL** among.
 "Two men dressed in white were standing with them." (Acts 1:10)

(c) main VP + perfective VP in Irrealis or Imperative Mood, expressing purpose.

Amaa m pu mɔr antu'a zugv o yela na sɔbi tis na'atita'ar laa.

Àmáa m̃ pū m̃ɔr ántù'a zúgú_ò yēlá_ø nà s̃ɔbɪ_ø tís

But **1SG** **NEG.IND** have case:**SG** upon **3AN** about **SER** **IRR** write **SER** give
ná'-tītā'ar lāa +ø.

king-great:**SG** **ART** **NEG**.

"But I have no case about him to write to the Emperor." (Acts 25:26)

Man ya'a pu kɛɛn na tu'asini ba ...

Mān yá' pū kēɛ-n nā_ø tú'asī-ní_ bā...

1SG.CNTR if **NEG.IND** come-**REM** hither **SER** talk-**REM** **3PL.OB**...

"If I had not come to talk to them ..." (Jn 15:22) Note **REM** on both verbs.

Kèm_ø tí ɲyē dɥ'átà.

Go:**IMP** **SER** afterwards see doctor:**SG**.

"Go and see the doctor."

The Serial VP construction seems always to imply some subordination; the equivalent in translation in European languages would often be a participle modifying the main verb subject.

26.2 Coordination

VPs in serial-verb constructions can be coordinated with *kà* "and", *bēē* "or", *kūu* "or"; *bēē* and *kūu* are here synonymous.

Bà bēē ànínā n wā'ad bēē yú'um yū'umá.

3PL EXIST ADV:there SER dance:DIPF or sing:DIPF song:PL.

"They're in the process of dancing or singing."

ka keŋ ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'uŋa.

kà kēŋ ... n jāŋ'asíd kà pīāŋ'ad n dū'əsíd

and go ... SER leap:DIPF and praise:DIPF SER elevate:DIPF

Wínà'am yú'ùr súŋā.

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.

Sógjà-sǝ' kǎ'e n túm kà yǝɔd ò mēŋá +∅.

Soldier-INDF.AN NEG.BE SER work:DIPF and pay:DIPF 3AN self NEG.

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

26.3 Auxiliary Verbs in Serial VPs

Certain verbs have characteristic specialised meanings in Serial VP constructions. Variable Verbs of this type agree in aspect with the main VP verb.

26.3.1 Preceding the Main VP

bē⁺ "exist, be somewhere" + *ànínā* "there" + imperfective "be in the process of ..."

Ò bē ànínā n ŋwé'éd bīŋ lā.

3AN EXIST ADV: there SER beat:DIPF child:SG ART.

"He's currently beating the child."

àeŋ^a "be something/somehow" : the construction seen in

Li ane o sidi sv'oe li.

Lì á né ò sīdɿ ∅ sú'vɿlɿ.

3INAN COP FOC 3AN husband:SG SER own 3INAN.OB.

"It's her husband who owns it." (1 Cor 7:4)

is parallel to the Supplement *kà*-clause type 29.2 but with the subject of the main clause as antecedent. By ellipsis, this construction gives rise to *n*-focus 33.1.1.

zī'⁺ "not know": *nàm zī' n* + perfective "never have X-ed"

M̐ nám zī' _ ∅ nyē gbīgimne ⁺∅.
 1SG still NEG.KNOW SER see lion:SG NEG.
 "I've never seen a lion." SB

zàŋ^ε and **nōk**^ε/ "pick up, take" with object "using" (of a literal object as instrument)

M̐ nók sú'ugò _ ∅ kǎ nīm lā.
 1SG pick.up knife:SG SER cut meat:SG ART.
 "I cut the meat with a knife."

M̐ zǎŋí _ m̐ nú'ugò _ ∅ sī'is dāká lā.
 1SG pick.up 1SG hand:SG SER touch box:SG ART.
 "I touched the box with my hand."

Not ??*M̐ zǎŋí _ m̐ nú'ug kà sī'is dāká lā.*
 1SG pick.up 1SG hand:SG and touch box:SG ART.
 ("I picked up my hand and touched the box.")

mōr^a/ "have" + object "bringing" with motion verbs:

Dābá _ àyópòŋ kà fù mōr-ó _ ∅ ∅ kē nā.
 Day:PL NUM:seven and 2SG have 3AN.OB SER come hither.
 "Bring her here in a week." WK

dōl^{la}/ "accompany in subordinate rôle, attend"

Bà dōl·ō _ ∅ ∅ kēŋ Bók.
 3PL follow 3AN.OB SER go Bawku.
 "They went to Bawku with him."

Beginning verbs naturally precede:

Ka Pita pin'ili pa'ali ba
Kà Pita pīŋ'il _ ∅ pá'alì _ bā.
 And Peter begin SER teach 3PL.OB.
 "Peter began to tell them." (Acts 11:4)

Tì déŋì_ ∅ tís-ò_ ∅ lór.

1PL precede **SER** give **3AN.OB** car.

"We previously gave him a car." (*dèŋ*^ε "do/go first")

Ka dau sɔ' duoe zi'en la'asug la suugin ...

Kà dàu-sɔ' dūe_ ∅ zì'en là'asug lā súugin-n ...

And man-**INDF.AN** rise **SER** stand.up assembly **ART** among-**LOC** ...

"And a man (having risen) stood up in the synagogue ..." (Acts 5:34)

"**Come**" and "**go**" can be used similarly as initiators:

M̃ kéŋì_ ∅ pīə nú'ùs.

"I went and washed my hands."

1SG go **SER** wash hand:**PL**.

su'ā^a "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baŋidib la ...

Kà Nà'ab Herod su'ā_ ∅ búəl bāŋidib lā ...

And king:**SG** Herod conceal **SER** ask understander:**PL** **ART**...

"Herod secretly called for the wise men ..." (Mt 2:7)

nyāŋ^{ε/} means "overcome" as a main verb:

Ka m nyan dunia.

"I have overcome the world." (Jn 16:33)

Kà m̃ nyāŋ dūniya.

And **1SG** overcome world:**SG**.

As a Serial-VP auxiliary it means "carry out successfully, prevail in":

M̃ pū nyāŋ_ ∅ záb nà'ab lāa +∅.

1SG **NEG.IND** prevail **SER** fight chief:**SG** **ART** **NEG**.

"I wasn't able to fight the chief."

Unlike English "can", *nyāŋ*^{ε/} expresses events and not states. Thus, to express present ability or inability, the auxiliary is in the Irrealis Mood:

M̃ kú nyāŋ_ ∅ záb nà'ab lāa +∅.

1SG **NEG.IRR** prevail **SER** fight chief:**SG** **ART** **NEG**.

"I can't fight the chief." ("I won't succeed in fighting the chief.")

If the main verb is Imperfective the auxiliary is imperfective too:

wad line nyanedin ketin ka nidib voen,

wād-línì nyāñídī-n_ ∅ kētí-n kà nīdīb vōv-n

law-REL.INAN prevail:DIPF-REM SER cause:DIPF-REM and person:PL be.alive-REM.

"a law which could make people live." (Gal 3:21, 1996)

tūñ'e means "be able"; it almost always occurs as an auxiliary. A rare example of independent use appears in:

ba daa tis ka li zemisi ba pañi na tun'e si'em

bà dāa tís kà lì zēmísì_ bà pàñì_ ∅ nà tūñ'e sī'em

3PL TNS give and 3INAN become.equal 3PL strength COMP IRR be.able INDF.ADV

"They gave as much as their strength would permit" (2 Cor 8:3)

I have no examples of the LF, but there are no Dynamic Imperfective forms in -d^a and **tūñ'e** occurs before both Perfective and Imperfective main verbs. The verb is thus Invariable. Unlike *nyāñ^ε*, **tūñ'e** expresses a state, and both Indicative and Irrealis Moods can express present ability or inability.

ka li ku tun'e su'a.

kà lì kú tūñ'e_ ∅ sū'āa +∅.

and 3INAN NEG.IRR be.able SER hide NEG.

"which cannot be hidden" (Mt 5:14)

So' kae' na tun'e dol na'anam ayii.

Sō' kā'e_ ∅ ná tūñ'e_ ∅ dōl ná'-nàmá_ àyí +∅.

INDF.AN NEG.BE SER IRR be.able SER follow king-PL NUM:two NEG.

"Nobody can serve two kings." (Mt 6:24, 1976)

Fu tun'e nyet si'ela?

Fù túñ'e_ ∅ nyēt sí'elàa +∅?

2SG be.able SER see:DIPF INDF.INAN PQ?

"Can you see anything?" (Mk 8:23)

O pu tun'e pian'ada.

Ò pū tūñ'e_ ∅ piāñ'adá +∅.

3AN NEG.IND be.able SER speak:DIPF NEG.

"He could not speak." (Lk 1:22)

Tūñ'e occurs as auxiliary to *nyāñ^ε* used as a main verb in

bozugo ba ku tun'e nyaŋe ba meŋa.

bō zúgō bà kò tūŋ'e_ ∅ nyāŋí_ bà mēŋá +∅.

because 3PL NEG.IRR be.able SER control 3PL self NEG.

"because they cannot control themselves." (1 Cor 7:5, 1996)

26.3.2 Following the Main VP

tis^E "give" is used for "to, for"; the meaning may have nothing to do with "giving", and is simply a way of adding an indirect object. This can be used to put an indirect object after a direct, or to have both direct and indirect bound pronoun objects.

Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ.

Fù pū má' n tìs nīn-sáalā +∅, àmáa fù mà'

2SG NEG.IND lie SER give person-smooth:SG NEG but 2SG lie

n tís nē Wínà'am Sí-sùŋ..

SER 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)

M̃ dāa kúès bùŋ_ ∅ tís dɔ́'átà.

1SG TNS sell donkey:SG SER give doctor:SG.

"I sold a donkey to the doctor."

Not **M̃ dāa kúès bùŋ kà tís dɔ́'átà.*

1SG TNS sell donkey:SG and give doctor:SG.

("I sold a donkey and gave it to the doctor.")

gàad^E "pass, surpass" can be used in comparisons:

Isaac kárim_ ∅ gát John.

Isaac read:DIPF SER pass:DIPF John.

"Isaac reads better than John." SB

À-Wīn gím_ ∅ gát À-Būgɔr.

PERS-Awini be.short SER pass:DIPF PERS-Abugri.

"Awini is shorter than Abugri." SB

Fu sid nɔŋ mam gat bamaa?

Fù síd nòŋ mām_ ∅ gát bámmáa +∅?

2SG truly love 1SG SER pass:DIPF DEM.DEI.PL PQ?

"Do you really love me more than these?" (Jn 21:15)

gàlìs^E "get to be too much" (as in *Sāa gálìs yā* "There's too much rain") is used intransitively for "too much":

Ò dì n gálìs. "She's eaten too much."
3AN eat **SER** exceed.

Dā kàrìm gbánà_ø gálìsìdā +ø.
NEG.IMP read:**DIPF** book:**PL** **SER** exceed:**DIPF** **NEG**.
 "Don't read books too much."

bàs^E "send/go away" is used for "away, off, out":

Bà yìis dāy lā_ø bás. "They threw the man out."
3PL expel man:**SG** **ART** **SER** throw.out.

Ano'òn nwaa yìsid nìdìb tuumbē'edi basida?
Ànó'òn_ø nwáa_ø yīsìd nīdìb túùm-bē'edi_ø básìdà +ø?
 Who **SER** this **SER** expel:**DIPF** person:**PL** deed-bad:**PL** **SER** throw.out:**DIPF** **CQ?**
 "Who is this who drives people's sins out?" (Lk 7:49)

Ending verbs naturally follow the main VP:

Ò dì_ø nāe. "He's finished eating."
3AN eat **SER** finish.

Ò dì_ø tíg. "She's eaten to satiety."
3AN eat **SER** become.satiated.

Motion verbs occur here with meanings like local prepositions e.g.

Ò kàt kíkīr-bé'èd-nàm n yīsìd nīdìb.
3AN drive:**DIPF** fairy-bad-**PL** **SER** expel:**DIPF** person:**PL**.
 "He drives evil spirits out of people."

Jesus ban'ad buṅ n kpen'ed Jerusalem
Jesus_ø bāṅ'ad búṅ n kpéṅ'èd Jerusalem
 Jesus **COMP** ride:**DIPF** donkey:**SG** **SER** enter:**DIPF** Jerusalem
 "Jesus riding a donkey into Jerusalem" (picture caption, NT 1976)

Ènrìgim_ Ø páa_m.

Shift.along:IMP SER reach 1SG.OB.

"Shift along up to me." (pāe⁺/ "reach")

wēn^{na}/ "be like": as a main verb it occurs as in e.g.

Ka o nindaa wenne nintan ne.

Kà ò nīn-dáa wēn nē nīntān nē.

And 3AN eye-face:SG resemble with sun:SG like.

"His face is like the sun." (Rev 10:1, 1996: KB *Ka o nindaa nwene winnig ne*)

Wēn is very common in Serial VP constructions. The verb is followed by a prepositional phrase as complement, using either **wūv** "like" or **nē** "with" 21.1. Any object without the article **lā**⁺, even a pronoun or proper name, is followed by a meaningless **nē**. **Wēn** is used before numbers and measurements for "about, approximately." Numbers as NP heads are not followed by the meaningless **nē**:

Li ane wuv maila ayi' ne.

Lì à nē wūv maila àyí nē.

3INAN COP FOC like mile NUM:two like.

"It's about two miles." (Jn 11:18)

but *ka ba kal an wuv kobiga ne pisi.*

kà bà kāl áŋ wūv kóbɪgā nē pīsí.

and 3PL number:SG COP like hundred with twenty

"and their number was about 120." (Acts 1:15)

Wēn + complement sequences have been reanalysed as prepositional phrases to a considerable degree 21.3.

là'am^m "together" is also found as a particle-verb 22.7.2. In **là'am nē** "together with" the expression has become a compound preposition 21.3. It appears as a main verb meaning "associate with":

Bà pō lá'amìd tāabaa +Ø.

3PL NEG.IND associate:DIPF each.other NEG.

"They don't associate together."

yà'as^ε or **yà'as**^a "again" usually lacks **n** and has become effectively an adverb, preposable with **kà** 33.2. ILK glosses the word as "repeat", but I have no example of its use as a main verb.

Ya'as ka m gos ...

"Again I looked ..." (Rev 5:11, 1976)

Yà'as kà m̃ gōs ...

Again and **1SG** look ...

26.4 Serial VPs Introduced by *hālí*⁺

Hālí⁺ [21.2](#) can introduce Serial VPs in the sense "until":

...ka keŋ ia arakon' kane bodig la hale n ti nye o?

...kà kēŋ_ø ǰá àdàkón'-kànɪ bòdɪg lā

...and go **SER** seek **NUM:one-REL.SG** get.lost **ART**

hālí n tì nyē-ó-o +ø?

until **SER** afterwards see-**3AN.OB CQ?**

"... and go and look for the one which is lost until he finds it?" (Lk 15:4, 1996)

Ba da ditne, ka nuud, ka dit pu'ab, ka pu'ab kun sidib, hali ti paae dabiskan ka Noa kpen' anruŋun la.

Bà dà dít nē, kà nūud, kà dít pū'ab, kà

3PL TNS eat:**DIPF FOC**, and drink:**DIPF**, and take:**DIPF** wife:**PL**, and

pū'ab kūn sīdɪb, hālí_ø tí pāe dábìs-kàn

wife:**PL** return.home:**DIPF** husband:**PL** until **SER** afterwards reach day-**REL.SG**

kà Noa kpén' ànrũŋũ-n lā.

and Noah enter boat:**SG-LOC ART**.

"They were eating and drinking and marrying and being given in marriage up until Noah entered the boat."

(Lk 17:27, KB; the 1996 NT has ... *kun sidib n ti paae* ...)

Ka be mōwgin hali ti paae san'kanε ka o yis o meŋ paalu ni Israel dim san'an.

Kà bé mōwgu-n hālí_ø tì pāe sān-kání

and **EXIST** grass:**SG-LOC** until **SER** afterwards reach time-**REL.SG**

kà ò yís ò mēŋ pāalú nì Israel díŋ sá'àn.

and **3AN** emerge **3AN** self openly **LOC** Israel individual.**PL** among.

"... and remained in the bush until the time when he showed himself openly to the Israelites." (Lk 1:80)

27 Clauses

27.1 Structure

Kusaal is strictly SVO; deviations not achieved by *kà*-preposing 33.2 always represent extraposition or dislocation 33.3. Indirect objects precede direct, and objects precede other complements.

Verb phrases can be concatenated by Serial VP constructions 26.

Except in certain special circumstances 27.1.1 all clauses require a subject NP.

Clause-level particles may occur at various points within the clause structure. These comprise clause-linker 27.1.2 and post-subject 27.1.4 particles along with Emphatics 33.6.

VP adjuncts may follow each VP. Clause-level adjuncts may follow the last VP; it is generally not possible to distinguish these formally from adjuncts of the last VP itself, unless the VP ends in a particle confined to VP-final position 33.3 27.2. Clause-level adjuncts may also precede the subject, but only in Main or Content Clauses 28.1.1, and only if they express time or circumstance.

Main Clauses and Content Clauses have similar structures. Both display Independency Marking on the first Verbal Predicator 22.6, and have structural possibilities not permitted to clauses of any other type: they may contain Non-verbal Predicators 25 or lack a predicator altogether 28.2.4, and they can show clefting or preposing with *kà*, or focus with *nē*^{+/}. *nē*^{+/} may follow a Verbal Predicator, precede a verb complement or adjunct, or appear clause-finally 33.1.2.

27.1.1 Subjects

A VP subject must normally be present; Kusaal is not a pro-drop language, and requires, for example, dummy subject pronouns for impersonal constructions such as

Lì tòl.

3INAN be.hot.

"It (weather) is hot."

Lì àŋ súnā.

3INAN COP good:ADV.

"It's good."

(Contrast Mooré *yaa sōama*, with no pronoun)

Lì nār kà fù kūl.

3INAN must and 2SG return.home.

"It's necessary for you to go home."

The dummy pronoun is 3sg inanimate; animate *ò* is not found. The dummy subject may be omitted in *yà*[!]-clauses:

Ya'a ka'anε alaa, m naan ku yeline ya ye ...

Yà' kã'a-ní àlá, m nãan kú yēlɪ-ní yā yē ...

If **NEG.BE-REM ADV:thus, 1SG** then **NEG.IRR say-REM 2PL.OB** that...

"If it were not so, I would not have told you that ..." (Jn 14:2)

Omission of the 2sg subject pronoun is required in direct commands, unless a presubject adjunct is present. In the contexts where the 2sg pronoun is deleted, the 2pl subject pronoun is transferred to follow the verb as an enclitic.

After clause linker *kà* "and" a pronoun repeating the subject of the previous clause is deleted [27.1.5.2](#) (though its tone-raising effect remains [8.3](#).)

Absence of subject pronouns in other cases is due to ellipsis [27.1.5](#); such structures are informal and are "corrected" by reinsertion of pronouns when informants' attention is drawn to them. This will therefore not be taken to invalidate the general principle that clauses require explicit subjects. Any L Raising induced by the ellipsed pronoun [8.3](#) remains.

Náe yàa +ø?

"[Have you] finished?"

Finish **PFV PQ?**

This is particularly common in greeting formulae like

Gbís wēlá?

"How did you sleep last night?"

for *Fù sá gbìs wēlá +ø?*

2SG TNS sleep how **cq?**

Dúø wēlá?

literally "(You) arose how?"

for *Fù dúø wēlá +ø?*

2SG arise how **cq?**

27.1.2 Clause-linker Particles

The **Clause-linker particles** *kà* "and" and *yē* "that" are placed before the subject (which may itself be ellipsed after *kà* [27.1.5.2](#).) Conjunctions almost always precede any clause-linker particles [27.1.3](#). When other clausal elements precede *kà* before the subject, the construction is probably to be understood as *kà*-preposing instead [33.2](#). "Resumptive" *yē* in longer passages of indirect speech frequently precedes clause-linking *kà* [29.3.3](#), but otherwise the clause-linker particles are mutually exclusive; apparent exceptions always arise from ellipsis [27.1.5.1](#).

While *yē* is invariably subordinating, *kà* may be coordinating or subordinating.

The glosses "and" and "that" are inadequate; both particles are used in a variety of constructions with meanings that vary considerably.

kà	introduces	subordinate clauses of purpose or result	29.1
		subordinate clauses expressing a relative sense	29.2
		from which derives <i>kà</i> -preposing	33.2
		subordinate content clauses	29.3
		sequential clauses	28.3.2
yē	introduces	subordinate clauses of purpose or result	29.1
		subordinate content clauses	29.3

The meaning is largely determined by the nature of the clauses; for example, purpose clauses contain Imperative Mood, and Content Clauses show main-clause type structural features. *yē* has different tonal effects with a following bound subject pronoun depending on the construction [8.3](#).

27.1.3 Conjunctions

No single group of words in Kusaal corresponds to English conjunctions. The particles *kà* "and" and *yē* "that" need to be treated separately [27.1.2](#). Some words translatable as English conjunctions are presubject adjuncts [28.1.1](#). The term "conjunction" will here be reserved for forms which either do not occur together with clause-linkers at all, or precede them, whereas presubject adjuncts follow. When there are no clause-linkers, conjunctions precede adjuncts. Thus

<i>kōv</i>	"or" (← Hausa)
<i>bēε</i>	"or"

never appear before or after *kà*, while

<i>àmáa</i>	"but" (cf Arabic <i>أما</i> <i>ʔamma</i> : "as for")
<i>hālí</i>	"until" (cf Arabic <i>حتى</i> <i>ḥatta</i> :); preposition 21.2
<i>àsέε</i>	"unless" (cf Hausa <i>sai</i>); preposition 21.2

occur overwhelmingly more often before *kà* than after it. The 1996 NT version has 92 examples of the order *àmáa kà*, 99 of *hālí kà* and 49 of *àsέε kà*; in the KB versions:

Ka sieba la' o. Amaa ka sieba yel ye ...
Kà sīāba lá' o_∅. Àmáa kà sīāba yél yē ...
 And **INDF.PL** laugh **3AN.OB**. But and **INDF.PL** say that...
 "Some laughed at him, but others said..." (Acts 17:32)

... zin'in anina **hali ka** Herod ti kpi.

... zín'ín ànínā, hālí kà Herod tí kpi.

... sit **ADV:** there, until and Herod afterwards die.

"...remaining there until Herod had died." (Mt 2:14)

Amaa baa yinne ku lu tejin kpíi, asɛɛ ka li aan ya Ba' Wina'am bɔɔdim.

Àmáa báa yīnní kù lū tēŋɪ-n_ ø kpíi⁺ø, àséɛ kà lì

But not.one **NEG.IRR** fall ground:SG-LOC **SER** die **NEG**, unless and **3INAN**

áaŋ_yà Bā' Wínà'am bɔɔdìm.

COP 2PL father:SG God:SG will.

"But not one of them will fall to the ground and die, unless your Father God agrees to it." (Mt 10:29)

The 1996 NT has just one example each of the orders *kà àmáa*, *kà hālí* and *kà àséɛ*. Thus

Ka na'ab la sunf sa'am, ka amaa on po saam tuon la zug ka o tis noor ye ba tisim bipuŋ la on bood si'el.

Kà nà'ab lā sūŋf sáŋ'àm, kà àmáa ɔn pō sáam

And king:SG **ART** heart:SG spoil, and but **3AN:COMP** swear stranger:PL

túèŋ lā zúg kà ò tís nɔɔr yé bà tìsɪm bī-púŋ lā

before **ART** upon and **3AN** give command:SG that **3PL** give:IMP child-girl:SG **ART**

ɔn bɔɔd sɪ'el.

3AN:COMP want **INDF.INAN**.

"The king was sad, but because he had sworn in front of guests he commanded that they give the girl what she wanted." (Mt 14:9, 1996: KB *amaa on po*)

Conjunctions also precede *yē* (both as linker and "resumptive" *yē* 29.3.3):

Wina'am daa pu garji ti ye ti tum dian'ad tuuma, amaa ye ti be nyain.

Wínà'am dāa pū gāŋí_ tī yé tì túm dǎ'ad túmà⁺ø,

God **TNS** **NEG.IND** choose **1PL.OB** that **1PL** work dirt work **NEG**,

àmáa yé tì bɛ nyāe.

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)

Adjuncts appear *after* clause-linking *kà*; any following *kà* is not clause-linking but *kà*-preposing 33.2. Time and circumstance adjuncts are not often *kà*-preposed.

For example, a rough count of the text of the 1996 NT shows with *nannanna nānná-nā*^{+/} "now" and *lin a si'em la lín à sɪ'əm lā* "as things stand":

	<u>X alone</u>	<u>kà X</u>	<u>X kà</u>
<i>nānná-nā^{+/}</i>	33	28	4
<i>lín à sī'əm lā</i>	4	6	0

Similarly *sān-sí'ēn lā* "at one time, once ..." is a presubject AdvP:

saŋsi'en la ya da ka' yinni ne Kiristo

sān-sí'ē-n lā, yà dà kā' yīnní nē Kiristo

time-INDF.IH-LOC ART 2PL TNS NEG.BE one with Christ

"at one time you were not one with Christ." (Eph 2:12, 1996)

Ka saŋsi'en la tinam meŋ da ane zon

Kà sān-sí'ē-n lā tīnám mēŋ dá à nē zōn.

And time-INDF.INAN-LOC ART 1PL.CNTR self TNS COP FOC fool:PL

"and once we ourselves were fools" (Titus 3:3, 1996)

Constructions based on *zùgō* (see 8.1.1), like *dìn zùgō* "therefore" *bō zùgō* "because" are conjunctions like *kōv/bēē* "or" which do not usually occur with clause linkers at all. *Bō zùgō*, though stigmatised as an Anglicism in ILK, is in fact freely used in the NT/KB for "because."

Police gbán'a_m bō zùgō m̄ ɲwé' dāy lā.

Police seize 1SG.OB because 1SG hit man:SG ART.

"The police arrested me because I hit the man." (ILK)

However, the corresponding types with Apocope, like *àlá zùg* "therefore" *dìn zùg* "therefore", can be used *either* as *kōv/bēē*-type conjunctions or as AdvPs; in the latter case, if they precede the subject they must be *kà*-preposed because they do not express time or circumstance 20.1. This results in a characteristic pattern: all combinations with *kà* occur *except* *kà X* (1996 NT again):

	<u>X alone</u>	<u>kà X</u>	<u>X kà</u>	<u>kà X kà</u>
<i>dìn zùgō</i>	208	2	0	0
<i>dìn zùg</i>	39	2	69	17

Unlike the NT, WK also treats *nānná-nā^{+/}* "now" in this way, accepting

Nānná-ná m̄ á nē ná'àb.

"Now I am a chief."

Now-hither 1SG COP FOC chief:SG.

Nānná-ná kà m̀ áṅ ná'àb. "Now I am a chief."
 Now-hither and **1SG COP** chief:**SG**.

Kà nānná-ná kà m̀ áṅ ná'àb. "And now I am a chief."
 And now-hither and **1SG COP** chief:**SG**.

but rejecting

**Kà nānná-ná m̀ áṅ ná'àb* "And now I am a chief."
 **Kà nānná-ná m̀ á nē ná'àb.*

Conjunctions have no effect on clause structure or on the occurrence of tense marking in narrative [28.3.2](#). A *subordinating* conjunction would therefore have to be regarded as preceding a Content Clause [29.3](#). Usually the meaning is not consistent with subordination and the issue does not arise; sometimes, although the English translation suggests subordination, the Kusaal construction is shown to be otherwise by the position of the Negative Prosodic Clitic. Thus with *àséé* "unless":

O ku kpīi, asee o ti nye Zugsob Kristo la.
Ò kù kpīi⁺∅, àséé ò tì nyè Zūg-sób Kristo lā.
3AN NEG.IRR die **NEG**, unless **3AN** afterwards see head-one:**SG** Christ **ART**.
 "He will not die, without seeing the Lord's Christ." (Lk 2:26)

However, the preposition *wōv* "like" [21.1](#) may introduce formally subordinate clauses with Content/Main Clause features like focus-*nē*^{+/}:

ka tuumbe'ed ku len so'e ti wuu ti aa li yamugo.
kà tùum-bē'ed kú lēm sù'v_tī wōv tì áṅ_lì yammugō⁺∅.
 and work-bad:**PL NEG.IRR** again own **1PL.OB** like **1PL COP** **3INAN** slave:**SG NEG**.
 "and that sin will not again own us as if we were its slave." (Rom 6:6, 1996)

M pian'adi tisidi ya wuv ya ane m biis ne.
M̀ pīáṅ'adī_∅ tísìdī_ yá wōv yà á né m̀ bīs nē.
1SG speak:**DIPF SER** give:**DIPF 2PL.OB** like **2PL COP FOC 1SG** child:**PL** like.
 "I talk to you as if you were my children." (2 Cor 6:13)

Hālí "until" and *àséé* "unless, except for" [21.2](#) occur both as conjunctions and as prepositions, suggesting that these categories could be merged. *Nē* appears both as *nē* "with" and as "and" coordinating NPs [19.4](#), but cannot link clauses which have not first been nominalised; however, conjunctions are in any case a separate category from clause linker particles like *kà* "and."

27.1.4 Post-Subject Particles

Several particles marking subordinate clause types follow the subject, including *yà* "if" ... *nāan* "then" [30.1](#) [30.1.2](#) and the complementiser *h* [31](#); *sāɗɨ́ɨm* "since" follows *h* [31.1.1](#). Other particles found in this slot are

sìd "truly"

Ò sìd à nē zōlvɔ. "He really is a fool."
3AN truly **COP FOC** fool:**SG**.

Ò sìd dāa á nē ná'àb. "Truly, he was a chief." WK
3AN truly **TNS COP FOC** chief:**SG**.

kōlɨm or **kūdɨm** "always" (← Hausa) seems only to be found with negatives:

Ka so' kudin ku len nyee li ya'asa.
Kà sō' kūdɨm kú lēm nyéé_lī yá'asā +∅.
 And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG**.
 "Nobody will ever see it again." (Rev 18:21, 1996)

nyāan or **nāan** [30.1.2](#) "next, afterwards"

Ka Yesu tans nē kukɔtita'ar ka nyaan kpí.
Kà Yesu táŋs nē kúkɔ-títā'ar kà nyāan 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", like *yà*, is followed by Indicative Mood with future meaning:

Ya yinni pa'a ti bu'osi m ye ...
Yà yīnní pá' tì bū'əsí_m yē...
2PL one perhaps ask **1SG.OB** that...
 "One of you will perhaps ask me ..." (Rom 9:19, 1976)

yū'un "then, next"

Manoa yu'un da ban ye o ane Zugsɔb maliak.
Manoa yū'un dá bàŋ yé ò à nē Zūg-sób máljāk.
 Manoa then **TNS** realise that **3AN COP FOC** head-one:**SG** angel:**SG**.
 "Then Manoa realised that he was an angel of the Lord." (Judges 13:12)

27.1.5 Ellipsis

Ellipsis is a spectrum. Informal ellipsis may be constantly used by speakers but is liable to be declared incorrect if their attention is drawn to it; it does not affect the meaning of the clause in which it occurs. More systematic ellipsis often implies anaphora or a similar repetition of preceding material. In yet more formalised cases the ellipsed type has become an autonomous construction with its own meaning.

Bound words, by definition, can never be left standing alone after ellipsis of the word to which they are bound but must be ellipsed along with it; however, many types of bound particle or pronoun are themselves subject to ellipsis.

Cases where I invoke ellipsis as a descriptive and explanatory device are with yes/no questions ending in *kúv* or *bée* 28.2.2; indirect commands 29.1 29.3.1; ellipsis of complements of verbs 23.1; *kà*-preposing and *n*-focus 33.1.1 33.2; *hāl* as intensifier 21.2; ambiguity with coordinated modifiers and determiners in the NP and cases where a pre-modifier applies to a coordinated head 19.4; and omission of aspect-marking *nē* in replies to questions 33.1.2.3. Implicit tense marking 22.3.3 could also reasonably be classified as a form of ellipsis.

27.1.5.1 Coordination and Ellipsis

Ellipsis is involved in many cases of coordination within NPs 19.4.

Ellipsis of repeated elements in clause coordination is common, e.g.

Dāy lā nyé bī-díbiŋ kūv bī-púŋàa +ø?

Man:SG ART see child-boy:SG or child-girl:SG PQ?

"Did the man see a boy or a girl?"

The surface form *kà yē* "but in order that ..." is always the result of ellipsis; the two particles cannot co-occur in a clause, unless the *yē* is "resumptive" 29.3.3, in which case it precedes the *kà*. Thus in the sequence *kà yē*, a clause must have been ellipsed between the two particles:

M̃ pō tísì_f gbáŋ lā yé fù kúəsì_lú +ø,
1SG NEG.IND give 2SG.OB book:SG ART that 2SG sell 3INAN.OB NEG,
kà yé fù kárim.

and that 2SG read.

"I didn't give you the book so you'd sell it, but [I gave it] so you'd read it."

27.1.5.2 Null Anaphora of Subjects

For null anaphora of VP complements see [23.1](#).

Clause subjects are required to be explicitly present, with cross-linguistically common exceptions like the subjects of direct commands [27.1.1](#). Dummy subject pronouns (always 3sg inanimate) are required in impersonal constructions like

<i>Lì tòl.</i>	"It (weather) is hot."
<i>Lì à sùḡā.</i>	"It's good."
<i>Lì nàr kà fù kūl.</i>	"It's necessary for you to go home."

However, subject pronouns are regularly deleted after the clause linker particle *kà* when they would have the same reference as the subject of the preceding clause. The L Raising that would follow the pronoun remains [8.3](#). Pronouns after *kà* introducing a Content Clause are not subject to this [29.3](#), and Supplement Clauses [29.2](#) usually have different subjects from the main clause, so this is characteristic of **Sequential Clauses** [28.3.2](#). It can occur with a *kà*-purpose clause too [29.1](#):

M na niḡ wala ka nye faangirɛ?
Ṃ ná nīḡ wēlā kà nyē fāaḡírɛ + \emptyset ?
1SG IRR do how and find salvation **cq**?
 "What must I do to get saved?" (Acts 16:30)

A non-deleted subject pronoun after *kà* thus usually signals a change of subject. A conversation may be reported simply by *Kà ò yél ... kà ò yél ...* with each *ò* marking a switch of speaker.

Kusaal is strict in requiring a pronoun to refer to the last grammatically possible antecedent; with the collapse of gender agreement [15.1](#) this can mean any antecedent of the same number, and can trump semantic appropriateness, e.g.

Pu'ā lā dá' dāká kà kēḡ Bók.
 Woman:**SG ART** buy box:**SG** and go Bawku.
 "The woman bought a box and went to Bawku."

**Pu'ā lā dá' dāká kà ò kēḡ Bók.*
 Woman:**SG ART** buy box:**SG** and **3AN** go Bawku.
 ("The woman bought a box and it went to Bawku")

Pu'āb lā dá' dāká kà kēḡ Bók.
 Woman:**PL ART** buy box:**SG** and go Bawku.
 "The women bought a box and went to Bawku."

Pŷ'āb lā dā' dāká kà bà kēŋ Bók.

Woman:PL ART buy box:SG and 3PL go Bawku.

"The women bought a box and they went to Bawku."

(acceptable but unusual with *bà* = *pŷ'ab*)

Occasionally the pronoun after *kà* is ellipted as referring, not to the subject of the preceding clause, but to the subject of a preceding *kà*-preposed Absolute Clause:

Ban daa yit la, ka nyε dau ...

Bán dāa yīt lā, kà nyē dāu ...

3PL:COMP TNS emerge:DIPF ART, and see man:SG...

"As they were going together, (they) saw a man ..." (Mt 27:32)

Ban wum nε'εŋa la ka sin.

Bán wùm nē'ŋá lá kà sīn.

3PL:COMP hear DEM.DEI.INAN ART and be.silent.

"After they heard this they fell silent." (Acts 11:18)

27.2 Downranking, Insubordination and Independency Marking

Clauses are either main or subordinate. The clearest criterion for subordination is whether a clause precedes or follows a Negative Prosodic Clitic induced by a negative Verbal Predicator in the preceding clause. Although placement before the Negative Clitic necessarily implies that a clause is subordinate, the converse is not always true: in the case of constructions which by default involve negative raising, if the subordinate clause is, exceptionally, outside the scope of the negation semantically, the Negative Clitic placement is also exceptional and precedes the subordinate clause [32.2](#) [32.3](#); such cases are marginal, however.

Subordinate Clauses can be divided formally into those marked by a post-subject particle and those preceded by a clause-linker particle. (On the question of subordination with Conjunctions see [27.1.3](#).) The post-subject-particle types, *yà*'-clauses [30](#) and *ñ*-Clauses [31](#) are AdvPs or NPs and there is no ambiguity regarding their embedded character. All lack Independency Marking [22.6.1.1](#).

Subordinate clauses may also be introduced by *yē* "that" or *kà* "and, that." Both particles introduce subordinate clauses of several kinds which appear last within their main clauses, just before any Negative Prosodic Clitic [32.3](#), as verb phrase complements or clause adjuncts. Particular verbs may prefer or require a complement clause with one or the other particle, and Supplement Clauses always use *kà*, but elsewhere the two particles are often equivalent.

Among subordinate clauses introduced by *yē* or *kà* there is a basic distinction between, on the one hand, **Purpose** and **Supplement Clauses** which lack Independency Marking, focus, clefting, *kà*-preposing and independent tense marking, and on the other hand **Content Clauses** which show both Independency Marking and a full range of possible structures: Main Clauses in terms of formal internal structure, they function as subordinate clauses by **Downranking**.

Purpose Clauses [29.1](#) thus lack Independency Marking, clefting and *kà*-preposing, and they show tense marking only if the main clause itself is ellipitd:

Ò *sáa zàb nà'ab lā*. "He should fight the chief tomorrow."
3AN TNS fight chief:**SG ART**.

Their Verbal Predicators have Imperative Mood:

Ì *pū bódòd yé fù kēŋ Bókō* ^{+∅}.
1SG NEG.IND want that **2SG** go Bawku **NEG**.
 "I don't want you to go to Bawku."

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì *pū nār yé fù dí fù bā'-bîg pū'á Herodiase* ^{+∅}.
3INAN NEG.IND must that **2SG** take **2SG** father-child:**SG** wife:**SG** Herodias **NEG**.
 "It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

Complement Clauses [29.2](#) show similar structural limitations; they have Verbal Predicators with Indicative or Irrealis Mood, and have quasi-relative meaning:

Ì *dāa pū nyē dāy lá kà ò áŋ ná'abā* ^{+∅}.
1SG TNS NEG.IND see man:**SG ART** and **3AN COP** chief:**SG NEG**.
 "I didn't see the man as a chief."

Content Clauses [29.3](#) have the full range of structural possibilities of Main Clauses. They function as arguments of verbs of cognition, reporting, and perception; like Purpose and Complement Clauses, they are always subordinate:

M pu yel ye nōcr ayōpōi ma'aanē.
 Ì *pū yél yē nōcr àyópòḡ má'anē* ^{+∅}.
1SG NEG.IND say that occasion:**SG NUM**:seven only **NEG**.
 "I don't say, only seven times." (Mt 18:22)

Bùṅ-bāṅ'ad zī' yē tēṅ túllā +∅.

Donkey-rider:SG NEG.KNOW that ground:SG be.hot NEG.

"The donkey-rider doesn't know the ground is hot."

Ka o ba' ne o ma pu baṅ ye o kpelim yaa.

Kà ò bā' né ò mà pū bāṅ yé ò kpèlɪm yāa +∅.

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)

The linker *kà*, despite the label "and" which I have adopted for it consistently in the glossing, like *yē* very often introduces subordinate Purpose and Content Clauses :

ka pu nar ka ba buolim ye Tumtumma

kà pū nár kà bà búəlì_m yē Túm-tūmma +∅.

and NEG.IND must and 3PL call 1SG.OB that work-worker:SG NEG.

"and ought not to be called an apostle" (1 Cor 15:9)

M̃ tén'ès kà nīgí lā ɔ̀nbìd nē.

1SG think and cow:PL ART chew:DIPF FOC.

"I think the cows are eating." WK

***Kà* also introduces clauses which are *not* subordinate** either by the criterion of Negative Prosodic Clitic placement or in lacking main-clause structural features. This use of *kà* to coordinate semantically and structurally independent clauses is especially characteristic of narrative [28.3.2](#), where potentially long series of **Sequential Clauses** [28.3.2](#) are each introduced by *kà* so long as the sequence of events is proceeding in order. So, for example

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-Pū-zót-yēl dá à né ò sàam bìg mà'aa.

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

Kà dāar yīnní kà bìg lā né ò sàam zín'i_∅ sṑnsid.

And day:SG one and child:SG ART with 3AN father:SG sit SER converse:DIPF.

Kà bìg lā tí yèl ò sàam yē ...

And child:SG ART afterwards 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

where the second *kà* is preposing the time expression *dāar yīnní* "one day", where *kà*-preposing is a structural feature not found in subordinate clauses [33.2](#) .

All clauses introduced by *kà* other than Content Clauses lack Independency Marking on the Verbal Predicator, including Sequential Clauses.

Historically, *kà* was perhaps always subordinating (compare *nē* "and" connecting NPs, which is essentially the same word as the preposition *nē* "with" [19.4](#).) This promotion of subordinate clauses to main-clause function is **Insubordination**, defined in [Evans 2009](#) as "the conventionalised main-clause use of what, on prima facie grounds, appear to be formally subordinate clauses."

The criterion of Negative Prosodic Clitic placement breaks down in cases where a subordinate clause has to be excluded from the scope of a negation in the main clause, which can give a spurious appearance of insubordination [32.3](#):

Ka li pu yuugε ka o pu'a mε kena.

Kà lì pō yúugē⁺∅, kà ò pɹ'ā mé kē nā.

And 3INAN NEG.IND delay NEG, and 3AN wife:SG also come hither.

"Not much later, his wife came too." (Acts 5:7)

However, in examples like

Ò vùl tîm kà ò nóbùr pō zábē⁺∅.

3AN swallow medicine and 3AN leg:SG NEG.IND fight NEG.

"She drank medicine and her leg didn't hurt." (*pō* negative Indicative)

it is not possible to make the first Verbal Predicator negative without the corresponding Negative Clitic appearing *before* the *kà*. Accordingly, the construction is simply a mini-narrative and the second clause is Sequential. In

Amaa Wina'am keya ka ya an nōr yinne nε Yesu Kristo.

Àmáa Wínà'am ké yá kà yà áŋ nōr yīnní nē Yesu Kristo.

But God cause PFV and 2PL COP mouth:SG one with Jesus Christ.

"But God has caused you to be in agreement with Jesus Christ." (1 Cor 1:30)

the phrase-final perfective marker *yā* [22.6.2.1](#) appears before a subordinate *kà*-clause after *kē⁺* "cause" [29.1](#), but this represents extraposition [33.3](#) of a subordinate clause from the VP to clause-adjunct position, not coordination.

Clauses of the type introduced by linker particles are themselves coordinated with *kà* "and" *kūv/bēε* "or", not *nē* like *ñ*-Clauses:

Ì bódòd yē dāy lā kēŋ dá'ā-n, kà pɹ'ā lā dūg dīlɪb.

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

28 Main Clauses

28.1 Structure

Main clauses show numerous structural possibilities which are not found in subordinate clauses other than Content Clauses, which are structurally identical, and regarded as downranked main clauses [29.3](#). Both clause types display characteristic Independency Marking on the first Verbal Predicator [22.6](#). They may contain Non-verbal Predicators [25](#) or even lack a predicator altogether [28.2.4](#). They can be focussed or clefted or prepose elements with *kà*; Focus-*nē*^{+/} occurs at most once in a main or content clause, following a Verbal Predicator, before a verb complement or adjunct, or clause-finally [33](#). Main and Content Clauses may contain time, circumstance or reason-why adjuncts before the subject.

28.1.1 Clause-Level Adjuncts Preceding the Subject

Main Clauses and Content Clauses with a verbal predicate may contain adjuncts which precede the subject and follow any clause linker particle. Such adjuncts may only express time, circumstance or reason, not place or manner. AdvPs expressing place or manner can only be placed before the subject by preposing with *kà* [33.2](#). Thus the AdvP may precede the subject in e.g.

Bēogú fù ná kŭl.

Tomorrow **2SG IRR** return.home.

"You're going home tomorrow." SB

but not in

**Mōgú-n mām bē.* for "I'm in the bush."

Grass:**SG-LOC 1SG.CNTR EXIST.**

which is corrected by WK to

Mōgú-n kà mām bē. "I'm in the bush."

Grass:**SG-LOC** and **1SG.CNTR EXIST.**

Permissible pre-subject adjunct types may be any AdvPs or clauses expressing time, circumstances, or reason, such as Absolute Clauses, *sādīgím*-clauses [31.1.1](#), AdvPs like *àlá zùg*, *dìn zùg* "therefore"; *lì nyá'an*^a "afterwards", *yà*'-clauses "if/when ...", *hālí* + *ñ*-Clause "although ...", "even though ...", *yā'a* + NP "as for ...", *lín à sī'am lā* "as things stand", *àsīda* "truly."

Some AdvPs of this kind, like Absolute Clauses, *lì nyá'an*^a or *dìn zúg* may also occur preposed with *kà*; others, like *yà'*-clauses or *sāḍígím*-clauses, may not.

Pre-subject adjuncts are not followed by L Raising [8.3](#).

28.2 Clause Types

Main Clauses, along with the structurally similar Content Clauses, can be classified into declarative, interrogative and imperative types. Declarative main clauses are the unmarked default. Interrogatives comprise Content and Polar question types, and the Imperative type are commands. There are also minor clause types with Non-verbal Predicators or no predicator at all.

28.2.1 Content Questions

Content questions (except for *lìā* [25](#)) contain an interrogative pronoun or determiner; the final word of the question appears as a LF with a tone perturbation due to the final Interrogative Prosodic Clitic [8.1](#).

There is no special interrogative word order; however if the interrogative word is the subject (or part of the subject NP) it is always *n*-focussed [33.1.1](#) when syntactically possible, and other interrogatives are very often also fronted with *kà* [33.2](#), obligatorily so in the case of *b̄* in the sense "why?" (compare the parallel construction with a demonstrative pronoun expressing a reason in *Dìn kà Kūsáàs yē* ... "That is why the Kusaasi say ..." KSS p16.)

Ánó'ónì _— *ø* *nyē bígà* ^{+ø?}

Who **SER** see child:SG CQ?

"Who has seen a child?"

Fù b̄òd b̄ ^{+ø?}

2SG want what CQ?

"What do you want?"

B̄ kà fù kúmmà ^{+ø?}

What and 2SG weep:DIPF CQ?

"Why are you crying?"

For "which?" the short demonstratives are used:

Lìnē?

"Which one?"

Nīf-kánē?

"Which eye?"

Nīn-kánē?

"Which person?"

Fù b̄òd línē ^{+ø?}

2SG want DEM.INAN CQ?

"Which do you want?"

Note the *short* final LF vowels [8.1](#); these are content, not polar, questions. Used after a cb, as a dependent pronoun, *b̄*⁺ is a determiner: "what?":

<i>nā'-b̄</i>	"what cow?" WK DK (not <i>náaf b̄</i> , only possible in the sense "What, of a cow's?")
<i>b̄-b̄</i>	"what goat?"
<i>dā-b̄</i>	"what beer?"

B̄- can be used as a pre-modifier, querying a description: "what sort of ...?"

Fù tùm b̄-tùuma + \emptyset ?
2SG work:DIPF what-work CQ?
"What kind of work do you do?"

Bo yir ka ya na me' n tis mane?
B̄-yír kà yà ná mē n tís mánè + \emptyset ?
What-house:SG and 2PL IRR build SER give 1SG.CNTR CQ?
"What kind of house will you build for me?" (Acts 7:49, 1996)

The compound *b̄-b̄udi*⁺ "what kind of?" can be used as a post-determiner:

<i>nā'-b̄-b̄udi</i>	"what kind of cow?"
<i>dā-b̄-b̄udi</i>	"what kind of beer?"

Note the idiom:

Fù á nē b̄- b̄udi + \emptyset ? "What tribe do you belong to?"
2SG COP FOC what sort CQ?

The focus particle *nē*^{+/} may not be used in content questions; this applies also to aspect-focus *nē*^{+/}.

Dāy lā nyé bīg. "The man has seen a child."
Man:SG ART see child:SG.

Ànó'oni \emptyset *nyé bígà* + \emptyset ? "Who has seen a child?"
Who SER see child:SG CQ?

Dāy lā nyé ànó'ònè ^{+ø?} "Whom did the man see?"
 Man:SG ART see who CQ?

or *Ànó'òn kà dāy lā nyé* ^{+ø?}
 Who and man:SG ART see CQ?
 "Whom did the man see?"

Bà kùvd nē bōvs. "They're killing goats."
 3PL kill:DIPF FOC goat:PL.

Ànó'ònì_ø kùvd bōvsè ^{+ø?}
 Who SER kill:DIPF goat:PL CQ?
 "Who is killing goats?" Progressive sense without *nē*.

Ànó'òn bīgi_ø nwá ^{+ø?} "Whose child is this?"
 Who child:SG SER this CQ?

Bó kà fù kúesìda ^{+ø?} "What are you selling?"
 What and 2SG sell:DIPF CQ? Progressive sense possible without *nē*.

Fù bódòd bó ^{+ø?} "What do you want?"
 2SG want what CQ?

Fù bódòd nē bó ^{+ø?} "What do you want it with?"
 2SG want with what CQ? WK confirms that *nē* must be "with" here.

M á nē dāy. "I am a man."
 1SG COP FOC man:SG.

M áṅ bó ^{+ø?} "What am I?"
 1SG COP what CQ?

Fù wá'e yáa ^{+ø?} "Where are you going?"
 2SG go where CQ?

Bùgúm lā yít yáa ní ná ^{+ø?}
 Fire ART emerge:DIPF where LOC hither CQ?
 "Where is the light coming from?"

28.2.2 Polar Questions

Polar questions are of two types. One is exactly like a statement but with final LF and tone changes due to the Interrogative Prosodic Clitic; in this case the neutralisation of LF-final vowel length is to long [8.1](#). There are no restrictions on focus *nē*. The answer expected is *ēēŋ* [28.2.4](#).

Dāy lā nyé bígàa ^{+∅?} "Has the man seen a child?"
 Man:SG ART see child:SG PQ?

Bà kùvd nē búvsèè ^{+∅?} "Are they killing goats?"
 3PL kill:DIPF FOC goat:PL PQ?

M á nē dáùv ^{+∅?} "Am I a man?"
 1SG COP FOC man:SG PQ?

Fù pō wúmmàa ^{+∅ +∅?} "Don't you understand?"
 2SG NEG.IND hear:DIPF NEG PQ? (expects *ēēŋ*, here "no")

Note that the Negative Prosodic Clitic **NEG** is effectively lost before the Interrogative Prosodic Clitic **CQ** or **PQ**.

The second type of polar question follows the ordinary statement form with either *béè* (expecting disagreement, with *áyìl*) or *kúv* (expecting agreement, with *ēēŋ*.) NT rarely uses *kúv* in this way. These are evidently the words for "or", with ellipsis of the rest of a tag question "or isn't it?" etc; such constructions are common in local languages, and indeed "or?" is used like this in local English.

Dāy lā nyé bíg kúv ^{+∅?}
 Man:SG ART see child:SG or PQ?
 "Has the man seen a child?" (I expect so.)

Dāy lā nyé bíg béè ^{+∅?}
 Man:SG ART see child:SG or PQ?
 "Has the man seen a child?" (I expect not.)

28.2.3 Commands

For indirect commands, see [29.1](#) [29.3.1](#).

In a direct command the subject is 2nd person; in accordance with a cross-linguistically common pattern, a singular pronoun is deleted, and a plural subject pronoun is placed immediately after the verb, in Kusaal assuming the Liaison enclitic form ^{ya}; for the realisation of ^{ya} see [8.2.1](#) and [8.2.1.2](#). Thus

Fù gós bīg lā. "You (sg) have looked at the child."
2SG look.at child:**SG ART**.

Yà gós bīg lā. "You (pl) have looked at the child."
2PL look.at child:**SG ART**.

but *Gòsim bīg lā!* "Look (sg) at the child!"
 Look.at:**IMP** child:**SG ART**!

Gòsimī_ ∅ bīg lā! "Look (pl) at the child!"
 Look.at:**IMP 2PL.SUB** child:**SG ART**!

Gòsim tēŋi-n! "Look (sg) down!"
 Look:**IMP** ground:**SG-LOC**!

Gòsimī_ ∅ tēŋi-n! "Look (pl) down!"
 Look:**IMP 2PL.SUB** ground:**SG-LOC**!

Dā gōs tēŋi-né +∅! "Don't (sg) look down!"
NEG.IMP look ground:**SG-LOC NEG**!

Dā gōsi_ ∅ tēŋi-né +∅!
NEG.IMP look **2PL.SUB** ground:**SG-LOC NEG**!
 "Don't (pl) look down!"

Dā gōsε +∅! "Don't (sg) look."
NEG.IMP look **NEG**!

Dā gōsi_ yá +∅! "Don't (pl) look."
NEG.IMP look **2PL.SUB NEG**!

No pronoun changes occur after presubject elements, e.g *yà*'-clauses [30.1](#):

Fu ya'a m̄ɔr pu'a, fun da m̄ɔɔd ye fu bas oo.

Fù yá' m̄ɔr p̄u'ā, fūn dā m̄ɔɔd yé fù bás-ō-o ^{+∅.}

2SG if have wife:**SG**, **2SG NEG.IMP** struggle:**DIPF** that **2SG** abandon-**3AN.OB NEG**.

"If you have a wife, don't try to leave her." (1 Cor 7:27)

Nor do they occur in quoted direct commands within indirect speech [29.3.1](#), even when the addressee is the same as in the original utterance:

Ò yèl yé bà gòsɪm tēŋɪ-n.

3AN say that **3PL** look:**IMP** ground:**SG-LOC**.

"She said to them: Look down!" WK

Ò yèl yé fù gòsɪm tēŋɪ-n.

3AN say that **2SG** look:**IMP** ground:**SG-LOC**.

"She said to you **SG**: Look down!"

Ò yèl yé yà gòsɪm tēŋɪ-n.

3AN say that **2PL** look:**IMP** ground:**SG-LOC**.

"She said to you **PL**: Look down!"

However, some speakers do still keep the enclitic ^y_a after the verb even when there is a pronoun subject before it:

Ò yèl yé bà gòsɪm̄_ ∅ tēŋɪ-n.

3AN say that **3PL** look:**IMP** **2PL.SUB** ground:**SG-LOC**.

"He said to them: Look down!" WK

Similarly in a serial-verb construction, where WK treats ^y_a as a pronoun and, consistently with this, does not repeat it:

Kè̄m̄_ ∅ nā n gōs!

Come:**IMP** **2PL.SUB** hither **SER** look!

"Come (ye) and look!"

such speakers have

Kè̄m̄_ ∅ nā n gōsɪ_ ∅!

Come:**IMP** **2PL.SUB** hither **SER** look **2PL.SUB**!

"Come (ye) and look!"

For these speakers ^{ya} is no longer a pronoun but an imperative plural marker.

Direct commands which consist only of a verb, or a verb with a following enclitic subject pronoun, occasionally end in a Long Form like that preceding a Negative Prosodic Clitic:

<i>Gòsımā!</i>	"Look!"
<i>Gòsımīyá!</i>	"Look! (plural)"

28.2.4 Clauses without Predicators

Some particles and phrases occur characteristically as complete utterances:

<i>T̀.</i>	"OK." (= Hausa <i>tôo</i>)
<i>Báp.</i>	"Wallop!"
<i>N fá!</i>	"Well done!"

Some of these are onomatopoeic; others are widely shared among local languages.

"Yes" is *ēēŋ*; "No" is *áyìì*. As in many languages, the reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

<i>Lì nàa néē +ø?</i> 3INAN finish FOC PQ?	"Is it finished?"
<i>ēēŋ.</i>	"Yes."
<i>áyìì.</i>	"No"
<i>Lì pū nāée +ø +ø?</i> 3INAN NEG.IND finish NEG PQ?	"Isn't it finished?"
<i>ēēŋ.</i>	"No."
<i>áyìì.</i>	"Yes."

Vocative phrases usually either precede a main clause, or stand alone.

Vocatives may take the form of NPs followed by the Vocative Prosodic Clitic [8.1](#):

<i>M̃ bīiga +ø!</i> 1SG child:SG VOC!	"My child!"
<i>M̃ bīise +ø!</i> 1SG child:PL VOC!	"My children!"

M̃ pɥ'ā né m̃ bīse +ø!
1SG wife:**SG** with **1SG** child:**PL** **VOC**!
 "My wife and my children!"

M̃ dīammā +ø, *bó kà fù kúesida* +ø?
1SG parent.in.law:**SG** **VOC**, what and **2SG** sell:**DIPF** **CQ**?
 "Madam [35.1](#), what are you selling?"

Vocative phrases often end in *ɲwà* "this":

<i>Bīs ɲwá!</i>	[bi:sa]	"Children!"	8.5.1 .
<i>Pɥ'ā ɲwá!</i>	[p'hɥāwǎ]	"Woman!"	
<i>Zōn ɲwá</i>	[zɔn:a]	"Fools!"	

This structure is sometimes simply exclamatory:

ɲwāamɪs ɲwá! [wǎ:mɪsa] "Monkeys!" (From a passenger in my car,
 on suddenly catching sight of some.)

28.3 Insubordinate *kà*-Clauses

28.3.1 Coordination of Main Clauses

Coordinated main clauses agree in type as declarative, interrogative or imperative. They are coordinated with *kà* "and", *kōv* "or", *bēε* "or". It is possible to regard *kōv bēε* as conjunctions, but the position with *kà* is more complex because it can occur *alongside* conjunctions. Even in coordinating function, *kà* introduces an *Insubordinate* clause *without* Independency Marking on the Verbal Predicator [27.2](#).

Coordination of statements with *kà* outside of narrative has a similar sense to English "and" (though *kà ... lēε* is "but" [22.7.1](#).)

Coordination of commands with *kà* is quite common:

Pò'usɪm À-Wīn, kà pú'ùs À-Bōgɔr.
 Greet:**IMP** **PERS**-Awini, and greet **PERS**-Abugri.
 "Greet Awini, and greet Abugri."

Coordination of questions is not common. It is seen in alternative questions like

Fù búg néε +ø? *Bēε fù géεɲm yā kúv* +ø?
2SG get.drunk **FOC** **PQ**? Or **2SG** go.mad **PFV** or **PQ**?
 "Are you drunk? Or have you gone mad?"

28.3.2 Narrative and Sequential Clauses

Kusaal narrative joins clause after clause with *kà*, corresponding to *zero* in English. Such clauses are again Insubordinate, but *without* Independency Marking on the Verbal Predicator 27.2. Tense marking in narrative is the norm for all main clauses without *kà* unless they contain an explicit time expression; clauses introduced by *kà*, on the other hand, usually only have tense marking to signal that they disrupt the narrative flow, as with flashbacks or descriptive passages¹⁵. Kusaal narrative favours long sequences of such **Sequential *kà*-clauses** with Perfective aspect without tense marking, which carry on the sequence of events narrated in order.

Ka Yesu daa an yuma pii ne ayi' la, ka ba keŋ maluŋ la wuɔ ban ɛnti niŋid si'em la. Ka maluŋ la dabisa naae la, ka ba lɛbidi kun. Ka Yesu kpɛlim Jerusalem teŋin ka o ba' ne o ma pu baŋ ye o kpɛlim yaa. Ba daa tɛn'es ye o doɔne ba teŋ dim la, ka keŋ ...

Kà Yesu_ø dāa áŋ yúmà pīi né àyí lā, kà bà kēŋ málùŋ
 And Jesus **COMP TNS COP** year:PL ten with **NUM:two ART**, and **3PL** go sacrifice:SG
lā wūɔ bān ēɛŋ tí nìŋɪd sɪ'əm lā. Kà málùŋ lā dábɪsà_ø
ART like **3PL:COMP** usually do:DIPF **INDF.ADV ART**. And sacrifice:SG **ART** day:PL **COMP**
nāe lā, kà bà lɛbɪdì_ø kūn. Kà Yesu kpɛlɪm
 finish **ART**, and **3PL** return:DIPF **SER** return.home:DIPF. And Jesus remain
Jerusalem tɛŋɪ-n kà ò bā' né ò mà pū
 Jerusalem land:SG-LOC and **3AN** father:SG with **3AN** mother:SG **NEG.IND**
bāŋ yé ò kpɛlɪm yāa +ø. Bà dāa tɛŋ'es yé ò dɔl né
 realise that **3AN** remain **PFV NEG**. **3PL TNS** think that **3AN** accompany **FOC**
bà tɛŋ-dim lā, kà kēŋ ...
3PL land-individual.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)

15) It is common in Africa for non-initial clauses in narrative to resemble subordinate clauses: Hausa narrative, for example, uses the Focus Perfective, otherwise found in relative clauses and in clefting (Jaggar 2001 pp161ff pp526ff, Caron pp171ff), and the Kordofanian Talodi language Lumun has *á* "and, while" followed by the Dependent Perfective, used elsewhere in purpose clauses and in coordinated commands following the Imperative (Smits pp363, 652.) Consistent narrative tense-marking behaviour of this kind is not seen in Mooré or Dagbani, which seemingly also lack subordinate-type tonal marking following a coordinating clause linker 27.2.

Most clauses without tense marking in narrative thus show initial *kà*, but some begin with an Absolute Clause, itself usually without tense-marking, *followed* by *kà*. Note these patterns of tense marking with Absolute Clauses preceding main clauses (from Mark, Luke, and Acts 1-14, 1976 version):

Tense Markers	A, B	A <i>kà</i> B	<i>kà</i> A, B	<i>kà</i> A <i>kà</i> B
A B				
- -	7	23	40	85
- +	2	0	4	2
+ -	0	7	3	17
+ +	11	2	11	0

Absent tense marking in *ñ*-Clauses within narrative is expected, because they mark tense relative to the narrative timeline rather than absolutely (see below.) Absent tense marking in A-*kà*-B type main clauses probably signifies that even tense-unmarked Absolute Clauses licence implicit tense marking in main clauses [22.3.3](#).

Conjunctions precede the linking *kà* of Sequential Clauses [27.1.3](#), and have no effect on the tense marking behaviour:

Ka sieba la' o. Amaa ka sieba yel ye ...

Kà sīāba lá'·o_ø. Àmáa kà sīāba yél yē ...

And **INDF.PL** laugh **3AN.OB**. But and **INDF.PL** say that...

"Some laughed at him, but others said..." (Acts 17:32)

Ka o ma daa a siakid. Amaa ka o saam daa a Greek nid.

Kà ò mà dāa áñ sīākíd. Àmáa kà ò sàam dāa á

And **3AN** mother:**SG TNS COP** believer:**SG**. But and **3AN** father:**SG TNS COP**

Greek *níd*.

Greek person:**SG**.

"His mother was a believer, but his father was a Greek." (Acts 16:1, 1976)

"Resumptive" *yē* in indirect speech also has no effect on the licencing of the dropping of explicit tense marking in *kà*-clauses in narrative [29.3.3](#).

A subject pronoun can be ellipied, not only after *kà* coordinating clauses when the preceding clause has a subject with the same reference, but also after *kà* when it is preposing an Absolute Clause with a subject with the same reference [27.1.5.2](#):

Ban daa yit la, ka nye dau ...

Bán dāa yīt lā, kà nyē dāy ...

3PL:COMP TNS emerge:**DIPF ART**, and see man:**SG**...

"As they were going together, (they) saw a man ..." (Mt 27:32)

The possible occurrence of pre-subject adjuncts demonstrates that Sequential Clauses are not only semantically but structurally main clauses, not subordinate. Sequential Clauses also differ from subordinate clauses in permitting the particle *nē* in its constituent-focussing sense.

In the genealogy of Jesus in Luke 3:23ff, which moves backwards in time, there are dozens of consecutive examples in the 1996 version of

kà X sààm dá à nē Y "and X's father **was** Y"
and X father:**SG TNS COP FOC Y**

whereas the genealogy in Matthew 1.1ff has dozens of clauses of the pattern

kà X dɔ́'á Y "and X begat Y."
and X beget Y

Note the "aside" *Ò mà dá à nē ...* in

Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma dá ane Uria pu'a. Ka Solomon du'a Rehoboam.

Kà Jese dɔ́'á ná'áb David. Kà David dɔ́'á Solomon. Ò mà

And Jesse beget king:**SG** David. And David beget Solomon. **3AN** mother:**SG**

dá à nē Uria pɔ́'á. Kà Solomon dɔ́'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)

Very long series sometimes change to Sequential Clauses; in KB the genealogy of Jesus in Lk 3:23ff shows *ka X saam da ane Y* at the beginning of paragraphs in the text, but *ka X saam an Y* otherwise.

N̄-Clauses normally mark tense independently and absolutely:

Ńn dāa nyēt súṅā ́n dāa áṅ bí-līa láa +ø?

3AN.CNTR TNS see:**DIPF** good:**ADV** **3AN:COMP TNS** **COP** child-baby:**SG ART** **PQ?**

"Did he see well when he was a baby?"

but within a series of Sequential Clauses in narrative they mark tense relative to the narrative timeline:

Kà bà nyē dáy-kànɪ sà kũ ná'àb lā.

And **3PL** see man-**REL.SG TNS** kill chief:**SG ART**.

"And they saw the man who killed the chief the day before."

Kà bà níŋ ɔn pà' yèlɪ bā sɪ'əm lā.

And **3PL** do **3AN:COMP TNS** say **3PL.OB INDF.ADV ART**.

"And they did what he'd told them earlier that day."

28.3.2.1 Aspect

The typical aspect seen in narration is naturally the Perfective. Asked to comment on the acceptability of *kà*-clauses without tense marking presented in isolation, informants interpreted them as narrative Sequential Clauses, and rejected interpretations with other aspects. The particle *nē* was taken as necessarily marking constituent focus rather than aspect:

Lì bódìg nē.

"It's lost."

3INAN get.lost **FOC**.

Kà lì bódìg nē.

And **3INAN** get.lost **FOC**.

Rejected by WK as ill-formed; accepted after some thought by DK, explaining the expression as contradicting "someone hid it", i.e. as contrastive VP focus.

Bà kùdìg nē.

"They're old."

3PL get.old **FOC**.

Kà bà kùdìg nē.

"And they're old."

And **3PL** get.old **FOC**.

Rejected by WK; accepted by DK with the gloss "You're saying they're old when he promised to give you new ones" i.e. contrastive focus on the VP.

With any tense marker, the aspectual meaning becomes freely acceptable to WK and DK, because the clause is no longer taken as Sequential:

Kà lì dāa bódìg nē.

"And it was lost."

And **3INAN TNS** get.lost **FOC**.

Kà bà sá kùdɪg nē.

Kà bà dāa kúɪg nē.

Kà bà dá kùdɪg nē.

all acceptable as "and they were old."

In an appropriate context in actual texts, other aspects are perfectly possible:

Ka ba due keŋ. Ka ban ken la, Jesus gbisid ne.

Kà bà dūe_ø kēŋ. Kà bán kēn lā, Jesus gbīsɪd nē.

And 3PL arise SER go. And 3PL:COMP go:IMPF ART, Jesus sleep:DIPF FOC.

"So they started out. As they were travelling, Jesus was sleeping."

(Lk 8:22-23, 1976; no *nē* in the 1996 version.)

Ka on kpɛn' la, o yɛli ba ye [...]. Ka ba la'ad o.

Kà ɔn kpɛŋ' lā, ò yéli_ bā yē [...]. Kà bà lá'ad_ō_ ø.

And 3AN:COMP enter ART, 3AN say 3PL.OB that ... and 3PL laugh:DIPF 3AN.OB.

"After he came in, he said to them [...]. But they laughed (dipf) at him."

(Mk 5:39-40)

Even in narrative, *kà* can mark coordination rather than sequence. The tense marker of the preceding clause is still not repeated, but again any aspect is possible:

Ba da pu mor biiga, bozugo Elizabet da ane kundu'ar, ka babayi la wusa me kudigne.

Bà dà pū mōr bīiga +ø, bōzúgō Elizabet dá à nē

3PL TNS NEG.IND have child:SG NEG, because Elizabeth TNS COP FOC

kúndù'ar kà bà bàyí lā wōsa mé kùdɪg nē.

barren.woman:SG and 3PL NUM:two ART all also get.old FOC.

"They had no child, because Elizabeth was barren and they were both old."

(Lk 1:7, 1996; no *nē* in the KB *ka babayi' la wusa me kudig hali.*)

Ka siakidib wusa bane be Judea ne Galilee ne Samaria daa mor sumalisim. Ka ba kal paasid. Ka ba yadda niŋir nobugid.

Kà sɪākɪɪb wōsa bānì bɛ Judea nē Galilee nē Samaria

And believer:PL all REL.PL EXIST Judea with Galilee with Samaria

dāa mōr sū-máɪsɪm. Kà bà kāl páasɪd. Kà bà

TNS have heart-sweetness. And 3PL number:SG increase:IPVF. And 3PL

yàddā-niŋɪr nōbɪgɪd.

assent-doing grow:IPVF.

"All the believers who were in Judea and Galilee and Samaria were joyful. Their numbers were increasing and their faith was growing." (Acts 9:31, 1976)

29 Subordinate Clauses after *kà* and *yē*

29.1 Purpose Clauses

Purpose Clauses can be introduced by either *yē* or *kà*. They have Imperative Mood. There is no Independency Marking and hence no special *-m^a* flexion of Variable Verbs, but the mood is apparent in the use of *dā*, not *pū* or *kū*, as the negation particle.

Purpose Clauses may appear as main clause adjuncts, and are then most often introduced by *yē*:

Bà tìs-ō_ø kú'è m yé ò nū.

3PL give **3AN.OB** water that **3AN** drink.

"They gave him water to drink. ("So that he might drink it.")

M ná tī_ f tìl m yé fù zàbır bás.

1SG IRR give **2SG.OB** medicine that **2SG** pain go.away.

"I'll give you medicine so your pain will go away."

M ná tī_ f tìl m yé fù nīf dā zábē +ø.

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

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

Kà + Purpose Clause is also possible as an adjunct:

M na nīj wala ka nye faangirè?

M ná nīj wēl á kà nyē fāangírè +ø?

1SG IRR do how and find salvation **CQ?**

"What must I do to get saved?" (Acts 16:30)

Purpose Clauses frequently appear as complements of particular verbs. Some such verbs prefer either *yē* or *kà* specifically; thus *bòd^a* "want" takes *yē* + Purpose Clause. Answers to *Fù bódd bó?* "What do you want?" might be

M bódd yé ò kūl.

1SG want that **3AN** return.home.

"I want him to go home."

M bódd yé m kūl.

1SG want that **1SG** return.home.

"I want [me] to go home."

M̃ bɔ̀d̃d̃ yé fù dā kūlɛ ^{+∅}.

1SG want that **2SG NEG.IMP** return.home **NEG**.

"I want you not to go home."

cf *M̃ pō bɔ̀d̃d̃ yé fù kūlɛ* ^{+∅}.

1SG NEG.IND want that **2SG** return.home **NEG**.

"I don't want you to go home."

Verbs expressing necessity or permission, e.g. *nār^a* "be obliged to" (negated "be obliged not to"); *mār sūər* "be allowed to" (literally "have a way [to]") usually take *yē* when used personally:

Fù pō nār yé fù níŋ àlāa ^{+∅}.

2SG NEG.IND must that **2SG** do **ADV:thus** **NEG**.

"You're not allowed to do that."

Yà mār sūər yé yà kūl.

2PL have way:**SG** that **2PL** return.home.

"You may go home."

With *impersonal* expressions *kà* may be used instead of *yē*:

Lì nār yé/kà fù kūl.

3INAN must that/and **2SG** return.home.

"You must go home."

Lì pō nār yé fù kūlɛ ^{+∅}.

3INAN NEG.IND must that **2SG** return.home **NEG**.

or *Lì pō nār kà fù kūlɛ* ^{+∅}.

3INAN NEG.IND must and **2SG** return.home **NEG**.

"You must not go home."

Sūər bē yé/kà tì kūl.

Way:**SG** **EXIST** that/and **1PL** return.home.

"We may go home." ("There's a way that ...")

Never **Lì pō nār kà fù kūl* 27.2. So too with *lì à [nē] tīlās* "it is necessary", either particle may be used:

Li a tilas ye m ken Jerusalem.

Lì àṇ tīlās yé m̃ kēṇ Jerusalem.

3INAN COP necessity that **1SG** go Jerusalem.

"I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka m niṇid ala.

Lì à nē tīlās kà m̃ níṇìd àlá.

3INAN COP FOC necessity and **1SG** do:**DIPF ADV**:thus.

"I must do that." (1 Cor 9:16, 1996)

Certain verbs require a Purpose Clause introduced by *kà* as complement. Thus *mīt* "see that it doesn't happen that ...", a defective verb used only in the imperative [32.1.1](#):

Mid ka ya maali ya tuum suma nidib tuon ye ba gōs.

Mīt kà yà máalì yà tùum-sùma nīdib túèṇ yé bà gōs.

NEG.LET.IMP and **2PL** make **2PL** deed-good:**PL** person:**PL** front that **3PL** look.at.

"See that you don't do your good deeds in front of people so they'll look."

(Mt 6:1)

So too *kē*⁺ "let, leave off" in the sense "let, cause that" which makes periphrastic causatives.

Tì ké kà bà lébìsì tī. "We made them reply to us."

1PL cause and **3PL** reply **1PL.OB**.

Ò kè kà bà pō kūlε ⁺∅.

3AN cause and **3PL NEG.IND** return.home **NEG**.

"He caused them not to go home." (Indicative)

The irregular imperative *kèl*^a, followed by a *kà*-clause with Imperative Mood, creates a way of expressing indirect commands, including first and third persons:

Kèl kà ò gōs tēṇi-n.

Cause:**IMP** and **3AN** look ground:**SG-LOC**.

"Let him look down."

Dā ké kà dābìàm bēē ⁺∅!

NEG.IMP cause and fear **EXIST NEG**.

"Don't be afraid." ("Let fear not exist.")

Kèl [or *Kèlí* \emptyset] *kà tì pú'ùs Wínà'am.*

Cause:IMP cause:IMP 2PL.SUB and 1PL greet God.

"Let us praise God."

In informal speech *kèl kà ...* is often ellipted [27.1.5](#), leaving the lack of Independency Marking as the only sign that the clause is an indirect command:

Ò gōs tēŋl-n.

3AN look ground:SG-LOC.

"Let her look down."

(No Independency Marking, so no tone overlay on *gōs*.)

Tì pú'ùs Wínà'am.

1PL greet God.

"Let us praise God."

(homophonous with "We thank God.")

Ì gōs nīf lā.

1SG look.at eye:SG ART.

"Let me look at the eye."

(No tone overlay on *gōs*.)

cf *Ì gós nīf lā.*

1SG look.at eye:SG ART.

"I've looked at the eye."

(Independency marked: tone overlay on *gós*.)

Ì díŋnèè +ø?

1SG lie.down PQ?

"Am I to lie down?"

(No Independency Marking: no imp *-m^a*)

Tì záb ná'àb lā.

1PL fight chief:SG ART.

"We've fought the chief."

(Independency: Tone overlay on *záb* seen in the following L raising [22.6.1.1](#))

Tì záb nà'ab lā.

1PL fight chief:SG ART.

"We should fight the chief."

(No Independency: No tone overlay on *záb*.)

Another tonal minimal pair with and without Independency Marking:

Ò zàb ná'àb lā.

3AN fight chief:SG ART.

"He's fought the chief."

but *Ò záb nà'ab lā.*

3AN fight chief:SG ART.

"He should fight the chief."

(No Independency: No tone overlay on *záb*.)

Absence of Independency Marking here forces interpretation as a subordinate clause, with an ellipted main clause *Ì búúð yē ...* "I want that ..." or *Kèl kà...* .

The "purpose" sense of a Purpose Clause is sometimes very attenuated:

Ka ba gban'e ba kpen'es sanrega ni ye beog nie.

Kà bà gbán'a_bā_ ∅ kpén'ès sārīgá nī yē bēog níe.

And **3PL** seize **3PL.OB SER** put.in prison:**SG LOC** that morning appear.

"They seized them and put them in prison until tomorrow should come."

(Acts 4:3)

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, again with this attenuated sense:

Nidib la daa gur Zakaria yiib na.

Nīdīb lā dāa gūr Zakaria yīīb nā.

Person:**PL ART TNS** watch Zechariah emerge:**GER** hither.

The people were watching for Zechariah's coming out. (Lk 1:21)

dap banε gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na

dàp-bànı gūr yé bà zūg-dáàn nāan pı'á-dīır dí'əmà

man-**REL.PL** wait that **3PL** head-owner:**SG** be.there wife-taking:**SG** feast:**PL**

zín'igī-n_ ∅ kūl nā

place:**SG-LOC SER** return.home hither.

"men who are waiting for their lord [being] at a wedding feast to return ..."

(Lk 12:36)

... gur ye pu'a la du'a ka o ɔnb biig la.

... gūr yē pı'ā lā dı'á kà ò ɔnb bīig lā.

watch that woman:**SG ART** bear and **3AN** eat child:**SG ART**.

"...waiting for the woman to give birth so that he could devour her child."

(Rev 12:4)

Purpose can also be expressed by Serial VPs [26](#), or by the particle-verb *tì* [22.7.2](#).

29.2 Supplement Clauses

A subordinate *kà*-clause with Indicative or Irrealis Mood and without Independency Marking is a **supplement** (Huddleston and Pullum 2002 pp1350 ff.) attached to a NP **anchor**, usually though not invariably the NP directly preceding the *kà*, but not the main clause subject (with one exception discussed below.) The *kà*-clause contains a pronoun referring to this NP, which is ellipsed if it is a verb direct object [23.1](#). The sense is usually that of a non-restrictive relative clause:

Asɛɛ lɪnɛ an bɛ'ɛd ma'aa ka m na tun'e nɪŋ.

Àséé líní àŋ bē'ɛd má'aa kà m ná tūŋ'e_ø níŋ.

Only **REL.INAN COP** bad only and **1SG IRR** be.able **SER** do.

"It's only that which is bad that I can do." (Rom 7:21)

Li anɛ ya taaba banɛ pu'usɪd Wina'am ka li nar ka ya kad saria.

Lì à né yà tāaba bání pù'usɪd Wínà'am kà lì nár

3INAN COP FOC 2PL fellow **REL.PL** greet:**DIPF** God and **3INAN** must

kà yà kád sàríyà.

and **2PL** drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

Dau sɔ' da bɛ Sizerea, ka o yu'ur buon Konelius.

Dàù-sɔ' dá bè Sizerea kà ò yū'ur búèn Konelius.

Man-**INDF.AN TNS** **EXIST** Caesarea and **3AN** name:**SG** call:**DIPF** Cornelius.

"There was a man in Caesarea whose name was Cornelius." (Acts 10:1)

Anina ka o nyɛ dau ka o yu'ur buon Aneas.

Áníná kà ò nyē dáy kà ò yū'ur búèn Aneas.

ADV:there and **3AN** see man:**SG** and **3AN** name:**SG** call:**DIPF** Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

The main clause may have a Non-verbal Predicator [25](#):

Ńnɪ_ø lá kà fù dāa nyēt.

3AN.CNTR SER that and **2SG TNS** see:**DIPF**.

"This is he whom you saw." WK

Ánɔ'ɔnɪ_ø nɔwá kà tì nyētá +ø?

Who **SER** this and **1PL** see:**DIPF CQ**?

"Who is this that we can see?"

B55_ ∅ lá kà m̄ nyētá +∅?

What **SER** that and **1SG** see:**DIPF CQ**?

"What is that that I can see?"

The construction is not permitted if the subject of the main clause is the same as the subject of the *kà*-clause; a serial-verb construction then is used instead, in a parallel way.

Supplement clauses are the basis of *kà*-clefting and *kà*-preposing 33.2.

Supplement *kà*-clauses with definite NPs as anchors may occur in the sense of predicative complements 23.2 in place of Content Clauses 29.3.

Examples (KT's translations) with an indefinite NP as anchor:

M̄ dāa nyē dāy kà ò áṇ ná'àb.

1SG TNS see man:**SG** and **3AN COP** chief:**SG**.

"I saw a man who was a chief."

M̄ dāa pū nyē dāy kà ò áṇ ná'abā +∅.

1SG TNS NEG.IND see man:**SG** and **3AN COP** chief:**SG NEG**.

"I didn't see a man who was a chief."

M̄ dāa pū nyē ná'àb kà ò áṇ bālērugó +∅.

1SG TNS NEG.IND see chief:**SG** and **3AN COP** ugly:**SG NEG**.

"I didn't see a chief who was ugly."

With a definite NP as anchor:

M̄ dāa nyē dāy lá kà ò áṇ ná'àb.

1SG TNS see man:**SG ART** and **3AN COP** chief:**SG**.

"I saw the man as a chief."

M̄ dāa pū nyē dāy lá kà ò áṇ ná'abā +∅.

1SG TNS NEG.IND see man:**SG ART** and **3AN COP** chief:**SG NEG**.

"I didn't see the man as a chief."

KT did not accept the readings "I saw the man, who was a chief" or "I didn't see the man, who was a chief."

KT rejected some similar sentences as ill-formed.

NEG before *ka*, making the subordinate reading impossible:

**M̐ dāa pū nyē dāu +∅ kà ò áṇ ná'àb.*
1SG TNS NEG.IND see man:**SG NEG** and **3AN COP** chief:**SG**.

**M̐ dāa pū nyē ná'abá +∅ kà ò áṇ bālēvug.*
1SG TNS NEG.IND see chief:**SG NEG** and **3AN COP** ugly:**SG**.

Tense marking in the subordinate clause:

**M̐ dāa pū nyē dāu lá kà ò dāa áṇ ná'abā +∅.*
1SG TNS NEG.IND see man:**SG ART** and **3AN TNS COP** chief:**SG NEG**.

Focus marking in the subordinate clause:

**M̐ dāa pū nyē dāu lá kà ò á nē ná'abā +∅.*
1SG TNS NEG.IND see man:**SG ART** and **3AN COP FOC** chief:**SG NEG**.

**M̐ dāa pū nyē dāu lá kà ò dāa á nē ná'abā +∅.*
1SG TNS NEG.IND see man:**SG ART** and **3AN TNS COP FOC** chief:**SG NEG**.

Supplement Clauses are essentially in complementary distribution with Serial VPs [26.1](#), replacing these when the subject and/or polarity do not agree with those of the main clause. A Supplement Clause has the same subject as the main clause only when it replaces a Serial VP because of polarity change, e.g.

Dau sō' da bē Lystra tengin an pōn'ōri zin' o nōba zug ka pu tun'e kenna.
Dāu-sō' dá bē Lystra tēṇī-n_ ∅ áṇ pōṇ'ōri_ ∅ zīṇ'i ò nōbá
 Man-**INDF.AN TNS EXIST** Lystra land:**SG-LOC SER COP** cripple:**SG SER** sit **3AN** leg:**PL**
zùg kà pū tūṇ'e_ ∅ kēnná +∅.
 upon and **NEG.IND** be.able **SER** go:**DIPF NEG**.

"There was a man in Lystra who was crippled and sat on his legs and could not walk." (Acts 14:8)

Compare also *n*-focus versus *kà*-preposing constructions [33.1.1](#) [33.2](#).

29.3 Content Clauses

Yē, and less often *kà*, may introduce clauses displaying Independency Marking on the Verbal Predicator [22.6](#). They show all the structural features possible for main clauses, such as focus and foregrounding. They occur very frequently representing passages of indirect speech, but are also found much more generally after verbs of cognition, reporting, and perception as **Content Clauses**. Kusaal content clauses are thus **downranked** main clauses functioning as subordinate clauses.

Verbs taking content clauses as objects include

<i>yèlʼɛ</i>	"say"	<i>wòm^m</i>	"hear"
<i>nyē⁺</i>	"see"	<i>tēŋ'ɛsʼɛ/</i>	"think"
<i>mī⁺</i>	"know"	<i>bàŋʼɛ</i>	"come to know"
<i>pà'alʼɛ</i>	"teach, show"	<i>kàrim^m</i>	"read"
<i>zī⁺</i>	"not know"		

Although the tone is different, *yē* is presumably connected with *yèlʼɛ* "say, tell." It occurs by itself in the sense *yèl yē*: *Wínà'am yē ...* "God says: " Compare the immediate future construction with subject + *yē*-Purpose Clause [22.3.2](#).

Except in indirect speech [29.3.1](#), content clauses are normally declarative. The equivalent of an interrogative main clause is a Relative Clause headed by an indefinite pronoun [31.2.1](#), and the equivalent of an imperative main clause is a subordinate Purpose Clause [29.1](#).

Fu wum ban yēt si'em laa?

Fù wúm bán yèt sī'əm láa +ø?

2SG hear:**DIPF** **3PL:COMP** say:**DIPF** **INDF.ADV** **ART** **PQ?**

"Do you hear what ["how"] they are saying?" (Mt 21:16)

Bà nà yēl·o_ø ́n nà nīŋ sī'əm.

3PL **IRR** say **3AN.OB** **3AN:COMP** **IRR** do **INDF.ADV**.

"They will tell him what he is to do."

Lì nàr yé/kà fù kūl.

3INAN must that/and **2SG** return.home.

"You must go home."

An Absolute Clause [31.1](#) cannot be used as the object of a verb of cognition, reporting, or perception; for "know (etc) the fact that ..." Content Clauses must be used.

Another possibility for the object of such verbs is NP + *yēlá* "about" [20.6](#).

In WK's speech *yē* + content clause is usual, but he prefers *kà* + content clause after *tēŋ'ɛs*^{ε/} "think"; the structure is otherwise the same, and this therefore constitutes an exception to the rules that *kà* is never followed by Independency Marking, and that *kà* deletes a following subject pronoun with the same reference as the preceding subject:

Ò tēŋ'ɛs kà ò zàb ná'àb lā.

3AN think and **3AN** fight chief:**SG ART**.

"He thinks he's fought the chief." WK

M̐ tēŋ'ɛs kà ò à nē dū'átà.

1SG think and **3AN COP FOC** doctor:**SG**.

"I think she's a doctor." WK

M̐ tēŋ'ɛs kà ò lù yā.

"I think she's fallen." WK

1SG think and **3AN** fall **PFV**.

M̐ tēŋ'ɛs kà m̐ lú yā.

"I think I've fallen" WK

1SG think and **1SG** fall **PFV**.

M̐ tēŋ'ɛs kà nīgí lā ɔ̀nbìd.

1SG think and cow:**PL ART** chew:**DIPF**.

"I think the cows eat." WK

M̐ tēŋ'ɛs kà nīgí lā ɔ̀nbìd nē.

1SG think and cow:**PL ART** chew:**DIPF FOC**.

"I think the cows are eating." WK

NT/KB sometimes has *kà* + content clause after other verbs, and *yē* + content clause after *tēŋ'ɛs*^{ε/}.

Ya pun wum ka ba da yeŋ ye...

Yà pún wùm kà bà dá yèl yē ...

2PL previously hear and **3PL TNS** say that...

"You previously heard that they had said ..." (Mt 5:43)

...yanam banim ka li san'auŋ li'el ya.

...yānám bànim kà lì sàŋ'auŋ lí'əl yā.

...2PL.CNTR realise:**IMP** and **3INAN** destruction approach **PFV**.

"Know that its destruction has come near." (Lk 21:20)

Ka ya ten'es ye m mood ye m ma'e nidib sunf bee?

Kà yà tén'ès yé m̄ mōɔd yé m̄ mā'e nīdɪb súɲf bée +ø?

And **2PL** think that **1SG** strive:**DIPF** that **1SG** cool person:**PL** heart:**SG** or **PQ**?

"And do you think that I am trying to please people?" (Gal 1:10, 1976)

Pronouns are changed throughout in the Content Clause to reflect its setting, on the same basis as in English "indirect speech."

The free personal pronouns have **logophoric** [29.3.2](#) meaning in Content Clauses.

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

Ò dāa yél yé bà dāa kūl.

3AN TNS say that **3PL TNS** return.home.

"She said that they had gone home."

Tì dāa tēɲ'es yé ò nà zāb ná'àb lā.

1PL TNS think that **3AN IRR** fight chief:**SG ART**.

"We thought he was going to fight the chief."

Examples of main-clause type structural features within content clauses:

ban mi' ye biig la kpine la zug

bán mī yē bīg lā kpí nē lā zúg

3PL:COMP know that child:**SG ART** die **FOC ART** upon

"because they knew that the child was dead" (Lk 8:53)

where focus-*nē*⁺ occurs in a content clause within an Absolute Clause. (The second article *lā* marks the end of the Absolute Clause.)

Bòɲ-bāɲ'ad zī' yē tēɲ túllā +ø.

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.

"The donkey-rider doesn't know the ground is hot."

(*Tēɲ túl*. "Ground is hot."; *tūl*^{la}/"be hot")

There is tone overlay due to Independency Marking on *tūl*^{la}. The final LF is induced by the Negative Prosodic Clitic belonging with the negative verb in the superordinate clause.

Content Clauses also appear after *wōb* "like" [21.1](#); the construction involves a subordinate rather than main clause, as is demonstrated by e.g.

ka tuumbe'ed ku len so'e ti wuu ti aa li yamugo.

kà tòum-bē'ed kú lēm sú'v_tī wōv tì áaŋ_lì yàmmugō⁺∅.

and work-bad:PL NEG.IRR again own 1PL.OB like 1PL COP 3INAN slave:SG NEG.

"and that sin will not again own us as if we were its slave." (Rom 6:6, 1996)

See further [27.1.3](#) on conjunctions and prepositions.

29.3.1 Direct and Indirect Speech

After a speech-verb *yē* may introduce the words of the direct speech itself, unaltered except for the presence of "resumptive" *yē* at intervals [29.3.3](#). This is an uncommon strategy in written materials prior to the 1996 NT Version; in the 1976 version it seems to be chosen mostly for direct utterances of Jesus.

More commonly, the original direct speech is downranked to a content clause or series of coordinated content clauses, with personal pronouns altered throughout as in English indirect speech. The free personal pronouns are used logophorically [29.3.2](#) as in all Content Clauses. All other features of the original main clauses, including tense marking and Independency Marking, are unchanged as usual.

Such passages of indirect speech may be kept up for very long stretches; the 1976 NT version has examples extending over several pages. The 1996 revision consistently replaces all indirect speech with direct, however.

Pronouns are changed even within a vocative in indirect speech:

O zuanam ne o saamnama, ye ba kelisim.

Ò zùà-nàm né ò sàam-nàmā⁺∅, yé bà kèlɪsɪm!

3AN friend-PL with 3AN father-PL VOC that 3PL listen:IMP!

(Acts 7:2, 1976)

for *M zùà-nàm né m sàam-nàmā⁺∅, kèlɪsɪmī_∅!*

1SG friend-PL with 1SG father-PL VOC, listen:IMP 2PL.SUB!

"My friends and my fathers, listen!"

Ka m wum Wina'am kokor ka li yi arazana ni na ye,

o nidiba, ye ba yimi teng la ni na.

Kà m wúm Wínà'am kúkór kà lì yī áràzàná ní nā yē,

And 1SG hear God voice:SG and 3INAN emerge heaven LOC hither that

ò nīdɪbá⁺∅, yé bà yīmī_∅ tēŋ lā ní nā.

3AN person:PL VOC, that 3PL emerge:IMP 2PL.SUB land:SG ART LOC hither.

"And I heard God's voice coming from heaven, saying

"My people, come out of the land!" (Rev 18:4, 1976)

These examples also illustrates the fact that **the indirect speech construction differs from other types of content clause in that it may feature imperative clauses as content clauses**, which elsewhere would be replaced by subordinate clauses of purpose.

In such quoted direct commands the usual deletion of a 2nd sg subject and change of 2pl subject to enclitic ^{ya} does not occur; this is true even when the addressee is the same as in the original utterance so that the pronouns remain 2nd person. Some speakers still keep the enclitic ^{ya} after the verb even when there is a pronoun subject before it; see the second example above, and [28.2.3](#).

Indirect-speech quoting of imperatives provides an alternative way of expressing indirect commands to the use of purpose clauses [29.1](#); as with that construction, the main clause and linker may be altogether ellipted [27.1.5](#) informally:

M̃ yél yé ò gòsɪm tēŋɪ-n.

1SG say that **3AN** look:**IMP** ground:**SG-LOC**.

"I said she should look down."

Ò gòsɪm tēŋɪ-n.

"She should look down."

3AN look:**IMP** ground:**SG-LOC**.

M̃ tēj'ès kà tì pú'usɪm Wínà'am.

1SG think and **1PL** greet:**IMP** God.

"I think we should praise God."

Tì pú'usɪm Wínà'am.

"We should praise God."

1PL greet:**IMP** God.

A main clause of interrogative type can be downranked in indirect speech too:

Ka Peter bu'os o ye, Ananias, ye bo ka o ke ka Sutaana kpen' o suunrin...

Kà Peter bũ'əs-ó_ø yē Ananias, yē bó kà ò ké kà Sūtáanà

And Peter ask **3AN.OB** that Ananias, that what and **3AN** cause and Satan

kpèŋ' ò sūuŋrí-n ... +ø?

enter **3AN** heart:**SG-LOC** ... **CQ?**

"Peter asked him: Ananias, why did you let Satan enter your heart ...?"

(Acts 5:3, 1976)

Similarly with a main clause without a predicate structure [28.2.4](#):

Ò *yèl yē báp.*

"She said 'Bap!'"

3AN say that Bap.

29.3.2 Logophoric Pronouns

Within Content Clauses personal pronouns are altered throughout as in English indirect speech, except in directly embedded passages of direct speech [29.3.1](#).

The free 3rd person pronouns have **logophoric** sense. In contexts where bound pronouns could have occurred instead (i.e. where they are contrastive [33.5](#)) they refer to the speaker(s), replacing 1st persons of the original utterance. Bound 3rd persons may also have this sense, but the free pronouns are much commoner, especially as subjects, even when no ambiguity would otherwise result.

Thus "He said: I will kill them." is usually

Ò *yèl yē ɔ́n ná kúv bā.*

3AN say that **3AN.CNTR IRR** kill **3PL.OB**.

It is possible to say *Ò yèl yé ò nà kóv bā* with this meaning, but this is more likely to be the equivalent of "He(1) said: 'He(2) will kill them.'" So e.g (all 1976 NT version):

Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.

Festus táns Paul yé ò gèem nē ... kà Paul lébìs

Festus shout Paul that **3AN** go.mad **FOC** ... and Paul reply

yē ɔ́n pō gèemm +∅.

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)

Wina'am ye ... arazana ane on na'am kuk ... bo yir ka ba na me n tis one?

Wínà'am yé ... àrazánà á nē ɔ́n nā'am kúk

God say:that...heaven:**SG COP FOC 3AN.CNTR** realm chair:**SG**

... bò-yír kà bà ná mē n tís òn +∅?

... what-house:**SG** and **3PL IRR** build **SER** give **3AN.CNTR CQ?**

"God says: heaven is his throne ... what house will they build for him?"

(Acts 7:49)

for *Àrazánà á né m̃ nā'am kúk*

Heaven **COP FOC 1SG** realm chair:**SG**

... bò-yír kà yà ná mē n tísì mà +∅?

... what-house:**SG** and **2PL IRR** build **SER** give **1SG.OB CQ?**

29.3.3 Resumptive *yē*

Regardless of whether a passage is direct or indirect speech, if it is longer than two or three clauses "resumptive" *yē* is inserted at intervals of roughly every third clause, after any conjunctions but before clause-linker *kà*; this is the only way that *yē* and *kà* occur together apart from ellipsis [27.1.2](#) [27.1.5.1](#).

Ye ka Paul yel ye o bood ye o kpelim sarega ni.

Yé kà Paul yél yé ò bɔ̀ɔd yé ò kpélìṁ sārīgá nī.

That and Paul say that **3AN** want that **3AN** remain prison:**SG LOC**.

"... but that Paul said he wanted to remain in prison...(Acts 25:21, 1976)

... amaa ye ba yaanam da pu bood ye ba siak o noore

... àmáa yé bà yāa-nám dá pū bɔ̀ɔd yé bà sɔ̀ák-ò_∅

... but that **3PL** ancestor-**PL TNS NEG.IND** want that **3PL** agree **3AN.OB**
nɔ̀ɔré ^{+∅}.

mouth:**SG NEG**.

(within a speech) " ... but their ancestors did not want to obey him"

(Acts 7:39, 1976)

Amaa ye ka on yeli ba ye ...

Àmáa yé kà ɔ̀n yélì_bā yē...

But that and **3AN.CNTR** say **3PL.OB** that...

"But he [the speaker] had said to them ..." (Acts 25:16, 1976)

Alazug ye Wina'am sadigim tisi ba piini kan ka o daa tisi ti la...

Àlá zùg yē Wínà'am ∅ sādīgím tísì_bā pīnì kán kà ò dāa

Thus that God **COMP** since give **3PL.OB** gift **REL.SG** and **3AN TNS**

tísì_tī lā...

give **1PL.OB ART**.

"Thus, since God had given them the gifts that he had given us ..."

(Acts 11:17, 1976)

Alazug ye ka on ke ka ba mor o ba sa'an na ...

Àlá zùg yé kà ɔ̀n ké kà bà mɔ̀r-ó_∅ bà sā'an nā ...

Thus that and **3AN.CNTR** let and **3PL** have **3AN.OB 3PL** before hither...

"So he [the speaker] had made them bring him [Paul] into their presence..."

(Acts 25:26, 1976)

Dinzugo ye ba kel tikpeedug...

Dìn zúgō yé bà kèl ...

Therefore that **3PL** let:IMP ...

"Therefore they should leave off disturbance ..." (Acts 19:36, 1976)

Resumptive *yē* may be placed between a clause-level presubject adjunct and the subject, or between a vocative NP and the following clause:

Nanana ye o zuanam, ye o baŋ ye...

Nānná-nā yé ò zṽà-nàm, yé ò bàŋ yē ...

Now-hither that **3AN** friend-PL, that **3AN** understand that ...

"Now, his friends should understand that..."

(Acts 3:17, 1976)

Ka nanana ye o niŋi ba Wina'am ne o popielim pia'ad la nu'usin...

Kà nānná-nā yé ò niŋī bá Wínà'am né ò pù-pìəlim

And now-hither that **3AN** do **3PL.OB** God with **3AN** inside-whiteness

pjāŋ'àd lā nū'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 zṽà-nàm né ò sàam-nàmā⁺∅, yé bà kèlɪsɪm!

3AN friend-PL with **3AN** father-PL **VOC** that **3PL** listen:IMP!

"His friends and my fathers should listen." (Acts 7:2, 1976)

30 Conditional Clauses

30.1 Conditional Clauses: Overview

Conditional clauses have a subordinate *yà'*-clause protasis before the subject of the main apodosis clause. *Yà'*-clauses cannot be coordinated with each other, though they may contain coordinated subclauses, and a main clause may contain more than one *yà'*-clause:

Fù yá' bòɔd, m̃ yá' lèb nā, m̃ ná yóɔ f.
2SG if want, **1SG** if return hither, **1SG** IRR pay **2SG.OB**.
 "If you want, when I return, I will pay you."

Ya'-clauses occur immediately before the subject of the main clause, after any other pre-subject adjuncts, clause-linker particles or conjunctions.

There must be a non-zero subject after a *yà'*-clause; even direct commands do not, as usual, delete the 2nd person subject pronoun [28.2.3](#); my informants use a free pronoun in this context, as does the KB version in

Fu ya'a m̃ɔr pu'a, fun da m̃ɔɔd ye fu bas oo.
Fù yá' m̃ɔr pɔ̃ā, fūn dā m̃ɔɔd yé fù bás-ō-o +∅.
2SG if have wife:SG, **2SG** NEG.IMP struggle:DIPF that **2SG** abandon-3AN.OB NEG.
 "If you have a wife, don't try to leave her." (1 Cor 7:27)

Other speakers permit bound pronouns:

Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.
Bùŋ yá' bòɔd yé ò lūbú f,
 Donkey:SG if want that **3AN** throw.off **2SG.OB**,
fù p̄ nyētí ò túbāa +∅.
2SG NEG.IND see:DIPF **3AN** ear:PL NEG.
 "If a donkey wants to throw you off, you don't see his ears." KSS p44

The main clause can be of any type, including a command, as above, or a question; it may have elements preposed with *kà* [33.2](#):

Fù yá' g̃s kpēlá, b́ kà fù nyētá +∅?
2SG if look here, what and **2SG** see:DIPF CQ?
 "If you look here, what do you see?"

Yà'-clauses express tense independently of the main clause. Indicative Mood, not Irrealis, is used for future meaning, but WK accepts negation with *kù* instead of *pō* when the sense is future; so too NT

So' ya'a ku tum, on da dii.

Sō' yá' kù tūm, ɔn dā dí +∅.

INDF.AN if NEG.IRR work, 3AN.CNTR NEG.IMP eat NEG.

"If anybody will not work, let him not eat." (2 Thess 3:10, 1976)

Occasionally, the *yà'*-clause appears clause-finally because of dislocation due to weight (cf 33.3), notably in constructions meaning "it would be better if ...":

Li naani so'on ba ya'a nokin neertita'are loon kollin o ningoonr ka zaŋ o lobi bas kolugin, n gati

Lì nāanɪ sōŋ'ɔ-n, bà yá' nōkɪ-n nēer-títā'arɪ ∅ lɔɔ-n ∅

3INAN then be.better-REM 3PL if take-REM millstone-big:SG SER tie-REM SER

kólɪ-n ɔn nín-gòɔr kà záŋ-ò ∅ ∅ lɔbɪ

put.around.neck-REM 3AN.CNTR body-neck:SG and take 3AN.OB SER throw

∅ bás kɔlvugv-n, n gát ...

SER abandon river:SG-LOC SER pass:DIPF...

"It would have been better if they had fastened a big millstone round his neck and thrown him into the river, than ..." (Lk 17:2, 1996)

Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa.

Dìn-zúg lì nāan áŋ súm bà yá' pū dú'ā-n dáy-kàŋáa +∅.

Thus 3INAN then COP good:ABSTR 3PL if NEG.IND bear-REM man-DEM.DEI.SG NEG.

"So it would have been better for that man not to have been born."

(Mk 14:21, 1996)

In archaic materials like proverbs, *yà'*-clauses sometimes end in a LF (but see 8.1.1 for an alternative analysis):

Buŋ ya'a kpi be'ede, ba siido ne be'ed.

Bùŋ yá' kpi bē'edɛ, bà sìɪd-ō ∅ nē bē'ed.

Donkey:SG if die bad:PL, 3PL flay:DIPF 3AN.OB FOC bad:PL.

"When a donkey dies wrongly, they skin it wrongly." KSS p42

("Make the best of a bad job.")

30.1.1 Remoteness Marker n^{ϵ}

The Remoteness Marker Liaison Enclitic n^{ϵ} can attach to any verb form in Indicative or Irrealis Mood; it is not compatible with the Imperative Mood. With Serial VPs, if n^{ϵ} is found in the first predicator it is repeated in all [26.1](#).

In much its commonest function, the particle has a meaning analogous to the modal remoteness expressed by the use of the English preterite in non-temporal usage (Huddleston and Pullum pp 148ff.) It expresses a hypothetical or unlikely state of affairs; it is frequently accompanied by the post-subject particle $n\bar{a}an(\iota)$ [30.1.2](#), which creates a contrary-to-fact interpretation. It is most often seen, without $n\bar{a}an(\iota)$, in $y\grave{a}$ '-clauses, and with or without $n\bar{a}an(\iota)$ in apodoses [30.2](#) [30.3](#), but also appears both with and without $n\bar{a}an(\iota)$ in other main and subordinate clause types.

In main clauses, n^{ϵ} without $n\bar{a}an(\iota)$ is most often seen in $b\grave{o}od\bar{i}n$ "might wish":

m pa'ati nye ka ya pu wenne wuu man boodin ye ya aan si'em laa.

m̃ pá' tì nyé kà yà pū wēn nē

1SG perhaps see and **2PL NEG.IND** resemble with

wūv mán b\grave{o}od\bar{i}-n yé yà áa-n sī'am láa +∅.

like **1SG:COMP** want-REM that **2PL COP-REM INDF.ADV ART NEG.**

"I will perhaps find you not as I might wish." (2 Cor 12:20, 1996)

Man boodin ne yaname naan aan ma'asiga bee yaname naan aan tuuliga.

Mān b\grave{o}od\bar{i}-n nē yānámì_∅ nāan áa-n mā'asígā bēē

1SG.CNTR want-REM with **2PL COMP** then **COP-REM** cold:ADV or

yānámì_∅ nāan áa-n tūlígā.

2PL COMP then **COP-REM** hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15, 1996)

The enclitic can be used temporally as a today-past, implying specifically that the state of affairs described no longer obtains [22.3.2](#):

M̃ ɔ̃nbɪdī-n sūmma.

1SG chew:DIPF-REM groundnut:PL.

"I was eating groundnuts." ("and now I'm not.")

The modal sense, though it occurs much more frequently, is probably secondary to this temporal function.

30.1.2 *Nāan(ɪ)* "in that/which case"

The post-subject particle *nāan(ɪ)* is distinct from *nyāan* "next, afterwards, then", but *nāan* (never *nāanɪ*) occurs commonly in the same sense as *nyāan*. Thus in the parallel NT passages from the 1996 version:

Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.

Fù ná kī'ɪs nōɔr àtán' yé fù zí'ɪ mā +ø,
2SG IRR deny occasion:SG NUM:three that 2SG NEG.KNOW 1SG.OB NEG,
kà nō-dáùg nyāan kās.

and hen-male:SG next cry.

"You will deny three times that you know me before the cock crows."

(Mt 26:75, 1996)

Fu na ki'is man noor atan' ka noraug naan kaas noor ayi.

Fù ná kī'ɪs mān nōɔr àtán' kà nō-dáùg
2SG IRR deny 1SG.CNTR occasion:SG NUM:three and hen-male:SG
nāan kās nōɔr àyí.

next cry occasion:SG NUM:two.

"You will deny me three times before the cock crows twice."

(Mk 14:30, 1996: KB *nyaan*)

The particle *nyāan* is probably a form of *nyá'an*^a "behind, after" with loss of glottalisation and assimilation of the final nasal because of its proclitic status [4.2.2 8.5.1](#). The particle *nāan(ɪ)* itself seems to have a core locative and logical sense "be(ing) there/thus, in that case" which has presumably broadened for speakers who use it in the sense of *nyāan* to temporal "then", unless the falling-together of the forms is simply phonological or dialectal.

There are examples in NT/KB of *nāan(ɪ)* used as an auxiliary verb with its own locative complement in both the Serial VP construction and in Supplement Clauses:

M nye ka Sutaana naane arazana ni n lu wenne saa yiti iank si'em la.

M nyé kà Sūtáanà nāanɪ ø àrazánà ní n lù ø wēn nē
1SG see and Satan be.there SER sky LOC SER fall SER resemble FOC
sáa ø yīɪ ø jāŋk sɪ'əm lā.

rain:SG COMP emerge:DIPF SER leap INDF.ADV ART.

"I saw Satan [being] in heaven fall like lightning." (Lk 10:18, 1996)

Ka nwadbibis na naan agɔla lit teŋin na.

Kà ɲwād-bíbìs ná nāan àgólà_ ø lít tēŋi-n nā.

And moon-small:PL IRR be.there ADV:above SER fall:DIPF ground:SG-LOC hither.

"And the stars [being] above will fall to earth." (Mk 13:25)

dap banɛ gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na

dàp-bàni gūr yé bà zūg-dáàn nāan pɔ'á-dīr dí'əmə

man-REL.PL wait that 3PL head-owner:SG be.there wife-taking:SG feast:PL

zín'igī-n_ ø kūl nā

place:SG-LOC SER return.home hither.

"men who are waiting for their lord [being] at a wedding feast to return ..."

(Lk 12:36)

yinni piiga wusa puugin ka li naan o yaab Abraham nu'usin

yīnní pīiga wūsa púvúgú-n kà lì nāan ò yáab Abraham

one ten all inside:SG-LOC and 3INAN be.there 3AN ancestor:SG Abraham

nú'usī-n

hand:PL-LOC

"the tithe which was in his ancestor Abraham's hands" (Heb 7:9, 1996)

The form *nāani* thus evidently originated in *nāan* followed by Serialiser *n*, but I will omit **SER** in the interlinear glossing henceforward for simplicity.

In main clause statements *nāan(ɪ)* without *n^ε* is most often a by-form of *nyāan* as described above. By far the most cases of modal *nāan(ɪ)* appear in the apodoses of Conditional Clauses 30.3. Elsewhere the meaning is "in that case, matters being thus", and has a contrary-to-fact implication when the Remoteness Marker is also present. Especially in Absolute Clauses, *nāan(ɪ)* without the Remoteness Marker may be effectively equivalent to *yà* "if/when."

In non-conditional main clause contexts it appears most often in the NT/KB with *bɔɔd*^a "want, wish" to convey a hypothetical "might have wished":

M naan bɔɔdin ye ya sid aan na'anam.

M̃ nāan bɔɔdī-n yé yà sìd āa-n ná'-nàm.

1SG then want-REM that 2PL truly COP-REM king-PL.

"I might have wished you really were kings." (1 Cor 4:8)

Other examples do occur, in both Main Clauses and Content Clauses:

Ka so' naam mori [sic] pe'is kobuga ka yinni bodige?

Kà sɔ' nāan mɔr pɛ'ɛs kɔbɔgá kà yīnní bɔ̀dɪgɛ +ø?

And **INDF.AN** then have sheep:**PL** hundred and one get.lost **PQ**?

"If someone had a hundred sheep and one got lost?" (Mt 18:12 1976)

Li an sum ye dau yinne naan kpi nidib la yela gaad ...

Lì àŋ súm yē dāy yīnní nāan kpí nīdɪb lā yélà_ø gàad ...

3INAN COP good that man:**SG** one then die person:**PL ART** about **SER** pass ...

"It is better if one man should die for the people than ..." (Jn 11:50)

Nāan(ɪ) also appears in subordinate clauses. Examples are not common in KB, which usually simply shows the Irrealis marker *nà* where the older versions have *nāan*.

Subordinate clauses introduced by *kà* or *yē*:

Li su'm ka fu daa naan zanjin m ligidi n su'an banki ni.

Lì sù'm kà fù dāa nāan zánjɪ-n_ m̀ līgɪdɪ

3INAN be.good and **2SG TNS** then take-**REM 1SG** money

n sū'a-n bánkɪ ní.

SER hide-**REM** bank:**SG LOC**.

"You should have put my money in the bank." (Mt 25:27, 1976)

Ka m bood ye li naani pun niŋin sa.

Kà m̀ bɔ̀dɪ yē lì nāanɪ pún nìŋɪ-n sá.

And **1SG** want that **3INAN** then already do-**REM** hence.

"I wish it had happened already." (Lk 12:49, 1976)

Relative Clauses:

M daa pu bood ye nimbane naan tisini m sumalisim la keen ka m moren susa'ana.

M̀ dāa pū bɔ̀dɪ yē nīn-bánɪ nāan tísɪ-nɪ_ m

1SG TNS NEG.IND want that person-**REL.PL** then give-**REM 1SG.OB**

sū-máɪsɪm lā kēɛ-n kà m̀ mɔrɪ-n sū-sán'àngā +ø.

heart-sweetness **ART** cause-**REM** and **1SG** have-**REM** heart-spoiling **NEG**.

"I did not want those who should have given me joy to give me sorrow."

(2 Cor 2:3, 1996)

... fun di'em o wuu fun naan di'enim si'em la.

... fūn di'əm-ō ∅ wōu fún nāan dī'ə-ní m̀ sī'əm lā.

... **2SG.CNTR** receive:**IMP** **3AN.OB** like **2SG:COMP** then receive-**REM** **1SG.OB** **INDF.ADV** **ART**.

"Welcome him as if you were welcoming me." (Philemon 1:17)

Absolute Clauses:

Bo a na'ana ne man naan yelin ka li ninine?

Bō áṅ ná'anā nē mán nāan yélí-n kà lì níṅī-né +∅?

What **COP** easily with **1SG:COMP** then say-**REM** and **3INAN** do-**REM** **CQ**?

"What is easier for me to have said might happen?" (Lk 5:23, 1996)

Hale baa m menji naani moren suekane na keen ka m nwe' nyo'og ne saalib yela laa.

Hālí báa m̀ mēṅí ∅ nāan mōrī-n sūā-kánì nà kēē-n

Even not **1SG** self **COMP** then have-**REM** way-**REL.SG** **IRR** cause-**REM**

kà m̀ ṅwé' ṅyō'og nē sáalib yélà láa +∅.

and **1SG** beat chest:**SG** with human:**PL** about **ART** **NEG**.

"Although I myself might have had reason to boast in human terms."

(Phil 3:4, 1996)

Fun naani tum be'ed ka ba sigis uf ne kpisinkpil ka fu sin ka mor suguru, li su'um a bo?

Fún nāan t́m bē'ed kà bà sīgí-sú f nē kpísìnkpìl

2SG:COMP then do bad and **3PL** put.down **2SG.OB** with fist:**SG**

kà fù sín kà mōr sūgurú, lì sùm áṅ bó +∅?

and **2SG** be.silent and have forbearance, **3INAN** good:**ABSTR** **COP** what **CQ**?

"If you do evil and they down you with fists and you are silent and forbear, what is the good of it?" (1 Pet 2:20, 1996)

Ka li su'um ye ya namis yaname naan ninid line dol suer... n gat yanam na tum line pu dol suere ka namis.

Kà lì sùm yé yà nā'mís yānámì ∅ nāan níṅìd línì

And **3INAN** be.good that **2PL** suffer **2PL** **COMP** then do:**DIPF** **REL.INAN**

dōl sūer ... n gát yānám ∅ nà t́m línì pō dōl

follow way:**SG**...**SER** pass:**DIPF** **2PL** **COMP** **IRR** do **REL.INAN** **NEG.IND** follow

sūeré +∅ kà nā'mís.

way:**SG** **NEG** and suffer.

"It is better that you suffer if you are doing what is right ... than that you do what is wrong and suffer." (1 Pet 3:17, 1996)

Ningbiŋ naan be ka siig kae' ka li a zaalim la, ala men ...

Nìn-gbín_ ∅ nāan bé kà sīg kā'e kà lì áŋ zāalím lā,
Body-skin:SG COMP then EXIST and spirit:SG NEG.BE and 3INAN COP empty:ABSTR ART,
àlá mèn ...

ADV:thus also...

"As a body with no spirit is empty, so too ..." (Jas 2:26, 1996)

Amaa da ke ka ya so' namisid tuum bamanaminee, on naani a ninkuud ...

Àmáa dā ké kà yà sō' nā'mísíd túùm-bàmmā námī-né⁺∅,
But NEG.IMP cause and 2PL INDF.AN suffer:DIPF deed-DEM.DEI.PL PL-LOC NEG,
ón nāani áŋ nīn-kúùd ...

3AN:COMP then COP person-killer:SG.

"But do not let any of you suffer for acts like these, whether as a murderer ..." (1 Pet 4:15, 1996)

Noŋir lem kae' gaad nidi naan kpi o zuanam zugo.

Nòŋir lém kā'e_ ∅ gáàd nīdí_ ∅ nāan kpi
Love again NEG.BE SER pass person:SG COMP then die
ò zùà-nàm zúgō⁺∅.

3AN friend-PL upon NEG.

"There is no love greater than if a person dies for his friends." (Jn 15:13, 1996)

wenne wuu saa naani iank ya nya'aŋ n ti paae ya tuona la

wēn nē wūv sáa_ ∅ nāani jánk yà nyá'aŋ
resemble with like rain:SG COMP then jump 2PL behind
n tí páe_ yà tùəna lā

SER afterwards reach 2PL before.ADV ART

"like when lightning leaps from East to West" (Mt 24:27, 1996)

Ba wenne zunzoŋ naani ve'ed zunzoŋ ne.

Bà wēn nē zúnzòŋ_ ∅ nāani vē'ed zúnzòŋ nē.

3PL resemble with blind.person:SG COMP then lead:DIPF blind.person:SG like.

"They are like when a blind person leads a blind person." (Mt 15:14, 1996)

Ka namisug ne'eŋa wenne po'a naani sa'a ye o du'a ne.

Kà nā'mísúg nē'ŋá wēn nē pū'á_ ∅ nāani sā'
And suffering DEM.DEI:INAN resemble with woman:SG COMP then strain
yé ò dū'á nē.

that 3AN bear like.

"This suffering is like when a woman labours to give birth." (Mt 24:8, 1996)

wuu kunduna naan lusi ba meŋ ne pe'es gbana n kpen' pe'esin.

wūv kúndùna_∅ nāan lōsí_bà mēŋ nē pē'es gbánà
like jackal:PL COMP then wrap 3PL self with sheep:PL skin:PL
n kpèŋ'es pē'esí-n.

SER enter sheep:PL-LOC.

"Like when jackals wrap themselves in sheepskins to go among sheep."

(Mt 7:15, 1996)

30.2 Open

Conditional clauses without the Remoteness Marker *n^ε* or *nāan(u)* express "if", and also "when" with a main clause with present or future reference. With main clauses with past reference, *yà'* is only used for conditionals; for the meaning "when", an Absolute Clause with time reference is used as a pre-subject adjunct [31.1](#), [28.1.1](#). In a *yà'*-clause, Indicative Mood is consistently used instead of Irrealis in positive polarity, and usually though not invariably in the negative.

Nid ya'a tum tuuma, o di'ed yɔɔd.

Nīd yá' tùm tūuma, ò dī'əd yōɔd.

Person:SG if work:DIPF work, 3AN receive:DIPF pay.

"If a person works, he gets pay." (Rom 4:4)

Ka Kristo ya'a da pu vu'ug kumine, alaa ti labasuŋ la mɔɔɔlɔg la anε zaalim.

Kà Kristo yá' dà pū vū'ug kūmɪ-né +∅, àláa_ tì làba-sùŋ

And Christ if TNS NEG.IND come.alive death-LOC NEG, ADV:thus 1PL news-good:SG

lā mɔɔɔlɔg lā á nē zāalím.

ART proclamation **ART COP FOC** empty:ABSTR.

"If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)

Fu ya'a kenna, fun on mɔrim waad fukanε ...

Fù yá' kēn nā, fūn ōn mōrí_m wāad fú-kánì ...

2SG if come:DIPF hither, **2SG.CNTR** also have **1SG** cold clothing-REL.SG ...

"When you come, bring my warm clothes that ..." (2 Tim 4:13)

Beog ya'a nie fu na wum o pian'ad.

Bēog yá' niè, fù ná wúm ò pjàŋ'ad.

Tomorrow if appear, **2SG IRR** hear **3AN** speech.

"When tomorrow comes, you will hear his words." (Acts 25:22)

Cf Hausa *ìdan gàrii yaa waayèe zaa mù tàfi* "When dawn comes we'll go." (Jaggar p608), where *ìdan* is likewise "if/when."

Bōn-píàlìg bḗ fù nīf lā púugū-n. Fù yá' bòòd, tì ná
 Thing-white:SG EXIST 2SG eye:SG ART inside:SG-LOC. 2SG if want, 1PL IRR
yīis, kà fù ná nyē súḡā yá'às.

extract, and 2SG IRR see good:ADV again.

"There is a white thing [i.e. cataract] inside your eye. If you want, we'll take it out and you'll see well again."

Fù yá' sjàk, tì ná dīgulí f.

2SG if agree, 1PL IRR lay.down 2SG.OB.

"If you agree, we'll put you to bed. [i.e. admit you to hospital]"

Negative polarity with non-past reference in the *yà'*-clause:

M ya'a pu keḡe, Sḡid la ku keḡen ya nī naa.

M̄ yá' pū kēḡé⁺∅, sḡid lā kú kēḡē yà nī náa⁺∅.

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)

So' ya'a ku tum, on da dii.

Sō' yá' kù tūm, ōn dā dí⁺∅.

INDEF.AN if NEG.IRR work, 3AN.CNTR NEG.IMP eat NEG.

"If anybody will not work, let him not eat." (2 Thess 3:10, 1976)

30.3 Hypothetical

If the Remoteness Marker *n^ε* 30.1.1 occurs in the *yà'*-clause, it also occurs in the main clause. Here the Remoteness Marker has an effect similar to the non-temporal use of the preterite in English conditional constructions.

The particle *nāan(i)* does not occur in a *yà'*-clause. If it is also absent in the main clause, there is no contrary-to-fact implication; such main clauses usually have Irrealis Mood.

Wief ya'a sigin li ni, li zuluḡ na paaen o salabir.

Wiəf yá' sīgí-n lì nī, lì zùluḡ ná páa-n ò sàlɪbɪr.

Horse:SG if descend-REM 3INAN LOC, 3INAN depth IRR reach-REM 3AN bridle:SG.

"If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbiŋ nii, lin ku nyanjin keen ka o ka' ningbiŋ nii.

Nóbìr yá' yèlī-n yē, ɔ́n pō áŋ nú'ùg lā zúg,

Leg:SG if say-REM that 3AN:COMP NEG.IND COP hand:SG ART upon,

ò kǎ' nín-gbīŋ ní +∅, līn kú ñyāŋi-n_ ∅

3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-REM SER

kēē-n kà ò kǎ' nín-gbīŋ ní +∅.

cause-REM and 3AN NEG.BE body-skin:SG LOC NEG.

"If the leg were to say, 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)

Ya ya'a aan zunzoos, ya pu morin taale.

Yà yá' āa-n zúnzòɔŋs, yà pō mōri-n táàllē +∅.

2PL if COP-REM blind.person:PL, 2PL NEG.IND have-REM fault:SG NEG.

"If you were blind, you wouldn't be guilty ." (Jn 9:41, 1976; 1996 *ya ku moren*)

30.4 Contrary-to-Fact

If the main clause has *nāan(i)* there is a contrary-to-fact implication:

Man ya'a pu kēēn na tu'asini ba, ba naan ku mōrin taale.

Mān yá' pō kēē-n nā_ ∅ tú'asī-ní_ bā, bà nāan kú

1SG.CNTR if NEG.IND come-REM hither SER talk-REM 3PL.OB, 3PL then NEG.IRR

mōri-n táàllē +∅.

have-REM fault:SG NEG.

"If I had not come to speak to them, they would not have been guilty."

(Jn 15:22)

Ba ya'a daa mi'ine li, ba naan ku kpa'an Zugsob one an na'atita'ar la dapuudir zug.

Bà yá' dāa mī'i-ní_ lī, bà nāan kú kpā'a-n Zūg-sób ɔ́nì

3PL if TNS know-REM 3INAN.OB, 3PL then NEG.IRR fasten-REM head-one:SG REL:AN

àŋ ná'-tītā'ar lā dá-pōvdá zùgō +∅.

COP king-great:SG ART wood-cross:SG upon NEG.

"If they had known it, they would not have fastened the Lord, who was a great king, to a cross." (1 Cor 2:8)

Ya'a ka'ane alaa, m naan ku yeline ya ye ...

Yà kǎ'a-ní_ àlá, m nāan kú yēlī-ní_ yā yē ...

If NEG.BE-REM ADV:thus, 1SG then NEG.IRR say-REM 2PL.OB that...

"If it were not so, I would not have told you that ..." (Jn 14:2)

Ya ya'a mi'in line na tisi ya sumbugusum zina nwa, li naan aan su'um!

Yà yá' mī-i-n línì nà tīsì yá súmbōgusím zíná ṇwá,
2PL if know-**REM** **REL.INAN** **IRR** give **2PL.OB** peace today this,
lì nāan āa-n sūm!

3INAN then **COP-REM** good:**ABSTR.**

"If you had known this day what would have brought you peace, that would have been good." (Lk 19:42)

Ya ya'a siakin Moses ya naan siakin man men.

Yà yá' sjàkī-n Moses, yà nāanì sjàkī-n mān mén.

2PL if believe-**REM** Moses, **2PL** then believe-**REM** **1SG.CNTR** also.

"If you had believed Moses you'd have believed me too." (Jn 5:46)

Li ya'a aane m meṇ gaṇir ka m tummin tuum kaṇa, m naani di'edin nyood.

Lì yá' āa-ní m mēṇ gánìr kà m túmmī-n túm-kàṇā,

3INAN if **COP-REM** **1SG** self choice and **1SG** work:**DIPF-REM** work-**DEM.DEI.SG**,

m nāanì dī'edi-n ṇyōōd.

1SG then receive:**DIPF-REM** pay.

"If it had been my own choice that I did this work, I would be getting pay."
 (1 Cor 9:17, 1976)

Contrary-to-fact conditions in the past are also sometimes marked by combining the Irrealis Mood with past tense marking:

Bɔzugɔ Josua ya'a da tisini ba vu'usum zin'ig, Wina'am da ku lɛm pian' dabis-si'a yɛla ya'asɛ.

Bɔ zúgɔ Josua yá' dà tìsī-ní bā vū'usím zín'ìg, Wínà'am dá kù

Because Joshua if **TNS** give-**REM** **3PL.OB** resting place:**SG**, God **TNS** **NEG.IRR**

lɛm pīāṇ' dábìs-sī'a yélà yà'asɛ ^{±∅}.

again speak day-**INDF.INAN** about again **NEG**.

"For if Joshua had given them a resting place, God would not subsequently have spoken of a certain day." (Heb 4:8)

Similarly, but without a *yà'*-clause:

Ò dāa ná zāb ná'àb lā.

3AN TNS **IRR** fight chief:**SG** **ART**.

"He would have fought the chief" (but didn't)

WK confirmed this meaning, as against "He was going to fight the chief."

31 N̄-Clauses

Kusaal transforms complete clauses into AdvPs or NPs by inserting the post-subject particle *n̄*. (For the realisation of the particle, see [8.2.2.1.1](#).) The *n̄* by itself is a complementiser, which turns the original clause "X" into an Absolute Clause [31.1](#) signifying "it being the fact that X." N̄-Clauses also form the basis of Kusaal Relative Clauses, though in the commonest type the complementiser particle has fused with a preceding demonstrative pronoun to create what is synchronically simply a relative pronoun [31.2.2](#).

All types of *n̄*-Clause have independent tense marking (relative to the narrative timeline within a series of Sequential Clauses, however [28.3.2](#).)

They cannot use the Imperative Mood; Irrealis appears instead:

Yaname na m̄ɔr sam si'a anɛ ye ya n̄ɔŋ taaba.

Yānámì_∅ nà m̄ɔr sām-sí'a á nē yé yà n̄ɔŋ tāaba.

2PL COMP IRR have debt-**INDF.INAN COP FOC** that **2PL** love each.other

"Any debt which you are to have is to love each other." (Rom 13:8)

N̄-Clauses cannot have any pre-subject elements or be *n*-focussed, but Relative Pronouns are often preposed with *kà* [31.2.2](#).

If the *n̄*-Clause has a negative Verbal Predicator, it only shows a final LF if the *n̄*-Clause is itself clause-final in the superordinate clause:

Nīn-báni p̄ dít ná kpī.

Person-**REL.PL NEG.IND** eat:**DIPF IRR** die.

"People who don't eat will die." WK

M̄ nyé nīn-báni p̄ dítā +∅.

1SG see person-**REL.PL NEG.IND** eat:**DIPF NEG**.

"I've seen some people who don't eat."

N̄-Clauses can contain other *n̄*-Clauses, serial-verb constructions and subordinate clauses:

ban mi' ye biig la kpine la zug

bán mī yē bīg lā kpí nē lā zúg

3PL:COMP know that child:**SG ART** die **FOC ART** upon

"because they knew that the child was dead" (Lk 8:53)

Paul n sob gbaun si'a n tis Efesus dim la nwa.

Paul ñ sōb gbáun-sī'a n tís Efesus díṃ lā_ ø ṇwá.

Paul **COMP** write book-**INDF.INAN** **SER** give Ephesus individual.**PL ART** **SER** this.

"This is the letter Paul wrote to the Ephesians." (1996 NT heading)

Ka m tuuma lin ka m tum n tis Zugsob la ke ka yanam a yadda niṇidib.

Kà ṁ tūuma lín kà ṁ túm n tìs Zūg-sób lā

And **1SG** work **REL.INAN** and **1SG** work **SER** give head-one:**SG ART**

ké kà yānám áṇ yáddā-níṇidib.

cause and **2PL.CNTR** **COP** assent-doer:**PL**.

"My actions which I did for the Lord led to you being believers."

(1 Cor 9:1, 1996)

dàṁ-kàn_ bòòd yé ò záb nà'ab lā

man-**REL.SG** want that **3AN** fight chief:**SG ART**

"the man who wants to fight the chief"

Ba mi' on daa tum si'em, on daa be ba sa'an sansa wusa,

daadin [sic] ka o daa paae Asia so'olim la na sa.

Bà mì' ón dāa túm sī'em ón dāa bé bà sā'an

3PL know **3AN:COMP TNS** work:**DIPF** **INDF.ADV** **3AN:COMP TNS** **EXIST** **3PL** presence

sānsá wūsa, dàa-lìn kà ò dāa pāe Asia sú'ulim lā nā sá.

time:**PL** all, day-**REL.INAN** and **3AN TNS** reach Asia realm **ART** hither ago.

"They knew what he'd been doing all the time he'd been with them

since the day he had arrived in the province of Asia" (Acts 20:18, 1976)

They can contain coordinated clauses and verb phrases:

dāṁ lá ñ dāa kēṇ dá'ā-n, kà pṁ'ā lā dāa kēṇ

Man:**SG ART** **COMP TNS** go market:**SG-LOC** and woman:**SG ART TNS** go

pōṁg lā zúg

field:**SG ART** upon

"because the man went to market and the woman went to the farm" WK

mam pu sa'amidi ba la'ad, ka me pu diti ba ki la.

mán pū sáṇ'amídí_ bà lā'ad, kà mé pū dí́tí_

1SG:COMP **NEG.IND** spoil:**DIPF** **3PL** goods:**PL** and also **NEG.IND** eat:**DIPF**

bà kī lāa +ø.

3PL millet **ART** **NEG**.

"that I don't spoil their property or eat their millet" BNY p20

N-Clauses are NPs or AdvPs and may take the article *lā*^{+/}, but they cannot take modifiers or post-determining pronouns. They can participate in forming larger NPs or AdvPs as pre-determiners, and may also themselves have pre-determiners:

ba diib n yit na'aterḡ la na zug

bà dīḡb ḡ yīt ná'-tēḡ lā nā zúḡ

3PL food **COMP** emerge:**DIPF** king-land:**SG ART** hither upon

"because their food came from the king's land" (Acts 12:20, 1996)

Pa'alimi ti nidiba ayi' nwa fun gaḡ sō'

Pà'alīmī tí nīdībá_ àyí ḡwá fún gāḡ sō'

Teach:**IMP 1PL.OB** person:**PL NUM**:two this **2SG:COMP** choose **INDF.AN**

"Tell us which of these two people you have chosen" (Acts 1:24)

The article *lā*^{+/} is not repeated a second time after an N-Clause which ends in a NP with *lā*^{+/}.

If the clause contains the VP-final particles *nā*^{+/} "hither" *sà*⁺ "hence" these may follow an article *lā*^{+/} belonging to the N-Clause [23.7](#).

N-Clauses, like other NPs/AdvPs, are coordinated with *nē* "and" *kōv/bēē* "or."

... pa'ali ba on daa nyē Zugsoḡb la suorin, ka o pian' tis o si'em,

nē Saul n mōḡl Yesu yēla nē sunkpī'eunḡ Damaskus teḡin si'em.

... pá'alì_ bā ḡn dāa ḡyē Zūḡ-sóḡb lā sūērí-n, kà ò

...teach **3PL.OB 3AN:COMP TNS** see head-one:**SG ART** road:**SG-LOC** and **3AN**

pīāḡ_ ø tīs-ò_ ø sī'am, nē Saul n mōḡl Yesu yēlà

speak **SER** give **3AN.OB INDF.ADV** with Saul **COMP** proclaim Jesus about

nē sūḡ-kpī'òḡ Damaskus téḡī-n sī'am.

with heart-strength Damascus land:**SG-LOC INDF.ADV**

"...informing them how he had seen the Lord on the road and He had spoken to him, and how Saul had preached boldly about Jesus in Damascus."

(Acts 9:27)

The first N-Clause itself contains two subclauses linked by *kà*.

31.1 Absolute Clauses

N̄-Clauses which do not contain Relative Pronouns or Determiners as heads are **Absolute Clauses** meaning "it being the fact that X", where "X" is the clause prior to the insertion of *n̄*:

Dāy lā dāa záb nà'ab lā.

Man:SG ART TNS fight chief:SG ART

"The man fought the chief."

dāy lá_∅ dāa záb nà'ab lā

Man:SG ART COMP TNS fight chief:SG ART

"the man having fought the chief"

Absolute Clauses always take the article *lā*^{+/}.

The characteristic use of Absolute Clauses is as **adverbs** of circumstance or time. Like other adverbs, they have limited use as verb arguments, most often as the complement of *àṇ*^a "be", though occasionally as subjects:

Dine kε ka m a saalbiis zua la anε

mam pu sa'amidi ba la'ad ka mε pu diti ba ki la.

Dìni ké kà m̄ áṇ sáal-bīis zúá lā á nē mán

REL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:COMP

pū sán'amídí_ bā lā'ad kà mé pū dítí_ bā kī lāa ^{+/∅}.

NEG.IND spoil:DIPF 3PL goods:PL and also NEG.IND eat:DIPF 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

Kristo da kp̄ii ti yēla la kε ka ti baṇ n̄ṇilim an sī'em.

Kristo_∅ dà kp̄ii_ tì yēlá lā ké kà tì bāṇ

Christ COMP TNS die 1PL about ART cause and 1PL realise

n̄ṇilím_∅ àṇ sī'em.

love COMP COP INDF.ADV

"Christ dying for us makes us understand what love is like." (1 Jn 3:16)

Absolute Clauses are accordingly not used as objects of verbs of perception or communication; either Relative Clauses with *sī'em* [31.2.1](#) or Content Clauses [29.3](#) appear in this function.

31.1.1 Time/Circumstance Adjuncts

Absolute Clauses are the usual way of expressing past "when." They may occur as adjuncts in the pre-subject position of main clauses [28.1.1](#), or preposed with *kà* [33.2](#), or less commonly as adjuncts clause-finally. Kusaal is stricter than English in requiring constituent order to reflect event order (cf Serial VPs [26.1](#)), so the clause-final position is usually confined to cases where the Absolute Clause expresses a state of affairs rather than a single event:

Ńn dāa nyēt súṇā, ́n dāa áṇ bí-lā láa +∅?
3AN.CNTR TNS see:**DIPF** good:**ADV**, **3AN:COMP TNS** **COP** child-baby:**SG ART** **PQ?**
 "Did she see well when she was a baby?"

Tense markers in an Absolute Clause are the same as in the main clause; the main clause markers may be omitted if the Absolute Clause precedes. It is thus not possible to manipulate the time relationship with tense particles; instead, this is determined by aspect, with a perfective in the Absolute Clause implying a prior event and imperfective a simultaneous one, setting the temporal scene for the main clause.

Ka ban dit la, Yesu yeli ba ...
Kà bán dīt lā, Yesu yéli_ bā ...
 And **3PL:COMP** eat:**DIPF ART**, Jesus say **3PL.OB**
 "As they were eating, Jesus said to them ..." (Mt 26:21)

Ka ban yi la, ka Zugsob malek nie o meṇ ...
Kà bán yī lā, kà Zūg-sób máljāk níe ò mēṇ ...
 And **3PL:COMP** emerge **ART** and head-one:**SG** angel:**SG** appear **3AN** self
 "After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Absolute Clauses with *sāḍígím* "since, because" immediately following the complementiser-*ḥ* occur in the pre-subject adjunct position of a main clause [28.1.1](#) and express "reason why":

Tiname sagidim aan o biis la, ti da ten'es ...
Tīnámì_∅ sāḍígím áaṇ_ò bīis lā, tì dā tēṇ'es ...
1PL **COMP** since **COP** **3AN** child:**PL ART**, **1PL** **NEG.IMP** think ...
 "Since we are his children, we should not think ..." (Acts 17:29)

Wina'am Siig Suŋ sadigim tisi ti vum paal la, keli ka ti beilim dolne o boodim la.

Wínà'am SÍ-sùŋ *∅* *sāḍígím tísì* *tī* *vūm-páàl* *lā*,

God spirit-good:SG COMP since give 1PL.OB life-new:SG ART

kèlí *∅* *kà* *tì* *bèllím* *dōl* *né* *ò* *bòòḍim lā*.

cause 2PL.SUB and 1PL existence follow with 3AN will ART

"Since God's Holy Spirit has given us new life,

let our lives be in accord with his will." (Gal 5:25, 1996)

On sadigim niŋ ala la, o sid na tisi ti si'el mekama wusa la'am ne o.

Ón *sāḍígím nīŋ* *álá* *lā*, *ò* *sìd* *nà* *tīsì* *tí* *sī'əl*

3AN:COMP since do ADV:thus ART, 3AN truly IRR give 1PL.OB INDF.INAN

mékàma wōsa lá'àm *né* *ò*.

altogether all together with 3AN

"Since he has done this, he will certainly give us everything together with him."

(Rom 8:32, 1976)

For Absolute Clauses with post-subject *nāan(ɪ)* see [30.1.2](#).

31.1.2 With Prepositions and Postpositions

Absolute Clauses occur after *hālí nē* or *hālí là'am nē* "although"

Hali la'am ne on daa an yelsum wusa daan la

Hālí là'am *nē* *ón* *dāa áŋ* *yēl-súm* *wōsa dáàn* *lā*

Even together with 3AN:COMP TNS COP matter-goodness:SG all possessor ART

"though he was the possessor of every blessing" (2 Cor 8:9)

Similarly after *hālí n tì pāa ...* "up until the time when ..." [26.3](#)

hālí n tì *pāa tīnámì* *∅* *kūl* *lā*

Up.to SER afterwards reach 1PL COMP return.home ART

"Until we'd returned home."

Before the postposition *zūg*^{3/} "on account of", Absolute Clauses form reason-why AdvPs used as adjuncts:

Ka ba la'as taaba n denji nye Blestus one a na'ab Herod samanna'ab la n maal suer ye o nwe' na'ab nu'ug, ba diib n yit na'ateŋ la na zug.

Kà bà lá'às tāaba n déŋì ∅ nyē Blestus

And **3PL** gather each.other **SER** do.first **SER** see Blastus

ónì àŋ ná'àb Herod sāmán-na'ab lā n máàl sūer

REL.AN COP king:SG Herod courtyard-chief:SG **ART SER** make way:SG

yé ò ɲwé' ná'ab nú'ùg, bà dīib ò yīt ná'-tēŋ

that **3AN** strike king:SG hand:SG, **3PL** food **COMP** emerge:DIPF king-country:SG

lā nā zúg.

ART hither upon

"They gathered together after first seeing Blastus, king Herod's chamberlain, to get him to make an agreement with the king, because their food came from the king's land." (Acts 12:20, 1996)

When they contain perfective forms, such Absolute Clauses may need to be preposed with *kà* 33.2 to match the word order to event order 22.2.1:

Mán ɲwè' dāy lā zúg kà police gbán'a_m.

1SG:COMP strike man:SG **ART** upon and police seize **1SG.OB**.

"Because I struck the man the police arrested me."

It is commoner for causation to be simply implied by a pre-subject Absolute Clause or by a Sequential Clause construction:

Mán ɲwè' dāy lā, kà police gbán'a_m.

1SG:COMP strike man:SG **ART** and police seize **1SG.OB**.

"I having struck the man, the police arrested me."

M ɲwé' dāy lā, kà police gbán'a_m.

1SG strike man:SG **ART** and police seize **1SG.OB**.

"I struck the man and the police arrested me."

yēlá⁺ "concerning" appears after an Absolute Clause in section headings in the NT:

Jesus n kpen' Jerusalem la yela

Jesus ò kpèŋ' Jerusalem lā yélà

Jesus **COMP** enter Jerusalem **ART** about

"[about] Jesus entering into Jerusalem."

The NT favours Absolute Clauses alone as picture captions:

Ban meed yir "A house being built"
Bán mēəd yīr
 3PL:COMP build:DIPF house:SG

Paul n sobid gboŋ nwa "Paul writing this letter"
Paul ñ sōbɪd gbáŋŋ ɲwá
 Paul COMP write:DIPF letter:SG this

31.2 Relative Clauses

Kusaal Relative Clauses are internally headed, so that the antecedent is included in the Relative Clause itself. The antecedent is either a pronoun or has a pronoun as a post-determiner. Relative Clauses fall into two types: those where the antecedent is initial within the Relative Clause, which use Relative Pronouns, and those where it is not initial, which normally use Indefinite Pronouns. The Relative Clause subject is followed by *ñ* in the type where the antecedent is not initial; in the initial-antecedent type this was also the case originally, but synchronically such clauses are most straightforwardly treated as headed by unitary Relative Pronouns.

Relative Clauses are normally restrictive in meaning, except when the construction is appositional [31.2.3](#), and usually even then. Compare [29.2](#) on Supplement *kà*-clauses, used typically with a non-restrictive relative meaning.

31.2.1 Non-Initial Antecedents

When the incorporated antecedent is not initial, it is in the great majority of cases an Indefinite Pronoun, or has an Indefinite Pronoun as post-determiner. Non-initial antecedents can be direct objects, VP complements or adjuncts:

Ón yèl sī'əl lā kā' sídāa +ø.
 3AN:COMP say INDF.INAN ART NEG.BE truth NEG.
 "What he says is not true" SB

dāy lá_ø zàb nà'-sō' lā
 man:SG ART COMP fight chief-INDF.AN ART
 "the chief whom the man fought"

nà'ab lá_ø zàb sīəba lā
 chief:SG ART COMP fight INDF.PL ART
 "those whom the chief fought"

Ka ban tum sɔ' la ku gaad onɛ tum o la.

Kà bán tùm sɔ' lā kú gāad ɔ̀nì tùm·o_ø lāa +ø.

And 3PL:COMP send INDF.AN ART NEG.IRR surpass REL.AN send 3AN.OB ART NEG.

"The one who was sent does not surpass the one who sent him." (Jn 13:16)

Paul n sob gbaun si'a n tis Efesus dim la

Paul ñ sɔb gbáun-sí'a n tís Efesus dímm lā

Paul COMP write letter- INDF.INAN SER give Ephesus individual.PL ART

"the letter which Paul wrote to the Ephesians" (NT heading)

Man mi' si'el nan anɛ bi'ela.

Mán mí sī'əl nān á nē bī'əlá.

1SG:COMP know INDF.INAN now COP FOC small.ADV

"What I know now is small." (1 Cor 13:12)

nà'ab lā_ø kpì sãn-sí'a lā

chief:SG ART COMP die time-INDF.INAN ART

"(at) the time the chief died"

Locative Relative Clauses headed by *sī'əl*^a are frequent in "where, whither" senses; neither the pronoun nor the Relative Clause have the locative particle:

Fù kɛŋ fún bɔ̀ɔd sī'əl.

2SG go 2SG:COMP want INDF.INAN.

"You went wherever you wanted." cf Jn 21:18.

biig la n be si'el la zugin

bīig lā ñ bè sī'əl lā zúgū-n

child:SG ART COMP EXIST INDF.INAN ART head-LOC.

"over where the child was" (Mt 2:9, 1976)

Objects of Invariable Verbs are not usually relativised using *kà*-preposed Relative Pronouns. (*Kà*-preposing is unusual in general with such objects [33.2.](#))

Yaname na mɔr sam si'a anɛ ye ya nɔŋ taaba.

Yānámì_ø nà mɔr sām-sí'a á nē yé yà nɔŋ tāaba.

2PL COMP IRR have debt-INDF.INAN COP FOC that 2PL love each.other

"Any debt which you are to have is to love each other." (Rom 13:8)

Examples with preposing do occur [31.2.2](#); however, as with *kà*-preposing generally, this is probably ungrammatical with predicative complements.

Thus always e.g.

M mi' fun an sɔ'.

"I know **who** you are." (Lk 4:34)

M mɪ' fún àŋ sɔ'.

1SG know **2SG:COMP COP INDF.AN**

Tiig walaa bigisid lin an tisi'a.

Tiig wélàa_ø bigisid lín àŋ tí-sí'a.

Tree:**SG** fruit:**PL SER** show:**IMPF 3INAN:COMP COP** tree-**INDF.INAN**.

"It's the fruit of the tree that shows **what tree** it is." (Mt 12:33)

Sĩ'am^m, the form of the indefinite pronoun system with the mass *m^m* Class suffix, is frequent in adverbial use as "somehow" and also as indefinite quantifier "some amount." Kusaal frequently uses manner-adverbs as predicative complements [23.2.1](#). Accordingly, relative clauses with *sĩ'am* are common as objects of verbs of cognition, reporting, and perception:

Kristo da kpil ti yela la ke ka ti ban nɔŋilim an si'em.

Kristo_ø dà kpil_ ti yēlá lā ké kà ti báy

Christ **COMP TNS** die **1PL** about **ART** cause and **1PL** realise

nòŋilím_ø àŋ sĩ'am.

love **COMP 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 *sĩ'am* Relative Clauses:

M mɪ' mán nà nĩŋ sĩ'am.

1SG know **1SG:COMP IRR** do **INDF.ADV**.

"I know what to do."

M mɪ' mán nà nĩŋ sĩ'am lā.

1SG know **1SG:COMP 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 *sĩ'am* and past tense marking have *lā^{+/}*; 75% lacking *lā^{+/}* have Irrealis Mood. Cf the two standing expressions

ŋn bɔ̀ɔd sĩ'am

"as he wishes"

3AN:COMP want **INDF.ADV**

lín àŋ sī'am lā "as things are"

3INAN:COMP COP INDF.ADV ART

Yèl^ε "say, tell" tends to take a *sī'am* 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 yèl-ō_ø bán nìŋ sī'am lā.

3PL say 3AN.OB 3PL:COMP do INDF.ADV ART

"They told him what they'd done"

Bà nà yèl_f fún nà nīŋ sī'am.

3PL IRR tell 2SG.OB 2SG:COMP IRR do INDF.ADV.

"They'll tell you what to do."

Pà'al^ε "teach, inform", surprisingly, typically takes a Relative Clause object without *lā*:

Bà pà'al-ō_ø bán nìŋ sī'am.

3PL inform 3AN.OB 3PL:COMP do INDF.ADV.

"They informed him of what they'd done."

Other verbs taking a *sī'am* Relative Clause as an object are

Gàad^ε "pass, surpass" in comparing actions:

Mam tum bēdegū gaad ban tum si'em la.

Mām túm bēdugū_ø gáàd bán tùm sī'am lā.

1SG.CNTR work much SER pass 3PL:COMP work INDF.ADV ART

"I've worked much harder than (how) they have." (2 Cor 11:23)

Gbāŋ'e^{+/} "catch" is used with a *sī'am* Relative Clause idiomatically for "decide what to do":

M gbāŋ'e mán nà nīŋ sī'am.

1SG seize 1SG:COMP IRR do INDF.ADV.

"I've decided what to do."

With verbs of doing a *sī'am* Relative Clause can be a manner-adverb:

Bà nìŋ ́n yèl_bā sī'am lā.

3PL do 3AN:COMP tell 3PL.OB INDF.ADV ART.

"They did as he'd told them."

which could answer *Bà nìṅ bɔ́?* or *Bà nìṅ àlá?* "What/how did they do?"

Like other AdvPs *sī'am* Relative Clauses can be verb subjects:

Man nonji ya si'em la ane bedego.

Mán nòṅi_yā sī'am lā á nē bédugū.

1SG:COMP love **2PL.OB INDF.ADV ART COP FOC** much.

"How much I love you, is a lot." (2 Cor 7:3, 1976)

Sī'am Relative Clauses occur often as objects of *wūv* "like" and *wēn*^{na/} "resemble"

Ò zòt wūv búṅù_ ∅ zòt sī'am lā.

3AN run:DIPF like donkey:**SG COMP** run:**DIPF INDF.ADV ART**

"He runs like a donkey (runs.)"

...ka ya na ke ka nidib dɔl man wuv ziingba'adibi gban'ad zimi si'em la.

...kà yà ná ké kà nīdīb dɔl mán wūv zīṅ-gbáṅ'adīb_ ∅

...and **3PL IRR** cause and person:**PL** follow **1SG.CNTR** like fish-catcher:**PL COMP**

gbāṅ'ad zīmí sī'am lā.

catch:**DIPF** fish:**PL INDF.ADV ART**

"... you will make people follow me like fishermen catch fish." (Mt 4:19)

Hālí (là'am) nē "although", alongside its use with Absolute Clauses [31.1.2](#) can take a *sī'am* Relative Clause in the sense "despite how...":

hali ne man daa sɔbi tisi ya si'em la

hālí nē mán dāa sɔbī_ ∅ tísì_yā sī'am lā

even with **1SG:COMP TNS** write **SER** give **2PL.OB INDF.ADV ART**

"despite how I wrote to you" (2 Cor 7:12)

Occasionally determiners other than Indefinite Pronouns can form non-initial antecedents of Relative Clauses: for example, ordinal expressions:

Paul n sob gbaun yiiga daan n tis Korint dim la nwa.

Paul ñ sɔb gbáun yīgá dāan n tís

Paul **COMP** write letter:**SG** firstly owner:**SG SER** give

Korint díṁ lā_ ∅ ṅwá.

Corinth individual.**PL ART SER** this.

"This is **the first letter** which Paul wrote to the Corinthians." (NT heading)

Perhaps parallel, but with the deictic *nwà*⁺ "this" instead of a determiner, is

Zugsɔb yɛl ye, Hali nɛ man vɔe nwa...

Zūg-sób yél yē, Hālí nē mán vōɛ nwá ...

head-one:SG say that even with 1SG:COMP be.alive this ...

"The Lord says: As I live .." (Rom 14:11)

31.2.2 Initial Antecedents

The commonest type of Relative Clause begins with a Relative Pronoun or an NP with a Relative Pronoun as a post-determiner. In origin, these pronouns are short demonstrative pronouns followed by *n̄*. When the head is the subject of the relative clause, this produces the forms *ɔ̀nɪ kà̀nɪ lìnɪ b̀ànɪ* (always written *onɛ kanɛ linɛ banɛ* in KB) where the final *-ɪ* is due to Liaison before the complementiser, which is itself invariably realised *ø* in this case.

M̄ n̄yɛ dáy-kànɪ_ ø zàb nà'ab lā.

1SG see man-DEM.SG COMP fight chief:SG ART

"I saw the man who fought the chief."

When the pronoun is not the subject of the Relative Clause, but is either another constituent preposed by *kà*, or belongs to a pre-determiner of the subject, one might expect the *n̄* 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:

b̀àn kà nà'ab lā zàb lā

DEM.PL and chief:SG ART fight ART

"those whom the chief fought."

yikan ka mam Paul be la

yī-kán kà mām Paul bɛ lā

house-DEM.SG and 1SG.CNTR Paul EXIST ART

"the house where I, Paul, am" (Rom 16:23, 1976)

on buudi ka Jew dim kis

ɔ̀n būdí kà Jew dí́m kīs

DEM.AN tribe:SG and Jew individual.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:

gbaɲ kanɛ ka dau la sɔb la

for *gbàɲ-kàn kà dāy lā sɔb lā*
 letter-REL.SG and man:SG ART write ART
 "the letter which the man has written"

In *dau kanɛ yadda niŋiri pɔ zu'oe*
dāy-kàn yàddā-níŋiri_ ∅ pū zú'e lā
 man-REL.SG assent-doing:SG COMP NEG.IND become.great ART
 "a man whose faith is not great..." (Mt 14:31)

the complementiser occurs after the actual relative clause subject.

In view of all this, it seems best to regard the forms *ɲɪ kànɪ lìnɪ bànɪ* synchronically as subordinating Relative Pronouns rather than Demonstrative + Complemetiser combinations, and where sources use the historically expected forms *ɲn kàn lìn bàn* in heads of Relative Clauses they will be regarded as allomorphs of the Relative Pronouns in that context. Accordingly, elsewhere I will write e.g.

Ṁ nyé dáɲ-kànɪ zàb nà'ab lā.
 1SG see man-REL.SG fight chief:SG ART
 "I saw the man who fought the chief."

bàn(ɪ) kà nà'ab lā záb lā
 REL.PL and chief:SG ART fight ART
 "those whom the chief fought."

Toende Kusaal shows the same development. Complementiser-*ɲ* is *ne* in Toende, and Serial-*n* is segmentally, at least, *∅*. Thus Abubakari 2011 (using her orthography):

N sa nye buraa kanne da da'a gbana la.
 "I saw the man who bought the book."

With *ne* before *ka* in relative clauses:

Buraa kanne ka fo bor la kiŋ tuma.
 "The man you are looking for is gone to work"

N sa nye buraa kanne ka Ayi da nye la.
 "I saw the man that Ayi saw."

If the antecedent is the subject within a Relative Clause, or a pre-modifier of the subject, a Relative Pronoun is the only possible construction:

bàni zàb nà'ab lā "those who fought the chief"
REL.PL fight chief:SG ART

M̃ nyé **dáu-kàni** zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw **the man who** fought the chief."

nimbane yuda sɔb Pɛbil la gbaunɔn line an nyɔvupaal dim gbaun la
nīn-bànì yūdá sɔb Pē'-bíl lā gbáun̄-n línì
person-REL.PL name:PL write Lamb:SG ART book:SG-LOC REL.INAN
àṇ nyɔ́-vū-páál dílm gbáun̄ lā
COP breath-alive-new:SG individual.PL book:SG ART
"those whose names are written in the Lamb's book of those with new life"
(Rev 21:27)

It is also the only possible way to relativise an indirect object, or an antecedent extracted from a prepositional phrase or from a subordinate clause. The antecedent is preposed with *kà* and a resumptive pronoun is placed in the corresponding gap within the relative clause, unless it is an inanimate-gender verb object:

Onɛ ka ba tis o ka li zu'oe, ba mɛ mɔr putɛn'er ye o na lɛbis line zu'oe.
Òni kà bà tís-ò kà lì zú'e, bà mè mɔr
REL.AN and 3PL give 3AN.OB and 3INAN become.much, 3PL also have
pú-tɛn'er yé ò nà lɛbis línì zù'e.
inside-mind:SG that 3AN IRR return REL.INAN become.much.
"Whom they have given much to, they expect he will return much." (Lk 12:48)

Búraa sō dāa bē ànīa, **ôn** kà mǎn né**ôn** dāa túm lā.
Būrā-sō' dāa bē ànīnā, òn kà mǎn nē ɔn dāa túm lā.
Man-INDF.AN TNS EXIST ADV:there, REL.AN and 1SG with 3AN TNS work:DIPF ART
"There was a man there whom I used to work with." ILK

ninkane ka Na'ab Aretus kɛ ka o su'oe Damaskus la
nīn-kànì kà nà'ab Aretus ké kà ò sū'e Damaskus lā
person-REL.SG and king:SG Aretus cause and 3AN own Damascus ART
"the person whom King Aretus had caused to possess Damascus" (2 Cor 11:32)

nimbanε ka ya tɛn'ɛs ye ba anε tuongatib la
nīn-báni kà yà tēŋ'ɛs yé bà à nē túèn-gātíb lā
 person-REL.PL and 2PL think that 3PL COP FOC ahead-passer:PL ART
 "those **whom** you consider to be leaders" (Gal 2:6)

linε [1996 lin] ka Kristo bɔɔd ye ti pian' la
līnɪ kà Kristo bóðd yé tì pīāŋ' lā
 REL.INAN and Christ want that 1PL speak ART
 "**what** Christ wishes us to say" (2 Cor 12:19)

If the antecedent is a pre-determiner in an NP which is not the subject, that entire NP is *kà*-preposed, but obviously no resumptive pronoun is needed:

Samaritan nid (on buudi ka Jew dim kis)
Samaritan níd, òn būudí kà Jew díɓ kīs
 Samaritan person:SG REL.AN tribe:SG and Jew individual.PL hate
 "a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

bikane [1996 biig kan] puug ka o mɔr la
bì-kànɪ púùg kà ò mɔr lā
 child-REL.SG belly:SG and 3AN have ART
 "the child **which** she is pregnant with" (Mt 1:20)
 ("child whose pregnancy she has")

Direct objects, complements and adjuncts may also be relativised by *kà*-preposing, in this case alongside constructions with non-initial antecedents [31.2.1](#). There is usually no resumptive pronoun in these cases (compare null anaphora in Verb Phrases [23.1](#)):

Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa.
Gbàũŋ-kànɪ kà Jerusalem kpéèŋm-nàm dāa sɔb lā_ø ŋwá.
 Letter-REL.SG and Jerusalem elder-PL TNS write ART SER this.
 "This is the letter that the elders of Jerusalem wrote."
 (heading, Acts 15:23, 1996)

nà'-kàn kà dāy lā záb lā
 chief-REL.SG and man:SG ART fight ART
 "the chief whom the man fought"

bàn kà nà'ab lā záb lā "those whom the chief fought."
 REL.PL and chief:SG ART fight ART

m antu'a linε [1996 *lin*] *ka ba mōr na*

m̃ àntù'a lìnɪ kà bà mōr nā

1SG case **REL.INAN** and **3PL** have hither

"the charge they are bringing against me" (Acts 25:11)

yεltɔɔd ayɔpɔi banε ka maliaknama ayɔpɔi mōr la

yēl-tɔɔd àyópòɛ bání kà màlǐāk-námá_ àyópòɛ mōr lā

matter-bitter:**PL** **NUM:seven** **REL.PL** and angel-**PL** **NUM:seven** have **ART**

"the seven plagues which the seven angels have" (Rev 15:8)

sān-kán kà nà'ab lā kpí lā

time-**REL.SG** and chief:**SG** **ART** die **ART**

"at the time the chief died"

A resumptive pronoun can occur:

nijkanε [1996 *nijkan*] *ka ba gban'e o la*

nīn-kání kà bà gbán'·o_ ∅ lā

person-**REL.SG** and **3PL** seize **3AN.OB** **ART**

"a person **whom** they have seized" (Acts 25:16)

It is not clear whether there is anything but a stylistic difference between Relative Clauses with non-initial antecedents and those with *kà*-preposed Initial Antecedents in cases where either would have been permissible. In particular, despite the use of Indefinite Pronouns as determiners, non-initial antecedents can be definite old information, e.g.

Ka bugum dit tej tita'asi'a la nyɔ'ɔs dūt nε agɔl saŋa dīnε ka' bεnnε.

Kà bùgúm_ ∅ dīt téŋ-tītá'-sī'a lā nyó'òs dūt nē

And fire **COMP** eat:**DIPF** land-big-**INDEF.INAN** **ART** smoke ascend:**DIPF** **FOC**

àgól sāŋá dīnɪ kā' bēnnε +∅.

ADV:upwards time:**SG** **REL.INAN** **NEG.HAVE** end:**SG** **NEG.**

"The smoke of **that great city** which fire is consuming is going up for time without end." (Rev 19:3), referencing the ongoing topic of the previous chapter *Babilon tej tita'ar* "the great city of Babylon" (Rev 18:21)

There is no focus or foregrounding sense with *kà*-preposing in Relative Clauses. *Kà*-preposing in subordinate clauses is seen only here.

Relative clauses with locative reference do not take the locative *nī*^{+/} [20.3](#):

yikan ka mam Paul be la yidaan

yī-kán kà mām Paul bé lā yí-dáàn

house-REL.SG and 1SG.CNTR Paul EXIST ART house-owner:SG

"the owner of the house where I, Paul, am" (Rom 16:23, 1976)

31.2.3 Appositional Relative Clauses

Written materials frequently show constructions with a human-reference NP followed by a Relative Clause introduced by *onε* or *banε*. Before *onε*, the preceding word never appears as a combining form. Examples may even show antecedents with a coordinate structure, which must represent appositional constructions:

Mam Paul nε Timoti banε an Yesu Kristo tumtumrib la sɔbid gbaun kaŋa

Mām Paul nē Timoti bání àŋ Yesu Kristo túm-tūmníb

1SG.CNTR Paul with Timothy REL.PL COP Jesus Christ work-worker:PL

lā sɔbɪd gbáyŋ-kàŋā...

ART write:DIPF letter-DEM.DEI.SG ...

"I, Paul, and Timothy, who are servants of Jesus Christ, are writing this letter."
(Phil 1:1)

On apposition elsewhere with human reference see [19.5](#) [19.8.1.5](#).

Appositional constructions are necessary, regardless of gender, when the antecedent cannot appear as a combining form, e.g. with coordinate structures or quantifiers (compare [19.5](#) [15.2](#)) or after a form with the Locative Liaison Enclitic:

sanlima laas ayɔpɔi linε ka Wina'am onε bε saŋa linε ka' bεn la sunpεεn
pε'eli ba la

sālɪma láàs àyɔpɔɛ línì kà Wínà'am ónì bε

gold vessel:PL NUM:seven REL.INAN and God REL.AN EXIST

sāŋá lìni ká' bēn lā súŋ-péèn pε'elì bā lā

time:SG REL.INAN NEG.HAVE end:SG ART heart-whiteness fill 3PL.OB ART

"the seven gold bowls filled with the anger of God who exists for time without end" (Rev 15:7)

nimbane yuda sɔb Pɛbil la gbaunɔn linε an nyɔvupaal dim gbaun la

nīn-bání yūdá sōb Pē'-bíl lā gbáyŋ-ŋ línì

person-REL.PL name:PL write Lamb:SG ART book:SG-LOC REL.INAN

àŋ nyɔ-vū-páàl díɪm gbáyŋ lā

COP breath-alive-new:SG individual.PL book:SG ART

"those whose names are written in the Lamb's book of those with new life"
(Rev 21:27)

An appositional relative clause may follow a noun with a post-determining pronoun of its own:

kokor kaŋa lini yi arazana ni la na
kùkōr-kánā línì yí àrazánà ní lā nā
 voice-DEM.DEI.SG REL.INAN emerge sky:SG LOC ART hither
 "this voice which came from heaven" (2 Pet 1:18, 1976)

Appositional clauses with Demonstratives as relatives are usually restrictive. Relative Clauses with non-initial antecedents may also be used in apposition:

Ka Yesu keŋ Nazaret, ban da ugus o teŋ si'a la.
Kà Yesu kēŋ Nazaret bán dà ūgus-ó_ø tèŋ-sī'a lā.
 And Jesus go Nazareth 3PL:COMP TNS raise 3AN.OB land-INDF.INAN ART.
 "And Jesus went to Nazareth, where he was raised." (Lk 4:16)

31.2.4 Article with Relative Clauses

With relative pronouns other than *sī'am* the function of the **article** after a relative clause is straightforward; of necessity, absence of the article also does duty for what with nouns is expressed by indefinite post-determining pronouns.

Ōn sōb á nē dáy-kànì sà kē nā sú'èš lā.
 3AN.CNTR individual.SG COP FOC man-REL TNS come hither yesterday ART
 "That one's the man who came yesterday."

Dàp-bànì bòòd yé bà nyéé_f ké nā.
 Man-REL.PL want that 3PL see 2SG.OB come hither
 "Some men who want to see you have come."

onε du'a nε Siig "someone born of the Spirit" (Jn 3:8)
òní dụ'à nē Sīig
 REL.AN bear with spirit:SG

onε tumi m la na "he who sent me hither" (Mk 9:37)
òní tùmì_m lā nā (òní = REL.AN; contrast *ón* 3SG:COMP)
 REL.AN send 1SG.OB ART hither

32 Negation

32.1 Negation of Clauses

Negation of clauses is achieved by using a negative marker particle in the Verbal Predicator [22.5](#) along with a clause-final Negative Prosodic Clitic [8.1](#).

Ti pu bɔɔd ye dau kaŋa aan ti na'aba.

Tì pō bɔ̀̀d yē dáy-kàŋā áaŋ tì nà'abā +∅.

1PL NEG.IND want that man-**DEM.DEI.SG COP 1PL** king:**SG NEG**.

"We don't want this man to be our king." (Lk 19:14)

Pō negates the Indicative, as above; Imperative is negated with *dā*:

Dìm nē Wīn, dā tú'às nē Wīnné +∅.

Eat:IMP with God:**SG, NEG.IMP** talk with God:**SG NEG**.

"Eat with God, don't talk with God."

The negative particle *ku* replaces the positive Irrealis marker *nà*:

Amaa man pian'ad la ku maligim gaade.

Àmáa m̀ pìàŋ'ad lā kú mālìgim gáadē +∅.

But **1SG** speech **ART NEG.IRR** again pass **NEG**.

"But my words will not pass away. (Mt 24:35)

32.1.1 Negative Verbs

There are four negative verbs, functionally equivalent to negative particle + verb: they are followed by a clause final Negative Prosodic Clitic, and they do not undergo tone overlay from Independency Marking [22.6.1.1](#).

mìt (always imperative) "see that it doesn't happen that ..." is construed with a following *kà*-clause of purpose [29.1](#). In address to more than one person it may or may not have the usual postposed 2pl subject enclitic ^{ya}: *mìtī*.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi yaa.

Mìt kà yà máàl yà tùum-sùma nīdīb túòn

NEG.LET.IMP and **2PL** do **2PL** deed-good:**PL** person:**PL** before

yé bà gōsì yáa +∅.

that **3PL** look.at **2PL.OB NEG**.

"See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1976)

In KB, this word appears throughout as invariant *mid*, without a following Negative Clitic: *Mid ka ya maali ya tuum suma nidib tuon ye ba gɔs.*

Mìt also appears with a NP object in the sense "beware of ..."; it is not followed by the Negative Prosodic Clitic in that case:

Miti ziri nodi'esidib bane kene ya sa'an na la.

Mìtì ∅ *zīrí* *nò-dí'əsìdɪb* *báni* *kēnní* *yà* *sā'an* *nā* *lā.*

Beware **2PL.SUB** lie mouth-receiver:**PL REL.PL** come:**DIPF 2PL** among hither **ART**.

"Beware of false prophets who come among you." (Mt 7:15, 1996)

zī'⁺ "not know" normally replaces negative particle + *mī*:

Bòŋ-bāŋ'ad *zī'* *yē* *tēŋ* *túllā* ⁺∅.

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.

"He who rides a donkey does not know the ground is hot." (Proverb)

Instances of *mī* with negative particles do occur, however:

M biig Solomon anɛ dasaŋ , ka pu mi' wuv lin nar si'em.

M *bīig* *Solomon* *á* *nē* *dá-sāŋ,* *kà* *pū* *mī*

1SG child:**SG** Solomon **FOC COP** young.man:**SG**, and **NEG.IND** know

wuv *lín* *nār* *sī'əmm* ⁺∅.

how **3INAN:COMP** be.proper **INDF.ADV NEG**.

"My son Solomon is young, and does not know how things ought to be."

(1 Chronicles 22:5)

kā'e⁺ "not be, not have" appears as *kā'* in close connexion with a following word [8.5.3](#). It is the negative to both "be" verbs, *àɛŋ*^a "be something/somehow" and *bè*⁺ "be somewhere, exist" and also to *mōr*^{a/} "have." **Pū bɛ* is not found, but *pū mōr* is quite common; *pū áɛŋ* is rare but can be found in contrastive contexts like

Māni ∅ *áŋ* *dɔ'átà* *àmáa* *fūn* *pū* *ányā* ⁺∅.

1SG.CNTR SER COP doctor:**SG** but **2SG.CNTR NEG.IND COP** **NEG**.

"I'm a doctor, but you're not."

Examples:

Dāy *lā* *kā'* *dɔɔgū-n* *lāa* ⁺∅.

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

"The man is not in the room."

Dāy lā kā' bīga +∅.

Man:SG ART NEG.HAVE child:SG NEG.

"The man hasn't got a child."

Dāy lā kā' ná'abā +∅. "The man isn't a chief."

Man:SG ART NEG.BE chief:SG NEG.

Dāy lā kā'e +∅. "The man isn't there."

Man:SG ART NEG.BE NEG.

Dāy kā'e dɔ́ɔgū-n lāa +∅.

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

"There's no man in the room."

Pụ'ā lā mór bīg àmáa dāy lā kā'e +∅.

Woman:SG ART have child:SG but man:SG ART NEG.HAVE NEG.

"The woman has a child but the man hasn't."

kà'asìgē (LF always, as the word only appears clause finally) "not exist"

Ò bīg ká'asìgē +∅. "She has no child."

3AN child NEG.EXIST NEG.

32.2 Negative Raising

Negative Raising occurs in a way generally analogous to negative raising in English. It is normal with verbs taking purpose-clauses as complements:

Ti pū bɔ́ɔd ye dau kaŋa aan ti na'aba.

Tì pū bɔ́ɔd yē dáɣ-kàŋā áaŋ tì nà'abā +∅.

1PL NEG.IND want that man-DEM.DEI.SG COP 1PL king:SG NEG.

"We don't want this man to be our king." (Lk 19:14)

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì pū nār yé fù dí fù bā'-bīg pụ'á Herodiase +∅.

3INAN NEG.IND must that 2SG take 2SG father-child:SG wife:SG Herodias NEG.

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

It occurs with a Content Clause following *tēŋ'es*^ε "think":

*Tiname sagidim aan o biis la, ti da ten'es ye Wina'am bellim nwenε bada banε
ka ninsaal nok sanlima bee anzurifa bee kuga, ten'esi maal ne o nu'usε.*

Tīnāmì_ø sādīgím áaŋ_ò bīs lā, tì dā tēŋ'es yē

1PL COMP since **COP 3AN** child:PL **ART 1PL NEG.IMP** think that

Wínà'am béllím wēn nē bádà bànì kà nīn-sáàl

God existence resemble with idol:PL **REL.PL** and person-smooth:SG

nōk sāluma bēε ānzúrìfà bēε kūgá_ø tēŋ'esi_ø mǎàl

take gold or silver or stone:PL **SER** think **SER** make

né ò nú'usē +ø.

with **3AN** hand:PL **NEG.**

"Since we are his children, we should not think that God's existence resembles idols which a human being thinks to make by hand using gold or silver or stone." (Acts 17:29)

Contrast Content Clauses after *mī*⁺ "know" or *bàŋ*^ε "realise":

Bùŋ-bāŋ'ad zī' yē tēŋ túllā +ø.

Donkey-rider:SG **NEG.KNOW** that ground:SG be.hot **NEG.**

"He who rides a donkey does not know the ground is hot."

Ka o ba' ne o ma pu baŋ ye o kpelim yaa.

Kà ò bā' né ò mà pū bǎŋ yé ò kpèlím 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)

ka o lee pu baŋ ye li anε onε.

kà ò léε pū bǎŋ yé lì à nē ōnε +ø.

And **3AN** but **NEG.IND** realise that **3INAN COP FOC 3AN.CNTR NEG.**

"but she didn't realise it was him." (Jn 20:14)

Negative raising similarly occurs with Supplement Clauses attached to a NP as an anchor [29.2](#), when the anchor is the object of a verb like *nyē*⁺ "see, find" used in the sense "see as...":

M̃ dāa pū nyē dāy lá kà ò áŋ 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

It is not seen after verbs expressing existence; so in particular with constituent negation constructions involving clefting [32.4](#) and a formally subordinate Supplement Clause:

Di len ka' fun yel si'el la zug, ka ti niŋ o yadda.

Lì lèm kâ' fún yèl sɪ'əl lā zúg kà

3INAN again **NEG.BE 2SG:COMP** say **INDF.INAN ART** upon and

tì níŋ·ò_ø yáddáa +ø.

1PL do **3AN.OB** assent **NEG.**

"It is no longer because of what you said that we believe in him." (Jn 4:42)

Lì kâ' mǎn bīg kà fù ɲwɛ́'ē +ø.

3INAN NEG.BE 1SG.CNTR child:**SG** and **2SG** beat **NEG.**

"It's not my child that you've beaten."

32.3 Position of the Negative Prosodic Clitic

The Negative Prosodic Clitic [8.1](#) normally appears at the end of the clause containing the negated verb, passing over all subordinate clauses:

Ti pu bɔɔd ye dau kaŋa aan ti na'aba.

Tì pō bɔ̀̀d yē dáy-kàŋā áaŋ tì nà'abā +ø.

1PL NEG.IND want that man-**DEM.DEI.SG COP 1PL king:SG NEG.**

"We don't want this man to be our king." (Lk 19:14)

Subordinate clauses only fall within the *semantic* scope of the negation when the main clause verb induces **negative raising** [32.2](#).

However, if a construction which by default would imply negative raising occurs exceptionally with the subordinate clause excluded from the negative scope, the Negative Prosodic Clitic is placed *before* the subordinate clause:

on nye ka Yesu pu pie o nu'use ka nyaan di la.

ón ɲyé kà Yesu pō píe ò nú'usé +ø kà

3AN:COMP see and Jesus **NEG.IND** wash **3AN hand:PL NEG** and

nyāan dí lā

then eat **ART**

"when he saw that Jesus didn't wash his hands before eating"

(Lk 11:38, 1996: KB *on nye ka Yesu pu pie o nu'us ka nyaan di la.*)

*Nidib be ka **pu** tum **si'ela** ye ba a popielim dim, ka kudun niŋ Wina'am
one ke ka tuumbe'ed dim lieb popielim dim o tuon la yadda.*

Nīdīb b́é kà p̄ t́úm sī'əla ⁺∅ ýé bà áŋ

person:PL EXIST and NEG.IND work:DIPF INDF.INAN NEG that 3PL COP

p̄-ṗiəlīm d́ím, kà k̄ūdīm níŋ Wínà'am

inside-whiteness individual.PL and ever do God

ŋ̀nì ḱé kà t̄uṃ-bē'ed d́ím líàb

REL.AN cause and work-bad:PL individual.PL become

p̄-ṗiəlīm d́ím ò t̄uən lā yáddā.

inside-whiteness individual.PL 3AN before ART assent.

"There are people who haven't done anything that they become blessed, but have believed in the God who causes sinners to become blessed before him."
(Rom 4:5, 1976)

The Negative Clitic is dropped at the end of *ñ*-Clauses containing a negative unless they are themselves clause final in the main clause, and also before the article *lā*^{+/}:

*m bi'emnam banε **pu** b̄w̄d ye m an na'abi su'oe ba la*

ṃ̀ bì'əm-nàm b́ánì p̄ b̄w̄d ýé ṃ̀ áŋ ná'abì_∅ s̄ú'v_ bā lā

1SG enemy-PL REL.PL NEG.IND want that 1SG COP king:SG SER own 3PL.OB ART

"my enemies who do not want me to be king over them" (Lk 19:27)

Clauses with *yà*' "if" keep their own Negative Clitics:

*Ba ya'a **pu** niŋ **si'ela**, o pu'usim d̄w̄g la na lieb zaalim.*

Bà yá' p̄ níŋ sī'əla ⁺∅, ò p̄-ṗsīm d̄w̄g lā

3PL if NEG.IND do INDF.AN NEG 3AN worship house:SG ART

ná līàb zāalím.

IRR become empty:ABSTR.

"If they don't do anything, her temple will become of no account." (Acts 19:27)

Apparent exceptions in the NT seem all to involve *yà*' clauses ending in words with final vowels or final *-m*, and probably do end in the Negative Clitic in reality.

With clauses with two VPs coordinated with *bēε/kūv* "or", if the first VP is negated with the scope extending over both VPs, the Negative Clitic ends the whole clause and may optionally precede the *bēε/kūv* also.

32.4 Constituent Negation

Clefting is the usual way of achieving constituent negation, using the patterns

Lì kā' X kà ... /Lì kā' X n ... "It's not X that ..."
X ká'ẹ̀ kà ... /X kǎ'ẹ̀ n ... "There's no X that ..."

For example:

Sɔ' kae na nyanjɪ dɔl zugdaannam ayi'...

Sɔ' kǎ'e_ ∅ ná nyāŋɪ_ ∅ dɔl zūg-dáàn-nàm àyí ...

INDF.AN NEG.BE SER IRR prevail **SER** follow head-owner:**PL NUM:two** ...

"Nobody can serve two masters." (Mt 6:24)

Sogia so' kae' n tum ka yood o meɲa.

Sógjà-sɔ' kǎ'e n túm kà yɔɔd ò mēɲá +∅.

Soldier-**INDF.AN NEG.BE SER** work:**DIPF** and pay:**DIPF 3AN** self **NEG.**

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

Lì kā' mǎn bīg kà fù ɲwɛ'ɛ +∅.

3INAN NEG.BE 1SG.CNTR child:**SG** and **2SG** beat **NEG.**

"It's not my child that you've beaten."

Another method is to use the particle *báa* 21.2 (Hausa *bâa* "not exist") as *báa* + NP extraposed from a negated clause:

Bà pū kē náa +∅, báa yīnní.

3PL NEG.IND come hither **NEG**, not one.

"They didn't come, not one."

Báa yīnní can be used as a NP, or as a dependent following a NP head. The meaning is "not one", with a negative concord of the clause Verbal Predicator, e.g.

Amaa ba pu nyanjɪ nyɛ linɛ tu'al baa yinne.

Àmáa bà pū nyāŋɪ_ ∅ nyɛ línì tò'al [+∅] báa yīnní.

But **3PL NEG.IND** prevail **SER** find **REL.INAN** condemn [**NEG**] not one.

"But they couldn't find anything condemning, not one thing." (Mt 26:60)

Ka nid baa yinne pu yel ye on m̄or si'el la, one su'oe lii.

Kà nīd bāa yīnní pō yél yē ́n m̄or

and person:SG not one NEG.IND say that 3AN:COMP have

sī'əl lā, ́n ̄ ∅ sū'v līl +∅.

INDF.INAN ART 3AN.CNTR SER own 3INAN.OB NEG.

"Not one person said that what he had, he owned." (Acts 4:32)

Fu du'adib baa yinne kae ka o yu'ur buon alaa.

Fù dū'adīb bāa yīnní kā'é kà ò yū'ur búèn àlāa +∅.

2SG relative:PL not one NEG.BE and 3AN name:SG call:DIPF ADV:thus NEG.

"Not one of your relatives is named thus." (Lk 1:61)

Relative clauses can also be used for constituent negation:

Da m̄or n̄ōr yinne n̄e ban̄e ka' yadda n̄íjídīb la ye ya n̄íj sī'ela.

Dā m̄or n̄ōr yīnní n̄ē bānì kā' yáddā-níjídīb lā

NEG.IMP have mouth:SG one with REL.PL NEG.BE assent-doer:PL ART

yé yà níj sī'ela +∅.

that 2PL do INDF.INAN NEG.

"Do not agree with those who are not believers to do anything." (2 Cor 6:14)

33 Information Packaging

33.1 Focus: Overview

The term "Focus" is used significantly differently in different grammars, and cross-linguistically it is not clear that there is even a fundamental common core to the concept. Apart from the theoretical challenges, the matter is difficult to investigate in practical terms. I had little acquaintance with these issues when I had access to Kusaal speakers, and it is not easy to remedy this retrospectively from my limited data. Much of this section is therefore very tentative.

As a starting point, I adopt the formulation from Lambrecht 1994: "[Focus] is the UNPREDICTABLE or pragmatically NON-RECOVERABLE element in an utterance. The focus is what makes the utterance into an assertion."

A distinction is made between **ordinary** and **contrastive focus**.

Separate from the notion of Focus is the concept of **foregrounding**, the usual function of it-clefting in English; as pointed out in Huddleston and Pullum, p1424, foregrounded elements in English need not be focussed.

Two syntactic devices in Kusaal relate to Focus: subject focussing with Serialiser-*n* 33.1.1, and the use of the particle *nē*⁺/ 33.1.2. Clefting constructions with the clause linker *kà* and corresponding ellipted types relate to foregrounding rather than Focus 33.2, or are motivated simply by ordering constraints.

Main clauses without any special syntactic marking of Focus have ordinary focus on the predicate by default.

The usage of the **article** *lā*⁺/ 19.3 interacts with the focus mechanisms described below.

33.1.1 Subject Focus: Serialiser-*n*

N-clefting uses a serial-verb construction in the sense of a relative clause with the subject as antecedent, after a main clause with *Lì à nē* "It is ...". The sense resembles that of the formally analogous "it-clefting" of English, *foregrounding* the clefted element and backgrounding the rest:

Ka dau mε pu sv'oe o mεŋ nɪŋgbinaa. Li anε o pu'a sv'oe li.

Kà dāy mé pū sú'v ò mēŋ nín-gbīnáa ⁺∅.

And man:SG also NEG.IND own 3AN self body-skin:PL NEG.

Lì á né ò pɔ'ā_ ∅ sú'v_ lī.

3INAN COP FOC 3AN wife SER own 3INAN.OB.

"And a husband, too, does not own his own body. It is his wife who owns it."

(1 Cor 7:4)

Like it-clefting in English (Huddleston and Pullum p1416) the construction has an implicature of exhaustiveness and exclusiveness: it is the wife (only), not the husband, who is the owner.

The main clause may instead have a Non-Verbal Predicator [25](#):

Anɔ'ɔn nwaa yisid nidib tuumbɛ'edi basida?

Ànɔ'ɔn_ø nwáa_ø yīsɪd nīdɪb túùm-bɛ'edi_ø básɪdà +ø?

Who SER this SER expel:DIPF person:PL deed-bad:PL SER throw.out:DIPF CQ?

"Who is this who drives people's sins out?" (Lk 7:49)

N-focus presumably arose from *n*-clefting by ellipsis of everything but the NP in the main clause. The focussed element stands first, with the rest of the clause introduced by *n*, phonologically identical to the Serial VP particle [8.2.2.1.2](#). The clause lacks Independency Marking but has independent tense marking, unlike a non-initial VP. (Compare tense marking in ellipsed indirect commands [22.3.1](#).)

The meaning of this construction is *focus* rather than foregrounding:

Wáafù_ø dúm-ō_ø.

"A snake bit him." WK

Snake:SG SER bite 3AN.OB.

would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"

The focus meaning presumably arose to fill the gap caused by the fact that a clause subject cannot be focussed with *nɛ* [33.1.2](#).

Focus rather than foregrounding is also demonstrated by the fact that

Interrogative Pronouns as subjects are always *n*-focussed. As a subject *ànɔ'ɔn* "who" thus always appears as *ànɔ'ɔn n* [anɔ:nɪ] (always NT *ano'one*, KB *anɔ'ɔnɛ*.)

Ànɔ'ɔnɪ_ø kābɪrídà +ø?

Who SER ask.for.entry:DIPF CQ?

"Who is asking permission to enter?"

Clauses containing interrogative pronouns may not contain focus-*nɛ*^{+/}, an incompatibility which seems most readily explained by analysing interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

Furthermore, the focus particle *nɛ*^{+/} in all its rôles is excluded from clauses which are *n*-focussed, with verb aspect distinctions present but unmarked, as in other cases of formal exclusion of the marker [33.1.2.1](#):

Ì zūgu_ø zábìd.

"My head is hurting."

1SG head SER fight:DIPF.

(Reply to "Where is the pain?")

cf *Ṁ zūg lā pú'alim nē.* "My head is hurting."
1SG head **ART** damage:**DIPF** **FOC**. (Reply to "What's the matter with you?")

Accordingly, the ellipted construction with Serialiser *n* after the subject represents focus, parallel to the use of *nē* with other clause constituents.

33.1.2 VP Constituent and VP Focus: *nē*^{+/}

As a constituent-focus particle *nē*^{+/} has two distinct rôles, readily distinguishable by position: preceding a VP-constituent, *nē*^{+/} focusses that constituent, while VP-final *nē*^{+/} focusses the entire VP contrastively.

The focus particle is homophonous with the preposition *nē* "with, and" and with the empty particle *nē* which follows objects of comparisons when they do not have the article [21.1](#); on distinguishing constituent-focus *nē*^{+/} from the preposition see [23.4](#).

Greater difficulty arises over the distinction from the *nē*^{+/} which is part of the aspect system [22.2](#)¹⁶, and which actually represents a specialised use of the same particle to focus the verb aspect. The aspect marker is subject to the same formal constraints on appearance as the focus marker, and *nē*^{+/} cannot appear twice in a clause to mark both focus and aspect [33.1.2.1](#). The *aspectual* sense normally prevails wherever semantically and formally possible; otherwise, the particle is interpreted as constituent focus. When aspectual *nē*^{+/} is excluded only by formal constraints, different verbal aspects still appear but are unmarked.

33.1.2.1 Contexts where *nē*^{+/} cannot Appear

Nē^{+/} cannot appear in either constituent focus or aspectual sense

- (a) if the subject has *n*-focus
- (b) in subordinate clauses other than Content Clauses
- (c) in content questions

***Nē*^{+/} may only occur *once* in a clause**; this not necessarily in the *first* VP of a Serial VP chain:

16) In Dagbani, two different particles, *mi* and *la*, correspond to Kusaal *nē*^{+/}, but they are in complementary distribution with no meaning difference to shed light on *nē*^{+/}; together, they show much the same range of senses. Mampruli *ni* shares the initial *n*- of *nē*^{+/}, but in the related languages the corresponding particles mostly have *m*-: Dagbani *mi*, Mooré *me*, Nabit and Farefare *mε*; even Toende Kusaal has *me*.

Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Sun.

Fù pū má' n tìs nīn-sáalā +∅, àmáa fù mà'

2SG NEG.IND lie **SER** give person-smooth:**SG NEG** but **2SG** lie

n tís nē Wínà'am Sí-sùŋ..

SER give **FOC** God Spirit-good:**SG**.

"You have not lied to a human being, but you have lied to the Holy Spirit."

(Acts 5:4, 1996)

When *nē*^{+/} marks constituent focus, aspect distinctions are unmarked. This constraint reveals that Aspectual *nē*^{+/} is a specialised use of Focus-*nē*^{+/}.

Examples of exclusion of Focus-*nē*^{+/}:

Exclusion with *N*-focussing of the subject:

M̃ zūgv_∅ zábìd.

1SG head **SER** fight:**DIPF**.

"My head is hurting/hurts." (No aspectual *nē*^{+/})

Reply to "Where is the pain?"

Ànó'ɔ̀nì_∅ dí́t sá'abò +∅?

Who **SER** eat:**DIPF** porridge **CQ?**

"Who eats/is eating millet porridge?" (No aspectual *nē*^{+/})

Exclusion of *nē*^{+/} in subordinate clauses:

In *ñ*-Clauses:

Ò dāa á nē bīg.

3AN TNS COP FOC child:**SG**.

"She was a child."

but *ón àñ bīg lā zúg* "because she's a child"

3AN:COMP COP child:**SG ART** upon

M̃ yí nē Bók.

1SG emerge **FOC** Bawku.

"I come from Bawku." SB

and *Yadda niñir yitne labaar la wummug ní.*

Yàddā-níñìr yít nē lābāar lā wúmmùg ní.

Assent-doing emerge:**DIPF FOC** news **ART** hearing **LOC**.

"Faith comes from hearing the news." (Rom 10:17)

but *Meeri one yi Magdala*

Meeri ónì yī Magdala

Mary **REL.AN** emerge Magdala

"Mary who came from Magdala" (Mk 16:9, 1996)

In Subordinate Supplement Clauses:

M̃ dāa p̃u nyē dāu lá kà ò áŋ ná'abā ^{+∅}.

1SG TNS NEG.IND see man:**SG ART** and **3AN COP** chief:**SG NEG**.

"I didn't see the man as a chief."

not **M̃ dāa p̃u nyē dāu lá kà ò á nē ná'abā*.

Contrast an *Insubordinate* Sequential clause [28.3.2](#) introduced by *kà*, showing aspectual *nē*^{+/}:

Ka ba due keŋ. Ka ban ken la, Jesus gbisid ne.

Kà bà dūe_∅ kēŋ. Kà bán kēn lā, Jesus gbīsɪd nē.

And **3PL** arise **SER** go. And **3PL:COMP** go:**IMPF ART**, Jesus sleep:**DIPF FOC**.

"So they started out. As they were travelling, Jesus was sleeping."

(Lk 8:22-23, 1976)

Exclusion of *nē*^{+/} in content questions: aspect-marking *nē*^{+/}:

Bó kà fù kúəsɪda ^{+∅?}

"What are you selling/do you sell?"

What and **2SG** sell:**DIPF CQ?**

Fù kúəsɪd bó ^{+∅?}

"What are you selling/do you sell?"

2SG sell:**DIPF** what **CQ?**

Bó kà fù kúmmà ^{+∅?}

"Why are you crying/do you cry?"

What and **2SG** cry:**DIPF CQ?**

Fù níŋɪd bó ^{+∅?}

"What are you doing/do you do?"

2SG do:**DIPF** what **CQ?**

Fù wá'e yáa ^{+∅?}

"Where are you going (just now)?"

2SG go where **CQ?**

Exclusion of *nē*^{+/} in content questions: constituent-focus *nē*^{+/}:

Mām áŋ bó ^{+∅?}

"What am I?"

1SG.CNTR COP what **CQ?**

Fù áaŋ_àń'ɔnè ^{+∅?}

"Who are you?"

2SG COP who **CQ?**

Fù bɔ̀d̥ nē bɔ́ +ø? "What do you want it with?"
 2SG want with what CQ? *Nē* must be interpreted as preposition (WK)

Focussing a constituent, thereby leaving aspect distinctions unmarked because *nē*^{+/} cannot be used twice:

M pú'vsìd̥ f nē. "I'm greeting you."
 1SG greet:DIPF 2SG.OB FOC.

M pú'vsìd nē ná'àb lā. "I'm greeting the chief."
 1SG greet:DIPF FOC chief:SG ART.

Ò kùəsìd̥ bá nē. "She's selling them."
 3AN sell:DIPF 3PL.OB FOC.

but *Ò kùəsìd sūmma lā nē.*
 3AN sell:DIPF groundnut:PL ART FOC.
 "She *sells/is selling* the groundnuts." ("They're not free.")

M pú'vsìd ná'àb lā nē. "I greet/am greeting the chief."
 1SG greet:DIPF chief:SG ART FOC.

33.1.2.2 Words which cannot be Focussed with *nē*^{+/}

Certain words do not prevent Focus-*nē*^{+/} from being used in the clause (unlike Interrogative proforms [33.1.2.1](#)), but cannot themselves be focussed with *nē*^{+/}. Words which behave like this include *sùṅā*^{+/} "good", *sùm*^m "good", *bē'ed*^ε "bad" *sìda*⁺ "truth" when used as adverbs, and the "two, three exactly" quantifier forms *àyíṅā*^{+/} *àtánā*^{+/} [16.2.2](#). AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

Lì àṅ sùṅā. "It's good."
 3INAN COP good:ADV.

Lì àṅ sùm. "It's good."
 3INAN COP good:ABSTR.

Lì àṅ bē'ed. "It's bad."
 3INAN COP bad:ABSTR.

Lì àṇ sídà.

"It's true."

3INAN COP truth.

[ye ka] o sariakadib a sum ne sida.

ò sàríyà-kādɪb áṇ súm nē sídà.

3AN law-drive **COP** good:**ABSTR** with truth.

"His judgments are good and true. (Rev 19:2, 1976)

If *nē*^{+/} does occur before such constituents it must be interpreted aspectually, limiting the state described to a particular time period, even with Descriptive Verbs and even if there is no explicit time marker in the clause (cf [33.1.2.3](#)):

Ṁ mór bīisá_ àtáṇā.

1SG have child:**PL NUM**:three.exactly.

"I've got exactly three children."

but *Ṁ mór nē bīisá_ àtáṇā.*

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 áṇ súnā.

"It was good." WK

3INAN TNS COP good:**ADV**.

Lì dāa á nē súnā.

"At the time, it was good." WK

3INAN TNS COP FOC good:**ADV**.

= *Sān kán lā, lì dāa á nē súnā.*

Time **DEM.SG ART**, **3INAN TNS COP FOC** good:**ADV**.

Lì à nē súnā.

"It's good." ("Now; it wasn't before." WK)

3INAN COP FOC good:**ADV**.

Emphatics [33.6](#) do not behave in this way:

bɔzugɔ o anɛ fɔ biig mɛn.

bɔ́ zúgɔ̀ ò à né fù bīig mén.

Because **3AN COP FOC 2SG** child:**SG** also.

"Because he is your child too." (Genesis 21:13)

33.1.2.3 Contexts where *nē*^{+/} cannot be Aspectual

Nē^{+/} as focus marker of VP complements and adjuncts precedes the focussed constituent. If this constituent follows the verb, there is a potential ambiguity between the focus particle and the aspect marker. The default interpretation is as aspectual, but this interpretation may be ruled out by the position of the particle, by incompatibility of Mood or Polarity, by Passive use of the verb, by impossibility of a Resultative reading of a Variable Verb Base Form, by the absence of an explicit time marker with Descriptive Verbs, or by the fact that the subject has generic status.

Aspectual use of *nē*^{+/} requires that it follow the verb word directly, with at most Liaison Enclitics intervening; if not, the relevant aspectual distinctions are unmarked:

Ò *kùəsɪdī* *bá* *nē*. "She's selling them." (Aspectual)
 3AN sell:DIPF 3PL.OB FOC.

but Ò *kùəsɪd* *sūmma* *lā* *nē*.
 3AN sell:DIPF groundnut:PL ART FOC.
 "She *sells/is selling* the groundnuts." (VP focussed: "They're not free.")

Nē^{+/} may only be used aspectually if the Verbal Predicator has positive polarity; if not, the relevant aspectual distinctions are again unmarked:

Ò *zàbɪd*. "He fights."
 3AN fight:DIPF.

Ò *zàbɪd* *nē*. "He's fighting."
 3AN fight:DIPF FOC.

but Ò *pū* *zábɪdā* ⁺∅. "He's not fighting"/"He doesn't fight."
 3AN NEG.IND fight:DIPF NEG.

The Predicator must have Indicative Mood for aspectual use of *nē*^{+/}. It is not clear if the relevant distinctions occur at all in the Irrealis.

In direct commands *nē*^{+/} may occur only as the VP-final marker of contrastive focus on the entire VP [33.1.2.5](#). It cannot be aspectual or focus a constituent.

Ò *gòsɪd* *nē*. "She's looking."
 3AN look:DIPF FOC.

Gòsɪm *kpē*. "Look here!"
 Look:IMP here.

but *Gòsim nē.* "Look!" ("Don't touch." WK)
Look:IMP FOC.

Ò à nē bāaṇlím. "She is quiet."
3AN COP FOC quiet:ABSTR.

but *Àṇ bāaṇlím!* "Be quiet!"
COP quiet:ABSTR.

However, a following *àlá* "thus" imposes a continuous/progressive imperfective sense on the verb, in a similar sense to *nē*^{+/} with a Dynamic Imperfective [22.4](#).

Passive constructions [23.1.1](#) may only express punctual events, and are thus limited to Perfective aspect, along with Dynamic Imperfective forms in the propensity/habitual sense only. Accordingly, the particle *nē*^{+/} can never be interpreted aspectually with passives.

(All interpretations WK):

Dāká lā zāṇl nē. "The box is portable by hand."
Box:SG ART carry.in.hands FOC. not "The box is being carried."

Dāká lā zīd nē. "The box is for carrying on the head."
Box:SG ART carry.on.head FOC. ("Not in the hands.")

Dāam lā núùd. "The beer gets drunk."
Beer ART drink:DIPF.

Dāam núùd zīná. "Beer gets drunk today."
Beer drink:DIPF today.

but *Dāam lā núùd nē.* Only "The beer is for drinking."
Beer ART drink:DIPF FOC. ("Not for throwing away.")
not "The beer is being drunk."

**Dāam núùd nē.* rejected by WK altogether

Contrast the intransitive use of Patientive Ambitransitive verbs expressing changes of state [23.1](#):

M̃ yóòd nē kúlìṇ lā. "I'm closing the door."
1SG close:DIPF FOC door:SG ART.

Kòlɪŋ lā yóòd nē. "The door is closing."

Door:SG ART close:DIPF FOC.

Ò tòlɪgɪd nē. "He's heating it up."

3AN heat.up:DIPF FOC.

Lì tòlɪgɪd nē. "It's heating up."

3INAN heat.up:DIPF FOC.

Lì mà'ad nē. "It is getting cool" (dipf of *mā'e*⁺ "get cool")

3INAN get.cool:DIPF FOC.

but *Lì mà'an nē.* "It gets *cooled*." (contrastive focus on the VP)

3INAN cool:DIPF FOC.

Not "It is getting cool"

(dipf of the causative *mā'al*^ε "cool" as passive)

A Variable Verb Base Form can only be interpreted as a Resultative Stative if it expresses a change of state in the subject.

M dá' búŋ. "I've bought a donkey."

1SG buy donkey:SG. ("What have you done?")

M dá' nē búŋ. "I've bought a *donkey*."

1SG buy FOC donkey:SG. ("What have you bought?")

M pū dá' bùŋā ⁺∅. "I haven't bought a donkey."

1SG NEG.IND buy donkey:SG NEG.

M pū dá' nē búŋā ⁺∅.

1SG NEG.IND buy FOC donkey:SG NEG.

"I haven't bought a *donkey*." ("I bought something else.")

Note that Assume-Stance verbs do not express a change of state in the subject, because Stance Verbs are not Stative in Kusaal [11.2.1](#). Accordingly, the Base Form of an Assume-Stance verb cannot accept a Resultative reading:

Ò dìgɪl nē.

"He's *laid it down*." ("I thought he'd pick it up.")

3AN lay.down FOC.

Ò dīgín nē.

3AN lie.down FOC.

"He's *lain down*." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."

WK: "You've said: the child looks filthy. I'm replying: He's been lying down."

Ò zì'ən nē.

3AN stand.still FOC.

"She's pregnant." (Not "She's stood still.")

With Descriptive Verbs, aspectual $nē^{+/-}$ may only occur if there is an explicit time expression in the immediate context. If not, $nē^{+/-}$ must be interpreted as focussing the VP or a constituent:

Ò gīm.

3AN be.short.

"She's short."

but Ò gīm nē.

3AN be.short FOC.

"He's *short*." ("I was expecting someone taller.")

Lì zùlím.

3INAN be.deep.

"It's deep."

but Lì zùlím nē.

3INAN be.deep FOC.

"It's *deep*."

Lì vèn.

3INAN be.beautiful.

"It's beautiful."

but Lì vèn nē.

3INAN be.beautiful FOC.

"It's *beautiful*." (Focus on the verb.)

M mór pŭ'ā.

1SG have wife:SG.

"I have a wife."

but M mór nē pŭ'ā.

1SG have FOC woman:SG.

"I have a woman."

(not "wife": implies an irregular liaison, WK)

The verb àɛŋ^a "be something/somehow" is *characteristically* followed by $nē^{+/-}$ focussing its complement [24.2](#):

Ò à *nē bīg*. "He/she's a child."
3AN COP FOC child:SG.

Descriptive Verbs can be constrained to a temporary stative meaning if there is an explicit time-limiting constituent present in the clause: this may, however, be as little as a tense marker. (This requirement for an *explicit* marker of time in the clause to licence aspectual *nē^{+/}* may be partly an artefact of acceptability judgments based on short isolated clauses.) The meaning is limitation of the state described by the verb to a particular time period, with a clear implication of contrast between the time referred to and other times when the state was not in effect:

Lì vèn *nē*. "It's *beautiful*." (Focus on the verb.)
3INAN be.beautiful **FOC**.

but *Nānnánā*, lì vèn *nē*.
 Now, **3INAN** be.beautiful **FOC**.
 "Just now, it's beautiful."

Sān kán lā, lì *dāa zúlum nē*.
 Time **DEM.SG ART**, **3INAN TNS** be.deep **FOC**.
 "At that time, it was deep."

Mù'ar lā dāa zúlum nē. "The lake was deep."
 Lake:SG **ART TNS** be.deep **FOC**. (Implying, "Now it's shallow." WK)

Lì *dāa vén nē*. "It was beautiful."
3INAN TNS be.beautiful **FOC**. WK: "I gave you a cup, and it was OK then, but you've spoiled it."

Lì *dāa būgvs nē*. "It was soft." ("Now it isn't.")
3INAN TNS be.soft **FOC**.

Aspectual interpretation of *nē^{+/}* is also forced when the following constituent does not permit focussing with *nē^{+/}* [33.1.2.2](#).

A generic subject is not semantically compatible with the use of *nē^{+/}* in aspectual function:

Nīgí òṇbɪd nē mōɔd. "Cows eat *grass*." ("What do cows eat?")
 Cow:PL chew:DIPF **FOC** grass:PL.

A form like *nīgí* is in itself ambiguous between generic and specific indefinite interpretations (like English "cows" versus the explicitly specific-indefinite "some cows") but the specific sense is only likely in the context of explicit introduction of a new discourse element [19.3](#). By context, pronoun subjects also can be generic or specific:

Bà òṅbɪd nē mōɔd. "They (cows in general) eat *grass*."
3PL chew:**DIPF** **FOC** grass:**PL**. or "They (particular cows) are eating grass."

A generic subject is compatible with the Perfective; this is seen, for example, in proverbs, though as proverbs shade into mini-anecdotes or analogies they may contain NPs that are not so much generic as illustrative or exemplary:

Kukoma da zab taaba ason'e bi'ela yela.
Kùkòma dá zàb t̄ābá à-sōṅ'e b̄ɪ'əlá ȳɛla.
 Leper:**PL** **TNS** fight each.other **PERS**-better.than slightly about.
 "Lepers once fought each other about who was a bit better." KSS p40

The particle *nē*^{+/} in its aspectual sense is omitted in replying to polar questions or responding to questions by repeating the verb:

A: *Gòsɪm!* "Look!"
 B: *M̄ gósìd!* "I'm looking!"
 A: *Fò gósìd n̄ɛ?* "Are you looking?"
 B: *M̄ gósìd!* "I'm looking!"

This probably simply represents the cross-linguistically common phenomenon of ellipsis in declarative replies to questions [27.1.5](#).

33.1.2.4 VP Constituent Focus

(See [33.1.2.3](#) for the constituent-focus sense of *nē*^{+/} in the examples below.)

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 [33.1](#):

M̄ dá' nē búṅ. "I've bought a donkey."
1SG buy **FOC** donkey:**SG**. ("What have you bought?")

Nīgí òṅbɪd nē mōɔd. "Cows eat *grass*."
 Cow:**PL** chew:**DIPF** **FOC** grass:**PL**. ("What do [generic] cows eat?")

However, under the scope of a negative, focus is likely to be **contrastive**:

M̃ pō dá' nē búṅā +∅.

1SG NEG.IND buy FOC donkey NEG.

"I haven't bought a *donkey*." ("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 *nē*^{+/} before a definite object is usually aspectual:

Nīḡí lā ʒṅbìd nē mōɔd lā.

Cow:PL ART chew:DIPF FOC grass:PL ART.

"The cows are eating the grass."

Nā'-síəbà ʒṅbìd nē mōɔd lā.

Cow-INDF.PL chew:DIPF FOC grass:PL ART.

"Some cows are eating the grass."

If focus does occur with old-information arguments, it is **contrastive**.

Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Sun.

Fù pō má' n tìs nīn-sáalā +∅, àmáa fù mà'

2SG NEG.IND lie SER give person-smooth:SG NEG but 2SG lie

n tís nē Wínà'am Sí-sùḡ..

SER 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)

Line ka ba'amaannib maanne tisid bada la, ba maanne tisid ne kikiris, ka pu maanne tisid Wina'am.

Lìni kà bà'-māannib máànni ∅ *tísìd bádà lā,*

REL.INAN and idol-sacrificer:PL sacrifice:DIPF SER give:DIPF idol:PL ART

bà màànni ∅ *tísìd nē kíkiris kà pō máànni*

3PL sacrifice:DIPF SER give:DIPF FOC fairy:PL and NEG.IND sacrifice:DIPF

∅ tísìd Wínā'amm +∅.

SER give:DIPF 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 *àɛn*^a "be something/somehow" in its ascriptive sense [24.2](#) is non-referring and almost prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by *nē* for **ordinary** focus:

- Ò à nē bīg.* "She is a child."
3AN COP FOC child:SG.
- Ò dāa á nē bīg.* "She was a child."
3AN TNS COP FOC child:SG.
- Ò à nē nīn-súŋ.* "She's a good person."
3AN COP FOC human-good:SG.
- Dīb á nē bōn-súŋ.* "Food is a good thing."
 Food **COP FOC** thing-good:SG.
- Ò à nē bāaŋlīm.* "She is quiet."
3AN COP FOC quiet:ABSTR.
- Lì à nē zāalīm.* "It's empty."
3INAN COP FOC empty:ABSTR.
- Lì à nē būgvsígā.* "It's soft."
3INAN COP FOC soft:ADV.

While such complements are characteristically indefinite, this is not invariably so: the pragmatic non-recoverability may lie in the internal relationship of the components of the complement, as for example in

Biis la diemid nē dua gbinin. Ba zamisid nē bula wa'ab. Ba anε Apam biis.

Bīs lā dí'amìd nē dúaŋ gbínnī-n. Bà zà'misid nē
 Child:PL ART play:DIPF FOC dawadawa:SG base:SG-LOC. 3PL learn:DIPF FOC
būla wá'àb. Bà à nē À-Pām bīs.

bula dance:SG. **3PL COP FOC PERS**-Apam child:PL.

"The children are playing under a dawadawa tree. They are learning the *bula* dance. They are Apam's children." KKY p6

(The father Apam has already been mentioned, as have the children, but the fact that the children belong to Apam is new.)

Ka bumbubda banε lu gɔn'ɔs sɔugin la anε banε wum pian'ad la, ka...

Kà bōn-búbudà bànì lù gòṅ'ɔs súugū-n lā á nē

And thing-planting:PL REL.PL fall thorn:PL among-LOC ART COP FOC

bànì wòm pìàṅ'ad lā, kà

REL.PL hear speech ART, and...

"And the seeds which fell among thorns are those who heard the word, but..."
(Lk 8:14)

Here, proper names are non-referential (cf Huddleston and Pullum p402):

O yū'ur na anε Joon.

"His name will be John." (Lk 1:60)

Ò yū'ur ná ā nē Joon.

3AN name:SG IRR COP FOC John.

Ò à né À-Wīn.

"He is Awini."

3AN COP FOC PERS-Awini.

As with objects, when the complement falls under the scope of the negative (here with the negative verb *kā'ε*⁺ "not be") focus is difficult to interpret in the "ordinary" sense, so that if *nē* is present at all the result is normally **contrastive**:

M á nē dɥ'átà.

"I'm a doctor."

1SG COP FOC doctor:SG.

M kā' dɥ'átāa +∅.

"I'm not a doctor."

1SG NEG.BE doctor:SG NEG.

M kā' nē dɥ'átāa +∅.

"I'm not a *doctor*." ("I'm a lab assistant.")

1SG NEG.BE FOC doctor:SG NEG.

Focus on a **Locative complement** 23.3 typically involves a definite pre-determiner of a locative postposition or an old-information place name, but the fact that a referent is at a known place is often new information resulting in **ordinary** focus on the locative. The head of a locative AdvP is the locative particle, with a zero allomorph for Kusaal place names 20.3; like other postpositions, it is not itself referential even though it has a pre-determiner. (Cf locative pre-modifiers 19.7.2.3.)

Dāy lā bé nē dɔ́-kàṅā lā púugū-n.

Man:SG ART EXIST FOC hut-DEM.DEI.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 bέ nē mōɔgυ-n.

1SG.CNTR EXIST FOC grass:**SG-LOC**.

M̃ yí nē Bók. "I come from Bawku." SB

1SG emerge **FOC** Bawku.

Yadda nijir yitne labaar la wummug ni.

Yàddā-níjìr yít nē lābāar lā wúmmùg ní.

Assent-doing emerge:**DIPF FOC** news **ART** hearing **LOC**.

"Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of *bέ*⁺, where the locative is a clause adjunct:

Dàṽ-sō' bέ dó-kàṇā lā púvgū-n.

Man-**INDF.AN EXIST** hut-**DEM.DEI.SG ART** inside:**SG LOC**.

"There is a certain man in that hut."

There are few examples of *nē*-focus on an adjunct in my data; one is

Tì dít sā'ab nē záàm. "We eat millet porridge *in the evening*."

1PL eat:**DIPF** porridge **FOC** evening. ("When do you eat porridge?")

33.1.2.5 VP Focus

When *nē* is placed finally in the VP and cannot be interpreted as aspectual, there is focus on the entire VP; this is usually **contrastive**, reflecting the fact that non-contrastive "ordinary" focus on the VP is the *default* state implied by the unmarked construction of a clause with a VP.

Examples (cf [33.1.2.3](#) for the the constituent-focus sense of *nē*^{+/} here):

Gòsım nē.

"Look!" ("Don't touch." WK)

Look:**IMP FOC**.

Ò kùəsıd sūmma lā nē.

3AN sell:**DIPF** groundnut:**PL ART FOC**.

"She *sells/is selling* the groundnuts." ("They're not free.")

Ò gım nē.

"He's *short*." ("I was expecting someone taller.")

3AN be.short **FOC**.

Lì zùlǔm nē.
3INAN be.deep **FOC**.

"It's *deep*."

M̄ bóɔdī f nē.
1SG want **2SG.OB FOC**.

"I really *love* you."

Ò dìgǔl nē.
3AN lay.down **FOC**.

"He's *laid it down*." ("I thought he'd pick it up.")

Ò dìgǔn nē.
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 in fact you've gone to bed."

Kà lì bóɔdìg nē.
 And **3INAN** get.lost **FOC**.

"It's *lost*."

Contradicting "someone hid it." [28.3.2.1](#)

Dāká lā zǎnǐ nē.
 Box:**SG ART** carry.in.hands **FOC**.

"The box gets carried *in the hands*."

("Not on your head.")

Dāká lā zīd nē.
 Box:**SG ART** carry.on.head:**DIPF FOC**.

"The box is for carrying *on the head*." ("Not carrying in the hands.")

Dāam lā núùd nē.
 Beer **ART** drink:**DIPF FOC**.

"The beer is for *drinking*."

("Not washing with!")

Lì mà'an nē.
3INAN get.cool:**DIPF FOC**.

"It gets *cooled*."

("Not heated!")

An idiomatic use, perhaps developed from pragmatic non-recoverability for social reasons (i.e. marking a euphemism), is seen in

Ò zì'ən nē.
3AN stand.still **FOC**.

"She's *pregnant*." (Not "She has stood still.")

33.2 Clefting and Preposing with *kà*

Kà-clefting arises from constructions with Supplement *kà*-clauses [29.2](#) in a way similar to the development of *n*-clefting from Serial VPs:

Aseε line an be'ed ma'aa ka m na tun'e niŋ.

Àséé líní àŋ bē'ed má'aa kà m ná tūŋ'e_ø níŋ.

Only **REL.INAN COP** bad only and **1SG IRR** be.able **SER** do.

"It's only that which is bad that I can do." (Rom 7:21)

Once again, there is an implicature of exhaustiveness and exclusiveness, in this case made explicit by *mà'aa* "only."

The preposed element may be extracted from a subordinate clause:

Li anε ya taaba banε pu'usid Wina'am ka li nar ka ya kad saria.

Lì à né yà tāaba bání pù'usid Wínà'am kà lì nár

3INAN COP FOC 2PL fellow **REL.PL** greet:**DIPF** God and **3INAN** must

kà yà kád sàríyà.

and **2PL** drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

The main clause may again have a Non-Verbal Predicate:

Ōni_ø lá kà fù dāa nyēt.

3AN.CNTR SER that and **2SG TNS** see:**DIPF**.

"This is he whom you saw." WK

Ànó'oni_ø nŵá kà tì nyētá +ø?

Who **SER** this and **1PL** see:**DIPF CQ**?

"Who is this that we can see?"

Bō_ø lá kà m nyētá +ø?

What **SER** that and **1SG** see:**DIPF CQ**?

"What is that that I can see?"

Once again, there is a construction with ellipse of all the main clause except the NP. Independent tense marking is possible in the ellipted structure, as with *n*-focus. Preposed direct objects leave a null-anaphora gap [23.1](#).

Bó kà fù kúesida +ø?

"What are you selling?"

What and **2SG** sell:**DIPF CQ**?

Unlike the construction with *n*, the effect of *kà*-preposing remains *foregrounding*, not focus. Preposing with *kà* is compatible both with *n*-focus and with the occurrence of the focus particle *nē*^{+/}:

Bī'əl bī'əl kà kōlīg pē'èl nē.

Little little and river:SG get.full **FOC**.

"Little by little, and a river is full." (Proverb)

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.

Dìn-zúg kà mām Paul n bé sārīgá nī Yesu Kiristo zúg yānám

That-upon and **1SG.CNTR** Paul **SER EXIST** prison:SG **LOC** Jesus Christ upon **2PL.CNTR**

búúd-bànī kā' Jew díím lā yélà.

tribe-REL.PL **NEG.BE** Jew individual.PL **ART** about.

"Therefore, I, Paul, am in prison for Jesus Christ because of you whose tribe is not Jewish." (Eph 3:1, 1996)

Kà-foregrounding of VP objects containing interrogative pronouns is very common. There is no syntactic movement rule for interrogative pronouns/proforms:

Bùgúm lā yít yáa ní ná +ø?

Fire **ART** emerge:DIPF where **LOC** hither **CQ?**

"Where is the light coming from?"

but *bō* "what?" is very often preposed with *kà*, as in the example above; preposing is *required* if the sense is "why?" rather than "what?":

Bó kà fù kúmmà?

"Why are you crying?"

cf **Fù kúm bó?*

*"What are you crying?"

This construction with *bó kà*... is by far the most frequent way of rendering "Why?", and most cases of *bó kà*... have this meaning, but foregrounding *bō* in the normal sense "What?" occurs too:

Bō ka ti na niŋε?

"What are we going to do?" (Acts 21:22)

Bó kà tì ná niŋε +ø?

What and **1PL IRR** do **CQ?**

Other queried NP objects in content questions are often preposed with *kà*:

Nū'-bíbɪsá_ àlá kà fù nyētá +ø?

Hand-small:PL NUM:how.many and 2SG see:DIPF CQ?

"How many fingers can you see?"

Kà-preposing can also be used to extract an interrogative pronoun from a prepositional phrase; the original position must be filled by an anaphoric pronoun:

Ka anɔ'ɔnam ka Wina'am sunf da pɛlig nɛ ba yuma piisnaasi la?

Kà ànɔ'ò-n-àm kà Wínà'am súnf dá pɛlɪg nɛ bà

And who-PL and God heart:SG TNS go.white with 3PL

yùma pīs nāasí lá +ø?

year:PL tens four ART CQ?

"And who was God angry with for forty years?" (Heb 3:17)

As interrogative pronouns are intrinsically focussed, these constructions, like other cases of preposing with *kà*, are best regarded as foregrounding, not focus.

Preposing the object of an Invariable Verb is uncommon, and interrogative pronouns in such cases usually remain *in situ*:

Fù bɔ̀d bɔ́ +ø?

"What do you want?"

2SG want what CQ?

Examples do occur:

Ningbiŋ bɔ buudi ka ba na ti mɔra?

nìn-gbīŋ bɔ́-būudí kà bà ná tī mɔ́rá +ø?

Body-skin:SG what-sort and 3PL IRR afterwards have CQ?

"What kind of body will they have?" (1 Cor 15:35)

Predicative complements do not seem to permit preposing. Thus, the interrogative pronouns are left *in situ* in:

Mām áŋ bɔ́ +ø?

"What am I?"

1SG.CNTR COP what CQ?

Kà fù áaŋ_ ànɔ'ɔnɛ +ø?

"Then who are you?"

And 2SG COP who CQ?

Adjuncts are often preposed with *kà*; there is probably a contrast between foregrounding with *kà* and focussing with *nɛ*:

Nwādisá_àtán' kà fù ná lēb nā.

Month:PL NUM:three and 2SG IRR return hither.

"You're to come back in three months."

Instructions: not a reply to a question; excludes any other time.

Tì dít sā'ab nē záàm.

1PL eat:DIPF porridge FOC evening.

"We eat millet porridge in the evening."

Reply to "When do you eat porridge?"

Kà-preposed elements cannot be clause subjects, as is to be expected if the construction has arisen from ellipsis, because a Supplement Clause normally has a different subject from its main clause.

The only structure other than a NP (including *ñ*-Clauses) or AdvP that I have found preposed with *kà* is *wūv* "like" + object:

Wūv búŋ né kà ò zót.

Like donkey:SG like and 3AN run:DIPF.

"It's like a donkey that he runs."

**Né m̀ nú'ùg kà m̀ sī'is.*

*With 1SG hand:SG and 1SG touch.

attempted for "With my hand, I touched it."

Kà-preposing is often simply a means of bringing a constituent before the clause subject with **no implication of foregrounding** at all. Purely formal *kà*-preposing is a feature of many relative clauses [31.2.2](#). Manner, place and reason adjuncts can *only* precede the subject by *kà*-preposing, and Absolute Clauses as adjuncts must often precede the main clause subject so that constituent order parallels event order [22.2.1](#) [27.2](#) [26.1](#) [31.1.1](#) [28.3.2](#):

Mán nwè' dāy lā zúg kà police gbán'a_m.

1SG:COMP hit man:SG ART upon and police seize 1SG.OB.

"Because I hit the man, the police caught me." ILK

33.3 Extraposition and Dislocation

A NP or AdvP placed after a distinctively phrase-final verb form must be an extraposed clause adjunct rather than part of the VP. The commonest cases involve manner-adverbs, where the effect seems to be to intensify the adverb:

Ya yidigya bēdegv. "You are very much mistaken." (Mk 12:27)
Yà yídìg yā bēdvǵū.
 2PL go astray PFV much.

M̃ pú'ùs yā bēdvǵū. "Thank you very much."
 1SG greet PFV much.

NP objects (other than pronouns) can be extraposed; the sense seems to be that the extraposed element is contrary to expectation:

Ò nyè yā ná'àb lā. "He's seen the chief." ("of all people!")
 3AN see PFV chief:SG ART.

Ò dà' yā múj. "She's bought rice." ("of all things!")
 3AN buy PFV rice.

Contrast the effects of focussing with *nē*, and foregrounding by *kà*-clefting:

Ò dà' nē múj. "She's bought rice."
 3AN buy FOC rice. (reply to "What did she buy?")

Lì à nē múj kà ò dá'. "It's rice that she's bought." ("not millet.")
 3INAN COP FOC rice and 3AN buy.

Leftward dislocation of objects and complements on the basis of **weight**, without clefting or *kà*-preposing, occurs in e.g.

Wilkanε bεε m ni ka pu wanna, m Ba' nwaadi li nε [sic: 1996 n] *basid.*

Wil-kànɿ bεε_m̃ ní kà pū wéñnā ⁺∅,

Branch-REL.SG EXIST 1SG LOC and NEG.IND bear.fruit:IPVF NEG.

m̃ Bā' ṇwá'adī lí n básìd.

1SG father:SG cut:DIPF 3INAN.OB SER throw.out:DIPF.

"A branch which is in me and does not bear fruit, my father cuts out."
 (Jn 15:2)

Onε ka ba tis o ka li zu'oe, ba mε m̃ɔr puten'er ye o na lēbis linε zu'oe.

Ònɿ kà bà tís·ò_∅ kà lì zú'e, bà mē m̃ɔr

REL.AN and 3PL give 3AN.OB and 3INAN become.much, 3PL also have

pú-tēṇ'er yé ò nà lēbis línì zù'e.

inside-mind:SG that 3AN IRR return REL.INAN become.much.

"Whom they have given much to, they expect he will return much." (Lk 12:48)

A heavy indirect object is right-dislocated to follow the object in

Mam Paul ... tisid gboŋ kaŋa Wina'am nidib bane a sida dīm ka a yinni ne Jesus Christ Efesus teŋin la.

Mām Paul ... tísìd gbáŋŋ-kàŋā Wínà'am níðìb bàni àŋ

1SG.CNTR Paul ... give:**DIPF** book-**DEM.DEI.SG** God person:**PL REL.PL COP**

sídà dīm kà áŋ yīnní nē Jesus Christ Efesus téŋī-n lā.

truth individual:**PL** and **COP** one with Jesus Christ Ephesus land:**SG-LOC ART**

"I, Paul ... give this letter to God's people who are truthful and one in Jesus Christ in Ephesus." (Eph 1:1, 1976; KB ...*gbaŋ kaŋa tisid Wina'am...*)

33.4 Presentational Constructions

A number of constructions are employed to introduce new entities into discourse. The NPs referring to the entities are, naturally, characteristically indefinite; it is in this context that absence of the article *lā*⁺ typically reflects an indefinite but *specific* rather than generic reference 19.3. The NP may (but need not) have an Indefinite post-determining pronoun or number.

The verb *bē*⁺ "be somewhere/exist" is frequent in presentational clauses, often with a following Serial VP construction 26 or Supplement Clause 29.2.

Dau da be mori o po'a yimmir

Dāŋ dá bē_ ø mārí_ò pŋ'à-yīmmír

Man:**SG TNS EXIST SER** have 3AN wife-single:**SG**

"There was a man who had one wife." KSS p26

Pu'a sɔ' da be mɔr o bipuŋ ka kikirig dɔl o.

Kà pŋ'à-sɔ' dá bē_ ø mār_ò bī-púŋ kà kīkīrīg dɔll-ó_ø.

And woman-**INDF.AN TNS EXIST SER** have 3AN child-girl:**SG** and fairy:**SG** follow 3AN.**OB**.

"There was a woman whose daughter was oppressed by a devil." (Mk 7:25)

Dapa atan' n da be.

"There were once three men." KSS p16

Dāpá_àtán' n dá bē.

Man:**PL NUM:three SER TNS EXIST**

Other verbs expressing location can introduce the subject as a new topic, and verbs of finding, seeing etc can introduce their objects in a similar way.

Ka dau daa zin'i Lystra ni ka pu tun'e kenna.

Kà dāy dāa zín'i Lystra ní kà pō tūŋ'e_ ∅ kēnná +∅.

And man:SG TNS sit Lystra LOC and NEG.IND be.able SER go:DIPF NEG.

"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Anina ka o nye dau ka o yu'ur buon Aneas.

Àníná kà ò nyē dāy kà ò yū'ur búèn Aneas.

ADV: there and 3AN see man:SG and 3AN name:SG call:DIPF Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

Change of polarity within a Serial VP construction, which is otherwise unusual, may occur with presentational constructions:

Ya sieba be kpela ku kpil asee ba ti nye Wina'am na'am la.

Yà sīēba bē kpēlá_∅ kú kpīl +∅, àsēē bà nà ti

2PL IND.F.PL EXIST here SER NEG.IRR die NEG, except 3PL IRR afterwards

nyē Wínà'am ná'àm lā.

see God kingdom ART.

There are some of you here who will not die before they see the kingdom of God." (Lk 9:27)

33.5 Free and Bound Personal Pronouns

There are environments in which only free pronoun *forms* are possible.

Isolation:	<i>Mánè?</i>	"Me?"
Apposition:	<i>mān Paul</i>	"I, Paul"
Coordination:	<i>tīnám nē fūn</i>	"us and you"
Before Relative Pronouns:	<i>fūn-kánì ...</i>	"you, who ..."

and for some speakers, the 2nd persons before direct commands after a *yà'*-clause [30](#). In these contexts the free pronoun forms are simply allomorphs of the bound pronouns; but in other contexts, the choice of a free pronoun over bound implies *contrast*. For the special case of **logophoric** use see [29.3.2](#).

A personal pronoun which is focussed [33.1](#) must be contrastive:

Manε an kōnbkem suŋ la.

Mānι_ ∅ áŋ kóŋb-kīm-sùŋ lā.

1SG.CNTR SER COP animal-tender-good:SG ART.

"I am the good shepherd." (Jn 10:11)

Bà nyè nē mān.

"They have seen *me*."

3PL see **FOC 1SG.CNTR**.

Funε mi', ka man zi'.

Fōnι_ ∅ mī', kà mān zī'ι +∅.

2SG.CNTR SER know, and **1SG.CNTR NEG.KNOW NEG**.

"You know but I do not know." (Rev 7:14)

Subordinate clauses cannot show any of the other markers of focus:

Li nar ka on du ka man sie.

Lì nàr kà 5n dō, kà mān sīe.

3INAN must and **3AN.CNTR** rise, and **1SG.CNTR** lower.

"He must increase and I must decrease." (Jn 3:30)

Contrastive pronouns as subjects of *ñ*-Clauses are distinguishable from the usual *non-contrastive* fused *ñ*-Clause pronoun subject series [15.1](#):

wuu mane a si'em la.

wūv mánι_ ∅ àñ sī'am lā.

like **1SG.CNTR COMP COP INDF.ADV ART**.

"as I am." (1 Cor 7:7, 1996)

33.6 Emphatics

I have borrowed the term "Emphatic" from Jeffrey Heath's Songhay grammars (e.g. Heath 2005 pp202ff.) The category corresponds quite well to Huddleston and Pullum's "Focussing Modifiers" in English (pp586ff); however, this "focus" is not "Informational Focus" of the kind discussed in [33.1](#) but "Scopal Focus", the semantic element which the particle applies to: this need not be the syntactic head of the NP, and is not necessarily the informational focus of the clause.

Emphatics occur after top-level NPs or AdvPs within clauses. They relate the NP or AdvP to the discourse context. Those which are not loanwords share the unusual morphological feature of forming the LF by adding *-nε* to the SF [6.4](#).

mè DK KT SB NT *mèn* WK; clause finally (all sources) *mèn*^ε "also, too"

bɔzugɔ o anε fɔ biig mɛn.

bɔ zúgɔ ò à né fù bīig 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 pɹ'ā mé kè nā.

3AN wife:SG also come hither.

The particle may follow *kà* + ellipted subject pronoun [27.1.5.2](#):

Wina'am tɪsɪd ... ka mɛ tɪsɪd ...

Wínà'am tísìd ... kà mé tɪsɪd ...

God give:IPVF ... and also give:DIPF

"God gives ... and [God] also gives ..." (1 Cor 15:38)

mà'aa (LF *mà'anē*) "only"

Aσεε line an bε'ed ma'aa ka m na tun'e nɪŋ.

Àséé línì àŋ bē'ed má'aa kà m ná tūŋ'e_∅ níŋ.

Only REL.INAN COP bad only and 1SG IRR be.able SER do.

"It's only that which is bad that I can do." (Rom 7:21)

(*Kà*-foregrounding of the NP, which also implies exclusiveness [33.2](#).)

gùllum^{NE} "only"

M níŋī lí m gùllum. "I did it myself alone."

1SG do 3INAN.OB 1SG only

kòtāa^{NE} "at all"

Áyì kòtāa.

"Not at all."

The added *-ne* of the LF of these words is found also with the quantifier *pāmm* SF *pāmné* LF "a lot" and the adverb *nyāe*^{NE}/ "brightly, clearly" [6.4](#).

The loanword **hālí**, in addition to its many other rôles, can be used preceding a top-level NP in the sense "even":

Hali tuumbε'ed dim nɪŋɪd ala.

Hālí tòum-bē'ed díŋ níŋìd àlá.

Even deed-bad:PL individual:PL do:DIPF ADV:thus.

"Even sinners do that." (Lk 6:33)

Lexicon

34 Greetings and Other Formulae

(a) Enquiries after health.

[Fù sá] gbìs wēlá?
Dúø wēlá?

"How did you sleep?"
literally "How did you get up?"
both usual greetings on meeting
for the first time in the morning.

Nīntāŋ á wēlá?
Yú'uy á wēlá?
Fù yī-dímàa?
Nìn-gbīnáa?
Fù sìdaa?
Pų'ā nē bíisèè?

"How is the day/afternoon?"
"How is the evening?" literally "night"
"[How are] your household?"
"[How is your] body?" i.e. "How are you?"
"[How is your] husband?"
"[How are your] wife and children?"

... and so on, often at great length.

Replies:

Àláafù bé.

literally "There is health."
(Also a general purpose greeting itself.)

Àláafù bé·o.

... for him/her.

Àláafù béē bá.

... for them.

(b) Blessings

These follow the pattern

Báŋkà né fù ...

"Blessing with your ..."

with the introductory words usually ellipted; the reply to all of these is *Náa*.

Kēn kēn.

"Welcome!" *Kēn*, gerund of *kēŋ* "come"
cf Hausa: *Barkà dà zuwàa*.

Nē záàm záàm.
Tūuma!

"Good evening."

or Tūuma tūuma!

literally "(Blessing on your) work!"
Interpreted to include practically anything
which could be regarded as work, and hence
probably the commonest daytime greeting.

Nē sŋsɔgā.

"(Blessing on your) conversation." to greet a group of people talking; also to greet a person sitting quietly alone, assumed to be conversing with his or her own *wīn*^{nɛ/} (spiritual essence, personal *genius*)

Nē fù bŋrɪyá-sùŋ.

"Merry Christmas." (*bŋrɪyá*⁺ ← **burŋya* ← Twi/Fante *brɔnya*, of unclear ultimate origin)

Nē fù yòum-pāalíg.

"Happy New Year."

(c) Prayers. Reply *Àmí!* "Amen!"

Wīn ná lēbɪsɪ f nē láafɪya.

"Safe journey!"
literally "[I pray that]
God will bring you back in health."

Wīn ná sŋɪ f.

"God will help you."
Generally a formula expressing thanks.

Wīn ná tā'así f.

"Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply *Tò* "OK", or as appropriate.

Bēogv lā.

"See you tomorrow!" ("That's tomorrow.")

Àtɪnì dāarì lā.

"See you on Monday."

Gbìsɪm sŋgā.

"Sleep well."

Kpèlɪmī sŋm.

"Remain (ye) well."

Said by departing person to those remaining.

Pù'usɪm yín.

"Greet (those) at home." i.e. "Goodbye."

reply *Tò* "OK", or *Bà nà wŋm* "They will hear."

(e) Miscellaneous formulae

M pú'ùs yā.

"Thankyou."

reply *Tò*, or *Pù'usug kā'e.*

"No thanks (sc. needed.)"

M pú'ùs yā bédugŋ.

"Thank you very much."

Gáafàra.

(← Arabic) "Pardon me, sorry."

Also (like Ghanaian English "sorry") used simply to empathise with misfortune, with no implication of apology as such.

Kābɪr kābɪrí!

Formula asking admission to a house or compound. "Knock, knock!" Twi *agoo* is also used. (Actual knocking is for robbers trying to find out if anyone is at home.)

Dìm sūgɔrú.

"Please forgive me."

M̀ bɛ̀lìm nɛ̀.

"I beg you." Not equivalent to "please"; Kusaasi etiquette does not demand a spoken equivalent of the English "please."

X lábāar á wēlá?

"What is the news of X?"

A common initial reply is *Dīb má'àa*.

"Only food." i.e. "good"

M̀ mōr kú'əm náa?

literally "Shall I bring water?"

Traditional first words to guest.

Reply for "No, thank you" is *Kù'əm á súm*.

("Water is good.")

Wīn yél sídà.

"Bless you!" (after a sneeze.) Literally

"God speaks truth"; WK explained: "If you sneeze, it means someone elsewhere is praising you."

Fù wúm Kūsáalɛɛ?

"Do you understand [literally "hear"] Kusaal?"

Ēɛn, m̀ wúm.

"Yes, I do."

Áyì, m̀ pū wúmmā.

"No, I don't."

35 Structured Semantic Fields

35.1 Kinship Terms

Though my informants readily cite them in isolation, kinship terms seem in actual usage to be always possessed. Thus *m̃ sàam* "my father", *ñn-só' sàam* "someone's father" etc.

Pervading the whole system is the importance of birth order among same-sex siblings, and its irrelevance between siblings of opposite sex. Some basic terms, such as those for siblings, do not in themselves distinguish sex, in a way that is surprising from a European perspective. Seniority goes by family branch, so I am senior to you if my parent is senior to your parent of the same sex, regardless of our own ages. Seniority among wives is determined by marriage order and is also independent of actual age. Age, as opposed to seniority, is in itself of little significance and many people do not know their own ages exactly.

My

Father	is my	<i>sàam</i> ^{ma} , less formally <i>bā'</i> ^{+/}
Father's elder brother		<i>sàam-kpēɛŋm</i> ^m
Father's younger brother		<i>sàam-pīt</i> ^{a/}
Father's sister		<i>pùgvɔɖɪb</i> ^a

My

Mother	is my	<i>mà</i> ⁺
Mother's elder sister		
or senior co-wife		<i>mà-kpēɛŋm</i> ^m
Mother's younger sister		
or junior co-wife		<i>mà-bīl</i> ^a or <i>mà-pīt</i> ^{a/}
Mother's co-wives	are my	<i>mà nám</i> ^a
Mother's brother	is my	<i>áŋsɪb</i> ^a

I am my mother's brother's *āŋsɪŋ*^a; to all the other relatives above I am *bīig*^a "child" or specifically *dà-kòɔŋr*^ε "son" or *pɸ'à-yù*⁺ "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent rôle towards his sister's child.

There are no special terms for aunts or uncles by marriage. Kusaasi tend to find the English usage of the same term for them as for blood relations bizarre.

My			
Grandparent	is my	<i>yáab^a</i>	Sex can be specified as
		♂ <i>yāa-dáy⁺</i>	
		♀ <i>yāa-pu'á^a</i>	
Grandchild		<i>yáaŋ^a</i>	

These words are also used for ancestor/descendant.

My		
Elder sibling of my own sex is my		<i>bīar^{ε/}</i>
Younger sibling of my own sex is my		<i>pītú⁺</i>
Sibling of opposite sex is my		<i>tāuŋ^{+/}</i>

These words are also used for cousins, with seniority, as always, going by family branch.

My			
Wife	is my	<i>yī-pu'á^a</i> or simply <i>pu'ā^a</i>	
Wife's parent		<i>dīam^{ma}</i>	Sex can be specified as
		♂ <i>dīam-dāy⁺</i>	
		♀ <i>dīam-puāk^a</i>	
Wife's sibling		<i>dākīig^a</i>	Sex can be specified as
		♂ <i>dàkì-dāy⁺</i>	
		♀ <i>dàkì-puāk^a</i>	

Dīam^{ma} is also used as polite address by a man to an unrelated woman of similar or greater age to himself but not old enough to be called *m̄ m̄* "my mother." 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 *Bùgúm-tōŋŋ^ε*, the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' *bīig^a* "child" and my wife's siblings' *dākīig^a*.

My		
Husband	is my	<i>sīd^a</i>
Husband's parent		<i>dàyāam^{ma}</i> Sex can be specified as
		♂ <i>dàyāam-dáy⁺</i>
		♀ <i>dàyāam-puāk^a</i>
Husband's elder brother		<i>sìd-kpēēṇm^m</i>
Husband's younger brother		<i>sìd-bīl^a</i>
Husband's sister		<i>sìd-puāk^a</i>

I am my husband's parents' *bīig*^a "child"; all my husband's siblings (of both sexes) call me *pɥ'ā*^a "wife."

My co-wife is my *nìn-tāa*⁼, "rival" in Ghanaian English. In traditional stories the rôle of the "wicked stepmother" in European folklore is assumed by one of the father's other wives.

Two men married to sisters are each *dàkì-tù*⁺ to the other; two women married to brothers are *nìn-tāas*^ε, "co-wives." "Fiancée" is *pɥ'à-ēlín*^a.

35.2 Personal Names

Kusaasi personal names are mostly formed by the Personifier Clitic *À-* 19.10 followed by common nouns, but a few based on adjective stems are preceded by *Ñ-*, becoming *M-* before labial consonants. There are also some less common names with the clitic *À-* followed by a whole verb phrase, or even by a clause. Most names of foreign origin also take the *À-* clitic: *À-Sīimóón* "Simon"; none take *Ñ-/M-*.

Many names relate to birth circumstances. Kusaasi do not use surnames traditionally; although everyone knows his or her clan, and indeed at least part of its genealogy, clan names are not used as surnames, as they are with the Mossi.

A relatively few personal names account for a large proportion of all individuals; *À-Wīn* and *À-Būgur* are especially common as names for males. Identification of particular individuals often requires further enquiries about kindred or residence.

On the form in which Kusaal personal and place names appear in English-language contexts see 35.3.1.

Examples:

<i>À-Wīn</i> ^{NE/}	Awini	<i>wīn</i> ^{NE/}	"personal god, <i>genius</i> "
<i>À-Būgur</i> ^ε	Abugri	<i>būgur</i> ^ε	"object where a <i>wīn</i> ^{NE/} resides"; also a <i>wīn</i> ^{NE/} inherited from one's mother's side
<i>À-Nà'ab</i> ^a	Anaba	<i>nà'ab</i> ^a	"chief" but in the sense "afterbirth" (because a chief leaves his house after his retainers)
<i>À-Fūug</i> ^{ɔ/}	Afugu	<i>fūug</i> ^{ɔ/}	Name for sole survivor of twins "clothing"
<i>À-Tūl</i> ^{le}	Atuli	<i>tūl</i> ^{gε}	for child born with a caul
<i>À-Tìg</i> ^a	Atiga	<i>tìg</i> ^a	"invert" for breech-delivered child "tree"

<i>À-Sāan^{a/}</i>	Asana	<i>sāan^{a/}</i>	"guest, stranger"
<i>À-Sāan-dú⁺</i>	Sadow	<i>sāan^{a/}</i>	"guest" + <i>dāy⁺</i> "man"
<i>À-Tāmpōur^ε</i>	Tampuri	<i>tāmpōur^ε</i>	"ashpit, rubbish tip"
<i>À-Dūk^{ɔ/}</i>	Aruk	<i>dūk^{ɔ/}</i>	"pot"
These two names are given to children born alive after previous stillbirths; they come from the apotropaic practice of throwing away the dead child or just burying it in a pot to avoid attracting malevolent spiritual attention.			
<i>À-Kūdug^ɔ</i>	Akudugu	<i>kūdug^ɔ</i>	"piece of iron (as a <i>bōgur^ε</i>)" As a common noun displaced by the plural-as-sg <i>kūt^ε</i>
<i>Ñ-Dāvug^ɔ</i>	Ndago	<i>dāvug^ɔ</i>	"male"
<i>Ṁ-Pyāk^a</i>	Mpoaka	<i>pyāk^a</i>	"female"
<i>Ṁ-Bīl^a</i>	Mbillah	<i>bīl^a</i>	"little"

The younger sibling of *À-Wīn^{nε/}* may be called *À-Wīn-bīl^a* "Awimbillah", of *À-Kūdug^ɔ*, *À-Kud-bīl^a* "Akudibillah" etc. Names for girls may follow the pattern *À-Wīn-pyāk^a* "Awimpoaka."

A whole clause [19.10.1](#) is seen as a birth-circumstance personal name in

À-Tīm bódìg yā "The medicine has got lost."

Many Kusaasi traditionally had non-Kusaasi names as yet another method of breaking a cycle of stillbirths or early deaths, via pretended adoption by a "stranger"; hence Fulfulde names like Jambeedu, and along similar lines

<i>À-Zàngbèog^ɔ</i>	Azangbego	<i>Zàngbèog^ɔ</i>	"Hausa person"
<i>À-Nàsà-pyāk^a</i>	Anasapoaka		"European woman"; also a birth-circumstance name for a child delivered by a European midwife.

Muslims often use day-of-the-week names depending on birth; these are not so common among traditional Kusaasi, as the seven-day week was not generally in use; older persons still do not use it, adhering to the older three-day cycle of markets instead.

<i>À-Tínì</i> ⁺	"Girl born on Monday"
<i>À-Tàláatà</i> ⁺	"Girl born on Tuesday"
<i>Àrzúmà</i> ⁺	"Boy born on Friday"
<i>À-Síbì</i> ⁺	"Boy born on Saturday"

Muslims also have formal Islamic Arabic names, sometimes adapted to Kusaal phonology, like *Dàhamáani*⁺/*Dàsmáani*⁺ عبد الرحمن *ʿAbdu-r-Raḥma:n(i)*

KKY p6 has the interesting girl's personal name *Amɔryam*, which looks like an adaptation of the Arabic name مريم *Maryam(u)* "Mary" as *À-Mōr Yām* "Has Common Sense."

Christians use English (or French) baptismal names in speaking European languages, and in official contexts use their Kusaal personal names as "surnames."

35.3 Place Names

For the form in which Kusaal personal and place names appear in English-language contexts see [35.3.1](#).

Many, though by no means all, Kusaal place names have transparent meanings.

[John Turl](#) maintains a site dedicated to Ghanaian toponymy, with much of interest both for the Kusaasi area and elsewhere. His research has helped me improve this section considerably. He does not always concur with my analyses: consult his site for details.

Place names include:

<i>Bòk</i> ^ɔ	Bawku	"pit, geographical depression"
<i>Kōk</i> ^{a/}	Koka	"mahogany tree"
<i>Kùkpàrig</i> ^a	Kokpariga	"palm tree"
<i>Tèmpáan</i> ^{nɛ}	Tempane	perhaps "new villages"
<i>Mu'à-nɔɔr</i> ^{ɛ/}	Mogonori	"lakeside" ("lake-mouth")
<i>Bàs-yɔn</i> ^{nɛ/}	Basyonde	"abandon sacks" ?reason for name
<i>Kūgur</i> ^{ɛ/}	Kugri	"stone"
<i>Bōgur</i> ^ɛ	Bugri	<i>bōgur</i> ^ɛ , object housing a <i>wīn</i> ^{nɛ/} "spirit"
<i>Wìdì-nyá'an</i> ^a	Woriyanga	archaic for <i>wìd-nyá'an</i> ^a "mare"
<i>Bì-nà'ab</i> ^a	Binaba	"prince"
<i>Gàaru</i> ⁺	Garu	probably Hausa <i>gàaruu</i> "wall around town or compound"
<i>Wiid-nà'ab</i> ^a	Widinaba	"chief of the clan <i>Wiid</i> ^a "
<i>Pūsɪg</i> ^{a/}	Pusiga	"tamarind"

<i>Tí ɛ/</i>	Tilli	"tree trunk" cf Toende Kusaal <i>tíl id</i> (Hasiyatu Abubakari, p.c.)
<i>Mì'isug^a</i>	Missiga	Explained locally as from "mission" i.e. the Assemblies of God mission around which the village grew; perhaps influenced by <i>mì'isug^ɔ</i> "dunking" (not in my materials, but cf Toende <i>mì'isuk</i> "baptism", KED <i>mì'is</i> "duck someone")
<i>Pùlma Kú'è^m</i> <i>Wìdāan^a</i>	Pulimakom Widana	"water by <i>pùlma⁺</i> (grass sp)" for <i>Wìd-dāan^a</i> "Horse-Owner", title of a chief's <i>nō-dí'ès^a</i> "linguist" (spokesman/counsellor.) Usual informal name for Pulimakom, as the seat of this particular linguist.
<i>Dènnug^ɔ</i>	Denugu	No known meaning
<i>Sā-bíl^a</i>	Zebilla	"small grass"?
<i>Sā-píəlìg^a</i>	Sapeliga	" <i>Isoberlinia Doka</i> " ("white grass")
<i>Kòl-tā'amís^ɛ</i>	Kultamse	"dog almonds" ("river shea trees")

WK thought that the first component of the names *Sā-bíl^a* and *Sā-píəlìg^a* was a plant used in making brooms. **Sāa*^{=/} does not occur in my data (only *sāa*⁼ "rain") or in Niggli's dictionary, but the cognate *sáagá* is glossed in his Farefare dictionary as "a kind of grass used for making brooms", and the Mampruli/Dagbani cognate *saa* refers to a grass *Sporobolus subglobosus* A. Chev ([Dagomba Plant Names](#) Blench 2006) used for binding materials together to make mats and traps, and presumably also brooms. Compounds need not have the literal sense of the components [19.8.1](#) [19.7.2.1](#), especially with names for plant and tree species: John Turl has located a careful 1935 report by an assistant agricultural officer which lists among local trees in the Farefare/Nabit area *sapelaga Isoberlinia doka*; it seems likely that this is the meaning of *sā-píəlìg^a*. The report also lists *ta-anga* "Butyrospermum parkii" (Kusaal *tá'an^a*), and *kulta-anga* "Andira inermis", so *kòl-tá'an^a* is probably this "dog almond."

<i>Kùlɔgúŋ^ɔ</i>	Kulungungu	?? <i>kòl-gùŋ^a</i> "river-kapok"
----------------------------	------------	---

Turl cites a Bisa-speaking informant who suggests a more plausible origin in Bisa "Kuurgongu", "Crooked Sheanut Tree." Prost's grammar of Bisa confirms that Bisa adjectives follow head nouns, and his dictionary cites *kúr* "karité." The second element is probably a simplex form of Prost's *gongeda* "arqué" (*ng* = [ŋ]); Prost notes an adjectival suffix *-da* "s'appliquant aux grandes choses ou marquant intensité."

<i>Àgòl</i> ^{lɛ}	Agolle	the Kusaasi area east of the White Volta; cf <i>àgól</i> ^{lɛ} "upwards"; for the H toneme see 8.3.
<i>Tùen</i> ^{nɛ}	Toende	Kusaasi area west of the White Volta; cf <i>tùen</i> ^{nɛ} "in front", "West"

For points of the compass, WK gave as accepted terms

N	<i>Bārvug</i> ^{ɔ/}	"Bisa country"
E	<i>Nyá'an</i> ^a	"behind"
S	<i>Zuēya</i> ⁺	"hills" (i.e. the Gambaga Escarpment)
W	<i>Tùen</i> ^{nɛ}	"in front"

reflecting the traditional Kusaasi orientation, opposite to the Muslim one.

Words referring to ethnic groups and clans consistently have place names formed from the same stem with the suffix *-g*^ɔ. These can be nonce-formations and need not necessarily refer to any established political entity or permanent settlement:

<i>Kùtāuŋ</i> ^{ɔ/}	any place inhabited by the clan <i>Kùtām</i> ^{ma/}
<i>Kūsáùg</i> ^ɔ	"Kusaasiland"
<i>Mòɔg</i> ^ɔ	"Mossi country" (<i>Mòɔg Ná'àb</i> ^a "Moro Naba, King of the Mossi")

Places outside *Kūsáùg*^ɔ generally do not have Kusaal names (an exception is *Sānkáàŋs*^ɛ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name *Ankara* is usual. Niggli's Dictionnaire has Toende *Wa'aruk* for "Ouagadougou", but I could not elicit any Agolle equivalent. The form looks like **Wā'adúg*^ɔ "Place of the Dancers (*wā'adíb*^a)", but the Mooré name *Waogdgo* apparently does not have a transparent meaning for Mooré speakers, and its true etymology is uncertain.

Curiously, there seems to be no Agolle Kusaal proper name for the White Volta river, which is simply *kōlvug*^a "river"; presumably this is simply because it is the only real river within *Kūsáùg*^ɔ.

35.3.1 Kusaal Personal and Place Names in English

When speaking English or French, Kusaasi cite Kusaal personal and place names in a guise which resembles the Long Form, showing the underlying final vowel without Apocope: thus *À-Wīn*^{nɛ/} from *Wìdɪ-nyá'anj*^a will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for *Kūsáàs*^ɛ, "Bawku" for *Bòk*^ɔ, and many other examples in 35.2 and 35.3.

If this behaviour were confined to personal names, it might plausibly be attributed to the incorporation of the Vocative Prosodic Clitic, but, as has been seen, it is equally characteristic of place names. Moreover, the form "Woriyanga" for *Wìdɪ-nyá'anj*^a shows a characteristically Mampruli rather than Kusaal form for the initial combining form of "horse": Mampruli *wuri-* versus Kusaal *wìd-*. It seems probable that this reflects a convention which originally arose from the fact that the British came to know the region through Mamprussi guides and interpreters. According to Tony Naden (p.c.) a parallel development had taken place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" for the Mampruli place name "Gambaa."

However, not all these forms can be explained without further ado as Mampruli. The place name "Widana", for example, resembles Kusaal *Wìdāan*^a rather than Mampruli *Wuddaana* "(title of) a chief's linguist" and female personal names like "Awimpoaka" *À-Wīn-pyák*^a even show the characteristic Agolle Kusaal vowel breaking, in contrast to the Toende form *Awɪnpɔka* (Niggli.) Again, the personal name "Akudugu" *À-Kūdug*^ɔ shows the postvocalic *-d-* characteristic of Agolle Kusaal rather than Mampruli. The Toende place name *Tīl*^{ɛ/} "Tilli" corresponds to Toende Kusaal *tíl* and Farefare *tíllé* "tree trunk", but no cognate word appears in Naden's extensive dictionary of Mampruli. Accordingly, even if the convention of preserving underlying final vowels originated from transposition of personal and place names from Kusaal into Mampruli, it has apparently been generalised by analogy and can now produce forms which cannot be regarded as Mampruli.

Cases also occur of straightforward reproduction of the Kusaal, as in "Aruk", alongside "Aruku" for the personal name *À-Dōk*^{ɔ/}.

35.4 Ethnic Group and Clan Names

Names for the group belong to the $^a|b^a$ or $g^a|s^e$ Classes (apart from *Zàngbèog*^ɔ "Hausa" and *Nàsāara*⁺ "European") and their language to the l^e Subclass of $r^e|a^+$. The place they inhabit has the suffix $-g^ɔ$.

<u>Ethnic gp sg</u>	<u>Ethnic gp pl</u>	<u>Language</u>	<u>Place</u>	
<i>Kūsáa</i> ⁼	<i>Kūsáàs</i> ^ε	<i>Kūsáàl</i> ^ε	<i>Kūsábùg</i> ^ɔ	Kusaasi
<i>Ñwāmpūrīg</i> ^{a/}	<i>Ñwāmpūris</i> ^{ε/}	<i>Ñwāmpūril</i> ^{ε/}	<i>Ñwāmpūrüg</i> ^{ɔ/}	Mamprussi
<i>Bārīg</i> ^{a/}	<i>Bāris</i> ^{ε/}	<i>Bāt</i> ^{ε/}	<i>Bārüg</i> ^{ɔ/}	Bisa
<i>Mùa</i> ⁺	<i>Mòɔs</i> ^ε	<i>Mòɔl</i> ^ε	<i>Mòɔg</i> ^ɔ	Mossi
<i>Dàgbān</i> ^{nε/}	<i>Dàgbām</i> ^{ma/}	<i>Dàgbān</i> ^{nε/}	<i>Dàgbāyùg</i> ^{ɔ/}	Dagomba
<i>Bìn</i> ^{nε}	<i>Bìm</i> ^{ma}	<i>Bìn</i> ^{nε}	<i>Bìyùg</i> ^ɔ	Moba
<i>Sìmīīg</i> ^a	<i>Sìmīs</i> ^ε	<i>Sìmīil</i> ^ε	<i>Sìmīüg</i> ^ɔ	Fulbe
<i>Yàaṅ</i> ^a	<i>Yàaṅs</i> ^ε	<i>Yàan</i> ^{nε}		Yansi
<i>Gūrīg</i> ^a	<i>Gūrís</i> ^ε	<i>Gūrín</i> ^{nε}		Farefare
<i>Yārīg</i> ^{a/}	<i>Yāris</i> ^{ε/}	<i>Yāt</i> ^{ε/}		Yarsi
<i>Zàngbèog</i> ^ɔ	<i>Zàngbèed</i> ^ε	<i>Zàngbèel</i> ^ε		Hausa
<i>Bùlīg</i> ^a	<i>Bùlis</i> ^ε	<i>Bùl</i> ^{lε}		Bulsa
<i>Tàlīg</i> ^a	<i>Tàlis</i> ^ε	<i>Tàlin</i> ^{nε}		Tallensi
<i>Nàbɪd</i> ^a	<i>Nàbɪɪb</i> ^a	<i>Nàbɪr</i> ^ε		Nabdema
<i>Bùsáṅ</i> ^a	<i>Bùsáàṅs</i> ^ε	<i>Bùsáàṅl</i> ^ε		Bisa
<i>Nàsāara</i> ⁺	<i>Nàsàa-nàm</i> ^a	<i>Nàsāal</i> ^ε		European
<i>Kàmbùṅ</i> ^a	<i>Kàmbùmɪs</i> ^ε	<i>Kàmbùnɪr</i> ^ε		Ashanti

Bāris^{ε/} is "Bisa" generally, not just the Bareka; *Bìm*^{ma} similarly is "Moba" in general, and not only the Bemba (WK.)

Note

<i>Tùen</i> ^{nε}	"Toende area"
<i>Tùennɪr</i> ^ε	"Toende dialect of Kusaal"
<i>Àgòl</i> ^{lε}	"Agolle area"
<i>Àgòl</i> ^{lε}	"Agolle dialect of Kusaal"
<i>Ò pṛàṅ'ad Àgòl.</i>	"She speaks Agolle Kusaal."
3AN speak: DIPF Agolle.	

Kusaasi clan names include, among many others:

<u>Singular</u>	<u>Plural</u>	<u>Place</u>	
<i>Kùtān</i> ^{nε/}	<i>Kùtām</i> ^{ma/}	<i>Kùtāyɛ</i> ^{ɔ/}	WK's clan
<i>Zùà</i> ⁺	<i>Zùəs</i> ^ε		
	<i>Zùà-sābulís</i> ^ε		subclans
	<i>Zùà-wiib</i> ^a		
	or <i>Zùà-wiis</i> ^ε		
<i>Wiid</i> ^a	<i>Wiid-nam</i> ^a	<i>Wiidug</i> ^ɔ	
<i>Nàbɪd</i> ^a	<i>Nàbɪɪb</i> ^a	<i>Nàbɪdug</i> ^ɔ	
<i>Gòɔg</i> ^a	<i>Gòɔs</i> ^ε	<i>Gòɔg</i> ^ɔ	
<i>Sà'dàbùà</i> ⁺	<i>Sà'dàbùəs</i> ^ε - <i>bùəb</i> ^a	<i>Sà'dàbòɔg</i> ^ɔ	
	<i>Nà'dàm</i> ^{ma}	<i>Nà'daɪ</i> ^ɔ	
	<i>Gùm-dim</i> ^a	<i>Gùm</i> ^{mε}	

Nàbɪd^a as a clan name is different from the ethnic group "Nabdema" (WK.)

35.5 Trees and Fruits

Tree names are almost all *g*^a|*s*^ε Class, like *tùg*^a "tree"; their fruits are Classes *r*^ε|*a*⁺ or *g*^ɔ|*d*^ε.

<u>Tree sg</u>	<u>Tree pl</u>	<u>Fruit sg</u>	<u>Fruit pl</u>	
<i>āaɲɪg</i> ^a	<i>āaɲɪs</i> ^ε	<i>āaɲɪr</i> ^ε	<i>āaɲda</i> ⁺	Vitex doniana
<i>dùaɲ</i> ⁺	<i>dòɔɲs</i> ^ε	<i>dòɔɲg</i> ^ɔ	<i>dòɔɲd</i> ^ε	dawadawa
<i>gāaɲ</i> ^{=/}	<i>gāaɲs</i> ^{ε/}	<i>gāɲr</i> ^{ε/}	<i>gāɲyá</i> ⁺	Nigerian ebony
<i>gùɲ</i> ^a	<i>gùmɪs</i> ^ε	<i>gùm</i> ^{mε}	<i>gùma</i> ⁺	kapok
<i>kìkàɲ</i> ^a	<i>kìkàmɪs</i> ^ε	<i>kìkàm</i> ^{mε}	<i>kìkàma</i> ⁺	fig tree
<i>kpòkpàɪg</i> ^a	<i>kpòkpàɪs</i> ^ε	<i>kpòkpàr</i> ^ε	<i>kpòkpàra</i> ⁺	palm
<i>pūsɪg</i> ^{a/}	<i>pūsɪs</i> ^{ε/}	<i>pūsɪr</i> ^{ε/}	<i>pūsá</i> ⁺	tamarind
<i>sīsíbìg</i> ^a	<i>sīsíbìs</i> ^ε	<i>sīsíbìr</i> ^ε	<i>sīsíbà</i> ⁺	neem
<i>tá'aɲ</i> ^a	<i>tā'amɪs</i> ^ε	<i>tá'am</i> ^{mε}	<i>tā'amá</i> ⁺	shea butter
<i>tè'εg</i> ^a	<i>tè'εs</i> ^ε	<i>tè'og</i> ^ɔ	<i>tè'εd</i> ^ε	baobab
<i>vúəɲ</i> ^a	<i>vūəmɪs</i> ^ε	<i>vúər</i> ^ε	<i>vūáá</i> ⁼	red kapok

The stems for "red kapok" and its fruit are slightly different: tree **vuəm*- fruit **vuəg*-

35.6 Body Parts

Most human and animal body parts belong to the Classes $r^{\epsilon}|a^{+}$ and $g^{\circ}|d^{\epsilon}$:

<i>bḷāuṅk</i> [∘]	"shoulder"	<i>bīān</i> ^{nε}	"shin"
<i>bì'isír</i> ^ε	"woman's breast"	<i>dūm</i> ^{mε}	"knee"
<i>gbāuṅ</i> ^{∘/}	"animal skin; lip, eyelid"	<i>gbēr</i> ^{ε/}	"thigh"
<i>gbè'og</i> [∘]	"forehead"	<i>gbìn</i> ^{nε}	"buttock"
<i>gbìn-vòṅr</i> ^ε	"anus"	<i>gūr</i> ^ε	"ridge of back"
<i>í </i> ^ε	"horn"	<i>kōbír</i> ^ε	"bone"
<i>kōṅbug</i> [∘]	"hair"	<i>kpēṅdír</i> ^{ε/}	"cheek"
<i>kpìsukpì </i> ^ε	"fist"	<i>lām</i> ^{mε/}	"gum"
<i>lān</i> ^{nε}	"testicle"	<i>lògur</i> ^ε	"organ, member"
<i>nìn-gbīṅ</i> ^{∘/}	"human skin, body"	<i>nìn-gòṅr</i> ^ε	"neck"
<i>nóbùr</i> ^ε	"leg"	<i>nōb-púmpàṅ</i> [∘]	"foot"
<i>nōṅr</i> ^{ε/}	"mouth"	<i>nyīn</i> ^{nε/}	"tooth"
<i>nyōṅd</i> ^ε	"intestines"	<i>nyōṅṅ</i> ^{∘/}	"chest"
<i>nyōṅr</i> ^ε	"nose"	<i>pèn</i> ^{nε}	"vagina"
<i>pūr</i> ^{ε/}	"stomach"	<i>sōṅr</i> ^ε	"liver"
<i>tàsintà </i> ^ε	"palm"	<i>tàtà </i> ^ε	"palm"
<i>tìəṅ-gūr</i> ^ε	"chin"	<i>tùb-kpìr</i> ^ε	"half of jaw"
<i>tùbur</i> ^ε	"ear"	<i>yìər</i> ^ε	"jaw"
<i>yū'ər</i> ^ε	"penis"	<i>zàṅ </i> ^ε	"umbilicus"
<i>zìlim</i> ^{mε}	"tongue"	<i>zūṅ</i> ^{∘/}	"head"
<i>zūəbúṅ</i> [∘]	"human head hair"	<i>zūr</i> ^ε	"tail"

There are significant exceptions, however:

$g^a|s^{\epsilon}$ Class:

<i>nú'ùṅ</i> [∘]	"hand" 9.3.2.1	perhaps as the prototypical tool.
<i>nū'-bíl</i> ^a	"finger"	but <i>nū'-dávòṅ</i> [∘] "thumb"
<i>nū'-íṅ'a</i> ⁺	"fingernail"	<i>nōb-bíl</i> ^a "toe"
<i>nōb-íṅ'a</i> ⁺	"toenail"	<i>sīa</i> ⁺ "waist"
<i>nyá'aṅ</i> ^a	"back"	<i>tìəṅ</i> ^a "beard"

$ṑ|t^{+}$ Class:

<i>nīṑ</i> [/]	"eye"	as a "small round thing"?
<i>sḷà-nīṑ</i> [/]	"kidney"	as a compound of "eye"
<i>sūṅṑ</i> [/]	"heart"	beside <i>sūuṅr</i> ^{ε/} $r^{\epsilon} a^{+}$ Class

35.7 Colour Terms

Kusaal, like many local languages, has a basic three-colour system:

<i>zèŋ'og</i> ^ɔ	"red"	covering all reddish shades
<i>sābɪlɪg</i> ^a	"black"	covering all darker shades of colour
<i>pìəlɪg</i> ^a	"white"	covering all lighter shades of colour

Wiug^ɔ "red" is synonymous with *zèŋ'og*^ɔ. Kusaal has many more or less standardised expressions for colour (e.g. *wōv támpōv nē* "like ash", i.e. "grey"), often with parallels in other West African languages. The system is described as "three-colour" because any colour can be allocated correctly to one of only three terms, and not because only three colour terms exist.

35.8 Time Expressions

Answers to *bò-wìn*^{nɛ} "what time of day?"

<i>bēogv-n</i> ^{ɛ/}	"morning"	<i>àsùbá</i> ⁺	"dawn" (← Arabic)
<i>bèkèkèong</i> ^ɔ	"very early morning"	<i>zàam</i> ^m	"evening"
<i>wìn-līr</i> ^ɛ	"sunset"	<i>yú'vɛ</i> ^ɔ	"night"
<i>wìn-kòɔŋr</i> ^ɛ	"sunset"	<i>nīntāŋ</i> ^{a/}	"heat of the day, early afternoon"

Wìn^{nɛ} "time of day" (cf *wìnnɪg*^a "sun"), always with a pre-determiner.

There are no traditional expressions for clock time; NT/KB adapts from Hausa:

<i>kérɪfà àtán'</i>	"three o'clock"	Hausa:	<i>karfèe ukù</i>
---------------------	-----------------	--------	-------------------

The deictic particle *ŋwà* "this" is commonly attached to time words:

<i>zàam ŋwá</i>	"this evening"	[za:ma]	
<i>yú'vɛ ŋwá</i>	"tonight"	[yʊ:vɛ:a]	<u>8.5.1</u>

The day begins at sunrise, not sunset as with Muslims.

Answers to *bōn-dáàr*^ɛ "which day?":

<i>zīná</i> ⁺	"today"	<i>sù'əs</i> ^a	"yesterday"
<i>bēog</i> ^ɔ	"tomorrow"	<i>dāar</i> ^ɛ	"day after tomorrow/ day before yesterday"

Weekday names are from Arabic via Hausa, the seven-day week being a Muslim importation. The traditional "week" is a three day market cycle, differing from village to village and carrying on regardless of any weekdays or festivals. Many older speakers do not use weeks at all, but count in days instead.

<i>Àláasìd dáàr</i> ^ε	"Sunday"	<i>Àtínì dáàr</i> ^ε	"Monday"
<i>Àtáláatà dáàr</i> ^ε	"Tuesday"	<i>Àlárìbà dáàr</i> ^ε	"Wednesday"
<i>Àlàmiisì dáàr</i> ^ε	"Thursday"	<i>À(r)zúmà dáàr</i> ^ε	"Friday"
<i>Àsíbitì dáàr</i> ^ε	"Saturday"		

Dāar^ε "day" is "twenty-four hour period" (*nīntān* "day as opposed to night") and is used with pre-determiners to specify a particular day; the word *dàbìsɪr*^ε is also used for "day" in counting periods of time, occurring usually in the plural:

<i>Dābá àyópɔ̀ɔ̀ dáàr kà fù ná lēb nā.</i>	"You'll come back in a week."
<i>Dābá àyópɔ̀ɔ̀ kà fù ná lēb nā.</i>	"You'll come back for a week."
<i>Àláasìd dáàr kà fù ná lēb nā.</i>	"You'll come back on Sunday."
<i>Tì kpélì m ànínā dábìsà bī'əlá.</i>	"We stayed there a few days."

Longer periods of time:

<i>dābá àyópɔ̀ɔ̀</i>	"week"	also <i>bákpàɔ̀</i> ← Hausa <i>bakwàì</i> "seven"
<i>ṅwāɗɪg</i> ^{a/}	"moon, month"	
<i>ṅwāɗ-kánì kēn nā lā</i>	"next month"	("the month which is coming")
<i>ṅwāɗ-kánì gāad lā</i>	"last month"	("the month which has passed")

There are two seasons:

<i>sēɔŋg</i> ^ɔ	"rainy season"	<i>úun</i> ^{nɛ}	"dry season"
---------------------------	----------------	--------------------------	--------------

The Harmattan part of *úun* is called *sāpál*^{lɛ} and the very hot humid part before the rains is *dàwàlɪg*^a.

<i>yùum</i> ^{mɛ}	"year"	<i>dūnná</i> ⁺	"this year"
---------------------------	--------	---------------------------	-------------

"Time" in general is the irregular noun *sānjá*⁺ pl *sānsá*⁺ cb *sān-*; "time of day" is *wìn*^{nɛ}; "time" as in "several times" is *nōɔr* 16.2.5. Examples with *sānjá*⁺:

<i>sān-kánè?</i>	"when?"	<i>sān-kán lā</i>	"at that time"
<i>sānjá kám</i>	"all the time"	<i>sānjá bèɗɔgū</i>	"a long time"
<i>sānsá bèɗɔgū</i>	"many times"	<i>sānjá bī'əlá</i>	"for/in a short time"

36 Minimal Pairs

In this section I will note only a few instances from two areas where traditional orthography has been deficient: the tense/lax distinction in monophthongal high vowels, and tone.

36.1 Tense and Lax Vowels

There are few minimal pairs for the contrast *u/v* in short root vowels and very few indeed for *i/ɪ*; there is no contrast in the corresponding nasal short vowels [4.2.1](#). There is a robust contrast between long *uu/vv* and long *ii/ɪɪ*, and thus between the corresponding vowels shortened by Apocope, but even here it is difficult to find true minimal pairs; *lì* "fall", for example, certainly contrasts phonetically with *lì* "it", but the words contain a root vowel and an affix vowel respectively.

Minimal and near-minimal pairs include

<i>lìdɪg</i>	"astonish, be amazed"	<i>lìdɪg</i>	"turn a shirt" WK
<i>sīd</i>	"husband"	<i>sīn</i>	"be silent"
<i>sībɪg</i>	antelope species KED	<i>sībɪg</i>	"termite"
<i>bùl</i>	"astonish"	<i>bùl</i>	"germinate" base form
<i>ùk</i>	"vomit"	<i>ūk</i>	"bloat"
<i>bōn</i>	"thing"	<i>bùn</i>	"germinate" dipf
<i>kūdɔg</i>	"old"	<i>kūdɔg</i>	"piece of iron"
<i>kōg-káŋā</i>	"this mahogany tree"	<i>kūg-káŋā</i>	"this stone"
<i>tōlɪg</i>	"heat up"	<i>tùlɪg</i>	"invert"
<i>yōgúm</i>	"camel"	<i>yūgɔdɪr</i>	"hedgehog"

Although contrasts do thus exist in short *i/ɪ u/v* even when these are not the result of Apocope, written sources show great fluctuation in the writing of *e/ɪ o/v*, and it may well be that in many contexts a three-way contrast is not demonstrable.

Contrasts among the short root vowels seem to be often found only after particular classes of preceding consonant, especially with *i/ɪ*; this is perhaps connected with the loss of the original palatal consonants in Western Oti-Volta.

36.2 Tones

Tone functions more as a syntactic marker than to distinguish lexemes, and words often undergo alteration of their tone patterns by tone sandhi or overlay. Lexical tone has a low functional load, and the absence of tone marking in the traditional orthography causes no great difficulty to Kusaasi experienced in reading the language. Minimal pairs exist, however; among other examples are

<i>àgɔ́</i> ^{lɛ}	"upwards"	<i>Àgò</i> ^{lɛ}	"Eastern Kusaasiland"
<i>bāŋ</i> ^a	"ring, chain"	<i>bàŋ</i> ^a	"agama lizard"
<i>bū'ar</i> ^{ɛ/}	"skin bottle"	<i>bù'ar</i> ^ɛ	"hole"
<i>būk</i> ^{ɛ/}	"weaken"	<i>bùk</i> ^ɛ	"cast lots"
<i>dāvg</i> ^ɔ	"male"	<i>dàvg</i> ^ɔ	"piece of wood"
<i>dīgɪr</i> ^{ɛ/}	"lying-place"	<i>dìgɪr</i> ^ɛ	"dwarf"
<i>dúər</i> ^ɛ	"raising" (gerund)	<i>dūər</i> ^{ɛ/}	"stick"
<i>gāŋ</i> ^{ɛ/}	"choose"	<i>gàŋ</i> ^ɛ	"step over"
<i>gbāuŋ</i> ^{ɔ/}	"skin", "book" DK	<i>gbàuŋ</i> ^ɔ	"book" WK
<i>kūk</i> ^{a/}	"mahogany tree"	<i>kùk</i> ^a	"ghost"
<i>kūk</i> ^a	"chair"		
<i>māk</i> ^{ɛ/}	"measure"	<i>màk</i> ^ɛ	"crumple up"
<i>mōvg</i> ^ɔ	"bush, wilderness"	<i>Mòvg</i> ^ɔ	"Mossi realm"
<i>nēm</i> ^{m/}	"grind with millstone"	<i>nēm</i> ^m	"emptiness; for free"
<i>nēr</i> ^{ɛ/}	"millstone"	<i>nēr</i> ^ɛ	"empty"
<i>nīs</i> ^ɛ	"birds"	<i>nīs</i> ^ɛ	"bodies"
<i>pīd</i> ^ɛ	"get bloated"	<i>pīd</i> ^ɛ	"put on hat, shoes etc"
<i>pīs</i> ^{ɛ/}	"wash"	<i>pīs</i> ^ɛ	"fool somebody"
<i>sām</i> ^{ma}	"guests"	<i>sām</i> ^{ma}	"father"
<i>sām</i> ^{m/}	"mash up"		
<i>sīāk</i> ^{ɛ/}	"suffice"	<i>sīāk</i> ^ɛ	"agree"
<i>wēog</i> ^ɔ	"cheap/common thing"	<i>wēog</i> ^ɔ	"deep bush"
<i>yāaŋ</i> ^a	"grandchild"	<i>Yāaŋ</i> ^a	"Yansi, Yanga person"
<i>yīdɪg</i> ^{ɛ/}	"untie"	<i>yīdɪg</i> ^ɛ	"go astray"
<i>yō</i> ⁺	"pay"	<i>yō</i> ⁺	"close"
SFs: <i>lābɪs</i> ^{a/}	"be wide"	<i>lābɪs</i> ^ɛ	"walk stealthily"
cbs: <i>nā'-kàŋā</i>	"this cow"	<i>nà'-kàŋā</i>	"this chief"

Certain particles differ in tone alone:

<i>dāa</i>	"two days ago"	<i>dàa</i>	"day after tomorrow"
<i>dā</i>	negative Imperative	<i>dà</i>	"before two days ago"

37 General Vocabulary

Words are ordered by Short Forms.

Vowel glottalisation, and the distinctions *n/ŋ*, *ə/e/ɛ/ɛ*, *i/ɪ/j*, *o/ɔ/ɔ* and *u/ʊ/ʊ* are ignored in the ordering. The consonant *ŋ* follows *n*.

Compounds are not listed if they are regularly formed and have transparent meanings. Those that *are* listed follow the entry for the Combining Form of the first element.

Nouns are listed under the singular form. Adjectives are listed under the *g^a|s^ε* Class form if extant, if not, then *g^ɔ|d^ε* or *r^ε|a⁺*. Variable Verbs are listed under the Base Form.

Variable Verb Dynamic Imperfectives and imperatives are listed only where irregular. Gerunds, Agent Nouns and Dynamic Deverbal Adjectives are not listed unless they show some irregularity of form or a specialised meaning.

Personal names and Kusaasi place names are not listed below: see [35.2](#) [35.3](#) for examples.

I have attempted to list all function words, with references to the sections in which they are treated above.

All words occurring in the paradigms and examples in the grammar should be included. I have added other words from my collected materials, and words from David Spratt's "A Short Kusaal-English Dictionary" (KED below) in all cases where I was able to determine the tones and also the quality of *i u* versus *ɪ ʊ* where necessary. Unfortunately, time considerations prevented me from systematically going through KED in its entirety with my informants.

Words listed as derived from Arabic are probably all borrowed via other languages, generally Hausa [18.1](#).

Binomial names of plants taken from Haaf (see sources) are likely to be reliable; he checked the identifications with local botanical experts.

Abbreviations:

<i>adj</i>	Adjective	<i>adv</i>	Adverb
<i>agt</i>	Agent Noun	<i>cb</i>	Combining Form
<i>dipf</i>	Dynamic Imperfective	<i>ger</i>	Gerund
<i>imp</i>	Imperative	<i>iv</i>	Invariable Verb
<i>n</i>	Noun	<i>pl</i>	Plural
<i>q</i>	Quantifier	<i>res</i>	Resultative
<i>sg</i>	Singular	<i>vv</i>	Variable Verb

A

à-	Personifier proclitic 19.10
āaṇḍig ^a	n. black plum tree, <i>Vitex doniana</i> 35.5
pl āaṇḍis ^ε	
cb āaṇḍ-	
āaṇḍir ^ε	n. black plum fruit 35.5
pl āaṇḍa ⁺	
àaṇs ^ε	vv. tear
àbùlá ⁺	how many-fold? 16.2.5
àbùyí ⁺ àbùtán ⁺ àbùnāasí ⁺	adv. twice, three times etc 16.2.5
à-dàalúŋ ^ɔ	n. stork 19.10
pl à-dàalís ^ε à-dàalímìs ^ε	
cb à-dàalúŋ-	
àdàkón ⁺	q. one 16.2.3
àeṇ ^a	iv. be something/somehow 24.2 8.5.3 8.5.2
ger àaṇlím ^m	
àeṇ ⁺	vv. get torn
res adj àaṇlúŋ ^ɔ	adj. torn
à-gáàṇŋ ^ɔ	n. pied crow 19.10
pl à-gáàṇḍ ^ε	
cb à-gāṇ-	
àgól ^{lε} àgólá ⁺	adv. upwards
Àgól ^{lε}	n. Agolle district of Kusaasi territory
	n. Agolle Kusaal dialect
à-kōra-díèṁ ^{ma}	n. praying mantis 19.10
pl à-kōra-díèṁ-nàṁ ^a	
àlá ⁺	adv. thus 17.1
àlá ⁺	q. so many; how many? 17.1
àláafù ⁺	n. health; in greetings 34 cf <i>láafīya</i> ⁺
	← Arabic العافية <i>ʔal-ʕa:fiya(tu)</i>
Àláasìd dáàr ^ε	n. Sunday 35.8 ← Arabic
Àlàníisì dáàr ^ε	n. Thursday 35.8 ← Arabic
Àlárìbà dáàr ^ε	n. Wednesday 35.8 ← Arabic
àlá zùg ^ɔ	therefore 28.1.1 17.1
àlópìr ^ε	n. aeroplane ← English
pl àlópìya ⁺	
àmáa ⁼	but 27.1.3 ← Hausa ← Arabic
àmēṇá ⁺	adv. really, truly 20.4
àmí	amen ← Arabic آمين; in replies to greetings 34

<i>à-mús</i> ^ε		n. cat 19.10 ; cf Hausa <i>mussàa id</i>
pl	<i>à-mús-nàm</i> ^a	
<i>ànāasí</i> ⁺		q. four 16.2.2
<i>àní</i> ⁺		adv. there 17.1
<i>àní</i> ⁼		q. eight 16.2.2
<i>àní nā</i> ^{+/}		adv. there 17.1
<i>àníṅà</i> ⁺		adv. promptly 20.4
<i>àń'òń</i> ^ε		who? 15.4
<i>àṅruṅ</i> ^ɔ		n. boat (written <i>aaruṅ</i> in the 1976/1996 NT)
pl	<i>àṅrɪmá</i> ⁺	
cb	<i>àṅruṅ-</i>	
<i>āṅs</i> ^ε		vv. pluck (leaves)
<i>āṅsìb</i> ^a		n. mother's brother 35.1
pl	<i>āṅs-nám</i> ^a	
cb	<i>āṅs-</i>	
<i>āṅsiḡ</i> ^{ε/}		vv. break at an angle
<i>āṅsín</i> ^a		n. (man's) sister's child 35.1
pl	<i>āṅsís</i> ^ε	
cb	<i>āṅsiṅ-</i>	
<i>àntù'a</i> ⁼		n. lawsuit
pl	<i>àntù'əs</i> ^ε	
cb	<i>àntu'à-</i>	
<i>ànū</i> ⁺		q. five 16.2.2
<i>àṅwá</i> ⁺		adv. like this 17.1
<i>ānzúrɪfà</i> ⁺		n. silver
		Hausa <i>azùrfaa</i> ← Berber * <i>a-zrəf</i> , Souag 2016
<i>àrazàk</i> ^a		n. wealth, riches ← Arabic الرزق <i>ʔar-rizq(u)</i>
pl	<i>àrazà'as</i> ^ε	Generally used in pl
cb	<i>àrazà'-</i>	
<i>àrazánà</i> ⁺		n. heaven, sky ← Arabic الجنة <i>ʔal-janna(tu)</i>
<i>Àrzúmà dáàr</i> ^ε		n. Friday 35.8 ← Arabic
<i>àsée</i>		except, unless 21.2 27.1.3 ← Hausa <i>sai</i>
<i>Àsíbtì dáàr</i> ^ε		n. Saturday 35.8 ← Arabic
<i>àsīda</i> ⁺		adv. truly 20.4
<i>àsùbá</i> ⁺		n. dawn ← Arabic الصباح <i>ʔasᶜ-sᶜaba:ħ(u)</i>
<i>àtáṅ</i> ¹⁺		q. three 16.2.2
<i>Àtáláatà dáàr</i> ^ε		n. Tuesday 35.8 ← Arabic
<i>àtáṅā</i> ^{+/}		q. three exactly 16.2.2
<i>Àtínì dáàr</i> ^ε		n. Monday 35.8 ← Arabic
<i>àtìḡk</i> ^ɔ		n. sea ← Hausa <i>tèeku</i>
<i>àwánā</i> ^{+/}		adv. like this 17.1

àwāḡ⁺q. nine [16.2.2](#)àyí⁺q. two [16.2.2](#)

áyì

no [28.2.4](#)àyíṅā^{+/}q. two exactly [16.2.2](#)àyópòḡ⁺q. seven [16.2.2](#)àyúəbù⁺q. six [16.2.2](#)**B**

bà

they, their (Proclitic) [15.1](#)ba⁺them (Enclitic object) [15.1](#)bā^{+/}n. father [9.4](#)

pl

bā'-nám^a

cb

bā'-

bāa⁼

n. dog

pl

bāas^ε

cb

bà-

bā'a⁼

n. traditional diviner

pl

bā'ab^a

cb

bà'a-

bà'a-kòlv^ɔ

n. diviner's bag

pl bà'a-kò^{nε}

cb bà'a-kòl-

bā'a⁼

n. peg to hang things on

pl

bā'as^ε

cb

bà'-

bà'an^{nε}

n. stocks (punishment)

pl

bà'ana⁺

cb

bà'an-

bàaṅlv^a

adj. narrow, slender

pl

bàaṅlv^εbāaṅlv^a

adj. quiet

bāaṅlv^m

adv. quietly

bà'ar^ε

n. idol

pl

bàda⁺ bà'a⁺

cb

bà'-

bābá⁺beside, postposition [20.6](#)cf *bābvr*^{ε/} sphere of activitybàlvḡā^{+/}q. many [16.1](#)bákpàḡ⁺n. week ← Hausa *bakwàì* "seven"

<i>bàlàar</i> ^ε		<i>n.</i> stick, staff, club
<i>pl</i>	<i>bàlàya</i> ⁺	
<i>cb</i>	<i>bàlà-</i>	
<i>bàlàŋɪ</i> ^ε		<i>n.</i> hat
<i>pl</i>	<i>bàlàŋa</i> ⁺	
<i>cb</i>	<i>bàlàŋ-</i>	
<i>bālērvg</i> ^{ɔ/}		<i>adj.</i> ugly cf <i>lēr</i> ^ε "get ugly"
<i>pl</i>	<i>bālērɪd</i> ^{ε/} <i>bālērɪs</i> ^{ε/}	
<i>cb</i>	<i>bālér-</i>	
<i>bàmmā</i> ^{+/}		these, those (Demonstrative 15.2)
<i>bàn</i> ^ε		these, those (Demonstrative 15.2)
<i>bán</i>		they (Subject of <i>h</i> -Clause) 15.1
<i>bān</i> ^ε		they, them (Contrastive) 15.1
<i>bāŋ</i> ⁺		<i>vv.</i> ride
<i>bānāa</i> ⁼		<i>n.</i> traditional "fugu" smock
<i>pl</i>	<i>bānāas</i> ^ε	
<i>cb</i>	<i>bànà-</i>	tone <i>sic</i> in my materials; ?error for <i>bānā-</i>
<i>bàŋ'ad</i> ^a		<i>n.</i> ill person
<i>pl</i>	<i>bàŋ'ad-nām</i> ^a	
<i>bāŋ'al</i> ^{ε/}		<i>vv.</i> make to ride (horse, bicycle)
<i>bāŋ'as</i> ^ε		<i>n. pl as sg</i> disease
<i>cb</i>	<i>bàŋ'-</i>	
<i>bàn-dāvg</i> ^ɔ		<i>n.</i> crocodile
<i>pl</i>	<i>bàn-dāad</i> ^ε	
<i>cb</i>	<i>bàn-dà-</i>	
<i>bān-kúsél</i> ^{lε}		<i>n.</i> lizard
<i>pl</i>	<i>bān-kúsēlá</i> ⁺	
<i>cb</i>	<i>bān-kúsēl-</i>	
<i>bāŋ</i> ^a		<i>n.</i> ring, chain, fetter
<i>pl</i>	<i>bāaŋs</i> ^ε	
<i>cb</i>	<i>bàŋ-</i>	
<i>bàŋ</i> ^a		<i>n.</i> agama lizard
<i>bàŋ</i> ^ε		<i>vv.</i> come to know
<i>báp</i>		wallop!
<i>Bārɪg</i> ^{a/}		<i>n.</i> Bisa person 35.4 ; not only the Bareka, WK
<i>pl</i>	<i>Bārɪs</i> ^{ε/}	
<i>cb</i>	<i>Bār-</i>	
<i>bárɪkà</i> ⁺		<i>n.</i> blessing; in greetings 34 ← Arabic بركة <i>baraka(tun)</i>
<i>Bārvg</i> ^{ɔ/}		<i>n.</i> Bisa country; North 35.3
<i>bàs</i> ^ε		<i>vv.</i> go away; abandon

Bāt^{ε/}*bàtán*⁺*bàunv*⁺*bàyēog*^{ɔ/}*bàýí*⁺*bàýópàḡ*⁺*bè*⁺*ger bèllím*^m *sic**bēdig*^{ε/}*bēdug*^ɔ *bēdɪr*^ε*pl bèda*⁺*cb bèd-**bēdugū*^{+/}*bēē**bèkèkèong*^ɔ or *bèkèong*^ɔ*bèlɪm*^m*bèlɪs*^ε*bēn*^{nε}*pl bēna*⁺*cb bēn-**bēn*⁺*ger bēn'ēs*^ε*bēnɪg*^ε*bēn*^ε*bēníd*^ε*cb bēn-**bēníd nē kī*^{+/}*bēnír*^ε*pl bēnáj*⁺*cb bēn-**bēog*^ɔ*bēogv-n*^{ε/}*bē'og*^ɔ *bīa*⁺*pl bē'ed*^ε *bīas*^ε*cb bē'- bjà'-**bèrɪj*^a*pl bèrɪgɪs*^ε *sic**n.* Bisa language [35.4](#)*q.* three (after personal pronoun [16.2.2](#))*n.* found only as in*Ò kpèn' báunv.* "He was circumcised."← Songhay "pool"; for the idiom [18.1](#)betrayal of secrets cf *yēs*^{ε/}*q.* two (after personal pronoun [16.2.2](#))*q.* seven (after personal pronoun [16.2.2](#))*iv.* exist; be in a place [24.1](#)*vv.* go rotten*adj.* great*q.* much, a lot [16.1](#)or [27.1.2](#) [28.2.2](#)*n.* very early morning*vv.* beg*vv.* comfort*n.* end*vv.* fall ill*vv.* serve soup*vv.* mark out a boundary*n.* *pl* bean leaves*Vigna unguiculata* (Haaf)*n.* beanleaf-and-millet, a traditional snack*n.* brown bean*n.* tomorrow [35.8](#)*Kà bēog níe kà ...* "The next day ..."*n.* morning [35.8](#)*adj.* bad*n.* a plant used for fibre (KED)*Hibiscus cannabinus* (Haaf)

<i>bēri_{ga}</i> ⁺		<i>pl</i> leaves of <i>bēri_η</i> used for soup (KED)
<i>cb</i>	<i>bēri_g-</i>	
<i>bēsug</i> ^ɔ		<i>n.</i> a kind of wide-mouthed pot
<i>pl</i>	<i>bēsɪd</i> ^ɛ	
<i>cb</i>	<i>bēs-</i>	
<i>bjā_ŋ'ar</i> ^{ɛ/}		<i>n.</i> wet mud, black mud; riverbed
<i>pl</i>	<i>bjā_ŋ'adá</i> ⁺ <i>bjā_ŋ'á</i> ⁺	
<i>cb</i>	<i>bjā_ŋ'-</i>	
<i>bjā_uŋk</i> ^ɔ		<i>n.</i> shoulder
<i>pl</i>	<i>bjā_ŋ'ad</i> ^ɛ	
<i>cb</i>	<i>bjā_ŋ'-</i>	
<i>bīəl</i> ^{lɛ}		<i>adj.</i> naked
<i>pl</i>	<i>bīəlá</i> ⁺	
<i>bìəl</i> ^ɛ		<i>vv.</i> accompany
<i>bī'əlá</i> ⁺		<i>q.</i> a little 16.1
	<i>bī'əl bī'əl</i>	<i>q. and adv.</i> a very little; little by little
<i>bī'əm</i> ^m		<i>n.</i> enemy
<i>pl</i>	<i>bī'əm-nàm</i> ^a <i>bī'əmma</i> LF	
<i>cb</i>	<i>bī'əm-</i>	
<i>bīən</i> ^{nɛ}		<i>n.</i> shin
<i>pl</i>	<i>bīəna</i> ⁺	
<i>cb</i>	<i>bīən-</i>	
<i>bīər</i> ^{ɛ/}		<i>n.</i> elder sibling of the same sex
<i>pl</i>	<i>bjēyá</i> ⁺	
<i>cb</i>	<i>bjā-</i>	
<i>bī'əs</i> ^ɛ		<i>vv.</i> doubt
<i>bīgɪs</i> ^ɛ		<i>vv.</i> show, teach
<i>bīig</i> ^a		<i>n.</i> child
<i>pl</i>	<i>bīs</i> ^ɛ	
<i>cb</i>	<i>bì- bī-</i>	
	<i>bī-dí_bì_ŋ</i> ^a	<i>n.</i> boy
	<i>bì-līa</i> ⁺	<i>n.</i> baby
	<i>bì-nà'ab</i> ^a	<i>n.</i> prince
	<i>bì-pīt</i> ^{a/}	<i>n.</i> father's younger brother 35.1
	<i>pl</i> <i>bì-pītí_b</i> ^a	
	<i>cb</i> <i>bì-pīt-</i>	
	<i>bī-pú_ŋ</i> ^a	<i>n.</i> girl
<i>bī'ig</i> ^ɛ		<i>vv.</i> ripen, become pregnant
<i>bīilí_f</i> ^ɔ		<i>n.</i> seed
<i>pl</i>	<i>bīilí</i> ⁺	
<i>cb</i>	<i>bīil-</i>	

<i>bìlím^m</i>		<i>n.</i> childhood
<i>bīlím^{m/}</i>		<i>n.</i> soup, stew
<i>cb</i>	<i>bī-</i>	
<i>bì'isím^m</i>		<i>n.</i> milk (human or animal)
<i>bì'isır^ε</i>		<i>n.</i> woman's breast
<i>pl</i>	<i>bì'isa⁺</i>	
<i>cb</i>	<i>bì'is-</i>	
<i>bīl^a</i>		<i>adj.</i> little, small
<i>pl</i>	<i>bībı^ε</i>	
<i>cb</i>	<i>bīl-</i> or <i>bì-</i>	
<i>bìlɿ^ε</i>		<i>vv.</i> roll (transitive)
<i>bīlím^m</i>		<i>vv.</i> roll (intransitive)
<i>bìmbìm^{mε}</i>		<i>n.</i> altar NT (KED: "mound or pillar of earth")
<i>pl</i>	<i>bìmbìma⁺</i>	
<i>cb</i>	<i>bìmbìm-</i>	
<i>Bìn^{nε}</i>		<i>n.</i> Moba, Bimoba person 35.4 not only Bemba, WK
<i>pl</i>	<i>Bìm^{ma}</i>	
<i>cb</i>	<i>Bìn-</i>	
<i>Bìn^{nε}</i>		<i>n.</i> Moba language 35.4
<i>bīn^{nε/}</i>		<i>n.</i> excrement (possibly Tone Pattern O)
<i>Bìyɿ^ɔ</i>		<i>n.</i> Moba country 35.4
<i>bò⁺</i>		<i>vv.</i> seek
<i>bòòd^a</i>		<i>dipf</i> used for: want, like, love (sexual, romantic)
<i>ger</i>	<i>bòòdım^m</i>	<i>imperfective gerund</i> "will" 13.1.1.4
<i>bō⁺</i>		what? why? 15.4
<i>cb</i>	<i>bò-</i>	
	<i>bò-būudı⁺</i>	what sort of ..?
	<i>bō-zúgō</i>	because 27.1.3 ; why? 17.1
	<i>bò-wìn^{nε}</i>	what time of day?
<i>bòbıg^ε</i>		<i>vv.</i> wrap round, tie round
<i>bòdıg^ε</i>		<i>vv.</i> lose, become lost
<i>bòdòbòdò⁺</i>		<i>n.</i> bread (? ultimately ← English)
<i>bòk^ɔ</i>		<i>n.</i> pit
<i>pl</i>	<i>bò'ad^ε</i>	
<i>cb</i>	<i>bı'à-</i>	
<i>bōsır^ε</i>		<i>n.</i> a kind of small, very poisonous snake
<i>pl</i>	<i>bōsa⁺</i>	
<i>cb</i>	<i>bòs-</i>	
<i>bō'⁺</i>		<i>vv.</i> beat

<i>bɔ̀àk</i> ^ε		vv. split
<i>bò'ar</i> ^ε		n. hole
	<i>pl</i>	<i>bɔ̀'àa</i> ⁺
	<i>cb</i>	<i>bɔ̀'à-</i>
<i>bō'ar</i> ^{ε/}		n. skin bottle
	<i>pl</i>	<i>bɔ̀'āá</i> ⁺
	<i>cb</i>	<i>bɔ̀'ā-</i>
<i>bòd</i> ^ε		vv. plant seeds
	<i>ger</i>	<i>bōdɪg</i> ^a <i>bōdug</i> ^ɔ
<i>bùdɪm</i> ^m		vv. get confused
<i>bùdɪmís</i> ^ε		n. confusion
<i>bù'e</i> ⁺		vv. pour out
<i>bòg</i> ^ε		vv. get drunk; cf Hausa <i>bùgu id</i>
<i>bōgud</i> ^a		n. client of a <i>bā'a</i> ⁼ (traditional diviner)
<i>bògɪlɪm</i> ^m		vv. cast lots
<i>bōgur</i> ^ε		n. dwelling-place of a <i>wīn</i> ^{nε} (localised spirit); also a <i>wīn</i> ^{nε} inherited from one's mother
	<i>pl</i>	<i>bōga</i> ⁺
	<i>cb</i>	<i>bòg-</i>
<i>bùgúm</i> ^m		n. fire
	<i>cb</i>	<i>bùgūm- bùgúm-</i> <i>Bùgúm-tɔ́ŋr</i> ^ε
<i>bōgus</i> ^{a/}		n. Fire Festival
<i>bōgusíg</i> ^a <i>bōgusír</i> ^ε		iv. be soft
	<i>pl</i>	<i>bōgusá</i> ⁺
	<i>cb</i>	<i>bōgus-</i>
<i>bōgusígā</i> ^{+/}		adv. softly 20.4
<i>bōgusím</i> ^m		n. softness, weakness
<i>būk</i> ^{ε/}		vv. weaken
<i>bùk</i> ^ε		vv. cast lots
<i>bùl</i> ^ε		vv. germinate, ooze
<i>bùl</i> ^ε		vv. astonish
<i>Bùl</i> ^{lε}		n. Buli language 35.4
<i>Bùlɪg</i> ^a		n. Bulsa person 35.4
	<i>pl</i>	<i>Bùlɪs</i> ^ε
	<i>cb</i>	<i>Bùl-</i>
<i>bùlɪg</i> ^a		n. well, pond
	<i>pl</i>	<i>bùlɪs</i> ^ε
	<i>cb</i>	<i>bùl-</i>
<i>bùmbàrɪg</i> ^a		n. ant
	<i>pl</i>	<i>bùmbàrɪs</i> ^ε
	<i>cb</i>	<i>bùmbàr-</i>

<i>bùn</i> ^ε		vv. reap, harvest
<i>bōn</i> ^{nε/}		n. thing (concrete or abstract) 19.9.3
<i>pl</i>	<i>bōn</i> ^{á+} <i>bōn-nám</i> ^a	
<i>cb</i>	<i>bōn-</i>	
	<i>bōn-búvdì</i> ^Ɔ	n. plant
	<i>bōn-gíŋ</i> ^a	n. short chap (informal, joking)
	<i>bōn-kóŋbòg</i> ^ɔ	n. animal
	<i>pl bōn-kóŋbìd</i> ^ε	
	<i>cb kòŋb-</i>	used as <i>cb</i>
	<i>bōn-kúdùg</i> ^ɔ	n. old man
<i>bōn-dáàr</i> ^ε		which day? 17.1
<i>bòŋ</i> ^a		n. donkey
<i>pl</i>	<i>bòmɪs</i> ^ε	
<i>cb</i>	<i>bòŋ-</i>	
<i>bòŋ</i> ^ε		vv. take a short cut
<i>bùel</i> ^ε		vv. call, summon
		<i>Ò yō'ur búèn</i> X. "She is called X." 23.2
<i>bùer</i> ^ε		n. grain store, silo
<i>pl</i>	<i>bùèya</i> ⁺	
<i>cb</i>	<i>bùà-</i>	
<i>bū'əs</i> ^ε		vv. ask
<i>ger</i>	<i>bū'əsúg</i> ^ɔ	n. question
<i>bù-pīga</i>		adv. ten times 16.2.5
<i>bōráa</i> ⁼		n. man, male adult; in ILK but characteristically <i>Toende</i> Kusaal; no examples in NT. See <i>dāy</i> ⁺
<i>bōrɪyá</i> ⁺		n. Christmas ← Twi/Fante <i>bronya</i>
<i>bòrkìn</i> ^a		n. free person; honourable person
<i>pl</i>	<i>bòrkìn-nàm</i> ^a	← Songhay, probably via Mooré 18.1
<i>cb</i>	<i>bòrkìn-</i>	
<i>Bùsáàŋl</i> ^ε		n. Bisa language 35.4
<i>Bùsáŋ</i> ^a		n. Bisa person 35.4
<i>pl</i>	<i>Bùsáàŋs</i> ^ε	
<i>cb</i>	<i>Bùsāŋ-</i>	
<i>bōtɪŋ</i> ^a		n. cup (in general; etymologically ← "seed planting [cup]")
<i>pl</i>	<i>bōtɪs</i> ^ε	irregular 6.2.1 2.4
<i>cb</i>	<i>bòtɪŋ-</i>	
<i>bōvd</i> ^ε		n. <i>pl</i> as <i>sg</i> innocence
<i>būudi</i> ⁺		n. kind, sort, ethnic group
<i>cb</i>	<i>bùud-</i>	

<i>būvg</i> ^a		<i>n.</i> goat
<i>pl</i>	<i>būvs</i> ^ε	
<i>cb</i>	<i>bù-</i> <i>bù-dìbıg</i> ^a	<i>n.</i> male kid

D

<i>dà</i>		before two days ago, Tense Particle 22.3.1
<i>dā</i>		"not" with Imperative Mood 22.5
<i>dàa</i>		day after tomorrow, Tense Particle 22.3.1
<i>dāa</i>		before yesterday, Tense Particle 22.3.1
<i>dà'</i> ⁺		<i>vv.</i> buy
<i>dà'a</i> ⁼		<i>n.</i> market
<i>pl</i>	<i>dà'as</i> ^ε	
<i>cb</i>	<i>dà'-</i>	
<i>dà'abır</i> ^ε		<i>n.</i> slave
<i>dàalum</i> ^m		<i>n.</i> masculinity
<i>dàalım</i> ^m		<i>n.</i> male organs
<i>pl</i>	<i>dàalımıs</i> ^ε	
<i>dāam</i> ^{m/}		<i>n.</i> millet beer, "pito"
<i>cb</i>	<i>dā-</i> <i>dā-núur</i> ^ε <i>dā-bín</i> ^{nε} <i>cb dā-bín-</i>	<i>n.</i> beer-drinking <i>n.</i> residue of beer; NT "yeast"
<i>dàam</i> ^m		<i>vv.</i> disturb, trouble; cf Hausa <i>dàamaa id</i>
<i>dāan</i> ^a		<i>n.</i> owner of ... 19.9.3
<i>pl</i>	<i>dāan-nām</i> ^a	
<i>cb</i>	<i>dāan-</i>	
<i>dāar</i> ^ε		<i>n.</i> day, 24-hour period 35.8
<i>pl</i>	<i>dābá</i> ⁺	
<i>cb</i>	<i>dà-</i> <i>dà-pīga</i> ⁺	<i>n.</i> ten days
<i>dābìəm</i> ^m <i>tone sic</i>		<i>n.</i> fear
<i>dàbīog</i> ^ɔ		<i>n.</i> coward
<i>pl</i>	<i>dàbīəd</i> ^ε	
<i>cb</i>	<i>dàbjà-</i>	
<i>dàbısr</i> ^ε		<i>n.</i> day (as one of several)
<i>pl</i>	<i>dàbısa</i> ⁺	
<i>cb</i>	<i>dàbıs-</i>	
<i>dādúk</i> ^ɔ		<i>n.</i> a kind of large pot
<i>dā'e</i> ^{+/}		<i>vv.</i> push; blow (of wind)

<i>Dàgáàd</i> ^a		<i>n.</i> Dagaaba person (L toneme prefix <i>sic</i>)
<i>pl</i>	<i>Dàgáadìb</i> ^a <i>Dàgáàd-nàm</i> ^a	
<i>cb</i>	<i>Dàgáàd-</i>	
<i>Dàgbān</i> ^{ne/}		<i>n.</i> Dagomba person 35.4
<i>pl</i>	<i>Dàgbām</i> ^{ma/}	
<i>cb</i>	<i>Dàgbān-</i>	
<i>Dàgbān</i> ^{ne/}		<i>n.</i> Dagbani language 35.4
<i>Dàgbāɲ</i> ^{ɔ/}		<i>n.</i> Dagomba country, Dagbon 35.4
<i>dàgòbɪ</i> ^a		<i>n.</i> left-hand
<i>dāká</i> ⁺		<i>n.</i> box ← Hausa <i>àdakàa</i>
<i>pl</i>	<i>dāká-nàm</i> ^a	
<i>cb</i>	<i>dāká-</i>	
<i>dàkīg</i> ^a		<i>n.</i> wife's sibling 35.1
<i>pl</i>	<i>dàkīs</i> ^ε	
<i>cb</i>	<i>dàkì-</i>	
	<i>dàkì-dāɲ</i> ⁺	<i>n.</i> wife's brother
	<i>dàkì-puāk</i> ^a	<i>n.</i> wife's sister
	<i>dàkì-tù</i> ⁺	<i>n.</i> wife's sister's husband
<i>dà-kòɲr</i> ^ε		<i>n.</i> unmarried son 35.1
<i>pl</i>	<i>dà-kòɲya</i> ⁺	
<i>cb</i>	<i>dà-kòɲ-</i>	
<i>dàm</i> ^m		<i>vv.</i> shake
<i>dipf</i>	<i>dàmmɪd</i> ^a	
<i>dàmà'a</i> ⁼		<i>n.</i> liar cf <i>mà'</i> ⁺
<i>dàmà'am</i> ^m		<i>n.</i> lie, untruth, lying
<i>dàmà'ar</i> ^ε		<i>n.</i> lie, untruth
<i>dāmpūsā</i> ^ε		<i>n.</i> stick
<i>dànkòɲ</i> ^ɔ		<i>n.</i> measles
<i>dà-pāa</i> ^{a/}		<i>n.</i> young man, son
<i>dà-sāɲ</i> ^a		<i>n.</i> young man
<i>pl</i>	<i>dà-sāaɲs</i> ^ε <i>dà-sām</i> ^{ma}	
<i>cb</i>	<i>dà-saɲ-</i>	
<i>dà-tāa</i> ⁼		<i>n.</i> enemy
<i>pl</i>	<i>dà-tāas</i> ^ε	
<i>cb</i>	<i>dà-tà-</i>	
<i>dàtiɲ</i> ^ɔ		<i>n.</i> right-hand
<i>dāɲ</i> ⁺		<i>n.</i> man (as opposed to woman)
<i>pl</i>	<i>dāp</i> ^a	
<i>cb</i>	<i>dāɲ- dàp-</i>	

<i>dàvɔ</i> ^ɔ		<i>n.</i> piece of wood, log
<i>pl</i>	<i>dàad</i> ^ε	<i>pl</i> also: wood (material)
<i>cb</i>	<i>dà-</i>	
	<i>dà-kīəd</i> ^a	<i>n.</i> wood-cutter
	<i>dà-kpīəd</i> ^a	<i>n.</i> carpenter
	<i>dà-pūvdír</i> ^ε	<i>n.</i> cross-piece
	<i>pl</i> <i>dà-pūvdá</i> ⁺	<i>n.</i> used as sg cross NT
<i>dāvɔ</i> ^ɔ		<i>adj.</i> male
<i>pl</i>	<i>dāad</i> ^ε	
<i>cb</i>	<i>dà-</i>	
<i>dàwàlɪg</i> ^a		<i>n.</i> hot humid season before the rains
<i>dàwān</i> ^{nε/}		<i>n.</i> pigeon
<i>pl</i>	<i>dàwāná</i> ⁺	
<i>cb</i>	<i>dàwān-</i>	
<i>dàyáam</i> ^{ma}		<i>n.</i> husband's parent 35.1
<i>pl</i>	<i>dàyāam-nám</i> ^a	
<i>cb</i>	<i>dàyāam-</i>	
	<i>dàyāam-dáy</i> ⁺	<i>n.</i> husband's father
	<i>dàyāam-puák</i> ^a	<i>n.</i> husband's mother
<i>dàyūug</i> ^{ɔ/}		<i>n.</i> rat
<i>pl</i>	<i>dàyūud</i> ^{ε/}	
<i>cb</i>	<i>dàyū-</i>	
<i>dèbɪr</i> ^ε		<i>n.</i> mat, pallet, bed
<i>pl</i>	<i>dèba</i> ⁺	
<i>dēɛŋ</i> ^a		<i>q.</i> first 16.2.4
<i>pl</i>	<i>dēɛŋs</i> ^ε <i>dēɛmɪs</i> ^ε <i>dēɛna</i> ⁺	
<i>cb</i>	<i>dēɛŋ-</i>	
<i>dēl</i> ^{la/}		<i>iv.</i> lean on something (of a person)
<i>ger</i>	<i>dēllóg</i> ^ɔ <i>dēllím</i> ^m	
<i>dèlɪm</i> ^m		<i>vv.</i> begin to lean
<i>dēŋ</i> ^a		<i>n.</i> accidental bruise
<i>pl</i>	<i>dēmɪs</i> ^ε	
<i>cb</i>	<i>dēŋ-</i>	
<i>dèŋ</i> ^ε		<i>vv.</i> go, do first
<i>dèŋɪm</i>		beforehand, Particle-Verb 22.7.2
<i>dì</i>		it, its (Proclitic) 15.1 = <i>lì</i>

<i>dì</i> ⁺		vv. eat, receive
<i>dipf</i>	<i>dìt</i> ^a	
<i>imp</i>	<i>dìm</i> ^{ma}	
<i>ger</i>	<i>dīb</i> ^ɔ	n. food
		<i>Ò dì pụ'ā.</i> "He's married a wife."
		<i>Ò dì nyán.</i> "She's ashamed."
<i>djā</i> ^a		vv. get dirty
<i>djā'ad</i> ^{ε/}		n. dirt
<i>dīe</i> ^{+/}		vv. receive, get
<i>dìam</i> ^{ma}		n. wife's parent 35.1 ; also polite address by a man to an unrelated woman of similar or greater age
<i>pl</i>	<i>dìam-nàm</i> ^a	
<i>cb</i>	<i>dìam-</i> <i>dìam-dāy</i> ⁺ <i>dìam-puāk</i> ^a	n. wife's father n. wife's mother
<i>dì'am</i> ^m		vv. play, not be serious
<i>dì'əma</i> ⁺		n. festival
<i>dīəs</i> ^{ε/}		vv. receive (many things)
<i>dīg</i> ^{ya/}		iv. be lying down
<i>ger</i>	<i>dīk</i> ^{a/} KT <i>dīg</i> ^{ε/} WK	
<i>dīg</i> ^{isá} ⁺		n. <i>pl</i> lairs
<i>dīg</i> ^l ^{ε/}		vv. lay down
<i>dīg</i> ⁿ ^ε		vv. lie down
<i>dīg</i> ^r ^ε		n. dwarf
<i>pl</i>	<i>dīga</i> ⁺	
<i>cb</i>	<i>dìg-</i>	
<i>dìs</i> ^ε		vv. feed
<i>agt</i>	<i>dìs</i> ^a	n. glutton
<i>dìsú</i> ^ɔ		n. spoon
<i>pl</i>	<i>dìsímà</i> ⁺ <i>dìsís</i> ^ε	
<i>cb</i>	<i>dìsúg-</i>	
<i>dìm</i> ^a		dummy head pronoun, animate <i>pl</i> 19.9.3
<i>dìn</i> ^{nε}		dummy head pronoun, inanimate 19.9.3
<i>dín</i>		it (Subject of <i>ñ</i> -Clause) 15.1
<i>dīn</i> ^ε		it (Contrastive) 15.1 = <i>līn</i> ^ε
<i>dìndēog</i> ^{ɔ/}		n. chameleon
<i>pl</i>	<i>dìndēed</i> ^{ε/}	
<i>cb</i>	<i>dìndē-</i>	
<i>dìndìs</i> ^a		n. glutton
<i>dìn zúg</i> ^ɔ		therefore 17.1

<i>dìtún^ɔ</i>		<i>n.</i> right-hand: see <i>dàtìún^ɔ</i>
<i>dì-zōrvu^ɔ/</i>		<i>n.</i> crumb
<i>pl</i>	<i>dì-zōrá⁺</i>	
<i>cb</i>	<i>dì-zōr-</i>	
<i>dōl^{la}/</i>		<i>iv.</i> accompany in a subordinate rôle
<i>ger</i>	<i>dōllím^m</i>	<i>Ànó'wònì dōllí fò?</i> "Who has come with you?" (to an elderly patient.)
		<i>Bà dōl nē tāaba.</i> "They went together."
<i>dōlɪg^ε/</i>		<i>vv.</i> make accompany, send along with
<i>dōlɪs^ε/</i>		<i>vv.</i> investigate, trace
<i>dōŋlɪg^ε/</i>		<i>vv.</i> stretch oneself
<i>dòŋ'wɔ^ε</i>		<i>vv.</i> water plants
<i>dòwɔ^ɔ</i>		<i>n.</i> house, hut; clan
<i>pl</i>	<i>dòwɔd^ε dòt^ε</i>	
<i>cb</i>	<i>dò-</i>	
	<i>dòwɔ bîg^a</i>	<i>n.</i> (house) cat
<i>dòwɔŋ^ɔ</i>		<i>n.</i> dawadawa fruit 35.5
<i>pl</i>	<i>dòwɔŋd^ε</i>	
<i>cb</i>	<i>dòŋ-</i>	
<i>dō⁺</i>		<i>vv.</i> go up
<i>dipf</i>	<i>dūt^a/</i>	
<i>imp</i>	<i>dùm^{ma}</i>	
<i>dɔ'à^a</i>		<i>vv.</i> bear, beget
<i>agt</i>	<i>dō'ad^a</i>	<i>n.</i> elder relation
<i>dò'al^ε</i>		<i>vv.</i> make interest (of a loan)
<i>dō'am^m</i>		<i>n.</i> birth
<i>dùan⁺</i>		<i>n.</i> dawadawa 35.5
<i>pl</i>	<i>dòwɔs^ε</i>	<i>Parkia clappertoniana</i> [= <i>biglobosa</i>] (Haaf)
<i>cb</i>	<i>dòŋ-</i>	
<i>dɔ'átà⁺</i>		<i>n.</i> doctor ← English
<i>dūe^{+/}</i>		<i>vv.</i> raise, rise
<i>dōg^ε</i>		<i>vv.</i> cook
<i>dōk^ɔ/</i>		<i>n.</i> cooking pot
<i>pl</i>	<i>dōgɔd^ε/ dút^ε</i>	
<i>cb</i>	<i>dōg-</i>	
	<i>dōg-pé'èla⁺</i>	<i>n.</i> full pots
<i>dùm^m</i>		<i>vv.</i> bite
<i>dūm^{mε} dūm^{nε}</i>		<i>n.</i> knee
<i>pl</i>	<i>dūma⁺</i>	
<i>cb</i>	<i>dùm-</i>	

<i>dòndùug</i> ^ɔ		<i>n. cobra</i>
<i>pl</i>	<i>dòndùud</i> ^ɛ	
<i>cb</i>	<i>dòndù-</i>	
<i>dūɪya</i> ⁺		<i>n. world</i> ← Arabic دنیا <i>dunya</i> : 9.7
<i>cb</i>	<i>dūɪyá-</i>	
<i>dūnná</i> ⁺		<i>adv. this year</i> 35.8
<i>dūŋ</i> ^a		<i>n. mosquito</i>
<i>pl</i>	<i>dūmɪs</i> ^ɛ	
<i>cb</i>	<i>dùŋ-</i>	
<i>dūər</i> ^{ɛ/}		<i>n. stick</i>
<i>pl</i>	<i>dūēyá</i> ⁺	
<i>cb</i>	<i>dūā-</i>	
<i>dū'əs</i> ^{ɛ/}		<i>vv. lift up, honour</i>
<i>dūr</i> ^a		<i>iv. be many</i>
<i>dū'un</i> ^{ɛ/}		<i>vv. pass water</i> (<i>ger</i> recorded as <i>dū'unúg</i> ^ɔ)
<i>dū'uním</i> ^m		<i>n. urine</i>
<i>cb</i>	<i>dū'un-</i>	
<i>dōvsá</i> ⁺		<i>n. pl. steps</i>

E

<i>ēɛŋ</i>	<i>yes</i> 28.2.4
<i>ēɛŋ</i> or <i>ēɛŋ tí</i>	see <i>nyēɛ</i> , <i>nyēɛ tí</i> Particle-Verb 22.7.2
<i>ēɛŋb</i> ^{ɛ/}	<i>vv. lay a foundation</i>
<i>ēɛŋbíɾ</i> ^ɛ	<i>n. foundation</i> 12.1.2
<i>èŋbɪs</i> ^ɛ	<i>vv. scratch</i>
<i>èŋd</i> ^ɛ	<i>vv. block up, plug up</i>
<i>èŋdɪg</i> ^ɛ	<i>vv. unblock, unplug</i>
<i>èŋrɪg</i> ^ɛ	<i>vv. shift along</i> (e.g. a bench)

F

<i>fāaŋ</i> ⁼	<i>q. every</i> 16.1
<i>fāeŋ</i> ^{+/}	<i>vv. save</i>
<i>agt</i>	<i>fāaŋd</i> ^{a/} <i>fāaŋgíd</i> ^a
<i>fāŋ</i> ⁺	<i>vv. grab, rob</i>
<i>fáss</i>	<i>ideophone for</i> <i>pìəɪɪg</i> ^a "white" 19.8.1.3
<i>fēɛg</i> ^{ɛ/}	<i>vv. (of food) get old, cold</i>
<i>fēŋ'og</i> ^{ɔ/}	<i>n. ulcer</i>
<i>pl</i>	<i>fēŋ'ed</i> ^{ɛ/}
<i>cb</i>	<i>fēŋ'-</i>

fɪəb^ε

vv. beat

fɪ'ig^ε

vv. cut off

fɪɪŋ⁼q. a little (liquid) [16.1](#)fɪtlá⁺n. lamp ← Hausa *fɪtilàa*fɔɔs^{ε/}

vv. blow, puff (wind)

ger fɔɔsúg^ɔ

n. hypocrisy NT

fù

you, your sg (Proclitic) [15.1](#)

fɔ

you sg (Enclitic object) [15.1](#)fùe⁺

vv. draw out

fūfūm^{mε}

n. envy; also: stye (believed to result from envy)

pl fūfūma⁺

cb fūfúm-

fún

you sg (as subject of *h*-Clause) [15.1](#)

fūn SF fúnē LF

you sg (contrastive) [15.1](#)fūug^{ɔ/}

n. shirt, clothing

pl fūud^{ε/} fūt^{ε/}

cb fū-

pl also: cloth

G

gàad^εvv. pass, surpass [26.3.2](#)

gáafàra

sorry (in formulae, [34](#))gà'al^ε

vv. button up

gà'am^m

vv. grind teeth

gāaŋ^{=/}n. Nigerian ebony [35.5](#)pl gāaŋs^{ε/}

cb gāŋ-

Diospyros mespilliformis (Haaf)gàas^ε

vv. pass by

gādv⁺ gādvug^{ɔ/}n. bed ← Hausa *gadoo*pl gādv-nám^a gāt^{ε/}

cb gād- gādv-

gàlɪm^m

vv. joke

gàls^ε

vv. exceed, get to be too much

gāŋr^{ε/}n. fruit of Nigerian ebony [35.5](#)pl gāŋyá⁺

cb gāŋr-

gàŋ^ε

vv. step over

gāŋ^{ε/}

vv. choose

gbāŋ'e^{+/}

vv. catch

gbányà'a⁼n. lazy person [18](#)gbányà'am^mn. laziness; 1976 NT *gonya'am*

<i>gbàṣṣe</i> ^ɔ		<i>n.</i> book WK
<i>pl</i>	<i>gbàna</i> ⁺	
<i>cb</i>	<i>gbàn- gbàṣṣe-</i>	
<i>gbāṣe</i> ^{ɔ/}		<i>n.</i> animal skin WK; animal skin, book DK
<i>pl</i>	<i>gbāná</i> ⁺	
<i>cb</i>	<i>gbān- gbāṣe-</i>	
<i>gbéṣe</i> ^m		<i>n.</i> sleep
<i>cb</i>	<i>gbēṣe-</i>	
<i>gbè'og</i> ^ɔ		<i>n.</i> forehead; shore of a lake
<i>pl</i>	<i>gbè'ed</i> ^ε <i>gbèda</i> ⁺	
<i>cb</i>	<i>gbè'-</i>	
<i>gbēr</i> ^{ε/}		<i>n.</i> thigh
<i>pl</i>	<i>gbēyá</i> ⁺	
<i>cb</i>	<i>gbēr-</i>	
<i>gbīgim</i> ^{nε}		<i>n.</i> lion
<i>pl</i>	<i>gbīgima</i> ⁺	
<i>cb</i>	<i>gbìgim-</i>	
<i>gbìn</i> ^{nε}		<i>n.</i> buttock; base (e.g. of a mountain); meaning as postposition 20.6
<i>pl</i>	<i>gbìna</i> ⁺	
<i>cb</i>	<i>gbìn-</i>	
<i>gbìn-vòṣe</i> ^ε		<i>n.</i> anus
<i>gbīs</i> ^ε		<i>vv.</i> sleep
<i>gēi</i> ^{ε/}		<i>vv.</i> place between one's legs; Pattern H
<i>gēṣe</i> ^{m/}		<i>vv.</i> go mad, madden
<i>pl</i>	<i>gēṣemís</i> ^ε	<i>n. pl as sg</i> madness
<i>gēṣe</i> ^a		<i>n.</i> madman
<i>pl</i>	<i>gēṣemís</i> ^ε	
<i>gél</i> ^{lε}		<i>n.</i> egg
<i>pl</i>	<i>gēlá</i> ⁺	
<i>cb</i>	<i>gēl-</i>	
<i>gēṣe</i> ⁺		<i>vv.</i> get tired
<i>res adj</i>	<i>gēṣeṣe</i> ^ɔ	<i>adj.</i> tired
<i>gēṣe</i> ^{l+}		<i>vv.</i> get angry
<i>gēog</i> ^ɔ		<i>n.</i> place between one's legs; Pattern O
<i>gīṣe</i> ^m		<i>n.</i> shortness
<i>gìk</i> ^a		<i>n. or adj.</i> dumb
<i>pl</i>	<i>gìgís</i> ^ε	
<i>cb</i>	<i>gìg-</i>	
<i>gīl</i> ^{ε/}		<i>vv.</i> go around 11.1.1
<i>dipf</i>	<i>gīn</i> ^{na/}	

gīm^{ma/}*gīŋ*^a*pl gīma*⁺*cb gīŋ-**gīŋ*^ε*gīŋa*⁺*gīŋulim*^m*gōdɪg*^{ε/} *gō'ɔn*^ε*gō*^{la/} *gōr*^{a/} *gō'e*^{ya/}*gōŋ*⁺*dipf gōŋŋd*^a*ger gōŋŋdɪm*^m*Gōŋg*^a*pl Gōŋs*^ε*Gōŋg*^ɔ*gō'ɔn*^ε*gōr*^{a/}*gōs*^ε*dipf gōsɪd*^{a/} *gōt*^{a/}*imp gōsɪm*^a *gōm*^{ma}*ger gōsɪg*^a*agt gōt*^{a/}*gōl*^ε*dipf gōn*^{na}*gōl*^{la}*ger gōlɪb*^ɔ*gōllim*^{nε}*gōm*^{mε}*pl gōma*⁺*Gōm*^{mε}*gōmpōzēr*^{ε/}*pl gōmpōzēyá*⁺*cb gōmpōzér-**gōŋ'a*⁺*pl gōŋ'ɔs*^ε*cb gōŋ'-**gōŋgōm*^{mε}*gōŋ*^a*pl gōmɪs*^ε*cb gōŋ-*

iv. be short

adj. short

vv. scrimp

adv. shortly [20.4](#)

n. shortness

vv. look up

iv. be looking up

vv. hunt

wander

[13.1.1.4](#)n. clan name [35.4](#)

n. place of the Goosi clan

vv. look up

iv. be looking up

vv. look

n. seer, prophet

vv. suspend

iv. be suspended

only; Post NP/AdvP Particle [33.6](#)n. kapok fruit [35.5](#); also "thread" WKn. place of the clan *Gōm-dīm*^a [35.4](#)

n. duck

n. thorn

n. kapok material

n. kapok tree [35.5](#)*Ceiba pentandra* (Haaf)

*gūr^{a/}**ger gūrím^m**Gūrín^{ne}**Gūrín^a**pl Gūrís^ε**gū'ul^{ε/}**gū'ulim^m**gū'ur^ε**pl gūya⁺**cb gū-**gū'ur^ε**pl gūya⁺**cb gū-**gū'us^{ε/}**gū'us^ε*iv. be on guard, watch for [29.1](#)n. Farefare language [35.4](#)n. Farefare person [35.4](#)

vv. put on guard

vv. become half-ripe

n. upland; bank of river

n. ridge of back

vv. take care, watch out

n *pl.* half-ripe fruit**H***hālí⁺*until, up to and as far as [27.1.3](#) [26.4](#) [21.2](#)Probably ultimately ← Arabic حتى *ḥatta*:**I***īā⁺**īāñ'as^{ε/}**īāñk^{ε/}**ger īāñ'ad^{a/}**agt īāñ'ad^{a/}**īgí^{ya/}**ger īk^{a/} KT īgír^{ε/} WK**īgí^{ε/}**īgín^ε**íí^ε**pl īlálá⁺**cb īl-**īsír^ε**pl īsa⁺**cb īs-**īsíg^ε*

vv. seek

vv. leap

vv. leap, fly [11.1.1](#)

iv. be kneeling

vv. make to kneel

vv. kneel down

n. horn

n. scar

vv. get up early

K

kà

kāab^{ε/}kāal^{ε/}kāas^{ε/}

kà'asigē LF only

kābig^{ε/}kābir^{ε/}ger kâbirí⁺kàd^ε

kàd sàríyà

agt sàríyà-kât^akā'ε⁺ger kâ'alím^mkāl^{|ε/}pl kâlá⁺

cb kâl-

kàligā^{+/}kām^aKàmbùnɪ^εKàmbùŋ^apl Kàmbùmɪs^ε

cb Kàmbùŋ-

kàn^εkànb^εger kânbir^εkàŋā^{+/}kà^akàrum^mkàsēt^{a/}pl kàsētí^bkē⁺dipf kēt^{a/}imp kèl^akèèkè⁺pl kèèkè-nàm^a

cb kèèkè-

kèès^εkèlɪs^εand, that [27.1.2](#) [28.3.2](#)

vv. offer, invite

vv. count

vv. cry out, weep; (cock) crow

iv. not exist [32.1.1](#)

vv. ladle out (liquid)

vv. call out asking for admission [34](#)

n. calling out for admission

vv. drive away

vv. judge [23.1](#)

n. judge NT

iv. not exist, not be, not have [32.1.1](#) [8.5.3](#)

n. number

q. few [16.1](#)q. every [16.1](#)n. Twi language [35.4](#)n. Ashanti person [35.4](#)this, that (Demonstrative [15.2](#))

vv. scorch

this, that (Demonstrative [15.2](#))

iv. be few

vv. read

n. witness; testimony; ?ultimately Songhay, cf
Humburi Senni kàsé:tè "inform in advance"

plural witnesses

vv. let, cause to ... [11.1.1](#) [29.1](#)

n. bicycle ← Hausa kèèkè

vv. say farewell to

vv. listen

kēŋ⁺

dipf *kēn*^{a/}
 imp *kēm*^a
 ger *kēn*^{nɛ/}
kēn kēn

vv. come [11.1.1](#); always with *nā* [23.7](#)welcome! [34](#)*kēŋ*^{ɛ/}

dipf *kēn*^{na/}
 imp *kēm*^{ma}
 agt *kēn*^{na/}

vv. go; walk [11.1.1](#)disambiguated with *sà* [23.7](#)*kérɪfà* or *káɪfà*

n. traveller

kī^{+/}from Hausa *karfèe*; in telling time [35.8](#)

n. cereal, millet

cb *kī- kā-*
kì-dà'ar^ɛ
 pl *kì-dà'ada*⁺
kā-wēnnɪr^ɛ
 pl *kā-wēnna*⁺
 cb *kā-wén-*

n. purchased millet

n. corn

kjà⁺

vv. cut

kīdɪg^{ɛ/}

vv. cross over, meet

À-Kīdɪgì Bū'əs

n. the constellation Orion

kīibú⁺n. soap WK; probable Mampruli loan [18.1](#);written materials *k'iib*^ɔ, probably *kī'ib*^{ɔ/}cb *kīib-**kīŋ*^ɔ

n. millet seed

pl *kīin*^ɪ⁺*kìɪs*^ɛ

vv. listen

kī'ɪs^{ɛ/}

vv. deny

kìkàm^{mɛ}n. fig [35.5](#)pl *kìkàma*⁺*kìkàŋ*^a *kìnkàŋ*^an. fig tree [35.5](#)pl *kìkàmɪs*^ɛ*Ficus capensis* (Haaf)cb *kìkàŋ-**kìkīrɪg*^{a/}

n. "fairy" in local English; protective spiritual

pl *kìkīrɪs*^{ɛ/}

beings associated with a person (three for a man, four for a woman because of the dangers of childbirth.) Wild *kìkīrɪs*^{ɛ/} hostile to man live in the bush. "Their feet are attached backwards to confuse trackers." WK

cb *kìkīr-*
kìkīr-bé'èd^ɛ

n. NT evil spirit, demon; KB just uses *kìkīrɪg*^{a/}*kīlɪm*^{m/}

vv. become, change into

<i>kìṃ^m</i>		vv. tend flock, herd
<i>agt kòṅb-kīm^{na}</i>		<i>n.</i> herdsman, shepherd
<i>kīr^ε</i>		vv. hurry, tremble
<i>ger kíkírùg^ɔ kīrɪb^ɔ</i>		
<i>kīs^{a/}</i>		iv. hate
<i>ger kísùg^ɔ</i>		
<i>agt kīs^{a/} kīsɪd^{a/}</i>		
<i>kísùg^ɔ</i>		<i>adj.</i> hateful, taboo
<i>kò⁺</i>		vv. get broken, break (intransitive)
<i>res adj kòɔlúg^ɔ</i>		<i>adj.</i> broken
<i>kòbɪgā kòbɪsɪ⁺</i>		<i>q.</i> one hundred, two hundred 16.2.2
<i>kōbɪr^ε</i>		<i>n.</i> bone
<i>pl kōba⁺</i>		
<i>cb kòb-</i>		
<i>kōdú⁺</i>		<i>n.</i> banana ← Twi <i>kwadu</i>
<i>kòl^ε</i>		vv. put something around the neck
<i>kōlɪg^a</i>		<i>n.</i> river
<i>pl kōlɪs^ε</i>		
<i>cb kòl-</i>		
<i>kōlugu-n nɔ́-dáùg^ɔ</i>		<i>n.</i> crayfish
<i>kòlug^ɔ</i>		<i>n.</i> sack, bag
<i>pl kòn^{nε}</i>		
<i>cb kòlug-</i>		9.2.2
<i>kōm^{m/}</i>		<i>n.</i> hunger
<i>cb kōm-</i>		
<i>kōṅbug^ɔ</i>		<i>n.</i> animal hair or human body hair; cf <i>zūəbúg^ɔ</i>
<i>pl kōṅbɪd^ε</i>		
<i>cb kòṅb-</i>		also used as <i>cb</i> of <i>būn-kòṅbùg^ɔ</i> animal
<i>agt kòṅb-kīm^{na}</i>		<i>n.</i> shepherd, herdsman
<i>pl kòṅb-kīmmɪb^a</i>		
<i>kōṅ'kō⁺</i>		<i>adv.</i> alone, by oneself 20.4
<i>kòṅs^ε</i>		vv. cough
<i>kòṅsɪm^m</i>		vv. cough
<i>kò'ɔg^ε</i>		vv. break (transitive or intransitive)
<i>kò'ɔs^ε</i>		vv. break several times
<i>kòtāa^{nε}</i>		at all; Post NP/AdvP Particle 33.6
<i>kótù⁺</i>		<i>n.</i> lawcourt ← English, probably via Hausa
<i>kpà'a⁼</i>		<i>n.</i> rich person
<i>pl kpà'a-nàm^a</i>		

<i>kpāad</i> ^{a/}	<i>n.</i> farmer, cultivator
<i>pl</i> <i>kpāadí</i> ^a	
<i>cb</i> <i>kpāad-</i>	
<i>kpà'am</i> ^m	<i>n.</i> riches
<i>kpāaṇm</i> ^{m/}	<i>n.</i> grease, ointment
<i>cb</i> <i>kpāṇ-</i>	
<i>kpāṇ-sóṇ'ɔ̀dì</i> ^m	<i>n.</i> anointing oil
<i>kpàkūr</i> ^{ε/}	<i>n.</i> tortoise
<i>pl</i> <i>kpàkūyá</i> ⁺	
<i>cb</i> <i>kpàkūr-</i>	
<i>kpān</i> ^{nε}	<i>n.</i> spear
<i>pl</i> <i>kpāna</i> ⁺	
<i>cb</i> <i>kpàn-</i>	
<i>kpàṇdɪr</i> ^ε	<i>n.</i> baboon
<i>pl</i> <i>kpàṇda</i> ⁺	
<i>cb</i> <i>kpàṇd-</i>	
<i>kpàr</i> ^ε	<i>vv.</i> lock
<i>kpār-kéòṇɔ̀</i>	<i>n.</i> rag
<i>pl</i> <i>kpār-kéèṇd</i> ^ε	
<i>cb</i> <i>kpār-kéṇ-</i>	
<i>kpā'úṇ</i> ^{ɔ̀}	<i>n.</i> guinea fowl
<i>pl</i> <i>kpī'iní</i> ⁺	
<i>cb</i> <i>kpā'-</i>	
<i>kpē</i> ⁺	<i>adv.</i> here 17.1
<i>kpèṇm</i> ^m	<i>n.</i> elder
<i>pl</i> <i>kpèṇm-nàm</i> ^a	
<i>cb</i> <i>kpèṇm-</i>	
<i>kpèṇm</i> ^{ma/}	<i>iv.</i> be older than
<i>kpēlá</i> ⁺	<i>adv.</i> here 17.1
<i>kpèlɪm</i>	still; immediately after, Particle-Verb 22.7.2
<i>kpèlɪm</i> ^m	<i>vv.</i> remain
<i>kpèn</i>	reduced form of the Particle-Verb <i>kpèlɪm</i>
<i>kpèṇ'</i> ⁺	<i>vv.</i> enter
<i>kpēṇdɪr</i> ^{ε/}	<i>n.</i> cheek
<i>pl</i> <i>kpēṇdá</i> ⁺	
<i>cb</i> <i>kpēṇd-</i>	
<i>kpèṇ'εs</i> ^ε	<i>vv.</i> make enter
<i>kpè'ṇ</i> ^ε	<i>vv.</i> strengthen
<i>kpēoṇɔ̀</i> ^{ɔ̀}	<i>n.</i> seniority
<i>kpi</i> ⁺	<i>vv.</i> die
<i>res adj</i> <i>kpiilúṇ</i> ^{ɔ̀}	<i>adj.</i> dead

<i>kpì'a</i> ⁺		<i>n.</i> neighbour
<i>pl</i>	<i>kpì'əs</i> ^ε	
<i>cb</i>	<i>kpì'à</i> ⁻	
<i>kpì'à</i> ⁺		<i>vv.</i> shape wood with axe etc
<i>kpì'e</i> ⁺		<i>vv.</i> approach
<i>kpì'əm</i> ^{ma/}		<i>iv.</i> be strong, hard
<i>kpìibɪg</i> ^a		<i>n.</i> orphan
<i>pl</i>	<i>kpìibɪs</i> ^ε	
<i>cb</i>	<i>kpìib-</i>	
<i>kpìig</i> ^ε		<i>vv.</i> go out (fire)
<i>kpì'im</i> ^{m/}		<i>n.</i> dead person, corpse
<i>pl</i>	<i>kpì'imís</i> ^ε	
<i>cb</i>	<i>kpì'im-</i>	
<i>kpìis</i> ^ε		<i>vv.</i> quench (fire)
<i>kpìkpin</i> ^{na/}		<i>n.</i> merchant
<i>pl</i>	<i>kpìkpiníb</i> ^a	
<i>cb</i>	<i>kpìkpin-</i>	
<i>kpì'oŋ</i> ^ɔ		<i>adj.</i> strong, hard
<i>pl</i>	<i>kpì'əma</i> ⁺	
<i>cb</i>	<i>kpì'oŋ-</i>	
<i>kpìsɪnkpìl</i> ^{lε}		<i>n.</i> fist
<i>pl</i>	<i>kpìsɪnkpìla</i> ⁺	
<i>cb</i>	<i>kpìsɪnkpìl-</i>	
<i>kpìsɪkpìl</i> ^{lε}		<i>n.</i> fist
<i>kpòkpàr</i> ^ε		<i>n.</i> palm tree fruit 35.5
<i>pl</i>	<i>kpòkpàra</i> ⁺	
<i>kpòkpàrig</i> ^a		<i>n.</i> palm tree 35.5
<i>pl</i>	<i>kpòkpàris</i> ^ε	(Probably <i>Borassus akeassii</i> or <i>aethiopum</i>)
<i>cb</i>	<i>kpòkpàr-</i>	
<i>kpòkpàɸŋ</i> ^ɔ		<i>n.</i> arm, wing
<i>pl</i>	<i>kpòkpàma</i> ⁺	
<i>cb</i>	<i>kpòkpàɸŋ-</i>	
<i>kù</i>		not; negates Irrealis Mood 22.5
<i>kū</i> ⁺		<i>vv.</i> kill
<i>kū</i> ⁺		<i>vv.</i> gather, threaten (of rain)
		<i>Sāa kú yā.</i> "It looks like rain."
<i>kūā</i> ⁺		<i>vv.</i> hoe, farm
<i>kū'alíŋ</i> ^a		<i>n.</i> sleeveless traditional smock
<i>pl</i>	<i>kū'alímìs</i> ^ε <i>kū'alís</i> ^ε	
<i>cb</i>	<i>kū'alíŋ-</i>	
<i>kùd</i> ^ε		<i>vv.</i> work iron

<i>kòdɪg^ε</i>		vv. shrivel up, dry out, age
<i>kōdɪm^m</i>		n. the olden days
<i>kōdvɔg^ɔ kōdɪr^ε</i>		adj. old
pl	<i>kōda⁺ kūt^ε</i>	
cb	<i>kòd-</i>	
<i>kūdvɔg^ɔ</i>		n. iron, nail; sg obsolete except in names 35.2
pl	<i>kūt^ε</i>	pl used as sg 9.5
cb	<i>kùt-</i>	
<i>kūgvɔr^{ε/}</i>		n. stone
pl	<i>kūgá⁺</i>	
cb	<i>kūg-</i>	
<i>kūk^a</i>		n. chair
pl	<i>kōgvɔs^ε</i>	
cb	<i>kùg-</i>	
<i>kūk^{a/}</i>		n. mahogany tree, <i>Khaya senegalensis</i> (Haaf)
<i>kùkò^{mε}</i>		n. leper
pl	<i>kùkòma⁺</i>	
cb	<i>kùkòm-</i>	
<i>kùkōr^{ε/}</i>		n. voice
pl	<i>kùkōyá⁺</i>	
cb	<i>kùkōr-</i>	
<i>kùkpàrɪg^a</i>		see <i>kpùkpàrɪg^a id</i>
<i>kūl^ε</i>		vv. return home;
		transitive "marry" (woman subject, man object)
ger	<i>kūlɪg^{a/}</i>	
<i>kōlɪm</i>		always, Post-Subject Particle 27.1.4
<i>kùlɪg^a</i>		n. door
pl	<i>kùlɪmɪs^ε kùlɪs^ε</i>	
cb	<i>kùlɪg-</i>	
<i>kùm^m</i>		vv. cry, weep
<i>kūm^m</i>		n. death
cb	<i>kùm-</i>	
	<i>kùm-vū'vɔgír^ε</i>	n. resurrection NT
<i>kùndù'ar^ε</i>		n. barren woman
pl	<i>kùndù'ada⁺</i>	
cb	<i>kùndu'à-</i>	
<i>kùndùg^a</i>		n. jackal, hyena
pl	<i>kùndùmɪs^ε kùndùna⁺</i>	

<i>kù'əm^m</i>		<i>n.</i> water
<i>cb</i>	<i>kɥ'à-</i>	
	<i>kɥ'à-nūud^{ε/}</i>	<i>n.</i> thirst
	<i>kɥ'à-ŋwīg^{a/}</i>	<i>n.</i> current in a river
	<i>pl kɥ'à-ŋwīs^{ε/}</i>	
<i>kùəs^ε</i>		<i>vv.</i> sell
<i>kòrkūr^{ε/}</i>		<i>n.</i> pig
<i>pl</i>	<i>kòrkūyá⁺</i>	
<i>cb</i>	<i>kòrkūr-</i>	
<i>Kūsáa⁼</i>		<i>n.</i> Kusaasi person 35.4
<i>pl</i>	<i>Kūsáàs^ε</i>	
<i>cb</i>	<i>Kūsá-</i>	
<i>Kūsáàl^ε</i>		<i>n.</i> Kusaal language 35.4
<i>Kūsáùg^ɔ</i>		<i>n.</i> Kusaasi country 35.4
<i>Kùtān^{nε/}</i>		<i>n.</i> member of WK's clan
<i>pl</i>	<i>Kùtām^{ma/}</i>	
<i>cb</i>	<i>Kùtān-</i>	
<i>Kùtāyɔ^{ɔ/}</i>		<i>n.</i> country of clan Kutamba
<i>kūv</i>		or 27.1.2 28.2.2 ← Hausa
<i>kūug^{a/} kūug^{ɔ/}</i>		<i>n.</i> mouse
<i>pl</i>	<i>kūus^{ε/}</i>	
<i>cb</i>	<i>kū-</i>	
<i>kùul^ε</i>		<i>vv.</i> get drunk

L

<i>lā^{+/}</i>		definite article 19.3
<i>là⁺</i>		<i>vv.</i> laugh
<i>lā'a^ɔ</i>		<i>n.</i> cowrie
<i>pl</i>	<i>līgɪdɪ⁺</i>	<i>n.</i> cowries; money
<i>cb</i>	<i>līg- là'-</i>	
	<i>là'-bīəlíf^ɔ</i>	<i>n.</i> small coin
<i>lāafiya⁺</i>		<i>n.</i> health ← Arabic العافية <i>ʔal-ʕa:fiya(tu)</i> replaced throughout by <i>laafe láafi</i> in 1996 NT
<i>là'am</i>		together, Particle-Verb 22.7.2
<i>là'am^m</i>		<i>vv.</i> associate with; together with 26.3
<i>là'as^ε</i>		<i>vv.</i> gather together (transitive)
	<i>Bà là'as tāaba</i>	"They gathered together."
<i>làbāa^ε</i>		<i>n.</i> news ← Arabic الاخبار <i>ʔal-ʔaxba:r(u)</i>
<i>cb</i>	<i>làbà-</i>	

<i>làbɪ</i> ^{ya}		iv. be crouching, hiding behind something cf Hausa <i>laɓɛ̀ɛ</i> "crouch behind something to eavesdrop" 18.1
<i>làbɪ</i> ^ɛ		vv. make crouch behind something
<i>làbɪn</i> ^ɛ		vv. crouch behind something
<i>làbɪs</i> ^ɛ		vv. walk stealthily
<i>lābɪs</i> ^{a/}		iv. be wide
<i>lābɪsɪg</i> ^a <i>lābɪsɪr</i> ^ɛ		adj. wide
pl <i>lābɪsá</i> ⁺		
cb <i>lābɪs-</i>		
<i>lābɪsɪm</i> ^m		n. wideness
<i>lāk</i> ^{ɛ/}		vv. open (eye, book)
<i>lāl</i> ^{la/}		iv. be distant
<i>lālɪg</i> ^{ɛ/}		vv. get to be far, make far
<i>lālɪ</i> ⁺		adv. far off
<i>lālɪŋ</i> ^a		adj. distant
pl <i>lālɪs</i> ^ɛ		
cb <i>lālɪŋ-</i>		
<i>lālɪg</i> ^ɔ		adj. distant
pl <i>lālɪá</i> ⁺		
cb <i>lāl-</i>		
<i>lām</i> ^{mɛ/}		n. gum (of tooth)
pl <i>lāmá</i> ⁺		
cb <i>lām-</i>		
<i>lām-fɔ̀̀g</i> ^ɔ		adj. toothless 19.8.1.4
pl <i>lām-fɔ̀̀d</i> ^ɛ		
<i>làmpɔ̄-dí'əs</i> ^a		n. tax collector 18 (French <i>l'impôt</i>)
<i>lān</i> ^{nɛ}		n. testicle
pl <i>lāna</i> ⁺		
cb <i>lān-</i>		
<i>làngáuv</i> ^ɔ		n. crab (cf <i>màngáuv</i> ^ɔ id)
pl <i>làngáam</i> ^{mɛ} <i>làngāamá</i> ⁺		
cb <i>làngāuv-</i>		
<i>lànnɪg</i> ^a		n. squirrel
pl <i>lànnɪs</i> ^ɛ		
cb <i>lànnɪg-</i>		9.2.2
<i>lā'ŋ</i> ^{ɛ/}		vv. set alight
<i>lāŋím</i> ^m		vv. wander around searching
<i>lāuk</i> ^ɔ		n. item of goods
pl <i>lā'ad</i> ^ɛ		pl goods
cb <i>lā'-</i>		

<i>là'vɿ</i> ^ɔ		<i>n.</i> fishing net
<i>pl</i>	<i>là'ama</i> ⁺	
<i>lèb</i> ^ɛ		<i>vv.</i> return (intrans)
<i>ger</i>	<i>lēbɿ</i> ^a	
<i>lèbɿ</i> ^ɛ		<i>vv.</i> turn over
<i>lèbɿs</i> ^ɛ		<i>vv.</i> answer; send back; divorce (wife)
<i>lèɛ</i>		but, Verbal Predicator particle 22.7.1
<i>lèm</i>		again, Particle-Verb 22.7.2
<i>lèm</i> ^m		<i>vv.</i> sip, taste
<i>dipf</i>	<i>lèmmɿd</i> ^a	
<i>lēr</i> ^ɛ		<i>vv.</i> get ugly
<i>lì</i>		it, its (Proclitic) 15.1
<i>lɿ</i> ⁺		it (Enclitic object) 15.1
<i>lì</i> ⁺		<i>vv.</i> fall
<i>dipf</i>	<i>lìt</i> ^a	
<i>imp</i>	<i>lìm</i> ^{ma}	
<i>ger</i>	<i>līg</i> ^a	
<i>lɿ</i> ⁺		<i>vv.</i> block up
<i>lì</i> ^a		where is ...? 25
<i>lìdɿ</i> ^ɛ		<i>vv.</i> turn a shirt WK
<i>lìdɿ</i> ^ɛ		<i>vv.</i> astonish, be amazed
<i>lìəb</i> ^ɛ		<i>vv.</i> become
<i>lì'əl</i> ^ɛ		<i>vv.</i> approach, come near
<i>lìəŋ</i> ^a		<i>n.</i> axe
<i>pl</i>	<i>līəmɿs</i> ^ɛ	
<i>cb</i>	<i>līəŋ-</i>	
<i>līg</i> ^ɛ		<i>vv.</i> patch
<i>līgɿ</i> ^ɛ		<i>vv.</i> cover
<i>līgɿn</i> ^ɛ		<i>vv.</i> cover oneself
<i>līɿbɿ</i> ^ɛ		<i>n.</i> twin
<i>pl</i>	<i>līɿba</i> ⁺	
<i>cb</i>	<i>līɿb-</i>	
<i>līk</i> ^a		<i>n.</i> darkness
<i>pl</i>	<i>līgɿs</i> ^ɛ	
<i>lìlāalɿ</i> ^a		<i>n.</i> swallow
<i>pl</i>	<i>lìlāalɿs</i> ^ɛ <i>lìlāalɿmɿs</i> ^ɛ	
<i>cb</i>	<i>lìlāalɿŋ-</i>	
<i>lín</i>		it (subject of <i>ḥ</i> -Clause) 15.1
<i>līn</i> ^ɛ		it (Contrastive) 15.1
<i>līn</i> ^ɛ		that (Demonstrative 15.2)
<i>lìná</i> ⁺		that (Demonstrative 15.2)

<i>l̥̄</i> ⁺		vv. tie
<i>l̥̄b</i> ^ε		vv. throw stones at
<i>l̥̄bɪdíg</i> ^a		n. water drawing vessel
	pl	<i>l̥̄bɪdís</i> ^ε
<i>l̥̄dɪg</i> ^{a/}		n. corner
	pl	<i>l̥̄dɪs</i> ^{ε/}
	cb	<i>l̥̄d-</i>
<i>l̥̄dɪg</i> ^{ε/}		vv. untie
<i>l̥̄k</i> ^{ɔ̄}		n. quiver (for arrows)
	pl	<i>l̥̄'ad</i> ^ε
	cb	<i>l̥̄'à-</i>
<i>l̥̄mbò'ɔ̄g</i> ^{ɔ̄}		n. garden ← Hausa <i>làmbuu</i>
	pl	<i>l̥̄mbò'ɔ̄d</i> ^ε
	cb	<i>l̥̄mbò'-</i>
<i>l̥̄ŋ</i> ^a		n. a kind of frog
	pl	<i>l̥̄mɪs</i> ^ε
	cb	<i>l̥̄ŋ-</i>
<i>l̥̄'ŋ</i> ^{ε/}		vv. go across river, road etc
<i>l̥̄r</i> ^ε		n. car, lorry ← English
	pl	<i>l̥̄yà</i> ⁺ <i>l̥̄ɔ̄m</i> ^{ma}
	cb	<i>l̥̄r-</i>
<i>l̥̄</i> ⁺		vv. fall
	dipf	<i>l̥̄t</i> ^a
	imp	<i>l̥̄m</i> ^{ma}
<i>l̥̄b</i> ^ε		vv. buck, kick, struggle, throw off rider
	ger	<i>l̥̄bɪr</i> ^{ε/}
<i>l̥̄g</i> ^ε		vv. swim
<i>l̥̄gɪr</i> ^ε		n. organ, member

M

<i>m̄</i>		I, my (Proclitic) 15.1
<i>m</i> ^a		me (Enclitic) 15.1
<i>mà</i> ⁺		n. mother
	pl	<i>mà nám</i> ^a
	cb	<i>mà-</i>
		<i>mà-bīg</i> ^a
		<i>mà-bīl</i> ^a
		<i>mà-kpēɛŋm</i> ^m
		<i>mà-pīt</i> ^{a/}
		n. sibling with same mother
		n. mother's younger sister or junior co-wife
		n. mother's elder sister or senior co-wife
		n. mother's younger sister

mà'⁺

mà'aa SF *mà'anē* LF

màal^ε

agt *màal-māan*^{na}

mā'al^{ε/}

māan^{nε}

pl *māana*⁺

cb *māan-*

mā'an^{nε}

pl *mā'aná*⁺

cb *mā'an-*

mā'as^{a/}

mā'asíg^a *mā'asír*^ε

pl *mā'asá*⁺

cb *mā'as-*

mā'asígā^{+/}

mā'asím^m

mādıg^{ε/}

mā'e^{+/}

māk^ε

māk^{ε/}

màljāk^{a/}

pl *màljā'as*^{ε/} *màljāk-nám*^a

cb *màljā'-*

mālıgım

mālıs^{a/}

mālısíg^a *mālısír*^ε

pl *mālısá*⁺

cb *mālıs-*

mālısım^m

mālısıg^a

pl *mālısıs*^ε

cb *mālısıg-*

mālıg^ɔ

pl *mālıma*⁺

cb *mālıg-*

mām

vv. lie, deceive

only; Post NP/AdvP Particle [33.6](#)

vv. prepare, sacrifice

n. sacrificer; used for "priest" in the NT, but in traditional usage just a worker who conducts the actual slaying for the the *tèg-dāan*^a earth-priest himself

vv. make cool, wet

n. sacrifice

n. okra

iv. be cool, wet

adj. cool, wet

adv. coolly [20.4](#)

n. coolness, wetness

vv. overflow, abound

vv. cool down

vv. crumple up

vv. measure, judge

n. angel ← Arabic ملاك *malʔak(un)* [18.1](#)

written *malek* in NT versions before 2016

again; Particle-Verb [22.7.2](#)

iv. be sweet, pleasant

adj. sweet, pleasant

n. sweetness

adj. sweet, pleasant

n. sacrifice

I, me [15.1](#)

<i>mán</i>	I (as subject of <i>h</i> -Clause) 15.1
<i>mān</i> SF <i>mánē</i> LF	I, me (contrastive) 15.1
<i>màngáuvɔ̌</i>	n. crab (cf <i>làngáuvɔ̌</i> id)
pl <i>màngáam^{mε}</i> <i>màngāamá⁺</i>	
cb <i>màngāuvɔ̌-</i>	
<i>màukɔ̌</i>	adj. crumpled up
pl <i>mà'ad^ε</i>	
<i>mè⁺</i>	vv. build
<i>mè mèn^ε</i>	too, also; Post NP/AdvP Particle 33.6
<i>mè-kàma</i>	-soever 15.3
<i>mēd^ε</i>	vv. mash up
<i>mèεη^a</i>	n. turtle
pl <i>mèεmɪs^ε</i>	
cb <i>mèεη-</i>	
<i>mèlɪgɪm^m</i>	n. dew
<i>mēη^{a/}</i>	self 19.9.3
<i>mēηír^ε</i>	adj. genuine
<i>mēt^{ε/}</i>	n. pl as sg pus
cb <i>mēt-</i>	
<i>mī⁺</i>	iv. know
ger <i>mī'ilím^m</i>	
agt <i>gbàn-mī'id^{a/}</i>	n. scribe NT
<i>míif^{ɔ̌}</i>	n. okra seed
pl <i>mīiní⁺</i>	
<i>mì'ig^ε</i>	vv. become sour
<i>mì'is^a</i>	iv. be sour
<i>mì'isuvɔ̌</i>	adj. sour
pl <i>mì'isa⁺</i>	
cb <i>mì'is-</i>	
<i>mīlɪg^{ε/}</i>	vv. get dirty
<i>mīmīlím^m</i> <i>mīmīlúgɔ̌</i>	n. sweetness
<i>mìt</i>	see that it doesn't happen that... 32.1.1
	Always <i>mid</i> in KB
<i>mō⁺</i>	vv. strive, struggle
<i>mōd^ε</i>	vv. swell
<i>mōdɪg^{ε/}</i>	vv. be patient, endure
<i>mòlɪ^{ɔ̌}</i>	n. gazelle
pl <i>mòlɪ⁺</i>	
cb <i>mòlɪ-</i>	
<i>mōn^ε</i>	vv. grind millet to make <i>sā'ab^{ɔ̌}</i> porridge
<i>mōη^{ε/}</i>	vv. refuse to lend

<i>m̄ɔɔg</i> ^ɔ		<i>n.</i> grass; "bush"
<i>pl</i>	<i>m̄ɔɔd</i> ^ɛ	
<i>cb</i>	<i>m̄ɔ-</i> <i>m̄ɔ-pīl</i> ^{lɛ}	<i>n.</i> grass thatch
<i>M̄ɔɔg</i> ^ɔ		<i>n.</i> Mossi realm
	<i>M̄ɔɔg Ná'àb</i> ^a	<i>n.</i> the Moro Naba, King of the Mossi
<i>m̄ɔɔl</i> ^{ɛ/}		<i>vv.</i> proclaim
<i>agt</i>	<i>m̄ɔɔl-m̄ɔɔn</i> ^{na}	<i>n.</i> proclaimer
<i>M̄ɔɔl</i> ^ɛ		<i>n.</i> Mooré language
<i>M̄ɔr</i> ^{ɛ/}		<i>n.</i> Muslim
<i>pl</i>	<i>M̄ɔɔm</i> ^{ma}	
<i>cb</i>	<i>M̄ɔr-</i>	
<i>m̄ɔr</i> ^{a/}		<i>iv.</i> have, possess; <i>m̄ɔr nā</i> "bring" 23.7
<i>ger</i>	<i>m̄ɔrí</i> ^m	
<i>M̄uà</i> ⁺		<i>n.</i> Mossi person 35.4
<i>pl</i>	<i>M̄ɔɔs</i> ^ɛ	
<i>cb</i>	<i>M̄ɔ-</i>	
<i>m̄ɔ'à</i> ^a		<i>vv.</i> suck (of a baby)
<i>m̄ɔ'àk</i> ^a		<i>n.</i> maggot
<i>pl</i>	<i>m̄ɔ'as</i> ^ɛ	
<i>cb</i>	<i>m̄ɔ'à-</i>	
<i>m̄ɔ'ar</i> ^ɛ		<i>n.</i> dam; reservoir
<i>pl</i>	<i>m̄ɔ'aa</i> ⁺ <i>m̄ɔ'ada</i> ⁺	
<i>cb</i>	<i>m̄ɔ'à-</i>	
<i>m̄ɔ'as</i> ^ɛ		<i>vv.</i> give (to baby) to suck
<i>m̄ɔ'e</i> ⁺		<i>vv.</i> redden
<i>m̄ɔj</i> ⁺		<i>n.</i> <i>pl as sg</i> rice
<i>cb</i>	<i>m̄ɔj-</i>	
<i>m̄ɔl</i> ^ɛ		<i>vv.</i> itch
<i>m̄ɔm</i> ^m		<i>vv.</i> bury

N

<i>ṇ</i>	Clause Complementiser particle 31
<i>n</i>	VP Serialiser particle 26.1
<i>ṇ-</i>	Personifier proclitic before an adjective 19.10
<i>n</i> ^ɛ	Remoteness Marker Enclitic 30.1.1
<i>n</i> ^ɛ <i>nī</i> ^{+/}	Locative Enclitic 20.3
<i>nà</i>	Positive Irrealis Mood marker 22.4
<i>nā</i> ^{+/}	hither: VP-final particle 23.7
<i>nā</i> ⁺	<i>vv.</i> join

<i>náa</i>		reply to greetings invoking blessings 34
<i>nà'ab^a</i>		<i>n.</i> chief, king
<i>pl</i>	<i>nà'-nàm^a</i>	
<i>cb</i>	<i>nà'-</i>	
	<i>nà'-bīīg^a</i>	<i>n.</i> prince, princess
<i>náaf^o</i>		<i>n.</i> cow
<i>pl</i>	<i>nīīgí⁺</i>	
<i>cb</i>	<i>nā'-</i>	
	<i>nā'-lór^ε</i>	<i>n.</i> place in compound for tying up cows
	<i>nā'-dáuḡ^o</i>	<i>n.</i> ox
	<i>pl</i> <i>nā'-dáàd^ε</i>	
	<i>cb</i> <i>nā'-dá-</i>	
	<i>nā'-dá-kūødír^ε</i>	<i>n.</i> ox for ploughing
<i>nā'am^m</i>		<i>n.</i> chieftaincy, kingdom
<i>cb</i>	<i>nà'am-</i>	
<i>nāan</i>		next, afterwards = <i>nyāan</i>
<i>nāan</i> or <i>nāanɪ</i>		then, in that case, being thus/there 30.1.2
<i>nà'anā^{+/}</i>		<i>adv.</i> easily 20.4
<i>nà'as^ε</i>		<i>vv.</i> honour
<i>ger</i>	<i>nà'asɪ⁺</i>	<i>n.</i> honour
<i>Nàbɪd^a</i>		<i>n.</i> Nabdema person 35.4
<i>pl</i>	<i>Nàbɪdɪb^a</i>	
<i>cb</i>	<i>Nàbɪd-</i>	
<i>Nàbɪdug^o</i>		<i>n.</i> Nabdema country
<i>Nàbɪr^ε</i>		<i>n.</i> Nabit language 35.4
<i>Nà'dàm^{ma}</i>		<i>n.</i> clan name 35.4
<i>Nà'dàuḡ^o</i>		<i>n.</i> place of clan Nadamba
<i>nà'-dàwān^{nε/}</i>		<i>n.</i> pigeon KED (= <i>dàwān^{nε/}</i>)
<i>nāe^{+/}</i>		<i>vv.</i> finish
<i>nàm</i>		still, yet; auxiliary tense particle 22.3.1
<i>nàm^a</i>		pluraliser 9.4
<i>nā'mɪs^{ε/}</i>		<i>vv.</i> persecute, suffer
<i>nān^ε</i>		<i>vv.</i> love, respect, appreciate
<i>nà'-nēsɪnnēog^{o/}</i>		<i>n.</i> centipede WK
<i>nānná⁺</i>		<i>adv.</i> now 17.1
<i>nānná-nā^{+/}</i>		<i>adv.</i> now 17.1
<i>nànzù'us^ε</i>		<i>n.</i> pepper ?tones
<i>nāḡ^a</i>		<i>n.</i> scorpion
<i>pl</i>	<i>nāmɪs^ε</i>	
<i>cb</i>	<i>nàḡ-</i>	

<i>nār^{a/}</i>		iv. be obliged to; impersonal: to be necessary with following purpose clause 29.1 negated: "be obliged not to"
<i>ger nārím^m</i>		
<i>nàrvɔ^ɔ</i>		adj. necessary
<i>pl nàrɪma⁺</i>		
<i>cb nàrvɔ-</i>		
<i>Nàsāal^ε</i>		n. English/French language
<i>Nàsāara⁺</i>		n. European person ← Arabic نصارى <i>Nas^ʿa:ra:</i>
<i>pl Nàsàa-nàm^a Nàsàar-nàm^a</i>		
<i>cb Nàsàa- Nàsàar-</i>		
<i>Nàsàa-bīig^a</i>		n. European child
<i>nàyiig^a</i>		n. thief
<i>pl nàyiig-nàm^a nàyiis^ε</i>		
<i>nàyiigim^m</i>		n. thievery
<i>nà'-zòm^{mε}</i>		n. locust
<i>nē</i>		preposition: with 21.1 linking NPs and AdvPs: and 19.4 after objects of <i>wūv</i> and <i>wēn^{na/}</i> 21.1 focus particle 33.1.2 ; aspectual marker 22.2 this (pronoun) 15.2
<i>nē^{+/}</i>		
<i>nē^{+/}</i>		
<i>nē^{+/}</i>		
<i>nēεl^ε</i>		vv. reveal
<i>nēεm^m</i>		adv. for free
<i>nēεm^{m/}</i>		vv. grind with a millstone
<i>nēεr^{ε/}</i>		n. millstone
<i>nēεs^ε</i>		vv. reveal
<i>nēεsɪm^m</i>		n. light
<i>nēm-néēr^ε</i>		n. someone who grinds
<i>pl nēm-néyà⁺</i>		
<i>nēn^{na/}</i>		iv. envy
<i>ger nēnním^m</i>		
<i>nē'ɲá⁺</i>		this (pronoun) 15.2
<i>nēog^ɔ nēεr^ε</i>		adj. empty
<i>pl nēεd^ε nēya⁺</i>		
<i>cb nē-</i>		
<i>nēsɪnnēog^{ɔ/}</i>		n. envious person WK; others: centipede
<i>pl nēsɪnnēεd^{ε/}</i>		
<i>cb nēsɪnné-</i>		
<i>h fá!</i>		Well done! 28.2.4
<i>nī^{+/}</i>		locative enclitic 20.3 see <i>n^ε</i>
<i>nī⁺</i>		vv. rain

<i>nīd</i> ^{a/}		<i>n.</i> person
<i>pl</i>	<i>nīdɪb</i> ^{a/}	
<i>cb</i>	<i>nīn-</i>	
	<i>nīn-sáàl</i> ^a	<i>n.</i> human being
	<i>pl nīn-sáalìb</i> ^a	
	<i>cb nīn-sáàl-</i>	
	<i>nīnpūnān</i> ^{na/}	<i>n.</i> disrespectful person
	<i>pl nīnpūnānní</i> ^b	
	<i>cb nīnpūnán-</i>	
	<i>nīn-sábulìs</i> ^ε	<i>n.</i> Africans
<i>nìe</i> ⁺		<i>vv.</i> appear, reveal
<i>nīf</i> ^{o/}		<i>n.</i> eye
<i>pl</i>	<i>nīnì</i> ⁺	
<i>cb</i>	<i>nīn- nīf-</i>	
	<i>nīf-gbáuy</i> ^ɔ	<i>n.</i> eyelid
	<i>nīf-sób</i> ^a	<i>n.</i> miser
	<i>nīf-nyáyuk</i> ^ɔ	<i>adj.</i> one-eyed 16.2.4 19.8.1.4
	<i>nīn-dáa</i> ⁼	<i>n.</i> face
	<i>nīn-gótìy</i> ^a	<i>n.</i> mirror
	<i>pl nīn-gótìs</i> ^ε	<i>n.</i> spectacles, glasses
	<i>nīn-kúgudìg</i> ^a	<i>n.</i> eyebrow
	<i>pl nīn-kúgudìs</i> ^ε	
	<i>nīn-tá'àm</i> ^m	<i>n.</i> tear(s)
	<i>nīn-múa</i> ⁺	<i>n.</i> concentration ("eye-redness")
<i>níiy</i> ^a		<i>n.</i> bird
<i>pl</i>	<i>nīimís</i> ^ε <i>nís</i> ^ε	
<i>cb</i>	<i>nīiy-</i>	
<i>nīm</i> ^{nε/} <i>nī'm</i> ^{nε/}		<i>n.</i> meat
<i>pl</i>	<i>nīmá</i> ⁺	
<i>cb</i>	<i>nīm-</i>	
<i>nīn-báalìg</i> ^a		<i>n.</i> pity
	<i>nīn-báàl-zɔɔr</i> ^ε	<i>n.</i> pity:
		<i>Ò zòt-ō nīn-báalìg.</i> "He has pity on him."
<i>nīn-dáa</i> ⁼		<i>n.</i> face
<i>pl</i>	<i>nīn-dáàs</i> ^ε	
<i>cb</i>	<i>nīn-dá-</i>	

<i>nīŋ</i> ^a		<i>n.</i> body (uncommon)
<i>pl</i>	<i>nīis</i> ^ε	
<i>cb</i>	<i>nìŋ- nìn-</i> <i>nìn-tōllím</i> ^m <i>nìn-tāa</i> ⁼ <i>pl nìn-tāas</i> ^ε <i>cb nìn-tà-</i> <i>nìn-gbīŋ</i> ^{ɔ/} <i>pl nìn-gbīná</i> ⁺ <i>cb nìn-gbīŋ-</i> <i>nìn-gòɔr</i> ^ε	<i>n.</i> fever <i>n.</i> co-wife; husband's sister's wife (Ghanaian English: "rival") <i>n.</i> body plural often used as singular <i>n.</i> neck
<i>nīn-púùd</i> ^ε		<i>n.</i> <i>pl</i> as <i>sg</i> pus
<i>nīntāŋ</i> ^{a/}		<i>n.</i> heat of the day, early afternoon
<i>pl</i>	<i>nīntāaŋs</i> ^{ε/}	
<i>cb</i>	<i>nīntáŋ-</i>	
<i>nìŋ</i> ^ε		<i>vv.</i> do
<i>h lā</i>		that is ... 25
<i>h nāas</i>		<i>q.</i> four 16.2.3
<i>h níi</i>		<i>q.</i> eight 16.2.3
<i>h nū</i>		<i>q.</i> five 16.2.3
<i>n ŋwá</i>		this is ... 25
<i>n ŋwá nā</i>		this here is ... 25
<i>nō</i> ⁺		<i>vv.</i> tread
<i>nōb</i> ^ε		<i>vv.</i> get fat
<i>nōbɪg</i> ^{ε/}		<i>vv.</i> grow (e.g. child, plant)
<i>nóbìr</i> ^ε		<i>n.</i> leg, foot
<i>pl</i>	<i>nōbá</i> ⁺	
<i>cb</i>	<i>nōb-</i> <i>nōb-bíl</i> ^a <i>nōb-yíuŋ</i> ^ɔ <i>nōb-íŋ'a</i> ⁺ <i>nōb-púmpàuŋ</i> ^ɔ	<i>n.</i> toe <i>adj.</i> one-legged 16.2.4 19.8.1.4 <i>n.</i> toenail <i>n.</i> foot
<i>nōk</i> ^{ε/}		<i>vv.</i> pick up, take up
<i>nòŋ</i> ^ε		<i>vv.</i> love (verb; family, spiritual) Descriptive Stative aspect 11.1.1
<i>agt</i>	<i>nòŋɪd</i> ^a	agent noun: irregularly Pattern L
<i>nōŋ</i> ^{ɔ/}		<i>n.</i> poverty
<i>cb</i>	<i>nōŋ-</i> <i>nōŋ-dáàn</i> ^a	<i>n.</i> poor person
<i>nòŋulím</i> ^m		<i>n.</i> love (noun)

<i>nɔ̃ɔr</i> ^{ε/}		<i>n.</i> mouth; command, message, opinion
<i>pl</i>	<i>nɔ̃yá</i> ⁺	
<i>cb</i>	<i>nɔ̃-</i>	
	<i>nɔ̃-dí'əs</i> ^a	<i>n.</i> Chief's "linguist", who speaks on his behalf on all official occasions 13.1.1.1 fn
	<i>Wínà'am nɔ̃-dí'əs</i> ^a	<i>n.</i> prophet NT
	<i>nɔ̃-lóòr</i> ^ε	<i>n.</i> fasting ("mouth-tying"; idiom throughout W Africa)
	<i>nɔ̃-náàr</i> ^ε	<i>n.</i> covenant
	<i>nɔ̃-pɔ̃ɔr</i> ^ε	<i>n.</i> oath
	<i>nɔ̃-gbáɣɛ</i> ^{ɔ̃}	<i>n.</i> lip
	<i>pl nɔ̃-gbánà</i> ⁺	
<i>nɔ̃ɔr</i> ^{ε/}		times 16.2.5
<i>nɔ̃ɔrí</i> ^m		times 16.2.5
<i>h̃pòɛ</i>		<i>q.</i> seven 16.2.3
<i>h̃táŋ'</i>		<i>q.</i> three 16.2.3
<i>nū</i> ⁺		<i>vv.</i> drink
<i>nūa</i> ^{+/}		<i>n.</i> hen
<i>pl</i>	<i>nɔ̃ɔs</i> ^{ε/}	
<i>cb</i>	<i>nɔ̃-</i>	
	<i>nɔ̃-dáùg</i> ^{ɔ̃}	<i>n.</i> cock
	<i>nɔ̃-nyá'àŋ</i> ^a	<i>n.</i> (specifically female) hen
	<i>Nɔ̃-nyá'àŋ-né-ò-Bīis</i>	the Pleiades
<i>nūlɛ</i> ^{ε/}		<i>vv.</i> make drink
<i>nūlɛs</i> ^{ε/}		<i>vv.</i> make drink
<i>nú'ùg</i> ^{ɔ̃}		<i>n.</i> hand, arm
<i>pl</i>	<i>nú'ùs</i> ^ε	
<i>cb</i>	<i>nū'-</i>	
	<i>nū'-bí</i> ^a	<i>n.</i> finger
	<i>pl nū'-bíbìs</i> ^ε	
	<i>nū'-dáùg</i> ^{ɔ̃}	<i>n.</i> thumb
	<i>nū'-yíɣɛ</i> ^{ɔ̃}	<i>adj.</i> one-armed 16.2.4 19.8.1.4
	<i>nū'-íŋ'a</i> ⁺	<i>n.</i> fingernail
	<i>pl nū'-éŋ'ès</i> ^ε	
	<i>cb nū'-éŋ'-</i>	
	<i>nū'-wéŋ'èd</i> ^a	<i>n.</i> mediator
<i>ŋwà</i> ⁺		this 19.3
<i>ŋwā</i> ⁺		<i>vv.</i> smash, break up
<i>ŋwāaŋ</i> ^a		<i>n.</i> monkey
<i>pl</i>	<i>ŋwāamɛs</i> ^ε	
<i>cb</i>	<i>ŋwāaŋ-</i>	

<i>ṇwādɪg</i> ^{a/}	<i>n.</i> moon, month
<i>pl ṇwādɪs</i> ^{ɛ/}	
<i>cb ṇwād-</i>	
<i>ṇwād-bíl</i> ^a	<i>n.</i> star
<i>pl ṇwād-bíbìs</i> ^ɛ	
<i>ṇwād-dár</i> ^ɛ	<i>n.</i> Venus
<i>ṇwà'e</i> ⁺	<i>vv.</i> cut wood
<i>ṇwāɛ</i>	<i>q.</i> nine 16.2.3
<i>ṇwām</i> ^{mɛ} <i>ṇwān</i> ^{nɛ}	<i>n.</i> calabash
<i>pl ṇwāma</i> ⁺ <i>ṇwāna</i> ⁺	
<i>cb ṇwām-</i> <i>ṇwàn-</i>	
<i>ṇwāmpūrɪg</i> ^{a/}	<i>n.</i> Mamprussi person 35.4
<i>pl ṇwāmpūrɪs</i> ^{ɛ/}	
<i>cb ṇwāmpúr-</i>	
<i>ṇwāmpūrɪ</i> ^{ɛ/}	<i>n.</i> Mampruli language 35.4
<i>ṇwāmpūrɪg</i> ^{ɔ/}	<i>n.</i> Mamprussi country
<i>ṇwè'</i> ⁺	<i>vv.</i> beat
	<i>ṇwè'</i> X <i>nú'ùg</i> "make an agreement with X"
	<i>ṇwè'</i> <i>ṇyɔ'ɔg</i> "boast"
<i>ṇwīig</i> ^{a/}	<i>n.</i> rope
<i>pl ṇwīis</i> ^{ɛ/}	
<i>cb ṇwī-</i>	
<i>ṇwī-ték</i> ^a	<i>n.</i> rope-puller
<i>pl ṇwī-tékìdɪb</i> ^a	
<i>cb ṇwī-ték-</i>	
<i>ṇwī-tékìr</i> ^ɛ	<i>n.</i> rope for pulling
<i>pl ṇwī-tékà</i> ⁺	
<i>ṇwīig</i> ^{ɛ/}	<i>vv.</i> make a rope
<i>ṇyā'al</i> ^{ɛ/}	<i>vv.</i> leave behind
<i>ṇyāan</i>	next, afterwards; Post-Subject Particle 27.1.4
<i>ṇyá'aŋ</i> ^a	<i>adj.</i> female (animal)
<i>pl ṇyá'as</i> ^ɛ <i>ṇyā'amís</i> ^ɛ	
<i>cb ṇyā'aŋ-</i>	
<i>ṇyá'aŋ</i> ^a	behind, postposition 20.6
<i>ṇyà'an-dòl</i> ^{la} <i>ṇyà'an-dòl</i> ^{lɛ}	<i>n.</i> disciple NT; tones unexpected, Pattern L
<i>pl ṇyà'an-dòlla</i> ⁺ <i>ṇyà'an-dòllɪb</i> ^a	
<i>cb ṇyà'an-dòl-</i>	
<i>ṇyā'ar</i> ^ɛ	<i>n.</i> root
<i>pl ṇyā'a</i> ⁺	
<i>cb ṇyā'-</i>	
<i>ṇyāe</i> ^{nɛ/}	<i>adv.</i> in the light, brightly, clearly 20.3

<i>nyālúŋ</i> ^ɔ		<i>adj.</i> wonderful
<i>pl</i>	<i>nyālimá</i> ⁺	
<i>cb</i>	<i>nyālŋ-</i>	
<i>nyàn</i> ^{ne}		<i>n.</i> shame
		<i>Ò dí nyán.</i> "He's ashamed."
<i>nyāŋ</i> ^{ε/}		<i>vv.</i> overcome 26.3
<i>nyàuk</i> ^ɔ		<i>adj.</i> only (eye) 16.2.4 19.8.1.4
<i>pl</i>	<i>nyà'ad</i> ^ε	
<i>nyē</i> ⁺		<i>vv.</i> see, find
<i>dipf</i>	<i>nyēt</i> ^{a/}	<i>nyē láafiya</i> "get well"
<i>imp</i>	<i>nyèm</i> ^{ma}	
<i>nyēε, nyēε tí</i>		habitually, Particle-Verb 22.7.2
<i>nyē'εr</i> ^{ε/}		<i>n.</i> next-younger sibling
<i>pl</i>	<i>nyēdá</i> ⁺	
<i>cb</i>	<i>nyē'-</i>	
<i>nyēs</i> ^a		<i>iv.</i> be self-confident
<i>nyēsım</i> ^m		<i>n.</i> self-confidence
<i>nyēsıŋ</i> ^a		<i>adj.</i> self-confident
<i>pl</i>	<i>nyēsıs</i> ^ε	
<i>cb</i>	<i>nyēsıŋ-</i>	
<i>nyēsıŋā</i> ^{+/}		<i>adv.</i> self-confidently 20.4
<i>nyí</i>		<i>q.</i> two 16.2.3
<i>nyīn</i> ^{ne/}		<i>n.</i> tooth
<i>pl</i>	<i>nyīnáy</i> ⁺	
<i>cb</i>	<i>nyīn-</i>	
<i>nyīrí</i> ^ɔ		<i>n.</i> a kind of edible seed, egusi
<i>pl</i>	<i>nyīrí</i> ⁺	<i>Colocynthis citrullus</i> (Haaf)
<i>nyōd</i> ^ε		<i>n.</i> intestines
<i>nyō'ɔg</i> ^{ɔ/}		<i>n.</i> chest
<i>nyōr</i> ^ε		<i>n.</i> nose; breath
<i>pl</i>	<i>nyōya</i> ⁺	
<i>cb</i>	<i>nyò-</i>	
	<i>nyò-vūr</i> ^{ε/}	<i>n.</i> life
	<i>pl nyò-vōyá</i> ⁺	
	<i>cb nyò-vūr-</i>	
	<i>nyò-vūr-páàl</i> ^{le}	<i>n.</i> new life NT
<i>nyō'ɔs</i> ^{ε/}		<i>n.</i> smoke
<i>nyúèb</i>		<i>q.</i> six 16.2.3
<i>nyūr</i> ^{ε/}		<i>n.</i> yam
<i>pl</i>	<i>nyūyá</i> ⁺	
<i>cb</i>	<i>nyū-</i>	

O

ò	[ʊ]	he, she, his, her (Proclitic) 15.1
o	LF [ʊ]	him, her (Enclitic object) 15.1 8.2.1.1
ón		he, she (subject of ñ-Clause) 15.1
ōn ^ε		he, she (Contrastive) 15.1
òn ^ε		this, that (animate sg Demonstrative) 15.2
òṅb ^ε		vv. chew
	ger òṅbɪr ^ε	
òṅā ^{+/}		this, that (animate sg Demonstrative) 15.2
òṅs ^{ε/}		vv. warm oneself
		Ò òṅsɪd nē búgúm lā.
		"She's warming herself at the fire."

P

pà'		earlier today, Tense Particle 22.3.1
pà'al ^ε		vv. teach, inform
	agt pā'an ^{na}	n. teacher
	pl pā'annɪb ^a	
	cb pà'an-	
pà'al ^ε		vv. put on top of something
pāalíg ^a pāal' ^{lε}		adj. new
	pl pāalís ^ε pāalá ⁺	
	cb pāal-	
pāalím ^m		adv. recently 20.4
pāalú ⁺		adv. openly 20.4
pàaṅlúṅ ^ɔ		n. spider's web
	pl pàaṅlímìs ^ε	
pàam ^m		vv. receive a gift
pàas ^ε		vv. add up to, amount to
pāe ^{+/}		vv. reach
pàk ^ε		vv. surprise
pàk ^ε		vv. take off from the top
pāmm SF pāmné LF		q. much, a lot 16.1 6.4
pàṅ'alım ^m		vv. dedicate
pàṅsɪg ^ε		vv. lack
pàṅ ^a		n. power
	pl pàaṅs ^ε	
	cb pàṅ-	
pà' tì		perhaps; Post-Subject Particle 27.1.4

<i>pèbis</i> ^ε		vv. blow (of wind)
<i>pèbisim</i> ^m <i>pèbisug</i> ^ɔ		n. wind
<i>pè'el</i> ^ε		vv. fill
<i>res adj pè'elúŋ</i> ^ɔ		adj. full
<i>pè'εs</i> ^ε		vv. add up to, amount to
<i>pèlig</i> ^ε		vv. whiten, go white
<i>pèlis</i> ^ε		vv. sharpen
<i>pèn</i> ^{nε}		n. vagina
<i>pē'ŋ</i> ^{ε/}		vv. borrow; knock over WK
<i>pèog</i> ^ɔ		n. basket
<i>pl pèed</i> ^ε		
<i>cb pè-</i>		
<i>pē'og</i> ^{ɔ/}		n. sheep
<i>pl pē'εs</i> ^{ε/}		
<i>cb pē'-</i>		
<i>pē'-sá'a</i> ⁼		n. ewe lamb
<i>pēsug</i> ^{ε/}		vv. sacrifice
<i>pā</i> ⁺		vv. dig up
<i>pāŋ</i> ^a		vv. speak, praise
<i>ger pāuŋk</i> ^ɔ		n. word
<i>pl pāŋ'ad</i> ^ε		plural: language
<i>cb pāŋ'-</i>		
<i>pāŋ'-zùna</i> ⁺		n. foreign language
<i>pibig</i> ^ε		vv. uncover
<i>pibil</i> ^ε		vv. cover up
<i>pibin</i> ^{nε}		n. covering 12.1.2
<i>pl pībina</i> ⁺		
<i>cb pībín-</i>		
<i>pìd</i> ^ε		vv. put on (hat, shoes, rings)
<i>pīd</i> ^ε		vv. get bloated
<i>pìdig</i> ^ε		vv. take off (hat, shoes, rings)
<i>pīe</i> ^{+/}		vv. wash (part of one's own body)
<i>pìab</i> ^ε		vv. blow (e.g. flute)
<i>pìalig</i> ^a <i>pìal</i> ^{lε}		adj. white
<i>pl pìala</i> ⁺ <i>pìalis</i> ^ε		
<i>cb pìal-</i>		
<i>pèelug</i> ^ɔ		in <i>zū-péelug</i> ^ɔ "bald; grey haired" 19.8.1.4
<i>pìalim</i> ^m		n. whiteness
<i>pìas</i> ^ε		vv. fool someone
<i>pīas</i> ^{ε/}		vv. wash
<i>pīiga</i> ⁺		q. ten 16.2.2

<i>pīim^{m/}</i>		<i>n.</i> arrow
<i>pl</i>	<i>pīmá⁺</i>	
<i>cb</i>	<i>pīm-</i>	
<i>píiŋ^ɔ</i>		<i>n.</i> genet
<i>pl</i>	<i>pīiŋí⁺</i>	
<i>cb</i>	<i>pīiŋ-</i>	
<i>pīini⁺</i>		<i>pl</i> as sg <i>n.</i> gift
<i>cb</i>	<i>pīin-</i>	
<i>pìl^ε</i>		<i>vv.</i> put (hat, shoes, rings) on someone
<i>pìlɿg^ε</i>		<i>vv.</i> take (hat, shoes, rings) off someone
<i>pīŋ'íl^{ε/}</i>		<i>vv.</i> begin
<i>pīpīrɿg^{a/}</i>		<i>n.</i> desert
<i>pl</i>	<i>pīpīrɿs^{ε/}</i>	
<i>cb</i>	<i>pīpír-</i>	
<i>pīsí⁺</i>		<i>q.</i> twenty 16.2.2
<i>pītú⁺</i>		<i>n.</i> younger sibling of the same sex 35.1
<i>pl</i>	<i>pītíb^a</i>	
<i>cb</i>	<i>pīt-</i>	
<i>pṣ⁺</i>		<i>vv.</i> swear
<i>pṣṣ^ε</i>		<i>vv.</i> crouch down
<i>pṣṣ'ɿ^{ε/}</i>		<i>vv.</i> cause to rot
<i>pṣṣ'ɿlɿm^m</i>		<i>vv.</i> cripple, get crippled
<i>pṣṣ'ɿr^ε</i>		<i>n.</i> cripple
<i>pl</i>	<i>pṣṣda⁺</i>	
<i>cb</i>	<i>pṣṣ'-</i>	
<i>pṣṣr^a</i>		<i>iv.</i> be near
<i>ger</i>	<i>pṣṣrɿb^ɔ</i>	
<i>pṣṣd^a</i>		<i>iv.</i> be few, small
<i>pṣṣdɿg^a pṣṣdɿr^ε</i>		<i>adj.</i> few, small
<i>pl</i>	<i>pṣṣda⁺</i>	
<i>cb</i>	<i>pṣṣd-</i>	
<i>pṣṣdɿm^m</i>		<i>n.</i> fewness
<i>pṣṣg^{ɔ/}</i>		<i>n.</i> field, farm
<i>pl</i>	<i>pṣṣd^{ε/} pṣṣt^{ε/}</i>	
<i>cb</i>	<i>pṣṣ-</i>	
<i>pṣṣ'g^ε</i>		<i>vv.</i> diminish, denigrate
<i>pṣṣr^{ε/}</i>		<i>n.</i> "slogan" of a clan, part of its traditional genealogy WK; ← <i>pṣ⁺</i> "swear", cf Farefare <i>pṣtε</i> , <i>pṣrε</i> "nom de famille, nom par lequel on jure" and also "serment"
<i>pṣ</i>		not: negates Indicative Mood 22.5

<i>pō</i> ⁺		vv. divide
<i>pū'ā</i> ^a		n. woman, wife
		<i>Ò dì pū'ā</i> . "He's married a wife."
<i>pl</i>	<i>pō'ab</i> ^a	
<i>cb</i>	<i>pū'à-</i>	
	<i>pū'à-dīr</i> ^ε	n. marriage
	<i>pū'à-ēlíg</i> ^a	n. fiancée
	<i>pū'à-gīnníg</i> ^a	n. prostitute
	<i>pū'à-gōṽṽdīr</i> ^ε	n. prostitute
	<i>pū'à-ṽyá'aṽ</i> ^a	n. old woman
	<i>pl pū'à-ṽyá'as</i> ^ε	
	<i>pū'à-pāa</i> ^{a/}	n. bride
	<i>pū'à-sāṽr</i> ^{ε/}	n. young woman
	<i>pū'à-sāṽ'am</i> ^{na}	n. adulterer
	<i>pū'à-yù</i> ⁺	n. daughter
<i>pūāk</i> ^a		adj. female (human only)
<i>pl</i>	<i>pō'as</i> ^ε	
<i>pù'alim</i> ^m		vv. cook
<i>pù'alim</i> ^m		vv. harm, damage
	<i>res adj pù'alúṽ</i> ^ᵛ	adj. damaged
<i>pù'alim</i> ^m		n. femininity
<i>pù'alím</i> ^m		n. female sex organs
<i>pl</i>	<i>pù'alímìs</i> ^ε	
<i>cb</i>	<i>pù'alím-</i>	
<i>pùd</i> ^ε		vv. name
<i>pūdīg</i> ^{ε/}		vv. divide, share out
<i>pùgudib</i> ^a		n. father's sister 35.1
<i>pl</i>	<i>pùgud-nàm</i> ^a	
<i>cb</i>	<i>pùgud-</i>	
<i>pùkòṽr</i> ^ε		n. widow
<i>pl</i>	<i>pùkòṽya</i> ⁺	
<i>cb</i>	<i>pùkòṽ-</i>	
<i>pūkpāad</i> ^{a/}		n. farmer
<i>pl</i>	<i>pūkpāadíb</i> ^a	
<i>cb</i>	<i>pūkpá-</i>	irreg. <i>cb</i> ; contrast <i>kpāad</i> ^{a/}
<i>pùluma</i> ⁺		n. a species of grass, <i>Imperata cylindrica</i> (Haaf)
<i>pùmpōṽg</i> ^ᵛ		n. housefly
<i>pùn</i>		previously, already Particle-Verb 22.7.2
<i>pūṽ'e</i> ^{+/}		vv. rot

<i>pūsɪg</i> ^{a/}		<i>n.</i> tamarind 35.5
<i>pl</i>	<i>pūsɪs</i> ^{ε/}	
<i>cb</i>	<i>pūs-</i>	
<i>pūsɪr</i> ^{ε/}		<i>n.</i> tamarind fruit 35.5
<i>pl</i>	<i>pūsá</i> ⁺	
<i>pō-súk</i> ^a		<i>n.</i> half 16.2.2
<i>pl</i>	<i>pō-súgòs</i> ^ε	
<i>pōt</i> ^{ε/}		<i>n.</i> <i>pl</i> as <i>sg</i> contents of stomach WK
<i>pūum</i> ^{m/}		<i>n.</i> flowers
<i>cb</i>	<i>pūum-</i>	
<i>pōvg</i> ^a		<i>n.</i> inside, belly
<i>cb</i>	<i>pò-</i>	<i>Pɥ'ā lā mór pōvg</i> "The woman is pregnant."
	<i>pò-pìəlɪm</i> ^m	<i>pōvgv-n</i> ^{ε/} inside, postposition 20.6
	<i>pò-tèŋ'ɛr</i> ^ε	<i>n.</i> holiness
	<i>pl pò-tèŋda</i> ⁺	<i>n.</i> mind
	<i>cb pò-tèŋ'-</i>	
<i>pōvr</i> ^{ε/}		<i>n.</i> stomach
<i>pò'us</i> ^ε		<i>vv.</i> greet, worship, thank
<i>ger</i>	<i>pò'usɪm</i> ^m	<i>n.</i> worship
<i>ger</i>	<i>pò'usvg</i> ^ɔ	<i>n.</i> thanks
	<i>pò'usvg dɔ́ɔg</i> ^ɔ	NT "temple"

S

<i>sà</i>		yesterday, Tense Particle 22.3.1
<i>sà</i>		hence, ago, VP-final particle 23.7
<i>sā</i> ⁺		<i>vv.</i> be in distress
<i>sàa</i>		tomorrow, Tense Particle 22.3.1
<i>sāa</i> ⁼		<i>n.</i> rain
		as subject of <i>jāŋk</i> ^{ε/} "leap": "lightning"
<i>pl</i>	<i>sāas</i> ^ε	
<i>cb</i>	<i>sà-</i>	
<i>sāa zúg</i> ^ɔ		<i>sāa díndēog</i> ^{ɔ/} "rainbow" ("rain chameleon")
<i>pl</i>	<i>sāa zút</i> ^ε	<i>n.</i> sky
<i>sā'ab</i> ^ɔ		<i>n.</i> millet porridge,
		"TZ", the staple food of the Kusaasi
<i>cb</i>	<i>sà'-</i>	
<i>sāafi</i> ⁺ ?tones		<i>n.</i> lock, key ← Twi <i>safě</i>

<i>sàal</i> ^a		<i>n.</i> human; perhaps ← "hairless" cf <i>būn-kógbùg</i> ^ɔ
<i>pl</i>	<i>sàalɪb</i> ^a	
<i>cb</i>	<i>sàal-</i> <i>sàal-bīg</i> ^a	<i>n.</i> human being
	<i>pl</i> <i>sàal-bīs</i> ^ε	
<i>sàalígā</i> ^{+/}		<i>adv.</i> smoothly 20.4
<i>sàam</i> ^{ma}		<i>n.</i> father
<i>pl</i>	<i>sàam-nàm</i> ^a	
<i>cb</i>	<i>sàam-</i> <i>sàam-kpēɛŋm</i> ^m	<i>n.</i> father's elder brother
	<i>sàam-pīt</i> ^{a/}	<i>n.</i> father's younger brother
	<i>pl</i> <i>sàam-pītɪb</i> ^a	
	<i>cb</i> <i>sàam-pīt-</i>	
<i>sāam</i> ^{m/}		<i>vv.</i> mash, crumble
<i>sā'an</i> ^{ε/}		<i>in the presence of, in the opinion of</i> <i>postposition</i> 20.6
<i>sāan</i> ^{a/}		<i>n.</i> guest, stranger
<i>pl</i>	<i>sāam</i> ^{ma}	
<i>cb</i>	<i>sāan-</i>	
<i>sāannim</i> ^m		<i>n.</i> strangerhood
<i>sàbēog</i> ^ɔ		<i>n.</i> wind, storm
<i>pl</i>	<i>sàbēɛd</i> ^ε	
<i>cb</i>	<i>sàbè-</i>	
<i>sābɪlíg</i> ^a <i>sābɪl</i> ^{lε}		<i>adj.</i> black
<i>pl</i>	<i>sābɪlís</i> ^ε <i>sābɪlá</i> ⁺	
<i>cb</i>	<i>sābɪl-</i>	
<i>sàbùà</i> ⁺		<i>n.</i> lover, girlfriend
<i>pl</i>	<i>sàbùəs</i> ^ε	
<i>cb</i>	<i>sàbùà-</i>	
<i>Sà'dàbòɔg</i> ^ɔ		<i>n.</i> place of the clan Sarabose 35.4
<i>Sà'dàbùà</i> ⁺		<i>n.</i> clan name: 35.4
<i>pl</i>	<i>Sà'dàbùəs</i> ^ε <i>Sà'dàbùəb</i> ^a	
<i>sādɪgím</i>		<i>since, because</i> 27.1.4 31.1.1
<i>sāɛŋ</i> ⁺ or <i>sāɛŋ</i> ^a		<i>n.</i> blacksmith
<i>pl</i>	<i>sāaŋb</i> ^a	
<i>cb</i>	<i>sāɛŋ-</i>	
<i>sākárùg</i> ^ɔ		<i>n.</i> fox
<i>pl</i>	<i>sākárɪd</i> ^ε	
<i>cb</i>	<i>sākár-</i>	
<i>sàlɪbɪr</i> ^ε		<i>n.</i> bridle

<i>sālɪma</i> ⁺		<i>n. pl as sg gold</i>
<i>cb</i>	<i>sàlɪm-</i>	
	<i>sàlɪm-kùəs</i> ^a	<i>n. gold merchant</i>
<i>sām</i> ^{nɛ/}		<i>n. debt</i>
<i>pl</i>	<i>sāmá</i> ⁺	
<i>cb</i>	<i>sām-</i>	
	<i>sām-kpá'às</i> ^a	<i>n. household servant</i>
<i>sāmán</i> ^{nɛ}		<i>n. open space in front of a <i>zàk</i>^a compound</i>
<i>pl</i>	<i>sāmánà</i> ⁺	
<i>cb</i>	<i>sāmán-</i>	
	<i>Sāmán-pīár</i> ^ɛ	<i>n. traditional New Year ceremony</i>
<i>sàŋ'am</i> ^m		<i>vv. spoil, get spoiled, get broken; destroy</i>
<i>sāngúnnìr</i> ^ɛ		<i>n. millipede</i>
<i>pl</i>	<i>sāngúnnà</i> ⁺	
<i>cb</i>	<i>sāngún-</i>	
<i>sāŋá</i> ⁺		<i>n. time</i> 35.8 9.3.2
<i>pl</i>	<i>sānsá</i> ⁺	
<i>cb</i>	<i>sān-</i>	
	<i>sān-kán</i> ^ɛ	<i>adv. then; when?</i>
	<i>sān-sí'ān lā</i>	<i>adv. at one time, once ...</i> 27.1.3
<i>sāpál</i> ^{lɛ}		<i>n. Harmattan part of the dry season</i> <i>úun</i> ^{nɛ}
<i>sārɪgá</i> ⁺		<i>n. prison</i> ← Hausa <i>sarkàa</i> "chain"
<i>sàríyà</i> ⁺ or <i>sèríyà</i> ⁺		<i>n. law</i> ← Arabic شريعة <i>fari:ḡa(tun)</i>
<i>cb</i>	<i>sàríyà-kāt</i> ^a	<i>n. judge NT</i>
<i>sāvg</i> ^{ɔ/}		<i>n. broom, brush</i>
<i>pl</i>	<i>sāad</i> ^{ɛ/}	
<i>cb</i>	<i>sā-</i>	
<i>sàvk</i> ^ɔ		<i>n. mote of dust</i>
<i>pl</i>	<i>sà'ad</i> ^ɛ	
<i>sāúbŋ</i> ^ɔ		<i>n. hospitality</i>
<i>sè</i> ⁺		<i>vv. transplant</i>
<i>dipf</i>	<i>sèɛd</i> ^a	
<i>sēoŋg</i> ^ɔ		<i>n. rainy season</i>
<i>sì</i> ⁺		<i>vv. skin, flay</i>
<i>sī'a</i> ⁺		<i>some, any (sg)</i> 15.3
<i>sīa</i> ⁺		<i>n. waist</i>
<i>pl</i>	<i>sīəs</i> ^ɛ	
<i>cb</i>	<i>sìà-</i>	
	<i>sìà-lōɔdɪŋ</i> ^a	<i>n. belt ("waist-tying-thing")</i>
	<i>sìà-nīf</i> ^{ɔ/}	<i>n. kidney</i>
<i>sġā'al</i> ^{ɛ/}		<i>vv. get to be enough</i>

<i>sjà'ar</i> ^ε		<i>n.</i> forest (WK), wilderness
<i>pl</i>	<i>sjà'a</i> ⁺	
<i>cb</i>	<i>sjà'-</i>	
<i>sjàk</i> ^ε		<i>vv.</i> agree (cf Mooré <i>sàke id</i>)
<i>sjàk</i> ^{ε/}		<i>vv.</i> suffice (cf Mooré <i>sékè id</i>)
<i>sībıg</i> ^{a/}		<i>n.</i> a kind of termite
<i>pl</i>	<i>sībı</i> ⁺	
<i>cb</i>	<i>sīb-</i>	
<i>sìd</i>		truly, Post-Subject Particle 27.1.4
<i>sìda</i> ⁺		<i>n.</i> <i>pl</i> as <i>sg</i> truth
<i>pl</i>	<i>sìd-</i>	
<i>sīd</i> ^a		<i>n.</i> husband 35.1
<i>pl</i>	<i>sīdıb</i> ^a	
<i>cb</i>	<i>sìd-</i>	
	<i>sìd-bīl</i> ^a	<i>n.</i> husband's younger brother
	<i>sìd-kpēēŋm</i> ^m	<i>n.</i> husband's elder brother
	<i>sìd-puāk</i> ^a	<i>n.</i> husband's sister
<i>sīe</i> ^{+/}		<i>vv.</i> descend, be humbled
<i>sīēba</i> ⁺		some(ones), any (ones) 15.3
<i>sīēl</i> ^a		something, anything 15.3
<i>sīēm</i> ^m		somehow, anyhow 15.3 17.1
<i>sīg</i> ^ε		<i>vv.</i> descend
<i>sīgıs</i> ^{ε/}		<i>vv.</i> lower
<i>sīgısır</i> ^ε		<i>n.</i> stopping-place
<i>pl</i>	<i>sīgısá</i> ⁺	
<i>sīıg</i> ^a		<i>n.</i> shade, personal spirit (KED); used in NT for "spirit"; in traditional belief rather "Lebenskraft" (Haaf) "vital energy", closely associated in concept with an individual's tutelary <i>kikīrs</i> ^{ε/} (qv)
<i>pl</i>	<i>sīıs</i> ^ε	
<i>cb</i>	<i>sì-</i>	
	<i>Sì-sùŋ</i> ^ɔ	<i>n.</i> Holy Spirit NT
<i>sīilı</i> ^m		<i>vv.</i> cite proverbs
<i>sīilıŋ</i> ^a <i>sīilúŋ</i> ^ɔ		<i>n.</i> proverb
<i>pl</i>	<i>sīilıs</i> ^ε <i>sīilımıs</i> ^ε <i>sīilımà</i> ⁺	
<i>cb</i>	<i>sīilıŋ-</i>	
<i>sīīŋd</i> ^{ε/}		<i>n.</i> honey
<i>sīīŋ</i> ^{ɔ/} <i>sīīŋg</i> ^{a/}		<i>n.</i> bee
<i>pl</i>	<i>sīīŋs</i> ^{ε/}	
<i>cb</i>	<i>sīīŋ-</i>	

<i>sī'ɿs</i> ^{ε/}		vv. touch
<i>sīlɿnsíùg</i> ^ɔ		n. ghost
pl	<i>sīlɿnsíſ</i> ^ε	
<i>sīlɿnsíùŋg</i> ^ɔ		n. spider
pl	<i>sīlɿnsíŋd</i> ^ε	
<i>sìlvog</i> ^ɔ		n. hawk
pl	<i>sìn</i> ^{nε} <i>sìlɿs</i> ^ε	
cb	<i>sìl-</i>	
<i>sìm</i> ^m		vv. sink in a liquid
<i>Sìmīig</i> ^a		n. Fulbe person, Fulani 35.4
pl	<i>Sìmīis</i> ^ε	
cb	<i>Sìmì-</i>	
<i>Sìmīil</i> ^ε		n. Fulfulde language
<i>Sìmīug</i> ^ɔ		n. place of the Fulbe
<i>sīn</i> ^{na/}		iv. be silent
ger	<i>sīnním</i> ^m	
<i>sīnsáŋ</i> ⁼		n. a kind of tiny ant
<i>sīj</i> ^a		n. a kind of very big pot
pl	<i>sīlɿs</i> ^ε	
cb	<i>sìŋ-</i>	
<i>sī'ŋ</i> ^{ε/}		vv. begin
<i>sīsíbìg</i> ^a		n. neem tree 35.5
pl	<i>sīsíbìs</i> ^ε	<i>Azadirachta indica</i> (Haaf)
cb	<i>sīsíb-</i>	
<i>sīsíbìr</i> ^ε		n. fruit of neem tree 35.5
pl	<i>sīsíbà</i> ⁺	
<i>sìsì'əm</i> ^m		n. wind, storm
<i>sìsùvgū-n</i> ^{ε/}		between, postposition 20.6 KB <i>suvgun</i>
<i>sī'úŋ</i> ^ɔ		n. a kind of large dish
pl	<i>sī'imís</i> ^ε	
cb	<i>sī'uŋ-</i>	
<i>sō</i> ⁺		some(one), any(one), animate sg 15.3
<i>sōb</i> ^a		dummy head pronoun, animate sg 19.9.3
<i>sōb</i> ^ε		vv. go/make dark; usually "write"
	<i>sōbɿr</i> ^{ε/}	n. piece of writing 12.1.2
<i>sōbɿg</i> ^{ε/}		vv. blacken
<i>sōŋŋ</i> ⁺ or <i>sōŋŋ</i> ^a		n. witch
pl	<i>sōŋŋb</i> ^a	
cb	<i>sōŋ-</i>	
<i>sógjà</i> ^a		n. soldier ← English

<i>sālvŋ</i> ^{ɔ/}		<i>n.</i> story
<i>pl</i>	<i>sālmá</i> ⁺	
<i>sāŋ</i> ⁺		<i>vv.</i> rub
<i>sāŋ'e</i> ^{ya/}		<i>iv.</i> be better than
<i>agt</i>	<i>sāŋ'ɔd</i> ^{a/}	
	<i>pl</i> <i>sāŋ'ɔb</i> ^{a/}	
	<i>cb</i> <i>sāŋ'ɔd-</i>	
<i>sānnur</i> ^ε		<i>n.</i> courtyard dividing wall
<i>pl</i>	<i>sānna</i> ⁺	
<i>cb</i>	<i>sàn-</i>	
<i>sāŋs</i> ^ε		<i>vv.</i> converse, talk with
<i>ger</i>	<i>sāŋsìg</i> ^a	
<i>sāwŋg</i> ^ɔ		<i>n.</i> witchcraft
<i>sāwŋr</i> ^ε		<i>n.</i> liver
<i>pl</i>	<i>sāŋya</i> ⁺	
<i>cb</i>	<i>sàŋ-</i>	
<i>sàs</i> ^ε		<i>vv.</i> ask
<i>ger</i>	<i>sāsìg</i> ^a	
<i>agt</i>	<i>sàs</i> ^a	<i>n.</i> beggar
<i>sù</i> ⁺		<i>vv.</i> take a bath
<i>sù'ā</i> ^a		<i>vv.</i> do secretly, hide
<i>sùāk</i> ^{a/}		<i>n.</i> hiding place
<i>sūeŋ</i> ^{+/}		<i>vv.</i> anoint
<i>sū'e</i> ^{ya/}		<i>iv.</i> own
<i>ger</i>	<i>sū'ulím</i> ^m	<i>n.</i> property
<i>sūgur</i> ^{ε/}		<i>vv.</i> show forbearance, be patient with
	<i>sūguró</i> ⁺	<i>n.</i> forbearance
<i>sùm</i> ^m		<i>n.</i> goodness; well 20.4 24.2
<i>sùm</i> ^{ma}		<i>iv.</i> be good
<i>sùmbōgusím</i> ^m		<i>n.</i> peace
<i>sūmmır</i> ^ε		<i>n.</i> groundnuts
<i>pl</i>	<i>sūmma</i> ⁺	
<i>cb</i>	<i>sùm-</i>	
	<i>sūm-dúgudà</i> ⁺	<i>n.</i> groundnuts for cooking WK
<i>sùn</i> ^{ne}		<i>vv.</i> bow one's head 6.2.1
<i>ger</i>	<i>sùnnur</i> ^ε or <i>sùnnug</i> ^ɔ	
<i>agt</i>	<i>sūn</i> ^{na}	<i>n.</i> deep thinker, close observer WK
<i>sūŋ'e</i> ^{+/}		<i>vv.</i> become better than

<i>sũḥʳ/ sũuḥʳ^{ε/}</i>	<i>n.</i> heart
<i>pl sũḥyá⁺</i>	
<i>cb sũḥ-</i>	
<i>sũḥ-kpí'òḥ^ᵛ</i>	<i>n.</i> boldness 19.7.1
<i>sũḥ-má'asìḥ^m</i>	<i>n.</i> joy
	<i>Ḥ sũḥf má'e yā.</i> "My heart has cooled."
	= "I'm joyful."
<i>sũḥ-málìsìḥ^m</i>	<i>n.</i> joy
<i>cb sũḥ-málìs-</i>	
<i>sũḥ-péèḥ^{nε}</i>	<i>n.</i> anger
	<i>Ḥ sũḥf pélìg nē.</i> "My heart is whitened."
	= "I'm angry"
<i>sũḥ-sáḥ'ùḥ^ᵛ</i>	<i>n.</i> sorrow
	<i>Ḥ sũḥf sáḥ'àḥ nē.</i> "My heart is spoilt"
	= "I'm sad."
<i>sùḥ^ε</i>	<i>vv.</i> help
<i>sùḥ^ᵛ sùḥ^{mε}</i>	<i>adj.</i> good
<i>pl sùḥma⁺</i>	
<i>cb sùḥ-</i>	
<i>sùḥā^{+/}</i>	<i>adv.</i> well 20.4 24.2
<i>sú'ḥ^a</i>	<i>n.</i> rabbit
<i>pl sũ'ḥmís^ε</i>	
<i>cb sũ'ḥḥ-</i>	
<i>sũḥ^{ε/}</i>	<i>n.</i> road;
<i>pl sũḥyá⁺</i>	"permission" in <i>sũḥ bḗ, mōr sũḥ</i> 29.1
<i>cb sũḥā-</i>	
<i>sù'ḥs^a</i>	<i>n.</i> yesterday 35.8
<i>sù'ḥs^ε</i>	<i>vv.</i> trick
<i>sù^a</i>	<i>iv.</i> have one's head bowed
<i>sùsḥ^{mε}</i>	<i>n.</i> grasshopper
<i>Sũtáanà⁺</i>	<i>n.</i> Satan
<i>sũvḥ^{ε/}</i>	<i>vv.</i> wither (leaves) WK
<i>sù'vḥ^a sù'vḥ^ᵛ</i>	<i>n.</i> knife
<i>pl sù'vḥs^ε</i>	
<i>cb sù'-</i>	

T

<i>tāa</i> ⁼ <i>tāas</i> ^ε	fellow- as second part of compound 13.1.1.4
<i>tāaba</i> ⁺ <i>tāab</i>	each other 15.5
<i>tā'adɪr</i> ^ε	<i>n.</i> sandal
<i>pl</i> <i>tā'ada</i> ⁺	
<i>cb</i> <i>tā'ad-</i>	
<i>tāal</i> ^ε	<i>n.</i> fault, sin
<i>pl</i> <i>tāala</i> ⁺	
<i>cb</i> <i>tāal-</i>	
<i>tá'am</i> ^{mε}	<i>n.</i> shea tree fruit 35.5
<i>pl</i> <i>tā'amá</i> ⁺	
<i>tá'aŋ</i> ^a	<i>n.</i> shea butter tree 35.5
<i>pl</i> <i>tā'amís</i> ^ε	<i>Butyrospermum Parkii</i> (Haaf)
<i>cb</i> <i>tā'aŋ-</i>	
<i>tā'as</i> ^{ε/}	<i>vv.</i> help someone to walk; in greetings 34
<i>tàb</i> ^ε	<i>vv.</i> get stuck to
<i>tàbɪ</i> ^{ya}	<i>iv.</i> be stuck to
<i>tàbɪg</i> ^ε	<i>vv.</i> get unstuck from
<i>tàbɪl</i> ^ε	<i>vv.</i> stick to
<i>tàdɪg</i> ^ε	<i>n.</i> become weak
<i>tādɪm</i> ^{m/}	<i>n.</i> weak person
<i>pl</i> <i>tādɪm-nàm</i> ^a	
<i>cb</i> <i>tādɪm-</i>	
<i>tādɪmís</i> ^ε	<i>n.</i> weakness
<i>Tàlɪn</i> ^{nε}	<i>n.</i> Talni language
<i>Tàlɪŋ</i> ^a	<i>n.</i> Tallensi person 35.4
<i>pl</i> <i>Tàlɪs</i> ^ε	
<i>cb</i> <i>Tàlɪŋ-</i>	
<i>tàm</i> ^m	<i>vv.</i> forget
<i>dipf</i> <i>tàmmɪd</i> ^a	
<i>tàmpūa</i> ⁺	<i>n.</i> housefly 9.3.2
<i>pl</i> <i>tàmpōɔs</i> ^ε	
<i>cb</i> <i>tàmpò-</i>	
<i>tàmpūv</i> ^ε	<i>n.</i> ashpit, rubbish tip
<i>cb</i> <i>tàmpù-</i>	
<i>tān</i> ^{nε}	<i>n.</i> earth
<i>pl</i> <i>tāna</i> ⁺	
<i>cb</i> <i>tàn-</i>	
<i>tàn-mēɛd</i> ^a	<i>n.</i> builder

tānp^ɔ*tānp-sɔb*^a*tāns*^ɛ*ger tānsug*^ɔ*tār*^{a/}*ger tārím*^m*tàsɪntàl*^{lɛ}*tàtəl*^{lɛ}*tāyūn*^{+/}*pl tānp*^{a/}*cb tāyūn- tānp-**tèb*^ɛ*ger tēbɪg*^a*tēbɪg*^{ɛ/}*tēbɪs*^{a/}*tēbɪsɪg*^a *tēbɪsír*^ɛ*pl tēbɪsá*⁺*cb tēbɪs-**tēbɪsím*^m*téɛbùl*^ɛ*pl téɛbùl-nàm*^a*tēɛg*^{ɛ/}*tè'ɛg*^a*pl tè'ɛs*^ɛ*cb tè'-**tēk*^{ɛ/}*tēnb*^ɛ*ger tēnbug*^ɔ*tēn'ɛs*^ɛ*tēn'ɛs*^{ɛ/}*ger tēn'ɛsá*⁺*tēnr*^a*ger tēnrɪb*^ɔor *tēnrím*^m*n.* war*n.* warrior*vv.* shout*Winnig tánsìd nē.* The sun is shining.*iv.* have; more typical of *Toende* Kusaal;NT always has the Agolle word *mōr*^{a/} instead*n.* palm of hand*n.* palm of hand*n.* sibling of opposite sex [35.1](#)*vv.* carry in both hands*vv.* get heavy*iv.* be heavy*adj.* heavy*n.* heaviness*n.* table ← English*vv.* drag (ILK)*n.* baobab [35.5](#)*Adansonia digitata* (Haaf)*vv.* pull*vv.* tremble, struggle*vv.* remind*vv.* think*n.* thought*iv.* remembertone sic; ??misheard for *tēnrím*^m

<i>tēŋ</i> ^a		<i>n.</i> land
<i>pl</i>	<i>tēŋs</i> ^ε	
<i>cb</i>	<i>tēŋ-</i>	
	<i>tēŋ-bīig</i> ^a	<i>n.</i> native
	<i>tēŋ-dāan</i> ^a	<i>n.</i> traditional earth-priest
	<i>tēŋ-dū'adig</i> ^a	<i>n.</i> native land
	<i>tēŋ-pūugv-n</i> ^{ε/}	<i>n.</i> village 20.3
	<i>pl tēŋ-pūvdi-n</i> ^{ε/}	
	<i>tēŋ-zūŋ</i> ^ɔ	<i>n.</i> foreign country
	<i>pl tēŋ-zūvŋs</i> ^ε	
<i>tēŋi-n</i> ^{ε/}		downward; "under" as postposition 20.6
<i>tēŋír</i> ^ε		downward; "under" as postposition 20.6
<i>tēog</i> ^ɔ		<i>n.</i> nest
<i>pl</i>	<i>tēed</i> ^ε	
<i>tē'og</i> ^ɔ		<i>n.</i> baobab fruit 35.5
<i>pl</i>	<i>tē'ed</i> ^ε	
<i>tì</i>		we, our (Proclitic) 15.1
<i>tì</i> ⁺		us (Enclitic object) 15.1
<i>tì</i>		Particle-Verb conveying completion 22.7.2
<i>tìà'al</i> ^ε		<i>vv.</i> come next
<i>tìàk</i> ^ε		<i>vv.</i> change
<i>tī'əb</i> ^a		<i>n.</i> healer
<i>tì'əb</i> ^ε		<i>vv.</i> heal; ultimately
		← Arabic طب <i>t'ibb(un)</i> "medicinal art"
<i>tìeŋ</i> ⁺		<i>vv.</i> inform WK ("remember " KED)
<i>tìeŋ</i> ⁺		<i>vv.</i> stretch out
<i>tìəŋ</i> ^a		<i>n.</i> beard
<i>pl</i>	<i>tìəmɪs</i> ^ε	
<i>cb</i>	<i>tìəŋ-</i>	
	<i>tìəŋ-gūvr</i> ^ε	<i>n.</i> chin
<i>tìg</i> ^ε		<i>vv.</i> become sated
<i>ger</i>	<i>tīgɪr</i> ^ε	<i>n.</i> glut
<i>tī'iyal</i>		<i>iv.</i> be leaning (object)
<i>ger</i>	<i>tī'ib</i> ^{ɔ/}	
<i>tìig</i> ^a		<i>n.</i> tree
<i>pl</i>	<i>tìis</i> ^ε	
<i>cb</i>	<i>tì-</i>	
<i>tī'il</i> ^{ε/}		<i>vv.</i> lean something

<i>tìlm^m</i>		<i>n.</i> medicine
<i>cb</i>	<i>tì-</i>	
	<i>tì-kōvdím^m</i>	<i>n.</i> poison (killing-medicine)
	<i>tì-sābílím^m</i>	<i>n.</i> "black medicine" (a particular traditional remedy)
	<i>tì-vōnním^m</i>	<i>n.</i> oral medication
<i>tì'in^ε</i>		<i>vv.</i> begin to lean
<i>tīlās^ε</i>		<i>n.</i> necessity ← Hausa <i>tiilàs</i> 29.1
<i>tìlg^ε</i>		<i>vv.</i> survive, be saved
<i>tīnámì</i>		<i>we</i> (Subject of <i>h</i> -Clause) 15.1
<i>tīnám^a</i>		<i>we, us</i> (Contrastive) 15.1
<i>tīntōnríg^a</i>		<i>n.</i> mole (animal)
<i>pl</i>	<i>tīntōnrís^ε</i>	
<i>cb</i>	<i>tīntōnr-</i>	
<i>tìp^a</i>		<i>n.</i> healer (see <i>tīṭab^a</i> <i>id</i>)
<i>pl</i>	<i>tìp-nàm^a</i>	
<i>cb</i>	<i>tìp-</i>	
<i>tīráàn^a</i>		<i>n.</i> neighbour, peer
<i>pl</i>	<i>tīráàn-nàm^a</i>	
<i>cb</i>	<i>tīráàn-</i>	
<i>tīráànnim^m</i>		<i>n.</i> neighbourliness
<i>tírīgà</i>		ideophone for <i>gīṇ^a</i> short 19.8.1.3
<i>tìs^ε</i>		<i>vv.</i> give also <i>tì</i> before enclitic pronouns: <i>tì f</i> "gave you"
<i>dipf</i>	<i>tìsɪd^a tìt^a</i>	
<i>agt</i>	<i>tìs^a</i>	
<i>tītā'al^{lε}</i>		<i>n.</i> proud person
<i>tītā'alim^m</i>		<i>n.</i> pride
<i>tītā'am^m</i>		<i>n.</i> multitude
<i>tītā'ug^ɔ tītā'ar^ε</i>		<i>adj.</i> big, great
<i>pl</i>	<i>tītāda⁺</i>	
<i>cb</i>	<i>tītā'-</i>	
<i>tò</i>		OK 28.2.4 (= Hausa <i>tôo</i>)
<i>tòd^ε</i>		<i>vv.</i> give to the poor, share
<i>tōḡ^{a/}</i>		<i>iv.</i> be bitter, difficult
<i>tóklàe⁺</i>		<i>n.</i> torch ← English "torchlight"
<i>tóluìli</i>		ideophone for <i>wōk^ɔ/</i> tall 19.8.1.3
<i>tólìb</i>		onomatopoeic word 19.8.1.3
<i>tòṇ⁺</i>		<i>vv.</i> shoot
<i>tòṇ'ɔs^ε</i>		<i>vv.</i> hunt

<i>tɔɔg</i> ^ɔ		<i>adj.</i> bitter, difficult
<i>pl</i>	<i>tɔɔd</i> ^ɛ	
<i>cb</i>	<i>tò-</i>	
<i>tɔɔm</i> ^{m/}		<i>vv.</i> depart, disappear
<i>tò'ɔtɔ</i> ^{+/}		<i>adv.</i> straight away 20.4
<i>tɔ̀à</i> ⁺		<i>vv.</i> grind in a mortar
	<i>tɔ̀à-bī</i> ^a	<i>n.</i> pestle
<i>tɔ̀'à</i> ^a		<i>vv.</i> speak, plead in court
<i>tò'a</i> ^ɛ		<i>vv.</i> condemn in court
<i>tò'as</i> ^ɛ		<i>vv.</i> talk
<i>tòbur</i> ^ɛ		<i>n.</i> ear
<i>pl</i>	<i>tòba</i> ⁺	
<i>cb</i>	<i>tòb-</i>	
	<i>tòb-kpìr</i> ^ɛ	<i>n.</i> half of jaw
	<i>tòb-yīyɔ</i> ^{ɔ/}	<i>adj.</i> one-eared 16.2.4 19.8.1.4
<i>tōl</i> ^{la/}		<i>iv.</i> be hot
<i>tùlg</i> ^ɛ		<i>vv.</i> invert
<i>tōlg</i> ^{ɛ/}		<i>vv.</i> heat up
<i>tùm</i> ^m		<i>vv.</i> work
<i>ger</i>	<i>tōum</i> ^{mɛ}	<i>n.</i> deed
	<i>pl tōuma</i> ⁺	<i>n.</i> deeds; work
	<i>cb tōum-</i>	
	<i>tōum-bē'ed</i> ^ɛ	<i>n.</i> bad deeds
	<i>tōum-bē'ed-dím</i> ^a	<i>n.</i> sinners NT
<i>agt</i>	<i>tòm-tōm</i> ^{na}	<i>n.</i> worker
<i>tùm</i> ^m		<i>vv.</i> send
		For the polysemy with "work", compare Hausa <i>àikaa</i> "send", <i>aikàtaa</i> "work"
<i>ger</i>	<i>tìtōmɪs</i> ^ɛ	
<i>tūŋ'e</i>		<i>iv.</i> be able 26.3
<i>tūəɖɪr</i> ^ɛ		<i>n.</i> mortar
<i>pl</i>	<i>tūəda</i> ⁺	
<i>cb</i>	<i>tùed-</i>	
<i>tùen</i> ^{nɛ}		<i>in front; as postposition</i> 20.6 ; <i>West</i>
	<i>tùen-gāt</i> ^a	<i>n.</i> leader
<i>Tùen</i> ^{nɛ}		<i>n.</i> Toende part of Kusaasiland
<i>Tùennɪr</i> ^ɛ		<i>n.</i> Toende dialect of Kusaal
<i>tūsɪr</i> ^{ɛ/}		<i>n.</i> thousand 16.2.2
<i>tòtūl</i> ^{lɛ}		<i>n.</i> upside-down thing cf <i>tùlg</i> ^ɛ
<i>tūvígā</i> ^{+/}		<i>adv.</i> hotly 20.4

*tōulóg^ɔ**adj.* hot*pl tōulá⁺**cb tōul-***U***ùdvǝ^ɔ**n.* (piece of) chaff*pl ùt^ε**cb ùd-**ūvus^{ε/}**vv.* bring up a child*ùk^ε**vv.* vomit*ūk^ε**vv.* bloat*ùm^m**vv.* close eyes*úun^{nε}**n.* dry season [35.8](#)**V***vābɪ^{ya/}**iv.* be lying prone*ger vāp^{ɔ/} KT vābɪr^{ε/} WK**vābɪ^{ε/}**vv.* make lie prone*vàbɪn^ε**vv.* lie prone*vāvǝǝ^{ɔ/}**n.* leaf*pl vāaǝd^{ε/}**cb vāǝ-**vē⁺**vv.* lead*vē^{ε/}εg^{ε/}**vv.* drag*vèn^{na}**iv.* be beautiful*vèǝ^{la}**iv.* be beautiful*vèǝllɪg^a**adj.* beautiful*pl vèǝllɪs^ε vèǝlla⁺**cb vèǝl-**vèǝllíǝ^a**adj.* beautiful*pl vèǝllís^ε**cb vèǝllíǝ-**vènnɪg^a vènnɪr^ε**adj.* beautiful*pl vènnɪs^ε vènnna⁺**cb vènn-**vènnɪm^m**n.* beauty*vī⁺**vv.* uproot*vīk^{ε/}**vv.* uproot

<i>vīug</i> ^{ɔ/}		<i>n.</i> owl
<i>pl</i>	<i>vīid</i> ^{ε/}	
<i>cb</i>	<i>vī-</i>	
<i>vū</i> ⁺		<i>vv.</i> make a noise
<i>ger</i>	<i>vūug</i> ^{ɔ/}	
	<i>vūud</i> ^{ε/}	<i>n.</i> noise
<i>vōē</i> ^{a/}		<i>iv.</i> be alive
<i>vōj</i> ^ε		<i>vv.</i> swallow
<i>vòlɪnvùuŋ</i> ^{lε}		<i>n.</i> mason wasp
<i>vōm</i> ^{m/}		<i>n.</i> life
<i>cb</i>	<i>vōm-</i>	
	<i>vōm-páàl</i> ^{lε}	<i>n.</i> new life
<i>vúēŋ</i> ^a		<i>n.</i> red kapok 35.5
<i>pl</i>	<i>vūēmís</i> ^ε	<i>Bombax buonopozense</i> (Haaf)
<i>vúēr</i> ^ε		<i>n.</i> fruit of red kapok 35.5
<i>pl</i>	<i>vūāá</i> ⁼	
<i>cb</i>	<i>vūē-</i>	
<i>vōr</i> ^{ε/}		<i>adj.</i> alive
<i>pl</i>	<i>vōyá</i> ⁺	
<i>cb</i>	<i>vōr-</i>	
<i>vō'ug</i> ^{ε/}		<i>vv.</i> come, make alive
<i>vō'us</i> ^{ε/}		<i>vv.</i> breathe, rest
<i>vō'usím</i> ^m		<i>n.</i> resting

W

<i>wā</i> ⁺		<i>vv.</i> dance
<i>wāad</i> ^{ε/}		<i>n.</i> cold weather
<i>wáaf</i> ^ɔ		<i>n.</i> snake
<i>pl</i>	<i>wīigí</i> ⁺	
<i>cb</i>	<i>wā'-</i>	
<i>wāal</i> ^{ε/}		<i>vv.</i> sow, scatter seed
<i>wā'alím</i> ^m		<i>n.</i> length
<i>wā'am</i> ^{ma/}		<i>iv.</i> be long, tall
<i>wàbɪg</i> ^a <i>wàbɪr</i> ^ε		<i>n. or adj.</i> lame
<i>pl</i>	<i>wàbɪs</i> ^ε <i>wàba</i> ⁺	
<i>cb</i>	<i>wàb-</i>	
<i>wàbɪlɪm</i> ^m		<i>vv.</i> make, go lame
<i>wābug</i> ^{ɔ/}		<i>n.</i> elephant
<i>pl</i>	<i>wābɪd</i> ^{ε/}	
<i>cb</i>	<i>wāb-</i>	

<i>wādir</i> ^{ε/}		<i>n.</i> law (English "order" via Hausa)
<i>pl</i>	<i>wādá</i> ⁺	<i>plural as sg:</i> law
<i>cb</i>	<i>wād-</i>	
	<i>wād-tís</i> ^a	<i>n.</i> lawgiver NT
<i>wà'e</i> ^{ya}		<i>iv.</i> be en route for
<i>wālig</i> ^a		<i>n.</i> a kind of gazelle
<i>pl</i>	<i>wālis</i> ^ε <i>wālí</i> ⁺ <i>tone sic</i>	
<i>cb</i>	<i>wàl-</i>	
<i>wàŋim</i> ^m		<i>vv.</i> waste away
<i>wàsɪnwàl</i> ^{lε}		<i>n.</i> a parasitic gall on trees, called "mistletoe" in local English
<i>wàuŋ</i> ^ɔ		<i>adj.</i> wasted, thin
<i>pl</i>	<i>wàna</i> ⁺	
<i>cb</i>	<i>wàuŋ-</i>	
<i>wèɛd</i> ^a		see <i>wìɪd</i> ^a
<i>wēɛl</i> ^{ε/}		<i>vv.</i> be left unsold (KED) but see <i>wēog</i> ^{ɔ/}
<i>wēl</i> ^ε		<i>vv.</i> bear fruit
<i>wēl</i> ^{lε/}		<i>n.</i> fruit
<i>pl</i>	<i>wēlá</i> ⁺	
<i>cb</i>	<i>wēl-</i>	
<i>wēlá</i> ⁺ or <i>wālá</i> ⁺		how? 17.1
<i>wēn</i> ^{na/}		<i>iv.</i> resemble; in KB <i>wēn nē</i> appears as <i>nwene</i> ??misheard for <i>wēnním</i> ^m ; cf the adjective ...
<i>ger</i>	<i>wēnním</i> ^m	<i>adj.</i> resembling (Pattern O, confirmed by WK)
<i>wēnnir</i> ^ε		
<i>wèog</i> ^ɔ		<i>n.</i> deep bush
<i>wēog</i> ^{ɔ/}		<i>n.</i> cheap thing sold in abundance WK
<i>pl</i>	<i>wēɛd</i> ^{ε/}	
<i>wìɪg</i> ^ε		<i>vv.</i> scatter
<i>wìəp</i>		<i>n.</i> horse
<i>pl</i>	<i>wìɪt</i> ⁺	
<i>cb</i>	<i>wìɪd-</i>	
	<i>wìɪd-l̥r</i> ^{ε/}	<i>n.</i> place for tying up horses in a compound
	<i>wìɪd-dāvg</i> ^ɔ	<i>n.</i> stallion
	<i>wìɪd-nyá'aŋ</i> ^a	<i>n.</i> mare
	<i>wìɪd-zōv</i> ^ε	<i>n.</i> horsetail
<i>wìɪd</i> ^a		<i>n.</i> hunter
<i>pl</i>	<i>wìɪb</i> ^a	
<i>cb</i>	<i>wìɪd-</i>	
<i>Wiid</i> ^a		<i>n.</i> clan name 35.4
<i>pl</i>	<i>Wiid-nàm</i> ^a	
<i>cb</i>	<i>Wiid-</i>	

<i>Wiidug</i> ^ɔ		<i>n.</i> place of the clan Wiid
<i>wīig</i> ^{a/}		<i>n.</i> whistle
<i>wìim</i> ^m		<i>n.</i> sickness, disease ("worse than <i>bāŋ'as</i> ^ε " WK)
<i>wìk</i> ^ε		<i>vv.</i> fetch water 11.1.1
	<i>dipf</i>	<i>wiid</i> ^a
<i>wìl</i> ^{lε}		<i>n.</i> branch
	<i>pl</i>	<i>wìla</i> ⁺
	<i>cb</i>	<i>wìl-</i>
<i>wīlúsúŋ</i> ^ɔ		<i>n.</i> a kind of snail 9.3.2.1
	<i>pl</i>	<i>wīlímís</i> ^ε
	<i>cb</i>	<i>wīlúsúŋ-</i>
<i>wím</i>		ideophone for <i>zìŋ'a</i> ⁺ red 19.8.1.3
<i>wīn</i> ^{nε/}		<i>n.</i> God; god; spiritual double, <i>genius</i> ; destiny
	<i>pl</i>	<i>wīná</i> ⁺
	<i>cb</i>	<i>wīn-</i>
		<i>wīn-tóŋg</i> ^ɔ
<i>Wínà'am</i> ^m		<i>n.</i> misfortune
<i>wìnnig</i> ^a		<i>n.</i> (Christian) God 18.1
	<i>cb</i>	<i>n.</i> sun; talent
		<i>wìn-</i>
		<i>wìn-līr</i> ^ε
		<i>wìn-kòŋr</i> ^ε
<i>wìug</i> ^ɔ <i>wìir</i> ^ε		<i>n.</i> sunset
	<i>pl</i>	<i>wìya</i> ⁺ <i>wiid</i> ^ε
	<i>cb</i>	<i>wì-</i>
<i>wōk</i> ^{ɔ/} <i>wā'ar</i> ^{ε/}		<i>n.</i> sunset
	<i>pl</i>	<i>wā'á</i> ⁺ <i>wā'ad</i> ^{ε/}
	<i>cb</i>	<i>wōk- wā'-</i>
<i>wùm</i> ^m		<i>adj.</i> red
<i>wōsa</i> ⁺		<i>adj.</i> long, tall
<i>wōv</i> ⁺		<i>vv.</i> hear; understand (a language)
<i>wōv</i>		<i>q.</i> all 16.1
<i>wō'ug</i> ^{ε/}		<i>q.</i> all 16.1
<i>wō'v</i> ^{ε/}		like, resembling 21.1
		<i>vv.</i> get wet
		<i>vv.</i> make wet

Y

<i>yà</i>		you, your <i>pl</i> (Proclitic) 15.1
<i>ya</i> ⁺		you <i>pl</i> (Enclitic object) 15.1
<i>ya</i>		you <i>pl</i> , Enclitic Subject after imperative 15.1 28.2.3
<i>yā</i> ⁺		Independent Perfective particle 22.6.2.1

yà'		if, when 30
yáa		adv. whither? 17.1
yā'a		as for ... 28.1.1
yáab ^a		n. grandparent, ancestor 35.1
pl	yāa-nám ^a	
cb	yāa-	
	yāa-dáɥ ⁺	n. grandfather
	yāa-pɥ'á ^a	n. grandmother
yà'al ^ε		vv. hang up; make perch (bird)
yà'an ^ε		vv. perch (of a bird)
Yàan ^{nε}		n. Yansi language (apparently Mooré now)
yáa nɪ ⁺		adv. where? 17.1
yáaŋ ^a		n. grandchild, descendant 35.1
pl irr	yáas ^ε	(consistently without nasalisation)
cb	yāaŋ-	
Yàaŋ ^a		n. Yansi person 35.4
pl	Yàam ^{ma} Yàamɪs ^ε Yàs ^ε	
cb	Yàaŋ-	
yāa ^{ε/}		vv. scatter
yàarɪm ^m		n. salt
cb	yàar-	
yà'as ^a yà'as ^ε		again 26.3
yā'as ^{ε/}		vv. open repeatedly
yàddā yàdā		n. faith, trust ← Hausa <i>yàrda</i> ; probably ← Arabic يرضى <i>yard'a</i> : 18.1 23.1
yàddā-níŋɪr ^ε		n. belief
yādɪg ^{ε/}		vv. scatter
agt	yāt ^{a/}	irreg. agent noun: technical term for a participant in a housebuilding ritual
yā'e ^{+/}		vv. widen, open (mouth)
yàk ^ε		vv. unhang, unhook
yàɪm ^{ma}		iv. be wide
yāɪsúŋ ^ɔ		n. quail 9.3.2.1
pl	yāɪmɪs ^ε	
cb	yāɪsúŋ-	
yàɪŋ ^ɔ		adj. wide
pl	yàɪma ⁺	
cb	yàɪŋ-	

<i>yām^{mε}</i>		<i>n. hay WK</i>
<i>pl yàma⁺</i>		
<i>cb yàm-</i>		
<i>yām^{m/}</i>		<i>n. gall; gall bladder; common sense WK yā'm^{m/}.</i>
<i>cb yām-</i>		
<i>yàmmıg^a yàmmıg^a yàmmıg^ɔ</i>		<i>n. slave</i>
<i>pl yàmmıs^ε</i>		
<i>cb yàm-</i>		
<i>yānámì</i>		<i>you pl (Subject of ñ-Clause) 15.1</i>
<i>yānám^a</i>		<i>you pl (Contrastive) 15.1</i>
<i>Yārıg^{a/}</i>		<i>n. Yarsi 35.4; also called Kantonsi; said to have been originally of Manding/Dyula origin</i>
<i>pl Yārıs^{ε/}</i>		
<i>cb Yār-</i>		
<i>Yāt^{ε/}</i>		<i>n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)</i>
<i>yàvıg^ɔ</i>		<i>n. grave, tomb</i>
<i>pl yàad^ε</i>		
<i>yē</i>		<i>that 29.1 29.3 29.3.3</i>
<i>yē</i>		<i>be about to ... 22.3.2</i>
<i>yē⁺</i>		<i>vv. dress oneself</i>
<i>res adj yèelúg^ɔ</i>		<i>adj. worn (e.g. of a shirt)</i>
<i>yèeg^ε</i>		<i>vv. undress oneself</i>
<i>yèel^ε</i>		<i>vv. dress someone</i>
<i>yēes^{ε/}</i>		<i>vv. betray a secret</i>
<i>yèl^ε</i>		<i>vv. say, tell</i>
<i>dıpf yèt^a</i>		
<i>ger yèlvıg^ɔ</i>		
<i>yēl^{lε/}</i>		<i>n. matter, affair</i>
<i>pl yēlá⁺</i>		<i>as postposition: about 20.6</i>
<i>cb yēl-</i>		
<i>yēl-méñìr^ε</i>		<i>n. truth</i>
<i>yēl-nárùg^ɔ</i>		<i>n. necessity</i>
<i>yēl-pákìr^ε</i>		<i>n. disaster</i>
<i>yēl-sú'adìr^ε</i>		<i>n. confidential matter</i>
<i>yēñım^m</i>		<i>vv. oscillate (like waves)</i>
<i>yèog^ɔ</i>		<i>n. bird's crop;</i>
		<i>person displaced from family (KED)</i>
<i>pl yèed^ε</i>		
<i>yēóğ</i>		<i>q. one 16.2.3</i>

<i>yī</i> ⁺		vv. go, come out
	dipf <i>yīt</i> ^{a/}	
	imp <i>yīm</i> ^{ma}	
<i>yìdɪg</i> ^ε		vv. go astray
<i>yīdɪg</i> ^{ε/}		vv. untie
<i>yìər</i> ^ε		n. jaw
<i>yīigá</i> ⁺		q. firstly 16.2.4 20.4
	<i>yīig-sób</i> ^a	n. first person 19.9.3
<i>yīs</i> ^{ε/}		vv. make go/come out, extract
	ger <i>yīsɪb</i> ^ɔ	
<i>yīmmír</i> ^ε		adj. solitary, lone 16.2.4
	pl <i>yīmmá</i> ⁺	
	cb <i>yīm-</i>	
<i>yīmmú</i> ⁺		adv. straight away, at once 16.2.5
<i>yīnní</i> ⁺		q. one 16.2.2
<i>yìŋ</i> ^a		adv. outside
<i>yīr</i> ^{ε/}		n. house
	pl <i>yā</i> ^{+/}	
	cb <i>yī-</i>	
	<i>yī-dáàn</i> ^a	n. householder
	<i>yī-sób</i> ^a	n. householder
	pl <i>yī-sób-nàm</i> ^a	
	<i>yī-dím</i> ^a	n. members of the household
	<i>yī-póŋròg</i> ^ɔ	n. neighbouring house
	pl <i>yī-póŋrà</i> ⁺	
	<i>yī-sígɪdìr</i> ^ε	n. lodging-house
<i>yín</i> ^{nε}		at home
	pl <i>yáan</i> ^ε	
<i>yīs</i> ^ε		vv. make go/come out, extract
<i>yīyŋ</i> ^{ɔ/}		adj. single- 16.2.4 19.8.1.4
	pl <i>yīná</i> ⁺	
<i>yò</i> ⁺		vv. close
	res adj <i>yòɔlúŋ</i> ^ɔ	adj. closed
<i>yō</i> ⁺		vv. pay
	ger <i>yōɔd</i> ^{ε/}	n. pay
<i>yōlɪs</i> ^{ε/}		vv. untie
<i>yōlɪsím</i> ^m		n. freedom
<i>yōlug</i> ^{ɔ/}		n. sack, moneybag, £100, ₵200 (200 cedis)
	pl <i>yōn</i> ^{nε/}	
	cb <i>yōl-</i>	
<i>yò'ɔg</i> ^ε		vv. open

<i>yòɔr</i> ^ε		<i>n.</i> soldier ant
<i>pl</i>	<i>yòya</i> ⁺	
<i>cb</i>	<i>yò-</i>	
<i>yɔ̀à</i> ⁺		<i>vv.</i> bleed; also "fornicate" WK
<i>yùbɪg</i> ^a		<i>n.</i> small bottle-like pot
<i>pl</i>	<i>yùbɪs</i> ^ε	
<i>cb</i>	<i>yùb-</i>	
<i>yūgvɔɔr</i> ^ε		<i>n.</i> hedgehog
<i>pl</i>	<i>yūgvɔɔda</i> ⁺	
<i>cb</i>	<i>yùgvɔɔ-</i>	
<i>yōgúm</i> ^{mε}	<i>yōgúm</i> ^{nε}	<i>n.</i> camel
<i>pl</i>	<i>yōgúmá</i> ⁺	
<i>cb</i>	<i>yōgúm-</i>	
<i>yùlɪg</i> ^ε		<i>vv.</i> swing (transitive)
<i>yūŋ'e</i> ^{+/}		<i>vv.</i> set alight
<i>yū'ər</i> ^ε		<i>n.</i> penis
<i>pl</i>	<i>yūāda</i> ⁺	
<i>cb</i>	<i>yù'ər-</i>	
<i>yùug</i> ^ε		<i>vv.</i> get to be a long time, delay
	<i>Tì yùùg nē tāaba.</i>	
	"It's a long time since we met."	
<i>yùul</i> ^ε		<i>vv.</i> swing (intransitive)
<i>yō'um</i> ^{m/}		<i>vv.</i> sing
<i>agt</i>	<i>yōum-yó'ùm</i> ^{na}	<i>n.</i> singer
	<i>pl yōum-yó'ùmnɪb</i> ^a	
<i>yó'um</i> ^{nε}		<i>n.</i> song
<i>pl</i>	<i>yō'umá</i> ⁺	
<i>cb</i>	<i>yō'um-</i> or <i>yōum-</i>	
<i>yòum</i> ^{mε}		<i>n.</i> year
<i>pl</i>	<i>yòma</i> ⁺	
<i>cb</i>	<i>yòum-</i>	
	<i>yòum-pāalíg</i> ^a	<i>n.</i> new year
<i>yō'un</i>		then, next 27.1.4
<i>yó'uh</i> ^ɔ		<i>n.</i> night
<i>pl</i>	<i>yō'umís</i> ^ε	
<i>cb</i>	<i>yō'uh-</i>	
<i>yō'ur</i> ^{ε/}		<i>n.</i> name
<i>pl</i>	<i>yōdá</i> ⁺	
<i>cb</i>	<i>yō'-</i>	

*yūr^ε**n. water pot**pl yūya⁺**cb yù-***Z***zā^{+/}**n. millet**cb zā-**zāalíg^a zāal^{lε}**adj. empty**pl zāalís^ε zāalá⁺**cb zāal-**zāalím^m**adv. emptily**zàam^m**n. evening**cb zà-**zà-sìsōbır^{ε/}**n. evening**zàaṇsım^m**vv. dream**zāaṇsım^m**n. soup; not "fish soup", unlike (according to Tony Naden) the Mampruli cognate cf Toende *zāasım* "soupe à viande" (Niggli)**cb zāaṇs-**zàaṇsúṅ^ɔ**n. dream**pl zàaṇsímà⁺**cb zàaṇsúṅ-**zàb^ε**vv. fight; hurt (of body part)**ger zàbır^ε**agt zàb-zàb^a**n. warrior**agt gbān-záb^a**n. leather-beater, leather-worker**zàbı^ε**vv. cause to fight**zàk^a**n. compound**pl zà'as^ε**cb zà'-**zà'-nōṛ^{ε/}**n. gate**zà'-nō-gúr^a**n. gatekeeper**zàkım^m**vv. itch**zàlıṅ^a**n. electric eel**pl zàlımıs^ε**cb zàlıṅ-**zàm^m**vv. cheat**dipf zàmmıd^a**agt zàm-zām^{na}**n. cheat**zà'mıs^ε**vv. learn, teach*

<i>zāŋ'a</i> ⁼	<i>q.</i> every 16.1
<i>zàŋ'as</i> ^ε	<i>vv.</i> refuse
<i>zàŋbi</i> ^ε	<i>vv.</i> tattoo, mark skin
<i>zāŋbɪn</i> ^{nε}	<i>n.</i> tattoo; NT "sign"
<i>pl</i> <i>zāŋbɪna</i> ⁺	
<i>cb</i> <i>zàŋbɪn-</i>	
<i>Zàŋgbèɛ</i> ^ε	<i>n.</i> Hausa language 35.4
<i>Zàŋgbèog</i> ^ɔ	<i>n.</i> Hausa person 35.4
<i>pl</i> <i>Zàŋgbèɛd</i> ^ε	
<i>zàngùem</i> ^{mε}	<i>n.</i> wall
<i>pl</i> <i>zàngùema</i> ⁺	
<i>cb</i> <i>zàngùem-</i>	
<i>zànkù'ar</i> ^ε	<i>n.</i> jackal
<i>pl</i> <i>zànkɥ'aa</i> ⁺ <i>zànkù'ada</i> ⁺	
<i>cb</i> <i>zànkɥ'à-</i>	
<i>zāŋ</i> ^{la/}	<i>iv.</i> be holding, carrying in hands
<i>ger</i> <i>zāŋllím</i> ^m	
<i>zàŋ</i> ^{lε}	<i>n.</i> umbilicus
<i>zàŋ</i> ^ε	<i>vv.</i> pick up, take up
<i>zēm</i> ^{ma/}	<i>iv.</i> be equal
<i>ger</i> <i>zēm móg</i> ^ɔ	
<i>zē'mɪs</i> ^{ε/}	<i>vv.</i> make equal
<i>zēm móg</i> ^ɔ	<i>adj.</i> equal
<i>pl</i> <i>zēm mǎ</i> ⁺	
<i>cb</i> <i>zēm-</i>	
<i>zī</i> ⁺	<i>vv.</i> carry on one's head
<i>ger</i> <i>zīd</i> ^{ε/}	
<i>agt</i> <i>zī-zīd</i> ^a	<i>n.</i> carrier on the head
<i>zī'</i> ⁺	<i>iv.</i> not know 32.1.1
<i>agt</i> <i>zī'ɪd</i> ^{a/}	<i>n.</i> ignorant person
<i>ger</i> <i>zī'ɪlím</i> ^m	
<i>zì'e</i> ^{ya}	<i>iv.</i> be standing
<i>ger</i> <i>zī'a</i> ⁺ KED; DK KT <i>zī'əg</i> ^a	(exceptional phonology 18 12.1.1.2)
<i>zì'ə</i> ^ε	<i>vv.</i> make to stand
<i>zì'ən</i> ^ε	<i>vv.</i> stand still
	<i>Ò zì'ən nē.</i> "She's pregnant."
<i>zīɪm</i> ^{m/}	<i>n.</i> blood
<i>cb</i> <i>zī-</i>	

<i>zīŋ</i> ^a		<i>n.</i> fish
<i>pl</i>	<i>zīm</i> ⁺	
<i>cb</i>	<i>zīm-</i>	
	<i>zīm-gbáŋ'àd</i> ^a	<i>n.</i> fisherman
<i>zìlɪm</i> ^{mɛ}		<i>n.</i> tongue
<i>pl</i>	<i>zìlɪma</i> ⁺	
<i>cb</i>	<i>zìlɪm-</i>	
<i>zīlɪnzíùg</i> ^ɔ		<i>adj.</i> unknown
<i>zím</i>		ideophone for <i>sābílíg</i> ^a black 19.8.1.3
<i>zīnā</i> ⁺		today 35.8
<i>zìŋ'a</i> ⁺ <i>zèŋ'ug</i> ^ɔ		<i>adj.</i> red
<i>pl</i>	<i>zèŋ'ɛd</i> ^ɛ <i>zèŋ'ɛs</i> ^ɛ <i>zèŋda</i> ⁺	
<i>cb</i>	<i>zèŋ'-</i>	
<i>zìŋ'i</i> ^{ya}		<i>iv.</i> be sitting
<i>ger</i>	<i>zīŋ'ig</i> ^a	gerund, also "place"
	<i>pl</i> <i>zīŋ'is</i> ^ɛ	
	<i>cb</i> <i>zìŋ-</i>	
<i>zìŋ'il</i> ^ɛ		<i>vv.</i> make sit, seat
<i>zìŋ'in</i> ^ɛ		<i>vv.</i> sit down
<i>zīnzāyŋ</i> ^{ɔ/}		<i>n.</i> bat
<i>pl</i>	<i>zīnzānā</i> ⁺	
<i>cb</i>	<i>zīnzáyŋ-</i>	
<i>zīr</i> ⁺		<i>n.</i> lie, untruth
<i>zò</i> ⁺		<i>vv.</i> run; fear; experience emotion
<i>dipf</i>	<i>zòt</i> ^a	
<i>imp</i>	<i>zòm</i> ^{ma}	
<i>ger</i>	<i>zūa</i> ⁺ <i>zōwɔ</i> ^ɔ	gerunds "run"
<i>ger</i>	<i>zòtɪm</i> ^m	<i>imperfective</i> gerund "fear" 13.1.1.4
		<i>Ò zòt-ō nīn-báalìg.</i> "He has pity on him"
<i>zōl</i> ^ɛ		<i>vv.</i> castrate
<i>zōlɪmís</i> ^ɛ		<i>n.</i> foolishness
<i>zōlɔg</i> ^{ɔ/}		<i>n.</i> fool
<i>pl</i>	<i>zōn</i> ^{nɛ/}	
<i>cb</i>	<i>zōl-</i>	
<i>zōm</i> ^{m/}		<i>n.</i> flour
<i>cb</i>	<i>zōm-</i>	
<i>zōwɔm</i> ^{mɛ} <i>zōwɔm</i> ^{nɛ}		<i>n.</i> refugee, fugitive
<i>pl</i>	<i>zōwɔma</i> ⁺	
<i>cb</i>	<i>zòwɔm-</i>	
<i>zōrɪg</i> ^{a/}		<i>n.</i> small child WK

<i>zōrug</i> ^{ɔ/}		<i>n.</i> piece
<i>pl</i>	<i>zōrá</i> ⁺	
<i>zū</i> ⁺		<i>vv.</i> steal
<i>zụà</i> ⁺		<i>n.</i> friend
<i>pl</i>	<i>zụà-nàm</i> ^a	
<i>cb</i>	<i>zụà-</i>	
<i>Zùà</i> ⁺		<i>n.</i> clan name 35.4
<i>pl</i>	<i>Zùəs</i> ^ε	
<i>pl</i>	<i>Zụà-wìis</i> ^ε <i>Zụà-wìib</i> ^a	subclans of Zoose
<i>pl</i>	<i>Zụà-sābulís</i> ^ε	
<i>zù'e</i> ⁺		<i>vv.</i> get higher, more
<i>zùe</i> ⁺		<i>vv.</i> perch, get on top (? variant of <i>zù'e</i> ⁺)
<i>zūg</i> ^{ɔ/}		<i>n.</i> head; as postposition 20.6 ; <i>zūgú-n</i> ^ε is also used as a postposition
<i>pl</i>	<i>zūt</i> ^{ε/}	
<i>cb</i>	<i>zūg- zū-</i> <i>zūg-dáàn</i> ^a	9.2.2 <i>n.</i> boss, master (replaces <i>zūg-sób</i> ^a in KB for meanings other than "the Lord")
	<i>zūg-kūgur</i> ^ε	<i>n.</i> pillow
	<i>pl</i> <i>zūg-kūga</i> ⁺	
	<i>cb</i> <i>zūg-kúg-</i>	
	<i>zūg-máyuk</i> ^ɔ	<i>adj.</i> crushed-headed 19.8.1.4
	<i>pl</i> <i>zūg-má'ád</i> ^ε	
	<i>zūg-sób</i> ^a	<i>n.</i> boss; NT Lord (Often read as <i>zū-sób</i> in the audio NT)
	<i>zū-péélùg</i> ^ɔ	<i>adj.</i> bald, grey-haired 19.8.1.4
	<i>pl</i> <i>zū-péélà</i> ⁺	
	<i>zū-píbìg</i> ^a	<i>n.</i> hat
<i>zùlīg</i> ^ε		<i>vv.</i> deepen
<i>zùlīm</i> ^{ma}		<i>iv.</i> be deep
<i>zùlūg</i> ^ɔ		<i>adj.</i> deep
<i>pl</i>	<i>zùlīma</i> ⁺	
<i>cb</i>	<i>zùlūg-</i>	
<i>zùlūg</i> ^ɔ		<i>n.</i> depth
<i>zùnzòḡ</i> ^a <i>zùnzòḡ</i> ^ɔ		<i>adj.</i> blind
<i>pl</i>	<i>zùnzòḡs</i> ^ε	
<i>cb</i>	<i>zùnzòḡ-</i>	
<i>zūəbúg</i> ^ɔ		<i>n.</i> hair (of human head); see <i>kōḡbug</i> ^ɔ
<i>pl</i>	<i>zūəbíđ</i> ^ε	
<i>cb</i>	<i>zūəb-</i>	
<i>zùəd</i> ^ε		<i>n.</i> friendship

<i>zùə</i> ^ε		vv. make to perch
<i>zū'əm</i> ^{m/}		n. blind person
<i>pl</i>	<i>zū'əmís</i> ^ε	
<i>cb</i>	<i>zū'əm-</i>	
<i>zū'əm</i> ^{m/}		vv. go blind, make blind
<i>zùən</i> ^ε		vv. begin to perch
<i>zūər</i> ^ε		n. hill
<i>pl</i>	<i>zūēya</i> ⁺	
<i>cb</i>	<i>zūà-</i>	
<i>zùəs</i> ^ε		vv. befriend
<i>zūríf</i> ^ɔ		n. dawadawa seed
<i>pl</i>	<i>zūrí</i> ⁺	
<i>cb</i>	<i>zūr-</i>	
<i>zúuŋ</i> ^ɔ		n. dawadawa seed
<i>pl</i>	<i>zūvni</i> ⁺	
<i>zùuŋ</i> ^ɔ		n. vulture
<i>pl</i>	<i>zùuŋs</i> ^ε <i>zùuŋd</i> ^ε	
<i>cb</i>	<i>zùŋ-</i>	
<i>zūv</i> ^ε		n. tail
<i>pl</i>	<i>zūya</i> ⁺	
<i>cb</i>	<i>zù-</i>	
	<i>zù-wōk</i> ^ɔ	adj. long-tailed 19.8.1.4