**A Grammar of Jenaama Bozo of Mali, Cliffs variety**

Jeffrey Heath

University of Michigan

February 2019

draft, do not cite without permission

texts to be added

author’s emails

[schweinehaxen@hotmail.com](mailto:schweinehaxen@hotmail.com)

[jheath@mich.edu](mailto:jheath@mich.edu)

color coding

black text written for this language

blue regular transcriptions for this language

green transcriptions for reconstructions, underlying forms in /…/, phonetic transcriptions in […], other languages, and formulas

orange temporary cross-refs to examples in other sections

**Contents**

[1 Introduction 15](#_Toc115205)

[1.1 Bozo languages 15](#_Toc115206)

[1.2 Jenaama language 15](#_Toc115207)

[1.3 Environment 17](#_Toc115208)

[1.4 Previous and contemporary study of Jenaama 18](#_Toc115209)

[1.4.1 Previous work 18](#_Toc115210)

[1.4.2 Fieldwork 18](#_Toc115211)

[1.4.3 Acknowledgements 18](#_Toc115212)

[2 Sketch 19](#_Toc115213)

[2.1 Phonology 19](#_Toc115214)

[2.1.1 Segmental phonology 19](#_Toc115215)

[2.1.2 Tones and tonal diacritics 20](#_Toc115216)

[2.1.3 Tonal morphophonology 21](#_Toc115217)

[2.1.4 Terminal intonation 21](#_Toc115218)

[2.2 Verbal and clausal inflection 22](#_Toc115219)

[2.3 Noun phrase (NP) 22](#_Toc115220)

[2.4 Case-marking and PPs 23](#_Toc115221)

[2.5 Relative clauses 23](#_Toc115222)

[2.6 Interclausal syntax 23](#_Toc115223)

[3 Phonology 24](#_Toc115224)

[3.1 Internal phonological structure of stems and words 24](#_Toc115225)

[3.1.1 Syllables 24](#_Toc115226)

[3.1.2 Metrical structure 24](#_Toc115227)

[3.2 Consonants 25](#_Toc115228)

[3.2.1 Stem-final consonants 25](#_Toc115229)

[3.2.2 Palatoalveolar glide (*ɥ* ) 26](#_Toc115230)

[3.2.3 Alveopalatals (*c* *j* ) 27](#_Toc115231)

[3.2.4 Labial fricative *f* 27](#_Toc115232)

[3.2.5 Voiceless stops (*p* *t k*) and voiced stops (*b d g*) 27](#_Toc115233)

[3.2.6 Laryngeals (*h* *ʔ*) 27](#_Toc115234)

[3.2.7 Sibilants (*s* *ʃ* *z* *ʒ*) 28](#_Toc115235)

[3.2.8 Nonnasal sonorants (*l*, *r*, *w*, *y*) 28](#_Toc115236)

[3.2.9 Nasalized sonorants (*wⁿ*, *yⁿ*, doubtfully *rⁿ*) 28](#_Toc115237)

[3.2.10 Consonant clusters 32](#_Toc115238)

[3.2.10.1 Stem-initial NC cluster 32](#_Toc115239)

[3.2.10.2 Stem-initial *Cw* and *Cy* clusters 32](#_Toc115240)

[3.2.10.3 Medial *CC* and *CCC* clusters 34](#_Toc115241)

[3.2.10.4 Final *CC* clusters 35](#_Toc115242)

[3.2.11 Historical linguistic significance of verb-stem alternations 35](#_Toc115243)

[3.2.11.1 Unusual bisyllabic stem variants 35](#_Toc115244)

[3.2.11.2 *bāā/bā-lā* ‘exit (v)’ 35](#_Toc115245)

[3.3 Vowels 36](#_Toc115246)

[3.3.1 High back unrounded vowel *ɯ* 36](#_Toc115247)

[3.3.2 Short and long vowels 37](#_Toc115248)

[3.3.3 Nasalized vowels 37](#_Toc115249)

[3.3.4 Initial vowels 38](#_Toc115250)

[3.3.5 Stem-final vowels 38](#_Toc115251)

[3.3.6 ATR harmony and Back/Rounding Harmony 38](#_Toc115252)

[3.3.7 Diphthongs 38](#_Toc115253)

[3.3.8 Vocalic sound symbolism 38](#_Toc115254)

[3.4 Segmental phonological rules 39](#_Toc115255)

[3.4.1 Local consonant cluster processes 39](#_Toc115256)

[3.4.1.1 *l* → *d* and *l* → *w* (in independent pronouns) 39](#_Toc115257)

[3.4.1.2 *vv*-Contraction 39](#_Toc115258)

[3.4.2 Local vowel-consonant interactions 39](#_Toc115259)

[3.4.2.1 Word-final *vⁿ* alternating with *vN* 39](#_Toc115260)

[3.4.2.2 Final *wⁿ* alternating with nasal consonant 45](#_Toc115261)

[3.4.3 Apocope (final u) 46](#_Toc115262)

[3.5 Cliticization 46](#_Toc115263)

[3.6 Tones 46](#_Toc115264)

[3.6.1 Lexical tone melodies 47](#_Toc115265)

[3.6.1.1 Lexical tone melodies of verbs 47](#_Toc115266)

[3.6.1.2 Summary of lexical tone melodies for noun stems 47](#_Toc115267)

[3.6.1.3 …LH… versus …LM… in nominal tone melodies 48](#_Toc115268)

[3.6.1.4 Examples of tonal melodies of nouns 49](#_Toc115269)

[3.6.1.5 Lexical tone patterns for adjectives and numerals 54](#_Toc115270)

[3.6.1.6 Tone-Component location for bitonal non-verb stems 54](#_Toc115271)

[3.6.1.7 Tone-Component location for tritonal non-verb stems 55](#_Toc115272)

[3.6.2 Grammatical tone patterns 56](#_Toc115273)

[3.6.2.1 Grammatical tone motifications for verb stems 56](#_Toc115274)

[3.6.2.2 Grammatical tone modifications for noun stems 56](#_Toc115275)

[3.6.2.3 Grammatical tone overlays for adjectives and numerals **Error! Bookmark not defined.**](#_Toc115276)

[3.6.3 Tonal morphophonology 57](#_Toc115277)

[3.6.3.1 Floating-H Docking (+H#L to #H) 57](#_Toc115278)

[3.6.3.2 Atonal-Morpheme Tone-Spreading 60](#_Toc115279)

[3.6.4 Low-level tone rules 63](#_Toc115280)

[3.6.4.1 Final Tone-Raising (L#L to M#L) 63](#_Toc115281)

[3.6.4.2 <ML>L-to-ML 63](#_Toc115282)

[3.7 Terminal intonation (final pitch rise) 64](#_Toc115283)

[4 Nominal, pronominal, and adjectival morphology 65](#_Toc115284)

[4.1 Nouns 65](#_Toc115285)

[4.1.1 Simple nouns (singular, plural) 65](#_Toc115286)

[4.1.2 Key nouns (‘woman’, ‘man’, ‘child’, ‘person’, ‘thing’, ‘place’) 66](#_Toc115287)

[4.1.3 Nouns with full-stem iteration 67](#_Toc115288)

[4.2 Derived nominals 68](#_Toc115289)

[4.2.1 Deverbal nominalizations 68](#_Toc115290)

[4.2.1.1 Verbal noun with zero affix 68](#_Toc115291)

[4.2.1.2 Verbal nouns with stem-final vocalic mutations 68](#_Toc115292)

[4.2.1.3 Verbal noun with suffix *-gu* 69](#_Toc115293)

[4.2.1.4 Factive verbal noun with suffix *-na* 71](#_Toc115294)

[4.2.1.5 Place nominal with suffix *-gàwⁿ* 73](#_Toc115295)

[4.2.2 Uncompounded agentives (*-yà* ~ *-yɛ̀*) 74](#_Toc115296)

[4.2.3 Deadjectival abstractives (*-aama* ) 74](#_Toc115297)

[4.2.4 Gentilic nominals with -ŋga suffix after spatial adverbial noun 75](#_Toc115298)

[4.3 Pronouns 76](#_Toc115299)

[4.3.1 Summary of personal pronouns 76](#_Toc115300)

[4.3.2 1Sg variants 76](#_Toc115301)

[4.4 Determiners 79](#_Toc115302)

[4.4.1 Definite 79](#_Toc115303)

[4.4.2 ‘This/that’ (demonstrative pronouns) 79](#_Toc115304)

[4.4.3 Demonstrative adverbs 80](#_Toc115305)

[4.4.3.1 Locative adverbs 80](#_Toc115306)

[4.4.3.2 Deictic manner adverb or verb (*kìyɛ̀wⁿ* ) 81](#_Toc115307)

[4.4.4 Presentatives (‘here’s …!’) 82](#_Toc115308)

[4.5 Adjectives 82](#_Toc115309)

[4.5.1 Inventory of adjectives 82](#_Toc115310)

[4.5.2 Exemplars as “adjectives” 84](#_Toc115311)

[4.5.3 Deverbal adjectives (participial *-na* ) 84](#_Toc115312)

[4.6 Numerals 85](#_Toc115313)

[4.6.1 Cardinal numerals 85](#_Toc115314)

[4.6.1.1 ‘One’ (*kēẁⁿ*, *sànnā* ), ‘same (one)’, and ‘other’ (*tīnāāⁿ* ) 85](#_Toc115315)

[4.6.1.2 ‘2’ to ‘10’ as postnominal modifiers 86](#_Toc115316)

[4.6.1.3 ‘1’ to ‘10’ in the counting recitation 87](#_Toc115317)

[4.6.1.4 Decimal multiples (‘10’, ‘20’, …) and composites (‘11’, ‘59’, …) 88](#_Toc115318)

[4.6.1.5 Large numerals (‘100’, ‘1000’, …) and their composites 89](#_Toc115319)

[4.6.1.6 Currency 90](#_Toc115320)

[4.6.1.7 Distributive iteration of numerals 90](#_Toc115321)

[4.6.2 Ordinal adjectives 91](#_Toc115322)

[4.6.2.1 ‘First’ (*pānāāⁿ*) and ‘last’ (*dágálè* ) 91](#_Toc115323)

[4.6.2.2 Other ordinals (*-ànà*) 92](#_Toc115324)

[4.6.3 Fractions and portions 93](#_Toc115325)

[5 Nominal and adjectival compounds 94](#_Toc115326)

[5.1 Nominal compounds 94](#_Toc115327)

[5.1.1 Nasal linker between initial and final 94](#_Toc115328)

[5.1.2 Compounds resembling possessor-possessum NPs 94](#_Toc115329)

[5.1.2.1 With simple initials 94](#_Toc115330)

[5.1.2.2 With plural initials 95](#_Toc115331)

[5.1.3 Compounds with tone-flattened initial 96](#_Toc115332)

[5.1.3.1 Verbal noun with incorporated object 97](#_Toc115333)

[5.1.3.2 Agentive compounds with incorporated object 98](#_Toc115334)

[5.1.4 H-final compounds 99](#_Toc115335)

[5.1.4.1 H-final compounds from temporal subject-verb collocations 99](#_Toc115336)

[5.1.4.2 H-final compounds with spatial PP initials for habitat 99](#_Toc115337)

[5.1.4.3 H-final compounds with noun-verb initials for a defining activity 100](#_Toc115338)

[5.1.4.4 ‘Male’ (*-kɛ́ɛ́gú* ) and ‘female’ (*-yúgóⁿ* ) in H-final compounds 100](#_Toc115339)

[5.1.4.5 Place nominal (*-gàwⁿ* ) with incorporated object 101](#_Toc115340)

[5.1.5 Diminutives and ‘X-child’ compounds 101](#_Toc115341)

[5.1.5.1 Diminutives with *-náwⁿ* 101](#_Toc115342)

[5.1.5.2 Diminutive and not-so-diminutive *-lɛ̄wⁿ* (plural *-lɛ̄m-bē*) 103](#_Toc115343)

[5.1.5.3 Compounds with ‘child’ as final (*-dīyɛ̄wⁿ*, *‑jēwⁿ* , *‑jéwⁿ* ) 104](#_Toc115344)

[5.1.6 Compounds with *tùgù* ‘owner’ 105](#_Toc115345)

[5.1.7 ‘True’ versus ‘false’ 106](#_Toc115346)

[5.1.7.1 Compound final *ŋɔ́mɔ̄* ~ *ŋɔ́mɛ̄* ‘false’ 107](#_Toc115347)

[5.1.7.2 Nonhuman animal possessor 107](#_Toc115348)

[5.1.8 Function-specifying compounds of nominalized verbs 108](#_Toc115349)

[5.2 Adjectival compounds 109](#_Toc115350)

[5.2.1 Bahuvrihi compounds 109](#_Toc115351)

[5.2.1.1 With adjectival final 109](#_Toc115352)

[5.2.1.2 With numeral final 110](#_Toc115353)

[5.2.2 Other composite adjectives 111](#_Toc115354)

[6 Noun Phrase structure 113](#_Toc115355)

[6.1 Organization of NP constituents 113](#_Toc115356)

[6.1.1 Linear order within multi-word NPs 113](#_Toc115357)

[6.1.2 Headless NPs (absolute function of demonstratives, etc.) 114](#_Toc115358)

[6.2 Possessives 115](#_Toc115359)

[6.2.1 Form of possessum 115](#_Toc115360)

[6.2.1.1 No tonal changes except after 1Sg *ŋ̀* (+H) 115](#_Toc115361)

[6.2.1.2 Default possessum *pàwⁿ* 116](#_Toc115362)

[6.2.2 Nonpronominal possessors 116](#_Toc115363)

[6.2.3 Pronominal possessors 117](#_Toc115364)

[6.2.4 Alienable and inalienable 119](#_Toc115365)

[6.2.5 Recursive possession 120](#_Toc115366)

[6.3 Core NP (noun plus adjective) 120](#_Toc115367)

[6.3.1 Tonal interactions between noun and modifying adjective 120](#_Toc115368)

[6.3.1.1 Noun plus uncompounded M- or H-initial modifying adjective 120](#_Toc115369)

[6.3.1.2 Noun plus LH-toned modifying adjective 124](#_Toc115370)

[6.3.1.3 L- versus M-toned nouns before H-toned adjectives 126](#_Toc115371)

[6.3.2 Set-partitioning quantifiers (‘some’, ‘a certain’) 127](#_Toc115372)

[6.3.2.1 ‘Certain (ones)’ (*pɔ̄-yē*, *tàá-yè* ) 127](#_Toc115373)

[6.3.2.2 ‘A certain one’ (*kɯ̄ɯ̄ⁿ* ) 127](#_Toc115374)

[6.3.2.3 Mass-partitioning ‘some (but not all)’ 128](#_Toc115375)

[6.3.2.4 Distributive-paucal ‘some (times, places)’ 128](#_Toc115376)

[6.3.3 Expansions of adjective 130](#_Toc115377)

[6.3.3.1 Adjective sequences 130](#_Toc115378)

[6.3.3.2 Basic adjective plus quantificational adjective ‘(a) certain’ 131](#_Toc115379)

[6.3.3.3 Adjectival intensifiers 131](#_Toc115380)

[6.3.3.4 ‘Good to eat’ 132](#_Toc115381)

[6.4 Noun or N-Adj plus numeral 132](#_Toc115382)

[6.4.1 Regular N-Num and N-Adj-Num sequences 132](#_Toc115383)

[6.4.1.1 Combination of noun plus numeral ‘1’ 133](#_Toc115384)

[6.4.1.2 Combination of noun plus numeral ‘2’ to ‘10’ 133](#_Toc115385)

[6.4.2 *pāàlōwⁿ* ~ *pāàlēwⁿ* ‘many/much’ 134](#_Toc115386)

[6.5 NP with determiner 135](#_Toc115387)

[6.5.1 Demonstrative preceding noun 135](#_Toc115388)

[6.5.1.1 Floating H with prenominal demonstrative *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H) 136](#_Toc115389)

[6.5.2 Demonstrative *gu* following noun (and inner modifiers) 136](#_Toc115390)

[6.5.2.1 Tonal interactions involving a postnominal demonstrative 136](#_Toc115391)

[6.6 Universal and distributive quantifiers 136](#_Toc115392)

[6.6.1 ‘All’ (*sāāⁿ* ) 136](#_Toc115393)

[6.6.2 Quantifiers with negation 138](#_Toc115394)

[6.7 Accusative (absent) 139](#_Toc115395)

[7 Coordination 140](#_Toc115396)

[7.1 Conjunction (*yèⁿ* or *yèhīīnì*) 140](#_Toc115397)

[7.1.1 NP conjunction 140](#_Toc115398)

[7.1.2 Three or more conjuncts 141](#_Toc115399)

[7.1.3 Pronouns as conjuncts 141](#_Toc115400)

[7.1.4 Plural NPs as both left and right conjuncts 142](#_Toc115401)

[7.1.5 Preferential ordering of coordinands 143](#_Toc115402)

[7.1.6 Reflexive possessor *ŋ̀* in right conjunct 143](#_Toc115403)

[7.1.7 ‘X and Y’ with a broad-scope modifier 144](#_Toc115404)

[7.1.8 ‘X and Y’ with a shared postposition 145](#_Toc115405)

[7.1.9 Conjunctions under the scope of negation 146](#_Toc115406)

[7.1.10 Lists (incompleteness intonation plus *yèhíínì* ) 146](#_Toc115407)

[7.1.11 “Conjunction” of verbs, VPs, and clauses 147](#_Toc115408)

[7.2 Disjunction 147](#_Toc115409)

[7.2.1 ‘Or’ (*wàlì, wàlì-màà* ) 147](#_Toc115410)

[8 Postpositions and adverbials 149](#_Toc115411)

[8.1 Dative, instrumental, and comitative 149](#_Toc115412)

[8.1.1 Dative 149](#_Toc115413)

[8.1.1.1 Dative *tè* with ‘say’ and with ditransitives 149](#_Toc115414)

[8.1.1.2 Dative *nà* 150](#_Toc115415)

[8.1.2 Instrumental and comitative 151](#_Toc115416)

[8.1.2.1 Instrumental (*ní* ) 151](#_Toc115417)

[8.1.2.2 Comitative (*bwāỳ* ) 154](#_Toc115418)

[8.1.2.3 *pàà* ‘shared with’ 155](#_Toc115419)

[8.2 Spatial postpositions 155](#_Toc115420)

[8.2.1 Spatial NPs without postposition 155](#_Toc115421)

[8.2.2 Locative, allative, and ablative senses 156](#_Toc115422)

[8.2.3 Suffixal locative (*-ỳ* ) and tonal locative 156](#_Toc115423)

[8.2.3.1 *-ỳ* or final tone drop with nouns 156](#_Toc115424)

[8.2.3.2 *-ỳ* added to predicates (‘X care about it’ and ‘X put Y in it’) 157](#_Toc115425)

[8.2.4 ‘In(side) X’ (*nìŋīì* ) 158](#_Toc115426)

[8.2.5 Locative ‘at (the outskirts of)’ (*lāgà* ) 159](#_Toc115427)

[8.2.6 Locative ‘at (well)’ or ‘on (body)’ (*kānà* ) 160](#_Toc115428)

[8.2.7 ‘On X’ or ‘over X’(*X kūmà* ) 160](#_Toc115429)

[8.2.8 ‘Next to, beside X’ (*X sɔ̄gɔ̀y* and *X sɔ̄gɔ̄-bwāỳ* ) 161](#_Toc115430)

[8.2.9 ‘In front of’ (*X tīgàà*) 162](#_Toc115431)

[8.2.10 ‘Behind X’ and ‘after X’ (*X kɔ̀rɛ̄-ỳ*) 163](#_Toc115432)

[8.2.11 ‘Below/under X’ (*X mūù* ) 164](#_Toc115433)

[8.2.12 ‘Upper’ and ‘lower’ 165](#_Toc115434)

[8.2.13 ‘In the middle of’ (*X bōgì* ) 165](#_Toc115435)

[8.2.14 ‘Between’ (*[X yèⁿ Y] nàŋāà* ) 166](#_Toc115436)

[8.2.15 ‘Chez, at the place of’ (*X kāẁⁿ* ) 166](#_Toc115437)

[8.2.16 *tówⁿ* ‘place’ as postposition 167](#_Toc115438)

[8.3 ‘For’ and ‘because of’ 168](#_Toc115439)

[8.3.1 Purposive-causal ‘for’ (*lāgà* ) 168](#_Toc115440)

[8.3.2 ‘For the sake of (someone)’ (*kāmà* ) 169](#_Toc115441)

[8.4 Other adverbs (or equivalents) 169](#_Toc115442)

[8.4.1 Similarity (‘like X’) 169](#_Toc115443)

[8.4.1.1 Predicate ‘Y be like X’ (*síí*, *nùmɛ̄wⁿ* ) 169](#_Toc115444)

[8.4.1.2 Adverbial ‘like X’ (*hɔ̀nɔ̀* ) 170](#_Toc115445)

[8.4.2 Extent 171](#_Toc115446)

[8.4.2.1 ‘A lot, greatly’ (*máɲɛ̀*, *yāālōⁿ*) 171](#_Toc115447)

[8.4.2.2 ‘A little, somewhat’ (*pā-lɛ̄wⁿ* ) 172](#_Toc115448)

[8.4.3 Specificity 173](#_Toc115449)

[8.4.3.1 ‘Exactly, truly’ (*jáátī* ) 173](#_Toc115450)

[8.4.4 Evaluation 173](#_Toc115451)

[8.4.4.1 ‘Well’ (*máɲɛ̀* ) and ‘badly’ 173](#_Toc115452)

[8.4.5 Deadjectival and other manner adverbials 174](#_Toc115453)

[8.4.5.1 ‘Fast, quickly’ and ‘slowly’ 174](#_Toc115454)

[8.4.5.2 Adverbial ‘far’ and ‘near’ 174](#_Toc115455)

[8.4.6 Spatiotemporal adverbials 175](#_Toc115456)

[8.4.6.1 Temporal adverbs 175](#_Toc115457)

[8.4.6.2 ‘First(ly)’ (*sɔ̄ŋɔ̀nì* ) and ‘later’ (*sāāgū kɔ̀rɛ̄-ỳ*) 176](#_Toc115458)

[8.4.6.3 ‘Still’ and ‘still (has) not’ (*hàlì sāàgù* ) 177](#_Toc115459)

[8.4.6.4 Spatial adverbs 177](#_Toc115460)

[8.4.6.5 Adjectival intensifiers 178](#_Toc115461)

[8.4.6.6 Iterative ‘-ish’ adjectives 178](#_Toc115462)

[9 Verbal derivation 180](#_Toc115463)

[9.1 Causative 180](#_Toc115464)

[9.1.1 Causative suffix *-ni* 180](#_Toc115465)

[9.1.2 Causative *of* *Cv-* verbs 181](#_Toc115466)

[9.1.3 Causative ‘make X VP’ phrased as ‘tell X to VP’ 183](#_Toc115467)

[9.2 No productive passive or antipassive 183](#_Toc115468)

[9.3 Stem-final vocalic mutations in verbal derivation 184](#_Toc115469)

[9.3.1 *a/ɔ* ~ *ɛ* and *o* ~ *e* mutations 184](#_Toc115470)

[9.3.1.1 Transitivity pairs with final *e/ɛ* in antipassive intransitive 184](#_Toc115471)

[9.3.1.2 Other mutations to verb-final *e/ɛ* 184](#_Toc115472)

[9.3.2 Transitivity pair with *uu* ~ *wii* alternation 186](#_Toc115473)

[9.3.3 Shift of final *ɛ* to *(a)y* for locative sense 186](#_Toc115474)

[9.4 Deadjectival inchoative and factitive verbs 187](#_Toc115475)

[9.4.1 Adjectives lacking an inchoative 187](#_Toc115476)

[9.4.2 Inchoatives without derivational suffix 187](#_Toc115477)

[9.4.3 Inchoatives with *-(aa)ma* 189](#_Toc115478)

[9.4.4 Inchoatives with *-ga ~ -gɛ* and *-g-aama* 189](#_Toc115479)

[10 Verbal inflection 191](#_Toc115480)

[10.1 Inflection of regular indicative verbs 191](#_Toc115481)

[10.1.1 Overview of AN categories 191](#_Toc115482)

[10.1.2 Verb stem shapes 192](#_Toc115483)

[10.1.3 Perfective and imperfective stems of verbs 193](#_Toc115484)

[10.1.3.1 Imperfective is unsuffixed 193](#_Toc115485)

[10.1.3.2 Imperfective and perfective differ in tones only 195](#_Toc115486)

[10.1.3.3 Imperfective has a syllabic suffix (*-lv*, *-nv*, *-dv* ) 198](#_Toc115487)

[10.1.4 Stative form of verbs (suffix *-na* ) 201](#_Toc115488)

[10.2 Positive indicative AN categories 203](#_Toc115489)

[10.2.1 Perfective and perfect categories 203](#_Toc115490)

[10.2.1.1 Simple perfective (positive and negative) of intransitive verbs 204](#_Toc115491)

[10.2.1.2 Remote perfective (postverbal *gàà* ~ *gà* ) 205](#_Toc115492)

[10.2.1.3 Transitive perfective with forms of pronominal objects 207](#_Toc115493)

[10.2.1.4 Experiential perfect ‘have ever’ (*báynà gà* ) 210](#_Toc115494)

[10.2.1.5 Recent perfect (*kɔ̀ⁿ* ) 210](#_Toc115495)

[10.2.1.6 Perfective positive markers in subordinated clauses (*gà*, *ɲàⁿ* ) 212](#_Toc115496)

[10.2.2 Nonperfective categories 212](#_Toc115497)

[10.2.2.1 Post-subject imperfective particles (positive *gà*, negative *nà* ) 212](#_Toc115498)

[10.2.2.2 Future (preverbal *gà bē*, negative *nà bē* ) 214](#_Toc115499)

[10.2.2.3 Presentative (*kày* ~ *kàȳ* ) 215](#_Toc115500)

[10.2.2.4 Presentative stative and progressive/stative negative 216](#_Toc115501)

[10.3 Shift of reference time 217](#_Toc115502)

[10.3.1 Shift to past time viewpoint 217](#_Toc115503)

[10.3.2 Past imperfective (*kōndō gà*, negative *tè kōndō* ) 218](#_Toc115504)

[10.3.3 Past stative (*kōndō gà*, negative *tè kōndō* ) 218](#_Toc115505)

[10.3.4 Past perfect (*kɔ̀ⁿ* and *gà* ) 219](#_Toc115506)

[10.4 Imperatives and hortatives 219](#_Toc115507)

[10.4.1 Imperatives and prohibitives 219](#_Toc115508)

[10.4.1.1 Imperative (unsuffixed singular, plural *yèⁿ* ) 219](#_Toc115509)

[10.4.1.2 *hm̄* ‘here, take this!’ 223](#_Toc115510)

[10.4.2 Hortatives 223](#_Toc115511)

[10.4.2.1 Hortative (*kèyⁿ* ) 223](#_Toc115512)

[10.4.3 Non-second person-subject deontics 224](#_Toc115513)

[10.4.3.1 Wishes with third-person agent 224](#_Toc115514)

[10.4.3.2 Clarifications with a first-person subject 225](#_Toc115515)

[11 Clause, VP, and predicate structure 226](#_Toc115516)

[11.1 Clausal constituents 226](#_Toc115517)

[11.1.1 Subjects 226](#_Toc115518)

[11.1.1.1 Subjects in indicative main clauses 226](#_Toc115519)

[11.1.1.2 Temporal and meteorological collocations 228](#_Toc115520)

[11.1.1.3 Emotion and bodily-emission collocations 231](#_Toc115521)

[11.1.1.4 Intransitives with PP complements 233](#_Toc115522)

[11.1.1.5 ‘(Don’t) care’ 234](#_Toc115523)

[11.1.2 Transitives and ditransitives 234](#_Toc115524)

[11.1.2.1 Direct objects of simple transitives 234](#_Toc115525)

[11.1.2.2 *tīẁⁿ/tī-nà* ‘do’ in collocations 236](#_Toc115526)

[11.1.2.3 Ditransitives 236](#_Toc115527)

[11.1.2.4 Valency of causatives 237](#_Toc115528)

[11.1.3 True versus pro-forma reflexive transitives 238](#_Toc115529)

[11.1.4 Verb phrase (VP) 241](#_Toc115530)

[11.2 ‘Be’, ‘become’, ‘have’, and other statives and inchoatives 241](#_Toc115531)

[11.2.1 Identificational predicates 241](#_Toc115532)

[11.2.1.1 ‘It is X’ (*nì* ) 241](#_Toc115533)

[11.2.1.2 ‘It isn’t X’ 242](#_Toc115534)

[11.2.2 Equational (copular) clauses 242](#_Toc115535)

[11.2.2.1 ‘Y is X’ (*Y gà X nì* ) 242](#_Toc115536)

[11.2.2.2 ‘Y isn’t X’ (*Y nàⁿ X nì* ) 243](#_Toc115537)

[11.2.3 Locational-existential ‘be’ 244](#_Toc115538)

[11.2.3.1 ‘Is/are (present)’ (*gà* ~ *gā* ) 245](#_Toc115539)

[11.2.3.2 ‘Was/were (present)’ (*kōndō gà* ) 245](#_Toc115540)

[11.2.3.3 ‘Is/Are not (present)’ and ‘was/were not (present)’ 246](#_Toc115541)

[11.2.4 ‘Become (noun)’, ‘happen’, and ‘remain’ predicates 247](#_Toc115542)

[11.2.4.1 ‘Remain’ (*kōndō* ) 247](#_Toc115543)

[11.2.4.2 ‘Become, turn into’ (*pwɔ̀* ) 247](#_Toc115544)

[11.2.5 Mental and emotional statives 247](#_Toc115545)

[11.2.5.1 ‘Know’ (*tùjɛ̀/tò* ) 248](#_Toc115546)

[11.2.5.2 ‘Want’ (*pɔ̄gɔ̄*, *màà* ) and ‘need’ (*mùrāārú* ) 249](#_Toc115547)

[11.2.5.3 ‘Resemble’ (*dɔ̀gɔ̀* ) 250](#_Toc115548)

[11.3 Quotative verbs 251](#_Toc115549)

[11.4 Adjectival predicates 251](#_Toc115550)

[11.4.1 Stative adjectival predicates 251](#_Toc115551)

[11.4.1.1 Adjectives with *-nā nì* 251](#_Toc115552)

[11.4.1.2 Pseudo-reflexive adjectival predicates 253](#_Toc115553)

[11.4.1.3 Past adjectival predicates 256](#_Toc115554)

[11.5 Possessive predicates 257](#_Toc115555)

[11.5.1 ‘X have Y’ 257](#_Toc115556)

[11.5.2 ‘Y belong to X’ predicates (*pàⁿ nì* ) 258](#_Toc115557)

[12 Comparatives 259](#_Toc115558)

[12.1 Asymmetrical comparatives 259](#_Toc115559)

[12.1.1 With verb ‘(sur)pass’ (*kīyɛ̄/kīyɛ̀* or stative *kīyɛ̄-nā* ) 259](#_Toc115560)

[12.1.1.1 ‘(Sur)pass’ as main verb 259](#_Toc115561)

[12.1.1.2 ‘(Sur)pass’ as chained verb 260](#_Toc115562)

[12.1.2 Comparatives from pseudo-reflexive adjectival predicates 261](#_Toc115563)

[12.1.3 Superlative ‘most’, ‘best’ 262](#_Toc115564)

[12.2 Symmetrical comparatives 262](#_Toc115565)

[12.2.1 Stative ‘be equal’ (*kāwⁿ* ) 262](#_Toc115566)

[12.2.2 Dynamic ‘become equal’ (*kājàmà* ) 262](#_Toc115567)

[12.2.3 Adverbial ‘as much (as)’ 263](#_Toc115568)

[12.2.3.1 With *jàté* ‘amount’ 263](#_Toc115569)

[12.2.3.2 Phrased with ‘likeness’ and factive verbal noun (suffix *-nà* ) 263](#_Toc115570)

[13 Focalization and interrogation 266](#_Toc115571)

[13.1 Focalization 266](#_Toc115572)

[13.1.1 Basic syntax of focalization 266](#_Toc115573)

[13.1.2 Subject focalization 266](#_Toc115574)

[13.1.3 Object focalization 267](#_Toc115575)

[13.1.4 Focalization of PP or other adverbial phrase 267](#_Toc115576)

[13.1.4.1 Focalization of purposive-causal expression 267](#_Toc115577)

[13.1.4.2 Focalization of temporal adverb 268](#_Toc115578)

[13.1.4.3 Spatial and manner adverbs not focalizable 269](#_Toc115579)

[13.1.5 “Interrogative” terminal prosody for weak focalization in indicatives 270](#_Toc115580)

[13.2 Interrogatives 271](#_Toc115581)

[13.2.1 Polar (yes/no) interrogatives 271](#_Toc115582)

[13.2.1.1 Clause-initial *tāmà* or *kòrī* in polar interrogatives 271](#_Toc115583)

[13.2.1.2 Polar interrogation by terminal pitch change 272](#_Toc115584)

[13.2.1.3 Disjunctive polar interrogatives (*tàā→*, *tàà*, *nà* ) 275](#_Toc115585)

[13.2.1.4 Tag question 276](#_Toc115586)

[13.2.2 Content (WH) interrogatives 276](#_Toc115587)

[13.2.2.1 ‘Who?’ (*wùlàà* ) 276](#_Toc115588)

[13.2.2.2 ‘What?’ (*màsí* ), ‘with what?’, ‘why?’ 277](#_Toc115589)

[13.2.2.3 ‘Where?’ (*màtāỳ*, *lāā-mì* , *lāā-màtāỳ* ) 278](#_Toc115590)

[13.2.2.4 ‘When?’ (‘which time’, etc.) 279](#_Toc115591)

[13.2.2.5 ‘How?’ (*-mɛ̀n-* and variants) 280](#_Toc115592)

[13.2.2.6 ‘How much/many?’ (*jèwⁿ* ) 281](#_Toc115593)

[13.2.2.7 ‘Which?’ (*mwɔ̀ … sīī* ) 282](#_Toc115594)

[14 Relativization 283](#_Toc115595)

[14.1 Basics of relative clauses 283](#_Toc115596)

[14.2 Internal head NP 283](#_Toc115597)

[14.2.1 Restrictions on the head of a relative clause 283](#_Toc115598)

[14.2.2 Conjoined NP as head 284](#_Toc115599)

[14.2.3 Headless relative clause 284](#_Toc115600)

[14.2.4 *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* ~ *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* as relative head for ‘place’ 285](#_Toc115601)

[14.3 Position of *màwⁿ* vis-à-vis postnominal modifiers in head NPs 285](#_Toc115602)

[14.3.1 Adjectives 285](#_Toc115603)

[14.3.2 Numerals 286](#_Toc115604)

[14.3.3 Demonstratives 286](#_Toc115605)

[14.3.4 Universal quantifier (‘all’) 287](#_Toc115606)

[14.3.5 Discourse-functional morphemes 287](#_Toc115607)

[14.4 Grammatical relation of relativized-on NP 287](#_Toc115608)

[14.4.1 Subject relative clause 287](#_Toc115609)

[14.4.2 Object relative clause 288](#_Toc115610)

[14.4.3 Possessor relative clause 289](#_Toc115611)

[14.4.4 Relativization on the complement of a postposition 289](#_Toc115612)

[15 Verb or VP chaining and adverbial clauses 291](#_Toc115613)

[15.1 ‘Be able to VP’ (*hīnì* ) 291](#_Toc115614)

[15.2 Chains including a motion verb 293](#_Toc115615)

[15.2.1 Motion plus ensuing action 293](#_Toc115616)

[15.2.2 Pejorative use of chained ‘go (and …)’ 294](#_Toc115617)

[15.2.3 ‘Come/go’ preceding a more specific directional motion verb 294](#_Toc115618)

[15.2.4 Imperfective ‘come’ or ‘go’ following another verb or VP 295](#_Toc115619)

[15.3 Sequential clauses 297](#_Toc115620)

[15.3.1 Sequential clauses with *bè* and perfective 297](#_Toc115621)

[15.3.2 Third person subjects of sequential *bè* clauses 299](#_Toc115622)

[15.3.2.1 ‘As soon as’ (*gìlɛ̄wⁿ* ) 300](#_Toc115623)

[15.4 ‘Before …’ clause (*sò* plus sequential *bè* clause) 300](#_Toc115624)

[15.5 Coincidence in time and space (*bā=à tīẁⁿ* ) 302](#_Toc115625)

[15.6 ‘Since’ and ‘until’ clauses (*hàlì* ) 303](#_Toc115626)

[15.6.1 ‘Since …’ clauses (*hàlì* ) 304](#_Toc115627)

[15.6.2 ‘Until …’ clauses (*hàlì* ) 304](#_Toc115628)

[15.6.3 ‘From X, until/all the way to Y’ (*gìlī*, *hàlì* ) 305](#_Toc115629)

[15.6.4 ‘VPed until got tired’ = ‘VPed for a very long time’ 306](#_Toc115630)

[15.7 Noun-headed adverbial clauses 306](#_Toc115631)

[15.7.1 Temporal relative clause (‘[at] the time when …’) 306](#_Toc115632)

[15.7.2 Spatial adverbial clause (‘[at] the place where …’) 307](#_Toc115633)

[15.7.3 Manner adverbial clause 307](#_Toc115634)

[15.7.3.1 Manner clause (‘how/the way …’) 307](#_Toc115635)

[15.7.3.2 ‘As though …’ clause (*hɔ̀nɔ̀* ) 308](#_Toc115636)

[16 Conditional constructions 310](#_Toc115637)

[16.1 Hypothetical conditional 310](#_Toc115638)

[16.1.1 Simple hypothetical with *ɲāⁿ* ‘if’, perfective positive *nàⁿ* 310](#_Toc115639)

[16.1.2 ‘Otherwise (=if not)’ 311](#_Toc115640)

[16.2 Alternative ‘if’ particles 312](#_Toc115641)

[16.2.1 ‘Even if …’ 312](#_Toc115642)

[16.3 Willy-nilly antecedents (‘whether X or Y …’) 312](#_Toc115643)

[16.4 Counterfactual conditionals (*pàà* ) 313](#_Toc115644)

[17 Complement and purposive clauses 315](#_Toc115645)

[17.1 Quotative complements 315](#_Toc115646)

[17.1.1 Original addressee in quotations 315](#_Toc115647)

[17.1.2 Invariant perfective positive *yè* ‘said’ (1Sg *ŋ̀ jè* ) 316](#_Toc115648)

[17.1.3 Inflectable verb *sē/sē* ‘say, tell’ 317](#_Toc115649)

[17.1.4 Jussive complement (quoted imperative or hortative) 318](#_Toc115650)

[17.1.4.1 Quoted imperatives and prohibitives 318](#_Toc115651)

[17.1.4.2 Quoted hortatives 318](#_Toc115652)

[17.1.5 Quoted questions 319](#_Toc115653)

[17.2 Full-clause propositional complements 320](#_Toc115654)

[17.2.1 Clausal complements of ‘know’ and ‘forget’ 320](#_Toc115655)

[17.2.1.1 ‘(not) know’ with main-clause or ‘whether’ complement 320](#_Toc115656)

[17.2.1.2 ‘Forget that/whether’ with ‘whether’ complement 322](#_Toc115657)

[17.2.2 Perception verb with clausal ‘whether’ complement. 323](#_Toc115658)

[17.2.3 ‘Fear (lest …)’ with ‘whether’ complement 324](#_Toc115659)

[17.2.4 ‘Encounter’ with imperfective clausal complement 324](#_Toc115660)

[17.2.5 Weak obligational ‘ought’ (post-subject *ŋ̀kāmbē* and perfective) 325](#_Toc115661)

[17.3 Subjunctive clausal complements 326](#_Toc115662)

[17.3.1 ‘Be possible’ (*màɲɛ̀* ) with subjunctive clause 326](#_Toc115663)

[17.3.2 ‘Want’ (*pɔ̄gɔ̄/pɔ̄gɔ̀* ) with subjunctive clausal complement 326](#_Toc115664)

[17.3.3 Strong obligational ‘must’ (*ŋ̄kàlà* plus subjunctive) 328](#_Toc115665)

[17.4 Subjectless VP complements 329](#_Toc115666)

[17.4.1 VP complement without an overt subordinator 329](#_Toc115667)

[17.4.1.1 Perception verbs with imperfective VP complement 329](#_Toc115668)

[17.4.1.2 ‘Be afraid to’ (*kwààⁿ* ) with imperfective or *bē* VP complement 329](#_Toc115669)

[17.4.2 Infinitival VP complement with *bē* 330](#_Toc115670)

[17.4.2.1 ‘Forget (to…)’ (*nùmàsāwⁿ* ) with infinitival VP complement 330](#_Toc115671)

[17.4.2.2 ‘Prevent’ (*hādà* ) with infinitival VP complement 331](#_Toc115672)

[17.4.2.3 ‘Help’ (*yìràwⁿ* ) with infinitival VP complement 331](#_Toc115673)

[17.4.2.4 *màà/màā* ‘be about to’ with infinitival VP complement 332](#_Toc115674)

[17.4.3 ‘Begin’ (*sīndì* ) with various complements 333](#_Toc115675)

[17.4.4 ‘Stop’ (*tàà*, *tàà-nì* ) with nominalized verb or VP complement 334](#_Toc115676)

[17.4.5 ‘Finish’ (*bày*) with place-nominal complement 335](#_Toc115677)

[17.4.6 ‘Abandon’ (*bày*) with nominalized VP complement 336](#_Toc115678)

[17.5 Purposive and causal clauses 336](#_Toc115679)

[17.5.1 Chained clause with coindexed subject and tone-raised object 336](#_Toc115680)

[17.5.2 Clausal *hālà/sālà* plus sequential clause 338](#_Toc115681)

[17.5.3 Nominalized VP plus postposition *làgà* 338](#_Toc115682)

[17.5.4 Subjunctive clause in purposive function 339](#_Toc115683)

[17.5.5 Causal clause (*bàdì* ‘because’) 339](#_Toc115684)

[18 Anaphora 341](#_Toc115685)

[18.1 Reflexive 341](#_Toc115686)

[18.1.1 Reflexive object 341](#_Toc115687)

[18.1.1.1 Simple 3Sg reflexive object after nonpronominal subject 341](#_Toc115688)

[18.1.1.2 Simple 3Pl reflexive object after nonpronominal subject 342](#_Toc115689)

[18.1.1.3 Simple reflexive objects after pronominal subjects 343](#_Toc115690)

[18.1.1.4 Reflexive object expressed by possessed ‘head’ as object 344](#_Toc115691)

[18.1.1.5 Reflexive imperatives 345](#_Toc115692)

[18.1.2 Reflexive PP complements 346](#_Toc115693)

[18.1.3 Third-person reflexive possessor 347](#_Toc115694)

[18.1.4 3Sg reflexive subject *ŋ̀* in subordinated clause 349](#_Toc115695)

[18.1.5 *ɲìyɛ̀wⁿ* ~ *ɲɛ̀wⁿ* ‘head’ in reflexive objects 351](#_Toc115696)

[18.2 Emphatic pronouns 351](#_Toc115697)

[18.3 Logophoric and indexing pronouns 352](#_Toc115698)

[18.3.1 Third person logophoric 352](#_Toc115699)

[18.3.1.1 No logophorics for second-person 352](#_Toc115700)

[18.3.1.2 3Sg logophoric same as 1Sg as subject in quotation 353](#_Toc115701)

[18.3.1.3 Plural logophoric same as 1Pl as subject of quoted clause 355](#_Toc115702)

[18.3.1.4 3Sg logophoric distinct from 1Sg as possessor in quotation 355](#_Toc115703)

[18.3.1.5 Plural logophoric same as 1Pl as possessor in quoted clause 356](#_Toc115704)

[18.3.1.6 Singular logophorics distinct from 1Sg as objects 357](#_Toc115705)

[18.3.1.7 Plural logophorics same as 1Pl as objects 357](#_Toc115706)

[18.3.1.8 Singular and plural logophorics in PPs 358](#_Toc115707)

[18.3.2 Logophorics in stacked quotations 359](#_Toc115708)

[18.4 Reciprocal 359](#_Toc115709)

[18.4.1 Reciprocal object *bùwɔ̀* 359](#_Toc115710)

[19 Grammatical pragmatics 361](#_Toc115711)

[19.1 Topic 361](#_Toc115712)

[19.1.1 Topic (*kòwⁿ* ) 361](#_Toc115713)

[19.1.2 Interrogative topic (*lāā* ) 361](#_Toc115714)

[19.1.3 ‘Also, too’ (*pē* ) 362](#_Toc115715)

[19.1.4 ‘Even’ (*hàlì* ) 363](#_Toc115716)

[19.2 Preclausal discourse markers 363](#_Toc115717)

[19.2.1 ‘But …’ (*ŋ̀gàà* ) 363](#_Toc115718)

[19.3 Pragmatic adverbs or equivalents 363](#_Toc115719)

[19.3.1 ‘Again’ 363](#_Toc115720)

[19.3.1.1 Adverb *tùⁿ* ‘again’ 363](#_Toc115721)

[19.3.1.2 ‘Return-come’ combination 364](#_Toc115722)

[19.3.1.3 ‘No longer’ 365](#_Toc115723)

[19.4 ‘Only’ 365](#_Toc115724)

[19.4.1 ‘Only’ particle (*dàmá* ) 365](#_Toc115725)

[19.4.2 *kēẁⁿ* ‘one; alone’ versus *dàmá* ‘only’ for exclusivity 366](#_Toc115726)

[19.5 Emphatic particles 368](#_Toc115727)

[19.5.1 Clause-initial emphatics (*mɔ̀rù*, *héé*, *hóó* ) 368](#_Toc115728)

[19.5.2 Clause-final emphatics 368](#_Toc115729)

[19.5.2.1 Clause-final *jáátī* ‘exactly’ and emphatic *kóy* 368](#_Toc115730)

[19.5.2.2 Clause-final admonitive *dè* 369](#_Toc115731)

[19.6 Greetings 369](#_Toc115732)

[19.6.1 All-purpose greetings 369](#_Toc115733)

[19.6.2 Time-of-day greetings 370](#_Toc115734)

[19.6.3 Location- or situation-specific greetings 371](#_Toc115735)

[19.6.4 Travel greetings 372](#_Toc115736)

[19.6.5 Condolences 372](#_Toc115737)

[19.6.6 Greetings on major Muslim holy days 373](#_Toc115738)

[Texts 374](#_Toc115739)

[Text 1: 374](#_Toc115740)

[References cited 375](#_Toc115741)

[Abbreviations and symbols 376](#_Toc115742)

[Abbreviations 376](#_Toc115743)

[Symbols 377](#_Toc115744)

[Index 380](#_Toc115745)

[1. selected morphemes 380](#_Toc115746)

[2. grammar 382](#_Toc115747)

# Introduction

## Bozo languages

Bozo is a small language family, chiefly of fishing people along the Niger and Bani rivers in central Mali, West Africa. It belongs to the large Mande family, and is most closely related to Soninké.

Four languages have been recognized, some of which have multiple names.

(xx1) language location(s)

Tiɛma Cɛwɛ Lac Débo

Tigemaxo = Tiéyaxo Diafarabé, Djenné

Kelenga = Hainyaxo Ké-Macina near Ségou

Jenaama = Sorogaama Mopti, Konna, Youwarou, Lac Débo

Jenaama probably now has 300,000 speakers in a number of separate areas and has several dialects. The other three languages are estimated to have a few thousand speakers each, are spoken in compact zones, and apparently have little internal variation.

## Jenaama language

A sociolinguistic survey of Jenaama (Blühberger 2006) notes that the language is spoken by three distinct (sub-)ethnic groups, the Bozo, the Somono, and the Nononké or Marka. The ethnic Bozo and Somono are primarily fishers and are interspersed along the rivers. The Nononké/Marka practice rice cultivation along the river, and extend into the millet-growing sandy plains west of the Dogon plateau, reaching the base of its cliffs. Blühberger points out that the previously accepted name of the language, Sorogaama, is used in this sense only by the Bozo, while the Somono and the Nononké/Marka call their language Jenaama.

Blühberger refers to the Jenaama dialects in (xx2), based in part on earlier SIL surveys.

(xx2) North Débo

South Débo

Korondougou

Mopti

Kotya

North Pondori

South Pondori

East Pondori

This grammar is based primarily on the Jenaama spoken in Namagué, a village at the eastern extreme of the entire Bozo family. This dialect belongs to “Korondougou” in the dialect classification in (xx2). Substantially the same variety is spoken in nearby Kargué. The two villages are nestled in the lower slope of the escarpment, on opposite sides of the mouth of the valley that is occupied by the Bangande people, who speak the Bangime language, an isolate with no known linguistic relatives.

A distinction is made locally between two subdivisions of what linguists have called Korondougou dialect, based on proximity to the cliffs versus proximity to the river. From *pààlɛ̄ỳ* meaning ‘cliff zone’ is derived *pààlɛ˦‑àmà* ‘(Jenaama dialect) of the cliff zone’. The contrasting dialect is called *būr-āmā* ‘(Jenaama dialect) of the river zone’, from *būrgù* ‘river zone’. The key villages associated with the two groups are listed in (xx3), along with their native names in Jenaama and their dominant clans (family names).

(xx3) village native name dominant clan(s)

a. *pààlɛ́-àmà*

Bolimba *wóndópà* Karambé

Bombori-Saré *bōmbōlī-kúwónì* Cissé

Dani-Saré *dàànì-kúwónì* Bako

Goumbo *gūmbò* Bamani

Kargué *kārgèwⁿ* Traoré

Kayel-Toupé *káàtúbè* Bamani

Madougou *māàlù* Traoré

Namagué *nɔ̀gùbèwⁿ* Traoré

b. *būr-āmā*

Bima *bīmà* Traoré

Bobo *bōbò* ??

Djambakourou *jààŋgúlì* Fofana

Foussi *nùùfílè* Soumaré

Kama *káámà* ??

Konna *kɔ̄nà* Kampo

Koubi *kóbī* ??

Kotaga *kèrá* ??

Saingo *sɛ́ŋgēwⁿ* Nadio

The surname Cissé is associated with the groups that brought Islam to the zone. Some Cissé live in Namagué, where they are a minority.

The name of Namagué, the village of my primary assistant, is *nɔ̀gù-bèwⁿ*. Its components resemble *nɔ̀gù* ‘village’ and *bēwⁿ/bēn-dē* ‘go back’, but locals claim the village name is from Bambara *nàmá gɛ̀ⁿ* ‘hunt hyena’).

There are two-level schools (premier and deuxième cycles) at Konna and Djambakourou. There are single-level schools (premier cycle) at Kargué (with deuxième under construction), Bobo, Bombori-Saré, Bima, Saingo, Kama, and Koubi. Students at lycée level begin at Konna but finish in Sévaré.

Many of the official village names go back to French colonial mapping, which made extensive use of Fulfulde names for villages even of Dogon and Bozo. In Bombori-Saré and Dani-Saré, the ending -Saré means (in Fulfulde) ‘house’ and by extension ‘settled village’. In each case it is contrasted with a variant ending in -Ouro (Bombori-Ouro, Dani-Ouro) denoting a Fulbe camp associated with the main village.

In addition to Bombori-Ouro and Dani-Ouro, other Fulbe villages interspersed among the local Jenaama villages include Ouro-Guéou and Moulentakou-Ouro.

Most adult native Jenaama speakers speak Fulfulde as second language, which is the lingua franca (for example between Bozo and Dogon or Bangande). Although Bangime- and Tiranige (Dogon)-speaking are adjacent to some Jenaama-speaking villages, there is little bilingualism involving those languages, except among individuals who have regular commercial relationships. For example, some old women of Namagué purchase calabashes in Bounou (Bangime-speaking) for resale at the nearby regional markets.

## Environment

Namagué and Kargué, as noted above, are located on the lower slope of the Dogon escarpment. Other nearby Jenaama-speaking villages are in the sandy plains that stretch from the escarpment to the Niger River. The villages in the sandy plains primarily practice pearl millet (*Cenchrus spicatus*) cultivation and small-scale livestock raising. Other rainy-season crops that can grow in the zone include maize, rice, sorghum, roselle (*Hibiscus sabdariffa*), cow-pea (*Vigna unguiculata*), groundnut (*Vigna subterranea*), and peanut. Cotton is locally cultivated by Namagué and Kargué villages along with Bangime-speaking Niana village in one relatively lush area (called *kèlèmpógòy*) dominated by borassus palms.

In those locations that benefit from dry-season springs or from receding water in seasonal ponds, off-season gardening is practiced, primarily as cash crops: onion, tobacco, tomato, eggplant, potato, lettuce, chili pepper, and cucumber.

The major weekly markets in the area, both along the main highway, are Konna (Thursday) and Sambéré (Sunday).

## Previous and contemporary study of Jenaama

### Previous work

The only substantial linguistic analysis of Jenaama is the work of Christiane Lauschitsky. She did a master’s thesis at Leiden University on verbs (2007), and presented a conference paper on nasality (2009). She was affiliated with SIL International. She is no longer active as a linguist.

Lauschitzky worked on the dialect of Djambakourou village, described at 60 km north of Konna and 10 km west of the main highway. Although this is also presumably within the “Korondougou” dialect area, her analysis differs considerably from my data from Namagué. Most importantly, Namagué clearly has three tone levels, all of which are common, while Lauschitzky states that there are just two. It is not clear whether this is a real difference between dialects or a difference in analysis. Secondly, Namagué has an additional vowel quality (back unrounded *ɯ*) that is apparently not otherwise known in the region, and a rounded glide *ɥ* that is known elsewhere only for neighboring Bangime.

### Fieldwork

I did my first week of Jenaama study in July 2016, at a time when my fieldwork on Dogon languages was beginning to wind down and after completing (jointly with Abbie Hantgan) a grammar and lexicon of Bangime.

### Acknowledgements

Specific funding for the pilot study on Jenaama in 2016 was from the University of Michigan (African Studies Center and UM Office of Research).

The fieldwork on Dogon and Bangime has been supported by the National Science Foundation, Documenting Endangered Languages program, grants BCS-0537435 (2006-09), BCS-0853364 (2009-13), and BCS-1263150 (2013-17).

I thank Thomas Blecke of SIL, now based in Ouagadougou, for helpful advice in getting started.

# Sketch

A few basic typological facts about (cliffs) Jenaama will serve to begin this sketch.

Like nearly all other Mande languages, Jenaama is SOVX. More specifically, it is S-infl-O-V-X, where “infl” is a class of clause-level inflectional markers (aspect, negation, mood). X includes any additional material, including dative, instrumental, purposive, and spatiotemporal PPs, and various simple (mostly spatiotemporal) adverbs. Temporal adverbials occur either at the very end or at the very beginning. Jenaama lacks structural case marking for subject and object NPs, and except for a tonal distinction in the 1Sg there are no differences in the form of subject and object pronominal clitics.

An example of a transitive clause in (xx1).It consists of a subject NP, a post-subject inflectional marker, an object NP, a verb marked for aspect, and alocational expression.

(xx1) *sèēdū gà sūgē-ē sà-nà sígèwⁿ*

S Ipfv goat-Pl buy-Ipfv market.Loc

‘Seydou buys goats in the market.’

## Phonology

### Segmental phonology

Jenaama has eight vowel qualities {*u ɯ o ɔ a ɛ e i*}. Vowels may be long or short, and may be oral or nasalized. The high back unrounded vowel *ɯ* may be unique to the cliffs dialect of Jenaama, and I know of no other language in the immediate zone that has it. (It does occur in many far-away coastal West Atlantic languages that have ten or more vowel qualities.)

There are relatively few phonological processes (rewrite rules) converting underlying to surface forms. The process most likely to cause problems for parsing and morpheme identification is *vv*-Contraction at compound and word boundaries. Since vowel-initial stems are rare, the bulk of contractions involve a vowel-final stem or morpheme followed by any of the pronominal clitics other than 1Sg (1Pl *ē*, 2Sg *āⁿ*, 2Pl *āā*, 3Sg *à*, 3Pl *è* ). Especially when one of the input vowel qualities or tones is lost by contraction, I use = as a warning. For example, *gē= è* in (xx1) is from imperfective *gà* (raised to *gā* by Final Tone-Raising before L-tone) contracting with 3Pl object pronominal *è*.

(xx1) *à gē= è kɔ̄-lɔ̄*

3SgSbu Ipfv 3PlObj hit-Ipfv

‘He/She (often) hits them.’

### Tones and tonal diacritics

Jenaama has three tone levels H[igh], M[id], and L[ow].

Contoured tones on individual syllables are <HL> falling, <ML> falling, <LM> rising, and rarely <LML> bell-shaped. The diacritics used are shown in (xx1), using *ma*, *maa*, and *maw* as props to illustrate mono- and bimoraic syllables.

(xx1) tone(s) *ma maa maw*

H *má máá máw*

M *mā māā māw*

L *mà màà màw*

<HL> *mâ máà máẁ*

<ML> *ma᷆ māà māẁ*

<LM> *mǎ màā màw̄*

<LHL> *ma᷈ màâ màŵ*

Note in particular that mǎ is <LM>, not <LH>. There appears to be no IPA symbol for <LM> tone. Fortunately there is no meaningful contrast in Jenaama between <LM> and <LH>.

*màâ* and *màŵ* are interchangeable with *mǎà* and *mǎẁ*.

There are some minimal pairs and triplets especially among noun stems: *sɔ́gɔ́* ‘milk’, *sɔ̄gɔ̄* ‘day (unit)’, and *sɔ̀gɔ̀* ‘sheep’.

Using /…/ for lexical melodies, prior to tonal ablaut and tone sandhi, nouns and other non-verb stems can be /H/, /M/, or /L/. However, H- and M-tones are not distinguishable in contoured melodies (excluding compounds and iterative stems). There is no distinction between /HL/ and /ML/, between /LH/ and /LM/, or between /LHL/ and /LML/. I transcribe and analyse these, respectively, as /ML/, /LH/, and /LML/, but the choice between H and M in such contoured melodies is based on subtle evidence. Taking the perfective form of verbs as lexically basic, the only melodies are /L/, /M/, /ML/, /LM/, and /LML/. In other words, there are no H‑tones in lexical melodies of verbs.

The most important tone sandhi process is Final Tone-Raising. Readers should pay special attention to this, since many morphemes are cited with final L-toned syllable, while appearing in many phrasal examples with M-tone. A word-final or monosyllabic L‑toned *Cv̀(v̀)* syllable is raised to M‑toned *Cv̄(v̄)* by dissimilation to a following L‑tone. For example, imperfective *gà* becomes *gā* before an L-toned syllable. There are some grammatical morphemes of *Cv* or *v* shape that do not undergo Final Tone-Raising. The resistent morphemes include all vocalic pronominal clitics except logophoric *ŋ*, and remote perfective *gà*. This resistance allows pronominal clitics 3Pl *è* and 1Pl *ē* to avoid homophony. For morphemes (including stems) that do undergo Final Tone-Raising, when they fail to raise before a seemingly L-toned particle or word, this is an indication that the second word is actually M‑toned structurally. For example, M-toned *bē* ‘come’ and some of its offshoots (future *bē*, infinitival VP *bē* ) are often heard as low-pitched, but they function as M-toned and do not trigger Final Tone-Raising on a preceding word.

### Tonal morphophonology

In some types of noun-noun compounds and in some sequences of two words within a phrase, the tones of one or both of the juxtaposed stems is modified. The details vary from one construction to another and full coverage must wait for the respective chapters of the grammar.

Two basic processes can be distinguished at this point. The first is described under the rubric of Floating-H Docking, but it is far from a low-level tone sandhi process. The proclitics that come with a floating H are 1Sg allomorph *ŋ̀* (+H) and the two prenominal demonstratives, *kɔ̀ⁿ* (+H) and *ɲɔ̀ⁿ* (+H). The floating H is realized, if at all, on the following stem. An initial L‑tone in the stem is raised to H, and under some conditions this spreads into the second syllable of the stem. If the stem begins with M‑ or H‑tone, the floating H has no effect. The precise morphophonology is somewhat different in the two constructions (1Sg versus demonstrative), hence the disclaimer that the processes involved are not low-level tone sandhi.

The 1Sg proclitic has three allomorphs, depending on grammatical function. *ŋ̀* (+H) occurs in the following functions: direct object (floating H realized on verb), possessor (realized on possessum), and postpositional complement (realized on postposition). By contrast, in subject function the allomorphs are *ŋ́* (perfective positive, i.e. with zero post-subject inflectional particle) and *ŋ̀* (other categories, i.e. those with nonzero post-subject inflectional particle). Neither of the subject allomorphs has a tonal effect on the following word. One might argue (but I choose not to) that *ŋ́* is another manifestation of *ŋ̀* (+H), with the H-tone docking to its left rather than to its right.

The second basic morphophonological process involving tones is Tone Flattening. It applies, for example, to noun stems as compound initials or in noun-adjective combinations. The initial tone spreads rightward to the end of the stem, e.g. /MLH/ flattens to all-M. In addition, in the noun-adjective case an /H/-melody stem is lowered a notch to M.

### Terminal intonation

In a polar interrogative that does not begin with an overt polar interrogative word, Jenaama has intonation-like effects raising the pitch of the final syllable or word. Analysis suggests that this is a combination of categorical tone-raising within the phonology proper, and gradient pitch raising of the familiar intonational type (§xxx).

Oddly, the same kind of tone-raising can also occur under some conditions at the end of indicative main clauses that have no suggestion of interrogation. This does not occur in negative clauses or in positive clauses that have a focal non-verb constituent. These restrictions suggest that weak focalization may be involved (§xxx).

## Verbal and clausal inflection

Verbs have two primary forms, perfective and imperfective, e.g. *kwāā* ‘hit.Pfv’ versus *kɔ̄-lā* ‘hit.Ipfv’. I cite verb stems with a slash between perfective and imperfective, e.g. *kwāā/kɔ̄‑lā* ‘hit’. The perfective and imperfective have the same segmental and tonal form for a minority of verbs, e.g. *sò/sò* ‘go’. The imperfective tends to be marked either by a tonal change on the last syllable (or mora), or by a suffix. This markedness asymmetry is reflected in morphosyntax. The perfective form such as *kwāā* ‘hit’ is also used as imperative, after *bē* in a future construction, and in subjunctive complements.

The only productive verbal derivation is causative *-ni*. A few verbs have a final vowel mutation distinguishing transitive from (antipassive) intransitive, e.g. *dīgā* ‘eat (something)’ versus *dīgɛ̄* ‘eat’.

The aspectual (perfective/imperfective) marking on verb stems is complemented by the array of post-subject inflectional particles in (xx1). These particles reinforce the verb’s own aspect marking but also mark polarity and (epistemic and deontic) mood.

(xx1) (zero) perfective positive (but see below on the bidirectional case marker)

*nàⁿ* perfective positive (in conditional antecedents)

*gà* perfective (positive?), in ‘until’ clauses

*tè* perfective negative

*gà* imperfective positive

*nà* imperfective negative

*gālà* subjunctive

*ma᷆ⁿ* prohibitive

Some verbs also have a derived stative form with suffix *-na*.

## Noun phrase (NP)

The basic order is (xx1), disregarding discourse-functional particles like ‘too’ and ‘as for’ (topic) that come at the end.

(xx1) ‘even’ - possessor/demonstrative - noun - adjective - numeral - demonstrative - ‘all’

There is no definiteness marking, no genitive marker in possessor-possessum combinations, and no gender or noun-class marking. Possessors, numerals, postnominal demonstratives, and ‘all’ have only minor tonal interactions with the noun and any intervening modifiers. However, adjectives and the sole prenominal demonstrative *kɔ̀ⁿ* ‘this/that’ do have complex tonal interactions with nouns. There are also complex tonal patterns inside noun-noun compounds.

## Case-marking and PPs

There is no nominative or accusative case-marking. The only possible exception is in the 1Sg pronominal clitic: *ŋ́* as perfective positive subject (with zero post-subject inflectional particle), *ŋ̀* as subject of clauses with nonzero particle, and 1Sg *ŋ̀* (+H) as object. However, the latter also occurs in possessor and postpositional-complement functions.

A few important postpositions are in (xx1).

(xx1) *tè* dative

*ní* instrumental

*bwāỳ* comitative (‘with’)

*nìŋīì* locative

*lāgà* purposive-causal (‘for’ or ‘because of’)

## Relative clauses

Relative clauses are internally headed. There is no doubling of the noun of the head NP in external position. The NP is likewise not resumed by a pronoun in the main clause, unless the relative clause is fronted as preclausal topic. The relative morpheme *màw*ⁿ (singular) or *mà-lè* (plural) is added near the end of the internal head NP. This morpheme follows a maximal Poss-N-Adj-Num sequence, but it is itself followed by ‘all’ and by discourse-functional particles. Internal-headedness makes it easy to relativize on NPs in any grammatical function (subject, object, postpositional complement, possessor).

## Interclausal syntax

Jenaama prefers a) finite clausal (i.e. including subjects) complements rather than just subjectless VP complements, and b) nominalized verb and VP complements. However, there are constructions with motion verbs and same-subject VPs.

In addition to complements in the form of regular main clauses, there are subjunctive complements. The morpheme *gālà* fills the post-subject inflectional position in positive complements, replaced by prohibitive *ma᷆ⁿ* in negative complements. Among other constructions, subjunctive and prohibitive complements occur in quoted imperatives (jussive complements).

# Phonology

## Internal phonological structure of stems and words

### Syllables

Syllables are predominantly *Cv* and *Cvv* (with long vowel). Monomoraic *Cv* stems are rare among lexical stems. There are a handful of high-frequency *Cv* verbs (e.g. *sò/sò* ‘go’). For nouns I can cite only *pā* as premodifier form of *pwɔ̄* ‘thing’, and *sɔ̄ⁿ* ‘needle, awl’, but the final nasalization of the latter counts as a mora. There are many *Cvwⁿ* stems that reduce to *Cv* in most clause-medial positions.

Onsets may be *Cw* and less often *Cy* rather than just *C*. Vowel-initial morphemes are primarily clitic pronominals like 3Sg *à* and 1Pl *ē*. Vowel-initial lexical stems are limited to borrowings that begin with *a* (many ultimately from Arabic).

Many stems ends in what I transcribe (in citation forms) as *wⁿ*. It functions as a nasal archiphoneme. The pronunciation *wⁿ* occurs in citation forms and more generally in prepausal position. Before another word within a sentence, it is pronounced as a nasal homorganic to the following consonant, or as nasalization of the preceding vowel. *wⁿ* can disappear entirely due to contraction (*vwⁿ#v* → *v#v* ).

The only common medial *CC* clusters are homorganic nasal plus voiced stop, e.g. *mb* and *nd*. There is no clear phonological evidence as to how e.g. *tóndō* ‘agama lizard’ should be syllabified (*tón-dō* or *tó-ndō* ?), or whether there is any point in attempting to find a syllable boundary. This makes it difficult to determine whether the two nouns with *CvvNCv* sequence, *māāŋgòró* ‘mango’ and *kāāŋgō* ‘vetiver (grass sp.)’, have superheavy syllables or just *Cvv*. The same point applies to words with rare medial triple clusters like *tɔ̀lmbé* ‘hornbill (bird)’ (§3.2.10.3).

### Metrical structure

Since syncope and accentual processes are rare in Jenaama, there is not much to say about foot structure. *CvCvCv* words do not syncopate to *CvCCv*. There is no stress system as such, and tones do not behave as pitch-accent markers.

There is a minor distinction between L-toned prosodically light (*Cv̀*, *Cv̀v̀*, *Cv̀Cv̀* ) and heavy (e.g. *Cv̀Cv̀Cv̀* ) stems in how far a floating H coming from the left is able to spread its high tone. Light stems become fully H-toned, e.g. *Cv̀Cv̀* → *Cv́Cv́*. Heavy stems stop the advance of the floating H-tone at the first syllable, e.g. *Cv̀Cv̀Cv̀* → *Cv́Cv̀Cv̀*.

## Consonants

Jenaama has the consonants in (xx1). Consonants in parentheses are arguably allophones of other phonemes. Consonants in double parenthese occur chiefly or only in loanwords but are now at least somewhat entrenched. Consonants in triple parentheses are effectively absent except in onomatopoeias and the like.

(xx1) Consonants

1 2 3 4 5 6 7 8

labial *p b m ((f)) (((v))) w wⁿ*

alveolar *t d n s ((z)) l, r (rⁿ)*

alveopalatal *c j ɲ (ʃ) ((ʒ)) y, ɥ (yⁿ)*

velar *k g ŋ*

laryngeal  *((h)), (((ʔ)))*

note: *j* is IPA [ɟ], *y* is [j], *r* is tap [ɾ]

key to columns: 1. aspirated voiceless stops (c is affricated); 2. voiced stops; 3. nasals, 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants); 6.  nonnasal sonorants; 7. nasalized sonorants; 8. laryngeals

Because *v* as voiced labial fricative is virtually nonexistent, I use “v” as a vowel variable in formulae like *Cv́Cv̀*. The lower-case permits tone markings which are difficult typographically for capital *V*.

Nasalized sonorants and tap *r* do not occur word-initially. Most consonants do not occur word-finally. Most unclustered intervocalic consonants in word-medial position are voiced.

### Stem-final consonants

The most common final consonant is *wⁿ*, but it is unstable except in prepausal position (§3.3.xxx). Other semivowels that can occur finally are *y* (§3.3.xxx), *yⁿ* (§3.3.xxx), and in one case *ɥ* (§3.3.xxx).

A stem-final syllable *mu* can be reduced to phonetic [m:] as an intermediate pronunciation with prolonged nasal consonant that keeps the prosodic beat intact, or to simple final *m* (Apocope, §3.4.3). For singular nouns, the prolonged pronunciation occurs optionally in *kāmū* ~ [kām:] ‘wing’ and *káámū* ~ [káám̄:] ‘doum palm (and fruit)’, for example. Evidence from plurals suggest that the prolonged [m:] has not been phonologized as a long or geminate nasal: *kāmū‑yē* ‘wings’, *káámú-yè* ~ *káámè-è* ‘doum palms’.

In compounds (including fixed noun-adjective combinations), initials with final sonorants are tolerated. In some cases the initials also occur as simple nouns. For example, *káámū* ‘doum palm (and fruit)’ mentioned just above is the initial in *káám-kɔ̀lɛ́wⁿ* ‘pit of doum-palm fruit’, while *sālì* ‘prayer, holy day’ occurs in the noun-adjective collocation *sāl dɛ̀gɛ̀-náwⁿ* ‘small(er) holy day’ (holy day at the end of Ramadan). In other cases the noun is compound-like but the initial is opaque: *kɔ̀n-jɛ́wⁿ* ‘circumcised boy’.

Evolution toward being lexically *m*‑final has gone farther in the case of *cɛ̄m* ‘10’. A bisyllabic pronunciation *cɛ̄mū* is possible but uncommon. The iterated distributive is *cɛ̄m-cɛ̄m* ‘ten by ten’. This numeral is also heard as *cɛ̄ɛ̄m* in the counting sequence (‘1, 2, 3, …’).

*sàm-sám* is a medicinal plant (*Blepharis linariifolia*). Its singular is pronounced as indicated. Its plural *sàm-sámè-è* is consistent with a stem-final *u* (or other short vowel).

### Palatoalveolar glide (*ɥ* )

This glide is the semivowel equivalent of high front rounded vowel (IPA [y]). The vowel itself does not occur in Jenaama. *ɥ* is a rarity in languages of the zone, but it also occurs with roughly similar restrictions in the adjacent language Bangime. All known examples in Jenaama are presented in (xx1).

(xx1) stem gloss comment

a. stem-initial

*ɥɛ̀ɛ̀/ɥɛ̀ɛ̄* ‘open’

*ɥīī/ɥīī-lì* ‘winnow by shaking’

b. stem-medial

*intervocalic*

*sìɥɛ̀/sìɥɛ̄* ‘cook, do cooking’ cf. transitive *sùwɔ̀/sùwɔ̄* ‘cook (sth)’

*kùɥɛ̀/kùɥɛ̄* ‘steal’

*cìɥè* ~ *cìyè* ‘field’

*gūɥōⁿ-* ‘sacred’ compound initial

*kɯ̀ɥɯ̀ⁿ* ‘pit, hole’

*in consonant cluster*

*tùɥgɛ̀/tùɥgɛ̄* ‘approach’ (cf. ‘short; near’ below)

*word-final*

*tùɥ* ‘short; near’

Stem-initial ɥ is rare but is attested before a front vowel in two verbs (xx1a). One could argue that *ɥ* here is an allophone of *w* before front vowels. Disregarding initial *Cw* clusters (*kwīī/kwīī-lì* ‘roll up’), my only example of stem-initial unpalatalized *w* before a front vowel is the Fulfulde loanword *wɛ̄ɛ̄tà* ‘spend a half-day (morning)’, found chiefly in a greeting (§19.6.2).

The medial cases in (xx1b) are associated with preceding high vowels {*i u ɯ*}, in some cases combined with a following front vowel. The alternation of *sìɥɛ̀/sìɥɛ̄* with its transitive counterpart *sùwɔ̀/sùwɔ̄* reflects a final-vowel mutation (§9.xxx), and constitutes the only known case of *ɥ* alternating with *w*. This alternation also brings out the lack of a clear distinction between *u* and *i* before *ɥ*, as both *u* and *i* tend toward IPA [y] before *ɥ*. There are few contrasting examples of intervocalic *w* after high vowel and before front vowel, but I can cite *púwē* ‘burrow (n)’.

### Alveopalatals (*c* *j* )

Voiceless *c* occurs word-initially chiefly before front vowels {*i e ɛ*} and semivowel *y*, as in *cyɛ̄wⁿ/cyɛ̄ẁⁿ* ‘carry on head’ and *cɛ̄bù/cɛ̄bù* ‘put (sth) up (on sth)’. However, there is no synchronic process converting either *k* or *t* to *c* before such vowels, as shown by *tīwⁿ/tī-nà* ‘do’ and *kìyɛ̀wⁿ/kìyɛ̄wⁿ* ‘arrive’ among other examples. *c* is rare before other vowels, but the noun ‘dust’ has variants *cɔ̄llɔ̀* and *sɔ̄llɔ̀*.

Voiced *j* occurs word-initially and occasionally word-medially, before a wide range of vowel qualities. Word-initial examples are *jīīⁿ* ‘year’, *jénāⁿ* ‘child, young person’, jōō ‘borassus palm’, *jùgù* ‘boubou (garment)’, *jáŋāⁿ* ‘shed, stall’. A word-medial example is *gɛ̀jɛ̄* ‘arrow’ (variant *gɛ̀sɛ̄* ).

### Labial fricative *f*

*f* is relatively uncommon. It occurs word-initially in borrowings from Fulfulde: *fɛ̄llà/fɛ̄llà* ‘explode’, *fàāmù/fàāmù* ‘understand’, *fāātī/fāātī* ‘pass away (die)’. ‘Understand’ and ‘pass away’ are ultimately from Arabic.

### Voiceless stops (*p* *t k*) and voiced stops (*b d g*)

For *c* and *j* see above. Voiceless stops {*p t k*} are common word-initially and rare medially. Voiced stops {*b d g*} are common initially and medially, either intervocalically or in nasal-stop clusters.

### Laryngeals (*h* *ʔ*)

h is limited to word-initial position. There are quite a few *h*-initial stems, most if not all borrowed from Fulfulde but now well-entrenched. Examples are *hīnì/hīnì* ‘be able to’, *hīīsà/hīīsà* ‘count’, amd *híílā* ‘trick, stratagem’.

*ʔ* is absent except in ‘uhn-uhn!’ type expressions.

### Sibilants (*s* *ʃ* *z* *ʒ*)

*ʒ* occurs in a few French loans like *ʒāndārmū* ‘gendarme’. *z* does not occur in my working vocabulary as of Januarh 2019 but may occur in unintegrated loanwords.

### Nonnasal sonorants (*l*, *r*, *w*, *y*)

{*l w y*} freely occur stem-initially: *lɔ̄gū* ‘mouth’, *yōgō* ‘shout (n)’, *wàŋgé* ‘hare’. There is no restriction against *yi* or *wu* sequences: *wùù* ‘night’, *yìràwⁿ/yìrān-nà* ‘help (v)’. *r* is not attested stem-initially but it does occur in that position in Fulfulde and a loanword or two may turn up.

All of these consonants are common intervocalically and are attested as first member of medial consonant clusters.

*y* occurs word-finally after low or back vowel: *kày/kà-nà* ‘see’, *tōy* ‘new’. I have no examples of word-final *w*, but see the following section on final *wⁿ*.

### Nasalized sonorants (*wⁿ*, *yⁿ*, doubtfully *rⁿ*)

There are no cases of stem-initial *wⁿ*, *yⁿ*, or *rⁿ*.

Stem-final *yⁿ* occurs in two stems after low vowel: *kāyⁿ* ‘work (n)’ (and related verb forms), *māyⁿ/māỳⁿ* ‘ruin, damage’.

Stem-final *wⁿ* is extremely common in stems after any vowel qualities except *u* or *o*. Examples of noun stems: *kùwɔ̀-tɔ̄mɔ̄wⁿ* ‘patas monkey’, *kòbéwⁿ* ‘(finger-)nail’, diminutive suffix *‑lɛ̄wⁿ*, *nàwⁿ* ‘mother’, *dàràmà-yīwⁿ* ‘maize’. There are also many adjectives and numerals ending in *wⁿ*. There are some verbs that have final *wⁿ* in both perfective and imperfective, e.g. *cyɛ̄ẁⁿ/cyɛ̄ẁⁿ* ‘carry on head’, and many others that have final *wⁿ* only in the perfective while the imperfective adds a suffix, e.g. *kāwⁿ/kā-nā* ‘draw (milk)’. As these verb doublets suggest, stem-final *wⁿ* is unstable. The *wⁿ* is heard in isolation pronunciations but it is reduced to vocalic nasalization or to a homorganic nasal when followed by another word.

When it comes to medial intervocalic position, analysis is more difficult. Nasalization is expressed phonetically on syllables, especially on vowels. The choice between transcriptions *Cvwvⁿ* and *Cvwⁿv*, *Cvyvⁿ* and *Cvyⁿv*, and *Cvrvⁿ* and *Cvrⁿv* (*v* = any vowel quality) is based partially on phonetic nasalization (if present) of the first vowel, but this doesn’t work if the first consonant is a nasal. Therefore the main test for distinguishing these options is presence or absence of a phonetic homorganic nasal before another word. For example, *kùmù* ‘sleep (n)’ does not “grow” a homorganic nasal in *kùmù bē* [kùmùbē] ‘sleep came’, but *sūmūⁿ* ‘visitor’ does grow one in *sūmūⁿ bē* [sūmūmbē] ‘a visitor came’. This test works regardless of the nasality of the stem-initial consonant. See especially §3.4.3.1 for the distinction between stem-final nasalized and oral vowels.

The relevance of this to the issue of medial *yⁿ* is brought out by (xx1). On the right we combine nouns with ‘came’ and verbs with ‘here’, both *b*‑initial. In the phonetic transcriptions, the under-tilde is used instead of superscript *ⁿ* for vocalic nasalization to avoid clutter.

(xx1) stem gloss with *bē* ‘came’ or *bōẁⁿ* ‘here’

a. *Ciyvⁿ* with nonnasal *C*

*with ɛⁿ*

*cīyɛ̀ⁿ* ‘gathering (n)’ *cīyɛ̀ⁿ bē* [cījɛ̰̀mbē]

*with oⁿ*

*tìyòⁿ* ‘ax’ *tìyòⁿ bē* [tìjò̰mbē]

b. *Cvyvⁿ* with nonnasal *C* and initial vowel other than *i*

*‘long, tall’*

*kɔ̄jāⁿ* ‘long’ (modifying) *kɔ̄jāⁿ bē* [kɔ̄jā̰mbē]

c. *Niyⁿv* with nasal *N*

*mīyⁿɛ̄* ‘flea’ *mīyⁿɛ̄ bē* [mḭ̄jⁿɛ̰̄bē]

*mìyⁿɛ̀* ‘fishing (n)’ *mìyⁿɛ̀ bē* [mḭ̀jⁿɛ̰̀bē]

*mìyⁿɛ̀* ‘fish (v)’ *mìyⁿɛ̀ bōẁⁿ* [mḭ̀jⁿɛ̰̀bō̰ẁⁿ]

*ɲīyⁿɛ̄* ‘pity (n)’ *ɲīyⁿɛ̄ bē* [ɲḭ̄jⁿɛ̰̄bē]

In isolation, both vowels of each stem in (xx1c) are phonetically nasalized, e.g. [mḭ̄jɛ̰̄ⁿ]. I can detect no difference in the degree of nasalization in the final vowels in (xx1a‑b) versus (xx1c), though an instrumental study might reveal a slight difference. Importantly, there is no phonetic homorganic nasal before *b* in (xx1c) like that in (xx1a‑b). I conclude that ‘flea’ etc. in (xx1c) should be transcribed with phonemic *yⁿ* to account for the phonetic (but not phonological) nasalization of the final vowel.

The fact that all the stems in (xx1c) also begin with a nasal consonant raises the possibility tht nasalization has spread from the left, converting medial *y* to *yⁿ*. I return to this question below.

Consider now the stems that have a final *yvwⁿ* syllable (xx2). Except when prepausal, the *wⁿ* disappears but leaves behind a homorganic nasal, e.g. [m] before *b*. (Either *wⁿ* becomes the homorganic nasal, or it is deleted and the remaining nasalized vowel creates the homorganic nasal.) The issue here is whether the medial *y* is nasalized, pointing to a leftward nasalization-spreading process. I tend to hear it as nasalized *yⁿ* in all these examples, whether the first syllable is nonnasal (xx2a) or nasal (xx2b). In (xx2a) the preceding *i*‑vowel is therefore slightly nasalized even though the stem begins with a nonnasal consonant. (xx2c) shows that a final, phonemically nasalized vowel does not nasalize a preceding medial *y*.

(xx2) stem gloss with *bē* ‘came’ or *bōẁⁿ* ‘here’

a. *Ciy(ⁿ)vwⁿ* with nonnasal *C*

*‘hot’*

*pīyⁿāwⁿ* ‘heat (n)’ *pīyⁿāⁿ bē* [pḭ̄jⁿā̰mbē]

*pīyⁿɛ̄wⁿ* ‘get hot’ (Pfv) *pīyɛ̄ⁿ bōẁⁿ* [pḭ̄jɛ̰̄mbō̰ẁⁿ]

*pīyⁿɛ̄-nā* ‘hot’ —

*pīyⁿɛ̄-nī* ‘heat (v)’ (Pfv) —

*‘dirty’*

*pìyⁿɛ̀wⁿ* ‘filth, dirt’ *pìyⁿɛ̀ⁿ bē* [pḭ̀jⁿɛ̰̀mbē]

*pìyⁿɛ̀-nā nì* ‘be dirty’

*‘heavy’*

*cīyⁿɛ̄wⁿ* ‘heavy’ (predicate) *cīyⁿɛ̄ⁿ bōẁⁿ* [cḭ̄jⁿɛ̰̄mbō̰ẁⁿ]

*‘arrive’*

*kìyⁿɛ̀wⁿ* ‘arrive’ (Pfv) *kìyⁿɛ̀ⁿ bōẁⁿ* [kḭ̀jⁿɛ̰̀mbōẁⁿ]

*‘shadow’*

*yíy(ⁿ)ēwⁿ* ‘shadow’ *yíy(ⁿ)éⁿ bē* [jḭjⁿḛ́mbē]

*‘sorghum’*

*síyɛ̄wⁿ* ‘sorghum grains’ *síyɛ́ⁿ bē* [síjɛ̰́mbē]

b. *Niyⁿvwⁿ* with nasal *N*

*‘head’*

*ɲìyⁿɛ̀wⁿ* ‘head’ *ɲìyⁿɛ̀ⁿ bē* [ɲḭ̀jⁿɛ̰̀mbē]

*‘easy’*

*ɲìyⁿɛ̀wⁿ* ‘easy’ (predicate) *ɲìyⁿɛ̀ⁿ bōẁⁿ* [ɲḭ̀jⁿɛ̰̀mbō̰ẁⁿ]

*ɲīyɛ̀-gù* ‘easy’ (modifying)

*‘thin’*

*mìyⁿɛ̀wⁿ* ‘thin’ (predicate) *mìyⁿɛ̀ⁿ bōẁⁿ* [mḭ̀jⁿɛ̰̀mbō̰ẁⁿ]

*mīyɛ̀-gù* ‘thin’ (modifying)

That the situation is unstable is suggested by ‘shadow’ in (xx2a). It is pluralized as *yíyéⁿ-yè* or contracted *yíyè-è*, the latter sometimes pronounced *yíyⁿè-è* or *yíyè-èⁿ*. Overall, these considerations are consistent with the hypothesis that there is a leftward nasalization-spreading process, not yet fully phonologized, from the final *wⁿ* to the medial *y(ⁿ)*.

I now consider the question whether the better established medial *yⁿ* in *mīyⁿɛ̄* ‘flea’ etc. in (xx1c) above is secondarily nasalized under the influence of the stem-initial nasal, i.e. whether there is a rightward nasalization-spreading process converting *Nvyv* to *Nvyⁿv*. The presence of an initial nasal in all known examples of the type (xx1c) supports this hypothesis. However, other data show that no rightward nasalization-spreading process is productive. In (xx2b), note especially *yⁿ* versus *y* in predicative *ɲìyⁿɛ̀wⁿ* and *mìyⁿɛ̀w* versus modifying *ɲìyɛ̀‑gù* ‘easy’ and *mìyɛ̀‑gù* ‘thin’. In the modifying forms with suffix *‑gù*, the medial *ɛ* is not phonetically nasalized, so the medial *y* cannot be transcribed as nasalized. This entails that the stems are lexically *ɲìyɛ̀* and *mìyɛ̀*, and their medial *y* is subject to leftward nasalization from a final *wⁿ* if present, but not to rightward nasalization from the initial *ɲ* or *m*. A corollary is that *mīyⁿɛ̄* ‘flea’ etc. in (xx1c) above have phonemic *yⁿ*, independent of the stem-initial nasal.

The analysis of medial *yⁿ* above is partially applicable to medial *wⁿ* (xx3). A final *ɔⁿ* is able to transmit nasality to the preceding *w(ⁿ)*. However, *Cvwvwⁿ* with nonnasal *C* does not nasalize the medial *w* (xx3c).

(xx3) stem gloss with *bē* ‘came’ or *bōẁⁿ* ‘here’

a. *Cuwvⁿ* with nonnasal *C*

*with oⁿ*

*búwōⁿ* ‘mortar’ *búwóⁿ bē* [búwó̰mbē]

*būwōⁿ* ‘horn’ *būwōⁿ bē* [būwō̰mbē]

*dūwōⁿ* ‘hunger’ *dūwōⁿ bē* [dūwō̰mbē]

*dùwóⁿ* ‘cheek’ *dùwóⁿ bē* [dùwó̰mbē]

*kùwóⁿ* ‘flank’ *kùwóⁿ bē* [kùwō̰mbē]

*pùwóⁿ* ‘water lily’ *pùwóⁿ bē* [pùwó̰mbē]

*with ɔⁿ*

*kūwⁿɔ̄ⁿ* ‘bone’ *kūwɔ̄ⁿ bē* [kūwɔ̰̄mbē]

*kúwⁿɔ̄ⁿ* ‘husband’ *kúwɔ́ⁿ bē* [kúwɔ̰́mbē]

*pùwⁿɔ́ⁿ* ‘fonio (grain)’ *pùwɔ́ⁿ bē* [pùwɔ̰́mbē]

b. *Nuwⁿv* with nasal *N*

*‘ripe’*

*mùwⁿɔ̀* ‘ripen’ (Pfv)

*mùwⁿɔ̀-nà* ‘ripe’ (participle)

distributive *mùwⁿɔ̄-mùwⁿɔ̀-nà*

c. *Cuwvwⁿ* with nonnasal *C*

*‘small’*

*dùwɔ̀wⁿ* ‘small’ (predicate) *dùwɔ̀ⁿ bōẁⁿ* [dùwɔ̰̀mbō̰ẁⁿ]

distributive *dùwɔ̄ⁿ-dùwɔ̀wⁿ* [dùwɔ̰̄ndùwɔ̀wⁿ]

*dūwɔ̀-gù* ‘small’ (modifying)

There is no good evidence for phonemically nasalized tap *rⁿ*. In the noun *mūrū* ‘donation to poor (after Ramadan)’ and the verb *mūrī/mūrì* ‘braid (v)’, the *r* is not nasalized. In other words, there is no hint of rightward nasalization-spreading affecting *r*. As for leftward nasalization-spreading, the *r* and the initial vowel of predicative *kùrùⁿ* ‘(be) short’ and those of *dàràmà-yīwⁿ* ‘maize’ are not phonetically nasalized. *r* does sound nasalized in *nàràwⁿ* ‘four’, variant of *nàtàwⁿ*, but in this stem it is flanked by initial and final nasals.

### Consonant clusters

#### Stem-initial NC cluster

Word-initial *mb*, *nd*, *nj*, and *ŋg* are abnormal in Jenaama. However, they do occur in Fulfulde. This is the likely source of the few examples in Jenaama.

preclausal discourse particle *ŋgàà* ‘but’ and noun *ŋgàlù* ‘city’ are examples.

There is at least one borrowed noun with *nd*, namely *ndūɲāāⁿ* ‘world (of the living)’. The initial nasal has no separate tone. In isolation it is pronounced with low pitch, but this is arguably automatic. In combinations like *bē ndūɲāāⁿ nìŋīì* ‘came to the world’ I do not hear a pitch drop after an M‑toned verb. This indicates that the initial nasal acquires its tone from the syllable to its left (if there is one).

If pronominal clitics are included (1Sg *ŋ̀* and variants, 3Sg reflexive *ŋ̀* ), there are many combinations that begin with [mb], [nd], and the like.

#### Stem-initial *Cw* and *Cy* clusters

The most common initial clusters are of the form *Cw*. There are attestations of *kw*, *pw*, *bw*, *mw*, *ŋw*, and even *ww*. The following vowel may be anything but *u*. The known examples are in (xx1).

(xx1) a. verbs related forms

*with long vowel*

*kwāā/kɔ̄‑lā* ‘hit’

*kwààⁿ/kwàāⁿ* ‘be afraid’

*kwɛ̄ɛ̀ⁿ/kwɛ̄ɛ̀ⁿ* ‘sweep’

*kwīī/kwīī-lì* ‘roll up (mat)’

*mwàà/mwàā* ‘become cold, cool’

*mwɛ̄ɛ̄ⁿ/mwɛ̄ɛ̀ⁿ* ‘massage’

*with short vowel*

*bwō/bwō* ‘burn’

*dwɔ̄/dɔ̄-lɔ̄* ‘enter’

*dwī/dwi᷆* ‘grind’

*kwē/kwē* ‘stretch out (arms, legs)’

*pwɔ̀/pɔ̀‑là* ‘sit’

*wwō/wwō* ‘weep’

b. adjectival predicates

*kwāāⁿ* ‘be white, clean’ as modifier: *kūwōwⁿ*

*mwàà-nà* ‘be cold’ as modifier: *mūwā-nā*

*wwō-nà* ‘be dry; be hard’ as modifier: *wūwò-nà*

c. modifying adjectives

*wwōⁿ-wwōⁿ* ‘empty’

d. nouns

*kwààⁿ* ‘rain (n)’

*kwīī* ‘terrestrial monitor liquid’

*ŋwɛ̀wⁿ* ‘millet or rice cake’

*pwɔ̄* ‘thing’

*pwììⁿ-wɔ̄bɔ̄* ‘swelling due to disease’

The adjectival predicates with *Cw* in (xx1b) correspond to modifying adjectives with *Cuw* (shown in the right-hand column). The verbs *kwāā/kɔ̄‑lā* ‘hit’ (xx1a) and *pwɔ̀/pɔ̀‑là* ‘sit’ have *Cw* only in the perfective.

Other stems that I analyse as beginning with *Cuw*, for example *mùwɔ̀/mùwɔ̄* ‘ripen’ and *pūwō/pūwò* ‘jab’, are subject to optional shortening or syncope of the u, making it difficult to distinguish *Cuwv* from *Cwv* (*v* some vowel other than *u*). Confirmation that there is a real distinction between *Cuwv* and *Cwv* comes from tone alternations in verbs. *bwō/bwō* ‘burn’ and *wwō/wwō* ‘weep’ have identical tones in the perfective and imperfective. This tone pattern is shared with monomoraic *Cv* verbs, all of which are either *Cv̄/Cv̄* or *Cv̀/Cv̀*, e.g. *bē/bē* ‘come’ and *sò/sò* ‘go’. By contrast, no *CvCv* verb is of the tonal type *Cv̄Cv̄/Cv̄Cv̄* or *Cv̀Cv̀/Cv̀Cv̀* with the same tone (M or L) throughout both perfective and imperfective. Unlike *bwō/bwō* ‘burn’ and *wwō/wwō* ‘weep’, *mùwɔ̀/mùwɔ̄* ‘ripen’ and *pūwō/pūwò* ‘jab’ show the productive tone patterns for *CvCv* stems, which have a level-toned perfective and a contour-toned imperfective, namely *Cv̄Cv̄/Cv̄Cv̀* and *Cv̀Cv̀/Cv̀Cv̄*. This is supporting evidence for a phonological distinction between *Cwv* and *Cuwv* in spite of the latter’s tendency to syncopate.

There are fewer examples of *Cy* than of *Cw*. The known cases, all verbs, begin with *cy* or *sy* (xx2).

(xx2) a. *cy*  related forms

*cyɛ̄wⁿ/cyɛ̄ẁⁿ* ‘carry on head’

*cyɛ̀ɛ᷆ⁿ/ cyɛ̀ɛ̄-nɛ̀* ‘weave’

b. *sy*

*syɛ̄/syɛ̄* ‘put in’ *sīyà-y* ‘put (sth) init’

In spite of the bisyllabic locative form *sīyà‑y* (§xxx), the transcription *syɛ̄/syɛ̄* is supported by its tone pattern, which shows the tonal identity of perfective and imperfective typical of *Cv* verbs.

The adjective ‘heavy’ has postnominal modifying form *cīyɛ̄wⁿ* ~ *cīyɔ̄wⁿ*. By analogy to the adjectival predicates in (1b) above, we might expect a predicative form beginning #*cyɛ̄ɛ̄ⁿ* or the like. The actual predicative form is *cīyɛ̄wⁿ* ~ *cīyɔ̄wⁿ*, identical to the modifying form. This is consistent with the overall relative infrequency of *Cy* as opposed to *Cw*.

#### Medial *CC* and *CCC* clusters

The most common medial clusters are those with homorganic nasal and voiced stop. Examples are *tèndé* ‘well (n)’, *wòmbò* ‘hollowed-out trunk’, *dèŋgè* ‘lower jaw’, and *kɔ̀njì* ‘urine’. Bisyllabic *CvNCv* with these clusters is treated for tonal purposes as prosodically light, like *CvCv*.

Other medial *CC* clusters occur sporadically, especially in Fulfulde borrowings or in frozen compounds. Some examples are in (xx1).

(xx1) cluster stem gloss

a. *ŋk tɔ́ŋkɔ́nɔ̄* ‘duck’

*mp sūmpōrō* ‘tick’

*nt kàlàmàntùŋɔ́* ‘giant millipede’

*nc tègèncíⁿ* ‘forehead’

b. *md tɛ̄ɛ̄mdɛ̄rɛ̄* ‘hundred’

c. *yn māynī* ‘natural catastrophe’

*yg kùygù* ‘blacksmith’

*rn kɔ̀ɔ̀rnɔ̀* ‘carp’

*rm ʒāndārmū* ‘gendarme’

d. *sk mìskììn-ààmà* ‘poverty’

*bd àsābdì* ‘Saturday’

e. *ll cɔ̄llɔ̀* ~ *sɔ̄llɔ̀* ‘dust’

Triple clusters are rare. Within a stem, I can cite the noun *tɔ̀lmbé* ‘hornbill (bird)’ and the verb *hāyndè* ‘amaze, astonish’. At a somewhat obscure morpheme boundary, the archaic suppletive plural ‘children’ is *dālm-bī-gē*, now mostly supplanted by *jénám-bí-gē* ‘children’ (singular *jénāⁿ* ‘child’). These clusters are of the type sonorant plus homorganic nasal-voiced-stop *NC* cluster. Such clusters are rather common in Fulfulde and more Jenaama cases may turn up during further lexicographic work.

#### Final *CC* clusters

There are no stem- or word-final clusters, with the marginal exception of the prolonged [m:] variant pronunciation of stem-final *mu*.

### Historical linguistic significance of verb-stem alternations

A historical analysis of variant forms of verb stems requires comparative Bozo and Mande data that are beyond the scope of this grammar. Here I simply point out the alternations of greatest possible comparative interest.

#### Unusual bisyllabic stem variants

Several verbs have a third stem-shape in addition to those in the perfective and imperfective. The third form appears in an unsuffixed verbal noun ending in *ɛ/e*, and in suffixal derivatives. A subset of these verbs have monosyllabic perfectives and bisyllabic third forms.

(xx1) Pfv Ipfv third form gloss

*kūūⁿ kū-nū kūmɛ̄* ‘catch’

*sīwⁿ sī-nī sīnɛ̄* ‘bite’

*kwāā kɔ̄-lā kɔ̀lɛ̀* ‘hit’

While many other verbs have a suffixal imperfective, usually *-la* or (after nasal syllables) *-na*, the verbs in (xx1) may have originally been bisyllabic, perhaps \*kūmū, \*sīnī, and \*kɔ̄lā. If so, the current perfective forms may have undergone some reductive phonological process, losing either a final vowel (\*kūm, \*sīn) or a medial consonant (\*kūūⁿ, \*kɔ̄ā ). The *n* in imperfective kū‑nū may reflect a secondary analogical shift.

#### *bāā/bā-lā* ‘exit (v)’

The verb ‘exit, go out’ has perfective *bāā* and imperfective *bā‑lā*. There is a suffixed verbal noun *bāā-gū* based on the perfective. Comparison with *kwāā/kɔ̄-lā* ‘hit’, mentioned in the preceding section, suggests the possibility that *bāā* reflects \*bālā, in which case the imperfective preserves the original bisyllabic form of the stem.

The factive verbal noun is irregular: *bān‑nā*, not the expected #*bāā-nā* based on the perfective. This could be another indication of an original shape \*baL(v) with some sonorant \*L.

## Vowels

The inventory of vowel qualities is (xx1). All qualities occur long and short, and oral and nasalized.

(xx1) back front

[+round] [-round]

high *u ɯ i*

mid [+ATR] *o e*

[-ATR] *ɔ̀ ɛ*

low *a*

This is essentially the regionally widespread 7-vowel system found in nearby Mande languages, Bangime, and Dogon languages, with the surprising addition of a high back unrounded vowel *ɯ*. There is an ATR-like distinction, or arguably just a Romance-type open/closed distinction, in the mid-height vowels but not in the high or low vowels.

### High back unrounded vowel *ɯ*

This vowel is unmistakable when it occurs. Acoustically it is not close to any other vowel quality. However, its distribution is very limited. All known examples are mono- and bisyllabic verb or noun stems that begin with a velar stop and contain no other vowel quality. The list is: *kɯ̀ɯ̀/kɯ̀ɯ̄* ‘run’, *kɯ̄ɯ̄/kɯ̄ɯ̀* ‘catch fire’, *kɯ̄ɯ̄* ‘moon, month’, *kɯ̀ɯ̀* ‘maternal uncle’ or ‘shea tree’, *kɯ̄ɯ̄ⁿ* ‘a certain one’, *kɯ̀ɥɯ̀* ‘pit, hole’, *kɯ́gɯ̄* ‘thigh’, *kɯ̀lɯ̀* ‘baobab’, kɯ̀ɥɯ̀ⁿ ‘pit (hole)’, kāŋāāⁿ-kɯ̀yɯ̀ⁿ ‘termitary’, *gɯ̄lɯ̄* ‘bat (mammal)’, *gɯ̄ɯ̄ⁿ* ~ *gɯ̄yɯ̄ⁿ* ‘place’. Contrast *u*-vowels after velar stops in *nàmū-kùù* ‘millet cakes’, *tèè-kúrú* ‘piece of meat’, *bùkúrú* ‘buttock’, *kɔ̀n-kūūⁿ* ‘vulture’, *kùmù/kùmū* ‘sleep (v)’, *kūūⁿ/kū‑nū* ‘catch’, *kùgù* ‘daytime’, and *gùrū-gùsúⁿ* ‘porcupine’.

*ɯ* does not occur in nearby language families known to me (Dogon, Bangime, Songhay) or in Bambara or Fulfulde. So far as I know it has not been reported for any Bozo variety. It is absent from the vowel charts in Lauschitzky’s documents on other nearby varieties of Jenaama.

A clue as to the origin of this vowel at least in *Cɯɯ* monosyllabics may come from comparisons between cliffs Jenaama (the focus of this grammar) and the nearby Konna variety, which has *kēw* ‘moon, month’ and *kèw* ‘maternal uncle’. Within cliffs Jenaama, the quantificational adjective *kɯ̄ɯ̄ⁿ* ‘a certain’, always singular, is likely related to the numeral *kēẁⁿ* ‘one’, though the connection is synchronically opaque. Similarly, the noun *gɯ̄ɯ̄ⁿ* ‘place’ has a strange iterative form *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* varying with *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* as relative head (§14.2.4). Whether *ew* or *ɯɯ* is the original pronunciation remains to be established, and I currently have nothing useful to say about the bisyllabic examples.

### Short and long vowels

In native vocabulary, the long/short opposition is most evidence in stem-initial syllables in nonmonosyllabic stems. Most noninitial syllables have short vowels but some cases of long vowels are also known.

In monosyllabic stems, monomoraic *Cv* does not exist among nouns, adjectives, or numerals (except when final *wⁿ* is elided). In verbs, *Cv* is rare but does occur in five high-frequency stems: *sò/sò* ‘go’, *bē/bē* ‘come’, *sē/sē* ‘say’, *kò/kò* ‘provide (with)’, and *dō/dō* ‘give’. There is also a suppletive adjectival predicate *kō* ‘(be) many, numerous’. Many grammatical morphemes have *Cv* shape. Bimoraic *Cvv* is common in nouns and (perfective) verbs and occurs in adjectival predicates: *nàà* ‘cow’, *tēē* ‘meat’, *ɲīī* ‘(be) bad’ *dāāⁿ* ‘distant’, *mūūⁿ/mū-nū* ‘insult (v)’, *ɥɛ̀ɛ̀/ɥɛ̀ɛ̄* ‘open (v)’.

In nonmonosyllabic stems, vowel-length oppositions occur mainly in initial syllables, e.g. *CvCv* versus *CvvCv*. Among minimal pairs are *kūūnū/kūūnù* ‘crawl’ versus imperfective *kū‑nū* ‘catches’ and *pɛ̄ɛ̄rɛ̀/pɛ̄ɛ̄rɛ̀* ‘rip, tear’ versus *pɛ̄rɛ̀/pɛ̄rɛ̀* ‘split (nut)’. Many examples of *CvCv* and *CvvCv* stems are in §10.1.2 (verbs) and §3.7.1.2 (nouns).

Even in initial syllables, a long vowel before a consonant cluster is rare except at compound boundaries and in poorly assimilated borrowings. An example of the latter is the Fulfulde loanword *tɛ̄ɛ̄mdɛ̄rɛ̄* ‘hundred’.

Most stem-final syllables have short vowels. Some with final long vowels are the perfectives in *pìyɛ̄ɛ̀/pìyɛ̄‑lɛ̀* ‘lick’ and *sùwōò/sùwō-lò* ‘sing’, and the nouns *kèbāà* ‘flint lighter’ and *kìrìkēè* ‘saddle (n)’.

### Nasalized vowels

Nasalized vowels occur chiefly in word- or morpheme-final position, with vowels of any quality. Examples not involving nasal consonants include *pīīⁿ* ‘black’, *súgūⁿ* ‘harvested rice heap’, *búwōⁿ* ‘mortar’, *sɔ̄ⁿ* ‘needle’, *kēlēⁿ-kālāⁿ* ‘forked stick’, *síyɛ̄ⁿ* ‘sorghum kernels’, and 2Sg pronominal *āⁿ*.

Nasalized vowels in nonfinal syllables not involving a nasal consonant are rare. Aside from compounds, I can cite *dòⁿsò* ‘hunter’, whose *s* does not allow a preceding full nasal (#*ns*).

Vowels following nasal or nasalized consonants are subject to some automatic phonetic nasalization. However, the difference between e.g. *na* and *naⁿ* is audible on careful listening. A generally reliable test is the pronunciation of such syllables before words beginning with an obstruent such as a stop, or with *l*. For example, phonemic *na* combines with *t* as [na̰t], while phonemic *naⁿ* combines with it as [na̰nt], including a nasal consonant that is assimilated to the position of the *t*. See §3.5.7.xxx below on such alternations.

### Initial vowels

Very few Jenaama words other than pronouns and pronominal clitics begin with a vowel. Nearly all of the stems that begin with vowels are Arabic noun borrowings (via Fulfulde), plus *àrjo᷆ⁿ* ‘radio’ from French where the initial vowel avoids a disallowed initial tap *r*.

### Stem-final vowels

All vowel qualities may occur stem-finally, and therefore word-finally.

### ATR harmony and Back/Rounding Harmony

Because there is so little affixal morphology, there are few opportunities to apply vocalic harmony to affixes. However, there are some verbs that “mutate” a final vowel to distinguish transitive from intransitive (antipassive) and/or in suffixal derivations. The mutations are from stem-final {*a ɔ*} to *ɛ*, and from stem-final *o* to *e* (§9.3.1), preserving ATR value.

This can, incidentally, be used as evidence that *a* is treated as ‑ATR. However, there is no constraint against combining a and {e o} within stems: *kārāndē* ‘tamarind’, *kāsò* ‘jail’, *kèbà* ‘marriage ceremony’.

### Diphthongs

Word-final rising diphthongs, i.e. sequences of low or mid-height vowel plus semivowel, are well-attested. Most involve final *wⁿ* after any vowel quality except *u* or *o*, e.g. *bílāwⁿ* ‘torch’, *pāàlɛ̄wⁿ*, ‘many’, *kɔ̀ɔ̀gɔ̀wⁿ* ‘five’, and *dībìwⁿ/dībì-nnà* ‘roast’. Others attested are *w*, *y*, and *yⁿ*, as in *sáw* ‘millet-based meal’, *tòy* ‘intelligence’, and *kāyⁿ* ‘work (n)’.

### Vocalic sound symbolism

I currently have no examples of vocalic sound symbolism in Jenaama parallel to those in some other languages of the zone, where vocalic mutations within verb stems and some adverbials correlate in some way with size or intensity.

## Segmental phonological rules

### Local consonant cluster processes

#### *l* → *d* and *l* → *w* (in independent pronouns)

Independent pronouns take the form pronominal plus *lɔ̀gɔ̀* in plural categoriesː *ē lɔ̀gɔ̀* ‘we’, *è lɔ̀gɔ̀* ‘they’, *āā lɔ̀gɔ̀* ‘you-Pl’. The singular pronouns are irregular: 1Sg *ŋ̀-dɔ́gɔ́*, 2Sg *ān-dɔ̀gɔ̀*, 3Sg *wɔ̀gɔ̀*. If we take *lɔ̀gɔ̀* to be basic, we need a rule *l* → *d* after a nasal for 1Sg and 2Sg, and a phonologically unmotivated *l* → *w*

for 3Sg.

There is no general *l* → *d* rule even after nasals. For example, *lɔ̄gū* ‘mouth’ has possessed forms including *ŋ̀ lɔ̄gū* ‘my mouth’ and *ān lɔ̄gū* ‘your-Sg mouth’.

#### *vv*-Contraction

Two vowels come together at boundaries only under limited conditions. Most examples involve a vocalic pronominal proclitic (1Pl *ē*, 2Sg *āⁿ*, 2Pl *āā*, 3Sg *à*, 3Pl *è* ) as the second element. These contract with other pronominals or with other words ending in a vowel (V1). When V1 and V2 contract, the result is a long vowel with the quality of V2. To some extent the tones of the inputs are respected, so that *v̀* plus *v̄* is realized as *v̀v̄* with rising tone, and *v̄* plus *v̀* is realized as *v̄v̀* with falling tone. However, in allegro speech there is some tendency to flatten contoured tones originating from such contractions.

### Local vowel-consonant interactions

#### Word-final *vⁿ* alternating with *vN*

There are alternations between word-final nasalized vowels and sequences of vowel plus nasal consonant, at word boundaries.

As an example of a word-final nasalized vowel, consider 2Sg pronominal clitic *āⁿ*. Although I normalize the transcription as *āⁿ*, and this pronunciation is normal in isolation and before s and semivowels (xx1a), before other consonants it is realized as [āⁿ] plus a homorganic nasal (xx1b-e).

(xx1) a. phonetic [āⁿ]

*āⁿ sèwⁿ* / *wɔ̀bɔ̀* / *yàbà*

2SgPoss road / disease / guinea.fowl

‘your-Sg road/disease/guinea-fowl’

b. phonetic [āⁿn]

*āⁿ lɔ̄gū* / *tòy* / *dàgà* / *nɔ̀gù*

2SgPoss mouth / intelligence / totem / village

‘your-Sg mouth/intelligence/totem/village’

c. phonetic [āⁿɲ]

*āⁿ jūgū* / *cɔ̄llɔ̀* / *ɲīnā*

2SgPoss medicine / dust / mouse

‘your-Sg medicine/dust/mouse’

(usually written *ān* …)

d. phonetic [āⁿm]

*āⁿ bārmā* / *pòwⁿ* / *mùlè*

2SgPoss modern.pot / wife / sugarcane

‘your-Sg pot/wife/sugarcane’

e. phonetic [āⁿŋ]

*āⁿ kèw* / *gàlà*

2SgPoss uncle / indigo

‘your-Sg (maternal) uncle/indigo’

The same alternations occur with *ŋ́=nàⁿ*, the combination of 1Sg subject *ŋ́* and its allomorph of the bidirectional case morpheme. Disregard for present purposes the application of Final Tone-Raising before L-tone. Again I normalize the bidirectional morpheme as *nàⁿ* ~ *nāⁿ*.

(xx2) a. pronounced [nāⁿ]

*ŋ́ =nāⁿ sèēⁿ* / *wɔ̀bɔ̄* / *yàbā kày*

1SgSbj Sbj/Obj road / disease / guinea.fowl see.Pfv

‘I saw the road/disease/guinea-fowl.’

b. pronounced [nàⁿn] or [nāⁿn]

*ŋ́ =nàⁿ lɔ̄gū kày*

*=nāⁿ tòȳ* / *dàgā* / *nɔ̀gū kày*

1SgSbj Sbj/Obj mouth / intelligence / totem / village see.Pfv

‘I saw the mouth/intelligence/totem/village.’

c. pronounced [nàⁿɲ]

*ŋ́ =nàⁿ jūgū* / *cɔ̄llɔ̀* / *ɲīnā kày*

1SgSbj Sbj/Obj medicine / dust / mouse see.Pfv

‘I saw the medicine/dust/mouse.’

d. pronounced [nàⁿm] or [nāⁿm]

*ŋ́ =nàⁿ bārmā kày*

*=nāⁿ pòwⁿ* / *mùlè kày*

1SgSbj Sbj/Obj modern.pot / wife / sugarcane see.Pfv

‘I saw the pot/wife/sugarcane.’

e. pronounced [nāⁿŋ]

*ŋ́ =nāⁿ kɯ̀lɯ̀* / *gàlà kày*

1SgSbj Sbj/Obj baobab / indigo see.Pfv

‘I saw the baobab/indigo.’

Neither 2Sg *āⁿ* nor 1Sg bidirectional *ŋ́=nāⁿ* occurs prepausally or in isolation (except artificially).

Many noun, verb, and other stems have similar alternations. Unlike the grammatical morphemes described above, these stems do occur prepausally. In this position they show the nasalized vowel with no final nasal consonant. (xx3) lists noun stems ending in nasalized vowels.

(xx3) Nouns with final nasalized vowel

a. *Cvvⁿ* with nonnasal *C*

*sááⁿ* ‘wild grape tree’ or ‘thorn-branch fence’

*sàáⁿ* ‘well bag’

*sààⁿ* ‘honey’

*jááⁿ* ‘fishhook’

*jīīⁿ* ‘year’

*cííⁿ* ‘trunk (of tree)’

*kūūⁿ* ‘boat’

*sɔ̄ɔ̄ⁿ* ‘needle’

*sūūⁿ* ‘fly (insect)’

*pīīⁿ* ‘grain(s)’ or ‘millet’

*tùùⁿ* ‘body’

*pāāⁿ* ‘mound (in field)’

*wāāⁿ* ‘okra’

b. nonmonosyllabic ending in *…Cvvⁿ* with nonnasal *C*

*sírāāⁿ* ‘tobacco plant’

*súbāāⁿ* ‘morning’

*tègèncííⁿ* ‘forehead’

*ɲāmāŋ-kūùⁿ* ‘ginger’

*bànàŋ-kūùⁿ* ‘cassava’

*kɔ̀n-kūūⁿ* ‘vulture’

c. *Nvvⁿ* with nasal consonant *N*

*mùùⁿ* ‘cold (n)’

*nùùⁿ* ‘belly’

*ɲīīⁿ* ‘tooth’

d. nonmonosyllabic ending in *…Nvvⁿ* with nasal consonant *N*

*jáŋāāⁿ* ‘shelter’

*kànààⁿ* ‘friend’

*kūlāàⁿ* ‘hip’

*síbɛ́ⁿ-nūūⁿ* ‘week’

*súmāāⁿ* ‘waterskin’

*ǹdūɲāāⁿ* ‘world’

e. nonmonosyllabic ending in *…Nvⁿ* (alphabetized by final nasal *N*)

*sūmūⁿ* ‘visitor’

*jénāⁿ* ‘child’

*kɔ̀ɲɔ́ⁿ* ‘slave’

*mùɲúⁿ* ‘harvested millet heap’

*sɔ̄ŋɔ̄ⁿ* ‘the bush (outback)’

*sùŋɔ́ⁿ* ‘crocodile’

f. nonmonosyllabic ending in *…Cvⁿ* (alphabetized by final nonnasal *C*)

*kābōⁿ* ‘shoes’

*jàmbóⁿ* ‘grasshopper’

*dòn-dóⁿ* ‘hourglass-shaped tomtom’

*ɲōgōⁿ* ‘soul’

*súgūⁿ* ‘harvested rice heap’

*yùgòⁿ* ‘woman’

*tàà-jūgōⁿ* ‘grandmother’

*wùjúⁿ* ‘giant pouched rat’

*tùwɔ̀-kɔ́lɔ́ⁿ* ‘testicle’

*kéléⁿ-kālāⁿ* ‘forked stick’

*kānā-kòlóⁿ* ‘throat (external)’

*sɔ̄ŋɔ̄m-būlōⁿ* ‘forest’

*tùwɔ̄-bùlòⁿ* ‘elephant’

*wōlōⁿ-wōlōⁿ* ‘bell’

*wòtōròⁿ* ‘cart’

*gùrū-gùsúⁿ* ‘porcupine’

*bōŋgūsɔ̄ⁿ* ‘malevolent object’

*sɔ̀ⁿ-sɔ̀ⁿ* ‘sand’

*búwōⁿ* ‘mortar’

*būwōⁿ* ‘horn’

*dūwōⁿ* ‘hunger’

*dùwóⁿ* ‘cheek’

*kàlàmàntùwɔ́ⁿ* ‘giant millipede’

*kààⁿ-kúwɔ́ⁿ* ‘crow’

*kūwɔ̄ⁿ* ‘bone’

*kùwōⁿ* ‘flank’

*kúwɔ̄ⁿ* ‘husband’

*pùwóⁿ* ‘water lily’

*pàām-pùwóⁿ* ‘sesame’

*pùlèŋ-kūwōⁿ* ‘laughing dove’

*cīyɛ̀ⁿ* ‘gathering, assembly’

*síyɛ̄ⁿ* ‘sorghum grains’

*tìyòⁿ* ‘ax’

Many other noun stems have a subphonemically nasalized final vowel that is simply the phonetic carry-over from a nasal or nasalized consonant (xx4). These stems do not have variants with final assimilated nasal consonant.

(xx4) Nouns with unnasalized vowel after nasal consonant *N*

a. monosyllabic *Nvv*

*nàà* ‘cow’

b. nonmonosyllabic ending in *…Nvv*

*kàmāà* ‘tale’

*sānāā* ‘gazelle’

c. nonmonosyllabic ending in *…yⁿv* (see §3.2.9 for discussion)

*mīyⁿɛ̄*  ‘flea’

*ɲīyⁿɛ̀* ‘pity (n)’

d. nonmonosyllabic ending in *…Nv* with nasal *N* (alphabetized by this *N*)

*nùmà* ‘rope’

*kùmù* ‘sleep (n)’

*sɔ̀mɔ́* ‘pick-hoe’

*tímī* ‘odor’

*tìmì* ‘rock python’

*ɲīmī* ‘person’

*sɔ̀mɔ̀* ‘louse’

*kāmà* ‘reason’

*kɔ̀mɔ́* ‘sickle’

*kìtɔ́mɔ́* ‘conical hat’

*mànàmì* ‘dance (n)’

*ɲōòmɔ́* ‘camel’

*ɲàmà-ɲāmā* ‘trash’

*kààmà* ‘lie (n), untruth’

*síí-mā* ʽsort (n), kind’

*kūlāàⁿ-nùmà* ‘belt’

*sīrāān-dūmà* ‘snuff tobacco’

*māynī* ‘disaster’

*ságánī* ‘bunch (unit of sale)’

*bànà* (~ *bàndà* ) ‘fatigue’

*bànù* ‘pestle’

*kānà* ‘throat’

*kānū* ‘breast’ or ‘gold’

*bɔ̀nɛ̀* ‘trouble’

*kɔ̄nɔ̄* ‘lungfish’

*ɲīnā* ‘mouse’

*tɔ̀ŋɔ̀nɔ̀* ‘truth’

*tùjūnù* ‘pigeon’

*kùwōnì* ‘settled area’

*ɲīmīnà* ‘nose’

*tɔ́ŋkɔ́nɔ̄* ‘duck’

*bāànā* ‘way, manner’

*wùù-tīnā* ‘night’

*kùgū-tàànà* ‘afternoon’

*ʃèètāānà* ‘devil’

*kàɲá* ‘calabsh saw’

*ɲāāɲì* ‘face’ (dialectal)

*kɔ̀nù-ɲɔ̄ŋɔ̄* ‘owl’

*sìbò-ɲɔ̄ŋɔ̄* ‘pig’

*nìŋīì* ‘interior’

Similar data from adjectives ae in (xx5).

(xx5) Adjectives

a. final nasalized vowel

*after nasal or nasalized consonant*

*dēmōⁿ* ‘sweet’

*tīnāāⁿ* ‘other’

*after other consonant*

*dāāⁿ* ‘distant’

*kɔ̄jāⁿ* ~ *kɔ̄yāⁿ* ‘long’

*pīīⁿ* ‘black’

b. unnasalized final vowel

*after nasal consonant*

*bīllà-nà* ‘narrow, tight’ (and others with suffix *-na* )

*bánū* ‘thick’

*ɲīī-ɲīī* ‘coarse’

*ɲɔ̄ŋɔ̄* ‘bad, nasty’

#### Final *wⁿ* alternating with nasal consonant

Dozens of stems end in a syllable that is pronounced *Cvwⁿ* prepausally (e.g. clause-finally or in isolation). For verbs, this form is limited to the perfective stem. All vowel qualities may precede the *wⁿ*, though *a* and *ɛ* are especially common. After a back rounded vowel, the labialization may be faint, but the nasality is clear. Some examples are in (xx1).

(xx1) a. non-verbs

*mɛ̀wⁿ* ‘iron, metal’

*nàwⁿ* ‘mother’

*pòwⁿ* ‘wife’ or ‘tomtom’

*sébēwⁿ* ‘amulet’

*bíyɛ̄wⁿ* ‘egg’

*dàràmà-yīwⁿ* ‘maize’

*sūmūwⁿ* ‘foreign’

*sìkèẁⁿ* ‘three’

b. verbs (perfective only)

*bāwⁿ* ‘shave’ (Pfv)

*bēwⁿ* ‘go back’ (Pfv)

*kɛ̄wⁿ* ‘snap, break’ (Pfv)

*síwⁿ* ‘bite’ (Pfv)

*pīyɛ̄wⁿ* ‘get hot’ (Pfv)

There are only a handful of stems ending in *yⁿ*, including verb *māyⁿ/māỳⁿ* ‘malfunction’ and noun *kāyⁿ* ‘work’. The numerical asymmetry between final *wⁿ* and final *yⁿ*, along with the absence of word-final nasals, suggests a diachronic hypothesis: most examples of final *wⁿ* reflect original final nasal consonants, including \*ŋ and perhaps \*m and \*n.

### Apocope (final u)

Word-final mu in words of two or more syllables can reduce to [mm] or just m (§3.2.1).

## Cliticization

There are no moveable, e.g. second-position, clitics.

In the absence of a weight-sensitive accentual system, cliticization is of little phonological as opposed to morphosyntactic importance. This is especially the case with proclisis.

Pronouns have full independent forms, and proclitic forms that occur before verbs (as subjects or objects), before nouns (as possessors), and before postpositions. Some of the independent pronouns can be segmented into a proclitic and a noun-like stem. For example, 1Pl is independent *ē‑lɔ̀gɔ̀* or proclitic *ē*. The only significant phonological interaction of proclitics with following stems is that 1Sg allomorph *ŋ̀* (+H) causes a following L-tone to raise to H, as in *nàà* ‘cow’, *ŋ̀ náá* ‘my cow’. This allomorph occurs in object, possessor, and pre-postposition functions, but not in subject function.

Other candidates for proclisis are prenominal demonstratives like *kɔ̀ⁿ* ‘this, that’, which do not occur in the same form without a following noun, and which induce tonal changes on the noun.

Enclisis, on the other hand, is not sharply distinguishable from suffixation. Candidates for the status of enclitics include plural *‑ye* and demonstrative *gu* in NPs, and *nì* ‘it is’ following a predicate NP or participle. *‑ye* and *gu* acquire their tones by spreading from the preceding stem. *‑ye* often contracts with a preceding vowel to form a long vowel, especially in longer stems, e.g. *bǎn-bànú* ‘shrub sp.’, plural *bǎn-bàné‑è* varying with *bǎn-bànú‑yè. nì* ‘it is’ is a good candidate for enclitic status, since a pronoun must take independent rather than proclitic form before it: *ē-lɔ̀gɔ̀ nì* ‘it’s us’.

## Tones

There are three tone levels, represented here as H[igh], M[id], and L[ow]. Two lexical minimal triplets are (xx1a-b).

(xx1) a. *sɔ́gɔ̄* ‘milk’

*sɔ̄gɔ̄* ‘day’ (unit)

*sɔ̀gɔ̀* ‘sheep’ (often in diminutive form *sɔ̀gɔ̀-lɛ̄wⁿ* )

b. *búwɔ̄* ‘mound (in field)’

*būwɔ̄* ‘line (drawn)’

*bùwɔ̀* ‘agemate’

### Lexical tone melodies

#### Lexical tone melodies of verbs

The best bet for a lexical tone melody of verbs is the perfective. In nearly all cases, the imperfective can be predicted from the perfective. The small number of monomoraic *Cv* verbs have the same tones in both aspects. Most other stems that do not have an imperfective suffix are either all-M in the perfective becoming ML in the imperfective, or all-L in the perfective becoming LM in the imperfective. There are also some ML-toned stems that have the same form in both aspects, and a few minor patterns.

#### Summary of lexical tone melodies for noun stems

Attested tone melodies for simple noun stems (i.e. excluding those that are transparently composite or that are treated phonologically as composite) are those in (xx1).

(xx1) a. monosyllabic (*Cvv*, *CvC, CCvv*)

/H/, /M/, /L/, /ML/ (loanwords)

b. light bisyllabic (*CvCv*, *CvNCv*)

/H/, /M/, /L/, /LH/, /ML/

c. bisyllabic with heavy initial syllable (*CvvCv*, *CvvNCv*, *CvCCv* except *CvNCv*)

/H/, /M/, /L/, /LH/, /ML/, /MLH/

d. bisyllabic with heavy final syllable (e.g. *CvCvv*, *CvCvC*)

/H/, /M/, /L/, /LH/, /ML/, /LML/

e. trisyllabic (e.g. *CvCvCv*)

/H/, /M/, /L/, /LH\*/, /L\*H/, /LMH/, /LML/, /MLH/

Before giving examples of each type in §3.7.1.4, it is necessary to explain why no /(…)LM/ or /LHL/ melodies are recognized.

#### …LH… versus …LM… in nominal tone melodies

There is no opposition between …LH… and …LM… either initially or finally within uncompounded noun stems. I transcribe the relevant nouns as …LH stem-finally (hence /LH/, /MLH/), and as LM… stem-initially (/LML/, /LMH/). The absence of contrasts between H and M in the same noninitial positions makes these transcriptions tricky. It also allows speakers to be less precise in articulation than would be the case if there were oppositions.

The best evidence that *yòrōgó* ‘cat’, and other nouns with final rising tone patterns (such as *mākàrí* ‘macari spice’), end in H rather than M is their plurals. These have L‑toned plural suffix *‑yè*, reliably in clause-medial position and often in citation forms (xx1a). *‑yè* also occurs under the same conditions after H‑toned nouns (xx1b). By contrast, M‑toned nouns consistently have M‑toned suffix *-yē* (xx1c). See §xxx for more examples. The most straightforward analysis of these facts is that the plural suffix is basically *‑yè* but assimilates to a preceding M.

(xx1) a. *yòrōgó-yè* ‘cats’

b. *kúŋgóló-yè* ‘dogs’

c. *sūgō-yē* ‘goats’

If on the other hand we were to take nouns like ‘cat’ as ending in M rather than H, we would then need a complex and phonetically unmotivated rule for the tones of the plural suffix, resulting in L-toned *‑yè* after LM as well as after H (and L), versus *‑yē* after M not preceded by L.

Possible (but in the end false) counterevidence comes from noun-verb sequences. In (xx2) below, LMH-toned *yòrōgó* ‘cat’, H-toned *kúŋgóló* ‘dog’, and M-toned *sūgō* ‘goat’ are each followed by *bē* ‘came’ and another word. In all three, the final syllable of the noun is level-pitched with ‘came’. Since the *gó* of ‘cat’ and *bē* form a level-pitched terrace (xx2a), this might be taken as evidence that the final syllable of ‘cat’ is really M-toned *gō*. However, *bē* (and other M-toned verbs) also rises to *bé* after H-toned ‘dog’ (xx2b). This is accounted for by a tone-spreading rule of the form H#M to H#H, which also applies in noun-postposition combinations (§3.xxx). My conclusion is that this process has applied to ‘cat’ in (xx2a) as well as to ‘dog’ in (xx2b). The level pitch in *yòrōgó bé* is due a change in the tones of the verb, not to the lexical melody of the noun.

(xx2) a. *yòrōgó bé wày*

cat come.Pfv today

‘The cat came today.’

b. *kúŋgóló bé wày*

dog come.Pfv today

‘The dog came today.’

c. *sūgō bē wày*

goat come.Pfv today

‘The goat came today.’

Overall the preponderance of evidence points to *yòrōgó* rather than #*yòrògō* for ‘cat’, and so forth for other nouns ending in a rising tone sequence.

The next issue is why recognize LM… rather than LH… at the beginning of /LML/ and /LMH/ nouns. Beginning with the latter, *màlīfá* ‘rifle’ (ultimately < Arabic) and similar words (e.g. *gàrībú* ‘child beggar’, *mùrāārú* ‘need [n]’) are most often pronounced with stepwise rising pitch, as the transcription indicates. In a language with three tone levels, this must be transcribed as L.M.H. However, there is a twist here that might make /LMH/ irrelevant to /LML/, namely that L.M.H may simply be the phonetic implementation of /L\*H/. Such nouns combine with 1Sg possessor *ŋ̀* (+H) as *ŋ̀ málìfá* ‘my rifle’, *ŋ̀ múrààrú* ‘my need’, and so forth with H.L.H tones.

More common is the /LML/ melody. In the absence of an opposition between /LML/ and /LHL/, evidence for medial M comes from tone sandhi applying to nouns like *kìrìkēè* ‘saddle’. When this noun is followed by an L‑toned syllable, it flattens to *kìrìkēē*, as in (xx3). This permits direct comparison with the pitch of M-toned *tēē* ‘meat’ versus H-toned *déé* ‘cotton’ in the same frame (xx3b). It is clear both to me and to my assistant that the final pitch of ‘saddle’ in (xx3a) matches the M-tone of ‘meat’ rather than the H-tone of ‘cotton’ in (xx3b).

(xx3) a. *kìrìkēē tè bē wày*

saddle PfvNeg come.Pfv today

‘The saddle didn’t come today.’

b. *tēē* / *déé tè bē wày*

meat / cotton PfvNeg come.Pfv today

‘The meat/cotton didn’t come today.’

#### Examples of tonal melodies of nouns

The arrays presented below include the simple singular, the suffixed plural, and both singular and plural with 1Sg possessor. Nouns with flat /H/ melody are shown with plural -yē, as usually heard in isolation, but in clause-medial position this drops to *-yè*. Nouns with /(M)LH/ melody are shown with *-yè*, as often heard in isolation as well as clause-medially, but isolation pronunciations with *‑yē* have also been noted.

Monosyllabic nouns are in (xx1). The productive melodies are monotonal /H/, /M/, and /L/. The contoured melody /ML/ is rare in monosyllabics and may be limited to loanwords.

All tone melodies are distinguished in the simple singular. There is a syncretism between /H/ and /L/ in the ‘my’ singular form since /L/ shifts to H after 1Sg *ŋ̀* (+H) with floating H-tone. The noun *sàáⁿ* ‘waterbag lowered into well’ (French *puisette*) is pronounced with a slight hiatus and I consider it to be bisyllabic, see (xx3) below.

(xx1) Sg Pl ‘my’ (Sg) ‘my’(Pl) gloss

/H/ *déé déé-yē ŋ̀ déé* *ŋ̀ déé-yē* ‘cotton’

*jááⁿ jááⁿ-yē ŋ̀ jááⁿ* *ŋ̀ jááⁿ-yē* ‘fishhook’

/M/ *kūūⁿ kūûⁿ-yē ŋ̀ kūūⁿ* *ŋ̀ kūūⁿ-yē* ‘boat’

*tēē tēē-yē ŋ̀ tēē ŋ̀ tēē-yē* ‘meat’

*kāyⁿ kāyⁿ-yē ŋ̀ kāyⁿ ŋ̀ kāyⁿ-yē* ‘work’

/L/ *dɔ̀ɔ̀ dɔ̄ɔ̀-yè ŋ̀ dɔ́ɔ́ ŋ̀ dɔ́ɔ́-yē* ‘knife’

*nàà nāà-yè ŋ̀ náá ŋ̀ náá-yē* ‘cow’

*kwààⁿ kwāàⁿ-yè ŋ̀ kwááⁿ ŋ̀ kwááⁿ-yē* ‘rain (n)’

*nàwⁿ nāỳⁿ-yè ŋ̀ náwⁿ ŋ̀ náyⁿ-yē* ‘mother’

*tòy* *tòy-yè* *ŋ̀ tóy* *ŋ̀ tóy-yē* ‘intelligence’

*kèw* *kèw-yè* *ŋ̀ kéw* *ŋ̀ kéw-yē* ‘maternal uncle’

/ML/ (loanwords)

*tēè tēè-yè ŋ̀ tēè ŋ̀ tēè-yè* ‘tea’

*sīì sīì-yè ŋ̀ sīì ŋ̀ sīì-yè* ‘saw (n)’

L-toned *Cvv* stems like *nàà* ‘cow’ undergo Final Tone-Raising before a word beginning with L‑tone (xx2).

(xx2) *nàā tè bē wày*

cow PfvNeg come.Pfv today

‘The cow didn’t come today.’

Examples of light bisyllabic stems are in (xx3). /H/ is realized as H.M prepausally, as in our citation forms. These nouns are either *CvCv* or *CvNCv* with homorganic nasal and voiced stop medially. *sàáⁿ* ‘well-bag’ patterns as bisyllabic and belongs here. I tentatively include *cɔ̄llɔ̀* ‘dust’ here. The plural suffix is usually *-yē* after /H/ melody nouns in isolation, but this drops to *‑yè* clause-medially. The floating H of 1Sg *ŋ̀* (+H) extends over both syllables of /L/ melody nouns, merging them with /H/ melody nouns.

(xx3) Sg Pl ‘my’ (Sg) ‘my’(Pl) gloss

/H/ *gándā gándá-yē ŋ̀ gándā ŋ̀ gándá-yē* ‘country’

*kégū kégú-yē ŋ̀ kégū ŋ̀ kégú-yē* ‘cream of millet with milk’

*búwōⁿ búwóⁿ-yē ŋ̀ búwōⁿ ŋ̀ búwóⁿ-yē* ‘mortar’

/M/ *bōgū bōgū-yē ŋ̀ bōgū ŋ̀ bōgū-yē* ‘zaban (fruit)’ or ‘middle’

*lɔ̄gū lɔ̄gū-yē ŋ̀ lɔ̄gū ŋ̀ lɔ̄gū-yē* ‘mouth’

*dūwōⁿ dūwōⁿ-yē ŋ̀ dūwɔ̄ⁿ ŋ̀ dūwōⁿ-yē* ‘hunger’

*nāndō nāndō-yē ŋ̀ nāndō ŋ̀ nāndō-yē* ‘scorpion’

/L/ *kìyɛ̀ kìyɛ̀-yè ŋ̀ kíyɛ̄ ŋ̀ kíyɛ́-yē* ‘stick’

*sɔ̀gù sɔ̀gù-yè ŋ̀ sɔ́gū ŋ̀ sɔ́gú-yē* ‘grass’

*dàmbà dàmbà-yè ŋ̀ dámbā ŋ̀ dámbá-yē* ‘daba’

*sɔ̀ŋgɔ̀ sɔ̀ŋgɔ̀-yè ŋ̀ sɔ́ŋgɔ̄ ŋ̀ sɔ́ŋgɔ́-yē* ‘price’

/LH/ *sàbá sàbá-yè ŋ̀ sâbá ŋ̀ sâbá-yè* ‘chicken’

*bɛ̀bɛ́ bɛ̀bɛ́-yè ŋ̀ bɛ̂bɛ́ ŋ̀ bɛ̂bɛ́-yè* ‘mud brick’

*sàⁿáⁿ* *sàⁿáⁿ-yè* *ŋ̀ sâⁿáⁿ* *ŋ̀ sâⁿáⁿ-yè* ‘well-bag’ (*puisette*)

*wùjúⁿ wùjúⁿ-yè ŋ̀ wûjúⁿ ŋ̀ wûjúⁿ-yè* ‘pouched rat’

*tèndé tèndé-yè ŋ̀ têndé ŋ́ têndé-yè* ‘well (n)’

*jàmbóⁿ jàmbóⁿ-yè ŋ̀ jâmbóⁿ ŋ̀ jâmbóⁿ-yè* ‘grasshopper’

*kàmbá kàmbá-yè ŋ̀ kâmbá ŋ̀ kâmbá-yè* ‘side of face’

/ML/ (mostly loanwords)

*mɔ̄lì mɔ̄lì-yè ŋ̀ mɔ̄lì ŋ̀ mɔ̄lì-yè* ‘holy man’

*ālà ālà-yè ŋ̀ ʔālà ŋ̀ ʔālà-yè* ‘God’

*kɔ̄rɔ̀ kɔ̄rɔ̀-yè ŋ̀ kɔ̄rɔ̀ ŋ̀ kɔ̄rɔ̀-yè* ‘meaning’

*cɔ̄llɔ̀ cɔ̄llɔ̀-yè ŋ̀ cɔ̄llɔ̀ ŋ̀ cɔ̄llɔ̀-yè* ‘dust’

Examples of bisyllabics with heavy first syllables are in (xx4). The /L/ melody nouns of this weight category allow the floating H of 1Sg *ŋ̀* (+H) to extend only over the first syllable.

(xx4) Sg Pl ‘my’ (Sg) ‘my’(Pl) gloss

/H/ *báásī báásí-yè ŋ̀ báásī ŋ̀ báásí-yē* ‘war’

*káádō káádó-yè ŋ̀ káádō ŋ̀ káádó-yè* ‘Dogon’

/M/ *bārmā bārmā-yē ŋ̀ bārmā ŋ̀ bārmā-yē* ‘pot’

*māynī māynī-yē ŋ̀ māynī ŋ̀ māynī-yē* ‘catastrophe’

*tāānā tāānā-yē ŋ̀ tāānā ŋ̀ tāānā-yē* ‘crazy person’

/L/ *tààpè tààpè-yè ŋ̀ táápè ŋ̀ táápè-yè* ‘wrap (n)’

*kùŋkù kùŋkù-yè ŋ̀ kúŋkù ŋ̀ kúŋkù-yè* ‘trouble’

*kùygù kùygù-yè ŋ̀ kúygù ŋ̀ kúygù-yè* ‘blacksmith’

/LH/ *kàànú kàànú-yè ŋ̀ káànú ŋ̀ káànú-yè* ‘calabash’

/ML/ (loanwords)

*sāākù sāākù-yè ŋ̀ sāākù ŋ̀ sāākù-yè* ‘sack’

*hɔ̄ɔ̄là hɔ̄ɔ̄là-yè ŋ̀ hɔ̄ɔ̄là ŋ̀ hɔ̄ɔ̄là-yè* ‘trust (n)’

/MLH/

*bāàná bāàná-yè ŋ̀ bāàná ŋ̀ bāàná-yè* ‘manner’

*ɲōòmɔ́ ɲōòmɔ́-yè ŋ̀ ɲōòmɔ́ ŋ̀ ɲōòmɔ́-yè* ‘camel’

Bisyllabic stems with heavy final syllables are in (xx5).

(xx5) Sg Pl ‘my’ (Sg) ‘my’(Pl) gloss

/H/ *bíyⁿɛ̄wⁿ bíyⁿɛ́w-yè ŋ̀ bíyⁿɛ̄wⁿ ŋ̀ bíyⁿɛ́wⁿ-yè* ‘egg’

*kíbāwⁿ kíbáyⁿ-yè ŋ̀ kíbāwⁿ ŋ̀ kíbáyⁿ-yè* ‘door’

/M/ *gīlɛ̄wⁿ gīlɛ̄ⁿ-yē ŋ̀ gīlɛ̄wⁿ ŋ̀ gīlɛ̄ⁿ-yē* ‘thirst’

/L/ *kànàà kànàà-yè ŋ̀ kánàà ŋ̀ kánàà-yè* ‘friend’

/ML/ *ɲīŋàwⁿ ɲīŋà-yè ŋ̀ ɲīŋàwⁿ ŋ̀ ɲīŋà-yè* ‘face’

*pārày pārà-yè ŋ̀ pārày ŋ̀ pārà-yè* ‘exterior’

/LH/ *kɔ̀béwⁿ kɔ̀béⁿ-yè ŋ̀ kɔ̂béwⁿ ŋ̀ kɔ̂béⁿ-yè* ‘fingernail’

*kɔ̀yɔ́wⁿ kɔ̀yɔ́ⁿ-yè ŋ̀ kɔ̂yɔ́wⁿ ŋ̀ kɔ̂yɔ́wⁿ-yè* ‘stone’

/LML/ *kèbāà kèbāà-yè ŋ̀ kêbāà ŋ̀ kêbāà-yè* ‘flint lighter’

*nìŋīì nìŋīì -yè ŋ̀ nîŋīì ŋ̀ nîŋīì-yè* ‘interior’

*nànāa nànāà-yè ŋ̀ nânāà ŋ̀ nânāà-yè* ‘mint’

Trisyllabic shapes are in (xx6). The most difficult to analyse are the trimoraic CvCvCv nouns shown under /LMH/ ~ /L\*H/. The unsuffixed isolation form, e.g. *màlīfá* ‘rifle’, is normally pronounced with a stepwise pitch increase (LMH). However, it may be that this is just a phonetic realization process superimposed on phonological L\*H (in this case LLH). I hear the 1Sg possessed forms as HLH, e.g. *ŋ̀ málìfá* ‘my rifle’. In the clearly L\*H noun *tɔ̀sìbíí* ‘rosary, prayer beads’, the final syllable has a long vowel, and there is no stepwise pitch increase.

(xx6) Sg Pl ‘my’ (Sg) ‘my’(Pl) gloss

/H/ *ɲárágō ɲárágó-yè ŋ̀ ɲárágō ŋ̀ ɲárágó-yè* ‘calabash cover’

*wágátū wágátú-yè ŋ̀ wágátū ŋ̀ wágátú-yè* ‘time’

*tímɔ́gɔ̄ tímɔ́gɔ́-yè ŋ̀ tímɔ́gɔ̄ ŋ̀ tímɔ́gɔ́-yè* ‘hearth’

/M/ *wārābā wārābā-yē ŋ̀ wārābā ŋ̀ wārābā-yē* ‘lion’

/L/ *tɔ̀ŋɔ̀nɔ̀ tɔ̀ŋɔ̀nɔ̀-yè ŋ̀ tɔ́ŋɔ̀nɔ̀ ŋ̀ tɔ́ŋɔ̀nɔ̀-yè* ‘truth’

*kàmàrì kàmàrì-yè ŋ̀ kámàrì ŋ̀ kámàrì-yè* ‘reason’

/L\*H/ *tɔ̀sìbíí tɔ̀sìbíí-yē ŋ̀ tɔ́sìbíí ŋ̀ tɔ́sìbíí-yē* ‘rosary’

/LMH/ ~ /L\*H/

*yòrōgó yòrōgó-yè ŋ̀ yórògó ŋ̀ yórògó-yè* ‘cat’

*jàmānáⁿ jàmānáⁿ-yè ŋ̀ jámànáⁿ ŋ̀ jámànáⁿ-yè* ‘time period’

*màlīfá màlīfá-yè ŋ̀ málìfá ŋ̀ málìfá-yè* ‘rifle’

/LH\*/ *bùkúrú bùkúrú-yē ŋ̀ bûkúrú ŋ̀ bûkúrú -yē* ‘buttock’

*mìsírí mìsírí-yē ŋ̀ mîsírí ŋ̀ mîsírí-yē* ‘mosque’

/M\*L/ *ɲīmīnà ɲīmīnà-yè ŋ̀ ɲīmīnà ŋ̀ ɲīmīnà-yè* ‘nose’

*sūkɔ̄rɔ̀ sūkɔ̄rɔ̀-yè ŋ̀ sūkɔ̄rɔ̀ ŋ̀ sūkɔ̄rɔ̀-yè* ‘sugar’

/LML/ *mòbōlì mòbōlì-yè ŋ̀ môbōlì ŋ̀ môbōlì-yè* ‘vehicle’

*tùjūnù tùjūnù-yè ŋ̀ tûjūnù ŋ̀ tûjūnù-yè ‘*pigeon’

*kìrìkēè kìrìkēè-yè ŋ̀ kírìkēè ŋ̀ kírìkēè-yè* ‘saddle’

/MLH/ *mākàrí mākàrí-yè ŋ̀ mákàrí ŋ̀ mākàrí-yè* ‘macari spice’

#### Lexical tone patterns for adjectives and numerals

#### Tone-Component location for bitonal non-verb stems

Uncompounded bitonal noun stems have falling /ML/ or rising /LH/ melodies. Tone breaks are positioned as far to the right as possible for /ML/, but the situation of /LH/ is mixed.

/ML/ melody is realized with the L‑tone on the final syllable or mora.

(xx1) kūù ‘yam’

jām̀ ‘well-being’

hūyà ‘courage’

bārkè ‘being blesse’

būūrù ‘bread (baguette)’

bāsīlà ‘tree sp.’ (*Anogeissus*)

tūbālāājì ‘traditional pants’

/LH/ melody in the broad sense includes LH\* (e.g. trisyllabic L.H.H), L\*H (e.g. trisyllabic L.L.H) and a trisyllabic type realized as L.M.H. An argument can be made that L.M.H is just the phnetic realization of L\*H for trisyllabics too light prosodically to pattern as compounds (CvCvCv, CvCvvCv), while overt L\*H is limited to heavier stems (CvvCvCv, CvCvCvCv). The situation is complicated by the existence of compounds. An /L/ stem can be followed by a compound final of melody /H/ or /M/, creating such syllable sequnces as L.L.H.H and L.L.M(.M). It is best to analyse these as /L/-/H/ and /L/-/M/ compounds, rather than based on their syllable-by-syllable tone sequence. The final as well as the initial may have more than one syllable. Stems of four or more moras, including CvvCvCv and CvCvCvCv, tend to behave prosodically like compounds (Cvv-CvCv, CvCv-CvCv ) even when the components are not identifiable. By contrast, CvCvvCv doesn’t parse easily as a compound. NC clusters are treated like simple consonants in this heaviness calculation.

(xx2) a. LH

wàláⁿ ‘tablet (for koranic pupil)’

wàŋgé ‘hare’

yàbááⁿ ‘henna’

gɛ̀ɛ̀nɛ́ ‘sweet peanut-millet balls’

b. LH\*

kààpírí ‘nonbeliever’

kàsíní ‘succulent plant spp.’ (*Caralluma*, *Desmidorchis*)

c. LMH

dèŋgēlé ‘kneading stick’

dèrēndé ‘burrgrass’

dɔ̀lūmbé ‘ring (on finger)’

kɔ̀rɔ̄ɔ̄gɔ́ ‘trimming hatchet’

d. L\*H

lààràbú ‘Arab (person)’

kùrùwáá ‘rope attaching donkey saddle’

wɔ̀kùlɔ̀níí ‘evil dwarf’

kàlàmàntùŋɔ́ ‘giant millipede’

d. /L/-/H/ compounds, and heavy stems treated as compounds)

dèsè-káá ‘petiole of borassus palm’

kɔ̀nù-kúⁿ ‘vulture’

sàbàn-jéwⁿ ‘koranic school pupil’

ɲìyɛ̀ŋ-kúrú ‘fontanel’

e. /L/-/M/ compounds

kùwɔ̀-sɔ̄ⁿ ‘grass sp.’ (*Enteropogon*)

kɯ̀lɯ̀n-dūū ‘baobab fruit pith’

To the extent that /L/-/H/ compounds become opaque, especially those of just three moras like kɔ̀nù-kúⁿ in (xx2d), they risk being categorized as L.L.H, creating a new opposition between L.L.H and L.M.H.

#### Tone-Component location for tritonal non-verb stems

Tritonal noun stems have /LML/ and /MLH/ melodies. Most of them are trisyllabic, with one tone per syllable, or else bisyllabic ending in a heavy syllable. However, /LML/ is realized as L.L.M.L on a few uncompounded quadrisyllabics, so the correct formula is L\*ML. All known examples of /MLH/ are trisyllabic.

(xx1) a. L\*ML

nànāà ‘mint’

pààlɛ̄ỳ ‘cliffs area’

lèmūrù ‘orange (citrus)’

lààsārà ‘4PM Muslim prayer’

ʃèètāānà ‘devil (djinn)’

làmbāānà ‘mule’

*quadrisyllabic*

làtìkɔ̄rɔ̀ ‘perfume’

màgàsālà ‘cucumber-like melon’

àlìkāmà ‘wheat (flour)’

gìrìpēè ‘grafted fruit tree’

*exception*

yògōbāà ‘sky’

b. MLH

nāàwó ‘euphorb (shrub)’

mākàrí ‘macari (spice)’

sāŋgòló ‘broom’

māāŋgòró ‘mango’

### Grammatical tone patterns

#### Grammatical tone motifications for verb stems

If we accept the claim that the perfective form of a verb carries the lexical melody, in most cases not involving segmental distinctions the imperfective is produced by the following rule:

(xx1) perfective imperfective

L.L → L.M

M.M → M.L

M.L → M.L (no change)

The generalization is that if the perfective is monotonal, the imperfective shifts the final syllable (or monosyllabic mora) up or down one notch.

#### Grammatical tone modifications for noun stems

Nouns do not undergo tone changes from unsuffixed singular to suffixed plural, except minor adjustments in connection with vv-Contraction when plural -ye contracts with a preceding vowel.

Noun stems do undergo some changes as initials or finals in compounds and in combinations with modifiers. The main type of modification, before a modifier or compounds final, is flattening of contour tones of the noun stem, along with merger of H with M tones as M-toned. In combinations calling for these changes, /LML/, /LMH/, and /LH/ merge with /L/ melody, while /ML/, /MLH/, and /H/ merge with /M/ melody. In some compounds, the final is raised to all-H tone.

### Tonal morphophonology

The two principal rules of tonal morphophonology, excluding low-level tone sandhi, are Floating H-Docking and Tone-Flattening. Both are limited to specific morphosyntactic contexts.

#### Floating-H Docking (+H#L to #H)

What I represent as floating H is arguably just shorthand for certain tonal effects on a word Y that are determined by a preceding word X (+H). There are two distinct forms of Floating-H Docking, one for 1Sg allomorph proclitic *ŋ̀* (+H) and the other for prenominal demonstratives. In both cases, only stems otherwise beginning with L-tone are affected. For 1Sg *ŋ̀* (+H), raising from L to H is limited to the first syllable, except that if the stem is a light bisyllabic both of its syllables are affected. For the demonstrative proclitics, the entire stem is affected. A further difference is that *ŋ̀* (+H) has its normal tonal effect on the noun of a noun-adjective combination, while in Dem-N-Adj the tonal effect controlled by the adjective trumps that of the demonstrative.

The 1Sg pronominal morpheme is variably *ŋ́*, *ŋ̀*, and *ŋ̀* (+H), depending on its grammatical function (§4.xxx). The last of these includes a floating H-tone that is manifested, if at all, on the immediately following word. *ŋ̀* (+H) functions as possessor before nouns, as direct object before verbs, and as complement of a following postposition.

The floating H has no effect when the following word begins with a nonlow tone (M or H). It raises a following L-tone to H. This extends to a second syllable in unsegmentable *CvCv*, *CvNCv*, and *CvCvwⁿ* stems, i.e. in light bisyllabics. If there is a boundary between the two syllables, as in the iterative stem *sɔ̀ⁿ‑sɔ̀ⁿ*, only the first segment is tone-raised. Heavy stems, such as *CvvCv* and trisyllabics, raise only the first syllable. If the first syllable is L but the second is nonlow (M or H), wherever possible the first syllable is realized with <HL> tone, allowing both the floating H and the initial lexical L to be audible, and the remainder of the stem is unchanged. However, in simple *Cv̀Cv́* stems like *sàbá* ‘chicken’, the target is articulatorily challenging (*sâbá* ) and it is sometimes simplified to *sábā*, perhaps via downstepped *sáꜜbá*.

The tonology is illustrated for 1Sg possessor of nouns in (xx1).

(xx1) a. /L/ melody noun

*nàà* ‘cow’ *ŋ̀ náá* ‘my cow’

*sɔ̀ŋɔ̀* ‘price’ *ŋ̀ sɔ́ŋɔ́* ‘my price’

*sìmbò* ‘chin’ *ŋ̀ símbó* ‘my chin’

*kòlòwⁿ* ‘skin’ *ŋ̀ kólówⁿ* ‘my skin’

*sɔ̀ⁿ-sɔ̀ⁿ* ‘sand’ *ŋ̀ sɔ́ⁿ-sɔ̀ⁿ* ‘my sand’

*CvvCv and trisyllabic*

*tààpè* ‘wrap (n)’ *ŋ̀ táápè* ‘my wrap (garment)’

*tɔ̀ŋɔ̀nɔ̀* ‘truth’ *ŋ̀ tɔ́ŋɔ̀nɔ̀* ‘my truth’

*tɔ̀ŋgɛ̀yà* ‘fortune-teller’ *ŋ̀ tɔ́ŋgɛ̀yà* ‘my fortune-teller’

*sèmpùwò* ‘donkey’ *ŋ̀ sémpùwò* ‘my donkey’

b. L-initial melodies

*sàbā* ‘chicken’ *ŋ̀ sábā* ~ *sâbā* ‘my chicken’

*tàjí* ‘basket’ *ŋ̀ tâjí* ‘my basket’

*tèndé* ‘well (n)’ *ŋ̀ têndé* ‘my well’

*tìmbɔ̄gɔ́* ‘ladder’ *ŋ̀ tîmbɔ̀gɔ́* ‘my ladder’

*yòrōgó* ‘cat’ *ŋ̀ yórògó* ‘my cat’

c. nouns beginning with nonlow tone

*sūgō* ‘goat’ *ŋ̀ sūgō* ‘my goat’

*kúŋgóló* ‘dog’ *ŋ̀ kúŋgóló* ‘my dog’

*tēè* ‘tea’ *ŋ̀ tēè* ‘my tea’

Examples with postpositions are dative *ŋ̀ té* ‘for me’ (postposition *tè* ) and *ŋ̀ kɔ̂rɛ̄ỳ* ‘behind me’ (postposition *kɔ̀rɛ̄ỳ*).

A few examples with 1Sg object before transitive verb are in (xx2). The phonology is the same as for nouns.

(xx2) a. all-L verbs

*à ŋ̀ káy* ‘he/she saw me’ *kày* ‘see.Pfv’

*à ŋ̀ kɛ́rɛ́* ‘he/she threw me’ *kɛ̀rɛ̀* ‘throw.Pfv’

*à ŋ̀ kíí-nì* ‘he/she awakened me’ *kìì-nì* ‘awaken.Pfv’

*trisyllabic*

*à ŋ̀ míyɛ̀-nì* ‘he/she fixed me (up)’ *mìyɛ̀-nì* ‘fix.Pfv’

b. L-initial verb

*à gā ŋ̀ kɛ́rɛ̄* ~ *kɛ̂rɛ̄* ‘he/she throws me’ *kɛ̀rɛ̄* ‘throw.Ipfv’

c. no change in verb beginning with nonlow tone

*à ŋ̀ kwāā* ‘he/she hit me’ *kwāā* ‘hit.Pfv’

1Sg possessor *ŋ̀* (+H) has the same tonal effect on the following possessum regardless of whether the possessum is modified by an adjective. In other words, the tonal effect of the possessor trumps that of the adjective, which would otherwise require Tone-Flattening (affecting contour-toned nouns). The noun in (xx3d) therefore has the same tones as in (xx3b), not those of (xx3c).

(xx3) a. *sìbò* ‘snake’

b. *ŋ̀ síbó* ‘my snake’

c. *sìbò tɔ̄mɔ̄wⁿ* ‘red (brown) snake’

d. *ŋ̀ síbó tɔ̄mɔ̄wⁿ* ‘my red (brown) snake’

Prenominal demonstratives *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H), see §4.4.2 and §6.5.1.1, convert any following noun beginning with an L-tone to all-H-toned. Whereas 1Sg *ŋ̀* (+H) spreads its H to only one or at most two syllables, the H of the demonstrative proclitics spreads to the end of the stem.

Illustrating with *kɔ̀ⁿ* (+H), nouns that begin with a nonlow tone are unaffected (xx4a). Nouns beginning with an L‑tone (over one or more syllables) raise the L to H (xx4b). Therefore /H/ melody *síbō* (xx4a) is indistinguishable after a demonstrative from /L/ melody *sìbò* (xx4b). The situation is exactly the same with *ɲɔ̀ⁿ* (+H), not shown here.

(xx4) Noun plus visible demonstrative (‘this/that’)

gloss melody citation ‘this/that \_\_’

a. no tone change

‘day’ /M/ *sɔ̄gɔ̄ kɔ̀ⁿ sɔ̄gɔ̄*

‘ashes’ /H/ *síbō kɔ̀ⁿ síbō*

‘dust’ /ML/ *cɔ̄llɔ̀ kɔ̀ⁿ cɔ̄llɔ̀*

b. tone change on noun with initial L-tone

‘snake’ /L/ *sìbò kɔ̀ⁿ síbō*

‘porridge’ /L/ *bɛ̀lɛ̀ kɔ̀ⁿ bɛ́lɛ̄*

‘folding knife’ /L/ *sìrìmbè kɔ̀ⁿ sírímbē*

‘rifle’ /LMH/ *màlīfá kɔ̀ⁿ málífā*

‘cat’ /LMH/ *yòrōgó kɔ̀ⁿ yórógō*

‘house’ /LML/ *yàmba᷆ kɔ̀ⁿ yámbāā* (Pl *kɔ̀ⁿ yámbáá-yè* )

‘sky’ /LML/ *yògōbāà kɔ̀ⁿ yógóbāā*

‘pigeon’ /LML/ *tùjūnù kɔ̀ⁿ tújúnū*

‘horse’ /LH/ *sìyéwⁿ kɔ̀ⁿ síyéwⁿ*

‘mosque’ /LH\*/ *mìsírí kɔ̀ⁿ mísírí*

‘prayer beads /L\*H/ *tɔ̀sìbíí kɔ̀ⁿ tɔ́síbīī*

A noun modified by prenominal demonstrative *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H), as in *kɔ̀ⁿ síbó* ‘this/that snake’ from *sìbò* ‘snake’, can also be modified by a postnominal adjective. In this combination, the tonal interaction (Tone-Flattening) between noun and adjective trumps that between demonstrative and noun (Floating-H Docking). This is the opposite of the case with 1Sg *ŋ̀* (+H) described above. Therefore /L/ melody *sìbò* ‘snake’ is L-toned in (xx2a-b), while /H/ melody *síbō* ‘ashes’ is M-toned in (xx2c), as it would be in the absence of the demonstrative.

(xx2) a. *kɔ̀ⁿ sìbò tɔ̄mɔ̄wⁿ*

**Dem** snake /ashes **red**

‘this/that brown snake’ (< *sìbò* )

b. *kɔ̀ⁿ sìbò bánú*

**Dem** snake **big**

‘this/that big snake’

*c. kɔ̀ⁿ sībō tɔ̄mɔ̄wⁿ*

Dem ashes red

‘these/those red (brown) ashes’

#### Atonal-Morpheme Tone-Spreading

Tones of plural *-ye* and post-nominal demonstrative *gu* are acquired by spreading from the left, with L-tone as a default. Alternatively, one could argue that these morphemes are lexically L‑toned and become M‑toned by spreading from the left.

The plural marker on nouns (or NPs) is *-ye* with tones depending on those of the stem. It is always L-toned *-yè* at word-level (i.e. prior to tone sandhi) after a noun ending in an L-tone (xx1).

(xx1) singular plural gloss

a. all-L-toned stems

*nàà nàà-yè* ‘cow’

*pàgù pàgù-yè* ‘pond’

*sìrìmbè sìrìmbè-yè* ‘folding knife, razor’

b. other stems ending in L-tone

*pārày pārày-yè* ‘outside’

*sāākù sāākù-yè* ‘sack’

*yàmbāà yàmbāà-yè* ‘house’

(L-toned -yè is raised secondarily to -yē by tone sandhi before an L-tone.)

If the stem (or a compound final) is all-M-toned, the M-tone is carried over to the suffix regardless of stem weight and regardless of position (prepausal or clause-medial)

(xx2) singular plural gloss

*kūūⁿ kūūⁿ-yē* ‘boat (skiff)’

*sūgō sūgō-yē* ‘goat’

*tāānā tāānā-yē* ‘fool’

*wārābā wārābā-yē* ‘lion’

If the stem is all-H-toned, in isolation the suffix is heard either as M-toned, arguably in this case a down-stepped prepausal form of H, or as L-toned.

(xx3) singular plural gloss

*jááⁿ jááⁿ-yē* ~ *-yè* ‘fishhook’

*kɔ́lɔ́ⁿ kɔ́lɔ́ⁿ-yē* ~ *-yè* ‘ball (shape)’

*kúŋgóló kúŋgóló-yē* ~ *-yè* ‘dog’ (plural often contracted *kúŋgólè-è* )

However, in clausal contexts (where nouns and NPs are always followed by other words), the suffix is heard as L-toned *-yè* (xx4), unless it is raised to *-yē* by tone sandhi.

(xx4) *ŋ́ =nàⁿ jááⁿ-yè* / *kɔ́lɔ́ⁿ-yè* / *kúŋgóló-yè tōlō*

1SgSbj Sbj/Obj fishhook-Pl / ball-Pl / dog-Pl sell.Pfv

‘I sold the fishhooks/balls/dogs.’

Uncompounded nouns that end in a nonlow tone following an L-tone are often heard with L‑toned plural *-yè* even in isolation.

(xx5) singular plural gloss

a. *yòrògó yòrògó-yè* ‘cat’

*sāŋgòló sāŋgòló-yè* ‘broom’

*ɲōòmɔ́* *ɲōòmɔ́-yè* ‘camel’

*wàŋgé wàŋgé-yè* ‘hare’

*wùjúⁿ wùjúⁿ-yè* ‘pouched rat’

b. *wààjíbí wààjíbí-yè* ‘duty’

*bààdígé bààdígé-yè* ‘manner’

*tɔ̀sìbíí tɔ̀sìbíí-yè* ‘prayer beads’

Alternative isolation pronunciations with M-toned *‑yē* have also been noted, e.g. *wùjúⁿ-yē*, but less often than with all-H-toned stems. My impression is that the variant *‑yē* is more common in (xx5b) than in (xx5a), likely because the four moras of each noun in (xx5b) are favorable to a compound-like prosodic division (e.g. *wàà-jíbí* ), which would induce the plural suffix to disregard the initial L‑toned segment. In clausal contexts the pronunciation is consistently *‑yè* for the nouns in both (xx5a) and (xx5c).

The tonal patterns in (xx5) support the analysis of rising melodies in nouns as …LH rather than …LM, there being no indication of an opposition between the two.

The other morpheme that behaves tonally like plural *-ye* is postnominal demonstrative *gu* (§4.4.2). Simple combinations with nouns are in (xx6). *gu* is atonal, acquiring its surface tone by spreading from the left. *gu* has no tonal or segmental effect on the preceding noun. In all-L combinations like *sìbò gù* (xx6a), the noun does not undergo Final Tone-Raising (#*sìbō gù*). Expected #*yàmbāà gù* ‘that house’ is slightly modified to *yàmbāā gù* (xx6a) by <ML>L-to-ML rule (§3.6.4.2).

(xx6) Noun plus discourse-definite demonstrative

gloss melody stem ‘that (same) \_\_’

a. L-toned *gù* after final L-tone (prior to tone sandhi)

‘snake’ L *sìbò sìbò gù*

‘porridge’ L *bɛ̀lɛ̀ bɛ̀lɛ̀ gù*

‘tea’ ML *tēè tēè gù*

‘dust’ ML *cɔ̄llɔ̀ cɔ̄llɔ̀ gù*

‘house’ LML *yàmbāà yàmbāā gù*

‘vehicle LML *mòbōlì mòbōlì gù*

b. M-toned *gū* after final M-tone

‘meat’ M *tēē tēē gū*

‘goat’ M *sūgō sūgō gū*

c. H-toned *gú* (shown as prepausal *gū* ) after final H-tone

‘cotton’ H *déé déé gū* → *gú* nonfinally

‘ashes’ H *síbō síbó gū* "

‘mortar’ H *búwōⁿ* *búwóⁿ gū* "

‘prayer beads’ LH *tɔ̀sìbíí tɔ̀sìbíí gū* "

‘horse’ LH *sìyéwⁿ sìyéⁿ gū*  "

‘rifle’ LMH *màlīfá màlīfá gū*  "

### Low-level tone rules

#### Final Tone-Raising (L#L to M#L)

When an L‑toned word is followed by another L‑toned word, the final mora of the first word is raised to M in some but not all combinations. This is a dissimilatory process, converting flat (L)L#L to a more rhythmical (L)M#L. It is a useful phonetic cue of word boundaries.

This process occurs twice in (xx1). In *yěⁿ* the diacritic indicates <LM> rather than <LH> tone. There are no <LH>-toned syllables in Jenaama.

(xx1) *wàȳ yěⁿ ɲàànù*

/wày yèŋ ɲàànù/

today and tomorrow

‘today and tomorrow’

M‑toned words like *kɛ̄ɛ̄gū* ‘man’ do not dissimilate to a following L or M tone.

(xx2) a. *kɛ̄ɛ̄gū bē*

man come.Pfv

‘A/The man came.’

b. *kɛ̄ɛ̄gū yèⁿ jénā*

man and child

‘A man and a child’

#### <ML>L-to-ML

An <ML>-toned final syllable in a stem flattens to M before an L-tone. This affects nouns such as *yàmbāà* ‘house’, and nouns also used as postpositions such as *nìŋīì* ‘interior’ or (as postposition) ‘inside’. It applies once in (xx1a) and twice in (xx1b) and (xx1c).

(xx1) a. *yàmbāā nìŋīì*

house interior

‘in(side) the house’ or ‘house interior’

b. *yàmbāā-nìŋīī-yè*

house-interior-Pl

‘house interiors’

c. *yàmbāā-nìŋīī màyⁿ*

house-interior-Pl be.good

‘The house interior is good.’

## Terminal intonation (final pitch rise)

Intonation-like effects occur at the right edge of the following: a) polar interrogatives that do not begin with an interrogative particle (§13.2.1.2); b) nonfinal items in lists (§7.1.10); c) nouns, optionally, before instrumental postposition ní (§8.1.2.1); and surprisingly d) some statements, especially those ending in temporal adverbs like ‘yesterday’, where weak focalization of the affected word may be at play (§13.1.5).

For the polar interrogatives and the statements, the intonation-like effect is actually a categorical tonal shift, enhanced by gradient intonational pitch rise (or cancellation of pitch decline). Items in lists have similar effects, along with gradient prolongation. For details see the sections listed above.

# Nominal, pronominal, and adjectival morphology

## Nouns

### Simple nouns (singular, plural)

Nouns generally have an unmarked singular and suffixal plural with *-ye* whose tone is determined by the tones of the stem. After an H‑tone, H‑toned *-yé* is downstepped to M‑toned *‑yē* prepausally (as in citation forms). I transcribe *-ye* as a suffix, but one could also consider it to be an enclitic, since in N-Adj combinations it appears on the adjective.

There is no morphological distinction between human, nonhuman animate, and inanimate nouns.

Some human nouns are in (xx1). Those in (xx1b) are derivatives with *-yà* whose plural is *‑y‑è* (seemingly segmentable as *‑Ø‑yè* with *‑yà* elided).

(xx1) Human nouns

singular plural gloss

a. simple noun

*kùygù kùygù-yè* ‘blacksmith’

*púnɔ́ púnɔ́-yē* ‘Fulbe person’

*káádō káádó-yē* ‘Dogon person’

*nɔ̀lɔ̀ nɔ̀lɔ̀-yè* ‘Bangande person’

*súmú súmú-yē* ‘visitor’

b. agentive derivatives with singular *-yà*

*bɔ́ɔ̀-yà bɔ́ɔ̀-y-è* ‘herder’

*sɔ̀gɔ̀-yà sɔ̀gɔ̀-y-è* ‘farmer’

Some nonhuman nouns, animate and inanimate, are in (xx2).

(xx2) Nonhuman nouns

stem marked plural gloss

a. animate

*kúŋgólō kúŋgóló-yē* ‘dog’

*sūgō sūgō-yē* ‘goat’

*nàà nàà-yè* ‘cow’

*sɔ̀gɔ̀lɔ̄wⁿ sɔ̀gɔ̀lɔ̄wⁿ-yē* ‘sheep’

b. inanimate

*kìyè kìyè-yè* ‘stick’

*kɔ̀yɔ̄wⁿ kɔ̀yɔ̄wⁿ-yē* ‘stone’

*jūbū jūbū-yē* ‘tree’

There is one *Cvⁿ* noun stem, *sɔ̄ⁿ* ‘needle; pointed instrument’, and one other that has a premodifier form Cv (*pwɔ̄* ‘thing’, premodifier *pā* ). The nasal in *sɔ̄ⁿ* counts as a mora. With these exceptions, the minimal syllabic shape of a noun stem is bimoraic *Cvv*, *Cvwⁿ*, *Cvy(ⁿ)*, or *CvCv*.

Noun stems may have any of several lexical tone melodies, whose expression is spread out over the entire stem. See §3.7.1.2 for details and examples. The lexical melodies are4 heard in citation forms but are subject to change in combinations with adjectives and other modifiers.

### Key nouns (‘woman’, ‘man’, ‘child’, ‘person’, ‘thing’, ‘place’)

High-frequency nouns whose plurals are frequently irregular in languages of the zone are in (xx1). ‘Man’ and ‘thing’ are basically regular. ‘Woman’, ‘person’, and ‘child’ have irregular plurals (the regular plural suffix is *-ye*).

(xx1) singular plural gloss

a. human

*yùgòⁿ yùgòm-bè* ‘woman’

*kɛ̄ɛ̄gū kɛ̄ɛ̄gū-yē* ~ *kɛ̄ɛ̄gē-ē* ‘man’

*ɲīmī ɲīmī-lè* or *ɲīmī-yē* ‘person’

*jénāⁿ jéná-mbí-gē* or *jénáⁿ-yè* ‘child’

— *dālm-bī-gē* ‘children’ (plural only)

b. nonhuman

*pwɔ̄ pwɔ̄-yē* ‘thing’ (→ *pā* before a modifier)

*gɯ̄ɯ̄ⁿ gɯ̄ɯ̄ⁿ-yē* ‘place’

There are distinct ‘child’ forms used in the kinship sense (‘son or daughter’), see §5.1.5.3 for these forms and their compounds.

*ɲīmī* ‘person’ has a special form in front of *ŋ-kēẁⁿ* ‘one’, hence *ɲā ŋ̄-kēẁⁿ* ‘one person’.

*pwɔ̄* ‘thing’ becomes *pā* before any modifier.

*gɯ̄ɯ̄ⁿ*, one of only a few stems with high back unrounded *ɯ*, occurs in an unusual iterated form *gɯ̄ɯ̄ⁿ-mà-gēw̄ⁿ* in relatives (§14.2.4).

For compounds containing ‘child’, ‘woman’, and ‘man’ as initials or finals, with L-H tone overlay, see §5.1.4.4.

### Nouns with full-stem iteration

A few nouns have the appearance of full-stem iterations. In some cases the vowel quality is different in the two parts. Often the uniterated form is unattested.

(xx1) a. no vocalic change

*L-M tones*

*yùrùgù-yūrūgū* ‘corruption’ cf. *yùrùgù* ‘this year’

*ɲàmà-ɲāmā* ‘garbage’ also simple *ɲàmà*

*LH-LH tones*

*ɲòý-ɲòý* ‘chameleon’

*L-L tones*

*sɔ̀ⁿ-sɔ̀ⁿ* ‘sand’

*L-H tones*

*dòn-dóⁿ* ‘hourglass-shaped tomtom’

*sàm-sám* ‘medicinal herb’ (*Blepharis*)

*kàà-káá* ‘tall herb sp.’ (*Senna obtusifolia*)

*M-M tones*

*būm-būⁿ* ‘red kapok tree’ (*Bombax*)

*wōlōⁿ-wōlōⁿ* ‘bell’

*kōlōŋ-kōlōⁿ* ‘wooden trough’

*kɔ̄bāŋ-kɔ̄bāⁿ* ‘tree sp.’ (*Dichrostachys*)

*wɔ̀ɲɔ́ⁿ-wɔ̀ɲɔ́ⁿ* ‘bush sp.’ (*Senna occidentalis*)

*ML-ML tones*

*pēgù-pēgù* ‘fromager tree’ (*Ceiba*)

*ML-H tones*

*dūwɔ̀n-dúwɔ́ⁿ* ‘fmistletoe’ (Loranthaceae)

b. with vocalic change

*kéléⁿ-kālāⁿ* ‘forked stick’

*yìrí-yàrá* ‘tree sp.’ (*Cassia*)

## Derived nominals

### Deverbal nominalizations

#### Verbal noun with zero affix

For some verbs, the verbal noun is unsuffixed. In such cases the verbal noun is homophonous to the perfective form of the verb (xx1a), except that monomoraic *Cv* lengthens its vowel (xx1b). Most intransitives readily form verbal nouns without a “possessor.” It is possible to elicit similar bare verbal nouns for many transitives, but some like ‘give’ and ‘say’ require at least a pro forma 3Sg *à* as possessor (or object).

(xx1) verbal noun gloss verb gloss

a. verbal noun = Pfv (no final tone shift as in Ipfv)

*M-toned verbal noun and perfective*

*ɲīnī* ‘washing’ *ɲīnī/ɲīnì* ‘wash’

*kēbē* ‘building’ *kēbē/kēbè* ‘build’

*pīīrī* ‘flying’ *pīīrī/pīīrì* ‘fly (v)’

*L-toned verbal noun and perfective*

*kɯ̀ɯ̀* ‘running’ *kɯ̀ɯ̀/kɯ̀ɯ̄* ‘run’

*mɛ̀wⁿ* ‘drinking’ *mɛ̀wⁿ/mɛ̀-nɛ̀* ‘drink’

*mìyⁿɛ̀* ‘fishing’ *mìyⁿɛ̀/mìyⁿɛ̄* ‘fish (v), go fishing’

*sɔ̀gɔ̀* ‘farming’ *sɔ̀gɔ̀/sɔ̀gɔ̄* ‘cultivate’

*sùbè-nì* ‘breast-feeding’ *sùbè-nì/sùbè-nī* ‘breastfeed’

*ML-toned verbal noun and perfective*

*sɛ̄gɛ̀* ‘pounding’ *sɛ̄gɛ̀/sɛ̄gɛ̀* ‘pound (in mortar)’

b. verbal noun based on Pfv = Ipfv but lengthened from *Cv* to *Cvv*

*bēē* ‘coming’ *bē/bē* ‘come’

*sòò* ‘going’ *sò/sò* ‘go’

*dōō* ‘give’ *dō/dō* ‘give’

*sēē* ‘say’ *sē/sē* ‘say’

#### Verbal nouns with stem-final vocalic mutations

Some verbal nouns that have no syllabic verbal-noun suffix differ from the perfective and imperfective stems, typically by stem-final vocalic mutation to *ɛ*. This may be accompanied by a switch to a variant form of the stem.

(xx1) verbal noun gloss verb gloss

a. mutation of final vowel only

*wɔ̀gɛ̀* ‘killing’ *wɔ̀gà/wɔ̀gā* ‘kill’

*tɔ̀ŋɛ̀* ‘looking at’ *tɔ̀ŋɔ̀/tɔ̀ŋɔ̄* ‘look at’

b. mutation of final vowel in verbal noun and intransitive (antipassive)

*dīgɛ̄* ‘eatng’ *dīgā/dīgà* ‘eat’ (transitive)

*dīgɛ̄/dīgɛ̀* ‘eat’ (intransitive)

c. mutuation of final vowel plus stem change

*kūmɛ̄* ‘catching’ *kūūⁿ/kū-nū* ‘catch’

*sīnɛ̄* ‘biting’ *sīwⁿ/sī-nī* ‘bite’

*kɔ̄lɛ̄* ‘hitting’ *kwāā/kɔ̄-lā* ‘hit’

In the cases of ‘bite’ and ‘hit’ (xx1c), the verbal noun more closely resembles the imperfective than the perfective, by virtue of showing the same medial consonant. These stems also show the stem variant with *ɛ/e* in other derivatives, such as *kūmɛ̄-nā*, *kɔ̄lɛ̄-nā*, and *sīnɛ̄-nā* factive verbal nouns (§4.2.1.4). In the case of ‘catch’ (xx1c), the verbal noun and the imperfective have different medial consonants. See §3.2.11.1 on the diachronic background.

#### Verbal noun with suffix *-gu*

Other verbs form the verbal noun with a suffix *-gu*, whose tone is spread from the stem.

(xx1) verbal noun gloss verb gloss

a. verbal noun same as or based on identical Pfv= Ipfv, plus *-gu*

*kɔ̀ɲɔ̄-gù* ‘snore’ *kɔ̀ɲɔ̄/kɔ̀ɲɔ̄* ‘snore’

*ɲɔ̀lī-gù* ‘pointing’ *ɲɔ̀lī/ɲɔ̀lī* ‘point at’

*tèmbē-gù* ‘encountering’ *tèmbē/tèmbē* ‘encounter’

*stem-final vowel shortened*

*kùgɛ̄-gù* ‘kneeling’ *kùgɛ̄ɛ̀/kùgɛ̄ɛ̀* ‘kneel’

*wòlō-gù* ‘snatching’ *wòlōò/wòlōò* ‘snatch’

*stem-final vowel lengthened*

*sɔ̀ŋgīī-gù* ‘pecking’ *sɔ̀ŋgī/sɔ̀ŋgī* ‘peck at’

b. verbal noun same as or based on Pfv, plus *-gu*

*pwɔ̀-gù* ‘sitting’ *pwɔ̀/pɔ̀-lɔ̀* ‘sit’

*bāā-gū* ‘exiting’ *bāā/bā-lā* ‘exit (v)’

*sēŋ-gū* ‘falling’ *sēwⁿ/sēn-dē* ‘fall’

*tēŋ-gū* ‘jumping’ *tēwⁿ/tēlēwⁿ* ‘jump’

*bēŋ-gū* ‘returning’ *bēwⁿ/bēn-dē* ‘return’

*sɛ̀y-gù* ‘pulling/tying’ *sɛ̀y/sɛ̀-lɛ̀* ‘pull, tie’

*sūū-gū* ‘rubbing in’ *sūū/sū-lū* ‘rub in (lotion)’

*yàŋ-gù* ‘descending’ *yàwⁿ/yà-là* ‘descend’

*sùwō-gù* ‘singing’ *sùwō/sùwō-lò* ‘sing’

*tūū-gù* ‘spitting’ *tūù/tūū-lù* ‘spit’

*tàà-gù* ‘stopping’ *tàà/tà-là* ‘stop, stand’

*bāŋ-gū* ‘shaving’ *bāwⁿ/bā-nā* ‘shave’

*tāŋ-gū* ‘ascending’ *tāwⁿ/tā-nā* ‘ascend’

*kēy-gù* ‘calling’ *kēỳ/kēē-lì* ‘call’

*bōy-gù* ‘greeting’ *bōỳ/bōy-lì* ‘greet’

*kōy-gù* ‘weaving’ *kōỳ/kōy-lì* ‘weave (fabric)’

*cīyɛ̀ŋ-gù* ‘assembling’ *cīyɛ̀ⁿ/cīyɛ̀-nɛ̀* ‘assemble’

*kwɛ̄ɛ̀ŋ-gù* ‘sweeping’ *kwɛ̄ɛ̀ⁿ/kwɛ̄ɛ̀-nɛ̀* ‘sweep’

*sūgòŋ-gù* ‘squatting’ *sūgòⁿ/sūgōn-nà* ‘squat’

*sīŋàŋ-gù* ‘breathing’ *sīŋàwⁿ/sīŋàn-nà* ‘breathe’

The suffix *-gù* is disallowed in verbal-noun phrases that include a preverbal constituent. For example, ‘snatching’ without a complement is *wòlōò-gù* (xx2b), but when an overt object is added the *-gù* is dropped (xx2c).

(xx2) a. *à wáléⁿ wòlōò*

3SgSbj money snatch.Pfv

‘He/She snatched the money.’

b. *wòlōò-gù nà m̀ māỳⁿ*

snatch-VblN Neg ReflObj be.good

‘Snatching isn’t good.’

c. *[wáléⁿ wòlōò] nà m̀ māỳⁿ*

[money snatch.VblN] Neg ReflObj be.good

‘Snatching money isn’t good.’

#### Factive verbal noun with suffix *-na*

The verbal noun in *-na* is factive, rather than abstractive in the fashion of -gu and other verbal nouns. Except when predicative, it requires a preceding object or possessor, minimally a 3Sg pronominal *à*. My assistant glosses it as ‘the fact of Vb-ing’ (*le fait de …*). It never occurred in abstractive contexts like ‘Vb-ing is difficult’ without a subject or object.

The verbal noun can be preposed to a clause. In (xx5a) ‘his/her exiting’ is a preposed topic and is resumed (and focalized) by a 3Sg pronoun. In (xx5b), ‘his/her ascending’ functions as a temporal setting adverbial. It is understood that the ascending preceded the event described in the following main clause, even without an overt ‘after’ or ‘behind’ element. This indicates that the factive verbal noun has a resultative connotation, as the free translation (‘having …’) tries to capture.

(xx5) a. *[à bān-nā] wɔ̀gɔ̄ màɲɛ̄ gà*

[3SgPoss exit(v)-**VblN**] 3Sg.Indep be.good.Pfv RemPfv

‘(The fact of) his/her exiting, that was good (=appropriate).’

b. *[à tān-nā gū] à= à tōlō*

[3SgPoss ascend-VblN Dem.Def] 3SgSbj 3SgObj sell.Pfv

‘Having gone up (e.g. traveled south), he/she sold it.’

The factive verbal noun in -na and the stative form of active verbs, also with suffix *-na* (§10.1.4), are intriguingly similar in form. In positive stative predicates, the stative verb with ‑na is followed by the ‘it is’ particle *nì*, suggesting that the stative is (or originated as) a noun-like participle.

The regular forms of the factive verbal noun are shown in (xx1), alongside the regular perfective and imperfective forms. The verbal noun is M-, ML-, or L-toned, following the tones of the perfective. The segmental form is also derived from the perfective in most cases where the perfective and imperfective differ segmentally. Monomoraic Cv is lengthened to Cvv one way or another, or in the case of ‘go’ is replaced by an alternative bisyllabic form that is also used by itself as a kind of verbal noun. Among intransitives, ‘exit (v)’ is irregular. Several transitives use a variant stem-form *CvCɛ/e* before *‑na*, as in several other derivatives. In the cases of ‘eat’ and ‘sell’, this variant form is used without reference to transitivity.

(xx1) Pfv Ipfv with *-nà* gloss comment

a. intransitive

*sēwⁿ sēn-dē sēn-nā* ‘fall’

*tāwⁿ tā-nā tān-nā* ‘ascend’

*yàwⁿ yà-là yàn-nà* ‘descend’

*wwō wwō wwō-nā* ‘weep’

*kùmù kùmū-nà kùmù-nà* ‘sleep’

*irregular*

*bāā bā-lā bān-nā* ‘exit (v)’

*suppletive*

*sò sò sìgè-nà* ‘go’ cf. noun *sìgè* ‘departure’

*Cv lengthened before suffix*

*bē bē bēē-nā* ‘come’

b. transitive

*mɛ̀wⁿ mɛ̀-nɛ̀ mɛ̀n-nà* ‘drink’

*tīẁⁿ tī-nà tīn-nà* ‘do’

*pɛ̄jɛ̄ pɛ̄jɛ̀ pɛ̄jɛ̄-nā* ‘split (firewood)’

*cɛ̄bù cɛ̄bù cɛ̄bù-nà* ‘push’

*Cv lengthened before suffix*

*dō dō dōē-nā* ‘give’

*tùjɛ̀ tò tòè-nà* ‘know’

*based on alternative CvCɛ/e form of stem (§4.2.3.3, §9.3.1.1)*

*dīgā dīgà dīgɛ̄-nā* ‘eat’

*tōlō tōlò* *tōlē-nā* ‘sell’

*kwāā kɔ̄-lā kɔ̄lɛ̄-nā* ‘hit’

*kūūⁿ kū-nū kūmɛ̄-nā* ‘catch’

*sīwⁿ sī-nī sīnɛ̄-nā* ‘bite’

*wɔ̀gà wɔ̀gā wɔ̀gɛ̀-nà* ‘kill’

For transitives, an object is optionally included. If the object is an unmodified singular common noun and has generic reference, it could be taken as a kind of compound initial (xx2a-c). If both the incorporated noun and the verbal noun are L-toned, Final Tone-Raising applies at the boundary (xx2c).

(xx2) object + verb gloss noun gloss

a. *sūbā pɛ̄jɛ̄-nā* ‘splitting firewood’ *sūbā* ‘firewood’

b. *kúŋgóló kɔ̄lɛ̄-nā* ‘hitting a/the dog’ *kúŋgóló* ‘dog’

c. *dùwɔ̄ mɛ̀n-nà* ‘drinking beer’ *dùwɔ̀* ‘beer’

The object can be expanded to a full NP (xx3). This suggests that the NP in question is either a full-fledged object NP or a possessor.

(xx3) *[ŋ̀ dēm-bē sāāⁿ] kɔ̄lɛ̄-nā*

[1SgPoss child-Pl all] hit-VblN

‘the fact of hitting all of my children’

The object may also be expressed as a personal name or as a pronominal. There is no difference in form between objects and possessors, so the pronominals could be marked up as either.

(xx4) a. *ŋ̀ kɔ̄lɛ̄-nā* ‘the fact of hitting me’

*sèēdù kɔ̄lɛ̄-nā* ‘the fact of hitting Seydou’

b. *ŋ̀ wɔ́gɛ̀-nà* ‘the fact of killing me’

*sèēdù wɔ̀gɛ̀-nà* ‘the fact of killing Seydou’

The factive verbal noun is obligatory in a comparative construction where it functions as a kind of compound initial for *síí* ‘likeness’ (§12.2.3.2). In this construction, the verbal noun and a compound initial (if present) are dropped to L-toned. A pronominal subject is included in possessor form preceding the factive verbal noun. The presence of this subject puts some limits on the possible forms of an overt object. If the object cannot be expressed as a simple compound initial, it is phrased as a separate PP (§12.2.3.2).

#### Place nominal with suffix *-gàwⁿ*

Addition of suffix *-gàwⁿ* to a verb produces a place nominal. The initial is normally identical to the perfective stem. Tone sandhi (Final Tone-Raising) raises a final L-tone to M-tone before the suffix, showing that *-gàwⁿ* is treated prosodically as a separate word. The basic noun meaning ‘place’ is gɯ̄ɯ̄ⁿ, which may be etymologically related.

(xx1) nominal gloss verb and gloss

a. initial segmentally identical to perfective

*yǎⁿ-gàwⁿ* ‘(the) way down’ *yàwⁿ/yàw̄ⁿ* ‘descend’

*kìì-nī-gàwⁿ* ‘ignition (of vehicle)’ *kìì-nì/kìì-nī* ‘wake (sb) up’

*ɥɛ̀ɛ̄-gàwⁿ* ‘opening (passage)’ *ɥɛ̀ɛ̀/ɥɛ̀ɛ̄* ‘open’

*kēbē-gàwⁿ* ‘construction site’ *kēbē/kēbè* ‘build’

*mūrī-gàwⁿ* ‘hairdressing place’ *mūrì/mūrì* ‘braid (a girl)’

*sāā-gàwⁿ* ‘bedroom’ *sāā/sāà* ‘lie down’

*sìɥē-gàwⁿ* ‘kitchen’ *sìɥɛ̀/sìɥɛ̄* ‘cook (in a pot)’

b. initial segmentally distinct from perfective

*tòlē-gàwⁿ* ‘shop (n)’ *tōlō/tōlò* ‘sell’

Place nominals also function as complements of *kìlɛ̀wⁿ/kìlɛ̄n-nà* ‘finish (VP-ing)’ (§17.xxx).

For compounds whose final is a place nominal and whose initial is an incorporated object, see §5.1.5.2.

### Uncompounded agentives (*-yà* ~ *-yɛ̀*)

The suffix is *-yà* ~ *-yɛ̀*, plural usually contracted as *-y-è* . The tone is usually L, but in *tōlē‑yā* ‘merchant’ the M-tone spreads from the stem into the suffix. The verbs in (xx1b) are among those that have intransitive (semantically antipassive) forms with final *ɛ* or *e* (§9.3.1.1).

(xx1) verb gloss agentive gloss

a. *sɔ̀gɔ̀/sɔ̀gɔ̄* ‘cultivate’ *sɔ̀gɔ̀-yà* ‘farmer’

*sùwōò/sùwō-lò* ‘sing’ *sùwō-yà* ‘singer’

*kēbē/kēbè* ‘build’ *kēbē-yà* ‘builder’

*kōy/kōy-lì* ‘weave’ *kōy-yà* ‘weaver’

*būwɔ̀/būwɔ̀-lɔ̀* ‘tend (herd)’ *būwɔ̀-yà* ‘herder’

*jàgò/jàgō* ‘deal (buy/sell)’ *jàgò-yà* ‘dealer, merchant’

b. *sìɥɛ̀/sìɥɛ̄* ‘cook (in a pot)’ *sìɥɛ̀-yà* ‘cook (n)’

*tōlē/tōlè* ‘sell’ *tōlē-yā* ‘merchant’

There are also a few lexical agentives such as *bārù* ‘builder, mason’, *dòⁿsò* ‘hunter (*chasseur*)’, *wààkɛ̀* ‘butcher’, *sàgè* ‘carpenter’, *mììmá* ‘leatherworker (*cordonnier*)’, and *kùygù* ‘blacksmith’. However, *mììmá* and *kùygù* are hereditary, in-marrying castes that are traditionally connected with the trades indicated. Compare *kòlóⁿ-tùgù* ‘leatherworker, shoemaker’ (“skin-owner”) as a pure occupation regardless of ancestry.

### Deadjectival abstractives (*-aama* )

Adjectives denoting scalar qualities or measurable dimensions have an abstractive nominal with suffix *‑aama* of variable tone. The abstractive which is typically possessed (‘its length’, etc.). It is not formed from color or taste adjectives.

The abstractive has some phonological traits shared with the adjectival predicate form, others with the modifying form of the adjective. The abstractive is either all‑M‑toned or all‑L‑toned, and this correlates with the tones of the predicative form. There is also an abstractive, admittedly rather irregular, related to predicative *kōⁿ* ‘be many’, which has a suppletive modifying form. On the other hand, the *-gu* suffix that occurs with some adjectives in the modifying form is also present in the abstractive

(xx1) predicate modifying gloss abstractive gloss

a. predicative form L-toned

*-gu absent in modifying form*

*kɔ̀yàⁿ kɔ̄yāⁿ* ‘long’ *kɔ̀y-ààmà* ‘length’

(~ *kɔ̀jàⁿ*, etc.)

*bùlòⁿ* *būlōⁿ* ‘big’ *bùl-àà-mà* ‘size, bigness’

*kùrùⁿ kūrū* ‘short’ *kùr-ààmà* ‘shortness’

*-gu present in modifying form*

*kùyⁿ kūy-gū* ‘deep’ *kùy-g-ààmà* ‘depth’

*wààⁿ wāā-gū* ‘wide’ *wàà-g-ààmà* ‘width’

*dùwɔ̀wⁿ dūwɔ̀-gù* ‘small’ *dùwɔ̀-g-ààmà* ‘smallness’

b. predicative form M-toned

*ɲīī ɲɔ̄ŋɔ̄* ‘nasty’ *ɲīŋ-āāmā* ‘nastiness’

*kōⁿ* (*pāàlōwⁿ* ) ‘many’ *kūy-ààmà* ‘number, abundance’

*nɔ̄gɔ̄rɔ̄wⁿ* *nɔ̄gɔ̄rɔ̄wⁿ* ‘difficult’ *nɔ̄gɔ̄r-āāmā* ‘difficulty, expensiveness’

The noun *mìskíínī* ‘pauper, poor person’, which can also be used as a modifier ‘poor, indigent’, has an abstractive *mìskììn-ààmà* ‘poverty’. The antonym is *nàfùrù-tùg-āāmā* ‘wealthiness’, based on an ‘owner of X’ compound with *-tùgù* (§5.xxx).

### Gentilic nominals with -ŋga suffix after spatial adverbial noun

Many adverb-like nouns denoting spatial locations or directions can be nominalized by suffix *‑ŋga*. The noun then denotes an individual associated with that location, cf. English *northerner*. The suffix is H-toned (becoming M-toned prepausally) after H-tone, and L-toned otherwise.

(xx1) spatial gloss gentilic gloss

a. *jííⁿ-kóndó* ‘north’ *jííⁿ-kóndó-ŋgā* ‘northerner’

*jííⁿ-sémú* ‘south’ *jííⁿ-sémú-ŋgā* ‘southerner’

*jííⁿ-cííⁿ* ‘east’ *jííⁿ-cííⁿ-ŋgā* ‘easterner’

*jííⁿ-kàmā* ‘west’ *jīīⁿ-kàmāā-ŋgà* ‘westerner’

b. *bóndó-kúmà* ‘on top’ *bóndó-kúmá-ŋgā* ‘highlander’

*dàmī* ‘at bottom’ *dàmìì-ŋgà* ‘lowlander’

c. *tīgàà* ‘in front’ *tígáá-ŋgā* ‘leader, one in front’

*kɔ̀rɛ̄-ỳ* ‘in back’ *kɔ̀rɛ̀ɛ̀-ŋgà* ‘laggard, one in back’

Gentilics can also be formed from place names, cf. *New York-er*, *Paris-ian*. For example, the name of the village Namagué is *nɔ̀gù-bèwⁿ*. The gentilic is *nɔ̀gù-bèw-ŋgà*.

## Pronouns

### Summary of personal pronouns

The system distinguishes three persons and number (singular versus plural). 1Pl and 3Pl differ by tones.

(xx1) Personal pronouns (nonpossessive)

independent object subject possessor in PP

1Sg *ŋ̀-dɔ́gó* *(yè=)ŋ̀* (+H)*̀* *ŋ́*,  *ŋ̀ ŋ̀* (+H) *ŋ̀* (+H)

1Pl *ē-lɔ̀gɔ̀* *yè=ē* *ē ē ē*

2Sg *āⁿ-dɔ̀gɔ̀* *(yà-)àⁿ āⁿ āⁿ* *āⁿ*

2Pl *āā-lɔ̀gɔ̀* *yà=à āā āā āā*

3Sg *wɔ̀gɔ̀ (yá=)à à à à*

3Pl *è-lɔ̀gɔ̀ yé=è* *è è* *è*

### 1Sg variants

The 1Sg has three variants, *ŋ́*, *ŋ̀*, and *ŋ̀* (+H). *ŋ́* and *ŋ̀* have no effect on the tones of a following word (or particle). *ŋ̀* (+H) raises the tone of a following /L/-tone to H.

*ŋ́* and *ŋ̀* occur in subject function, the choice depending on the inflectional category. In perfective positive clauses, which have zero aspect-negation marking, *ŋ́* is used. This is illustrated for intransitives in (xx1a). (xx1b) illustrates the transitive perfective variant without the bidirectional case marker *nā*. (xx1c-d) illustrate the variant with the bidirectional marker, which drops to *nà* before H-toned object in (xx1d).

(xx1) a. *ŋ́ sò* / *kwààⁿ* / *sīlē*

1SgSbj go.Pfv /fear.Pfv / get.old.Pfv

‘I went/was afraid/got old.’

b. *ŋ́ sèēdù* / *kúŋgóló* / *yàbà* / *sūgō kwāā*

1SgSbj S / dog / guinea.fowl / goat hit.Pfv

‘I hit-Past Seydou / the dog / the guinea-fowl / the goat.’

c. *ŋ́ =nā sèēdù* / *yàbà* / *sūgō kwāā*

1SgSbj Sbj/Obj S / guinea.fowl / goat hit.Pfv

‘I hit-Past Seydou / the dog / the guinea-fowl / the goat.’

d. *ŋ́ =nà kúŋgóló kwāā*

1SgSbj Sbj/Obj dog hit

‘I hit-Past the dog.’

The 1Sg subject allomorph *ŋ̀* occurs in all combinations with nonzero aspect-negation marking: perfective negative *ŋ̀ tè*, imperfective *ŋ̀ gà*, imperfective negative *ŋ̀ nà* (xx2a-c). The tone-raised variants *ŋ̀ tē*, *ŋ̀ gā*, and *ŋ̀ nā* occur only before L-tones and are explained by the tone sandhi rule Final Tone-Raising (xx2d‑f). This tone-raising is not due to the 1Sg subject marker.

(xx2) a. *ŋ̀ tè sīlē*

1SgSbj PfvNeg get.old.Pfv

‘I did not get old.’

b. *ŋ̀ gà sīlè*

1SgSbj Ipfv get.old.Ipfv

‘I get old.’

c. *ŋ̀ nà sīlè*

1SgSbj IpfvNeg get.old.Ipfv

‘I don’t get old.’

d. *ŋ̀ tē sò*

1SgSbj PfvNeg go.Pfv

‘I did not go.’

e. *ŋ̀ gā sò*

1SgSbj Ipfv go.Pfv

‘I go.’

f. *ŋ̀ nā sò*

1SgSbj IpfvNeg go.Pfv

‘I don’t go.’

In nonsubject functions, the 1Sg pronominal is *ŋ̀* (+H). The “(+H)” notation means that a following L-tone is raised to H-toned. Following M- and H-tones are unaffected.

1Sg independent pronoun *ŋ̀-dɔ́gó* is an example, compare *lɔ̀gɔ̀* after other pronominals (preceding section).

(xx3) has L-toned *kày* ‘saw’ except in the 1Sg object combination (xx3d) where it becomes H-toned.

(xx3) a. *sèēdù yà =āⁿ kày*

S Sbj/Obj 2SgObj see.Pfv

‘Seydou saw you-Sg.’

b. *sèēdù yá =à kày*

S Sbj/Obj 3SgObj see.Pfv

‘Seydou saw him/her/it.’

c. *ŋ́ nā sèēdù kày*

1SgSbj Sbj/Obj S see.Pfv

‘I saw Seydou.’

d. *sèēdù (yè) ŋ̀ káy*

S (Sbj/Obj) 1SgObj see.Pfv

‘Seydou saw me.’

*ŋ̀* (+H) has no tonal effect on a following word that begins with M-tone. *kwāā* ‘hit-Past’ and *mūrì* ‘braided’ have the same tones in (xx4a) and (xx4b).

(xx4) a. *ŋ́ nā sèēdù kwāā* / *mūrì*

1SgSbj Sbj/Obj S hit.Pfv / braid(v).Pfv

‘I hit-Past/braided Seydou.’

b. *sèēdù (yè) ŋ̀ kwāā* / *mūrì*

S (Sbj/Obj) 1SgObj hit.Pfv

‘Seydou hit-Past/braided me.’

## Determiners

### Definite

There is no high-frequency definite marker ‘the’ apart from the demonstratives covered below. Simple nouns and NPs without an overt determiner can be interpreted as definite or indefinite. However, one of the demonstratives is a strong discourse-definite marker ‘that (same)’.

### ‘This/that’ (demonstrative pronouns)

Demonstratives are deictic (pointing) or discourse-definite (referring to previously introduced discourse referents). Singular and plural forms of the demonstratives are shown in (xx1), in absolute form (without a noun) and as modifiers of a noun X. The notation *X-ye* represents any plural noun (including those with plural suffixes other than *-yè* ).

(xx1) category Sg Pl

a. absolute forms (without a noun)

deictic or discourse-definite *kú kú-yè*

discourse-definite *ɲɔ̄ⁿ ɲɔ̄ⁿ-yē*

b. combinations with noun X

deictic *kɔ̀ⁿ* (+H) *X kɔ̀ⁿ* (+H) *X-ye*

discourse-definite *X gu X kù-lè*

*ɲɔ̀ⁿ* (+H) *X ɲɔ̀ⁿ* (+H) *X-ye*

*ɲɔ̀ⁿ* (+H) *X gu ɲɔ̀ⁿ* (+H) *X gu-ye*

combined *kɔ̀ⁿ* (+H) *X gu kɔ̀ⁿ* (+H) *X gu-ye*

There is no human/nonhuman or animacy distinction. The opposition deictic versus discourse- definite is partially neutralized in the absolute forms, where *kú* and plural *kú-yè* are common in both deictic and discourse-definite contexts. However, *ɲɔ̄ⁿ* may also occur in discourse-definite contexts. In combination with a noun, L-toned *kɔ̀ⁿ* (+H) and *ɲɔ̀ⁿ* (+H) precede the modified noun. The floating H raises the tone of an L-initial noun to all-H. Conversely, *gu* follows the noun. Without *gu*, *kɔ̀ⁿ* is deictic ‘this’ or ‘that (over there)’ and may be accompanied by pointing. The most common discourse-definite combination is simple *X gu*, with plural *X kù-lè*. *gu* may also be added to a noun already preceded by *ɲɔ̄ⁿ* or by *kɔ̀ⁿ*, but in this case it is pluralized as *gu-ye*. In the combination *ɲɔ̄ⁿ X gu*, *gu* reinforces the already discourse-definite *ɲɔ̄ⁿ*. By contrast, *kɔ̀ⁿ X gu* occurs when both deictic and discourse-definite elements are present, as when the object in question is nearby but has also just been talked about (e.g. ‘that same one over there’).

*gu* behaves tonally like plural *-ye*. It is realized as M‑toned *gū* by spreading from an M‑toned preceding word. It is L-toned after an L‑tone and does not trigger Final Tone-Raising. After an H‑toned word it is L-toned in clausal context, but often M-toned in isolation.

(xx2) *sūgō gū*  ‘that goat’

*kúŋgóló gù* ‘that dog’ (often *kúŋgóló gū* in isolation)

*bùwà gù* ‘that shoulderbag’

Plural *kù-lè* is invariant tonally (xx3). It triggers Final Tone-Raising on the final syllable of a preceding L-toned noun, as with ‘those shoulderbags’.

(xx3) *sūgē-ē kù-lè* ‘those goats’

*kúŋgólé-é kù-lè* ‘those dogs’

*bùwà-yē kù-lè* ‘those shoulderbags’

For combinations of demonstratives with nouns within an NP, including tonal changes on the noun, see §6.5.

In addition to being a discourse-definite demonstrative, *ɲɔ̄ⁿ* can also function as a possessed noun or compound final with abstract meaning (‘situation, matter, problem’).

(xx4) a. *[à ɲɔ̄ⁿ] màà*

[3SgPoss **situation**] look.for.Pfv

‘You-Sg figure out a solution for it!’

b. *āⁿ wɔ́léⁿ-ɲɔ́ⁿ kìlɛ̀↗*

2SgSbj money-**situation** get.Pfv

‘Did you-Sg resolve the money situation?’

### Demonstrative adverbs

#### Locative adverbs

Locative adverbs based on demonstrative-like categories are in (xx1).

(xx1) form gloss

*bōẁⁿ* ‘here’

*kìntá* ‘over there’ (deictic, not far)

*yāẁⁿ* ‘there’ (discourse-definite)

For nondemonstrative spatial adverbs, see §8.4.xxx.

#### Deictic manner adverb or verb (*kìyɛ̀wⁿ* )

*kìyɛ̀wⁿ* can be an invariant deictic manner adverb ‘like this/that’. It follows the main verb but does not agree with it in aspect marking.

(xx1) a. *ē kúŋgóló kwāā gā kìyɛ̀wⁿ*

1PlSbj dog hit.Pfv RemPfv **like.this**

‘We hit-Past the dog like this.’

b. *ē gā à kɔ̄-lɔ̄ kìyɛ̀wⁿ*

1PlSbj Ipfv 3SgObj hit-Ipfv like.this

‘We (often) hit the dog like this.’

In the absence of a main verb like ‘hit’ in (xx1), *kìyɛ̀wⁿ* itself can function as a transitive verb. *kìyɛ̀wⁿ* is then specifically perfective, versus imperfective *kìyɛ̀-nà*. For the modified tonal form *kìyɛ̀-ná* in (xx2a), see §13.1.5.

(xx2) a. *ē gā ā kìyɛ̀-ná*

1PlSbj Ipfv 3SgObj **do.like.this**-Ipfv

‘We’ll do it like this/that.’

b. *ē gā ā kìyɛ̀-nà bōẁⁿ*

1PlSbj Ipfv 3SgObj **do.like.this**-Ipfv here

‘We’ll do it like this/that here.’

c. *ē nā= ā kìyɛ̀-nà*

1PlSbj IpfvNeg 3SgObj **do.like.this**-Ipfv

‘We won’t do it like this/that.’

d. *ŋ̀-dɔ́gɔ́ gā= ā kìyɛ̀-nà*

1Sg-Indep Ipfv 3SgObj **do.like.this**-Ipfv

‘It’s I [focus] who will do it like this/that.’

e. *ē yā= ā kìyɛ̀ⁿ gà*

1Pl Sbj/Obj 3SgObj **do.like.this**.Pfv RemPfv

‘We did it like this/that.’

### Presentatives (‘here’s …!’)

The presentative morpheme *kày* follows the topical NP.

(xx1) a. *sèēdù kày*

S Prsntv

‘Here’s Seydou!’

b. *ŋ̀ kāy*

1Sg Prsntv

‘Here I am!’

A fuller set of pronominal forms is (xx2). 1Sg ŋ*̀* requires M‑toned *kāy*. Other pronominals spread their tone (M or L) to the presentative morpheme (xx2b‑c).

(xx2) Presentatives with pronouns

a. 1Sg *ŋ̀ kāy*

b. 1Pl *ē kāy*

2Sg *āⁿ kāy*

2Pl *āā kāy*

c. 3Sg *à kày*

3Pl *è kày*

## Adjectives

### Inventory of adjectives

This section describes the forms of postnominal modifying adjectives. For adjectival predicates see §11.4. For deadjectival verbs (inchoative and factitive) see §9.5.

Modifying adjectives immediately follow the noun. The majority have /M/ or /ML/ melody, but there are two basic adjectives with /H/. At the margins of the adjective class is /LH/‑toned *sèlé* ‘soft, brittle (rock)’, which is only attested in two combinations: *sīlē sèlé* ‘soft rock’ and *sòōⁿ-sèlé* ‘sandstone’. One could consider *sèlé* to be a compound final. L-toned postnominal adjectives are absent. Adjectival stems that are L-toned as predicates (§11.xxx) are M-toned postnominally.

(xx1) a. /H/ melody

*bánū* ‘big (and solid), massive, thick’

*sílē* ‘old’

b. /M/ melody

*būlōⁿ* ~ *būrōⁿ* ‘big (in outer dimensions); fat; wide, loose’

*dāāⁿ* ‘distant’

*dēmōⁿ* ‘delicious, sweet’

*kāā* ‘wet; raw; unripe’

*kāgājī* ‘bitter’

*kāmnā* ‘old (person)’

*kījī-nā* ‘plump’

*kɔ̄jāⁿ* ~ *kɔ̄yāⁿ* ‘long; tall’

*kūrūⁿ* ‘short’

*kūwōⁿ* ‘white’

*māɲāwⁿ* ‘good’

*ɲɔ̄ŋɔ̄* ‘bad; nasty’

*ɲīɲī* ‘coarse’

*pīīⁿ* ‘black’

*sūmūⁿ* ‘foreign’

*tīnāāⁿ* ‘other’

*tīyɔ̄wⁿ* ‘heavy’

*tɔ̄mɔ̄wⁿ* ‘red’

*tōy* ‘new’

*with suffix -gu*

*kūy-gū* ‘deep’

*pēlū-gū* ‘light(weight)’

*with participial -na*

*kūmā-nā* ‘lean, emaciated’

*kūrī-nā* ‘full-strength, undiluted’

*mwāā-nā* ‘cold’

*nɔ̄gɔ̄rɔ̄wⁿ* ‘difficult’

*ɲāāmū-ɲāāmū-nā* ‘multicolored (e.g. spotted, striped)’

*pān-nā* ‘full’

*pīyɛ̄-nā* ‘hot’ predicative: *pīyɛ̄-nā nì*

*pīyɛ̄-nā* ‘dirty’ predicative: *pìyɛ̀-nā nì*

*pōrē-nā* ‘wet’

*wwōmā-nā* ‘empty’

*iterative*

*wwōⁿ-wwōⁿ* ‘empty; isolated, by itself’

c. /ML/ melody

*with suffix -gu*

*dūwɔ̀-gù* ‘small’

*tūɥ̀-gù* ‘nearby’

*mīyɛ̀-gù* ‘thin’

*ɲīyɛ̀-gù* ‘easy’

*pūlù-gù* ‘soft’

*with participial -na*

*bīllà-nà* ‘narrow, tight’

*dāātà-nà* ‘smooth’

*tāndà-nà* ‘sour’

*wwō-nà* ‘dry; hard’

*iterative*

*yɔ̄rɔ̄-yɔ̄rɔ̀-nà* ‘loose, slack’

d. /LH/ melody (adjectival status doubtful)

*sèlé* ‘soft, breakable (rock)’

e. /L/, / /MLH/, or /LMH/ melody

[none]

Nouns undergo tonal changes before adjectives under some conditions (§6.4).

### Exemplars as “adjectives”

‘Yellow’ is based on the exemplar *nɛ̀rɛ̀n-dūū* ‘powdery bright yellow meal inside pods of néré tree (*Parkia biglobosa*)’. The compound initial is based on the Bambara word for the tree (cf. Jenaama *nàndò* ). As modifying color adjective, ‘yellow’ is contracted and tone-raised to *nɛ̄lɔ̄ndūū*, e.g. *jūgū nɛ̄lɔ̄ndūū* ‘yellow cloth’ (< *jùgù* )

‘Green’ is based on the exemplar *sɔ̄gū kāā* ‘wet (=fresh) grass’. As color adjective it is usually contracted to *sɔ̄gɔ̄-kāā* or *sɔ̄ɔ̄‑kāā*, as in *jùgù sɔ̄ɔ̄-kāā* ‘green cloth’.

These exemplar adjectives have no simple predicative forms. ‘X is yellow/green’ is expressed as ‘X is a yellow/green thing’.

These exemplars for ‘yellow’ and ‘green’ are widespread in languages of the zone.

### Deverbal adjectives (participial *-na* )

The participial suffix *-nà* ~ *-nā* added to a verb stem creates a modifying adjective denoting the result of an action applied to something. The suffix is related to stative *-na* (§9.xxx).

(xx1) a. *māātīgɛ̄* / *tēē ɲɛ̄ŋɛ̄-nā*

peanut / meat roast-Ppl

‘roasted peanuts/meat’ (cooked with a little oil)

b. *gòrò pɛ̄rɛ̀-nà*

kola.nut split-Ppl

‘split kola nuts’

c. *tēē kōy-nā*

meat char-Ppl

‘charred (over-roasted) meat’

d. *pīīⁿ sɛ̄gɛ̀-nà*

millet pound-Ppl

‘millet grain that has been pounded in a mortar’

Some adjectives presented in §4.5.1 above also have the suffix *‑na* but are not obviously deverbal.

## Numerals

### Cardinal numerals

#### ‘One’ (*kēẁⁿ*, *sànnā* ), ‘same (one)’, and ‘other’ (*tīnāāⁿ* )

‘1’ is *kēẁⁿ* either postnominally (attributively) as in (xx1a) or absolutely as in (xx1b). In postnominal use as a numeral, it is accompanied by a nasal linker *ŋ-* unless the noun already ends in a nasalized vowel (xx1a). In absolute function (without a noun), the linker is absent (xx1b). *kēẁⁿ* can occasionally combine with a discourse-definite determiner provided it has been established in preceding discourse (xx1c). *kēẁⁿ* can be repeated in each of two parallel clauses; the free translation is ‘one …, the other …’(xx1d).

(xx1) a. *sàbà ŋ̀-kēẁⁿ*

chicken Link-**one**

‘one chicken’ (< *sàbá* )

b. *ŋ̀ kō [ke᷆ⁿ nī]*

1SgObj give.Pfv [**one** Inst]

‘Give me one!’

c. *[ke᷆ⁿ gù] dō [ŋ̀ té]*

[**one** Dem.Def] give.Pfv [1Sg Dat]

‘Give me the one (e.g., the one that you mentioned).’

d. *[těⁿ yěⁿ dùgòⁿ] kōndō gā,*

[elder.sib and younger.sib] stay.Pfv be,

*[ke᷆ⁿ sò↗] [ke᷆ⁿ kōndō yāẁⁿ]*

[one go.Pfv] [one stay.Pfv there.Def]

‘There were two brothers, elder and younger. One left, the other stayed there.’ (< *tèwⁿ* )

‘One person’ is irregularly *ɲā ŋ̄-kēẁⁿ*, compare *ɲīmī* ‘person’ in all other contexts.

Distributive *(ŋ-)kēⁿ-ꜜkēẁⁿ* ‘one at a time’, ‘one by one’, ‘one each’ also has distributive-paucal sense ‘scattered, here and there’ (§4.6.1.7)

In addition to its use as a numeral (‘1’ as opposed to ‘2’ or more), *kēẁⁿ* can function as a modifier in the sense ‘X alone’ (i.e. not with anyone else), provided that X denotes a single individual. In this construction X may be any singular NP, such as a personal name or a pronominal clitic. There is no nasal linker. See §19.4.2 for examples.

In the counting sequence (‘1, 2, 3, …’), *kēẁⁿ* is replaced by *sànnā*.

The singular-only quantificational adjective *kɯ̄ɯ̄ⁿ* ‘a certain’ (§6.3.2.2) is likely etymologically related to *kēẁⁿ* but it is now semantically and morphosyntactically as well as phonologically divergent.

#### ‘2’ to ‘10’ as postnominal modifiers

The forms in (xx1) are postnominal.

(xx1) gloss form melody

‘2’ *péndé* /H/

‘3’ *sìgèwⁿ* /L/

‘4’ *nàtàwⁿ* ~ *nàràwⁿ* "

‘5’ *kɔ̀ɔ̀gɔ̀wⁿ* "

‘6’ *tùùmì* "

‘7’ *yīyènì* /ML/

‘8’ *sɛ̄kī* /M/

‘9’ *kàpì* /L/

‘10’ *cɛ̄m* ~ cɛ̄mū /M/

An L‑toned noun raises its final syllable (or monosyllabic mora) to M by dissimilation to a following L‑toned numeral: *nàà* ‘cow’, *nàā nàtàwⁿ* ‘4 cows’; *sɔ̀gɔ̀* ‘sheep’, *sɔ̀gɔ̄ kɔ̀ɔ̀gɔ̀wⁿ* ‘5 sheep’.

The bisyllabic variant cɛ̄mū for ‘10’ is often pronounced [cɛ̄m:] with lengthened nasal.

For numerals in bahuvrihis (e.g. ‘two-headed’), see §5.2.1.2.

#### ‘1’ to ‘10’ in the counting recitation

In the counting recitation (‘1, 2, 3, …’), an incantational prosody is overlaid. A suppletive form of ‘1’ is used. ‘10’ is lengthened to *cɛ̄ɛ̄m*. ‘3’ is pronounced with *k* instead of *g*. The overall pitch during the recitation is close to monotonal, in the general area of ordinary M‑tone, but L and M tones are distinguished. The complete cycle through ‘10’, including ‘1’, is (xx1). From ‘1’ to ‘3’ may be pronounced either with uniform pitch (*sānnā pēndē sīkɛ̄wⁿ* ), or with audibly distinct L and M tones (*sànnā pēndē sìkɛ̄wⁿ*). From ‘3’ onward, the numerals that are L-toned as postnominal modifiers raise the pitch of their final syllables to M. This sounds like “list” intonation in many languages. However, in the sequences ‘3-4’, ‘4-5’, ‘5-6’, and ‘6-7’ the pitch rise is also justified by tone sandhi within Jenaama, if we assume that adjacent numerals are phrased together and therefore subject to Final Tone-Raising. However, the same LM tones occur in ‘7’ and ‘9’, which are lexically L‑toned and are followed in the counting sequence by an M‑toned numeral which should not trigger Final Tone-Raising. So not all of the LM-toned words can be explained by tone sandhi (even when they are phrased without a break, which is unusual).

(xx1) counting recitation

gloss form tones

‘1’ *sànnā* L.M

‘2’ *pēndē* M.M

‘3’ *sìkēwⁿ* L.M

‘4’ *nàtāwⁿ* "

‘5’ *kɔ̀ɔ̀gɔ̄wⁿ* "

‘6’ *tùùmī* "

‘7’ *yīyènī* "

‘8’ *sɛ̄kī* M.M

‘9’ *kàpī* L.M

‘10’ *cɛ̄ɛ̄m* M

#### Decimal multiples (‘10’, ‘20’, …) and composites (‘11’, ‘59’, …)

The multiples of ‘10’ are in (xx1). *dɛ̀bɛ̀* ‘40’ and *yōlō* ‘80’ are the only simple, monomorphemic forms. ‘20’ and ‘30’ consist of the numeral ‘2’ or ‘3’ following *tāⁿ-*, which must therefore be understood as suppleting *cɛ̄ɛ̄m* ‘ten’ (compare English *-ty* in *twenty* etc.). A similar composite structure is observed in *tààlmā-sìgèwⁿ* ‘60’. Its final is clearly a variant of *sìkèwⁿ*  ‘3’, so one infers that *tààlmā*- must be a suppletive term for ‘20’. The odd-numbered decimal terms ‘50’, ‘70’, and ‘90’ add ‘10’ to the preceding decimal, following a linker-like element *-è-* that may be a reduced form of an original ‘and’ conjunction. The combination with ‘10’ is realized as *-è-cɛ́m* with an H-toned variant of *cɛ̄m* ‘10’. In the case of ‘70’, the other option is to substract ‘10’ from the next higher decimal (*cɛ̄m-āā-kèwⁿ* roughly ‘one less ten’).

(xx1) *tāⁿ-pēndē* 20

*tāⁿ-sīgēwⁿ* 30

*dɛ̀bɛ̀* 40

*dɛ̀bɛ̀-è-cɛ́m* 50

*tààlmā-sìgèwⁿ* 60

*tààlmā-sìgè-è-cɛ́m* 70

*yōlō-cɛ̄n-āā-kèwⁿ* "

*yōlō* 80

*yōlè-è-cɛ́m* 90

Combinations of decimal terms in (xx1) with the digit ‘1’ are in (xx2). Only ‘10’ has a new form distinct from those seen above, namely *tēmbè-*. It is used in all numerals ‘11’ to ‘19’, whose single-digit form shows no irregularities. Between L‑toned *dɛ̀bɛ̀* ‘40’ and an L‑toned single-digit numeral, the linker *-è-* is raised to M‑tone by Final Tone-Raising: *dɛ̀bɛ̀-ē-nàtàwⁿ* ‘44’. An L‑toned noun likewise raises its final syllable to M before *dɛ̀bɛ̀*, as in *sɔ̀gɔ̄ dɛ̀bɛ̀* ’40 sheep’.

(xx2) ‘11’ *tēmbè-è-kēẁⁿ*

‘21’ *tāⁿ-pēndè-è-kēẁⁿ*

‘31’ *tāⁿ-sīgè-è-kēẁⁿ*

‘41’ *dɛ̀bɛ̀-è-kēẁⁿ*

‘51’ *dɛ̀bɛ̀-è-cɛ̄ɛ̄mù-è-kēẁⁿ*

‘61’ *tààlmā-sìgè-ỳ-kēẁⁿ*

‘71’ *tààlmā-sìgè-ỳ-cɛ̄ɛ̄mù-èy-kēẁⁿ*

‘81’ *yōlō-è-kēẁⁿ*

‘91’ *yōlè-è-cɛ̄ɛ̄mù-è-kēẁⁿ*

the otherwise M-toned digits ‘2’ and ‘8’ rise to H-toned in such combinations. The full set of digit terms in their form following decimal numerals is (xx3).

(xx3) numeral postnominal after decimal

‘1’ *kēẁⁿ -kēẁⁿ*

‘2’ *pēndē -péndē*

‘3’ *sìgèwⁿ -sìgèwⁿ*

‘4’ *nàràwⁿ -nàràwⁿ*

‘5’ *kɔ̀ɔ̀gɔ̀wⁿ -kɔ̀ɔ̀gɔ̀wⁿ*

‘6’ *tùùmì -tùùmì*

‘7’ *yīyènì -yīyènì*

‘8’ *sēkī -sékī*

‘9’ *kàpì kàpì*

As with numerals ‘2’ through ‘9’, higher numerals including a decimal term do not interact tonally with preceding nouns except for the low-level tone sandhi process Final Tone-Raising. This process applies to the combination of an /L/‑toned noun and a numeral beginning with an L‑tone like *dɛ̀bɛ̀* ‘40’, as in *sìbō dɛ̀bɛ̀* ’40 snakes’.

#### Large numerals (‘100’, ‘1000’, …) and their composites

The stems in (xx1) are noun-like morphosyntactically.

(xx1) *tɛ̄ɛ̄mdɛ̄rɛ̀* hundred

*mùjù* thousand

*mīlyōⁿ* million

The numeral ‘1’ is not normally present after any of these: *sɔ̀gɔ̀ tɛ̄ɛ̄mdɛ̄rɛ̀* ‘a hundred sheep’.

In examples like *sɔ̀gɔ̄ mùjù* ‘a thousand sheep’ (< *sɔ̀gɔ̀*), the final syllable of the L‑toned noun is raised by regular tone sandhi to M before the L‑toned numeral.

In combinations with smaller numerals, the linear order is from higher to lower number. The uncontracted conjunction *yèý* or even *yèhínì* ‘and’ connects the two.

(xx2) *sɔ̀gɔ̀ tɛ̄ɛ̄mdɛ̄rɛ̀ pēndē yè-ý yōlō*

sheep hundred two and eighty

‘Two hundred and eighty sheep’

#### Currency

As in all languages of the zone, currency is calculated by means of a currency unit equivalent to five CFA francs. Thus ‘one thousand FCFA’ is expressed as ‘two hundred (units)’. The unit is called *dārì* in Jenaama. The smallest coin is for 5 FCFA.

Most actual occurrences of higher numerals from ‘100’ up in everyday speech are references to money. *dārì* is usually omitted when money is understood to be the topic, for example in market transactions. *dàrì* is also normally contracted to *dɛ̄ɛ̄* before numerals from ‘2’ to ‘999’, thus *dārì ŋ̀-kēẁⁿ* ‘one unit’ (5 FCFA) but *dɛ̄ɛ̄ pēndē* ‘two units’ and so forth, up to *dārì tɛ̄ɛ̄mdɛ̄rɛ̀* ‘one hundred units’ (500 FCFA).

The 5000 FCFA banknote is called *mùjū-sìlāāmù* or (especially among older speakers) *sìlāāmū-mùjù*, and the 10000 FCFA banknote is called *mùjù-pēndē-sìlāāmù*. These compounds contain *mùjù* ‘thousand’, *pēndē* ‘2’, and an obscure compounding element that has a vague phonological resemblance to *sìláámá* ‘Muslim’.

#### Distributive iteration of numerals

Numerals are iterated to form distributive adverbs: ‘two each’, ‘two by two’, ‘two at a time’, etc. The forms for the basic numerals are in (xx1).

(xx1) gloss digit distributive

‘1’ *kēẁⁿ (ŋ-)kēⁿ-ꜜkēẁⁿ*

‘2’ *pēndē pēndē-pēndē*

‘3’ *sìgèwⁿ sìgēⁿ-sìgèwⁿ*

‘4’ *nàràwⁿ nàrāⁿ-nàràwⁿ*

‘5’ *kɔ̀ɔ̀gɔ̀wⁿ kɔ̀ɔ̀gɔ̄ⁿ-kɔ̀ɔ̀gɔ̀wⁿ*

‘6’ *tùùmì tùùmī-tùùmì*

‘7’ *yīyènì yìyènī-yìyènì*

‘8’ *sēkī sēkī-sēkī*

‘9’ *kàpí kàpī-kàpì*

‘10’ *cɛ̄m cɛ̄m-cɛ̄m*

‘20’ *tāⁿ-pēndē tāⁿ-pēndē-tāⁿ-pēndē*

‘40’ *dɛ̀bɛ̀ dɛ̀bɛ̄-dɛ̀bɛ̀*

*kēẁⁿ* ‘1’ differs from the nonsingular numerals in being an adjective, with consequences for tonal interactions with the noun. Its distributive iteration *kēⁿ-ꜜkēẁⁿ* likewise behaves differently from those based on nonsingular numerals, both in its tonal interactions and its predilection for a nasal linker. See §6.3.2.4 for the phonology of its combinations with nouns. *kēⁿ-ꜜkēẁⁿ* may also mean ‘scattered, infrequent, here and there’.

For ‘3’, ‘4’, ‘5’, ‘6’, and ‘40’, all of which are based on L-toned digit terms, the tones of the distributives are explained by regular operation of Final Tone-Raising. This converts LL-LL to LM-LL. The LM-LL output is also extended analogically to ‘7’ and ‘9’, where they are slightly irregular phonologically.

Complex numerals other than ‘20’ and ‘30’ that end in a clearly recognizable digit term usually just iterate this digit term.

(xx2) a. *dɛ̀bɛ̀-è-cɛ́m-cɛ́m* ‘fifty by fifty’

b. *tēmbè-è-kēⁿ-ꜜkēẁⁿ* ‘eleven by eleven’

See also interrogative *jèn̄-jèwⁿ* ‘how much/many each?’ (§13.2.2.6).

Distributives based on nonsingular numerals do not control tonal changes on preceding nouns, except for tone sandhi (Final Tone-Raising) where applicable. Thus *yàmbāà pēndē-pēndē* ‘two houses at a time’, *mànàmī sìgēⁿ-sìgèwⁿ* ‘three dances each’ (< *mànàmì* ), *māāŋgòró kɔ̀ɔ̀gɔ̄ⁿ‑kɔ̀ɔ̀gɔ̀wⁿ* ‘five mangoes each’. In other words, the noun has the same form it would have before a simple (nondistributive) numeral.

### Ordinal adjectives

Ordinals derivedfrom numerals are presented below. For interrogative *jèyⁿ-ànà* ‘how-manieth?’ (French *quantième*) see §13.2.2.6.

#### ‘First’ (*pānāāⁿ*) and ‘last’ (*dágálè* )

*pānāā(ⁿ)* ‘first’ is a suppletive ordinal (compare English *first* and many other parallels). Its antonym is *dāgālē* ‘last’. Tonal interactions with preceding nouns are the normal ones for M‑toned adjectives (xx1).

(xx2) noun gloss ‘first’ ‘last’

a. *nàà* ‘cow’ *nàà pānāāⁿ nàà dāgālē*

b. *sūgō* ‘goat’ *sūgō pānāāⁿ sūgō dāgālē*

c. *kúŋgóló* ‘dog’ *kūŋgōlō pánāā kūŋgōlō dāgālē*

(xx2) presents the positive predicate forms ‘be first/last’. *pānāā* is M-toned, but *dàgàlè* is L‑toned (before tone sandhi).

(xx1) a. *ŋ̀ gā pānāā nì*

1Sg be first it.is

‘I am first.’

b. *ŋ̀ gā dàgàlē nì*

1Sg be last it.is

‘I am last.’

#### Other ordinals (*-ànà*)

Other ordinals are formed by adding *-ànà* to the numeral. It surfaces as *‑ānā* after M‑tone, and as *‑ànà* after L‑tone or H-tone.

(xx1) full form gloss contracted variants

a. from single-digit numeral

*pēndē-ānā* ‘second’ *pēn-ānā*

*sìgà-ànà* ‘third’

*nàtà-ànà* ~ *nàrà-ànà* ‘fourth’

*kɔ̀ɔ̀gɔ̀-ànà* ‘fifth’ *kɔ̀ɔ̀gà-ànà*

*tùùmì-ànà* ‘sixth’

*yìyènà-ànà* ‘seventh’

*sēkī-ānā* ‘eighth’

*kàpì-ànà* ‘ninth’

*cɛ̄ɛ̄mū-ānā* ‘tenth’

b. decimal

*tāⁿ-pēndē-ānā* ‘twentieth’ *tāⁿ-pēn-ānā*

c. decimal plus single-digit numeral

*tēmbè-è-ké-ànà* ‘eleventh’

d. hundred

*tɛ̄ɛ̄mdɛ̄rɛ̀-ànà* ‘hundredth’

The ordinal interrogative is *jèyⁿ-ànà* ‘how-manieth?’ (§13.2.2.6).

Ordinals behave like other adjectives in tonal interactions with preceding nouns, e.g. *kūŋgōlō pēn-ānā* ‘second dog’ (< *kúŋgóló* ).

### Fractions and portions

‘Half’ (always with a possessor) is *tàá* or *pɛ́jɛ̄*. The minimal form is *à tàá* or *à pɛ́jɛ́* ‘half of it’. A full NP possessor occurs in *[wɔ́léⁿ gú] tàá* or *[wɔ́léⁿ gú] pɛ́jɛ́* ‘half of that money’. Diminutive *tàà-lɛ̄wⁿ* can mean ‘(small) portion’ of variable size. There are no terms specifically meaning ‘a third’ or other fraction.

Also relevant are *kúrū* ‘piece (of meat)’, *kùrí* ‘piece, segment (of a long object such as a rope or a stem)’, *pɛ́rɛ̄* ‘half (of a split object, e.g. kola nut or watermelon)’, and the very general *kómbē* ‘piece (of cloth), shard (of broken calabash)’. The related verb *kōmbō/kōmbò* means ‘remove a piece’.

# Nominal and adjectival compounds

## Nominal compounds

### Nasal linker between initial and final

Scattered throughout the compounds presented in the following sections of this chapter are some with a nasal linker separating the initial from the final. The nasal assimilates in position to some following consonants. Some examples are in (xx1).

(xx1) compound gloss lexical form of initial

a. *pùù-n-jɛ̄wⁿ* ‘heart of palm’ *pùù* ‘germinated borassus palm nut’

b. *nàà-m-būwɔ̀-yà* ‘cowherd’ *nàà* ‘cow’

c. *sīlē-ⁿ-sàbá* ‘stone partridge’ *sīlē* ‘rock’

*kēẁⁿ* ‘one’ appears with a nasal linker (*ŋ-kēẁⁿ* ) after a noun when it functions as a numeral (§4.xxx, §6.xxx).

Such nasal linkers separating compound initials and finals occur, sometimes sporadically and unpredictably, in other languages of the zone (Bangime, Dogon, Songhay).

### Compounds resembling possessor-possessum NPs

#### With simple initials

In this type, the initial and final retain their lexical tones, and there is no tone-flattening in the initial (unlike the case with some other compounds). If the initial ends in L-tone and the final begins with L-tone, Final Tone-Raising (tone sandhi) applies at the boundary (xx1g). The semantic relationship of initial and final is highly variable. The initial and/or final may itself be composite.

Many such compounds could be parsed morphosyntactically as possessor-possessum combinations (e.g. ‘donkey’s ear’ as opposed to ‘donkey-ear’). A compound, however, behaves morphosyntactically (as well as semantically) as a noun. In particular, the initial cannot be separately modified by a possessor or a demonstrative. Similarly, unless the initial is lexicalized in plural form (see the following section), the initial in a compound cannot normally be independently pluralized.

A further distinction between compounds and possessor-possessum combinations is that some compounds present a nasal linker between initial and final that does not occur elsewhere. ‘Stone partridge’ exemplifies the nasal linker.

(xx1) a. *sīlē-ⁿ-sàbá* ‘stone partridge’ (*Ptilopachus*)

*sīlē* ‘rock’ plus *sàbá* ‘chicken’

b. *nàà-kūmū* ‘trailing vine sp. with bends at nodes’

*nàà* ‘cow’ plus *kūmū* ‘knee’ (dialectal)

c. *ʃèmpùwò[-túwɔ́-lɛ̄wⁿ]* ‘plant sp.’

*ʃèmpùwò* ‘donkey’ plus *túwɔ́-lɛ̄wⁿ* ‘ear’

d. *kàŋgé-[pùù-n-jɛ̄wⁿ]* ‘wild onion spp.’

*kàŋgé* ‘hyena’ plus *pùù-ǹ-jɛ̄wⁿ* ‘heart of palm’

e. *[yùgòⁿ-sílé]-ɲīī* ‘trailing vine sp.’

*yùgòⁿ sílé* ‘old woman’ plus *ɲīī* ‘tooth’

f. *kùwɔ̀-sɔ̄ɔ̄ⁿ* ‘plant sp. (resembles a de-braiding needle)’

*kùwɔ̀* ‘monkey’ plus *sɔ̄ɔ̄ⁿ* ‘needle’

g. *kùgū-ɲɛ̀wⁿ* ‘sun’

*kùgù* ‘daytime’ plus *ɲɛ̀wⁿ* ~ *ɲìyɛ̀wⁿ* ‘head’

h. *màlīfá-būūrūⁿ* ‘barrel of rifle’

*màlīfá* ‘rifle’ plus *būūrūⁿ* ‘tube, pipe’

While there are some criteria (mentioned above) for distinguishing compounds from possessor-possessum NPs, the distinction can be blurry. The transitional cases are possessives with indefinite or generic possessor.

#### With plural initials

In these examples, the initial denotes a generic type of “possessor,” which may be an animal species, an ethnicity, or an age-sex category.

(xx1) a. *kùwɔ̀-yē nàm-jīī* ‘floating pond scum (*Najas*)’

*kùwɔ̀-yè* ‘monkeys’ plus *nàm-jīī* ‘baobab-leaf sauce’

b. *pùlé-mbē pùwɔ́ⁿ* ‘herb sp. (*Amaranthus*)’

*pùlé-mbē* ‘birds’ plus *pùwɔ́ⁿ* ‘fonio (grain)’

c. *nɔ̀lɔ̀-mbē sɔ̀m̄-bàà-tīī* ‘prickly herb sp. (*Achyranthes*)’

*nɔ̀lɔ̀-mbè* ‘Dogon-Pl’ plus *sɔ̀m̄-bàà-tīī* ‘pubic hairs’

### Compounds with tone-flattened initial

Compounds of this type involve a deverbal nominal (verbal noun or agentive) as final, and an incorporated object noun as initial. The initial denotes a typical, generic object.

The initial partially retains its lexical tones. However, a contoured melody flattens to a monotonal one: the first tone spreads to the end of the compound initial.

(xx1) melody noun gloss as initial in these compounds

a. melody begins with L

/LH/ *kàŋgé* ‘hyena’ *kàŋgè‑*

/LH\*/ *kìtɔ́mɔ́* ‘conical hat’ *kìtɔ̀mɔ̀‑*

/LMH/ *màlīfá* ‘rifle’ *màlìfà-*

/LML/ *yàmbāà* ‘house’ *yàmbàà‑*

b. melody begins with M or H

/ML/ *sīīsò* ‘scissors’ *sīīsō‑*

/MLH/ *mākàrí* ‘macari’ *mākārī-*

In some noun-noun compounds of this type, there is also a tonal change in the final. For example, dɛ̀gɛ̀ ‘pain’ is M-toned in all compounds with body parts (xx2).

(xx2) compound gloss usual form of initial

*kɔ̀rɔ̀-n-dɛ̄gɛ̄* ‘back pain’ kɔ̀rɔ̀

*nùùn-dɛ̄gɛ̄* ‘upset stomach’ nùùⁿ

*ɲìyɛ̀n-dɛ̄gɛ̄* ‘headache’ ɲìyɛ̀wⁿ

*ɲīīn-dɛ̄gɛ̄* ‘toothache’ ɲīīⁿ

*[tūwɔ̄-lɛ̄n]-dɛ̄gɛ̄* ‘ear-ache’ túwɔ́-lɛ̄wⁿ

#### Verbal noun with incorporated object

In this construction, a transitive verb takes verbal-noun form. The initial is a noun that denotes the general category of object. It undergoes tone-flattening as described just above. An L‑toned final shifts to M‑toned (xx1b-c), but an ML‑toned final like *-sɛ̄gɛ̀* retains its tones (xx1d).

In each row of the array (xx1), the basic form of the noun corresponding to the initial is shown in the right-hand column only if it has undergone audible tone-leveling (i.e., only if the noun has a contoured lexical melody).

(xx1) compound gloss lexical form of initial

a. *dīgɛ̄* ‘eating

*tēē-dīgɛ̄* ‘meat-eating’

*kégú-dīgɛ̄* ‘cream of millet-eating’

*màkàrì-dīgɛ̄* ‘macari-eating’ *mākàrí*

b. *wɔ̀gɛ̀* ‘killing’

*kúŋgóló-wɔ̄gɛ̄* ‘dog-killing’

*sūgō-wɔ̄gɛ̄* ‘goat-killing’

*kàŋgè-wɔ̄gɛ̄* ‘hyena-killing’ *kàŋgé*

*yòrògò-wɔ̄gɛ̄* ‘cat-killing’ *yòrōgó*

*kùmbùrù-wɔ̄gɛ̄* ‘bug-killing’

c. *kūmɛ̄* ‘catching’

*kàŋgè-kūmɛ̄* ‘hyena-catching’ *kàŋgé*

*tōōrū-kūmɛ̄* ‘fetish-catching’ *tōōrù*

*gīlɛ̄ⁿ-kūmɛ̄* ‘cowry-catching’ *gīlɛ̀wⁿ*

d. *màkàrì-sɛ̄gɛ̀* ‘macari-pounding’ *mākàrí*

*nàm-sɛ̄gɛ̀* ‘baobab-pounding’

*pīīⁿ-sɛ̄gɛ̀* ‘millet-pounding’

e. *màlìfà-mīyɛ̄nī* ‘rifle-making’ *màlīfá*

*búwóⁿ-mīyɛ̄nī* ‘mortar-making’

*kìyɛ̀-kùlà-mīyɛ̄nī* ‘bowl-making’ *kìyɛ̀-kūlā*

*kìtɔ̀mɔ̀-mīyɛ̄nī* ‘conical hat-making’ *kìtɔ́mɔ́*

*sīīsō-mīyɛ̄nī* ‘scissors-making’ *sīīsò*

f. *dùwɔ̀-mɛ̄wⁿ* ‘beer-drinking’

*sɔ́gɔ́-mɛ̄wⁿ* ‘milk-drinking’

*jīī-mɛ̄wⁿ* ‘water-drinking’

*tēē-mɛ̄wⁿ* ‘tea-drinking’ *tēè*

g. *yàmbàà-kēbē* ‘house-building’ *yàmbāà*

*tùbà-kēbē* ‘granary-building’

*jáŋáⁿ-kēbē* ‘shed-building’

*mìsìrì-kēbē* ‘mosque-building’ *mìsírí*

These are true compounds to the extent that the initial is invariant in form (not separately pluralizable or determined). However it is possible to free the initial from these restrictions and rephrase it as an open-ended NP, in which case it may be pluralized or otherwise modified (xx2a), and it may be pronominal (xx2b). In these cases there is no way to determine whether the NP or pronoun in question is still a direct object of the verb, or a possessor of the nominalized verb. I will gloss the pronominal in (xx2b) as possessor.

(xx2) a. *[kɔ̀ⁿ nāā-yē kù-lè] kɔ̄lɛ̄*

[Dem cow-Pl Dem.Def-Pl] hit.VblN

‘hitting those cows’ (< *nàà-yè* )

b. *ŋ̀ kɔ̄lɛ̄*

1SgPoss hit.VblN

‘hitting me’

When the object of the transitive verb is a high-frequency lexicalized plural, the distinction between open-ended NP and compound initial may be blurred, unless additional modifiers are present. It is possible that ‘children’ in (xx3a) is just a compound initial, like ‘child’ in (xx3b).

(xx3) a. *[jéná-mbí-gé]-kɔ̄lɛ̄* ‘children-hitting’

b. *jénáⁿ-kɔ̄lɛ̄* ‘child-hitting’

#### Agentive compounds with incorporated object

For uncompounded agentives with suffix *-ya* ~ *-yɛ*, see §4.2.2. Some agentives allow an incorporated object for more specificity. This initial undergoes tone-flattening as in verbal-noun compounds (preceding section).

(xx1) compound gloss basic form of initial

a. *būwɔ̀-yà* ‘herder’

*nàà-m-būwɔ̀-yà* ‘cowherd’ *nàà*

*sūgō-būwɔ̀-yà* ‘goatherd’

*[sɔ̀gɔ̀-lɛ̀ⁿ]-būwɔ̀-yà* ‘sheepherd’

b. *tōlē-yā* ‘seller’

*kúŋgóló-tōlē-yā* ‘dog seller’

*nàà-tōlē-yā* ‘cattle seller’

*pīīⁿ-tōlē-yā* ‘grain seller’

*kààn-tōlē-yā* ‘calabash seller’ *kàànú*

*màlìfà-tōlē-yā* ‘gun seller’ *màlīfá*

### H-final compounds

In this type, the initial is flattened to all-M or all-L, and the final raises tones to all-H.

#### H-final compounds from temporal subject-verb collocations

Of the subject-verb collocations in §11.1.xxx, two correspond to H-final compounds (xx1a‑b). These compounds denote events rather than cardinal directions (‘west’, ‘east’).

(xx1) a. *[kùgù-ɲɛ̀ⁿ]-túⁿ* ‘sunset’

*kùgū-ɲɛ̀ⁿ tūⁿ* ‘the sun has set’ (lit. “has gotten lost”)

b. *[kùgù-ɲɛ̀ⁿ]-táwⁿ* ‘sunrise, dawn’

*kùgū-ɲɛ̀ⁿ tāwⁿ* ‘the sun has risen’ (lit. “has ascended”)

I was not able to elicit compounds of this type corresponding to ‘day break’ or ‘night fall’.

#### H-final compounds with spatial PP initials for habitat

In this type, the initial is a spatial PP that specifies the habitat of the referent of the final. The PP is tone-flattened and the final is raised to all-H.

(xx1) PP gloss final

compound

a. *jīī nìŋīì* ‘in water’

*[jīī-nīŋī]-púléwⁿ* ‘aquatic bird’ *pùléwⁿ* ‘bird’

b. *sīlē kūmà* ‘on rock’

*[sīlē-kūmā]-sábá* ‘stone partridge’ (*Ptilopachus*) *sàbá* ‘chicken’

#### H-final compounds with noun-verb initials for a defining activity

In this type, the initial is a noun-verb compound that denotes the characteristic activity of the referent denoted by the final. Examples are the compounds in (xx1). The corresponding noun-verb combinations (in perfective form) and the nouns functioning as finals are shown under the compounds.

(xx1) a. *[kùwò-cyɛ̀ⁿ]-kúmbúrú* ‘dung beetle’ (scarabaeid)

*kùwò cyɛ̄wⁿ* ‘carry excrement on head’

*kùmbùrù* ‘bug, beetle’

b. *[nàm-sɛ̀gɛ̀]-búwōⁿ* ‘mortar for pounding sauce ingredients’

*nàm sɛ̄gɛ̄* ‘pound dried baobab leaves’

*búwōⁿ* ‘mortar’

#### ‘Male’ (*-kɛ́ɛ́gú* ) and ‘female’ (*-yúgóⁿ* ) in H-final compounds

*kɛ̄ɛ̄gū* ‘man’and *yùgòⁿ* ‘woman’ can be added as modifiers to another noun in the senses ‘male’ and ‘female’. These compounds belong to the H-final tonal type, ending in *‑kɛ́ɛ́gū* and *‑yúgōⁿ* prepausally and in *‑kɛ́ɛ́gú* and *‑yúgóⁿ* before another word. Some common combinations denoting human relationships are in (xx1).

(xx1) a. *bùwɔ̀* ‘age-mate, peer, generation-mate’

*bùwɔ̀-kɛ́ɛ́gū* ‘male age-mate’

*bùwɔ̀-yúgōⁿ* ‘female age-mate’

b. *cìyè-kɛ́ɛ́gū* ‘grandfather’

*tàà-yúgōⁿ* ‘grandmother’

c. *dùgòⁿ* ‘younger sibling’

*dùgòⁿ-kɛ́ɛ́gū* ‘younger brother’

*dùgòⁿ-yúgōⁿ* ‘younger sister’

Any sex-differentiated animal species can use these compound finals (xx2a). The ‘male’ form can apply to any plant term to indicate sterility (no fruits borne) (xx2b). For dioecious plants such as palms the male-female distinction is botanically correct (xx2c).

(xx2) a. *sàbá* ‘chicken’

*sàbà-kɛ́ɛ́gū* ‘rooster’

*sàbà-yúgōⁿ* ‘hen’

b. *kārāndē* ‘tamarind (tree and fruit)’

*kārāndē-kɛ́ɛ́gū* ‘sterile tamarind tree’

*kārāndē-yúgōⁿ* ‘fruit-producing tamarind tree’

c. *yīyē* ‘borassus palm’

*yīyē-kɛ́ɛ́gū* ‘male borassus palm’

*yīyē-yúgōⁿ* ‘female (fruit-bearing) borassus palm’

#### Place nominal (*-gàwⁿ* ) with incorporated object

Simple place nominals consist of a verb stem (usually perfective) plus suffix *-gàwⁿ* (§4.2.1.4). If the verb is transitive, an incorporated object may be added as compound initial.

(xx1) a. *mōtōⁿ-mīyɛ̄nī-gàwⁿ*

motorcycle-repair-**place**

‘garage, motorcycle-repair place’

b. *ɲàmā-pìī-gàwⁿ*

garbage-dump(v)-**place**

‘refuse heap’

### Diminutives and ‘X-child’ compounds

#### Diminutives with *-náwⁿ*

The modifying adjective ‘small’ is *dɛ̀gɛ̀-náwⁿ*. It is suppleted as adjectival predicate (pseudo-reflexive) by *dùwɔ̀wⁿ*, as in *X yē ŋ̄ dùwɔ̀wⁿ* ‘X is small’. Numerous nominal diminutives derived from simple nounsshow the same ending as *dɛ̀gɛ̀-náwⁿ*. The tones of the initial are leveled to all-M or all-L.

This is the productive diminutive formation for inanimates. The diminutives are generally lexicalized to some extent. Those based on ‘tree’ or tree-species names denote saplings (xx1a). Those based on terms for tools or other man-made objects denote recognizable subtypes (xx1b). For example, mortars and pestles are manufactured in different sizes for different tasks (pounding entire millet grain spikes to knock off the grains, pounding whole grains to knock off the chaff, pounding grains into flour, pounding spices for sauce-making, etc.). Diminutive ‘pants’ in (xx1c) has an idiosyncratic semantic relationship to its host noun, and denotes leggings of any size (from shorts to long pants).

(xx1) a. *jūgū* ‘tree’ *jūgū-náwⁿ* ‘sapling’

*kɯ̀lɯ̀* ‘baobab (tree)’ *kɯ̀lɯ̀-náwⁿ* ‘baobab sapling’

b. *kūlā* ‘eating bowl’ *kùlà-náwⁿ* ‘small eating bowl’

*búwōⁿ* ‘mortar’ *būwō-náwⁿ* ‘small mortar’

*bàn-jēwⁿ* ‘pestle’ *bàn-jèⁿ-náwⁿ* ‘small pestle’

*yàmbāà* ‘house’ *yàmbàà-náwⁿ* ‘small house’

*àrjo᷆ⁿ* ‘radio’ *àrjòⁿ-náwⁿ* ‘small radio’

*kūūⁿ* ‘boat (skiff)’ *kūūⁿ-náwⁿ* ‘small boat; brick mold’

c. *tàbà* ‘foot, leg’ *tàbà-náwⁿ* ‘pants, shorts, leggings’

An example of a noun that occurs only in diminutive form is *sàmà-náwⁿ* ‘soap’. It is likely that this variant of a regionally widespread word (e.g. Fulfulde *saabunde*) has been secondarily reshaped as a diminutive.

The diminutive in *-náwⁿ* is distinct tonally and semantically from compounds with final *‑nàwⁿ* ‘mother’. The distinction is important for *jūgū* ‘tree’ and tree species names. The compound *jūgū‑nàwⁿ*, literally “tree-mother,” means ‘(entire) tree’ as opposed to *jūgū‑jēwⁿ* “tree-child,” which means ‘fruit of tree'. *jūgū-nàwⁿ* differs tonally from diminutive *jūgū-náwⁿ* in (xx1a).

*-náwⁿ* can combine with terms of animals. It is not the productive compound type for juveniles (puppy, goat kid, lamb, calf), which has *-lɛ̄wⁿ* instead of *-náwⁿ*. However, *-náwⁿ* can be used to denote an unusually small (e.g. stunted) animal. With human nouns ‘woman’ and ‘man’, *-náwⁿ* has specialized use in denoting preadolescent children (xx2b). My assistant rejected *‑náwⁿ* with other human nouns including *ɲīmī* ‘person’ and terms like ‘Fulbe person’, ‘blacksmith’, and the like.

(xx2) a. *nàà-náwⁿ* ‘small cow’

*[sɔ̀gɔ̀-lɛ̀ⁿ]-náwⁿ* ‘small sheep’

*sūgō-náwⁿ* ‘small goat’

b. *yùgòⁿ-náwⁿ* ‘girl’ (around 7-8 years old)

*kɛ̄ɛ̄gū-náwⁿ* ‘boy’ (around 7-8 years old)

In the animal cases (xx2a), the compound with *-náwⁿ* has more or less the same sense as the noun plus adjective *dɛ̀gɛ̀‑náwⁿ* ‘small’. This adjective can also combine with any human noun to denote an individual of small stature, of whatever age (‘small woman’, ‘small person’, ‘small Fulbe person’, ‘small blacksmith’, etc.).

#### Diminutive and not-so-diminutive *-lɛ̄wⁿ* (plural *-lɛ̄m-bē*)

A semantically somewhat opaque formative *-lɛ̄wⁿ* occurs in a number of nouns. Its etymological relationship to *-jɛ̄wⁿ* ‘child’ (compound final) and *dīyɛ̄wⁿ* ‘child (offspring)’ is unclear, but there is no close synchronic connection. *-lɛ̄wⁿ* has a distinctive plural *-lɛ̄m-bē* which is especially common for semantically diminutive nouns. It is in free variation with the productive plural *‑lɛ̄ⁿ‑yē*, which is favored in nouns that have no clear diminutive sense.

With most animal terms, *-lɛ̄wⁿ* denotes the juvenile (xx1a). For ‘sheep’, however, *sɔ̀gɔ̀‑lɛ̄wⁿ* is in common use for adults as well as juveniles, and is more common than the unsuffixed form (xx1b). *-lɛ̄wⁿ* does not normally occur on human nouns, but *jénáⁿ-lɛ̄wⁿ* can replace the usual ‘child’ noun *jénáⁿ* in ironic contexts, as when a child attempts unsuccessfully to perform an adult feat (xx1c). The plural in this context is *jénám-bí-gé-lɛ̄m-bē*.

(xx1) a. animals (juvenile)

*sūgō-lɛ̄wⁿ* ‘goat kid’ *sūgō* ‘goat’

*nàà-lɛ̄wⁿ* ‘calf (yearling)’ *nàà* ‘cow, bovine’

*kúŋgóló-lɛ̄wⁿ* ‘puppy’ *kúŋgóló* ‘dog’

*pùléⁿ-lɛ̄wⁿ* ‘chick’ *pùléwⁿ* ‘bird’

b. animals (juvenile to adult)

*sɔ̀gɔ̀-lɛ̄wⁿ* ‘sheep’ *sɔ̀gɔ̀* ‘sheep’

c. humans

*jénáⁿ-lɛ̄wⁿ* ‘child’ (special contexts) *jénáⁿ* ‘child’

A fair number of inanimate nouns also end in *-lɛ̄wⁿ*. The noun *pā-lɛ̄wⁿ* ~ *pɔ̄-lɛ̄wⁿ* ‘a little’, diminutive of *pwɔ̄* ‘thing’, is used as a noun or adverb (§8.4.2.2). The other inanimate examples are likewise rather lexicalized, but *-lɛ̄w*ⁿ is phonologically conspicuous, making segmentability easier. The plural with *-lɛ̄m-bē* is sometimes used instead of *‑lɛ̄ⁿ-yē*. Some of the inanimates have an obscure relationship to an independently existing noun, not involving any apparent diminutivity or endearment (xx2a). Others are lexically isolated (xx2b).

(xx2) a. inanimates with recognizable initial

*jūgū-lɛ̄wⁿ* ‘wild prune tree (*Sclerocarya*)’ *jūgū* ‘tree (in general)’

*dūgū-lɛ̄wⁿ* ‘thorny scrub acacia spp.’ *dúgúⁿ* ‘dense forest, thicket’

*kùgù-lɛ̄wⁿ* ‘blazing hot sun (at mid-day)’ *kùgù* ‘daytime’

*kùgū-ɲɛ̀wⁿ* ‘sun’ (celestial body)

b. inanimates without a recognizable initial

*dùbà-lɛ̄wⁿ* ‘mirror’

*tígé-lɛ̄wⁿ* ‘cut (wound)’

*túwɔ́-lɛ̄wⁿ* ‘ear’

*tùwɔ̀-lɛ̄wⁿ* ‘penis’

*wōō-lɛ̄wⁿ* ‘groundnut’ (*Vigna subterranea*)

*wóó-lɛ̄wⁿ* ‘cataract’

*pɔ́mɔ́-lɛ̄wⁿ* ‘herb sp. (*Commelina*)’

*kōgū-lɛ̄wⁿ* ‘tall grass sp. (*Andropogon*)’

*kàɲà-lɛ̄wⁿ* ‘tall grass sp.’

*kwāā-lɛ̄wⁿ* ‘shrub sp. (*Sarcocephalus*)’

*kùgù-lɛ̄wⁿ* (xx2a) emphasizes mid-day heat. In the collocation (xx3a), uncompounded *kùgù* occurs since there is no specific reference to heat. *kùgù-lɛ̄wⁿ* occurs in (xx3b) which does emphasize heat.

(xx3) a. *kùgū tàà-nà*

**daytime** stand-Stat

‘The sun is at its zenith (mid-day).’

b. *kùgù-lɛ̄ⁿ bàà máɲɛ̄ wày*

**sun** exit.Pfv a.lot today

‘The sun is really blazing hot today.’

#### Compounds with ‘child’ as final (*-dīyɛ̄wⁿ*, *‑jēwⁿ* , *‑jéwⁿ* )

The following uncompounded terms for (human) ‘child’ and ‘children’ occur. The plurals are often irregular or suppletive. Those in (xx1a) denotes age grades. Those in (xx1b) denote relationships to parents.

(xx1) singular plural gloss

a. juvenile person

*jénāⁿ jénám-bí-gé*, *jénáⁿ-yè* ‘child’

— *dālm-bī-gē* ‘children’

b. offspring (kinship)

*dīyɛ̄wⁿ* *dīyɛ̄ⁿ-yē*, *dēm-bē*, *dēm-bē-yē* ‘child, son or daughter’

Only *dīyɛ̄wⁿ* is in use as a compound final. It is contracted to *-jēwⁿ* or *-jéwⁿ* in some compounds, in which case it is pluralized as *-dēm-bē* or *-dēm-bè*. It can denote a young member of a given ethnicity or other human category (xx2). There is no tone-flattening of the initial as shown by (xx2c).

(xx2) noun gloss ‘child’ ‘children’

a. *púnāwⁿ* ‘Fulbe person’ *púnáⁿ-dīyɛ̄wⁿ púnáⁿ-dēm-bē*

b. *kùygù* ‘blacksmith (caste)’ *kùygù-dīyɛ̄wⁿ* *kùygù-dēm-bē*

c. *mììmá* ‘leatherworker (caste)’ *mììmá-dīyɛ̄wⁿ mììmá-dɛ̄m-bē*

‘Child’ as compound fnal can also extend into nonhuman domains. In (xx3a), two paired objects of different sizes are distinguished by the use of this compound final.

(xx3) a. *dwī-sīlē*

grind.Pfv-stone

‘large stone on which grain is ground’

b. *dwī-sīlē-dīyɛ̄wⁿ*

grind.Pfv-stone-child

‘smaller round stone held in hand for grinding grain’

‘Heart of (borassus) palm’ is *pùù-ǹ-dīyɛ̄wⁿ*, compare *pùù* ‘germinated borassus palm nut’.

### Compounds with *tùgù* ‘owner’

The noun *tùgù* ‘owner’ requires a possessor or compound initial, minimally 3Sg possessor *à* (xx1).

(xx1) *ŋ̀ nā= [ā tùgū] tò*

1Sg IpfvNeg [3SgPoss owner] know.Ipfv

‘I don’t know its owner.’

The plural is *tùgù-yè*, usually pronounced *tùgè-è*.

Examples of compounds denoting ownership are in (xx2). Final Tone-Raising applies to an L-toned initial like *sìrìmbè*.

(xx2) *bìtígí-tùgù* ‘shop owner (storekeeper)’

*dáábá-tùgù* ‘owner of livestock’

*yàmbāā-tùgù* ‘homeowner’ < *yàmbāà*

*sìrìmbē-tùgù* ‘folding knife-owner’ < *sìrìmbè*

In addition, *-tùgù* ‘owner’ occurs in a wide range of compounds denoting attributes, ranging from conditions to unusual body parts to abstractions.

(xx3) noun gloss ‘owner of X’ gloss

a. condition

*wɔ̀bɔ̀* ‘disease’ *wɔ̀bɔ̄-tùgù* ‘sick person, carrier of disease’

b. body part

*sìmbò-cīī* ‘beard’ *sìmbò-cīī-tùgù* ‘bearded (person)’

*kùlù* ‘hump’ *kùlū-tùgù* ‘humped, hunchback’

c. abstract attribute

*dáwlā* ‘aura of success’ *dáwlá-tùgù* ‘one who is constantly successful’

*-tūgū* with M-tones is also attested, as in *nàpɔ̀rɔ̀-tūgū* ‘wealthy person’. (xx4b) is formed from the compound noun that appears as final in (xx4a).

(xx4) a. *ɲīmī-[sɔ̀gɔ̀-bēwⁿ]*

person-[serious(ness)]

‘responsible (trustworthy) person’

b. *[sɔ̀gɔ̀-bèn]-tūgū*

[serious(ness)]-**owner**

‘responsible one (person)’

### ‘True’ versus ‘false’

There is no single mechanism for distinguishing valuable ‘true’ plant species from inferior ‘false’ or ‘wild’ ones. Adjectives ‘good’ (*māɲāwⁿ* ) and ‘bad’ (*ɲɔ̄ŋɔ̄* ) can always be added opportunistically.

There is likewise no all-purpose construction for ‘main, principle’. The main men’s shed (palaver house) in a village is simply called ‘big shed’ (*jāŋāⁿ būlōⁿ* ). See also *jáátī* ‘exactly, truly’ (§8.4.3.1).

In at least two cases the true and false versions of a cultivated plant are denoted by unrelated lexical items (xx1a-b). In another, a diminutive is used (by some speakers) to distinguish the nonprototypical species (xx1c).

(xx1) a. *pīīⁿ* ‘millet’ (cultivated *Cenchrus spicatus*, formerly *Pennisetum glaucum*)

*sùwòⁿ* ‘false millet’ (stray millet plants, not from seedstock)

b. *dūgā* ‘rice’ (cultivated *Oryza sativa*)

*kɔ̄bà* ‘wild rice’ (wild *Oryza* spp.)

c. *ʃìì* ‘wild fruit tree sp.’ (*Vitex doniana*)’

*ʃìì-náwⁿ* ‘sapling of *ʃìì* tree’ or ‘related tree sp. (*Vitex madiensis*)’

Some other devices are illustrated in the following subsections.

#### Compound final *ŋɔ́mɔ̄* ~ *ŋɔ́mɛ̄* ‘false’

By ‘false’ plant species are meant wild species that resemble a more conspicuous or more useful species, especially cultivated plants. The ‘false’ species is typically not edible or otherwise useful. The compound final *ŋɔ́mɔ̄* ~ *ŋɔ́mɛ̄* ‘false’ is added to the name of the prototypical plant. It can also function as a self-standing noun ‘false one’. The form *ŋɔ́mɔ̄* is used by older speakers, *ŋɔ́mɛ̄* by younger ones. Two compounds are in use.

(xx1) a. *pàā-m-pùwóⁿ* ‘sesame’ (cultivated *Sesamum indicum*)

*pàà-m-pùwòⁿ ŋɔ́mɔ̄/ɛ̄* ‘false sesame’ (wild *Sesamum alatum*)

b. *sààgù* ‘roselle’ (cultivated *Hibiscus sabdariffa*)

*sààgù ŋɔ́mɔ̄/ɛ̄* ‘wild roselle’ (wild hibiscus)

#### Nonhuman animal possessor

Several plants are referred to by a possessor-possessum construction ‘X’s Y’, where Y denotes a prototypical species and X denotes an animal species.

(xx1) a. *sàbúlá* ‘cowpea’ (cultivated *Vigna unguiculata*)

*ɲīnā sàbúlá* ‘mouse’s cowpea’ (wild *Vigna* spp.)

more exx. < lexicon

### Function-specifying compounds of nominalized verbs

Nouns like ‘water’, ‘oil’, and ‘wood’ denote substances that are put to different uses. In the case of ‘oil’ the uses correlate with source (peanut, shea-tree, etc.). This is less so with wood and much less so with water.

To distinguish water, oil, and wood reserved for different functions, these nouns are combined with a compound initial that denotes the prototypical action. This may be a verbal noun with -gu (§4.xxx). It may also be an unsuffixed verbal noun, with or without a final-vowel mutation or a variant form of the stem (§4.2.1.2). Both the initial and final are tone-flattened. The final is all-H-toned or all-M-toned, the latter being the output for /L/ melody nouns. The initial is all-L-toned or all-M-toned.

(xx1) noun gloss verb (Pfv/Ipfv)

a. *jīī* ‘water’

*mɛ̀ⁿ-jīī* ‘drinking water’ *mɛ̀wⁿ/mɛ̀-nɛ̀*

*ɲīnī-jīī* ‘dishwater; bathing water’ *ɲīnī/ɲīnì*

b. *tīyɛ̄* ‘oil’

*[sūū-gū]-tīyɛ̄* ‘lotion, rubbing oil’ *sūū/sū-lū* ‘rub on’

*[dīgɛ̄-gū]-tīyɛ̄* ‘cooking (eating) oil’ *dīgɛ̄/dīgɛ̀* ‘eat’

c. *kìyɛ̀* ‘wood, stick’

*kēbē-kīyɛ̄* ‘lumber (for building)’ *kēbē/kēbè*

*[kɯ̄ɯ̄-nī]-kīyɛ̄* ‘firewood’ *kɯ̄ɯ̄-nī/kɯ̄ɯ̄-nì* ‘ignite’

*[sūgū-kūmɛ̄]-kīyɛ̄* ‘staff held in hand’ *kūūⁿ/kū-nā* ‘catch’, sūgū ‘hand’

*[būwɔ̄-gū]-kīyɛ̄* ‘herder’s staff’ *būwɔ̄/būwɔ̀* ‘tend (livestock)’

d. *búwōⁿ* ‘mortar’

*[sɛ̀gɛ̀-gù]-búwōⁿ* ‘mortar for pounding’ *sɛ̄gɛ̀/sɛ̄gɛ̀* ‘pound (in mortar)’

e. *bàn-jɛ̄wⁿ* ‘pestle’

*[sɛ̄gɛ̄-gū]-bān-jɛ̄wⁿ* ‘pestle for pounding’ *sɛ̄gɛ̀/sɛ̄gɛ̀* ‘pound (in mortar)’

f. *kūwɔ̄ⁿ* ‘bone’

*sīnɛ̄-kūwɔ̄ⁿ* ‘bone for biting’ *sīwⁿ/sī-nī* ‘bite’

## Adjectival compounds

### Bahuvrihi compounds

Bahuvrihis can function as modifiers or as nouns in Jenaama. A bahuvrihi denotes individuals who have a feature (such as a body part) of a specified quality (e.g. size, color) or quantity. Compare English adjectives *big-bellied* and *two-headed*, and nouns *Blackbeard* and *greenhorn*.

#### With adjectival final

In a noun-adjective bahuvrihi, such as “hand-big” (having big hands), the adjective and the noun are subject to tonal modifications. Modifying adjectives have M-, ML-, or in a few cases H-tones. These tones are preserved in the bahuvrihi. The compound initial shifts to M-tone.

(xx1) a. *sìbò bōndō-* / *ɲīyɛ̄ⁿ-* / *pīyɛ̄- pīīⁿ*

snake neck- / head- / tail- **black**

‘black-necked/-headed/-tailed snake’

(< *bòndò*, *ɲìyɛ̀wⁿ*, *píyɛ̄* )

b. *kɛ̄ɛ̄gū sūgū-* / *būkūrū-* / *ɲīyɛ̄ⁿ- [dūwɔ̀-gù]*

man hand- / buttock- / head- [**small-**Adj]

‘a small-handed/-buttocked/-headed man’

(< *sūgū*, *bùkúrú*, *ɲìyɛ̀wⁿ* )

c. *kɛ̄ɛ̄gū* / *jēnāⁿ sūgū-* / *būkūrū-* / *bōndō- bánū*

man / child hand- / buttock- / neck- **big**

‘a big-handed/-buttocked man/child’

(< *jénāⁿ*, *sūgū*, *bùkúrú*, *bòndò* )

d. *sìbò pīyɛ̄- bánū*

snake tail **big**

‘a big-tailed snake’

(< *píyē* )

e. *sìbò kōlōⁿ- dáátà-nà*

snake skin- **smooth**

‘a sleek-skinned snake’

(< *kòlòwⁿ* )

The tonal forms of the noun in the bahuvrihi are summarized in (xx2).

(xx2) lexical melody before M ‘black’ before H ‘big’

a. /H/ M M

*píyɛ̄* ‘tail’ *pīyɛ̄-pīīⁿ pīyɛ̄-bánū*

*kɯ́gɯ̄* ‘thigh’ *kɯ̄gɯ̄-pīīⁿ kɯ̄gɯ̄-bánū*

b. /M/ M M

*sūgū* ‘hand’ *sūgū-pīīⁿ sūgū-bánū*

*lɔ̄gū* ‘mouth’ *lɔ̄gū-pīīⁿ lɔ̄gū-bánū*

c. /ML/ M M

*ɲīŋàwⁿ* ‘face’ *ɲīŋāⁿ-pīīⁿ ɲīŋāⁿ-bánū*

d. /L/ M M

*bòndò* ‘neck’ *bōndō-pīīⁿ bōndō-bánū*

*ɲìyɛ̀wⁿ* ‘head’ *ɲīyɛ̄ⁿ-pīīⁿ ɲīyɛ̄ⁿ-bánū*

e. /LH/ M M

*ɲɛ̀lɛ́wⁿ* ‘tongue’ *ɲɛ̄lɛ̄ⁿ-pīīⁿ ɲɛ̄lɛ̄ⁿ-bánū*

*bùkú(rú)* ‘buttock’ *būkū(rū)- būkū(rū)-bánū*

Word sequences of tonal type M-H are difficult to distinguish from those of type L-H. This is an issue in all of the bahuvrihis ending in *-bánū* in the right-hand column of (xx2) above. It is also an issue in (non-bahuvrihi) noun-adjective sequences. In both cases, M-toned noun stems can be distinguished from L-toned ones on the basis of tone sandhi when an L-toned word precedes them. This is true even when the M-toned stem is itself pronounced as though L-toned. See §6.3.1.3 for discussion.

#### With numeral final

Examples of noun-numeral bahuvrihis as postnominal modifiers are in (xx1).

(xx1) a. *sìbò ɲīyɛ̄ⁿ- kēẁⁿ* / *sìgèwⁿ*

snake head- one / three

‘one-/three-headed snake’

(< *ɲìyɛ̀wⁿ* )

b. *sìbò lɔ̄gū- ŋ-kēẁⁿ* / *sìgèwⁿ* / *kɔ̀ɔ̀gɔ̀wⁿ*

snake mouth- one / three / five

‘one-/three-/five-mouthed snake’

(< *lɔ̄gū* )

There is variation in my data between two tonal systems for noun-numeral bahuvrihis. One is to pronounce them in the same way as the corresponding noun-numeral sequence. I suspect that this is typical of unfamiliar combinations that are not in common use. For example, *nùù* ‘belly’ combines with *sìgèwⁿ* ‘three’ as *nùū sìgèwⁿ* ‘three bellies’, and this can function as bahuvrihi in (xx2). Both ‘snake’ and ‘belly’ show the effects of tone sandhi (Final Tone-Raising) in this example.

(xx2) *sìbō nùū-sìgèwⁿ*

snake belly-three

‘three-bellied snake’ (< *sìbò*, *nùù* )

The other pattern, which differs tonally from other constructions and which therefore may be the “authentic” noun-numeral bahuvrihi pattern, follows the lead of noun-adjective bahuvrihis in merging the tone melodies of the initial into all-M. Unlike noun-adjective bahuvrihis, this pattern also raises an M-toned (but not ML-toned) numeral to H-toned (xx3a). Since *ɲìyɛ̀wⁿ* ‘head’ is now M-toned, *sìbò* does not undergo Final Tone-Raising in either (xx3a) or (xx3b).

(xx3) a. *sìbò ɲīyɛ̄ⁿ-péndé*

snake head-two

‘two-headed snake’ (< *pēndē* )

b. *sìbò ɲīyɛ̄ⁿ-sìbèwⁿ*

snake head-three

‘three-headed snake’

### Other composite adjectives

The adjective ‘fast, rapid, speedy’ is *bāā-ⁿ-húúⁿ*, as in *mòbòlì bāāⁿ-húúⁿ* It includes an incorporated noun *bàà* ‘body’ (term used chiefly in speed expressions), along with a nasal linker. In predicates, *bàà* is rephrased as the possessum of the subject. There is also a verb *hūmā/hūmā‑nā* ‘be(come) fast’ that appears in non-present-time contexts (xx1d).

(xx1) a. *[[ŋ̀ môbōlì] bàā] hùùⁿ*

[[1SgPoss vehicle] body] fast

‘My car is fast.’

b. *[[ŋ̀ môbōlì] bàā] nà(ⁿ) hūūⁿ*

[[1SgPoss vehicle] body] not.be fast

‘My car is not fast.’

c. *[ŋ̀ báà] hùùⁿ*

[[1SgPoss body] fast

‘I am fast.’

d. *[[ŋ̀ môbōlì] bàā] gà bē hūmā*

[[1SgPoss vehicle] body] Ipfv Fut be.fast.Pfv

‘My car will be(come) fast.’

# Noun Phrase structure

## Organization of NP constituents

### Linear order within multi-word NPs

The order of elements within an NP that contains modifiers as well as a head noun is summarized in (xx1). Demonstratives split into prenominal (deictic) and postnominal (discourse-definite) types. Discourse-functional morphemes include ‘also’, ‘only’, and ‘as for’ (topic).

(xx1) ‘even’ - Poss/Dem - noun - Adj - Num - Dem - DiscFunct - ‘all’

Examples showing the relative orderings, except for discourse-function versus ‘all’, are in (xx2).

(xx2) a. *sèēdù sūgō pīīⁿ pēndē*

S goat black two

‘Seydou’s two black goats’ Poss-N-Adj-Num

b. *sūgō pēndē gū*

goat two Dem.Def

‘these/those two goats’ N-Num-Dem

c. *kɔ̀ⁿ sūgē-ē gū sāāⁿ*

Dem goat-Pl Dem.Def all

‘all these/those goats’ Dem-N-Dem-‘all’

d. *hàlī sèēdù sūgē-ē*

even S goat-Pl

‘even Seydou’s goat’ ‘even’-Poss-N

The relative order of discourse-functional morphemes (*pē* ‘too’, topic *kòwⁿ* ) and the universal quantifier *sāāⁿ* ‘all’ is not completely fixed tin templatic fashion. In examples produced spontaneously by my assistant, *sāāⁿ* ‘all’ always followed the other morpheme. It follows *pē* ‘too’ in (xx3a) and topic-marking *kòwⁿ* in (xx3b).

(xx3) a. *ŋ́ =nàⁿ [sūgē-ē sāāⁿ] tōlō,*

1SgSbj Sbj/Obj [goat-Pl all] sell.Pfv,

*[yèŋ̄ [sàbē-ē pē sāāⁿ]] tōlō*

[and [chicken-Pl **too all**]] sell.Pfv

‘I sold all the goats, and I sold all the chickens too.’

b. *ŋ́ =nàⁿ [sūgē-ē sāāⁿ] tōlō,*

1SgSbj Sbj/Obj [goat-Pl all] sell.Pfv,

*[ŋ̀gàà [sàbē-ē kù-lē kòwⁿ sāāⁿ] gā bōẁⁿ*

[but [chicken-Pl Dem.Def-Pl **Topic all**] be here

‘I sold all the goats, but as for all the chickens, they’re all (still) here.’

In (xx3a), there is a possibility that the second ‘all’ is a final summation encompassing ‘goats’ and ‘chickens (too)’, somewhat analogous to adverbial *all* in English intransitive clauses (*[the goats and the chickens] will all come*). However, only a narrow-scope reading of ‘all’ is possible in (xx3b).

Less often, *pē* ‘too’ follows *sāāⁿ*. Asked if a sequence ‘chickens-all-too’ was possible, my assistant produced (xx3).

(xx3) *ŋ́ =nàⁿ [sūgē-ē sāāⁿ] tōlō,*

1SgSbj Sbj/Obj [goat-Pl all] sell.Pfv,

*[ŋ̀ bē [sàbē-ē sāāⁿ pē]] kw= [è bwāỳ]*

[1Sg Chain [chicken-Pl **all** **too**]] hit.Pfv [3Pl Comit]

‘I sold all the goats, and I (then) added all the chickens too.’ (< *kwāā* )

By specifying that the sale (or gift) of the chickens was a separate event from the sale of the goats, the assistant rules out a summative reading of ‘all’ with scope over ‘goats’ and ‘chickens’. This is evidently a factor in the ordering of ‘all’ and ‘too’.

### Headless NPs (absolute function of demonstratives, etc.)

A numeral or demonstrative by itself may function as a NP in the absence of a noun (xx1a-b).

(xx1) a. *ŋ̀ kō [kú ní]*

1SgObj give.Pfv [**Dem** Inst]

‘Give me that!’

b. *ŋ̀ kō [ke᷆ⁿ / ní]*

1SgObj give.Pfv [**one** Inst]

‘Give me one!’ (< *kēẁⁿ* )

However, adjectives require a noun, minimally *pā* ‘thing’ (premodifier form) (xx2a). Likewise, *sāāⁿ* ‘all’ requires at least a pronominal clitic (xx2b).

(xx2) a. *ŋ̀ kō [pā tɔ̄mɔ̄] ní]*

1SgObj give.Pfv [**thing red**] Inst]

‘Give me a/the red one!’

b. *ŋ̀ kō [à sāāⁿ] ní]*

1SgObj give.Pfv [**3Sg all**] Inst]

‘Give me all (of it)!’ = ‘Give me everything!’

## Possessives

Possessors immediately precede possessed nouns (possessums). There is no segmental genitive morpheme, but certain possessors induce tonal changes on possessums.

### Form of possessum

#### No tonal changes except after 1Sg *ŋ̀* (+H)

The relationship between lexical melody (/…/) and the tonal form of a possessum is shown in (xx1). The possessum forms were checked with a nonpronominal possessor (*sèēdù* ‘Seydou’). Such possessors have no effect on the tones of the possessum: *sìbò* ‘snake’, *sèēdù sìbò* ‘Seydou’s snake’, and so forth. However, 1Sg possessor *ŋ̀* (+H) raises a following L to H.

(xx1) melody noun ‘Seydou’s ‘my’ gloss

a. 1Sg raises tones of first L of possessum to H

*raises entire /L/ melody stem to H*

/L/ *sìbò sèēdū sìbò* *ŋ̀ síbó* ‘snake’

*converts initial-syllable L to H before LH or LM*

/LMH/ *màlīfá sèēdū màlīfá* *ŋ̀ málìfá* ‘rifle’

/L\*H/ *tɔ̀sìbíí sèēdū tɔ̀sìbíí* *ŋ̀ tɔ́sìbíí* ‘prayer beads’`

*converts initial-syllable L to <HL> before a nonlow tone*

/LM/ *gɛ̀jɛ̄ sèēdū gɛ̀jɛ̄* *ŋ̀ gɛ̂jɛ̄* ‘arrow’

/LH/ *tèndé sèēdū tèndē* *ŋ̀ têndé* ‘well (n)’

/LH\*/ *mìsírī sèēdū mìsírī* *ŋ̀ mîsírí* ‘mosque’

/LML/ *tùjūnù sèēdū tùjūnù* *ŋ̀ tûjūnù* ‘pigeon’

b. 1Sg does not affect tones of possessum

/M/ *jūgū sèēdū jūgū* *ŋ̀ jūgū* ‘medication’

/H/ *jáŋā sèēdū jáŋā* *ŋ̀ jáŋā* ‘shed’

/ML/ *sīīsò sèēdū sīīsò* *ŋ̀ sīīsò* ‘scissors’

#### Default possessum *pàwⁿ*

When the nature of the possessum is contextually understood, the possessum is expressed minimally by the noun *pàwⁿ*, plural *pàⁿ-yè*. This is the case in parallel sequences (xx1a-b) or more generally wheneven the nature of the possessum is contextually clear. The 1Sg possessor form is *ŋ̀ páwⁿ*, plural *ŋ̀ páⁿ-yè*.

(xx1) a. *[sèēdù yàmbāā] gà bōẁⁿ,*

[S house] be here,

*[ŋ̀ páⁿ] yè ŋ̀ dāāⁿ [bo᷆ⁿ bwāỳ]*

[1Sg **Poss**] Sbj/Obj ReflObj distant [here Comit]

‘Seydou’s house is here, (but) mine is far from here.’

b. *[sèēdù yàmbāā-yē] gà bōẁⁿ,*

[S house-Pl] be here,

*[ŋ̀ páⁿ-yē] yè ŋ̀ dāāⁿ [bōm̀ bwāỳ]*

[1Sg **Poss-Poss**] Sbj/Obj ReflObj distant [here Comit]

‘Seydou’s houses are here, (but) mine are far from here.’

*pàwⁿ* also occurs in the ‘Y belong to X’ predicate, in the combination *pàⁿ nì* including the ‘it is’ enclitic (§11.5.2). However, predicative *pàⁿ nì* is rather fused and does not pluralize or undergo tone sandhi.

### Nonpronominal possessors

Nonpronominal possessors immediately precede possessums. There is no genitive morpheme. There are no tonal interactions, except for the tone sandhi process Final Tone-Raising in examples like *nàā tàbà* ‘the cow’s foot’, from *nàà* ‘cow’. The possessor and possessum can be separately pluralized.

(xx1) a. *jénáⁿ yàmba᷆*

child house

‘the child’s house’

b. *jéná-mbí-gé yàmba᷆*

child-Pl-Pl house

‘the children’s house’

c. *jéná-mbí-gé yàmbāà-yè*

child-Pl-Pl house

‘the children’s houses’

### Pronominal possessors

Pronominal possessors are in (xx1). 1Pl and 3Pl are distinguished by tone. 1Sg *ŋ̀* (+H) raises tones of some following nouns (details below).

(xx1) possessor

1Sg *ŋ̀* (+H)

1Pl *ē*

2Sg *āⁿ*

2Pl *āā*

3Sg *à*

3Pl *è*

Examples of these possessors with nouns of different tone classes are in (xx2). The pronominal keeps its tones, except that M‑toned pronominals drop to L‑tone before an H‑tone (‘shed’). Likewise, the noun keeps its tones, except that the 1Sg pronominal applies an initial floating H‑tone to a following noun beginning with L‑tone. In the case of /L/-melody ‘sheep’, the noun merges tonally with /H/-melody ‘shed’ when the 1Sg possessor precedes it. In the case of /LH/-melody ‘knee’, the floating H can only intrude into the onset of the first syllable.

(xx2) *sɔ̀gɔ̀ lɔ̄gū jáŋā kāsò kɔ̀bɔ́*

‘sheep’ ‘mouth’ ‘shed’ ‘jail’ ‘knee’

1Sg *ŋ̀ sɔ́gɔ̄ ŋ̀ lɔ̄gū ŋ̀ jáŋā ŋ̀ kāsò ŋ̀ kɔ̂bɔ́*

1Pl *ē sɔ̀gɔ̀ ē lɔ̄gū è jáŋā ē kāsò ē kɔ̀bɔ́*

2Sg *āⁿ sɔ̀gɔ̀ āⁿ lɔ̄gū àⁿ jáŋā āⁿ kāsò āⁿ kɔ̀bɔ́*

2Pl *āā sɔ̀gɔ̀ āā lɔ̄gū àà jáŋā āā kāsò āā kɔ̀bɔ́*

3Sg *à sɔ̀gɔ̀ à lɔ̄gū à jáŋā à kāsò à kɔ̀bɔ́*

3Pl *è sɔ̀gɔ̀ è lɔ̄gū è jáŋā è kāsò è kɔ̀bɔ́*

I now present data on 1Sg possessor *ŋ̀* (+H) in detail. First, it has no tonal effect when the possessum already begins in M or H tone (xx3).

(xx3) melody noun ‘my …’ gloss

/M/ *jūgū ŋ̀ jūgū* ‘medication’

/H/ *jáŋā ŋ̀ jáŋā* ‘shed’

/ML/ *sīīsò ŋ̀ sīīsò* ‘scissors’

/MLM/ *ɲōòmɔ̄ ŋ̀ ɲōòmɔ̄* ‘camel’

If the possessum has level /L/ melody, after 1Sg possessor *ŋ̀* (+H) raises at least the first syllable to H. Prosodically light stems (*Cvv*, *CvCv*, *CvNCv* ) are raised to all-H. Prosodically heavy stems (*CvCvv*, trisyllabics) raise only the first syllable.

(xx4) melody noun ‘my …’ gloss

a. monosyllabic

/L/ → H *nàà ŋ̀ náá* ‘cow’

*dɔ̀ɔ̀ ŋ̀ dɔ́ɔ́* ‘knife’

*nùùⁿ ŋ̀ núúⁿ* ‘belly’

*tùùⁿ ŋ̀ túúⁿ* ‘body’

*tàwⁿ ŋ̀ táwⁿ* ‘mat’

b. light bisyllabic (*CvCv*)

/L/ → H *sìbò ŋ̀ síbō* ‘snake’

*tàbà ŋ̀ tábā* ‘foot’

*tùɥè ŋ̀ túɥē* ‘field’

*tìgè ŋ̀ tígē* ‘gear’

c. light bisyllabic (*CvNCv*)

/L/ → H *bòndò ŋ̀ bóndō* ‘neck’

*dàmbà ŋ̀ dāmbā* ‘daba (hoe)’

*kèndè ŋ̀ kéndē* ‘sorghum’

*dèŋgè ŋ̀ déŋgē* ‘lower jaw’

*tìŋgè ŋ̀ tíŋgē* ‘stool’

*dàndì ŋ̀ dándī* ‘chili pepper’

d. heavy bisyllabic (*CvCvv*, *CvvCv* )

/L/ → HL *kànàà(ⁿ) ŋ̀ kánàà(ⁿ)* ‘friend’

*sààgù ŋ̀ sáágù* ‘roselle’

e. trisyllabic

/L/ → HL\* *bìrìgì ŋ̀ bírìgì* ‘manure’

*sìrìmbè ŋ̀ sírìmbè* ‘folding knife’

If the noun begins with L-tone but contains a subsequent H or M, 1Sg possessor *ŋ̀* (+H) raises the first syllable if this would not erase the initial L-toned segment. This is the case when the first two syllables of the noun are L-toned. Otherwise it raises just the onset of the first syllable to produce an <HL> falling-toned syllable. The apparent exception to this rule is that /LMH/ trisyllabics become H.L.H rather than #<HL>.M.H. This is evidence that /LMH/ trisyllabics are structurally L\*H, and the medial M-tone is due to a phonetic implementation process: the pitch of an uncompounded trisyllabic is raised stepwise from L to H. This process does not apply to diminutives like *pàgù-náwⁿ*.

(xx5) L-initial contoured melody

(xx4) melody noun ‘my …’ gloss

a. initial syllable becomes H

/L\*H/ *pàgù-náwⁿ ŋ̀ págù-náwⁿ* ‘small pond’

/L\*H/ *tɔ̀sìbíí ŋ̀ tɔ́sìbíí* ‘prayer beads’`

/LMH/ *màlīfā ŋ̀ málìfá* ‘rifle’

b. initial syllable becomes <HL>

/LH/ *gɛ̀jɛ́ ŋ̀ gɛ̂jɛ́* ‘arrow’

/LH/ *tèndé ŋ̀ têndé* ‘well (n)’

/LH\*/ *mìsírī ŋ̀ mîsírī* ‘mosque’

/LML/ *tùjūnù ŋ̀ tûjūnù* ‘pigeon’

### Alienable and inalienable

There is no distinction in form between alienable and inalienable possession. Kin terms and partonyms have paradigms like those above. Inalienable ‘father’ is parallel to alienable ‘cow’, and inalienable ‘hand’ is parallel to alienable ‘medication’

(xx4) *kàà nàà sūgū jūgū*

‘father’ ‘cow’ ‘hand’ ‘medication’

1Sg *ŋ̀ káá ǹ náá ǹ sūgū ǹ jūgū*

1Pl *ē kàà ē nàà ē sūgū ē jūgū*

2Sg *āⁿ kàà ā nàà āⁿ sūgū āⁿ jūgū*

2Pl *āā kàà āā nàà āā sūgū āā jūgū*

3Sg *à kà à nàà à sūgū à jūgū*

3Pl *è kà è nàà è sūgū è júgú*

### Recursive possession

A possessed NP can itself be a possessor. Normal tone sandhi occurs, like LL#L-to-LM#L in ‘father’ in (xx1a)

(xx1) a. *[sèēdù kàā] yàmba᷆*

[S father] house

‘Seydou’s father’s house’ (< *sèēdù kà* )

b. *[sèēdù kúŋgólō] píyɛ̄*

[S dog] Ltail

‘Seydou’s dog’s tail’

## Core NP (noun plus adjective)

### Tonal interactions between noun and modifying adjective

#### Noun plus uncompounded M- or H-initial modifying adjective

Basic adjectives can have /H/, /M/, or /ML/ as lexical melody at least in postnominal position; see the inventory in §4.5.1. There are no basic modifying adjectives that begin with L-tone since adjectives that have L-toned predicative forms have M-toned postnominal forms. With this glaring gap, the tonal patterns are summarized in (xx1) and illustrated below.

(xx1) Tonal forms of nouns before adjectives

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **adjective** | M | ML | H |
| **noun** |  |  |  |  |
| H |  | M | M | M |
| M |  | M | M | M |
| ML |  | M | M | M |
| MLH |  | M | M | M |
| L |  | L | L | L |
| LH |  | L | L | L |
| LML |  | L | L | L |

Nouns whose melody begins with H or M merge as all-M before adjectives. Those whose melody begins with L merge as all-L before adjectives. Several minimal pairs of independent noun stems are merged in noun-adjective combinations. For example, H-toned *kólō* ‘squared basket’ and M-toned *kōlō* ‘Nile monitor lizard’ merge as *kōlō* before an adjective.

There is an issue as to whether the sequence of M-toned noun and H-toned adjective, as in *yɔ̄gɔ̄ sílē* ‘old fish’, is authentic, or whether the noun is really L-toned in this combination. See §6.3.1.3 below for discussion.

The following presentation is organized on the basis of the lexical melody of the noun. The sequence is /H/, /M/, /L/, then the various contoured melodies.

Combinations with H‑toned nouns *sááⁿ* ‘thorn-branch fence’, *kúlū* ‘caterpillar,grub’, *tíbɛ̄wⁿ* ‘name’, and *ɲárágō* ‘calabash cover’ are in (xx2).

(xx2) /H/-melody noun plus adjective

a. adjective has /H/ melody

*sāāⁿ sílē* ‘old fence’

*tībɛ̄ⁿ sílē* ‘old name’

*ɲārāgō sílē* ‘old calabash cover’

b. adjective has /M/ melody

*sāāⁿ tōy* ‘new fence’

*tībɛ̄ⁿ tōy* ‘new name’

*ɲārāgō tōy* ‘calabash cover’

c. adjective has /ML/ melody

*ɲārāgō pūlù-gù* ‘soft calabash cover’

*ɲārāgō bīllà-nà* ‘narrow calabash cover’

Combinations with M‑toned nouns *pwɔ̄* ‘thing’ (becomes *pā* before modifier) and *yɔ̄gɔ̄* ‘fish’ are in (xx3).

(xx3) /M/-melody noun plus adjective

a. adjective has /H/ melody

*pā sílē* ‘old thing’

*yɔ̄gɔ̄ sílē* ‘old fish’

b. adjective has /M/ melody

*pā tōy* ‘new thing’

*yɔ̄gɔ̄ tōy* ‘new fish’

c. adjective has /ML/ melody

*pā pūlù-gù* ‘soft thing’

*pā bīllà-nà* ‘narrow thing’

Combinations with L‑toned nouns *nàà* ‘cow’, *sìbò* ‘snake’, *kànà* (*kànàà-*) ‘friend’, and *tɔ̀ŋɔ̀nɔ̀* ‘truth’ are in (xx4). There are no tone changes before adjectives beginning with H or M.

(xx4) /L/-melody noun plus adjective

a. adjective has /H/ melody

*nàà sílē* ‘old cow’

*sìbò sílē* ‘old snake’

*kànàà sílē* ‘old friend’

*tɔ̀ŋɔ̀nɔ̀ sílē* ‘old truth’

b. adjective has /M/ melody

*nàà tōy* ‘new cow’

*sìbò tōy* ‘new snake’

*kànàà tōy* ‘new friend’

*tɔ̀ŋɔ̀nɔ̀ tōy* ‘new truth’

c. adjective has /ML/ melody

*nàà pūlù-gù* ‘soft cow’

*nàà bíllà-nà* ‘narrow cow’

Combinations with LH-toned nouns *gɛ̀jɛ́* ‘arrow’ and *wùjúⁿ* ‘giant pouched rat’, LMH-toned *gàrībú* ‘child beggar’, LH\*-toned *mìsírī* ‘mosque’, and LML-toned *mòbōlì* ‘vehicle’ and *yàmbāà* ‘house’ are in (xx5). These nouns all begin with L‑tone followed by a higher tone. They flatten to level-L‑toned before adjectives.

(xx5) /LH/- or /LML/-melody noun plus adjecrtive

a. adjective has /H/ melody

*gɛ̀jɛ̀ sílē* ‘old arrow’

*wùjùⁿ sílē* ‘old pouched rat’

*gàrìbù sílē* ‘old child beggar’

*mìsìrì sílē* ‘old mosque’

*mòbòlì sílē* ‘old vehicle’

*yàmbàà sílē* ‘old house’

b. adjective has /M/ melody

*gɛ̀jɛ̀ tōy* ‘new arrow’

*wùjùⁿ tōy* ‘new pouched rat’

*gàrìbù tōy* ‘new child beggar’

*mìsìrì tōy* ‘new mosque’

*mòbòlì tōy* ‘new vehicle’

*yàmbàà tōy* ‘new house’

c. adjective has /ML/ melody

*gɛ̀jɛ̀ bīllà-nà* ‘narrow arrow’

*mìsìrì bīllà-nà* ‘narrow mosque’

*gɛ̀jɛ̀ pūlù-gù* ‘soft arrow’

*yàmbàà bīllà-nà* ‘narrow house’

Combinations with /ML/-melody nouns *tēè* ‘tea’, *kāsò* ‘jail’, *mɔ̄lì* ‘holy man’, *cɔ̄llɔ̀* ‘dust’, *sāākù* ‘sack’, *ɲīŋàwⁿ* ‘face’, and *gīlàwⁿ* ‘cowry’ are in (xx6). They flatten to M-toned before an adjectives.

(xx6) /ML/-melody noun plus adjective

a. adjective has /H/ melody

*tēē sílē* ‘old tea’

*kāsō sílē* ‘old jail’

*mɔ̄lī sílē* ‘old holy man’

*cɔ̄llɔ̄ sílē* ‘old dust’

*sāākū sílē* ‘old sack’

*ɲīŋāⁿ sílē* ‘old face’

*gīlāⁿ sílē* ‘old cowry’

b. adjective has /M/ melody

*tēē tōy* ‘new tea’

*kāsō tōy* ‘new jail’

*mɔ̄lī tōy* ‘new holy man’

*cɔ̄llɔ̄ tōy* ‘new dust’

*sāākū tōy* ‘new sack’

*ɲīŋāⁿ tōy* ‘new face’

*gīlāⁿ tōy* ‘new cowry’

c. adjective has /ML/ melody

*cɔ̄llɔ̄ pūlù-gù* ‘soft dust’

*sāākū bīllà-nà* ‘narrow sack’

Combinations with /MLH/-melody nouns *bāàná* ‘manner’ and *māāŋgòró* ‘mango’ are in (xx7). They flatten to M (*bāānā*, *māāŋgōrō* ) before adjectives.

(xx7) /MLH/-melody noun plus adjective

a. adjective has /H/ melody

*bāānā sílē* ‘old manner’

*māāŋgōrō sílē* ‘old mango’

b. adjective has /M/ melody

*bāānā tōy* ‘new manner’

*māāŋgōrō tōy* ‘new mango’

c. adjective has /ML/ melody

*bāānā pūlù-gù* ‘soft manner’

*māāŋgōrō pūlù-gù* ‘soft arrow’

*bāānā bīllà-nà* ‘narrow manner’

*māāŋgōrō bīllà-nà* ‘narrow mango’

#### Noun plus LH-toned modifying adjective

As noted in the preceding section and elsewhere, there are no basic modifying adjectives with /L/ or /LH/ melodies, since adjectives that have L-toned predicative forms become M-toned as postnominal modifiers. To supplement the data in the preceding section, data are presented here showing nouns plus L-initial adjectives. These are of multiple types, but all are LH-toned: *dɛ̀gɛ̀‑náwⁿ* ‘small’ which is diminutive in form (§5.xxx), bahuvrihis with L-toned noun like *bòndò‑bánū* ‘big-necked’ (§5.2.1), and plural-only quantificational adjective *tàá-yè* ‘certain (ones)’ (§6.3.2).

(xx1) melody noun gloss ‘small’ ‘big-necked’

/H/ *kólō* ‘basket’ *kōlō dɛ̀gɛ̀-náwⁿ* *kōlō bòndò-bánū*

/M/ *yɔ̄gɔ̄* ‘fish’ *yɔ̄gɔ̄ dɛ̀gɛ̀-náwⁿ yɔ̄gɔ̄ bòndò-bánū*

/L/ *sìbò* ‘snake’ *sìbò dɛ̀gɛ̀-náwⁿ sìbò bòndò-bánū*

/LH/ *wùjúⁿ* ‘rat’ *wùjùⁿ dɛ̀gɛ̀-náwⁿ wùjùⁿ bòndò-bánū*

/LMH/ *gàrībú* ‘beggar’ *gàrìbù dɛ̀gɛ̀-náwⁿ gàrìbù bòndò-bánū*

/LH\*/ *mìsírí* ‘mosque’ *mìsìrì dɛ̀gɛ̀-náwⁿ mìsìrì bòndò-bánū*

/LML/ *mòbōlì* ‘vehicle’ *mòbòlì dɛ̀gɛ̀-náwⁿ mòbòlì bòndò-bánū*

/ML/ *sāākù* ‘sack’ *sāākū dɛ̀gɛ̀-náwⁿ sāākū bòndò-bánū*

/MLH/ *māāŋgòró* ‘mango’ *māāŋgōrō dɛ̀gɛ̀-náwⁿ māāŋgōrō bòndò-bánū*

The same nouns are shown in (xx2) with *tàá-yè* ‘certain (ones)’. The nouns preserve their lexical melodies before this quantificational adjective, prior to tone sandhi (Final Tone-Raising applied to /L/ melody ‘snake’).

(xx2) melody noun gloss ‘certain (ones)’

/H/ *kólō* ‘basket’ *kóló tàá-yè*

/M/ *yɔ̄gɔ̄* ‘fish’ *yɔ̄gɔ̄ tàá-yè*

/L/ *sìbò* ‘snake’ *sìbō tàá-yè*

/LH/ *wùjúⁿ* ‘rat’ *wùjúⁿ tàá-yè*

/LMH/ *gàrībú* ‘beggar’ *gàrībú* *tàá-yè*

/LH\*/ *mìsírí* ‘mosque’ *mìsírí tàá-yè*

/LML/ *mòbōlì* ‘vehicle’ *mòbōlì tàá-yè*

/ML/ *sāākù* ‘sack’ *sāākù tàá-yè*

/MLH/ *māāŋgòró* ‘mango’ *māāŋgòró tàá-yè*

Given that there are no basic modifying adjectives of /L/, /LML/, or /LH/ melody, one is tempted to conclude that either (xx1) or (xx2) reveals the tonal behavior of nouns before L-initial adjectives. However, neither (xx1) nor (xx2) is a pure play in this regard.

In (xx1), all nouns flatten to all-M or all-L, based on the initial tone of the noun.

In (xx2), all nouns retain their lexical melodies before quantificational adjective *tàá‑yè* ‘certain (ones)’. However, retention of lexical melodies also occurs with the synonym *pɔ̄-yē* ‘certain (ones)’ and with the suppletive singular *kɯ̄ɯ̄ⁿ* ‘a certain (one)’. *pɔ̄-yē* and *kɯ̄ɯ̄ⁿ* are M‑toned, but preceding nouns do not undergo the tonal changes required before M-initial basic adjectives. These quantificational adjectives behave tonally like nonsingular numerals, and do not control tonal ablaut on preceding nouns.

#### L- versus M-toned nouns before H-toned adjectives

§6.3.1.1 above argues that nouns beginning with H- or M-tone flatten and merge as all-M before adjectives. This includes combinations with H-toned adjectives such as *sílē* ‘old’, as in (xx1a-b). Contrast (xx1c) with an L-toned noun that remains L-toned before the adjective.

(xx1) a. *ɲárágō* ‘calabash cover’ /H/ melody

*ɲārāgō sílē* ‘old calabash cover’

b. *yɔ̄gɔ̄* ‘fish’ /M/ melody

*yɔ̄gɔ̄ sílē* ‘old fish’

c. *nàà* ‘cow’ /L/ melody

*nàà sílē* ‘old cow’

Phonetically, the noun in *ɲārāgō sílē* and *yɔ̄gɔ̄ sílē* has much lower pitch than the H-toned adjective does. I initially transcribed them as *ɲàràgò sílē* and *yɔ̀gɔ̀ sílē* and postulated a tone-dropping process that merged H-initial and M-initial melodies with /L/ melody.

However, further study led me to recognize M‑toned rather than L‑toned ‘calabash cover’ and ‘fish’ before *sílē*. First, I sometimes did hear *ɲārāgō sílē* and *yɔ̄gɔ̄ sílē*. More importantly, even when I heard *ɲàràgò sílē* and *yɔ̀gɔ̀ sílē*, they behaved as M-initial rather than as L-initial for purposes of tone sandhi involving a preceding word. Specifically, a preceding L-toned syllable is subject to Final Tone-Raising before *nàà sílē* ‘old cow’ but not before *ɲārāgō sílē* ‘old calabash cover’ or *yɔ̄gɔ̄ sílē* ‘old fish’, regardless of how the latter two are actually pronounced. Observe the tones of perfective negative *tè* in (xx2a-c).

(xx2) a. *à tē [nàà sílé] kày*

3SgSbj **PfvNeg** [cow old] see.Pfv

‘He/She didn’t see the old cow.’

b. *à tè [ɲārāgō sílē] kày*

3SgSbj **PfvNeg** [cover old] see.Pfv

‘He/She didn’t see the old calabash cover.’

c. *à tè [yɔ̄gɔ̄ sílē] kày*

3SgSbj **PfvNeg** [fish old] see.Pfv

‘He/She didn’t see the old fish.’

In (xx2b-c), ‘fish’ and ‘calabash cover’ may be pronounced at the same pitch level as *tè*. However, the distinction between *tē* (xx2a) and *tè* (xx2b-c) is systematic, showing that ‘fish’ and ‘calabash cover’ pattern as nonlow-toned. I conclude that these nouns really are M-toned phonologically before adjectives, but that M-H word sequences can be subject to phonetic realization processes that may merge them with L-H sequences.

### Set-partitioning quantifiers (‘some’, ‘a certain’)

#### ‘Certain (ones)’ (*pɔ̄-yē*, *tàá-yè* )

*pɔ̄-yē* and *tàá-yè* are interchangeable stems, always plural, that function as quantificational adjectives or (when the noun is omitted) nouns. They partition off a subset (‘some Xs’) of a larger set (‘all Xs’). One common construction is a juxtaposition of two clauses, each with an identical quantified NP (except that the noun is often omitted in the second clause), in the same grammatical function. Especially when the predicates are positive and negative, the two subsets exhaust the larger set. In this case, idiomatic free translations have ‘some Xs’ in the first clause and ‘the others’ in the second.

(xx1) *[ŋ̀ sūgō pɔ̄-yē* / *tàá-yè] bē,*

[1SgPoss goat **certain**-Pl] come.Pfv,

*pɔ̄-yē* / *tàá-yē tè bē*

**certain**-Pl PfvNeg come.Pfv

‘Some of my goats came (back), the others didn’t come (back).’

Nouns do not undergo the tonal changes typical of ordinary noun-adjective combinations when they are followed by *pɔ̄-yē* or *tàá-yè*. Instead, the nouns preserve their lexical tones, as they do before nonsingular numerals. Examples are *kúŋgóló pɔ̄‑yē* / *tàá‑yè* ‘certain dogs’, *mìsírí pɔ̄‑yē* / *tàá‑yè* ‘certain mosques’, *yàmbāà pɔ̄‑yē* / *tàá‑yè* ‘certain houses’.

#### ‘A certain one’ (*kɯ̄ɯ̄ⁿ* )

When a single individual is picked out of the larger set, the quantificational adjective *kɯ̄ɯ̄ⁿ* is used instead of *pɔ̄‑* or *tàá‑*.

(xx1) *ŋ̀ gà [ɲīmī kɯ̄ɯ̄ⁿ] tò*

1Sg Ipfv [person **a.certain**] know.Ipfv

*[màⁿ gà kú tī-nà]*

[Rel Ipfv Dem do-Ipfv]

‘I know a certain person who does that.’

The likely etymological affinity between *kɯ̄ɯ̄ⁿ* and the numeral *kēẁⁿ* ‘one’ is no longer apparent to native speakers.

Combinations of noun plus *kɯ̄ɯ̄ⁿ* do not follow the tonal rules for noun-adjective combinations. Nouns preserve their lexical tones before *kɯ̄ɯ̄ⁿ*, as they do before nonsingular numerals and before the plural quantificational adjectives *pɔ̄-yē* and *tàá-yè*. Examples: *kúŋgóló kɯ̄ɯ̄ⁿ* ‘a certain dog’, *mìsírí kɯ̄ɯ̄ⁿ* ‘a certain mosque’, *yàmbāà kɯ̄ɯ̄ⁿ* ‘a certain house’.

#### Mass-partitioning ‘some (but not all)’

For mass nouns, there is no dedicated quantificational adjective of the types described above (‘certain ones’, ‘a certain’). However, *pā-lɛ̄wⁿ* ~ *pɔ̄-lɛ̄wⁿ* ‘a little’ can be used in a comparable parallel construction.

(xx1) *[sɔ́gɔ́ pā-lɛ̄ⁿ] pìì↗,*

[milk **a.little**] spill.Pfv,

*[(sɔ́gɔ́) pā-lɛ̄ⁿ] kōndō*

[(milk) **a.little**] stay.Pfv

‘Some (of the) milk was spilled, some (=the rest) has remained.’

#### Distributive-paucal ‘some (times, places)’

Distributive-paucal ‘some’ as in ‘now and then, at times’ and ‘here and there’ is expressed by a iteration of the numeral *kēẁⁿ* ‘one’, pronounced *kēⁿ-ꜜkēwⁿ* with downstep. If the noun does not already end in a nasalized vowel, a linker ŋ- precedes *kēⁿ-ꜜkēwⁿ*. A similar nasal linker occurs in some compounds.

(xx1) a. *wɔ́gátú* *ŋ́-kēⁿ-ꜜkēẁⁿ*

time **one-one**

‘now and then, occasionally, at times’ (< *wɔ́gátú* )

b. *jàmànàⁿ ŋ̀-kēⁿ-ꜜkēẁⁿ*

time **one-one**

[=(a)] (< *jàmānáⁿ* )

c. *gɯ̄ɯ́ⁿ kēⁿ-ꜜkēẁⁿ*

place **one-one**

‘here and there, in places’

The noun preceding *kēⁿ-ꜜkēẁⁿ* undergoes tonal adjustments illustrated in (xx2). The initial tone of the noun spreads rightward to the end of the noun, except that a final M-toned mora is raised to H.

(xx2) melody noun gloss ‘certain (ones)’

a. H-initial noun

/H/ *kólō* ‘basket’ *kóló ŋ́-kēⁿ-ꜜkēẁⁿ*

b. M-initial noun

/M/ *yɔ̄gɔ̄* ‘fish’ *yɔ̄gɔ́ ŋ́-kēⁿ-ꜜkēẁⁿ*

/ML/ *sāākù* ‘sack’ *sāākú ŋ́-kēⁿ-ꜜkēẁⁿ*

/MLH/ *māāŋgòró* ‘mango’ *māāŋgōró ŋ́-kēⁿ-ꜜkēẁⁿ*

c. L-initial noun

/L/ *sìbò* ‘snake’ *sìbò ŋ̀-kēⁿ-ꜜkēẁⁿ*

/LH/ *wùjúⁿ* ‘rat’ *wùjùⁿ kēⁿ-ꜜkēẁⁿ*

/LMH/ *gàrībú* ‘beggar’ *gàrìbù* *ŋ̀-kēⁿ-ꜜkēẁⁿ*

/LH\*/ *mìsírí* ‘mosque’ *mìsìrì ŋ̀-kēⁿ-ꜜkēẁⁿ*

/LML/ *mòbōlì* ‘vehicle’ *mòbòlì ŋ̀-kēⁿ-ꜜkēẁⁿ*

Roughly corresponding to English *now and then* and *here and there*, but iterating the same adverb, are the expressions in (xx3). The first two are distributive-paucal in sense, and my assistant finds that the times and places referred to are even more sparsely distributive than in the preceding cases with ‘one-one’. (xx3c) has a different sense; it occurs in contexts like ‘the doctor will see you shortly’ (reassuring an anxious patient).

(xx3) a. *bōⁿ yèⁿ bōẁⁿ*

here and here

‘here and there’ (< *bōẁⁿ* )

b. *wɔ́gátú yèⁿ wɔ́gátú*

time and time

‘from time to time’

c. *sāàgū yèⁿ sāàgù*

now and now

‘soon, shortly’ (< *sāàgù* )

### Expansions of adjective

#### Adjective sequences

Two adjectives may follow the same noun.

(xx1) a. *yàmbàà pīīⁿ*

house black

‘a black house’

b. *yàmbàà būlōwⁿ*

house big

‘a big house’

c. *yàmbàà bùlòⁿ pīīⁿ*

house big black

‘a big black house’

Some other examples are in (xx2). In all cases my assistant approved the order shown as better than the alternative order. Overall he prefers the order size-evaluation-color.

(xx2) a. *yàmbàà màɲàⁿ pīīⁿ*

house good black

‘a good black house’

b. *yàmbàà bùlòⁿ māɲāwⁿ*

house big good

‘a good big house’

(xx3) shows the same structure when two color adjectives are combined. Here the English translation requires ‘and’. Either order is possible but my assistant indicated that the order shown sounds better to the ear.

(xx3) *yàmbàà kùwòⁿ pīīⁿ*

house white black

‘a white-and-black house’

In N-Adj-Adj sequences like those presented above, the final adjective retains its normal tones (as a modifying adjective). The preceding N-Adj sequence is dropped to L-toned. Some further examples are in (xx4).

(xx4) a. *sīlē* ‘stone’

*sīlē cīyɛ̄wⁿ* ‘heavy stone’

*sìlè cìyɛ̀ⁿ pīīⁿ* ‘heavy black stone’

b. *kúŋgóló* ‘dog’

*kūŋgōlō dɛ̀gɛ̀-náwⁿ* ‘small dog’

*kūŋgōlō dɛ̀gɛ̀-nàⁿ pīīⁿ* ‘small black dog’

c. *kìyɛ̀* ‘stick’

*kìyɛ̀ bánū* ‘big (=thick) stick’

*kìyɛ̀ bànù pīīⁿ* ‘big black stick’

#### Basic adjective plus quantificational adjective ‘(a) certain’

Quantificational adjectives are plural *pɔ̄-yē* or *tàá-yè* ‘certain (ones)’ and *kɯ̄ɯ̄ⁿ* ‘a certain (one)’. As illustrated in §6.3.2.1, they are treated like numerals rather than like basic adjectives in their tonal interactions with preceding nouns. Likewise, quantificational adjectives follow other adjectives.

(xx1) a. *yàmbàà pīīⁿ kɯ̄ɯ̄ⁿ*

house black **a.certain**

‘a certain black house’

b. *yàmbàà pīīⁿ pɔ̄-yē / tàá-yè*

house black **certain.Pl**

‘certain black houses’

#### Adjectival intensifiers

An adjective functioning as NP-internal modifier cannot be directly intensified. Extent modifiers are restricted to adjectival predicates (xx1).

(xx1) *[ŋ̀ yâmbāa] pìyɛ̀-nā nì yāālōⁿ* / *pā-lɛ̄wⁿ*

[1Sg house] be.black-Stat it.is a.lot / a.little

‘My house is very/slightly black.’

See §8.4.2 for more on extent expressions.

#### ‘Good to eat’

‘X is good to eat’ is phrased as ‘X-eating is good’, and so forth. The verbal concept cannot directly modify the predicate adjective.

(xx1) a. *tɔ̄mɔ̄ⁿ-dīgɛ̄ ŋ̄ màyⁿ*

jujube-eating(n) 3SgReflObj **be.good**

‘Jujube fruits are good to eat.’

b. *[[kɔ̀ⁿ jùgù] kúléⁿ] yē ŋ̄ ɲìyɛ̀wⁿ*

[[Dem tree] cut.up.VblN] Sbj/Obj 3SgReflObj **easy**

‘Chopping up that tree is easy.’

c. *sūūⁿ-kūmɛ̄ yē ŋ̀ nɔ̄gɔ̄rɔ̄wⁿ*

fly(n)-catch.VblN Sbj/Obj 3SgReflObj **difficult**

‘Flies are difficult to catch.’

## Noun or N-Adj plus numeral

### Regular N-Num and N-Adj-Num sequences

Numerals follow nouns and N-Adj core NPs. No inversion of numeral and adjective is allowed.

(xx1) a. *sūgō pēndē*

goat two

‘two goats’

b. *sūgō pīīⁿ*

goat black

‘(a/the) black goat’

c. *sūgō pīīⁿ pēndē*

goat black two

‘two black goats’ (not #*sūgō pēndē pīīⁿ* )

There is no plural marker (*-ye* ) in NPs containing a nonsingular numeral.

#### Combination of noun plus numeral ‘1’

Examples of *kēẁⁿ* ‘1’ (§4.6.1.1) after nouns of different tone classes are in (xx1). A nasal linker is obligatory unless the noun already ends in a nasalized vowel. Any noun beginning with a non-low tone merges tonally with the M‑toned onset of the numeral (xx1a). Any noun beginning with L‑tone is flattened to all‑L (xx1b).

(xx1) melody noun ‘1 …’ gloss

a. /H/ *kólō kōlō ŋ̄ kēẁⁿ* ‘Nile monitor lizard’

/M/ *yɔ̄gɔ̄* *yɔ̄gɔ̄ ŋ̄ kēẁⁿ* ‘fish’

/ML/ *kāsò kāsō ŋ̄ kēẁⁿ* ‘jail’

b. /L/ *sìbò sìbò ŋ̀ kēẁⁿ* ‘snake’

/LH/ *gɛ̀jɛ̄* *gɛ̀jɛ̀ ŋ̀ kēẁⁿ* ‘arrow’

*sàáⁿ sààⁿ kēẁⁿ* ‘well-bag (*puisette*)’

/LMH/ *gàrībú gàrìbù ŋ̀ kēẁⁿ* ‘child beggar’

/LH\*/ *mìsírī mìsìrì ŋ̀ kēẁⁿ* ‘mosque’

/LML/ *mòbōlì* *mòbòlì ŋ̀ kēẁⁿ* ‘vehicle’

The tonal patterns show that *kēẁⁿ* is treated like a postnominal adjective (§6.xxx). For distributive *(ŋ-)kēⁿ-ꜜkēẁⁿ* see §6.3.2.4.

#### Combination of noun plus numeral ‘2’ to ‘10’

Basic numerals have either /L/ or /M/ melody (§4.6.1.2). Using /M/-melody *sɛ̄kī* ‘8’ and /L/‑melody *nàtàwⁿ* ‘4’ as examples, combinations with nouns of various tone classes are in (xx1). There is no special tonal interaction between noun and numeral, in contrast to N-Adj combinations. Routine tone sandhi (Final Tone-Raising) occurs in the combination of an L-toned noun and the L-numeral ‘four’ (xx1b).

(xx1) melody noun ‘8 …’ ‘4 …’ gloss

a. /H/ *kólō kóló sɛ̄kī* *kóló nàtàwⁿ* ‘Nile monitor lizard’

/M/ *yɔ̄gɔ̄* *yɔ̄gɔ̄ sɛ̄kī* *yɔ̄gɔ̄ nàtàwⁿ* ‘fish’

/ML/ *kāsò kāsò sɛ̄kī* *kāsò nàtàwⁿ* ‘jail’

/LM *gɛ̀jɛ̄* *gɛ̀jɛ̄ sɛ̄kī* *gɛ̀jɛ̄ nàtàwⁿ* ‘arrow’

/LM\*/ *gàrībū gàrībū sɛ̄kī gàrībū nàtàwⁿ* ‘child beggar’

/LH\*/ *mìsírī mìsírí sɛ̄kī mìsírí nàtàwⁿ* ‘mosque’

/LML/ *mòbōlì* *mòbōlì sɛ̄kī mòbōlì nàtàwⁿ* ‘vehicle’

b. /L/ *nàà nàà sɛ̄kī nàā nàtàwⁿ* ‘cow’

/L/ *sìbò sìbò sɛ̄kī sìbō nàtàwⁿ* ‘snake’

/L/ *bìrìgì* *bìrìgì sɛ̄kī bìrìgī nàtàwⁿ* ‘manure’

Different tonal rules apply when the noun-numeral sequence is a bahuvrihi compoundd like ‘two-headed’ (§5.2.1.2).

### *pāàlōwⁿ* ~ *pāàlēwⁿ* ‘many/much’

This quantificational adjective follows both count nouns (‘many Xs’) and mass nouns (‘much X’). It does not occur as a predicate adjective, in which function it is replaced by (pseudo-reflexive) *kóⁿ* as in *ē yè ŋ kóⁿ* ‘we are many’.

It has an unusual MLM tone melody. Its combinations with nouns of various melodic classes in (xx1) show that it is treated like an adjective and like numeral ‘one’, rather than like nonsingular numerals and the quantificational adjectives ‘certain (one)’. Neither the noun nor the quantifier takes plural suffix *‑yè*. I use the variant *pāàlōwⁿ* here but the variant *pāàlēwⁿ* is always possible.

(xx1) melody noun ‘many/much …’ gloss

a. /H/ *kólō kōlō pāàlōwⁿ* ‘Nile monitor lizard’

/M/ *yɔ̄gɔ̄* *yɔ̄gɔ̄ pāàlōwⁿ* ‘fish’

/ML/ *kāsò kāsō pāàlōwⁿ* ‘jail’

b. /L/ *sìbò sìbò pāàlōwⁿ* ‘snake’

/LM *gɛ̀jɛ̄* *gɛ̀jɛ̀ pāàlōwⁿ* ‘arrow’

/LM\*/ *gàrībū gàrìbù pāàlōwⁿ* ‘child beggar’

/LH\*/ *mìsírī mìsìrì pāàlōwⁿ* ‘mosque’

/LML/ *mòbōlì* *mòbòlì pāàlōwⁿ* ‘vehicle’

While *pāàlōwⁿ* differs from *kɯ̄ɯ̄ⁿ* ‘a certain’ and the latter’s relatives in its tonosyntactic properties, the two occur in the same linear position, following other adjectives.

(xx2) *yɔ̀gɔ̀ pììⁿ pāàlōwⁿ*

fish black many

‘many black fish’ (not #*yɔ̀gɔ̀ pààlòⁿ pīīⁿ* )

‘A lot’, either abstract or with understood but covert common noun, is *pā pààlōwⁿ*, literally ‘many things’. Note the tone of *pààlōwⁿ* in this combination. This ‘a lot’ phrase can function adverbially, but in (xx3) it is treated as an object NP, transitivizing ‘sleep’ in the process (compare *ŋ́ kùmù* ‘I slept’).

(xx3) a. *ŋ́ =nàⁿ [pā pààlēⁿ] tōlō*

1SgSbj Sbj/Obj [thing **many**] sell.Pfv

‘I sold a lot/many.’

b. *ŋ́ =nàⁿ [pā pààlōⁿ] kùmù*

1Sg Sbj/Obj [thing **many**] sleep.Pfv

‘I slept a lot.’

The noun modified by *pāàlōwⁿ* may take a possessor, expressing a partitive relationship (xx4a‑b). It ‘many’ modifies a plural pronoun, the phrasing can be either ‘our/your/their many people’ (xx4c) or as possessive ‘a lot of out/your/their people’ (xx4d).

(xx4) a. *[[ŋ̀ náá] pāàlōwⁿ] wàà*

[[1SgPoss cow] many] die.Pfv

‘Many of my cows died.’

b. *ŋ́ =nā [[ŋ̀ náá] pāàlōⁿ] tōlō*

1SgSbj Sbj/Obj [[1SgPoss cow] many] sell.Pfv

‘I sold many of my cows.’

c. *ē ɲīmī pāàlōwⁿ*

1PlPoss person many

‘many of us’

d. *[ē ɲīmī] [pā pààlōwⁿ]*

[1PlPoss person] [thing many]

[=(c)]

## NP with determiner

### Demonstrative preceding noun

The visible (deictic) demonstrative *kɔ̀ⁿ* precedes the modified noun.

#### Floating H with prenominal demonstrative *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H)

Prenominal demonstratives *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H) come with a floating H-tone that is realized on the following noun if the noun’s lexical melody begins with L. Unlike 1Sg possessor *ŋ̀* (+H), whose floating H is limited to the first one or two syllables of the noun, the H of *kɔ̀ⁿ* (+H) or *ɲɔ̀ⁿ* (+H) spreads over the entire noun stem.

See §3.6.3.1 for details and examples.

### Demonstrative *gu* following noun (and inner modifiers)

Discourse-definite demonstrative *gu* (§4.4.2) follows the noun and its inner modifiers. It is atonal, and gets its surface tone in the same way as plural *-ye* on nouns. See §3.6.3.2 for details on the tones.

#### Tonal interactions involving a postnominal demonstrative

## Universal and distributive quantifiers

### ‘All’ (*sāāⁿ* )

The basic universal quantifier is *sāāⁿ*, following the noun and any inner modifiers. It can be added directly to pronouns. The tonal form of the noun (or the noun plus inner modifiers) is not affected by *sāāⁿ*.

In the sense ‘all’, if the noun denotes a set of individuals as opposed to a mass, it is normally marked for plurality (suffix *-ye* or irregular plural) for human and animate sets, less reliably for inanimates. Mass nouns like ‘milk’ do not pluralize in this way. As an alternative to plural noun plus *sāāⁿ*, one can add the plural suffix *-ye* directly to *sāāⁿ*. (xx1b) therefore has two versions.

(xx1) a. *à [sɔ́gɔ́ sāāⁿ] mɛ̀wⁿ*

3SgSbj [milk **all**] drink.Pfv

‘He/She drank all the milk.’

b. *à [ŋ̄ yàmbāā-yè sāāⁿ] tōlō*

*yàmbāà sāāⁿ-yē]*

3SgSbj [3SgReflPoss house(-Pl) **all**(-Pl)] sell.Pfv

‘He sold all of his houses.’

c. *à gè [=ē sāāⁿ] wàgā*

3SgSbj Ipfv [1Pl **all**] kill.Ipfv

‘He/She will kill us all.’

d. *kú sāāⁿ*

Dem **all**

‘all that’

e. *[nɔ̀gù sāāⁿ] nìŋīì*

[village **all**] Loc

‘in all the villages’

‘Everything’ is *à sāāⁿ* with 3Sg pronominal possessor in partitive function (xx2a). Its plural *à sāāⁿ‑yē* means ‘all of them’ with reference to a nonhuman set. ‘Everyone’ is *è sāāⁿ* with 3Pl pronominal possessor (xx2b).

(xx2) a. *à [=à sāāⁿ] dīgā*

3SgSbj [3Sg **all**] eat.Pfv

‘He/She ate everything.’

b. *[è sāāⁿ] bē*

[3Pl **all**] come.Pfv

‘Everyone has come.’

*sāāⁿ* can also function as distributive ‘each’. In this case neither the noun nor the quantifier is pluralized. Distributive sense is clearest when the NP with *sāāⁿ* is paired with another quantified or possessed NP. In (xx4), ‘child’ is singular in form and is coindexed distributively with the possessor of ‘father’.

(xx4) *[jénáⁿ sāāⁿ] bē [[ŋ̄ kàà] ní]*

[child all] come.Pfv [[3SgReflPoss father] Inst]

‘Each childx brought his/herx father.’

*mà-sāāⁿ* is a specialized form ‘each one, anyone’, ranging from human to inanimate, that can be used when no other noun or pronoun is present.

(xx5) *mà-sāāⁿ nàⁿ bē, āⁿ gālā= à sē*

**anyone** Pfv come.Pfv, 2SgSbj Sbjn 3SgObj say.Pfv

*[ŋ̀ nà bōẁⁿ]*

[1Sg not.be here]

‘If anyone comes, say that I am not here.’

See also *mà-sāāⁿ* in (xx1c) in §8.4.71 (‘I left each one in his (respective) place’).

### Quantifiers with negation

Clausal negation scopes over a universal quantifier.

(xx1) *ŋ̀ tè [bíyɛ́ⁿ sāāⁿ] dīgā*

1SgSbj PfvNeg [egg all] eat.Pfv

‘I didn’t eat all the eggs.’

‘Nothing’ is *pā sí* under clausal negation (xx2a). *pā* is the premodifier form of *pwɔ̄* ‘thing’. *pwɔ̄* by itself can mean ‘anything’ or ‘something’ (xx2b).

(xx2) a. *ŋ̀ tè [pā sí] dīgā*

1Sg PfvNeg [**thing any**] eat.Pfv

‘I haven’t eaten anything.’

b. *ā nàⁿ pwɔ̄ dīgā,*

3SgSbj Pfv **anything** eat.Pfv,

*à gà āⁿ wɔ̀bɔ̀-nī*

3SgSbj Ipfv 2SgObj sicken-Caus.Pfv

‘If you-Sg eat anything, it will make you sick.’

c. *sèēdù pwɔ̄ dīgā,*

3SgSbj **something** eat.Pfv,

*wɔ̀gā= ā wɔ̀bɔ̀-nī gà*

3Sg.Indep 3SgObj sicken-Caus.Pfv RemPfv

‘Seydou ate something and it made him sick.’

*sí* ‘any’ is added to other nouns under the scope of negation (xx3a). The noun can be morphologically pluralized in partitive function (xx3b). Subjects can take sí just like NPs in any other function (xx3c-d).

(xx3) a. *ŋ̀ tē [yàmbāà sí] tōlō*

1Sg PfvNeg [house **any**] sell.Pfv

‘I haven’t sold any houses.’

b. *ŋ̀ tē [[kɔ̀ⁿ yàmbāā-yè] sí] tōlō*

1Sg PfvNeg [[Dem house-Pl] **any**] sell.Pfv

‘I haven’t sold any of these houses.’

c. *[yàmbāà sí] tè sēwⁿ*

[house **any**] PfvNeg fall.Pfv

‘No house fell.’

d. *[ɲìmì sí] nà bē sò*

[person **any**] IpfvNeg come.Ipfv go.Pfv

‘Nobody will go.’

## Accusative (absent)

There is no accusative marking on direct object NPs.

# Coordination

## Conjunction (*yèⁿ* or *yèhīīnì*)

The usual ‘and’ conjunction between two NPs or adverbial X and Y is *yèⁿ*. There is also an extended variant *yèhīīnì*.

### NP conjunction

*yèⁿ* is treated as bimoraic. It undergoes Final Tone-Raising before an L‑tone, becoming *yěⁿ* (the diacritic indicates <LM> tone on a vowel). The left conjunct may also undergo this process before *yèⁿ* or *yěⁿ* (xx1e).

(xx1) a. *kɛ̄ɛ̄gū yěⁿ yùgòⁿ*

man and woman

‘a man and a woman’

b. *dìgéwⁿ yěⁿ wày*

yesterday and today

‘yesterday and today’

c. *bōⁿ yèⁿ yāẁⁿ*

here and over.there

‘here and (over) there’ (< *bōẁⁿ* )

d. *sɔ̀gɔ̀-lɔ̄ⁿ yěⁿ nàà*

sheep and cow

‘a sheep and a cow’

e. *nàā yèⁿ sūgō*

cow and goat

‘a cow and a goat’ (< *nàà* )

See also *wùlāā [yěⁿ wùlàà]* ‘who and who?’ in §13.2.2.2.

*yèⁿ* also has an extended variant *yèhīīnì*.

(xx2) a. *kɔ̀yɔ̄wⁿ yèhīīnì bíyɛ̄wⁿ*

stone and egg

‘a stone and an egg’

b. *nàmàgé yèhīīnì bàrà*

Namagué and Bargué

‘Namagué and Bargué (villages)’

c. *tùbā yèhīīnì yàmba᷆*

granary and house

‘a granary and a house’ (< *tùbà* )

For conjoined NPs as heads of relative clauses, see §14.2.2.

### Three or more conjuncts

It is possible to conjoin three or more NPs. The conjunction *yèⁿ* may precede all nonitial conjuncts, or it may occur only before the final conjunct (xx1a). Triple conjunctions are normally expressed as lists (enumerations) with their distinctive prosody (§7.1.5).

(xx1) a. *ŋ̀-dɔ́gɔ́↗(,) [yà= āⁿ-dɔ̀gɔ́↗(,) [yē= è-lɔ̀gɔ̀]*

1Sg-Indep(,) [**and** 2Sg-Indep] [**and** 3Pl-Indep]

‘me, you-Sg, and them’

b. *yùgòm-bè↗ kɛ̄ɛ̄-gē↗ yèⁿ jéná-mbí-gé*

woman-Pl man-Pl **and** child-Pl-Pl

‘women, men, and children’

### Pronouns as conjuncts

In a conjoined NP, a pronominal conjunct (left or right) must take independent pronoun form. In the absence of conjunction, simple pronominal subjects are normally proclitic (xx1a), unless focalized (xx1b). When a pronoun is the left or right conjunct of a conjoined NP, it takes full independent pronominal form regardless of syntactic function or focalization (xx1c-d). # means ungrammatical.

(xx1) a. *ŋ̀ bē*

1SgSbj come.Pfv

‘I have come.’

b. *ŋ̀-dɔ́gɔ́ bē*

1Sg-Indep come.Pfv

‘I [focus] have come.’

c. *[sèēdù yèⁿ ŋ̀-dɔ́gɔ́] bē*

#*ŋ̀*

[S and 1Sg-**Indep**] come.Pfv

‘Seydou and I came.’

d. *[ŋ̀-dɔ́gɔ́ yēⁿ [ŋ̀ káá]] gà bē*

#*ŋ̀*

[1Sg-**Indep** and [1SgPoss father]] Ipfv come.Ipfv

‘I and my father will come.’

### Plural NPs as both left and right conjuncts

When both conjuncts are plural NPs other than pronouns, the left conjunct sometimes takes unmarked “singular” form although it is interpreted as plural. Therefore (xx1a) has a variant with plural-marked left conjunct and another without this marking.

(xx1) *sūgō yěⁿ sɔ̀gɔ̀-lɛ̄m-bē*

*sūgē-ē*

goat(**-Pl**) and sheep-Pl

The background to this is that the productive plural suffix is *-ye* (*-yē* or *-yè* depending on the tones of the stem). It may contract with the stem-final syllable especially in longer words. More to the point, it can also contract with *yèⁿ* ‘and’ as *ye=e* (with appropriate tones), just as it can with the bidirectional case-marking *yè*. It may be that such contractions have led to a reanalysis whereby plural suffixation is optionally dropped on left conjuncts in contexts where plurality can be inferred. That such reanalysis is going on is suggested by combinations where the noun functioning as left conjunct has a different plural form that is not at risk of misinterpretation.

(xx1) a. *sɔ̀gɔ̀-lɛ̄ⁿ yɛ̀ⁿ sūgē-ē*

*sɔ̀gɔ̀-lɛ̄m-bē*

sheep(**-Pl)** and goat-Pl

‘sheep and goats’

b. *yùgōⁿ yèⁿ kɛ̄ɛ̄gē-ē*

*yùgòⁿ-bē*

woman(**-Pl**) and man-Pl

‘women and men’

c. *kɛ̄ɛ̄gū yěⁿ yùgòⁿ-bē*

*kɛ̄ɛ̄gē-ē*

man(**-Pl**) and woman-Pl

‘men and woman’

### Preferential ordering of coordinands

There are some preferential tendencies for relative ordering of left and right coordinands. Other things being equal, the preferred ordering of two pronouns is 1st>2nd>3rd. Other orders are not ungrammatical but are less common.

(xx1) a. *ŋ̀-dɔ́gɔ́ yèⁿ ān-dɔ̀gɔ̀*

1Sg-Indep and 2Sg-Indep

‘me and you’

b. *ān-dɔ̀gɔ̄ yěⁿ wɔ̀gɔ̀*

2Sg-Indep and 3Sg.Indep

‘you-Sg and him/her’

There appear to be no preferences based on nominal semantics or euphony. For example, there is no preferred ordering of ‘men’ versus ‘women’ or of ‘sheep’ versus ‘goats’.

If one conjunct denotes an individual X and the other denotes a possession or a relative of X, X normally takes left conjunct position. See the following section for discussion.

### Reflexive possessor *ŋ̀* in right conjunct

As noted above, when the referent of one conjoined NP is also the possessor of the other conjunct, the first NP normally precedes the possessed NP (xx1). If the NP serving as left conjunct denotes a single individual other than the current speaker or addressee, it binds a 3Sg reflexive pronominal possessor (§18.1.3) in the right conjunct.

(xx1) *sèēdū yē [ŋ̄ kàà]*

S and [3SgReflPoss father]

‘Seydoux and hisx father.’

### ‘X and Y’ with a broad-scope modifier

The basic principle is that both conjuncts in a conjoined NP must be complete.

When a modifier (possessor, adjective, determiner, numeral) has scope over both conjuncts, it is repeated. In (xx1), the repeated modifier is bolded in the interlinear. It is a possessor in (xx1a-b), an adjective in (xx1c), a demonstrative in (xx1d), and a numeral in (xx1e). Omission of the repeated modifier results in ungrammaticality (or in a narrow-scope reading). Free English translations show optional “conjunction” reduction (except with numerals).

(xx1) a. *à [[ŋ̄ sɔ̀gɔ̀-lɛ̄m-bē] yèⁿ [ŋ̄ sūgē-ē]] tōlō*

3SgSbj [[3SgReflPoss sheep-Pl] and [**3SgReflPoss** goat-Pl] sell.Pfv

‘Hex sold hisx sheep and hisx goats.’

b. *è yè= [[ē sɔ̀gɔ̀-lɛ̄m-bē] yèⁿ= [è sūgē-ē]]*

3PlSbj Sbj/Obj [[3PlReflPoss sheep-Pl] and [**3SgReflPoss** goat-Pl]

*tōlō*

sell.Pfv

‘Theyx sold theirx sheep and (theirx) goats.’

c. *ŋ́ =nà [[sūgō sílé-yè] yěⁿ [sɔ̀gɔ̀-lɛ̄ⁿ sílé=yè]] sàwⁿ*

1SgSbj Sbj/Obj [[goat old-Pl] and [sheep **old-Pl**]] buy.Pfv

‘I bought some old goats and (old) sheep.’

(contracts to […sūgōsílèēⁿsɔ̀gɔ̀lɛ̄ⁿsílèè…] )

d. *[kɔ̀ⁿ sɔ̄gɔ̄-lɛ̄m-bē] yěⁿ [kɔ̀ⁿ sūgē-ē]*

[Dem sheep-Pl] and [**Dem** goat-Pl]

‘these sheep and (these) goats’

e. *[sɔ̀gɔ̀-lɛ̄ⁿ pēndē] yèⁿ [sūgō pēndē]*

[sheep two] and [goat **two**]

‘two sheep and two goats’

The universal quantifier ‘all’ may occur after the entire NP with broad scope (xx2a,c). My assistant was quite uncomfortable with a proposed alternative with *sāāⁿ* repeated after the left conjunct ‘women’. He suggested that such a duplicate ‘all’ could only occur in a preclausal double-topic construction with pauses, without *yèⁿ* ‘and’, and with a resumptive pronoun and another ‘all’ in the clause proper (xx2b).

(xx1) a. *[[yùgōⁿ yèⁿ kɛ̄ɛ̄gē-ē] sāāⁿ] bē*

[[woman and man-Pl] **all**] come.Pfv

‘All the women and men came.’

b. *yùgòm-bè sāāⁿ, kɛ̄ɛ̄gē-ē sāāⁿ, [è sāāⁿ] bē*

woman-Pl **all**, man-Pl **all**, [3Pl **al**l] come.Pfv

‘All the women, all the men, they all came.’

c. *ŋ́ =nā à sē*

1SgSbj Sbj/Obj 3SgObj say.Pfv

*[[[kɛ̄ɛ̄gū yěⁿ yùgòm-bè] sāāⁿ] tè]*

[[[man and woman-Pl] **all**] Dat]

‘I told (=said it) to all the men and women.’

### ‘X and Y’ with a shared postposition

A single postposition can readily take an entire conjoined NP as its complement (xx1a-b).

(xx1) a. *à ŋ̀ kō [[sɔ̀gɔ̀-lɛ̄ⁿ yèⁿ sūgō] ní]*

3SgSbj 1SgObj give.Pfv [[sheep and goat] **Inst**]

‘He gave me (=provided me with) a sheep and a goat.’

b. *ŋ́ =nā= à sē*

1Sg Sbj/Obj 3SgObj say.Pfv

*[[[ŋ̀ káá] yà= [āⁿ kàā]] tè]*

[[[1SgPoss father] and [2SgPoss father] **Dat**]

‘I told (“said it”) to my father and (to) your father.’

For (xx1b) but not (xx1a), my assistant accepted a variant with conjoined PPs, i.e. with a duplicate postposition (xx2). However, he prefers (xx1b) with just one postposition.

(xx2) *ŋ́ =nā= à sē*

1Sg Sbj/Obj 3SgObj say.Pfv

*[[[ŋ̀ káá] tè] yà= [[āⁿ kàā]] tè]*

[[[1SgPoss father] **Dat**] and [[2SgPoss father] **Dat**]

‘I told (“said it”) to my father and (to) your father.’

Two PPs with different postpositions (or nouns with locative suffixes) can be conjoined.

(xx3) *ē gā sō [tèndé kánà] yèhīīnì sɔ̄ŋɔ̀-y*

1Pl Ipfv go.Ipfv [well(n) **at**] and the.bush-**Loc**

‘We are going to the well and out to the bush.’

### Conjunctions under the scope of negation

Unlike English, a conjunction has scope over negation. (xx1) is literally “I don’t like [couscous and cowpea]” but it doesn’t mean that I dislike the combination. It means I don’t care for either couscous or cowpeas. Note ‘or’ rather than ‘and’ in the free translation.

(xx1) *ŋ̀ nà lākīrī yěⁿ sàbúlá pɔ̄gɔ̀*

1Sg IpfvNeg [couscous and cowpea] like.Ipfv

‘I don’t like (either) couscous or cowpeas.’

### Lists (incompleteness intonation plus *yèhíínì* )

Long enumerations of nouns or NPs require incompleteness terminal intonation (pitch rise) on each nonfinal listed item. The final item is exempt from this. It may be preceded by *yèhíínì* ‘and (finally)’, which may be related to *yèyⁿ* ‘and’.

In (xx1), *gā* ‘be’ at the end of the first line is prolonged with slowly falling pitch (dying quail intonation). The items in the list proper, except the final one, have incompleteness prosody as in polar questions (§xxx). This is expressed by raising a final L- or M-toned syllable to H, enhanced by an above-modal terminal pitch level. The nonfinal items often prolong their final syllable (*→*). The prolongation is optional and the extra duration (when present) is variable.

(xx1) *[ē gā mà-lē sɔ̀gɔ̄] gā→↘,*

[1Pl Ipfv Rel-Pl cultivate] be,

*pīíⁿ→,*

millet

*dūgá→,*

rice,

*kèndé→,*

sorghum,

*pàā-m-pùwóⁿ→,*

sesame,

*sààgú→,*

roselle,

*wōō-lɛ́wⁿ→,*

groundnut,

*sàbúlá→,*

cowpea,

*bògò-[dù-tɔ́mɔ́ⁿ]→,*

melon-[?-red].

*yèhíínì màgàsālà*

as well as yellow.melon

‘What we cultivate is: millet, rice, sorghum, sesame, roselle, groundnut, cow-pea, watermelon, and (finally) yellow melon.’

(< *pīīⁿ*, *dūgā*, *kèndè*, *pàā-m-pùwóⁿ*, *sààgù*, *wōō-lɛ̄wⁿ*, *sàbúlá*, *bògò-[dù-tɔ̄mɔ̄wⁿ]*)

### “Conjunction” of verbs, VPs, and clauses

Verbs, VPs, and clauses cannot be conjoined by *yèⁿ*. See chapter 15 for various mechanisms to combine VPs and clauses.

## Disjunction

### ‘Or’ (*wàlì, wàlì-màà* )

(xx1) presents NP or adverb disjunctions ‘X or Y’ in indicative clauses. The disjunctive particle is *wàlì* or *wàlì-màà*. Phonologically similar forms occur in other languages of the zone (e.g. Songhay *wàlà* ).

(xx1) a. *[sɔ̀gɔ̀-lɛ̄wⁿ bòndò kūlɛ̄wⁿ] [wàlì-màà sūgō]*

[sheep neck cut.Pfv] [**or** goat]

‘Slaughter-2Sg a sheep or a goat!’

b. *[ŋ̀ gà kāỳⁿ wàȳ] [wàlì-māā ɲàànù*]

[1Sg Ipfv work.Ipfv today] [or tomorrow]

‘I will work today or tomorrow.’ (< *wày* )

c. *[[ŋ̀ káá] wàlì-màà [āⁿ kàà]] [ŋāŋ kēŋ̀] ŋ̀kāmbē sò*

[[1Sg father] or [2Sg father]] [person one] ought go.Pfv

‘My father or your father, one (of them) should go.’

The ‘or’ disjunction normally occurs clause-initially or in topicalized NPs that are outside of a clause. For example, (xx1a) is literally ‘Slaughter a sheep, or (slaughter) a goat’ with the second clause pruned, rather than ‘Slaughter [a sheep or a goat]’. (xx1b) is likewise arguably ‘I will work today, or (I will work) tomorrow.’ (xx1c) begins with a disjunctive topicalized NP that is then resumed by ‘one person’ in the clause proper.

Two imperative clauses cannot be combined as a disjunction. Instead, only the first clause is imperative in form (i.e. with a perfective verb). The second clause is subjunctive.

(xx2) *[ŋ̀ túgó] [wàlì-màà āⁿ gālā sò]*

[1SgObj pay.Pfv] [or 2SgSbj **Sbjn** go.Pfv]

‘Pay me, or go!’

French *ou bien* ‘or (else)’ is widely used by younger speakers.

# Postpositions and adverbials

## Dative, instrumental, and comitative

### Dative

#### Dative *tè* with ‘say’ and with ditransitives

A postverbal PP with dative postposition *tè* is regularly used for the indirect object of ‘say’ (xx1a‑b).

(xx1) a. *sèēdù màsī sē gà= [āⁿ tè]*

S what? say.Pfv Past [2Sg **Dat**]

‘What did Seydou say to you-Sg?’

b. *āⁿ màsī sē gā [sèēdù tè]*

2Sg what? say.Pfv Past [S **Dat**]

‘What did you-Sg say to Seydou?’

Forms of the dative with nouns of various melodies are in (xx2). The postposition is L‑toned *tè* throughout. The only change in a preceding noun is regular application of LL#L-to-LM#L to nouns of /L/ melody.

(xx2) melody noun with *tè* gloss

a. noun of /L/ melody, triggers LL#L-to-LM#L

/L/ *nà nàā tè* ‘cow’

b. nouns of other melodies

/LML/ *tùjūnù tùjūnù tè* ‘pigeon’

/M/ *ɲīmī ɲīmī tè* ‘person’

/MLH/ *ɲōòmɔ́ ɲōòmɔ́ tè* ‘camel’

/H/ *kúŋgóló kúŋgóló tè* ‘dog’

The pronominal paradigm is (xx3). The 1Sg form is based on *ŋ̀* (+H).

(xx3) a. 1Sg *ŋ̀ té*

b. 1Pl *ē tè*

2Sg *āⁿ tè*

2Pl *āā tè*

3Sg *à tè*

3Pl *è tè*

Logo *ŋ̀ tè*

Whether the dative occurs with ‘give’ depends on the choice of ‘give’ verb. If the recipient is treated as preverbal direct object, it has no dative marking, and the theme is phrased as a postverbal instrumental, cf. ‘X furnish/provide Y [with Z]’. In this construction the ‘furnish/’ verb is *kò/kò* (xx4a). If on the other hand the theme Z is the preverbal direct object, the recipient is expressed as a postverbal dative PP. In this case the ‘give’ verb is *dō/dō* (xx4b). The dative construction is the only one possible with ‘show’ (xx4c).

(xx4) a. *ŋ́ (=nāⁿ) sèēdù kō [nàà nì]*

1SgSbj (=Sbj/Obj) S furnish.Pfv [cow **Inst**]

‘I gave Seydou a cow.’ (= ‘I furnished Seydou with a cow.’)

b. *ŋ́ =nāⁿ nāà dō [sèēdù tè]*

1SgSbj Sbj/Obj cow give.Pfv [S **Dat**]

‘I gave a cow to Seydou.’

(variant *ŋ́ nàà* … without the Sbj/Obj linker)

c. *ŋ́ =na᷆ⁿ nàà wɔ̄jī [sèēdù tè]*

1Sg Sbj/Obj cow show.Pfv [cow **Dat**]

‘I showed a cow to Seydou.’

(variant *ŋ́ nàà* … without the Sbj/Obj linker)

‘X have Y’ can be expressed as ‘Y be [X *tè* ]’, see §11.5.1.

#### Dative *nà*

An alternative dative postposition is *nà*. It can occur in place of *tè* with ditransitives ‘give’ and ‘show’, but not with ‘say’. Both postpositions are possible in (xx1a), but only *tè* in (xx1b). *tè* is significantly more common than *nà* with these ditransitives.

(xx1) a. *ŋ́ =nàⁿ wɔ́léⁿ dō [sèēdū nà* / *tè]*

1SgSbj =Sjb/Obj money give.Pfv [S Dat]

‘I gave the money to Seydou.’

b*. ŋ́ =nā= à sē [sēédū* (# *nà* ) / *tè]*

1SgSbj =Sjb/Obj 3SgObj say.Pfv [S Dat]

‘I told (=said it to) Seydou.’

The 1Sg form is *ŋ̀ ná*.

*nà* also occurs in asymmetrical comparative constructions (§12.1) where it is used like English *than*.

### Instrumental and comitative

#### Instrumental (*ní* )

Combinations of this postposition with nouns of various tonal melodies are in (xx1). For the transcriptions *ní* and *nī* see comments later in this section.

The noun may undergo tonal changes and sometimes final-vowel lengthening before *ní*. My assistant sometimes pronounces nouns in their regular lexical form before the postposition. This seems to be his usual practice with nouns that are not common in instrumental PPs. Some of the tonal changes described below are subtle, but when the noun has /L/ melody the distinction is clear. An example is (xx1), where ‘donkey’ remains all-L‑toned.

(xx1) *ŋ̀ gā sɔ̀gɔ̄ [ʃèmpùwò nī]*

1Sg Ipfv cultivate.Ipfv [donkey Inst]

‘I do farm work with a donkey.’

However, in elicitation my assistant often raises tones of the noun before *ní*. An all-L-toned noun raises its final syllable (or the final mora of *Cvv*) to H-toned, and a final *Cv* syllable is optionally lengthened, especially in bisyllabic stems. At least the initial vocalic mora in an L‑toned noun must remain L‑toned, and if there is only one such mora (*tàwⁿ* ‘mat’, *tòy* ‘intelligence’) the stem remains L‑toned since there is no vocalic mora left for an added final H‑tone. A final L following a nonlow tone within the stem (ML, HL, etc.) is not raised. A final M-toned syllable is raised to H, whether or not it is preceded by L‑tones. A bisyllabic M‑toned word like *sūgū* ‘hand’ may be raised as a whole to H, or less often just the final syllable is raised (*súgú nī* or *sūgú ní* ). However, a trisyllabic M‑toned stem often becomes M.M.H with just a final H‑tone. The pronunciation of this ideal M.M.H can approximate L.L.H to give increased prominence to the final H, but the stem still behaves as M-initial for tone-sandhi purposes. These tonal patterns are identical to those that apply to nouns as objects in one type of purposive clause (§17.5.1). The patterns are also similar to those that operate in “intonational” polar-interrogative formation (§13.2.1.2).

(xx2) melody noun instrumental gloss of noun

a. L

*vowel-final*

*sìrìmbè sìrìmbé ní* ‘razor (large folding knife)’

*dàmbà dàmbá(á) ní* ‘daba (hoe)’

*tègè tègé(é) ní* ‘baggage’

*tàbà tàbá(á) ní* ‘foot’

*dɔ̀ɔ̀ dɔ̀ɔ́ ní* ‘knife’

*nasal-final*

*tàwⁿ tàⁿ ní* [tàn:í] ‘mat’

*tìyòwⁿ tìyóⁿ ní* ‘ax’ also *tìyòwⁿ ní*

*ɲìyɛ̀wⁿ ɲìyɛ́ⁿ ní* ‘head’

*semivowel-final*

*tòy tòy ní* ‘intelligence’

b. M *tīyɛ̄ tíyɛ́ nī* ‘oil, butter’

*tēē téé nī* ‘meat’

*dēē déé nī* ‘blood’

*sūgū súgú nī* ‘hand’

*tāānā tááná nī* ‘fool’

*heavy*

*kārāndē* *kārāndé ní* ‘tamarind’

c. H *túwɔ̄ túwɔ́ nī* ‘handle’

*bílāⁿ bíláⁿ nī* ‘torch’

*búwōⁿ búwóⁿ nī* ‘mortar’

*déé déé ní* ‘cotton’

*sɛ́mbɛ́ sɛ́mbɛ́ nī* ‘force’

d. contoured melodies

LH *sɔ̀mɔ̄ sɔ̀mɔ́ ní* ‘pick-hoe’

*bɛ̀bɛ̄ bɛ̀bɛ́ ní* ‘brick’

*kàɲá kàɲá ní* ‘saw (n)’

LH\* *tìmɔ̄gɔ̄ tìmɔ́gɔ́ nī* ‘ladder’

MLH *māāŋgòrō māāŋgòró ní* ‘mango’

H\*L *dágánà dágánà ní* ‘cream of millet’

LML *kèbāà kèbāà ní* ‘flint lighter’

ML *kɔ̄rɔ̀ kɔ̀rɔ̀ ní* ‘meaning’

The postposition is downstepped by regular rule to *nī* prepausally after an H‑toned stem of two or more syllables, as in *sɛ́mbɛ́ nī* ‘by force’ (xx1c). This downstepping can also occur after a single H-toned syllable, or even after an L-toned syllable as in 3Sg pronominal *à ní*. In prepausal position, *nī* is particularly vulnerable to prepausal intonational pitch-dropping, and it often sounds like L-toned *nì*, especially in the combination *à ní*. However, it does not trigger Final Tone-Raising on a preceding L-toned syllable, showing that it behaves phonologically as nonlow-toned.

The instrumental is used in connection with tools or other physical instruments (xx3a‑b) and with abstractions like ‘power, force’ (xx3c).

(xx3) a. *ń nāŋ kúŋgóló kwāā [kìyɛ́ ní]*

1Sg Sbj/Obj dog hit.Pfv [stick Inst]

‘I hit-Past (a/the) dog with (a/the) stick.’ (< *kìyɛ̀* )

b. *ŋ̀ gā sɔ̀gɔ̄ [dàmbáá ní]*

1Sg Ipfv cultivate.Ipfv [daba Inst]

‘I cultivate (=do farm work) with a daba (hoe).’ (< *dàmbà* )

c. *è dwɔ̄ gà [sɛ́mbɛ́ nī]*

3Pl enter.Pfv Pfv [force(n) Inst]

‘They entered by force.’

*ní* is also the postposition for the postverbal theme (transferred entity) of one of the two ‘give’ verbs (compare English *furnish X with Y*), ‘bring’, and ‘take (convey somewhere)’. For ‘give’, see (xx2a) in §8.1.1 above. For ‘bring’ and ‘take (convey)’ phrased as ‘come [with X]’ and ‘go [with X]’, see §11.1.1.5.

The pronominal form of the instrumental in common use is 3Sg *à ní*, usually heard clause-finally as *à nì*. This pronominal PP often resumes a previously introduced NP denoting an object that can be used as an instrument.

(xx4) *ŋ́ =nāⁿ dɔ̀ɔ̀ dēē gà*

1SgSbj Sbj/Obj knife take.Pfv RemPfv

*[ŋ̀ bè tēē kūlēⁿ [à nī]*

[1SgSbj Seq meat cut.up.Pfv [**3Sg Inst**]

‘I took a knife to cut up meat with it.’

For *màsí nī* ‘with what?’ see §13.2.2.2.

#### Comitative (*bwāỳ* )

The comitative postposition *bwāỳ* indicates accompaniment or cooperation.

(xx1) a. *ŋ̀ gà kāỳⁿ [sèēdù bwāỳ]*

1Sg Ipfv work.Ipfv [S **Comit**]

‘I work with Seydou.’

b. *à gà kāỳⁿ [ē bwāỳ]*

3Sg Ipfv work.Ipfv [1Pl **Comit**]

‘He/She works with us.’

c. *ŋ̀ gā sò bàmàkɔ́ [sèēdù bwāỳ]*

1Sg Ipfv go.Ipfv B [S **Comit**]

‘I’m going to Bamako with Seydou.’

When the reference is to an object that is being transported by someone, the complement of *bwāỳ* denotes the person. Schematically: ‘X takes Y [with X]’ rather than just ‘X goes [with Y].’

(xx2) a. *è gà bē [sààⁿ né=] [ē bwāỳ]*

3Pl Ipfv come.Ipfv [honey Inst] [3Pl **Comit**]

‘They are bringing (the) honey with them.’ (< *nì* )

b. *ŋ̀ gà bē [sààⁿ ní] [ŋ̀ bwāỳ]*

1Sg Ipfv come.Ipfv [honey Inst] [1Sg **Comit**]

‘I am bringing the honey with me.’

The combination of a reflexive transitive form of *kwāā/kɔ̄-lɔ̄* ‘hit’ and a following *bwāỳ* (here in adverbial function) idiomatically means ‘get together’ (e.g. for cooperative work).

(xx3) *ē gè= ē kɔ̄-lɔ̄ bwāỳ [ē bè kāyⁿ]*

1PlSbj Ipfv 1PlObj hit-Ipfv **Comit** [1PlSbj Seq work(v).Pfv]

‘We will get together and work.’

*bwāỳ* is also part of the ‘think of/about’ construction, which can also mean ‘remember, be reminded of’. The verb *mīīlà/mīīlà* (< Fulfulde) is reflexive.

(xx4) *ŋ́ =nā ŋ̀ mīīlā [sèēdù bwāỳ]*

1SgSbj Sbj/Obj 1SgObj think.Pfv [S **Comit**]

‘I thought of/about Seydou.’

This postposition is invariant in form, e.g. 1Sg *ŋ̀ bwāỳ*.

#### *pàà* ‘shared with’

This postposition, much less common than *bwāỳ* (preceding section), has a similar comitative sense. However, it implies either coinvolvement in an activity or sharing a bodily characteristic (internal or external). In (xx1), if the 3Sg subject refers to a medical condition or a bodily modification such as facial scarification (but not clothing or jewelry), it indicates that the complement (here 1Sg) shares the condition with another person already mentioned. If the 3Sg subject refers to a human, it indicates coinvolvement.

(xx1) *à gā [[ŋ̀ pé] pàà]*

3SgSbj be [[1Sg too] **shared.with**]

‘It (e.g. scarification, skin sores, disease) is on/in me too’

‘He/She is with me too (in an activity)’

For garments and jewelry, *kānà* is used instead.

*pàà* also occurs in a collocation with the noun *sèwⁿ* ‘road’.

(xx2) *à gā [sěⁿ pàà]*

3SgSbj be [road on]

‘He/She is on the road.’

## Spatial postpositions

### Spatial NPs without postposition

Place names such as names of villages and cities, in other than subject or object position, are assumed to be locative adverbs. No postposition is present.

(xx1) a. *ŋ̀ gà sévárè*

1Sg be S

‘I am in Sevare (city).’

b. *ŋ̀ gà kāỳⁿ sévárè*

1Sg Ipfv work.Ipfv S

‘I work in Sevare (city).’

Most names of villages and cities in the area end in an L‑tone. Therefore one cannot exclude the possibility that, in adverbial use, they belong with tonal locatives (§8.2.3).

### Locative, allative, and ablative senses

The distinction between (stationary) locative, allative (‘to’), and ablative (‘from’) is not made by PPs, rather by verbs, as in all languages of the zone. Thus the city name ‘Sevare’ and the zone ‘the bush’ (see preceding section) can be used without change in any of these three contexts.

With ‘village’, my assistant prefers the explicit ‘in(side)’ postposition in stationary locative function (xx1a), and prefers to omit it with ‘go’ or ‘leave’ (xx1b‑c).

(xx1) *a. ŋ̀ gā [[ŋ̀ nɔ́gú] nìŋi᷆]*

1Sg be [[1Sg village] inside]

‘I am in my village.’ (< *nɔ̀gù* )

b. *ŋ̀ gā sò [ŋ̀ nɔ́gì-ỳ]*

1Sg Ipfv go.Ipfv [1Sg village-Loc]

‘I am going to my village.’ (< *nɔ̀gī-ỳ* )

c. *ŋ̀ bāā gà [ŋ̀ nɔ́gì-ỳ]*

1Sg leave.Pfv RemPfv [1Sg village-Loc]

‘I have left (=come from) my village.’

### Suffixal locative (*-ỳ* ) and tonal locative

#### *-ỳ* or final tone drop with nouns

Some nouns have a word-internal locative form, used in the usual range of stationary locative, allative, and ablative contexts depending on verbs. The form ends in L‑toned *-ỳ*, which can trigger Final Tone-Raising on an L‑toned noun (‘village’). In the case of *síbɛ̄wⁿ* ‘market’, which ends in *wⁿ*, the locative is heard only as a drop in the final-syllable tone.

(xx1) a. *ŋ̀ gā sò sɔ̄ŋ(g)ɔ̀-y* / *nɔ̀gī-ỳ* / *síbɛ̀wⁿ*

1Sg Ipfv go.Ipfv the.bush-Loc / village-Loc / market.Loc

‘I am going out to the bush (=outback)/to the village/to the market.’

b. *ŋ̀ gā sɔ̄ŋ(g)ɔ̀-y* / *nɔ̀gī-ỳ* / *síbɛ̀wⁿ*

1Sg be the.bush-Loc / village-Loc / market.Loc

‘I am (out) in the bush (=outback)/in the village/in the market.’

The known examples are in (xx2).

(xx2) gloss noun locative

a.

‘distant place’ *gɯ̄ɯ̄ⁿ dāāⁿ gɯ̄ɯ̄ⁿ dāāⁿ-ỳⁿ*

‘ignorance’ *kúmbā kúmbà-y*

‘village’ *nɔ̀gù nɔ̀gī-ỳ*

‘the bush (=outback)’ *sɔ̄ŋ(g)ɔ̄ sɔ̄ŋ(g)ɔ̀-y*

‘hand’ *sūgū sūgì-ỳ*

‘nearby place’ *gɯ̄ɯ̄ⁿ tūɥ-gù gɯ̄ɯ̄ⁿ tūɥ-gū-ỳ*

‘field’ *tùɥè* ~ *tìyè tùɥē-ỳ* ~ *tìyē-ỳ*

‘section of village’ *túlū túlù-y*

b. ‘market’ *síbɛ̄wⁿ síbɛ̀wⁿ*

‘mosque’ *mìsírí mìsírì*

*sūgì-ỳ* ‘in the hand’ is part of one construction meaning ‘X have Y’, phrased as ‘Y be [in X’s hand]’, see §11.5.1. The postposition *nìŋīì* ‘inside’ and the related noun *nìŋīì* ‘interior’ may also have originated as a suffixal locative. From *kɔ̀rɔ̀* ‘back (of body)’ is derived *kɔ̀rɛ̄‑ỳ*, which can function as a noun or adverb ‘(in the) rear, behind’.

The noun *kùwōnì* ‘(in) the settled area’ (as opposed to ‘the bush’) is used adverbially and may belong to this pattern, but there is no difference in form between noun and adverb.

#### *-ỳ* added to predicates (‘X care about it’ and ‘X put Y in it’)

Two constructions are known in which *-ỳ* with spatial sense is added to a verb or similar predicate. It probably originated as the contraction of a 3Sg PP \*à ỳ, with a locative postposition no longer in general use. No other noun or pronoun may be substituted for the 3Sg pronominal, and the preceding vowel is not lengthened. *-ỳ* is therefore best considered suffixal.

One construction is ‘X care about/be concerned by it’, under negation ‘X doesn’t care about it’. It is phrased as ‘[X’s care] (not) be (on) it’, with locational-existential *gà* ‘be’ or *nà* ‘not be’ (xx1a-b). The past-time counterpart has *kōndà-y* (xx1c), based on *kōndō* ‘stayed’, which forms past-time counterparts of various other statives. If ‘it’ is replaced by an NP denoting the object of concern, this NP takes a dative postposition (xx1d), and *-ỳ* is absent.

(xx1) a. *[ŋ̀ pāāⁿ] gā-ỳ*

[1Sg care(n)] be.Loc-**Loc**

‘I care about it.’ = ‘It concerns (=is relevant to) me.’

b. *[ŋ̀ pāāⁿ] nā-ỳ*

[1Sg care(n)] not.be.Loc-**Loc**

‘I don’t care about it.’

c. *[ŋ̀ pāāⁿ] tè kōndà-ỳ*

[1Sg care(n)] PfvNeg stay.Pfv-**Loc**

‘I didn’t (use to) care about it.’ (< *kōndō* )

d. *[ŋ̀ pāāⁿ] nā [kwàāⁿ tè]*

[1Sg care(n)] not.be.Loc [rain(n) **Dat**]

‘I don’t care about the rain.’

The second construction with *-ỳ* suffixed to a predicate is when *syɛ̄/syɛ̄* ‘put X in Y’ is replaced by *sīyà-y/sīyà-y* ‘put X in (it)’ with no other overt indication of the container. See §9.3.3 for this alternation.

### ‘In(side) X’ (*nìŋīì* )

Location inside a container or other enclosing space (such as a house or vehicle), or in an encompassing mass (like water) is expressed by *nìŋīì*. This word can also be used as a noun ‘interior’. *nìŋīì* may have originated as a derivative of *nùù* ‘belly’. Its form resembles that of suffixal locatives like *nɔ̀gī-ỳ* ‘in/to the village’ (preceding section).

(xx1) a. *ŋ̀ gā [yàmbáá nìŋīì]*

1Sg be [house inside]

‘I am in the house.’

b. *ŋ̀ gā sò [jīī nìŋīì]*

1Sg Ipfv go.Ipfv [water inside]

‘I am going in(to) the water.’

c. *sìbò gā [sɔ̀gū nìŋīì]*

snake be [grass inside]

‘The snake is in the grass.’

d. *ŋ́ =nāⁿ ʃɛ̀ⁿ syɛ̄ [bùwā nìŋīì]*

1Sg SbjObj squirrel put.Pfv [shoulderbag inside]

‘I put-Past the squirrel in the shoulderbag.’ (< *ʃɛ̀wⁿ* )

e. *ŋ̀ gā sò bàmàkɔ̀ [káár nìŋīì]*

1Sg Ipfv go.Ipfv B [bus in]

‘I (will) go to Bamako in the bus.’ (< *bàmàkɔ́* )

*nìŋīì* always requires an overt complement, minimally 3Sg *à*. It cannot be used adverbially without such a complement.

### Locative ‘at (the outskirts of)’ (*lāgà* )

Obscurely related to noun *lɔ̄gū* ‘mouth’ is postposition *lāgà* ‘at (the outskirts/bank of)’ or ‘at the entrance of)’. The complement may denote a body of water, a market, a village, a forest, or a dwelling. H-toned *síbɛ̄wⁿ* ‘market’ drops to M-toned (xx1c). Other H-toned nouns are followed by *lágà* (xx1e).

(xx1) a. *pàgù lāgà*

pond at.bank.of

‘at (the edge of) the pond

b. *dèbò lāgà*

river at.bank.of

‘at (the bank of) the river

c. *à bē [sībɛ̄ⁿ lāgà]*

3SgSbj come.Pfv [market at.edge.of]

‘He/She came to the approaches to the market’ (< *síbɛ̄wⁿ* )

d. *tēlè lāgà*

television at.edge.of

‘at the edge of (=watching) the TV’

e. *dúgúⁿ lágà*

forest at.edge.of

‘at the edge of the forest’

For *lāgà* in purposive-causal sense, see §8.3.1.

### Locative ‘at (well)’ or ‘on (body)’ (*kānà* )

Location ‘at’ a well (to draw water by letting down a rope with a waterbag attached) is expressed by *kānà*, which is also the noun ‘throat’. The image is the large circular form of the well as a ‘neck’ with a ‘throat’ inside. After H-tone, the postposition is *kánà* (xx1a).

(xx1) a. *ŋ̀ gā [tèndé kánà]*

1Sg be [well(n) at]

‘I am at the well.’ (< *tèndé* )

b. *[tèndè būlōⁿ] kānà*

[well(n) big] at

‘at the big well’

In addition, *kānà* can take a complement that denotes a human. The topic can be a garment covering the upper body or an accessory such as a necklace.

(xx2) *jùgū gā [[ŋ̀ pé] kánà]*

boubou be [[1Sg too] **on.neck.of**]

‘A boubou (=garment) is on me too.’ = ‘I am wearing a boubou too.’

### ‘On X’ or ‘over X’(*X kūmà* )

In this PP, the landmark X is conceptualized as being held up by an extended surface, whether horizontal (mat) or vertical (wall), or else as being in the atmosphere above something (object or surface). After H-tone, the postposition is *kúmà* (xx1d).

(xx1) a. *kɔ̀yɔ̄ⁿ gā yàgà-nā [tàⁿ kūmà]*

stone Ipfv be.put-Stat [mat **on**]

‘The stone is on the mat.’ (< *kɔ̀yɔ̄wⁿ*, *gà*, *tàwⁿ* )

b. *ŋ́ =nāⁿ kɔ̀yɔ̄ⁿ yàgā [tàⁿ kūmà]*

1Sg SbjObj stone put.Pfv [mat **on**]

‘I put the stone on the mat.’

c. *kìyɛ̀ sēⁿ [ŋ̀ kūmà]*

stick fall.Pfv [1Sg **on**]

‘The stick fell on me.’

d. *tóndó gà [kɛ́rɛ́ kúmà]*

agama be [wall **on**]

‘The agama lizard is on the wall.’ (< *kɛ́rɛ́* )

Combinations with nouns of different tone melodies are in (xx2).

(xx2) melody noun ‘on/over X’ gloss

a. noun ends in H-tone

/H/ *kúŋgóló kúŋgóló kúmà* ‘dog’

/LH/ *tèndé tèndé kúmà* ‘well (n)’

/LMH/ *màlīfá màlīfá kúmà* ‘rifle’

/MLH/ *ɲōòmɔ́ ɲōòmɔ́ kúmà* ‘camel’

b. noun ends in L‑tone

/L/ *tàbà tàbà kūmà* ‘foot’

/ML/ *kāsò kāsò kūmà* ‘jail’

/LML/ *yàmbāà yàmbāà kūmà* ‘house’

c. noun ends in M‑tone

/M/ *ɲīmī ɲīmī kūmà* ‘person’

The pronominal paradigm is (xx3). The tonal form is *kūmà* throughout.

(xx3) 1Sg *ŋ̀ kūmà*

1Pl *ē kūmà*

2Sg *āⁿ kūmà*

2Pl *āā kūmà*

3Sg *à kūmà*

3Pl *è kūmà*

### ‘Next to, beside X’ (*X sɔ̄gɔ̀y* and *X sɔ̄gɔ̄-bwāỳ* )

The noun *sōgɔ̀y* means ‘vicinity, proximity (of sth)’. It can be used as a postposition meaning ‘next to’ or ‘beside’, without specifying the orientation of the landmark. The landmark may be human or nonhuman.

(xx1) a. *ŋ̀ gā [sèēdù sɔ̄gɔ̀y]*

1Sg be [S vicinity]

‘I am next to Seydou.’

b. *sèēdù gā [yàmbàà sɔ́gɔ̀y]*

S be [house vicinity]

‘Seydou is next to the house.’

Examples with nouns of various tone melodies are in (xx2).

(xx2) melody noun ‘next to X’ gloss

a. noun ends in H‑tone

/H/ *kúŋgóló kúŋgóló sɔ́gɔ̀y* ‘dog’

b. noun ends in L‑ or M‑tone

/L/ *tàbà tàbà sɔ̄gɔ̀y* ‘foot’

/ML/ *dōōrò dōōrò sɔ̄gɔ̀y* ‘whip (n)’

/M/ *ɲīmī ɲīmī sɔ̄gɔ̀y* ‘person’

*rising sequence flattened to L*

/LMH/ *màlīfá màlìfá sɔ́gɔ̀y* ‘rifle’

/LH/ *tèndé tèndé sɔ́gɔ̀y* ‘well (n)’

/MLH/ *mākàrí mākàrí sɔ́gɔ̀y* ‘macari (spice)’

‘Beside/next to me’ is *ŋ̀ sɔ̄gɔ̀y*. ‘Beside/next to us’ is *ē sɔ̄gɔ̀y*.

A composite postposition *sɔ̄gɔ̄-bwāỳ* means ‘right next to’ or ‘adjacent to’.

Adverbial ‘on/to the side’ without an overt landmark was not elicitable.

### ‘In front of’ (*X tīgàà*)

The noun *tīgàà* ‘front’ can function as a postposition ‘in front of’ in the form *tīgàà*, becoming *tígàa* after an H-tone. The 1Sg form is *ŋ̀ tīgàà* ‘in front of me’.

(xx1) a. *ŋ̀ gā [sèēdù tīgàà]*

1Sg be [S **front**]

‘I am in front of Seydou.’

b. *sèēdù gā [yàmbāà tīgàà]*

S be [house **front**]

‘Seydou is in front of the house.’

c. *kúŋgóló tígàà*

dog **front**

‘in front of the dog’

This postposition can also have the temporal sense ‘before X’.

(xx2) *à gà bē ŋ̄ kìlɛ̀ⁿ [ŋ̀ tīgàà]*

3SgSbj Ipfv Fut 3SgReflObj finish.Pfv [1Sg **front**]

‘He/She will finish before me (=before I do).’

Adverb ‘in front, ahead’ is *tīgàà*.

(xx3) *à gà* / *sò tīgàà*

3SgSbj be / go.Pfv **in.front**

‘He/She is/went in front.’

The alternative is an instrumental PP with noun *tīgàà* and the landmark expressed as possessor.

(xx4) *sò [[āⁿ tīgàà] nì]*

go.Pfv [[2Sg **front**] Inst]

‘Go-2Sg ahead (of yourself)!’ ‘Go-2Sg straight (ahead)!’

‘The one in front’, i.e. the one in the lead or at the head of a line, is *tīgāā-ŋgā.*

### ‘Behind X’ and ‘after X’ (*X kɔ̀rɛ̄-ỳ*)

The noun *kɔ̀rɛ̄-ỳ* ‘rear’, cf. *kɔ̀rɔ̀* ‘back (n)’, serves as the postposition ‘behind, in back of’.

(xx1) a. *ŋ̀ gā [sèēdù kɔ̀rɛ̄-ỳ]*

1Sg be [S **back**-Loc]

‘I am behind Seydou.’

b. *sèēdù gā [yàmbáá kɔ̀rɛ̄-ỳ]*

S be [house **back**-Loc]

‘Seydou is behind the house.’

The 1Sg form is *ŋ̀ kɔ̂rɛ̄-ỳ* ‘behind me’.

The temporal sense ‘after X’ where X is a temporal reference point is expressed either by this same postposition, or by a phrase of the type ‘(when) X has passed’.

(xx2) a. *sālī kɔ̀rɛ̄-ỳ*

holy.day **back**-Loc

‘behind (=after) the holy day’

b. *sālī nàŋ kìyè*

holy.day Cond.Pfv **pass**.Pfv

‘when the holy day has passed’

c. *sāàgù kɔ̀rɛ̄-ỳ*

now **back**-Loc

‘later, afterwards (not now)’

Only *kɔ̀rɛ̄-ỳ* occurs in ‘after X’ where X is a person, in the context ‘in X’s absence’ or ‘after X is no longer around’. Example: *ŋ̀ kɔ̂rɛ̄-ỳ* ‘after me’.

‘The one in back’, i.e. ‘the last one, the one bringing up the rear’ (in a line of people, animals, etc.) is *kɔ̀rɛ̄ɛ̄-ŋgà*.

*kɔ̀rɛ̄-ỳ* can also function as an adverb ‘behind, in back, to the rear’ without an overt landmark.

(xx3) *à gā* / *sō kɔ̀rɛ̄-ỳ*

3SgSbj be / go.Pfv **in.back**

‘He/She is/went in/to the rear.’

### ‘Below/under X’ (*X mūù* )

The noun *mūù* ‘base, bottom part’ (also abstractly ‘reason, cause, grounds’ for a situation) can function as postposition ‘below X, under X’. The 1Sg form is *ŋ̀ mūù*. The form *múù* occurs after an H-tone.

(xx1) a. *ŋ̀ gà [sīlē mūù]*

Sg be [rock **under**]

‘I am below/under the rock.’

b. *sīlē gā [ŋ̀ mūù]*

stone be [1Sg **under**]

‘The rock is below/under me.’

c. *kúŋgúló múù*

dog **under**

‘under the dog’

The adverb ‘down below’ is *dàmīì*.

For ‘over X, above X’, see *kūmà* §8.2.6 above.

### ‘Upper’ and ‘lower’

Many villages along the escarpment have two sections or quartiers (*túlū* ), upper and lower. These can be distinguished by the compounds in (xx2). The initials are L-toned forms of *bōndō‑kūmà* ‘hilly area’ and *dàmi᷆* ‘below’.

(xx2) a. *bōndō-kūmā túlū* ‘upper section’

b. *dàmì túlū* ‘lower section’

These can be made into PPs by changing *túlū* to *túlù-y*, a suffixal locative.

### ‘In the middle of’ (*X bōgì* )

Corresponding to the noun *bōgū* ‘middle’ (e.g. near the center of a village or field, or in middle position in an oriented line), and adverb *bōgì* ‘in the middle’, is postposition *bōgì* (xx1a). It becomes *bógì* after an H-tone. It can also be used in temporal contexts (xx1b). It can co-occur with plural pronouns (xx1c) and with 3Sg denoting e.g. a village, but not with 1Sg or 2Sg pronouns (#*ŋ̀ bōgì*, #*ām bōgì* ).

(xx1) a. *nɔ̀gù bōgì*

village **amidst**

‘in the middle of the village’

b. *wùù bōgì*

night **amidst**

‘in the middle of the night’

c. *ē* / *āā* / *è bōgì*

1Pl / 2Pl / 3Pl **amidst**

‘in our/your-Pl/their midst’

d. *à bōgì*

3Sg **amidst**

‘in the middle of it’

e. *jénám-bí-gé bógì*

child-Pl-Pl **amidst**

‘in the middle of/amidst the children’

A compound postposition *[X bōgū] ŋìníì* ‘in(side) the middle of X’ is also possible with similar sense.

The gentilic derivative denoting something or someone in the middle, e.g. of a long line (queue), is *bōgī-ŋgā*.

### ‘Between’ (*[X yèⁿ Y] nàŋāà* )

The ‘between’ postposition is *nàŋāà*, prepausally sometimes shortened to *nàŋa᷆*. It can be added to a conjoined NP (chapter 7).

(xx1) *[ŋ̀ nɔ́gú] gā*

[1SgPoss village] be.Loc

*[[sēwāārē yèⁿ kɔ̄nà] nàŋāà]*

[[S and K] **between**]

‘My village is (located) between Sevare and Konna (cities).’

The postposition can also be added to any NP or pronoun denoting two or more entities,

(xx2) a. *ē nàŋāà*

1Pl **between**

‘between us’

b. *kànààm-bē nàŋāà*

friend-Pl **between**

‘among friends’

### ‘Chez, at the place of’ (*X kāẁⁿ* )

This postposition is used like French *chez*, i.e. in the sense ‘at the place (or home) of X’. X is normally phrased as a plural when referring to a dwelling or housing compound, since in most contexts it is culturally inappropriate to specify a single owner. A singular noun such as a personal name can be made into an associative plural for this purpose (xx1b).

(xx1) a. *ē kāẁⁿ*

1Pl **chez**

‘at our place’

b. *sèēdū-yè kāẁⁿ*

S-Pl **chez**

‘at Seydou’s place’ (lit. “chez the Seydou-s’)

c. *kúŋgóló kāẁⁿ*

dog **chez**

‘at the dog’s place’

### *tówⁿ* ‘place’ as postposition

*tówⁿ* can be a possessed noun ‘X’s place’ used in contexts of substitution or separation, but it is likely well on its way to becoming a postposition. The 1Sg form is *ŋ̀ tówⁿ*. Substitution (replacement) is the context in (xx1).

(xx1) a. *à sō [ŋ̀ tówⁿ]*

3SgSbj go.Pfv [1Sg **place**]

‘He/She went in my place.’ = ‘He/She went instead of me.’

b. *à gà tōlē [sèēdù tówⁿ]*

3SgSbj Ipfv sell.Ipfv [S **place**]

‘He/She is selling (=running the shop) in Seydou’s place.’

The comparison with English *instead of* is apt since it implies that *tówⁿ* is postposition-like even in (xx1a-b).

The context is separateness (being in separate locations) or having distinct identities in (xx2). The postposition requires possessive pronominals in these examples since the pronominal is coindexed with the subject, or in (xx2c) with the object.

(xx2) a. *[káádó-yē yěⁿ jànàŋg-è sāāⁿ] gè= [è tówⁿ]*

[Dogon-Pl and Bozo-Pl all] be [3PlRefl **place**]

‘Dogon and Bozo (are) separate.’

b. *sèēdū gā [ŋ̀ tówⁿ], āāmādū gā [ŋ̀ tówⁿ]*

S be [3SgRefl **place**], A be [3SgRefl **place**]

‘Seydou and Amadou are in separate places.’

c. *ŋ́ nāⁿ mà-sāāⁿ bày gà [ŋ̀ tówⁿ]*

1SgSbj Sbj/Obj each leave.Pfv RemPfv [3SgRefl **place**]

‘I left (=put) each one in his (respective) place.’

PPs with *tówⁿ* are the regular complements of the verb ‘forget’.

(xx3) *ŋ́ ŋùmàsāⁿ [sèēdù tówⁿ]*

1SgSbj **forget**.Pfv [S **place**]

‘I have forgotten Seydou.’

No other verb appears to require this postposition. ‘X think of/about Y is expressed by *mīīlà/mīīlà* ‘think’(reflexive verb) plus a PP with comitative *bwāỳ*. ‘X remember Y’ is expressed as a ‘X’s mind come [to Y]’ with a dative PP.

## ‘For’ and ‘because of’

For purposive and causal (‘because’) clauses, see §17.5.

### Purposive-causal ‘for’ (*lāgà* )

Purposive ‘for’ (generally prospective) and causal ‘because’ (generally retrospective) are expressed by the postposition *lāgà*. For this postposition or a homonym in the spatial sense ‘at (the outskirts of)’, see §8.2.5. For L-toned *làgà* after verbal nouns, see §17.5.3.

(xx1) a. *ē dwɔ̄ gā [kwààⁿ lāgà]*

1PlSbj enter.Pfv RemPfv [rain(n) **Purp**]

‘We went in(side) because of the rain.’ (< *kwààⁿ* )

b. *è bē gā [sààⁿ lāgà]*

3PlSbj come.Pfv RemPfv [honey **Purp**]

‘They came for (the) honey.’ (< *sààⁿ* )

c. *à sò [kāyⁿ lāgà] nɔ̀gī-ỳ*

3SgSbj go.Pfv [work(n) **Purp**] village-Loc

‘He/She went to the city for work.’

also with different order: *à sō nɔ̀gī-ỳ [kāyⁿ lāgà]*

d. *wɔ́léⁿ lágà*

money Purp

‘for/because of money’ (< *wɔ́lēwⁿ* )

An expanded PP *[X sààbí] lāgà* can also have causal meaning. This is one of many borrowings from Arabic *sabab-* ‘reason, cause’ in Malian languages. Here X denotes a person or God. The context is doing something in the name of or out of respect for X. Especially in the case of God, the *lāgà* is omitted and the result is *ālā sààbí* (xx2).

(xx2) a. *à =à dō gà [ŋ̀ té] [[sèēdū sààbí] lāgà]*

3SgSbj Tr give.Pfv RemPfv [1Sg Dat] [[S cause] Purp]

‘He/She gave (it) to me for the sake of Seydou.’

b. *à ŋ̀ yīrɛ̄wⁿ gà [ālā sààbí]*

3SgSbj 1Sg help.Pfv RemPfv [God cause]

‘He/She helped me for God (i.e. without expecting recompense)’

### ‘For the sake of (someone)’ (*kāmà* )

*kāmà* ‘cause’ can function as a postposition meaning ‘for the sake of X’ or ‘out of respect for X’, where X is a person. The PP may be clause-initial (pre-subject) or clause-final.

(xx1) a. [*nɔ̀gù-míírù kāmà] ŋ̀ gà bā= āⁿ kō [cìyè nī]*

[village-chief sake] 1Sg Ipfv Fut 2Sg provide.Pfv [field Inst]

‘Out of respect for the village chief, I will give you-Sg a field.’

## Other adverbs (or equivalents)

### Similarity (‘like X’)

#### Predicate ‘Y be like X’ (*síí*, *nùmɛ̄wⁿ* )

‘Y is like (similar to) X’ is expressed as ‘Y is [X’s likeness]’, with either *síí* or *nùmɛ̄wⁿ* as the noun ‘likeness’. For the phrasing compare French *Y est le semblable de X* and certain English locutions like *Y is the spitting image of X*. The frame contains *gà* ‘be’ or its negation *nà* after the subject Y, and the ‘it is’ particle *nì* after the predicate nominal. For past time *kōndō* ‘stay’ (negative tè kōndō ) replaces ‘be’ in the usual way (§10.3.1). X may be plural but ‘likeness’ remains singular (xx1d).

(xx1) a. *ŋ̀ gā [sèēdù síí* / *nùmɛ̄ⁿ] nì*

1Sg be [S **likeness**] it.is

‘I am like Seydou.’

b. *ŋ̀ nā [sèēdū síí* / *nùmɛ̄ⁿ] nì*

1Sg not.be [S **likeness**] it.is

‘I am not like Seydou.’

c. *ŋ̀ (tè) kōndō gā [sèēdū síí* / *nùmɛ̄ⁿ] nì*

1Sg (PfvNeg) stay.Pfv RemPfv [S **likeness**] it.is

‘I was (not) like Seydou.’

d. *ē gà [púnàm-bè síí] nì*

1Pl be [Fulbe-Pl likeness] it.is

‘We are like the Fulbe (people).’

The similarity may be between a possession or attribute of X and the corresponding one of Y. The possessum is ‘house’ in (xx2a), which is phrased with the ‘have’ construction (§11.5.1). The default possessum is *pàⁿ* (§6.2.1.2), which depending on context may refer to a physical possession (xx2b) or an abstract attribute like behavior or character (xx2c). In the latter case there is little practical difference between presence and absence of *pàⁿ*.

(xx2) a. *[[sèēdū yàmbàà] síí] gā [ŋ̀ té]*

[[S house] **likeness**] be [1Sg Dat]

‘I have the same kind of house as Seydou.’ (< *yàmbāà* )

b. *[[sèēdū pàⁿ] síí] gā [ŋ̀ té]*

[[S Poss] **likeness**] be [1Sg Dat]

‘I have the same kind of thing as Seydou.’

c. *ŋ̀ kōndō gā [[sèēdū pàⁿ] síí nì*

1Sg stay.Pfv RemPfv [[S Poss] **likeness**] it.is

‘I was like Seydou (in behavior).’

#### Adverbial ‘like X’ (*hɔ̀nɔ̀* )

An adverbial phrase ‘like X’ attached to a main verb begins with *hɔ̀nɔ̀* ‘like’ (< Fulfulde *hono* ), which is followed by ‘X’s likeness’ using either *síí* or *nùmɛ̄wⁿ* as possessum (see the preceding section). X may be expanded by adding the default possessum *pàⁿ*, especially when X is pronominal (xx1b).

(xx1) a. *ŋ̀ gà kāyⁿ [hɔ̀nɔ̄ [sèēdū nùmɛ̄wⁿ]]*

1Sg Ipfv work.Ipfv [**like** [S **likeness**]]

‘I work like Seydou.’ (< *kāỳⁿ* )

b. *sèēdū gà kāyⁿ [hɔ̀nɔ̄ [ŋ̀ páⁿ] síí]*

S Ipfv work.Ipfv [**like** [1Sg Poss] **likeness**]

‘Seydou works like me.’

c. *sèēdū gà kāyⁿ [hɔ̀nɔ̄ [ŋ̀ síí]*

S Ipfv work.Ipfv [**like** [1Sg **likeness**]

[=(b)]

For other manner adverbs see §4.4.3.2 (‘like this/that’) and §8.4.5. For manner relatives (‘the way X VPs’) see §15.7.3.

### Extent

#### ‘A lot, greatly’ (*máɲɛ̀*, *yāālōⁿ*)

The two key adverbs are those in (xx1). *máɲɛ̀* can denote extent (‘a lot’) or quality (‘well’). *yāālōⁿ* denotes extent only and is the stronger expression of the two. The gloss ‘too much’ captures the heightened extent but also has some semantic baggage that is not applicable to Jenaama.

(xx1) a. *máɲɛ̀* ‘a lot, very much’, also ‘well’

b. *yāālōⁿ* ‘greatly, excessively, too much’

Examples are in (xx2).

(xx2) a. *ŋ́ kɯ̀ɯ̀ máɲɛ̀*

1SgSbj run.Pfv **a.lot/well**

‘I ran a lot / ran hard.’

b. *à kɯ̀ɯ̀* / *dīgɛ̄ yāālōⁿ*

3SgSbj run.Pfv / eat.Pfv **a.lot**

‘He/She ran/ate a lot (or: too much).’

For quantificational adjective *pāàlōwⁿ* ‘many, much’ see §6.4.2.

#### ‘A little, somewhat’ (*pā-lɛ̄wⁿ* )

The simple NP meaning ‘a lot’ is *pā-lɛ̄wⁿ* ~ *pɔ̄-lɛ̄wⁿ* the diminutive (§5.1.5.2) of *pwɔ̄* ‘thing’ (before modifiers *pā*). It is a direct object in (xx1a) and the complement of a postposition in (xx1b). It is basically adverbial in (xx1c).

(xx1) a. *à pā-lɛ̄ⁿ kìlè*

3SgSbj **a.little** get.Pfv

‘He/She got a little.’

b. *à ŋ̀ kó [pā-lɛ̄ⁿ ní]*

3SgSbj 1SgObj give.Pfv [**a.little** Inst]

‘He/She gave me a little.’

c. *ŋ́ kɯ̀ɯ̀ pā-lɛ̄wⁿ*

1SgSbj run.Pfv **a.little**

‘I ran a little.’

*pā-lɛ̄wⁿ* can function as a quantificational modifier of another noun. It can be freely translated as ‘a little’ with a mass noun and as ‘a few’ with a countable noun.

(xx2) a. *[pīīⁿ pā-lɛ̄ⁿ] gā [ŋ̀ súgì-y]*

[millet **a.little**] be [1SgPoss hand.Loc]

‘I have a little millet.’

b. *ŋ̀ bē [[sɔ̀gɔ̀-lɛ̄ⁿ pā-lɛ̄ⁿ] ní]*

1Sg come.Pfv [[sheep **a.little**] Inst]

‘I brought a few sheep.’

A disdainful term for an unsatisfactory amount is *túwɔ́-lɛ̄ⁿ-dūū*. It literally denotes the pinch of gunpowder (*dūū* ) put in the “ear” (*túwɔ́-lɛ̄wⁿ* ) of an old-fashioned musket before firing a shot.

### Specificity

#### ‘Exactly, truly’ (*jáátī* )

*jáátī* ‘exactly’, a regionally widespread word likely from Fulfulde, is common in conversation as a one-word confirmation of what the interlocutor has just said. *jáátì* can also be added to an NP in the sense ‘precisely’ or ‘personally’ (xx1a-b).

(xx1) a. *sèēdū gā / nā [ŋ̀ káá jáátī] nì*

S be / not.be [1SgPoss father **exactly**] it.is

‘Seydou is (not) my real father.’

b. *[púnà-mbè sāāⁿ] gà būwɔ̀-lɔ́,*

[Fulbe-Pl all] Ipfv tend.livestock-Ipfv,

*[ŋ̀ kɔ̄n jáátí] nā =à pɔ̄gɔ̀*

[1Sg Topic **exactly**] IpfvNeg 3SgObj like.Ipfv

‘All the (other) Fulbe tend cattle, (but) I personally don’t like it.’

An otherwise unmodified pronoun combined with *jáátì* takes independent pronoun form (xx2).

(xx2) *ŋ̀ nā [ŋ̀ jɛ̄wⁿ] bàȳ sò,*

1Sg IpfvNeg [1Sg child] leave.Ipfv go.Ipfv,

*[ŋ̀-dɔ́gɔ́ jáátí] gā sò*

[1Sg-**Indep** **exactly**] Ipfv go.Ipfv

‘I won’t (just) send my son; (rather) I will go myself (in person).’

### Evaluation

#### ‘Well’ (*máɲɛ̀* ) and ‘badly’

*máɲɛ̀* is an adverb ‘well’, i.e., in a good or competent manner. It combines with a wide variety of predicates. As with French *bien*, it can easily shift from qualitative to quantitative, with (xx1b) an example of the transition.

(xx1) a. *sèēdū gà pīīⁿ sɔ̀gɔ̄ máɲɛ̀*

S Ipfv millet cultivate.Ipfv **well(adv)**

‘Seydou is good at farming millet.’

b. *sèēdù kúŋgóló kwāā máɲɛ̀*

S dog hit.Pfv **well(adv)**

‘Seydou really hit the dog.’ = ‘Seydou gave the dog a good beating.’

There is no adverb ‘badly, poorly’. The sense is expressed by negating the clause containing *máɲɛ̀*.

### Deadjectival and other manner adverbials

There is no productive mechanism for converting adjectives into adverbs or adverbial phrases. Certain adjective-like senses do have an adverbial phrase, however.

#### ‘Fast, quickly’ and ‘slowly’

Adverb ‘fast, quickly’ is *kɯ̀ɯ̄ nà*. This appears to be a dative PP (postposition *nà*) based on a noun related to the verb *kɯ̀ɯ̀/kɯ̀ɯ̄* ‘run’, which may co-occur with it (xx1a). It is also compatible with predicates denoting other time-sensitive activities (xx1b).

(xx1) a. *sèēdū kɯ̀ɯ̄ [kɯ̀ɯ̄ nà]*

S run.Pfv [**speed Dat**]

‘Seydou ran fast.’

b. *sèēdū gà kāyⁿ [kɯ̀ɯ̄ nà]*

S Ipfv work.Ipfv [**speed Dat**]

‘Seydou works fast.’

However, ‘drive (vehicle) fast’ is phrased with *máɲɛ̀* ‘well’ or ‘greatly’, compare English *drive hard*.

The antonym ‘slowly’ or ‘gently, not hard’ is *mìyɛ̄ nà.* It appears to end in the same dative postposition, but no semantically related noun or verb stem *mìyɛ̀* (or *mìyⁿɛ̀* ) is known.

#### Adverbial ‘far’ and ‘near’

With motion verb ‘run’, ‘walk’, etc. “adverbial” ‘far away’ is expressed as ‘distant place’. In one version, the motion verb is (unusually) treated as transitive, so ‘distant place’ is direct object (xx1a). In the other, ‘distant place’ takes a suffixal locative form (§8.2.3) and follows the motion verb.

(xx1) *a. à (tè) [gɯ̄ɯ̄ⁿ dāāⁿ] kɯ̀ɯ̀* / *ɲìŋì*

3SgSbj (PfvNeg) [place **distant**] run.Pfv / walk.Pfv

‘He/She ran/walked far away.’

b. *à (tè) kɯ̀ɯ̀* / *ɲìŋì [gɯ̄ɯ̄ⁿ dāāⁿ-ỳⁿ]*

3SgSbj (PfvNeg) run.Pfv / walk.Pfv [place **distant-Loc**]

[=(a)]

The antonyms *gɯ̄ɯ̄ⁿ tūɥ̀-gù* ‘nearby place’ and its locative *gɯ̄ɯ̄ⁿ tūɥ̀-gū-ỳ* occur in the same frames.

### Spatiotemporal adverbials

#### Temporal adverbs

Some of the major temporal adverbs are in (xx1). The European (and Arab) 7-day cycle is used by the two major nearby weekly markets, Sambere (market day is Sunday) and Konna (Thursday).

(xx1) a. *wày* ‘today; nowadays’

*tùⁿ* ‘again (another time)’

*sāàgù* ‘now’ (originally \*‘time-this’)

*sásààlèwⁿ* ‘right now, just now’

b. *dìgéwⁿ* ‘yesterday’

*dìgéⁿ-sá* ‘day before yesterday’

*dìgéⁿ-sá-sā* ‘two days before yesterday’

*pānāā* ‘formerly; in the old days’

*síléwⁿ* ‘formerly; in the old days’

c. *ɲàànù* ‘tomorrow; in the future’

*ɲàànū-sèwⁿ* ‘day after tomorrow’

*ɲàànū-sèwⁿ kɔ̄rɛ̄ɛ̄ŋgà* ‘second day after tomorrow’ (“…behind”)

d. *ʃègɔ̀* ‘last year’

*kɔ̀nɔ̀sè* ‘next year’, lit. “when the farming season has exited”

*yùrùgù* ‘this year’

Several of these temporal adverbs are lexically L-toned or otherwise (as with ‘now’) end in two L‑toned syllables as shown in the array above. However, in final position in positive sentences without a focalized constituent they are subject to a process raising the final-syllable tone to H, hence *túⁿ*, *ɲàànú*, and so forth. The syntactic restrictions on this process imply weak focalization of the adverb (§13.1.5).

*dìgéwⁿ* ‘yesterday’ is also part of the compound *dìgèⁿ-síbɛ̄wⁿ* ‘the last (=most recent) market day’. This can be further elaborated by adding either *tèwⁿ* ‘elder sibling’ or an iterative form with two occurrences of *tèwⁿ* separated by *pē* ‘also’. Either of these additions pushes the time back one unit.

(xx2) *dìgèⁿ-síbɛ́ⁿ tèm-pē-tèwⁿ*

yesterday-market elder.sib-also-elder.sib

‘two market days ago’ (i.e. the market day before last)

The seven days of the week are expressed by Arabic terms as generally in the region. The initial a in several of the day names is from Arabic definite prefix *al-* or variant, but the initial a has been dropped in ‘Tuesday’ and ‘Thursday’. The terms for ‘Monday’ and ‘Friday’ begin with an extra *g* of unknown origin.

(xx3) *gàtīnɛ̀* ‘Monday’

*tàlāātà* ‘Tuesday’

*àlāābà* ‘Wednesday’

*lààmūsà* ~ *làāmsà* ‘Thursday’

*gàjūmà* ‘Friday’

*àsābdì* ‘Saturday’

*àlāādì* ‘Sunday’

The night between two days is expressed as the night of the following day, beginning with the 4PM prayer. For example, the period beginning at 4PM Sunday is called “Monday night” (*gàtīnɛ̄ wùù* ).

#### ‘First(ly)’ (*sɔ̄ŋɔ̀nì* ) and ‘later’ (*sāāgū kɔ̀rɛ̄-ỳ*)

These adverbials function to sequence two or more time intervals and associated activities. *sɔ̄ŋɔ̀nì* is not transparently segmentable. *sāāgū kɔ̀rɛ̄-ỳ* means ‘behind/after now’. *kɔ̀rɛ̄-ỳ* is also a noun or adverb ‘(in the) rear, behind’.

(xx1) a. *ē gà kāỳⁿ sɔ̄ŋɔ̀nì, ē bè dīgɛ̄*

1PlSbj Ipfv work.Ipfv **firstly**, 1PlSbj Seq eat.Pfv

‘We’ll work first, then we’ll eat.’

b*. ē gè= ēn(d)è= [ē sīnì] [sāāgū kɔ̀rɛ̄-ỳ]*

1PlSbj Ipfv be.able.Ipfv [1PlReflObj begin.Ipfv] [**now behind**]

‘We can begin later.’

Under negation, *sɔ̄ŋɔ̀nì* means ‘(not) yet’.

(xx2) *sèēdū tè bē sɔ̄ŋɔ̀nì*

S PfvNeg come.Pfv **firstly**

‘Seydou hasn’t come yet.’

#### ‘Still’ and ‘still (has) not’ (*hàlì sāàgù* )

*hàlì sāàgù* ‘(all the way) until now’, with *hàlì* ‘until’ (§xxx), specifies a time interval extending from a point in the past all the way to the present. This adverbial can be translated ‘still’ in positive clauses (xx1a). Under negation, the unmarked ‘not yet’ construction uses *sɔ̄ŋɔ̀nì* ‘firstly’, as indicated in the preceding section. *hàlì sāàgù* can be added to make this more emphatic (‘still hasn’t’) (xx1b).

(xx1) a. *ŋ̀ jā= [à gālā kɯ̀ɯ̄ tàà-nì],*

1SgSbj said [3SgSbj Sbjn run.Nom stop-Caus.Pfv]

*ŋ̀gàà [=àlì sāàgù] à gā kɯ̀ɯ̄*

but [**until now**] 3SgSbj Ipfv run.Ipfv

‘I told him/her to stop running, but he/she is still running.’

b. *[hàlì sāāgū] sèēdū tè bē sɔ̄ŋɔ̀nì*

[**until now**] S PfvNeg come.Pfv **firstly**

‘Seydou still hasn’t come.’

#### Spatial adverbs

The following are the main nouns used in simple spatial adverbials.

(xx1) a. *bóndó-kúmà* ‘above, on top; upstairs’ (cf. *kūmà* ‘on, over’)

*dàmī* ‘below, (at) the bottom, down; downstairs’

b. *jííⁿ-cííⁿ* ‘east’ (*cííⁿ* “source; trunk [of tree]”)

*jīīⁿ-kàmā* ‘west’ (? cf. *kàmbà* ‘occipital bone (above nape)’)

*jííⁿ-sémū* ‘south’ (cf. *sémū* ‘right (hand)’)

*jīīⁿ-kóndō* ‘north’ (cf. *kóndō* ‘left (hand)’)

c. *kɔ̀rɛ̄-ỳ* ‘(in) the rear, behind’

*tígàà* ‘forward, ahead, (in) front’

Gentilic nominals with suffix *-ŋgà* are derivable from these adverbs, see §4.2.5.

Instead of using the terms given above for ‘north’ and ‘south’ to describe the direction of travel, speakers use *tāwⁿ/tā-nā* ‘ascend’ in the sense ‘head south (to Mopti, Bamako, etc.)’ and use *yàwⁿ/yà-là* ‘descend’ in the sense ‘head north (to Konna, Douentza, etc.)’. Using the same vertical imagery, they use *kùmà-sèwⁿ* ‘upper road, high road’ for the road to Mopti and Bamako, and *dàmì-séwⁿ* ‘lower road, low road’ for the road to Douentza and Gao. Conventionally, *sō kùmà‑sèwⁿ* ‘go (on) the high road’ means ‘go (south) to the big city (for work)’ (local French *aller en exode*).

The stems for ‘right’ and ‘left’ (side) are *sémú* and *kóndó*. ‘Right hand/arm’ is *sémú‑sūgū*, as in *à sémú-sūgū* ‘his/her right hand’. ‘Left hand’ is *kóndó‑sūgū*. The final ‑*sūgū* may be omitted in both compounds if the context is clear. ‘Right leg/foot’ is *sémú‑tābā* and ‘left leg/foot’ is *kóndó‑tābā* from *tàbà* ‘foot’.

‘Right’ and ‘left’ may be used to indicate relative position with comitative postposition *bwāỳ*, as in *āⁿ sémú bwāỳ* ‘to your right’, *āⁿ kóndó bwāỳ* ‘to your left’. Likewise with direction: *sò āⁿ sémú bwāỳ* ‘go to your right’.

#### Adjectival intensifiers

My assistant denied knowledge of any lexical adjectival intensifiers of the *brand new*, *dead right*, or *jet black* types. For ordinary extent modifiers like ‘very’, ‘a lot’, and ‘a little’, see §8.4.2.

#### Iterative ‘-ish’ adjectives

Color adjectives may be fully iterated with L-H tone overlay to indicate a moderate degree of the quality. Postnominal modifying forms are in (xx1a). My assistant rejected iterations in this function for several classes of adjectives including dimension and taste. For these stems, stem-iteration occurs only in distributive plural sense and is based on lexical tone melodies rather than the L-H overlay (xx1b).

(xx1) a. *pīīⁿ* ‘black’ *pììⁿ-pííⁿ* ‘blackish’

*kūwōⁿ* ‘white’ *kùwòⁿ-kúwóⁿ* ‘whitish, off-white’

*tɔ̄mɔ̄wⁿ* ‘red’ *tɔ̀mɔ̀ⁿ-tɔ́mɔ́ⁿ* ‘reddish’

b*. dègɛ̀-náwⁿ* ‘small’ *dɛ̀gɛ̀-nàⁿ-dɛ̀gɛ̀-náwⁿ* ‘all small’

*kūrū* ‘short’ *kūrū-kūrū* ‘all short’

*kɔ̄yāⁿ* ‘long’ *kɔ̄yāⁿ-kɔ̄yāⁿ* ‘all long’

Both types of adjectival iteration also apply to the respective adjectival predicates. There is no tone overlay. The only tonal modifications are due to tone sandhi (Final Tone-Raising) where applicable.

(xx2) a. *à pìyⁿɛ̄-pìyⁿɛ̀-nā nì*

3SgSbj black-black-Ppl it.is

‘It is blackish.’ (< *pìyⁿɛ̀-nā nì* )

b. *ì yè ŋ̀ kɔ̀yāⁿ-kɔ̀yàⁿ*

3PlSbj Sbj/Obj ReflObj long-long

‘Each of them is long.’ = ‘They are all long.’

# Verbal derivation

The productive suffixal derivation for verb stems is causative -ni (§9.1).

There is no Dogon-style reversive derivation (‘un-tie’, etc.). Verbs denoting reversive actions are lexicalized and unrelated to the corresponding primary verb. The verb *ɥɛ̀ɛ̀/ɥɛ̀ɛ̄* ‘open (v)’ is common in reversive contexts, e.g. ‘untie’ reversing *sɛ̀y/sè-lè* ‘tie’, and ‘un-braid, undo braids of’ reversing mūrì/mūrì ‘braid the hair of (a woman)’. The sense ‘open (v)’ is itself construable as the reversive of *tɛ̄gɛ̄/tɛ̄gɛ̀* ‘shut’. Likewise, *bāgā* ‘remove’ can function as reversive of several verbs with senses like ‘put in’ and ‘put on, wear’.

There is also no mediopassive-transitive derivational alternation within verbal morphology. For example *à=ŋ̀ kɛ̄wⁿ* ‘it (e.g. a stick) snapped’ is phrased as a reflexive of the transitive verb ‘snap (sth)’, as in *à=à kɛ̄wⁿ* ‘he/she snapped it’. Such reflexives are expressed in the preverbal subject-inflection-object combination, not by derivational verb morphology.

Some other intransitive-transitive pairs are expressed without reflexives. For example, transitive *kìlè/kìlè* ‘get’ can also function intransitively in e.g. *à gā kìlē* ‘it is obtainable, it is found (there)’.

## Causative

### Causative suffix *-ni*

The causative suffix is *-ni* (atonal). The input may be transitive or intransitive, but intransitives are more common. Except for the few monomoraic *Cv* verbs (see below), the suffix is added directly to the verb stem. There are some alternations of final *a* or *ɔ* in the simple verb and *ɛ* before *-ni*.

(xx1) presents representative examples of input-causative relationships, for verbs that have a tonal distinction between perfective and imperfective (see §10.xxx below). In (xx1a), the perfective is M and the imperfective ML, in both input and causative. In (xx1b), the perfective is L and the imperfective LM, in both input and causative.

(xx1) input gloss causative gloss

Pfv/Ipfv Pfv/Ipfv

a. input and causative M/ML

*kɯ̄ɯ̄/kɯ̄ɯ̀* ‘catch fire’ *kɯ̄ɯ̄-nī/ kɯ̄ɯ̄-nì* ‘ignite’

*sāgā/sāgà* ‘lie down’ *sāgā-nī/sāgā-nì* ‘lay down’

*pīyɛ̄wⁿ/pīyɛ̀wⁿ* ‘get hot’ *pīyɛ̄-nī/pīyɛ̄-nì* ‘heat (sth)’

b. input and causative L/LM

*kìì/kìī* ‘get up’ *kìì-nì/kìì-nī* ‘awaken, get (sb) up’

*tàà/tàā* ‘stop, stand’ *tàà-nì/tàà-nī* ‘stop (sth)’

*mùɔ̀/mùɔ̄* ‘ripen; heal’ *mùɔ̀-nì/mùɔ̀-nī* ‘cause to ripen; heal (sth)’

*kwààⁿ/kwàāⁿ* ‘fear (v)’ *kwààⁿ-nì/kwààⁿ-nī* ‘frighten’

*sùbè/sùbē* ‘suckle’ *sùbè-nì/sùbè-nī* ‘(woman) breastfeed’

*bàndà/bàndā* ‘get tired’ *bàndà-nì/bàndà-nī* ‘weary, pester (sb)’

(xx2) shows the treatment of verbs whose inputs have invariant M in both perfective and imperfective. The causative is M in the perfective, but ML in the imperfective. This indicates that the M/M type is not possible for trisyllabics.

(xx2) input gloss causative gloss

Pfv/Ipfv Pfv/Ipfv

input M/M, causative M/ML

*dwɔ̄/dɔ̄-lɔ̄* ‘enter’ *dūwɛ̄-nī/dūwɛ̄-nì* ‘take/bring in’

*wwō/wwō* ‘weep’ *wwō-nī/wwō-nì* ‘cause to weep’

### Causative *of* *Cv-* verbs

The two monomoraic *Cv* motion verbs do not allow direct addition of *-ni* to the stem. Instead, an L‑toned augment *‑à‑* or *‑ɛ̀‑*  is interposed. In the case of ‘go’, the two adjacent vowels contract to form a long *àà* (xx3). The causative suffix is M‑toned in (xx3b) after an entirely L‑toned stem, but L‑toned in (xx3a) after the HM‑toned sequence of stem and augment.

(xx3) input gloss causative gloss

Pfv/Ipfv Pfv/Ipfv

a. input M/M, causative ML/ML

*bē/bē* ‘come’ *bī-ɛ̀-nì/bī-ɛ̀-nì* ‘cause to come’

b. input L/L, causative L/LM

*sò/sò* ‘go’ *sà-à-nì/sà-à-nì* ‘cause to go’

or: *sò-à-nì/sò-à-nì*

Clausal examples showing that these function as transitive verbs are in (xx2).

(xx2) a. *ŋ́ =nāⁿ sèēdù bī-ɛ̀-nì*

*sèēdū sà-à-nì*

1SgSbj Sbj/Obj S come-/go-Aug-Caus.Pfv

‘I made/had Seydou come/go.’

b. *ŋ̀ gā sèēdù bī-ɛ̀-nì*

*sèēdū sà-à-nì*

1SgSbj Sbj/Obj S come-/go-Aug-Caus.Ipfv

‘I (often) make/have Seydou come.’

There is probably at least a historical connection between these two aberrant causative forms and a construction with motion verb plus PP meaning ‘bring’ or ‘take, convey’. The postposition is *nì*, apparently tone-dropped from instrumental postposition *ní*.

(xx3) a. *ŋ́ bē [sèēdù / tēē nì] bōẁⁿ*

1SgSbj come.Pfv [S / tea **with**] here

‘I brought (=came with) Seydou/the tea here.’ (< *tēè* )

b. *ŋ́ sò [sèēdu / tēē nì] yāẁⁿ*

1SgSbj go.Pfv [S / tea with] there.Def

‘I took (=went with) Seydou/the tea there.’

The 3Sg pronominal version of this PP is *à nì* ‘(come/go) with him/her/it’.

(xx4) *ŋ́ bē [à nì] bōẁⁿ*

1SgSbj come.Pfv [3Sg **with**] here

‘I brought (=came with) him/her/it here.’

Moreover, *à ní* (often pronounced *à nì* clause-finally) occurs commonly as a resumptive in sentences like ‘I picked up a daba (=hoe) to work with (it)’; for examples see (xx4) in §8.1.2.1.

The causatives *bī-ɛ̀-nì* ‘cause to come’ and *sà-à-nì* ‘cause to go’ may have originated by enclisis of *à nì* (perhaps itself originally < \*à ní) to the simple motion verbs, reinterpreted as causatives so that they may now be preceded by direct objects.

The other *Cv* verb that can be causativized is *sē/sē* ‘say’. It has a causative *sēē‑nī/sēē‑nì* ‘cause (X) to say (Y, to Z)’. In (xx5a) *sēē‑nī* is followed by a subjunctive complement. In (xx5b) the original quotation is a 3Sg pronominal within a PP *à nì* that contracts with sēē-nī as phonetic [sē:nā:nì]. This contracted form could be in very early stages of reanalysis as a an irregular causative *sēē-nāā-nì* with an augment *-nāā-* preceding causative suffix *-nì*. However, there is not yet any morphosyntactic sign of this reanalysis, and the imperfective version in (xx5c) has phonetic [sē:nà:nì], whose tones point to *sēē-nì [à nì]* before vocalic contraction.

(xx5) a. *[ŋ̀ káá] yē ŋ̀ sēē-nī [sèēdū tè]*

[1Sg father] Sbj/Obj 1SgObj say-Caus.Pfv [S Dat]

*[à gālà bē]*

[3SgSbj Sbjn come.Pfv]

‘My father made me tell Seydou to come.’

b. *[ŋ̀ káá] yē ŋ̀ sēē-nā= [ā nì] [sèēdū tè]*

[1Sg father] Sbj/Obj 1SgObj say-Caus.Pfv [3Sg with] [S Dat]

‘My father made me say that to Seydou.’

c. *[ŋ̀ káá] gā ŋ̀ sēē-nà= [à nì] [sèēdū tè]*

[1Sg father] Ipfv 1SgObj say-Caus.Ipfv [3Sg Inst] [S Dat]

‘My father (often) makes me say that to Seydou.’

### Causative ‘make X VP’ phrased as ‘tell X to VP’

Something functionally similar to a true causative can be cobbled together as a quoted imperative (‘say’ plus subjunctive clause), the implication being that the command was carried out.

(xx1) *[ŋ̀ káá] yē [ŋ̀ gālà bē]*

[1Sg father] said [1SgSbj Sbjn come.Pfv]

‘My father told me to come.’ ( ≅ ‘My father made me come.’)

## No productive passive or antipassive

Many verbs are ambi-valent (labile), thus *kɛ̄wⁿ/kɛ̄-nɛ̀* ‘break, snap’ in transitive ‘X break Y’ and in intransitive (middle) ‘Y break’.

There is no productive passive derivation. However, when stative suffix *-na* is added to a transitive verb that denotes an enduring impact on an object, it functions like a resultative passive (§10.1.4). Since the stative suffix is also common with intransitives (especially stance verbs), passivization is not its main function. Moreover, the input to the stative is arguably an already intransitive counterpart to the transitive verb, given the prevalence of ambi-valency.

There is likewise no productive antipassive derivation. See, however, the transitivity-related vocalic mutations in the following section.

## Stem-final vocalic mutations in verbal derivation

### *a/ɔ* ~ *ɛ* and *o* ~ *e* mutations

#### Transitivity pairs with final *e/ɛ* in antipassive intransitive

A few verb stems occur in transitivity doublets with a vocalic mutation (xx1a-b). In both cases the intransitive is semantically antipassive (omitting the object). The transitive ends in a low or back mid-height vowel {*a ɔ o*}. The intransitive has *ɛ* corresponding to *a* or *ɔ*, and *o* corresponding to *e*. This is a rare example of ATR harmony in derivation (§3.4.5).

(xx1) transitive intransitive gloss

a. *dīgā/dīgà* *dīgɛ̄/dīgɛ̀* ‘eat (a meal)’

b. *sùwɔ̀/sùwɔ̄ sìɥɛ̀/sìɥɛ̄* ‘cook (in a pot)’

c. *tōlō/tōlò tōlē/tōlè* ‘sell’

(xx1b) is phonologically interesting since the shift from *ɔ* to *ɛ* brings about the fronting of *w* to *ɥ*, before which the distinction between *i* and *u* is neutralized (§3.xxx).

A related alternation is seen in (xx2), where however the transitive perfective form has apparently contracted from bi- to monosyllabic, and where the intransitive forms and the imperfective have different medial consonants.

(xx2) transitive *kūūⁿ/kū-nū* ‘catch’

intransitive *kūmɛ̄/kūmɛ̀* ‘(trap) catch (an unspecified animal)’

#### Other mutations to verb-final *e/ɛ*

The stem-final vocalic mutations described in the previous section are not limited to transitivity alternations. For the verbs that do have such transitivity alternations, the stem variant ending in *e/ɛ* also occurs in the otherwise unsuffixed verbal noun and in various suffixal derivatives.

(xx1) a. ‘eat’

*dīgɛ̄* ‘eating’ verbal noun

*tēē-dīgɛ̄* ‘meat-eating’ verbal noun with object

*dīgɛ̄-nī/dīgɛ̄-nì* ‘feed (v)’ causative

*dīgɛ̄-pwɔ̄* ‘food’ compound (*pwɔ̄* ‘thing’)

*dìgɛ̀-nà* ‘eating’ with ‘likeness’ (§12.2.xxx)

*with incorporated object*

*tēē-dīgɛ̄* ‘meat-eating’ verbal noun with object

*tēē-dīgɛ̄-yà* ‘meat-eater’ agentive with object

b. ‘cook (in pot)’

*sìɥɛ̀-yà* ‘cook (n)’ agentive

*sìɥɛ̄‑gàwⁿ* ‘kitchen, cooking area’ place nominal

*sìɥɛ̀-nà* ‘cooking’ with ‘likeness’ (§12.2.xxx)

c. ‘sell’

*tōlē-yà* ‘seller, merchant’ agentive

*tōlē-gàwⁿ* ‘selling place’ place nominal

*tōlē-nā (nì)* ‘be (already) sold’ stative (resultative)

*tòlè-nà* ‘selling’ with ‘likeness’ (§12.2.xxx)

d. ‘catch’

*kūmɛ̄* ‘catching’ verbal noun

*kūmɛ̄-nā (nì)* ‘be (already) caught’ stative (resultative)

*kūmɛ̄-yà* ‘collector, captor’ agentive

*kùmɛ̀-nà* ‘catching’ with ‘likeness’ (§12.2.xxx)

Examples like *tēē-dīgɛ̄* ‘meat-eating’ and *tēē-dīgɛ̄-yà* ‘meat-eater’ with incorporated object (xx1a) show that the form in *e/ɛ* occurs even in “transitive” contexts where an object is overt, in spite of the requirement for the transitive form (*dīgā/dīgà* ) in transitive main clauses (*X tēē dīgā* ‘X ate meat’).

Another verb that presents an *ɔ/ɛ* alternation is ‘enter’. Since the variant with final *ɔ* is already intransitive, no transitivity pairing occurs. However, its suffixal derivatives mutate *ɔ* to *ɛ* in the same way seen with ‘eat’.

(xx4) a. *dwɔ̄/dɔ̄-lɔ̄* ‘enter’

b. *dūwɛ̄-ní/dūwɛ̄-nì* ‘cause to enter, take/put in’

*dūwɛ̄-gàwⁿ* ‘entering place, access’

*dūwɛ̄-gù* ‘entering’ (verbal noun)

It is unclear whether the forms in (xx5) below are wayward relatives of ‘enter’ (xx4) above via some ancient semantic shift. The vocalic and tonal alternations do not fit the patterns shown by the clear transitivity pairs and related vocalic mutations shown in (xx1-xx2) above.

(xx3) a. *dùwɔ̀/dùwɔ̄* ‘circumcise (a child)’

b. *dūwɛ̄* ‘circumcision’

### Transitivity pair with *uu* ~ *wii* alternation

Somewhat similar to the preceding is the alternation in (xx1).

(xx1) transitive *pùù/pùù* ‘blow on; inflate’

intransitive *pwìì/pwìì* ‘(body part) become swollen’

There is no shift of *pùù* to *pwìì* in suffixal derivatives: *pùū-gàwⁿ* ‘inflating place’. This weakens the connection with the cases described in preceding sections.

### Shift of final *ɛ* to *(a)y* for locative sense

The transitive verb *syɛ̄/syɛ̄* ‘put X (in Y)’ is exemplified in (xx1a-c).

(xx1) a. *ŋ́ =nāⁿ dàndì syɛ̄ [kɔ̀lū nìŋīì]*

1Sg Sbj/Obj chili **put.in**.Pfv [pot inside]

‘I put-Past the chili peppers in the pot.’

b. *ŋ́ =nāⁿ dàndì syɛ̄*

1Sg Sbj/Obj chili **put.in**.Pfv

‘I put-Past the chili peppers in.’

c. *ŋ́ =nāⁿ à syɛ̄ [kɔ̀lū nìŋīi]*

1Sg Sbj/Obj 3SgObj **put.in**.Pfv [pot inside]

‘I put-Past it in the pot.’

A variant *sīyà‑y/sīyà‑y* ‘put X in’ occurs optionally when the container is omitted and the direct object is pronominalized (and discourse-definite). Therefore both variants are possible in (xx2a). *sīyà‑y/sīyà‑y* can also be used with *sɔ́mɛ́* ‘spices, condiments’ as object, with ‘in the pot’ understood but covert (xx2b). This suggests that *sīyà‑y/sīyà‑y* is a frozen combination of *syɛ̄/syɛ̄* ‘put X in’ plus an original locative PP \*à ỳ ‘in it’. For other vestiges of \*à ỳ directly suffixed to predicates, see §8.2.3.2. While the alternation of final *ay* and *ɛ* superficially resembles the stem-final vocalic mutations described in preceding sections, their history and its grammatical functions are unrelated.

(xx2) a. *ŋ́ =nāⁿ à sīyà-y*

1SgSbj Sbj/Obj 3SgObj **put.in**.Pfv-**Loc**

‘I put it (=chili) in (ir).’

b. *à nà sɔ́mɛ́ sīyà-y*

3SgSbj IpfvNeg condiments **put.in**.Ipfv-**Loc**

‘She doesn’t put (enough) condiments in (ir).’

c. *āⁿ tā= à syɛ̄,*

2Sg PfvNeg 3SgObj put.in.Pfv

*è nā à sīyà-y*

3PlSbj IpfvNeg 3SgObj **put.in**.Pfv-**Loc**

‘If you-Sg (=a man) don’t put it in (=provide or pay for food), they (=women) won’t put it (=condiments) in (the pot).’

The cultural context needed to understand (xx2c) is that an old woman, acting as treasurer, is responsible for providing condiments (or money to pay for them) for the family. The adage (xx2c) refers to this.

## Deadjectival inchoative and factitive verbs

Most but not all basic modifying adjectives have a corresponding intransitive inchoative verb. In some cases, the “adjective” is itself derived from the verb.

### Adjectives lacking an inchoative

Some adjectives can only be made into inchoative predicates using the verb *pwɔ̀/pɔ̀-lɔ̀* ‘become’, which elsewhere takes NP complements (xx1). *pwɔ̀/pɔ̀-lɔ̀* also means ‘sit’.

(xx1) *pwɔ̀ ɲīī-ɲīī* ‘become coarse’

*pwɔ̀ sūmū nī* ‘become foreign’

*pwɔ̄ tīnāāⁿ nī* ‘become other’

In the case of ‘new’, an actual noun, minimally ‘thing’ (*pā* ), is required to form a predicate (xx2).

(xx2) *pwɔ̀ [pā tōy] nī* ‘become a new thing’

### Inchoatives without derivational suffix

In (xx1), the inchoative is identical or similar to the modifying adjective, without an obvious derivational suffix.

(xx1) Deadjectival inchoatives without derivational suffix

inchoative (Pfv/Ipfv) modifying gloss

a. *sīlē* / *sīlè sílē* ‘old’

*dēmō* / *dēmò dēmōⁿ* ‘delicious, sweet’

*tɔ̀mɔ̀* / *tɔ̀mɔ̄ tɔ̄mɔ̄wⁿ* ‘red’

b. *kwāāⁿ* / *kwāàⁿ kūwōⁿ* ‘white; clean’

c. *màɲɛ̀* / *màɲɛ̄ māɲāwⁿ* ‘good’

d. *pìyⁿɛ̀wⁿ* / *pìyⁿɛ̄wⁿ pīīⁿ* ‘black’

In (xx2), the only attested modifying adjective is derived from the inchoative by suffix *-na*, in some cases with minor phonological adjustments of the stem. The inchoative is generally one tone level lower than the modifying adjective, unless the latter is already L-toned. ‘Dirty’ (xx2b) has the same inchoative as ‘black’ in (xx1) above, but their modifying adjectives differ. Compare also ‘hot’ in (xx2a), which differs only tonally from ‘dirty’.

(xx2) Modifying adjective is inchoative plus *-na*

inchoative (Pfv/Ipfv) modifying gloss

a. inchoative L-toned, modifying adjective M-toned

*kìjì* / *kìjī kījī-nā* ‘plump’

*kūmā* / *kūmà kūmā-nā* ‘lean, emaciated’

*mwàà* / *mwàā mwāā-nā* ‘cold’

*pìyɛ̀wⁿ* / *pìyɛ̄wⁿ* *pīyⁿɛ̄-nà* ‘dirty’

*pòrè* / *pòrē pōrē-nā* ‘wet’

b. inchoative and modifying adjective M-toned

*ɲāāmū-ɲāāmū* / *ɲāāmū-ɲāāmù ɲāāmū-ɲāāmū-nā* ‘multicolored, spotted, striped’

*pāā* / *pā-lā pān-nā* ‘full’

*pīyɛ̄wⁿ* / *pīyɛ̀wⁿ pīyⁿɛ̄-nā* ‘hot’

c. inchoative and modifying adjective ML-toned

*bīllà* / *bīllà bīllà-nà* ‘narrow, tight’

*dāātà* / *dāātà dāātà-nà* ‘smooth’

*tāndà* / *tāndà tāndà-nà* ‘sour’

d. inchoative LML-toned, modifying adjective ML(-L)-toned

*wwo᷈ⁿ* / *wwǒ-lò wūwò-nà* ‘dry; hard’

### Inchoatives with *-(aa)ma*

In (xx1), the inchoative verb ends in a suffix *-(aa)ma* of variable tone, not already part of the adjective. In (xx1a), the stem in the inchoative has lower tone than it does as modifying adjective.

(xx1) Deadjectival inchoatives with *-(aa)ma*

inchoative (Pfv/Ipfv) modifying gloss

a. *-ààmà/ààmā*

*bān-ààmà* / *bān-ààmā bánū* ‘big, massive, thick’

*bùl-ààmà* / *bùl-ààmā būlōⁿ* ‘big; fat; wide, loose’

*kɔ̀j-ààmà* / *kɔ̀j-ààmā kɔ̄jāwⁿ* ‘long; tall’ (variant)

*kɔ̀y-ààmà* / *kɔ̀y-ààmā kɔ̄yāwⁿ* ‘long; tall’ (variant)

*kùr-ààmà* / *kùr-ààmā kūrū* ‘short’

*ɲīŋ-ààmà* / *ɲīŋ-ààmā ɲɔ̄ŋɔ̄* ‘bad; nasty’

b. *-āāmā/-āāmà*

*kāgāj-āāmā* / *kāgāj-āāmà kāgājī* ‘bitter’

*kāmn-āāmā* / *kāmn-āāmà* *kāmnā* ‘old (person)’

*nɔ̄gɔ̄r-āāmā* / *nɔ̄gɔ̄r-āāmà nɔ̄gɔ̄rɔ̄wⁿ* ‘difficult’

c. *-mā/-mà*

*ciyē-mā* / *cīyē-mà cīyēwⁿ* ‘heavy’

*dāā-mā* / *dāā-mà dāāⁿ* ‘distant’

*kāā-mā* / *kāā-mà kāā* ‘wet; raw; unripe’

*wwō-mā* / *wwō-mà* *wwōⁿ-wwōⁿ* ‘empty’

For inchoatives with suffix combination *-g-aama*, see (xx2) in §9.4.4 below.

### Inchoatives with *-ga ~ -gɛ* and *-g-aama*

In (xx1), the inchoative ends in *-ga* or *-gɛ*, corresponding to *-gu* in the modifying adjective. The stems are L-toned in the inchoatives.

(xx1) Deadjectival inchoatives with *-ga* ~ *-gɛ*

inchoative (Pfv/Ipfv) modifying gloss

a. *-ga*

*mìyɛ̀-gà* / *mìyɛ̀-gā mīyɛ̀-gū* ‘thin’

*ɲìyɛ̀-gà* / *ɲìyɛ̀-gā ɲīyɛ̀-gù* ‘easy’

*dùwɔ̀-gà* / *dùwɔ̀-gā dūwɔ̀-gù* ‘small’

b. *-gɛ* or -ga

*tùɥ-gɛ̀* / *tùɥ-gɛ̄ tūɥ̀-gù* ‘nearby’

or: *tùɥ-gà* / *tùɥ-gā*

There are also some inchoatives that combine *-g-* with *-aama* (xx2). Again the modifying adjective has *-gu*.

(xx2) Deadjectival inchoatives with *-g-aama*

inchoative (Pfv/Ipfv) modifying gloss

a. stem L-toned in inchoative

*pùlù-g-ààmà* / *pùlù-g-ààmā pūlù-gù* ‘soft’

*kùy-g-ààmà* / *kùy-g-ààmā kūyⁿ* ‘deep’

b. stem remains M-toned in inchoative

*pēl-g-ààmà* / *pēl-g-ààmā pēlù-gù* ‘light(weight)’

# Verbal inflection

## Inflection of regular indicative verbs

At the word level, verbs have two basic indicative forms, perfective and imperfective. Some verbs distinguish the two only by tones, others distinguish them segmentally.

Many verbs also have a stative, really a participial predicate with suffix *-nà*.

A minority of verbs have a distinct form of the stem ending in *ɛ/e* that occurs in suffixal derivatives and unsuffixed verbal nouns.

Verbs, or rather clauses, are inflected more systematically for aspect, polarity, and mood by post-subject particles, e.g. imperfective negative *nà*. Since these particles interact with the aspect marked on the verb itself, both the morphology of verbs and the clausal inflectional system are covered in this chapter.

### Overview of AN categories

The indicative categories are those in (xx1). Included are some categories whose expression includes preverbal or postverbal particles and auxiliaries. “X” indicates the position of the object NP in transitive verbs. Pfv, Ipfv, and Stat are three different forms of the verb. The imperfective verb form is rather restricted, occurring after positive *gà* and *kày* (which are arguably allomorphs) and negative *nà*. The perfective verb form, which is also morphologically simple, is clearly the unmarked verb form functionally.

(xx1) category positive negative

a. perfective and perfect

perfective X Pfv *tè* X Pfv

remote perfective X Pfv *gàà* *tè* X Pfv *gàà*

experiential perfect (‘ever’) *báynà gà* X Ipfv *tè báynà gà* X Ipfv

recent perfect (‘already’) *kɔ̀ⁿ* X Pfv —

b. imperfective system

imperfective *gà* X Ipfv *nà* X Ipfv

future *gà bē* X Pfv *nà bē* X Pfv

presentative progressive *kày* X Ipfv *nà* X Stat

presentative stative *kày* X Stat *nà* X Stat

### Verb stem shapes

The only known *Cv* verb stems are the two most basic motion verbs plus ‘give’ (xx1a). There are also a few *Cwo* and *Cyɛ* stems (xx1b) which pattern as monomoraic. All of these stems have identical perfective and imperfective tonal forms, arguably because they are two short to permit the addition of other tone features of the sort typical in imperfectives of heavier stems.

(xx1) gloss Pfv Ipfv

a. ‘go’ *sò sò*

‘come’ *bē bē*

‘give *dō dō*

b. ‘burn’ *bwō bwō*

‘weep’ *wwō wwō*

‘put in’ *syɛ̄ syɛ̄*

Other monosyllabic stems are of the shapes *Cvv*, *Cvwⁿ*, and *Cvyⁿ*. *Cvwⁿ* ends in a nasal(ized) element of variable pronunciation, usually *wⁿ* prepausally and an assimilating nasal before another word. A partial inventory is (xx2a-c). Some verbs of these shapes have bisyllabic suffixed imperfective stems.

(xx2) gloss Pfv Ipfv

a. *Cvv*

‘get up’ *kìì kìì*

‘run’ *kɯ̀ɯ̀ kɯ̀ɯ̀*

‘stand’ *tàà tà-là*

b. *Cvwⁿ*

‘descend’ *yàwⁿ yà-là*

‘ascend’ *tāwⁿ tā-nā*

c. *Cvyⁿ*

‘ruin’ *māyⁿ māỳⁿ*

Most uncompounded verb stems are bisyllabic. Typical shapes are *CvCv*, *CvNCv* with homorganic nasal-voiced stop cluster, and *CvvCv*, plus any of the preceding with a final *wⁿ*. A few examples are in (xx3).

(xx3) gloss Pfv Ipfv

a. CvCv

‘sleep’ *kùmù kùmū-nà*

b. CvNCv

‘stay’ *kōndō kōndò*

c. CvvCv

‘crawl’ *kūūnū kūūnù*

‘fly (v)’ *píírí píírì*

‘pass away (die)’ *fáátì fáátì*

d. CvCvwⁿ

‘arrive’ *kìyɔ̀wⁿ kìyɔ̀wⁿ*

### Perfective and imperfective stems of verbs

The imperfective stem is either suffixed or unsuffixed depending on the stem.

#### Imperfective is unsuffixed

This section covers perfective-imperfective pairings that involve no segmental change (i.e. no suffixation).

For some verbs with unsuffixed imperfective stem, the imperfective and perfective stems are identical tonally as well as segmentally (xx1). There is one L-toned *Cv̀* stem along with two M-toned *Cv̄* stems, all three being high-frequency verbs. There are a few M-toned *Cwō* and *Cyɛ̄* stems, alternatively transcribable as diphthongal *Cu̯o* and *Ci̯ɛ*, and that in any event behave like monomoraic stems. All the others are clearly bisyllabic or heavier. Of these, one is LM-toned. All the others, including numerous Fulfulde loanwords, end in L-tone (ML or LML).

(xx1) Imperfective identical to perfective

gloss perfective imperfective comment

a. L-toned

*Cv*

‘go’ *sò* *sò*

b. M-toned

*Cv*

‘come’ *bē* *bē*

‘give’ *dō* *dō*

*Cwv or Cyv*

‘burn’ *bwō* *bwō*

‘weep’ *wwō* *wwō* phonetic [wu̯ō]

‘put in’ *syɛ̄* *syɛ̄*

c. ML-toned

*CvCv*

‘push’ *cɛ̄bù* *cɛ̄bù* also ‘put up on fire’

‘be able to’ *hīnì hīnì*

‘blink’ *ŋɔ̄mɛ̀ ŋɔ̄mɛ̀* ‘touch lightly (as sign)’

‘begin’ *sīnì sīnì*  reflexive verb (also *sīndì* )

*CvCCv*

‘burst’ *fēllà* *fēllà*

*CvvCv*

‘pass away, die’ *fāātì* *fāātì*

‘reply’ *jāābì* *jāābì*

‘rip, tear’ (var.) *pɛ̄ɛ̄rɛ̀* *pɛ̄ɛ̄rɛ̀* variant *pīyɛ̀rɛ̀*

‘count’ *hīīsà* *hīīsà* synonym *yīyē*

‘think’ *mīīlà* *mīīlà* reflexive verb

*CvCvCv*

‘rip, tear’ (var.) *pīyɛ̀rɛ̀* *pīyɛ̀rɛ̀* variant *pɛ̄ɛ̄rɛ̀*

‘slip’ *yīyɛ̀rɛ̀* *yīyɛ̀rɛ̀*

d. LM-toned

*CvCv*

‘peck’ *sɔ̀ŋgī* *sɔ̀ŋgī* verbal noun *sɔ̀ŋgīī-gù*

e. LML-toned

*CvCvv*

‘kneel’ *kùgɛ̄ɛ̀* *kùgɛ̄ɛ̀*

*CvvCv*

‘understand’ *fàāmù* *fàāmù*

*CvCvCv*

‘beg’ *gàrībù* *gàrībù*

#### Imperfective and perfective differ in tones only

For other verbs without an imperfective suffix, the perfective and imperfective are segmentally identical but differ tonally, at least before tone-sandhi. Often the perfective is level-toned, while the imperfective raises or lowers the tone of the final syllable.

In (xx1), the perfective is L-toned while the imperfective is LM-toned with M on the final syllable (or monosyllabic mora). This is the standard pattern for verbs with L-toned perfective. The monomoraic *Cv̀* verb *sò/sò* ‘go’ (preceding section) arguably belongs here but is too short to allow an imperfective contoured tone. The perfective (L) versus imperfective (LM) opposition is masked when the verb is followed by a word beginning with L-tone. This is because Final Tone-Raising shifts the final tone of an L-toned work to M in this environment, so both perfective and imperfective end up as LM.

(xx1) Perfective L-toned, imperfective LM-toned

gloss perfective imperfective comment

a. *Cvv*

‘get up’ *kìì* *kìī*

‘look for’ *màà* *màā*

‘run’ *kɯ̀ɯ̀* *kɯ̀ɯ̄*

‘pour out’ *pìì* *pìī*

‘blow’ *pùù* *pùū*

‘laugh (v)’ *sàà* *sàā*

‘wipe, erase’ *sìì* *sìī*

‘die’ *wàà* *wàā*

‘do long time’ *wùù* *wùū*

‘fear’ *kwààⁿ* *kwàāⁿ*

b. *Cvy*

‘leave, abandon’ *bày* *bàȳ*

c. *CvCv*

‘curse (v)’ *jìgà* *jìgā*

‘dispossess’ *kàmà* *kàmā*

‘throw’ *kɛ̀rɛ̀* *kɛ̀rɛ̄*

‘obtain’ *kìlè* *kìlē*

‘open’ *ɥɛ̀ɛ̀ ɥɛ̀ɛ̄*

‘walk’ *ɲìŋì ɲìŋí*

‘dig’ *sàgà* *sàgā*

‘cultivate’ *sɔ̀gɔ̀* *sɔ̀gɔ̄*

‘cook in pot’ *sùwɔ̀* *sùwɔ̄*

‘look at’ *tɔ̀ŋɔ̀* *tɔ̀ŋɔ̄*

‘kill’ *wàgà* *wàgā*

‘put down’ *yàgà* *yàgā*

‘give birth’ *yɛ̀gɛ̀* *yɛ̀gɛ̄*

‘take down’ *yɛ̀lì* *yɛ̀lī*

d. *CvCvwⁿ*

‘arrive’ *kìyɔ̀wⁿ* *kìyɔ̀wⁿ* variant *kìyɛ̀wⁿ*

e. *CvNCv*

‘get tired’ *bàndà* *bàndā*

‘betray’ *jàmbà* *jàmbā*

‘carry on back’ *tìndì* *tìndī*

e. trisyllabic

‘talk (v)’ *dìgɛ̀mù* *dìgɛ̀mū*

‘dance (v)’ *mànàmì* *mànàmī* variant *mɔ̄nɔ̀mì*

‘fix, repair’ *mìyɛ̀nì* *mìyɛ̀nī*

In (xx2), the perfective is M-toned, while the imperfective drops the tone of the final syllable (or monosyllabic mora) to L. This is the productive pattern for verbs with M‑toned perfectives, except for monomoraic *Cv̄*, *Cwō*, and *Cyɛ̄* which are too short to allow contour-toned imperfectives (see the preceding section). The perfective (M) versus imperfective (ML) opposition is masked when the following word begins with L-tone. This is because ML-toned words flatten to M-toned before an L-tone, so both perfective and imperfective end up as ML.

(xx2) Perfective M-toned, imperfective ML-toned

gloss perfective imperfective comment

a. *Cvv*

‘shatter (sth)’ *kāā* *kāà*

b. *Cvv*

‘ruin (v)’ *māyⁿ* *māỳⁿ*

c. *CvCv*

*Ciye, Ciyɛ*

‘count’ *yīyē yīyè* synonym *hīīsà*

‘ask, inquire’ *tīyē* *tīyè*

‘pass’ *kīyɛ̄* *kīyɛ̀* also ‘(day) break’

*Cuwo, Cuwɔ*

‘winnow in wind’ *pūwō* *pūwò* (homophone)

‘jab, poke’ *pūwō* *pūwò* (homophone)

*other CvCv*

‘scrape’ *kāgā* *kāgà*

‘build’ *kēbē* *kēbè*

‘die’ *lɔ̄gɔ̄ⁿ* *lɔ̄gɔ̀ⁿ*

‘nudge’ *mɛ̄mɛ̄* *mɛ̄mɛ̀*

‘bathe, wash’ *ɲīnī*  *ɲīnì* reflexive or transitive

‘like (v)’ *pɔ̄gɔ̄* *pɔ̄gɔ̀*

‘lie down’ *sāgā* *sāgà*

‘get old’ *sīlē* *sīlè*

‘shut; cover’ *tɛ̄gɛ̄* *tɛ̄gɛ̀*

‘sell’ *tōlō* *tōlò*

‘show’ *wājī* *wājì*

d. *CvCvwⁿ*

‘become hot’ *pīyɛ̄wⁿ* *pīyɛ̀wⁿ*

e. *CvCCv* and *CvNCv*

‘remain’ *kōndō* *kōndò*

f. *CvvCv*

‘fly (v)’ *pīīrī* *pīīrì*

‘crawl’ *kūūnū* *kūūnù*

‘rub’ *sāālō* *sāālò*

‘ask for’ *wāālē* *wāālè*

‘chew’ *kwōōlō* *kwōōlò*

g. trisyllabic

‘paw (v)’ *sɔ̄gɔ̄rī* *sɔ̄gɔ̄rì*

‘lay down’ *sāgā-nī* *sāgā-nì* causative

‘get old’ *kāmn-āāmā* *kāmn-āāmà*

In (xx3), the perfective is M-toned and the imperfective is LML-toned.

(xx3) Perfective M-toned, imperfective LML-toned

gloss perfective imperfective comment

*CvvCv*

‘bite off’ gɯ̄gɯ̄jō gɯ̀gɯ̄jò only known example

#### Imperfective has a syllabic suffix (*-lv*, *-nv*, *-dv* )

The suffixed imperfective stems end in *-lv*, *-nv*, or *-dv*, where “v” is either a copy of the preceding stem-final vowel or, for some stems, a fixed vowel (*-lì*, *‑nà*). It is reasonable to take *‑lv* as primary, since *-nv* and *-dv* are largely predictable from the phonological form of the stem.

The verbs with imperfective allomorph *‑lv* are in (xx1). In one major type, several monosyllabic *Cvv* and a handful of *Cvy* and *Cvwⁿ* perfectives are shortened before the imperfective suffix. In this type (xx1a), the suffixal vowel is copied from an immediately preceding vowel, and the imperfective keeps the tone melody shown in the perfective (/M/ or /L/). The variant of this for LH-toned perfectives is to add L-toned suffix *-lv* (xx1b). In a second major type, a *Cuu*, *Cii*, *Coy*, or *Cey* perfective is not shortened, and *-lù* (after *uu* ) or *‑lì* (after *ii* or *y*) is directly added to form the imperfective (xx1c). Minor irregularities occur in (xx1d-e).

(xx1) Imperfective *-lv*

gloss perfective imperfective comment

a. *Cvv/CvL* perfective shortened to *Cv-* before suffix

*long vowel shortened*

‘exit (v)’ *bāā bā-lā*

‘enter’ *dwɔ̄* *dɔ̄-lɔ̄*

‘fill up (intr)’ *pāā pā-lā*

‘stand’ *tàà tà-là*

‘sow; bury’ *cīī cī-lī*

‘rub on’ *sūū sū-lū*

*long vowel not shortened*

‘spit; set (trap)’ *tūù* *tūū-lù*

*falling diphthong loses semivowel*

‘sit’ or ‘become’ *pwɔ̀ pɔ̀-lɔ̀*

*rising diphthong loses semivowel*

‘pull; tie’ *sɛ̀y sɛ̀-lɛ̀*

*rising diphthong loses semivowel, denasalized*

‘descend’ *yàwⁿ yà-là*

b. bisyllabic, *-lv* with copied vowel, tones LH/LH-L

‘lick’ *pìyɛ̄ pìyɛ̄-lɛ̀*

‘sing’ *sùwō sùwō-lò*

*denasalized imperfective*

‘dry off’ *wùōⁿ wùō-lò*

c. unshortened *Cvv/CvC*, suffix L-toned

*Cii or Cuu with copied vowel in suffix*

‘winnow up and down’ *ɥīī ɥīī-lì*

‘roll up’ *kwīī kwīī-lì*

‘spit; set (trap)’ *túù túú-lù*

*Cvy with invariant -lì*

‘greet’ *bōy bōy-lì*

‘weave (cloth)’ *kōy kōy-lì*

‘call’ *kēy kēy-lì*

d. *-lv-* infixed before final semivowel

‘jump’ *tēwⁿ tē-lē-wⁿ*

e. alternative stem shape (cf. verbal noun *kɔ̄lɛ̄* )

‘hit’ *kwāā kɔ̄-lā*

The list above includes a few verbs whose perfectives end in a nasal syllable (*yàwⁿ*, *tēwⁿ*, *wùōⁿ* ). Their imperfectives are formed in two different ways. Nasalization is simply dropped from the imperfective in the cases of *yàwⁿ* and *wùōⁿ*, which have imperfectives *yà-là* and *wùō-lò*. For *tēwⁿ*, the *‑lv‑* suffix is anomalously infixed between *tē* and *wⁿ*, producing *tē‑lē‑wⁿ*.

The great majority of verbs that end in a nasal syllable (*Nv*, *Cvⁿ*, *Cvwⁿ*) have imperfective *‑nv* instead of *‑lv* (xx3). This implies a morphophonological rule *l* → *n* after nasal syllable. Indeed, monosyllabic perfectives, except ‘do’ (xx3c), generally follow the shortening and vowel-copying pattern of monosyllabics that have *-lv* (xx3a). However, falling diphthongs are not reduced (xx3b), and all nonmonosyllabics (and monosyllabic ‘do’) have *‑nà* suffix regardless of stem vocalism (xx3d‑e). Most nonmonosyllabics with final *wⁿ* in the perfective convert this into a second *n* preceding the suffix, and some other nonmonosyllabics irregularly show a second *n*.

Imperfective variant *-na* should be distinguished from the productive stative suffix *-na*. For some verbs, the two forms are homophonous, but positive stative verbs are followed by *nì* ‘it is’ while imperfectives are not. Therefore actual confusion is unlikely. See §10.1.4 for more on statives and occasional homophony with imperfectives.

(xx3) Imperfective *-nv*

gloss Pfv Ipfv comment

a. *Cvv/CvL* perfective shortened to *Cv-* before suffix

*long vowel shortened*

‘catch’ *kūūⁿ kū-nū*

‘insult (v)’ *mūūⁿ mū-nū*

‘get lost’ *tūūⁿ tū-nū*

*rising diphthong loses semivowel*

‘milk (v)’ *kāwⁿ kā-nā*

‘bite’ *sīwⁿ sī-nī*

‘shave’ *bāwⁿ bā-nā*

‘ascend’ *tāwⁿ tā-nā*

‘break (tr)’ *kɛ̄wⁿ kɛ̄-nɛ̄*

‘carve’ *sɛ̄wⁿ sɛ̄-nɛ̄*

‘drink’ *mɛ̀wᵇ mɛ̀-nɛ̀*

‘buy’ or ‘(rain) fall’ *sàwⁿ sà-nà*

‘swallow (v)’ *tɔ̀wⁿ tɔ̀-nɔ̀*

b. long vowel not shortened

‘sweep’ *kwɛ́ɛ̀ⁿ kwɛ́ɛ̀-nɛ̄*

‘weave (basket); spin’ cyɛ̀ɛ̂ⁿcyɛ̀ɛ̄-nɛ̀

c. monosyllabic with *-nà* not copied from stem vowel

‘do’ *tíwⁿ tí-nà*

d. nonmonosyllabics with *-nà* not copied from stem vowel

*LM-toned stem*

‘tilt (intr)’ *sɛ̀ŋɛ̄ sɛ̀ŋɛ̄-nà*

‘lock (v)’ *tàbāwⁿ tàbān-nà*

‘welcome (v)’ *tèmbē tèmbē-nà*

‘narrate’ *kàmāà kàmāà-nà*

‘read’ *kàlāàⁿ kàlāà-nà*

‘forget’ *nùmàsāwⁿ nùmàsā-nà*

*L-toned perfective becomes LM-toned before suffix*

‘turn (sth)’ *kɛ̀ŋɛ̀ kɛ̀ŋɛ̄-nà*

‘sleep (v)’ *kùmù kùmū-nà*

‘bow (v)’ *sùnù sùnū-nà*

‘finish (v)’ *kìlɛ̀wⁿ kìlɛ̄n-nà*

‘wait’ *kùlèwⁿ kùlēn-nà*

‘help (v)’ *yìràwⁿ yìrān-nà*

*ML-toned stem, suffix gets M-tone*

‘assemble [intr]’ *cīyɛ̀ⁿ cīyɛ̀-nɛ̄*

‘sneeze (v)’ *cīyɛ̀ⁿ cīyɛ̀-nɛ̄*

‘squat’ *sūgòⁿ sūgòn-nā*

‘breathe’ *sīŋàwⁿ sīŋàn-nā*

‘copulate’ *tīgèwⁿ tīgèn-nā* reciprocal verb

‘heal (tr)’ *sābūlèwⁿ sābūlèn-nā*

‘rinse’ *sàŋgòⁿ sàŋgōn-nà*

e. final syllable of perfective not nasalized

‘see’ *kày kà-nà*

The verbs taking imperfective *-dv* suffix have monosyllabic perfective *Cewⁿ* (xx4). The *e* vowel is copied on the suffix. Contrast this with the *Cvwⁿ* perfectives whose *v* is a vowel other than *e* (or *o* ?), namely *Cawⁿ*, *Ciwⁿ*, *Cɛwⁿ*, and *Cɔwⁿ*, in (xx3a) above. No *Cowⁿ* verb is known.

(xx4) Imperfective -dv

gloss Pfv Ipfv

*Cewⁿ* stems

‘fall’ *sēwⁿ sēn-dē*

‘go back’ *bēwⁿ bēn-dē*

### Stative form of verbs (suffix *-na* )

A stative stem is derived from several aspectually active verbs (i.e. verbs that elsewhere are marked for aspect) by means of the suffix *-na* on the verb. The suffix gets its tone by spreading from the stem (*‑nā* or *‑nà* ). For a few verbs of shape *Cv̀Nv̀* like ‘squat’ and ‘sleep’, the form with *-na* suffix is homophonous to the imperfective, due to nasalization of imperfective *‑là*.

Morphosyntactically, stative stems are participles. They can be predicates, or they can function as postnominal modifiers. They are closely related to one set of adjectives, which have *-na* when functioning as predicates. Statives are especially common with intransitive stance verbs, denoting the state resulting from taking the position. Statives are also formed from transitive verbs, denoting the resulting state of the object (a kind of resultative passive).

(xx1) compares stative with active (perfective and imperfective) forms of stance verbs. My assistant alternated between *kùmù-nà* and *kùmū-nà* ‘asleep’, making it difficult to pin down the relationship between stative and imperfective for that verb (xx1b).

(xx1) stative gloss Pfv Ipfv gloss (active)

a. stative segmentally distinct from imperfective

*from intransitive*

*pùwɔ̀-nà* ‘be sitting (=seated)’ *pwɔ̀ pɔ̀-lɔ̀* ‘sit down’

*tàà-nà* ‘be standing, be up’ *tàà tà-là* ‘stand up’

*sāgā-nā* ‘be lying down’ *sāgā sāgà* ‘lie down’

*sēn-nā* ‘be fallen’ *sēwⁿ sēn-dē* ‘fall down’

*from transitive*

*tɛ̄gɛ̄-nā* ‘be shut’ *tɛ̄gɛ̄ tɛ̄gɛ̀* ‘shut’

*māyⁿ-nā* ‘malfunction, be ruined’ *māyⁿ māỳⁿ* ‘ruin (v)’

*kɛ̄n-nā* ‘be broken’ *kɛ̄wⁿ kɛ̄-nɛ̀* ‘break (tr)’

*kwīī-nā* ‘be rolled up’ *kwīī kwīī-lì* ‘roll up’

b. stative versus imperfective with suffix variant *-nà* (< *-là* )

*sùnū-nà* ‘be squatting’ *sùnù sùnū-nà* ‘squat’

*kùmù-nà* ‘sleep’ *kùmù kùmū-nà* ‘sleep’

~ *kùmū-nà*

In positive predicates, the stative form is followed by *nì* ‘it is’, whether or not a locational expression follows (xx2a). L-toned suffix variant *-nà* rises to *-nā* before *nì* by regular tone sandhi (Final Tone-Raising). The positive predicate of statives is like that of NPs, which likewise have *nì*. However, *nì* is absent in negative stative predicates, which instead have imperfective negative *nà* (xx2b). By contrast, negative NP predicates have both post-subject *nà* and clause-final *ni*. Overall, the morphosyntax of predicates connects statives not to nouns and NPs, rather to a class of adjectives including color adjectives (§11.4.1.1).

(xx2) a. *à sāgā-nā nì (bōẁⁿ)*

3SgSbj lie.down-**Stat** **Stat** (here)

‘He/She is lying down (e.g. asleep) here.’

b. *à nà sāgā-nā (bōẁⁿ)*

3SgSbj **IpfvNeg** lie.down-Stat (here)

‘He/She is not lying down (e.g. asleep) here.’

Some but not all transitive verbs have statives distinct from imperfective active forms. These function as progressives for such verbs. They are most easily elicited in the progressive negative, which does not allow the regular imperfective verb form. They can also occur in positive progressives, as optional variants of the presentative progressive which does use the imperfective verb form (preceding section).

(xx3) stative gloss Pfv Ipfv gloss (active)

*kūlēn-nà* ‘be cutting up’ *kūlēwⁿ kūlèwⁿ* ‘cut up’

*bùrū-nà* ‘be breaking in half’ *bùrù bùrū* ‘break/cut (in half)’

*kɛ̀rɛ̄-nà* ‘be throwing’ *kɛ̀rɛ̀ kɛ̀rɛ̄* ‘throw’

*kìlē-nà* ‘be getting’ *kìlè kìlē* ‘get, obtain’

An example of idiomatic use of the stative is (xx4). The literal image is of disinflation as of a balloon. The usual context is that Seydou is no longer in the state of being blessed by his father.

(xx4) *[sèēdù cíyɛ́ⁿ] bān-nā nì*

[S air] exit(v)-Stat it.is

‘Seydou’s air has gone out.’ = ‘The air has gone out of Seydou.’

An important but tricky issue is the relationship between the stative predicate and the factive verbal noun with the same (or homophonous) suffix -na (§4.2.1.4). The fact that the latter can have a resultative sense is relevant.

## Positive indicative AN categories

### Perfective and perfect categories

There is only one morphological perfective category at word level (§10.2.1.1). Additional tense-aspect categories that elaborate perfectivity in one direction or another are the remote perfective (expressed by a postverbal particle), the experiential perfect (expressed by a preceding auxiliary with imperfective complement), and the recent perfect (expressed by adding a particle at the end of the subject NP).

The perfective differs from the non-perfective indicative categories in that the subject and object are not separated by a regular inflectional particle such as imperfective *gà*. The result is that pronominal objects, and pronominal subject-object combinations, have special forms not found in non-perfective clauses.

#### Simple perfective (positive and negative) of intransitive verbs

The simple perfective is used to report a bounded event that has been completed in the past, before the present (or other reference time). When used without a following particle *gàà*, it may denote an event that has just occurred.

The perfective has no segmentable suffix. The stem has lexical melody, most often /L/ or /M/, for bisyllabics also /H/, /ML/, or /LM/, and for trisyllabics also /LML/. There is no inflectional particle (other than the negative) and no auxiliary. The main verb therefore immediately follows the subject in positive perfective clauses. The perfective is negated by adding *tē* between subject and verb.

(xx2) has a pronominal-subject paradigm for ‘slept’, which is L‑toned. 1Sg subject is H‑toned *ŋ́* in the positive, L‑toned *ŋ̀* in the negative. The perfective negative auxiliary is *tè*, rising to *tē* before an L‑tone. 1Sg *ŋ́* ~ *ŋ̀* assimilates to the position of the following consonant, e.g. negative *ŋ̀ tē* [ǹtē].

(xx1) ‘slept’ ‘didn’t sleep’

1Sg *ŋ́ kùmù ŋ̀ tē kùmù*

1Pl *ē kùmù ē tē kùmù*

2Sg *āⁿ kùmù āⁿ tē kùmù*

2Pl *āā kùmù āā tē kùmù*

3Sg *à kùmù à tē kùmù*

3Pl *è kùmù è tē kùmù*

(xx2) has a subject paradigm for ‘fall’. This verb is M‑toned, so negative *tè* remains L‑toned in all combinations. For 1Sg subject, again there is a tonal contrast between positive and negative, but now the positive has *ŋ̄*, forming an M‑toned sequence with the verb. In the negative,the tone of the pronominal (not that of the intervening *tè*) determines that of the verb. L‑toned pronominals (1Sg, 3Sg, 3Pl) are followed by *tè sēwⁿ* (the verb showing its lexical melody). M‑toned pronominals (1Pl, 2Sg, 2Pl) are followed by *tè sèwⁿ*. In other words, the M‑toned verb dissimilates tonally to an M‑toned pronominal, by dropping to L, in spite of the intervening L‑toned *tè*.

(xx2) ‘fell’ ‘didn’t fall’

1Sg *ŋ̄ sēwⁿ ŋ̀ tè sēwⁿ*

1Pl *ē sēwⁿ ē tè sēwⁿ*

2Sg *āⁿ sēwⁿ āⁿ tè sēwⁿ*

2Pl *āā sēwⁿ āā tè sēwⁿ*

3Sg *à sēwⁿ à tè sēwⁿ*

3Pl *è sēwⁿ è tè sēẁⁿ*

A fuller set of intransitive perfectives showing 1Sg, 1Pl, and 3Sg forms is in (xx3).

(xx3) Perfective

gloss 1Sg 1SgNeg 1Pl 1PlNeg 3Sg 3SgNeg

a. L-toned verb

‘get up’ *ŋ́ kìì ŋ̀ tē kìì ē kìì ē tē kìì à kìì à tē kìì*

‘run’ *ŋ́ kɯ̀ɯ̀ ŋ̀ tē kɯ̀ɯ̀ ē kɯ̀ɯ̀ ē tē kɯ̀ɯ̀ à kɯ̀ɯ̀ à tē kɯ̀ɯ̀*

‘go’ *ŋ́ sò ŋ̀ tē sò ē sò ē tē sò à sò à tē sò*

‘stand’ *ŋ́ tàà ŋ̀ tē tàà ē tàà ē tē tàà à tàà à tē tàà*

‘descend’ *ŋ́ yàwⁿ ŋ̀ tē yàwⁿ ē yàwⁿ ē tē yàwⁿ à yàwⁿ à tē yàwⁿ*

‘arrive’ *ŋ́ kìyɔ̀wⁿ ŋ̀ tē kìyɔ̀wⁿ ē kìyɔ̀wⁿ ē tē kìyɔ̀wⁿ à kìyɔ̀wⁿ à tē kìyɔ̀wⁿ*

‘sleep’ *ŋ́ kùmù ŋ̀ tē kùmù ē kùmù ē tē kùmù à kùmù à tē kùmù*

‘sit’ *ŋ́ pwɔ̀ ŋ̀ tē pwɔ̀ ē pwɔ̀ ē tē pwɔ̀ à pwɔ̀ à tē pwɔ̀*

b. M-toned verb

‘exit’ *ŋ̄ bāā ŋ̀ tè bāā ē bāā ē tè bāā à bāā à tè bāā*

‘come’ *ŋ̄ bē ŋ̀ tè bē ē bē ē tè bē à bē à tè bē*

‘fall’ *ŋ̄ sēwⁿ ŋ̀ tè sēwⁿ ē sēwⁿ ē tè sēwⁿ à sēwⁿ à tè sēwⁿ*

‘ascend’ *ŋ̄ tāwⁿ ŋ̀ tè tāwⁿ ē tāwⁿ ē tè tāwⁿ à tāwⁿ à tè tāwⁿ*

‘weep’ *ŋ̄ wwō ŋ̀ tè wwō ē wwō ē tè wwō à wwō à tè wwō*

‘enter’ *ŋ̄ dwɔ̄ ŋ̀ tè dwɔ̄ ē dwɔ̄ ē tè dwɔ̄ à dwɔ̄ à tè dwɔ̄*

‘stay’ *ŋ̄ kōndō ŋ̀ tè kōndō ē kōndō ē tè kōndō à kōndō à tè kōndō*

‘crawl’ *ŋ̄ kūūnū ŋ̀ tè kūūnū ē kūūnū ē tè kūūnū à kūūnū à tè kūūnū*

‘die’ *n̄ lɔ̄gɔ̄ⁿ ŋ̀ tè lɔ̄gɔ̄ⁿ ē lɔ̄gɔ̄ⁿ ē tè lɔ̄gɔ̄ⁿ à lɔ̄gɔ̄ⁿ à tè lɔ̄gɔ̄ⁿ*

‘lie down’ *ŋ̄ sāgā ŋ̀ tè sāgā ē sāgā ē tè sāgā à sāgā à tè sāgā*

c. H-toned verb

‘fly (v)’ *ŋ́ píírī ŋ̀ tè píírí ē pīīrī ē tè pīīrī à píírí à tè píírí*

#### Remote perfective (postverbal *gàà* ~ *gà* )

The particle *gà(à)* immediately following a perfective verb indicates that the event occurred some time ago. A long vowel is heard before emphatic *kòy*, the combination then being heard as *gàā kòy*, see (xx2b) in §10.3.3.2 (‘He/She had already left’). In other non-clause-final contexts, and clause-finally, it is short-voweled *gà*. The combination of an L-toned verb and *gà* can undergo tone-sandi: *sɔ̀gɔ̀* ‘cultivate.Pfv’, remote *sɔ̀gɔ̄ gà*.

In main clauses, a simple perfective without *gà* may function as a recent past (cf. the English present perfect). For example, (xx1a) might be uttered to explain why a child is now weeping. (xx1b) by contrast is a report of an event that occurred at an earlier time (this morning, last year, etc.).

(xx1) a. *à sēwⁿ*

3Sg fall.Pfv

‘He/She (just) fell.’

b. *à sēⁿ gà*

3Sg fall.Pfv RemPfv

‘He/She fell (some time ago).’ (< *sēwⁿ* )

(pronounced [àsēŋgàː] )

*gà(à)* is marginally compatible with negation, though the combination is not common:

(xx2) *à tè sēⁿ gà*

3Sg Neg fall.Pfv RemPfv

‘He/She didn’t fall (some time ago).’ (< *sēwⁿ* )

In practice negative perfectives with *gà* are limited to specific discourse contexts, especially in the polar interrogative (§13.2.1.2) form *gàá↗*. My assistant stated that (xx3) could be uttered when the speaker has some reason to believe that the referent may have just suffered a fall (out of the speaker’s sight).

(xx3) *à tè sēⁿ gàá↗*

3SgSbj PfvNeg fall.Pfv RemPfv.Q

‘He/She didn’t fall?’

*gà* is compatible with polar interrogative intonation (§13.xxx).

(xx4) *āⁿ dāwā gàá↗*

2SgSbj travel.Pfv **RemPfv.Q**

‘You went on a trip?’ (< *dāwà* )

*gà* is obligatory, without consideration of time gaps, in perfective positive relative clauses; see chapter 14 *passim*.

#### Transitive perfective with forms of pronominal objects

Given S-infl-OVX order, when a transitive clause is in the perfective positive (which has no overt inflectional marker), the subject and object should be adjacent, unlike the situation in other inflectional categories. However, the two NPs are separated under some conditions by *yè*, a bidirectional case-marker that functions as a subject-object linker when they are not otherwise separated. Interlinear gloss is “SbjObj.” *yè* is optional but usually absent before nonhuman object NPs (xx1b). It is common before human objects (xx1a), but my assistant produces some combinations variably with and without *yè*.

(xx1) a. *sèēdù (yè) jénáⁿ kwāā*

S (SbjObj) child hit.Pfv

‘Seydou hit the child.’

b. *sèēdù (yè) sɔ̀gɔ̀lɔ́ŋ* / *kɔ̀yɔ̄ŋ kwāā*

S (SbjObj) sheep / rock hit.Pfv

‘Seydou hit the the sheep-Sg / the rock.’

When the object is pronominal, following a nonpronominal NP like ‘Seydou’, its forms are those in (xx2). *yè* is present in the plural forms, and optionally in the singulars. Vocalic contractions occur in all but the 1Sg. The difference between 1Pl and 3Pl is tonal, as is that between 2Pl and the full form for 3Sg. In allegro speech, the contracted long vowels may shorten, and/or contour tones LM and ML may flatten to L.

(xx2) Pronominal objects

1Sg *(yè) =ŋ̀*

1Pl *yè =ē*

2Sg *(yà) =āⁿ* (compare *yà=àⁿ* after 1Pl and *nà=àⁿ* after 1Sg subjects)

2Pl *yà =ā* (compare *yà=à* after 1Pl and *nà=à* after 1Sg subjects)

3Sg *(yā) =à*

~ *à =à*

3Pl *yē =è*

The M-toned forms of the bidirectional marker, in 3Sg *yā=à* and 3Pl *yē=è*, become H-toned after an H‑tone by assimilation. (xx3a‑b) illustrate M‑toned forms after L or M, (xx3c‑d) illustrate H‑toned forms after H.

(xx3) a. *sèēdù* / *sūgō yā =à kwāā*

S / goat Sbj/Obj 3SgObj hit

‘Seydou/The goat hit him/her/it.’

b. *sèēdù* / *sūgō* *yē =è kwāā*

S / goat Sbj/Obj 3PlObj hit

‘Seydou/The goat hit them.’

c. *kúŋgóló yá =à kwāā*

dog Sbj/Obj 3SgObj hit

‘The dog hit him/her/it.’

b. *kúŋgóló* *yé =è kwāā*

dog Sbj/Obj 3PlObj hit

‘The dog hit them.’

When the subject is 1Sg, whether the object is pronominal or not, instead of *yè* a different linker *nàⁿ* is used. The resulting combination (1Sg plus linker) is *ŋ́=nàⁿ*, pronounced [ńnàⁿ]. It becomes *ŋ́=nāⁿ* before an L‑tone (xx4a). Before a nonpronominal object, *ŋ́=nàⁿ* optionally reduces to simple *ŋ́* (xx4e). Unreduced *ŋ́=nàⁿ* is a tightly fused, irregular combination that might better be regarded as a portmanteau. Unlike *yè*, *ŋ́=nàⁿ* occurs regularly before nonhuman as well as human objects. Except for the fact that it is limited to perfective clauses, *=nàⁿ* has some resemblance to ergative markers in ergative-absolutive case systems.

(xx4) a. *ŋ́ =nāⁿ yùgòⁿ kwāā*

1SgSbj SbjObj woman hit.Pfv

‘I hit-Past the woman.’

b. *ŋ́ =nàⁿ sūgō kwāā*

1SgSbj SbjObj goat hit.Pfv

‘I hit-Past the goat.’

c. *ŋ́ =nāⁿ kɔ̀yɔ̄ŋ kwāā*

1SgSbj SbjObj stone hit.Pfv

‘I hit-Past the rock.’

d. *ŋ́ kúŋgóló kwāā*

1SgSbj dog hit.Pfv

‘I hit-Past the dog.’

When both subject and object are pronominal, they combine in somewhat complex ways. (xx5) presents combinations that occur when the object is 1st/2nd person. The comments made above about allegro-speech shortening and tone-flattening are applicable here. The 1st-on-2nd combinations (xx5a‑b) always end in L‑ rather than M‑tone in my data, even in careful speech. 2Sg *āⁿ* is denasalized to *ā* in 2Sg-on-1Pl *ā y=è*, perhaps by (re-)analysis of *āⁿ* as *ā* in the 3Sg-on-1Sg form *ā=ŋ̀* +H. In 2Sg-on-1Pl *ā y=è* and some other combinations, 1Pl object is expressed as *yè* for expected transparent *yè=ē*. It is not clear whether this yè should be parsed as *y=è* (contracted from *yè ē* ) or analysed as an L-toned variant of 1Pl ē with an epenthetic semivowel.

(xx5) object: 1Sg 1Pl 2Sg 2Pl

subject:

a. 1Sg — — *ŋ́=nà=àⁿ ŋ́=nà=à*

b. 1Pl — — *ē yà=àⁿ* *ē yà=à*

c. 2Sg *ā=ŋ̀* +H *ā y=è* — —

2Pl *āā yè=ŋ̀* +H *āā y=è* — —

3Sg *à=ŋ̀* +H *à y=è à=āⁿ à=ā*

3Pl *ì yè=ŋ̀* +H *ì yè=ē ì yà=āⁿ ì yà=ā*

The remaining combinations, those where the object is third person, are in (xx6). H‑toned *=ná* occurs in the 1Sg subject combinations (xx6a). There is no sign of bidirectional *yè* in the 2Sg→3Sg or 3Sg→3Sg forms (xx6b). Bidirectional *yè* is overt in the combinations where either or both participants are plural, except for 1Sg subject. The 3→3 combinations are all entirely L‑toned.

(xx6) object: 3Sg 3Pl

subject:

a. 1Sg *ŋ́=nā=à ŋ́=nē=è*

b. 2Sg *ā=à ā y=è*

3Sg *à=à à y=è*

c. 1Pl *ē yà=à ē y=è*

2Pl *āā yà=à āā y=è*

3Pl *ì yà=à ì y=è*

#### Experiential perfect ‘have ever’ (*báynà gà* )

This construction denotes a past event that may have occurred long ago but that has left an imprint in the subject’s memory and/or status. It corresponds to *have ever* and to its negation *have never* in English. It’s main ingredient is the auxiliary *báynà*, which functions as a perfective verb, as shown by its negation with *tè* (xx1c). The following subjectless VP ends with an imperfective verb. This suggests that the *gà* that follows *báynà* is the positive imperfective particle. However, the combination *báynà gà* is rather fused, and might be analysed as a single-word portmanteau.

(xx1) a. *ām báynà gà tùwɔ̀bùlōⁿ kà-nà ↗*

2Sg ExpPf Ipfv elephant see-Ipfv.Q

‘Have you-Sg ever seen an elephant?’

b. *ŋ̀ báynà=gà tùwɔ̀bùlōⁿ kà-nà*

1Sg ExpPf=Ipfv elephant see-Ipfv

‘I have (once) seen an elephant.’

c. *ŋ̀ tè báynà gà tùwɔ̀bùlōⁿ kà-nā*

1Sg PfvNeg ExpPf Ipfv elephant see-Ipfv

‘I have never seen an elephant.’

#### Recent perfect (*kɔ̀ⁿ* )

Particle *kɔ̀ⁿ* appears at the end of the subject NP, and is followed by any inflectional particles and by the VP, which is perfective positive in form. *kɔ̀ⁿ* is treated as part of the subject NP, rather than as a post-subject inflectional morpheme. In transitive clauses, *kɔ̀ⁿ* is therefore followed by a bidirectional case-marker (“SbjObj”). Clause-final emphatic *kòy* is common in this construction.

(xx1) a. *[ŋ̀ kɔ́ⁿ] dīgɛ̄ kòy*

[1Sg **already**] eat.Pfv Emph

‘I’ve already eaten.’

b. *[à kɔ̌ⁿ] yè ŋ̀ túwó kòy*

[3Sg **already**] SbjObj 3SgReflObj depart.Pfv Emph

‘He/She has already left.’

c. *[ŋ̀ kɔ́ⁿ] kìyɛ̀ kūlēwⁿ kòy*

[1Sg already] wood cut.Pfv Emph

‘I’ve already cut (=chopped) the wood.’

d. *[ŋ̀ kɔ́ⁿ] yà =à kūlēwⁿ kòy*

[1Sg already] Sbj/Obj 3SgObj cut.Pfv Emph

‘I’ve already cut (=chopped) it.’

e. *[āⁿ kɔ̌ⁿ] kìyɛ̀ kūlēwⁿ kòy*

[2Sg already] wood cut.Pfv Emph

‘You-Sg have already cut (=chopped) the wood.’

*kɔ̀ⁿ* is sometimes followed by a morpheme *nàⁿ*.

The pronominal paradigm is (xx2). After 1Sg *ŋ̀* (+H), the particle is H‑toned *kɔ́ⁿ* in all environments. After other pronouns it is L‑toned *kɔ̀ⁿ* prior to tone sandhi (on which see below).

(xx2) a. 1Sg *ŋ̀ kɔ́ⁿ*

b. 1Pl *ē kɔ̀ⁿ*

2Sg *āⁿ kɔ̀ⁿ*

2Pl *āā kɔ̀ⁿ*

3Sg *à kɔ̀ⁿ*

3Pl *è kɔ̀ⁿ*

Although *kɔ̀ⁿ* is pronounced with a short vowel, it behaves tonally like a bimoraic *Cv̀v̀* morpheme. Its L‑toned variant (after all but 1Sg subject) surfaces with rising <LM> tone when followed by an L‑tone, regardless of the tone that precedes *kɔ̀ⁿ*. This is evidently due to Final Tone-Raising, which would convert *Cv̀v̀* to *Cv̀v̄* in this environment. I transcribe the rising variant as *kɔ̌ⁿ*, see (xx1b,e) above.

An approximate negative equivalent to the recent perfect is formed by omitting *kɔ̀ⁿ*, negating the perfective verb, and adding temporal adverb *sɔ́ŋɔ̀nì* ‘firstly’ (xx3a-b). For this adverb see §8.4.6.1.

(xx3) a. *ŋ̀ tè dīgɛ̄ sɔ̄ŋɔ̀nì*

1Sg PfvNeg eat.Pfv firstly

‘I haven’t eaten (yet).’

b. *kùgù-lɛ̄ⁿ tè sāgā sɔ̄ŋɔ̀nì*

sun PfvNeg lie.down.Pfv as.of.now

‘The sun hasn’t set yet.’

#### Perfective positive markers in subordinated clauses (*gà*, *ɲàⁿ* )

In a few subordinated clause types, a nonzero perfective positive particle occurs, making the bidirectional case marker unnecessary (and ungrammatical).

*gà* appears to function as a perfective positive marker in one type of ‘until’ clause, where it co-occurs with a perfective verb (§15.xxx). This must be sharply distinguished from the overwhelmingly more common use of a homophonous *gà* as imperfective positive inflectional morpheme or ‘be’ verb in the same post-subject position.

In perfective positive conditional antecedent clauses, *ɲàⁿ* is required in post-subject position. It therefore forms a positive/negative opposition with perfective negative *tè* in this construction. See §16.1 for details and examples.

### Nonperfective categories

The nonperfective indicative categories are a) imperfective, b) future, and c) progressive. They are expressed by a combination of verbal morphology and preverbal particles.

#### Post-subject imperfective particles (positive *gà*, negative *nà* )

The general imperfective may denote habitual or gnomic eventualities, ongoing processes, or future events. It is expressed by the combination of post-subject inflectional particles, described in this section, and the imperfective stem of the verb (see the following section).

The particle *gà* occurs between subject NP and VP in positive clauses. It is replaced by *nà* in negative clauses. *gà* is identifiable morphemically as a copula used in equational (§11.2.1.2) and locational-existential predicates (§11.2.2), where its negative counterpart is again *nà*.

A pronominal-subject paradigm for ‘sleep’ is in (xx1). The imperfective stem of this verb begins in L‑tone. The 1Sg pronominal is L‑toned in both positive and negative. Inspection shows that *ga* and *na* are uniformly M-toned in these paradigms. I nevertheless divide the paradigm into two parts, for reasons explained just below.

(xx1) ‘sleep(s)’ ‘don’t/doesn’t sleep’

a. 1Sg *ŋ̀ gā kùmū-nà ŋ̀ nā kùmū-nà*

3Sg *à gā kùmū-nà à nā kùmū-nà*

3Pl *è gā kùmū-nà è nā kùmū-nà*

b. 1Pl ē *gā kùmū-nà ē nā kùmū-nà*

2Sg *āⁿ gā kùmū-nà ā nā kùmū-nà*

2Pl *āā gā kùmū-nà āā nā kùmū-nà*

The uniform M-toned *gā* and *nā* in (xx1) is deceptive. Before an M‑toned verb like ‘fall’, the paradigm divides into two groups. The L‑toned subject pronominals are followed by L‑toned *gà* and *nà* (xx2a). The M‑toned subject pronominals are followed by M‑toned *gā* and *nā* (xx2b).

(xx2) ‘fall(s)’ ‘didn’t/doesn’t fall’

a. 1Sg *ŋ̀ gà sēn-dē ŋ̀ nà sēn-dē*

3Sg *à gà sēn-dē à nà sēn-dē*

3Pl *è gà sēn-dē è nà sēn-dē*

b. 1Pl *ē gā sēn-dē ē nā sēn-dē*

2Sg *āⁿ gā sēn-dē ā nā sēn-dē*

2Pl *āā gā sēn-dē āā nā sēn-dē*

In the light of (xx2), the uniformly M‑toned *gā* and negative *nā* in (xx1) is seen to be an accidental by‑product of Final Tone-Raising, which applies in (xx1a) to /gà/ and /nà/ when flanked by L‑tones. I therefore posit an early (morphophonemic) forward tone-assimilation, spreading the final tone of the pronominal subject to the imperfective particle. This is followed by regular low-level application of Final Tone-Raising.

Examples with nonpronominal subjects ending in various tones are in (xx3). As with the pronominal subjects, the final tone of the subject is carried over to ga or na. Final Tone-Raising applies in ‘Seydou sleeps (not)’ in (xx3a).

(xx3) subject final tone ‘sleeps (not)’ ‘falls (not)’

a. ‘Seydou’ L *sèēdù gā* / *nā kùmū-nà gà* / *nà sēn-dē*

b. ‘goat’ M *sūgō gā* / *nā kùmū-nà gā* / *nā sēn-dē*

c. ‘dog’ H *kúŋgóló gá* / *ná* *kùmū-nà gá* / *ná* *sēn-dē*

The diagnostic 1Sg and 1Pl subject forms for a larger set of intransitive verbs is in (xx4). (xx4b) shows the effects of the forward tone-assimilation rule. (xx4a) has also undergone this process, but in the 1Sg subject forms it has been followed by Final Tone-Raising.

(xx4) Present (first person)

gloss 1Sg 1SgNeg 1Pl 1PlNeg

a. L-toned verb

*unsuffixed*

‘get up’ *ŋ̀ gā kìì ŋ̀ nā kìì ē gā kìì ē nā kìì*

‘run’ *ŋ̀ gā kɯ̀ɯ̀ ŋ̀ nā kɯ̀ɯ̀ ē gā kɯ̀ɯ̀ ē nā kɯ̀ɯ̀*

‘go’ *ŋ̀ gā sò ŋ̀ nā sò ē gā sò ē nā sò*

‘arrive’ *ŋ̀ gā kìyɔ̀wⁿ ŋ̀ nā kìyɔ̀wⁿ ē gā kìyɔ̀wⁿ ē nā kìyɔ̀wⁿ*

*suffixed*

‘stand’ *ŋ̀ gā tà-là ŋ̀ nā tà-là ē gā tà-là ē nā tà-là*

‘descend’ *ŋ̀ gā yà-là ŋ̀ nā yà-là ē gā yà-là ē nā yà-là*

‘sit’ *ŋ̀ gā pɔ̀-lɔ̀ ŋ̀ nā pɔ̀-lɔ̀ ē gā pɔ̀-lɔ̀ ē nā pɔ̀-lɔ̀*

‘sleep’ *ŋ̀ gā kùmū-nà ŋ̀ nā kùmū-nà ē gā kùmū-nà ē nā kùmū-nà*

b. M-toned verb

*unsuffixed*

‘come’ *ŋ̀ gà bē ŋ̀ nà bē ē gā bē ē nā bēe*

‘weep’ *ŋ̀ gà wōō ŋ̀ nà wōō ē gā wōō ē nā wōō*

‘enter’ *ŋ̀ gà dwɔ̄ ŋ̀ nà dwɔ̄ ē gā dwɔ̄ ē nā dwɔ̄*

*unsuffixed, final L‑tone*

‘stay’ *ŋ̀ gà kōndò ŋ̀ nà kōndò ē gā kōndò ē nā kōndò*

‘crawl’ *ŋ̀ gà kūūnù ŋ̀ nà kūūnù ē gā kūūnù ē nā kūūnù*

‘die’ *ŋ̀ gà lɔ̄gɔ̀ⁿ ŋ̀ nà lɔ̄gɔ̀ⁿ ē gā lɔ̄gɔ̀ⁿ ē nā lɔ̄gɔ̀ⁿ*

‘fly (v)’ *ŋ̀ gà pīīrì ŋ̀ nà pīīrì ē gā pīīrì ē nā pīīrì*

‘lie down’ *ŋ̀ gà sāgà ŋ̀ nà sāgà ē gā sāgà ē nā sāgà*

*suffixed*

‘exit’ *ŋ̀ gà bā-lā ŋ̀ nà bā-lā ē gā bā-lā ē nā bā-lā*

‘fall’ *ŋ̀ gà sēn-dē ŋ̀ nà sēn-dē ē gā sēn-dē ē nā sēn-dē*

‘ascend’ *ŋ̀ gà tā-nā ŋ̀ nà tā-nā ē gā tā-nā ē nā tā-nā*

#### Future (preverbal *gà bē*, negative *nà bē* )

The future makes use of the same imperfective *gà* (positive) and *nà* (negative) inflectional particles already seen with the present. However, it adds a second element before the primary verb, namely *bē*, which is at least etymologically the ‘come’ verb, ambiguously perfective or imperfective. The following main verb takes perfective form.

Because *bē* is M‑toned, the preceding imperfective particles are L‑toned. However, except in careful pronunciation *bē* (in this construction) is often heard as L‑toned before a nonlow tone. The result is what sounds like *gà bè* and *nà bè* before nonlow tone versus *gà bē* and *nà bē* before L-tone. This distribution of *bè* versus *bē* would ordinarily point to *bè* being lexical, becoming *bē* secondarily before an L‑tone by Final-Tone Raising. However, if bè were lexically L‑toned, the preceding morphemes *gà* and *nà* would undergo this raising process, resulting in #*gā bè* and #*nā bè*. However, this does not happen; *gà* and *nà* are consistently L‑toned in this combination. My conclusion is that the future morpheme is is lexically M-toned *bē*, but subject to phonetic realization processes that lower its pitch before a nonlow tone.

The 1Pl combination *ē gà bē*, and the 3Pl combination *è gà bē*, can assimilate in vowel quality to *ē gè bē* and *è gè bē*, respectively. This is common in allegro speech but generally corrected in elicitation.

Future paradigms for L‑toned ‘sleep’ are in (xx1). The verb takes perfective form *kùmù*, compare *kùmū‑nà* imperfective.

(xx1) ‘will sleep’ ‘won’t sleep’

1Sg *ŋ̀ gà bē kùmù ŋ̀ nà bē kùmù*

1Pl *ē gà bē kùmù ē nà bē kùmù*

2Sg *āⁿ gà bē kùmù āⁿ nà bē kùmù*

2Pl *āā gà bē kùmù āā nà bē kùmù*

3Sg *à gà bē kùmù à nà bē kùmù*

3Pl *è gà bē kùmù è nà bē kùmù*

The future paradigm of M-toned ‘fall’ is in (xx2). It is exactly identical to that of ‘sleep’ in (xx1) except for the change in main verb. The latter again takes perfective form *sēwⁿ* rather than imperfective *sēn‑dē*. Because the verb has a nonlow tone, *bē* is often heard as *bè* before it, except in careful pronunciation.

(xx2) ‘will fall’ ‘won’t fall’

1Sg *ŋ̀ gà bē sēwⁿ ǹ nà bē sēwⁿ*

1Pl ē *gà bē sēwⁿ ē nà bē sēwⁿ*

2Sg *āⁿ gà bē sēwⁿ ā nà bē sēwⁿ*

2Pl *āā gà bē sēwⁿ āā nà bē sēwⁿ*

3Sg *à gà bē sēwⁿ à nà bē sēwⁿ*

3Pl *è gà bē sēwⁿ è nà bē sēwⁿ*

#### Presentative (*kày* ~ *kàȳ* )

A (positive) presentative construction makes use of *kày* as auxiliary, between subject and VP. This form is progressive, describing an ongoing process that the speaker is directly perceiving. The verb is imperfective in form. *kày* is the perfective of ‘see’, and functions by itself as a presentative predicate without another verb (*à kày* ‘[t]here he/she is!’).

If the main verb begins with L‑tone, *kày* undergoes Final Tone-Raising to *kàȳ* (xx1).

(xx1) ‘am/is/are descending’

1Sg *ŋ̀ kàȳ yà-là*

1Pl *ē* *kàȳ yà-là*

2Sg *āⁿ kàȳ yà-là*

2Pl *āā kàȳ yà-là*

3Sg *à kàȳ yà-là*

3Pl *è kàȳ yà-là*

If the verb begins with M‑tone, it surfaces without change as *kày*.

(xx2) ‘am/is/are falling’

1Sg *ŋ̀ kày sēn-dē*

1Pl *ē kāy sēn-dē*

2Sg *āⁿ kāy sēn-dē*

2Pl *āā kāy sēn-dē*

3Sg *à kày sēn-dē*

3Pl *è kày sēn-dē*

An object NP, if present, follows *kày*.

(xx3) *à kày tēē kūlèwⁿ*

3SgSbj Prsntv meat cut.Ipfv

‘He/She is cutting the meat.’

My assistant rejected a direct negation of this progressive presentative form, probably because a negative presentative would make no sense (#‘here he/she isn’t!’). One can, however, combine a presentative predicate with a separate full clause that is negative (xx4).

(xx4) *à kày [à nà tā-nā]*

3SgSbj Prsntv [3SgSbj IpfvNeg ascend-Ipfv]

‘There he/she is, not going up!’

#### Presentative stative and progressive/stative negative

The presentative construction with *kày* (preceding section) is also used in stative as opposed to progressive contexts, but with the stative form of the verb (§10.1.4), which has an invariant suffix *‑na* that gets its tones by spreading. The distinction is important for stance verbs.

The negative version replaces *kày* by *nà*, which is elsewhere the imperfective negative. This suggests that *kày* might be analysed as an allomorph of imperfective positive particle *gà*. Both *kày* and *nà* are subject to Final Tone-Raising when flanked by L‑tones. English translations (‘be sitting’, etc.) can be misleading since English fails to distinguish progressive from stative with stance verbs.

(xx1) a. *à kàȳ pùwɔ̀-nà*

3Sg Prsntv sit-Stat

‘He/She is sitting (=seated).’

b. *à nā pùwɔ̀-nà*

3Sg IpfvNeg sit-Stat

‘He/She is not sitting (=seated).’

The construction also accepts detransitivized resultatives like ‘be laid out’ in (xx3c). A corresponding transitive is in (xx3a). There is no active intransitive for this verb, so an aspect-marked construction is reflexive in form (xx3b). It is unclear why *kāy* is M-toned in (xx3c).

(xx3) a. *ŋ́ =nǎⁿ tààⁿ sīnā*

1Sg =SbjObj mat lay.Pfv

‘I laid out the mat.’

b. *tàāⁿ yēⁿ ŋ̀ sīnā*

mat SbjObj 3SgReflObj lay.Pfv

‘The mat was laid out.’ (= ‘The mat laid itself out.’)

c. *tààⁿ kāy sīnā-nā*

mat Prsntv lay.out-Stat

‘The mat is (over there) laid out.’

## Shift of reference time

### Shift to past time viewpoint

Ordinary tense-aspect marking (perfective, present, future, progressive, stative) presupposes the perspective of the here-and-now of the speech event. The time interval of an event or situation that is described is automatically compared to the moment of speaking. However, mechanisms are available to shift the reference time to the past.

In addition to the constructions in §10.3.2-4 below, the construction with *màà/màā* ‘look for’ as a kind of auxiliary can be glossed ‘was on the verge of VPing’, i.e. a type of future-in-past.

### Past imperfective (*kōndō gà*, negative *tè kōndō* )

This construction consists of a perfective form of *kōndō* ‘stay’ as auxiliary, followed by a VP with imperfective verb. The imperfective particle *gà* is usually present but can be omitted. *kōndō* is negated by the usual perfective negative *tè*. Negation of *kōndō* entails no change in the following VP (xx1b). This VP cannot itself be directly negated (xx1c).

The sense is either past habitual or past progressive.

(xx1) a. *jénáⁿ kōndō (gà) kɯ̀ɯ̄* / *yā-là*

child stay.Pfv (Ipfv run.Ipfv / descend-Ipfv

‘The child was running/used to run/go down.’

b. *jénáⁿ tè kōndō (gà) kɯ̀ɯ̄* / *yā-là*

child PfvNeg stay.Pfv (Ipfv) run.Ipfv / descend-Ipfv

‘The child was not running/didn’t use to run/go down.’

c. #*jénáⁿ (tè) kōndō nà kɯ̀ɯ̄*

child (PfvNeg) stay.Pfv IpfvNeg run.Ipfv

[intended sense: ‘The child was not running/didn’t use to run.’]

### Past stative (*kōndō gà*, negative *tè kōndō* )

*kōndō (gà)* can also be added to a stative to shift its time to the past. (xx1a) illustrates with a stative derived from an active verb *pwɔ̀/pɔ̀-lɔ̀* ‘sit’. Other semantically stative constructions are illustrated in (xx1b-e).

(xx1) a. *à kōndō (gā) pùwɔ̀-nà*

3SgSbj **stay**.Pfv (Ipfv) sit-**Stat**

‘He/She was sitting (=seated).’

b. *ŋ́ kōndō (gā) nɔ̀gī-ỳ*

1SgSbj **stay**.Pfv (**be**.Loc) village-Loc

‘I was in the village.’

c. *yàmbāà kōndō (gā) [ŋ̀ té]*

house stay.Pfv (be) [1Sg Dat]

‘I had a house.’

d. *ŋ́ kōndō (gā) sɔ̀gɔ̀-yā nì*

1SgSbj **stay**.Pfv (**be**) cultivate-Agent it.is

‘I used to be a farmer.’

e. *ŋ́ kōndō (gà) sābūlèⁿ-yā tò*

1Sg **stay**.Pfv (be) heal-Agent **know**.Ipfv

‘I used to know a healer.’

### Past perfect (*kɔ̀ⁿ* and *gà* )

To indicate that an event had already happened at a reference time in the past, the remote past with postverbal *gà(à)* may be used. If the recent perfect morpheme *kɔ̀ⁿ* ‘already’ is added, such a clause can function as past perfect (xx2b).

(xx2) a. *à kɔ̀ⁿ ŋ̀ tūwō kòy*

3Sg already 3SgReflObj depart.Pfv Emph

‘He/She has already left.’

b. *ā kɔ̀ⁿ ŋ̀ tūwō gàā kòy*

3Sg already 3SgReflObj depart.Pfv RemPast Emph

‘He/She had already left (e.g. when I arrived).’

## Imperatives and hortatives

### Imperatives and prohibitives

All imperatives and prohibitives are based on the perfective stem of the verb

#### Imperative (unsuffixed singular, plural *yèⁿ* )

The perfective stem is used, without any preverbal material (subject pronoun, inflectional particle) as intransitive singular-addressee imperative.

(xx1) a. M-toned imperative (and perfective)

*bē* ‘come!-2Sg’

*tāwⁿ* ‘ascend!-2Sg’

*dwɔ̄* ‘enter!-2Sg’

*sāgā* ‘lie down!-2Sg’

*kōndō* ‘stay!-2Sg’

*pīīrī* ‘fly away!-2Sg’

b. L-toned imperarive (and perfective)

*sò* ‘go!-2Sg’

*tàà* ‘stop!-2Sg’ (or ‘stand up!’)

*pwɔ̀* ‘sit!-2Sg’

*yàwⁿ* ‘descend!-2Sg’

c. other tones (imperative = perfective)

*yīyɛ̀rɛ̀* ‘slide!-2Sg’

*tīgɛ̀* ‘cough!-2Sg’

As usual the all-L-toned stems undergo Final Tone-Raising before another L-tone. This applies to the monomoraic *sò* in (xx2a), but not in (xx2b) where it is followed by a nonlow tone.

(xx2) a. *sō nàmàgèwⁿ*

go.Pfv Namagué

‘Go-2Sg to Namagué (village)!’

b. *sò mɔ̄ptì*

go.Pfv Mopti

‘Go-2Sg to Mopti (city)!’

Transitive singular-addressee imperatives likewise begin with the object, with no overt subject. This is the only clause type that begins with an object NP (xx3a-b). As in indicative clauses, 1Sg object *ŋ̀* (+H) raises the tone of a following L-toned verb to H, e.g. *wágá* from *wàgà* in (xx3a).

(xx3) a. *ŋ̀ kwāā* / *wágá*

1Sg hit.Pfv / kill.Pfv

‘Hit-/Kill-2Sg me!’ (< *ŋ̀* (+H), *wàgà* )

b. *sɔ́gɔ́ mɛ̀wⁿ*

milk drink.Pfv

‘Drink-2Sg the milk!’

Prohibitives (i.e. negative imperatives) and plural-addressee positive imperatives do have overt material preceding the VP. The full set of intransitive imperatives is shown in (xx4). The key inflectional morphemes are *yèⁿ* for plural-addressee positive imperative, and *ma᷆ⁿ* for prohibitives. The latter is preceded by a 2Sg or 2Pl subject pronominal.

(xx4) Imperatives and prohibitives of two intransitive verbs

particle ‘come’ ‘stop’

a. positive, Sg subject (none) *bē tàà*

b. positive, Pl subject *yèⁿ* *yèⁿ bē yēⁿ tàà*

c. negative, Sg subject *ma᷆ⁿ* *āⁿ ma᷆ⁿ bē āⁿ māⁿ tàà*

d. negative, Pl subject *ma᷆ⁿ* *āā ma᷆ⁿ bē* *āā māⁿ tàà*

There is an ambiguity about the grammatical function of *yèⁿ*. It does not resemble the 2Pl pronoun *āā*, so I do not take it to be a pronominal as such. It could be treated as a post-subject inflectional particle occupying the same linear position as prohibitive *ma᷆ⁿ*. There are similar difficulties in many languages of the zone in identifying and glossing morphemes that occur in plural-addressee imperatives.

In transitive imperatives, the grammatical morphemes in (xx4b-d) above are immediately followed by objects. Examples are in (xx5). *yèⁿ* is subject to LL#L-to-LM#L before an L-tone (xx5b).

(xx5) a. *yèⁿ jénáⁿ kwāā*

Imprt.2Pl child hit.Pfv

‘Hit!-3Pl the child!’

b. *yēⁿ yùgòⁿ kwāā*

Imprt.2Pl woman hit.Pfv

‘Hit!-2Pl the woman!’

c. *āⁿ ma᷆ⁿ jénáⁿ kwāā*

2Sg Proh child hit.Pfv

‘Don’t-2Sg hit the child!’

d. *āⁿ māⁿ yùgòⁿ kwāā*

2Sg Proh woman hit.Pfv

‘Don’t-2Sg hit the woman!’

Two imperative verbs cannot be combined in the same seamless way that two perfectives (xx6a) or two futures (xx6b) can. Instead, the second of two notional imperatives is expressed by a subjunctive clause with *gālà* (xx6c‑d). Elsewhere, subjunctive clauses also indirect commands to third parties and quoted imperatives like ‘he told me to go up’.

(xx6) a. *[à dīgɛ̄] [à tāwⁿ]*

[3Sg eat.Pfv] [3Sg ascend.Pfv]

‘He/She ate and (then) went (away).’

b. *[à gà bē dīgɛ̄] [à bè tāwⁿ]*

[3Sg Ipfv Fut eat.Pfv] [3Sg Fut ascend.Pfv]

‘He/She will eat and (then) go up.’

c. *dīgɛ̄ [āⁿ gālà tāwⁿ]*

eat.Pfv [2Sg Sbjn ascend.Pfv]

‘Eat-2Sg and go up!’

d. *[yèⁿ dīgɛ̄] [āā gālà tāwⁿ]*

[2Pl.Imprt eat.Pfv] [2Pl Sbjn ascend.Pfv]

‘Eat-2Pl and go up!’

Because transitive imperatives are the only construction with clause-initial objects, the forms of non-second-person pronominal objects are exemplified in (xx7a) and for plural addressee in (xx7b). The combinations in (xx7b) are fused and the *yèⁿ* morpheme does not rise to M-tone before an L-toned object pronominal. Reflexive imperatives are (xx7c) for singular addressee and (xx7d) for plural addressee.

(xx7) a. *ŋ̀* / *ē* / *à* / *è kwāā*

1Sg/1Pl/3Sg/3Pl hit.Pfv

‘Hit-2Sg me/us/him-or-her/them!’

b. *yè=ŋ̀* / *yè=ē* / *yà=à* / *yè=è kwāā*

Imprt.2Pl=1Sg/=1Pl/=3Sg/=3Pl hit.Pfv

‘Hit-2Pl me/us/him-or-her/them!’

c. *āⁿ ɲínī*

2SgObj bathe.Pfv

‘Bathe-2Sg (yourself)!’

d. *yà =ā ɲīnī*

Imprt.2Pl 2PlObj bathe.Pfv

‘Bathe-2Pl (yourselves)!’

For quoted imperatives see §17.xxx. For indirect commands and imprecations, see §xxx.

#### *hm̄* ‘here, take this!’

*hm̄* is a specialized imperative uttered when the speaker hands something to the addressee, cf. English *here!* and French *tiens!* or *tenez!*. It is pronounced with lips closed during the syllabic rime after a brief aspiration.

It has a plural imperative form *yèⁿ hm̄*, but it cannot be negated. The only way to add an “object” is to combine *hm̄* with a presentative clause.

(xx1) *hm̄ māŋgòrò kāy*

here! mango Prsntv

‘Here! (Take) a mango!’

### Hortatives

#### Hortative (*kèyⁿ* )

In the first inclusive plural hortative (‘let’s VP!’), hortative morpheme *kèyⁿ* replaces the normal subject pronoun (xx1a‑d). It regularly becomes *kèȳⁿ* by Final Tone-Raising before an L‑tone. There is no difference between singular and plural addressees.

(xx1) a. *kèȳⁿ yàwⁿ* / *tàwⁿ*

Hort descend.Pfv / stand.Pfv

‘Let’s go down!/stop!’

b. *kèyⁿ bāā* / *bē*

Hort exit(v).Pfv / come.Pfv

‘Let’s go out!/come!’

c. *kèyⁿ tēē dīgā*

Hort meat eat.Pfv

‘Let’s eat the meat!’

d. *kèȳⁿ kùù dīgā*

Hort meal eat.Pfv

‘Let’s eat a meal!’

‘Let’s go!’ is the highest-frequency hortative. It is slightly irregular: *kè* instead of *kèyⁿ*, and H‑toned *só* instead of expected L‑toned perfective *sò* (cf. *ē sò* ‘we went’). A specific locational expression may be added. *kè só* optionally assimilates vocalically to *kò só*.

(xx2) *kè só (síbɛ̀wⁿ)*

Hort go.Pfv (market.Loc)

‘Let’s go (to the market)!’

Hortatives are negated by *ē ma᷆ⁿ*, consisting of regular 1Pl *ē* plus the same negative marker *ma᷆ⁿ* used in prohibitives (2Sg *ā ma᷆ⁿ*, 2Pl *āā ma᷆ⁿ* ).

(xx3) a. *ē māⁿ yàwⁿ* / *tàwⁿ*

1Pl **Proh** descend.Pfv / stand.Pfv

‘Let’s not go down!/stand up!’

b. *ē ma᷆ⁿ bāā* / *bē*

1Pl Proh exit(v).Pfv / come.Pfv

‘Let’s not go out!/come!’

c. *ē māⁿ sò*

1Pl Proh go.Pfv

‘Let’s not go!’

### Non-second person-subject deontics

#### Wishes with third-person agent

A wish, blessing, curse, or other imprecation involving a third-person agent is expressed with subjunctive *gālà* if positive, and with prohibitive *ma᷆ⁿ* if negative.

(xx1) a. *ālà gālà ē yìràwⁿ*

God **Sbjn** 1PlObj help.Pfv

‘May God help us!’

b. *à gālà tāwⁿ*

3SgSbj **Sbjn** ascend.Pfv

‘May he/she go up!’

c. *à ma᷆ⁿ tāwⁿ*

3SgSbj **Proh** ascend.Pfv

‘May he/she not go up!’

These wishes have the same form as quoted imperatives (jussives), as in ‘I told Seydou (not) to come’. See §17.1.4.1 for this construction. The similarity in form suggests the possibility that wishes like (xx1a-b), which consist of a single overt clause, are reduced from biclausal constructions with a higher ‘say’ clause and a quoted imperative. However, one might argue against this on cultural grounds when ‘God’ is the subject as in (xx1a).

#### Clarifications with a first-person subject

A first-person agent occurs when the speaker seeks clarification or confirmation of a wish or command from an interlocutor.

(xx1) a. *ŋ̀ gālà bē [tēè ní]*

1SgSbj **Sbjn** come.Pfv [tea Inst]

‘Should I bring the tea?’ (i.e. do you want me to bring the tea?)

b. *ŋ̀ ma᷆ⁿ bē [tēè ní]*

1SgSbj **Proh** come.Pfv [tea Inst]

‘Should I not bring the tea?’ (i.e. do you want me to not bring the tea?)

# Clause, VP, and predicate structure

## Clausal constituents

Constituent order is S-infl-O-V-X. The “infl” position is empty in perfective positive intransitive main clauses and sometimes in perfective positive transitive clauses. There is a single preverbal object slot; if a second “object” is present it must follow the verb as part of the residual X, which also includes adverbs. (xx1a) is S-V-Adv. (xx1b) is S-O-V-Adv. (xx1c) is S-infl-O-V-PP. The negative sentence (xx1d) is S-infl-V-PP.

(xx1) a. *sèēdù bē dìgēwⁿ*

S come.Pfv yesterday

‘Seydou came yesterday.’

b. *sèēdù [sɔ̀gɔ̀-lɛ̄wⁿ bòndò] kūlēwⁿ dìgēwⁿ*

S [sheep neck] cut.Pfv yesterday

‘Seydou slaughtered (=cut the throat of) the sheep yesterday.’

c. *ŋ́= nā sèēdù kò [wōlē nī]*

1Sg =Sbj/Obj S give.Pfv [money Inst]

‘I gave Seydou the money.’ (= ‘I furnished Seydou with the money.’)

d. *sèēdù tè bē [tēè nì]*

S PfvNeg come.Pfv [tea Comit]

‘Seydou didn’t bring the tea.’

### Subjects

#### Subjects in indicative main clauses

The 1Sg clitic pronominal is *ŋ́* for perfective positive subject, *ŋ̀* for other subjects, and *ŋ̀* (+H) for objects, possessors, and postpositional complements. With this exception, there is no difference in form for NPs in subject versus object function. Nevertheless, it is easy to distinguish subjects from objects on the basis of their linear position and some other properties.

Subjects, both pronominal and noun-headed, occur in a fixed clause-initial position. Except in imperatives and a few subordinated constructions, an overt nonzero subject is obligatory. Subjects are preceded only by elements of the types listed in (xx1).

(xx1) a. temporal adverbs and adverbial phrases (e.g. ‘today’, ‘after the holy day’)

b. discourse markers (e.g. *ŋgàà* ‘but’)

c. optional polar interrogative markers

d. topicalized NPs and adverbials

Since temporal adverbs and adverbials more commonly occur in absolute clause-final position, when they do precede subjects they may be topicalized, at least in some cases.

Subjects are immediately followed by any of a number of inflectional morphemes, marking aspect and polarity for indicatives and some modals. The main ones are listed in (xx2).

(xx2) a. indicative

*gà* imperfective positive

*nà* imperfective negative

*tè* perfective negative

b. *gālà* subjunctive

*ma᷆ⁿ* prohibitive

It is possible for the post-subject inflectional “slot” to be empty. This is the case in perfective positive main clauses, especially with intransitive verbs like ‘go’ (xx3). In perfective positive intransitives, the subject NP is immediately followed by the verb or other predicate.

(xx3) a. *sèēdū sō nɔ̀gī-ỳ*

S go.Pfv village-Loc

‘Seydou went to the village.’

In perfective positive transitive clauses, the empty post-subject inflectional “slot” is often, but not always, filled by a bidirectional case-marker. This morpheme takes the form *nàⁿ* after 1Sg *ŋ́* (which has high tone only as perfective positive subject), and the form *yè* after all other subjects.

(xx4) *ē yē= è kày*

1Pl Sbj/Obj 3Pl see.Pfv

‘We saw them.’

Singular-addressee imperatives lack overt subjects, and also lack an overt modal marker. Plural-addressee imperatives have a morpheme *yèⁿ* that precedes the subject. It is difficult to gloss this morpheme, since it is unrelated to the usual 2Pl pronominal *āā*. I gloss it as Imprt.Pl, treating it as a portmanteau. Prohibitives (negative imperatives) do have overt second person subjects, 2Sg *āⁿ* and 2Pl *āā*, preceding the prohibitive morpheme. There is likewise a difficulty in glossing hortative *kèyⁿ*, which has no clear connection to 1Pl *ē*. Again, in negative hortatives 1Pl ē does appear, before the prohibitive morpheme. See §10.4.1 and §10.4.2 for more on imperatives and prohibitives.

“Subject” as a syntactic category is relevant to anaphora. Reflexive objects and possessors, which have a distinctive form as least for 3Sg, are normally coindexed to clausemate subjects, though under limited conditions they may instead be coindexed to clausemate objects (§18.1).

Since reflexive objects can occur in imperative as well as indicative clauses, the preponderance of evidence supports recognition of imperative subjects, even if covert.

#### Temporal and meteorological collocations

Unusual subject-verb collocations denote transitions between day and night. In (xx1a), the noun functioning as subject elsewhere means ‘year’. In (xx1b), the subject is a short form of the usual noun for ‘night’, *wùù-tīnā*.

(xx1) a. *jīīⁿ kīyɛ̄*

year pass.Pfv

‘Day has broken.’

b. *wùù túⁿ*

night be.lost.Pfv

‘Night has fallen.’

Collocations with ‘sun’ as subject are in (xx2). The term for ‘sun’ as a celestrial body is *kùgū‑ɲìyɛ̀wⁿ* ~ *kùgū‑ɲɛ̀wⁿ*, literally “daytime-head.” In the sense ‘blazing hot sun (at mid-day)’ it is replaced by *kùgù‑lɛ̄wⁿ*, with an ending elsewhere diminutive in sense (§xxx). (xx2c) has simple *kùgù* as subject.

(xx2) a. *kùgū-ɲìyɛ̀wⁿ tāwⁿ*

daytime-head ascend.Pfv

‘The sun has risen.’ (= ‘It has dawned.’)

b. *kùgū-ɲìyɛ̀wⁿ sāgā*

sun-head lie.down.Pfv

‘The sun has set.’

c. *kùgū tàà-nà*

daytime stand-Stat

‘The sun is at its zenith. (mid-day)

(xx2a-b) are not reflexive object constructions with possessed ‘head’ as object (§18.xxx). This is shown by the positive of perfective negative tè in e.g. *kùgū-ɲìyɛ̄wⁿ tè tāwⁿ* ‘the sun has not risen.’. (xx2c) has a stative verb; the active counterpart is *kùgū tàà* ‘the sun has reached its zenith’.

Expressions with ‘rainy season’ (roughly June to September) as subject are in (xx3). Verbs glossed ‘arrive’ in languages of this zone have a primary sense ‘arrive at the door or gate (of a house)’, i.e. waiting to be invited in.

(xx3) a. *kāāgā* *kìyɛ̀wⁿ*

rainy.season arrive.Pfv

‘The rainy season is about to begin.’ (around late May) (< *kāāgà* )

(local French: *l’hivernage s’annonce*)

b. *kāāgà dùwɔ̀*

rainy.season enter.Pfv

‘The rainy season has begun.’ (timing variable, often June or July)

c. *kāāgà tāwⁿ*

rainy.season ascend.Pfv

‘The rainy season is over.’ (e.g. late October)

Expressions with ‘harvest (n)’ as subject are in (xx4). They are similar to those for ‘rainy season’ above, except that there is a second option (‘descend’) in (xx4b). The reference is to the main millet harvest when everyone is in the fields.

(xx4) a. *jààmúndè kìyɛ̀wⁿ*

harvest(n) arrive.Pfv

‘The harvest season is not far off.’ (around end of September)

b. *jààmúndè yàwⁿ / dùwɔ̀*

harvest(n) descend.Pfv / enter.Pfv

‘It is harvest season.’ (October)

c. *jààmúndè tāwⁿ*

harvest(n) ascend.Pfv

‘The harvest season is over.’ (November)

Ambient temperature extremes are phrased with ‘cold (n)’ and ‘sun’ as subjects of the verb ‘descend’, in the sense ‘come down (to us), become manifest’..

(xx5) a. *mùù gā yàwⁿ*

cold(n) be descend.Pfv

‘It is cold (out).’ (French *il fait froid*)

b. *kùgù-lɛ̄wⁿ gā yàwⁿ*

sun be descend.Pfv

‘It is hot (out).’ (French *il fait chaud*)

‘Rain’ is the subject in (xx6). (xx6a) and (xx6b) are more or less interchangeable.

(xx6) a. *kwàāⁿ sàwⁿ*

rain(n) fall.Pfv

‘Rain fell.’

b. *kwàāⁿ bē*

rain(n) come.Pfv

‘Rain came (=fell).’

c. *kwàāⁿ tàà*

rain(n) stand/stop.Pfv

‘The rain has ended.’

d. *kwàāⁿ gā mīnī-mīnì*

rain(n) Ipfv drizzling(adv)

‘It is drizzling (raining very lightly).’

The subject in (xx7) is *cīyɛ̄wⁿ* ‘wind’. The same collocations occur with *cɔ̄llɔ̀* ‘dust’, which in this region generally refers to ‘airborn dust, dust storm’. Dust storms are fairly common locally in the dry season.

(xx7) a. *cīyɛ̄ⁿ* / *cɔ̄llɔ̀ kìì*

wind(n) / dust get.up.Pfv

‘The wind/dust (storm) has risen/kicked up (=is blowing).’

b. *cīyēwⁿ* / *cɔ̄llɔ̀ tàà* / *sāgā*

wind(n) / dust stand/stop / lie.down.Pfv

‘The wind/dust (storm) has died down.’

#### Emotion and bodily-emission collocations

Afflictions such as hunger, thirst, and most named diseases are subjects in (xx1), with the afflictee appearing as a comitative PP.

(xx1) a. *dūwōⁿ gā [sèēdù bwāỳ]*

hunger be [S Comit]

‘Seydou is hungry.’

b. *gīlɛ̄wⁿ gā [sèēdù bwāỳ]*

thirst be [S Comit]

‘Seydou is thirsty.’

c. *sɔ̀mū* / *kùrù-kūrū gā [sèēdù bwāỳ]*

Guinea.worm / measles be [S Comit]

‘Seydou has (=suffers from) Guinea worm/measles.’

For ‘fever’ a different construction is used. Possessed ‘body’ is subject. The fact that ‘body’ belongs with the possessor rather than with ‘hot’ is shown by the position of the negator in (xx2b).

(xx2) a. *[sèēdù tùùⁿ] pīyɛ̄-nā nì*

[S body hot-Adj it.is

‘Seydou is running a fever (e.g. malaria).’

b. *[sèēdù tùùⁿ] nà pīyɛ̄-nā nì*

[S body] IpfvNeg hot-Adj it.is

‘Seydou is not running a fever.’

The anger of someone ‘gets up’ and ‘lies down’ (xx3)

(xx3) a. *[sèēdù bìrìsí] kìì (ŋ̀ bwāỳ)*

[S anger] get.up.Pfv (1Sg Comit)

‘Seydou got angry (with me).’

b. *[sèēdù bìrìsí] tè kìì*

[S anger] PfvNeg get.up.Pfv

‘Seydou did not get angry.’

c. *[sèēdù bìrìsí] sāgā*

[S anger] lie.down.Pfv

‘Seydou cooled off (after being angry).’

Euphoria and dysphoria have either the experiencer or his/her ‘body’ or ‘soul, vital spirit’ as subject, with adjectival (including participial) predicates. A negator in each case follows the subject and precedes the adjective. *húyà* in (xx4a‑b) is a Fulfulde borrowing.

(xx4) a. *sèēdù húyà-nā nì*

S happy-Adj it.is

‘Seydou is happy.’

b. *sèēdù nà húyà-nā nì*

S IpfvNeg happy-Adj it.is

‘Seydou is not happy.’

c. *[sèēdù tùⁿ] wàà-nā nì*

[S body] die-Adj it.is

‘Seydou is sad/disappointed.’

d. *[sèēdù ɲōgōⁿ] wōō-nā nì*

[S soul] weep-Adj it.is

‘Seydou is devastated/heart-broken.’

‘X bleed’ is phrased as ‘X’s blood ooze’ (xx5a), or in extreme cases as ‘X’s blood run’ (xx5b). ‘Nose’ can be substituted for ‘blood’ to describe bloody noses (nosebleeds) (xx5c‑d).

(xx5) a. *[sèēdù dēē] gà pūndì*

[S blood] Ipfv ooze.Ipfv

‘Seydou is bleeding.’ (blood is oozing out slowly)

b. *[sèēdù dēē] gà kɯ̀ɯ̀*

[S blood] Ipfv run.Ipfv

‘Seydou is bleeding profusely.’ (blood is pouring out)

c. *[sèēdù ɲīmīnà] pūndì*

[S nose] ooze.Pfv

‘Seydou has gotten a bloody nose.’

d. *[sèēdù ɲīmīnà] tè pūndì*

[S nose] PfvNeg ooze.Pfv

‘Seydou has not gotten a bloody nose.’

A similar construction is used for sweat using the verb ‘exit, go/come out’ (xx7).

(xx7) *[sèēdù wāā] bāā*

[S sweat(n)] exit.Pfv

‘Seydou (has) sweated (=is sweaty).’

The related transitive verb *bālī/bālì* ‘cause to exit, remove, take out’ occurs in (xx8) where the emission comes from a liquid.

(xx8) *tēè* / *dùwɔ̀ púlá bā-lī*

tea / beer foam(n) cause.to.exit.Pfv

‘The tea/beer foamed up.’

Toilet emissions are ‘put (in)’.

(xx9) a. *sèēdù kɔ̀njì syɛ̄*

S urine put.in.Pfv

‘Seydou urinated.’

b. *sèēdù kùwò syɛ̄*

S excrement put.in.Pfv

‘Seydou defecated.’

c. *sèēdù tūwɔ̄ⁿ syɛ̄*

S fart(n) put.in.Pfv

‘Seydou farted.’

‘Burp, belch’ and ‘hiccough’ are expressed by simple intransitive verbs.

#### Intransitives with PP complements

Verbs of conveyance (‘bring’, ‘take/deliver’) are expressed as intransitive motion verbs plus instrumental PPs with *nì*.

(xx1) a. *à bē [tēè nì]*

3Sg come.Pfv [tea Inst]

‘He/She brought the tea.’

b. *à sò [tēè nì]*

3Sg go.Pfv [tea Inst]

‘He/She took the tea away.’

#### ‘(Don’t) care’

In this somewhat opaque construction, a form *pāāⁿ* which can be taken as a possessed noun is followed by *gà* ‘be’ or its negatiion *nà*, then either a dative PP with postposition *tè* or, as default, an unusual morpheme *ỳ* that I hesitantly gloss ‘for it’.

(xx1) a. *[ŋ̀ pāāⁿ] nā ỳ*

[1SgPoss concern(n)] not.be for.it

‘I don’t care (about it).’ or ‘It doesn’t concern me.’

b. *[ŋ̀ pāāⁿ] gā ỳ*

[1SgPoss concern(n)] be for.it

‘I care about it.’

c. *[ŋ̀ pāāⁿ] nā [kwàāⁿ tè]*

[1SgPoss **concern**(n)] not.be [rain(n) **Dat**]

‘I don’t care about the rain.’

### Transitives and ditransitives

The inventory of transitive verbs resembles that of English. Simple transitives include verbs of impact and creation (‘hit’, ‘cut’, ‘make/fix’), perception (‘see’, ‘hear’), acquisition (‘get’), and transportation (‘carry’).

The inflectable ‘say’ verb, *sē/sē*, is transitive. It has an obligatory 3Sg pronominal object (‘say it’) even when followed by quoted matter (§xxx). There is also a ‘said’ quasi-verb *yè* in past positive contexts, but it is not a true verb.

Predicates of conveyance (‘bring X’, ‘take/convey X’) are expressed as ‘come [with X]’ and ‘go [with X]’, i.e. as intransitives with comitative PPs (§xxx).

#### Direct objects of simple transitives

The S-infl-O-V-X linear order of Jenaama makes it easy to identify objects and study their properties, even though there is no accusative marking. Direct object NPs including pronominals follow the subject NP and any post-subject inflectional particles (e.g. imperfective *gà*) and immediately precede the verb.

(xx1) *sèēdū gà sūgō sà-nà bōẁⁿ*

S Ipfv goat buy-Ipfv here

‘Seydou (often) buys a goat here.’

In perfective positive main clauses, which have no overt inflectional particle, a bidirectional case marker may separate the subject NP from the object NP. This marker is *nàⁿ* after 1Sg subject *ŋ́*, and this *nàⁿ* is obligatory before any object (xx2a). After all other subjects, the bidirectional marker is *yè*. Depending on the specific combination, yè is obligatory (e.g. nonpronominal subject with 3Sg object, always *yā= à* ), or else it is optional and usually omitted (xx2b-c).

(xx2) a. *ŋ́ =nàⁿ sūgō sàⁿ dìgéwⁿ*

1Sg **Sbj/Obj** goat buy.Pfv yesterday

‘I bought a goat yesterday.’

b. *sèēdū yā= ā kày*

S Sbj/Obj 3SgObj see.Pfv

‘Seydou saw him/her/it.’

c. *sèēdù (yè) sūgō sàwⁿ*

S (Sbj/Obj) goat buy.Pfv

‘Seydou bought a goat.’

In singular-addressee imperatives, objects are clause-initial (xx3a). This does not happen in indicatives, which require a nonzero subject. In plural-addressee imperatives, the object follows *yèⁿ*, whose status (pronominal or inflectional) is difficult to pin down.

(xx3) a. *sūgō sàwⁿ*

goat buy.Pfv

‘Buy-2Sg the goat!’

b. *yèⁿ sūgō sàwⁿ*

Imprt.2Pl goat buy.Pfv

‘Buy-2Sg the goat!’

Ditransitives add another constituent to the basic transitive frame; see §11.xxx below.

#### *tīẁⁿ/tī-nà* ‘do’ in collocations

This verb occurs in a modest number of collocations with object NPs.

(xx1) a. *ŋ́ =nā [ŋ̀ páⁿ] tīẁⁿ*

1SgSbj Sbj/Obj [1SgPoss **share(n)**] **do**.Pfv

‘I did my part (=my share).’

b. *ŋ́ =nā [ŋ̀ hīnɛ̄] tīẁⁿ*

1SgSbj Sbj/Obj [1SgPoss **capability**] **do**.Pfv

‘I did my best (=what I could).’

c. *à bɔ̀nɛ̀ tīwⁿ sèīỳⁿ*

3SgSbj **trouble** **do**.Pfv road.Loc

‘He/She caused an incident on the way.’ (locative of sèwⁿ )

The ‘do’ verb is not required in the integration of verbs borrowed from Fulfulde, since Fulfulde verbs can be directly borrowed as Jenaama verbs. Predicates meaning ‘hunt (v), go hunting’, ‘work (v)’, and ‘bless, give a blessing’ are single verbs rather than combinations of ‘do’ plus a nominal.

#### Ditransitives

‘Give’ is the prototypical ditransitive verb cross-linguistically, but in Jenaama ‘X give Z to Y’ can be expressed by either of two verbs, each with its own syntax. The verb dō/dō ‘give’ takes a preverbal direct object denoting the theme, and is followed by a dative PP denoting the recipient.

(xx1) *à jīī dō [ŋ̀ té]*

3SgSbj water **give**.Pfv [1Sg **Dat**]

‘He/She gave water to me.’

The other verb is *kò/kò* which is glossed ‘provide, furnish’ because its preverbal direct object denotes the recipient. The theme is expressed as an instrumental PP. In spite of the gloss, this verb is at least as common as *dō/dō* in ‘give’ predicates.

(xx2) *à ŋ̀ kò [jīī ní]*

3SgSbj 1SgObj **provide**.Pfv [water **Inst**]

‘He/She gave me water (provided me with water).’

‘Show’ is *wɔ̄jī/wɔ̄jì*. Its syntax is like that of *dō/dō* rather than like that of *kò/kò* (xx3a). ‘Entrust’ is *kàlìfà/kàlìfà*. Its syntax is like those of dō/dō and wɔ̄jī/wɔ̄jì except that it has a comitative rather than dative PP.

(xx3) a. *à jīī wɔ̄jī [ŋ̀ té]*

3SgSbj water **show**.Pfv [1Sg **Dat**]

‘He/She showed water to me.’

b. *à [ŋ̀ sūgō] kàlìfā [ŋ̀ bwāỳ]*

3SgSbj [3SgReflPoss goat] **entrust**.Pfv [1Sg **Comit**]

‘He/She entrusted his/her goat to/with me.’

#### Valency of causatives

Most suffixal causatives are based on intransitive verbs. The subject of the intransitive (xx1a) becomes the object of the causative (xx1b).

(xx1) a. *jénáⁿ tēwⁿ*

child jump.Pfv

‘The child jumped.’

b. *ŋ́ =nàⁿ jénáⁿ tēn-nī*

1SgSbj Sbj/Obj child jump-Caus.Pfv

‘I made the child jump.’

*bēẁⁿ/bēn-dē* ‘return, go back’ is a lexically reflexive verb, i.e. it has a pro forma reflexive object that is coindexed with the subject (xx2a). The reflexive object is omitted in the causative (xx2b).

(xx2) a. *à ŋ̀ bēwⁿ*

3SgSbj 3SgReflObj return.Pfv

‘He/She went back.’

b. *ŋ́ =nā= à bēn-nī*

1SgSbj Sbj/Obj **3SgObj** return-**Caus**.Pfv

‘I made him/her return.’ = ‘I sent him/her back.’

Among transitive verbs that are readily causatived are ‘eat’ and ‘drink’. The causative of ‘eat’, glossed ‘feed (v)’, is illustrated in (xx1a-b). The specific food is optionally expressed by an instrumental NP (xx1b). This corresponds to the direct object of simple ‘eat’ (xx1c). For the vocalic alternation *dīgā* versus *dīgɛ̄* see §9.xxx.

(xx3) a. *ŋ́ =nàⁿ jénáⁿ dīgɛ̄-nī*

1SgSbj Sbj/Obj child eat-Caus.Pfv

‘I fed the child.’

b. *ŋ́ =nàⁿ jénáⁿ dīgɛ̄-nī [sàbúlá ní]*

1SgSbj Sbj/Obj child eat-Caus.Pfv [**cowpea Inst**]

‘I fed the child with cowpeas (=beans).’

c. *jénáⁿ sàbúlá dīgā*

child **cowpea** eat.Pfv

‘The child ate cowpeas (=beans).

The syntax of *mɛ̀n-nì* ‘cause to drink, give something to drink to (sb)’ is the same.

Other transitives are less frequently causativized. However, my assistant did produce *wɔ̀gɛ̀-nì/wɔ̀gɛ̀-nī* ‘X cause Y [to kill Z]’. Again, the object in the simple transitive (xx4a) becomes an instrumental PP in the causative (xx4b).

(xx4) a. *ŋ́ =nàⁿ kúŋgóló wɔ̀gà*

1PlSbj Sbj/Obj **dog** kill.Pfv

‘I killed the dog.’

b. *à ŋ̀ wɔ́gɛ̀-nì [kúŋgóló ní]*

3SgSbj 1Sg kill-Caus [**dog** **Inst**]

‘He/She made me kill the dog.’

The use of instrumental PPs for “demoted” objects is reminiscent of their use in predicates of conveyance based on motion verbs (‘come [with X]’ = ‘bring X’), where no demotion from transitive object has occurred.

### True versus pro-forma reflexive transitives

True reflexives are special cases of transitive verbs where the object happens to be coindexed with the subject (xx1).

(xx1) *sèēdū yē ŋ̀ kwāā*

S Sbj/Obj **3SgReflOb**j hit.Pfv

‘Seydou hit himself.’

See §18.xxx for this reflexive-object construction.

There are also some verbs that occur only in morphologically reflexive constructions, with no detectable true reflexive sense. These can be called pro forma reflexive verbs. An example is the verb *tūwō/tūwò* ‘depart’ (xx2a-b). This cannot be used as a simple transitive #‘X depart Y’ in any sense (xx2c), though *tūwō/tūwò* can be causativized to add a higher agent (xx2c).

(xx2) a. s*èēdū yē ŋ̀ tūwō*

S Sbj/Obj 3SgReflObj depart.Pfv

‘Seydou has departed.’

b. *sèēdū gà bē ŋ̀ tūwō*

S Ipfv Fut 3SgReflObj depart.Pfv

‘Seydou will depart.’

c. *ŋ́ =nǎⁿ sèēdù tūwē-nī*

# *tūwō*

1SgSbj Sbj/Obj S depart-**Caus**.Pfv

‘I made/had Seydou depart.’ = ‘I sent Seydou away.’

The verbs whose regular (i.e., noncausative) forms occur only in pro-forma reflexive clauses are in (xx2). They do not occur in simple intransitive form. They cannot take nonreflexive objects as transitives, unless first converted into causatives by suffixation.

(xx2) *bēwⁿ/bēn-dē* ‘return, go back’

*kìlɛ̀wⁿ/kìlɛ̄n-nà* ‘finish’

*mīīlà/mīīlà* ‘think, reflect’

*pīrī-pīrī/pīrī-pīrì* ‘(body) writhe’

*tānī/tānì* ‘vomit (v)’

*tūwō/tūwò* ‘depart’

There are also several ambi-valent (labile) verbs that occur in pro-forma reflexives functioning as (mediopassive) intransitives, but that also occur as transitives without having to be causativized. Several examples are in (xx3).

(xx3) verb gloss (transitive) gloss (pro-forma reflexive)

*bàà-būwō* ‘warm (sth) up at a fire’ ‘warm oneself up at a fire’

*dāŋgè/dāŋgè* ‘post, affix, stick (sth) on’ ‘adhere, stick, be posted’

*kāā/kāà* ‘shatter (sth)’ ‘be shattered’

*kɛ̄wⁿ/kɛ̄-nɛ̄* ‘snap, break (sth)’ ‘(sth) snap, break’

*ɲīnī/ɲīnì* ‘bathe (sb), wash (sth)’ ‘bathe (oneself)’

*pāndì/pāndì* ‘make a fissure in (sth)’ ‘become cracked (fissured)’

*pùgèwⁿ/pùgēn-nà* ‘hide (sb, sth)’ ‘hide (oneself)’

*sɛ̀ŋɛ̄ẁⁿ/sɛ̀ŋɛ̄n-nà* ‘tilt (sth)’ ‘tilt, lean over’

*sīndī/sīndì* ‘begin (sth)’ ‘begin’

*sùnù/sùnū-nà* ‘bend (sth, sb) over’ ‘bow, bend (oneself) over’

The verb *kwāā/kɔ̄-lā* ‘hit’ is usually a normal transitive. However, it functions as pro-forma reflexive in a construction with *-bwāỳ*, related to the comitative position *bwāỳ*.

(xx4) *i ye= è kwāā-bwāỳ*

3PlSbj Sbj/Obj 3PlReflObj hit.Pfv-with

‘They assembled.’

The verbs ‘eat’ and ‘drink’ occasionally function as pro-forma reflexive under very limited conditions. *mɛ̀wⁿ/mɛ̀nɛ̀* ‘drink’ is otherwise transitive, requiring an overt object (minimally 3Sg *à* ). ‘Eat’ elsewhere can be transitive *dīgā/dīgà* ‘X eat Y’ or (antipassive) intransitive *dīgɛ̄/dīgɛ̀* ‘X eat’; for the vocalic mutation see §9.xxx. (xx5a-b) show the pro-forma reflexive construction.

(xx5) a. *ŋ́ =nàⁿ ŋ̀ dīgɛ̄*

1SgSbj Sjb/Obj 1Sg eat.Pfv

‘I have eaten.’ [ŋ́nāǹdīgɛ̄]

b. *ŋ́ =nàⁿ ŋ̀ mɛ́wⁿ*

1SgSbj Sbj/Obj 1Sg drink.Pfv

‘I have drunk.’ [ŋ́nām̀:ɛ̄wⁿ]

My assistant rejected versions of (xx5a-b) with any subject other than 1Sg. This makes the reflexive morphosyntactic structure rather opaque, especially in (xx5a) where 1Sg object *ŋ̀* iseffectively inaudible. However, the H-tone of *mɛ́wⁿ* in (xx5b) points to the presence of 1Sg object *ŋ̀* (+H) with its floating H, and this confirms the parsing in (xx5b).

My assistant suggests that (xx5a-b) might be uttered as answers to the questions ‘Have you eaten/drunk?’ uttered by someone who is prepared to offer food or drink but doesn’t know if it is needed. This suggests the possibility that the *nàⁿ* in (xx5a-b) may have originated as a perfect-marking inflectional morpheme, and was secondarily reinterpreted as the bidirectional case marker of 1Sg perfective reflexives. This trail may lead to *nàⁿ* as perfective positive marker in conditional antecedents (§16.1).

### Verb phrase (VP)

VP, consisting of a clause minus subject and post-subject aspect and polarity markers, is relevant to Jenaama syntax especially in connection with some types of chaining and complementation. For example, motion verbs are chained to same-subject VPs in various ways (§15.2). However, the broader tendency in Jenaama is to favor either finite subordinated clauses (including subjects) or nominalized VPs.

## ‘Be’, ‘become’, ‘have’, and other statives and inchoatives

### Identificational predicates

#### ‘It is X’ (*nì* )

Clause-final *nì* occurs in identificational predicates, which minimally have the form *X nì* where X is a noun or NP. If X is a pronoun, it takes independent rather than clitic form. The “subject” is omitted, but contextually clear. I gloss *nì* as “it.is” in interlinears, but it is not specifically third person. An L-toned noun preceding *nì* undergoes Final Tone-Raising (xx1e).

(xx1) a. *màsī nì*

what? it.is

‘What is it?’

b. *sūgō nì*

goat it.is

‘It’s a goat.’

c. *wùlāā nì*

who? it.is

‘Who is it?’

d. *ŋ̀-dɔ́gɔ́ nì*

1Sg it.is

‘It’s me.’

e. *bùwā nì*

shoulderbag it.is

‘It’s a shoulderbag.’ (< *bùwà* )

(xx2) presents the full set of forms with pronominal predicates. Final Tone-Raising applies regularly to third person forms (xx2c) but only sporadically to the forms in (xx2b). This is likely because the M-toned pronominal morphemes in (xx2b) disfavor the raising process in the following *-lɔ̀gɔ̀* morpheme.

(xx2) category ‘it is’

a. 1Sg *ŋ̀-dɔ́gɔ́ nì*

b. 1Pl *ē-lɔ̀gɔ̀ nì* ~ *ē-lɔ̀gɔ̄ nì*

2Sg *āⁿ-dɔ̀gɔ̀ nì* ~ *āⁿ-dɔ̀gɔ̄ nì*

2Pl *āā-lɔ̀gɔ̀ nì* ~ *āā-lɔ̀gɔ̄ nì*

c. 3Sg *wɔ̀gɔ̄ nì*

3Pl *è-lɔ̀gɔ̄ nì*

#### ‘It isn’t X’

The positive identificational predicates described above, with no overt subject, do not have a dedicated negative counterpart. Instead, ‘it isn’t X’ is phrased as ‘Y is not X’ (§11.2.2.2 below), i.e. as a negative copular clause with an obligatory subject, the default being a 3Sg pronominal.

### Equational (copular) clauses

#### ‘Y is X’ (*Y gà X nì* )

The identificational ‘it is X’ construction (preceding section) may be elaborated by adding an overt subject. In this case, the subject is followed by *gà*. This is arguably identical to the imperfective particle *gà* and existential-locational *gà* ‘be (present)’. However, in equational clauses *gà* functions as a copula ‘be’. Like the other two *gà* morphemes, the copula is raised to *gā* before L-tone by Final Tone-Raising. However, both *gà* and *gā* can occur before nonlow tones. A similar variation occurs in existential-locational clauses, where *gā* marks subject focalization. The cases of M‑toned copula *gā* before nonlow tone may also correlate to some extent with subject focalization (xx1f), but the evidence is not clear on this point. Similar variation does not occur with imperfective *gà*, which becomes *gā* only by tone sandhi.

(xx1) a. *kú gā màsī nì*

Dem **be** what? **it.is**

‘What is that?’

b. *ŋ̀ gà káádó nì*

1Sg **be** Dogon **it.is**

‘I am a Dogon.’

c. *ē gà káádó-yè nì*

1Pl **be** Dogon-Pl **it.is**

‘We are Dogon.’

d. *ŋ̀ gā ɲìyɛ̄ⁿ nì*

1Sg **be** head **it.is**

‘I am the chief.’ (< *ɲìyɛ̀wⁿ* )

e. *ē gā ɲìyɛ̀ⁿ-yē nì*

1Pl **be** head-Pl **it.is**

‘We are the chiefs.’

f. *wùlāā gā kēbē-yāⁿ nì*

who? **be** build-Agent **it.is**

‘Who is a builder?’

#### ‘Y isn’t X’ (*Y nàⁿ X nì* )

Under negation, *gà* is replaced by *nàⁿ* ‘not be’. Its final nasalization distinguishes it from imperfective negative *nà* and from negative existential *nà* ‘not be (present), be absent’. The final nasalization is heard as a homorganic nasal before stops or *l*. In (xx1a), *nàⁿ* ‘not be’ (negative copula) is realized as [nàm] before the labial stop of ‘herder’. In (xx1b-c), there is no similar homorganic nasal consonant before *b*, showing that a different morpheme (negative locational or imperfective negative) is at hand.

(xx1) a. *à nàⁿ būwɔ̄-yā nì*

3SgSbj not.be tend.animals-Agent it.is

‘He/She is not a herder.’ [ànàmbūwɔ̄jānì] (< *būwɔ̄-yà* )

b. *à nà bōẁⁿ*

3SgSbj not.be.Loc here

‘He/She is not here.’ [ànàbōẁⁿ]

c. *à nà bē*

3Sg IpfvNeg come.Ipfv

‘He/She doesn’t come.’ [ànàbē]

Negative copula *nàⁿ* is treated as bimoraic and can therefore become <LM>-toned *nǎⁿ* before an L-tone by Final Tone-Raising.

(xx2) *à nǎⁿ sɔ̀gɔ̀-yà nì*

3Sg not.be cultivate-Agent it.is

‘He/She is not a farmer.’

Corresponding to identificational *X nì* ‘it is X’ with no overt subject, the only negative counterpart is a negative equational clause of the type *à nà X nì* ‘he/she/it isn’t X’, with 3Sg subject pronominal *à*.

(xx3) *à nàⁿ sūgō nì*

3SgSbj not.be goat it.is

‘It isn’t a goat.’

Final Tone-Raising does not usually apply audibly before *nì* in negative ‘it isn’t X’. This is likely because *nàⁿ* itself undergoes the raising process, to <LM>-toned *nǎⁿ*, before an L-toned noun, and this disfavors another application of the process to the syllable preceding *nì*. Compare positive (xx4a), where ‘cow’ is tone-raised, with negative (xx4b), where *nàⁿ* but not ‘cow’ is tone-raised.

(xx4) a. *nàā nì*

cow it.is

‘It’s a cow.’ (< *nàà* )

b. *à nǎⁿ nàà nì*

3SgSbj not.be cow it.is

‘It isn’t a cow.’

### Locational-existential ‘be’

The constructions described below express ‘X be (present) [in a location]’. In the limiting case where the location is nonspecific, free translations of the type ‘X exists’ or ‘there is/are some X(x)’. The key morphemes are post-subject *gà* (positive) and *nà* (negative). This pairing is related to

#### ‘Is/are (present)’ (*gà* ~ *gā* )

The basic locational ‘be (present)’ verb occurs as *gà* before nonlow tone and (due to Final Tone-Raising) as *gā* before L‑tone. However, it is also M-toned *gā* when clause-final (‘be present’), or when the preceding NP is focal.

In the typical locational construction, *gà* is followed by an overt locational expression, the defaults being *gà bōẁⁿ* ‘be here’ (xx1a) and *gà yāẁⁿ* ‘be there (definite)’. In the absence of focalization, *gà* is raised to *gā* only by tone sandhi (Final Tone-Raising) before an L‑tone, as in (xx1b). If no overt locational expression is present, the M-toned clause-final form *gā* is used (xx1c). This can be freely translated as ‘X be present (here/there)’ or as existential ‘There is (some) X’. Finally, if the subject is focalized, M-toned *gā* occurs even before a nonlow-tone (xx1d‑e), but this *gā* is treated as though still L-toned in that Final Tone-Raising applies to a preceding L-toned syllable (xx1d).

(xx1) a. *à gà bōẁⁿ* / *yāẁⁿ*

3SgSbj **be.Loc** here / there.Def

‘He/She/It is here/there.’

b. *à gā nɔ̀gī-ỳ* / *nɔ̀gù-bèwⁿ*

3SgSbj **be.Loc** village-Loc / N

‘He/She/It is in the village / in Namagué.’

c. *à gā*

3SgSbj **be.Loc**

‘He/She/It is present (here/there).’ or ‘There is some.’

d. *wùlāā gā [jūgū kūmà]*

who? **be.Loc** [tree on]

‘Who is up in the tree?’ (< *wùlàà* )

e. *ŋ̀-dɔ́gɔ́ gā [jūgū kūmà]*

1Sg-Indep be.Loc [tree on]

‘I [focus] am up in the tree.’

#### ‘Was/were (present)’ (*kōndō gà* )

*kōndō* ‘stayed’ shifts the time to the past (xx1a), as with other statives and past perfects. *kōndō* takes the inflectional particles. After *kōndō* and before an overt locational, *gà* is optionally omitted (xx1b). When there is no overt locational, it occurs in L-toned form *gà* (xx1c), but this is then subject to misreading as remote perfect *gà* following kōndō in the sense ‘stayed’.

(xx1) a. *ē kōndō gà bōẁⁿ*

1PlSbj **stay.Pfv be.Loc** here

‘We were here.’

b. *ē kōndō bōẁⁿ*

1PlSbj **stay.Pfv** here

[=(a)]

c. *ē kōndō gà*

1PlSbj **stay.Pfv be.Loc**

‘We were present.’

d. *wùlàà kōndō gà bōẁⁿ*

who? **stay.Pfv** **be.Loc** here

‘Who was here?’

#### ‘Is/Are not (present)’ and ‘was/were not (present)’

Negation of present-time locational-existentials is expressed by *nà* replacing *gà* (xx1a). Its tones are exactly like those of *gà*, including *nā* in negative existential sense in the absence of a locational (xx1b).

(xx1) a. *à nà bōẁⁿ*

3SgSbj not.be here

‘He/She/It is not here.

b. *à nā*

3SgSbj not.be

‘He/She/It is absent’ or ‘There is/are none.’

For past time, kōndō is directly negated as *tè kōndō*, which can also mean ‘did not stay’. After *tè kōndō*, *gà* is optionally omitted if it is followed by an overt locational (xx2a), but obligatory if there is no overt locational (xx2b).

(xx2) a. *à tè kōndō (gà) bōẁⁿ*

3SgSbj PfvNeg stay.Pfv (be.Loc) here

‘He/She/It was here.’

b. *à tè kōndō gà*

3SgSbj PfvNeg stay.Pfv be.Loc

‘He/She/It was absent.’ or ‘There was none.’

### ‘Become (noun)’, ‘happen’, and ‘remain’ predicates

#### ‘Remain’ (*kōndō* )

As a simple intransitive verb, *kōndō* means ‘stay, remain’.

(xx1) *à kōndō bōẁⁿ*

3SgSbj remain here

‘He/She remained here.’

*kōndō* can also precede a second verb to shift the temporal perspective to the past (‘X was here’, ‘X was sweeping’, etc.). For this function, see §10.xxx.

#### ‘Become, turn into’ (*pwɔ̀* )

‘Become (something)’, with a noun or NP (rather than an adjective) as complement, is *pwɔ̀*. It becomes *pwɔ̌* [pẁɔ́] by regular tone sandhi before an L‑tone.

(xx1) *sèēdū pwɔ̌ [pùlēⁿ nī]*

S become [bird Inst]

‘Seydou became (= turned into) a bird.’ (< *pùléwⁿ* )

The semantically causative counterpart is noncognate transitive *yàgà* ‘put down’ or *wābì* ‘flip’, with the same final PP as in (xx1).

(xx2) *ŋ́ =nǎⁿ sèēdù wābī [pùlēⁿ nī]*

1Sg =Sbj/Obj S flip.Pfv [bird Inst]

‘I turned Seydou into a bird.’

### Mental and emotional statives

These predicates described below (‘know’, ‘want’, ‘resemble’) have senses that can be construed as stative (aspect-neutral). However, in Jenaama they are expressed by morphosyntactically more or less regular verbs.

#### ‘Know’ (*tùjɛ̀/tò* )

‘Know’ is a regular transitive verb. Minimally, a 3Sg pronominal object is required. In normal contexts the clause has time reference including the present. In stative sense, the imperfective form *tò* is regular.

(xx1) *ŋ̀ gá =à tò*

1SgSbj Ipfv =3SgObj know.Ipfv

‘I know (it/him/her).’

*tò* can mean ‘know (a fact)’ or ‘know, be familiar with (someone)’, cf. French *savoir* and *connaître*. For propositional (factive) complements, see §17.xxx. The familiarity sense is exemplified in (xx2).

(xx2) *ŋ̀ gá sèēdù tò*

1Sg Ipfv S know.Ipfv

‘I know Seydou.’

Negation is regular (imperfective negative).

(xx3) *ŋ̀ ná =à tò*

1SgSbj IpfvNeg 3SgObj know.Ipfv

‘I don’t know (it/him/her).’

For past time stative ‘knew’, *kōndō* ‘stay’ is added as an auxiliary.

(xx4) a. *à kōndō (gà) sèēdù tò*

3SgSbj **stay**.Pfv (Pfv) S know.Ipfv

‘He/She knew Seydou.’

b. *ŋ̀ tè kōndō à tò*

1SgSbj PfvNeg **stay**.Pfv 3SgObj know.Ipfv

‘I didn’t know (it).’

The perfective form is *tùjɛ̀*. It is much less common than *tò* but can be elicited in special contexts.

(xx5) a. *à gà bā =à tùjɛ̀*

3SgSbj Ipfv come 3SgObj know.Pfv

‘He/She will know (it).’ (< *bē* )

b. *ŋ̀ tá =à tùjɛ̀*

1SgSbj PfvNeg 3SgObj know.Pfv

‘I didn’t find out about it.’

What would be a regular causative derivative ‘cause to know’ (#*tò-nì* or whatever) does not exist. However, a suspicously similar verb *tòynì/tòynī* occurs in the specific context of transmitting esoteric knowledge, i.e. initiation into tribal or family secrets (xx6).

(xx6) *kàā yē [ŋ̀ dīyɛ̄ⁿ] tòynì [kɔ̀ɔ̀rɔ̀ ní]*

father Sbj/Obj [3SgReflPoss child] **initiate**.Pfv [secret Inst]

‘The father initiated his son into tribal (or family) secrets.’

*tòynì/tòynī* may be more directly related to the noun tòy ‘intelligence; knowledge’, but both may be distantly related etymologically to *tò/tò* ‘know’.

The absence of an all-purpose causative ‘cause to know; inform’ (cf. English *let X know* and French *faire savoir*) is partially made up for by expressions involving the noun *kúmbā* ‘ignorance, not being aware’ or its suffixal locative *kúmbà‑y*. ‘Inform X’ is phrased as ‘remove X from ignorance’ (xx7a).

(xx7) a. *ŋ́ =nā sèēdū bāgā kúmbà-y*

1SgSbj Sbj/Obj S remove.Pfv **ignorance**-Loc

‘I informed Seydou.’

b. *jɛ̄ⁿ-tībɛ̄ⁿ pwɔ̀ [sèēdù bwāỳ] [kúmbá ní]*

baptism sit.Pfv [S Comit] [**ignorance** Inst]

‘The baptism (christening) took place unbeknownst to Seydou.’

#### ‘Want’ (*pɔ̄gɔ̄*, *màà* ) and ‘need’ (*mùrāārú* )

Two transitive verbs can be used in the genereal sense ‘want (something)’. These are *pɔ̄gɔ̄/pɔ̄gɔ̀* ‘want’ or ‘like’ and *màà/màā* ‘look for, seek’ or ‘(actively) want, try to get’. They occur in the same inflectional frames as other verbs, including perfective (xx1c). However, past stative ‘wanted’ is expressed with kōndō and imperfective verb (xx1d).

(xx1) a. *āⁿ gā màsī màā*

2SgSbj Ipfv what? **look.for**.Ipfv

‘What are you-Sg looking for?’ (= ‘What do you want?’)

b. *ŋ́ nà tēè pɔ̄gɔ̀*

1SgSbj IpfvNeg tea **want**.Ipfv

‘I don’t want/like tea.’

c. *ŋ̀ tá =à màà* / *pɔ̄gɔ̄*

1SgSbj PfvNeg 3SgObj **look.for**.Pfv / **want**.Pfv

‘I didn’t want it.’

d. *à kōndō gà sɔ́gɔ́ màā* / *pɔ̄gɔ̀*

3SgSbj stay.Pfv Pfv milk **look.for**.Ipfv / **want**.Ipfv

‘He/She wanted milk.’

For clausal complements (‘want [to VP]’, ‘want [X to VP]’, see §17.xxx.

‘Need X’ is expressed by an entirely different construction. A possessed form of the noun *mùrāārú* ‘need (n)’ (originally from Arabic) is the subject, followed by *gà* ‘be’ or its negation and then by a comitative PP (‘with X’).

(xx2) a. *[ŋ̀ múrààrú] gà [wɔ́léⁿ bwāỳ]*

[1Sg **need(n)**] be [money **Comit**]

‘I need money.’

b. *[sèēdù mùrāārú] nā [kòmbò bwāỳ]*

[S **need(n)**] not.be [charcoal **Comit**]

‘Seydou doesn’t need any charcoal.’

#### ‘Resemble’ (*dɔ̀gɔ̀* )

In stative contexts (‘resemble’), this transitive verb too normally takes imperfective form (xx1a-b). The perfective tends to mean ‘imitate, act like’ (xx1c).

(xx1) a. *sèēdù gà =ā dɔ̀gɔ̄*

S Ipfv 3SgObj resemble.Ipfv

‘Seydou resembles him/her.

b. *à nā ŋ̀ dɔ́gɔ̀*

3SgSbj IpfvNeg 1SgSbj resemble.Ipfv

‘He/She doesn’t resemble me.’

c. *ì yà =ā dɔ̀gɔ̀*

3PlSbj Sbj/Obj 3SgObj resemble.Pfv

‘They imitated him.’

However, ‘imitate’ is better expressed by a dedicated verb: *bààndīyɛ̀*.

## Quotative verbs

‘Say’ is expressed either by a regular verb sē/sē, compatible with all inflectional categories, or with an invariant quasi-verb *yè* ‘said’ that is only used in perfective positive (i.e. veridical) contexts. See §17.1 for the syntax.

## Adjectival predicates

### Stative adjectival predicates

Tis section focuses on stative predicates of the type ‘X be red/heavy’ etc., as opposed to inchoative (processual) predicates ‘X become red/heavy’.

For *sílē* ‘old’, no stative predicate was elicitable, as opposed to the inchoative verb *sīlē* ‘get old’. For example, *à sīlē* ‘he/she has gotten old’ is used instead of ‘he/she is old’. A similar case is ‘wet’ (inchoative verb *kāā-mā*, modifying *kāā* ).

For *sūmū* ‘foreign, strange’, *tīnāāⁿ* ‘other’, and *tōy* ‘new’, an NP predicate including an overt noun is required (‘is a foreign animal’, etc.).

For some adjectival qualities that presuppose a preceding event or process, an inchoative verb is preferred to a stative predicate. Examples of such inchoatives are *sīlē* ‘get old’, *kāā-mā* ‘get wet; ripen’, *pòrè* ‘get wet’, and *pāā* ‘become full’.

#### Adjectives with *-nā nì*

Stative predicates of basic color terms take the form of identificational predicates, elsewhere typical of nominal predicates (‘be a man/woman’, etc.). The adjective takes participial suffix *‑na*. The identificational (‘it is’) particle *nì* (§11.2.1.1-2) occurs clause-finally. A subject, minimally 3Sg *à*, is required in positive as well as negative clauses. 1Sg subject has *ŋ́* with H-tone in positive predicates, as in perfective positive clauses with active verbs, but unlike imperfective and negative clauses with active verbs which have L-toned *ŋ̀*. There is no plural marking in the predicate. Negation is by *nà* in post-subject position, without the clause-final *nì*. The 1Sg negative has *ŋ̀ nà* with L-toned *ŋ̀* as in the imperfective negative of active verbs.

(xx1) a. *à* / *ē tɔ̀mɔ̀-nā* / *pìyⁿɛ̀-nā* / *kwāā-nā nì*

3SgSbj/1PlSbj red-Ppl / black-Ppl / white-Ppl it.is

‘It is red/black/white.’

b. *ŋ́ tɔ̀mɔ̀-nā* / *pìyⁿɛ̀-nā* / *kwāā-nā nì*

1SgSbj red-Ppl / black-Ppl / white-Ppl it.is

‘I am red/black/white.’

c. *à nā tɔ̀mɔ̀-nà* / *pìyⁿɛ̀-nà* / *kwāā-nā*

3SgSbj Neg red-Ppl / black-Ppl / white-Ppl

‘He/She is not red/white.’

The adjectives with this type of stative predicate are in (xx2). The predicative forms are shown alongside the modifying forms used in N-Adj combinations. Addition of nì ‘it is’ (not shown) in positive predicates raises *‑nà* to *‑nā* by tone sandhi. Predicative *pìyⁿɛ̀‑nà* corresponds to both *pīyⁿɛ̄‑nā* ‘dirty’ and *pīīⁿ* ‘black’ as modifying adjectives; contrast M-toned predicative *pīyⁿɛ̄‑nā* ‘(be) hot’.

(xx2) predicative modifying gloss

a. predicative identical to modifying

*/ML/ tones*

*wwō-nà wwō-nà* ‘dry; hard’

*bīllà-nà bīllà-nà* ‘narrow, tight’

*tāndà-nà tāndà-nà* ‘sour’

*dāātà-nà dāātà-nà* ‘smooth’

*/M/ tones*

*kūmā-nā kūmā-nā* ‘lean, emaciated’

*kɔ̄ɔ̄-nā kɔ̄ɔ̄-nā* ‘clean, clear’

*pīyⁿɛ̄-nā pīyⁿɛ̄-nā* ‘hot’

*wwōmā-nā wwōmā-nā* ‘empty’

*/M/ tones, iterative*

*ɲāāmū-ɲāāmū-nā ɲāāmū-ɲāāmū-nā* ‘multicolored (e.g. spotted, striped)’

b. like (a) but no *-na* in modifying

*ɲīī-ɲīī-nā ɲīī-ɲīī* ‘coarse’

c. predicative L-toned, modifying M-toned

*mwàà-nà mwāā-nā* ‘cold’

*wàà-nà wāā-nā* ‘dead; slow’

*pòrè-nà pōrē-nā* ‘wet’

*kìjì-nà kījī-nā* ‘plump’

*kùrì-nà kūrī-nā* ‘full-strength, undiluted’

*pìyⁿɛ̀-nà pīyⁿɛ̄-nà* ‘dirty’

*iterative*

*yɔ̀rɔ̀-yɔ̄rɔ̄-nā yɔ̄rɔ̄-yɔ̄rɔ̀-nà* ‘loose, slack’

d. like (c), but no *-na* in modifying

*tɔ̀mɔ̀-nà tɔ̄mɔ̄wⁿ* ‘red’

e. more complex cases

*kāā-mā-nā kāā* ‘wet; raw; unripe’

*pāā-nā pān-nā* ‘full’

*pìyɛ̀-nà pīīⁿ* ‘black’

*kwāā-nā kūwōⁿ* ‘white’

*iterative*

*wwōⁿ-mā-nā wwōⁿ-wwōⁿ* ‘empty’

#### Pseudo-reflexive adjectival predicates

Some adjectives have stative predicates that resemble reflexive-object constructions (§18.1). In true reflexives, the reflexive object marker ŋ̀ is limited to coindexation with a 3Sg subject. In these stative predicates, ŋ̀ is generalized to all pronominal subjects. The three plural pronominal categories require bidirectional *yè* between subject and reflexive object (xx1a). The 1Sg form also has its characteristic bidirectional allomorph *nàⁿ*, resulting in *ŋ́=nàⁿ ŋ̀* prior to tone sandhi (xx1b). However, unlike the superficially similar 1Sg reflexive *ŋ́=nàⁿ ŋ̀*(+H), this *ŋ́=nàⁿ ŋ̀* does not raise the tones of a following /L/-melody stem (xx1c). In other words, the final *ŋ̀* in adjectival predicate *ŋ́=nà=ŋ̀* is the same transpersonal “reflexive” morpheme as in the plural-subject cases (xx1a), not the specifically 1Sg object marker *ŋ̀*(+H) that occurs in true reflexives (and ordinary transitives). The bidirectional case marker is omitted in the 3Sg and 2Pl combinations (xx1d‑e), as in true reflexives.

(xx1) a. *ì* / *ē* / *āā yè ŋ̀ cīyɛ̄wⁿ*

3PlSbj / 1PlSbj / 2PlSbj Sbj/Obj ReflObj heavy

‘They/We/You-Pl are heavy.’

b. *ŋ́ nā ŋ̀ cīyɛ̄wⁿ*

1SgSbj Sbj/Obj ReflObj heavy

‘I am heavy.’

c. *ŋ́ nāⁿ ŋ̄ kɔ̀jàwⁿ*

1SgSbj Sbj/Obj ReflObj long

‘I am long (=tall).’

d. *à ŋ̀ cīyɛ̄wⁿ*

3SgSbj ReflObj heavy

‘He/She/It is heavy.’

e. *āⁿ ŋ̀ cīyɛ̄wⁿ*

2SgSbj ReflObj heavy

‘You-Sg are heavy.’

Negation is by what is elsewhere the imperfective negative morpheme *nà* (xx2a‑b). In the 1Sg subject form, positive *ŋ́=nàⁿ ŋ̀* is mainly distinguished from negative *ŋ̀ nà ŋ̀* by the tone of the initial 1Sg pronominal. In all cases the “reflexive” *ŋ̀* becomes *ŋ̄* by regular tone-sandhi before an L‑tone.

(xx2) a. *à nà ŋ̀ cīyɛ̄wⁿ*

3SgSbj **IpfvNeg** ReflObj heavy

‘He/She is not heavy.’

b. *ŋ́ nà ŋ̄ kɔ̀jàwⁿ*

1SgSbj **IpfvNeg** ReflObj long

‘I am not long (=tall).’

Irregularly, ‘(be) good’ is *màyⁿ* in positive predicates but its tones shift to *māỳⁿ* in negative ones. Perhaps the M-tone of original \*ŋ̄ màyⁿ shifted rightward.

(xx3) a. *à ŋ̄ màyⁿ*

3SgSbj ReflObj **good**

‘He/She/It is good.

b. *à nà ŋ̀ māỳⁿ*

3SgSbj IpfvNeg ReflObj **good**

‘He/She/It is no good.’

I have noticed a tendency in the same direction with negative predicates of other nasal-initial predicate adjectives, as with *nà ŋ̄ mìyɛ̀wⁿ* ‘not be thin’ and *nà ŋ̄ ɲìyàwⁿ* ‘not be easy’. The mechanism is that *ŋ̀* fuses with the stem-initial nasal as [m:], [ɲ:], etc., which facilitates the rightward spreading of the M-tone. However, the tone shift has become entrenched only for ‘good’.

Care must be taken to distinguish ‘be good’ from a segmentally identical but semantically opposite verb ‘malfunction (v)’ or ‘be ruined’ (xx4). The main danger is confusion of negative predicative *nà ŋ̀ māỳⁿ* [nàmmāj̀ⁿ] ‘is not good’ as in (xx3b) above with the imperfective negative *nà māỳⁿ* [nàmāj̀ⁿ] ‘does not malfunction’ as in (xx4b).

(xx4) a. *à māyⁿ*

3SgSbj malfunction(v).Pfv

‘It malfunctioned.’ or ‘It was ruined.’

b. *à nà māỳⁿ*

3SgSbj IpfvNeg malfunction.Ipfv

‘It doesn’t malfunction.’

The inventory of adjectives that have predicates of the type described above is (xx5). The predicate adjectives are shown alongside their modifying forms (those that occur in N‑Adj combinations). Negative predicative forms are shown in the middle column only for L‑toned stems. The negative forms are identical to the positive forms except for ‘good’.

(xx5) predicate modifying gloss

positive negative

a. predicate has same form as modifying

*bánū bánū* ‘big (and solid), massive, thick’

*cīyɛ̄wⁿ cīyɛ̄wⁿ* ‘heavy’

*dāāⁿ dāāⁿ* ‘distant’

*kāgājī kāgājī* ‘bitter’

*nɔ̄gɔ̄rɔ̄wⁿ nɔ̄gɔ̄rɔ̄wⁿ* ‘difficult’

b. predicate L-toned, modifying M-toned

*bùlòwⁿ bùlòwⁿ būlōwⁿ* ‘big (in outer dimensions); fat; wide, loose’

*kɔ̀jàwⁿ kɔ̀jàwⁿ kɔ̄jāwⁿ* ‘long’ (variants with *y* for *j*)

c. tones as in (b), plus segmental changes

*kùrùwⁿ kùrùwⁿ kūrūwⁿ* ‘short’

*irregular negative predicate*

*màyⁿ māỳⁿ māɲāwⁿ* ‘good’

d. same tones, but segmental changes

*dēwⁿ dēmōⁿ* ‘sweet’

*ɲīī ɲɔ̄ŋɔ̄* ‘bad, nasty’

e. *-gu* in modifying

*L-toned as predicate*

*kùyⁿ kùyⁿ kūy-gū* ‘deep’

*tùɥⁿ tùɥⁿ tūɥ̀-gù* ‘nearby’

*mìyɛ̀wⁿ mìyɛ̀wⁿ mīyɛ̀-gù* ‘thin’

*ɲìyàwⁿ ɲìyàwⁿ ɲīyɛ̀-gù* ‘easy’

*pùlùwⁿ pùlùwⁿ pūlù-gù* ‘soft’

*dùwɔ̀wⁿ dùwɔ̀wⁿ dūwɔ̀w-gù* ‘small’

*M-toned as predicate*

*pēlūwⁿ pēlū-gū* ‘light(weight)’

#### Past adjectival predicates

As with stative verbs, the time frame for adjectival predicates is shifted to the past with *kōndō* ‘stay’. Adjectives that have identificational predicates (§11.4.1.1) show the same participial form of the stem, but without the final *nì* in the positive. Remote perfect *gà*, if present, follows *kōndō*.

(xx1) a. *à kōndō (gà) tɔ̀mɔ̀-nà* (# *nì* )

3SgSbj **stay**.Pfv (RemPfv) red-**Ppl** (# it.is)

‘He/She/It was red.’

b. *à tè kōndō (gà) tɔ̀mɔ̀-nà*

3SgSbj PfvNeg **stay**.Pfv (RemPfv) red-**Ppl**

‘He/She/It wasn’t red.’

More surprisingly, several pseudo-reflexive adjective predicates optionally shift to participles (of inchoative vebs) when preceded by *kōndō* (xx2).

(xx2) a. *à kōndō (gà) cīē-mā-nā* / *nɔ̄gɔ̄r-āāmā-na* / *kùy-g-ààmà-nà*

3SgSbj **stay**.Pfv (RemPfv) heavy-/difficult-/deep-Inch-**Ppl**

‘He/She/It was heavy/difficult/deep.’

b. *à tè kōndō (gà) cīē-mā-nā* / *nɔ̄gɔ̄r-āāmā-na* / *kùy-g-ààmà-nà*

3SgSbj PfvNeg **stay**.Pfv (RemPfv) heavy-/difficult-/deep-Ø-Inch-**Ppl**

‘He/She/It was not heavy/difficult/deep.’

They may alternatively keep their pseudo-reflexive form when combined with *kōndō*, as in *à kōndō ŋ̀ cīyɛ̄wⁿ* ‘it was heavy’.

The tonal distinction between positive *màyⁿ* ‘be good’ and negative *māỳⁿ* ‘(not) be good’, described in the preceding subsection, is preserved (along with its pseudo-reflexive morphology) in the past forms. There is no participialization.

(xx3) a. *à kōndō [ŋ̄ màyⁿ]*

3SgSbj stay.Pfv [ReflObj **good**]

‘He/She/It was good.’

b. *à tè kōndō [ŋ̀ māỳⁿ]*

3SgSbj PfvNeg stay.Pfv [ReflObj **good**]

‘He/She/It was no good.’

## Possessive predicates

### ‘X have Y’

‘X have Y’ is expressed as ‘T be [in X’s hand]’ (xx1a,c) or as ‘Y be [X-Dative]’ (xx1b,d). For *sūgì‑ỳ*, suffixal locative of *sūgū* ‘hand’, see §8.2.3. For dative postposition *tè* (including 1Sg *ŋ̀ té* ), see §8.1.1.

(xx1) a. *kúŋgóló gà [ŋ̀ sūgì-ỳ]*

dog **be** [1Sg hand-Loc]

‘I have a dog.’

b. *kúŋgóló gà [ŋ̀ té]*

dog **be** [1Sg Dat]

‘I have a dog.’

c. *kúŋgóló nà [ŋ̀ sūgì-ỳ]*

dog **not.be** [1Sg hand-Loc]

‘I don’t have a dog.’

d. *kúŋgóló nà [ŋ̀ té]*

dog **not.be** [1Sg Dat]

‘I don’t have a dog.’

### ‘Y belong to X’ predicates (*pàⁿ nì* )

A predicate of (long-standing) possession, translatable ‘Y belongs to X’ or ‘Y is X’s’, takes the form ‘Y is [X Poss] it.is’. Following the subject Y is positive *gà* ‘be’ or its negation *nà* ‘not be’. This is followed by X denoting the owner, a default possessum *pàⁿ* (§6.2.1.2), and the ‘it is’ clitic *nì*. If X is a pronoun, it takes independent form, compare *ŋ̀ páⁿ* ‘mine’ as default possessum with *ŋ̀‑dɔ́gɔ́ pàⁿ nì* ‘it is mine’. In the positive, Y and *gà* may be omitted if the reference of Y is understood, hence just *[X pàⁿ] nì*. In the negative, *nà* is required and Y is expressed minimally by 3Sg subject pronominal *à*, hence *à nà [X pàⁿ] nì*.

Although the bracketing *Y gà/nà [X pàⁿ] nì*, literally ‘Y is (not) X’s’, is semantically reasonable, *pàⁿ* and *nì* show signs of fusion into a monolithic predicative form *pà(-)nì*. The combination *pàⁿ nì* does not undergo the tone sandhi process Final Tone-Raising to become #*pāⁿ nì*. Also, whereas *pàⁿ* as default possessum has a plural *pàⁿ-yè*, predicative *pàⁿ nì* does not allow pluralization to #*pàⁿ-yē nì* (xx1e).

(xx1) a. *[kɔ̀ⁿ yāmbāà] gā [wùlāā pàⁿ] nì*

[Dem house] be [who? **Poss**] it.is

‘This/That house belongs to who(m)?’

b. *cìɥē gà [ŋ̀-dɔ́gɔ́ pàⁿ] nì*

field be [1Sg-Indep **Poss**] it.is

‘The field is mine.’

c. *à nà [āⁿ-dɔ̀gɔ̀ pàⁿ] nì*

3SgSbj not.be [2Sg-Indep **Poss**] it.is

‘It isn’t mine/yours-Sg.’

d. *[yàmbāā gū] gà [sèēdù pàⁿ] nì*

[house Dem.Def] be [S **Poss**] it.is

‘That house is Seydou’s.’

e. *[yàmbāā gū-yē] gà [sèēdù pàⁿ] nì*

[house Dem.Def-Pl] be [S **Poss**] it.is

‘Those houses are Seydou’s.’

# Comparatives

## Asymmetrical comparatives

### With verb ‘(sur)pass’ (*kīyɛ̄/kīyɛ̀* or stative *kīyɛ̄-nā* )

#### ‘(Sur)pass’ as main verb

The intransitive motion verb ‘X go past, X pass (by), X move on’ is *kīyɛ̄* (perfective) or *kīyɛ̀* (imperfective). As a motion verb, it can mean ‘X pass (by) Y’, where Y is expressed as complement of dative postposition *nà* (§8.1.1.2). An example is (xx1a), which can denote change of position (rank) in a race. (xx1a) can also be used abstractly (‘surpass’) to denote change of rank in a more abstract comparative context not involving literal motion. In the stative form *kīyɛ̄-nā* ‘be more than, outdo’, it denotes static (temporally extended) rank (xx1b).

(xx1) a. *āāmādù kīyɛ̄ [sèēdù nà]*

A **pass**.Pfv [S **Dat**]

‘Amadou passed Seydou.’ (e.g. in a race)

or: ‘Amadou has surpassed Seydou.’

b. *āāmādù kīyɛ̄-nā [sèēdù nà]*

A **pass-Stat** [S **Dat**]

‘Amadou outdoes Seydou.’

default interpretation: ‘Amadou is better than Seydou.’

A domain of comparison, e.g. strength or wealth, may be expressed overtly as a PP with postposition *nìŋīì* ‘in, inside’.

(xx2) a. *āāmādù kīyɛ̄ [sèēdù nà] [sɛ́mbɛ́* / *wɔ́léⁿ* / *tàà-gū nìŋīì]*

A pass.Pfv [S Dat] [strength / money / stand-Nom **inside**]

‘Amadou has moved past Seydou in strength/wealth/height.’

(= ‘Amadou has become stronger/richer/taller than Seydou.’)

b. *āāmādù kīyɛ̄-nā [sèēdù nà] [sɛ́mbɛ́* / *wɔ́léⁿ*  / *tàà-gū nìŋīì]*

A pass-Stat [S Dat] [strength / money / stand-Nom **inside**]

‘Amadou is stronger/richer/taller than Seydou.’

#### ‘(Sur)pass’ as chained verb

When the comparison is about an event type that requires expression by its own verb, like ‘eat’ or ‘give’, the ‘pass’ verb is chained to it in a biclausal construction with *bē*. The context can be quantitative (‘more than Y’) or qualitative (‘better than Y’). If the context is quantitative, the main clause normally includes an extent quantifier. When the main clause has two or more human arguments, the comparandum phrase (‘than Y’) does not overtly indicate which grammatical role is at hand. This accounts for alternative readings of sentences like (xx1b) and (xx1d).

(xx1) a. *āāmādù dīgɛ̄ (yāālōⁿ) [bē kīyɛ̄ [sèēdū nà]]*

A eat.Pfv a.lot [**Chain** **pass.**Pfv [S Dat]]

‘Amadou ate more than Seydou (ate).’

b. *āāmādù yè= ŋ̀ kó máɲɛ̀ [bē kīyɛ̄ [sèēdū nà]]*

A Sbj/Obj 1SgObj give.Pfv a.lot [**Chain** **pass.**Pfv [S Dat]]

‘Amadou gave me more than Seydou (gave me).’

or: ‘Amadou gave me more than (Amadou gave to) Seydou.’

c. *ŋ̀ tēē mɛ̀wⁿ [bē kīy= [āⁿ nà]]*

1Sg tea drink.Pfv [**Chain** **pass.**Pfv [2Sg Dat]]

‘I drank more tea than you-Sg (drank).’

d. *sèēdū yē ŋ̀ kwáá [bē kīy= [āāmādū nà]]*

S Sbj/Obj 1SgObj hit.Pfv [**Chain** **pass.**Pfv [A Dat]]

‘Seydou hit me more than Amadou (hit me).’

or: ‘Seydou hit me more than (Seydou hit) Amadou.’

e. *sèēdù bān-ààmà [bē kīy= [āāmādū nà]]*

S stout-Inch.Pfv [**Chain** **pass.**Pfv [A Dat]]

‘Seydou has gotten fatter than Amadou.’

or: ‘Seydou has grown more than Amadou (has grown).’

f. *āⁿ gā mànàmī [bē kīyɛ̄ [ŋ̀ ná]]*

2Sg Ipfv dance.Ipfv [**Chain** **pass.**Pfv [1Sg Dat]]

‘You-Sg dance better than I (dance).’

The same chain construction is used for some stative adjectival predicates. This does not apply to pseudo-reflexive adjectival predicates, on which see the following section. It does apply to adjectival predicates with participialized adjectives and with final ‘it is’ clitic (xx2a-b).

(xx2) a. *[āⁿ sɔ̀gɔ̀-lɛ̄wⁿ] kūmā-nā nì*

[2Sg sheep] skinny-Ppl it.is

*[bē kīyɛ̄ [[ŋ̀ sɔ́gɔ́-lɛ̄ⁿ] nà]]*

[**Chain** pass.Pfv [[1Sg sheep] Dat]

‘Your sheep-Sg is more emaciated than my sheep (is).’

b. *āāmādū pìyɛ̀ⁿ-nā nì [bē kīyɛ̄ [sèēdū nà]]*

A black-Ppl it.is [**Chain** pass.Pfv [S Dat]]

‘Amadou is darker than Seydou.’

### Comparatives from pseudo-reflexive adjectival predicates

Some adjectives have a special pseudo-reflexive predicate (§11.4.1.2). In the corresponding comparative construction, the verb ‘(sur‑)pass’ is absent. Instead, the regular predicative form of the adjective is followed by the comparandum. The latter is expressed with dative *tè*, not *nà*.

(xx3) a. *áámádù yè ŋ̀ bánú [sèēdù tè]*

A Sbj/Obj **ReflObj** stout [S **Dat**]

‘Amadou is stouter than Seydou.’

b. *ŋ́= nà ŋ̀ kāmnā [sèēdù tè]*

1SgSbj Sbj/Obj **ReflObj** old [S **Dat**]

‘I am older than Seydou.’

This is also the way to compare quantity (numbers or measures). The pseudo-reflexive adjective in this case is *kōⁿ* ‘much’ or ‘many’, which can denasalize to *kō* before a vowel. Plural suffix *-ye* (of variable tone) is usually omitted before *yè* (~ *yē* ) bidirectional case marker (xx2b).

(xx2) a. *jéná-mbí-gé yē ŋ̀ kō [ē tè]*

child-Pl-Pl Sbj/Obj ReflObj **many** [1Pl Dat]

‘The young people outnumber us.’

b. *kúŋgóló(-yé) yē ŋ̀ kōⁿ [yòrògō-yē tè]*

dog(-Pl) Sbj/Obj ReflObj **many** [1Pl Dat]

‘There are more dogs than (there are) cats.’

### Superlative ‘most’, ‘best’

There is no dedicated superlative construction. Something like a superlative reading can be forced by adding an expression denoting or presupposing a pool of individuals, either as possessor or in an adverbial adjunct. An example is ‘village’ as possessor in (xx1).

(xx1) *sèēdù gā [nɔ̀gū dòⁿsò māɲā] nì*

S be [village hunter good] it.is

‘Seydou is the village’s good (=best) hunter.’

## Symmetrical comparatives

### Stative ‘be equal’ (*kāwⁿ* )

*kāwⁿ* ‘equal’ occurs in a pseudo-reflective predicate construction. The subject is plural, either a conjunction of two NPs or an otherwise already plural NP or pronoun. The universal quantifier *sāāⁿ* ‘all’ or ‘both’ occurs at the end of the subject in either case (e.g. *ē sāāⁿ* ‘both/all of us’). If the domain of comparison is understood in context, no further adjunct is needed (xx1a). As in asymmetric comparatives, it is possible to add an overt locative PP specifying the domain of comparison (xx1b).

(xx1) a. *[sèēdū yèⁿ āāmādù sāāⁿ] yè ŋ̀ kāwⁿ*

[S and A **all**] Sbj/Obj ReflObj **equal**

‘Seedu and Amadou are equal.'

b. *[sèēdū yèⁿ āāmādù sāāⁿ] yè ŋ̀ kāwⁿ [tàā nìŋīì]*

*[tàà-gū*

[S and A **all**] Sbj/Obj ReflObj **equal** [stand(-Nom) **inside**]

‘Seedu and Amadou are of the same height.'

c. *[jéná-mbí-gé sāāⁿ] yē ŋ̀ kāwⁿ [ɲìyɛ̄ⁿ-tàā nìŋīì]*

[child-Pl-Pl **all**] Sbj/Obj Refl **equal** [head-stand.Nom inside]

‘All the young people are of the same height.’

### Dynamic ‘become equal’ (*kājàmà* )

The verb *kājàmà/kājàmā* ‘become equal’ denotes the process of convergence of two or more individuals in some measure (xx1a). If the two comparanda are separately syntactically into subject and nonsubject, with the subject denoting the individual most responsible for the convergence, transitive *kājàmà-nì/kājàmà-nī* (causative in form) is used (xx1b). The nonsubject is expressed as a comitative PP ‘with Y’.

(xx1) a. *è kājàmà*

3PlSbj **become.equal**.Pfv

‘They have become equal.’

b. *ŋ̀= nā à kājàmà-nì [āāmādù bwāỳ]*

1Sg Sbj/Obj 3SgObj **be.equal-Caus**.Pfv [A **Comit**]

‘I have equaled Amadou.’

### Adverbial ‘as much (as)’

#### With *jàté* ‘amount’

The noun *jàté* ‘amount, quantity, count’, borrowed from Fulfulde, combines with a possessed NP with default possessum *pàwⁿ* (§6.2.1.2) in this construction. *jàté* may be NP-final, or it may followed by another noun that heads the NP (but has partitive semantic function), like ‘meat’ in (xx1b). In either case, the 3Sg independent pronoun *wɔ̀gɔ̀* is required as the direct object before the final verb, presumably resuming the preceding ‘amount’ NP.

(xx1) a. *āⁿ gā [[ŋ̀ páⁿ] jàté] wɔ̀gɔ̄ dīgà* / *mɛ̀-nɛ̀*

2Sg Ipfv [[1Sg Poss] **amount**] 3Sg.Indep eat.Ipfv/drink-Ipfv

‘You-Sg eat/drink as much as I (eat).’

b. *āⁿ gā [[[ŋ̀ páⁿ] jàté] tēē] wɔ̀gɔ̀ dīgà*

2Sg Ipfv [[[1Sg Poss] **amount**] meat] 3Sg.Indep eat.Ipfv

‘You-Sg eat as much meat as I (eat).’

#### Phrased with ‘likeness’ and factive verbal noun (suffix *-nà* )

Somewhat the same pragmatic effect, but without an overtly quantitative expression, is achieved using similarity expressions (§8.4.1.2). (xx1a) is a simple symmetrical comparison ‘fall(s) like me’, by extension ‘fall(s) as much as I (do)’. (xx1b) is a more interesting construction consisting of a final ‘do’ verb, with a direct object headed by *síí* ‘likeness’ with a “possessor” consisting of factive verbal noun (suffix *‑na*), here with overlaid L‑tone. A literal paraphrase would be “do(es) like my falling.”

(xx1) a. *à gà sēn-dē [hɔ̄nɔ̄ [ŋ̀ nûmɛ̄wⁿ]]*

3Sg Ipfv fall-Ipfv [**like** [1SgPoss **likeness**]]

‘He/She falls like (=as much as) I (fall).’

b. *à gā [ŋ̄ sèn-nà] síí] tī-nà*

3Sg Ipfv [1SgPoss fall-**VblN**] **likeness**] **do**-Ipfv

‘He/She falls as much as I (fall).’ (< *sēn-nā* )

For the regular forms of the factive verbal noun in *-na* (*-nā* or *-nà* ), which can be M- or ML- as well as L-toned depending on the verb, see §4.2.1.4. In the construction exemplified by (xx2b), the factive verbal noun is dropped to L-toned, in this case *sēn-nā* ‘fact of falling’ becoming *sèn-nà*. Likewise *tān-nā* ‘fact of ascending’ becomes *tàn-nà*, *wwō-nā* ‘fact of weeping’ becomes *wwò-nà*, and so forth.

With transitive verbs, an object can be expressed in one way or another. In (xx2a), my assistant preferred to append ‘dog(s)’ as a PP following the final ‘do’ verb. In other cases he did place the object in the “correct” position preceding the nominalized verb (xx2b). However, ‘firewood’ in (xx2b) is really a compound initial (incorporated object), and its tones drop to L along with the tones of the nominalized verb. ‘Beer’ in (xx2c) is likewise a compound initial but since this noun is already L-toned there is no audible tonal change.

(xx2) a. *à gā [ŋ̄ kɔ̀lɛ̀-nà] síí] tī-nà*

3SgSbj Ipfv [1SgPoss hit-**VblN**] **likeness**] do-Ipfv

*[kúŋgól-é bwāỳ]*

[dog-Pl Comit]

‘He beats dogs as much as I (do).’

b. *à gā [[āⁿ sùbà-pɛ̀jɛ̀-nà] síí] tī-nà*

3SgSbj Ipfv [[2SgPoss firewood-split-**VblN**] **likeness**] do-Ipfv

‘He cuts wood as much as you-Sg do.’ (< *sūbā*, *pɛ̄jɛ̄-nā* )

c. *à gā [[āⁿ dùwɔ̀-mɛ̀n-nà] síí] tī-nà*

3SgSbj Ipfv [[2SgPoss beer-drink-**VblN**] **likeness**] do-Ipfv

‘He drinks beer as much as you-Sg do.’ (< *dùwɔ̀* )

When the object is a pronominal, as in (xx3) below, the compound construction with factive verbal noun exemplified by (xx2b‑c) above is awkward. My assistant shifts the ‘like X’ segment to the position following a simple subject-object transitive, as an adverbial adjunct.

(xx3) *à gā= [[āⁿ mū-nū] [hɔ̀nɔ̀ [[ŋ̀ páⁿ] síí]]* 3SgSbj Ipfv [[2SgObj insult-Ipfv] [**like** [[1Sg Poss] **likeness**]]

‘He/She insults you-Sg like me (=as much as I do).’ (< *pàwⁿ* )

# Focalization and interrogation

## Focalization

### Basic syntax of focalization

Focalization of a nonpredicative constituent is most clearly expressed by replacing a simple proclitic pronominal by a full independent pronoun in the same syntactic position. There is no fronting, and no change in verb forms. Under limited conditions, a nonpronominal constituent can be focalized by fronting with the ‘it is’ clitic, compare English clefts of the type ‘it is/was X that …’. This construction is attested with purposive-causal adverbials (§13.1.4).

### Subject focalization

(xx1a) is a simple clause with an unfocalized subject expressed as a pronominal proclitic. Replacing the proclitic by an independent pronoun (§4.3.1) focalizes the subject.

(xx1) a. *ē gā bè tāwⁿ*

1Pl Ipfv Fut ascend.Pfv

‘We will go up.’

b. *ē-lɔ̀gɔ̀ gā bè tāwⁿ*

1Pl-Indep ascend.Ipfv Fut ascend.Pfv

‘It’s we [focus] who will go up.’

Even with careful elicitation, my assistant did not distinguish focalized from unfocalized nonpronominal NPs. In (xx2), for example, the first clause has a focalized independent pronoun, but the contrasting second clause has no overt marking of focalization on ‘Seydou’.

(xx2) *ŋ̀-dɔ́gɔ́ tē sò,*

1Sg-Indep PfvNeg go.Pfv,

*sèēdù sō gà*

S go.Pfv RemPfv

‘I [focus] didn’t go, it was Seydou [focus] who went.’

Presence or absence of the final remote perfective particle *gà* is not relevant to focalization. The absence of *gà* in the first clause in (xx1) is due the fact that it rarely occurs in negative clauses (§10.2.1.2).

### Object focalization

Pronominal objects, like pronominal subjects, can be focalized by substituting an independent pronoun for the usual preverbal pronominal proclitic. (xx1a) has unfocalized object; (xx1b) focalizes the object, which is not fronted. As with subjects, there is no marking of focalized nonpronominal objects, so ‘Seydou’ in (xx1c) is understood to be focalized only by the context.

(xx1) a. *sèēdù yē ŋ̀ kwāā gà*

S Sbj/Obj 1Sg hit.Pfv RemPfv

‘Seydou hit me.’

b. *sèēdù yē ŋ̀-dógó kwāā gà*

S Sbj/Obj 1Sg-Indep hit.Pfv RemPfv

‘It’s me [focus] that Seydou hit.’

c. *āⁿ tē ǹ-dógó kwāā,*

2Sg PfvNeg 1Sg-Indep hit.Pfv,

*āⁿ sèēdù kwāā gà*

2Sg S hit.Pfv RemPfv

‘It wasn’t me [focus] that you-Sg hit, it was Seydou [focus] that you hit.’

### Focalization of PP or other adverbial phrase

Overt focalization is possible with purposive-causal and temporal adverbials. Both types of adverbial are somewhat peripheral to the semantic core of a sentence. Often the focalized adverbial resumes preceding discourse material, as in ‘my father got sick; it’s for that reason [focus] that I came’.

Spatials and other adverbs do not allow focalization.

#### Focalization of purposive-causal expression

A purposive-causal expression is focalized, i.e. clause-initial and followed by the ‘it is’ clitic, in (xx1). *kú lāgà* ‘for/because of that’ resumes preceding discourse that spells out the purpose in detail (not shown).

(xx1) *[kú lāgà nì] ŋ́ bē gà*

[Dem Purp **it.is**] 1SgSbu come.Pfv RemPfv

‘That [focus] is why I came.’

The same construction is used with interrogative *màsī lāgà* ‘why?’ (§13.2.2.2).

#### Focalization of temporal adverb

In (xx1), a temporal relative clause occurs first, headed by a temporal noun ‘(moment in) time’, ‘day’, or ‘year’. The head may occur clause-finally (as shown) or it may be clause-initial; such variation in order is typical of temporal adverbials. The temporal adverbial clause is then resumed and focalized at the beginning of the main clause. Clause-initial *ɲàwⁿ* functions here as a near-distant discourse-definite demonstrative. It is tonally (and semantically) distinct from clause-initial *ɲāwⁿ* ‘if’ in conditionals. Overall the two-clause construction resembles a correlative construction (a specialty of South Asian languages).

(xx1) *ŋ́ bē gà [wɔ́gɔ́tú* / *táláⁿ* / *jīīⁿ màwⁿ]*

1Sg come.Pfv RemPfv [time / day / year **Rel**]

*[ɲàⁿ wɔ́gɔ́tú* / *táláⁿ* / *jīīⁿ (jáátí) nà=] à lɔ̄wɔ̄ⁿ gà*

[Dem.Def time / day / year (exactly) **it.is**] 3SgSbj die.Pfv RemPfv

‘The time/day/year when I came, (at/on/in) that (very) time/day/year [focus] is when he/she died.’ (< *nì à lɔ̄wɔ̄ⁿ* )

As an alternative to *ɲàwⁿ* plus temporal noun, a variant of *wɔ́gɔ́tú* ‘(moment in) time’, namely *wɔ̀gɔ̄* (arguably raised from *wɔ̀gɔ̀* ) may occur in the focal position. It is not attested elsewhere.

(xx2) *[wɔ́gɔ́tú màⁿ] jéná-mbí-gé gā sùwó-lò*

[time Rel] child-Pl-Pl RemPfv sing-Ipfv

*[wɔ̀gɔ̄ nì] ŋ́ kìyɛ̄ⁿ gà*

[**time** it.is] 1SgSbj arrive.Pfv RemPfv

‘When the children were singing, then [focus] is when I arrived.’

*wɔ́gɔ́tū* ‘(moment in) time’ and *wɔ̀gɔ̄* belong to a regionally widespread set of forms ultimately from Arabic *waqt-* ‘time’.

Simple temporal adverbs like ‘tomorrow’ and ‘now’ can occur clause-finally (xx3a) or clause-initially (xx3b) without morphological modification, and can also be focalized with the ‘it is’ clitic (xx3c).

(xx3) a. *ē gā sō ɲàànù*

1Pl Ipfv go.Ipfv **tomorrow**

‘We will go tomorrow.

b. *ɲàànù ē gā sò*

**tomorrow** 1Pl Ipfv go.Ipfv

‘Tomorrow we will go.’

c. *[ɲàànū nì] ē gā sò*

[**tomorrow it.is**] 1Pl Ipfv go.Ipfv

‘It’s tomorrow [focus] that we are going.’

In (xx3a), clause-final *ɲàànù* ‘tomorrow’ can also be realized as *ɲàànú* with a tonal pattern elsewhere associated with polar interrogation. See §13.1.5 below for details.

#### Spatial and manner adverbs not focalizable

Spatial adverbs like *bōẁⁿ* ‘here’ and *yāẁⁿ* ‘there’ cannot be overtly focalized. They occur only at or near the end of clauses, being followed only by any temporal adverb that may be present. The spatial adverbs cannot be fronted, and they have no raised tonal variants. In (xx1) there is no overt marking of focalization.

(xx1) *ŋ̀ gà kōndò bōẁⁿ*

1Sg Ipfv stay.Ipfv **here**

‘It’s here [focus] that I will stay.’

or: ‘I will stay here.’

(xx2) was elicited using the same correlative frame (in French) that successfully produced overtly focalized purposive-causal and temporal expressions. However, the resumptive (discourse-definite) *yāẁⁿ* ‘there’ is clause-final with no overt sign of syntactic focalization, though the optional *jáátī* ‘exactly’ makes semantic focus evident.

(xx2) *[ŋ́ =nāⁿ tìŋgē bày gà gɯ̄ɯ̄ⁿ-mà-gēwⁿ]*

[1SgSbj Sbj/Obj stool leave.Pfv RemPfv place-Link-place]

*ē gā pɔ̀-lɔ̀ [yāẁⁿ (jáátī)]*

1Pl Ipfv sit-Ipfv [**there**.Def (exactly)]

‘(At) the place where I left the stools, (right) there [focus] is where we will sit.’

Manner adverbials are likewise not syntactically focalizable. In (xx3) there is no way to tell whether *kìyɛ̀wⁿ* ‘like this/that’ is focal or not.

(xx3) *ē gā pɔ̀-lɔ̄ kìyɛ̀wⁿ*

1PlSbj Ipfv sit-Ipfv **like.this**

‘We will sit like this.’

or: ‘(Like) this [focus] is how we will sit.’

### “Interrogative” terminal prosody for weak focalization in indicatives

The same phonological and phonetic effects that occur in polar interrogative prosody (§13.xxx) can also apply to the final word of statements that have no hint of interrogation. This is striking given that the default terminal intonational effect on statements is a pitch drop.

This prosodic effect is strongly associated with clause-final temporal adverbs. Unlike other adverbs (e.g. spatial), temporal adverbs can occur clause-initially as well as clause-finally, showing that they are on the outer periphery of their clauses.

In (xx1a) below, repeated with modifications from (xx3a) in §13.1.4.2 above, the clause-final adverb ‘tomorrow’ has either of two tonal forms: *ɲàànù* with the regular lexical /L/ melody, and *ɲàànú*. The latter is also the form this adverb takes clause-finally in polar interrogatives (§13.2.1.2). However, all examples in (xx1a-c) are statements (assertions) rather than questions. The variant *ɲàànú* is ungrammatical (symbol #) in negative statements (xx2b). It is also ungrammatical in the presence of a distinct (semantically) focal constituent such as a content interrogative or a focalized independent pronoun (xx3c-d). In other words, *ɲàànú* is an option only in positive statements without a focalized constituent, aside from polar interrogatives.

(xx1) a. *ē gā sò ɲàànú*

*ɲàànù*

1Pl Ipfv go.Ipfv tomorrow

‘We will go tomorrow.’

b. *ē nā sō ɲàànù*

(# *ɲàànú* )

1Pl IpfvNeg go.Ipfv tomorrow

‘We won’t go tomorrow.’

c. *wùlāā gā sō ɲàànù*

(# *ɲàànú* )

who? Ipfv go.Ipfv tomorrow

‘Who is going tomorrow?’

d. *ŋ̀-dɔ́gɔ́ sō ɲàànù*

(# *ɲàànú* )

1Sg-Indep go.Ipfv tomorrow

‘It’s I [focus] who am going tomorrow.’

The temporal adverbs that have similar tonal variants with the same restrictions are listed in (xx3). *dìgéwⁿ* ‘yesterday’ is already L.H-toned so it cannot express an overt tonal distinction.

(xx3) lexical form raised form gloss

*kɔ̀nɔ̀sè kɔ̀nɔ̀sé* ‘next year’

*ɲàànù ɲàànú* ‘tomorrow’

*sāàgù sāàgú* ‘now’

*sègɔ̀* *sègɔ́* ‘last year’

*tùⁿ túⁿ* ‘again’ (§19.3.1)

*yùrùgù yùrùgú* ‘this year’

The ungrammaticality of tonally raised forms like *ɲàànú* under negation and in the presence of another focal constituent suggests the possibility that the raised forms of temporal adverbs are at least weakly focal.

This tone-raising has also been observed with the deictic manner verb *kìyɛ̀wⁿ/kìyɛ̀‑nà* ‘do like this/that’. See (xx2a-e) in §4.4.3.2 for examples.

## Interrogatives

The following sections in this chapter describe questions that function as main clauses. For quoted questions see §17.1.5. For propositional complements of ‘know’ and ‘not know’, see §17.2.1.1.

### Polar (yes/no) interrogatives

#### Clause-initial *tāmà* or *kòrī* in polar interrogatives

Clause-initial *tāmà* is another mechanism for converting a statement into a yes/no question. It functions like French *est-ce que*, which is also used by younger speakers. When this morpheme is present, there is no tone/pitch rise on the final word of the clause.

(xx1) a. *tāmà āⁿ dīgɛ̄*

**Q** 2SgSbj eat.Pfv

‘Have you-Sg eaten?’

b. *tāmà āⁿ gā sò síbɛ̀wⁿ*

**Q** 2SgSbj Ipfv go.Ipfv market.Loc

‘Are you going to the market?’

*kòrì*, borrowed from Fulfulde, occurs chiefly in greetings but can also occur elsewhere under limited conditions. (xx2) can be said to an addressee who has just stated that he/she has been franctically seeking something. The speaker isn’t sure of the outcome but hopes that the answer is ‘yes’.

(xx2) *kòrì ā= ā kìlɛ̀*

Q 2SbSbj 3SgObj get.Pfv

‘So did you (hopefully) get it?’

#### Polar interrogation by terminal pitch change

Alternatively, polar interrogation may be expressed by a change in pitch on the clause-final word. Whether this pitch change is best described as phonological (i.e. tonal) or extra-phonological, or both at the same time, is an interesting question. To the extent that the process is tonal, it should be expressable in terms of shifts from L or M to H-tone, or from L to M-tone.

Because Jenaama is a verb-final language, all full clauses including interrogatives end in a verb. The presentation below therefore focuses on verbs, but at the end of this section I discuss polar interrogatives based on clause fragments such as nouns.

Shown in phonetic notation, (xx1a) is indicative (i.e. a statement) and (xx1b) is the corresponding pitch-marked interrogative. The audible difference is in pitch level of the final verb. There is no prolongationd (extra duration).

(xx1) a. *[āⁿ kàà] bē*

[2SgPoss father] come.Pfv

‘Your-Sg father has come.’

b. *[āⁿ kàà] bé*

[2SgPoss father] come.Pfv.Q

‘Has your-Sg father come?’

The indicative (xx1a) is subject to downdrift, especially on the final word, which might be represented as *bē↘* or perhaps (with downstep notation) *ꜜbē*. The main question here is whether phonetic *bé* in (xx1b) has a phonological H‑tone or whether it should be analysed (and transcribed) as phonological *bē* (as in xx1a) plus an extraphonological intonational rise (or cancellation of downdrift), which might be transcribed as *bē↗*.

Clause-final indicative verbs of various tone patterns and their intonationally-marked interrogative counterparts are shown in the next few arrays. These arrays assume (for the present) that the interrogatives are produced by tonal processes. In (xx2a-c), we observe that all verbs that begin with an L-tone have interrogatives with L(L…)H, i.e. all L-toned except for a final H-toned syllable or mora. ‘Go’ is the only L-toned superlight *Cv̀* verb; it can only support one tone, and it is the H-tone that appears in the interrogative form.

(xx2) indicative interrogative example gloss

a. indicative L-toned

*monomoraic*

*Cv̀* *Cv́* *sò* → *só* ‘go’ (Pfv/Ipfv)

*bimoraic or heavier*

*Cv̀y* *Cv̀ý kày* → *kàý* ‘see’ (Pfv)

*Cv̀Cv̀* *Cv̀Cv́* *kà-nà* → *kàná* ‘see’ (Ipfv)

*jìŋɛ̀* → *jìŋɛ́* ‘accept’ (Pfv)

*Cv̀NCv̀ Cv̀NCv́ bàndà* → *bàndá* ‘get tired’ (Pfv)

*Cv̀Cv̀Cv̀ Cv̀Cv̀Cv́* *kùlùbɛ̀* → *kùlùbɛ́* ‘knead’ (Pfv)

b. indicative LM-toned

*Cv̀Cv̄ Cv̀Cv́ jìŋɛ̄* → *jìŋɛ́* ‘accept’ (Ipfv)

*Cv̀NCv̄ Cv̀NCv́ bàndā* → *bàndá* ‘get tired’ (Ipfv)

*Cv̀Cv̀Cv̄w Cv̀Cv̀Cv́w* *nùmàsāwⁿ* → *nùmàsáwⁿ* ‘forget’ (Pfv)

c. indicative LML-toned

*Cyv̀v̂ Cv̀v̀v́ cyɛ̀ɛ᷆ⁿ* → *cyɛ̀ɛ́ⁿ* ‘weave (basket)’ (Pfv)

*Cv̀Cv̄Cv̀ Cv̀Cv̀Cv́ gàrībù* → *gàrìbú* ‘beg’ (Pfv/Ipfv)

*Cv̀Cv̀Cv̄Cv̀ Cv̀Cv̀Cv̀Cv́ nùmàsā-nà* → *nùmàsà-ná* ‘forget’ (Ipfv)

Verbs that begin with M-tone are in (xx3). The interrogatives do not distinguish input all-M from input ML. The final syllable is raised to H-tone (see below for nominal compounds where a final bisyllabic sequence is raised to H). The preceding M-toned syllables lower their pitch somewhat (not shown) to enhance the pitch rise at the end, but do not drop to L-tone.

(xx3) indicative interrogative example gloss

a. indicative M-toned

*Cv̄* *Cv́* *bē* → *bé* ‘come’ (Pfv/Ipfv)

*Cv̄v̄* *Cv́v́* *bāā* → *báá* ‘exit (v)’ (Pfv)

*Cv̄Cv̄* *Cv́Cv́* *kīyɛ̄* → *kīyɛ́* ‘pass’ (Pfv)

*Cv̄NCv̄ Cv́NCv́* *kōndō* → *kōndó* ‘remain’ (Pfv)

*heavy stems*

*Cv̄Cv̄Cv̄ Cv̀Cv̀Cv́* *pɛ̄gɛ̄lɛ̄* → *pɛ̄gɛ̄lɛ́* ‘winnow by shaking’ (Pfv)

*Cv̄CCv̄v̄Cv̄ Cv̀CCv̀v̀Cv́ kāmn-āāmā* → *kāmn-āāmá* ‘get old’ (Pfv)

b. indicative ML-toned

*Cv̄Cv̀* *Cv́Cv́* *kīyɛ̀* → *kīyɛ́* ‘pass’ (Ipfv)

*Cv̄NCv̀ Cv́NCv́* *kōndò* → *kōndó* ‘remain’ (Ipfv)

*heavy stems*

*Cv̄Cv̄Cv̀ Cv̄Cv̄Cv́ nīmīsà* → *nīmīsá* ‘regret’ (Pfv/Ipfv)

*Cv̄Cv̄Cv̀ Cv̄Cv̄Cv́* *pɛ̄gɛ̄lɛ̄* → *pɛ̄gɛ̄lɛ́* ‘winnow by shaking’ (Ipfv)

*Cv̄CCv̄v̄Cv̀ Cv̄CCv̄v̄Cv́ kāmn-āāmà* → *kāmn-āāmá* ‘get old’ (Ipfv)

In the minority of indicative clauses that end in an H-tone, this tone is enhanced by a further pitch rise. This is the case with clauses that end with *dìgéwⁿ* ‘yesterday’. (xx4a) and (xx4b) are phonologically (including tonally) identical, but can be distinguished by the slightly above modal tone of the question (xx4b). This is marked by *↗*, by which is meant an extraphonological (intonational) pitch increment, and the interlinear has “.Q” on the final word.

(xx4) a. *sèēdù sō dìgéwⁿ*

S go.Pfv yesterday

‘Seydou left yesterday.’

b. *sèēdù sō dìgéwⁿ↗*

S go.Pfv yesterday.Q

‘Seydou left yesterday?’

For the majority of cases where the polar interrogative conditions a tonal change on the clause-final verb, such intonational effects merely enhance what is already an audible tonal change. Nevertheless, I will show *↗*in the transcription and “.Q” in the interlinear (xx5a-b).

(xx5) a. *āⁿ báynà gà tùwɔ̀bùlōⁿ kà-ná↗*

2SgSbj ExpPf Ipfv elephant see-Ipfv.**Q**

‘Have you-Sg ever seen an elephant?’ (< *kà-nà* )

b. *à dwɔ́↗*

3SgSbj enter.Pfv**.Q**

‘Did he/she go in?’ (< *dwɔ̄* )

When nouns (or other clausal fragments), as opposed to full clauses ending in verbs, are subject to polar interrogative prosody, a more complex situation is revealed. If the noun has stem-wide /L/ or /M/ melody, only the final syllable is tone-raised, consistent with what happens with verbs. However, unlike verbs, nouns in polar interrogatives often prolong their final syllable (symbol →).

(xx6) noun gloss as polar Q

a. *dūgā* ‘rice’ *dūgá→↗*

b. *sààgù* ‘roselle’ *sààgú→↗*

Unlike verbs, nouns may be composite. When the compound final is an M-toned bisyllable, under polar interrogation it is usually raised to H-tone as a whole (not just the final syllable), as in *būrūgù-kúwɔ́ⁿ→↗* (xx6a). L-toned bisyllabic final segments only raise the final syllable (xx6b).

(xx6) noun gloss as polar Q

a. *kūwɔ̄ⁿ* ‘water lily tuber’ *kūwɔ́ⁿ→↗*

*būrūgù-kūwɔ̄ⁿ* ‘type of water lily tuber’ *būrūgù-kúwɔ́ⁿ→↗*

b. *bòndò* ‘neck’ *bòndó→↗*

*pīīm-bòndò* ‘millet grain spike’ *pīīm-bòndó→↗*

This type of prosodic modification of nouns is also found in open-ended lists (enumerations), see §7.1.5.

#### Disjunctive polar interrogatives (*tàā→*, *tàà*, *nà* )

In this construction, two clauses with polarized truth conditions are presented to the addressee as alternatives to choose from. The second is often a simple negation of the former (perhaps abbreviated). Clause-final polar interrogative *tàā→* replaces clause-initial *tāmà*, and the second disjunct begins with *nà* ‘or’.

(xx1) *āⁿ gā sò síbɛ̀wⁿ tàā→,*

2SgSbj Ipfv go.Ipfv market.Loc **Q**,

*nà āⁿ nā sò*

**or** 2SgSbj IpfvNeg go.Ipfv

‘Are you-Sg going to the market, or aren’t you going?’

In the form *tàà*, this particle is used in simple queries without an overt second disjunct. It may have above-modal pitch for an L-toned clause-final particle, but the pitch does not rise in the fashion of (xx1). (xx2) can be used when the speaker needs confirmation that he himself is being summoned by another person. Likewise *kú tàà↗* ‘(you mean) that one (over there)?’ and so forth.

(xx2) *ŋ̀-dɔ́gɔ́ tàà↗*

1Sg-Indep Q

‘(You mean) me?’

#### Tag question

The equivalent (roughly) of an English tag question is expressed by preposing *wàà* or postposing *wāà* to the relevant indicative clause. The speaker suspects that the proposition is true but requests confirmation. For example, (xx1a) or (xx1b) might be used when the speaker has observed the interlocutor walking in the generally direction of a weekly market while carrying products of the sort typically sold there.

(xx1) a. *wàà āⁿ gā sò síbɛ̀wⁿ*

Q 2SgSbj Ipfv go.Ipfv market.Loc

‘You’re going to the market, aren’t you?’

b. *āⁿ gā sò síbɛ̀wⁿ wāà*

2SgSbj Ipfv go.Ipfv market.Loc Q

[=(a)]

Preposed *wàà* does not rise to #*wàā* before an L-tone: *wàà à* (‘he/she …’).

### Content (WH) interrogatives

Content interrogatives normally remain *in situ*, i.e. they are not fronted to clause-initial position.

#### ‘Who?’ (*wùlàà* )

The human WH interrogative noun is *wùlàà*. It occurs in the normal range of syntactic environments for NPs.

(xx1) a. *wùlàà gā sò*

who? Ipfv go.Ipfv

‘Who will go?’

b. *āⁿ wùlāā kàȳ gà síbàwⁿ*

2Sg who? see.Pfv RemPfv market.Loc

‘Who(m) did you-Sg see in the market?’

c. *wùlāā nì*

who? it.is

‘Who is it?’ (e.g. to2 someone knocking at the door)

d. *wùlāā tùgū nì*

who? Past it.is

‘Who was it?’

e. *ē gā sāgà [wùlàà káẁⁿ]*

1Pl Ipfv lie.down.Ipfv [who? chez]

‘At whose place will we spend the night?’

f. *kúú gā [wùlàà kán] nì*

Dem be [who? chez] be

‘This is whose house?”)

When it is understood that multiple individuals are concerned, the plural form *wùlāā yè* is optionally used. Another possibility is ‘who and who?’, *wùlāā [yèŋ̄ wùlàà]*.

#### ‘What?’ (*màsí* ), ‘with what?’, ‘why?’

The nonhuman interrogative noun is *màsí* ‘what?’

(xx1) a. *màsí (yè) ŋ̀ tīⁿ gà*

what? (Sbj/Obj) 3SgReflObj do.Pfv RemPfv

‘What (has) happened?’ (lit. “What has done itself?”) (< *tīẁⁿ* )

b. *āⁿ màsī dīgā gà*

2SgSbj what? eat.Pfv RemPfv

‘What did you-Sg eat?’

c. *kú gā màsí nì*

Dem be what? it.is

‘What is that?’

d. *āⁿ gā màsī tī-nà*

2SgSbj Ipfv what? do-Ipfv

‘What are you-Sg doing?’

With instrumental postposition *ní* (§8.1.2.1) the form is *màsí nī* ‘with what?’ (xx2a). This is tonally distinct from focalized clause-initial *màsí nì* ‘(it is) why?’ (xx2b). The full form for ‘why?’ is *màsī lāgà* (clause-initially *màsī lāgà nì* as focus) (xx2c-d).

(xx2) a. *āⁿ gà cī-lī [màsí nī]*

2SgSbj Ipfv sow-Ipfv [what? **Inst**]

‘With what will you-Sg plant (the seeds)?’

b. *[màsí nì] āādàmà bē gà*

[what? **it.is**] A come.Pfv RemPfv

‘Why did Adama come?’

c. *āⁿ bē gà [màsī lāgà]*

2SgSbj come.Pfv RemPfv [what? **Purp**]

‘Why did you-Sg come?’

d. *[màsī lāgà nì] āⁿ bē gà*

[what? **Purp** **it.is**] 2SgSbj come.Pfv RemPfv

[=(c)]

#### ‘Where?’ (*màtāỳ*, *lāā-mì* , *lāā-màtāỳ* )

*màtāỳ* is the main interrogative for locations. It can be adverbial in either static locative or directional (‘to/from where’) function (xx1a). It can be made predicative by adding the locational ‘be’ quasi-verb *gà* (xx1c).

(xx1) a. *āⁿ gā sō màtāỳ*

2SgSbj Ipfv go.Ipfv where?

‘Where are you-Sg going?’

b. *màtāỳ*

where?

‘Where (is it)?’

c. *āⁿ gā màtāỳ*

2SgSbj be where?

‘Where are you-Sg?’

As an alternative to predicative *gā màtāỳ* ‘be where?’ with locational ‘be’, there are specialized forms *lāā-mì* and *lāā-màtāỳ*, both meaning ‘be where?’. They function as predicates with present-time reference (xx2a). They do not allow aspectual marking (i.e. imperfective positive *gà* ). The *lāā* element has the same form as a topicalizer used in interrogative contexts (§19.1.1.2), but *āā-mì* and *lāā-màtāỳ* cannot be parsed in this fashion. In past-time contexts, only *gà* ‘be’ plus *màtāỳ* is possible (xx2b).

(xx2) a. *āⁿ lāā-mì*

*āⁿ lāā-màtāỳ*

2Sg **be.where?**

‘Where are you?’

b. *āⁿ kōndō gā màtāỳ*

2SgSbj stay.Pfv be **where?**

‘Where were you?’

#### ‘When?’ (‘which time’, etc.)

Interrogatives for time are often specified for scale, e.g. ‘which day?’ or ‘which year?’. For shorter time frames (e.g. likely during the same day), the noun *wɔ́gátū* ‘(moment in) time’ is used as default (xx1a).

(xx1) a. *āⁿ gā bē [mùɔ̀ wɔ́gátū]*

2SgSbj Ipfv come.Ipfv [**which? time**]

‘When will you-Sg come (back)?’

b. *āⁿ gā bē [mùɔ̀ tálāwⁿ]*

2SgSbj Ipfv come.Ipfv [**which? day**]

‘When (on what day) will you-Sg come (back)?’

For ‘which?’see §13.2.2.7 below.

#### ‘How?’ (*-mɛ̀n-* and variants)

The manner interrogative is built from a combination of *mɛ̀n-* and the verb ‘do’ (*tī-ẁⁿ/tī-nà* ). If there is no other main verb, the extended form *à-mɛ̀n-* functions as direct object, and the ‘do’ verb can occur in any inflected form (xx1a-b). The *à‑* may have originated as a 3Sg possessor, but it seems to be frozen synchronically.

(xx1) a. *ē gā à-mɛ̀n tī-nà*

1Pl Ipfv **how?** do.Ipfv

‘What will we do?’

b. *āⁿ à-mɛ̀n tīŋ gà*

1Pl **how?** do.Pfv RemPfv

‘What did you-Sg do?’ (< *tīẁⁿ* )

c. *sèēdù yā= à-mɛ̀n tīŋ gà*

1Pl Sbj/Obj **how?** do.Pfv RemPfv

‘What did Seydoug do?’ (< *tīẁⁿ* )

In the presence of another main verb, the ‘how?’ stem without *à-* is fused with the perfective form of ‘do’ and follows the main verb (xx2). The form *mɛ̀n-tīẁⁿ* may occur in perfective and imperfective clauses. I gloss it simply as ‘how?’.

(xx2) a. *āⁿ gà kāyⁿ mɛ̀n-tīẁⁿ*

how? Ipfv work.Ipfv **how?**

‘How do you-Sg work?’ (< *kāỳⁿ* )

b. *āⁿ bē gà mɛ̀n-tīẁⁿ*

2Sg come.Pfv RemPfv **how?**

‘How did you-Sg come?’

With topic-subject, which might happen to be 3Sg *à*, the form *mɛ̀n-tīẁⁿ* may also function as complement of the ‘it is’ clitic (§11.2.1.3) as in (xx3a‑c). A past-time counterpart with kōndō (§10.3.2) is (xx3d).

(xx3) a. *à mɛ̀n-tīn nì*

3Sg **how?** it.is

‘How is it?’

b. *è mɛ̀n-tīn nì*

3Pl **how?** it.is

‘How are they?

c. *dīgɛ̄-pùwɔ̄ mɛ̀n-tīn nì*

food **how?** it.is

‘How is the food?’

d. *à kōndō gà mɛ̀n-tīẁⁿ*

3Sg stay.Pfv be **how?**

‘How was it?’

#### ‘How much/many?’ (*jèwⁿ* )

The interrogative for quantities is *jèwⁿ*. The quantity may be a measure or a number. *jèwⁿ* may follow a noun. The iterative form is distributive *jèn̄-jèwⁿ* ‘how much/many each?’ (xx1e).

(xx1) a. *jèn̄ nì*

**how.much?** it.is

‘How much is it?’

b. *jèyⁿ-yē nì*

**how.much?-Pl** it.is

‘How many are they?’ (e.g. counting sheep)

c. *āā ɲīmī jèŋ gà bē*

2Pl person **how.much?** Ipfv come.Ipfv

‘How many of you-Pl are coming?’

d. *āⁿ [sɔ̀gɔ̀-lɛ̄n jèŋ̄] sàŋ gà*

2Sg [sheep **how.much?**] buy.Pfv RemPfv

‘How many sheep did you-Sg buy?’ (< *sɔ̀gɔ̀-lɛ̄wⁿ, sàwⁿ* )

e. *sāŋgòlō gā jèn̄-jèn̄ nì*

broom be **how.much?-how.much?** it.is

‘How much (each) are the brooms?’ (distributive, §4.6.1.6)

Ordinal adjective ‘how-manieth?’ (Fr *quantième*) is *jèyⁿ-ànà*. This is the more-or-less regular ordinal formation with suffix *-ànà* (§4.6.2.2).

#### ‘Which?’ (*mwɔ̀ … sīī* )

The interrogative identificational adjective is *mwɔ̀* preceding the noun, as in *mwɔ̀ sūgō* ‘which goat?’ It becomes *mwɔ̌* with <LM> tone before an L‑tone. The noun is often but not always followed by *sīī* ‘kind’ (locative *sī-ỳ* ).

(xx1) a. *āⁿ gà bā-lā [mwɔ̌ nɔ̀gù sī-ỳ]*

2SgSbj Ipfv exit-Ipfv [**which?** village **kind**-Loc]

‘What (=which) village are you-Sg from?’

b. *āⁿ [mwɔ̌ nàà sīī] tōlō gà*

2SgSbj [**which?** cow **kind**] sell.Pfv RemPfv

‘Which cow did you-Sg sell?’

c. *āⁿ gā à pɔ̄gɔ̀*

2SgSbj Ipfv 3SgObj want.Ipfv

*āⁿ gālā [mwɔ̌ nàà sīī] sàwⁿ*

2SbSbj Sbjn [**which?** cow **kind**] buy.Pfv

‘Which of my cows do you-Sg want to buy?’

d. *[mwɔ̌ yùgòⁿ sīī] yà= āⁿ kēy gà*

[**which?** woman **kind**] Sbj/Obj 2SgObj call.Pfv RemPfv

‘Which woman called you-Sg?’ (< *kēỳ* )

e. *āⁿ [mwɔ̌ yùgòⁿ sīī] kēy gà*

2Sg [**which?** woman **kind**] call.Pfv RemPfv

‘Which woman did you-Sg call?’

# Relativization

Relative clauses are normally restrictive (not parenthetical).

## Basics of relative clauses

Relative clauses are internally headed. The relative morpheme *màwⁿ* (singular) or *mà-lè* (plural) is is positioned at the end of the head NP, which remains *in situ* (i.e. in its regular position within the clause). In perfective positive relatives, *gà* follows the verb.

Examples of simple subject relatives are in (xx1a-b). In both examples, tone sandhi process LL#L to LM#L applies repeatedly. Since this process normally applies at word boundaries, we transcribe *màwⁿ* and *gà* as separate words. However, we bracket *màwⁿ* with the head and *gà* with the verb.

(xx1) a. *[yùgōⁿ màn̄] [dìgɛ̀mū gà]*

[woman **Rel**] [speak.Pfv **Rel**]

‘the woman who spoke’ (< *yùgòⁿ*, *dìgɛ̀mù* )

b. *[yùgò-mbē mà-lē] [dìgɛ̀mū gà]*

[woman-Pl **Rel-Pl**] [speak.Pfv **Rel**]

‘the women who spoke’ (< *yùgò-mbè*, *dìgɛ̀mù* )

The clause may contain postverbal constituents such as ‘yesterday’ in (xx2). If so, they follow *gà*, which is therefore not necessarily clause-final.

(xx2) *[yùgōⁿ màn̄] [dìgɛ̀mū gà] dìgéwⁿ*

[woman Rel] speak.Pfv Rel] yesterday

‘the woman who spoke yesterday’

## Internal head NP

### Restrictions on the head of a relative clause

Under limited conditions an independent pronoun can function as relative head.

(xx1) a. *[[ē-lɔ̀gɔ̄ mà-lē] gà nɔ̀gī] mùrāārú]*

[[1Pl-Indep Rel-Pl] be village.Loc need(n)]

*n= [[āā kɛ́ɛ́rán] tè]*

not.be [[2PlPoss benevolence] Dat]

‘We who are in the village don’t need your charity.’

b. *āⁿ gà [ŋ̀-dɔ́gɔ́ màn̄] tò*

2SgSbj Ipfv [1Sg-Indep Rel] know.Ipfv]

‘I who(m) you-Sg know’

### Conjoined NP as head

A conjoined NP may function as head, with a single occurrence of the relative morpheme at the end of the NP. My assistant tended to use singular relative *màwⁿ* after a singular right conjunct (xx1b), but accepted the plural *mà-lè*.

(xx1) a. *[yùgò-mbē yèⁿ kɛ̄ɛ̄gē-ē mà-lè] bē gà*

[woman-Pl **and** man-Pl **Rel-Pl**] come.Pfv RemPfv

‘the women and (the) men who have come’

b. *[yùgòȳⁿ yèŋ kɛ̄ɛ̄gū màm] bē gà*

*mà-lè*

[woman **and** man **Rel(-Pl)**] come.Pfv RemPfv

‘the woman and the man who have come’

### Headless relative clause

Either singular *màwⁿ* or plural *mà-lè* may head a relative clause, without an overt head NP.

(xx1) a. *màⁿ kōndō gà*

**Rel** stay.Pfv RemPfv

‘(the) one who stayed’

b. *[mà-lè gā kāỳⁿ] yē [mà-lē nà kāỳⁿ]*

[**Rel-Pl** Ipfv work.Ipfv] and [**Rel-Pl** IpfvNeg work.Ipfv]

‘those who work, and those who don’t work’

### *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* ~ *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* as relative head for ‘place’

The noun ‘place’ is *gɯ̄ɯ̄ⁿ*. As head of a relative, it takes an unusual iterative form *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* varying with *gɯ̄ɯ̄ⁿ-mà-gēwⁿ*. For the vocalic variation, see §3.4.1. The apparent linking element *-mà-* is likely an irregularly truncated form of relative *màwⁿ*, which is otherwise absent. One would have expected #*gɯ̄ɯ̄ⁿ màwⁿ* without the iteration.

(xx1) *[ŋ̀ gà gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ tō] ŋ̀ dāāⁿ*

[1SgSbj Ipfv **place** know.Ipfv] 3SgReflObj distant

‘The place that I know is far away.’

Other examples are (xx2) in §13.1.4.3 (‘the place where I left the stools’) and (xx4) in §17.2.1.1 (‘where Seydou went’).

While *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* or *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* is an idiosyncratic iterative compound synchronically, one might internally reconstruct it as \*[gɯ̄ɯ̄ⁿ màwⁿ LOC] ending with some locative postposition that was later (mis-)interpreted as an iteration of \*gɯ̄ɯ̄ⁿ. This would make sense morphosyntactically, since spatial relatives are most often adverbial adjuncts (locative, allative, or ablative) in a higher clause, as in (xx1), rather than subject and object arguments as in ‘[The place where the child fell yesterday] is far away’. Synchronically, however, *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* or *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* can have argument as well as adjunct function. The current locative postpositions in Jenaama, the most productive of which is *nìŋīì* (§8.2.4), do not resemble *gɯ̄ɯ̄ⁿ* phonologically.

## Position of *màwⁿ* vis-à-vis postnominal modifiers in head NPs

Relative *màwⁿ* follows adjectives, numerals, and the demonstrative *gu*. It precedes *sāāⁿ* ‘all’ and discourse-functional particles.

### Adjectives

Modifying adjectives follow the noun in the same way (including tonal internactions) as in main clauses. The relative morpheme follows.

(xx1) a. *[nɔ̀gù nám-bē mà-lè] gà bōẁⁿ*

[village small-Pl Rel-Pl] be here

‘the small villages that are here.’

b. *ŋ́ (-nā) [yàmbàà tōy màāⁿ] sàŋ̄ gà*

1SgSbj (Sbj/Obj) [house new Rel] buy.Pfv RemPfv

‘the new house that I bought’ (< *yàmbāà*, *sàwⁿ* )

### Numerals

Numerals are likewise added to the head noun, preceding the relative marker. After a nonsingular numeral, the plural marking in relative *mà‑lè* is redundant. The combination with *mà‑lè* is grammatical, but the singular form *màwⁿ* is often used instead.

(xx1) a. *ŋ́ (-nà) [yàmbāā sìgɛ̀m màāⁿ] sàŋ̄ gà*

*mà-lē]*

1SgSbj (Sbj/Obj) [house three Rel(-Pl)] buy.Pfv RemPfv

‘the three houses that I bought’ (< *sìgɛ̀wⁿ* )

b. *[nàā nàrⁿàm̄ màāⁿ] sēŋ gà*

*mà-lè*

[cow four Rel(-Pl)] fall.Pfv RemPfv

‘the four cows who fell’ (< *sēwⁿ* )

### Demonstratives

The head noun may be directly modified by a demonstrative. This applies both to the prenominal deictic type *kɔ̀ⁿ X* ‘this/that X’ and to the postnominal discourse-definite type *X gu* (with *gu* acquiring its tone from the noun X). In the latter case, *gu* precedes the relative marker. Addition of the relative morpheme does not interfere with tonal interactions between the noun and the prenominal demonstrative (§6.1).

(xx1) a. *āⁿ [yàmbāā gū mǎⁿ] kàȳ gà*

2Sg [house **Dem.Def** **Rel**] see-Ipfv RemPfv

‘that house that you saw’ (discourse-definite)

b. *āⁿ gā [kɔ̀ⁿ yāmbāā mǎⁿ] kà-nà*

2Sg Ipfv [**Dem** house **Rel**] see-Ipfv

‘this/that house that you see’ (pointing)

### Universal quantifier (‘all’)

The universal quantifier directly follows the relative morpheme when it has scope over the head. Plural marking in relative *mà-lè* is redundant and optional. Its singular counterpart *màwⁿ* may occur in its place even for countable nouns.

(xx1) a. *[jéná-mbí-gé mà-lè sāāⁿ] sēⁿ gà dìgéwⁿ*

[child-Pl-Pl **Rel-Pl** **all**] fall.Pfv RemPfv yesterday

‘all the children who fell yesterday’

b. *āⁿ gā [yàmbāā màⁿ sāāⁿ] kà-nà*

2Sg Ipfv [house **Rel all**] see-Ipfv

‘all the houses that you-Sg see’

### Discourse-functional morphemes

Topic morpheme *kòwⁿ* follows the entire relative construction and is not part of the internal head NP.

(xx1) *[[jéná-mbí-gé mà-lè] [sēⁿ gà] dìgéŋ kòm] bē*

[[child-Pl-Pl **Rel-Pl**] [fall.Pfv RemPfv] yesterday **Topic**] come.Pfv

‘As for the children who fell, they have come.’ (< *sēwⁿ*, *dìgéwⁿ*, *kòwⁿ* )

## Grammatical relation of relativized-on NP

### Subject relative clause

From main clause (xx1a) is formed the subject relative in (xx1b). The relative morpheme *màwⁿ* occurs at the end of the head. Remote perfective *gà* appears to be obligatory after the verb in the perfective positive relatives.

(xx1) a. *jénáⁿ* / *yàmbāá sēⁿ dìgéwⁿ*

child/house fall.Pfv yesterday

‘The child/house fell yesterday.’

b. *[[jénáⁿ* / *yàmbāá màⁿ] sēⁿ gà dìgéⁿ] lāā-mì*

[[child/house **Rel**] fall.Pfv RemPfv yesterday] be.where?

‘Where is the child who/the house that fell yesterday?’

The main clause (xx2a) with plural subject corresponds to the relative clause in (xx2b).

(xx2) a. *jéná-mbí-gé* / *yàmbāā-yè sēwⁿ dìgéwⁿ*

child-Pl-Pl / house-Pl fall.Pfv yesterday

‘The children/houses fell yesterday.’

b. *[[jéná-mbí-gé* / *yàmbāā-yē mà-lè] sēⁿ gà dìgéⁿ] lāā-mì*

[[child-Pl-Pl / house-Pl **Rel-Pl**] fall.Pfv RemPfv yesterday] be.where?

‘Where are the children who/the houses that fell yesterday?’

(xx3a) is perfective negative. (xx3b) is imperfective positive, and (xx3c) is imperfective negative.

(xx3) a. *[jénáⁿ mǎⁿ] tè sēwⁿ*

[child Rel] PfvNeg fall.Pfv

‘the child who didn’t fall’

b. *[jénáⁿ mǎⁿ] gà sēn-dē*

[child Rel] Ipfv fall-Ipfv

‘the child who falls’

c. *[jénáⁿ mǎⁿ] nà sēn-dē*

[child Rel] IPfvNeg fall-Ipfv

‘the child who doesn’t fall’

### Object relative clause

The object NP functioning as head remains in its regular position, following the subject and post-subject inflectional markers but preceding the verb and any postverbal constituents. In the perfective positive, the verb is again followed immediately by remote perfective *gà*.

(xx1) a. *[ŋ́ nā [nàā màāⁿ] sàŋ̄ gà dìgén] lāā-mì*

[1SgSbj Sbj/Obj [cow **Rel**] buy.Pfv RemPfv yesterday] be.where?

‘Where is the cow that I bought?’ (< *sàwⁿ*, *dìgéwⁿ*)

b. *[ŋ́ nā [nàà-yē mà-lē] sàŋ̄ gà dìgén] lāā-mì*

[1SgSbj Sbj/Obj [cow-Pl **Rel-Pl**] buy.Pfv RemPfv yesterday] be.where?

‘Where are the cows that I bought?’ (< *nàà-yè*, *sàwⁿ* )

Further examples of object relatives are perfective negative (xx2a), imperfective positive (xx2b), and imperfective negative (xx2c).

(xx2) a. *ŋ̀ dè [jénáⁿ màn̄] kày*

1SgSbj PfvNeg [child Rel] see.Pfv

‘the child who(m) I didn’t see’

b. *ŋ̀ gà [jénáⁿ màn̄] kà-nà*

1SgSbj Ipfv [child Rel] see-Ipfv

‘the child who(m) I see’

c. *ŋ̀ nà [jénáⁿ màn̄] kà-nà*

1SgSbj IpfvNeg [child Rel] see-Ipfv

‘the child who(m) I don’t see’

### Possessor relative clause

Possessors precede possessums with no genitive marker (xx1a). It is easy to form possessor relatives by adding the relative morpheme to the possessor (xx1b).

(xx1) a. *kɛ̄ɛ̄gū yàmbāà*

man house

‘a/the man’s house’

b. *[[kɛ̄ɛ̄gū mǎⁿ] yàmbāā] sēⁿ gà*

[[man Rel] house] fall.Pfv RemPfv

‘the man whose house fell’

### Relativization on the complement of a postposition

A relative can easily be formed from the complement of a postposition. This is illustrated for the dative in (xx1a), for one of the spatial postpositions in (xx1b), and for the instrumental in (xx1c).

(xx1) a. *ŋ́ nā wɔ́léⁿ dō gà [[yùgōⁿ mǎⁿ] tè]*

1Sg Sbj/Obj money give.Pfv RemPfv [[woman **Rel**] **Dat**]

‘the woman to whom I gave the money’ (< *wɔ́lɛ̄wⁿ* )

b. *ŋ́ nā wɔ́léⁿ syɛ̄ gà [[sāākù mǎⁿ] nìŋīì]*

1Sg Sbj/Obj money put.in.Pfv RemPfv [[bag **Rel**] **inside**]

‘the bag into which I put-Past the money’

c. *ŋ̀ gā sɔ̀gɔ̄ [[dàmbā màⁿ] ní]*

1Sg Ipfv cultivate.Ipfv [[daba **Rel**] **Inst**]

‘the daba (=hoe) with which I cultivate (=work in the field).’

In relatives with *gɯ̄ɯ̄ⁿ* ‘place’ as head, the special iterative form of the head noun does not allow the expected locative postposition *nìŋīì*.

Manner relatives of the type ‘the way X VPs’ do not take the form of relative clauses. Instead, síí ‘likeness’ or a synonym is added to a nominalized form of the subordinated clause.

# Verb or VP chaining and adverbial clauses

This chapter covers constructions that involve two or more verbs or two or more VPs. This chapter is complemented by chapter 16 on conditionals and by chapter 17 on clausal and VP complements of specific main-clause verbs. The primary coverage of purposive clauses is in chapter 17, but the motion-verb constructions in this chapter can have purposive implications.

Jenaama does not have a productive verb-verb compounding pattern. However, motion verbs *bē/bē* ‘come’ and *sò/sò* ‘go’ can form compound-like sequences with other verbs, often without their usual directional senses. In additiion, *hīnì* ‘be able, can’ combines directly with following VPs.

Many of the constructions covered in this chapter express temporal relationships between two events or co-events. For example, (xx1a) and (xx1b) both combine ‘fall’ and ‘descend’. However, in (xx1a) there is at least a brief chronological separation of the two events, while in (xx1b) they are conceptualized as overlapping or simultaneous.

(xx1) a. *sèēdù sēwⁿ [à bē yàⁿ sò]*

S fall.Pfv [3SgSbj Seq descend.Pfv go.Pfv]

‘Seydou fell and (then) dropped all the way)down.’ (< *yàwⁿ* )

b. *sèēdù sēwⁿ yà-là*

S fall.Pfv descend-Ipfv

‘Seydou fell all the way down.’

## ‘Be able to VP’ (*hīnì* )

The verb ‘be able (to VP)’ is *hīnì*. It occurs in this unreduced form in perfectives (positive hīnì, negative *tè hīnì* ) meaning ‘could (not)’. The complement is also perfective in these examples.

(xx1) a. *à (tè) hīnī kɯ̀ɯ̀*

3SgSbj (PfvNeg) **be.able.Pfv** run.**Pfv**

‘He/She was (not) able to run.’

b. *à (tè) hīnì tāwⁿ*

3SgSbj (PfvNeg) be.able.Pfv ascend.**Pfv**

‘He/She was (not) able to go up.’

The more frequently occurring imperfectives undergo contraction with the inflectional particle *gà* (positive) and *nà* (negative) as *gè=ēnì* and *nè=ēnì*, respectively. The complement is also imperfective in these examples.

(xx2) a. *à gè= / nè= ēnī kɯ̀ɯ̄*

3SgSbj Ipfv / IpfvNeg **be.able.Ipfv** run.**Ipfv**

‘He/She can (not) run.’

b. *à gè= / nè= ēnì tā-nā*

3SgSbj Ipfv / IpfvNeg **be.able.Ipfv** ascend-**Ipfv**

‘He/She can (not) go up.’

(xx3) illustrates transitive and other multi-word complements. The complement in (xx3a) is transitive with a direct object. That in (xx3b) has a postverbal adverb.

(xx3) a. *à hīnī [sàbā kūūⁿ]*

3SgSbj be.able.Pfv [chicken catch.Pfv]

‘He/She could not catch the chicken.’

b. *ŋ̀ nè= ēnī [bē wày]*

1SgSbj IpfvNeg be.able.Ipfv [come.Ipfv today]

‘I cannot come today.’

In the previous examples (xx1-3), the complement VP (‘run’, ‘ascend’) agrees in aspect with *hīnì*. However, under limited conditions a perfective complement may follow imperfective ‘be able’. (xx4a) and (xx4b) both have imperfective ‘be able’ but differ in complement aspect.

(xx4) a. *ŋ̀ gē= ēnā= [āⁿ yìràwⁿ]*

1Sg Ipfv be.able.Ipfv [2SgObj help.Pfv]

‘I can help you-Sg.’

b. *ŋ̀ gē= ēnā= [āⁿ yìrān-nà]*

1Sg Ipfv be.able.Ipfv [2SgObj help-Ipfv]

‘I can help you-Sg.’

My assistant explained that (xx4a) could be an offer for one-shot help, as when the speaker sees that the addressee needs a push to re-start a vehicle or carry a heavy load, and that (xx4b) would be a more open-ended offer to be helpful. However, in other cases he rejected main/complement aspect mismatches. For example, he rejected a suggested alternative to (xx2b) above replacing imperfective *tā-nā* with perfective *tāwⁿ* after imperfective ‘be able’.

In some contexts the verb ‘get, obtain’ can approximate the sense ‘be able (to VP)’ (xx5), cf. English *get to VP*.

(xx5) *ŋ̀ tē kìlè dīgɛ̄ sɔ́ŋɔ̀nì*

1Sg PfvNeg find.Pfv eat.Pfv as.of.now

‘I haven’t gotten to eat yet.’ = ‘I haven’t been able to eat yet.’

## Chains including a motion verb

### Motion plus ensuing action

A motion verb is commonly chained with a following VP or clause that denotes an action that is performed, or planned but not necessarily carried out, after the motion (xx1). There is sometimes but not always an implication that the motion was intended to make the second action possible, so that the second clause functions as purposive (‘in order to VP’). The context makes this implication unavoidable in (xx1c), but implausible in (xx1d). The second action is expressed by a verb or VP without an overt subordinator. The second verb is perfective in form even if the motion verb (and the overall context) is imperfective (xx1b,d). Spatiotemporal adverbs following the second VP, like ‘here’ in some of these examples, may have broad scope including the motion event.

(xx1) a. *à bē (gà) mànàmì bōẁⁿ*

3SgSbj **come**.Pfv (RemPfv) dance.**Pfv** here

‘He/She came here to dance.’

or: ‘He/She came here and danced.’

b. *à gà bē [ŋ̀ kwáá]*

3SgSbj Ipfv **come**.Ipfv [1SgObj hit.**Pfv**]

‘He/She (often) comes and hits me.’

or: ‘He/She (often) comes to hit me.’

c. *à bē [kāyⁿ màà] bōẁⁿ*

3SgSbj **come**.Pfv [work(n) look.for.**Pfv**] here

‘He/She came here to look for work.’

d. *à gà bē sēwⁿ*

3SgSbj Ipfv **come**.Ipfv fall.**Pfv**

‘He/She came and fell down.’

e. *à bē (gà) [āⁿ kwāā] bōẁⁿ*

3SgSbj **come**.Pfv (RemPfv) [2SgObj hit.**Pfv**] here

‘He/She came here in order to hit you-Sg.’

The second clause can be made explicitly purposive either by reducing it to a purposive PP with purposive-causal postposition *lāgà*, or by phrasing it as a subjunctive (positive) or prohibitive (negative) clause. See §17.5.2 for details and examples.

### Pejorative use of chained ‘go (and …)’

English *go and VP* sometimes has pejorative force and may not even involve motion, as in *the dog went and died on me*. Jenaama *sò/sò* ‘go’ can likewise be chained to a following VP in this function.

(xx1) *à māⁿ sò [ŋ̀ bīīndī]*

3SgSbj Proh **go**.Pfv [3SgReflObj strangle]

‘Don’t let it (=sheep tied up in courtyard) go and choke itself (on its rope).’

My assistant consistently added ‘go and’ in this function to ‘lest’ complements of the verb ‘fear, be afraid’, which of course denote unwanted events. The French elicitation cues did not include a motion verb. For examples see §17.2.xxx.

### ‘Come/go’ preceding a more specific directional motion verb

A primary motion verb ‘come’ or ‘go’ may combine with a more specific directional motion verb (‘ascend’, ‘descend’, ‘enter’, ‘exit’) in either of two ways. The most obvious difference is that ‘come/go’ precedes the other verb in one construction and follows it in the other. This subsection treats the first of these.

In (xx2a-b), the centripetal (‘come’) or noncentrifigual (‘go’) trajectory begins horizontally and culminates with a subevent denoted by the second verb. For example, the referent goes to a house and then goes up the stairs to the roof terrace. Conceptually, ‘go’ or ‘come’ precedes the second subevent. This is a regular ‘come/go and VP’ construction that has the same structure as e.g. ‘come/go and eat’. The second verb is perfective regardless of the aspect of ‘come/go’.

(xx1) a. *à bē/sò tāwⁿ*

3SgSbj **come**.Pfv/**go**.Pfv ascend.**Pfv**

‘He/She came/went and climbed up.’

b. *à gà bē tāwⁿ*

*gā sò*

3SgSbj Ipfv **come**.Ipfv/**go**.Ipfv ascend.**Pfv**

‘He/She (often) goes and climbs up.’

### Imperfective ‘come’ or ‘go’ following another verb or VP

In combination with another, more specific motion verb, ‘come’ or ‘go’ follows the other verb (or VP), and is reduced to a directional (centripetal versus noncentripetal) specification. (xx1a‑b) illustrate their combination with *tāwⁿ/tā-nā* ‘ascend’.

(xx1) a.  *à tāⁿ bē/sò Ø*

*bē/sō gà*

3SgAbj **ascend**-Pfv **come**.Ipfv/go.Ipfv (RemPfv)

‘He/She came/went up.’

*b. à gà tā-nā bē/sò*

3SgAbj Ipfv **ascend**-Ipfv **come**.Ipfv/go.Ipfv

‘He/She (often) comes/goes up.’

*bē/bē* ‘come’ and *sò/sò* ‘go’ have homophonous perfective and imperfective forms. It might seem that, in spite of the interlinear labeling, ‘come’ and ‘go’ should be glossed as perfective in (xx1a). This conclusion might seem indicated based on 1) the perfective marking of the first verb, 2) the optional presence of clause-final remote perfective *gà* following the motion verb, and 3) the well-documented existence of other chain constructions with invariant perfective second verb/VP. This is (seemingly) strong evidence that ‘come’ and ‘go’ should be labeled perfective in (xx1a). The case is (seemingly) clinched by noting that when a further VP is chained to the right of ‘come’ or ‘go’, this additional VP also has a perfective verb. This is the case with *kwāā/kɔ̄-lā* ‘hit’ in (xx2a-b), which has unmistakably perfective form.

(xx2) a. *à tāⁿ bē/sò [ē kwāā] (gà)*

3SgAbj ascend-Pfv come.Ipfv/go.Ipfv [1PlObj hit.**Pfv**] (RemPfv)

‘He/She came/went up to hit us.’

b. *à gà tā-nā bē/sò [ē kwāā]*

3SgAbj Ipfv ascend-Ipfv come.Ipfv/go.Ipfv [1PlObj hit.**Pfv**]

‘He/She (often) comes/goes up to hit us.’

Nevertheless, I insist that *bē* and *sò* are imperfective in (xx1a) and (xx2a), as well as in the more favorable cases (xx1b) and (xx2b). The evidence comes from the forms of other motion verbs like *tāwⁿ/tā-nā* ‘ascend’ in comparable examples. (xx3a) is parallel to (xx1a), and (xx3b) is parallel to (xx2a). The ‘ascend’ verb is imperfective in form, regardless of the aspect of the first verb.

(xx3) a. *à kɯ̀ɯ̀ / kūūnū / pīīrī tā-nā (gà)*

3SgSbj run.Pfv/crawl.Pfv/fly.Pfv **ascend.Ipfv** (RemPfv)

‘He/She/It ran/crawled/flew up.’

b. *à kɯ̀ɯ̀ / kūūnū / pīīrī tā-nā [ē kwāā]*

3SgSbj run.Pfv/crawl.Pfv/fly.Pfv **ascend.Ipfv** [1PlObj hit.Pfv]

‘He/She/It ran/crawled/flew up to hit us.’

The first verb or VP in this construction may also denote a non-motion co-event that accompanied the motion or that occurred during the motion.

(xx4) a. *à sùwōò bē* / *tā-nā*

3SgSbj sing.Pfv come.**Ipfv**/ascend.**Ipfv**

‘He/She came singing/went up singing.’

b. *à gā sùwō-lò bē* / *tā-nā*

3SgSbj Ipfv sing.Ipfv come.**Ipfv**/ascend.**Ipfv**

‘He/She came/went up singing.’

c. *à sèmpùwò kwāā bē/tānā gà*

3SgSbj donkey hit-Ipfv hit.Pfv come.Ipfv/ascend.Ipfv RemPfv

‘He/She came beating the donkey.’

d. *à gā sèmpùwò kɔ̄-lɔ̄ bē*

3SgSbj Ipfv donkey hit-Ipfv come.Ipfv

‘He/She came beating the donkey.’

e. *yèⁿ tēē dīgā sò*

2Pl.Imprt meat eat.Pfv go.Ipfv

‘Eat-2Pl some meat on the way!’

What all this adds up to is that when ‘come’, ‘go’, or a directional motion verb like ‘ascend’ follows another verb or VP, it indicates that motion in the indicated direction occurred during the performance of the main action. It is therefore imperfective in form, even though the larger complex event (e.g. beating the donkey) that encompasses the directional information is conceptualized as a bounded, perfective event. The semantics are therefore similar to those of English ‘X came singing’. For more on combinations of a main clause of either aspect with an imperfect VP, see §15.5 below.

## Sequential clauses

### Sequential clauses with *bè* and perfective

The morpheme *bè*, labeled “Seq” (for sequential) in interlinears, combines with a preceding subject and a following VP to denote an event that follows in time the event denoted by the preceding main clause. The main clause can be in any tense-aspect category but the subordinated sequential clause has fixed perfective positive form. Any referents that recur in the two clauses are pronominalized in the *bè* clause, and spatiotemporal adverbials are generally not repeated.

The sequential clause with *bè* should not be confused with the infinitival VP complement with *bē*. Except in a few minor constructions which really are ambiguous between the two, sequential *bè* always has at least a pronominal subject, while infinitival VPs (by definition) lack subjects. *bè* and *bē* also differ in lexical tones, but this is often obscured by Final Tone-Raising, which raises *bè* to *bē* before an L-tone.

Each of (xx1), (xx2), and (xx3) has an (a) version with a perfective main clause and a (b) version with an imperfective main clause. The attached sequential clause is identical in the two versions, with invariant perfective verb form. The corresponding imperfectives *sà-nà* ‘buy(s)’, *tūwò* ‘depart(s)’, and *bàȳ* ‘leave(s)’ cannot replace the perfective verbs in these *bè* clauses.

(xx1) a. *ŋ́ =nàⁿ sūgē-ē kày,*

1SgSbj Sbj/Obj goat-Pl see.Pfv,

*ŋ̀ bē= è sàwⁿ*

1SgSbj **Seq** 3PlObj buy.**Pfv**

‘I saw some goats and bought them.’

b. *ŋ́ gà sūgē-ē kà-nà*

1SgSbj Sbj/Obj goat-Pl see-Ipfv,

*ŋ̀ bē= è sàwⁿ*

1SgSbj **Seq** 3PlObj buy.**Pfv**

‘I (regularly) see goats and buy them.’

(xx2) a. *ŋ̀ sāā gà*

1SgSbj lie.down.Pfv RemPfv

*[ŋ̀ bē ŋ̀ tūwō]*

[1SgSbj **Seq** 1SgObj depart.**Pfv**]

‘I spent the night and left.’

b. *ŋ̀ gà sā-gà*,

1Sg Ipfv lie.down-Ipfv,

*[ŋ̀ bē ŋ̀ tūwō]*

[1SgSbj **Seq** 1SgObj depart.**Pfv**]

‘I (often) spend the night and leave.’

(xx3) a. *ŋ́ =nàⁿ sāākù yàgà*

1SgSbj Sbj/Obj sack put.down.Pfv

*[ŋ̀ bā= ā bày yāẁⁿ]*

[1SgSbj **Seq** 3SgObj leave.**Pfv** there.Def]

‘I put-Past down and left the sack there.’

b. *ŋ̀ gā sāākū yàgā*

1SgSbj Ipfv sack put.down.Ipfv

*[ŋ̀ bā= ā bày yāẁⁿ]*

[1SgSbj **Seq** 3SgObj leave.**Pfv** there.Def]

‘I (often) put down and leave the sack there.’

The two events in this construction are usually integrated conceptually, for example as two closely spaced events that form a logical sequence within a narrative. Consistently with this, the two clauses may be pronounced with no prosodic break between them, though the transcriptions usually separate the clauses with commas. The requirement of temporal sequencing (non-overlap) is loosely applied, and the *bē* clause may describe the natural culmination of the first event.

The semantic distinction between (xx4a) with two juxtaposed main clauses and (xx4b) with a sequential *bè* clause is subtle. If the shot killed the rat more or less immediately, (xx4a) is appropriate. (xx4b) can also be used in this context on the grounds that the unfortunate animal expired a brief interval after the shot. However, (xx4b) also leaves open the possibility that the shooter later finished off the wounded but still living rat, perhaps with a knife, after the shooting event.

(xx4) a. *à wùjúⁿ pɛ̄llà,*

3SgSbj pouched.rat shoot.Pfv,

*à= à wàgà*

3SgSbj 3SgObj kill.Pfv

‘He/She shot and killed a pouched rat.’

b. *à wùjúⁿ pɛ̄llà*

3SgSbj pouched.rat shoot.Pfv

*à bā= à wàgà*

3SgSbj **Seq** 3SgObj kill.Pfv

‘He/She shot and killed a pouched rat.’

The likely etymon for sequential *bè* is the verb *bē/bē* ‘come’, which often combines with other verbs and VPs in its literal motion sense. ‘Come’ is also the probable source of future *bē* and infinitival VP complementizer *bē*. Sequential *bè*, like future *bē* and the complementizer, does not indicate or even imply actual motion.

Future marker bē is often heard as seemingly L-toned *bè* before nonlow tones, versus *bē* before L-tone. This suggests that the future morpheme has begun the transition to phonological reinterpretation as *bè*, becoming *bē* secondarily before an L-tone by Final Tone-Raising. However, this transition has not been completed. Future *bē* is always preceded by an L-toned imperfective post-subject morpheme (*gà* positive, *nà* negative). If the future morpheme were really L-toned *bè*, both *gà* and *nà* would be raised to *gā* and *nā* by Final Tone-Raising. But *gà* and *nà* are not raised before *bē*, although they are raised before any truly L-toned morpheme. Therefore *gà* and *nà* treat future *bē* as M-toned, regardless of its actual pitch. I conclude that the future marker is still M-toned but is subject to phonetic de-stressing and pitch lowering.

By contrast, sequential *bè* represents the culmination of this process. It is now lexically L-toned as well as phonetically low-pitched. It becomes M-toned only secondarily, by Final Tone-Raising. A preceding L-toned syllable rises to M before *bè*, except in morphemes that are resistant to raising. In the parallelistic examples presented above in this section, this is masked by the fact that the repeate subject preceding *bè* must be a pronominal clitic, and all nonanaphoric pronominal clitics resist Final Tone-Raising. However, logophoric *ŋ̀* is a pronominal clitic, and it does rise to *ŋ̄* before *bè* (xx5).

(xx5) *sèēdú yè [ŋ̀ sāā gà]*

S said [LogoSbj lie.down.Pfv RemPfv]

*[ŋ̄ bè tāwⁿ]*

[**LogoSbj** Seq ascend.Pfv]

‘Seydou said that he spent the night and then went up.’

There are other constructions including sequential *bè* that allow a wide range of subjects, not just pronominal clitics. This makes it easier to demonstrate that sequential *bè* is L-toned. See, for example, the ‘before’ clauses in §15.4.

### Third person subjects of sequential *bè* clauses

If the subject of both clauses denote the same third-person referent, the subject of the sequential clause has regular third person (not reflexive) form: 3Sg *à*, 3Pl *è*. The subject of the bè clause may, however, bind its own reflexive object clause-internally as in (xx1b) (‘depart’ is a pseudo-reflexive verb), but this is another matter.

(xx1) a. *à sāā gà bōẁⁿ,*

3SgSbj lie.down.Pfv RemPfv here,

*à bē ŋ̀ tūwō*

**3SgSbj Seq** 3SgReflObj depart.Pfv

‘He/She spent the night here and left.’

b. *è sāā gà bōẁⁿ,*

3PlSbj lie.down.Pfv RemPfv here,

*è bē è tūwō*

**3PlSbj Seq** 3PlReflObj depart.Pfv

‘They spent the night here and left.’

#### ‘As soon as’ (*gìlɛ̄wⁿ* )

The verb *gìlɛ̄wⁿ/gìlɛ̀wⁿ* is directly followed by a VP to form an ‘as soon as’ clause. The two verbs in this clause are either both perfective or both imperfective. The right edge of this clause is marked by *sāāⁿ* ‘all’. The ‘as soon as’ clause is paired with a second clause denoting an event that occurred immediately on completion of the ‘as soon as’ event.’ The overall scenario may be in the past (xx1a) or in the future (xx1b).

(xx1) a. *[à gìlɛ̄ⁿ bāā gà sāāⁿ]*

[3SgSbj **as.soon.as** exit.Pfv RemPfv **all**]

*[ì yā= ā wɔ̀gà]*

[3PlSbj Sbj/Obj 3SgObj kill.Pfv]

‘As soon as he went outside, they killed him.’

= ‘No sooner did he step outside than they killed him.’

b. *[à gā gìlɛ̀ⁿ bā-lē=] [ē gà dīgɛ̄]*

[3SgSbj Ipfv **as.soon.as** exit-Ipfv] [1PlSbj Ipfv eat.Ipfv]

‘As soon as he/she comes out, we will eat.’ (< *bā-lā* )

## ‘Before …’ clause (*sò* plus sequential *bè* clause)

A ‘before …’ clause begins with *sò*, perhaps etymologically derived from *sò/sò* ‘go’ (becoming *sō* before L‑tone) but glossed simply as “before” in interlinears.

If chronological sequencing is focal, the subject of the ‘before …’ clause is followed by a clause containing sequential *bè* (becoming bē before L-tone) and a perfective verb.

(xx1) a. *ŋ́ kɯ̀ɯ̄ gà,*

1Sg run.Pfv RemPfv,

*sò ʒāndārmū-yē bē yàwⁿ*

*bè tāwⁿ*

**before** gendarme-Pl **Seq** descend.**Pfv**/ascend.**Pfv**

‘I fled, before the gendarmes came down/came up.’

b. *sèēdù bāā gà,*

S exit.Pfv RemPfv,

*sō ŋ̀ bē kìyɛ̀wⁿ*

**before** 1SgSbj **Seq** arrive.**Pfv**

‘Seydou had (already) left before I arrived (here).’

c. *ŋ̀ gā ŋ̀ púgéwⁿ,*

1SgSbj Ipfv 1SgObj hide.Pfv,

*[sō tùùⁿ-yē bē kìì]*

[**before** bee-Pl **Seq** get.up.**Pfv**]

‘I will hide (=take shelter) before the bees get up (=swarm).’ (< bè )

d. *āⁿ pùgèwⁿ,*

2SgObj hide.Pfv,

*[sō tùùⁿ-yē bà= āⁿ sīwⁿ]*

[**before** bee-Pl **Seq** 2SgObj bite.**Pfv**]

‘Hide (=take shelter) before the bees bite you.’ (< *bè* )

If the ‘before …’ clause denotes a harmful event that is/was avoided, instead of *bè* one can use prohibitive *ma᷆ⁿ*, as in ‘lest’ complements of ‘fear’. This alternative is possible in (xx1d) above, which can also be re-phrased as (xx2a) below. Another example is (xx2b), which also illustrates the pejorative function of the second *sò* ‘go’ preceding the final VP.

(xx1) a. *āⁿ pùgèwⁿ*

2SgObj hide.Pfv

*sō tùùⁿ-yē bè āⁿ sīwⁿ*

**before** bee-Pl **Proh** 2SgObj bite.**Pfv**

‘Hide-2Sg (=take shelter) before/lest the bees bite you.’ (< *bè* )

b. *ŋ́ kɯ̀ɯ̄ gà,*

1Sg run.Pfv RemPfv,

*sò ʒāndārmū-yē ma᷆ⁿ sō [ŋ̀ kwāā]*

**before** gendarme-Pl **Proh** **go**.Pfv [1SgObj hit.**Pfv**]

‘I fled, before the gendarmes (could) (go and) hit me.’ (< *kɯ̀ɯ̀*, *sò* )

## Coincidence in time and space (*bā=à tīẁⁿ* )

The phrase *bā=à tìwⁿ* occurs in contexts where an individual X has arrived somewhere and finds (observes) that something has happened or is in progress. Compare English *only to discover/find/learn that …*, which however has a pejorative connotation not always present in Jenaama.

The parsing is most transparent in examples like (xx1) where *bā=à tīẁⁿ* is not part of a subordinated clause. Here we can identify the onset of *bā=à tīẁⁿ* as the verb *bē* ‘came’.

(xx1) a. *sèēdù bā= [à tīⁿ]*

S **come**.Pfv [3SgObj do.Pfv]

*[[ŋ̀ kànààⁿ-kɛ̄ɛ̄] bāā]*

[[3SgReflPoss friend-male] exit(v).Pfv]

‘Seydoux came (only) to find that hisx friend had gone out.’ (< *tīẁⁿ* )

b. *sèēdù gà bē bā= [à tīⁿ]*

S Ipfv Fut **come**.Pfv [3SgObj do.Pfv]

*[[ŋ̀ kànààⁿ-kɛ̄ɛ̄] bāā]*

[[3SgReflPoss friend-male] exit(v).Pfv]

‘Seydoux will come (only) to find that hisx friend has gone out.’

c. *sèēdù gà bā= [à tīⁿ]*

S Ipfv **come**.Ipfv [3SgObj do.Pfv]

*[[ŋ̀ kànààⁿ-kɛ̄ɛ̄] bāā]*

[[3SgReflPoss friend-male] exit(v).Pfv]

‘Seydoux (often) comes (only) to find that hisx friend has gone out.’

This leaves *à tìwⁿ*, which can seemingly then be parsed as 3Sg clitic *à* in object function, plus perfective verb *tīẁⁿ* ‘did’. Indeed, *bē* ‘come’ can be followed by a transitive VP with perfective verb in the sense ‘came and VPed’ or ‘came in order to VP’ (xx2). See §15.2.1 for this construction (motion plus ensuing action).

(xx2) *sèēdù bē (gà) [à tīẁⁿ]*

S come.Pfv (RemPfv) [**3Sg do.Pfv**]

‘Seydou came and did it.’ or ‘Seydou came in order to do it.’

However, there are important differences between *bā=à tīẁⁿ* in (xx1a-b) and the construction in (xx2). First, remote perfective *gà* is common even if not obligatory in (xx2), but it is not allowed in (xx1a-c). Second, the sense ‘X came and (X) did it’ does not match the semantics of (xx1), where the act following the motion is not a volitional act that could be denoted as ‘do’, rather the essentially involuntary and passive-like ‘find, observe, discover’. On this parsing one should have a verb like ‘find, encounter’ or ‘see’ rather than ‘do’.

This reasoning suggests that *à tīẁⁿ* in (xx1) means (or formerly meant) ‘it was done; it happened’, with a 3Sg subject (not object) that prospectively (cataphorically) resumes the proposition expressed by the following clause (the fact that the friend has gone out). In this interpretation, the construction *X bā=à tīẁⁿ* in (xx1) was originally of the type ‘X came, it happened (that …)’. However, this parsing is no longer transparent as *bā=à tīẁⁿ* has become fused.

This fused, structurally somewhat opaque *bā=à tīẁⁿ* occurs frequently at the beginning of subordinated clauses (xx3). *bā=à tīẁⁿ* is only optionally preceded by a subject pronominal coindexed to the main-clause subject. This optionality suggests that *bā=à tīẁⁿ* is hovering in the murky zone between a reading including *bē* ‘come’ and one where *bā=à tīẁⁿ* is fused together as a subordinating particle.

(xx1) a. *ŋ́ kìyɛ̄ⁿ gà*

1SgSbj arrive.Pfv RemPfv

*[(ŋ́) bā= à tīⁿ]*

[**(1SgSbj)** **come**.Pfv 3SgObj **do**.Pfv]

*[jéná-mbí-gé gā sùwō-lò]*

[child-Pl-Pl Ipfv dance-Ipfv]

‘I arrived to find that the children were singing.’

b. *sèēdū gà bē sō nɔ̀gī-ỳ,*

S Ipfv Fut go.Pfv village-Loc,

*[(à) bā= à tìⁿ]*

[**(3SgSbj)** **come**.Pfv 3SgObj **do**.Pfv]

*[āⁿ kwà= āⁿ tūwō]*

[2SgSbj RecPrf 2SgObj depart.Pfv]

‘Seydou will go to the village, (only) to find that you-Sg have left.’ (< *kɔ̀ⁿ* )

## ‘Since’ and ‘until’ clauses (*hàlì* )

Elsewhere, *hàlì X* with an NP or adverbial means variably ‘until X’, ‘all the way to X’, or ‘even X’. The common feature is emphasis on the gap between the referent and some baseline, which is often unexpressed. In other words, the domain may be time, space, or a more abstract domain with a center and a periphery.

My assistant tends to pronounce this word as *hàlī* in isolation. However, in phrases I always hear it as *hàlì* before a nonlow tone and as *hàlī* before a low tone (due to Final Tone-Raising), pointing to *hàlì*.

### ‘Since …’ clauses (*hàlì* )

In a ‘since’ clause, or in an adverbial phrase like *hàlī dìgéwⁿ* ‘(ever) since yesterday’, *hàlì* can be thought of as ‘(going) all the way back to (a time in the past)’. The clause denotes a past event that led to a state that has persisted. The ‘since …’ clause usually preceded the foregrounded main clause.

(xx1) a. *hàlī ŋ̀ bē gà, ŋ̀ tè dīgɛ̄*

**all.the.way** 1SgSbj come.Pfv RemPfv, 1SgSbj PfvNeg eat.Pfv

‘Since I got here, I haven’t eaten.’

b. *hàlā= [ā kàà] lɔ̄gɔ̄ⁿ gà,*

**all.the.way** [3SgPoss father] die.Pfv RemPfv,

*[à ɲōgōⁿ] wwō-nā nì*

[3SgPoss soul] weep-Stat it.is

‘Ever since his father died, he has been distraught.’

### ‘Until …’ clauses (*hàlì* )

While ‘since …’ clauses point back to an event in the past, ‘until …’ clauses point to a future event that cultimates or terminates a state or process beginning at an often implied reference point (the time of speaking, or some past reference point from current discourse). The same clause-initial *hàlì* ‘until, all the way (to)’ occurs in both ‘since …’ and ‘until …’ clauses.

If the entire beginning-and-end sequence is in the past, both main and ‘until …’ clauses are perfective.

(xx1) a. *ŋ́ =nàⁿ kúŋgóló kwāā [hàlā= ā wàà]*

1SgSbj Sbj/Obj dog hit.Pfv [**all.the.way** 3SgSbj animal.die.Pfv]

‘I beat the dog until (=to the point that) it died.’

b. *ŋ́ =nāⁿ [sìbò pīīⁿ] kālā [hàlā= ā tàwⁿ]*

1SgSbj Sbj/Obj [snake black] chase.Pfv [**all.the.way** 3SgSbj ascend.Pfv]

‘I chased the spitting cobra until it climbed up.’

There is a second type of ‘until’ clause. This one is characterized by post-subject *gà* and a perfective verb. This *gà* looks like the imperfective positive inflectional marker *gà*, which also follows subjects. However, the fact that *gà* in the ‘until’ clause is followed by a perfective verb suggests that *gà* is not the imperfective morpheme. It may in fact be a truncated form of subjunctive *gālà*, which is also followed by a perfective verb. A more dubious equation is with remote perfective *gà*, which occurs in a different linear position, directly following verbs rather than subjects. Functionally, *gà* might be connected with other marked perfective positive morphemes that occur in other types of subordinated clause, like ‘conditional perfective’ *nàⁿ* in conditional antecedents (§16.1). It is here labeled ‘until.Pfv’ in interlinears.

(xx1) a. *à kùmū gà*

3SgSbj sleep.Pfv RemPfv

*[hàlī ŋ̀ gā= ā kwāā]*

[**all.the.way** 1SgSbj **until.Pfv** 3SgObj hit.**Pfv**]

‘He/She slept until I tapped him/her.’ (< *kùmù*, *gā à kwāā* )

b. *à tè pā-sí tīẁⁿ,*

3SgSbj PfvNeg thing-any do.Pfv,

*hàlī ŋ̀ gà sūgō kwāā*

**until** 1SgSbj **until.Pfv** goat hit.**Pfv**

‘He/She didn’t do anything, until I beat the goat.’’

### ‘From X, until/all the way to Y’ (*gìlī*, *hàlì* )

In this construction, two subordinated clauses specify the both endpoints of an extended time interval, which then serves as the temporal setting for a foregrounded clause. The book-ended period may be a specific time interval in the past (xx1a), or a generic time interval (xx1b). Both of the book-ending clauses are positive. The first clause is perfective. The second clause is an ‘until’ clause of the second type described in the preceding section, i.e. with post-subject *gà* and a perfective verb. One or the other of the two book-ending clauses begins with *hàlì* ‘all the way (to)’, which can be prospective ‘until’ or retrospective ‘since’. If the second clause has *hàlì* (or its extended variant *hàlī-kànà*) the first clause is either bare or begins with *gìlī* ‘since, from the time that’. If the first clause has *hàlì*, the second clause has no initial subordinator.

The combination *gìlī* plus *hàlì* is illustrated in (xx1a). (xx1b) has just *hàlī-kànà* at the beginning of the second clause. (xx1c) has just *hàlì* in the first clause.

(xx1) a. *gìlā= ā yàⁿ gà,*

**since** 3SgSbj descend.Pfv RemPfv,1

*hàlā= ā gā tàwⁿ,*

**until** 3SgSbj **until.Pfv** ascend.**Pfv**

*à tè dīgɛ̄*

3SgSbj PfvNeg eat.Pfv

‘From the time that he/she went down, until he/she went (back) up, he/she didn’t eat.’ (< *gìlì à*, *hàlì à gà tàwⁿ* )

b. *[ì yā= ā yɛ̀gɛ̄ gà]*

[3PlSbj Sbj/Obj 3SgObj give.birth.Pfv RemPfv]

*[hàlī-kànà à gā lɔ̀gɔ̀ⁿ]*

[**until** 3SgSbj **until.Pfv** die.**Pfv**]

*[à nà ŋ̀ māỳⁿ]*

[3SgSbj IpfvNeg 3SgReflObj be.good]

‘From the time he is born (“they have borne him”) until he is dying, he is evil.’

(generic statement about an ethnic group)

c. *hàlì kúŋgóló bē gà,*

**all.the.way** dog come.Pfv RemPfv,

*à gā ŋ̀ tūwō,*

3SgSbj until.Pfv 3SgReflObj go.away.**Pfv**,

*ŋ̀ kōndō gā kwàāⁿ= [ā tè]*

1SgSbj stay.Pfv RemPfv fear(v).Ipfv [3Sg Dat]

‘From the moment the dog came, until it went away, I was afraid.’

### ‘VPed until got tired’ = ‘VPed for a very long time’

As in other languages of the region, the duration of an activity can be exaggerated by adding an ‘until X got tired’ clause. The main clause may have a verb like ‘work’ or ‘run’ that makes physical weariness plausible. However, it can also be a verb like ‘laugh’ (xx1) or ‘speak’ where duration is focal and weariness or pain secondary, compare English *he laughed until his sides ached*.

(xx1) *à sàà [hàlā= ā bàndà]*

3SgSbj laugh.Pfv [**until** 3SgSbj **get.tired**.Pfv]

‘He/She laughed until he got tired.’ (i.e. he couldn’t stop laughing)

## Noun-headed adverbial clauses

### Temporal relative clause (‘[at] the time when …’)

A relative clause headed by a temporal noun (‘time/moment’, ‘day’, ‘year’, etc.) can function as a temporal relative clause, without an additional postposition (xx1).

(xx1) *āⁿ bē gà [wɔ́gɔ́tú* / *táláⁿ* / *jīīⁿ màwⁿ]*

2SgSbj come.Pfv RemPfv [**time/day/year** Rel].

‘(at/on/in) the time/day/year when you-Sg came’

The unmarked ‘while …’ construction is of this type, with *wɔ́gɔ́tū* ‘time, moment in time’.

(xx2) *ŋ́ kùmū gà*

1SgSbj sleep.Pfv RemPfv

*[[wɔ́gɔ́tú màⁿ] sùrù-mbē gā mànàmī]*

[[**time Rel**] remainder-Pl Ipfv dance.Ipfv]

‘I slept while the others danced.’

b. *ŋ́ =nā ŋ̀ mīīlà*

1SgSbj Sbj/Obj 1SgObj think.Ipfv

*[[wɔ́gɔ́tú màⁿ] ŋ̀ kōndō gā ɲìŋī]*

[[**time Rel**] 1SgSbj stay.Pfv Ipfv walk.Ipfv]

‘I thought (=reflected) while I was walking.’

### Spatial adverbial clause (‘[at] the place where …’)

The noun ‘place’ is *gɯ̄ɯ̄ⁿ*. It has an irregular iterative form as relative-clause head, pronounced either *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* or *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ*, instead of expected #*gɯ̄ɯ̄ⁿ màwⁿ*. This occurs in the regular position of spatial adverbials, postverbal and followed only by temporal adverbs.

(xx1) *ē gà bē sò*

1PlSbj Ipfv Fut go.Pfv

*[jénáⁿ sēⁿ gà* gɯ̄ɯ̄ⁿ-mà-gēⁿ *dìgéwⁿ]*

[child fall.Pfv RemPfv place-Rel-place yesterday]

‘We will go (to) where the child fell yesterday.’

For additional information on *gɯ̄ɯ̄ⁿ-mà-gēwⁿ* or *gɯ̄ɯ̄ⁿ-mà-gɯ̄ɯ̄ⁿ* and its origin, see §14.2.4.

### Manner adverbial clause

#### Manner clause (‘how/the way …’)

Instead of a relative clause like ‘the manner (in) which …’, either as argument or adverbial phrase, the Jenaama construction is a compound ending in *síí* ‘likeness’ or synonym, preceded by a form of the relevant clause that has a nominalized verb with suffix *-nà*. For details on this deverbal nominal derivation, see §12.2.3.2.

(xx1) a. *ŋ̀ nā [sèēdù kāyⁿ-nà síí] pɔ̄gɔ̀*

1SgSbj IpfvNeg [S work(v)-**Nom** **likeness**] like.Ipfv

‘I don’t like the way Seydou works.’

b. *ŋ́ gā [sèēdù kāyⁿ-nà síí] tī-nā*

1SgSbj Ipfv [S work(v)-**Nom likeness**] do-Ipfv

‘I work the (same) way Seydou does.’

(lit. “I do [Seydou’s working likeness].”]

c. *ŋ́ gā [sèēdù sūgō būwɔ̀-nà síí] tī-nā*

1SgSbj Ipfv [S goat tend-**Nom likeness**] do-Ipfv

‘I tends goats the (same) way Seydou does.’

#### ‘As though …’ clause (*hɔ̀nɔ̀* )

An ‘as though’ clause takes the form of an instrumental PP (postposition ní ) whose complement is a compound noun of the type ‘likeness of [X VP]’. This complement NP begins with *hɔ̀nɔ̀* ‘like’ and optionally ends with *síí* ‘likeness’ or synonym.

(xx1) a. *à gà ŋ̄ yàgà*

3SgSbj Ipfv 3SgReflObj put.down.Ipfv

*[[hɔ̀nɔ̄ ŋ̄ nà ŋ̀ tó] ní]*

[[**like** 3ReflSgSbj IpfvNeg 1Sg know.Ipfv] Inst]

‘Hex acts like (pretends that) hex doesn’t know me.’

b. *jénáⁿ gà wwō*

child Ipfv weep.Ipfv

*[[hɔ̀nɔ̄ ŋ̄ tè dīgɛ̄] síí] ní]*

[[**like** 3ReflSgSbj PfvNeg eat] **likeness**] **Inst**]

‘The child is weeping as though he/she hasn’t eaten.’

Another way to express ‘as though’ clauses is to reduce the content of a main-clause proposition to a possessed NP in a juxtaposed manner phrase, with the obligatorily possessed or compounded ‘share, portion, role’ referring to a variant of the earlier proposition with one element replaced. This is the case in (xx2). It was initially given without the final postposition *ní*. My assistant later accepted the alternative version with overt postposition.

(xx2) *yùrùgù kwààⁿ nā bē sàwⁿ,*

this.year rain(n) IpfvNeg Fut rain.fall.Pfv,

*[[hɔ̀nɔ̄ [ʃɛ̀gɔ̄ pàⁿ] síí] (ní)]*

[[**like** [last.year **share**] **likeness**] (**Inst**)]

‘This year it won’t rain the way it did last year.’

# Conditional constructions

## Hypothetical conditional

### Simple hypothetical with *ɲāⁿ* ‘if’, perfective positive *nàⁿ*

A hypothetical conditional construction consists of an antecedent that denotes a possible but uncertain eventuality, and a consequent that denotes an eventuality that will result (or be otherwise be true) if the antecedent is true. Typically both antecedent and consequent denote events. In this case, the antecedent is in perfective aspect and the consequent is imperfective or future indicative, or a deontic modal (imperative, hortative).

The antecedent begins in any case with *ɲāⁿ* ‘if’. A perfective positive antecedent clause also has a post-subject inflectional morpheme *nàⁿ*, versus zero in perfective positive main clauses. In these antecedents, positive *nàⁿ* contrasts with the regular perfective negative *tè*. There is no special marking of the consequent, which has the same form as an independent main clause.

(xx1) a. *ɲāⁿ kwàāⁿ nāⁿ sàwⁿ, ŋ̀ nā sò sɔ̄ŋɔ̀-y*

**if** rain(n) **Cond.Pfv** rain.fall.Pfv, 1Sg IpfvNeg go.Ipfv the.bush-Loc

‘If it rains, I won’t go to the bush (=to the fields).’

b. *ɲāⁿ kwààⁿ tē sàwⁿ, ŋ̀ gā sò sɔ̄ŋɔ̀-y*

**if** rain(n) **PfvNeg** rain.fall.Pfv, 1Sg Ipfv go.Ipfv the.bush-Loc

‘If it doesn’t rain, I will go to the bush.’

c. *ɲāⁿ kwààⁿ tē sàwⁿ, kò sō sɔ̄ŋɔ̀-y*

**if** rain(n) **PfvNeg** rain.fall.Pfv, Hort go.Pfv the.bush-Loc

‘If it doesn’t rain, let’s go to the bush!’

d. *ɲāⁿ kwààⁿ tē sàwⁿ, sò sɔ̄ŋɔ̀-y*

**if** rain(n) **PfvNeg** rain.fall.Pfv, go.Pfv the.bush-Loc

‘If it doesn’t rain, go!-2Sg to the bush!’

The antecedent may also denote a state that is a precondition for some act.

(xx2) a. *ɲāⁿ sèēdù gà bōẁⁿ, kúŋgóló nā wōō*

**if** S be here, dog IpfvNeg bark(v).Ipfv

‘If Seydou is here, the dog won’t bark.’

b. *ɲāⁿ dàmbà gā [ŋ̄ sūgì-ỳ], ŋ̀ gè= ēnī sɔ̀gɔ̄*

**if** daba be [1Sg hand-Loc], 1SgSbj Ipfv be.able.Ipfv cultivate.Ipfv

‘If I have a daba (=hoe), I can do farm work.’

c. *ɲāⁿ āⁿ sāgā-nā nì,*

**if** 2SgSbj lie.down-Stat Stat,

*āⁿ gè= ēnì kāỳⁿ mɛ̀n-tīẁⁿ*

2SgSbj Ipfv be.able.Ipfv work(v).Ipfv how?

‘If you are lying down, how can you work?’

If both clauses have second person subject, a positive consequent may take subjunctive form with post-subject *gālà*. This is the case in (xx2), where the two clauses have the same 2Sg subject. The subjunctive also occurs in quoted imperatives (§10.4.3.1) and in the second of two conjoined imperatives (§10.4.1.1).

(xx2) *ɲā āⁿ nàⁿ sēwⁿ, āⁿ gālā kìì*

if 2Sg Cond.Pfv fall.Pfv, 2Sg **Sbjn** get.up.Pfv

‘If you-Sg fall, get up!’

### ‘Otherwise (=if not)’

This construction is of the type ‘if X, then Y; otherwise (=if not X), then Z’. The ‘otherwise’ expression is phrased as ‘if it is not that’ with discourse-definite demonstrative (xx1).

(xx1) *ɲǎⁿ kwààⁿ nǎⁿ sàwⁿ*

if rain Cond.Pfv rain.fall.Pfv

*ē gà kōndō bōẁⁿ,*

1Pl Ipfv stay.Ipfv here,

*ɲǎⁿ= à nàⁿ ɲɔ̄ⁿ nì,*

**if 3SgSbj IpfvNeg Dem.Def it.is**,

*ē gā sò sɔ̄ŋɔ̀-y*

3SgSbj Ipfv go.Ipfv the.bush-Loc

‘If it rains, we’ll stay here. Otherwise (=if not), we’ll go the fields.’

## Alternative ‘if’ particles

### ‘Even if …’ (hàlí )

In this construction, the speaker knows that some would think that the factuality of the antecedent would block that of the consequent, but the speaker asserts that the consequent will occur regardless. The antecedent begins with *hàlí* ‘even’ (§xxx). It is optionally followed by *ɲāⁿ* ‘if’, which is absent in (xx1a) but present in (xx1b). The remainder of the antecedent is the same as in hypothetical conditionals; note perfective *nàⁿ* in (xx1a-b). In (xx1a) my assistant added interrogative-like pitch rise to ‘tomorrow’ at the end of the antecedent, but I observed no such pitch rise in several other examples from him.

(xx1) a. *hàl= āⁿ nàⁿ bē ɲàànú↗,*

**even** 2SgSbj Cond.Pfv come.Pfv tomorrow

*āⁿ nà dīgɛ̀ bōẁⁿ*

2SgSbj IpfvNeg eat.Ipfv here

‘Even if you-Sg come tomorrow, you won’t eat here.’

b. *hàlí ɲāⁿ kwàā nāⁿ sàwⁿ,*

**even** if rain(n) **Cond.Pfv** rain.fall.Pfv,

*ŋ̀ nà cī-lī ɲàànù*

1SgSbj IpfvNeg sow(v)-Ipfv tomorrow

‘Even if it rains, I’m not going to plant (seeds) tomorrow.’

## Willy-nilly antecedents (‘whether X or Y …’)

In this construction, two paired antecedents have opposite truth conditions. Usually a positive clause is followed by its negation. If so, the second subject is always pronominalized, some adjuncts may be omitted in the second clause, and the verb is repeated. The first antecedent ends with nonterminal intonation (higher than modal pitch for this position). Whichever antecedent turns out to be true is asserted to have no effect on the truth of the consequent. An explicit ‘don’t care about it’ clause (§11.1.1.7) is optional.

(xx1) *[kwàāⁿ sàwⁿ↗] [à tē sàwⁿ],*

[rain(n) rain.fall.Pfv] [3SgSbj PfvNeg rain.fall.Pfv]

*[ŋ̀ pāāⁿ] nā-ỳ, ŋ̀ gā sò sɔ̄ŋɔ̀-y*

[1SgPoss care(n)] not.be.Loc-Loc, 1Sg Ipfv go.Ipfv the.bush-Loc

‘Whether it rains or it doesn’t rain, I don’t care, I’m going to the bush (=the fields).’

## Counterfactual conditionals (*pàà* )

In a counterfactual, the eventuality expressed by the antecedent, whether a current state or a past event, is understood to be false. It is asserted that in an alternative world where the antecedent was true, the consequent would also have been realized, as in ‘if you had hit me, I would have killed you’.

The antecedent usually omits the initial *ɲāⁿ* ‘if’. Instead, it has a post-subject counterfactual (i.e. irrealis) morpheme *pàà*. It is shortened to *pà* (becoming *pā* ) before 1Sg *ŋ̀* and contracts with other pronominal objects (which consist of vowels). Before any other word it is realized as *pàà* (becoming *pàā* before L‑tone) The antecedent is in perfective aspect if it denotes an event, but it may also denote a state. The perfective morpheme *nàⁿ* found in hypothetical conditional antecedents is absent. *pāā* may be followed by perfective negative *tè*. The consequent takes the form of an ordinary imperfective main clause.

(xx1) a. *āⁿ pā ŋ̀ kwáá gā dìgéwⁿ,*

2SgSbj **Counterf** 1SgObj hit.Pfv Rem.Pfv yesterday,

*ŋ̀ gà= āⁿ wɔ̀gā*

1SgSbj Ipfv 2SgObj kill.Ipfv

‘If you-Sg had hit me yesterday, I’d have killed you.’

b. *āⁿ pàā tè bē dìgéwⁿ,*

2SgSbj **Counterf** PfvNeg come.Pfv yesterday

*ŋ̀ gā sà= [āⁿ màā]*

1SgSbj Ipfv go.Ipfv [2SgObj look.for.Ipfv]

‘If you-Sg hadn’t come yesterday, I’d have gone looking for you.’

c. *à pàā dìrīsà nì*

3SgSbj **Counterf** D it.is,

*à nā kɯ̀ɯ̄*

3SgSbj IpfvNeg run.Ipfv

‘If he had been Drisa, he wouldn’t have run.’

The construction can also appear when the antecedent denotes a state that is presently untrue or a future event that is unlikely to happen. This is pragmatically halfway between hypothetical and (past) counterfactual conditionals. My assistant uses both initial *ɲāⁿ* ‘if’ and post-subject counterfactual *pàà* in this context. In (xx2a), *pāā* seems to have “swallowed” the expected following ‘be’ quasi-verb *gà*, which is otherwise part of the ‘have’ construction. The negative counterpart has *nà* ‘not be’ (xx2b).

(xx2) a. *ɲāⁿ mótóⁿ pā [ŋ̀ sūgì-y]*

**if** motorcycle **Counterf** [1Sg hand-Loc]

*ŋ̀ gè= ēnì [[sō nɔ̀gī-ỳ] bē]*

1SgSbj Ipfv be.able.Ipfv [[go.Ipfv village-Loc] come.Pfv]

‘If I had a motorcycle, I could go to the village and come back.’

b. *ɲāⁿ mótóⁿ pàà nā [ŋ̀ sūgì-y]*

if motorcycle **Counterf** not.be [1Sg hand-Loc]

‘if I didn’t have a motorcycle’

(i.e., ‘were it not for the fact that I have a motorcycle’)

c. *ɲāⁿ ŋ̀ pàā nàpɔ̀rɔ̀-tūgū nì,*

**if** 1SgSbj **Counterf** rich.person it.is,

*ŋ̀ nā kōndò nɔ̀gī-ỳ*

1Sg IpfvNeg stay.Ipfv village

‘If I were a rich person, I wouldn’t stay in the village.’

d. *ɲāⁿ ŋ̀ pàà sēⁿ gà*

**if** 1SgSbj **Counterf** fall.Pfv RemPfv

*ŋ̀ gā kìī*

1SgSbj Ipfv get.up.Ipfv

‘If I fell (=if I were to fall), I’d get up.’ (< *sēwⁿ* )

# Complement and purposive clauses

## Quotative complements

There are two ‘say’ verbs. One is the defective quasi-verb *yè* ‘said’, which occurs only in veridical perfective positive contexts. The other is the all-purpose, fully inflectable verb *sē/sē* ‘say, tell’. Both verbs allow an optional dative PP specifying the original addressee.

If an NP inside the quoted matter is coindexed with the current speaker or addressee, it is normally updated to correspond to the current role in the speech event.

If an NP inside the quoted matter is coindexed with a third-person quoted speaker, i.e. if it corresponds to what was a first person pronoun in the original utterance, it is expressed as a logophoric pronoun (§18.3). The original addressee, if overtly mentioned (‘you’ in the original utterance) and if not updated due to coindexation with the current speaker or addressee, is expressed as an ordinary third person pronominal.

### Original addressee in quotations

A second person pronominal in the original utterance may be replaced by the corresponding third person pronominal in the quoted clause.

(xx1) a. *sèēdù āāmàdù tīyē [sālà āⁿ gā wùlāā nì]*

S A ask.Pfv [whether 2SgSbj be who? it.is]

‘Seydou asked Amadoux “who are youx?” ’

b. *sèēdù āāmàdù tīyē [sālā à gā wùlāā nì]*

S A ask.Pfv [whether 3SgSbj be who? it.is]

‘Seydou asked Amadoux who hex was.’

Both (xx1a) and (xx1b) are actually ambiguous. (xx1a) can also mean ‘Seydou asked Amadoux who youy were’, where ‘you’ is the current addressee, who was not present during the quoted speech event. Similarly, (xx1b) can also mean ‘Seydou asked Amadoux who he/shey was’, referring to a distinct third-party referent.

### Invariant perfective positive *yè* ‘said’ (1Sg *ŋ̀ jè* )

That *yè* ‘said’ is not a true verb is shown immediately by its 1Sg subject form *ŋ̀ jè* ‘I said’. In addition to the hardening of *y* to *j*, there is more importantly an L-toned *ŋ̀* instead of the H‑toned 1Sg subject *ŋ́* that occurs in true perfective positive clauses.

The defective verb (quasi-verb) *yè* ‘said’ is limited to perfective positive contexts, reporting an actual event of speaking. *yè* always follows an overt subject. It is itself directly followed by an optional dative PP (xx1b), then by quoted matter. The latter may be a clause or a fragment thereof such as an NP or adverb (with the rest of the proposition understood). The quoted matter may also be referred to by a demonstrative ‘that’ (xx1d). If an overt dative is present, the quoted matter may be absent if contextually understood (xx1e).

(xx1) a. *sèēdū yàⁿ= [āⁿ ŋ̀ kwāā]*

S **said** [2Sg LogoSgObj hit.Pfv]

‘Seydoux said that you-Sg hit himx.’

b. *sèēdù yē [ŋ̀ té] [ŋ̀ gà bē]*

S **said** [1Sg **Dat**] [LogoSgSbj Ipfv come.Ipfv]

‘Seydoux told me that hex is coming.’

c. *sèēdū yē ɲàànù*

S **said** tomorrow

‘Seydou said tomorrow.’

d. *sèēdū yè kú*

S **said** Dem

‘Seydou said that.’

e. *sèēdū yē [ŋ̀ té]*

S **said** [1Sg Dat]

‘Seydou told me.’

*yè* is compatible with all types of interrogation (xx2a-c) and with relativization (xx2d).

(xx2) a. *tāmā sèēdù yè kú*

Q S said Dem

‘Did Seydou say that?’

b. *wùlāā yē ɲàànù*

who? **said** tomorrow

‘Who said (it’s) tomorrow?’

c. *sèēdù yē màsī*

S **said** what?

‘Seydou said what?’

d. *[màȳⁿ yē ɲàànù] lāā-màtāỳ*

[Rel **said** tomorrow] be.where?

‘Where is the one (=the person) who said (it’s) tomorrow?’

*yè* cannot be negated or used in deontic modals (imperative, hortative). It cannot be combined with any preceding nonzero aspect-marking such as imperfective positive *gà* or (in conditional antecedents) perfective positive *nàⁿ*. In all these combinations, *yè* must be replaced by the inflectable verb *sē/sē*. Likewise, only *sē/sē* occurs as the subordinated ‘say’ verb in ‘X said (that) [Y said …]’, and in other subordinated clauses and VPs (except relatives).

*yè* is suggestively homophonous with the main bidirectional case marker *yè* that separates otherwise adjacent subjects and objects in perfective positive transitives (including *sē/sē* ‘say’). However, a synchronic conflation is not possible.

### Inflectable verb *sē/sē* ‘say, tell’

The verb *sē/sē* ‘say’ is compatible with any inflectional frame (perfective or imperfective, positive or negative, indicative or modal). It is immediately preceded by a pro forma 3Sg object *à* if there is no other preverbal object NP, even when an actual quotation follows. This *à* often contracts with the vowel of a preceding inflectional particle (imperfective positive *gà*, imperfective negative *nà*, perfective negative *tè*, in conditionals also perfective positive *nàⁿ* ). The *à* is unmistakable in imperatives where it is clause-initial (xx1b). The verb *sē/sē* is followed by an optional dative PP denoting the original addressee (in which case the usual free translation has ‘tell’ rather tha ‘say’), then by quoted material.

(xx1) a. *ɲāⁿ sèēdù nāⁿ= à sē ɲàànù, ŋ̀ gà bē*

if S Pfv 3SgObj **say**.Pfv tomorrow, 1Sg Ipfv come.Ipfv

‘If Seydou says (it’s) tomorrow, I’ll come.’

b. *à sē [sèēdù gālà bē]*

3SgObj **say**.Pfv [S Sbjn come.Pfv]

‘Tell Seydou to come.’

c. *à tā= à sē [ŋ̀ té]*

3SgSbj PfvNeg 3SgObj **say**.Pfv [1Sg Dat]

‘He/She didn’t tell me.’ (< *à tē à* )

d. *[táláⁿ sāāⁿ] à gā= à sē*

[day all] 3SgSbj Ipfv 3SgObj **say**.Ipfv

*[ŋ̀ gà bē]*

[LogoSgSbj Ipfv come.Ipfv]

‘Every day he/shex says that he/shex is coming.’

### Jussive complement (quoted imperative or hortative)

#### Quoted imperatives and prohibitives

Quoted imperatives take the form [X say [Y Modal … Verb.Pfv …]]. Y is an open-ended NP coindexed with the covert singular or suffixally expressed plural addressee in the original utterance, but updated in the context of the current speech event. This construction can be elaborated by adding a dative addressee, but the lower subject Y remains obligatory: [X say [to Y (or Z)] [Y …]]. The dative is often omitted, since it is usually understood that the original addressee was also the subject Y of the original imperative. Therefore the usual form is [X say [Y …]]’, and the free translation ‘X tell Y [Ø to …]’ with Y functioning as main-clause object is syntactically misleading.

If the original command was positive, the quoted imperative clause has subjunctive *gālà* after the subject (xx1a). If it was negative, i.e. if it contained prohibitive *ma᷆ⁿ*, the original form is retained verbatim in the quotation except for the presence of an overt subject (xx1b).

(xx2) a. *à yē [ŋ̀ gālà tāwⁿ* / *yàwⁿ]*

3Sg say.Pfv [1Sg Sbjn ascend.Pfv / descend.Pfv]

‘He/She told me to go up.’ (or: ‘He said that I must go up.’)

b. *ŋ̀ yē [sèēdù ma᷆ tāwⁿ]*

1Sg say.Pfv [S Proh ascend.Pfv]

‘I told Seydou not to go up.’ (or: ‘I said that Seydou must not go up.’)

#### Quoted hortatives

A quoted hortative has the same type of structure as described above for quoted imperatives. Positive hortatives are expressed under quotation as subjunctive clauses without hortative morpheme *kèyⁿ*. Examples like (xx1a) therefore have distinct hortative and imperative readings, the difference being whether or Seydou plans to join the other(s) in eating. In some cases, e.g. with a singular subject and a singular dative, it may be inferred that the hortative is the relevant reading (xx1b).

(xx1) a. *sèēdù yē= [è gālà dīgɛ̄*]

S said [3PlSbj Sbjn eat.Pfv]

a) ‘Seydou said (to him/her), “let’s eat!” ’

b) ‘Seydou told them to eat.’

b. *sèēdū yē [ŋ̀ té] [ē gālà dīgɛ̄]*

S said [1Sg Dat] [1PlSbj Sbjn eat.Pfv]

‘Seydou said to me, “let’s eat!” ’

My assistant did allow overt hortative marking in the case of ‘let’s go!’, which has a special form *kò só*. In the quoted hortative, kò só follows the subjunctive morpheme.

(xx2) *sèēdù y= [ē gālā kò só]*

S said [1Pl Sbjn **Hort** go.Pfv]

‘Seydou said (to me), let’s go!’

A main-clause hortative negative has the form of a prohibitive with 1Pl subject. The quoted version therefore has the same form as a quoted prohibitive (preceding section).

(xx3) *sèēdū yè= [ē māⁿ sò]*

S said [1Pl **Proh** go.Pfv]

a) ‘Seydou said, “let’s not go!” ’

b) ‘Seydou told us not to go.’

### Quoted questions

Both polar and content questions are embedded with *sālà* ‘whether’. This is all that is needed for polar questions (xx1a). Content questions additionally retain the content interrogative word (xx1b-c).

(xx1) a. *à ŋ̀ tíyé gà*

3SgSbj 1SgObj ask.Pfv RemPfv

*sālā [ŋ̀ káá] gà bōẁⁿ*

**whether** [1Sg father] be here

‘He/She asked me whether my father was there.’

b. *à tīyē gà*

3SgSbj ask.Pfv RemPfv

*sālā wùlāā gà bē*

**whether** **who?** Ipfv come.Ipfv

‘He/She asked, who is/was coming?’

b. *à ŋ̀ tíyé gà*

3SgSbj 1SgObj ask.Pfv RemPfv

*sālā ŋ̀ gā sò màtāỳ*

**whether** 1Sg Ipfv go.Ipfv **where?**

‘He/She asked me where I was going.’

## Full-clause propositional complements

### Clausal complements of ‘know’ and ‘forget’

#### ‘(not) know’ with main-clause or ‘whether’ complement

*tò* ‘know’ can be a simple transitive, as in ‘I know it’ (where ‘it’ refers to a proposition) and in ‘I know him/her’ in the sense of acquaintancement; see §11.xxx. When the complement is a proposition like (xx1a), it follows the main clause, which includes the 3Sg object marker. So (xx1b) is literally ‘I know it [Seydou came]’. In positive contexts, ‘X know S’, it is understood that the eventuality S denoted by the complement (Seydou’s having come) is veridical. The complement has main-clause form without subordinators.

(xx1) a. *sèēdù bē*

S come.Pfv

‘Seydou came (=has come).’

b. *ŋ̀ gā=à tò [sèēdù bē]*

1Sg Pres=3SgObj know [S come.Pfv]

‘I know that Seydou has come.’

When ‘know’ is negated, the complement is treated as nonveridical, whether or not the current speaker believes or knows it to be veridical. In other words, the epistemic modal status of the complement is phrased from the perspective of the subject of ‘know’, not the speaker. The English distinction between factive ‘that’ and irrealis ‘whether’ is not made. The complement has subordinated form with *māàⁿ* or *sālà* ~ *hālà* as subordinator (‘whether’). *sālà* ~ *hālà* contract with following vowel-initial pronominals, as in *sālè=ē* ‘whether we …’.

(xx2) a. *ŋ̀ bē*

1Sg come.Pfv

‘I came (=have come).’

b. *sèēdù nā=à tò [māāⁿ / sālà ŋ́ bē]*

S PresNeg=3SgObj know [**whether** 1SgSbj come.Pfv]

‘Seydou doesn’t know whether/that I have come.’

c. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*māàⁿ/sālā/hālā sèēdù gā bōẁⁿ*

whether S be here

‘I don’t know whether Seydou is here.’

Both ‘who?’ and ‘what?’ interrogatives are replaced by *màwⁿ* in the relevant position within a clause embedded under ‘(not) know’ (xx3a-b). The same *màwⁿ* can be added to a noun, from human to inanimate, functioning then as embedded ‘which?’ (xx3c-e).

(xx3) a. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*[màŋ gà bē]*

[**WH** Ipfv come.Ipfv

‘I don’t know who/what is coming.’

b. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*[sèēdù màn dīgā gà]*

[S **WH** eat.Pfv RemPfv]

‘I don’t know what Seydou ate.’

c. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*[yùgōⁿ màŋ] gà bē*

[woman **WH**] Ipfv come.Ipfv

‘I don’t know which woman will come.’

d. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*ā [yàmbāā màⁿ] sàŋ̄ gà*

3SgSbj [house **WH**] buy.Pfv RemPfv

‘I don’t know which house he/she bought.’

e. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*à gà bē tālā màwⁿ*

3SgSbj Ipfv come.Ipfv day WH]

‘I don’t know on what day he/she will come.’

‘Where?’is replaced by a special iterated form of the noun ‘place’, with a linker *‑mà‑* (xx4) that is likely a truncated form of relative *màwⁿ*.

(xx4) *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*sèēdù sō gà gɯ̄ɯ̄ⁿ-mà-gēwⁿ*

S go.Pfv RemPfv **place-Link-place**

‘I don’t know where Seydou went.’

Other content interrogatives preserve their interrogative form when embedded.

(xx5) a. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*sèēdù gà bē mɛ̀n-tīẁⁿ*

S go.Pfv RemPfv **how?**

‘I don’t know how Seydou will come.’

b. *ŋ̀ nā ā tò*

1Sg IpfvNeg 3SgObj know.Ipfv

*jèŋ gà bē*

**how.much?** Ipfv come.Ipfv

‘I don’t know how many will come.’

#### ‘Forget that/whether’ with ‘whether’ complement

The complement S of positive ‘X forget that S’ is treated as nonveridical, since the subject X is presently unaware of its truth status.

(xx1) a. *ŋ̀ bē*

1SgSbj come.Pfv

‘I have come.’

b. *sèēdù nùmàsāwⁿ [māàⁿ ŋ́ bē* / *yàwⁿ]*

S forget.Pfv [whether 1SgSbj come.Pfv/descend.Pfv]

‘Seydou forgot whether/that I have (=had) come.’

The same nonveridical complement is used under negation of ‘forget’.

(xx2) sèēdù *tē nùmàsāwⁿ [māàⁿ ŋ̀ bē]*

S PfvNeg forget.Pfv [whether 1SgSbj come.Pfv]

‘Seydou did not forget that I came/had come.’

‘Remember’ is expressed with the verb also meaning ‘think, reflect’. It has the same complements as ‘forget’.

(xx3) *sèēdù míílà [māàⁿ ŋ́ bē]*

S think.Pfv [whether 1SgSbj come.Pfv]

‘Seydou remembered that (=reflected whether) I came.’

### Perception verb with clausal ‘whether’ complement.

When ‘see’ or ‘hear’ has a complement denoting a propositional fact, acquired by the subject through inference or hearsay rather than immediate observation, the proposition is spelled out in the form of ‘whether’ clause. The proposition is resumed in the main clause by a pro forma 3Sg object pronoun.

(xx1) a. *ŋ́ =nā ā kày*

1SgSbj Sbj/Obj **3SgObj** see

*[māàⁿ jéná-mbí-gé nà yāwⁿ]*

[whether child-Pl-Pl not.be there.Def]

‘I saw that the children were not there.’

b. *ŋ́ =nā ā miŋɛ̀*

1Sg Sbj/Obj 3SgO hear.Pfv

*[māàⁿ [āⁿ kàā] sò]*

[whether [2SgPoss father] go.Pfv]

‘I have heard (=I hear) that your-Sg father left.’

### ‘Fear (lest …)’ with ‘whether’ complement

In this construction, the subject painfully imagines a hypothetical future event. The complement has *māàⁿ* or synonym ‘whether’ and a perfective verb. The primary subordinated verb is often chained to ‘go’ in pejorative function with no requirement of actual motion (§15.1.10.2). A negative subordinated clause cannot be directly expressed as such; instead an intermediate clause with ‘say’ (xx1d) or ‘do’ is required.

(xx1) a. *ŋ̀ gā kwààⁿ [kúŋgóló māāⁿ sō [ŋ̀ sīwⁿ]]*

1Sg Ipfv **fear**(v).Ipfv [dog **whether** go.Pfv [1SgObj bite.**Pfv**]]

‘I am afraid that the dog might go and bite me.’

b. *ŋ̀ gā kwààⁿ [sèēdù māāⁿ sō [ŋ̀ kwāā]]*

1Sg Ipfv **fear**(v).Ipfv [dog **whether** go.Pfv [1SgObj hit.**Pfv**]]

‘I am afraid that Seydou might (go and) hit me.’

c. *ŋ̀ gā kwààⁿ*

1Sg Ipfv **fear**(v).Ipfv

*[sèēdù māāⁿ sò [[ŋ̀ kó] [[tēē ɲɔŋɔ̄] nī]]*

[S **whether** go.Pfv [[1SgObj give.**Pfv**] [[meat bad] Inst]

‘I am afraid that Seydou might (go and) give me some bad meat.’

d. *ŋ̀ gā kwàāⁿ*

1Sg Ipfv **fear**(v).Ipfv

*[sèēdù māàⁿ sā= [à sē*

[S **whether** go.Pfv [3SgObj say.Pfv

*[[ŋ́ nā ŋ̀ kó [pàsí ní]]]*

[[LogoSBj Fut 1SgObj provide.Ipfv [nothing Inst]]]

‘I am afraid that Seydou might not give me anything.’

(lit. “I fear that Seydou might go and say ‘I won’t give anything.’”)

### ‘Encounter’ with imperfective clausal complement

The combination of *bē/bē* ‘come’ and a transitive VP with perfective *tīwⁿ* ‘do’ means ‘encounter (someone) by chance’, cf. colloquial English *run into* or *stumble upon* (or archaic *happen upon*).

(xx1) a. *ŋ́ bē [sèēdù tīwⁿ]*

1Sg **come**.Pfv [S **do**.Pfv]

‘I ran into Seydou.’

b. *ŋ̀ gà bē [sèēdù tīwⁿ]*

1Sg Ipfv **come**.Ipfv [S **do**.Pfv]

‘I (often) run into Seydou.’

The combination of *bē/bē* and *tīwⁿ* can also have a clausal complement, as in ‘I stumbled on Seydou (who was) carrying firewood’. This is phrased in Jenaama as ‘I encountered it [Seydou carries firewood]’. ‘It’ resumes the embedded proposition, which is expressed as a regular main clause in imperfective or stative form.

(xx2) *ŋ́ bā= à tīwⁿ*

1Sg **come**.Pfv **3SgObj** **do**.Pfv

*[jéná-mbí-gé gà tēē dīgà]*

[child-Pl-Pl Ipfv meat eat.**Ipfv**]

‘I encountered the children eating meat.’

### Weak obligational ‘ought’ (post-subject *ŋ̀kāmbē* and perfective)

*ŋ̀kāmbē* occurs in post-subject position in positive clauses. The main verb is perfective in form and does not undergo tone shifts.

(xx1) a. *sèēdù ŋ̀kāmbē sò* / *bē* / *yàw* / *dìgɛ̀mù*

S ought go.Pfv / come.Pfv / descend.Pfv / speak.Pfv

‘Seydou ought to go/go down/speak.’

b. *sèēdù ŋ̀kāmbē [āⁿ kwāā* / *yìràwⁿ* / *cīyɛ̄ŋgɛ̄* / *kày]*

S ought [2SgObj hit.Pfv / help.Pfv / listen.to.Pfv / see.Pfv]

‘Seydou ought to hit/help/listen to/see you-Sg.’

The negative counterpart of *ŋ̀kāmbē* is *nā ŋ̀kāmbē*, with imperfective negative *nà*.

(xx2) a. *sèēdù nā ŋ̀kāmbē sò* / *yàw* / *dìgɛ̀mù*

S IpfvNeg ought go.Pfv/descend.Pfv/speak.Pfv

‘Seydou should not go/go down/speak.’

b. *sèēdù nā ŋ̀kāmbē [āⁿ kwāā* / *yìràwⁿ* / *cīyɛ̄ŋgɛ̄* / *kày]*

S IpfvNeg ought [2SgObj hit.Pfv / help.Pfv / listen.to.Pfv / see.Pfv]

‘Seydou should not hit/help/listen to/see you-Sg.’

*ŋ̀kāmbē* is otherwise invariant in form and does not combine with *kōndō* (§10.3.1) for past time.

## Subjunctive clausal complements

Positive subjunctive clauses have post-subject particle *gālà* and perfective verbs. Negative counterparts are similar but substitute prohibitive *ma᷆ⁿ* for *gālà*. These complements occur in a number of constructions in addition to those described just below.

One might be tempted to segment *gālà* as #*gā là* beginning with imperfective *gà*. However, the fact that the following verb is perfective in form makes this analysis improbable. In addition, #*gā là* would be expected to have a negation #*nā là*, which is also nowhere to be seen.

### ‘Be possible’ (*màɲɛ̀* ) with subjunctive clause

Possibility is expressed by juxtaposing an ‘it is possible’ clause with a subjunctive second clause with *gālà*. The ‘it is possible’ clause has verb *màɲɛ̀* and a pro forma 3Sg subject resuming the semantically subordinated proposition. All aspect and polarity combinations with *màɲɛ̀* are possible, as in ‘is/was (not) possible’, but imperfective positive *gā màɲɛ̀* ‘is possible’ is common. A parallelistic construction where ‘it is possible’ is repeated along with the first subjunctive clause repeated in negative form (or in some other mutually incompatible form) is usually redundant, but can occur. As usual, the negative counterpart of a positive subjunctive clause is a prohibitive clause with *ma᷆ⁿ*.

(xx1) *à gā màɲɛ̀ [è gālà bē],*

3SgSbj Ipfv **be.possible**.Ipfv [3PlSbj **Sbjn** come.Pfv],

*à gā màɲɛ̀ [è ma᷆ⁿ bē]*

3SgSbj Ipfv **be.possible**.Ipfv [3PlSbj **Proh** come.Pfv]

‘Maybe he/she will come, maybe he/she won’t come.’

### ‘Want’ (*pɔ̄gɔ̄/pɔ̄gɔ̀* ) with subjunctive clausal complement

‘Want’ is expressed by either of two transitive verbs, *pɔ̄gɔ̄/pɔ̄gɔ̀* ‘want, like’ or *màà/màā* ‘look for, seek; want’ (§11.2.4.2). *pɔ̄gɔ̄/pɔ̄gɔ̀* is a simple transitive in (xx1).

(xx1) *ŋ̀ gā dùwɔ̀* / *mànàmì pɔ̄gɔ̀*

1Sg Ipfv beer / dance(n) like.Ipfv`

‘I enjoy beer/dancing.’

The same-subject construction ‘X want [(for X) to VP]’ is illustrated in (xx2). The main clause has the form ‘X want(s) it’ with 3Sg object resuming the event denoted by the subordinated VP. This clause is normally imperfective in form. The subordinated clause has a pronominal subject coindexed to the main-clause subject. For coindexed third person, the subject of the second clause is logophoric (or arguably reflexive). The subject pronoun is immediately followed by subjunctive subordinator *gālà*, which dissimilates to *gālā* before an L-tone. Negation is expressed in the main (‘want’) clause (xx2c).

(xx2) a. *sèēdù gā à pɔ̄gɔ̀*

S Ipfv 3SgObj **want**.Ipfv

*[ŋ̀ gālā pwɔ̀]*

[LogoSgSbj **Sbjn** sit.**Pfv**]

‘Seydou wants to sit down.’

b. *jéná-mbí-gé gā à màā*

child-Pl-Pl Ipfv 3SgObj **look.for**.Ipfv

*[ē gālā sàbā dīgā]*

[LogoPlSbj **Sbjn** chicken eat.**Pfv**]

‘The young people would like to eat chicken.’

c. *ŋ̀ nā à pɔ̄gɔ̀*

1SgSbj IpfvNeg 3SgObj **want**.Ipfv

*[ŋ̀ gālà tēē kày]*

[1SgSbj **Sbjn** tea see.**Pfv**]

‘I don’t want to see the tea.’

d. *āⁿ gā à pɔ̄gɔ̀*

2SgSbj Ipfv 3Sg **want**.Ipfv

*[āⁿ gālà tēē mɛ̀ẃⁿ↗]*

[2SgSbj **Sbjn** tea drink**.Pfv**.Q]

‘Do you-Sg want to drink tea?’ (< *tēè*, *mɛ̀wⁿ* )

e. *sèēdù nā à pɔ̄gɔ̄*

S IpfvNeg 3SgObj **want**.Ipfv

*[ŋ̀ gālā ŋ̀ kó [wɔ́léⁿ ní]*

[3SgReflSbj **Sbjn** 1SgObj provide.**Pfv** [money Inst]]

‘Seydou doesn’t like to give me money.’

f. *tāmā āⁿ gā= à pɔ̄gɔ̀*

Q 2SgSbj Ipfv 3SgObj **want**.Ipfv

*[āⁿ gālà bē bōwⁿ]*

[2SgSbj **Sbjn** come.**Pfv** here]

‘Do you-Sg like to come here?’

Different-subject examples are (xx3a-b). The basic structure is the same, but now the subject of the second clause is open-ended and for third persons it is not logophoric.

(xx3) a. *[āⁿ kàà] gā à pɔ̄gɔ̀*

[2SgPoss father] Ipfv 3SgObj **want**.Ipfv

*[āⁿ gālà bē]*

[2Sg **Sbjn** come.Pfv]

‘Your-Sg father wants you to come.’

b. *ŋ̀ gā à pɔ̄gɔ̀*

1Sg Ipfv 3SgObj **want**.Ipfv

*[sèēdù gālà bē]*

[S **Sbjn** come.**Pfv**]

‘I want Seydou to come.’

c. *ē nā à pɔ̄gɔ̀*

1PlSbj IpfvNeg 3SgObj **want**.Ipfv

*[sèēdù gālā dùwɔ̄ mɛ̀wⁿ]*

[S **Sbjn** beer drink.**Pfv**]

‘We don’t want Seydou to drink beer.’ (< *dùwɔ̀* )

### Strong obligational ‘must’ (*ŋ̄kàlà* plus subjunctive)

Impersonal and invariant clause-initial *ŋ̄kàlà* functions like French *il faut que*. The subject is followed by the subjunctive morpheme *gālà*, then a form of the perfective stem with the same tonal changes as in polar interrogatives (§13.2.1.2). (xx1a) illustrates with intransitive verbs.

(xx1) a. *ŋ̄kàlà sèēdù gālà sòó* / *bé* / *yàẃⁿ* / *kíyɛ́* / *dìgɛ̀mú* / *kàmn-ààmá*

must S Sbjn go.Pfv/come.Pfv/descend.Pfv/go.past.Pfv/get.old.Pfv

‘Seydou must go / come / go down / go past / get old.’

(< *sò*, *bē*, *yàwⁿ*, *kīyɛ̄*, *dìgɛ̀mù*, *kāmn-āāmā* )

b. *ŋ̄kàlà sèēdù gālà āⁿ kwáá* / *yìràẃⁿ* / *cìyɛ̀ŋgɛ́* / *kàý*

must S Sbjn 2SgObj hit.Pfv/help.Pfv/listen.to.Pfv/see.Pfv

‘Seydou must hit/help/listen to/see you-Sg.’

(< *kwāā*, *yìràwⁿ*, *cīyɛ̄ŋgɛ̄*, *kày* )

## Subjectless VP complements

Complements in the form of a VP (including direct object of transitives) may lack an overt subordinator, or may begin with *bè*.

### VP complement without an overt subordinator

#### Perception verbs with imperfective VP complement

When the complement denotes an event or activity that was directly seen or heard, the complement is phrased as an imperfective VP, even if the event was abrupt. The individual observed is expressed as the object of ‘see’ or ‘hear’ and is not repeated in the complement. The complement may be a simple intransitive (xx1a-b) or a transitive with a preverbal object (xx1c).

(xx1) a. *ŋ́ =nàⁿ jéná-mbí-gé kàȳ mànàmī* / sēn-dē

1Sg Sbj/Obj child-Pl-Pl see.Pfv dance.Ipfv / fall-Ipfv

‘I saw the children dancing/fall(-ing).’

b. *ŋ́ =nàⁿ jéná-mbí-gé mìŋɛ̄ sùwō-lò*

1Sg Sbj/Obj child-Pl-Pl hear.Pfv sing-Ipfv

‘I heard the children sing(-ing).’

c. *ŋ́ =nàⁿ jéná-mbí-gé kàȳ [tēē dīgà]*

1Sg Sbj/Obj child-Pl-Pl see.Pfv [meat eat.Ipfv]

‘I saw the children eat(ing) meat.’

#### ‘Be afraid to’ (*kwààⁿ* ) with imperfective or *bē* VP complement

The verb *kwààⁿ/kwàāⁿ* ‘fear, be afraid’ can function as a simple intransitive with optional dative complement.

(xx1) a. *ŋ̀ gā kwàāⁿ [sèēdū tè]*

1Sg Ipfv **fear**.Ipfv [S **Dat**]

‘I am afraid of Seydou.’

b. *jēnāⁿ gā kwàāⁿ [tɔ̄ɔ̄ tè]*

child Ipfv **fear**.Ipfv [fire **Dat**]

‘The child is afraid of fire.’

If the ‘fear’ verb is imperfective, it can also take an imperfective VP complement, with covert but implicitly coindexed subject. There is no overt complementizer.

(xx2) a. *à gā kwàāⁿ yà-là*

3SgSbj Ipfv **fear**(v).Ipfv descend.**Ipfv**

‘He/She is afraid to go down.’

b. *ŋ̀ gā kwàāⁿ [dùwɔ̄ mɛ̀nɛ̀]*

1SgSbj Ipfv **fear**(v).Ipfv [beer **drink**.Ipfv]

‘I am afraid of drinking beer.’

If the ‘fear’ verb is perfective, denoting a temporary moment of fear in the past, the complement is an infinitival VP with *bē*.

(xx3) a. *à kwààⁿ [bē yàwⁿ]*

3SgSbj **fear**(v).Pfv [**Infin** descend.Pfv]

‘He/She was (suddenly) afraid to go down.’

b. *ŋ́ kwààⁿ [bē dùwɔ̄ / sɔ́gɔ́ mɛ̀wⁿ]*

1SgSbj **fear(**v).Ipfv [**Infin** beer/milk drink.Pfv]

‘I was (suddenly) afraid of drinking beer/milk.’

### Infinitival VP complement with *bē*

*bē* as infinitival complementizer likely developed from *bē/bē* ‘come’, which is also the likely source of future bē and sequential *bè*. Infinitival complements lack a subject. This is the most conspicuous difference between them and sequential clauses with bè, which do have at least a pronominal subject. Semantically, sequential clauses denote separate events that follow the main-clause event in time, while infinitival complements are semantically integrated into the main clause. However, both require perfective verbs.

#### ‘Forget (to…)’ (*nùmàsāwⁿ* ) with infinitival VP complement

The verb *nùmàsāwⁿ/nùmàsā-nà* ‘forget’ is followed by an infinitival VP complement beginning with bē. The complement denotes an action type that the subject intended to carry out but that never happened.

(xx1) a. *ŋ́ nùmàsāwⁿ [bē tāwⁿ* / *bē]*

1SgSbj **forget**.Pfv [**Infin** ascend.Pfv / come.Pfv]

‘I forgot to go up/come.’

b. *sèēdū nùmàsāwⁿ [bē tēē sàwⁿ]*

S **forget**.Pfv [**Infin** meat buy.Pfv]

‘Seydou forgot to buy the meat.’

For ‘forget (that …)’ with a propositional complement, see §17.2.xxx.

#### ‘Prevent’ (*hādà* ) with infinitival VP complement

The verb *hādà/hādà*, a borrowing from Fulfulde, can function as a simple transitive when the larger context is understood (xx1a). If the stymied action is spelled out explicitly, it takes the form of a VP with bē. The understood subject of the complement VP is coindexed with the object (not subject) of ‘prevent’ in the main clause (xx1b-c).

(xx1) a. *ŋ́ =nǎⁿ sèēdù hādà*

1SgSbj Sbj/Obj S **prevent**.Pfv

‘I stymied/blocked Seydou.’

b. *sèēdū yē ŋ̀ hādà [bē dīgɛ̄]*

S Sbj/Obj 1SgObj **prevent**.Pfv [**Infin** eat.Pfv]

‘Seydou prevented me from eating.’

c. *à= ŋ̀ hādà [bē dùwɔ̄ mɛ̀wⁿ]*

3SgSbj 1SgObj **prevent**.Pfv [**Infin** beer drink.Pfv]

‘He/She prevented me from drinking beer.’

#### ‘Help’ (*yìràwⁿ* ) with infinitival VP complement

The verb ‘help’ is *yìràwⁿ/yìrān-nà*. Its syntax is similar to that of ‘prevent’ (see above). It can be a simple transitive with a human direct object (xx1a). This can then be expanded by adding an infinitival VP complement with bē.

(xx1) a. *sèēdū ŋ̀ yíráwⁿ*

S 1SgObj **help**.Pfv

‘Seydou helped me.’

b. *sèēdū ŋ̀ yíráwⁿ [bē nàā sɛ̀y]*

S 1SgObj **help**.Pfv [**Infin** cow tie.Pfv]

‘Seydou helped me tie up the cow.’

The semantics of ‘help’ and ‘prevent’ are slightly distinct. In the case of ‘X prevent Y [from VPing]’, there is no question that the covert subject of the lower VP is coindexed with Y and is not coindexed with X. In that of ‘X help Y [(to) VP]’, the covert lower subject is coindexed with Y but may or may not also be coindexed with X. If X assists Y directly, for example in a two-person job like carrying a heavy object, then the real agent of that activity is the combined ‘X and Y’. Alternatively, the assistance may be indirect (writing a check, giving permission, etc.), in which case the action is carried out singly by Y. However, this fine distinction between ‘help’ and ‘prevent’ is disregarded by the grammar.

#### *màà/màā* ‘be about to’ with infinitival VP complement

The transitive verb *màà/màā* means ‘look for, seek’, leaking semantically into ‘want’. In this sense it can take an ordinary direct object NP. It can also combine with an infinitival VP complement beginning with *bē*, in the sense ‘be on the verge of VPing’ or ‘nearly VP’. This VP is perfective in form. The clause as a whole can be perfective or imperfective, but in either case the time frame is past, so there is little practical difference between the two aspects. *màà* is tonally invariant although bē may be pronounced with low pitch (as with future bē ).

(xx1) a. *à màà [bē sēwⁿ]*

3SgSbj **look.for**.Pfv [**Infin** fall.Pfv]

‘He/She was about to fall.’ = ‘He/She nearly fell.’

b. *à gā màā [bē sēwⁿ]*

3SgSbj Ipfv **look.for**.Ipfv [**Infin** fall.Pfv]

[=(a)]

c. *à tē màà [bē sēwⁿ]*

3SgSbj PfvNeg **look.for**.Pfv [**Infin** fall.Pfv]

‘He/She was not about to fall.’

d. *à nā màā [bē sēwⁿ]*

3SgSbj PfvNeg l**ook.for**.Ipfv [**Infin** fall.Pfv]

[=(c)]

### ‘Begin’ (*sīndì* ) with various complements

‘Begin’ is *sīndì/sīndì* or *sīnì/sīnì*. “Intransitive” ‘begin’ is expressed as a reflexive transitive, in either antipassive (xx1b) or middle (xx1c) sense.

(xx1) a. ŋ́ *=nàⁿ kāyⁿ sīndì*

1Sg Sbj/Obj work(n) **begin**.Pfv

‘I started the job.’

b. *sèēdù (yē) ŋ̀ sīndì*

S (Sbj/Obj) 3SgReflObj **begin**.Pfv

‘Seydou began (e.g. to work).’

c. *kāyⁿ yè ŋ̀ sīndì*

work(n) Sbj/Obj 3SgReflObj l **begin**.Pfv

‘The work began.’

The semantically active reflexive type (xx1b) can be elaborated by a complement. The latter takes any of three forms: 1) an imperfective VP (xx2a); 2) an instrumental PP with verbal noun complement; or 3) a full imperfective clause with coindexed subject (xx2d). The simple first type seems to be associated with intransitive complements.

(xx2) a. *sèēdū (yē) ŋ̀ sīndī kɯ̀ɯ̄ / yà-là*

S (Sbj/Obj) 3SgReflObj **begin**.Pfv run.**Ipfv** / descend-**Ipfv**

‘Seydou began to run/to go down.’

b. *sèēdū (yē) ŋ̀ sīndī [kɯ̀ɯ̀ / yàŋ-gù nī]*

S (Sbj/Obj) 3SgReflObj **begin**.Pfv [run.Nom / descend-VblN Inst]

[=(a)]

c. *sèēdù (yè) ŋ̀ sīndī [ŋ̀ kɔ̄-lā]*

S (Sbj/Obj) 3SgReflObj **begin**.Pfv [1SgObj hit-Ipfv]

‘Seydou began to hit me.’

d. *sèēdù (yè) ŋ̀ sīndī*

S (Sbj/Obj) 3SgReflObj **begin**.Pfv

*[ŋ̀ gā ŋ̀ kɔ̄-lā]*

[**3SgReflSbj** **Ipfv** 1SgObj hit-**Ipfv**]

[=(d)]

### ‘Stop’ (*tàà*, *tàà-nì* ) with nominalized verb or VP complement

Intransitive ‘stop, come to a halt’ is *tàà/tà-là* (xx1a). The causative is *tàà-nì/tàà-nī* ‘stop (something), cause to halt’ (xx1b).

(xx1) a. *mòbōlī tàà*

vehicle **stop**.Pfv

‘The vehicle stopped.’

b. *ʒāndārmū mòbōlī tàà-nì*

gendarme vehicle **stop-Caus**.Pfv

‘The gendarme stopped the vehicle.’

In the sense ‘stop, interrupt (an activity)’, the object of the causative version can also be a noun that denotes the activity. This may be a suffixed verbal noun (xx2a-b), or an unsuffixed verb (usually more or less identical to the perfective) that is arguably functioning here as a noun (xx2c‑d). If an object noun is included, it is arguably a compound initial (xx2e).

(xx2) a. *è sūwō-gū tàà-nì*

3PlSbj sing-**VblN** **stop**-Caus.Pfv

‘They stopped (=interrupted) the song.’

(< *sūwō-gù* )

b. *ē yàŋ-gū tàà-nì*

3PlSbj descend-**VblN** **stop**-Caus.Pfv

‘They stopped (=interrupted) going down.’

(< *yàŋ-gù* )

c. *ē kɯ̀ɯ̄ tàà-nì*

3PlSbj run.**Nom** stop-Caus.Pfv

‘They stopped running.’ (i.e. they interrupted their race)

(cf. perfective *kɯ̀ɯ̀* )

d. *è wwō* / *sīŋāⁿ tàà-nì*

3PlSbj weep.**Nom** / breathe.**Nom** stop-Caus.Pfv

‘They stopped weeping/breathing.’

(cf. perfective *sīŋàwⁿ* )

e. *è tēē-dīgɛ̄ / dùwɔ̀-mɛ̄ⁿ tàà-nì*

3PlSbj meat-eat.**Nom** / beer-drink.**Nom** stop-Caus.Pfv

‘They stopped drinking beer.’

(cf. perfective *mɛ̀wⁿ* )

### ‘Finish’ (*bày*) with place-nominal complement

The translation equivalent of intransitive ‘finish’ is a reflexive transitive *kìlɛ̀wⁿ/kìlɛ̄n-nà* or stative *kìlɛ̀-nà* (xx1). It can have antipassive (xx1a) or middle (xx1b-c) sense.

(xx1) a. *ŋ́ =nàⁿ ŋ̀ kílɛ́wⁿ*

1Sg Sbj/Obj 1SgReflObj **finish**.Pfv

‘I have finished.’

b. *mànàmì ŋ̄ kìlɛ̀wⁿ*

dance(n) 3SgReflObj **finish**.Pfv

‘The festivities are over.’

c. *mànàmī kìlɛ̀-nā nì*

dance(n) **finish**-Stat it.is

‘The festivities are coming to an end.’

This verb can take a VP complement consisting of, or ending with, a place nominal with suffix *‑gàwⁿ* (§4.2.xxx). The verb of the complement VP is perfective subject to minor reductions (*sùwōò* ‘sang’ to *sùwō* )

(xx2) a. *ì yē ỳ kìlɛ̄ⁿ [sùwō* / *mànàmī -gàwⁿ]*

3PlSbj Sbj/Obj 3PlReflObj **finish**.Pfv [sing.Pfv / dance.Pfv **-place**]

‘They have finished singing/dancing.’

(< *sùwōò/sùwō-lò* ‘sing’)

b. *ŋ́ =nā ŋ̀ kílɛ́ⁿ [[dùwɔ̀ mɛ̄ⁿ] -gàwⁿ]*

1Sg Sbj/Obj 1SgReflObj **finish**.Pfv [[beer drink.Pfv] **-place**]

‘I have finished drinking beer.’

c. *ŋ́ =nā ŋ̀ kílɛ́ⁿ [tāⁿ* / *yǎⁿ -gàwⁿ]*

1Sg Sbj/Obj 1SgReflObj **finish**.Pfv [ascend.Pfv/descend.Pfv **-place**]

‘I have finished going up/going down.’

### ‘Abandon’ (*bày*) with nominalized VP complement

The transitive verb ‘leave (sb, sth), abandon, leave alone’ is *bày/bàȳ* (xx1a). It can also take a nominalized VP complement in the sense ‘(definitively) cease VPing; give up VPing’ (xx1b-d).

(xx1) a. *ŋ́ =nāⁿ sèēdū bày*

1SgSbj Sbj/Obj S **leave**.Pfv

‘I have left Seydou (alone).’

b. *ŋ́ =nāⁿ kɯ̄ɯ̄* / *tāŋ-gū* / *dūwɛ̄ bày*

1SgSbj Sbj/Obj run.Nom / ascend-Nom / enter.Nom **leave**.Pfv

‘I have (permanently) given up running/going up/going in.’

[< *kɯ̀ɯ̀/kɯ̀ɯ̄*, *tāwⁿ/tā-nā*, *dwɔ̄/dɔ̄-lɔ̄* ]

c. *ŋ́ =nāⁿ [dùwɔ̀ mɛ̄ⁿ] bày*

1SgSbj Sbj/Obj [beer drink.Nom] **leave**.Pfv

‘I have (permanently) given up beer drinking.’

d. *ŋ́ =nāⁿ [[ŋ̀ kúŋgóló-yé] kɔ́-lɛ́] bày*

1SgSbj Sbj/Obj [[1SgPoss dog-Pl] hit-Nom] **leave**.Pfv

‘I have (permanently) given up hitting my dogs.’

## Purposive and causal clauses

A number of constructions can function as purposive clauses. The flexibility is attributable to the fact that a VP or clause immediately following a motion clause is often purposive in function, e.g. ‘come and eat’ = ‘come in order to eat’.

### Chained clause with coindexed subject and tone-raised object

(xx1a-b) are simple transitives, perfective and imperfective respectively.

(xx1) a. *à [(ŋ̄) dàndì] bāgā*

3SgSbj [(3SgReflPoss) chili] take.out.Pfv

‘He/Shex took out (his/herx) chili peppers.

b. *à gā [(ŋ̄) dàndì] bāgà*

3SgSbj Ipfv [(3SgReflPoss) chili] take.out.Ipfv

‘He/Shex takes out (his/herx) chili peppers.

In (xx2a-b), ‘take out (his/herx) chili peppers’ is converted into a purposive clause with coindexed subject. The main clause with ‘come’ is perfective in (xx2a) and imperfective in (xx2b). If the shared subject is 3Sg, the second clause begins with a reflexive pronominal as subject. The ‘take out’ verb in the purposive clause is perfective in both (xx2a) and (xx2b), i.e., it does not agree in aspect with the main clause. The other notable change is that L-toned *dàndì* ‘chili (pepper)’ has become LH-toned *dàndí(í)* with optionally lengthened final vowel.

(xx2) a. *à bē gā [[(ŋ̄) dàndí] bāgā]*

3SgSbj come.Pfv RemPfv [[(3SgReflPoss) chili] take.out.Pfv]

‘He/Shex came to take out (his/herx) chili peppers.’ (< *dàndì* )

b. *à gà bē [[(ŋ̄) dàndí(í)] bāgā]*

3SgSbj Ipfv come.Pfv [[(3SgReflPoss) chili] take.out.Pfv]

‘He/Shex came to take out (his/herx) chili peppers.’ (< *dàndì* )

The phonology of object nouns in purposive clauses with the same verb ‘take out’ is exemplified in (xx3). The same modifications occur in nouns followed by instrumental postposition ní (§8.1.2.1). A final L- or M-toned syllable is raised to H. An M-toned segment of exactly two syllables is also raised, as in M-toned bisyllabics and longer stems ending in just two M-toned syllables. An M-toned trisyllabic like *sūmpōrō* ‘tick’ raises only its final syllable.

(xx3) noun gloss ‘in order to take out X’

a. /L/ melody

*dàndì* ‘chili pepper’ *dàndí(í) bāgā*

*tìŋgè* ‘stool’ *tìŋgé(é) bāgā*

*dàmbà* ‘daba (hoe)’ *dàmbá(á) bāgā*

*kùmbùrù* ‘insect’ *kùmbùrú bāgā*

*tìyòwⁿ* ‘ax’ *tìyówⁿ bāgā*

b. /M/ melody

*tīyɛ̄* ‘oil’ *tíyɛ́ bāgā*

*sūmpōrō* ‘tick’ *sūmpōró bāgā*

*sɔ̄gɔ̄-sɔ̄gɔ̄* ‘round basket’ *sɔ̄gɔ̄-sɔ́gɔ́ bāgā*

c. /H/ melody

*síbō* ‘ashes’ *síbó bāgā*

*sɔ́gɔ́* ‘milk’ *sɔ́gɔ́ bāgā*

*sórógō* ‘door-lock’ *sórógó bāgā*

d. …LM or …LH

*sɔ̀mɔ̄* ‘pick-hoe’ *sɔ̀mɔ́ bāgā*

*tìmɔ̄gɔ̄* ‘ladder’ *tìmɔ́gɔ́ bāgā*

*sɔ̄gɔ̀lɛ̄wⁿ* ‘gutterspout’ *sɔ̄gɔ̀lɛ́ⁿ bāgā*

*tàjí* ‘basket’ *tàjí bāgā*

e. …ML or …HL

*tēè* ‘tea’ *téé bāgā*

*sɔ̄llɔ̀* ‘dust’ *sɔ̄llɔ́ bāgā*

### Clausal *hālà/sālà* plus sequential clause

One type of purposive clause begins with *hālà* ~ *sālà*, which also occurs in dubitative ‘whether …’ clauses (§17.2.1.1). This is followed by the subject, sequential *bè*, and a VP with perfective verb.

(xx1) a. *à dàmbā sàwⁿ*

3SgSbj daba buy.Pfv

*[sālā ŋ̄ bè pīīⁿ sɔ̀gā= [ā nī]]*

[**until** 3ReflSgSbj Seq millet cultivate.Pfv [3Sg Inst]

‘Hex bought a daba (=hoe) in order for himx to cultivate millet with it.’

b.. *ŋ́ dàmbā sàwⁿ*

1SgSbj daba buy.Pfv

*[sālā ŋ̄ bè pīīⁿ sɔ̀gā= [ā nī]]*

[**until** 1Sg **Seq** millet cultivate.Pfv [3Sg Inst]

‘I bought a daba (=hoe) in order for me to cultivate millet with it.’

### Nominalized VP plus postposition *làgà*

The purposive element can be made explicit by adding purposive-causal postposition *làgà* (§8.3.1) to a nominalized verb or VP. This *làgà* is a slightly different tonal form of the usual postnominal purposive-causal postposition *lāgà* (§8.3.1). Because it begins with L-tone, a preceding L-toned syllable undergoes Final Tone-Raising.

(xx1) *à bē gà [[ŋ̀ kɔ̄lɛ̄* / *tɔ̀ŋɛ̄] làgà]*

3SgSbj come.Pfv RemPfv [[1SgObj hit.Nom/look.at.Nom] **Purp**]

‘He/She came here for the purpose of hitting/looking at me.’ (< *tɔ̀ŋɛ̀* )

b. *ŋ̀ bē gà [sɔ̀gɔ̄* / *kùmū* / *pwɔ̀-gū làgà]*

1Sg come.Pfv RemPfv [cultivate.Nom/sleep.Nom/sit-VblN **Purp**]

‘I came to cultivate/sleep/sit.’

(< *sɔ̀gɔ̀/sɔ̀gɔ̄*, *kùmù/kùmū-nà*, *pwɔ̀/pɔ̀-lɔ̀* )

### Subjunctive clause in purposive function

An alternative construction is a motion verb followed by a subjunctive clause, with coindexed subject.

(xx1) a. *à bē gà [ŋ̀ gālā ŋ̀ wɔ́gá]*

3SgSbj come.Pfv RemPfv [3SgReflSbj **Sbjn** 1SgObj kill.Pfv]

‘He/She came here in order to kill me.’

b. *ŋ́ =nǎⁿ dàmbā sàwⁿ,*

1SgSbj Sbj/Obj daba buy.Pfv,

*ŋ̀ gālā [ŋ̀ cíɥé] sɔ̀gā= [à nī]*

1SgSbj Sbjn [1SgPoss field] cultivate.Pfv [3Sg Inst]

‘I bought a daba (=hoe) so I can cultivate my field.’ (< *cìɥè*, *sɔ̀gɔ̀* )

The subjunctive construction can also be used when the two subjects are disjoint, as long as the second clause is positive (xx4a). If the second clause is negative, it takes prohibitive form (xx4b).

(xx2) *ŋ́ bē [sàmúnáⁿ ní]*

1SgSbj come.Pfv soap Inst]

*āⁿ gālā jùgù-yè ɲīnā= [à nī]*

2Sg **Sbjn** garment-Pl wash.Pfv [3Sg Inst]

‘I brought some soap for you to wash the clothes with.’ (< *ɲīnī* )

b. *ē gā bɛ̀ndɛ̀ bīyɛ̄gà*

1Pl Ipfv roof replaster.Ipfv

*[à ma᷆ⁿ sō bòwⁿ]*

[3SgSbj **Proh** go.Pfv leak.Pfv]

‘We will replaster the roof (with mud) so it won’t (go and) leak.’

### Causal clause (*bàdì* ‘because’)

‘Because’ is expressed by *bàdì* at the beginning of the causal clause. It becomes *bàdī* before an L‑tone by Final Tone-Raising.

(xx1) a. *ŋ̀ tē sɔ̀gɔ̀-lɛ̄ⁿ sàwⁿ,*

1Sg PfvNeg sheep buy.Pfv,

*bàdī [à sɔ̀ŋɔ̄] ŋ̀ kōⁿ yāālōⁿ*

because [3SgPoss price] 3SgReflObj be.much a.lot

‘I didn’t buy a sheep, because its price is too much.’

b. *sèēdū tè bē,*

S PfvNeg come.Pfv,

*bàdī [à nàⁿ] nā ŋ̀ kēnāwⁿ*

**because** [3SgPoss mother] IpfvNeg ReflObj healthy

‘Seydou didn’t come, because his mother is sick.’ (< *nàwⁿ* )

For many young people, French *parce que* is standard, as in other languages of the zone.

# Anaphora

## Reflexive

### Reflexive object

When the subject and object of a transitive clause are co-indexed, the object is expressed either as a simple pronominal object, or as a possessed form of *ɲìyɛ̀wⁿ* ‘head’. The presentation below begins with the simple reflexives and cover the ‘head’ reflexives in §18.1.5 below.

In the simple case, special reflexive object forms occur 3Sg (clearly) and 3Pl (marginally), but 1st/2nd persons have their usual object forms.

One recurring issue in this section is the relationship between 3Sg reflexive *ŋ̀* and the various allomorphs of 1Sg: *ŋ̀* (+H), *ŋ̀*, and *ŋ́*. In general they are distinct morphemes, but homophonous in some contexts. A more difficult issue is the relationship between 3Pl reflexive *è* or *ē*, nonreflexive 3Pl *è*, and 1Pl *ē*. The 3Pl reflexive merges in some constructions with nonreflexive 3Pl, and in other constructions with 1Pl *ē*.

Reflexives are coindexed with the clausemate subject in most cases. The same third person reflexive morphemes also function as logophorics, coindexed with the ascribed author of a quotation (§18.3.1).

#### Simple 3Sg reflexive object after nonpronominal subject

The morphologically simple option is illustrated for 3Sg in (xx1a‑d), using *yùgòⁿ* ‘woman’ as subject. The bidirectional object marker in the perfective positive is *yè*. The same tonal patterns described below are applicable to other post-subject inflectional particles (perfective negative *tè*, imperfective positive *gà*, imperfective negative *nà* ).

The crucial morpheme is 3Sg reflexive *ŋ̀*. This morpheme has no tonal effect on the following verb, which preserves its regular perfective melody: /L/ in (xx1a), /M/ in (xx1b), and /ML/ in (xx1d). In (xx1) and later examples, verbs are grouped by initial tones.

(xx1) a. *yùgōⁿ yē ŋ̀ sèy* / *wàgà* / *tɔ̀ŋɔ̀* / *ɲɔ̀lī*

woman Sbj/Obj **3SgReflObj** tie.Pfv/kill.Pfv/look.at.Pfv/point.at.Pfv

‘The woman tied/killed/looked at/pointed at herself.’

b. *yùgōⁿ yē ŋ̀ kwāā* / *sīwⁿ* / *pɛ̄ɛ̄rɛ̀*

woman Sbj/Obj **3SgReflOb**j hit.Pfv/bite.Pfv/tear.Pfv

‘The woman hit/bit/tore herself.’

The *yē ŋ̀* in (xx1a‑b) is clearly distinct segmentally from nonreflexive 3Sg object *yā=à* in (xx2).

(xx2) a. *yùgōⁿ yā= à sèy* / *wàgà* / *tɔ̀ŋɔ̀* / *ɲɔ̀lī*

woman Sbj/Obj 3SgObj tie.Pfv/kill.Pfv/look.at.Pfv/point.at.Pfv

‘The womanx tied/killed/looked at/pointed at himy/hery/ity.’

b. *yùgōⁿ yā =à kwāā* / *sīwⁿ* / *pɛ̄ɛ̄rɛ̀*

woman Sbj/Obj 3SgObj hit.Pfv/bite.Pfv/tear.Pfv

‘The womanx hit/bit/tore himy/hery/ity.’

There is also the question of how 3Sg reflexive object *yē ŋ̀* in (xx1) above is distinguished from 1Sg object *(yè) ŋ̀* (+H). The latter occurs with and without the bidirectional case marker *yè*. If the marker is omitted, 1Sg object *ŋ̀* (+H) is easily distinguished from reflexive 3Sg object *yē ŋ̀* regardless of the tonal form of the following verb.

If the marker is present before 1Sg object, there is no segmental difference, and the only way to distinguish the two is by tones. This is possible when the following verb begins with L‑tone, since 1Sg object *yē ŋ̀* (+H) raises the tones of the verb while 3Sg reflexive object *yē ŋ̀* does not. Compare (xx3a) below with (xx1a) above, focusing on the tones of the verb. This does not work for verbs that begin with a nonlow tone, which are unaffected by the floating H of the 1Sg pronominal. Therefore (xx3b) below is not clearly distinguishable from (xx1b) above when the *yè* marker is present.

(xx3) a. *yùgōⁿ (yē) ŋ̀ séy* / *wágá* / *tɔ́ŋɔ́* / *ɲɔ̂lī*

woman (Sbj/Obj) **1SgObj** tie.Pfv/kill.Pfv/look.at.Pfv/point.at.Pfv

‘The woman tied/killed/looked at/pointed at me.’

b. *yùgōⁿ (yē) ŋ̀ kwāā* / *sīwⁿ* / *pɛ̄ɛ̄rɛ̀*

woman (Sbj/Obj) **1SgObj** hit.Pfv/bite.Pfv/tear.Pfv

‘The woman hit/bit/tore me.’

Difficulties in distinguishing 3Sg reflexive and 1Sg objects are undoubtedly a factor favoring the use of the alternative reflexive object construction with possessed ‘head’ as object (§18.1.5 below).

#### Simple 3Pl reflexive object after nonpronominal subject

Before considering 3Pl reflexive objects after nonpronominal subject NPs, it is useful to contrast nonreflexive 3Pl (xx1a) from 1Pl (xx1b) objects.

(xx1) a. *yùgò-mbē yē= è sèy* / *kwāā*

woman-Pl Sbj/Obj 3PlObj tie.Pfv/hit.Pfv

‘The women tied/hit them.’

b. *yùgò-mbē yè= ē sèy* / *kwāā*

woman-Pl Sbj/Obj 1PlObj tie.Pfv/hit.Pfv

‘The women tied/hit us.’

The phonetic difference between *yē=è* and *yè=ē* is more subtle than the transcriptions suggests, since (like other combinations of *yè* and pronominal object) they are subject to de-stressing, contraction to a single mora, and pitch flattening. *yē=è* is realized as [jè], and *yè=ē* as [jē], with slightly different pitches but no audible modulation.

My assistant has a clear awareness of the distinction between (xx1a) and (xx1b). For him, the 3Pl reflexive object (xx2) is homophonous to the 3Pl object (xx1a), not to the 1Pl object (xx1b).

(xx1) *yùgò-mbē yē =è sèy* / *kwāā*

woman-Pl Sbj/Obj 3PlReflObj tie.Pfv/hit.Pfv

‘The women tied/hit themselves.’

As with 3Sg reflexive object, the only way to express 3Pl reflexive object with no risk of ambiguity is to use the ‘head’ reflexives (§18.1.5).

#### Simple reflexive objects after pronominal subjects

When we replace the nonpronominal subject NPs (‘the woman’, ‘the women’) used in the preceding sections with pronominal subjects, the combinations (in the perfective positive) are those in (xx1).

(xx1) Reflexive subject-object combinations (perfective positive)

a. 1Sg *ŋ́ =nāⁿ ŋ̀* (+H) with H realized on a following /L/ verb

b. 2Sg *āⁿ= āⁿ*

3Sg *à ŋ̀*

c. 1Pl *ē yè= ē*

2Pl *āā yà= ā*

3Pl *ì yē= è*

As noted elsewhere, combinations of *yè* with a vocalic object marker are usually contracted to short vowels with consequent flattening of pitch. A consequence of this is that *yè=ē* reduces to something like [jē] and *yē=è* reduces to something like [jè].

3Sg reflexive *à ŋ̀* is again homophonous with 3Sg-on-1Sg *à ŋ̀* (+H), unless they are followed by a L-toned verb. 3Pl reflexive *ì yē=è*, typically pronounced [ìjè], is homophonous with nonreflexive 3Pl-on-3Pl *ì yē=è*, but distinct from 3Pl-on-1Pl *ì yè=ē* and of course from reflexive 1Pl *ē yè=ē*.

#### Reflexive object expressed by possessed ‘head’ as object

The noun *ɲìyɛ̀wⁿ* ‘head’ with a pronominal possessor may function as reflexive object, as an alternative to the morphologically simpler construction described above. Especially in such reflexives, *ɲìyɛ̀wⁿ* often contracts to *ɲɛ̀wⁿ*, though the full bisyllabic pronunciation is also possible.

With a nonpronominal subject, the bidirectional case marker *yè* is present, followed by ‘head’ with either 3Sg reflexive *ŋ̀* or regular 3Pl *è* as possessor. L‑toned *ɲìyɛ̀wⁿ* triggers Final Tone-Raising on the pronominal object. The second syllable of *ɲìyɛ̀wⁿ* or the second mora of its contracted form *ɲɛ̀wⁿ* also undergoes this process when followed by an L‑tone (xx1a).

(xx1) a. *yùgōⁿ yē [ŋ̀ ɲɛ̌ⁿ] sèy*

woman Sbj/Obj [3SgReflPoss **head**] tie.Pfv

‘The woman tied herself.’

b. *jéná yē [ŋ̀ ɲɛ̀ⁿ] sīwⁿ*

child Sbj/Obj [3SgReflPoss **head**] bite.Pfv

‘The child bit him-/her-self.’

c. *jéná-mbí-gé yē= [ē ɲɛ̀wⁿ] sīwⁿ*

child-Pl-Pl Sbj/Obj [3PlReflPoss **head**] bite.Pfv

‘The children bit themselves.’

Combinations of pronominal subjects with ‘head’ reflexives are in (xx2). In the plural and 3Sg combinations, the object marker is raised from L to M by regular Final Tone-Raising. The 1Sg possessor *ŋ̀*(+H) raises the tones of ‘head’.

(xx2) Reflexive subject-object combinations with ‘head’

a. 1Sg *ŋ́ =nà ŋ̀ ɲíyɛ́wⁿ* ~ *ɲɛ́wⁿ*

b. 2Sg *āⁿ =āⁿ ɲìyɛ̀wⁿ* ~ *ɲɛ̀wⁿ*

3Sg *à =ŋ̄*  "

c. 1Pl *ē yè =ē*  "

2Pl *āā yà =ā*  "

3Pl *ì yè =ē*  "

The 3Pl reflexive form has *ē* rather than *è* as the “possessor” of ‘head’. This is consistent with the convergence of 3Pl reflexive possessor *ē* with 1Pl possessor *ē*, versus nonreflexive 3Pl *è*. 2

#### Reflexive imperatives

A general issue in languages of the zone is whether “imperative subjects” are on a par with regular subjects (i.e. in indicative clauses). The interaction of imperatives with pronominal or transpersonal reflexivization (excluding ‘head’ reflexives) is the key decider. Those Dogon languages that have transpersonal reflexives show that imperatives lack true subjects, though they mark addressee number. In Jenaama, there is no clear evidence in this direction.

Singular-addressee reflexive imperatives are in (xx1). The single pronominal morpheme is probably the 2Sg object (not subject) marker. If this is correct, there is no overt subject marker and no bidirectional case marker. The verb has perfective tones.

(xx1) *āⁿ sèy* / *wàgà* / *tɔ̀ŋɔ̀* / *kwāā* / s*īwⁿ* / *pɛ̄ɛ̄rɛ̀* / *ɲɔ̀lī*

2SgObj tie.Pfv/kill.Pfv/look.at.Pfv/hit.Pfv/bite.Pfv/tear.Pfv/point.at.Pfv

‘Tie/Kill/Look at/Hit/Bite/Tear/Point at yourself!’

Plural-addressee reflexive imperatives are in (xx2). These begin with bidirectional *yè*, contracting with the 2Pl object marker *āā* as *yà=à*, becoming *yà=ā* before an L-tone by Final Tone-Raising (xx2a). If *yè* is always a bidirectional case-marker, its presence here implies that a 2Pl subject is recognized, though phonologically unexpressed.

(xx2) a. *Ø yà= ā sèy* / *wàgà* / *tɔ̀ŋɔ̀*

2PlSbj Sbj/Obj 2PlObj tie.Pfv/kill.Pfv/look.at

‘Tie/Kill/Look at yourselves!’

b. *Ø yà= à kwāā* / *sīwⁿ* / *pɛ̄ɛ̄rɛ̀* / *ɲɔ̀lī*

2PlSbj Sbj/Obj 2PlObj hit.Pfv/bite.Pfv/tear.Pfv/point.at

‘Hit/Bite/Look at yourselves!’

Sample reflexive imperatives (singular and plural addressees) with ‘head’ are in (xx3).

(xx3) a. *[āⁿ ɲɛ̀w̄ⁿ] sɛ̀y*

[2SgPoss head] tie.Imprt

‘Tie yourself!’

b. *yà= [=ā ɲɛ̀w̄ⁿ] sɛ̀y*

Sbj/Obj [2PlPoss head] tie.Imprt

‘Tie yourselves!’

### Reflexive PP complements

A 3Sg pronominal complement of a postposition is reflexive if coindexed with the clausemate subject. (xx1a) shows coindexed 1Sg, which does not have a distinct reflexive pronominal form. (xx1b) shows noncoindexed 3Sg (with 1Sg subject). (xx1c) shows the familiar 3Sg reflexive *ŋ̀* under coindexation with the subject.

(xx1) a. *ŋ̀ =nāⁿ kɔ̀yɔ̄wⁿ yàgā [ŋ̀ mūù]*

1SgSbj Sbj/Obj stone put.down.Pfv [**1Sg** under]

‘I put the stone under myself.’ (< *yàgà* )

b. *ŋ̀ =nāⁿ kɔ̀yɔ̄wⁿ yàgā [à mūù]*

1SgSbj Sbj/Obj stone put.down.Pfv [**3Sg** under]

‘I put the stone under him/her/it.’

c. *à kɔ̀yɔ̄wⁿ yàgā [ŋ̀ mūù]*

3SgSbj stone put.down.Pfv [**3SgRefl** under]

‘He/She put the stone under himself/herself.’

The 3Pl reflexive is *ē*, homophonous with 1Pl *ē* (xx2a) and distinct from nonreflexive 3Pl *è* (xx2b).

(xx2) a. *è kɔ̀yɔ̄wⁿ yàgà [ē mūù]*

3PlSbj stone put.down.Pfv [**3ReflPl/1Pl** under]

‘They put the stone under themselves/under us.’

b. *è kɔ̀yɔ̄wⁿ yàgā [è mūù]*

3PlSbj stone put.down.Pfv [**3Pl** under]

‘Theyx put the stone under themy.’

Reflexivity can be made explicit by using ‘head’ reflexives.

(xx3) a. *ŋ́ =nāⁿ yàmbāà kēbē [[ŋ̀ ɲɛ́ⁿ] tè]*

1Sg Sbj/Obj house build-Pfv [[1SgPoss **head**] Dat]

‘I built the house for myself.’

b. *è yàmbāà kēbē [[ē ɲɛ́ⁿ] tè]*

1Sg house build-Pfv [[3PlReflPoss **head**] Dat]

‘They built the house for themselves.’

### Third-person reflexive possessor

The regular (nonreflexive) pronominal possessor paradigm of *yàmbāà* ‘house’ is (xx1). Only 1Sg possessor *ŋ̀*(+H) changes the tones of *yàmbāà* (xx1a).

(xx1) possessor

a. 1Sg *ŋ̀ yâmbāà*

b. 1Pl *ē yàmbāà*

2Sg *āⁿ*  "

2Pl *āā*  "

3Sg *à*  "

3Pl *è*  "

In transitives with coindexed object possessor, like ‘X sold X’s house’, the second X is a reflexive pronominal possessor. In all 1st/2nd person pronominal categories, the reflexive pronominal possessor is identical to the ordinary pronominal possessor shown in the array (xx1) above.

For 3Sg, the reflexive pronominal possessor is *ŋ̀*. Perfective positive ‘X sold X’s house’ where the first X is already a (regular) pronoun, are in (xx2), using the transitive verb *tōlō* ‘sold’. 3Sg reflexive *ŋ̀* is subject to Final Tone-Raising before the initial L-tone of ‘house’. The other reflexive possessors in (xx2b-c) are M-toned in all positions.

(xx2) ‘X sold X’s house’ with reflexive possessors

a. 1Sg *ŋ́ =nāⁿ [ŋ̀ yâmbāà] tōlō*

b. 2Sg *āⁿ [=āⁿ*  " "

3Sg *à [ŋ̄*  " "

c. 1Pl *ē yè= [ē yàmbāà] tōlō*

2Pl *āā yà= [=ā*  " "

3Pl *ì* *yè= [=ē*  " "

(xx3a) has regular 3Sg possessor on the object ‘boubou’ (garment), indicating that the two 3Sg referents are not coindexed. The shift to 3Sg reflexive possessor *ŋ̀* in (xx3b) does mark coindexation.

(xx3) a. *à= [ā jùgù] dō [ŋ̀ té]*

3SgSbj [**3SgPoss** boubou] give.Pfv [1Sg Dat]

‘Shex gave me hisy boubou (garment).’

b. *à [ŋ̄ jùgù] dō [ŋ̀ té]*

3SgSbj [**3SgReflPoss** boubou] give.Pfv [1Sg Dat]

‘Hex gave me hisx (own) boubou.’

In conjoined NPs, the left conjunct binds a coindexed 3Sg possessor *ŋ̀* in the right conjunct, as in ‘Seydou and his father’. See §7.1.6 for an example.

While regular and reflexive 3Sg possessors are clearly distinguished, the reflexive form *ŋ̀* can be confused with 1Sg possessor *ŋ̀* (+H). When the following noun begins with an L‑tone, as with *jùgù* ‘boubou’, the two are audibly distinguishable since the floating H-tone of the 1Sg is realized on the noun. Therefore the tones of ‘boubou’ distinguish (xx3b) above from (xx4) below.

(xx4) *à [ŋ̀ júgú] dō [ŋ̀ té]*

3SgSbj [**1SgPoss** boubou] give.Pfv [1Sg Dat]

‘Hex gave me my boubou.’

However, a floating H has no effect on a following possessed noun that already begins with M‑ or H‑tone, as with *sūgō* ‘goat’ or *kúŋgóló* ‘dog’. The 3Sg reflexive possessor in (xx5a) is therefore not audibly distinguishable from the 1Sg reflexive possessor in (xx5b).

(xx5) a. *à [ŋ̀ sūgō / kúŋgóló] dō [ŋ̀ té]*

3SgSbj [**3SgReflPoss** goat / dog] give.Pfv [1Sg Dat]

‘Hex gave me hisx (own) goat/dog.’

b. *à [ŋ̀ sūgō / kúŋgóló] dō [ŋ̀ té]*

3SgSbj [**1SgPoss** goat / dog] give.Pfv [1Sg Dat]

‘Hex gave me my goat/dog.’

3Pl counterparts are in (xx6). The reflexive version (xx6b) is homophonous to ‘They sold our house’.

(xx6) a. *ì yē= [è yàmbāà] tōlō*

3Pl Sbj/Obj [**3PlPoss** house] sell.Pfv

‘Theyx sold theiry house.’

b. *ì yè= [ē yàmbāà] tōlō*

3Pl Sbj/Obj [**3PlReflPoss** house] sell.Pfv

‘Theyx sold theirx (own) house.’

In interlinears, we limit “ReflPoss” to the third-person forms, since there is no evidence for morphologically distinctive first or second person reflexive pronominals (excluding ‘head’ reflexives).

### 3Sg reflexive subject *ŋ̀* in subordinated clause

3Sg reflexive *ŋ̀* can also function as subject of a subordinated clause, when coindexed to the main-clause subject. Examples are (xx1a) and (xx1b).

(xx1) a. *sèēdù nā= à pɔ̄gɔ̄*

S IpfvNeg 3SgObj like.Ipfv

*[ŋ̀ gālā ŋ̀ kó [wɔ́léⁿ ní]*

[**3SgReflSbj** Sbjn 1SgObj provide.Pfv [money Inst]]

‘Seydou doesn’t like to give me money.’ (§17.3.1)

b. *sèēdù (yè) ŋ̀ sīnī*

S (Sbj/Obj) 3SgReflObj begin.Pfv

*[ŋ̀ gā ŋ̀ kɔ̄-lā]*

[**3SgReflSbj** Ipfv 1SgObj hit-Ipfv]

‘Seydou began to hit me.’ (§17.4.3)

A challenge for syntactic analysis (but not for communication) is that many instances of *ŋ̀* as subordinated subject could be construed as logophoric. This is the case in (xx1a), where the subordinated proposition ‘Seydou give me money’ could be construed as part of Seydou’s thought process. However, such a construal would be difficult in other cases such as (xx1b).

A slightly more serious problem (this time for communication) is that 1Sg subject *ŋ̀* and reflexive 3Sg *ŋ̀* are homophonous except in the perfective positive (where 1Sg subject is *ŋ́* ). In (xx2), the relative clause in each case has *ŋ̀* as subject. In (xx2a), it can only be 1Sg since there is no third person antecedent available. In (xx2b), *ŋ̀* is reflexive 3Sg, coindexed with the main-clause subject Seydou. (xx2b) is homophonous with (xx2c) where *ŋ̀* is 1Sg.

(xx2) a. *ŋ̀ gā à tò*

**1SgSbj** Ipfv 3SgObj know.Ipfv

*[ŋ̀ gā màⁿ tī-nà]*

[**1SgSbj** Ipfv Rel do-Ipfv]

‘I know what I’m doing.’

b. *sèēdū gā à tò*

**S** Ipfv 3SgObj know.Ipfv

*[ŋ̀ gā màⁿ tī-nà]*

[**3SgReflSbj** Ipfv Rel do-Ipfv]

‘Seydou knows what he’s doing.’

c. *sèēdū gā à tò*

**S** Ipfv 3SgObj know.Ipfv

*[ŋ̀ gā màⁿ tī-nà]*

[**1SgSbj** Ipfv Rel do-Ipfv]

‘Seydou knows what I’m doing.’

This ambiguity can be avoided by fronting the relative clause as a preclausal topic, with a resumptive pronominal in the following full clause. This is the case in (xx3a-b), both of which are unambiguous.

(xx3) a. *ŋ̀ gè= ēnī [mǎⁿ tè]*

**1SgSbj** Ipfv be.able.Ipfv [Rel Dat]

*ŋ̀ gā wɔ̀gɔ̀ tī-nà*

**1SgSbj** Ipfv 3Sg.Indep do-Ipfv

‘I do what I can (do).’

(lit. ‘What I can, that [focus] is what I do.’)

b. *sèēdù gè= ēnī [mǎⁿ tè]*

**S** Ipfv be.able.Ipfv [Rel Dat]

*à gā wɔ̀gɔ̀ tī-nà*

**3SgSbj** Ipfv 3Sg.Indep do-Ipfv

‘Seydoux does what hex can (do).’

(lit. ‘What Seydou can, that [focus] is what he does.’)

### *ɲìyɛ̀wⁿ* ~ *ɲɛ̀wⁿ* ‘head’ in reflexive objects

The noun *ɲìyɛ̀wⁿ* ‘head’ is optionally used in reflexive objects. It has a pronominal possessor, cf. English *your-self* and *your-selves*. For third person the possessor is reflexive in form (3Sg *ŋ̀*, 3Pl *ē* ). The full bisyllabic pronunciation of *ɲìyɛ̀wⁿ* is possible, but especially in such reflexives it is often contracted to *ɲɛ̀wⁿ*.

(xx1) a. *ŋ́ =nā [ŋ̀ ɲɛ́ⁿ] kwāā*

1SgSbj Sbj/Obj [1SgPoss **head**] hit.Pfv

‘I hit myself.’

b. *à [ŋ̄ ɲɛ̀ⁿ] kwāā*

3SgSbj [3SgReflPoss **head**] hit.Pfv

‘He hit himself.’ or ‘She hit herself.’

c. *ì yè= [ē ɲɛ̀ⁿ] kwāā*

3PlSbj Sbj/Obj [3PlReflPoss **head**] hit.Pfv

‘They hit themselves.’

The use of ‘head’ reflexives in object function avoids homophony between 3Sg reflexive object *ŋ̀* and 1Sg object *ŋ̀* (+H). These morphemes are distinguishable before otherwise L‑toned verbs, which become H-toned after the 1Sg object morpheme. They are indistinguishable before verbs beginning with M‑tone. By contrast, the ‘head’ reflexives are distinguishable based on the tone of ‘head’ (and its tone sandhi effects on the preceding morpheme), regardless of the tones of the verb: 1Sg *ŋ̀ ɲɛ́wⁿ*, 3Sg reflexive *ŋ̄ ɲɛ̀wⁿ*.

My assistant did not accept ‘head’ in reflexive possessors, even where it might resolve potential ambiguities.

## Emphatic pronouns

There are no special emphatic pronominal forms comparable to the emphatic (nonreflexive) sense of *X‑self/selves* in English.

Exclusivity is marked for pronouns in the same way as for nonpronominal NPs. See especially §19.4.2 for ‘one; alone’ and ‘only’ in the context ‘unassisted, without anything else’.

Likewise, specificity in the context ‘personally, in person, instead of someone/something else’ is expressed by *jáátī* ‘exactly’. See §8.4.3.1 for examples.

## Logophoric and indexing pronouns

### Third person logophoric

The forms used for third-person reflexives, 3Sg *ŋ̀* and 3Pl *ē*, are also used as third-person logophorics. A logophoric is an anaphoric pronominal inside a quotation that is coindexed to the ascribed author of the quoted material, which may be an articulated thought as well as a spoken utterance.

As with reflexives, we must consider the relationship between 3Sg logophoric *ŋ̀* and 1Sg ŋ̀ and allomorphs, and that between 3Pl logophoric *ē* and 1Pl *ē* (as opposed to nonlogophoric 3Pl *è* ). We saw in §18.1 above that the 3Sg reflexive is not the same morpheme as 1Sg, though in some contexts they are homophonous. We also saw that 3Pl reflexive converges in form with 1Pl as possessor or as postpositional complement, while converging instead with nonreflexive 3Pl in simple reflexive objects.

The relationship between third person and first person takes on an added dimension in logophorics. Whereas any convergence between these persons in reflexives is a matter of accidental homophony, in logophorics it would have a sound semantic basis. This is because ‘Seydoux said that hex came’ with logophoric (i.e. coindexed) ‘hex’ is the quoted version of ‘I came’ uttered by Seydou.

It turns out that logophorics and first-person pronouns fall together systematically as subjects of quoted sentences. In non-subject functions, logophoric singular and 1Sg do not merge, but logophoric plural and 1Pl do.

#### No logophorics for second-person

Pronominals in quoted material that are coindexed to a second-person author take regular second-person (not logophoric) form. *yè* ‘say’ contracts with the subject pronominal in the quoted clause (xx1a‑b). The unusual combination of 2Sg author and 2Pl quoted subject has a similar contracted version (xx1c), but in this case my assistant preferred not to contract *yè* ‘say’ (xx1d). The *y* of *yè* ‘say’ optionally hardens to *j* after 2Sg *āⁿ* (xx1a,c).

(xx1) a. *āⁿ jà= [āⁿ bē]*

2SgSbj said [**2SgSbj** come.Pfv]

‘You-Sg said that you-Sg came.’

b. *āā yà= [à(à) bē]*

2PlSbj said [**2PlSbj** come.Pfv]

‘You-Pl said that you-Pl came.’

c. *āⁿ jà [à(à) bē]*

2SgSbj said [2PlSbj come.Pfv]

‘You-Sg said that you-Pl came.’

d. *āⁿ jè(,) [àà bē]*

2SgSbj said(,) [2PlSbj come.Pfv]

‘You-Sg said that you-Pl came.’

#### 3Sg logophoric same as 1Sg as subject in quotation

In quotations, 1Sg subject (denoting the current speaker) and logophoric 3Sg (denoting the author of the quotation) have the same form *ŋ̀*. Consider first the simple perfective positive forms in (xx1).

(xx1) a. *à bē*

3SgSbj come.Pfv

‘He/She came.’

b. *ŋ́ bē*

1SgSbj come.Pfv

‘I came.’

c. *à (yè) kúŋgóló kày*

3SgSbj (Sbj/Obj) dog see.Pfv

‘He/She saw the dog.’

d. *ŋ́ (=nàⁿ) kúŋgóló kày*

1SgSbj (Sbj/Obj) dog see.Pfv

‘I saw the dog.’

In the perfective positive, 1Sg is H-toned *ŋ́*, and in transitives it is followed by an idiosyncratic allomorph *nàⁿ* of the bidirectional case marker. Now consider the quoted clauses in (xx2). *ŋ̀* as subject of the quoted clause can be coindexed either with the quoted speaker (Seydou) or with the current speaker. *ŋ̀* is basically L-toned in both cases, becoming *ŋ̄* before an L-tone by Final Tone-Raising.

(xx2) a. *sèēdū yē [ŋ̀ bē]*

3SbSbj said [**LogoSbj/1SgSbj** come]

‘Seydoux said that hex came.’

or: ‘Seydou said that I came.’

b. *sèēdū yē [ŋ̄ nàⁿ kúŋgóló kày]*

*[ŋ̀ Ø*

3SbSbj said [**LogoSbj/1SgSbj** (Sbj/Obj) dog see.Pfv]

‘Seydoux said that hex saw the dog.’

or: ‘Seydou said that I saw the dog.’

The use of L-toned *ŋ̀* for 1Sg subject (coindexed with the present speaker) is general in quoted sentences, as shown by (xx3a-b).

(xx3) a. *āⁿ* / *ŋ̀ jē [ŋ̀ bē]*

2SgSbj/1SgSbj said [**LogoSbj/1SgSbj** come.Pfv]

‘You-Sg/I said that I came.’

b. *āⁿ* / *ŋ̀ jē [ŋ̄ nàⁿ kúŋgóló kày]*

*[ŋ̀ Ø*

2SgSbj/1SgSbj said [**LogoSbj/1SgSbj** (Sbj/Obj) dog see.Pfv]

‘You-Sg/I said that I saw the dog.’

The identity of logophoric and 1Sg subjects is maintained in quoted sentences with nonzero post-subject inflectional markers. (xx4) illustrates with imperfective positive *gà*.

(xx4) a. *sèēdū yē [ŋ̄ gà bē]*

S said [**LogoSbj** be come.Ipfv]

‘Seydoux said hex is coming.’

b. *sèēdū yē [ŋ̄ gà bē]*

S said [**1SgSbj** be come.Ipfv]

‘Seydou said that I am coming.’

(xx5) illustrates with perfective negatives.

(xx5) a. *sèēdū yē [ŋ̄ tè bē]*

S said [**LogoSbj** PfvNeg come.Pfv]

‘Seydoux said that hex didn’t come.’

b. *sèēdū yē [ŋ̄ tè bē]*

S said [**1SgSbj** PfvNeg come.Pfv]

‘Seydou said that I didn’t come.’

#### Plural logophoric same as 1Pl as subject of quoted clause

As in the singular, logophoric plural subject and 1Pl subject are merged as *ē* in quoted sentences (xx1a), distinct from nonlogophoric 3Pl *è* (xx1b).

(xx1) a. *jénám-bī-gē yè= [=ē bē]*

child-Pl-Pl said [LogoPlSbj/1PlSbj come.Pfv]

‘The childrenx said that theyx came.’

or: ‘The children said that we came.’

b. *jéná-Ø yē [=è bē]*

child-Pl said [3PlSbj come.Pfv]

‘The childrenx said that theyy came.’

#### 3Sg logophoric distinct from 1Sg as possessor in quotation

The systematic merger of logophoric singular and 1Sg as subjects does not extend to possessors, even possessors of subjects. 3Sg reflexive possessor *ŋ̀* does not raise the tones of the possessum ‘house’ in (xx1a), so *ŋ̀* itself then undergoes Final Tone-Raising. The 1Sg possessor *ŋ̀*(+H) in (xx1b) raises the initial L of the possessum, after which *ŋ̀* itself is not subject to Final Tone-Raising.

(xx1) a. *sèēdū yē [ŋ̄ yàmbāà] sēwⁿ*

S said [3SgLogoPoss house] fall.Pfv

‘Seydoux said that hisx (own) house fell (=collapsed).’

b. *sèēdù yē [ŋ̀ yâmbāà] sēwⁿ*

S said [1SgPoss house] fall.Pfv

‘Seydou said that my house fell (=collapsed).’

When the possessum begins with M‑ or H‑tone, 1Sg *ŋ̀*(+H) has no tonal effect on it, so the tones of the possessum do not distinguish 3Sg logophoric possessor *ŋ̀* from 1Sg possessor *ŋ̀* (+H).

(xx2) a. *sèēdū yē [ŋ̀ kúŋgóló] sēwⁿ*

S said [3SgLogoPoss dog] fall.Pfv

‘Seydoux said that hisx (own) dog fell.’

b. *sèēdù yē [ŋ̀ kúŋgóló] sēwⁿ*

S said [1SgPoss dog] fall.Pfv

‘Seydou said that my dog fell.’

While I hear no difference between (xx2a-b), my assistant’s intuition is that they are faintly distinct phonetically.

The distinction between logophoric possessor *ŋ̀* and 1Sg possessor *ŋ̀* (+H) is also observed in possessors of nonsubject NPs in the quoted sentence. ‘House’ is *yàmbāà* versus *yâmbāà* in (xx3a-b), but *kúŋgóló* is invariant in (xx3c-d).

(xx3) a. *sèēdū yè [āⁿ [ŋ̀ yàmbāà] kày]*

S said [2SgSbj [**LogoPoss** house] see.Pfv]

‘Seydoux said that you-Sg saw hisx house.’

b. *sèēdū yè [āⁿ [ŋ̀ yâmbāà] kày]*

S said [2SgSbj [**1SgPoss** house] see.Pfv]

‘Seydou said that you-Sg saw my house.’

c. *sèēdū yè [āⁿ [ŋ̀ kúŋgóló] kày]*

S said [2SgSbj [**LogoPoss** dog] see.Pfv]

‘Seydoux said that you-Sg saw hisx dog.’

d. *sèēdū yè [āⁿ [ŋ̀ kúŋgóló] kày]*

S said [2SgSbj [**LogoPoss** dog] see.Pfv]

‘Seydou said that you-Sg saw my dog.’

#### Plural logophoric same as 1Pl as possessor in quoted clause

Plural logophoric *ē* and 1Pl *ē* merge as possessors, and are distinct from 3Pl possessor *è*.

(xx1) a. *jénám-bí-gé yè [=ē kúŋgóló] sēwⁿ*

child-Pl-Pl said [3PlLogoPoss/1PlPoss dog] fall

‘The childrenx said that theirx (own) dog/our dog fell.’

b. *jénám-bí-gé yē [=è kúŋgóló] sēwⁿ*

child-Pl-Pl said [3PlPoss dog] fall

‘The childrenx said that theiry dog fell.’

The merger of logophoric plural *ē* with 1Pl *ē* also occurs as possessors of nonsubject NPs within the quotation (xx3a‑b). Again they jointly differ from nonlogophoric 3Pl (xx3c).

(xx3) a. *jénám-bí-gé yè [ŋ̀ =nē= [ē yàmbāà] kày]*

child-Pl-Pl said [1SgSbj Sbj/Obj [LogoPlPoss/1PlPoss house] see.Pfv]

‘The childrenx said that I saw theirx house/our house.’

b. *jénám-bí-gé yè [ŋ̀ =nē [=è yàmbāà] kày]*

child-Pl-Pl said [1SgSbj Sbj/Obj [3PlPoss house] see.Pfv]

‘The childreny said that I saw theiry house.’

#### Singular logophorics distinct from 1Sg as objects

In object position within the quotation, logophoric singular is *ŋ̀* versus 1Sg *ŋ̀* (+H). They are audibly distinct only when the following verb is L-toned, since it will then rise to H-toned after 1Sg object. The audible difference between (xx1a) and (xx1b) is in the tones of ‘tie’.

(xx1) a. *sèēdù yà= [āⁿ yè ŋ̄ sèy]*

S said [2SgSbj Sbj/Obj **LogoObj** tie.Pfv]

‘Seydoux said that you-Sg tied himx.’

b. *sèēdù yà= [āⁿ yē ŋ̀ séy]*

S said [2SgSbj Sbj/Obj **1SgObj** tie.Pfv]

‘Seydou said that you-Sg tied me.’

As expected, there is no difference when the verb begins with M-tone, as with ‘hit’.

(xx1) a. *sèēdù yà= [āⁿ yē ŋ̀ kwāā]*

S said [2SgSbj Sbj/Obj **LogoObj** hit.Pfv]

‘Seydoux said that you-Sg hit himx.’

b. *sèēdù yà= [āⁿ yē ŋ̀ kwāā]*

S said [2SgSbj Sbj/Obj **1SgOb**j hit]

‘Seydou said that you-Sg hit me.’

#### Plural logophorics same as 1Pl as objects

Bidirectional case marker *yè* contracts with 1Pl object *ē* as *yè=ē* and with 3Pl object *è* as *yē=è*. Based on parallels with singular objects, we would expect logophoric plural object to be *yè=ē*, merged with 1Pl. This seems to be my assistant’s preference. However, the phonetic distinction between *yē=è* and *yè=ē* is subtle due to de-stressing and contraction to approximately [jē] versus [jè], and my transcriptions of logophoric plural objects are not entirely consistent. The presentation below assumes that logophoric plural object does in fact merge with 1Pl object.

(xx1a‑b) have logophoric plural object *ē*. It contracts with bidirectional *yè* as *yè=ē*, often shortened to something like [jě] in normal allegro speech.

(xx1) a. *jénám-bí-gé yà= [ā(ⁿ) yè= ē kwāā]*

child-Pl-Pl said [2SgSbj Sbj/Obj **LogoPlObj/1PlObj** hit.Pfv]

‘The childrenx said that you-Sg hit themx/hit us.’

b. *jénám-bí-gé yà= [ā(ⁿ) yē =è kwāā]*

child-Pl-Pl said [2SgSbj Sbj/Obj **3PlObj** hit]

‘The childrenx said that you-Sg hit themy.’

b. *jéná-Ø yà= [=ā(ⁿ) yè= ē sèy]*

child-Pl said [2SgSbj Sbj/Obj **LogoPl** tie.Pfv]

‘The childrenx said that you-Sg tied themx.’

#### Singular and plural logophorics in PPs

The patterns described above for possessors and objects extend to postpositional complements. Logophoric singular *ŋ̀* is indistinguishable from 1Sg *ŋ̀* (+H) when the postposition begins with nonlow tone, as with comitative *bwāỳ* (xx1a‑b).

(xx1) a. *sèēdù yà [=āⁿ gà kāỳⁿ [ŋ̀ bwāỳ]]*

S said [2SgSbj be work.Ipfv [**Logo** Comit]]

‘Seydoux says that you-Sg work with himx.’

b. *sèēdù yà= [=āⁿ gà kāỳⁿ [ŋ̀ bwāỳ]]*

S said [2SgSbj be work.Ipfv [**1Sg** Comit]]

‘Seydou says that you-Sg work with me.’

If the postposition is L‑toned, like dative *tè*, it is raised to H after 1Sg *ŋ̀* (+H) (xx2a) but not after logophoric *ŋ̀* (xx2a).

(xx2) a. *sèēdù yè [[ŋ́ =nā à dó [ŋ̀ té]]*

S said [[Logo Sbj/Obj 3SgObj give.Pfv [**1Sg** Dat]

‘Seydoux said that hex gave it to me.’

b. *sèēdù yè [[ŋ́ =nā à dō [ŋ̀ tè]]*

S said [[1Sg Sbj/Obj 3SgObj give.Pfv [**Logo** Dat]

‘Seydoux said that I gave it to himx.’

Plural logophoric *ē* is indistinguishable from 1Pl *ē*, versus nonlogophoric 3Pl *è*, as postpositional complements. The examples use comitative *bwāỳ*.

(xx2) a. *jéná-Ø yà= [=āⁿ gà kāỳⁿ [ē bwāỳ]]*

child-Pl said [2SgSbj be work.Ipfv [**LogoPl/1Pl** Comit]]

‘The childrenx say that you-Sg work with themx/with us.’

b. *jéná-Ø yà= [=āⁿ gà kāỳⁿ [è bwāỳ]]*

child-Pl said [2SgSbj be work.Ipfv [**3Pl** Comit]]

‘The childrenx say that you-Sg work with themy.’

### Logophorics in stacked quotations

Two clauses down, two logophorics can be coindexed with two quoted authors at different levels (xx1).

(xx1) *sèēdū yè, āāmādū yè*

S said, A said

*ŋ̀ gā ŋ̄ wɔ̀gā*

**LogoSbj** Ipfv **LogoObj** kill.Ipfv

‘Seydoux said that Amadouy said that hey will kill himx.’

= ‘Seydoux accused Amadou of threatening to kill himx.’

## Reciprocal

In reciprocals, subject and object NPs denote sets. They are sloppily coindexed, i.e. at least some nonreflexive subject-object pairings within the set are asserted to have occurred.

The reciprocal morpheme morpheme *bwɔ̀* is syntactically a noun, and occurs in nonsubject grammatical functions. It is coindexed to the clausemate subject.

### Reciprocal object *bùwɔ̀*

In (xx1), the sloppily coindexed NP is the object of a transitive verb.

(xx1) a. *ē bùwɔ̄ kày*

1PlSbj **Recip** see.Pfv

‘We saw each other?’

b. *jénám-bígé bùwɔ̀ kwāā*

child-Pl **Recip** hit.Pfv

‘The children hit each other.’

c. *è gā bùwɔ̀ kɔ̄-lā*

3PlSbj Ipfv **Recip** hit-Ipfv

‘The children hit each other.’

d. *āā māⁿ bùwɔ̀ mūūⁿ*

2PlSbj Proh **Recip** insult.Pfv

‘Don’t-2Pl insult each other!’

The sloppily coindexed NP may also be the complement of a postposition (xx2a) or the possessor of a nonsubject NP (xx2b).

(xx2) a. *è gà kāyⁿ [bùwɔ̀ bwāỳ]*

3PlSbj Ipfv work.Ipfv [**Recip** Comit]

‘They work with each other.’ (< *kāỳⁿ* )

b. *è [bùwɔ̄ yàmbāà] bwō*

3PlSbj [**Recip** house] burn.Pfv

‘They burned each other’s dogs/houses.’

# Grammatical pragmatics

## Topic

Free English translations of topicalized NPs are forced to use preclausal ‘as for X, …’. These awkward translations do not capture the syntactic nature of topicalized NPs in Jenaama, which are often embedded in clauses.

### Topic (*kòwⁿ* )

The morpheme *kòwⁿ* is added to an NP to make it a topic (‘as for X’). The 1Sg pronominal combination ‘as for me’ is *ŋ̀ kówⁿ*, based on 1Sg allomorph *ŋ̀* (+H) with floating H-tone. Otherwise the morpheme is L-toned *kòwⁿ*, dissimilating regularly to *kòw̄ⁿ* before another L‑tone.

Topicalized NPs need not be preclausal. In (xx1a-b) the topical NP functions as subject and there is no prosodic break between it and the remainder of the clause. Likewise, (xx1c) shows a topicalized NP functioning as object in normal clause-medial object position.

(xx1) a. *[ŋ̀ kóŋ] gà dūgā dīgà*

[1Sg **Topic**] Ipfv rice eat.Ipfv

‘As for me, I eat rice.’

b. *[sèēdù kòw̄ⁿ] sò*

[S **Topic**] go.Pfv

‘As for Seydou, he has gone.’

c. *sèēdù tē [ŋ̀ kōŋ] kwāā*

S PfvNeg [1Sg **Topic**] hit.Pfv

‘As for me, Seydou didn’t hit me.’

### Interrogative topic (*lāā* )

This alternative topic morpheme is associated with interrogatives. The context is somewhat similar to that of Engish topicalizer ‘what about X?’ preceding an interrogative. The topicalized constituent is usually the subject and therefore clause-initial. However, clause-medial topicalized constituents such as objects are also possible (xx1c).

(xx1) a. *[āⁿ lāā] gā màsí dīgà*

[2Sg **Topic**] Ipfv what? eat.Ipfv

‘And you, what do you eat?’

b. *[sèēdù lāā] gà bōẁⁿ*

[S **Topic**] be here

‘As for Seydou, is he here?’

c. *tāmà sèēdù yà [āⁿ lāā] kwāā*

Q S Sbj/Obj [2SgObj **Topic**] hit.Pfv

‘As for you, did Seydou hit you?’

### ‘Also, too’ (*pē* )

pē can be added to any NP including pronouns, in any syntactic position. In (xx1e), pē has scope on the possessor ‘Seydou’ (there is no straightforward English translation that brings this out).

(xx1) a. *[kóŋgóló pē] bē*

[dog **too**] come.Pfv

‘The dog came too.’

b. *à [=ŋ̀ pē] kwāā*

3SgSbj [1SgObj **too**] hit.Pfv

‘He/She hit me too.’

c. *[à pē] yè =ŋ̀ kwāā*

[3SgSbj **too**] Sbj/Obj 1SgObj hit.Pfv

‘He/She too hit me.’

d. *āⁿ wɔ́léwⁿ dō [[ŋ̀ pē] tè]*

2SgSbj money give.Pfv [[1Sg **too**] Dat]

‘He/She gave money to me too.’

e. *[[sèēdù pē] mòbōlì] māyⁿ*

[[Seydou **too**] vehicle] be.ruined.Pfv

‘Seydou’s vehicle too broke down.’

*pē* is not used with clausal scope.

### ‘Even’ (*hàlì* )

‘Even’ can be expressed with *hàlì*, the local variant of a regionally widespread form. It is limited to clause-initial position, indicating that it is not syntactically bracketed with any specific constituent. In (xx1a) the pragmatic focus is on the verb, while in (xx1b) it is on the subject (‘child’). A nonverbal constituent can be singled out by adding *pē* ‘too’ as in (xx1b).

(xx1) a. *hàlī à tè bōỳ*

even 3SgSbj PfvNeg greet.Pfv

‘He/She didn’t even say hello.’

b. *hàlì [jénáⁿ (pē)] gè= ēnì [[kɔ̀ⁿ kāyⁿ] tè]*

even [child (too)] Ipfv be.able.Ipfv [[Dem work(n)] Dat]

‘Even a child is capable of (doing) this work.’

## Preclausal discourse markers

### ‘But …’ (*ŋ̀gàà* )

‘But …’ is expressed by clause-initial *ŋ̀gàà* (xx1a-b).

(xx1) a. *sèēdù bē [ŋ̄gà= à tè dīgɛ̄]*

S come.Pfv **but** 3SgSbj PfvNeg eat.Pfv

‘Seydou came, but he didn’t eat.’

b. *ŋ́ dīgɛ̄ [ŋgàà sèēdū tè dīgɛ̄]*

1SgSbj eat.Pfv [**but** S PfvNeg eat.Pfv]

‘I ate, but Seydou didn’t eat.’

Younger speakers generally use *mɛ̀ɛ̀* (French *mais*), as widely in the region.

## Pragmatic adverbs or equivalents

### ‘Again’

#### Adverb *tùⁿ* ‘again’

The adverb *tùⁿ* means ‘again (another time)’. Like other temporal adverbs (‘yesterday’, ‘today’, ‘now’, ‘tomorrow’), *tùⁿ* can occur clause-initially or clause-finally. The less common clause-initial cases are perhaps really preclausal, giving a setting for the following event. The normal position is clause-final, following all other postverbal elements (spatial adverbs, PPs, and so forth). In this clause-final position, *tùⁿ* is subject to tone-raising to *túⁿ* in positive clauses with no focal constituent (xx1a), but not in negative clauses (xx1b) or in positive clauses that contain a focal constituent (xx1c). This tone-raising pattern is typical of temporal adverbs (§13.1.5).

(xx1) a. *tùⁿ kúŋgóló kùmù*

**again** dog sleep.Pfv

‘Again the dog went to sleep.’

b. *à kùmù túⁿ*

3SgSbj sleep.Pfv **again**

‘He/She went to sleep again.’ = ‘He/she went back to sleep.’

c. *à tē kùmù bōⁿ tùⁿ*

3SgSbj PfvNeg sleep.Pfv here **again**

‘He/She didn’t sleep here again (=go back to sleep).’

d. *wùlāā kùmū gà bōⁿ tùⁿ*

who? sleep.Pfv RemPfv here **again**

‘Who slept here again?’

#### ‘Return-come’ combination

The notion of repetition can be expressed more emphatically by a multi-verb construction combining *bēwⁿ/bēn‑dē* ‘return, go back’ (a reflexive verb) in any inflectional category and then invariant imperfective bē ‘come’ (for this imperfective ‘come’ see §15.2.4). In spite of ‘come’, there is no suggestion of centripetal motion, and other imperfective motion verbs like *sò* ‘go(es)’ and *yà-là* ‘descend(s)’ cannot replace *bē* except in their literal directional senses. The ‘return-come’ combination is followed by a clause denoting the repeated event, e.g. ‘he fell/falls’. The final *tùⁿ* ‘again’ reinforces the notion of repetition. It is indeterminate whether the scope of *tùⁿ* is limited to the final clause or extends to the ‘return-come’ clause. If the entire sequence is imperfective, the first ‘fall’ and ‘get up’ clauses are imperfective, the ‘return-come’ clause is either imperfective (xx1b) or more often sequential (xx1c), and in either case the final ‘fall again’ clause is sequential.

(xx1) a. *à sēwⁿ, à kìì,*

3SgSbj fall.Pfv, 3SgSbj get.up.Pfv,

*à ŋ̀ bēⁿ bē [à sēⁿ] tùⁿ*

3SgSbj 3SgReflObj **return**.Pfv **come**.Ipfv [3SgSbj fall.Pfv] **again**

‘He fell, he got back up, and he (came back and) fell again.’

b. *à gà sēn-dē, à gā kìì,*

3SgSbj Ipfv fall.Ipfv, 3SgSbj Ipfv get.up.Ipfv,

*à gā ŋ̀ bēn-dē bē [à bè sēwⁿ] tùⁿ*

3SgSbj Ipfv 3SgReflObj **return**-Ipfv **come**.Ipfv [3SgSbj **Seq** fall.Pfv] **again**

‘(Often) he falls, he gets back up, and he (comes back and) falls again.’

c. *à gà sēn-dē, à gā kìì,*

3SgSbj Ipfv fall.Ipfv, 3SgSbj Ipfv get.up.Ipfv,

*à bē ŋ̀ bēⁿ bē [à bè sēwⁿ] tùⁿ*

3SgSbj Seq 3SgReflObj **return**.Pfv **come**.Ipfv [3SgSbj Seq fall.Pfv] again

[=(b)]

#### ‘No longer’

Negation plus *tùⁿ* ‘again’ produces ‘no longer’ or ‘not again, not any more’.

(xx1) a. *à nā nɔ̀gī-ȳ tùⁿ*

3SgSbj **not.be** village-Loc **again**

‘He/She is no longer in the village.’

b. *à tè ŋ̀ bēⁿ bē nɔ̀gī-ȳ tùⁿ*

3SgSbj **PfvNeg** 3SgReflObj return.Pfv be.Ipfv village-Loc **again**

‘He/She hasn’t come back to the village again.’

## ‘Only’

### ‘Only’ particle (*dàmá* )

*dàmá* ‘only’ is added at the end of an NP, a clitic or (for focus) independent pronoun, or adverbial phrase.

(xx1) a. *[ɲāŋ kēⁿ dàmá] bē gà*

person one **only**] come.Pfv Rem.Pfv

‘Only one person came.’

b. *[ŋ̀-dɔ́gɔ́ dàmá] gà yāǹ tò*

[1Sg-Indep **only**] Ipfv there.Def know.Ipfv

‘Only I know that place.’ (< *yāẁⁿ* )

c. *ŋ̀ gà [yāⁿ dàmá] tò*

1SgSbj Ipfv [there.Def **only**] know.Ipfv

‘I know only that place.’

d. *ŋ̀ gā sɔ̀gɔ̄ [[dàmbā dàmá] nī]*

1SgSbj Ipfv cultivate.Ipfv [[daba **only**] Inst]

‘I do farm work only with a daba (=hoe).’

*dàmá* can also occur clause-finally with scope over at least the VP.

(xx2) *à nà kāỳⁿ, à gā kùmū-nà dàmá*

3SgSbj IpfvNeg work(v).Ipfv, 3SgSbj Ipfv sleep-Ipfv **only**

‘He doesn’t work, he just sleeps.’

Clause negation scopes over a constituent with *dàmá*.

(xx3) *[ŋ̀-dɔ́gɔ́ dàmá] nā sò*

[1Sg-Indep **only**] **IpfvNeg** go.Ipfv

‘It’s not only I who will go.’

### *kēẁⁿ* ‘one; alone’ versus *dàmá* ‘only’ for exclusivity

To emphasize that an action was performed by an individual without assistance of others, the numeral *kēẁⁿ* ‘one’ is added to the relevant NP, which may be pronominal (xx1a‑b) or nonpronominal. There is no nasal linker in this construction, unlike the case with *ŋ-kēẁⁿ* ‘one’ following a noun in its function as a numeral. A nonpronominal NP must be singular, but it may be a personal name (xx1c), which would not otherwise combine with ‘one’ as an ordinary numeral. Unless it is focalized, a pronoun (always singular) takes clitic rather than independent form, as with 1Sg *ŋ̀ kēẁⁿ* ‘I alone’ (xx1a), likewise 3Sg *à kēẁⁿ* and 2Sg *āⁿ kēẁⁿ*.

(xx1) a. *[sèēdù kēⁿ] jénáⁿ yìrāⁿ gà*

[S **one**] child help.Pfv RemPfv

‘Seydou alone helped the child.’

b. *[ŋ̀ kēⁿ] jénáⁿ yìrāⁿ gà*

[1Sg **one**] child help.Pfv RemPfv

‘I alone helped the child.’

As with *dàmá*, clausal negation scopes over *kēẁⁿ* in this function.

(xx2) a. *[ŋ́ kēⁿ] nè= ēnī kɔ̀yɔ̄ⁿ tōndò*

[1Sg **one**] IpfvNeg be.able.Ipfvchild stone lift.Ipfv

‘I can’t lift the rock by myself.’

b. *[sèēdù kēⁿ] nè= ēnī kɔ̀yɔ̄ⁿ tōndò*

[S **one**] IpfvNeg be.able.Ipfvchild stone lift.Ipfv

‘Seydou can’t lift the rock by himself.’

The exclusivity function of ‘one’ is limited to specific individuals belonging to sets of individuals, including humans in the case of ‘Seydou’ in the last example above. Singular common nouns in generic function are avoided in this construction, since the normal reading of the NP *X ŋ̀-kēẁⁿ* is ‘one X’ rather than ‘only an X’ (xx3).

(xx3) *[kɛ̄ɛ̄gū ŋ̀-kēⁿ] gè= ēnì [[kɔ̀ⁿ kāyⁿ] tè]*

[man Link-**one**] Ipfv be.able.Ipfv [[Dem work(n)] Dat]

‘One man can handle this job.’ = ‘This is a one-man job.’

For masses (xx4a), nonsingular pronouns (xx4b), and other nonsingular NPs (xx4c), *dàmá* ‘only’ is required and *kēẁⁿ* is impossible.

(xx4) a. *ē nè= ēnī [kùwɔ̄ dàmá] dīgà*

1PlSbj IpfvNeg be.able.Ipfv [salt **only**] eat.Ipfv

‘We can’t eat just salt.’

b. *[è dàmá] nè= ēnì tā-nā [jūgū kūmà]*

[3Pl **only**] IpfvNeg be.able.Ipfv ascend-Ipfv [tree on]

‘They can’t climb the tree by themselves (=without help).’

c. *[jéná-mbí-gé dàmá] nè= ēnī kɔ̀yɔ̄ⁿ tōndò*

[child-Pl-Pl **only**] IpfvNeg be.able.Ipfv stone lift.Ipfv

‘The children can’t lift the rock by themselves.’

## Emphatic particles

### Clause-initial emphatics (*mɔ̀rù*, *héé*, *hóó* )

Any of these emphatics may occur clause-initially, or arguably preclausally. They are glossed as ‘truly’ in interlinears.

(xx1) a. *mɔ̀rū ŋ́ bàndā wày*

*héé*

*hóó*

truly 1SgSbj get.tired.Pfv today

‘I’m really tired (=exhausted) today.’

b. *mɔ̀rù kúŋgóló ŋ́ bùlòwⁿ*

*héé*

*hóó*

truly dog 3SgReflObj be.big

‘The dog is really big (=huge).’

### Clause-final emphatics

#### Clause-final *jáátī* ‘exactly’ and emphatic *kóy*

Either the adverb *jáátī* ‘exactly’ (§xxx) or the clause-final emphatic particle *kóy* can function to strongly confirm an interlocutor’s statement or polar interrogative. Compare English *sure* in A: *it’s hot today* followed by B: *it sure is (hot)!* *jáátī* occurs either by itself or at the end of a clause, while *kóy* can only occur at the end of a clause.

(xx1) A: *kùgù-lɛ̄wⁿ pīyⁿɛ̄-nā nì wày*

sun hot-Ppl it.is today

‘It’s hot out today!’

B: *à pīyⁿɛ̄-nā nì jáátī / kóy*

3Sg hot-Ppl it.is **exactly** / **Emph**

‘It sure is (hot)!’

Both *jáátī* and *kóy* are local variants of regionally widespread forms.

#### Clause-final admonitive *dè*

This particle, likewise regionally widespread, adds a note of warning or surprise. The speaker encourages the addressee to perform or avoid an action for the addressee’s own good, or informs the addressee of something important that the addressee might not already know. It can be added to imperatives as well as to statements. Compare English unstressed, nontemporal *now* in *don’t get caught out in the cold now!*, or phrases like terminal *mind you* with similar admonitive functions.

(xx1) a. *āⁿ māⁿ sò* / *bē dè*

2SgSbj Proh go.Pfv/come.Pfv **Emph**

‘Don’t go/come!’ (warning)

b. *kwààⁿ gà bē dè*

rain(n) Ipfv come.Ipfv **Emph**

‘(Watch out,) it’s about to rain!’ (warning)

## Greetings

The transitive verb ‘X greet Y’ is *bōỳ/bōy-lì*. The noun ‘greeting’ is its verbal noun *bōy‑gù*. In many of the greetings discussed below, 2Pl *āā* is favored over 2Sg *āⁿ* except as noted. Some other features shared by several greetings are tone-dropping on final words, and the use of intransitive verbs with causative meaning in blessings with ‘God’ as subject.

### All-purpose greetings

A simple greeting exchange among two people who come across each other is (xx1). A’s greeting is transparently parsable, but B’s response is not.

(xx1) A: *ŋ́ bōỳ*

1SgSbj greet.Pfv

‘I have greeted!’

B: *èńnà*

The formal Islamic greeting exchange in Arabic, chiefly among men, is the A-B sequence in (xx2).

(xx6) A: *āsàlāā-mwàlēēkùⁿ*

‘Peace to you-Pl!’

B: *wāālēkūmā-sàlām̀*

‘To you peace, and praise and blessing of God!’

### Time-of-day greetings

Time-of-day greetings (A) and responses (B) are in (xx1). (xx1b) is not used by all speakers. (xx1c) and (xx1d) are functionally interchangeable. *kɛ́ɛ́rāwⁿ* can replace *jām̀* in all formulae, but *jām̀* is most common.

(xx1) a. A: *jām sàà* ‘good morning’ (said until noon or 2 PM)

B: *kòrì jām̀ sāā gà= [āā bwāỳ]* (reply)

b. A: *āā wɛ̄ɛ̄tà [jām̀ ní]* ‘good day’ (between 10 AM and 1 PM)

B: *kòrì jām̀ wɛ̄ɛ̄tà gà= [āā bwāỳ]* (reply)

c. A: *jām sìwⁿ*  ‘good afternoon’ (from noon to evening)

B: *kòrì jām̀ sīīⁿ gà= [āā bwāỳ]* (reply)

Recurring elements in these greeting formulae include *jām̀* (< Fulfulde) or *kɛ́ɛ́rāwⁿ* ‘well-being, peace’, interrogative *kòrī* (< Fulfulde, see §13.2.1.1), and in the responses the comitative PP *āā bwāỳ* ‘with you-Pl’. The different times of day are expressed by the verbs *sāā/sā-gà* ‘lie down, go to bed’, *wɛ̄ɛ̄tà* ‘spend a half-day (morning)’ (< Fulfulde and not elsewhere in common use except in connection with paid morning-only labor in the fields), and *sīwⁿ/sīyɛ̄-nà* ‘spend the mid-day’. Each of these is used retrospectively in the greetings, e.g. ‘good morning’ is phrased as (an abbreviated form of) ‘how did you spend the night?’ *jām sàà* and *jām sìwⁿ* have irregularly L‑toned perfective verbs, but the normal forms *sāā* and *sīwⁿ* show up in the responses, which are overall less truncated and more grammatically transparent.

The only time-of-day greetings that are prospective rather than retrospective in literal content are the two alternative ‘good night!’ greetings (xx2a-b). Both are phrased as blessings (wishes) with ‘God’ as subject and subjunctive *gālà*. The response, as to all similar blessings, is *àmí* ‘amen’ or an extended variant *àmíínà yàràbì* (Arabic for ‘amen oh Lord!’).

(xx2) a. *ālà gālà wùū ŋɛ̀gà-nì*

God Sbjn night easy-Caus.Pfv

‘May God make the night easy!’

b. *ālà gālà súbááⁿ dùwɔ̀ [ē gàrjàgà-y]*

God Sbjn morning enter.Pfv [1PlPoss luck-Loc]

‘May God put the morning in our (good) luck!’

In (xx2b), *dùwɔ̀* is trimmed from the semantically appropriate causative *dùwɛ̀-nì* ‘cause to enter’, and *gàjàgà-y* is an L-toned form of the usual *gàrgàgā-ỳ* ‘in (someone’s) good luck’, parallel to other suffixal locatives (§8.2.3).

### Location- or situation-specific greetings

A greeting from A to B when B is working (in the field, building a house, etc.) or on his/her way to or from work or some other productive activity, is (xx1). The response is (i) *èńnà āāy kày* if A is also at or on the way to or from work, otherwise just (ii) *èńnà*.

(xx1) A: *ì yā= à bāy kày*

B: *i) èńnà āāy kày*

ii) *èńnà*

These formulae are rather contracted and nontransparent. My assistant “reconstructs” the A greeting as a reduction and deformation of an idealized (xx2).

(xx2) *ì yā= āā bōỳ [āā yèⁿ kāỳⁿ]*

3PlSbj Sbj/Obj 2PlObj greet.Pfv [2Pl and work(n)]

‘They have greeted you-Pl (=you have been greeted), you-Pl and work!’

Greetings of the form ‘you and X’ where X is some noun denoting a situation (work, fatigue, weekly market, etc.) occur widely in the zone. ‘You-Pl and work(n)’ at the end of (xx2) above is one example. The conjunction begins with either an independent or clitic pronominal, followed by a noun or even a verb (perhaps functioning as a verbal noun even though verbal in form). The second conjunct is pronounced with L-tones. The greeting (xx3a) can be given to someone met at a weekly market like that of Konna. (xx3b) can be uttered to someone who is encountered while walking out in the bush.

(xx3) a. *āā(-lɔ̀gɔ̀) yèⁿ sìbɛ̀wⁿ*

2Pl(-Indep) and market

‘You-Pl and the market!’ (< *síbɛ̄wⁿ* or locative *síbɛ̀wⁿ* )

b. *āā(-lɔ̀gɔ̀) yèⁿ ɲìŋì*

2Pl(-Indep) and walk.Pfv

‘You-Pl and walking!’ (< *nīŋī* )

This syntactic pattern is also used as a ‘thank you’ expression, usually following a physical action by the addressee. This greeting can have either 2Sg or 2Pl form depending on addressee number. ‘Work’ is probably an L-toned form of the noun *kāỳⁿ* but could also be from the verb *kāyⁿ/kāỳⁿ*.

(xx4) a. *āⁿ-dɔ̀gɔ̀ yěⁿ kàyⁿ*

2Sg-Indep and work(n)

‘You-Sg and work!’ (i.e., ‘thanks for the help!’)

b. *āā-lɔ̀gɔ̀ yěⁿ kàyⁿ*

2Pl-Indep and work(n)

‘You-Pl and work!’

### Travel greetings

A departing traveler is given the ‘bon voyage!’ blessing (xx1a). It can be “reconstructed” with causative *kìyɛ̀-nì* ‘cause to arrive, deliver’ instead of intransitive *kìyɛ̀wⁿ* ‘arrive’, and with a 2Sg or 2Pl object pronominal before this causative verb. A similar reconstruction is appropriate for (xx1b), which greets one returning from a long trip.

(xx1) a. *ālà gālà kìyⁿà= [[āⁿ* / *āā màɲɛ̀ⁿ] nì*]

God Sbjn arrive.Pfv [[2SgPoss/2PlPoss good] Inst]

‘May God (let you) arrive with your goodness (=in safety).’

b. *ālà gà bē gà [[āⁿ* / *āā màɲɛ̀ⁿ] nì*

God Sbjn come.Pfv RemPfv [[2SgPoss/2PlPoss good] Inst]

‘God has brought (you) with your goodness (=in safety).’

### Condolences

Either (xx1a) or (xx1b) may be said to bereaved relatives of a person who has just passed away.

(xx1) a. *ālà gālà hīīnà= [à nà]*

God Sbjn have.pity.Pfv [3Sg Dat]

‘May God have pity on him/her!’ (< *hīīnè* )

b. *ālà gālà [à sāā-gàⁿ] mùwɔ̀-nī [à bwāỳ]*

God Sbjn [3SgPoss lie.down-place] cool-Caus.Pfv [3Sg Comit]

‘May God keep his/her resting place cool(ed)!’

If the deceased was a child, (xx2) is added.

(xx2) *ālà gālà āⁿ tùgò*

God Sbjn 2SgObj pay.Pfv

‘May God compensate you-Sg’

Replies to such formulae are of the ‘amen!’ type.

### Greetings on major Muslim holy days

The three major Muslim holy days are eid al-adha (Feast of the Ram) called ‘big prayer’ (*sālī būlōwⁿ* ), aid al-fitr (at the end of Ramadan) called “little prayer” (*sāl dɛ̀gɛ̀-náwⁿ* ), and Muharram (*bɛ̀ndɛ̀* ). On all three holy days, the A-B greeting sequence in (xx1) is used. Neither the A greeting nor the B reply is parsable in Jenaama and they are said to be from Soninke (“Sarakole”) language.

(xx1) A: *kēbèrè wāāgà*

B: *wāāgà dùⁿhēērè*

After B’s response, B continues:

(xx2) *ālà gālà ē kwāā [[kɔ̀nɔ̀sē kày-yè] bwāỳ]*

God Sbjn 1PlObj add.Pfv [[next.year see.Nom-Pl] Comit]

‘May God add (=include) us in those who (will) see next year!’

(*kwāā* ‘hit X’ plus comitative PP → ‘add X [to Y]’)

Response is of the ‘amen!’ type.

# Texts

## Text 1:

# References cited

Blecke, Thomas. 1996. *Lexikalische Kategorien und grammatische Strukturen im Tigemaxo (Bozo, Mande)*. Cologne: Köppe.

—. 2004. Antipassive in Tigemaxo. Paper presented at CALL conference, Leiden. <http://sil-mali.org/en/content/antipassive-tigemaxo>

—. 2008. Vers une classification aspectuelle des verbes en tigemaxoo (bozo). Paper presented at the 2nd Mande linguistics conference, St. Petersburg. (pdf of Powerpoint.) <http://sil-mali.org/sites/default/files/Thomas-Blecke-2008-Classification%20aspectuelle%20des%20verbes%20en%20tigemaxoo%20(bozo).pdf>

—. 2009. The grammar of action nominals in Tigemaxo. Paper presented at WOCAL 2009. <http://sil-mali.org/en/content/grammar-action-nominals-tigemaxo>

— & Bärbel Blecke. 1997. Les parlers bozo: révision d’une enquête dialectologique. Mandenkan. <http://llacan.vjf.cnrs.fr/PDF/Mandenkan32/32Blecke.pdf>

Blühberger, Jutta. 2006. Rapport d’enquête sociolinguistique des dialectes du djenaama (aussi appelé Sorogaama). SIL International. online:

<http://www.sil.org/system/files/reapdata/92/70/69/92706978063511754516789736607174776277/silesr2006_001.pdf>

Daget, Jacques, M. Konipo & M. Sanakoua. 1953. *La langue bozo*. (Études soudaniennes, 1). Koulouba: Institut français d'Afrique noire, Gouvernement du Soudan, Centre [IFAN](https://en.m.wikipedia.org/wiki/Institut_Fondamental_d%27Afrique_Noire).

Lauschitzky, Christiane. 2007. *The verb in Bozo Jenaama*. Masters thesis, Leiden University. <http://sil-mali.org/sites/default/files/SIL-Mali-bze-2007-Lauschitzky-The-Verb-in-Bozo-Jenaama.pdf>

—. 2009. Nasality in Bozo Jenaama. paper presented at WOCAL-6 conference.

SIL Bozo map <http://www-01.sil.org/silesr/2000/2000-003/Bozo_map.htm>

# Abbreviations and symbols

## Abbreviations

Adj adjective

Agent agentive nominal

ATR advanced tongue root (vowel feature)

C consonant (in formulae like CvCv )

Caus causative

Counterf counterfactual conditional

Dat dative postposition

Def (discourse-)definite

Dem demonstrative

Dim diminutive

DiscFunct discourse-functional

Emph emphatic (clause-final particle)

ExpPf experiential perfect

Fut future

H high (tone)

Hort hortative

Imprt imperative

Inch inchoative (deadjectival verb)

Inst instrumental postposition

Ipfv imperfective

Iter iteration (full reduplication)

L a) low (tone)

b) any sonorant (in formulae like CvL )

Loc locative

Logo logophoric

M mid tone

N a) noun (in e.g. “N-Adj”)

b) nasal consonant (in formulae like CvN )

(n) noun, in glosses like ‘work (n)’

Neg negative

Nom nominalization

NP noun phrase

Num numeral

Obj object

Pf perfect (in ExpPf)

Pfv perfective

Pl plural

Poss possessive, possessor

PP postpositional phrase

Ppl participle, in relative clauses

Pron pronoun

Proh prohibitive

Prsntv presentative (‘here’s X!’)

Purp purposive

Q question

Recip reciprocal

Refl reflexive

Rel relative marker (in relative clause)

Rem.Pfv remote perfective

S subject (in e.g. “SOV order”)

Sbj subject (in e.g. “2PlSbj”)

Sbj/Obj bidirectional case marker

Sbjn subjunctive

Sg singular

Stat stative

V a) verb (in e.g. “SOV order”)

b) vowel (in names of phonological rules)

v vowel (in formulae like CvCv )

(v) verb, in interlinear glosses like ‘fight (v)’

VblN verbal noun

VP verb phrase

## Symbols

\* reconstructed

# ungrammatical, unacceptable, unattested

/L/, /LH/, etc. lexical tone melody of a stem

<HL>, <LH>, <LHL> contour-toned syllable, e.g. <HL>, <LH>, <LHL>

M.M.H, etc. syllable-by-syllable tone pattern of a word

→ gradient prolongation of final segment of a word

= clitic boundary

tone diacritics on vowels

*á*, etc. high tone (H)

*à*, etc. low tone (L)

*ā*, etc. mid tone (M)

*â*, etc. falling high-low tone (HL)

*a᷆*, etc. falling mid-low tone (ML)

*ǎ*, etc. lexical low-high (LH) or sandhi-induced low-mid (LM) tone

*a᷈*, etc. bell-shaped tone (LML)

# Index

## 1. selected morphemes

notes:

in suffixes, “v” is a variable vowel;

alphabetization: *ɛ* follows *e*, *ɔ* follows *o*, nasals ordered *n* then *ɲ* then *ŋ* ;

atonal morphemes are not tone-marked here;

not all variants due to tone sandhi are presented;

perfective/imperfective pairings shown with /

*a*

*à (ā)* 3Sg pronominal clitic, §4.3.1

*āā*  2Pl pronominal clitic, §4.3.1

*āⁿ* 2Sg pronominal clitic, §4.3.1

*be*

*bē/bē* a) ‘come’

b) in verb chains (not from *bè* )

*bè (bē)* a) in verb chains

b) future (after imperfective *gà* or *nà* )

*bōgì*  postposition ‘in the middle of’, §8.2.12

*bwāỳ* comitative postposition ‘with’

*bwɔ̀* reciprocal, §18.4

*-dɔ́gɔ́* (see *-lɔ̀gɔ̀* )

*e*

*è (ē)* 3Pl pronominal clitic, §4.3.1

ē 1Pl pronominal clitic, §4.3.1

*ga*

*gà (gā)* a) imperfective positive, following the subject, §10.2.2.1

b) remote perfective (following the main verb)

*gàà* remote perfective (variant of *gà* )

*kānà* postposition ‘at (a well)’, §8.2.6

*káẁⁿ* postposition ‘at the place of, chez’, §8.2.14

*kɔⁿ*

*kɔ̀ⁿ* a) demonstrative ‘this/that’, before noun

b) recent perfect, §10.2.1.5

*kɔ̀rɛ̄-ỳ* postposition ‘behind’, §8.2.10

*kūmà* postposition ‘on’ or ‘over’, §8.2.7

*lāgà* a) purposive-causal postposition ‘for, because of’, §8.3.1

b) postposition ‘at (the outskirts of)’, §8.2.5

*-lɔ̀gɔ̀*  suffix on independent pronouns, §4.3.1

*mūù*  postposition ‘below, under’, §8.2.11

*na*

*nà* a) negative (other than perfective), following subject

imperfective negative, following the subject, §10.2.2.1

stative negative

b) dative-like postposition, §8.1.1.2

‘than’ in comparatives

*-nà* verbal suffix

stative, §10.1.4

imperfective for some verbs already containing a nasal

*nàŋáà* postposition ‘between’, §8.2.13

*ni*

*ní*, *nì* instrumental postposition, §8.1.2.1

*nì* ‘it is’ clitic

*-nì/-nī* causative sufffix on verb, §9.1.1

*nìŋīì* postposition ‘in, inside’, §8.2.4

*nùmɛ̄wⁿ* ‘likeness’, §8.4.1

*ŋ*

*ŋ́* 1Sg subject pronominal clitic, perfective positive, §4.3.1

*ŋ̀ (ŋ̄)* a) 1Sg subject pronominal clitic, except in perfective positive, §4.3.1

b) 3Sg anaphoric pronominal clitic

3Sg reflexive object, possessor

3Sg reflexive subject (subordinated clause)

3Sg logophoric

c) pseudo-reflexive (transpersonal)

in adjectival predicates

*ŋ̀* (+H) 1Sg clitic (possessor, object, or postpositional complement), §4.3.1

*síí* ‘likeness’, §8.4.1

*sɔ́gɔ̀y* postposition ‘next to’, §8.2.8

*tè* a) perfective negative

b) dative postposition, §8.1.1.1

*tīgàà*  postposition ‘in front of’, §8.2.9

*tówⁿ*  postposition ‘instead of, in the place of’, §8.2.15

*ya*

*yà= (yā=)* contraction of *yè*

*ye*

*yè (yē)* a) bidirectional case marker separating otherwise adjacent subject and object (perfective positive)

b) ‘said’, invariant form in perfective positive (i.e. veridical) contexts

c) ‘and’, §7.1.1

*yè-hīnì* ‘and’, §7.1.1

*yèⁿ* ‘and’, §7.1.1

## 2. grammar

‘abandon’ complement §17.4.6

abstractive (deadjectival) §4.2.3

accusative (absent) §6.7

adjective §4.5

tones §3.6.1.5, §3.6.2.3

ordinal, 4.6.2

NP syntax §6.3

expansions §6.3.3

‘-ish’ §8.4.6.6

deadjectival verb §9.4

deadjectival adverb §8.4.5

deadjectival abstractive §4.2.3

as predicates §11.4

comparative §12.1.2-3

in relative clauses §14.3.1

bahuvrihi §5.2.1.1

intensifiers §8.4.6.5

comparatives §12.1.2

adverb §8.4

demonstrative §4.4.3

‘as much as’ §12.2.3

focalization §13.1.4

adverbial clause §15.7

‘again’ §19.3

agentive §4.2.2, §5.1.3.2

‘all’ §6.6.1

in relatives §14.3.4

‘also’ §19.1.3

anaphora chapter 18

antipassive §9.3.1.1

apocope §3.2.1, §3.4.3

aspect §10.1.3 (verb morphology), §10.2.1

atonal morphemes §3.6.3.2

ATR-harmony §3.3.6

Back/Rounding Harmony §3.3.6

bahuvrihi compound §5.2.1

‘be’

locational §11.2.3

‘identificational ‘it is’ §11.2.1

equational §11.2.2

‘be (adjective)’ §11.4.1

‘because’

clause §17.5.5

‘because of (NP)’ §8.3

‘become’

with noun §11.2.4.2

with adjective §9.4

‘before ...’ clause §15.4

‘begin’ §17.4.3

‘can’ §15.1

causative

morphology §9.1

valency §11.1.2.4

‘cease’ complements §17.4.4

‘certain one(s)’ §6.3.2

chaining of verb/VP/clause chapter 15

comparatives §12.1.1.2

purposives §17.5.1

‘child’

compound final §5.1.5.3

cliticization §3.5

clusters (consonants) §3.3.10

‘come’ *(see “motion verb”)*

comitative §8.1.2.2-3

comparatives chapter 12

compounds chapter 5

conjunction §7.1

conditionals chapter 16

conjunction §7.1

consonants §3.2

dative §8.1.1

deadjectival verb (see under “adjective”)

definite (see “discourse-definite”)

demonstrative

demonstrative pronoun §4.4.2

demonstrative adverb §4.4.3

absolute §6.1.2

in NPs §6.5

in relative clauses §14.3.3

deontic modals §10.4

deverbal adjectives §4.5.3

diminutive §5.1.5

diphthongs §3.3.7

discourse-definite §4.4.2

discourse markers chapter 19

disjunction §7.2

in polar questions §13.2.1.3

distributive

‘each’ §6.6.1

iterated adverbials §4.6.1.7

ditransitive verb §11.1.2.3

‘do’

in collocations §11.1.2.2

in comparatives §12.2.3.2

‘how?’ construction §13.2.2.5

coincidence construction §15.5

subordinated clauses

‘fear (lest) §17.2.3

‘encounter (find)’ §17.2.4

dying-quail intonation §7.1.10 (lists)

‘each’ §6.6.1

emphatic

pronouns §18.2

clause-final particles §19.5

evaluative adverbs §8.4.4

‘even’ §19.1.4

‘even if’ §16.2.1

exemplar §4.5.2

experiential perfect §10.2.1.4

extent adverbs §8.4.2

factitive deadjectival verb §9.4

factive verbal noun §4.2.1.4

‘false’ §5.1.7.1

‘fear’

complements §17.2.3

‘finish’ §17.4.5

Final Tone-Raising §3.6.4.1

Floating-H Docking §3.6.3.1

focalization chapter 13

‘forget’ complements §17.2.1.2, §17.4.2.2

fraction §4.6.3

‘from’ §8.2.2, §15.6.3

future §10.2.2.2

‘be about to’ §17.4.2.4

gender

‘male/female’ compound §5.1.4.4

gentilic §4.2.4

‘give’ §10.1.2 (form)

syntax §8.1.1.1-2, §8.1.2.1, §11.1.2.3

‘go’ *(see “motion verb”)*

greetings §19.6

‘have’ §11.5.1

‘help’ §17.4.2.3

hortative §10.4.2

quoted §17.1.4.2

imperative §10.4.1

quoted §17.1.4.1

imperfective

verb forms §10.1.3

inflectional particles §10.2.2.1

categories §10.2.2

past imperfective §10.3.2

multi-verb constructions

‘come’ and ‘go’ §15.2.4

‘encounter’ §17.2.4

perception verbs §17.4.1.1

‘fear’ §17.4.1.2

inchoative (deadjectival) §9.4

infinitival complement §17.4.2

instrumental §8.1.2.1

intensifier (adjectival) §6.3.3.3

interrogatives §13.2

intonation §3.7.3

polar §13.2.1

content (WH) §13.2.2

embedded §13.2.3

topical NP §19.1.2

intonation §3.7

polar questions §13.2.1.2

lists §7.1.10

iteration

lexicalized (nouns) §4.1.3

distributive (numerals) §4.6.1.7

‘-ish’ (adjectives) §8.4.7.5

jussive §17.1.4

‘know’ §11.2.5.1

complements §17.2.1.1

labile verbs §9.2

‘like’ (similarity) §8.4.1

‘as though’ clause §15.7.3.2

locative (spatial)

adverbs §4.4.3.1, §8.4.6.4

not focalizable §13.1.4.3

postpositions §8.2.1-3

in compound initials §5.1.4.2

verb ending §9.3.3

spatial adverbial clauses §15.7.2

in gentilic derivative §4.2.4

‘be (somewhere)’ §11.2.3

logophoric §18.3

manner

adverb §4.4.3.2

‘fast’ and ‘slowly’ §8.4.5.1

not focalizable §13.1.4.3

adverbial clause §15.7.3

‘many/much’ §6.4.2

melody (lexical tones) §3.6.1

mental verbs §11.2.5

metrical structure §3.1.2

ML>L-to-ML §3.6.4.2

modal *(see imperative, hortative, obligation, ‘can’)*

motion verb

in verb/VP/clause chains §15.2

nasal linker in compounds §5.1.1

nasalized

sonorant §3.2.9

vowel §3.3.3

stem-final alternations §3.4.2.2

‘need’ §11.2.5.2

negation

indicative clauses §10.2.1-2

‘is not X’ §11.2.1.2, §11.2.2.2

‘not be (somewhere)’ §11.2.3.3

‘not be (adjective)’ §11.4.1

scope issues §6.6.2, §7.1.9

noun phrase chapter 6

numeral §4.6

in relative clauses §14.3.2

distributive iteration §4.6.1.7

bahuvrihi compounds §5.2.1.2

object §11.1.2

pronominal §10.2.1.3

focalization §13.1.3

relativization §14.4.4

incorporated §5.1.3, §5.1.4.5

obligation

weak (‘ought to’) §17.2.5

strong (‘must’) §17.3.3

‘only’ §19.4

ordinal §4.6.2

‘owner’ §5.1.6

participles §4.5.3

passive §9.2

past §10.3

adjectival predicates §114.1.3

perception verb

complements §17.2.2, §17.4.1.1

perfect

experiential perfect §10.2.1.4

present perfect §10.2.1.2

recent perfect §10.2.1.5

past perfect §10.3.4

perfective

verb forms §10.1.3

clausal inflections §10.2.1

in subordinated clause §10.2.1.6

in conditionals §16.1.1

sequential clauses §15.3.1

obligational clause §17.2.5

person  *(see “pronouns”)*

place nominal §4.2.1.5

complement of ‘finish’ §17.4.5

plural

nouns §4.1.1

as compound initial §5.1.2.2

in conjunctions §7.1.4

addressees §10.4

1Pl versus logophoric Pl §18.3

possessive

possessed NP §6.2

compounds §5.1.2

reflexive possessor §18.1.3, §7.1.6

predicates §11.5

possessor relative §14.4.3

postposition and PP §8.1-3

focalization §13.1.4

relativization §14.4.4

presentative §10.2.2.3-4

‘prevent’ complements §17.4.2.2

prohibitive §10.4.1

pronouns §4.3

emphatic §18.2

reflexive §18.1

logophoric §18.3.1

pseudo-reflexive §11.4.12

comparatives §12.1.2

purposive

postposition §8.3

focalization §13.1.4.2

clause §17.5

quantification *(see “extent”, ‘all’, ‘each’, ‘many/much’, ‘certain’*

quasi-verb

‘said’ §17.1.2

‘it is’ §11.2.1-2

‘be (somewhere)’ §11.2.3

quotation *(see also ‘say’, “logophoric”)*

quoted clauses §17.1

recent perfect §10.2.1.5

reduplication *(see “iteration”)*

relative clauses chapter 14

‘say’

inflectable verb §17.1.3

invariant quasi-verb §17.1.2

‘show’ §11.1.2.3

‘since ...’ (temporal) §15.6.1

‘some; certain ones’ §6.3.2

sound symbolism §3.3.8

spatial (see “locative”)

stative (verb) §10.1.4 (morphology)

‘be’, ‘have’, etc. §11.2

presentative §10.2.2.4

past stative §10.3.3

adjectival predicates §11.4.1

‘stop’ complements §17.4.4

subject §11.1.1

subjunctive complements §17.3

syllables §3.1.1

temporal *(see also “past”)*

adverbs §8.4.6.1-3

focalization §13.1.4.2

postpositions

‘before’ §8.2.9

‘after’ §8.2.10

‘in (during)’ §8.2.13

times of day, seasons §11.1.1.2

relative clause §15.7.2

tone §2.1.2-3, §3.6

floating H §3.6.3.1

in compounds §5.1.3-4, §5.2

noun plus adjective §6.3.1

‘too’ §19.1.3

topic §19.1

valency

transitives §11.1.2.1

ditransitives §11.1.2.3

causatives §11.1.2.4

verb

derivations chapter 9

inflections chapter 10

verbal noun §4.2.1.1-4

in compounds §5.1.3.1

in complements

‘stop’ §17.4.4

‘abandon’ §17.4.6

verb phrase §11.1.4 *(see also “chaining”)*

vowels §3.3

vv-Contraction §3.4.1.2

‘want’ §11.2.5.2

complements §17.3.2

‘whether’ complements §17.2.1-3

WH interrogatives §13.2.2

‘with’  *(see “instrumental” and “comitative”)*