A Grammar of Penange (Dogon, Mali)

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author's email
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color coding:
blue ordinary phonological transcriptions for this language
green reconstructions (*), underlying forms (/…/), phonetic transcriptions ([…]), formulas, and transcriptions for other languages

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1 Introduction

1.1 Dogon languages

Dogon is a well-established genetic family of languages spoken on the cliff-fringed Dogon plateau, the cliffs and slopes that lead down from them, the sandy plains that stretch out to their north and east, and scattered inselbergs separated from the plateau to the north. Not all varieties have been surveyed professionally, but there are at least 80 varieties with distinct local names, and we currently think that these can be grouped into about 20-25 units of the sort that linguists generally consider to be "languages."

Dogon has traditionally been thought to belong to Niger-Congo, but no close relationships to specific NC families have been demonstrated, and not all Africanists are convinced of the connection.

Penange belongs to a western Dogon division in which its closest relatives are Ampari, Mombo (aka Kolu), and Bunoge. My working hypothesis is that they constitute a genetic subgroup nested within a larger western Dogon division that also includes Tiranige, Najamba-Kindige, Yanda Dom, Tebul Ure, and Dogulu. The opposing eastern division includes the better-known Dogon languages (Jamsay, Tommo So, Donno So, Toro So, Togo Kan, Toro Tegu, and Tomo Kan). However, we are not yet sure of the overall genetic subgrouping.

1.2 Penange language

Penange (*pénà:ŋgè*) is the Dogon language spoken in the village of Pinia (native name *péná*). Like many Dogon villages, its official name is based on the Fulfulde term, which is *piɲa* (the French colonial surveyors had Fulbe guides). The people call themselves *péná nógè* 'Pinia people'. The predominant surname is Degoga (*dègɔ́*). Other surnames are Kamio (*kàmìyɔ́ⁿ*), Seiba (*sèybá*), Karambe (*kà:rámbè*), and a few Yanogue (*yànógè*).

Dogon who are born and raised in Pinia learn Fulfulde (called *púndé:ŋgè* in Penange) as a second language. Ethnic Fulbe (*púndè*) people, who specialize in herding, are present in Pinia itself and in nearby hamlets, and Fulbe women make daily rounds selling milk and butter.

Many young Dogon work either seasonally or for years at a time in southern Mali (Segou and Bamako areas), and pick up basic speaking competence in Bambara (aka Bamana), a Mande language. Another popular destination for work, also for high school study, is nearby Mopti-Sevare, which is also becoming Bambara-dominant.

There is a weekly market in Pinia on Fridays, supported by minibuses and vans from Mopti and other locations. The other major weekly markets frequented by Pinia people are Somadougou to the east on the north-south highway, and Goundaka near the east-west highway from Mopti to Bandiagara. A few merchants originally from Pinia now live in Somadougou. Especially on market days, Somabougou and Goundaka are rather cosmopolitcan ethnically, but Fulfulde and Bambara are common lingue franche.

There is no single other Dogon language that is especially well-known to people of Pinia. Mombo (aka Kolu) is spoken to the east and northeast, Ampari is spoken to the southeast, and Tomo Kan is present as a minority language in Somadougou and some other villages to the south.

Bwamu (in local French misleadingly called “Bobo”), a Gur language, is also present in Somadougou and is an important language in San and Bla farther south on the main highway. It is not to be confused with the Bobo languages (Mande language family) spoken chiefly around Bobo Dioulasso in Burkina Faso.

1.3 Environment

Penange is located at N. 14 23.631 x W. 04 01.943 (degrees, minutes, decimal fractions of minutes). Administratively it is in the *commune* of Goundaka, which is part of the *cercle* (district) of Bandiagara, which in turn is (until the next reorganization!) part of the *région* (province) of Mopti, in Mali. The village is located on a low rocky elevation. To the west, a flat plain including scattered millet fields extends to the main north-south highway which links Sevare to San, Segou, and Bamako. The southern part of the Dogon plateau spreads out to the east.

Pinia is a single, rather large village rather than a village cluster of the sort common elsewhere in Dogon country. The main reason for this is the presence of a large rock pond that retains some water through to the end of the dry season, a major attraction in a dry land (no crocodiles, though). The village has four mosques and a school (first to sixth grade as of 2012), and continues to expand with new construction.

The main economic activity is rainy-season farming. The staple cereal grown in fields near the village is millet (*Cenchrus spicatus*, previously *Pennisetum glaucum*), with sorghum also cultivated in depressions. Pinia people are also active in rice farming, but the fields are some distance from the village (at Moussofandougou near Somadougou, at Soufouroullaye on the north-suth highway, and at Fatoma north of Sevare). Fonio (*Digitaria exilis*), a traditional grain staple, is also grown but less so than in the old days. Maize is absent.

Non-cereal rainy-season crops are peanut, groundnut (*Vigna subterranea*), several cultivars of roselle (*Hibiscus sabdariffa*), sesame, and cow-pea (*Vigna unguiculata*). Peanut, groundnut, and roselle are cash crops cultivated exclusively by women, who use the proceeds to purchase daily condiments.

There are no vegetable gardens or other notable work opportunities during the period from the harvest (October, early November) to the next planting season (around June). This is the major reason for the southward exodus especially of young men during the dry season.

Herding (cattle, sheep, goats) is carried out in this area by Fulbe, though most of the animals are owned by Dogon.

1.4 Previous study of and current fieldwork on Penange

1.4.1 Previous study

Kirill Prokhorov, a member of the Dogon languages project who specialized in Mombo and Ampari, did an initial reconnaissance of Penange in 2011. He was the first linguist to identify Penange as a distinct language, though belonging to the genetic subgroup including Mombo, Ampari, and Bunoge.

1.4.2 Fieldwork

After learning about Penange from Prokhorov, I visited Pinia for two days in 2011 in order to collect flora-fauna vocabulary and to see the village and its environment.

During a 20-month field trip from January 2011 to August 2012, I did fieldwork on several Dogon languages including Penange. The Penange work was done part-time in May-August 2012. This was a time of turmoil in Mali (Tuareg rebellion, coup and counter-coup in Bamako) and the fieldwork was done in Bobo Dioulasso, Burkina Faso. Follow-up study was done in Sevare, Mali in summer 2015 and summer 2016.

The primary informant was an individual with a high-school education. He was born in 1989 into a Penange-speaking family that used the language at home though living chiefly in Cote d'Ivoire and more recently in Sevare. Further study may show that there are some divergences between his speech and those of his contemporaries living in Pinia.

1.4.3 Acknowledgements

Primary funding for the Dogon linguistics project during the period of fieldwork on Penange was National Science Foundation grant BCS 0853364 (2009-13), Documenting Endangered Languages (DEL) program. During school year 2011-12 I received salary support in the form of a sabbatical from the University of Michigan and a fellowship from the Guggenheim foundation.

1.4.4 Additional resources

In addition to grammars, lexical data, and texts, the project has done extensive work in the following areas: a) flora-fauna (native terminology, identification), b) GPS mapping and photography of Dogon and other villages, and c) production of many videos (2 to 20 minutes) dealing with practical activities and with cultural events such as festivals. See the project website at www.dogonlanguages.org for free access to this material.

2 Sketch

This is a brief run-down of major features, including those that distinguish Penange from other Dogon languages. After reading this sketch, first-time readers with no previous knowledge of Dogon languages should skim some of the sample texts at the end of the grammar to get a feeling for clause structures.

2.1 Phonology

2.1.1 Segmental phonology

Penange has a fairly conventional Dogon phoneme inventory, including the usual seven vowel qualities with a [±ATR] opposition in mid-height vowels. Long and short vowel length are distinguished. Most of the theoretically possible nasalized vowels occur but are uncommon. *r*^{n} is absent. *y*^{n} and *w*^{n} are common word-finally (§3.2.7).

2.1.2 Prosody

Tones at syllable level are H, L, <HL>, <LH>, and occasionally <LHL>. Word-final short *Cv* syllables are most often either H or L, i.e. tonally flat. *Cv̂* with short vowel and falling tone occurs in *ŋ̀ bô* 'we are' (§11.2.2.2) and *nê* 'we said' (§10.1.2.1).

<LHL> is rare in monosyllabic nouns: I can cite only *sɛ̌:y*^{n} 'rib(s)', plural *sɛ̌:y*^{n}*-gè*. This stem is probably contracted from an old bi- or trisyllabic 'child' compound, cf. Bunoge *sɛ̀ŋgɛ́-bè* 'rib(s)'. <LHL> is more common in monosyllabic words involving a grammatically conditioned {LHL} overlay that has ended up being fully expressed on a single syllable, perhaps after apocope of a final vowel. Examples are past imperfective *ŋ́ nɔ̌:=yè* 'I was going in' (§10.6.1.4), imperfective negative *nwǎ-à-l* 'you-Sg don't go in' pronounced [nwã:l] (§10.2.3.3), and the possessed noun in *ŋ́ sɔ̌:y*^{n} 'my tigerfish' (§6.2.1.1).

Stem-level tone patterns can be lexical melodies, for example in a noun, adjective, or numeral that occurs at the end of an NP. However, these word-classes (especially nouns) are also subject to tonosyntactic overlays, such as {L} (all-low tone contour) on a noun followed by an adjective. Tones of verbs are entirely determined by the inflectional (e.g. aspect-negation) category and by pronominal subjects.

Intonational prolongation (symbol →) is lexicalized in some grammatical morphemes (e.g. *wàgà→* 'or') and adverbs (*só→* 'long ago'). A final intonational effect is the basic way to express polar interrogatives, as there is no segmental morpheme (except in quoted interrogatives). There are no Jamsay-type "dying quail" intonation effects.

2.1.3 Key phonological rules

Syncope or apocope of short {*i u*} after an unclustered sonorant in a noninitial (especially second) syllable is common but usually optional.

Vowel-initial stems grow an initial epenthetic *y-* or *ɲ-* when preceded by a 1st/2nd person subject or possessor proclitic (*ŋ́ ŋ́ à á*). In some *Cv* reduplications of verbs, specifically the reduplicated perfective and imperfective, a copy of the epenthetic consonant is included in the reduplicant, even when separated from the stem by an intervening pronominal (§10.2.1.6, §10.2.2.3). This copying does not occur in the reduplicated stative (§10.4.1.1).

The most important regular tonological process is spreading of an H-tone to the right, before a word or suffix with initial L-tone, thus schematically …H.L.L → …H.H.L.

2.2 Inflectable verbs

Suffixal verb-to-verb derivations are reversive ('un-VERB'), causative, mediopassive and transitive (often paired), and reciprocal. Many adjectives have corresponding inchoative verbs, whose causatives function as factitives.

Verbal inflection consists chiefly of perfective/imperfective aspect crossed with positive/negative polarity. In the perfective system there is an experiential perfect, but no recent perfect or resultative. For imperfective positive there are two constructions, one with auxiliary *bò* ~ *wò* and one with prolonged final vowel, in addition to a progressive with auxiliary *bô*.

There is also a capacitative form ('can VP') with suffix *-mâ:* .

Aspect-neutral statives include those derived from certain types of active verb (e.g. *ínjɛ̀* 'stand up' becomes *íŋgà* 'be in standing position'), with final *a*, along with a few underived defective quasi-verbs ('be', 'have', 'know', 'want', 'resemble').

Both statives and active (aspectually marked) verbs can have their temporal reference point shifted to the past ('used to sit', 'was sitting', 'was sitting down', 'was going to sit', 'had sat') by adding a past clitic *=ye*.

Deontic moods are the imperative (and its negation, the prohibitive), the hortative ('let's VP'), an allative hortative ('let's go VP'), and a quoted imperative.

2.3 Noun phrase (NP)

All possessors (except 3Sg pronoun) and determiners (definite, demonstrative) precede the noun. Adjectives and all quantifiers (numerals, 'all/each') are postnominal.

Modifying adjectives control tone-dropping on a preceding noun. Possessors and determiners control various tone overlays or edge tones on following nouns.

(1a) is a simple NP with preposed determiner and postposed numeral. The noun is subject to a left-edge L-tone increment, while the numeral is fully tone-dropped, cf. (147) in §6.5.3.2. (1b) shows a tone-dropped noun plus a modifying adjective. Superscript ^{L} indicates full tone-dropping, $^{L+}$ indicates an incremental L-tone at the edge. The superscript "points" left or right toward the controlling element.

(1) a. *ín* $^{L+}$*dèm-gè* ^{L}*tà:ndì*
Prox $^{L+}$house-Pl ^{L}three
'these/those three houses'

b. *dèm*^{L} *ŋkà:líyè*
house^{L} small
'(a) small house'

2.4 Case-marking and PPs

Accusative *-ŋ* ~ *-ẁ*^{n}, which is generally limited to pronouns and human NPs, is NP-final and could be considered a postposition. There is a homophonous (but probably noncognate) locative postposition *ŋ* ~ *-w*^{n}, which competes with another locative postposition *ba*. The other simple postpositions are instrumental *ni* and purposive-causative *námù*. There is no specifically dative postposition (the accusative is used for indirect objects). Other postpositions are composite, typically consisting of a possessed-noun-like stem and a final locative *ŋ* ~ *-w*^{n} or *ba*, compare English *in back of* and the like.

2.5 Main clauses and constituent order

Basic constituent order is SOV when S[ubject] and O[bject] are both nonpronominal NPs. Adverbs occur in various positions before the verb, including clause-initial position for setting adverbs like 'yesterday'. 1st/2nd person pronominal subjects are always immediately preverbal proclitics. In main clauses, 3Pl is suffixal and 3Sg is zero. Pronominal objects also gravitate to preverbal position.

(2a) illustrates SOV order and has an initial setting adverb. The verb agrees with the 3Pl subject 'kids'. (2b) illustrates a preverbal 1st/2nd person subject proclitic, here 2Pl. Such proclitics have tonal effects on the following verb.

(2) a. *yà:gú* *wè:-gé* *gà:*^{n} *sém-yè*
yesterday child-Pl cat slaughter.Pfv-3PlSbj
'The kids slaughtered a cat yesterday.' (*yà:gù*)

b. *mbá* *à* *gwê:*
where? 2PlSbj go.out.Pfv
'Where are you-Pl from?'
(lit. "Where did you exit?")

2.6 Relative clauses

The overt head of a relative is internal to the relative clause. This overt head is maximally Poss/Det-N-Adj-Num. This sequence undergoes no additional tonal modification by virtue of being relative head, though its final word is subject to ordinary low-level tone sandhi (§3.6.3). The 'all' quantifier and (often) plural marking constitute a coda that follows the verb in relative clauses. The verb behaves like a participle (so it can take the usual NP-level plural suffix), and it has overt participial suffixes in some inflectional categories (mainly negative and stative). Subject relatives allow no main-clause-like pronominal-subject marking, whether proclitic or suffixal, on verbs. Nonsubject relatives have regular pronominal-subject proclitics for1st/2nd person categories immediately preceding the verb. Nonsubject relatives also have a 3Pl subject proclitic *ŋké* (versus suffixal marking of 3Pl subject in main clauses) and a special 3Sg subject postverbal enclitic *nà* (versus zero marking in main clauses).

(3a) shows a Det-N-Adj internal head, in the same form it would have as a regular NP in a main clause, preceding the verb-participle. The latter is suffixally pluralized when the referent is plural. (3b) shows that a the internal head NP, even in subject function, can be preceded by a setting adverb that belongs to the relative clause.

(3) a. *[è* $^{H+}$*dêm* ^{L}*bày^{n}]* *tìbè(-gé)*
[Def $^{H+}$house ^{L}big] fall.Pfv(-Pl)
'the big house(s) that fell'

b. *yà:gú* *[è* $^{H+}$*dêm]* *tìbè(-gé)*
yesterday [Def $^{H+}$house] fall.Pfv(-Pl)
'the house(s) that fell yesterday'

2.7 Interclausal syntax

Since there is no "bare stem" or "chaining form" of verbs, in clause-chaining either the nonfinal clause has more or less the same form (including inflectional marking) as a main clause, or it has an overt subordinating morpheme. In past-time contexts, one basic pattern is for both verbs to appear in perfective form, each with its own pronominal-subject conjugation. There are two versions, distinguishable (by verbal tones) only with third-person subjects, depending on whether two clauses denote consecutive events, or simultaneous co-events of a single complex event (§15.2.1.5, §15.2.2.1). In both types, if the subject of the nonfinal clause is a 3Sg pronominal, it is expressed by the same enclitic *nà* as in relative clauses, versus zero marking in the final perfective clause of the chain (which has main-clause form). Another perfective construction has nonpast anterior subordinator *né* ~ *nè* after the nonfinal verb (§15.2.2.2).

If the nonfinal verb is imperfective ('while VPing'), it can be followed by imperfective subordinator *w^{n}* ~ *ŋ*, or the verb itself can have its final vowel lengthened (§15.2.1.2-3). Purposive clauses also end in *w^{n}* ~ *ŋ*, but after a different form of the verb (§17.5.1).

The same particle *né* ~ *nè* found in nonpast anterior chained clauses is also the regular 'if' particle, though in this function it can be expanded as *bé-né*. Counterfactual conditionals have *bé-né* and shift the temporal axis in both clauses by adding past clitic *=ye*.

Quotations are marked either by a conjugated form of *né* 'say' or by the unconjugated quotative particle *wa*. In quoted indicative clauses, original first person pronouns (i.e. coindexed with the attributed author of the quoted material) are replaced by logophoric pronouns, and original second person pronouns (if not identical to the current speaker or addressee) are replaced by third person pronouns. Therefore 'He said "I will kill you" ' is phrased as "[LogoSg$_{x}$ will kill him/her] he$_{x}$ said" if the original addressee is not identical to the current speaker or addressee. Quoted imperative and hortative clauses have special verb forms. Quoted interrogatives have a clause-final particle *lè* not used in the corresponding main clauses.

Most "control" verbs in matrix clauses take verbal-noun complements (which may include non-subject complements) when the subjects are coindexed. For 'want', a nonpast anterior complement is used when the subjects are disjoint.

3 Phonology

3.1 Internal phonological structure of stems and words

3.1.1 Syllables

Primary syllabic shapes that occur within stems are *Cv*, *Cv:*, *CvL* with sonorant *L*, and occasionally *Cv:L*. The initial *C* position may be vacant in a word-initial syllable.

Nouns, adjectives, and numerals have at least two vocalic moras (subminimal *Cv* stems are not allowed). However, there are a handful of *NCv* stems whose initial (syllabic) nasal counts as a vocalic mora. For verbs, the only regular (aspectually inflected) *Cv* stem is *nɛ́* 'say'. There are also some stative *Cv* quasi-verbs (*bô* 'be', *sâⁿ* 'have'), and a derived stative stem *dâⁿ* 'be sitting' from verb *dâ:yⁿ* 'sit (down)'. With these exceptions, verbs (like other stems) have at least two vocalic moras. The inventory of monosyllabic verb stems is given in §10.1.2.12. Examples of monosyllabic stems for other stem-classes are in (4). "Adjectives" that are just perfective participles of cognate verbs (e.g. *mɛ̀:* 'dry') are omitted.

(4) a. *Cv:* (including *v:*, *Cv:ⁿ*, and *Cwv:*), complete list

v:	
à:	'who?'
ɛ̂:	'that same (one)'
Cv:	
bɔ́:	'father's sister'
dá:	'evil'
dɔ̀:	'mortar (for pounding)'
dɛ̀:	'40'
kó:	'head'
mì:	'water'
nà:	'cow'
ɲà:	'meal'
nɔ̀:	'song'
nɛ̀: ~ *nwɛ̀:*	'hand'
ní:	'mother'
nù:	'fat(n)'
pɔ́:	'share, portion'
sɔ́:	'vomiting'
sɛ̀:	'(a) grain'
sí:	'color'
tɔ́:	'bow (for arrows)'
té:	'tea' (variant)
tí:	'errand, mission'
tó:	'other'
wá:	'day' (in *wá: sɛ̀lɛ̀* 'every day')
wɔ̀:	'weeping'
wɛ̀:	'child'
wɛ̂:	'moon'

yɔ̀: ‘woman’
yɛ̀: ‘thing’

Cv:^{n}
dû:^{n} ‘rag (as head cushion)’
gà:^{n} ‘cat’
gɛ̀:^{n} ‘sun’ or ‘fart’
gí:^{n} ‘odor’
gɔ̀:^{n} ‘chest (body)’
já:^{n} ‘shed, thatch shelter’
kí:^{n} ‘boat’
sà:^{n} ‘waterbag’
sú:^{n} ‘Ramadan’

Cwv: (see also *nɛ̀:* ~ *nwɛ̀:* ‘hand’ above)
dwɛ̀: ‘ashes’
kwé: ‘a spice (*Xylopia*)’
kwɛ́: ‘calabash vine’
nwá: ‘this year’
twɛ̀: ‘pile’

Cwv:^{n}
gwɛ̀:^{n} ‘whip’

b. *CvL* (including *vL*), selected examples

final nasal
dèm ‘house’
jòm ‘thorn’
dèn ‘day’
dòn ‘mouth’
géŋ ‘place’

final semivowel (nasalized or not)
bày^{n} ‘big’
bòw^{n} ‘(door-)shutter’
ɛ̌w^{n} ‘there’ (definite)
jòy^{n} ‘fight (n)’
téw ‘lid’

final liquid
búl ‘herd’
dúl ‘root’ or ‘east’
hâl ‘until’

c. *Cv:L*, all known examples
dɛ̀:l ‘gum (resin)’
kà:m ‘anxiety’
kà:y^{n} ‘Bozo (ethnicity)’
lâ:m ‘political authority’, < Arabic
mû:l ‘mold (for shaping bricks’, Fr. *moule*
ná:m (response similar to ‘amen!’)
pô:y ‘sack’
sɛ̌:y^{n} ‘rib’

d. *NCv*, all known examples
ntá ‘person’
ŋkɛ̀ ‘dog’

e. *NCv:* and *NCv:^{n}*, all known examples

nsì:^{n}	'sweet'
ntɛ̀:	'hatred'

3.1.2 Metrical structure

In *CvCvCv*, the medial syllable is treated as metrically weak in most trisyllabic verb stems, including reversive, mediopassive, and transitive suffixally derived stems. The effect is that only a short nonhigh vowel is allowed, variably *i* or *u* (depending on vocalic and consonantal environment). For example, *dájé* 'attach blade' has a reversive derivative *dájú-lɛ̀* 'remove blade'. The short high vowel can be syncopated under limited conditions, especially /i/ before *y* (§3.4.2.2).

Trisyllabic noun and other non-verb stems do not have a position that is systematically weak metrically. However, trisyllabic nouns with medial short high vowel may syncopate (§3.4.2.2).

3.1.3 Prosodically light and heavy stems

Prosodic weight is important in tonal patterns especially for verbs. The basic split is shown in (5).

(5) a. light

Cv and *Cv:*
regular (unsegmentable) *CvCv*
most *CvNCv* (*NC* a homorganic nasal - voiced stop cluster)

b. heavy

two *CvNCv* stems (see comments below)
all *CvCCv* stems with *CC* not a homorganic *NC* cluster
Cv:Cv and all trisyllabic or longer stems

The two heavy *CvNCv* stems in (5b) are *ínjɛ̀* 'stop, stand' and *ándɛ̀* 'go' (3Sg perfective forms). *ínjɛ̀* is probably contracted from trisyllabic mediopassive *íŋgí-yɛ̀. Cognates include Najamba *íŋgí-yɛ́* and Tiranige *ígí-yó*. Even in Penange, the transitive counterpart is trisyllabic *íŋgí-rɛ̀* 'stop, cause to stand'. *ándɛ̀* 'go' (compare Mombo *ándé* and, curiously, Bunoge *gé:ndɛ̀*) has a lengthened (and prosodically heavy) variant *-a:nde* when it is preceded by epenthetic *ɲ-*, see for example (310a-c) in §10.7.2.1.

Details of tonal patterning in various inflectional categories are given in various sections of chapter 10. An example involving prosodic weight: the 3Sg perfective has {H} overlay for light stems and {HL} for heavy stems (§10.2.1.1). The tonal contrast between *búndé-∅* 'he/she hit', a typical *CvNCv* verb, and *ándɛ̀-∅* 'he/she went', shows that 'go' is treated as heavy even when its initial vowel is not long (see comments above). One could envisage a unifying ablaut model with an "invariant" underlying overlay {HL} whose L-tone is not realized on light stems. A similar model, with multitonal underlying overlays that are reduced on light stems, is developed for possessed nouns in §6.2.2.1.

The same prosodic weight split occurs in imperative verbs, where we find {H} overlay in *búndé* 'hit!' and other light verbs versus {L} in *àndà* 'go!' and other heavy verbs (§10.7.1.1).

In such cases it is difficult to avoid recognition of weight-sensitive stem-wide ablaut overlays, as opposed to a one-size-fits-all underlying {HL} or {LH} that is realized differently on light and heavy stems.

A handful of bisyllabic stems have mixed light/heavy attributes. *síndé* 'convey, take (sth) away' is mostly treated as light, but {HL}-toned imperative *síndò* is intermediate between light and heavy. *bí-yé* 'lie down' and *dú-yɛ́* 'carry on head' (or homonym 'bathe') are usually light but have {L}-toned imperatives like heavy stems.

3.2 Consonants

The consonant phonemes are in (6). Marginal ones that occur in loanwords or as junctures (glottal stop) are parenthesized. Obstruents occur chiefly in stem-initial position.

(6) Consonants

	1	2	3	4	5	6	7	8	9	10
labial	*p*	*b*	*m*	*(f)*			*w*	*w*^{n}		
alveolar	*t*	*d*	*n*	*s*	*(z)*	*l*	*r*			
alveopalatal	*c*	*j*	*ɲ*				*y*	*y*^{n}		
velar	*k*	*g*	*ŋ*							
laryngeal									*(h)*	*(ʔ)*

c is IPA [tʃ], *j* is [dʒ], *y* is [j].
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. laterals; 7-8. unnasalized then nasalized sonorants; 9-10. laryngeals

3.2.1 Alveopalatals (*c*, *j*) versus velars (*k*, *g*)

j and *g* are distinct even before front vowels {*i e ɛ*}. Examples with *i* are *gí:*^{n} 'odor', *pírígí* 'hobbles (rope)', *síŋgì* 'rope', *ígírè* 'stir', but *kójí* 'grass', *sò:njì* 'spittle', and *mɔ̀:njì* 'urine'.

c and *k* are likewise distinct before front vowels, though *c* is uncommon. Examples are *cìmjà* 'snot', *làcírì* 'couscous', but *kíbá* 'kidney', and *kíndó* 'shadow'.

3.2.2 Back nasals (*ŋ*, *ɲ*)

I know of no *ŋi*, *ŋe*, or *ŋɛ* sequences in Penange words, so I have no evidence that *ŋ* and *ɲ* are distinct before front vowels. There are several examples of *ɲ* before front vowels, e.g. *ɲíngè* 'stimulate eardrum (with feather)', *ɲɛ́y*^{n} 'know'.

3.2.3 *g*-Spirantization (*g* → *ɣ*)

There is some subphonemic spirantization of *g* in the medial position in *Cv_v* between flanking back/low vowels {*a ɔ*}. In words like *ágálá* 'jaw' and *ɔ̀gɔ̀lɔ̀* 'mud', the phoneme *g* is often pronounced as a velar fricative [ɣ].

3.2.4 Minor labials (*f*, *w*)

p, *m*, and *b* are basic consonants. *p* and *b* have the normal distribution of obstruents, strongly favoring syllable-initial position. *m* can occur syllable- and word-finally.

f occurs in loanwords like *fìlá:nà* 'So-and-so' (§13.2.2), *sífà* 'description', *fúfù* 'scrubber (for bathing)', and *nàfòrò* 'wealth'.

For stem-initial *Cw* clusters, see §3.2.8.1 below.

3.2.5 Laryngeals (*h*, *ʔ*)

h and *ʔ* are not full-fledged phonemes in Penange. *h* occurs as initial consonant in a number of stems, mostly Fulfulde borrowings, e.g. *hâl* 'until', *hɔ́:lá:rɛ̀* 'confidence'. Presentative *ì^{n}hí^{n}* 'here (it is)!' has medial *h*, but its internal morphological structure is nontransparent, cf. demonstrative *ínì* 'this/that'.

Vowel-initial words do not have a phonemic glottal stop in the fashion of e.g. Bunoge. Instead, *y-* and *ɲ-* are added as epenthetic consonants before V-initial words following pronominal-subject proclitics (§3.4.4.1). Aside from *ɔ́^{n}ʔɔ̀^{n}* 'no!', glottalization within unreduplicated stems is limited to unassimilated Fulfulde loanwords, some of which retain Fulfulde preglottalized consonants, as in *sáʔdà* 'expense'.

In the positive stative construction, *Cv̀* reduplicative proclitics take the form *v̀* when the stem is vowel-initial. With third-person subject, this results in a *Cv̀ v́* sequence. The two vowels in this case are separated by a glottal stop, as in *ì íŋgà-∅* [ìʔíŋgà] 'he/she is standing' (§10.4.1.1).

3.2.6 Sibilants (*s*, *z*)

s is a basic consonant, occurring in prevocalic position like other obstruents. *š*, *z*, and *ž* are found only in a few loanwords, e.g. *zùnú:bù* 'sin' (< Arabic).

3.2.7 Nasalized sonorants (*r^{n}* absent, *w^{n}* and *y^{n}* word-finally)

There is no *r^{n}* (nasalized tap).

w^{n} occurs finally in a handful of lexical stems: *ɛ̌w^{n}* 'there' (discourse-definite), *bòw^{n}* '(door-)shutter', *tɔ̂w^{n}* 'club (association)', *nǔw^{n}* 'here'. It is more common in word-final grammatical elements, notably imperfective subordinator *w^{n}*, accusative *-w^{n}*, and locative postposition *w^{n}*. In all cases, word-final *w^{n}* is heard as such almost exclusively in prepausal position. Before another word, the *w^{n}* (if this is the most basic form) is typically realized as a nasal (homorganic to a following *C*), as vowel nasalization, or as zero.

yⁿ is fairly common in stem-final position. *gùyⁿ* 'thief' (contrast verb *gúyé* 'steal'), *jòyⁿ* 'fight (n)', *kà:yⁿ* 'Bozo (ethnicity)', *káyⁿ* 'work(n)', *kéyⁿ* 'want', *kɔ̀yⁿ* 'the bush, outback', *kùyⁿ* 'war', *mòyⁿ* 'sprain(n)', *mùyⁿ* 'patience', *ŋòyⁿ* 'pancake-like cake', *ɲéyⁿ* 'know', *óyⁿ* 'waterjar'. It can also occur in "medial" position in stems ending in *yⁿi* whose final /i/ is usually deleted (apocope, syncope): *dâ:yⁿ* /dá:yⁿì/ 'sit', *gî:yⁿ* /gí:yⁿì/ '(sth) smell, emit an odor', *jáyⁿ(í)* 'fight (v)'.

3.2.8 Consonant clusters

3.2.8.1 Word- and morpheme-initial *CC* clusters (*NC*, *Cw*)

Word- and stem-initial clusters are nasal plus homorganic obstruent, and consonant plus *w*.

The known stems beginning in a nasal-stop cluster are in (7). Postpausally, the nasal is syllabic and can therefore bear its own pitch, but it is not clear that this is distinctive (i.e. phonological tone). The pitch of the nasal in postpausal position is low (7a), except in *NCv(:)* stems like 'dog' and 'sweet' when the final vowel is L-toned, in which case the pitch of the nasal is high in this position (7b).

(7)	a.	*mbòllí*	[m̀bòl:í]	'knobbed end of stick'
		mbé	[m̀bé]	1Pl pronoun
		mbú:dù	[m̀bú:dù]	'currency unit'
		mpànî:	[m̀pànî:]	'riddle'
		ndámdì	[ǹdámdì]	'butter catfish (*Schilbe*)'
		ntá	[ǹtá]	'person'
		ntíyé	[ǹtíjé]	'hurt (sb)'
		njó	[ǹdʒó]	'today'
		ŋgòlò-ŋgòlò	[ŋ̀gòlòŋgòlò]	'giant millipede'
		ŋgállù	[ŋ̀gál:ù]	'city'
		ŋkà:lí-yè	[ŋ̀kà:líjè]	'small'
		ŋké	[ŋ̀ké]	'be depleted, be used up'
		ŋké	[ŋ̀ké]	3Pl pronoun
		ŋkíndɛ̀	[ŋ̀kíndɛ̀]	'die'
	b.	*ŋkɛ̀*	[ŋ́kɛ̀]	'dog'
		nsì:ⁿ	[ńsì:ⁿ]	'sweet' (as modifying adjective)
		ńsà bó-∅	[ńsàbó]	'it is sweet'

When a *NCv* noun like *ntá* or *ŋkɛ̀* gets an {HL} tone overlay as possessed noun, I usually hear the result as *NCv̂* with falling tone on the vowel.

(8) a. *mbé* HL*ntâ*
1PlPoss HLperson
'our person (our guy)'

b. *mbé* HL*ŋkɛ̂*
1PlPoss HLdog
'our dog'

However, I sometimes hear the possessed form as [ńCv̀], especially after an L-tone (and final words in nonpronominal NPs functioning as possessors are usually {L}-toned). This suggests

that the initial nasal is at least sometimes treated as syllabic for purposes of expressing tone overlays. An example is singular ^{HL}*ŋ́kɛ̀* 'dog' in (9), which can have the pitch peak on the nasal in the unsuffixed singular, though the timing of this peak is variable. In the suffixed plural, I hear the pitch peak on the *ɛ*. The strike-through superscript represents an overlay that is cancelled (overridden) by another.

(9)

[mbé	~~^{HL}~~*ntà*^{L}*]*	^{HL}*ŋ́kɛ̀* / ^{HL}*ŋkɛ́-gɛ̀*
[1PlPoss	~~^{HL}~~person^{L}]	^{HL}dog / ^{HL}dog-Pl
'our guy's dog(s)'		

Initial *Cw* clusters occur primarily in monosyllabic stems. The few known unsegmentable stems of two or more syllables with initial *Cw* are listed in (10a). *Cw* is attested only before {*a: ɛ:*} in nonmonosyllabics. Comparable stems with +ATR vowel *e* are pronounced *Coe*, with no desyllabification of the *o* (10b). This contrasts with structurally similar sequences in monosyllabics, like *gwé:* 'go out', arguably from /goe/ (see below), whose *w* is clearly nonsyllabic.

(10) Bisyllabic noun/adjective stems with *Cwv* or *Coe* onset

a. *Cwa*, *Cwɛ*

nwá:gá	[nwá:gá]	'hot', cf. verb *nú:gɛ̀* 'warm up'
dwɛ́:rɛ́	[dwɛ́:rɛ́]	'tied bundle'

b. *Coe*

dóélé	[dóélé]	'ball, globe'
nɔ̀ɛ̀-rɛ̀	[nɔ̀ɛ̀rɛ̀]	'sleep (n)', variant *nɔ̀:-rɛ̀*, cf. *nɔ́:yɛ̀* 'sleep (v)'

Including monosyllabics, the vowel after an initial *Cw* cluster is unrounded {*i e ɛ a*} in all known examples. Attested initial *Cw* clusters are {*dw tw jw gw kw sw nw*}, i.e. *w* following a nonlabial obstruent or *n*. That *nw* is somewhat marginal is suggested by the variable pronunciation of *nwɛ̀: ~ nɛ̀:* 'hand' and by the contrast between perfectives *nɛ́:* 'drink' and *nwɛ́:* 'sing' or 'go in'. The absence of *Cw* clusters with *C* a palatal {*y ɲ*} is motivated; there are *Cv:* verbs beginning in these consonants, none of which allows the *Cw* cluster. On the other hand, the absence of {*pw bw fw*} and that of {*lw*} could possibly be accidental, as there are no *Cv:* verbs with initial labial or *l*. Initial *ww* clusters can occur with *wv:* verbs in the relevant vocalism stems, but may be audible as such only in careful pronunciation.

For nouns, see the list of monosyllabic stems (including *Cwv:*) in (4a) in §3.1.1 above. The absence of *Cwi* in nouns may be accidental. For modifying adjectives, only *nwá:gá* 'hot' can be cited; there are very few monosyllabic adjectives so the infrequency of *Cw* is not surprising (§4.5.1). There are no *Cw*-initial stems among the small inventory of numerals, few of which are monosyllabic.

For verbs, initial *Cw* occurs in certain vocalism stems (§3.3.6) of some *Cv:* (bimoraic monosyllabic) verbs. The relevant vocalism stems are those with a following unrounded vowel {*a ɛ e i*}, namely the E- and A-stems of some +ATR *Cv:* verbs, and the E-, A/O-, and A-stems of several -ATR *Cv:* stems. Vocalism stems with {*u o ɔ*} as the nucleus lack the *w*. For example, *gwé:* 'go out' has vocalism stems *go:*, *guy*, *gwa:*, and *gwe:* . Lists of monosyllabic verbs including their vocalism stems are in (219) in §10.1.2.2.

The phonological status of initial *Cw* clusters is problematic. In view of the alternations between e.g. vocalism stems *gwe:* and *go:* for 'go out' in verbal morphology, we must consider the possibility that *gwe:* is derived from /goe/, with the *o* desyllabifying to *w* and its

moraic value transferred to the nuclear *e*. Likewise, given the alternation of *dwɛ:* and *dɔ:* for 'pound', we would derive *dwɛ:* from /dɔɛ/ (§3.4.4.4). Since the vocalism stems for verbs primarily involve changes in the stem-final vowel, such an analysis would explain the strong association of *Cw* with monosyllabic stems; we would simply argue that in the case of *Cv:* stems the shift to *e* or *ɛ* affects only the final mora. Moreover, the pronunciation of *Cw* before *ɛ*, as in *dwɛ:*, is [Co̯], i.e. with the "w" more open than the transcription *dwɛ:* suggests.

I am sympathetic to this desyllabification analysis, but there is some reason to believe that the desyllabified /o̯/ and /o̯/ merge as phonemic /u̯/, and acquire their phonetic form by harmonizing with the ATR value of the following vowel. There is no surface opposition of [Co̯a] to [Coa], or of [Co̯i] to [Coi], though such oppositions might be expected in a desyllabification model.

Moreover, monosyllabic verbs of the relevant types have an interesting 3Pl subject perfective form. From (perfective) *gwé:* 'come out' and *dwɛ́:* 'pound', 3Pl subject perfective forms are *gúy-yè* and *dúy-yɛ̀*. If we derive *gúy-yè* 'they went out' from /góé-yè/, parallel to 3Sg subject *gwé:-∅* 'he/she/it went out' from /góé-∅/, the desyllabification of *e* and its fusion into geminate *yy* should have resulted in #*góy-yè*. Likewise we should have gotten #*dɔ́y-yɛ̀* instead of *dúy-yɛ̀*. The attested *gúy-yè* and *dúy-yè* suggest more complex derivations, first with /góé-/ becoming /gue-/ and /dɔɛ-/ becoming /duɛ-/, then with a resyllabification as the *e* or *ɛ* fuses with the suffixal *y* and the /u/ (or /w/) becomes the syllabic nucleus, resulting in *gúy-yè* and *dúy-yɛ̀*.

3.2.8.2 Medial geminated *CC* clusters

Stem-internal geminate clusters are uncommon, and are probably confined to loanwords (geminates are common in Fulfulde) and to suffixed verb stems that have undergone syncope of a short high vowel. An example of each attested cluster is in (11). If no stem-internal example is available, a stem-suffix boundary cluster is given if attested.

(11)			
	bb	—	
	cc	*fɛ́ccèrɛ́*	'half' (< Fulfulde)
	dd	*púddì*	'henna' (< Fulfulde)
	ff	—	
	gg	*jùggâl*	'hitching post' (< Fulfulde)
	jj	*èjjè*	'Dogon (person)'
	kk	*júkkì*	'fine (penalty)' (regional)
	ll	*sátállà*	'kettle' (regional)
	mm	*kàmmì*	'hard, solid'
	nn	*àljénnè*	'paradise' (regional, < Arabic)
	ɲɲ	*bàɲ-ɲà*	'size, dimensions' (§4.2.7)
	ŋŋ	—	
	pp	—	
	rr	*bárrá:dà*	'tea-kettle' (regional, < Arabic)
	ss	*àssî:l*	'Saturday' (< Arabic)
	tt	*síttì*	'sulfur' (< Fulfulde)
	ww	—	
	$w^n w^n$	—	
	yy	*dòyyà:lò*	'lunch'
	$y^n y^n$	*níy^n-y^{n}è*	'they drank' (§10.2.1.1, stem *né:*)

3.2.8.3 Medial nongeminate *CC* clusters

Obstruents (stops, affricates, fricatives) do not occur as first members of nongeminate clusters. This leaves sonorant-obstruent and sonorant-sonorant combinations.

The only common stem-internal medial clusters are {*mb nd nj ŋg*}, i.e. nasal plus homorganic voiced stop/affricate. Most *CvNCv* verb stems with such clusters are treated as prosodically light (like *CvCv* verbs), while other *CvCCv* verbs are prosodically heavy (like trisyllabics). This distinction is seen, for example, in the tones of the 3Sg perfective, e.g. *búndé-∅* 'he/she hit' versus *wɛ́lgɛ̀-∅* 'he/she dispossessed' (§10.2.1.1).

Other *CC* clusters are generally either limited to loanwords, or occur only at stem-suffix or compound boundaries, usually as the result of syncope. Boundary clusters of type *C-y* are very common in mediopassive derivatives (including frozen ones), due to syncope. In the lists below, if a stem-internal example is known it is given. If not, if an example involving a morpheme boundary is known it is given. Failing that, — is shown. Stem- and word-initial *Cw* clusters are not included.

(12) Nasal plus consonant

a.	*mb*	*jɛ́mbɛ́*	'winnow by shaking'
	nd	*ándɛ̀*	'go'
	nj	*ínjɛ̀*	'stand, stop'
	ŋg	*jɔ́ŋgɛ́*	'treat (medically)'
b.	*mp*	*gìrè-m-pûl*	'face'
	nt	*ɲìntí:rè*	'couscous steamer'
	nc	—	
	ŋk	*kúŋkù*	'problem'
c.	*ns*	*ànànsá:lá*	'white person' (< regional as e.g. *anasa:ra*, < Arabic 'Nazarene')
	mj	*kámjè*	'squeeze'
d.	*my*	*úm-yɛ̀*	'endure'
	ny	*ányà*	'intention, plan' (< Arabic)
	ɲy	—	
	ŋy	—	
e.	*mw*	—	
	nw	—	
	ɲw	—	
	ŋw	—	
f.	*ml*	*kúm-lɛ̀*	'open (eyes)'
	nl	—	
	ɲl	—	
	ŋl	—	

g.	*mr*	—	
	nr	—	
	ɲr	—	
	ŋr	—	

(13) Liquid plus consonant

a.	*lb*	*kálbà*	‘act of entrusting’
	ld	*íldɛ̀*	‘forget’
	lj	*àljɛ́nnɛ̀*	‘paradise’
	lg	*wɛ́lgɛ̀*	‘dispossess’
b.	*lp*	—	
	lt	—	
	lc	—	
	lk	—	
c.	*ls*	—	
d.	*lm*	*àlmà:m*	‘imam’ (regional, < Arabic)
	ln	—	
	lɲ	—	
	lŋ	—	
	ly	*gályɛ́*	‘spices’
	lw	*ălwà*	‘soft candy’
	lr	—	
e.	*rb*	—	
	rd	*yórdɛ́*	‘black’
	rj	*kùrjù*	‘rough’
	rg	*bárgɛ̀*	‘help’
f.	*rp*	—	
	rt	—	
	rc	—	
	rk	—	
g.	*rs*	—	
h.	*rm*	*bármà*	‘cooking pot’ (< Bambara)
	rn	*àrnà*	‘world of the living’ (regional as e.g. *adunya*, < Arabic)
	rɲ	—	
	rŋ	—	
	ry	*ír-yé*	‘heal’
	rw	—	
	rl	*wɛ́r-lɛ̀*	‘unravel (sth)’

(14) Semivowel plus consonant

a.	*yb*	*káybè*	‘watch over’ (< Fulfulde)
	yd	—	
	yj	—	
	yg	*káy-gè*	‘cut an incision in’ (§9.2.2)
b.	*yp*	—	
	yt	*mànà tày-tàyí-yè*	‘slingshot’ (iterated, §5.1.10)
	yc	—	
	yk	—	
c.	*ys*	—	
d.	*ym*	*áymà*	‘Friday’ (regional as e.g. *aljuma*, < Arabic)
	yn	—	
	yɲ	—	
	yŋ	—	
	yl	*sáy-lè*	‘undo (braids)’
	yw	—	
	yr	*báyrè*	‘add, increase’
e.	*wb*	—	
	wd	*bá:wdè*	‘means, resources’ (< Fulfulde)
	wj	—	
	wg	—	
f.	*wp*	—	
	wt	—	
	wc	—	
	wk	—	
g.	*wz*	—	
	ws	—	
h.	*wm*	—	
	wn	*háwnì kán*	‘amaze (sb)’
	wɲ	—	
	wŋ	—	
	wy	*yáw-yáw*	‘lightweight’
	wr	*já:wrè*	‘harvest pile’
	wl	*sáwlè*	‘(rain) stop’

3.2.8.4 Medial triple *CCC* clusters

The few *CCC* clusters within stems consist of a sonorant (semivowel or liquid) plus a homorganic nasal/voiced-stop cluster. The attested examples are in (15). A reasonable

hypothesis is that many or all of these examples result from syncope of a short high vowel after the initial sonorant, or else are borrowings.

(15)			
	yŋg	*jòyŋgà*	‘wind scorpion (solifuge)’
	ynd	*kóyndé*	‘rock hyrax’
		sòyndà	‘sand’
		táyndè	‘spread (sth) out’
	lmb	*gùlmbò*	‘korrigum (antelope)’
		pɛ́lmbɛ́	‘Wednesday’
		sìlmbè	‘folding knife’
	lŋg	*bèlŋgè*	‘fodder’ (with frozen suffix, §4.1.1.2)

3.2.8.5 Final *CC* clusters

No stem- or word-final *CC* clusters have been observed.

3.3 Vowels

The vowels are given in (16). Nasalized vowels are uncommon.

(16)	oral		nasalized	
	short	long	short	long
	u	*u:*	—	*u:^{n}*
	o	*o:*	—	—
	ɔ	*ɔ:*	*ɔ^{n}*	*ɔ:^{n}*
	a	*a:*	*a^{n}*	*a:^{n}*
	ɛ	*ɛ:*	*ɛ^{n}*	*ɛ:^{n}*
	e	*e:*	—	—
	i	*i:*	*i^{n}*	*i:^{n}*

3.3.1 Oral vowels

All oral short and long vowels are common. Monosyllabic noun, verb, adjective, and numeral stems normally have two moras, so *Cv:* and *CvC* are common while *Cv* is limited to one verb (*nɛ́* ‘say’, §10.1.2.1). There are a handful of *NCv* stems where the nasal can be treated as moraic, licensing the short vowel (*ntá* ‘person’, *ŋkɛ̀* ‘dog’, *ŋkɛ́* ‘be used up’).

Within nonmonosyllabic stems, long vowels are most common in stem-initial syllables, as in *tà:ŋgà* ‘one’, *dí:rɔ́* ‘last, final’, and *tá:rɛ̀* ‘show’ However, trisyllabic and longer stems other than verbs can have medial long vowels, e.g. *kùlɛ̀:nì* ‘six’ and loanwords like *álbárká:jɛ̀* ‘bdellium (resin incense)’.

3.3.2 Nasalized vowels

Nasalized vowels are quite rare, and no +ATR nasalized vowels are known (except for reduced forms of combinations with *wⁿ* postposition). Long nasalized vowels are attested in a few monosyllabic nouns (17), and in one verb, *twɛ́ːⁿ* 'step on' or (God) create' (O-stem *tɔːⁿ*).

(17)			
	iːⁿ	*síːⁿ*	'grub, larva'
	(eːⁿ)	—	
	ɛːⁿ	*gwɛ̀ːⁿ*	'sedge'
	aːⁿ	*gwàːⁿ*	'scrub acacia'
	ɔːⁿ	*gɔ̀ːⁿ*	'chest (body)'
	(oːⁿ)	—	
	uːⁿ	*púːⁿ*	'white-faced whistling duck'

Short nasalized vowels are even less common (18). The absence of *uⁿ* may be accidental.

(18)			
	iⁿ	*ìⁿhíⁿ*	'here's __!' (§4.4.3)
	(eⁿ)	—	
	ɛⁿ	*ɛ̀ⁿ*	existential particle (§11.2.2.1)
	aⁿ	*wàⁿ* ~ *wàwⁿ*	'Nile monitor lizard'
		pùgùjáⁿ-pùgùjáⁿ	'lung'
	ɔⁿ	*ɔ́ⁿʔɔ̀ⁿ*	'no!'
	(oⁿ)	—	
	uⁿ	—	

3.3.3 Initial vowels

The onset *C* position of an initial syllable may be empty. Examples of vowel-initial stems are *ábé* 'accept', *ɔ́njɛ́* 'become skinny', *ébá* 'market', *ɛ́jɛ́* 'become clean', *ínjè* 'sift', *óyⁿ* 'waterjar', and *úgújè* 'churn'.

That these stems begin with a vowel, rather than with a glottal stop, is shown by Word-initial *y*/*ɲ*-Epenthesis (§3.4.4.1), by which an epenthetic initial consonant is added when the stem follows a 1st/2nd person proclitic, either in subject function (before a predicate) or possessor function (before a noun). Thus *ábé-∅* 'he/she accepted' but *á y-àbè* 'you-Sg accepted', and *ímbé-∅* 'he caught' but *á ɲ-ìmbè* 'you-Sg caught'. Penange contrasts with Bunoge, where "vowel-initial" stems are always glottal-initial.

As mentioned in §3.2.5 above, reduplicated statives (§10.4.1.1) like *ì íŋgà-∅* [ìʔíŋgà] 'he/she is standing' have a phonetic glottal stop instead of *y*/*ɲ*-Epenthesis.

3.3.4 Stem-final vowels

All oral vowel qualities occur stem- and word-finally in nouns, adjectives, and numerals.

For verbs, the situation is complicated by extensive ablaut (vocalism stems), which particularly affects stem-final vowels. However, all oral vowel qualities are attested stem-finally with one verb class or another.

In nonmonosyllabic noun stems (and compound finals), final long vowels are rare. However, note (19).

(19) *pèrègèllé:* ‘namaqua dove (*Oena*)’

3.3.5 Vocalic harmony

Advanced tongue root (ATR) distinguishes two sets of mid-height vowels, +ATR {*e o*} and -ATR {*ɛ ɔ*}. To some extent these form harmonic sets, though there are some mixed-ATR words (see below). High vowels {*i u*} are extraharmonic; they may combine in a stem with vowels of either ATR category. Low vowel *a* generally patterns as +ATR, except as noted below.

Among nouns, exceptions to word-level ATR harmony are originally -ATR nouns that contain a frozen inanimate singular classifying suffix *-ŋgɛ* or *-gɛ*, which is no longer readily segmentable (§4.1.1.2). Another mixed-ATR noun is *kɔ́:ndɛ̀* ‘cotton’ (cf. Mombo *kɔ́:ndì*). Plural *-gɛ̀* also fails to harmonize with stems.

ATR is an important feature in verb-stem morphophonology. Verbs are lexically either +ATR or -ATR. All known stems in the minority final-high-vowel class of verbs are +ATR. The majority final-nonhigh-vowel class clearly distinguishes +ATR from -ATR in some vocalism stems, including the perfective, which ends in *e* or *ɛ* (E-stem, or more generally E/I-stem) depending on the verb. One vocalism stem, the A-stem, can neutralize lexical ATR, since the final vowel becomes *a* and all nonfinal vowels favor +ATR-compatible (+ATR or extraharmonic) forms, i.e. {*i u e o a*} but not {*ɛ ɔ*}. Another stem, the A/O-stem, also favors +ATR or +ATR-compatible vocalism, but indirectly distinguishes underlying +ATR verbs (stem-final *o*) from underlying -ATR verbs (stem-final *a*).

The association of *a* with +ATR is seen not only in the presence of stem-final *a* in these +ATR stems, but also in the fact that a verb with *a* in one or more nonfinal syllables is always +ATR. For example, *nálé* ‘give birth’ and all other *CaCv* verbs are +ATR (perfective always ends in *e* rather than *ɛ*).

My assistant’s intuitions and my ear sometimes diverged on the issue whether the first syllable of a *CɔCɔ* or *CɛCɛ* verb becomes +ATR when the final vowel becomes *a* in the A- or A/O-stem. I generally heard the outputs as *CoCa* and *CeCa*, but when I pronounced them as such my assistant corrected me and pronounced (in careful style) *CɔCa* and *CɛCa*. Further study with other speakers is indicated (I may need a hearing test, or my assistant may have idealized). We did agree that the stative (A-stem) from *gɛ́njɛ̀* ‘become tilted’ is *gɛ́ŋgà* ‘be tilted’ (§10.4.1.1) not #*gɛ́ŋgà*, that adjective *dɔ́ŋgá* ‘heavy’ corresponds to verb *dón-jɛ̀* ‘become heavy’ (+ATR even in the E-stem), and that the reversive of *sɔ́gɛ́* ‘buy’ is *sógú-lɛ̀* ‘sell’. Further examples of alternations are reversive derivatives in §9.1.

3.3.6 Vocalism stems for verbs

There are two main classes of verbs, final-nonhigh-vowel and final-high-vowel. The verbs ‘come’ and ‘bring’ have features of both classes. Final-nonhigh-vowel verbs are the majority, and distinguish lexically -ATR and +ATR subtypes. All known final-high-vowel verbs, as well as ‘come’ and ‘bring’, are +ATR. Both final-nonhigh-vowel and final-high-vowel verbs have a subtype characterized by a nonfinal *a*-vowel.

Each verb has several vocalism stems characterized by a stem-final vowel, complemented in some cases by a shift to +ATR in nonfinal syllables. Each indicative (aspect-negation) and modal category requires a particular vocalism stem, whether or not the category is also

expressed by a suffix or auxiliary. The imperative and the perfective (positive) are both unsuffixed but occur in different vocalism stems.

Inflectional categories associated with the various vocalism stems of final-nonhigh-vowel verbs are given in (20).

(20) Distribution of vocalism stems (final-nonhigh-vowel verbs)

O-stem	imperfective positive before auxiliary *bò* 'be' (§10.2.2.1); imperfective negative (§10.2.3.3); purposive clauses with *w*^{n} (§17.5.1); progressive positive (§10.2.2.4) and negative (§10.2.3.4)
A/O-stem	singular-addressee imperative (§10.7.1.1); experiential perfect positive (§10.2.1.4) and negative (§10.2.3.2); before causative *-mì* (§9.2.1)
A-stem	A-stem imperfective (§10.2.2.6); before imperfective subordinator *w*^{n} (§15.2.1.3); 3Pl perfective negative portmanteau (§10.2.3.1); plural-addressee imperative (§10.7.1.1); prohibitive (§10.7.1.2); hortative negative (§10.7.2.2); before causative *-gè* (§9.2.2); derived stative (§10.4.1.1)
E-stem	perfective positive (§10.2.1.1) and negative (§10.2.3.1); hortative (§10.7.2.1); verbal noun (§4.2.4)
I-stem	before *-yè* in quoted imperative (§10.7.3.1); before *-yè* ~ *-yɛ̀* in the 3Pl subject perfective (§10.2.1.1)
U-stem	for certain stems before causative *-gè* (§9.2.2); agentive nominalizations (§5.1.4)

The labels refer to the stem-final vowel possibilities. They are summarized in (21).

(21) Stem-final vowels, final-nonhigh-vowel verbs

O-stem	{*o ɔ*} depending on ATR-harmonic class of stem
A/O-stem	*a* from +ATR stems with nonfinal *a*, *o* from +ATR stems with nonfinal nonlow vowel, *a* from -ATR stems
A-stem	*a* for all stems
E-stem	{*e ɛ*} depending on ATR-harmonic class for final-nonhigh-vowel stems
I-stem	*i* (occurs only before suffix-initial *y*)
U-stem	*u*

In addition, the A-stem (often) and the U-stem favor +ATR or +ATR-compatible (i.e. extraharmonic) vowels throughlout the stem (see comments above about my assistant's intuitions contradicting this). To the extent that this is correct, the effect is that -ATR {*ɛ ɔ*} in such syllables shift to {*e o*}. The vowels {*i u a*} are already +ATR-compatible and are not shifted in nonfinal syllables. The E-stem, the O-stem, and the I-stem do not impose +ATR compatibility on nonfinal vowels. For my assistant, the A/O-stem likewise preserves ATR values in nonfinal vowels.

Alternations for representative final-nonhigh-vowel verbs are shown in (22). Tones are omitted since they are determined by separate rules.

(22) Sample final-nonhigh-vowel vocalism-stem paradigms

O	A/O	A	E	I	U	gloss
a. -ATR final-nonhigh-vowel stems						
monosyllabic, C onset throughout						
ɲɔ:	*ɲa:*	*ɲa:*	*ɲɛ:*	*ɲiy*^{n}	*ɲi:*	'eat (meal)'
monosyllabic, Cw onset in some vocalism stems						
dɔ:	*dwa:*	*dwa:*	*dwɛ:*	*duy*	*du:*	'pound'
nonmonosyllabic, nonfinal vowels are nonlow						
yɛbɔ	*yɛba*	*yɛba*	*yɛbɛ*	*yɛbi*	*yebu*	'dance'
	~ *yeba*	~ *yeba*				
sɔgɔ	*sɔga*	*sɔga*	*sɔgɛ*	*sɔgi*	*sogu*	'buy'
	~ *soga*	~ *soga*				
nɔlɔ	*nɔla*	*nɔla*	*nɔgɛ*	*nɔgi*	—	'crumple'
	~ *nola*	~ *nola*				
giyɔ	*giya*	*giya*	*giyɛ*	*giy(i)*	*giy*	'kill'
dugɔ	*duga*	*duga*	*dugɛ*	*dugi*	*dugu*	'insult'
b. +ATR final-nonhigh-vowel stems						
monosyllabic, Cw onset in some vocalism stems						
jo:	*jo:*	*jwa:*	*jwe:*	*juy*	—	'fill up'
nonmonosyllabic, nonfinal nonlow vowel, final o in A/O-stem						
guyo	*guyo*	*guya*	*guye*	*guy(i)*	—	'steal'
	[agentive *gùy*^{n} 'thief' is irregularly nasalized]					
sigo	*sigo*	*siga*	*sige*	*sigi*	*sigu*	'go down'
yelo	*yelo*	*yela*	*yele*	*yeli*	*yelu*	'drape (sth, over sth)'
nonmonosyllabic, nonfinal a, final a in A/O-stem						
nalo	*nala*	*nala*	*nale*	*nali*	*nalu*	'give birth'

Final-high-vowel verbs, a small minority (except for causative derivatives), have a rather different system. The vocalism stems and their distributions are summarized in (23). These verbs are notable for avoiding stem-final mid-height vowels {*e ɛ o ɔ*}. The status of the O/A-stem for these verbs is dubious, since the relevant forms are *CaCa*, which could be either the A-stem or the A/O-stem, and whose first (lexical) *a* requires stem-final *a* rather than *u*.

(23) Distribution of vocalism stems (final-nonhigh-vowel verbs)

O/A-stem	for *CaCv* stems, final *a* as in *CaCa-* where other verbs of this class have the U-stem: singular-addressee imperative (§10.7.1.1); experiential perfect (§10.2.1.4); before causative *-mì* (§9.2.1) [note: *CaCa-* could also be attributed to the A-stem]
A-stem	3Pl perfective negative portmanteau (§10.2.3.1); plural-addressee imperative (§10.7.1.1); prohibitive (§10.7.1.2); hortative negative (§10.7.2.2)
I-stem	perfective positive (§10.2.1.1) and negative (§10.2.3.1); verbal noun (§4.2.4); hortative (§10.7.2.1); quoted imperative (§10.7.3.1)
U-stem	imperfective positive (§10.2.2.1) and negative (§10.2.3.3); progressive positive (§10.2.2.4); singular-addressee imperative except for stems with nonfinal *a* (§10.7.1.1); agentives (§5.1.4); experiential perfect positive (§10.2.1.4) and negative (§10.2.3.2); progressive negative (§10.2.3.4); capacitative (§10.5.1)

The final vowels for final-high-vowel verbs are indicated in (24). All known verbs of this class are lexically +ATR.

(24) Stem-final vowels, final-nonhigh-vowel verbs

O/A-stem	*a*	(could be attributed to A-stem)
A-stem	*a*	
I-stem	*i*	
U-stem	*u*	

Vocalism stems for representative final-high-vowel verbs are shown in (25), again with tones omitted. For these verbs the A/O-stem is not shown separately since it is not clearly distinct from the A-stem. Word-final short high vowels are often syncopated/apocopated, so the distinction between I-stem and U-stem is difficult to make. I assign a form to the I-stem if the *i* actually appears for at least one verb in this class, and likewise for the U-stem if the *u* appears. Failing that (i.e. when the vowel is always deleted), I assume that the I-stem corresponds to the E-stem of final-nonhigh-vowel verbs, and that the U-stem corresponds to the O-stem of final-nonhigh-vowel verbs.

(25) Sample final-high-vowel vocalism-stem paradigms

A	I	U	gloss
a. nonfinal syllable with *a*			
kana	*kan(i)*	*kan(u)*	‘do’
ɲa:-ma	*ɲa:-mi*	*ɲa:-mu*	‘feed’ (causative)
b. nonfinal syllable with nonlow vowel			
se:ma	*se:m(i)*	*se:mu*	‘look’
sigo-ma	*sigo-mi*	*sigo-mu*	‘take down’ (causative)

The two verbs ‘come’ and ‘bring’ (§10.1.2.9) irregularly combine features of final-nonhigh-vowel and final-high-vowel vocalism. In most inflectional categories they follow the pattern of the majority final-nonhigh-vowel verbs. However, their singular-addressee imperatives, probably the two most frequently occurring imperatives in everyday speech, are based on the U-stem: *égù* ‘come!’, *sóŋgù* ‘bring!’. The U-stem in imperatives is typical for final-high-vowel verbs with a nonfinal vowel other than *a*. These are also the only singular imperatives with {HL} overlay.

I refer jointly to the E-stem of final-nonhigh-vowel verbs and the I-stem of final-high-vowel verbs as the **E/I-stem**, where the two occur in the same inflectional categories (perfective positive and negative, hortative, verbal noun). I likewise speak of a complementary **O/U-stem** combining the O-stem of final-nonhigh-vowel verbs with the U-stem of final-high-vowel verbs, with reference to categories where they cooccur (imperfective positive and negative, progressive positive and negative, capacitative). In Penange, the association of front vowels with perfectivity and of back rounded vowels with imperfectivity is more thorough-going than in most other Dogon languages.

3.4 Segmental phonological rules

3.4.1 Trans-syllabic consonantal processes

3.4.1.1 Nasalization-Spreading uncommon

There is no productive process of rightward nasalization spreading of the (mainly eastern) Dogon type where e.g. *Nvyv*, *Nvwv*, and *Nvrv* sequences are realized as *Nvy^{n}v*, *Nvw^{n}v*, and *Nvr^{n}v*. Nasalized *r^{n}* does not exist, and no nasalization of *y* is observed in e.g. *nò nóyà-∅* ‘he/she is asleep’.

However, an idiosyncratic case of nasalization spreading does occur, in combination with a vowel shift from *u* to *i*, in the 3Pl perfective of *Nv:* and *Nv* verbs with initial nasal. Compare e.g. *dúy-yɛ̀* ‘they pounded’ (3Sg *dwɛ́:*) with *ɲíy^{n}-y^{n}ɛ̀* ‘they ate’ (3Sg *ɲɛ́:*), *níy^{n}-y^{n}ɛ̀* ‘they drank’ (3Sg *nɛ́:*) or ‘they said’ (3Sg *nɛ́*), and *núy^{n}-y^{n}ɛ̀* ‘they sang’ or ‘they went in’ (3Sg *nwɛ́:*).

3.4.2 Nonharmonic vocalic processes

3.4.2.1 V-lengthening before nasal-stop clusters absent

No pattern of lengthening vowels in contexts like *C_ndv* has been observed as a synchronic process (i.e. where a stem or other morpheme has a short/long vowel alternation). See however (41a) in §4.1.1.2 where a frozen *-ŋge nominal suffix is preceded by long vowels, and §4.2.1 for a similar pattern with characteristic allomorph *-ŋga*.

3.4.2.2 Syncope

A short high vowel in the medial syllable of *CvC_Cv* (a metrically weak position, §3.1.2) can be syncopated if the resulting *CC* cluster is allowable. In some words, alternative pronunciations have been heard (26). When the potentially syncopated vowel bears a tone

distinct from that of the preceding and following syllables, syncope tends not to occur. In (26b), this leads to a difference between singular and plural, since in the plural the H-tone of *sùŋúnè* spreads to the stem-final, and nothing blocks syncope in the resulting /sùŋúné-gè/.

(26) a. *ɔ́ŋúné ~ ɔ́ŋné* 'frog'
tɔ́ŋúné ~ tɔ́ŋné 'duck'

b. *sùŋúnè* 'small ant(s)' (Sg)
sùŋné-gè 'small ants' (Pl)

Alternations like 3Sg perfective *bárgè-∅* 'he/she helped' and 3Pl perfective *báríg-yè* 'they helped' could be handled either by allowing medial-vowel syncope in the 3Sg or by positing a minor epenthesis process in the 3Pl.

3.4.2.3 Apocope

Final short {*i u*} are allowable word- or stem-finally even after an unclustered sonorant, but bisyllabics show a tendency to apocopate (delete) the vowel. For a discussion of apparent *CvL* verb stems with *L* a sononant, see §10.1.2.4. For bisyllabic verb stems with final high vowel, see §10.1.2.8.

3.4.3 Local consonant sequence rules

3.4.3.1 Semivowel assimilation

A segment that is heard as w^n (especially prepausally) occurs as a locative postposition (§8.2.3.2) and as the accusative case-marker (§6.7). When followed by a *C*-initial word this segment generally surfaces as a nasal homorganic to the following *C*. It may also appear in the form of nasalization of the preceding vowel, or it may be more or less inaudible.

3.4.3.2 *b* ~ *w* alternation

An irregular *b* ~ *w* alternation occurs in the imperfective paradigm, which has forms like *sɛ́mɔ́ ŋ́ bò* 'I slaughter' and *sɛ́mɔ̀ bò-∅* 'he/she slaughters' but second person forms like *sɛ́má-á wò ~ sɛ́má-á wò* 'you-Sg slaughter' (§10.2.2.1). Here *bò ~ wò* is an optionally lenited form related to *bò-* 'be'.

3.4.3.3 *r* → *d* after alveolar

Alternations of this type are uncommon, but transitive derivational suffix *-rè- ~ -rɛ̀* has variants *-dɛ̀* and *-ndɛ̀* that are suggestive of a hardening process (§9.4.1).

3.4.3.4 /gy/ → *jj* and /y^{n}y/ → *ɲɲ*

/gy/ → *jj* is not completely productive synchronically. However, it does apply in *náj(-)jè* 'surpass' versus stative *naga* in comparative predicates (§12.1.2). Further examples are the first three forms in (209b) in §9.6, and the first two in (357d) in §11.4.1.1. The sequence /ŋgy/ is realized in similar contexts as *nj*, presumably via /ŋjj/. This is seen in *ín-jɛ̀* 'stand up; stop' (no longer easily segmentable) versus stative *iŋga* 'be standing' and transitive *íŋgí-rɛ̀* 'stop (sth)'. Further examples are *dɔ̀nj-à* 'weight' in (52b) in §4.2.7, two examples in (209b) in §9.6, and the last two examples in (357d) in §11.4.1.1. These combinations involve suffixes of the form *-yv* (*-yè*, *-yɛ̀*, *-yà*), before which stem-final vowels are regularly raised and syncopated. Among frozen diminutive compounds, it probably occurred in *nèjjé* 'bird' (for original medial *g see Dogul Dom *lègé:-gù* including an inanimate suffix).

No such process applies in combinations involving 3Pl subject *-yè* ~ *-yɛ̀*. For example, in *sójá-g-yè* 'they tied each other' the cluster gy surfaces without change. This shows that the process is not productive synchronically.

bày^{n} 'big' occurs in suffixal combinations showing /y^{n}y/ → *ɲɲ*, as in *bàɲ-ɲà bó-∅* 'be big' and *bàɲ-ɲà* 'size, dimensions', see (357e) in §11.4.1.1 and (52a) in §4.2.7. Presumably /ɲy/ would also become *ɲɲ*, but I have no examples.

3.4.4 Vowel-vowel and vowel-semivowel sequences

The stem-initial syllabic shapes transcribed as *Cwv* (*v* = some unrounded vowel) might be analysed as containing vowel clusters like *Cov* and *Cɔv*, with the {*o ɔ*} desyllabifying to glides. The phonology is most amenable to this analysis for monosyllabic verbs, which have ablaut alternations, see §3.3.6 above and §10.1.2.2. In bisyllabic words, initial-syllable +ATR *oe* escapes this desyllabification and is pronounced with approximately equal duration for the two vocalic segments. The two known examples of this are *dóélé* 'ball, globe' and *nòè-rè* 'sleep(n)' (§3.2.8.1). There is no hiatus or prosodic break between the adjacent vocalic segments.

There are no cases in Penange of *ae* or *aɛ* sequences.

3.4.4.1 Word-initial *y/ɲ*-Epenthesis

An epenthetic *y* or *ɲ* is inserted before a stem-initial vowel immediately preceded by a 1st/2nd person pronominal (1Sg *ŋ́*, 1Pl *ŋ̀*, 2Sg *á*, 2Pl *à*). The pronominal may be subject of a verb, or possessor of a noun. Especially after the 2nd person pronominals, this epenthesis obviates the need for *vv*-Contraction. The choice between *ɲ* and *y* correlates almost perfectly with presence/absence of a nasal consonant after the stem-initial vowel.

It is difficult to hear the distinction between *y* and *ɲ* after *ŋ*, but the distinction is clear after *a*. Examples involving verbs are in (27).

(27) V-initial verbs with *y/ɲ*-Epenthesis

gloss	perfective (or stative) 3Sg	2Sg
a. with *y*		
‘accept’	*ábé-∅*	*á y-àbè*
‘suckle’	*áré-∅*	*á y-àrè*
‘forget’	*íldè-∅*	*á y-ĭldè*
‘come’	*égé-∅*	*á y-ègè*
‘go back’	*újúlè-∅*	*á y-ùjúlè*
‘ripen’	*úlgè-∅*	*á y-ŭlgè*
‘heave’	*úbé-∅*	*á y-ùbè*
‘suck’	*úré-∅*	*á y-ùrè*
b. with *ɲ*		
vowel lengthened		
‘go’	*ándè-∅*	*á ɲ-ă:ndè*
other		
‘stand/stop’	*ínjè-∅*	*á ɲ-ĭnjè*
‘catch’	*ímbé-∅*	*á ɲ-ìmbè*
‘become skinny’	*ɔ́njɛ́-∅*	*á ɲ-ɔ̀njè*
‘become smooth’	*ɔ́nán-gè*	*á ɲ-ɔ̀nán-gè*
‘become wet’	*ɛ́mbɛ́*	*á ɲ-èmbè*
‘sprinkle’	*ámí-∅*	*á ɲ-àmì*
‘sift’	*ínjè-∅*	*á ɲ-ĭnjè*
‘become skinny’	*ɔ́njɛ́-∅*	*á ɲ-ɔ̀njè*

The idiosyncratic lengthening in *á ɲ-ă:ndè* ‘you-Sg went’ from *ándè* ‘go’ does not apply to the corresponding causative *ándá-mì* ‘cause to go’ (also ‘toss’), hence *á ɲ-àndá-mì* ‘you-Sg caused to go’.

Because of the epenthetic *ɲ-*, 1st/2nd person subject forms of *ɔ́njɛ́* ‘become skinny (ematiated)’ are in danger of homophony with corresponding forms of *ɲɔ́njè* ‘become thin’, especially because of the semantic similarity, but the two verbs are distinguished even in these forms by tones: *á ɲɔ̆njè* ‘you-Sg became thin’, *á ɲ-ɔ̀njè* ‘you-Sg became skinny’.

The *ɲ* in *ɲɛ̀y*^{n} ‘know’ (1st/2nd person subject form) may also be epenthetic. However, synchronic segmentation is opaque since third person forms (which have no proclitic pronoun) are based on a suppletive stem (§11.2.5.1).

Examples with nouns are in (28). Again, *ɲ-* is associated with stems that begin in *vN*…

(28) V-initial nouns with *y/ɲ*-Epenthesis

gloss	unpossessed	2Sg possessor (‘your’)
a. with *y*		
‘pot’	*èjɛ̀*	*á y-èjɛ̀*
‘brick mix’	*ɔ̀gɔ́*	*á y-ɔ̀gɔ̀*
‘road’	*ɔ̀jù*	*á y-ɔ̀jù*
‘cloud’	*àlè*	*á y-àlè*
‘market’	*ébá*	*á y-èbà*
‘disease’	*ùrù*	*á y-ùrù*
‘star’	*ɔ̀jɔ̀gɔ̀lɔ̀*	*á y-ɔ̀jɔ̀gɔ́lɔ̀*

‘medication’	*ílé:ŋgé*	*à y-ìlé:ŋgè*
‘rice’	*éré:ŋgé*	*à y-èré:ŋgè*
‘doorway’	*ígódón*	*à y-ìgòdôn*
‘sheep’	*àlàm(ù)nɔ̀*	*à y-àlàmúnɔ̀*
‘breast’	*éjjé*	*à y-ějjè*
‘peanut’	*ɔ̀gùlɛ̀*	*á y-ɔ̀gúlɛ̀*
‘baobab sauce’	*ɔ̀rɔ̂m*	*à y-ɔ̀rɔ̂m*
‘health’	*àlàpɛ̀*	*á y-àlápɛ̀*

b. with *ɲ*

‘waterjar’	*óy^{n}*	*á ɲ-òy^{n}*
‘name’	*ùn*	*á ɲ-ùn*
‘tooth’	*ìnì*	*á ɲ-ìnì*
‘well(n)’	*ɔ́ndɔ́*	*á ɲ-ɔ̀ndɔ̀*
‘milk’	*émɛ́:ŋgé*	*á ɲ-èmɛ́:ŋgè*
‘winnowing van’	*òŋgò*	*á ɲ-ǒŋgò*

Exceptionally, *ànànsá:lá* ‘white person’ and *énjé:ŋgé* ‘sediments’ take *y-* in my data where *ɲ-* is expected. It may be relevant that both have not one but two consecutive nasal or *NC* clusters after the initial vowel. A kind of incipient nasal-dissimilation?

3.4.4.2 *vv*-Contraction

Contraction of two vowels is most conspicuous in imperfective verbs. Here 2Sg *á* and 2Pl *à* are positioned between the verb (which appears in the O/U-stem) and auxiliary. Compare 3Sg *sɛ́mɔ̀ bò-∅* ‘he/she slaughters’ and 1Sg *sɛ́mɔ́ ŋ́ bò* ‘I slaughter’ with 2Sg *sɛ́má-á wò* [sɛ́má:wò] ‘you-Sg slaughter’ (§10.2.2.1). The O/U-stem must end in {*ɔ o u*}, and all three of these combine with 2nd person *a* morphemes as [a:] (omitting tone).

Similar contractions involving 2nd person *a* occur in the imperfective negative, which also involves the O/U-stem. Compare 3Sg *yèlò:-ndí-∅* ‘he/she doesn’t drape’ with 2Sg *yèlá-à-l* or variant *yèlá-á-lì* ‘you-Sg do not drape’. The imperfective negative also has apparent contractions in 1Sg and 1Pl forms, as in *yèló-ò-l* ‘I do not drape’, but here the morphological composition is obscure (§10.2.3.3).

vv-Contraction is bled by *y/ɲ*-Epenthesis (§3.4.4.1) in stems that follow proclitic 1st/2nd person pronominals, and in verb reduplications by insertion of phonetic glottal stop.

vv-Contraction may be involved in the derivations of *dú:-rɛ̀* ‘put (sth) on (sb’s) head’, its homonym *(mì:) dú:-rɛ̀* ‘bathe (sb)’, *bí:-rɛ̀* ‘have (sb) lie down’, and *tú:-rɛ̀* ‘put (shoe) on (sb)’, if these transitive forms are directly derived by adding transitive suffix *-rɛ̀/-rɛ̀* to intransitives *dú-yɛ́* ‘carry on head’, *(mì:) dú-yɛ́* ‘bathe’, *bí-yɛ̀* ‘lie down’, and *túlé* ‘put on (shoe)’. However, the morphophonology of these few alternations is nontransparent, since one can argue whether transitive *-rɛ̀/-rɛ̀* is added to mediopassive *-ye/-yɛ* or replaces it; see (205) in §9.4.1.

3.4.4.3 Monophthongization (/iy/ to *i:*, /uw/ to *u:*)

It is difficult to find clear examples of this process. In a derivational pair like mediopassive *bí-yɛ̀* ‘lie down’ and transitive *bí:-rɛ̀* ‘put to sleep’, we could derive the latter either from

/bi-yi-re/ by Syncope and Monophthongization, or from /bi-re/ by a minor vowel-lengthening process.

3.4.4.4 Desyllabification (/o/ to *w*, /ɔ/ to *o̯*)

Monosyllabic *Co:* and *Cɔ:* verb stems have perfectives (E-stems) transcribed *Cwɛ:* and *Cwɛ:* (§10.2.1.1). Phonetically, *w* in *Cwɛ:* is rather open, and it could be transcribed *o̯*. Although the phonology of monosyllabic E-stems is not transparent, one could argue for underlying /Coe/ and /Cɔɛ/ and posit a desyllabification rule producing *Co̯e* and *Cɔ̯ɛ*, respectively. For objections to this analysis, and additional data, see discussion of (10) in §3.2.8.1 above.

3.5 Cliticization and reduplication

3.5.1 Proclitics and enclitics

There are no second-position clitics of the Wackernagel type. There is no stress or accent system that would clearly distinguish affixes, clitics, and particles, so it is not easy way to recognize phonological clitics.

1st/2nd person subject markers directly precede verbs. They interact tonally with the verb, but in a complex and somewhat abstract way. They are best thought of as syntactically controlled proclitics. However, I transcribe them as free particles for typographic reasons.

In the cases of *vv*-Contraction mentioned in §3.4.4.2 above, e.g. 2Sg *sémá-á wò* [sémá:wò] 'you-Sg slaughter', the second person that is (syntactically) proclitic to the auxiliary *wò* is phonologically rebracketed with the preceding verb, allowing the contraction to occur.

A good case for proclitic status can also be made for existential *ɛ̀ⁿ* ~ *èⁿ*, see §11.2.2.1. It can co-occur with a following 1st/2nd person proclitic.

The 'it is' morpheme *=yo* (and variants), which occurs in identification predicates, is a good candidate for enclitic status (it is added to NPs, §11.2.1.1). Likewise for its negative counterpart *=là* (§11.2.1.2).

In verbal morphology, past *=ye* is the best candidate for an enclitic; see §10.6.1.

3.5.2 Reduplication and iteration

I use the term "reduplication" to refer to partial rather than full-stem copying (I call the latter "iteration"). A few noun stems have built-in initial *Cv-* reduplication or full-stem iteration (§4.1.3-5). A minor final reduplication pattern (*CvC₂vC₂-*) occurs in a few deadjectival inchoative verbs derived from adjectives whose own form is fully iterative, e.g. *sém-sém* 'pointed' (adjective) with inchoative *sémém-gè* 'become pointed', see (211c) in §9.6.

Verbs have an optional *Cv* reduplicative proclitic in the perfective positive and imperfective positive. A similar reduplication is much more conspicuous in the stative paradigm, because stative positive clauses (with no focalized constituent) must have either the reduplicative proclitic or the existential proclitic *ɛ̀ⁿ*. The two cannot co-occur (§10.4.1.1). Both the reduplicative and existential proclitics are separated from the verb by first and

second person subject proclitics. A reduplicative example is (29), which also has epenthetic *ɲ-* since the verb is vowel-initial.

(29) *ì* *á* *ɲ-ìŋgà*
Rdp 2SgSbj Epen-stand.Stat
'You-Sg are standing'

As this example shows, stative *Cv̀* reduplication reduces to *v̀* when the stem is also vowel-initial (but see just below). When nothing separates this *v̀* from the stem, a glottal stop separates the two vowels, as in *ì íŋgà-∅* [ìʔíŋgà] 'he/she is standing'. Other examples of stative reduplication are *nò nóyà=yè* 'he was sleeping' in (454) in §15.2.1.3, and (with rhetorical lengthening) *dì díndà→* 'he was holding (an iron bar)' in (585) in Text 4.

For the rather less common reduplicated perfective see §10.2.1.6, and for the reduplicative imperfective see §10.2.2.3. While these reduplications have much lower text frequency than stative reduplications, they can be elicited from almost any verb, whereas the stative is restricted to certain semantic types of verb. A morphophonological difference between active and stative reduplications is that active ones require that epenthetic *y-* or *ɲ-* inserted between a 1st/2nd person subject proclitic and a vowel-initial verb be included in the reduplicative proclitic, as in perfective *yè ŋ́ y-ègè* 'I came' and *ɲà ŋ́ ɲ-ă:ndè* 'I went' (§10.2.1.6). In the only vowel-initial verb known to me that allows the stative derivation ('stand'), the epenthetic *ɲ-* is not included in the reduplicative proclitic, as seen in (29) above.

3.6 Tones

3.6.1 Lexical tone melodies

Stems other than verbs, i.e. nouns, adjectives, and numerals, have lexical tone melodies that are subject to grammatical modifications. Nouns and numerals occur in morphosyntactically bare form, which reveals their lexical melodies. Adjectives normally follow nouns, and in this combination the adjective (but not the noun) shows its lexical tones.

I give lexical melodies in slashes /…/, grammatical melodies and other surface tone patterns in curly brackets {…}, syllable-by-syllable tone sequences using periods as dividers (as in H.H.L), angled brackets <…> for single-syllable contour tones (as in H.<HL>), and no special brackets when none of these apply.

3.6.1.1 Lexically /L/-melody stems allowed, but …

For stems that do have lexical tones, /L/ is one of the allowable melodies. In fact, /L/ is quite common especially for nouns and adjectives. This situation is characteristic of southwestern Dogon languages. In these languages, grammatically conditioned tone-dropping to {L} has no audible effect on lexically /L/-toned stems. By contrast, eastern Dogon languages generally require a lexical H-tone, so tone-dropping is always audible.

There is some evidence that Penange has a preferred target of one H-toned prominence per word (or tightly knit phrase), realized on a single stretch ranging from a mora to a string of adjacent syllables. Most actual verb forms (including suffixes and clitics) have one such prominence (occasionally two, including an H-toned proclitic). Simple unsuffixed nouns and adjectives do not require an H-tone, but their plurals do, so plural *-gè* is raised to *-gé* after

/L/-melody nouns (§4.1.1.1). Possessed nouns likewise have a single H-toned prominence; the few exceptions are prosodically light nouns following H-toned proclitics or preceding 3Sg *-nà* (§6.2.2.1). Combinations of nouns with preceding determiners likewise generally have one prominence, rarely two (§6.5.1). If all else fails, the final syllable/mora of an L-toned word is raised to H before another L-toned word (§3.6.3.1).

3.6.1.2 Verbs have no lexical tones

Verbs have no lexical tones, and there are no "bare" verb forms. Verbs occur exclusively in one or another of the vocalism stems (A/O-stem, etc.), with or without following inflectional suffixes or auxiliaries. The tones of the verb depend on the inflectional category and on the pronominal-subject category. For example, *tíbɛ́* 'fall' occurs with different tones in *ŋ́ tìbɛ̀* 'I fell', *ŋ̀ tíbɛ̀* 'we fell', and *tíbɛ́-∅* 'he/she/it fell', to cite three forms within the perfective positive paradigm. Details on tones (and vocalism stems) are given in the sections on the various inflectional (i.e. aspect-mood-negation) categories in chapter 10.

3.6.1.3 Lexical tone melodies for unsegmentable noun stems

Lexical tone melodies for uncompounded nouns, prior to the operation of tonosyntactic and tonological processes, are /H/, /L/, /LH/, /HL/, and /LHL/. Of these, /L/ is the most common. A few examples of each are in (30).

(30) a. /H/-toned

pú:^{n}	'white-faced whistling duck'
úná	'goat'
kɔ́jí	'grass'

b. /L/-toned

nà:	'cow'
dòn	'mouth'
dùgù	'village'
mìnjìlì	'mosque'
kùmà:ŋgà	'rain(n)'
àlàmùnɔ̀	'sheep'

c. /LH/-toned

sɔ̌:y^{n}	'tigerfish'
nɛ̀jjé	'bird'
gɛ̀:ní	'broom'
cɔ̀:dál	'cattle egret'
ɔ̀rɔ́m	'green sauce (baobab-leaf or okra)'
kìn-wé:	'stone'
bùyà:gí	'guava'

d. /HL/-toned

bâl	'bush sp. (*Cassia*)'
májà	'electric catfish'
kó:tì	'tick'

ká:láwâl	‘bamboo’
pólmálá:ndù	‘pigeon’

e. /LHL/-toned

sɔ̀:mbúlɛ̀	‘hamerkop (bird)’
èjɛ̀gɛ́lɛ̀	‘carp (fish)’
kà-kàrá:wò	‘white-bellied bustard (bird)’
kùlù-ŋ-kùndí-yè	‘laughing dove’

Nonmonosyllabic /L/-toned nouns (and other words) are pronounced in isolation with a variable degree of phonetic initial-syllable stress. I initially mistranscribed some such words as having initial-syllable H-tone. However, the distinction between /L/- toned (common) and the less common true /HL/-toned stems is clearer in phrasal context, and word-internally before plural *-gè*. The latter appears as H-toned *-gé* after an /L/-toned stem, and as L-toned *-gè* after an /HL/-toned stem, whose H-tone spreads to the stem-final syllable. For example, in isolation the melody of *kó:tì* ‘tick’ could be mistaken for /L/, since #*kò:tì* would in fact have some phonetic stress on its initial syllable. However, plural *kó:tí-gè*, with a clear fall in pitch from the second to the third syllable, is unmistakably the plural of an /HL/-toned noun, while the plural of nonexistent /L/-toned #*kò:tì* would have been #*kò:tì-gé* with the opposite pitch change from second to third syllable.

For trisyllabic and longer stems, true /HL/-toned nouns are heard as H.H.(H…)L with the tone break near the right edge. By contrast, nonphonemic phonetic stress in isolation pronunciations is limited to the leftmost syllable of /L/-toned stems. Therefore a trisyllabic noun like *kùmà:ŋgà* ‘rain’ whose pitch contour in isolation sounds somewhat like H.L.L is in fact lexically /L/-toned. This is confirmed by its plural *kùmà:ŋgà-gé*.

Tonal minimal pairs are rare. I can cite *éjjé* ‘female breast’ versus *èjjè* ‘Dogon (person)’, and *álé* ‘macari (spice)’ versus *àlè* (‘cloud’). The tonal differences in these pairs are partially or fully erased by grammatical tone overlays, for example with a preceding possessor or determiner and/or with a following adjective, so their functional value is low.

3.6.1.4 Lexical tone melodies for adjectives and numerals

Morphologically unsegmentable, underived modifying adjectives are almost exclusively /H/ or /L/ toned lexically; see §4.5.1 for lists. This includes *tà:ŋgà* ‘one’ and *tó:* ‘other’ (§4.7.1.1), which are syntactically adjectives. The only seemingly /HL/-toned basic adjective is *nsì:ⁿ* ‘sweet, delicious’, pronounced [ńsì:ⁿ] in isolation. This is also the only simple adjective beginning with an *NC* sequence, and the initial phonetic high pitch on the nasal is predictable (§3.2.8.1). There are two adjectives with obligatory diminutive suffix *-yè* that have /LHL/ melody (§4.5.5). In all cases, the lexical tone can be heard in simple N-Adj sequences. Adjectives have rather different, verb-like forms when functioning as predicates.

Lexical melodies for numerals ‘2’ to ‘10’ are /H/ and /HL/. There are also two numerals that get their tone by spreading from the noun, and end up either H- or L-toned. For details see §4.7.1.2. Higher numerals (*tɛ̀:mdɛ́rɛ̀* ‘hundred’, *mùnjù* ‘thousand’, *mìlyɔ̂ⁿ* ‘million’) are noun-like and two of them have /LHL/ melody (§4.7.1.4).

3.6.1.5 Tone-Component location for bitonal noun stems

Bitonal lexical contours are /HL/ and /LH/. Unsegmentable nouns with these melodies have their tone break near the right edge, as best seen with trisyllabic and longer stems. Examples are *bùyà:gí* 'guava' with L.L.H syllable sequence, and *pólmálá:ndù* 'pigeon' with H.H.H.L. For /HL/-toned stems, the H-tone extends onto the onset of a final *CvC* syllable, which is therefore <HL>-toned: *ká:láwâl* 'bamboo'.

3.6.1.6 Tone-Component location for tritonal noun stems

The only unsegmentable tritonal noun stems are lexically /LHL/. Here too the tone breaks are bunched at the right edge. This is best seen in a quadrisyllabic noun like *èjègélè* 'carp' with its L.L.H.L syllable sequence. Analysis is complicated by the possibility that all such stems are treated prosodically by native speakers as compounds, in which case we should add a hyphen (*èjè-gélè*).

3.6.2 Grammatical tone patterns

3.6.2.1 Grammatical tones for verb stems

Verb stems have no intrinsic (lexical) tones. The tone of a verb form depends on a combination of a) the inflectional category and b) the person and number of the subject for indicatives, and addressee number for deontic modals. Details are given in the relevant sections of chapter 10; see especially the schematic summary in §10.3.2. There are some further changes in tones (and suffixation) of verbs in focalized and relative clauses.

3.6.2.2 Grammatical tones for noun stems

Nouns are subject to tonosyntactic overlays as well as to lower-level tone-sandhi processes.

In unpossessed NPs, the last modifying adjective controls an {L} overlay (i.e. tone-dropping) on the preceding noun or N-Adj combination (§6.3.1).

In possessed NPs, the possessor (which is preposed to the noun) controls {HL} or {LHL} overlay on the possessed NP (§6.2.1.1). The choice between {HL} and {LHL} depends on the final tone of the possessor; a final H-tone (including 1Sg *ŋ́* and 2Sg *á*) requires a following {LHL}. One could therefore argue that either {HL} or {LHL} is the basic possessor-controlled overlay, and add a local phonological wrinkle to account for the other. This wrinkle would either be a tone-dissimilation at the boundary, with […H][HL] becoming […H][LHL], or a flattening, with […H][LHL] becoming […H][HL].

{LHL} arguably also applies to the combination of a noun with 3Sg possessor enclitic *-nà*, the only possessor that follows the noun. However, *-nà* and (if present) a following plural suffix included in the domain of {LHL}, see §6.2.2.1.

Some inalienables (kin terms) have slightly different tones when possessed (§6.2.3.1).

3.6.2.3 Grammatical tones for adjectives and numerals

Modifying adjectives can be lexically /L/- or /H/-toned; see §4.5.1 for lists. Two diminutive adjectives are /LHL/-toned, including the L-toned diminutive suffix *-yè* (§4.5.5).

In the counting sequence '1' to '10', odd-numbered numerals are L-toned while even-numbered numerals are H-toned, giving a rhythmical singsong feeling to the recited sequence. In postnominal position, most basic numerals are H- or HL-toned, e.g. *nɔ́ːm* '5' and *sɔ́ːlì* '7'. *nègà* '2' and *kɛ̀jɔ̀* '4' are unusual in having both H- and L-toned forms depending on the overall tone pattern of the preceding noun (§4.7.1.2). In absolute form (i.e. without a noun), all numerals '2' to '10' are L-toned.

3.6.3 Phonological tone rules (tone sandhi)

3.6.3.1 Final Tone-Raising (LL#L-to-LH#L)

A final L-tone of an {L}-toned word is raised to H-tone by dissimilation before a closely phrased word that begins with an L-tone. The formula is therefore LL#L-to-LH#L. The raising occurs on the final syllable, which may also be the only syllable of the first word. A *CvL* syllable with final sonorant may appear with rising tone in careful pronunciation.

An example with an L-toned noun ('elephant') followed by a 3Sg subject verb that begins with an L-tone is (31).

(31) *nìgé* *màlgà-téː-ndí-∅*
elephant see-ExpPrf-Neg-3SgSbj
'He/She has never seen an elephant.' (< *nìgè*)

There is no raising before 3Sg subject verb forms with initial H-tone, such as positive perfectives. Raising does not occur directly before subject proclitics 1Pl *ŋ̀* or 2Pl *à*, even though they are L-toned, probably because these morphemes are phonologically encliticized to and syllabified with the preceding word. Raising also does not apply to an LL#L sequence that is created by spreading a word-final L-tone into a lexically atonal particle like quotative *wa*. When this particle is added to an LL-type sequence, the resulting LL#L sequence surfaces without change; see (316a) and (317a) in §10.7.3.1.

Raising does occur before imperatives that begin with an L-tone. *nàː* 'cow' remains L-toned in in (32a) before an H-initial imperative (typical of light stems) , but it is raised to *nǎː* in (32b) since the following imperative is {L}-toned (typical of heavy stems).

(32) a. *nàː* *sɔ́gá*
cow buy.Imprt
'Buy-2Sg a cow!' (< *nàː*, *sɔ́gɛ́*)

b. *nǎː* *sɔ̀gù-lò*
cow buy-Rev.Imprt
'Sell-2Sg a cow!'

Tone-raising also occurs before *nɛ̀* 'if'. For examples see (470) in §16.1.

Finally, tone-raising occurs before existential proclitic *è^{n}*, which occurs in 'have' and 'be (somewhere)' predicates, and in some other stative constructions. It does not matter whether a 1st/2nd person subject proclitic follows *è^{n}*.

(33) a. *àlàmùnɔ́* *ɛ̀ⁿ* *sâⁿ-∅*
sheep Exist have-3SgSbj
'He/She has a sheep.' (< *àlàmùnɔ̀*)

b. *àlàmùnɔ́* *ɛ̀ⁿ* *ŋ́* *sàⁿ* / *ŋ̀* *sâⁿ*
sheep Exist 1SgSbj have / 1PlSbj have
'I have/We have a sheep.' (< *àlàmùnɔ̀*)

c. *nàfǎ* *ɛ̀ⁿ* *sâⁿ-∅*
usefulness Exist have-3SgSbj
'It is useful.' (< *nàfà*)

d. *kìbǎl* *ɛ̀ⁿ* *sá:ⁿ-yà*
awareness Exist have-3PlSbj
'They are aware.' (< *kìbàl*)

3.6.3.2 Contour-Tone Resyllabification

A final <HL>-toned syllable that is followed by a tightly-phrased L-toned particle or modifier often merges its L-tone element with the L-tone of the particle and therefore surfaces with just the H-tone. The particle may be L-toned, or may be atonal, having acquired its tone by spreading from the preceding word.

(34) *ŋ̀ nɛ̂* 'we said' plus quotative *wà* → *ŋ̀ nɛ́ wà*

See also (3a-b) in §2.6, where expected $^{H+}$*dêm* from /dèm/ surfaces as $^{H+}$*dém* before an L-toned modifier.

3.6.3.3 Contour-Tone Mora-Addition (absent)

Though rare, <HL>-toned *Cv̂* syllables can occur word-finally, as in *ŋ̀ nɛ̂* 'we said'. The contour tone does not force lengthening of the vowel, and *ŋ̀ nɛ̂* 'we said' remains distinct from *ŋ̀ nɛ̂:* 'we drank'.

An <LH>-toned monomoraic *Cv̌* syllable is very rare. However, I did hear this in perfective forms of the *Cv* verb *nɛ́* 'say' before *nɛ̀* 'if' (35a). The full form of the overlay for perfective verbs after 1Sg (or 2Sg) subject proclitic is {LHL}, and the combination with *nɛ̀* 'if' permits' full expression of this overlay. In (35a) there is no lengthening of the vowel of 'say' to accomodate the contour tone.

(35) a. *ŋ́* *nɛ̌* *nɛ̀*
1SgSbj say.Pfv if
'if I said'

b. *ŋ̀* *nɛ́* *nɛ̀*
1PlSbj say.Pfv if
'if we said'

c. *né-∅* *né*
say.Pfv-3SgSbj if
'if he/she said'

3.6.3.4 Rightward L-Spreading (absent)

There is no systematic rule of this type. In (36), the final H-tone on 'bird' is not erased by the preceding L-tone spreading to the end of the word preceding an H-toned word ('fly').

(36) *nèjjé* *pírígè-∅*
bird fly.Pfv-3SgSbj
'A bird flew away.'

3.6.3.5 Rightward H-Spreading

Rightward H-Spreading converts a sequence H.L.L to H.H.L, whereby the first H-tone is at the left edge of a word. It is illustrated in (37) by the /HL/-toned noun *kó:tì*, which becomes *kó:tí-* before an L-toned suffix.

(37) Rightward H-Spreading

kó:tì + plural *-gè*	*kó:tí-gè*	'ticks'
kó:tì + 3Sg possessor *-nà*	*kó:tí-nà*	'his/her tick'

Phonetically, there is often a slight pitch rise on the last H-toned syllable before an L-toned syllable. Therefore H.H.L forms like *kó:tí-nà* were mistranscribed as L.H.L in early fieldwork (" *kò:tí-nà* ").

Rightward H-Spreading is not always rigorously implemented. The targeted syllable is sometimes heard with lower pitch than one would expect for a true H-tone.

Further examples of spreading are in (38). (38c) shows that the process is recursive.

(38) a. demonstratives

ínì 'this' + noun	*ínì ùnà* 'this goat' (§6.5.3.2)

b. stative verbs and related forms

túlà (progressive) + 3Pl *-yà*	*túlá-yà* 'they're doing' (§10.2.2.5)
túlà + negative *-ndà*	*túlá-ndà* 'isn't doing' (§10.2.3.5)

c. recursion

túlà + Neg *-ndà* + 3Pl *-yà*	*túlá-ndá-yà* 'they aren't doing' (§10.2.3.5)
kó:tì + 3Sg *-nà* + Pl *-gè*	*kó:tí-ná-gè* 'his/her ticks'

Rightward H-Spreading is not triggered by past clitic *=ye*, which can be preceded by an HL tone pattern (§10.6.1).

Cv̂: words, including definite singular forms of *Cv̀:* nouns (*nà:* 'cow', definite singular *è* $^{H+}$*nâ:*), can undergo Rightward H-Spreading if closely phrased with a following word beginning with L-tone. Since the spreading is not rigorous in this case, my practice is to transcribe *è* $^{H+}$*nâ:* etc.

3.7 Grammaticalized intonation

3.7.1 Morphemes with lexically specified prolongation (→)

Some elements characterized by lexically embedded prolongation of the final syllable are *só→* 'long ago', *nsâ→* 'now', *tìrà→* 'only' (§19.3), *jwá→* 'a lot' and *bà:lè→* 'a little' (§8.4.2), *wàgà→* 'or' (§7.2.1), expressive adverbials like *yà→* 'gliding' and *bɔ̀jɛ́→* 'straight', and onomatopoeias like *cì^{n}→* (humming of cicada).

As a grammatical feature, final prolongation occurs in one type of imperfective subordinate clause (§15.2.1.2), with no other subordinator.

Polar interrogation is expressed intonationally, with prolongation and pitch rise on the final syllable (§13.2.1).

4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

4.1.1 Simple nouns

For the lexical tone contours of nouns, see §3.6.1.3.

4.1.1.1 Singular (zero) and plural (*-gè* ~ *-ŋgè*)

The singular of nouns is morphologically unmarked. As pronounced in isolation, the plural of any noun, including inanimates, is formed by suffixing *-gé* after /H/-melody stem, again *-gé* after /L/-melody stem (unless followed by an H-tone), or *-gè* after /LH/-melody stem. This distribution suggests that L-toned *-gè* is basic. It becomes *-gé* by two distinct mechanisms: progressive assimilation after /H/, and satisfaction of a preference for a single H-toned prominence (§3.6.3.1) after /L/.

/HL/- and /LHL/-melody stems also have L-toned *-gè*, but in these cases the H-tone spreads to the end of the stem proper, see Rightward H-Spreading §3.6.3.5. This spreading does not apply to /L/-melody nouns that have acquired an initial H-tone due to preceding definite *è* (§4.4.1.1), so in forms like *è* $^{H+}$*dúgù-gè* 'the villages' from *dùgù* (§6.5.2) the H-tone remains confined to the left edge of the noun. If the noun is treated prosodically as a compound, the initial is disregarded in the tonal processes. For example, *dù-[pá^{n}-pá^{n}]-gé* 'large bustard' has H-toned *-gé* after /H/-toned *pá^{n}-pá^{n}* (compound final), disregarding the L-toned initial. Likewise *tɔ̀gù-dúmbú-gé* 'wood-hoopoes'.

Variant *-ŋge* occurs in definite plural *è-ŋgè* (§6.5.2) and in *sígó:-ŋgé* 'times' (with a quantifier). It also occurs after *ɲé:-* 'belong to' (§11.5.2) and after a few other stems with final nasal syllables, including *nà:* 'cow', see (115) in §6.2.2.1. This variant plural suffix is distinct from *-ŋge* in other functions (§4.1.1.2, §4.2.3).

Singular/plural pairs showing the basic tonology are in (39).

(39)

singular	plural	gloss
a. lexically /H/-toned noun		
úná	*úná-gé*	'goat'
tɔ́ŋ(ú)né	*tɔ́ŋ(ú)né-gé*	'duck'
kɔ́gúlé	*kɔ́gúlé-gé*	'fish'
b. lexically /L/-toned noun (*-gé*, except *-gè* before H-tone)		
gwè:	*gwè:-gé*	'parrot'
dùgù	*dùgù-gé*	'village'
kà:lò	*kà:lò-gé*	'griot'
wèlàgù	*wèlàgù-gé*	'division, subgroup'
kùmà:ŋgà	*kùmà:ŋgà-gé*	'rain (n)'
àlàmùnɔ̀	*àlàmùnɔ̀-gé*	'sheep'

c. lexically /LH/-toned noun

bòmà:-wĭl	*bòmà:-wĭl-gè*	‘dung beetle’
sɔ̌:y^{n}	*sɔ̌:y^{n}-gè*	‘tigerfish’
nèjjé	*nèjjé-gè*	‘bird’
gè:ní	*gè:ní-gè*	‘broom’

d. HL-toned noun

lexically /HL/

bâl	*bál-gè*	‘bush sp. (*Cassia*)’
kó:tì	*kó:tí-gè*	‘tick’
dúndù	*dúndú-gè*	‘owl’
kó:-kò:	*kó:-kó:-gè*	‘plantain-eater (bird)’
dábè-dábè	*dábè-dábé-gè*	‘nightjar’
kí:lɔ́-ŋ-kò:	*kí:lɔ́-ŋ-kó:-gè*	‘hornbill (bird)’

HL-toned from /L/ or /LH/ plus definite-controlled initial H

è $^{H+}$*gé:nì*	*è* $^{H+}$*gé:nì-gè*	‘the broom’	(< *gè:ní*)
è $^{H+}$*álàmùnɔ̀*	*è* $^{H+}$*álàmùnɔ̀-gè*	‘the sheep’	(< *àlàmùnɔ̀*)

e. lexically /LHL/-toned noun

sɔ̀:mbúlɛ̀	*sɔ̀:mbúlé-gè*	‘hamarkop’
kà-kàrá:wò	*kà-kàrá:wó-gè*	‘white-bellied bustard’
álá^{n}-să:bà	*álá^{n}-să:bá-gè*	‘cattle egret’
gìŋ-gí kɔ̀bílɛ̀	*gìŋ-gí kɔ̀bílé-gè*	‘cuckoo wasp’
gò:ŋgò tɛ̀bɛ̀lɛ̂:y	*gò:ŋgò tɛ̀bɛ̀lɛ́:y-gè*	‘female agama lizard’

plural syncopated (§3.4.2.2)

sùŋúnɛ̀	*sùŋné-gè*	‘small ants’

The final H-toned *-gé* after /L/-toned noun reverts to L-toned when the following word begins with an H-tone. This is seen by comparing what happens to *àlàmùnɔ̀-gé* ‘sheep-Pl’ and *úná-gé* ‘goats’ before a verb that begins with H-tone. The plural suffix is L-toned for ‘sheep’ but remains H-toned for ‘goats’.

(40)

àlàmùnɔ̀-gè / *úná-gé*	*sɛ́mé-∅*
sheep-Pl / goat-Pl	slaughter.Pfv-3SgSbj

‘He/She slaughtered some sheep / goats.’

4.1.1.2 Frozen classifying suffixes (*-ŋge, *-ge)

Some nouns end in *ŋge* or *ge*, reflecting an original inanimate classifying suffix *-ŋge or *-ge. In most cases the ending is no longer clearly segmentable, but a few such nouns have related forms without the ending. The consistently +ATR vowels of *ŋge* and *ge* often clash with -ATR vowels in the original stem. *ŋge* but not *ge* regularly follows a long vowel. A similar correlation with vowel length is found with *-gà* versus *-ŋgà* allomorphs of the characteristic derivational suffix, §4.2.1. In (41), a few examples are classified as segmentable since there is a related unsuffixed form, but most examples are isolated and not transparently segmentable.

(41)

noun	gloss	related unsuffixed form	
a. *-ŋge			
unsegmentable			
bèlŋgè	‘fodder’		
érɛ́:ŋgé	‘rice’		
ílé:ŋgé	‘medication’		
pɔ́:ŋgè	‘fonio (grain)’		
sàlè:ŋgè	‘cemetery’		
sè:ŋgè	‘millet’		
tàndà:ŋgè	‘twin’		
té:ŋgé	‘wood’		
segmentable			
ɛ́mɛ́:-ŋgé	‘milk’	ɛ̀mɛ̀ kòlò	‘fresh milk’
kèlè-ŋgè	‘marriage’	kèlè yɔ̀:	‘bride’ (“marriage woman”)
nènɔ̀:-ŋgè	‘fatigue’	néné	‘become tired’
nù:gɔ̀:-ŋgè	‘heat’	nú:gɛ̀	‘become hot’
sínjá:-ŋgè	‘sorghum’	sìnjà-n-dúmbé	‘sugar cane’
púná:-ŋgé	‘flour, powder’	púná	‘flour, powder’
b. *-ge after nasal other than ŋ (could reflect *-ge or *-ŋge)			
unsegmentable			
númgé	‘cow-pea’		
sòmgè	‘tamarind’		
c. *-ge after vowel or nonnasal sonorant			
unsegmentable			
pábálgè	‘sesame’		
sɔ̀lɔ̀gè	‘roselle (bissap)’		
ɔ̀rɔ̀gè	‘baobab leaves’		

For -ŋge as a nominalizer see §4.2.3.

4.1.2 High-frequency nouns (‘woman’, ‘man’, ‘child’, ‘person’, ‘thing’)

Some of the most basic nouns are those in (42). The plurals are regular.

(42)

gloss	singular	plural
‘person’	ntá	ntá-gé
‘woman’	yɔ̀:	yɔ̀:-gé
‘man’	wálá	wálá-gé
‘child’	wè:	wè:-gé
‘thing’	yɛ́:	yɛ́:-gé

A possible archaic noun meaning ‘person’ might be discernible as the compound final -nó- in dùgù-nó-gè ‘villagers’ in (600) in Text 4, with dùgù ‘village’ and plural -gè. Cf. Najamba nǒ: ‘person’ and cognates in some eastern Dogon languages.

4.1.3 Initial *Cv-* reduplication in nouns

Initial *Cv-* reduplication is not common in nouns or other non-verbs. 'Grasshopper' is *káyá*, 'hyena' is *tà:ⁿ*, both unreduplicated unlike their reduplicated cognates in eastern Dogon (e.g. Jamsay). The few Penange examples that appear to contain an initial single-syllable reduplication are in (43). In (43a) the reduplicant has the same vowel quality as the first vowel of the base. In (43b) the reduplicant has *i*. Neither is sufficiently common to constitute a recognizable pattern.

(43) a. *kà-kàrá:wò* 'white-bellied bustard' (onomatopoeic)
ná-náyè 'mint' (regional word < Arabic √nʕnʕ)

b. *tí-túgù* 'spice (seeds of *Ammodaucus*) for porridge'

4.1.4 Miscellaneous nominal reduplications

Minor patterns involving some kind of partial reduplication are listed in (44). In (44a) the initial *Cv-* echoes the onsets of both following segments, unlike the simple *Cv-*reduplications in the preceding section. Most are bird terms and likely have onomatopoeic qualities.

(44) a. *[bɛ̀-bɛ̀rɛ̀]-bɛ̀y* 'sandgrouse'
[kà-kàràŋ]-ká:yɛ̀ 'long-tailed starling'

b. *bìrì-[kɛ̀mɛ́:-mɛ̀:]* 'house bunting'

c. *dábá-dábá:jì* 'sardine-like fish sp.'

d. *tɛ̀:gú-ⁿ-tɛ̌:lɛ̀* 'Abyssinian roller (bird)'

e. *kɛ̀-kɛ̌:rɛ̀ ~ kɛ́:-kɛ̌:rɛ̀* 'buffalo-weaver (bird)'

For *bɔ̀l-bɔ̀l-yɛ̀* 'catfish (*Clarias*)' see (96a) in §5.1.5.

4.1.5 Nouns with frozen full-stem iteration

Some nouns and compound finals, especially flora-fauna terms, are full iterations. In a few cases there is an apparent nasal linker (§5.1.8). In general the uniterated base does not occur separately. A minority of the examples are onomatopoeic bird names. These lexical iterations are distinct from superficially similar agentive compounds with incorporated cognate nominal, like *nɔ̀:-nùw* 'singer' or *jòŋgà:-jòŋgù* 'healer' (§5.1.4).

(45) Without vocalic shift

a. monosyllabic base
/H/-/H/
dù-[páⁿ-páⁿ] 'Denham's bustard (bird)'
kón-kón 'mistletoe'

/LH/-/LH/

kă:^{n}-kă:^{n}	‘pied crow’

/HL/-/HL/

tîm-tîm	‘bush sp. (*Scoparia*)’

/H/-/L/

kó:-kò:	‘plantain-eater (bird)’
kɔ̀jì-[pó:-pò:]	‘herb sp. (*Endostemon*)’
tóy-tòy	‘bush sp. (*Physalis*)’

b. bisyllabic base

/H/-/H/

kúb(ú)-kúb(ú)	‘machete blade’ (local Fr. *coupe-coupe*)
yúgú-yúgú	‘used clothing heap’

/L/-/L/

bɔ̀rɔ̀-bɔ̀rɔ̀	‘trash, refuse (n)’
dègè-dègè	‘statuette’
kàrà-kàrà	‘armpit’
kìjì-kìjì	‘winged termite’
kòlò-kòlò	‘donkey’
[kɔ̀rɔ̀-kɔ̀rɔ̀]-jùwà	‘tree sp. (*Gardenia*)’
tɔ̀gù-tɔ̀gù	‘gecko’

/L/-/L/ *with nasal linker*

gìlò-ŋ-gìlò	‘broken up bits of millet grain spike’
kàlà-ŋ-kàlà	‘herb sp. (*Senna obtusifolia*)’
pòlò-m-pòlò	‘tree sp. (*Gyrocarpus*)’
sàgà-^{n}-sàgà	‘tree sp. (*Piliostigma*)’

/LH/-/LH/

kìlɔ́^{n}-kìlɔ́^{n}	‘black-headed lapwing (bird)’
pògú-pògú	‘shrub sp. (*Calotropis*)’

/L/-/HL/

èjò-éjò	‘grass sp. (*Eragrostis*)’
kìrì-kírì	‘epilepsy’
kìndò-kíndò	‘skink sp. (*Chalcides*)’

/HL/-/HL/

údà-údà	‘hoopoe (bird)’

/H/-/HL/

búlá-búlà	‘blue’

/H/-/L/

kíyɔ́^{n}-kìyɔ̀^{n}	‘herb sp. (*Spermacoce*)’
kɔ́lɔ́-kɔ̀lɔ̀	‘shoulder’

c. trisyllabic base

/LH/-/LH/ *with nasal linker*

kòlòbé-ŋ-kòlòbé	‘tree sp. (*Mitragyna*)’

Ordinary (non-onomatopoeic) common nouns that combine iterative form with a vowel change are uncommon. I can cite only (46), which corresponds to a more productive pattern in some other Dogon languages.

(46) With vocalic shift

/H/-/L/ with nasal linker
kó:ló-ŋ-kà:là ‘tree locust (*Anacridium*)’

The cases in (47) below are stylized onomatopoeias and can be made into predicates with *kán* /kání/ ‘do, make’, but they can also be used as nouns, as in ‘I heard a …’. Shift of a nonlow vowel to *a* in the second part is common. Forms like *hò:-hà:* are usually bipartite in Penange (compare tripartite counterparts like *hó:-hà:-hó:* in other Dogon languages), but the whole form may be repeated to denote extended noises: *hò:-hà: hò:-hà*.

(47) Onomatopoeic stems

a. without vowel shift
kùgùrúŋ-kùgùrúŋ ‘crunching sound’ (e.g. dog crunching bone)

b. with vowel shift
kóló-kàlà ‘sudden loud noise’
dìm-dàm ‘sound of someone running’
hò:-hà: ‘loud talking noise, hubbub’

4.1.6 Frozen initial *a-* or *aN-* in nouns

Penange does not have nouns with an apparently segmentable initial *a-* or variant.

4.2 Derived nominals

4.2.1 Characteristic derivative (*-gà* or *-ŋgà*)

This suffix derives a noun (or adjective) in which a distinctive feature such as a body part is used to characterize an entity. The suffix is *-gà* or *-ŋgà*, in the latter case usually with lengthened preceding vowel (cf. comments on frozen *-ge* versus *-ŋge* inanimate suffixes, §4.1.1.2). The input stem is tone-dropped, so the entire derivative is {L}-toned.

(48)

characteristic	gloss	input	gloss
a. with *-gà*			
kɛ̀lɛ̀-gà	‘having a horn’	*kɛ́lɛ́*	‘horn’
kùlù-gà	‘humped’	*kùlù*	‘hump’
kùlɛ̀-gà	‘hairy’	*kúlɛ́*	‘hair’
kòlòm-gà	‘sorceror’	*kòlòm*	‘(evil) spell’
nàfòrò-gà	‘rich person’	*nàfòrò*	‘wealth’
jàŋgà-gà	‘pot-belly (person)’	*jàŋgà*	‘belly’
ùrù-gà	‘sick person’	*ùrù*	‘disease’
b. with *:-ŋgà*			
bà:wdɛ̀:-ŋgà	‘rich person’	*bá:wdɛ̀*	‘means, capability’
nòèrè:-ŋgà	‘sleepy one’	*nòèrè*	‘sleep (n)’
nì:gɔ̀:-ŋgà	‘coward’	*ní:gɔ́*	‘fear (n)’

ɲàmàgù:-ŋgà	‘destroyer (person)’	*ɲàmàgù*	‘ruining (n)’
nwà:gà:-ŋgà	‘lefty(n)’	*nwà:gà*	‘left (hand/foot)’
tùyà:-ŋgà	‘making trouble’	*tùyà*^{n}	‘trouble-maker’
wàlà:-ŋgà	‘hero, real man’	*wálá*	‘man’
yɔ̀:-ŋgà	‘real woman’	*yɔ̀:*	‘woman’
yùbùgɔ̀:-ŋgà	‘liar’	*yùbùgɔ̀*	‘(a) lie’

‘Lazy person’ is *kòjò* or *kòjò-gà*, so in this case the *-gà* derivative has the same sense as the input. ‘Laziness’ is *kòjò-lmà* (see the following section).

4.2.2 *-lmà* and *-ŋ-kálmá* abstractives

Suffix *-lmà* or *-ŋ-kálmá* takes as input a noun denoting a class of people, often but not always pejorative, and derives an abstractive. The *-ŋ-* is tentatively segmented as a nasal linker (§5.1.8). The noun is tone-dropped, see especially ‘craziness’ and ‘youth’ in (49b).

(49)

abstractive	gloss	input	gloss
a. *-lmà*			
kòjò-lmà	‘laziness’	*kòjò*	‘lazy one’
yàbà-lmà	‘idiocy’	*yàbà*	‘idiot’
mòrò-lmà	‘being spastic’	*mòrò*	‘spastic, uncoordinated one’ (Fr *amaldème*)
b. *-ŋ-kálmá*			
gìrgà-ŋ-kálmá	‘blindness’	*gìrgà*	‘blind person’
sàgàllà-ŋ-kálmá	‘youth’ (coll.)	*ságállá*	‘(a) youth’
tàlàgà-ŋ-kálmá	‘poverty’	*tálágá*	‘pauper’
tà:nà-ŋ-kálmá	‘craziness’	*tá:ná*	‘crazy’

See also *sàwlè-lmà* ‘dynamism, vigor’ in (569) in Text 3.

4.2.3 Deverbal and denominal *-ŋgè* ~ *-ŋgé* nominals

Deverbal and denominal nouns with *-ŋgè* ~ *-ŋgé* in (50a-b) probably reflect a now frozen inanimate singular suffix (§4.1.1.2). Those in (50a) show a stem-final *ɔ:* that was likely the original nominalizer.

(50)

nominal	gloss	input	gloss
a. deverbal			
nènɔ̀:-ŋgè	‘fatigue’	*néné*	‘become tired’
dìgɔ̀:-ŋgè	‘height’	*dígé*	‘go up’
b. denominal			
tá:-ŋgé	‘craziness’	*tá:ná*	‘crazy person’

4.2.4 Verbal nouns (*-l*)

An abstractive verbal noun is freely formed by suffixing *-l* (L-toned) to the otherwise {H}-toned E/I-stem of the verb, i.e. the E-stem for final-nonhigh-vowel verbs and the I-stem for final-high-vowel verbs. For typographic reasons I transcribe with falling tone on the stem-final vowel.

(51)

Pfv 3Sg	verbal noun	gloss
a. final nonhigh vowel, +ATR		
gwé:	*gwê:-l*	'leaving'
nó:yè	*nó:yê-l*	'sleeping'
gó:ndè	*gó:ndê-l*	'going out'
túmbú-gè	*túmbú-gê-l*	'pushing'
b. final nonhigh vowel, -ATR		
nɛ́:	*nɛ̂:-l*	'drinking'
tɔ́lɛ́	*tɔ́lɛ̂-l*	'butchering'
sɛ́mɛ́	*sɛ́mɛ̂-l*	'slaughtering'
tímbí-rɛ̀	*tímbí-rɛ̂-l*	'superimposing'
c. final high vowel		
dám	*dámî-l*	'speaking'
kán	*kánî-l*	'doing'
d. 'come' and 'bring'		
égé	*égê-l*	'coming'
sóŋgé	*sóŋgê-l*	'bringing'

For compounds, see §5.1.3.

4.2.5 Derived nominals with suffix *-yè* or *-yɛ̀* ~ *-yè*

For compounds whose final is an instrument nominal with suffix *-yè*, see §5.1.10. For product-of-action compounds with suffix *-yɛ̀* ~ *-yè*, see §5.1.11. These suffixed derivatives are not recorded in uncompounded nouns.

See also the diminutive nouns in *-yè* in §5.1.5.

4.2.6 Uncompounded agentives

The attested agentives are nearly all compounds; see §5.1.4.

dà:nà 'hunter' is obscurely related to *dà:nàmà* '(the) hunt, (act of) hunting'. The latter is made predicative by *kán* 'do' (*dà:nàmà kán* 'hunt, do hunting') or by *ándè* 'go' (*dà:nàmà ándè* 'go hunting').

gùy^{n} 'thief' (note the nasalization) is obscurely related to verb *gúyé* 'steal, rob', cognate nominal *gùyò* as in *gùyò gúyé* 'commit theft'.

4.2.7 Deadjectival extent nominals (suffix *-yà*)

Nouns denoting dimensions related to scalar adjectives are in (52). The suffix is *-yà*. If the adjective is nonmonosyllabic, its final vowel is (raised and) syncopated before *-yà*. Minor phonological idiosyncracies are *ɲɲ* for expected /y^{n}y/ in 'size, dimensions', and *j* for expected /gy/ in 'weight', both in (52a). See (§3.4.3.4) on these phonological processes.

(52) Extent nominals

noun	gloss	adjective	gloss
a. suffixal derivatives			
gòl-yà	'length'	*gòlò*	'long'
bàɲ-ɲà	'size, dimensions'	*bày^{n}*	'big'
sùmb-yà	'depth'	*sùmbè*	'deep'
bàmb-yà	'width'	*bámbá*	'wide'
dɔ̀nj-à	'weight'	*dɔ́ŋgá*	'heavy'
b. suppletive			
dìgɔ̀:-ŋgè	'height (of object)'	(cf. *gòlò* 'long, tall')	
íŋgí-r	'height (of person)'		

Since 'long' and 'tall' as adjectives are both expressed by *gòlò*, to distinguish the nominals 'height' and 'length' suppletion is necessary in the case of 'height' (52b). *dìgɔ̀:-ŋgè* 'height' (e.g. of a wall or a tree) is related to verb *dígɛ́* 'go up'; for the ending see §4.2.3. *íŋgí-r* 'height (of a person)' is obscurely related to *ínjè* 'stand, get up' and its transitive derivative *íŋgí-rè* 'stop (sth)'.

4.2.8 Other derived nominals

Minor nominal derivational types are grouped in (53).

(53)

derivative	gloss	related forms	
a. final *u* (apocopated after some sonorants)			
bámbú	'wrap for carrying baby on back'		
		bámb-yè	'carry (on back)'
nàgàlù	'load (n)'	*nágálè*	'load (cart, truck)'
téw	'lid'	*té:-rè*	'cover (with lid)'
b. final *i*			
gè:ní	'broom'	*gɛ́:n-yè*	'sweep'
kìndò-sè:mí	'mirror'	*kíndó*	'shadow, image'
		sé:mì	'look'
c. suffix (?) *-rv*, *-lv*			
nòè-rè	'sleep(n)'	*nó:yè*	'sleep', old mediopassive
dɔ́ɛ́(-)rɛ́	'gear'	*dú-yɛ́*	'carry on head' (?)
dóélé	'ball, globe'	—	

d. suffix *-gu*

ɲàmà-gù	'damage(n)'	*ɲám(í)*	'malfunction(v)'

e. suffix *-mâl*

dɔ́gá-mâl	'afterworld'	*dɔ́gɛ́*	'die'

4.3 Pronouns

4.3.1 Basic personal pronouns

Forms of personal pronouns are in (54). Accusatives are based on the independent series. Nonsingular categories also base the possessor forms on the independent series. A distinct series (e.g. 1Sg *ŋ́*) of proclitics is used as pronominal-subject markers for 1st/2nd persons preceding verbs in main and relative clauses, and for 1Sg and 2Sg as possessors preceding possessed NPs. 3Sg is unmarked for main-clause subject, and has a unique suffix *-nà* for possessor and an enclitic *ná* for subject of a nonsubject relative (or of a nonsubject focalized clause). 3Pl has various suffixal forms (depending on aspect-negation category) for main-clause subjects, and is parallel to 1Sg and 2Sg in possessor and relative-clause subject series.

(54) Personal pronouns

	independent	accusative	possessor (§6.2.2.1)	subject: main clause	subject: relative clause (§14.3)
1Sg	*mí*	*mì-ŋ*	*ŋ́* X	*ŋ́* Vb	*ŋ́* Vb
1Pl	*mbé*	*mbé-ŋ*	*mbé* X	*ǹ* Vb	*ǹ* Vb
2Sg	*ó*	*ò-ŋ*	*á* X	*á* Vb	*á* Vb
2Pl	*ábé*	*ábé-ŋ*	*ábé* X	*à* Vb	*à* Vb
3Sg	*ɔ̀nɔ̀*	*ɔ̀nɔ̀-ŋ*	X-*na*	Vb-∅	Vb *na*
3Pl	*ŋké*	*ŋké-ŋ*	*ŋké* X	Vb-*yà* (etc.)	*ŋké* Vb

A frozen plural morpheme *-bé can be discerned in the 1Pl and 2Pl independent pronouns. It has cognates in other Dogon languages (variously a free plural suffix in NPs or a 2Pl or 3Pl pronoun).

There are no special inanimate pronouns. Possessed 'my head', 'your head', etc. are used for reflexive objects (§18.1.1).

Logophoric singular subject proclitic *à* in quotations is homophonous with 2Pl proclitic *à* (not 2Sg *á*) and has the same tonal effect on a following verb. Logophoric plural subject in quotations is expressed by 3Pl proclitic *ŋké*, even in main clauses where a regular 3Pl is expressed by a suffix such as *-yà* on the verb. See §18.3 for the syntax of logophorics.

4.4 Definite and deictic words

4.4.1 Determiners

4.4.1.1 Definite (*è* ~ *é*)

Definite *è* cannot be used absolutely (i.e. without a noun or some other following word). It is invariant for all animacy and number categories. Like demonstratives, it precedes the noun. If the noun is lexically H-initial, i.e. if it has /H/ or /HL/ melody, its tones are unchanged when *è* is added (55a-b). If the noun has an L-initial melody, the noun gets an initial-syllable H-tone. Therefore /L/ surfaces as HL (optionally reduced to H for *Cv:* stems) (55c), and /LH/ surfaces as HLH (55d). If the melody is /LHL/, however, the medial H-tone is generally not audible after the initial-syllable H-tone is added, so instead of expected #HLHL the usual output is just HL (55e).

(55)

noun	gloss	definite
a. /H/-toned		
úná	'goat'	*è* $^{H+}$*úná*
wálá	'man'	*è* $^{H+}$*wálá*
b. /HL/-toned		
kó:tì	'tick'	*è* $^{H+}$*kó:tì*
c. /L/-toned		
nà:	'cow'	*è* $^{H+}$*ná:* (~ *nâ:*)
dùgù	'village'	*è* $^{H+}$*dúgù*
sè:ŋgè	'millet'	*è* $^{H+}$*sé:ŋgè*
àlàmùnɔ	'sheep'	*è* $^{H+}$*álàmùnɔ*
d. /LH/-toned		
gè:ní	'broom'	*è* $^{H+}$*gê:ní*
nèjjé	'bird'	*è* $^{H+}$*nêjjé*
bùyà:gí	'guava'	*è* $^{H+}$*búyà:gí*
e. /LHL/-toned		
èjègélè	'carp'	*è* $^{H+}$*éjègèlè*
sɔ̀:mbúlè	'hamerkop'	*è* $^{H+}$*sɔ́:mbùlè*

The partial flattening in *è* $^{H+}$*éjègèlè* may be a low-level phonetic process, and when plural *-gè* is added the full HLHL can appear (*è* $^{H+}$*éjègélé-gè* 'the carps'), see (138e) in §6.5.1. For more on the (tono-)syntax of the definite marker, including definite forms of noun-adjective and noun-numeral sequences with H-toned *é* and plural *è-ŋgè*, see §6.5.2.

4.4.1.2 Demonstrative pronouns (*ínì*, *èm-bà*, *ê:*)

Demonstratives, like the definite marker, are preposed to nouns. The categories are discourse-definite and two deictic categories, proximate and distant. There is no morphological distinction between human, animate, and inanimate. The regular nominal plural suffix *-gè* is

added directly to the demonstrative if the latter is used absolutely, i.e. without an overt noun (56).

(56) Absolute forms of demonstratives

a. Proximate

ínì	'this'
íní-gè	'these'

b. Distant

èm-bà	'that' (also 'over there', §4.4.2.1)
èm-bà-gé	'these'

c. Discourse-definite

ɛ̂:	'that'
ɛ́:-(ŋ)gè	'those'

If the NP is plural, plural suffix *-gè* is added only to the noun: *íní ùnà-gè* 'these goats', *èm-bà gé:ní-gè* 'those brooms'. Note the Rightward H-Spreading in the latter example.

For the syntax, and tonal interactions with a following noun, see §6.5.3.1-2. There we see that *èm-bà* and *ɛ̂:* combine with following nouns in ways that resemble (in their tonosyntax) possessor-possessum combinations.

4.4.2 Demonstrative adverbs

4.4.2.1 Locative adverbs

The basic locational demonstrative adverbs are in (57). They appear to end in more or less frozen locative postpositions *w^n* and *bà*. Only *èm-bà* is identical in form to the corresponding demonstrative pronoun. However, as just mentioned above, *èm-bà* and discourse-definite *ɛ̂:* as demonstrative "pronouns" behave morphosyntactically like nouns in taking what look like possessed nouns as complements (§6.5.3.1).

(57)

form	gloss
nùw^n	'here'
èm-bà	'over there' (nearby or distant, deictic)
ɛ̀-w^n	'there (discourse-definite)'

4.4.2.2 Emphatic and approximinative modifiers of adverbs

Modifiers of spatial adverbs are in (58). *já:tì* is a regional word, occurring for example in Fulfulde.

(58)

	form	gloss
a.	*nùwⁿ já:tì*	‘right here’
	èm-bà já:tì	‘right there (deictic)’
	èⁿ já:tì	‘right there (discourse-definite)’
b.	*nùwⁿ pélɔ́*	‘around here, in this area’
	èm-bà pélɔ́	‘around there (deictic)’
	èⁿ pélɔ́	‘around there (discourse-definite)’
c.	*nùwⁿ ní*	‘this way’
	èm-bà ní	‘that way (deictic)’
	èⁿ ní	‘that way (discourse-definite)’

The forms in (58c) may contain instrumental postposition *ni*, which has a range of functions (§8.1.2).

4.4.2.3 ‘Like this/that’ (*nɛ́nì*, *ènɛ̀* ~ *ènɛ́*)

nɛ́nì→ ‘like this, like that’ is deictic; it is used when the speaker demonstrates the indicated action or speech, or when another agent is observed doing so. *ènɛ̀* ~ *ènɛ́* ‘like that, thus’ (French *ainsi*) is (discourse-)definite.

(59) a.

ènɛ̀	*káyⁿ*	*kán*	*bò-∅*
thus	work(n)	do.Ipfv	Ipfv-3SgSbj

‘He/She works like that (as described previously).’

b.

nɛ́nì	*káná*
like.this	do.Imprt

‘Do (it) like this!’ (demonstrating)

ènɛ́ is also common in narrative in the sense ‘then, following that’ or more abstractly ‘in that situation’. It effectively resumes the situation described by the preceding discourse. See, for example, (535) twice, (537), and (539) in Text 1.

4.4.3 Presentative (‘here’s X!’) (*ìⁿhíⁿ*)

There is a single presentative form, translatable as ‘here’s X’ or ‘there’s X’ in combination with an NP, namely *ìⁿhíⁿ*. It is invariant in form (no plural or other agreement). When the referent is an overt pronoun, the pronoun follows *ìⁿhíⁿ*, which keeps its final H-tone before an L-toned pronoun (60a) but drops to *ìⁿhìⁿ* before an H-toned pronoun (60b). When the referent is an overt nonpronominal NP, the NP usually follows *ìⁿhíⁿ* (60c).

(60) a.

ìⁿhíⁿ	*ɔ̀nɔ̀*
here’s	3Sg

‘Here he/she is!’

b. *ì^{n}hì^{n}* *mí*
here's 1Sg
'Here I am!'

c. *ì^{n}hí^{n}* *sěydù*
here's Seydou
'Here's Seydou!'
[less often *sěydù ì^{n}hí^{n}*]

4.5 Adjectives

Adjectives may be postnominal modifiers or predicates. This section describes their forms as modifiers. See also adjectival predicates in §11.4.1 and deadjectival inchoative verbs in §9.6.

Within the NP, adjectives follow nouns (including those with 3Sg possessor *-nà*) and precede numerals. Sequences of two or more adjectives are possible. A final adjective controls tone-dropping on the preceding noun and any intervening adjective, hence [N^{L} Adj] and [[N Adj1]^{L} Adj2], see §6.3.1 and §6.3.3.1.

4.5.1 Morphologically simple adjectives

Morphologically simple modifying adjectives are illustrated in (61), grouped roughly by semantic domain. Simple adjectives have either /H/ or /L/ lexical melody.

(61) simple adjectives

dimensions (for 'short' and 'small' see §4.5.5 below)

bày^{n}	'big (house, tree)'
bámbá	'wide (passageway), spacious (courtyard)'
bàgàlà	'big, fat, massive, stout (animal, person, rock)'
gòlò	'long, tall'
wàgè	'distant'
sùmbè	'deep (well, hole)'
dóndó	'empty, deserted',
dóŋgá	'heavy'
ɲɔ̀ŋgɔ̀	'thin, slender (person, pole)'
èlɔ̀	'thin, delicate (e.g. fabric)'

fullness

kùrè	'undiluted, full-strength (e.g. milk)'
sèlè	'diluted (e.g. watered-down milk)'
jwè:	'full (container)'

age and state

ká:mnɔ́	'old, aged (person)'
kándá	'new'
ɲàm	'malfunctioning'
kòlò	'fresh (vegetation); 'fresh (milk); raw (meat)'
dèmè	'ripe (grain, fruit); cooked, done (meat)'
ùlgɛ̀	'ripe (fruit)'
bɔ̀rɛ̀	'cooked, done (meal, meat)'

ɔ̀njɛ̀	‘lean (animal, meat)’
kùnɛ̀	‘plump, fatty’
dɔ̀gɛ̀	‘dead’
málá	‘alive’ (lit. “who can see”)

temperature and speed

nwá:gá	‘hot (water, food); fast’
tàyɛ̀	‘cold, cool (water)’
tà:mì	‘slow’

texture and hardness

ɔ̀nànà	‘smooth, sleek (surface)’
kùrjù	‘coarse (surface)’
kàmmì	‘hard (e.g. rock, wood)’

taste and smell

gɔ̀mɛ̀	‘rotten (meat, fruit)’
nsì:ⁿ [ńsì:ⁿ]	‘sweet, delicious’ (also ‘sharp’)
gà:là	‘bitter’

sharpness

nsì:ⁿ [ńsì:ⁿ]	‘sharp’ (also ‘delicious, sweet’)

evaluation

pɔ́:lɔ́	‘good’
ɲàm	‘bad (malfunctioning)’
yágá	‘pretty’
dá:	‘nasty, evil’

difficulty, expensiveness

má:gá	‘difficult (work); expensive’
mɔ́mɔ́	‘inexpensive’
jámá	‘easy (work)’, ‘nearby (village)’

color

bɔ̀mbɛ̀	‘red, brown’
yɔ́rdɛ́	‘black, dark’
tòmbò	‘white, light-colored’

moisture

mɛ̀:	‘dry’
èmbɛ̀	‘wet’

The regionally widespread syncretisms ‘sweet’ = ‘sharp’ and ‘hot’ = ‘fast’ are present. However, ‘cold’ is distinct from ‘slow’, and the ‘hot’ = ‘fast’ syncretism in modifying adjectives is subtly undone in inchoative verbs (*nú:gɛ̀* ‘become hot’, *nwá:jɛ̀* ‘become fast, accelerate’) and adjectival predicates (*nwà:gɛ̀ bó-∅* ‘it is hot’ versus *nwà:jɛ̀ bó-∅* ‘it is fast’).

4.5.2 Iterated adjective stems

The stems in (62) are always (i.e. lexically) iterated, but function syntactically like other adjectives (e.g. tone-dropping a preceding noun). 'Blue' is a regionally widespread loanword.

(62)

búlá-búlà	'blue'
kárá-kárá	'bitter'
èb-èb	'supple (e.g. goatskin)'
sém-sém	'pointed'
yáw-yáw	'lightweight'
tóm-tóm	'sour, acrid (like lemon)'

4.5.3 Phrasal adjectives (exemplars)

As in other Dogon languages, 'yellow' and 'green' are expressed by compounds or noun-adjective sequences denoting exemplars.

(63)

	adjective	gloss	literal sense
a.	*pòrò-púnà*	'yellow'	'néré-tree flour' (bright yellow)
b.	*kɔ̀jì*^{L} *kòlò*	'green'	'fresh grass'

4.5.4 Negative adjectives

Certain adjectival senses that are rendered by a simple lexical item in English can be expressed in Penange by negating the adjective at the marked pole. In modifying function within NPs, the form used is that of a relative clause, with participial *-gà* suffix (64). 'Bad' can also be expressed directly as *ɲàm*.

(64)

a.	*nsì:*^{n}*-dì-gà*	'dull, blunt, not sharp (blade)'
b.	*yágá-ndá-gà*	'ugly, not pretty'
c.	*pɔ́:lɔ́ wǒl-gà*	'bad, no good' (< *pɔ́:lɔ́* 'good')
	sùmb-yà wǒl-gà	'shallow, not deep'
	mà:gè wǒl-gà	'easy, not difficult' (< *má:gá* 'difficult')

For predicative counterparts see §11.4.2.

4.5.5 Diminutive adjectives (*-yè*)

Two adjectives denoting small dimensional values end in *-yè*, which can be recognized as a frozen diminutive.

(65)

form	gloss
dùŋgùrí-yè	'short'
ŋkà:lí-yè	'small'

There are no nondiminutive counterparts for these adjectives.

For diminutive *-yè* after a noun stem, see §5.1.5. For suffix *-yè* on nouns in nondiminutive functions, see §4.2.5 and the compounds in §5.1.10-11.

4.5.6 Derived adjective with *-mà*

sànjàl-mà 'slippery (ground)' is the combination of the verb *sánjálè* 'slide, slip' with a derivational suffix apparently related to capacitative *-mâ:* (§10.5.1). It is used only as a predicate, so its status as an adjective is shaky: *sànjàl-mà bó-∅* 'it (ground) is slippery'.

4.5.7 Intensifying adjectives

Some regular adjectives have corresponding intensifiers.

(66)

adjective	gloss	with intensifier
a. uniterated intensifier		
adjective has lexical /L/ melody		
tòmbò	'white'	*tòmbò*^{L} *pájá*
bɔ̀mbɛ̀	'red'	*bɔ̀mbɛ̀*^{L} *cóy*
ùlgɛ̀	'ripe'	*ùlgɛ̀*^{L} *jɛ́y*^{n}
tàyè	'cold'	*tàyè*^{L} *kílólló*
adjective has lexical /H/ melody		
kándá	'new'	*kàndà*^{L} *céy*^{n}
nwá:gá	'hot'	*nwà:gà*^{L} *táw*
b. iterated		
adjective has lexical /L/ melody		
kàmmì	'hard'	*kàmmì*^{L} *káŋ-káŋ*
gɔ̀mɛ̀	'rotten'	*gɔ̀mɛ̀*^{L} *dúgá-dúgá*
adjective has lexical /H/ melody		
yɔ́rdɛ́	'black'	*yɔ̀rdɛ̀*^{L} *kárí-kárí*

Syntactically, these intensifiers are adjectives, though rather specialized. In the forms shown, they follow the primary adjective, and they control tone-dropping on the preceding adjective (this is audible if the adjective has /H/ melody). If plural *-gè* is added, it appears after the intensifier, as in *tòmbò*^{L} *pájá-gé* 'very white ones'. In other words, N^{L} Adj plus intensifier is treated as [N Adj1]^{L} Adj2 for tonosyntactic and morphological purposes. This sequence is syntactically an NP. It is made predicative by adding the 'it is' clitic at the end (67). For H-toned definite *é* before L-toned adjective, see §4.4.1.1. The corresponding negative predicate has *=lá* replacing *=yó*.

(67) *é* *tòmbò*^{L} *pájá=yó*
Def white^{L} very.white=it.is
'It is very white (snow white etc.).'

With 'die' as the core stem, the intensifier *gádá* requires subject inflection on the verb (68a, 69a). For 3Sg subject, the form used is the postverbal *nà* as in relative clauses.

(68) *dɔ̀gɛ̀* *nà* (a) *gádá*
" " (b) *ɲɔ́mɛ́-∅*
die.Pfv 3SgSbj (a) very.dead
(b) be.a.long.time.Pfv-3SgSbj
(a) 'He/She is very dead (stone dead).'
(b) 'It's been a long time since he/she died'

(69) *dɔ̀g-yɛ̀* (a) *gádá*
" (b) *ɲɔ́mɛ́-∅*
(a) 'They are very dead (stone dead).'
(b) 'It's been a long time since he/she died.'

4.6 Participles functioning like adjectives

Participles (i.e. forms of verbs used in relative clauses) are described in §14.4. Some "adjectival" senses are expressed by participles of *kán* 'do' following an expressive adverbial (70).

(70) *mɔ̆n-mɔ̀n kân* 'soft (skin)'
tɔ̀gúl-tɔ̀gûl kân 'spotted'

4.7 Numerals

4.7.1 Cardinal numerals

In the chanted recitation of numerals '1' to '10', a rhythmical alternation of L-toned (odd numerals) and H-toned (even numerals) is observed. The indentations in (71) reflect these pairings. Arguably this is intonational rather than (lexically) tonal.

(71) counting sequence

'1' *tè:dà*
'2' *né:ŋgá*
'3' *tà:ndì*
'4' *ké:jɔ́*
'5' *nɔ̀:m*
'6' *kúlé:ní*
'7' *sɔ̀:lì*
'8' *sé:lé*
'9' *tò:wà*
'10' *pé:lú*

Focusing on segmental form rather than tones, '1' through '4' have a common *Cv:Cv* (or *Cv:NCv*) shape in the counting sequence, which contributes to the incantational rhythm of the recitation. In the case of '3', the regular form (see below) is already *Cv:NCv*. '4' achieves the *Cv:Cv* shape by lengthening its first vowel. '1' and '2' have significantly distinct segmental forms in counting sequences and in NPs.

4.7.1.1 'One' or 'same (one)' (*tà:ŋgà*), 'other' (*tó:*)

Other than in the counting sequence (i.e. absolutely or following a noun), '1' is *tà:ŋgà*. It behaves tonosyntactically as an adjective. In the numeral's absolute function, definite *è* is allowed (72a,d), the sense being 'one (of them)'. Unlike nouns, *è* is tone-raised before *tà:ŋgà*.

(72) a. *[(é)* *tà:ŋgà]* *mì-ŋ / ɔ̀nɔ̀-ŋ* *tábá*
[(Def) one] 1Sg-Acc / 3Sg-Acc give.Imprt
'Give-2Sg me/him-or-her one!'

b. *ùnà*^{L} / *yɔ̀:*^{L} / *nèjjè*^{L} / *kò:tì*^{L} / *èjègèlè*^{L} *tà:ŋgà*
goat^{L} / woman^{L} / bird^{L} / tick^{L} / carp^{L} one
'one goat/woman/bird/tick/stone' (< *úná*, *yɔ̀:*, *nèjjé*, *kó:tì*, *èjègélè*)

c. *tà:ŋgá* *tùmbùgò*
one push.Imprt
'Push-2Sg one!'

d. *é* *tà:ŋgà*
Def one
'the one' (< *è*), as in (539) in Text 1

In (72c), *tà:ŋgá* has undergone Final Tone-Raising before the {L}-toned imperative.

Identity or equivalence of two referents, for example belonging to the same species, is expressed by a predicative 'it is' (§11.2.1.1) form of *tà:ŋgà* (73).

(73) *[[ínì* *nì]* *[ínì* *nì]* *sèlé]* *tà:ŋgà = yó*
[[this and] [this and] all] one=it.is
'This and this are the same.'

As in English ('Then one day, …'), *tà:ŋgà* can be used to introduce a discourse referent (such as a time or place). See 'one day' in (576) in Text 4.

tó: 'other' is an adjective, and controls tone-dropping on a preceding noun: *ùnà*^{L} *tó:* 'another goat' (*úná*). A textual example is in (580) in Text 4. Adverbial 'apart, separate, distinct' is *tó:-nà* or iterated *tó:-tó:* (§8.4.5.2).

4.7.1.2 '2' to '10'

For forms in the counting sequence, see §4.7.1 above.

Numerals '2' to '9' are added to a noun (or noun-adjective sequence) that ends in plural *-gè*. The plural suffix is allowed, but usually omitted, with '10'. The plural noun has its regular tones, except that a lexically /L/-toned noun has L-toned plural *-gè* before a numeral.

‘2’ and ‘4’ get their tones (on both syllables) by spreading from the final tone of the preceding plural morpheme, except that they are {H}-toned after an /L/-toned noun. The effect is that ‘2’ and ‘4’ are {H}-toned after flat /H/- and /L/-toned nouns, but {L}-toned after a noun with a contour tone (/HL/, /LH/, /LHL/). ‘3’ and ‘7’ through ‘9’ have {HL} pattern after a plural noun. ‘5’, ‘6’, and ‘10’ have {H}. When used absolutely (‘give me two!’), all of the numerals are {L}-toned.

(74)	gloss	after N or N-Adj (“X”)	absolute
	‘2’	X-*gè nègà* (contour-toned noun)	*nègà*
		X-*gè négá* (/L/-toned noun)	
		X-*gé négá* (/H/-toned noun)	
	‘3’	X-*gè/-gé tá:ndì*	*tà:ndì*
	‘4’	X-*gè kèjɔ̀* (contour-toned noun)	*kèjɔ̀*
		X-*gè kéjɔ́* (/L/-toned noun)	
		X-*gé kéjɔ́* (/H/-toned noun)	
	‘5’	X-*gè/-gé nɔ́:m*	*nɔ̀:m*
	‘6’	X-*gè/-gé kúlé:ní*	*kùlè:nì*
	‘7’	X-*gè/-gé sɔ́:lì*	*sɔ̀:lì*
	‘8’	X-*gè/-gé sé:lè*	*sè:lè*
	‘9’	X-*gè/-gé tó:wà*	*tò:wà*
	‘10’	X*(-gè/-gé) pé:l(ú)*	*pè:l(ù)*

‘2’ and ‘4’ are {H}-toned after flat /L/ and /H/ melodies (75a), in the former case by dissimilation. They are {L}-toned after all contoured melodies (75b).

(75)	lexical melody	noun	gloss	Pl noun plus ‘2/4’
	a. noun has flat tonal melody			
	/L/	*yɔ̀:*	‘woman’	*yɔ̀:-gè négá* / *kéjɔ́*
	/H/	*úná*	‘goat’	*úná-gé négá* / *kéjɔ́*
	b. noun has contoured tonal melody			
	/LH/	*nèjjé*	‘bird’	*nèjjé-gè nègà* / *kèjɔ̀*
	/HL/	*kó:tì*	‘tick’	*kó:tí-gè nègà* / *kèjɔ̀*
	/LHL/	*èjègélè*	‘carp’	*èjègélé-gè nègà* / *kèjɔ̀*

Numerals may follow nonsingular pronouns. In this case, the numeral is {H}-toned and is followed by a plural suffix *-gè*, always L-toned.

(76)	*mbé* / *ábé* / *ŋké*	*négá-gè* / *tá:ndí-gè* / *pé:l-gè*
	1Pl / 2Pl / 3Pl	two-Pl / three-Pl / ten-Pl
	‘we/you/they two/three/ten’ (= ‘the three of us’ etc.)	

When a numeral directly follows a demonstrative, the demonstrative has the plural suffix, and the numeral is {L}-toned. In other words, both the demonstrative and the numeral have the same form they would have in isolation (i.e., absolutely).

(77) *íní-gè* *nègà* / *tà:ndì* / *pè:l(ù)*
Prox-Pl two / three / ten
'these two/three/ten'

In (77), plural *-gè* may be doubled: *ín-gé-gè nègà* 'these two'.

When a numeral follows the definite morpheme without an intervening noun, the latter takes the plural form *è-ŋgè*. The numeral has {L}-toned form.

(78) *è-ŋgè* *nègà* / *tà:ndì* / *pè:l(ù)*
Def-Pl two / three / ten
'the two/three/ten'

Numerals cannot be directly possessed. Instead of 'your three', for example, one says 'your three things (possessions)': *à ɲé:-gè tá:ndì*.

4.7.1.3 Decimal multiples ('20', …) and combinations ('11', '59', …)

The multiples of '10' are given in (79). There are distinctive lexical items for '20' and '40', and an obscurely composite form for '80'. '60' is based on '20' but the morpheme *sígò* does not otherwise occur. Odd-numbered multiples '30', '50', '70', and '90' are conjunctions of the next lower even decimal multiple and '10', e.g. '50' is literally "40 and 10." In '30', the left conjunct ('20 and') is usually contracted to *tà:ⁿ*. In '50' and higher odd-numbered decimal multiples, *nì* 'and' in the left conjunct is often reduced to *n* or to vowel nasalization.

(79)

gloss	form
'10'	*pè:l(ù)*
'20'	*tà:lmɔ̀*
'30'	*[tà:lmɔ̀ nì] [pè:l nì]* ~ *tà:ⁿ [pè:l nì]*
'40'	*dè:*
'50'	*[dé: nì] [pè:l nì]* ~ *dè:ⁿ [pè:l nì]*
'60'	*tà:lmɔ̀ sígò*
'70'	*[tà:lmɔ̀ sígò nì] [pè:l nì]*
'80'	*tɔ̀:ⁿ-jígì*
'90'	*[tɔ̀:ⁿ-jígì nì] [pè:l nì]*

As noted previously, a preceding noun occasionally takes plural *-gè* before '10', though the unsuffixed noun is preferred. With higher numerals, *-gè* is absent. Nouns like *nà:* 'cow' and *mìnjìlì* 'mosque' that are lexically /L/-toned acquire a final H-tone (on the final syllable, or on the final mora of a monosyllabic) before decimal numerals from '20' up. Nouns of other tone classes, like 'goat', 'bird', and 'tick', undergo no changes before these numerals. The final H-tone on 'cow' and 'mosque' in (80b) is therefore attributable to Final Tone-Raising, a tone sandhi process, rather than to a tonosyntactic {LH} overlay erasing lexical melodies.

(80) a. *nà:(-gè)* / *mìnjìlì(-gè)* / *úná(-gé)* / *nèjjé(-gè)* / *kó:tì* *pé:lú*
cow(-Pl) / mosque(-Pl) / goat(-Pl) / bird(-Pl) / tick 10
'10 cows/mosques/goats/birds'
(with *-gè*, 'tick' is *kó:tí(-gè)* before *pé:lú*)

b. *nă:* / *mìnjìlí* / *úná* / *nèjjé* / *kó:tí* *tà:lmɔ̀* / *dɛ̀:* / *tɔ̀:ⁿ-jígì*
cow / mosque / goat / bird / tick 20 / 40 / 80
'20/40/80 cows/mosques/goats/birds/ticks'

Decimal plus single-digit numerals like '47' are expressed as conjunctions of the decimal numeral (with the appropriate form of a preceding noun) and the single-digit numeral. The conjunction *nì* 'and' takes H-toned form *ní* in the left conjunct in such composite numerals, where it is surrounded by other L-tones, cf. Final Tone-Raising. In isolation (i.e. prepausally), my assistant sometimes pronounced H-toned *ní* in the right conjunct too, but this was not consistent even in isolation, and it was not observed in medial position in clauses.

(81) a. *[dɛ̀:* *ní]* *[sɔ̀:l* *nì]*
[40 and] [seven and]
'47'

b. *[tà:lmɔ̀* *ní]* *[nɔ̀:m* *nì]*
[20 and] [five and]
'25'

c. *[tɔ̀:ⁿ-jígí* *ní]* *[tà:ndí* *nì]*
[80 and] [3 and]
'83'

In such combinations, the decimal numerals have their regular forms, subject to minor contractions in allegro speech style.

In these combinations, '1 and' (as in '11' and '51') is *tèdà n*, cf. *tɛ̀:dà* '1' in the counting sequence. The other single-digit numerals have their usual {L}-toned absolute form before the conjunction *nì*.

4.7.1.4 Large numerals ('100', '1000', …) and their composites

The stems in (82) are are added to the regular form of a noun, or are used absolutely.

(82)	gloss	independent form	modifying a noun X
a.	'hundred'	*tɛ̀:mdɛ́rɛ̀* (< Fulfulde)	*X tɛ̀:mdɛ́rɛ̀*
b.	'thousand'	*mùnjù*	*X mùnjù*
c.	'million'	*mìlyɔ̂ⁿ* (< French)	*X mìlyɔ̂ⁿ*

'Hundred' and 'million' (both loanwords) are treated like common nouns, and therefore require plural *-gè* before numerals '2' to '9' (and optionally '10'). 'Thousand' does not have the plural suffix in such combinations, though in isolation *mùnjù-gé* 'thousands' is grammatical. 'Million' is used chiefly for currency.

(83)	gloss	simple	with '2'	gloss
a.	'hundred'	*tɛ̀:mdɛ́rɛ̀*	*tɛ̀:mdɛ́rɛ́-gè nègà*	'200'
b.	'thousand'	*mùnjù*	*mùnjù nègà*	'2,000'
c.	'million'	*mìlyɔ̂ⁿ*	*mìlyɔ́ⁿ-gè nègà*	'2,000,000'

4.7.1.5 Currency

Mali and several other Francophone West African belong to the ECOWAS regional association (French acronymn CEDEAO). Their common currency is the CFA franc (FCFA). As of 2015, one US dollar was worth about 600 FCFA. In the native languages, currency is calculated based on a unit equal to five FCFA, except for millions which use the French loanword *mìlyɔ̂ⁿ* to denote one (not five) million FCFA. In Penange the five FCFA unit unit is called *m̀bú:dù*, plural *m̀bú:dú-gè* before numerals '2' through '9'.

(84) a. *m̀bú:dù*
currency.unit
'5 FCFA'

b. *m̀bú:dú-gè* *nègà*
currency.unit-Pl two
'10 FCFA'

4.7.1.6 Distributive numerals

Numerals are iterated with no further morphology to make distributives ('two by two', 'two currency units each', etc.). The forms are based on the absolute and postnominal (rather than counting-sequence) forms where we can distinguish them (especially '1' and '2'). The regular tone pattern is L for the left iteration and HL for the right iteration, represented as L-HL in the right column in (85). However, for '100' the right iteration has its lexical tone, and the left iteration is {H}-toned.

(85)

gloss	absolute	distributive	tones
'1'	*tà:ŋgà*	*tà:ŋgà-tá:ŋgà*	L-HL
'2'	*nègà*	*nègà-négà*	L-HL
'3'	*tà:ndì*	*tà:ndì-tá:ndì*	L-HL
'4'	*kɛ̀jɔ̀*	*kɛ̀jɔ̀-kɛ́jɔ̀*	L-HL
'5'	*nɔ̀:m*	*nɔ̀:m-nɔ̂:m*	L-HL
'6'	*kùlè:nì*	*kùlè:nì-kúlé:nì*	L-HL
'7'	*sɔ̀:lì*	*sɔ̀:lì-sɔ́:lì*	L-HL
'8'	*sè:lè*	*sè:lè-sé:lè*	L-HL
'9'	*tò:wà*	*tò:wà-tó:wà*	L-HL
'10'	*pɛ̀:l(ù)*	*pɛ̀:l(ù)-pɛ́:lù*	L-HL
'20'	*tà:lmɔ̀*	*tà:lmɔ̀-tá:lmɔ̀*	L-HL
'40'	*dɛ̀:*	*dɛ̀:-dɛ̂:*	L-HL
'100'	*tɛ̀:mdérɛ̀*	*tɛ́:mdéré-tɛ̀:mdérɛ̀*	H-LHL
'100'	*mùnjù*	*mùnjù-múnjù*	L-HL

The negative predicative form is with *=là* 'it is not'.

(86) *nègà-négá=là*
'It isn't two by two.'

For *àŋgà-áŋgà* 'how many (each)?' see §13.2.8.

4.7.2 Ordinal adjectives

4.7.2.1 'First' (*páná*) and 'last' (*dí:rɔ́*)

Adjective 'first' is *páná*, as in *yè:*^{L} *páná* '(the) first thing' (*yé:* 'thing'). The noun is tone-dropped as before other adjectives.

Adjective 'last' is *dí:rɔ́*, as in *yè:*^{L} *dí:rɔ́* '(the) last thing'.

For adverbial 'first(ly), at first', see §8.4.4.2.

4.7.2.2 Other ordinals (suffix *-lò*)

Ordinals from 'second' to 'tenth' are in (86). The suffix is *-lò*, and the stem is {L}-toned. There are some segmental irregularities, especially in 'second' through 'fourth'. In 'fourth' but not 'tenth', there is a switch from -ATR *ɛ* to +ATR *e*, harmonizing with the suffixal *o*. Except for 'third', all stems end in a short high vowel before *-lò*, see especially 'fifth', but this vowel is frequently syncopated when also preceded by *l* ('seventh', 'eighth', 'tenth').

(87)

form	gloss
a. single-digit numeral	
nè:gù-lò	'second'
tà:ndè-lò	'third'
kè:jù-lò	'fourth'
nɔ̀:mù-lò	'fifth'
kùlè:nì-lò	'sixth'
sɔ̀:l(ì)-lò	'seventh'
sè:l(ì)-lò	'eighth'
tò:wà-lò	'ninth'
pè:l(í)-lò	'tenth'
b. decimal	
tà:lmɔ̀-lò	'twentieth'
dè:-lò	'fortieth'
c. decimal plus single-digit numeral	
pè:l-ní tèdà-n-lò	'eleventh'
d. hundred	
tɛ̀:mdèrɛ̀-lò	'hundredth'

For interrogative *à:ŋgù-lò* 'how many-eth?' see §13.2.8.

4.7.3 Fractions and portions

féccérɛ̀ 'portion, division' (< Fulfulde) can mean 'half', 'third', or other substantial fraction.

5 Nominal and adjectival compounds

The notation I use for tonal types of noun-noun and relative compounds is as follows. Using n for noun, a for adjective, num for numeral, v for verb, and x for a variable word class (noun, adjective, perhaps adverb), the stem-class combinations are represented as e.g. [x n], [n n], [n v], [n num], [n a] and (with a suffix) [n v-VblN]. Tone diacritics are added: x́ = {H}, x̂ = {HL}, x̌ = {LH}, x̀ = {L}, x̄ = regular lexical melody. Example: [ǹ n̄] is a noun-noun compound whose initial is dropped to {L} tone contour and whose final has its lexical melody.

5.1 Nominal compounds

5.1.1 Pseudo-possessive compounds of type [n̄ n̂]

This is the productive noun-noun compound type. The initial preserves its own lexical tone, but like many nonpronominal possessors it controls {HL} on finals.

Examples with prosodically light finals are in (88). The clearest examples are those in (88a), where the initial has a lexical melody other than /L/ and where the final has an audible tone change. The cases in (88b) are assigned to this compound type by extrapolation, although the initial is already lexically /L/-toned. *kó:* 'head' idiosyncratically drops to {L} as compound initial (88c).

(88) Prosodically light final with {HL}

	compound	gloss	initial	final
a.	*dɔ́mjɔ̀-kúlɛ̀*	'beard'	*dɔ́mjɔ̀* 'chin'	*kúlɛ́* 'hair'
	sígé-gɔ́:gɛ̀	'shinbone'	*sígé* 'foot'	*gɔ̀:gɛ̀* 'bone'
	úná-gújù	'goatskin'	*úná* 'goat'	*gùjù* 'skin'
	túlú-kɔ́bɛ̀	'*Guiera* tree leaf'	*túlú* '*Guiera*'	*kɔ̀bɛ̀* 'leaf'
	kámbé-mî:	'zaban juice'	*kámbé* 'zaban'	*mì:* 'water'
	àmànà-nâ:	'velvet mite'	*àmànà* 'God'	*nà:* 'cow'
b.	*gɔ̀:^{n}-kúlɛ̀*	'chest hair'	*gɔ̀:^{n}* 'chest'	*kúlɛ́* 'hair'
	nɛ̀:-gɔ́:gɛ̀	'arm bone'	*nɛ̀:* 'hand, arm'	*gɔ̀:gɛ̀* 'bone'
	àlàmùnɔ̀-gújù	'sheepskin'	*àlàmùnɔ̀* 'sheep'	*gùjù* 'skin'
	sà:l-gújù	'snake sp. skin'	*sà:l* 'snake sp.'	*gùjù* 'skin'
	màlfà-púnà	'gunpowder'	*màlfà* 'rifle'	*púná* 'powder'
	sɛ̀:ŋgɛ̀-nî:	'*Maerua* tree'	*sɛ̀:ŋgɛ̀* 'millet'	*ní:* 'mother'
	kɔ̀y^{n}-swâ:	'wild mouse'	*kɔ̀y^{n}* 'outback'	*swá:* 'mouse'
	kɔ̀y^{n}-nâ:	'buffalo'	*kɔ̀y^{n}* 'outback'	*nà:* 'cow'
	kɔ̀y-gâ:^{n}	'wild cat'	*kɔ̀y^{n}* 'outback'	*gà:^{n}* 'cat'
	sànà-mî:	'wild-grape juice'	*sànà* 'wild grape'	*mì:* 'water'
	sòmgè mî:	'tamarind juice'	*sòmgè* 'tamarind'	*mì:* 'water'

c.	*kɔ̀ː-ŋ-gúlɛ̀*	‘head hair’	*kóː* ‘head’	*kúlɛ́* ‘hair’
	kɔ̀ː-bɔ̀gólyɛ̀	‘skull’	*kóː* ‘head’	(unattested)

Examples with trisyllabic finals are in (89). Here the {HL} overlay on the final is realized as H.H.L. *púnáː-ŋgé* is a variant of *púná* ‘flour, powder’ with a frozen nominal suffix (§4.1.1.2).

(89) Prosodically heavy final with {HL}

	compound	gloss	initial final
a.	*ɛ́rɛ́ːŋgɛ́-[púnáː-ŋgɛ̀]*	‘rice flour’	*ɛ́rɛ́ːŋgɛ́* ‘rice’ *púnáː-ŋgé* ‘flour’
b.	*sɛ̀ːŋgɛ̀-[púnáː-ŋgɛ̀]*	‘millet flour’	*sɛ̀ːŋgɛ̀* ‘millet’ *púnáː-ŋgé* ‘flour’
	dàːnà-báːmbúlà	‘hunter’s hat’	*dàːnà* ‘hunter’ *bàːmbùlà* ‘hat’
	[mɔ̀l-wàlà]-báːmbúlà	‘marabout’s hat’	*mɔ̀l-wàlà* ‘marabout’ *bàːmbùlà* ‘hat’

Although the compound has a form similar to that of a possessive construction, it functions syntactically as a common noun in cases like those presented above. The compound noun can therefore take a true possessor.

Examples with preposed possessor (i.e. any possessor other than a 3Sg pronominal) are in (90). The 1Sg possessor forms have {L}-toned initial, the 1Pl forms have {H}-toned initial, and for both the final is {HL}-toned (§6.2.2.1). For the initials, comparison with uncompounded *ŋ́ mălfà* ‘my rifle’ and *ŋ́ y-ɛ̀rɛ́ːŋgɛ̀* ‘my rice’ shows that the tones are flattened to {L} as compound initial after 1Sg possessor, so that the whole compound can be treated as a single heavy possessed noun with {LHL} overlay. Comparison with uncompounded *ŋ̀ málfà* ‘our rifle’ and *ŋ̀ y-ɛ́rɛ́ːŋgɛ̀* ‘our rice’ shows that the initial is flattened to {H} after 1Pl possessor before the {HL}-toned final, forming an extended H-terrace. Nonpronominal possessors like ‘Seydou’ control the same tones as 1Pl.

(90) Possessed forms of compounds

a. *màlfà-púnà* ‘gunpowder’

ŋ́ màlfà-púnà	‘my gunpowder’
ŋ̀ málfá-púnà	‘our gunpowder’
sèydù málfá-púnà	‘Seydou’s gunpowder’

b. *ɛ́rɛ́ːŋgɛ́-[púnáː-ŋgɛ̀]* ‘rice flour’

ŋ́ y-ɛ̀rɛ̀ːŋgɛ̀-púnáː-ŋgɛ̀	‘my rice flour’
ŋ̀ y-ɛ́rɛ́ːŋgɛ́-púnáː-ŋgɛ̀	‘our rice flour’
sɛ̌ydù ɛ́rɛ́ːŋgɛ́-púnáː-ŋgɛ̀	‘Seydou’s rice flour’

c. *[mɔ̀l-wàlà]-báːmbúlà* ‘marabout’s hat’

ŋ́ [mɔ̀l-wàlà]-báːmbúlà	‘my [marabout’s hat]’
ŋ̀ [mɔ́l-wálá]-báːmbúlà	‘our [marabout’s hat]’
sèydù [mɔ́l-wálá]-báːmbúlà	‘Seydou’s [marabout’s hat]’

The question arises whether a possessed compound noun, e.g. X's A-B, is tonally distinguishable from recursively possessed [X's A]'s B. It turns out that there is no clear difference. For example, *ŋ́ [mɔ̀l-wàlà]-bá:mbúlà* 'my [marabout's hat]' is homophonous to *[ŋ́ mɔ̀l-wàlà]* ^{HL}*bá:mbúlà* '[my marabout]'s hat', although we can differentiate them orthographically by using brackets. Likewise with *ŋ̀ [mɔ́l-wálá]-bá:mbúlà* 'our [marabout's hat]' and *[ŋ̀ mɔ́l-wálá]* ^{HL}*bá:mbúlà* '[our marabout]'s hat'. In the 1Sg possessor case, the {L}-toned *mɔ̀l-wàlà* in *[ŋ́ mɔ̀l-wàlà]* ^{HL}*bá:mbúlà* '[my marabout]'s hat' could be explained as the result of a tone-lowering rule (§6.2.1).

The situation is different with 3Sg possessor *-nà* is different, the only suffixed possessor. If it scopes over the entire compound, it can appear either at the end of the compound, or after the initial: A-B-*nà* or A-*nà*-B. Only the latter is possible when the possession clearly has narrow scope over A, as in recursive possessive *dà:nà-nà* ^{HL}*dêm* '[his/her hunter]'s house'.

Examples involving compounds are in (91). In (91a), compound initial *pòrò-* has diverged in vocalism from the related simple noun *pòrì*, but remains *pòrò-* before *-nà*. (91c) shows the two bracketings discussed above.

(91)

a.	*pòrì*	'néré tree (*Parkia*)'
	pòrì-nà	'his néré tree'
	pòrò-púnà	'néré flour'
	pòrò-púná-nà	'his/her néré flour'
	pòrò-nà púná	"
b.	*màlfà*	'rifle'
	màlfá-nà	'his/her rifle'
	màlfà-púnà	'gunpowder'
	màlfá-nà púnà	'his/her gunpowder'
	màlfà-púná-nà	"
c.	*dà:nà*	'hunter'
	dà:ná-nà	'his/her hunter'
	dà:nà-bá:mbúlà	'hunter's hat'
	dà:nà-nà-bà:mbúlà	'his/her [hunter's hat]'
	dà:nà-bá:mbúlá-nà	"
	dà:ná-nà bá:mbúlá-nà	'[his/her hunter]'s hat'

5.1.2 Other noun-noun compound types

I have no clear examples of [n̄ n̄] (no tone changes) or of [ǹ n̄] (initial drops tones). A [ǹ ǹ] type (both initial and final are tone-dropped) occurs in agentive compounds (§5.1.4). The situation should be reviewed following additional lexicography.

5.1.3 Compounds with final verbal noun, type [n̄ v̂-l]

The verbal noun with final *-l* (§4.2.4) can take nominal compound initials, usually denoting a prototypical object (92a). As usual, *kó:* 'head' drops to *kò:-* as initial (92b). Cognate nominals other than verbal nouns can also serve as finals in such compounds. An example is *kùbɔ̀* 'agriculture, farm work' in (92c).

(92) a. *bí:ŋgò-[tíyê-l]* ‘weaving cloth/mats’ (< *bí:ŋgò*)
kɔ̀njè-[nê:-l] ‘beer drinking’
wótóró-[ˡtúmbú-gê-l] ‘pushing carts’ (< *wótórò*)
bòwⁿ-[túmbú-gê-l] ‘pushing doors’

b. *kò:-[múndê-l]* ‘tressing hair’

c. *sè:ŋgè-kúbɔ̀* ‘millet farming’
númgé-kúbɔ̀ ‘cowpea farming’
èrè:ŋgè-kúbɔ̀ ‘rice farming’
pábálgé-[ˡkúbɔ̀] ‘sesame farming’ (< *pábálgè*)

In *wótóró-[ˡtúmbú-gê-l]* (92a) and *pábálgé-[ˡkúbɔ̀]* (92c), the sequence /…HL-H…/ is realized as /…HH-ˡH…/. The first H-tone spreads to the right, and the L-tone is manifested as downstep on the next H-tone. Pronunciations with /…HL-H…/ preserved are also possible.

5.1.4 Agentive compounds of type [ǹ v̀] and archaic [ǹ v̌]

Most agentives denoting human occupations are compounds. The initial is an {L}-toned noun such as an incorporated prototypical object. A prosodically light final is also {L}-toned. A heavy final is {H}-toned, but if it is trisyllabic (before syncope) it takes L-toned plural *-gè*. In a few cases the initial is a cognate nominal variant (not in use elsewhere) ending in *a:* . The final is a verb, in the I/U-stem, though /u/ is apocopated after an unclustered sonorant.

(93)

compound	plural	gloss (components)
a. initial is regular noun, *u* in final apocopated after sonorant		
initial is audibly tone-dropped		
ùnà-gìr	*ùnà-gìr-gé*	‘goatherd’ (< *úná*, *gírɛ́*)
tàjì-tìy	*tàjì-tìy-gé*	‘basket-weaver’ (< *tájí* ‘basket’, *tíyɛ́*)
initial has lexical /L/ melody		
sɔ̀y-kùw	*sɔ̀y-kùw-gé*	‘tailor’ (< *sɔ̀y* ‘fabric’ *kwɛ́:*)
nɔ̀:-nùw	*nɔ̀:-nùw-gé*	‘singer’ (< *nɔ̀:*, *nwɛ́:*)
gèjì-tìy	*gèjì-tìy-gé*	‘weaver’ (< *gèjì* ‘cotton string with gear’, *tíyɛ́*)
dèm-sìm	*dèm-sìm-gé*	‘builder’ (< *dèm* ‘house’, *símɛ́*)
sàbàl-kàn	*sàbàl-kàn-gé*	‘merchant’ (< *sàbàl kán(í)* ‘do business’)
b. initial is regular noun, *u* in final is overt after cluster or obstruent		
tè:ŋgè-jòmbù	*tè:ŋgè-jòmbù-gé*	‘wood-gatherer’ (< *tè:ŋgè*, *jómbɛ́*)
c. initial is a special cognate nominal with final *a:*		
final u apocopated		
gìrà:-gìr	*gìrà:-gìr-gé*	‘herder’ (< verb *gírɛ́* ‘tend’, no noun)
final u audible after obstruent or cluster		
yèbà:-yèbù	*yèbà:-yèbù-gé*	‘dancer’ (< verb *yɛ́bɛ́*, usual noun *yèbù*)
mùndà:-mùndù	*mùndà:-mùndù-gé*	‘braiding lady’ (< *múndé*)
pènjà:-pènjù	*pènjà:-pènjù-gé*	‘milker (of cows)’ (< *pénjɛ́*)
jòŋgà:-jòŋgù	*jòŋgà:-jòŋgù-gé*	‘healer’ (< *jɔ́ŋgɛ́*)

d. trisyllabic verb

nàmà-ná:ndù	*nàmà-ná:ndú-gè*	'meat-taster' (< *ná:ndè*)
[sògù-là]-[sógú-l]	*[sògù-là]-[sógú-l]-gè*	'merchant' (< *sògù-là* 'selling', *sógú-lè* 'sell')
wòtòrò-túmbú-gú	*wòtòrò-túmbú-gú-gè*	'pusher of carts'

In flora-fauna terminology, 'dung beetle' (a scarabaeid that pushes a small ball of animal droppings) is *bòmà:-wĭl*. The initial is otherwise unfamiliar to my assistant (cf. *sùgɔ̀* 'excrement'), but *wĭl* is suggestively similar to *wí:lè* 'roll (sth) along'. Though synchronically isolated, this could be a vestige of an archaic agentive compound type with {LH} rather than {L} overlay on the final.

5.1.5 Compounds with *wè:* 'child', diminutive *-yé* ~ *-yè* , and *sè:* 'grain'

Possessive-type compounds with *wè:* 'child' as the final are illustrated in (94). 'Child' takes the {HL}-toned form ^{HL}*wê:*, plural ^{HL}*wé:-gè*. I usually omit the tonosyntactic diacritics.

(94)

compound	gloss	initial	gloss
bòw^{n} wê:	'key'	*bòw^{n}*	'door (shutter)'
dɔ̀: wê:	'pestle'	*dɔ̀:*	'mortar'
dógó wê:	'herb (*Caralluma*)'	*dógó*	'night'
kìn wê:	'small stone'	*kìnì*	'stone, rock, hill'
kɔ̀ndì wê:	'circumcised boy'	*kɔ̀ndì*	'circumcision'
kúm wê:	'balanzan fruit'	*kúm*	'balanzan tree'
nàm-yà wê:	'small grindstone'	*nàm-yà*	'large grindstone'
tí: wê:	'envoy'	*tí:*	'mission'

A pestle is a blunt club for pounding grain inside a wooden mortar. A small grindstone is held in the hand and used to grind grain that is placed on the large flat grindstone.

For adjectives with diminutive *-yè*, see §4.5.5. A noun with transparent diminutive *-yè* is in (95).

(95)

compound	gloss	initial	gloss
tùmá-yè	'twig'	*tùmà*	'stick'

A number of nouns and compound finals always end in *-ye*, either H- or L-toned. In these cases *-ye* is no longer transparently segmentable, but it probably originated as a diminutive ending. Hyphens are added in (96) to bring this out; elsewhere the hyphen is usually omitted. In some cases, L-toned *-yè* follows a stem with LH pattern, as with 'twig' in (95) above.

(96)

compound	gloss
a. final *-yé* ~ *-yè*	
{H}-toned -yé	
ból-yé	'tomtom'
gùjà sá:nd-yé	'tree sp. (*Combretum*)'
té:b-yé	'kite (hawk)'

{L}-toned -yè after L-toned stem

bɔ̀l-bɔ̀l-yè	'catfish (*Clarias*)'
dábál-yè	'story, tale'
kòmbòl-yè	'shell; scale'
núgúr-yè	'seedstock'
súgúl-yè	'ear'

{L}-toned -yè after LH-toned stem

kùlù-ŋ-kùndí-yè	'laughing dove'
nìgìlì-^{n}-[sá:l-yè]	'swift; bat (mammal)'
sìlɔ̃:nd-yè	'gutter spout (on roof)'
tɔ̀:ndí-yè	'cowry shell(s)'
tùgùn-[tá:l-yè]	'tree sp. (*Boscia*)'

b. likely *gy → *jj*

nèjjé	'bird' (cf. Dogul Dom *lègé:-gù*)

This construction with *-yè* is distinct from an instrumental compound type [noun-[verb-*yè]]* with homophonous suffix, see §5.1.10 below. Some compounds listed above have forms suggestive of that instrumental pattern ('swift', 'laughing dove', '*Boscia* tree'), but an instrumental (as opposed to agentive) compound is implausible as an etymological source for a flora-fauna term.

A compound final *-sê:* derived from *sè:* '(single) grain, seed' is attested in a more abstract sense denoting small units in (97). 'Heart' is usually treated in Dogon languages as part of the liver-heart(-lung) complex, but *dòŋgò-* in this compound is obscure.

(97)

tɔ́:-sê:	'arrow'	< *tɔ́:* 'bow'
mɔ́rɛ́-sê:	'bullet'	< *mɔ́rɛ́* 'bullets, ammunition'
dòŋgò-sê:	'heart'	cf. *dòŋgò* 'wooden spear'

5.1.6 Compounds with 'man' (*wálá*) and 'woman' (*yɔ̀:*)

No irregular or otherwise unusual compounds including 'man' or 'woman' have been observed. Both *wálá* 'man' and *yɔ̀:* 'woman' occur as nouns or as modifying adjectives: *ŋkɛ̀*^{L} *wálá* 'male dog', *ŋkɛ̀*^{L} *yɔ̀:* 'female dog'. 'Boy' and 'girl' are just 'male child' (*wè:*^{L} *wálá*) and 'female child' (*wè:*^{L} *yɔ̀:*).

5.1.7 *X* ^{HL}*bá:ŋgà* 'owner of X'

A possessive-type compound of the type *X* ^{HL}*bá:ŋgà* means 'owner of X', with {HL} overlay on *bá:ŋgá* 'owner'. An example is *dèm* ^{HL}*bá:ŋgà* 'home-owner'.

5.1.8 Nasal linker between compound initial and final

A number of compounds, including iterations and frozen combinations that behave prosodically as compounds, have an apparent nasal linker. It is heard as a homorganic nasal before stops, and as vocalic nasalization before *s*. The nasal linker is especially common in flora-fauna iterations and compounds (see also the following section).

(98) a. iterative (§4.1.5)

flora-fauna

kàlà-ŋ-kàlà	‘herb sp. (*Cassia*)’
kó:ló-ŋ-kà:là	‘tree locust (*Anacridium*)’
pòlò-m-pòlò	‘tree sp. (*Gyrocarpus*)’
sàgà-^{n}-sàgà	‘tree sp. (*Piliostigma*)’

other

gìlò-ŋ-gìlò	‘broken up bits of millet grain spike’

b. non-iterative

flora-fauna

álá-^{n}-sǎ:bà	‘cattle egret’
gítè-ŋ-gá:rì	‘bush sp. (*Solanum*)’
kùlù-ŋ-kùndí-yè	‘laughing dove’
nìgìlì-^{n}-[sá:l-yè]	‘swift; bat (mammal)’
nùmà-ŋ-gílό	‘tree sp. (*Cassia*)’
tè:gú-n-tě:lè	‘roller (bird)’
sìnjà-n-dúmbé	‘sugar cane’
ùnjà-ŋ-kámbé	‘bush sp. (*Waltheria*)’

with -n-túná ‘one day farther off’

ògà-n-túná	‘day after tomorrow’ (< *ògà* ‘tomorrow’)
màŋànà-n-túná	‘five days from today’
yà:gù-n-túná	‘day before yesterday’ (< *yà:gù* ‘yesterday’)

other

jàŋgà-n-tì:	‘stomach ache’ (< *jàŋgà* ‘belly’)
ɲàŋgù-n-sìyà	‘happiness, enthusiasm’ (< *ɲàŋgù* ‘soul’)

5.1.9 Iterative natural-species compounds (*X-màn-X*)

I can cite the examples in (99). The *n* might be a nasal linker. In other Dogon languages with similar flora-fauna compounds, the base is usually a verb. For *dàŋgù-màn-dáŋgù*, cf. verb *dáŋgé* ‘affix, stick on, glue on’ and derivatives. For ‘woodpecker’ the base is undoubtedly a verb ‘(woodpecker) peck, drill into (tree)’. The Penange verb for this sense is not (yet) recorded, but cf. *tóŋgó* in Tiranige and similar forms in other Dogon languages.

(99)

tɔ̀ŋgù-màn-tɔ́ŋgù	‘woodpecker’
dàŋgù-màn-dáŋgù	‘herb sp. (*Zornia*)’

5.1.10 Instrumental compounds (*bí-yà*, *-yè*)

A form based on a verb with impersonal subject can be used to specify a functional type of a commodity. Those in (100) end in *bí-yà*, a nonsubject participial form of auxiliary *bô* ‘be’, see (429) in §14.4.4.

(100) a.

mì:^{L}	*nɔ̀:*	*bí-yà*
water^{L}	drink.Ipfv	Ipfv-Ppl

‘drinking water, water for drinking’

b. *mì:*^{L} *dù-yɔ́* *bí-yà*
water^{L} bathe-MP.Ipfv Ipfv-Ppl
'water for bathing'

c. *nù:*^{L} *nù:mb-yò* *bí-yà*
oil^{L} rub.on-MP.Ipfv Ipfv-Ppl
'oil for rubbing (not cooking)'

There is a textual example with L-toned *b-yà*, a transitive verb, a covert head noun, and an overt object. See *ntá-gé-ŋ gámbò b-yà* '(gear) for fending off people' (i.e. weapons) in (598) in Text 4.

The combinations in (101) below are based on the perfective stem. A modified noun ('stick') is present in (101a-b), but this slot is empty in (101c-e). The morphological formula is [noun-[verb-*yè*]]. One could take *-yè* as a 3Pl subject variant, and therefore the construction as an instrumental relative with generic 3Pl subject, e.g. '[stick] that they hit (=do) hitting (with)'. However, the translation is awkward, and the suffix is this construction is always +ATR *-yè* even for -ATR verbs whose regular 3Pl perfective ends in *-yɛ̀*. Compare the compound final *-bùmbí-yè* in (101e) below with *búmb-yɛ̀* 'they filed'. The internal structure of these instrumental compounds is therefore nontransparent. The initials, like *bùmbù-* in *bùmbù-[bùmbí-yè]*, might better be analysed as reduplication-like iterations rather than as cognate nominals.

(101) a. *tùmà*^{L} *bùndù-[bùndí-yè]*
stick^{L} hitting(n)-[hit.Pfv-Inst]
'stick for hitting, cudgel' (< *búndé* 'hit')

b. *mànà*^{L} *tày-[tàyí-yè]*
plastic^{L} shooting(n)-[shoot.Pfv-Inst]
'slingshot' (i.e. rubber used for shooting) (< *mánà*, *táyé* 'shoot')

c. *kòjì-[kòjí-yè]*
scraping(n)-[scrape.Pfv-Inst]
'scraper (for excavating the interior of a calabash or mortar)'

d. *dàgù-[dàgí-yè]*
locking(n)-[lock.Pfv-Inst]
'padlock' or 'blacksmith's hammer'

e. *bùmbù-[bùmbí-yè]*
filing(n)-[file.Pfv-Inst]
'file (tool)' (< verb *búmbɛ́* 'brush, file')

See also *kèmbù-[kèmbí-yè]* 'tongs' from *kɛ́mbɛ́* 'hold by pinching' in (564) in Text 3.

The examples in (102) below have forms similar to those in (101) above, including the {LHL} overlay of the verb. However, now the initial does not denote the same activity as the final verb, rather the characteristic object of the action. For example, a toothbrush is not a tooth that one brushes with, rather an implement that one brushes teeth with.

(102) a. *ìnì-[bùmbí-yè]*
tooth-[brush.Pfv-Inst]
'toothbrush' (< *ìnì*, verb *búmbɛ́* 'brush, file')

b. *ɔ̀rɔ̀gè-[ìgìrí-yè]*
baobab.leaf-[stir.by.rotation.Pfv-Inst]
'stirring-stick' (< *ɔ̀rɔ̀gɛ̀*, verb *ígírè*)

c. *kò:-[pùlí-yè]*
head-[cover.Pfv-Inst]
'veil, abaya' (< *kó:*, verb *púlé*)

5.1.11 Product-of-action compounds (*-yɛ̀* ~ *-yè*)

A product-of-action expression like 'roast(ed) meat' can be generated with a noun denoting the substance followed by a form that is segmentally identical to the 3Pl subject perfective, but here functions as an adjective with no specific subject in mind. In this construction, the verb stem is {L}-toned, and the lexical ATR value of the stem is reflected in the suffixal vowel (except *i*). Both of these features distinguish this product-of-action construction from the instrument nominals covered in the preceding section. Compare the examples in (103) with regular {HL}-toned 3Pl perfective *yá:r-yè*, *dú-yyè*, and *nám-mì(:)*.

(103) a. *ɔ̀gùlɛ̀*^{L} / *nàmà*^{L} *yà:r-yè*
peanut^{L} / meat^{L} roast.Pfv-Product
'roasted peanuts / meat' (< *ɔ́gúlɛ́*, *nàmà*)

b. *ɔ̀gùlɛ̀*^{L} / *sè:ŋgè*^{L} *dù-yyè*
peanut^{L} / millet^{L} pound-Product
'pounded peanuts / millet' (< *ɔ́gúlɛ́*, *sè:ŋgè*)

c. *sè:ŋgè*^{L} *nàm-mì*
millet^{L} stone.grind-Product
'(stone-)ground millet' (< *sè:ŋgè*)

5.2 Adjectival compounds

5.2.1 Bahuvrihi ("Blackbeard") compounds

5.2.1.1 With adjectival compound final [ǹ-*nà*-ā]

In (104), the bahuvrihi adjective consists of a noun (e.g. body part), a 3Sg possessor suffix, and an adjective. The compound itself functions as an adjective modifying a common noun such as a natural-species term, but it can also be used abolutely, i.e. without the noun. The compound-initial noun (with 3Sg possessor -*nà*) drops its tones, while the final adjective has its lexical tones. The resulting form is identical to the corresponding true possessive 'his/her ADJ N' combination (e.g. 'his/her black hair'). Note the {H}-toned final *dɔ́ŋgá* 'heavy' in (104c) and the {H}-toned *kúlɛ́* 'hair' dropping to *kùlɛ̀* as initial in (104d). A common noun modified by a bahuvrihi is tone-dropped, as it is before any modifying adjective, see 'dove' in (104a) and 'goat' in (104d).

Orthographically, I write the bahuvrihi as a single word.

(104) a. *kùlù-ŋ-kùndì-yè*[L] *pàrò-nà-yɔ́rdɛ́*
dove[L] nape-3SgPoss-black
'doves with black nape rings' (e.g. vinaceous dove, *Streptopelia vinacea*)
(< *kùlù-ŋ-kùndí-yè*, *pàrò*, *yɔ́rdɛ́*)

b. *yɔ̀:*[L] *jàŋà-nà-bàgàlà(-gé)*
woman[L] belly-3SgPoss-big(-Pl)
'big-bellied woman/women' (< *yɔ̀:*, *jàŋà* ~ *jàŋgà*, *bàgàlà*)

c. *yɔ̀:*[L] *kò:-nà-dɔ́ŋgá(-gé)*
woman[L] head-3SgPoss-heavy(-Pl)
'heavy-headed woman/women' (< *yɔ̀:*, *kó:*, *dɔ́ŋgá*)

d. *ùnà*[L] *kùlɛ̀-nà-yɔ́rdɛ́(-gé)*
goat[L] hair-3SgPoss-black(-Pl)
'black-haired goat(s)' (< *úná*, *kúlɛ́*, *yɔ́rdɛ́*)

The *-nà-* is invariant and pro forma. If the compound is pluralized, plural suffix *-gè* (or H-toned variant *-gé*) is added to the "singular" form with *-nà-*, as shown in the examples, rather than to a form with 3Pl possessor.

5.2.1.2 With numeral compound final

Bahuvrihis with a nonsingular numeral instead of an adjective have the same form as the corresponding noun-numeral combination, e.g. 'two heads', including tone patterns and the medial plural suffix *-gè*. An example is (105a). If the numeral is *tà:ŋgà* '1', which is syntactically an adjective (§4.7.1.1), the compound has the form of an adjectival bahuvrihi (105b), with 3Sg possessor *-nà-* as in the examples presented in the preceding section.

(105) a. *ùnà*[L] *kó:-gé-négá*
goat[L] head-Pl-two
'a two-headed goat' (< *úná*, *kò:*, *nègà*)

b. *ntà*[L] *gìrè-nà-tà:ŋgà(-gé)*
person[L] eye-3SgPoss-one(-Pl)
'one-eyed person/people' (< *ntá*, *gìrè*, *tà:ŋgà*)

6 Noun Phrase structure

6.1 Organization of NP constituents

6.1.1 Linear order

The basic left-to-right linear order of elements is (106).

(106)
-2 determiner (demonstrative or definite)
-1 possessor
0 noun
+1 modifying adjective
+2 cardinal numeral
+3 universal quantifier (*sèlè* 'all')

Examples illustrating the relative ordering of adjacent elements are in (107). The linear ordering in (106) above is cobbled together from such examples. In the "type" formulae, n = noun and a = adjective.

(107)

	NP constituents	type
a.	*dèm*^{L} *ŋkà:líyè* house^{L} small '(a) small house'	[n-a]
b.	*dèm*^{L} *ŋkà:líyé-gè* ^{L}*tà:ndì* house^{L} small-Pl ^{L}three 'three small houses' (< *tá:ndì*)	[n-a-num]
c.	*ín* $^{L+}$*dèm-gè* ^{L}*tà:ndì* Prox $^{L+}$house-Pl ^{L}three 'these/those three houses'	[dem-n-num]
d.	*ín* *dèm-gé*^{LH} *sèlè* Prox house-Pl^{LH} all 'all of these/those houses'	[dem-n-'all']
e.	*⊂[è* $^{H+}$*dém-gè]* ^{L}*tà:ndì⊃* *sèlè* ⊂[Def $^{H+}$house-Pl] ^{L}three⊃ all 'all three (of the) houses'	[def-n-num-'all']
f.	*íní* *sèydù*^{L} ^{HL}*[dém-gè* *tà:ndì]* Prox Seydou^{L} ^{HL}[house-Pl three] 'these three houses of Seydou'	[dem-poss-n-num]

g. *à:màdù*^{L} ^{HL}*úná* [poss-n]
Amadou^{L} ^{HL}goat
'Amadou's goat' (< *úná*)

h. *à:màdù*^{L} *[ùnà*^{L} *ŋkà:líyé-gè]* [poss-n-a]
Amadou^{L} [goat^{L} small-Pl]
'Amadou's small goats'

i. *à:màdù*^{L} *[ùnà*^{L} *ŋkà:líyé-gé tà:ndì]* [poss-n-a-num]
Amadou^{L} [goat^{L} small-Pl three]
'Amadou's three small goats'

j. *ŋ́* ^{LHL}*[ɲ-ùnà-gè* *tá:ndì]* [poss-n-num]
1SgPoss ^{LHL}[Epen-goat-Pl three]
'my three goats'

6.1.2 Headless NPs (absolute function of non-noun NP constituents)

An NP component other than a noun may (appear to) head the NP if the noun slot is empty. The examples in (108) are shown (with definite *è* where appropriate) and can function as NPs in clauses, as in 'give me __ !'.

(108) a. *è* $^{H+}$*bɔ́mbɛ̀* 'the red one'
bɔ̀mbɛ̀ '(some) red'

b. *è-ŋgè tà:ndì* 'the three'
tá:ndì 'three'

c. *ínì* 'this (one)'

d. *sèlè* 'all, everything'

6.1.3 Bifurcation of relative-clause head NP

The apparent bifurcation of the head NP in a relative has limited effect in Penange, since possessors and determiners are prenominal. The 'all' quantifier *sèlè* is postverbal (§14.6.2).

6.1.4 Internal bracketing and tone-dropping in unpossessed NP

A noun is tone-dropped to {L} before a modifying adjective, see §6.3.1 below. This is the most systematic right-to-left tonosyntactic control process. Numerals '2' and up have only limited tonal interactions with preceding nouns or N-Adj sequences; certain numerals ('2', '4') themselves have variable tonal form depending on tones of a preceding noun, but there is no systematic tonosyntax for these combinations. *sèlè* 'all' controls {LH} on some preceding sequences, but not those that include definite *è*.

Tonal effects on nouns under the influence of preceding possessors and determiners are of two types. Tonosyntactic overlays erase lexical tone melodies on entire words or word

strings. More local tonal effects limited to one or two syllables at the adjacent edge of the possessum are referred to as tone sandhi. Tone sandhi may involve productive phonological processes, or it may be morphologically constrained.

A preposed possessor controls a tonosyntactic overlay on the following possessum. For nonpronominal and some pronominal possessors, the overlay on the possessum is realized as {HL} or {H} depending on the prosodic shape of the possessum. The two H-toned pronominal possessors (1Sg *ŋ́*, 2Sg *á*) have a different tonal effect on the possessum, maximally {LHL}. I consider possessor-possessum tonal interactions to be tonosyntactic, possibly supplemented with morphologically controlled tone sandhi. Details are given in §6.2 below.

3Sg possessor suffix *-nà*, the only possessor that follows the possessum (specifically, the possessed noun), induces idiosyncratic tone sandhi effects on the adjacent (right) edge of the possessum, adding a final H-tone to /L/-melody nouns. The suffix *-nà* is also unusual in that it immediately follows the possessed noun stem, preceding a plural suffix. It also precedes any adjectives or numerals that modify the possessed noun. See (125) in §6.2.2.2 below. There is some quirky tonology of such combinations (e.g. noun-*nà*-Plural Adj Num), but it is not purely tonosyntactic in nature.

Determiners ('this', 'that', 'the') are preposed to nouns, like most possessors. Nonproximate demonstratives ('that') control tonosyntactic {HL} overlays on the following noun and its inner modifiers, and can be analysed as possessor-possessum constructions. Definite 'the' and proximate 'this', on the other hand, induce only local tonal changes at the adjacent (left) edge of the following noun. This is morphologically conditioned tone sandhi, not tonosyntax. Details are in §6.5 below.

NPs undergo no additional tone-dropping when functioning as relative-clause internal heads.

6.2 Possessives

Except for 3Sg pronominal possessor (suffix *-nà*), all possessors precede the possessed NP. There is no genitive morpheme. Instead, possessor-possessed relationships are expressed by linear juxtaposition and by tone overlays (§6.2.2-3). In addition, possessors are tone-dropped under some conditions (§6.2.1).

Pronominal possessors are shown in (109). The independent pronouns and pronominal-subject proclitic pronouns for the same categories are also shown to bring out the morphological relatinships. Tone overlays on the possessed noun X are disregarded for the moment.

(109)

category	possessor of X	independent	subject clitic/suffix with verb (Vb)
a. possessor is H-toned proclitic			
1Sg	*ŋ́* X	*mí*	*ŋ́* Vb
2Sg	*á* X	*ó*	*à* Vb
b. possessor is L-toned proclitic or independent pronoun			
1Pl	*mbé* X ~ *ŋ̀* X	*mbé*	*ŋ̀* Vb
2Pl	*ábé* X ~ *à* X	*ábé*	*à* Vb

c. possessor is independent pronoun only

3Pl	*ŋké* X	*ŋké*	Vb-*yà* (etc.) suffix

d. possessor is suffix

3Sg	X-*nà*	*ɔ̀nɔ̀*	Vb-∅ (Vb *ná* in relatives)

There are no differences in segmental form or linear order between alienable and inalienable possessors. There are slight differences in tones of nouns (for 1Sg and 2Sg possessors) in the two cases.

A default inanimate possessed noun is *ɲɛ̂:*, as in *wɛ̀:-gɛ̀ ɲɛ̂:* 'the children's' and *á ɲɛ̂:* 'yours'. It can be pluralized (*X ɲɛ́:-gɛ̀*). It is probably an old word for 'thing', with possessor-controlled {HL} and with originally epenthetic *ɲ-* that is now fused and unsegmentable. Cf. *ɛ̀* 'that which' (default relative head), §14.2.4.

6.2.1 Tonal modifications on the final word of a nonpronominal possessor

Simple personal names drop to {L}-toned as alienable or inalienable possessors (110a). By contrast, common nouns (110b) and toponyms (110c) preserve their lexical melodies as possessors.

(110) a. *sèydù*^{L} / *à:màdù*^{L} ^{HL}*nâ:* / ^{HL}*bɔ́bɔ̀*
S^{L} / A^{L} ^{HL}cow / ^{HL}father
'Seydou's/Amadou's cow/father' (< *sɛ̌ydù*, *á:mádù*)

b. *úná* / *àlàmùnɔ̀* / *nèjjé* / *kó:tì* / *sɔ̀:mbúlɛ̀* ^{HL}*sígè*
goat / sheep / bird / tick / hamerkop ^{HL}foot
'a goat's/sheep's/bird's/tick's/hamerkop's foot'

c. *péná* / *bày^{n}àŋgàrà* ^{HL}*ójù*
Pinia / Bandiagara ^{HL}road
'the road to Pinia/Bandiagara'

Fauna terms like 'hare' and 'hyena' that are used much like personal names in animal stories can be treated like human personal names in this respect. Thus *jɔ̀mɛ̀*^{L} ^{HL}*nî:* 'hare's mother' from *jɔ́mɛ̀* 'hare', (557) in Text 2, in a tale with Hare and Hyena as protagonists.

The full set of conditions for this type of simple-possessor tone-dropping are not yet fully understood. I note *wàlà-gɛ̀*^{L} ^{HL}*dígâm* 'talk of (=about) men' with plural *wálá-gé* 'men' as apparent possessor, (562) in Text 3.

If the possessor contains its own determiner or possessor, as in '[Z's X]'s Y', '[the X]'s Y', or '[this/that X]'s Y', the situation is more complex. The determiner or possessor would have a tonal effect on X even before the possessum Y comes into play. A possessor or a nonproximate demonstrative controls a tonosyntactic overlay {LHL}, {LH}, or {HL} (sometimes further reduced) on X. Proximate demonstratives and definite markers add an H- or L-tone at the left edge of X (tone sandhi). See the following sections for possessors, and §6.5 for other determiners. Our focus here, however, is on the tones of the possessor.

Examples of '[Z's X]'s Y' are in (111). The form of 'Z's X' without Y is given in parentheses after each example.

(111) a. *[sèydù bɔ̀bɔ̀]*^{L} ^{HL}*nâ:*
[Seydou father]^{L} ^{HL}cow
'Seydou's father's cow' (< *sèydù*^{L} ^{HL}*bɔ́bɔ̀*)

b. *[sèydù àlàmùnɔ̀]*^{L} ^{HL}*sígè*
[Seydou sheep]^{L} ^{HL}foot
'the foot of Seydou's sheep-Sg' (< *sèydù*^{L} ^{HL}*álámúnɔ̀*)

c. *[péná / bày^{n}àŋgàrà* ~~^{HL}~~*ójú]* ^{HL}*págù*
[Pinia / Bandiagara ~~^{HL}~~road] ^{HL}end
'the end of the road to Pinia (village)' (< *péná* ^{HL}*ójù*)

d. *[ḿbé* ~~^{HL}~~*álámúnɔ́]* ^{HL}*sígè*
[1PlPoss ~~^{HL}~~sheep] ^{HL}foot
'the foot of our sheep-Sg' (< *ḿbé* ^{HL}*álámúnɔ̀*)

e. *[ŋ́* ~~^{LH}~~*bɔ̀bɔ̀]* ^{HL}*nâ:*
[1SgPoss ~~^{LH}~~father] ^{HL}cow
'my father's cow' (< *ŋ́* ^{LH}*bɔ̀bɔ́*)

f. *[ŋ́* ~~^{LHL}~~*y-àlàmùnɔ̀]* ^{HL}*sígè*
[1SgPoss ~~^{LHL}~~Epen-sheep] ^{HL}foot
'the foot of my sheep-Sg' (< *ŋ́* ^{LHL}*y-àlàmúnɔ̀*)

In these '[Z's X]'s Y' examples, if Z has been tone-dropped as possessor of X, as with 'Seydou' in (111a-b), the L-tones continue to the end of X. This does not happen when Z is a toponym, even an /L/-melody one like 'Bandiagara' (111c). Instead, the tones of the X noun 'road' in (111c) are based on its {HL} possessed overlay, but this flattens to {H} before the higher-level possessum 'end'. This is the case whenever X is an {HL}-toned possessum, as also in (111d) with 'sheep' after 1Pl possessor. Just as {HL} flattens to {H}, the {LH} overlay on kin terms after 1Sg or 2Sg possessor like 'father' in (111e), and the {LHL} on alienables with 1Sg or 2Sg possessor like 'sheep' in (111f), are flattened to {L}. The upshot is that the X noun in '[Z's X]'s Y' always surfaces with all-H or all-L tones.

All of the examples in (111) are difficult to model formulaically using our normal tonosyntactic notation, since the tones of the X morpheme are, as it were, jointly controlled by Z on the left and Y on the right. They result from rather complex computations involving the category (e.g. personal name) of Z, the initial tone of the overlay on X in simple 'Z's X', and the presence of the higher possessum Y. In (111a-b), where the L-toned form of X is an extension of the L-toned form of Z, I write a single ^{L} superscript after the Z-X combination. In the other cases, where the L- or H-toned form of X spreads from the first tone component of X's regular overlay in 'Z's X', I use strikethroughs to show how the {HL}, {LH}, or {LHL} overlay has been flattened.

Since (strong) discourse-definite *ê:* and distant *èm-bà* are treated as possessors, in the combination '[that X]'s Y' the tonal behavior of X and Y are exactly as in (111c) above. In addition, the demonstrative itself is tone-dropped in the simple 'that X' combination, just as personal names like 'Seydou' are tone-dropped as possessors, see (110a-b) above. The tone-dropping is audible for *ê:* (becoming *è:*^{L}), but not for the already L-toned *èm-bà*. The tonal formula is therefore [Dem^{L} ~~^{HL}~~X] ^{HL}Y, with strike-through on just the ^{L} of the superscripted ^{HL} on X. Examples are in (112).

(112) a. *[è:*^{L} */ èm-bà*^{L} $^{H\!\!\!-}$*wálá]* ^{HL}*nâ:*
[DiscDef/Dist $^{H\!\!\!-}$man] ^{HL}cow
'that man's cow' (< *è:*^{L} */ èm-bà* ^{HL}*wálà*)

b. *[è:*^{L} */ èm-bà*^{L} $^{H\!\!\!-}$*éjɛ́gɛ́lɛ́]* ^{HL}*kô:*
[DiscDef/Dist $^{H\!\!\!-L}$carp] ^{HL}head
'that (same) carp's head' (< *è:*^{L} */ èm-bà* ^{HL}*éjɛ́gɛ́lɛ̀*)

c. *[è:*^{L} */ èm-bà*^{L} $^{H\!\!\!-}$*búyá:gí]* ^{HL}*kómbúl-yè*
[DiscDef/Dist $^{H\!\!\!-L}$guava] ^{HL}shell
'that (same) guava's skin' (*è:*^{L} */ èm-bà* ^{HL}*búyá:gì*)

Examples of '[the X]'s Y' are in (113). The form of 'the X' by itself is given in parentheses. The tonal formula is *[è* $^{H+}$*X]* ^{HL}*Y*, where the superscript $^{H+}$ indicates that an additional H-tone is added just at the left edge of X. Other than the tonal patterns internal to *[è* $^{H+}$*X]* and the regular {HL} possessum overlay on Y, the only further tonal modification specific to the combination *[è* $^{H+}$*X]* ^{HL}*Y* is that lexically /LH/-toned nouns like 'guava' and 'bird' in X position drop the final H-tone in definite *è* $^{H+}$*búyà:gí* 'the guava' and *è* $^{H+}$*nêjjé* 'the bird' before the initial H-tone of the possessum (113d-e).

(113) a. *[è* $^{H+}$*wálá]* ^{HL}*nâ:*
[Def $^{H+}$man] ^{HL}cow
'the man's cow' (< *è* $^{H+}$*wálá*)

b. *[è* $^{H+}$*éjɛ̀gɛ̀lɛ̀*] ^{HL}*kô:*
[Def $^{H+}$carp] ^{HL}head
'the carp's head' (< *è* $^{H+}$*éjɛ̀gɛ̀lɛ̀*)

c. *[è* $^{H+}$*álàmùnɔ̀]* ^{HL}*sígè*
[Def $^{H+}$sheep] ^{HL}foot
'the sheep-Sg's foot'

d. *[è* $^{H+}$*búyà:gì]* ^{HL}*kómból-yè*
[Def $^{H+}$guava] ^{HL}shell
'the skin of the guava' (< *è* $^{H+}$*búyà:gí*)

e. *[è* $^{H+}$*néjjè]* ^{HL}*sígè*
[Def $^{H+}$bird] ^{HL}foot
'the bird's foot' (< *è* $^{H+}$*nêjjé*)

Examples of '[this X]'s Y' are in (114). The form of 'this X' by itself is given in parentheses. The tonal formula is *[íní* $^{L+}$*X]* ^{HL}*Y* (the demonstrative surfaces as *íní* after tone sandhi). Superscript $^{L+}$ indicates that an L-tone is added just to the left edge of X. The only further modifications are that medial and final H-tones in nouns of /LH/ and /LHL/ melody, which are not suppressed by *íní* itself, are dropped to L-tone before the initial H-tone of the possessum. This applies to the final syllable of 'guava' in (114b) and to the penult of 'carp' in (114c).

(114) a. *[íní* $^{L+}$*wàlà]* ^{HL}*nâ:*
[Prox $^{L+}$man] ^{HL}cow
'this man's cow' (< *íní* $^{L+}$*wàlà*)

b. *[íní* $^{L+}$*bùyà:gì]* ^{HL}*kómból-yè*
[Prox $^{L+}$guava] ^{HL}shell
'this guava's skin' (< *íní* $^{L+}$*bùyà:gí*)

c. *[íní* $^{L+}$*èjègèlè]* ^{HL}*kô:*
[Prox $^{L+}$carp] ^{HL}head
'this carp's head' (< *íní* $^{L+}$*èjègélè*)

6.2.2 Alienable possession

6.2.2.1 Tones of alienably possessed noun

The array (115) presents pronominal-possessor paradigms for three alienably possessed nouns. The nouns here are lexically /L/-toned. Prosodically heavy 'sheep' and 'mosque' best bring out the full {LHL} overlay on nouns after 1Sg/2Sg possessors and on nouns that include the 3Sg suffix, versus the full {HL} on nouns after 1Pl/2Pl/3Pl possessors. Superscripts without + indicate tone overlays on the full word, including suffixes. Strikethroughs in the superscripts indicate reductions in the full forms of the overlays due to the brevity (prosodic lightness) of the noun.

(115) Alienable possession paradigm (/L/-toned nouns)

	poss	'sheep' (< *àlàmùnɔ́*)	'mosque' (< *mìnjìlì*)	'village' (< *dùgù*)	'cow' (< *nà:*)
a.	1Sg	*ŋ́* ^{LHL}*y-àlàmúnɔ́* *ŋ́* ^{LHL}*y-àlàmùnɔ́-gè*	*ŋ́* ^{LHL}*mìnjílì* *ŋ́* ^{LHL}*mìnjìlí-gè*	*ŋ́* $^{L\cancel{H}L}$*dùgù* *ŋ́* ^{LHL}*dùgú-gè*	*ŋ́* $^{L\cancel{H}L}$*nà:* *ŋ́* ^{LHL}*nă:-ŋgè*
	1Pl	*mbé* ^{HL}*álámúnɔ́* *mbé* ^{HL}*álámúnɔ́-gè*	*mbé* ^{HL}*mínjílì* *mbé* ^{HL}*mínjílì-gè*	*mbé* $^{H\cancel{L}}$*dúgú* *mbé* ^{HL}*dúgú-gè*	*mbé* $^{H\cancel{L}}$*ná:* *mbé* ^{HL}*ná:-ŋgè*
	<u>or</u>:	*ǹ̩* ^{HL}*y-álámúnɔ́* *ǹ̩* ^{HL}*y-álámúnɔ́-gè*	*ǹ̩* ^{HL}*mínjílì* *ǹ̩* ^{HL}*mínjílì-gè*	*ǹ̩* $^{H\cancel{L}}$*dúgú* *ǹ̩* ^{HL}*dúgú-gè*	*ǹ̩* $^{H\cancel{L}}$*ná:* *ǹ̩* ^{HL}*ná:-ŋgè*
b.	2Sg	*á* ^{LHL}*yàlàmúnɔ́* *á* ^{LHL}*yàlàmùnɔ́-gè*	*á* ^{LHL}*mìnjílì* *á* ^{LHL}*mìnjìlí-gè*	*á* $^{L\cancel{H}L}$*dùgù* *á* ^{LHL}*dùgú-gè*	*á* $^{L\cancel{H}L}$*nà:* *á* ^{LHL}*nă:-ŋgè*
	2Pl	*ábé* ^{HL}*álámúnɔ́* *ábé* ^{HL}*álámúnɔ́-gè*	*ábé* ^{HL}*mínjílì* *ábé* ^{HL}*mínjílì-gè*	*ábé* $^{H\cancel{L}}$*dúgú* *ábé* ^{HL}*dúgú-gè*	*ábé* $^{H\cancel{L}}$*ná:* *ábé* ^{HL}*ná:-ŋgè*
	<u>or</u>:	*à* ^{HL}*y-álámúnɔ́* *à* ^{HL}*y-álámúnɔ́-gè*	*à* ^{HL}*mínjílì* *à* ^{HL}*mínjílì-gè*	*à* $^{H\cancel{L}}$*dúgú* *à* ^{HL}*dúgú-gè*	*à* $^{H\cancel{L}}$*ná:* *à* ^{HL}*ná:-ŋgè*
c.	3Sg	*àlàmùnɔ́* $^{+H}$*-nà* *àlàmùnɔ́-ná* $^{+H}$*-gè*	*mìnjìlí* $^{+H}$*-nà* *mìnjìlì-ná* $^{+H}$*-gè*	*dùgù* $^{+\cancel{H}}$*-nà* *dùgù-ná* $^{+H}$*-gè*	*nà:* $^{+\cancel{H}}$*-nà* *nà:-ná* $^{+H}$*-ŋgè*
	3Pl	*ŋké* ^{HL}*álámúnɔ́* *ŋké* ^{HL}*álámúnɔ́-gè*	*ŋké* ^{HL}*mínjílì* *ŋké* ^{HL}*mínjílì-gè*	*ŋké* $^{H\cancel{L}}$*dúgú* *ŋké* ^{HL}*dúgú-gè*	*ŋké* $^{H\cancel{L}}$*ná:* *ŋké* ^{HL}*ná:-ŋgè*
d.	NP	NP$^{L\ HL}$*álámúnɔ́* NP$^{L\ HL}$*álámúnɔ́-gè*	NP$^{L\ HL}$*mínjílì* NP$^{L\ HL}$*mínjílì-gè*	NP$^{L\ HL}$*dúgù* NP$^{L\ HL}$*dúgú-gè*	NP$^{L\ HL}$*nâ:* NP$^{L\ HL}$*ná:-ŋgè*

For 3Sg possessor, prosodically light stems show no H-tone before *-nà* in the singular, so the full {LHL} (including the suffix) is reduced to apparent {L}. This is indicated by superscript $^{L\text{~~H~~}L}$ with strike-through over the H. However, addition of plural *-gè* allows *-nà* itself to get the H-tone, and the full {LHL} is then overt. Heavy stems show the full {LHL} in singular as well as plural forms. Prosodic weight is defined as in (116).

(116) Prosodic weight

light stems: *Cv:*, *CvC*, *CvCv*, *CvNCv* (*NC* = homorganic nasal + voiced-stop)
heavy stems: *Cv:Cv*, *Cv:NCv*, *CvCCv* other than *CvNCv*, trisyllabics and longer

In other words, light stems have up to two vocalic moras and no medial consonant clusters (other than homorganic *NC*). Heavy stems have three or more vocalic moras, or two vocalic moras and a medial *CC* cluster. The difference between light *CvNCv* and heavy *CvCCv* is illustrated by *gùmbà-nà* 'his/her bowl' versus *àlgá-nà* 'his/her pig', from *gùmbà* and *àlgà*. An example with a long vowel in the initial syllable is *tù:mbá-nà* 'his/her gourd' from *tù:mbà*.

1Sg and 2Sg possessors are expressed by single-segment H-toned pronominal proclitics identical to those used as subjects before verbs (1Sg *ŋ́*, 2Sg *á*). 1Pl and 2Pl possessors can be expressed either by independent pronouns (1Pl *mbé*, 2Pl *ábé*) or by subject-like proclitics (1Pl *ǹ*, 2Pl *à*). 3Pl possessor is always independent *ŋkέ*. 3Sg possessor is a suffix *-nà* (H-toned *-ná* after /H/-toned noun) resembling the 3Sg subject enclitic *ná* found in nonsubject relative and nonsubject focalized clauses. 3Sg possessor *-nà* directly follows the noun stem, and can itself be followed by the plural suffix *-gè* and/or by noun modifiers (adjective, numeral). 3Pl and 3Sg possessor pronominals are not used when the corresponding nonpronominal NP possessor is present (115d).

Examples with representative nouns that have lexical melodies other than the already illustrated /L/ are in (117). The lexical melodies are overridden by the tonosyntactic overlays, except for 3Sg possessor.

(117)

noun	gloss	'my'	'our'	'his/her/its'
a. lexically /H/-toned				
pú:^{n}	'duck sp.'	*ŋ́* $^{L\text{~~H~~}L}$*pù:^{n}*	*mbé* $^{H\text{~~H~~}}$*pú:^{n}* ~ *ǹ* $^{H\text{~~H~~}}$*pú:^{n}*	*pú:$^{n+H}$-ná*
úná	'goat'	*ŋ́* $^{L\text{~~H~~}L}$*ɲ-ùnà*	*mbé* $^{H\text{~~H~~}}$*úná* ~ *ǹ* $^{H\text{~~H~~}}$*ɲ-úná*	*úná$^{+H}$-ná*
b. lexically /LH/-toned				
1Sg {LH}				
nèjjé	'bird'	*ŋ́* $^{LH\text{~~H~~}}$*nèjjé*	*mbé* ^{HL}*néjjè* ~ *ǹ* ^{HL}*néjjè*	*nèjjé$^{+H}$-nà*
1Sg {LHL}				
sɔ̌:y^{n}	'tigerfish'	*ŋ́* ^{LHL}*sɔ̌:y^{n}*	*mbé* ^{HL}*sɔ̂:y^{n}* ~ *ǹ* ^{HL}*sɔ̂:y^{n}*	*sɔ̌:y^{n+H}-nà*
gè:ní	'broom'	*ŋ́* ^{LHL}*gě:nì*	*mbé* ^{HL}*gé:nì* ~ *ǹ* ^{HL}*gé:nì*	*gè:ní$^{+H}$-nà*
bùyà:gí	'guava'	*ŋ́* ^{LHL}*bùyá:gì*	*mbé* ^{HL}*búyá:gì* ~ *ǹ* ^{HL}*búyá:gì*	*bùyà:gí$^{+H}$-nà*

c. lexically /HL/-toned

bâl	'bush sp.'	*ŋ́* ^{LHL}*bằl*	*mbé* $^{H\not{L}}$*bál* ~ *ŋ̀* $^{H\not{L}}$*bál*	*bál*$^{+H}$*-nà*
kó:tì	'tick'	*ŋ́* ^{LHL}*kŏ:tì*	*mbé* $^{H\not{L}}$*kó:tí* ~ *ŋ̀* $^{H\not{L}}$*kó:tì*	*kó:tí*$^{+H}$*-nà*
ká:láwâl	'bamboo'	*ŋ́* ^{LHL}*kà:làwâl*	*mbé* ^{HL}*ká:láwâl* ~ *ŋ̀* ^{HL}*ká:láwâl*	*ká:láwál*$^{+H}$*-nà*
pólmálá:ndù	'pigeon'	*ŋ́* ^{LHL}*pòlmàlá:ndù*	*mbé* ^{HL}*pólmálá:ndù* ~ *ŋ̀* ^{HL}*pólmálá:ndù*	*pólmálá:ndú*$^{+H}$*-nà*

d. lexically /LHL/-toned

sɔ̀:mbúlɛ̀	'hamerkop'	*ŋ́* ^{LHL}*sɔ̀:mbúlɛ̀*	*mbé* ^{HL}*sɔ́:mbúlɛ̀* ~ *ŋ̀* ^{HL}*sɔ́:mbúlɛ̀*	*sɔ̀:mbùlɛ́*$^{+H}$*-nà*
èjègélè	'carp'	*ŋ́* ^{LHL}*y-èjègélè*	*mbé* ^{HL}*éjégélè* ~ *ŋ̀* ^{HL}*y-éjégélè*	*èjègèlé*$^{+H}$*-nà*

Data are sparse on *CvL* nouns with final sonorant; for *bâl* 'bush sp.', my assistant produced the full {LHL} overlay in *ŋ́ bằl* (1Sg) but reduced expected {HL} to {H} in *ŋ̀ bál* (1Pl). Even the consistent reductions for *CvCv* and *Cv:* stems must be stipulated since they are not phonologically automatic, as can be seen by the fact that the {HL} overlay does not reduce after a nonpronominal NP possessor (117a), see (115d) for data.

y/*ɲ*-Epenthesis applies to vowel-initial nouns if preceded by 1st/2nd person proclitics, but not by 1Pl or 2Pl independent pronouns; see 'goat' in (117a), 'carp' in (117d), and 'sheep' in (115) above.

The tone patterns can be summarized for the different possessors as in (118).

(118) a. after nonpronominal NP possessor
{HL} overlay on noun

b. after 1Pl (*ŋ̀*, *mbé*), 2Pl (*à*, *ábé*), or 3Pl (*ŋké*)
{HL} overlay on noun
—reduced to {H} in prosodically light stems

c. after 1Sg (*ŋ́*) or 2Sg (*á*)
{LHL} overlay on noun
—includes plural suffix in *CvCv́-gè* and *Cv̌:-gè*
—reduced to {L} in unsuffixed prosodically light stems

d. before 3Sg *-nà* ~ *-ná*
lexical /H/ and /LH/ melodies are preserved
lexical /HL/ is preserved; the H-tone spreads to the presuffixal syllable
lexical /LHL/ is preserved; the H-tone shifts to the presuffixal syllable
lexical /L/ becomes /LH/ if heavy (e.g. *Cv:Cv*) or with plural *-gè*
lexical /L/ is preserved if light (*Cv:*, *CvCv*, or *CvNCv*) and unsuffixed

Contour overlays {HL}, {LHL}, and {LH} have their tone breaks near the right edge of the relevant tonal domain, as is also the case when such stems appear without modifiers in their lexical shape. For example, quadrisyllabic 'carp' in (117d) realizes {HL} as *élégélè* (H.H.H.L), {LHL} as *èlègélè* (L.L.H.L), and {LH} as *èlègèlé* (L.L.L.H).

6.2.2.2 Tones of modifiers following an alienably possessed noun

We have seen that a simple possessed noun has {HL} tones after a nonpronominal NP possessor. When an adjective is added to the possessed noun, formulaically [Poss [N Adj]], we get the same {HL} contour, but it is realized over the entire N-Adj sequence, with only the final syllable L-toned. The tonosyntactic formula is therefore [Poss$^{L\ HL}$[N Adj]]. Compare unpossessed (119a) with possessed counterparts (119b). The same is true of the {HL} overlay for possessed NPs after a plural pronominal possessor (119c).

(119) a. *ùnà*^{L} *yɔ́rdé* / *yɔ́rdé-gé*
goat^{L} black / black-Pl
'black goat(s)' (< *úná*)

b. *à:màdù*^{L} ^{HL}*[úná* *yɔ́rdɛ̀* / *yɔ́rdé-gè]*
Amadou^{L} ^{HL}[goat black / black-Pl]
'Amadou's black goat(s)' (< *á:mádù*)

c. *mbé* / *ábé* / *ŋké* ^{HL}*[úná* *yɔ́rdɛ̀* / *yɔ́rdé-gè]*
1Pl- / 2Pl- / 3PlPoss ^{HL}[goat black / black-Pl]
'our/your-Pl/their black goat(s)'

Similarly, the maximal {LHL} overlay controlled by a 1Sg or 2Sg possessor is expressed over the entire possessed N-Adj sequence (120).

(120) *ŋ́* / *á* ^{LHL}*[ɲ-ùnà* *yɔ́rdɛ̀* / *yɔ́rdé-gè]*
1Sg- / 2SgPoss ^{LHL}[Epen-goat black / black-Pl]
'my/your-Sg black goat(s)' (epenthetic *ɲ*)

Consider now [Poss [N-Pl Num]]. Without the possessor, the noun 'goat' has its usual lexical tones (121a). When (121a) is possessed, an {LHL} overlay, distinct from the {HL} overlay seen in (119b) above, is applied to the entire possessed NP (121b). The tonosyntactic formula is [Poss$^{L\ LHL}$[N-Pl Num]]. This {LHL} overlay converges with the {LHL} that is controlled, here and elsewhere with prosodically heavy possessed NPs, by 1Sg/2Sg possessors (121c).

(121) a. *úná-gé* *tá:ndì*
goat-Pl three
'three goats' (*úná*, plural *úná-gé*)

b. *à:màdù*^{L} ^{LHL}*[[ùnà-gè* *tá:ndì]*
Amadou^{L} ^{LHL}[[goat-Pl three]
'Amadou's three goats' (*á:mádù*)

c. *ŋ́* / *á* ^{LHL}*[[ùnà-gè* *tá:ndì]*
1SgPoss / 2SgPoss ^{LHL}[[goat-Pl three]
'my/your-Sg three goats'

An unpossessed N-Adj-Num combination is expressed as [N Adj-Pl]^{L} Num if the numeral is H-initial, as [N Adj-Pl]$^{L\ HL}$Num if the numeral is L-initial, and as [N Adj-Pl]$^{L+H}$ Num if the numeral is tonally variable ('2' and '4'). See (122a-c) below, and (136b-d) in §6.4.1. When a possessor like 'Amadou' in (122d-f) is added, the possessed [N Adj-Pl Num] sequence has an LHL tone pattern, but only with '3' (122e) are the tone breaks maximally close to the right

edge as is usual with the {LHL} overlay. {HL} has seemingly been separately applied to '6' (122d). In the case of '4' (122f), the only H-tone is on plural *-gé*, which could be ascribed to Final Tone-Raising rather than to an overlay.

(122) a. *[ùnà* *yɔ̀rdɛ̀-gɛ̀]*^{L} *kúlé:ní*
[goat black-Pl]^{L} six
'six black goats.'

b. *[ùnà* *yɔ̀rdɛ̀-gɛ̀]*^{L} ^{HL}*tá:ndì*
[goat black-Pl]^{L} ^{HL}three
'three black goats.'

c. *[ùnà* *yɔ̀rdɛ̀-gé]*^{L} *kɛ̀jɔ̀*
[goat black-Pl]^{L} four
'four black goats.'

d. *à:màdù*^{L} ^{LHL}*[ùnà* *yɔ̀rdɛ̀-gɛ̀* *kúlé:nì]*
Amadou^{L} ^{LHL}[goat black-Pl six]
'Amadou's six black goats.'

e. *à:màdù*^{L} ^{LHL}*[ùnà* *yɔ̀rdɛ̀-gɛ̀* *tá:ndì]*
Amadou^{L} ^{LHL}[goat black-Pl three]
'Amadou's three black goats.'

f. *à:màdù*^{L} ^{LHL}*[ùnà* *yɔ̀rdɛ̀-gé* *kɛ̀jɔ̀]*
Amadou^{L} ^{LHL}[goat black-Pl four]
'Amadou's four black goats.'

3Sg pronominal possessor *-nà* ~ *-ná* (e.g. *úná-ná* 'his/her goat', *úná-ná-gɛ̀* 'his/her goats') is added to the noun stem even when it has logical scope over the entire unpossessed NP including modifiers and numerals. When the possessed noun with *-nà* ~ *-ná* is followed by a numeral (123a) or by an adjective (123b-c), the initial lexical tone melody of the noun stem spreads to the end of the word. The effect is that the five lexical tone melodies for nouns reduce to two patterns, {H} and {L}. The numeral or adjective has {HL} overlay regardless of whether the noun is {H}- or {L}-toned after this tone-spreading rule. The shift to {HL} is inaudible for *tá:ndì* '3' but is audible for *nɛ̀gà* ~ *négá* '2'. When the noun with *-nà* ~ *-ná* is followed by both an adjective and a numeral, the adjective is treated as an extension of the noun for tonosyntactic purposes, so the N-Adj sequence is entirely {H}-toned (123d) or entirely {L}-toned (123e). The numeral has the same {HL} overlay as before. The adjectives in these examples are *yórdé* 'black' (regular plural *yórdé-gé*) and *bɔ̀mbɛ̀* 'red'.

(123) 3SgPoss with *úná* 'goat', *nà:* 'cow', *kó:tì* 'tick', *nɛ̀jjé* 'bird', *ɛ̀jɛ̀gélɛ̀* 'carp'

a. *úná-ná-gé* / *nà:-nà-gɛ̀* / *kó:tí-ná-gé* / *nɛ̀jjɛ̀-nà-gɛ̀* / *ɛ̀jɛ̀gɛ̀lɛ̀-nà-gɛ̀*
goat- / cow- / tick- / bird- / carp-3SgPoss-Pl
^{HL}*tá:ndì* / ^{HL}*négà*
^{HL}three / ^{HL}two
'his/her three/two goats/cows/ticks/birds/carps'

b. *úná-ná* / *nà:-nà* / *kó:tí-ná* / *nèjjè-nà* / *èjègèlè-nà*
goat- / cow- / tick- / bird- / carp-3SgPoss
HL*yɔ́rdɛ̀* / HL*bɔ́mbɛ̀*
HLblack / HLred
'his/her black/red goat/cow/tick/bird/carp'

c. *úná-ná* / *nà:-nà* / *kó:tí-ná* / *nèjjè-nà* / *èjègèlè-nà*
goat- / cow- / tick- / bird- / carp-3SgPoss
HL*yɔ́rdɛ́-gè* / HL*bɔ́mbɛ́-gè*
HLblack-Pl / HLred-Pl
'his/her black/red goats/cows/ticks/birds/carps'

d. *úná-ná* / *kó:tí-ná* *yɔ́rdɛ́-gé* HL*tá:ndì* / HL*négà*
goat- / tick-3SgPoss black-Pl HLthree / HLtwo
'his/her three/two black goats/ticks.' (*kó:tì*)

e. *nà:-nà* / *nèjjè-nà* / *èjègèlè-nà* *yɔ̀rdɛ̀-gè* HL*tá:ndì* / HL*négà*
cow / bird- / carp-3SgPoss black-Pl HLthree / HLtwo
'his/her three/two black cows/birds/carps'

6.2.3 Inalienable possession

6.2.3.1 Kin terms and other alienables

Inalienably possessed nouns are kin terms and a few similar relationship terms.

The possessor has the same form in alienable and inalienable possession. All of the pronominal possessors have the same forms in the two constructions. Some nonpronominal NP possessors drop the tones of their final word in both constructions. The possessors in the inalienables (124a-b) therefore have the same forms seen above for alienables, and 3Sg pronominal possessor is again expressed by suffixed *-nà* (124c).

(124) a. *ŋ́* / *mbé* / *á* / *ábé* / *ŋ̀ké* LH*bɔ̀bɔ́*
1Sg / 1Pl / 2Sg / 2Pl / 3PlPoss LHfather
'my/our/your-Sg/your-Pl/their father

b. *à:màdùL* HL*bɔ́bɔ̀*
AmadouL HLfather
'Amadou's father'

c. *bɔ̀bɔ̀-nà*
father-3SgPoss
'his/her father'

We now consider the tonal form of the inalienably possessed nouns that follow such a possessor. Paradigms in the same format given earlier for alienables are in (125). The crucially different forms are those for 1Sg and 2Sg possessors that are flagged with "(!)."

(125) Inalienable possession paradigm

	category	‘father’ (< *bɔ̀bɔ̀*)	‘uncle’ (< *nèjì*)	‘mother’ (< *ní:*)
a.	1Sg	*ŋ́* LH*bɔ̀bɔ́* (!) *ŋ́* LHL*bɔ̀bɔ́-gè*	*ŋ́* LH*nèjí* (!) *ŋ́* LHL*nèjí-gè*	*ŋ̀* HL*nî:* (!) *ŋ́* HL*ní:-gè* (!)
	1Pl	*mbé* H~~L~~*bɔ́bɔ́* *mbé* HL*bɔ́bɔ́-gè*	*mbé* H~~L~~*néjí* *mbé* HL*néjí-gè*	*mbé* H~~L~~*ní:* *mbé* HL*ní:-gè*
b.	2Sg	*á* LH*bɔ̀bɔ́* (!) *á* LHL*bɔ̀bɔ́-gè*	*á* LH*nèjí* (!) *á* LHL*nèjí-gè*	*á* HL*nî:* (!) *á* HL*ní:-gè* (!)
	2Pl	*ábé* H~~L~~*bɔ́bɔ́* *ábé* HL*bɔ́bɔ́-gè*	*ábé* H~~L~~*néjí* *ábé* HL*néjí-gè*	*ábé* H~~L~~*ní:* *ábé* HL*ní:-gè*
c.	3Sg	*bɔ̀bɔ̀-nà* *bɔ̀bɔ̀-ná-(ŋ)gè*	*nèjì-nà* *nèjì-ná-(ŋ)gè*	*ní:-ná* *ní:-ná-(ŋ)gè*
	3Pl	*ŋké* H~~L~~*bɔ́bɔ́* *ŋké* HL*bɔ́bɔ́-gè*	*ŋké* H~~L~~*néjí* *ŋké* HL*néjí-gè*	*ŋké* H~~L~~*ní:* *ŋké* HL*ní:-gè*
d.	NP	NP^{L} HL*bɔ́bɔ̀* NP^{L} HL*bɔ́bɔ́-gè*	NP^{L} HL*néjì* NP^{L} HL*néjí-gè*	NP^{L} HL*nî:* NP^{L} HL*ní:-gè*
		[“NP^{L}” means final word in NP is {L}-toned]		

The alienable and inalienable paradigms are very similar. There is no difference in the plural-pronoun, 3Sg, or nonpronominal NP possessor combinations. However, there are notable differences in the 1Sg/2Sg possessed forms for prosodically light stems (which include most kin terms). If the possessed noun is *CvCv*, the {LH} overlay is fully expressed in the plural in both constructions (‘father’, ‘uncle’, ‘village’): *ŋ́* LH*bɔ̀bɔ́-gè* ‘my fathers’ and *ŋ́* LH*nèjí-gè* ‘my uncles’ like *ŋ́* LH*dùgú-gè* ‘my villages’. However, in the unsuffixed singular, the {LH} overlay remains fully articulated with inalienables, but flattens or reduces to {L} for inalienables: *ŋ́* LH*bɔ̀bɔ́* ‘my father’ and *ŋ́* LH*nèjí* ‘my uncle’, but *ŋ́* L*dùgù* ‘my village’ equivalent to *ŋ́* L~~H~~*dùgù* including the strike-through. With 1Sg/2Sg possessor, if the possessed noun is *Cv:*, it appears with <HL>-tone if inalienable (*ŋ̀* HL*nî:* ‘my mother’, *ŋ̀* HL*dê:* ‘my elder sibling’), but with L-tone in the singular and <LH>-tone before H-toned plural suffix ({LHL} at word-level) in the plural if alienable (*ŋ́* L*nà:* ‘my cow’ equivalent to *ŋ́* L~~HL~~*nà:*, *ŋ́* LHL*nă:-ŋgè* ‘my cows’). For prosodically heavy nouns there is no tonal difference between alienable and inalienable.

The prosodically light kin and relationship terms in (126a) have the telltale {LH} or monosyllabic HL-tone of inalienable nouns in the 1Sg form. The heavy nouns in (126b) have {LHL} overlay in the 1Sg form which is compatible with alienable or inalienable possession.

(126)

	stem	‘(X’s) __’	‘my __’	gloss
a.	*prosodically light, definitely inalienable monosyllabic with {H}*			
	ní:	HL*nî:*	*ŋ̀* HL*nî:*	‘mother’
	dè:	HL*dê:*	*ŋ̀* HL*dê:*	‘elder sibling’
	bɔ̀:	HL*bɔ̂:*	*ŋ̀* HL*bɔ̂:*	‘aunt’

bisyllabic with {LH}

nèjì	HL*néjì*	*ŋ́* LH*nèjí*	‘uncle’
nɔ̀bɛ̀	HL*nɔ́bɛ̀*	*ŋ́* LH*nɔ̀bɛ́*	‘younger sibling’
tòrì	HL*tórì*	*ŋ́* LH*tòrí*	‘grandfather’
bɔ̀bɔ̀	HL*bɔ́bɔ̀*	*ŋ́* LH*bɔ̀bɔ́*	‘father’
sèjì	HL*séjì*	*ŋ́* LH*sèjí*	‘grandmother’
nòlò	HL*nólò*	*ŋ́* LH*nòló*	‘friend’

b. prosodically heavy, no evidence for or against inalienability

ká:	HL*kâ:*	*ŋ́* L*kà:*	‘agemate’
àmbàl	HL*ámbâl*	*ŋ́* LHL*ɲ-àmbâl*	‘parent-in-law’
nùmbùl	HL*númbûl*	*ŋ́* LHL*nùmbûl*	‘person with the same name’
sèjì-gò	HL*séjí-gò*	*ŋ́* LHL*sèjí-gò*	‘grandchild’

No special vocatives were elicitable. My assistant uses full kin terms like ‘my father’ in address, instead of a specialized vocative (‘dad!’).

wè: ‘child’, *wálá* ‘man’, *ká:* ‘agemate’, and *yɔ̀:* ‘woman’ are alienable nouns, but they can take (alienable) possessors in relationship contexts. With 1Sg possessors: *ŋ́* L*wè:* ‘my child’ (also ‘my nephew/niece’), *ŋ́* L*wàlà* ‘my husband’, *ŋ́* L*kà:* ‘my agemate’, *ŋ́* L*yɔ̀:* ‘my wife’. Possessed forms of N-Adj sequence *wè:*L *wálá* ‘male child, boy’ and of *wè:*L *yɔ̀:* can mean either ‘X’s son’ and ‘X’s daughter’ from a parent’s perspective, or ‘X’s girlfriend’ and ‘X’s boyfriend’ from the perspective of an opposite-sex person.

If a man has taken a second wife, the senior and junior wives can be distinguished adjectivally as ‘big’ versus ‘small’ or ‘first’ versus ‘second’. ‘Co-wife’ is a compound *àmbàl-yɔ̀:*.

6.2.3.2 Tone contour of modifiers following an inalienably possessed noun

There is no difference between alienable and inalienable possession in the tonal treatment of possessed N-Adj, N-Num, or N-Adj-Num combinations. In all cases the noun and its modifiers constitute the domain onto which the possessor-controlled tone overlay is applied.

A possessed NP of the form N-Adj is treated the same way in alienable and inalienable possession. ‘Stone’ (*kìn-wé:*) and ‘uncle’ (*néjí*) have the same tonal treatments in unpossessed where they are tone-dropped by the adjective (127a), and when possessed as in (127b-c) where the possessor’s {LHL} or {HL} is overlaid.

(127) a. *kìn-wè:*L / *nèjì*L *dɔ́ŋgá*
stoneL / uncleL heavy
‘(a) heavy stone/uncle’

b. *ŋ́* LHL*[kìn-wè:* / *nèjì* *dɔ́ŋgà]*
1SgPoss LHL[stone / uncle heavy]
‘my heavy stone/uncle’

c. *à:màdù*L HL*[kín-wé:* / *néjí* *dɔ́ŋgà]*
AmadouL HL[stone / uncle heavy]
‘Amadou’s heavy stone/uncle’

Similarly, if the possessed NP is N-Num, alienable ‘stone’ and inalienable ‘uncle’ have the same tonal treatments. They have lexical tone melodies in (128a-b). (‘4’ happens to be one of

the two numerals that gets its own tone by spreading from the left.) Both ‘stone’ and ‘uncle’ are part of the {LHL} overlay in (128c) and the {HL} overlay in (128d).

(128) a. *kìn-wé:-gè* *kɛ̀jɔ̀*
stone-Pl four
‘four stones’

b. *néjí-gé* *kéjɔ́*
uncle four
‘four uncles’

c. *ŋ́* ^{LHL}*[kìn-wè:-gè / nèjì-gè* *kɛ́jɔ̀]*
1SgPoss ^{LHL}[stone-Pl / uncle-Pl four]
‘my four stones/uncles’

d. *à:màdù*^{L} ^{HL}*[kín-wé:-gé / néjí-gé* *kɛ́jò]*
Amadou^{L} ^{HL}[stone-Pl / uncle-Pl four]
‘Amadou’s four stones/uncles’

In a triple sequence N-Adj-Num, there is again no tonal alienability distinction. Possessed phrases with ‘stone’ and ‘uncle’ have the same tonosyntactic patterns in (129a), where they are tone-dropped by the adjective, and in (129b-c) where they are part of the domain of the {LHL} and {HL} overlays, respectively.

(129) a. *kìn-wè:*^{L} / *nèjì*^{L} *dɔ́ŋgá-gé* *kɛ́jɔ́*
stone^{L} / uncle^{L} heavy-Pl four
‘four heavy stones/uncles’

b. *ŋ́* ^{LHL}*[kìn-wè:* / *nèjì* *dɔ̀ŋgà-gè* *kɛ́jɔ̀]*
1SgPoss ^{LHL}[stone / uncle heavy-Pl four]
‘my four heavy stones/uncles’

c. *à:màdù* ^{HL}*[kín-wé:* / *néjí* *dɔ́ŋgá-gé* *kɛ́jò]*
Amadou^{L} ^{HL}[stone / uncle heavy-Pl four]
‘Amadou’s four heavy stones/uncles’

Conclusion: inalienability is only weakly distinguished from alienability. The distinction is limited to the tones of unmodified, prosodically light 1Sg/2Sg possessor forms.

6.2.4 Recursive possession

Recursive possession of the type [[X’s Y]’s Z] is possible. The formula for the embedded possessor as an independent NP is [X^{L} ^{HL}Y] if X is a single word, as in (130a-b). The formula for the recursive possessive can be modeled as X^{L} ^{LHL}[Y Z], or as [[X^{L} ~~^{HL}~~Y^{L}] ^{HL}Z], where the outermost possessed noun Z requires that the final word in the preceding possessor be {L}-toned, erasing the previous {HL} overlay. The second alternative is applied in (130c-d). The double strikethrough in ~~^{HL}~~ indicates this erasure using the second model.

(130) a. *ŋkɛ̀* [HL]*díl*ɔ̀
dog [HL]tail
'(a/the) dog's tail'

b. *à:màdù*[L] [HL]*ŋ́kɛ̀* / [HL]*néjì* / [HL]*bɔ́bɔ̀*
Amadou[L] [HL]dog / [HL]uncle / [HL]father
'Amadou's dog/uncle/father' (for the tones of 'dog' see §3.2.8.1)

c. *[à:màdù*[L] ~~[HL]~~*ŋkɛ̀*[L]*]* [HL]*díl*ɔ̀
[Amadou[L] ~~[HL]~~dog[L]] [HL]tail
'[Amadou's dog]'s tail'

d. *[à:màdù* ~~[HL]~~*nèjì*[L]*]* [HL]*bɔ́bɔ̀*
[Amadou ~~[HL]~~uncle[L]] [HL]father
'[Amadou's uncle]'s father'

6.3 Noun-adjective

6.3.1 Noun plus regular modifying adjective

A noun can be followed by one or more modifying adjectives (including ordinals) within the NP. The noun is tone-dropped to {L} before an adjective, though if the adjective is /L/-toned the final syllable of the noun can be tone-raised by phonological tone sandhi. The first adjective retains its lexical tone melody. Plural *-gè*, if present, follows the adjective only (131b). The tonosyntactic formula, disregarding the tone of the plural morpheme, is therefore [N[L] Adj(-Pl)].

(131) a. *úná* 'goat'
ùnà[L] *yɔ́rdɛ́* 'black goat'
ùnà[L] *bàgàlà* 'big goat'

b. *úná-gé* 'goats'
ùnà[L] *yɔ́rdɛ́-gé* 'black goats'
ùnà[L] *bàgàlà-gé* 'big goats'

c. *káy*^{n} 'work'
kày^{n}[L] *má:gá* 'difficult (hard) work'

For [[N Adj1][L] Adj2(-Pl)] with two adjectives, see §6.3.3.1 below.

6.3.2 Noun/adjective *ntă:-nà* 'some', adjective *yɛ́:nɛ́* 'a certain (one)'

ntă:-nà 'some, certain ones' can be used one or more times to denote specific subsets of a larger set. It is distinct in form from *ntá-ná* 'his/her person'. The final syllable of *ntă:-nà* may or may not be a frozen 3Sg possessor suffix *-nà* etymologically (compare *tó:-nà* 'apart', §8.4.5.2). If there are two parallel occurrences, it is usually implied that the two divisions exhaust the set (132a). As a modifying adjective, *ntă:-nà* becomes {L}-toned *ntà:-nà* (132b). *yɔ̀:* undergoes Final Tone-Raising to *yɔ̌:* in (132b).

(132) a. *ntǎ:-nà* *ánd-yè,* *ntǎ:-nà* *wánj-yè*
certain go.Pfv-3PlSbj, certain stay.Pfv-3PlSbj
'Some (people) went, (the) others stayed.'

b. *yǒ:* *ntà:-nà* / *ntà:-ná-gè*
woman certain(-Pl)
'certain women, some (specific) women'

An plural form *ntà:-ná-gè* is possible, but *ntǎ:-nà* by itself is usually understood to be plural; note the 3Pl verb forms in (132a).

An explicitly singular quantifier of this type is *yɛ́:nɛ́* 'a certain (one)', with tonally irregular plural *yɛ́:nɛ́-gè* 'certain (ones)'. It is an adjective and requires a common noun: *yɔ̀:*^{L} *yɛ́:nɛ́* 'a certain woman', plural *yɔ̀:*^{L} *yɛ́:nɛ́-gè* (essentially synonymous with *yǒ: ntà:-nà*). *yɛ́:nɛ́* is typically used to introduce a referent into a discourse such as a narrative ('a certain man', etc.).

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

Section §6.3.1 described the noun-adjective construction, i.e. [N^{L} Adj(-Pl)]. When a second adjective is added, it keeps its lexical melody, the plural suffix is added to it, and the first adjective (as well as the noun) is tone-dropped, resulting in [N Adj1]^{L} Adj2(-Pl)].

(133) a. *[ùnà* *yɔ̀rdɛ̀]*^{L} *dɔ́ŋgá(-gé)*
[goat black]^{L} heavy(-Pl)
'(a) heavy black goat' (*úná*, *yɔ́rdɛ́*)

b. *[kày*^{n} *kàndà]*^{L} *pɔ́:lɔ́(-gé)*
[work(n) new]^{L} good(-Pl)
'good new job(s)' (*káy*^{n}, *kándá*)

c. *[ŋkɛ̀*^{L} *yɔ̀rdɛ̀]*^{L} *bàgàlà(-gé)*
[dog black]^{L} big(-Pl)
'big black dog(s)' (*ŋkɛ̀*, *yɔ́rdɛ́*)

6.3.3.2 Intensifying adjectives

Intensifying adjectives are a subset of adjectives that are associated with ordinary adjectives whose sense they reinforce or exaggerate. The intensifying adjective normally follows the corresponding ordinary adjective. For examples, see §4.5.7.

6.3.3.3 'Good to eat'

A verbal noun of the relevant verb (here 'eat') is preposed to an adjectival predicate. The construction is therefore of the literal type '[eating X] is good'.

(134) a. *[[è púló-gé] ɲĕ:-l] ńsà bó-∅*
[[Def flower-Pl] eat-VblN] sweet be-3SgSbj
'The flowers are good (sweet) to eat.'

b. *ɲĕ:-l pó:ló wŏl-∅*
eat-VblN good not.be-3SgSbj
'It (something) isn't good to eat.'

6.4 NPs containing a numeral

For the forms of cardinal numerals see §4.7.1. Ordinals are not considered separately here since they behave syntactically like other adjectives.

6.4.1 Ordinary N-(Adj-)Num sequences

Examples of N-Num sequences are in (135). '1' is syntactically an adjective and controls tone-dropping on the noun. Plural *-gè* on the noun is required by any following numeral '2' to '9', and is optional with higher numerals including '10'. Plural nouns have their regular tones except that plural suffix *-gè* is not tone-raised to *-gé* after nouns with lexical /L/ melody (135b). Numerals have their lexical tones, but '2' and '4' shift between {H}- and {L}-toned forms, with {H} after nouns with flat monotonal /H/ or /L/ melody and {L} after nouns with contoured tone melodies. '10' usually omits the plural suffix on the noun. For more details on the tone patterns for various numerals see §4.7.1.1-2.

(135) a. *ŋkɛ̀*^{L} / *ùnà*^{L} *tà:ŋgà*
dog^{L} / goat^{L} one
'one dog/goat' (*ŋkɛ̀*)

b. *ŋkɛ̀-gè* / *úná-gé* *négá* / *tá:ndì* / *nɔ́:m*
dog-Pl / goat-Pl two / three / five
'two / three / five dogs/goats'

c. *ŋkɛ̀(-gè)* / *úná(-gé)* *pɛ́:l(ú)*
dog(-Pl) / goat(-Pl) ten
'ten dogs'

Examples of N-Adj-Num sequences are in (136), using *yɔ́rdɛ́* 'black' and *tòmbò* 'white' as the adjectives. '1' is an adjective, so it tone-drops the preceding N-Adj combination (136a), which would elsewhere be *ùnà*^{L} *yɔ́rdɛ́* '(a) black goat' or *ùnà*^{L} *tòmbò* '(a) white goat'. Numerals '2' to '9' require plural *-gè* on the adjective. Those except '2' and '4' begin with an H-tone, and appear to control {L} on the N-Adj complex (136b-c). However, in (136b) the numeral *tà:ndì* also grows an initial H-tone, which suggests a further {HL} overlay or a local H+ modification at the left edge. (136b) could also be analysed as having a global {LHL} overlay on the entire N-Adj-Num sequence, but I reject this approach since it would not work for other numerals like '6' (136c). '2' and '4', the two numerals that switch between H-toned form (after /H/ or /L/ noun) and L-toned form (after contoured tone melodies) allow H-toned plural *-gé* and are therefore themselves L-toned (136d). This can be modeled as an {L} overlay on the N-Adj string as with other numerals, plus a terminal H-tone specifically

required by ‘2’ and ‘4’. We could therefore speak of an {L}+H overlay controlled by ‘2’ and ‘4’. {L}+H is phonologically indistinguishable from {LH}, given that tone breaks are realized near right edges, but the notation {L}+H is useful in this case since it brings out the connection with {L}. Alternatively, we could posit {L} before ‘2’ and ‘4’ as with the other numerals, but require Final Tone-Raising (a tone sandhi process) of plural *-gè* to *-gé* when flanked by L-tones. However, this would require that ‘2’ and ‘4’ be treated as /L/-toned in the input to the rule, which would be somewhat circular.

(136) a. *[ùnà yɔ̀rdɛ̀ / tòmbò]*^{L} *tà:ŋgà*
[goat black / white]^{L} one
‘one black/white goat’

b. *[ùnà yɔ̀rdɛ̀-gè / tòmbò-gè]*^{L} ^{HL}*tá:ndì*
[goat black-Pl / white-Pl]^{L} ^{HL}three
‘three black/white goats.’
(this markup preferable to ^{LHL}*[ùnà yɔ̀rdɛ̀-gè/tòmbò-gè tá:ndì]*)

c. *[ùnà yɔ̀rdɛ̀-gè / tòmbò-gè]*^{L} *kúlé:ní*
[goat black-Pl / white-Pl]^{L} six
‘six black/white goats.’

d. *[ùnà*^{L} *yɔ̀rdɛ̀-gé / tòmbò-gé]*$^{L+H}$ *nègà / kɛ̀jɔ̀*
[goat^{L} black-Pl / white-Pl]$^{L+H}$ two / four
‘two/four black/white goats.’

The {L} overlay in (136a) is tonosyntactically unproblematic. It is simply the extension of the usual N^{L} Adj pattern to [N Adj1]^{L} Adj2. By contrast, the overlays in (136b-d) are noncompositional, i.e. constructional, however we model them. This is because numerals do not control overlays on immediately preceding nouns in the absence of other modifiers. One cannot predict [N Adj]^{L} Num or [N Adj]$^{L+H}$ Num from the atomic tonosyntactic properties of numerals, so they must be stipulated as constructional formulae.

6.4.2 Adjective-Numeral Inversion absent

My assistant rejected inversion of Poss-N-Adj-Num to Poss-N-Num-Adj in e.g. ‘Amadou’s three black goats’, see §6.2.2.2. So there is no Adjective-Numeral Inversion of the sort found in several eastern Dogon languages.

6.5 NP including a determiner

All determiners (definite, ‘this’, and ‘that’) are NP-initial. They normally directly precede a noun, but an intervening possessor is allowed (“this Seydou house” meaning ‘this house of Seydou’s’). The forms of demonstratives (‘this’, ‘that’) and the definite marker are in (137), repeated from §4.4.1.1-2.

(137) Determiners

a. demonstratives (isolation forms)

ínì	proximate	'this'
èm-bà	distant	'that' (really 'over there', §4.4.2.1)
ê:	discourse-definite	'that'

b. definite (always prenominal)

è	definite	'the'

6.5.1 Tonal interactions between determiner and noun

Array (138) summarizes what happens tonally when nouns of various melodic types are combined with determiners that control various tonal modifications on them. Superscripts $^{L+}$ and $^{H+}$ at the left edge of a noun indicate local (not stem-wide) tone increments.

(138)

	noun	gloss	proximate	distant	disc-def	definite
a. /L/-toned						
	dùgù	'village'	*íní* $^{L+}$*dùgù*	*èm-bà* $^{L\ HL}$*dúgù*	*è:* $^{L\ HL}$*dúgù*	*è* $^{H+}$*dúgù*
b. /H/-toned						
	úná	'goat'	*íní* $^{L+}$*ùnà*	*èm-bà* $^{L\ HL}$*únà*	*è:* $^{L\ HL}$*únà*	*è* $^{H+}$*úná*
c. /HL/-toned						
	kó:tì	'tick'	*íní* $^{L+}$*kò:tì*	*èm-bà* $^{L\ HL}$*kó:tì*	*è:* $^{L\ HL}$*kó:tì*	*è* $^{H+}$*kó:tì*
d. /LH/-toned						
	gè:ní	'broom'	*íní* $^{L+}$*gè:ní*	*èm-bà* $^{L\ HL}$*gé:nì*	*è:* $^{L\ HL}$*gé:nì*	*è* $^{H+}$*gê:ní*
e. /LHL/-toned						
	èjègɛ́lɛ̀	'carp'	*íní* $^{L+}$*èjègɛ́lɛ̀*	*èm-bà* $^{L\ HL}$*éjégɛ́lɛ̀*	*è:* $^{L\ HL}$*éjégɛ́lɛ̀*	*è* $^{H+}$*éjègèlɛ̀* (Pl *è* $^{H+}$*éjègɛ́lɛ́-gè*)

For more examples and analysis see §6.5.2 just below for definite *è*, §6.5.3.1 for *èm-bà* and *ê:*, and §6.5.3.2 for *ínì*.

6.5.2 Definite *è* plus noun

Definite *è* (§4.4.1.1) always precedes a singular or plural noun or a sequence like N-Adj or N-Num. It cannot be used absolutely as a one-word pronoun-like NP. It is normally L-toned, but see the penultimate paragraph of this section for H-toned *é* in one context. *è* imposes an initial H-tone at the left edge of the following noun. Therefore /L/ changes to HL, and /LH/ changes to HLH. One additional modification is that the /LHL/ melody may flatten to L-tone when the initial H-tone is added, resulting in HL instead of expected *HLHL, as in $^{H+}$*éjègèlɛ̀* 'the carp' from *èjègɛ́lɛ̀*. However, this may be an optional low-level process, and I have heard the definite plural as *è* $^{H+}$*éjègɛ́lɛ́-gè* with the full HLHL pattern on the noun. Lexically H-initial stems (those of /H/ or /HL/ melody) are not overtly modified. Examples are in (139a-b) and in the rightmost column of (138) in the preceding section.

(139) a. *è* $^{H+}$*úná* / $^{H+}$*dêm* / $^{H+}$*dúgù*
Def $^{H+}$goat / $^{H+}$house / $^{H+}$village
'the goat/house/village' (< *úná*, *dèm*, *dùgù*)

b. *è* $^{H+}$*úná-gé* / $^{H+}$*dém-gè* / $^{H+}$*dúgù-gè*
Def $^{H+}$goat / $^{H+}$house / $^{H+}$village
'the goats/houses/villages' (< *úná*, *dèm*, *dùgù*)

As noted above, /LH/ melody surfaces as HLH after the local H+ is added at the left edge. Expressing this tritonal pattern is challenging for prosodically light stems. Bisyllabics with heavy initial syllable have no difficulty. In *è* $^{H+}$*nêjjé* 'the bird' (from *nèjjé*) the final H-tone is loud and clear. Bisyllabics with light initial syllable are more tricky. In *è* $^{H+}$*ɔ́rɔ̌m* 'the green sauce' (from *ɔ̀rɔ́m*), a pitch rise in the final syllable is difficult for me to hear, but even when the pitch of that syllable is flat it seems to be like that of a mid-tone. In some repetitions, my assistant prolonged the *m* sufficiently to make a faint rise audible. The definite of monosyllabic *sɔ̌:y*^{n} 'tigerfish' should theoretically be *è* $^{H+}$*sɔ̃:y*^{n} with an <HLH> syllable. What I hear is close to <HM>, with no terminal rise, but without the sharp fall typical of <HL>.

In (140), an adjective has been added to the definite noun: *è* N Adj. The definite noun has the same form it would have without the adjective, and if it has an H-tone it is not tone-dropped by the adjective. Instead, the adjective itself is tone-dropped, even if it is lexically /H/-toned ('old', 'heavy'). This is rather difficult to model formulaically, since *è* has only a local tonal effect on the left edge of the noun, but a word-level effect on the more distant adjective. The formula is therefore something like [Def $^{H+}$N] ^{L}Adj, with either *è* (at a distance) or possibly [Def $^{H+}$N] as a unit controlling {L} on the adjective.

(140) a. *è* $^{H+}$*úná* ^{L}*tòmbò* / ^{L}*kà:mnɔ̀*
Def $^{H+}$goat ^{L}white / ^{L}old
'the white/old goat' (< *úná*, *è* $^{H+}$*úná*, *tòmbò*, *ká:mnɔ́*)

b. *è* $^{H+}$*dúgù* / $^{H+}$*álàmùnɔ̀* ^{L}*bày*^{n}
Def $^{H+}$village / $^{H+}$sheep ^{L}big
'the big village/sheep' (< *dùgù*, *è* $^{H+}$*dúgù*, *àlàmùnɔ̀*, *è* $^{H+}$*álàmùnɔ̀*, *bày*^{n})

c. *è* $^{H+}$*gé:nì* / $^{H+}$*éjègèlè* ^{L}*dɔ̀ŋgà*
Def $^{H+}$broom/ $^{H+}$carp ^{L}heavy
'the heavy broom/carp' (< *gè:ní*, *è* $^{H+}$*gê:ní*, *èjègélè*, *è* $^{H+}$*éjègèlè*, *dóŋgá*)

Compare (146a-e) in §6.5.3.2 below, where however the adjective in Prox ^{L}[N Adj] is tone-dropped as part of the target domain of the {L} overlay.

A numeral is added to the noun in (141). The numeral has its regular postnominal tones, and it has no tonal effect on the plural noun. The formula is therefore Def $^{H+}$[N-Pl] Num.

(141) *è* $^{H+}$*úná-gé* / $^{H+}$*dúgù-gè* / $^{H+}$*gê:ní-gè* *tá:ndì* / *kèjɔ̀* / *kúlé:ní*
Def $^{H+}$goat / $^{H+}$village / $^{H+}$broom three / four / six
'the three/four/six goats/villages/brooms'

The combination Def-N-Adj-Num is illustrated in (142), adapted from (408d) in §14.2.2. The tonosyntactic and morphological formula is Def $^{H+}$N ^{L}[Adj-Pl] Num. The numeral (note the tones on '3') is not included in the tone-dropping domain.

(142) *è* $^{H+}$*dêm* ^{L}*bày^{n}-ŋgè* *nègà/tá:ndì*
Def $^{H+}$house ^{L}big-Pl two/three
'the two/three big houses'

Definite *è* does not co-occur with demonstratives. It can co-occur with possessors, most readily with 3Sg possessor suffix *-nà*. Recall that "definite" in Penange means discourse-definiteness ('the aforementioned').

(143) *è* $^{H+}$*sé:ŋgè-nà* / $^{H+}$*álàmùnɔ̀-nà*
Def $^{H+}$millet- / $^{H+}$sheep-3SgPoss
'his/her millet/sheep-Sg (definite)'

For a non-3Sg possessor example, therefore with the pronominal possessor sandwiched between *è* and the possessum, see *è ŋké* ^{HL}*ná:-ŋgè* 'their afore-mentioned cows' in (576) in Text 4. In this combination, only 3Pl *ŋké* possessor has a tonosyntactic effect on the noun.

When *è* immediately precedes an /L/-melody adjective (including '1', which behaves as an adjective) with no intervening noun or plural suffix, *è* becomes H-toned *é*, as in *é tòmbò* 'the white one' (plural *é tòmbò-gè*). Before an /H/-melody adjective, it remains L-toned, as in *è kándá* 'the new one', plural *è kándá-gé*.

As this last example shows, plural *-gè* is added to the noun rather than to the definite marker. Another example is *è éjègélé-gè* 'the carps'. However, when an otherwise absolute numeral is directly marked as definite, *è* takes a plural form *è-ŋgè* (subject to further tonal processes), see (108b) in §6.1.2 and (78) in §4.7.1.2). Likewise, when the definite marker immediately precedes a nonsingular numeral, it takes plural form *è-ŋgè*, as in *è-ŋgè nègà* 'the two' and *è-ŋgè tà:ndì* 'the three'. This suggests that *è* can take over the syntactic function of a missing noun, but only before a numeral.

6.5.3 Demonstrative plus noun

Demonstratives are proximate *ínì*, distant *èm-bà*, and discourse-definite *ê:*, see §4.4.1.2. If they are followed by a noun, plural marking (*-gè*) is on the noun only: *ínì* $^{L+}$*ùnà-gè* 'these goats', *èm-bà* ^{HL}*gé:ní-gè* 'those brooms'. If there is no noun, i.e. if the demonstrative is used absolutely, the demonstrative may be directly pluralized: *ínì-gè*, etc.

Demonstratives have tonal effects on the following noun, as already indicated briefly in §6.5.1 above. Further details and examples follow (next two subsections).

6.5.3.1 Distant *èm-bà* and (strong) discourse-definite *ê:* ~ *è:*

Distant *èm-bà* and (strong) discourse-definite *ê:* are treated as possessors; they therefore take {L}-toned form themselves (overtly so with *è:*^{L}), and control {HL} on the following noun and its immediate modifiers (if any). Using *èm-bà*, examples (144a-b) illustrate Dem$^{L\ HL}$N, (144c-d) illustrate Dem$^{L\ HL}$[N Adj] (recall that '1' is an adjective syntactically), (144e) illustrates Dem$^{L\ HL}$[N Num], and (144f) illustrates Dem$^{L\ HL}$[N Adj Num]. See also (138) in §6.5.1.

(144) a. *èm-bà* ^{L} / *è:*^{L} ^{HL}*únà* / ^{HL}*úná-gè*
Dist^{L} / DiscDef^{L} ^{HL}goat(-Pl)
'that goat / those goats' (< *úná*, *úná-gé*) Dem^{L} ^{HL}N

b. *èm-bà* ^{L} / *è:*^{L} ^{HL}*gé:nì* / ^{HL}*gé:ní-gè*
Dist^{L} / DiscDef^{L} ^{HL}broom(-Pl)
'that broom / those brooms' (< *gè:ní*, *gè:ní-gè*) Dem^{L} ^{HL}N

c. *èm-bà* ^{L} / *è:*^{L} ^{HL}*[káy*^{n} *kándà* / *kándá-gè]*
Dist^{L} / DiscDef^{L} ^{HL}[work(n) new(-Pl)]
'that new job / those new jobs' (< *káy*^{n}, *kándá*, *kày*^{n} ^{L} *kándá*) Dem^{L} ^{HL}[N Adj]

d. *èm-bà* ^{L} / *è:*^{L} ^{HL}*[ŋkɛ́* / *gé:ní* *tá:ŋgà]*
Dist^{L} / DiscDef^{L} ^{HL}[dog / broom one]
'that one dog/broom' (< *ŋkɛ̀*, *gè:ní*, *ŋkɛ̀* ^{L} *tà:ŋgà*, *gè:nì*^{L} *tà:ŋgà*) Dem^{L} ^{HL}[N Adj]

e. *èm-bà* ^{L} / *è:*^{L} ^{HL}*[úná-gé* / *gé:ní-gé* *négà* / *tá:ndì* / *nɔ̂:m]*
Dist^{L} / DiscDef^{L} ^{HL}[goat-Pl / broom-Pl two / three / five]
'those two/three/five goats/brooms' Dem^{L} ^{HL}[N Num]

f. *èm-bà* ^{L} / *è:*^{L} ^{HL}*[úná* / *gé:ní* *kándá-gé* *négà* / *tá:ndì* / *nɔ̂:m]*
Dist^{L} / DiscDef^{L} ^{HL}[goat / broom new-Pl two / three / five]
'those two/three/five new goats/brooms' Dem^{L} ^{HL}[N Adj Num]

Occasionally *ê:* is added at the end of an already well-formed NP. An example is *è* $^{H+}$*nɔ́bɛ́ ê:* 'the younger brother' in (575) in Text 4, with an already definite-marked noun. See also *ê:* at the end of a heavy NP ('the work that they do') in (564) in Text 3.

6.5.3.2 Proximate *íní*

Proximate *íní* requires that a following noun (if there is one) must begin with an L-tone, which then allows *íní* to become *íní* by Rightward H-Tone Spreading. Nouns of /H/ or /HL/ melody become entirely L-toned (145a). Nouns that already begin with an L-tone show no change; in particular, the H-tone of /LH/ or /LHL/ melody is not dropped (145b). See also (138) in §6.5.1.

(145) a. *íní* $^{L+}$*ùnà(-gè)*
Prox $^{L+}$goat(-Pl)
'this goat / these goats' (< *úná*, *úná-gé*)

b. *íní* $^{L+}$*gè:ní(-gè)*
Prox $^{L+}$broom(-Pl)
'this broom / these brooms' (< *gè:ní*, *gè:ní-gè*)

The combination Prox-N-Adj is illustrated in (146). '1' is an adjective and so is included here (146d). Even /H/-melody adjectives like *kándá* 'new' and *yɔ́rdɛ́* 'black' are L-toned in these examples. The tonosyntactic formula is therefore Prox ^{L}[N Adj], with a single {L} overlay extending over the N-Adj sequence. Contrast the local L+ in simple Prox-N combinations (§4.4.1.2). It is true that the noun would be tone-dropped (by the adjective) even if the

demonstrative were not there. However, the tone-dropping of the adjective can only be explained as the long-distance influence of the demonstrative.

(146) a. *íní* ^{L}*[kày^{n}* *kàndà(-gè)]*
Prox ^{L}[work(n) new(-Pl)]
'this/these new job(s)' (< *káy^{n}*, *kándá*, *kày^{n}*^{L} *kándá*)

b. *íní* ^{L}*[gè:nì* *kàndà(-gè)* / *gòlò(-gè)]*
Prox ^{L}[broom new(-Pl)/long(-Pl)]
'this/these new/long brooms' (< *gè:ní(-gè)*, *íní* $^{L+}$*gè:ní*, *kándá*, *gòlò*)

c. *íní* ^{L}*[àlàmùnɔ̀* *yɔ̀rdè(-gè)* / *tòmbò(-gè)]*
Prox ^{L}[sheep black(-Pl) / white(-Pl)]
'this/these black/white sheep' (< *àlàmùnɔ̀*, *yɔ́rdé(-gé)*, *tòmbò(-gé)*)

d. *íní* ^{L}*[ŋkɛ̀* / *ùnà* / *gè:nì* *tà:ŋgà]*
Prox ^{L}[dog / goat / broom one]
'this one dog/goat/broom' (< *ŋkɛ̀*, *úná*, *gè:ní*)

e. *íní* ^{L}*[ŋkɛ̀* / *ùnà* / *gè:nì* *gòlò]*
Prox ^{L}[dog / goat / broom long]
'this long dog/goat/broom' (< *ŋkɛ̀*, *úná*, *gè:ní*)

The combination Prox-N-Num is illustrated in (147) for representative numerals '2' to '10'. The noun has the same tonal form it would have if the numeral were absent, i.e. in Prox-N. The numeral is tone-dropped.

(147) *íní* $^{L+}$*[ùnà-gè* / *gè:ní-gè]* ^{L}*nègà* / ^{L}*tà:ndì* / ^{L}*nɔ̀:m*
Prox $^{L+}$[goat-Pl / broom-Pl] ^{L}two / ^{L}three / ^{L}five
'these two/three/five goats/brooms'

One cannot posit a formula Prox ^{L}[N Num] parallel to Prox ^{L}[N Adj] above, since nouns like 'broom' are not fully tone-dropped in (147). The data instead point to [Prox $^{L+}$N] ^{L}Num. In effect, the proximate demonstrative applies its tonosyntactic control separately to the noun (local tone change at the left edge) and to the numeral (word-level tone-dropping), rather than casting a global L-toned net on the entire N-Num sequence. Alternatively, we could envisage a single {L} overlay but with some mechanism to exempt a noninitial H-tone in the noun from being tone-lowered. Such complex tonosyntactic formulae are absent in most other Dogon languages.

Finally, the combination Prox-N-Adj-Num is illustrated in (148). Except for the addition of *íní* at the beginning, the tones are those of the [N Adj]$^{L\ (HL)}$Num formula for most numerals (148a), and the variant [N Adj]$^{L+H}$ Num for '2' and '4', presented above as (136b-d) in §6.4.1. So it is not necessary to assume that any further tonosyntactic work is done by the demonstrative in (148a-b). One could argue for tonosyntactic islands here but I omit the ⊂…⊃ brackets.

(148) a. *íní* *[ùnà* *yɔ̀rdɛ̀-gè* / *tòmbò-gè]*^{L} *tá:ndì* / *kúlɛ́:ní*
Prox [goat black-Pl / white-Pl]^{L} three / six
'these three/six black/white goats.'

b. *íní* *[ùnà* *yɔ́rdɛ̀-gé* / *tòmbɔ̀-gé]*$^{L+H}$ *nègà* / *kɛ̀jɔ̀*
Prox [goat black-Pl / white-Pl]$^{L+H}$ three / six
'these two/four black/white goats.'

6.6 Universal and distributive quantifiers

6.6.1 'All' or 'each' (*sèlè*)

The universal quantifier *sèlè* 'all' can be used absolutely ('everything', 'everybody').

(149) a. *sèlè* *sógú-lè-∅*
all buy-Rev.Pfv-3SgSbj
'He/She sold everything.'

b. *sèlè* *ánd-yè*
all go.Pfv-3PlSbj
'Everybody went'.

If *sèlè* is added to a countable noun in the sense 'all', plural *-gè* is required on the noun (150a-b). It may follow an indefinite singular noun denoting a mass or collectivity (150c), but for such nouns definite marking is preferred. An {LH} overlay with just a final H-tone is applied to the noun, including the plural suffix if present. Adjectives and numerals are included in the domain of {LH} (150d-e).

(150) a. *[sàgàllà-gé*^{LH} *sèlè]* *[gándà* *ŋ]* *ánd-yè*
[young.person-Pl^{LH} **all**] [exodus Loc] go.Pfv-3PlSbj
'All the young people have gone away (to work).' (< *ságállá-gé*)

b. *àlàmùnɔ̀-gé*^{LH} / *ùnà-gé*^{LH} / *gè:nì-gé*^{LH} / *kò:tì-gé*^{LH} / *èjègèlè-gé*^{LH} *sèlè*
sheep-Pl^{LH} / goat-Pl^{LH} / broom-Pl^{LH} / tick-Pl^{LH} / carp-Pl^{LH} all
'all the sheep/goats/brooms/ticks/carps' (< *àlàmùnɔ̀*, *úná*, *gè:ní*, *kó:tì*, *èjègélè*)

c. *dùgú*^{LH} *sèlè*
village^{LH} all
'(the) whole village' (< *dùgù*)

d. *[ùnà* *tòmbɔ̀-gé* / *yɔ́rdɛ̀-gé]*^{LH} *sèlè*
[goat white-Pl / black-Pl]^{LH} all
'all (the) white/black goats' (< *úná*, *tòmbɔ̀*, *yɔ́rdɛ́*)

e. *[ùnà-gè* *tà:ndí]*^{LH} *sèlè*
[goat-Pl three]^{LH} all
'all three goats'

Since the final H-tone is both preceded and followed by L-tones, there is some possibility that it could be accounted for by Final Tone-Raising. However, since a tone overlay is needed here anyway to account for the L-tones, not much would be gained.

The same {LH} overlay is observed with possessed nouns, though the possessor keeps its normal tones. The usual {LHL} and {HL} possessed overlays (151a-b) are replaced by the quantifier-controlled {LH} when *sèlè* is added (151c-d).

(151) a. *ŋ́* ^{LHL}*sě:ŋgè*
1SgPoss ^{LHL}millet
'my millet'

b. *ḿbé* ^{HL}*sé:ŋgè*
1PlPoss ^{HL}millet
'our millet'

c. *ŋ́* / *ḿbé* *sè:ŋgé*^{LH} *sèlè*
1SgPoss/1plPoss millet^{LH} all.
'all my/our millet'

d. *sè:dù*^{L} *sè:ŋgé*^{LH} *sèlè*
S^{L} millet^{LH} all
'all of Seydou's millet'

The quantifier-controlled {LH} also applies when the noun is determined by a demonstrative ('this', 'that'). The post-demonstrative nouns in (152a,c) have just the demonstrative-controlled left-edge L+, but when *sèlè* is added the noun has {LH} overlay (152b,d).

(152) a. *íní* $^{L+}$*èrɛ̀:ŋgè*
Prox $^{L+}$rice
'this rice' (*érɛ́:ŋgé*)

b. *íní* *èrɛ̀:ŋgé*^{LH} *sèlè*
Prox rice^{LH} all
'all this rice'

c. *íní* $^{L+}$*ùnà-gè*
Prox $^{L+}$goat-Pl
'these goats'

d. *íní* *ùnà-gé*^{LH} *sèlè*
Prox goat-Pl^{LH} all
'all these goats'

A distant demonstrative controls {HL} on a simple noun (153a). This is again replaced by {LH} when *sèlè* is added (153b).

(153) a. *èm-bà* ^{HL}*érɛ́:ŋgè*
Dist ^{HL}rice
'that rice (over there)'

b. *èm-bà* *èrɛ̀:ŋgé*^{LH} *sèlè*
Dist rice^{LH} all
'all that rice (over there)'

However, when the noun is preceded by definite *è*, a following *sèlè* has no tonal effect on the noun. In other words, the definite-noun combination is a tonosyntactic island.

(154) a. *⊂è* $^{H+}$*sé:ŋgè* / $^{H+}$*dúgù⊃* *sèlè*
⊂Def $^{H+}$millet/ $^{H+}$village⊃ all
'all the millet / the whole village'

b. *⊂è* $^{H+}$*yɔ́:-gè* / $^{H+}$*álàmùnɔ̀-gè⊃* *sèlè*
⊂Def $^{H+}$woman-Pl/ $^{H+}$sheep-Pl⊃ all
'all the women / sheep'

sèlè can also be used distributively ('each X' or 'every X'), with a singular common noun X and with singular agreement. See (543) in Text 1 ('he put each person's share …'), and (573) in Text 3 ('everyone goes [back] to his [own] house').

For 'always' see §8.4.5.3.

6.7 Accusative (*-ŋ* ~ *-ẁ^{n}*)

The accusative morpheme *(-)ŋ* ~ *(-)ẁ^{n}* occurs at the end of NPs (including pronouns). It can be analysed morphologically as an encliticized postposition. The accusative is applied to direct objects and to indirect objects (recipient of 'give' and 'say', referred-to addressee with 'say'); see §8.1.1.

The accusative may be the "same" morpheme in some sense as locative *ŋ* ~ *w^{n}* (§8.2.3.2). In practice the accusative occurs only with personal pronouns and NPs with animate (especially specific human) reference. Since locative PPs normally have inanimate complements, there is usually no confusion.

For pronouns, *-ŋ* is added to the independent (rather than proclitic) form of the pronoun. The nasal may be phonetically weakened to nasalization of the preceding vowel, but I have not heard it as rounded. 1Sg *mì-ŋ*, 2Sg *ò-ŋ*, and 3Sg *ɔ̀nɔ̀-ŋ* are {L}-toned, but become *mí-ŋ*, *ó-ŋ*, and 3Sg *ɔ̀nɔ́-ŋ* before e.g. {L}-toned 3Sg-subject verbs or {L}-toned imperatives by Final Tone-Raising. Tables of independent and accusative pronouns are in §4.3.1.

Examples of *-ẁ^{n}* with NPs are in (155). That the enclitic is L-toned in this variant is observed with 'my father'. The rounding is heard inconsistently in isolation. In phrasal contexts *-ẁ^{n}* can appear as an assimilated homorganic nasal (before a stop) or as vocalic nasalization. Here as elsewhere *w^{n}* functions as a lenited *ŋ*. In 'the big dog', the accusative morpheme follows the adjective.

(155)

unmarked	accusative	gloss
sěydù	*sěydù-w^{n}*	'Seydou (man's name)'
ŋ́ bɔ̀bɔ́	*ŋ́ bɔ̀bɔ̂-w^{n}*	'my father'
è $^{H+}$*wê:*	*è* $^{H+}$*wê:-w^{n}*	'the child'
wè:-gé	*wè:-gè-w^{n}*	'children'
è $^{H+}$*ŋkɛ̂*	*è* $^{H+}$*ŋkɛ̂-w^{n}*	'the dog'
è $^{H+}$*ŋkɛ́* ^{L}*bàgàlà*	*è* $^{H+}$*ŋkɛ́* ^{L}*bàgàlà-w^{n}*	'the big dog'

The accusative enclitic is usually omitted on NPs ending in a numeral ('two dogs'). However, adding a determiner to the noun ('the two dogs', 'those two dogs', 'my two dogs') makes the accusative more felicitous (156)

(156) *[è* *ŋ́kɛ́-gɛ̀* *nègà-wⁿ]* *gíyɛ́-∅*
[Def H+dog-Pl two-Acc] kill.Pfv-3SgSbj
'He/She killed the two dogs.'

The accusative is not used with focalized objects (157); see §13.1.3.

(157) *mì = yò* *búndé* *ná*
1Sg=Foc hit.Pfv 3SgSbj
'It was me [focus] that he/she hit.'

Accusative *-ŋ* ~ *-ẁⁿ* is not pronounced before a second person subject proclitic (2Sg *á*, 2Pl *à*). See (165b) in §8.1.1. These second person proclitics elsewhere have a strong tendency to merge phonologically with the preceding word.

7 Coordination

7.1 NP coordination

7.1.1 NP conjunction (*[X ni] [Y ni]*)

The conjunction particle *ni* 'and' (identical to the instrumental postposition, §8.1.2) is added to both left and right conjuncts. In isolation, prepausally, or before an H-tone, it gets its tone by spreading from the preceding syllable, as in both conjuncts in (158a) and the second conjunct in (158b). However, in the left (or any nonfinal) conjunct, if it is both preceded and followed by L-tones its tone is raised to *ní*, as in (158b), by Final Tone-Raising (§3.6.3.1). This process (or perhaps nonterminal intonational pitch-raising) can also occur after an L-tone before a clause-internal pause. So before a pause (158b) can either appear with final L-toned *nì* as shown here, or with a final high tone (or pitch).

(158) a. *[yɔ̀:-gè nì] [wálá-gé ní]*
[woman-Pl **and**] [man-Pl **and**]
'women and men'

b. *[á:mádù ní] [bɔ̀bɔ̀-nà nì]*
[Amadou **and**] [father-3SgPoss **and**]
'Amadou and his father'

Textual examples are 'his children and he' in (547) in Text 1, and both 'an older brother and a younger brother' and 'cattle and sheep' in (577) in Text 4.

This construction can be used to conjoin NPs (including pronouns and place names) and adverbial phrases (including PPs). If both conjuncts are complements of the same postposition, the postposition may be repeated and the PPs conjoined (159b), or the postposition can take the conjoined NP as complement (159c). When two instrumental PPs are conjoined, the logically expected double *ni ni* is avoided, and there is a single *ni* after each NP (159d).

(159) a. *[bàmàkɔ̀ nì] [móttì nì] bí-yà*
[Bamako **and**] [Mopti **and**] be-3PlSbj
'They are in Bamako and Mopti (cities).'

b. *[dèm jáŋgà^{n} nì] [pàŋgà jáŋgà^{n} nì] bí-yà*
[house inside **and**] [granary inside **and**] be-3PlSbj
'They are [in the house] and [in the granary].'

c. *[[[dèm ní] [pàŋgà nì]] jáŋgà^{n}] bí-yà*
[[[house **and**] [granary **and**] inside] be-3PlSbj
'They are [in [the house and the granary]].'

d. *[dɔ́ɲjɔ́gɔ́ ní] [dà:mbɛ̀ nì] kùbɔ́ ŋ́ bò*
[pick-hoe **Inst**] [daba **Inst**] do.farm.work.Ipfv 1SgSbj Ipfv
'I work (in the fields) [with [a pick-hoe and a daba (hoe)]].'

My assistant did not accept accusative *-wⁿ* (or variant) at the end of a conjoined NP, or on both conjuncts.

In discourse it sometimes happens that the speaker utters one NP, then adds a second conjunct as an afterthought. An example of this is in (570) in Text 3. The first NP is the verbal-noun phrase 'to cook the meal', without *ni*. To make this the left conjunct after the fact, it is resumed by discourse-definite *ɛ̂:* 'that'. The sequence is therefore '… to cook the meal, that and to (go and) draw water'.

The universal quantifier *sèlè* 'all' can occur at the end of a conjoined NP, functioning as a right-edge marker. An example is (73) in §4.7.1.1.

7.1.2 "Conjunction" of verbs or VP's

Verbs, VPs, and clauses are not conjoined by *ni*. The rough equivalent of conjunction for such elements is chaining, see chapter 15.

7.2 Disjunction

7.2.1 'Or' particle (*wàgà→*)

The disjunctive particle is *wàgà→*. It is often grouped prosodically with the final disjunct, hence *[X [wàgà→ Y]]* 'X or Y'. The arrow indicates intonational prolongation of variable duration. The particle is most common in interrogative contexts, and it is difficult to elicit unambiguously noninterrogative examples. In a question (or a "statement" whose form is suggestive of a question), if *wàgà→* is prepausal or if the prolongation is considerable the usual interrogative intonation (final pitch rise) is applied: *wàgà→ˊ*, phonetic [wàgàā→].

Where logically possible, the disjunction is expressed at the level of an NP or similar constituent, which may be extraposed (right-dislocated).

(160) *bàmàkɔ̀ ándá-á wò [wàgà→ ségú]*
Bamako go.Ipfv-2SgSbj Ipfv [**or** Segou]
'Are you-Sg going to Bamako or (are you-Sg going) to Segou?' (cities)

7.2.1.1 *wàgà→* 'or' preceding second disjunct in indicative context

wàgà→ 'or' is added before the second NP coordinand in the disjunctive question (161). The 'or' phrase is added after a complete clause, in the fashion of an afterthought.

(161) *[wá: sèlè] àlàmùnɔ̀-gè sɛ́mà-à-yà*
[day all] sheep-Pl slaughter.Ipfv-2PlSbj-Ppl
[wàgà→ˊ úná-gé]
[**or** goat-Pl]
'Each day, do you-Pl slaughter <u>sheep</u> [focus], or goats?'

An attempt to elicit a noninterrogative disjunction by switching the subject to first singular resulted in (162). In theory this should be a statement, but the form is indistinguishable from that of a question.

(162) *[wá:* *sèlè]* *àlàmùnɔ̀* *sémɔ́* *ŋ̀* *b-yà*
[day all] sheep-Pl slaughter.Ipfv 1SgSbj Ipfv-Ppl
[wàgà→ *úná]˦*
[**or** goat-Pl]
'Each day, (do) I slaughter a sheep [focus], or a goat (?)'

7.2.1.2 *wàgà→* after each disjunct in interrogative context

Although my assistant preferred to extrapose the disjunctive phrase after the verb in examples like those given above, it was possible to elicit an example with fronted disjunct (163). The left but not right disjunct has the terminal pitch rise of the interrogative intonation pattern. The 'or' disjunctive particle occurs once, between the two disjunctive constituents.

(163) *[àlàmùnɔ̀˦* *[wàgà→* *àlgà]]* *sɛ́mà-à*
[sheep [or pig]] slaughter.Ipfv-2SgSbj
'Will you-Sg slaughter a sheep or a pig [focus]?'

7.2.2 Clause-level disjunction

As noted above, the preference is to express disjunction at the subclausal constituent level, with a shared predicate. However, where the two alternative propositions require different predicates, the disjunctive particle must scope over a clause.

(164) *bàmàkɔ̀* *ándá-á* *wò*
Bamako go.Ipfv-2SgSbj Ipfv
[wàgà→ *nùŋ* *wánjá-á* *wò]*
[**or** here stay.Ipfv-2SgSbj Ipfv]
'Are you-Sg going to Bamako, or are you-Sg staying here?'

8 Postpositions and adverbials

Penange has morphologically simple postpositions for the instrumental (*ni*) and locative (*ba*). Accusative *-ŋ* ~ *-ẁ*^{n} (§6.7) could also be classified as a postposition since it follows complete NPs, and the same morpheme (or a homophone) is also used as locative postposition in some combinations.

These simple postpositions are complemented by composite postpositions. The latter typically take the form of a possessed noun followed by a simple postposition, usually locative (§8.2.4-13). The nouns in these composite postpositions, and purposive *námù* (§8.3), have the {HL} contour of possessed nouns, and the complement can be taken to be a possessor.

8.1 Dative and instrumental

8.1.1 Dative absent

No dative postposition occurs with ditransitive 'give' (§11.1.3.3), quotative 'say' (§11.1.2.3), or the unique derived benefactive 'do for' (§9.2.4). The recipient or beneficiary is expressed as a direct object, often alongside another direct object. If animate and if not directly followed by a second person subject clitic, the recipient or beneficiary can take accusative marking, as with 'Seydou' in (165a) and 'me' in (165c).

(165) a. *sěydù-*^{n} *wálé* *táb-yè*
Seydou-Acc money give.Pfv-3PlSbj
'They gave the money to Seydou.'

b. *yè:* *mì* *á* *nè-l*
thing **1Sg** 2SgSbj say-PfvNeg
'You-Sg didn't say anything to me.'

c. *yè:* *mí-ŋ* *nè-l-∅*
thing **1Sg-Acc** say-PfvNeg-3SgSbj
'He/She didn't say anything to me.'

d. *yè:* *mì* *á* *kà:-ndè-l*
thing **1Sg** 2SgSbj do-for-PfvNeg
'You-Sg didn't do anything for me.'

See also accusative 3Sg *ɔ̀nɔ́-ŋ* '(for) him' in benefactive sense in (546) in Text 1 ('They put [embers] in it for him'). Similarly, with omission of the optional accusative marker, 3Pl *ŋké* in 'you cook porridge and a meal for them' in (570) in Text 3.

8.1.2 Instrumental (*ni*)

This postposition is basically L-toned. It becomes H-toned *ní* after a noun of /H/ (but not /LH/) melody. It is also raised to *ní* by Final Tone-Raising when flanked by L-tones.

Its core sense is instrumental ('by means of X', 'using X'). It (or a homophonous morpheme) is also the 'and' conjunction (§7.1.1).

(166) a. invariant H-toned *ní* after H-toned word
dɔ́njɔ́gɔ́ ní 'with a pick-hoe'

b. L-toned *nì* after L-toned word (eligible for Final Tone-Raising in context)
dà:mbɛ̀ nì 'with a daba'
tùmà nì 'with a stick'

c. invariant L-toned *nì* after contour-toned word
gɛ̀:ní nì 'with a broom'
[è $^{H+}$*gé:nì] nì* 'with the broom'
kìn-wé: nì 'with a stone'
èjɛ̀gɛ́lɛ̀ nì 'with a carp'

Some examples are in (167). Final Tone-Raising between L-tones has applied in (167a,c).

(167) a. *[tùmà ní] bùndè-l-∅*
[stick **Inst**] hit-PfvNeg-3SgSbj
'He/She did not hit (it) with a stick.'

b. *[gè:ní nì] gɛ́:n-yɛ̀-∅*
[broom **Inst**] sweep-MP.Pfv-3SgSbj
'He/She swept with a broom.'

c. *[è* $^{H+}$*námà] [tàlà ní] pùrùgò*
[Def $^{H+}$meat] [knife **Inst**] cut.Imprt
'Cut-2Sg the meat with a knife!'

d. *[[ŋ́ dă:mbɛ̀] nì] kúbɔ̀ bò-∅*
[[1SgPoss daba] **Inst**] do.farming.Ipfv Ipfv-3SgSbj
'He/She will farm with my daba.'

'By force' is *sɛ̀mbɛ̀ nì*.

ni also occurs with nouns denoting times or seasons: *gè:nà nì* 'in (i.e., during) the rainy season', *dógó ní* 'at night', *gè:*^{n} *nì* 'during the day' (lit. 'with sun', cf. *gè:*^{n} 'sun'). The pattern *[X* ^{HL}*N] nì*, parallel to complex spatial postpositions of the form *[X* ^{HL}*N] ŋ* discussed below (with "possessed" noun N), appears to occur in *[sú:*^{n} ^{HL}*wɛ̂:] nì* 'during (the) month' based on *wɛ̀:* 'moon, month'.

ni also occurs with nouns denoting vehicles: *móbɛ̂l nì* 'by motor vehicle (e.g. truck)', e.g. in 'I went to Bamako by truck'.

For H-toned *ní* in 'this/that way' adverbs, see §4.4.2.2.

8.2 Locational postpositions

8.2.1 Locative, allative, and ablative functions

Verbs rather than postpositions are used to distinguish static locative 'at, in' from allative 'to' and from ablative 'from'. The fact that verbs occur in various types of chains is helpful here. Most motion verbs imply an allative relationship to a locational complement. *gwé* 'go out, leave, depart' and its derivatives are the usual verbs to indicate an ablative relationship.

However, an emphatic '(all the way) from X' can be expressed by the PP-like phrase *X dígí* 'since', and emphatic '(all the way) to X' can be expressed as *hâl X (bà)*, with preposed *hâl* 'until, all the way to'.

(168) a. *[móttì dígí] dúgú-rè-∅*
[Mopti **since**] run.Pfv-3SgSbj
'He/She ran all the way from Mopti.'

b. *[dùgù-rè nà] [hâl móttì (bà)]*
[run.Pfv 3SgSbj] [**until** Mopti (Loc)]
'He/She ran all the way to Mopti.'

For *dígí* 'approximately' see §8.4.3.1.

8.2.2 Simple and complex postpositions

Most of the complex (compound, composite) postpositions are locationals of the type [[X's noun] in], compare English *in front of X* or *ahead (a-head) of X*. In several complex postpositions, the regular simple locative postposition *ba* is replaced by w^n ~ *ŋ*, though there are some complex postpositions that do include *ba*. In the case of 'under', *ba* is used for a human/animate landmark, *ŋ* for an inanimate one.

Since the noun is "possessed," it is subject to tone overlays associated with preceding possessors. Its final syllable is also subject to tone-raising before an L-tone. After a nonpronominal "possessor" the noun has {HL} tones. 3Sg possessor is expressed by a suffix *-nà* or *-ná* that does not affect the lexical tone melody of the noun. Sample paradigms are in (169). Tonal superscripts are generally omitted in this chapter.

(169)

	'under X'	'in front of X'	'on X'	'beside X'
1Sg	*ŋ́ sùgù bà*	*ŋ́ tègò bà*	*ŋ́ kò* w^n	*ŋ́ pà* w^n
1Pl	*mbé súgú bá*	*mbé tégó bá*	*mbé kó* w^n	*mbé pá* w^n
2Sg	*á sùgù bà*	*á tègò bà*	*á kò* w^n	*á pà* w^n
2Pl	*ábé súgú bá*	*ábé tégó bá*	*ábé kó* w^n	*ábé pá ŋ*
3Sg	*sùgù-nà bà*	*tègò-nà bà*	*kó:-ná* w^n	*pă:-nà* w^n
3Pl	*ŋké súgú bá*	*ŋké tégó bá*	*ŋké kó* w^n	*ŋké pá* w^n
NP	*X súgù bà*	*X tégò bà*	*X kô* w^n	*X pâ* w^n

The complement of the complex postposition, as the "possessor," has the same phonological form as a regular possessor. Personal names are dropped to {L} (170a), and a final HL- or LH-toned noun is subject to flattening (170b).

(170) a. *[à:màdù*^{L} *tégò]* *ŋ̀*
[A^{L} front] Loc
'in front of Amadou' (< *á:mádù*)

b. *[[ŋ́* *bɔ̀bɔ̀]* *tégò]* *ŋ̀*
[[1SgPoss father] front] Loc
'in front of my father' (< *ŋ́ bɔ̀bɔ́*)

8.2.3 Locative 'in, at, on'

8.2.3.1 Locative (*ba*)

The unmarked locative postposition 'in, at' is *ba*. Its gets its tone by spreading from the preceding syllable. I have not observed Final Tone-Raising before an L-tone.

(171)

noun	locative	gloss
a. after H-tone		
ébá	*ébá bá*	'in/at the market'
ɔ́ndɔ́	*ɔ́ndɔ́ bá*	'at the well'
b. after L-tone		
dùgù	*dùgù bà*	'in the village'
dèm	*dèm bà*	'in the house, at home'
kɔ̀y^{n}	*kɔ̀y^{n} bà*	'in the bush'
yàlà	*yàlà bà*	'in the field'
bàmàkɔ̀	*bàmàkɔ̀ bà*	'in Bamako (city)'
è $^{H+}$*dúgù*	*[è* $^{H+}$*dúgù] bà*	'in the village' (definite)

This postposition is used to specify location by reference to a landmark or zone. 'At X' is often the best English translation. It occurs in high-frequency expressions like 'in the (i.e. our) village', where a precise spatial relationship is not necessary. For enclosure inside a container or other confined space, *[X jáŋgà] ŋ̀* is used (§8.2.4).

In some complex postpositions, *ba* is generally human/animate while *ŋ* ~ *w^{n}* is generally inanimate.

8.2.3.2 Locative *ŋ* ~ *w^{n}*

This morpheme competes with *ba* as the locative postposition. It occurs almost exclusively with inanimate complements. It may be the "same" morpheme as the accusative (§6.7), which is largely limited to humans. Before a C-initial word, both locative and accusative are realized as homorganic nasals. The tone is spread from the left.

ŋ ~ *w^{n}* is added directly to a noun in certain common phrases, as in (172).

(172) *[kíndó* *ŋ́]* *dâ:y^{n}-∅*
[shade **Loc**] sit.Pfv-3SgSbj
'He/She sat down in the shade.'

More often, locative *ŋ* ~ *w*^{n} is part of complex postpositions, which are documented in the following sections. Here too it competes with *ba*.

8.2.4 'Inside X' (*[X jáŋgà] ŋ̀*)

This complex postposition puts the trajector inside a container or other bounded zone. It is based on a possessed form, with {HL} overlay, of the noun *jàŋgà* 'belly'. In the postposition, *ŋg* is optionally reduced to *ŋ*, hence *jáŋà*.

(173) a. after H-tone

kójí	*kójí jáŋgà ŋ̀*	'in the grass'

b. after L-tone

dòn	*dòn jáŋgà ŋ̀*	'in(side) (the) mouth'
tègèlè	*tègèlè jáŋgà ŋ̀*	'in(side) (the) waterjar'
mì:	*mì: jáŋgà ŋ̀*	'in (the) water'
ŋ́ yàlà	*[ŋ́ yàlà] jáŋgà ŋ̀*	'in my field'
è dúgù	*[è dúgù] jáŋgà ŋ*	'in the village'
ín dùgù	*[ín dùgù] jáŋgà ŋ*	'in this/that village'
è dúgù-gè sèlè	*è dúgù-gè sèlè jáŋgà ŋ*	'in all the villages'

An example is (174).

(174) *sàkkó:sì* *[[dèm* *jáŋgà]* *ŋ̀]* *ŋ́* *nwà:-m*
bag [[house **belly**] **Loc**] 1SgSbj go.in-Caus.Pfv
'I put the bag in(side) the house.' (< *dèm*)

Textual examples: (543) in Text 1 ('in a sack'), (544) in Text 1 ('inside the house'), (581) in Text 4 ('inside the [housing] compound'), (591) in Text 4 ('inside the outhouse'), and (600) in Text 4 ('inside the village')

8.2.5 'Under, at the bottom/base of X' (*[X súgù] w*^{n}*], [X súgù] bà]*)

[X súgù] w^{n}*]*, often heard with final *ŋ* or vocalic nasalization for *w*^{n}, denotes a position at or just next to the base or bottom of an entity (tree, mountain, well), or directly under it. Noun *sùgù* means 'base, bottom'. For a human or higher animate landmark ('under me', 'under the horse'), *bà* replaces *w*^{n}. The 3Sg pronominal form is *sùgù-nà bà*.

(175) a. *[è* *dúgù]* *[[kìnì* *súgù]* *ŋ̀]* *bô-∅*
[Def village] [[stone **base**] **Loc**] be-3SgSbj
'The village is at the base of the mountain.' (< *kìnì*)

b. *má:ŋgórò* *[[óy*^{n} *súgù]* *ŋ̀]* *dù:ndò*
mango [[waterjar **base**] **Loc**] put.down.Imprt
'Put the mangoes down under the waterjar!' (< *óy*^{n})

c. *[ŋ́* *sùgù]* *bà*
[1SgPoss **base**] **Loc**
'under me'

Adverbial PP *sùgù bà* means ‘at the base/bottom’ (e.g. of a well), French *au fond*.

Another semantically similar adverbial PP is *sígó-lò bà* or *sígó-lò* w^n ‘down below’, referring (for example) to the ground floor from the perspective of an upper floor, or referring to the ground level from the perspective of the top of a tree. *sígó-* in *sígó-lò* is related to *sígé* ‘foot’ and is parallel in structure to its antonymn *kó:-lò bà* ‘on top, above, overhead’ (§8.2.6 below). However, the phonological similarity of *sùgù* ‘base, bottom’ and *sígé* ‘foot’ is suggestive.

8.2.6 ‘Above, over, at the top of X’ (*[X kó:-lò] bà]* or *[X kó:-lò]* w^n*]*)

This complex postposition is related to the adverbial phrase *kó:-lò bà* ‘on top, above, overhead’, denoting a position high above a landmark, or a position perched at the top of a tall landmark (tree, hill). The 3Sg pronominal form is *kó:-ló-nà bà* or *kó:-ló-nà* w^n ‘above/over him/her/it’.

(176) *nèjjé-gè* *[[mbé* *kó:-lò]* *ŋ]* *pìrìgò* *bí-yà*
bird-Pl [[1PlPoss **above**] **Loc**] fly.Prog Prog-3PlSbj
‘(The) birds are flying above us.’

‘Over Pinia (village)’ is *péná kó:-lò ŋ̀* (< *péná*).

kó:-lò is based on *kó:* ‘head’. The morpheme *-lò* recurs in *sígó-lò* in the antonymic adverbial PP *sígó-lò bà* ‘below, underneath’ (§8.2.5 above).

8.2.7 ‘On (the head of) X’ (*[X kò] ŋ*)

This complex postposition is based on a possessed form of *kó:* ‘head’. However, here it has a short vowel (except in the 3Sg form). Unlike most composite postpositions it does not behave tonally as a possessum. It lacks the usual {HL} overlay, and a preceding trajector does not flatten its own tones. The 3Sg pronominal form is *kó:-ná ŋ* ‘on him/her/it’. The final locative postposition *ŋ* is pronounced w^n prepausally, as in other combinations.

This postposition occurs not only in the more or less literal sense, as in ‘a mango fell on me (=on my head)’, but also when the landmark is a surface. In my data, the trajector is in contact with the object or surface, so ‘on’ is the best gloss.

(177) a. *ámbú* *[[bí:ŋgò* *kò]* *ŋ]* *bô-∅*
blanket [[mat **head**] **Loc**] be-3SgSbj
‘The blanket is on the mat.’

b. *[[dógò* *kò]* *ŋ]* *bô-∅*
[[roof **head**] **on**] be-3SgSbj
‘He/She is on the roof.’

c. *[[ŋ́* *kò]* *ŋ̀]* *tíbé-∅*
[1Sg **head**] **Loc**] fall.Pfv-3SgSbj
‘It fell on me (=on my head).’

8.2.8 ‘Beside, next to (sth); against, on (wall)’ (*[X pâ] ŋ*)

This complex postposition is presumably derived from an original noun that is not attested elsewhere. It describes horizontal proximity (‘next to me’, ‘beside the tree’), including actual contact (‘against the wall’, ‘on the wall’). The 3Sg pronominal form is *pă:-nà ŋ* ‘beside him/her/it’. The construction has the tone patterns of a possessed NP.

(178) *[[tìndìgɔ̀ / mótò / úná / gè:ní pâ] ŋ] yàbà-∅*
[[tree/motorcycle/goat/broom **against**] **Loc**] be.against.Stat-3SgSbj
‘He/She is (leaning) against a tree/motorcycle/goat/broom.’

For ‘on (wall)’ see (349b) and (350b) in §11.2.3. A related sense ‘(going) alongside (X)’ occurs in (566) in Text 3 and in (577) in Text 4. For an abstract sense see discussion at the end of §12.2.1.

In (597) in Text 4, *mŭ:*$^{+H}$*-nà ŋ̀* ‘(he put food/water down) next to her’ seems to represent an alternative construction, otherwise unattested. Other elicited forms: *á* ^{LH}*mŭ: ŋ̀* ‘next to you-Sg’, *ḿbé* ^{H}*mû: ŋ̀* ‘beside us’.

8.2.9 ‘In front of’ (*[X tégò] w*^{n})

Related to adverbial phrase *tégó bá* or *tégó w*^{n} ‘forward, ahead’ is this complex postposition. The 3Sg pronominal form is *tégó-ná ŋ* ‘in front of him’.

(179) a. *[[ŋ́ tègò] w*^{n}*] bô-∅*
[[1Sg **front**] **Loc**] be-3SgSbj
‘He/She is in front of me.’

b. *[[tìndìgɔ̀ tégò] w*^{n}*] bì-ý-yè*
[[tree **front**] **Loc**] lie.down-MP.Pfv-3PlSbj
‘They lay down in front of the tree.’ (*tìndìgɔ̀*)

c. *[gè:ní tégò] w*^{n}*]*
[broom **front**] **Loc**]
‘in front of a broom’

8.2.10 ‘Behind/after X’ (*[X túndù] bà*)

Spatial ‘behind X’ is *[X túndù] bà*. Temporal ‘after X’ is *[X túndù] w*^{n}. The related noun is *tùndù* ‘rear (of sth)’. *[X túndù] w*^{n} can also mean ‘in addition to X’ or ‘aside from X’, see (598) in Text 4.

(180) a. *[[ŋ́ tùndù] bà] bô-∅*
[[1Sg **behind**] **Loc**] be-3SgSbj
‘He/She is behind me.’

b. *[[sɛ̀ndì*^{L} *túndù] w*^{n}*] égó ŋ́ bò*
[[holy.day^{L} **behind**] **Loc**] come.Ipfv 1SgSbj Ipfv
‘I will come (back) after the holy day.’ (*sɛ́ndí*)

8.2.11 'Chez' (*[X sôw^{n}] bà*, *[X démù] ŋ*)

'Chez X', i.e. 'at the house of X', 'in the presence of X', or 'in the midst of/among X' is expressed by (*[X sôw^{n}] bà*. For examples see *[è ŋké* ^{HL}*ná:-ŋgè] sôw^{n} bà* 'among their cows' (576) in Text 4 and *nòlò-nà sôw^{n} bà* '(at) his friend's place' (582) in Text 4. 'Chez lui' is *sŏn-nà bà* , 'chez moi' is *ŋ́ sŏw^{n}-bà*.

An alternative, meaning specifically 'at the house of X', is based on the noun *dèm* 'house', which here takes {HL} tone as possessed noun and is followed by locative *ŋ*, hence *[X démù] ŋ*. See (573) in Text 3. This shows how easily nouns can still be incorporated into complex postpositions.

8.2.12 'Between' (*[[X nì Y] nâ:] ŋ*)

The compound postposition *nâ: ŋ* is added to an NP denoting a plurality, for example a plural noun or pronoun, or a conjoined NP *[X ni] [Y (ni)]* (§7.1.1). Before *nâ: ŋ*, the second occurrence of the *ni* 'and' conjunction is reduced to [n] or omitted.

(181) a. *[mbé* *dúgú]*
[1PlPoss village]
[[[[séwá:rè *nì]* *[dwá:^{n}sà* *(n)]]* *nâ:]* *ŋ]* *bô-∅*
[[[[Severe and] [Douentza and]] **middle**] **Loc**] be-3SgSbj
'Our village is located between Severe and Douentza.'

b. *[[mbé* *nâ:]* *ŋ]* *dà:y^{n}à*
[[1PlPoss **middle**] **Loc**] sit.Imprt
'Have a seat between us!'

c. *[wálá-gé* *nâ:]* *ŋ*
[man-Pl **middle**] **Loc**
'between/among men'

8.2.13 'In the possession/custody of X' (*[X kî:] ŋ̀*)

A PP 'with (=in the temporary possession of) X' is produced by this composite postposition. No semantically related noun #*kí:* is known.

(182) a. *[è* $^{H+}$*pô:y]* *[kí:-ná* *ŋ́]* *bô-∅*
[Def $^{H+}$sack] [**custody**-3SgPoss **Loc**] be-3SgSbj
'The sack is with him (=in his possession).'

b. *[è* $^{H+}$*wê:]* *[[ŋké* *kî:]* *ŋ̀]* *ŋ́* *dɛ̌:ndɛ̀*
[Def $^{H+}$child] [[3PlPoss **custody**] **Loc**] 1SgSbj leave.Pfv
'I left the child in their custody.'

This construction can also be used abstractly, as in 'Y take a credit (=buy on credit) from X', see (553) in text 2.

8.2.14 ‘From X to Y’ (*X dígí*, *hâl Y*)

For *dígí* ‘(all the way) from’ and *hâl* ‘(all the way) to/until’, see §8.2.1.

8.3 Purposive-causal ‘for’ (*námù* ~ *nâm→*)

[X námù] means ‘for X’, in a prospective (forward-looking) purposive sense (e.g. ‘in order to get X’), as in (183). The postposition is treated tonally as a possessed noun, and X as a possessor (hence subject to tone-dropping). That this is a possessive is clearly shown by 3Sg *năm-nà ŋ* ‘for him/her’.

The *mu* segment is often pronounced as a prolonged [m:], indicated in transcription as *nam→*, though it can also be pronounced as [mu] or apocopated to [m]. Combinations include 1Sg *ŋ́ nàmú* [ǹnăm:], 1Pl *mbé námú* [mbénám:], and *sèydù námù* [sèjdùnâm:] ‘for/because of Seydou’.

(183) *[ìgè námù] ég-yè*
[honey **for**] come.Pfv-3PlSbj
‘They have come for honey.’ (*ìgè*)

The sense can also be retrospective (‘because of, due to, as a result of’), as in (184a), or abstract ‘on account of’, as in (184b-c). The distinction between retrospective cause and prospective purpose is sometimes blurry.

(184) a. *[kùmà:ŋgà námù] ŋ̀ nwé:*
[rain(n) **for**] 1PlSbj go.in.Pfv
‘We went into the house because of the rain (outside).’

b. *[ŋ́ námú] ég-yè*
[1Sg **for**] come.Pfv-3PlSbj
‘They have come for (i.e. to visit) me.’

c. *[àmànà námù] ó-^{n} bàrgó ŋ́ bò*
[God **for**] 2Sg-Acc help(v).Ipfv 1SgSbj Ipfv
‘I will help you-Sg on account of God (i.e. as a charitable act).’

See also ‘because of money’ (with *nâm→*) in (574) in Text 4.

8.4 Other adverbs (or equivalents)

8.4.1 Similarity (*X pínà=:*, *X pínì=:* ‘like X’)

‘Like (similar to) X’ is *[X pínà]=:* or *[X pínì]=:*, with a “possessed” form of the stem and final ‘it is’ clitic. The clitic is audible as vowel length except before a 1st/2nd person proclitic. X may be a possessor pronoun, including 3Sg suffix *-nà*.

(185) a. *[ŋ́ pìná]=: bô-∅ / wŏl-∅*
[1SgPoss **like**]=it.is be-3SgSbj / not.be-3SgSbj
‘He/She is / is not like me.’

b. *[pìná-nà]=:* *bí-yà*
[**like**-3SgSbj]=it.is be-3PlSbj
'They are like him/her.'

c. *[pìnà-ná]=∅* *ŋ́* *bò*
[**like**-3SgSbj]=it.is 1SgSbj be
'I am like him/her.'

d. *[wè:* *pínà]=:* *wá-á* *wò*
[child **like**]=it.is weep.Ipfv-2SgSbj Ipfv
'You-Sg weep like a child.'

For a 'like/as though' clause using a variant *pínì* of this element without the 'it is' clitic, see §15.3.2.2. There is also an invariant combination *kán pínà→* 'like, as though, pretending that', with *kán* 'do' and a preceding predicate, see (593) in Text 4.

'Like this/that, thus' is *nɛ́nì* or *ènɛ̀* (§4.4.2.3).

The verb 'resemble' is *(m)pímà: bò* (§11.2.5.3). Its etymological connection with *pínà→* etc., if any, is unclear.

8.4.2 Extent (*jwá→* 'a lot', *bà:lè→* 'a little')

jwá→ 'a lot' can function as an NP argument (186a), or as an adverb (186b). It can also function as an adjective, tone-dropping a modified noun (186c).

(186) a. *jwá→* *mì-ŋ* *tábé-∅*
a.lot 1Sg-Acc give.Pfv
'He/She gave me a lot.'

b. *[ùnù* *wⁿ]* *jwá→* *ándó* *ŋ́* *bò*
[travel(n) Loc] **a.lot** go.Ipfv 1SgSbj Ipfv
'I travel a lot.'

c. *kày^{nL}* *jwá→*
work(n)^{L} **a.lot**
'a lot of work' (< *káy^{n}*)

The antonym is *bà:lè→* 'a little'. It undergoes Final Tone-Raising to *bà:lé→* before an L-tone as in (187a).

(187) a. *bà:lé→* *mì-ŋ* *tábé-∅*
a.little 1Sg-Acc give.Pfv-3SgSbj
'He/She gave me a little.'

b. *[ùnù* *ẃⁿ]* *bà:lè→* *ándó* *ŋ́* *bò*
[travel(n) Loc] **a.little** go.Ipfv 1SgSbj Ipfv
'I travel a little (i.e. occasionally).'

8.4.3 Specificity

8.4.3.1 'Approximately' (*dígí*)

To indicate that the figure given is correct as a minimum, but might be slightly understated (cf. English *odd* as in *twenty odd*), *dígí* can be added. It can be made into a predicate with *bò* 'be'.

(188) *àlàmùnɔ́* *dɛ̀:* *dígí* *bô-∅*
sheep 40 **approximately** be-3SgSbj
'(They are) forty odd sheep.'

For *dígí* in the sense 'since' see §8.2.1 and §15.2.1.4. The semantic connection between 'since X' and 'X odd' is that X is the starting point (minimum).

8.4.3.2 'Exactly' (*gɔ̂n*)

With numbers (e.g. of livestock or currency units), *gɔ̂n* can be used (189).

(189) *àlàmùnɔ́* *dɛ̀:* *gɔ̂n* *kìyò*
sheep 40 **exactly** equal
'(it adds up to) exactly forty sheep'

See also 'precisely today' in (588) in Text 4. For topic marker *gɔ̀n* ~ *gɔ̂n* 'as for', see §19.1.1.

8.4.4 Spatiotemporal adverbials

8.4.4.1 Temporal adverbs

Some of the major temporal adverbs are in (190). The element *-túná* ~ *-túnà* is understood by my assistant to be related to the numeral '3' (*tà:ndì*), but alternative semantic sources ('one' or 'other') are possible etymologically given that *-túná* ~ *-túnà* adds one time unit to the temporal distance already denoted by the stem.

(190) a. *njó* 'today'
nsâ→ 'now'
nè:gù-lò pé 'again' (with *nè:gù-lò* ordinal 'second')

b. *yà:gù* 'yesterday'
yà:gù-n-túná 'day before yesterday'
pànà:ŋgè 'in the past, long ago'
só→ "
è: wâ:r " (lit. "that.Definite time")

c. *ògà* 'tomorrow; in the future'
ògà-n-túná 'day after tomorrow'
màŋànà-n-túnà 'in (about) four days'

d. *gò:lí* ‘last year’
nà:ŋgòlì ‘next year’
nwá: ‘this year’

8.4.4.2 ‘First’ (*túndùŋ*)

túndùŋ ‘at first, firstly, to begin with’ is illustrated in (191).

(191) *[sègú ŋ́ ɲ-à:ndé nɛ̀ túndùŋ]*
[Segou 1SgSbj Epen-go and.then **firstly**]
[bàmàkɔ́ ándó ŋ́ bò]
[Bamako go.Ipfv 1SgSbj Ipfv]
‘First I’ll go to Segou (city), later I’ll go to Bamako.’

8.4.4.3 Spatial adverbs

The following are the main nondemonstrative spatial adverbs. Some contain locative postposition *bà* or w^n ~ *ŋ*. No terms meaning ‘north’ or ‘south’ could be elicited.

(192) a. *kó:-lò bà*, *kó:-lò* w^n ‘above, on top, overhead’ (§8.2.6)
sígó-lò bà, *sígó-lò* w^n ‘(down) below, underneath’ (§8.2.5)

b. *dúl* ‘east’
gɛ̀:^{n}*-tíbí-l* ‘west’ (“sun-fall-Nom”)

c. *túndú bá* ‘in the rear’
túndù ŋ ‘afterward’
tégó bá ‘forward; in front’

For demonstrative locative adverbs, see §4.4.2.1.

‘Left’ (*nwá:gá*) and ‘right’ (*ɲà:*) are modifiers that follow e.g. ‘hand’ and ‘foot’. *nwá:gá* behaves tonosyntactically like an adjective, and tone-drops the preceding noun: *sígé* ‘foot’, *sìgɛ̀*^{L} *nwá:gá* ‘left foot’. *ɲà:* ‘right’ may be related etymologically to *ɲɛ́:* ‘eat (meal)’ since eating is strongly associated with the right hand. The same pair of phonologically similar forms occurs in most Dogon languages, so if there is a historical connection it is ancient. In any case, *ɲà:* ‘right’ does not behave like an adjective tonosyntactically: *sígé ɲà:* ‘right foot’ and even *nwɛ́: ɲà:* ‘right hand’ from L-toned *nwɛ̀:* ‘hand’. Adverbial ‘to the left, leftward’ is *nwà:gà bà*, while ‘to the right, rightward’ is *nùmà bà*. The latter is based on an archaic variant of *nwɛ̀:* ~ *nɛ̀:* ‘hand’ (better preserved in Bunoge *númɛ̀* and Najamba *nùmă:* ‘hand’).

8.4.5 Expressive adverbials (EAs)

Expressive adverbials (aka “ideophones”) are basically one-word adverbial phrases, sometimes but not always with colorful senses. They do not combine with other words into NPs or similar syntactic phrases, they cannot be focalized, and they have no tonosyntactic interactions with other elements. There are, however, ways to make them predicative, see §11.1.3.1.

8.4.5.1 Representative expressive adverbials

Expressive adverbials (EAs) may be highly marked phonologically. Some have lexicalized "intonational" prolongation (193a). Others are iterated, often in a two-part form with an optional third segment repeating the first (193b). The third segment is generally present in isolation, but omitted before an auxiliary verb. Still others EAs more normal-looking (193c).

(193) a. *kèy^{n}→* '(teeth) sticking out, having buck teeth'

b. *gèŋ-gàŋ(-gèŋ)* 'walking with hips swinging'
yì:lì-yà:lì 'flapping (in the wind)'

c. *kéléw^{n}* 'silent'

Adjectival intensifiers behave tonosyntactically like adjectives rather than like EAs, see §4.5.7.

Some interjection-like intensifiers or emphatics are associated with verbal concepts. An example is *péw* 'completely used up'. It can be added directly to a conjugated verb (194b). For 3Sg subject, an alternative is a tight perfective chain with 3Sg *nà* (§15.2.1.5), as in (194c).

(194) a. *ŋké-∅*
be.depleted.Pfv-3SgSbj
'It (e.g. sugar) is used up.'

b. *ŋké-∅* *péw*
be.depleted.Pfv-3SgSbj all.used.up
'It is completely used up.'

c. *[ŋkè* *nà]* *péw*
[be.depleted.Pfv 3SgSbj] all.used.up
[=(b)]

8.4.5.2 'Apart, separate' (*tó:-nà*)

This element occurs frequently in parallelistic constructions, with NPs denoting the two separate sets. *-nà* is presumably a frozen 3Sg possessor morpheme (compare *ntă:-nà* 'some, certain ones' §6.3.2). *tó:* occurs elsewhere as an adjective meaning 'other' (§4.7.1.1). 'Apart' constructions are generally parallelistic (195).

(195) *àlàmùnɔ̀-gè* *tó:-nà,* *úná-gé* *tó:-nà*
sheep-Pl **apart**, goat-Pl **apart**
'The sheep apart (e.g. on one side), the goats apart (e.g. on the other side).'

For a textual example with three rather than two parts, see (565) in Text 3.

When not spelled out in this parallelistic fashion, the sense can be expressed by the adverbial iteration *tó:-tó:* 'separately, apart (in distinct locations)'.

8.4.5.3 ‘Always’ (*wá:r sèlè*), ‘never’ (*àbádá*)

wá:r sèlè ~ *wàgár sèlè* ‘always, constantly, every time’ is the combination of *wàgàr* or variant ‘time, moment’ with *sèlè* ‘all’. ‘Never’ can be expressed emphatically (cf. ‘not on your life’) by *àbádá* (regional, originally Arabic) in combination with a negative predicate. Nonemphatic ‘never’ is expressed as an experiential perfect negative (§10.2.3.2).

8.4.6 ‘Together’ (*bòw^{n}*)

Adverb *bòw^{n}* ‘together’ (homonym of ‘door’, as physical object rather than as passageway) is illustrated in (196).

(196)

bòw^{n}	*káy^{n}*	*kánù*	*ŋ̀*	*bò*
together	work(n)	do.Ipfv	1PlSbj	Ipfv

‘We will all work together.’

bòw^{n} can co-occur with a reciprocal verb, but as (196) shows it is also compatible with any verb that can involve joint activity. Textual examples are with ‘buy (jointly)’ in (538) in Text 1 and with verb ‘fight’ in (583) in Text 4.

9 Verbal derivation

The suffixal derivations (stem to stem) for verbs are reversive *-lè* ~ *-lɛ̀* ('un-…'), causative *-mì* (less often *-gè* or *-ndè*), a very restricted passive *(-m)-û:*, mediopassive *-yè* ~ *-yɛ̀* often paired with transitive *-rè-* ~ *-rɛ̀* ~ *-ndè*, and reciprocal *-gè* or *-lè*. Also included in this chapter are deadjectival inchoatives.

9.1 Reversive verbs (*-lè* ~ *-lɛ̀*)

The reversive suffix is *-lè* ~ *-lɛ̀* (perfective), the vowel depending on the ATR-harmonic class of the verb. The majority of reversives are from bisyllabic inputs, including *CvC-* syncopated from /CvCv/. A third (underlying) syllable in the input consisting of a mediopassive or transitive derivational suffix is omitted from the reversive. The medial vowel in reversive *CvCv́-lv̀* is weakened to *u* (or *i* if the first syllable also has *i*). This medial high vowel is subject to syncope in some consonantal environments, notably after unclustered{*l r m y*} (197b).

A prior action (e.g. 'tie') that produces a resulting state is presupposed. The reversive action restores the original state. Examples illustrating the range of senses and forms are in (197). As usual there is some fluctuation in vocalism of reversives from bisyllabic -ATR inputs. For 'buy'/'sell' I hear a shift (*sɔ́gɛ́* to *sógú-lè*), but some other cases resist the shift.

(197)

input	gloss	reversive	gloss
a. simple inputs, no syncope			
twɛ́:ⁿ	'step on'	*twí:ⁿ-lɛ̀*	'remove foot from'
dájé	'attach blade'	*dájú-lè*	'remove blade (from handle)'
sɔ́jɛ́	'tie (up)'	*sɔ́jú-lɛ̀*	'untie'
sɔ́gɛ́	'buy'	*sógú-lè*	'sell'
pégé	'button'	*pégú-lè*	'unbutton'
díŋgé	'bury'	*díŋgí-lè*	'disinter'
púndé	'roll up; fold'	*púndú-lè*	'unroll; unfold'
nándé	'tangle [tr, intr]'	*nándú-lè*	'become untangled; tangle (sth)'
kónjé	'roll up (pants)'	*kónjú-lè*	'unroll (pants)'
dáŋgé	'paste, glue'	*dáŋgú-lè*	'un-glue'
dágé	'lock'	*dágú-lè*	'unlock'
b. simple inputs, with syncope			
táré	'affix, post'	*tál-lè*	'un-post (remove)'
yélé	'hook, hang'	*yél-lè*	'unhook'
nɔ́lɛ́	'sag'	*nɔ́l-lɛ̀*	'bounce back (after sagging)'
púlé	'cover (sb)'	*púl-lè*	'uncover (sb)'
wɛ́ré	'braid (rope)'	*wɛ́r-lɛ̀*	'unravel (rope)'
kúmí	'clench (fist)'	*kúm-lè*	'unclench (fist)', cf. under (c)

c. suffixed mediopassive and transitive inputs

mediopassive, from Cv- stem			
dú-yé	'carry on head'	*dú:-lɛ̀*	'take (load) off head'
mediopassive, from (syncopated) bisyllabic stem			
íb-yè	'put on (a wrap)'	*íbí-lè*	'take off (a wrap)'
kúm-yè	'shut (eye)'	*kúm-lè*	'open (eye)', cf. under (b)
dómb-yè	'put on (hat)'	*dómbú-lè*	'take off (hat)'
ámb-yè	'get dressed'	*ámbú-lè*	'undress'
transitive			
tímbí-rɛ̀	'stack up'	*tímbí-lɛ̀*	'unstack'
kágú-rè	'slip (sth) in'	*kágú-lè*	'slip (sth) out'

d. causative *-gè* input

gíndá-gè	'bend into a curve'	*gíndú-lɛ̀*	'unbend, straighten'

e. *CvCvle* input reduced to *CvCv-* before reversive suffix

púndólè	'crumple (sth)'	*púndú-lè*	'uncrumple'
nágálè	'load (cart)'	*nágú-lè*	'unload'

f. irregular (archaic)

tɛ́:-rɛ̀	'cover (sth)'	*tɛ́wú-lɛ̀*	'uncover (sth)'
bá:-ndè	'shut (door)'	*báŋgú-lè*	'open (door)'
génjè	'be tilted'	*géndú-lè*	'become un-tilted (=straighten back up)'

g. suppletive

múndé	'braid (sb)'	*sáy-lè*	'unbraid (sb)'

Reversive verbs are optionally combined with a following 'go out' (*gwé:*) or 'take out' (*gó:-mì*), with the same subject. Intransitive *gwé:* is combined with intransitive verbs, causative *gó:-mì* with transitives. In other words, there is transitivity harmony between the two chained verbs. Literal exiting from a space may or may not be involved; 'go/take out' may be abstract. If the event is completed, the construction used is the tight perfective chain (§15.2.1.5). This is the construction in (198a-b), as shown especially by the {L}-tones of *bàŋgù-lè* and the 3Sg postverbal subject *nà* in (198a). For uncompleted and future events, the first verb has nonpast anterior *né* ~ *nè* (§15.2.2.2), as in (198c).

(198) a.

bòw^{n}	*[bàŋgù-lè*	*nà]*	*gwé:-∅*
door	[close-**Rev**.Pfv	3SgSbj]	go.out.Pfv-3SgSbj

'The door opened (by itself).'

b.

bòw^{n}	*[ŋ́*	*bàŋgú-lè]*	*ŋ́*	*gǒ:-mì*
door	[1SgSbj	close-**Rev**.Pfv]	1SgSbj	go.out-Caus.Pfv

'I opened the door.'

c.

bòw^{n}	*[báŋgú-lé*	*né]*	*gô:*	*bò-∅*
door	[close-**Rev**	and.then]	go.out.Ipfv	Ipfv-3SgSbj

'The door will open (by itself).'

9.2 Deverbal causative verbs

9.2.1 Productive causative (*-mì*)

The productive causative suffix added to verb inputs is *-mì-* (perfective form). The suffix can be added to a wide variety of verbs, including transitives, in a range of causative senses ('force X to VP', 'have X VP', 'let X VP'). It also makes factitives out of deadjectival inchoatives (§9.6), e.g. 'make (sth) small(er)' from inchoative 'become small(er)'.

All causatives belong to the final-high-vowel verb class. Partial paradigms of *sígó-mì* 'take down' and of *yɛ́bá-mì* 'cause to dance' (variant *yébá-mì*), with tones based on 3Sg forms, are in (199). The input verb takes the A/O-stem.

(199)

category	'take down' (< *sígé*)	'cause to dance' (< *yɛ́bɛ́*)
perfective	*sígó-mì*	*yɛ́bá-mì*
imperfective	*sígó-m bò*	*yɛ́bá-m bò-*
imperfective negative	*sìgò-mù:-ndí*	*yɛ̀bà-mù:-ndí*
capacitative	*sìgò-m-mâ: bò*	*yɛ̀bà-m-mâ: bò*
imperative	*sìgò-mù*	*yɛ̀bà-m-à*

More causatives are in (200). Some examples in (200b,d) show that an initial-syllable *a* requires stem-final *a* before the causative suffix. With the bisyllabic -ATR stems in (200b), I tend to hear +ATR initial vowels in the causative, but my assistant's intuition is that the vowels remain -ATR.

(200)

input	gloss	causative	gloss
a. monosyllabic			
nɛ́:	'drink'	*ná:-mì*	'give drink to'
ɲɛ́:	'eat (meal)'	*ɲá:-mì*	'feed'
nwɛ́:	'enter'	*nwá:-mì*	'make enter, bring or take in'
jwɛ́:	'(sth) fill up'	*jó:-mì*	'fill (sth)'
gwɛ́:	'go out'	*gó:-mì*	'take out, remove'
hybrid mono- and bisyllabic (§10.1.2.5)			
mɛ́:	'(sth) dry'	*méá-mì*	'dry (sth)'
b. bisyllabic			
input stem with initial-syllable a			
tábɛ́	'give'	*tábá-mì*	'cause to give'
táŋgɛ́	'go past'	*táŋgá-mì*	'take past'
input -ATR, beginning Cɔ or Cɛ			
sɔ́gɛ́	'buy'	*sɔ́gá-mì*	'cause to buy' (~ *sógá-mì*)
sɛ́mɛ́	'slaughter'	*sɛ́má-mì*	'cause to slaughter' (~ *sémá-mì*)
kɔ́mɛ́	'shout'	*kɔ́má-mì*	'cause to shout' (~*kómá-mì*)
dɛ́mdɛ̀	'budge'	*dɛ́mdá-mì*	'move (sth) over' (~*démdá-mì*)
input -ATR, beginning Ci			
tíbɛ́	'fall'	*tíbá-mì*	'cause to fall'

c. trisyllabic

dúgú-rè	'run'	*dúgú-ró-mì*	'cause to run'

d. input already has derivational suffix

reversive

báŋgú-lè	'open (door)'	*báŋgú-lá-mì*	'have (sb) open (door)'

causative -gè

pánjá-gè	'tear, rip'	*pánjá-gá-mì*	'have (sb) rip (sth)'

causative -mì

sígó-mì	'take down'	*sígó-mú-mì*	'have (sb) take down (sth)'

I can cite no example where *-mì* is added to a mediopassive or transitive derivational suffix (the transitive form is itself the functional "causative" of the mediopassive).

For *gó:-mì* 'take out, remove' and *gó-m-dè* 'cause to go out, cause to leave', see §10.1.2.3.

Causatives from final-high-vowel input verbs are in (201). Those with *a* in the nonfinal syllable have stem-final *a* before *-mì*, which could be taken as the A/O- or A-stem. Others have the U-stem.

(201)

input	gloss	causative	gloss
a. nonfinal *a* in stem			
dám	'speak'	*dámá-mì*	'make speak'
b. nonfinal nonlow vowel in stem			
sé:mì	'look'	*sé:mú-mì*	'cause to look'

The causative of 'come' is *égó-mì* 'cause to come' with the A/O-stem.

9.2.2 Minor causative suffix *-gè* ~ *-gɛ̀*

Several well-lexicalized causative-like action verbs, generally involving destructive impact, have a suffix *-gè* ~ *-gɛ̀* (perfective form) added to that A-stem or to the I/U-stem, depending on the verb. With the A-stem, the suffix always takes the +ATR form *-gè*, but the limited data show lexical variation as to whether a nonfinal -ATR vowel shifts to +ATR, see 'shatter' and 'crumple' in (202a). With the U-stem, the ATR value observed in the stem-final syllable in the perfective of the input is transferred to the suffixal syllable in the derivative, so both *-gè* and *-gɛ̀* are represented in (202b). The presuffixal *u* in the U-stem cases is syncopated after some unclustered sonorants ('make incision in', 'wake (sb) up').

(202) Causative *-gè* (all known examples)

input	gloss	causative	gloss
a. A-stem			
with a in nonfinal syllable			
máré	'be lost'	*márá-gè*	'cause to be lost'
ɲám(í)	'malfunction'	*ɲámá-gè*	'ruin (sth)'
pánjé	'be torn'	*pánjá-gè*	'tear, rip'

with high vowel in nonfinal syllable			
gílɛ́	‘(sth) snap’	*gílá-gè*	‘snap, break (sth)’
gíndɛ́	‘(sth) be curved’	*gíndá-gè*	‘bend (sth) into a curve’
with -ATR vowel in nonfinal syllable			
tɛ́bɛ́	‘be shattered’	*tébá-gè*	‘shatter (sth)’
		(in careful style also *tɛ́bá-gè*)	
nɔ́lɛ́	‘(sth) crumple’	*nɔ́lá-gè*	‘crumple (sth)’
b. U-stem			
+ATR			
gúmbé	‘be split’	*gúmbú-gè*	‘split (wood, nut)’
káyé	‘be incised’	*káy-gè*	‘make incision in’
kúré	‘be roiled’	*kúrú-gè*	‘roil, muddy’
múré	‘be punctured’	*múrú-gè*	‘puncture’
nímbé	‘(fire) go out’	*nímbú-gè*	‘extinguish (fire)’
púré	‘be severed’	*púrú-gè*	‘cut off, sever’
-ATR			
yúlɛ́	‘wake up’	*yúl-gè*	‘wake (sb) up’
tú-yɛ́	‘be dumped’	*tú:-gè*	‘dump’ (slightly irregular)

For the last example (*tú-yɛ́*), compare *dú-yɛ́* (205c-d) in §9.4.1.

Several verbs ending in *gè* or *gè* probably originated as suffixal derivatives, but are not synchronically paired with an unsuffixed intransitive. Examples are *pélgè* ‘strike (e.g. a match), hone (a razor blade in one’s palm)’, *tírgè* ‘pour (into a container)’, *wélgè* ‘dispossess (sb, of sth)’, *bálgè* ‘gather’, its homophone *bálgè* ‘help’, and *wélágè* ‘divide, share’. Likely cognates without the suffix include Mombo *pélɛ́* ‘strike’, Najamba *élɛ́* ‘dispossess’, Tebul Ure *bàrá* ‘help’, and Tiranige *báló* ‘gather’. Jamsay (Pergué dialect) *túrɔ́* ‘pour’ is a possible cognate for *tírgè*.

The *-gè* in *yígíl-gè* ‘be dizzy’ is segmentable, compare noun *yìgìl* ‘dizziness’, but the verb does not fit the usual semantic profile here.

The final syllable of *málgè* ‘see’ is arguably segmentable (*mál-gè*) based on comparison with stative *málà* (§10.4.1.1), but *málà* could alternatively be derived by applying a templatic target *CvCa* to *málgè* (derived statives do not allow nonhomorganic medial clusters), see §10.4.1.1. The only likely cognate I know of is Mombo *mályê:* ‘see’, which may be composite, cf. *yɛ́* ‘see’ in Najamba and similar monosyllabic stems in several other languages.

A different *-gè* suffix is used with prosodically light verbs as a reciprocal (§9.5). Another *-gè* suffix occurs in some deadjectival inchoatives (§9.6).

9.2.3 Minor causative suffix *-ndè*

The examples of this formation are in (203).

(203) Causative *-ndè* (all known examples)

input	gloss	causative	gloss
a. sense is causative			
dâ:y^{n}/dá:y^{n}ì/	‘sit down’	*dá:-ndè*	‘cause to sit, seat (sb)’

b. idiosyncratic senses

gí:yⁿì /gí:yⁿì/	‘(sth) be smelly’	*gí:-ndè*	‘sniff, smell (sth)’
sáyé	‘be untied’	*sáy-ndè*	‘scatter [tr]; be scattered [intr]’
yél-yè	‘cling, be held’	*yélé-ndè*	‘hold onto’
púrú-gè	‘cut (off)’	*púr-gú-ndè*	‘cross (river, road)’

In (203b), *sáyé* ‘(e.g. knot, bundle) become untied, undone’ is much more clearly related to transitive *sáy-lè* ‘undo (sth tied)’.

gú:ndè ‘go out’ probably originated as a derived stem *gú:-ndè*, cf. *gwé:* ‘leave’ (imperative *gó:*), §10.1.2.3. Comparative evidence suggests that *núndé* ‘hear’ might also have originated in the fashion, cf. Ben Tey *nŭ-*, Yanda Dom and Tebul Ure *nó*. In the case of ‘hear’, *-nde* does not seem to have altered the valency of the verb. Both *gú:ndè* and *núndé* have counterparts in other western Dogon languages, e.g. Bunoge.

9.2.4 *kán* ‘do’, *ká:-ndè* ‘do for’, *kándí-gè* ‘fix’

The simple transitive ‘do’ verb is kán /kání/, as in ‘what are you doing?’ It also occurs in a number of collocations as a semantically light auxiliary verb (§11.1.2.2).

ká:-ndè means ‘do (sth) for (sb)’. Assume that it is derived from *kán*, it adds a beneficiary (morphosyntactically, an additional direct object) to the case frame, see (165d) in §8.1.1. The other attested benefactive derivative is *gá:-rè* ‘put in for’ at the end of §9.4.1. These are the only known cases of this unproductive benefactive derivation.

kándí-gè ‘fix, repair’ is vaguely similar in form to ‘do’ and ‘do for’, but it fits into no transparent derivational relationship.

9.2.5 *núndé* ‘hear’ and *núnd-yè* ‘listen’

núndé ‘hear’ and *núnd-yè* ‘listen (to)’ do not fit the usual semantic profile for mediopassive derivatives.

9.3 Passive *-m-û:*

A passive with suffixed *-m-û:* is attested with three transitive verbs (‘see’, ‘get’, ‘encounter’). The sense is ‘be VERB-able’ or ‘be habitually VERB-ed’. Only 3Sg subject forms are attested. The negative counterpart is *-mù:-ndí*, with imperfective negative *-ndí*.

(204)

verb	gloss	‘be VERB-able’	‘not be VERB-able’
díné	‘get, obtain’	*dìnà-m-û:*	*dìnà-m-ù:-ndí*
málgè	‘see’	*màlgà-m-û:*	*màlgà-m-ù:-ndí*
témbé	‘encounter’	*tèmbò-m-û:*	*tèmbò-m-ù:-ndí*

Suffix complex *-m-û:* is probably at least historically related to the final-long-vowel imperfective (§10.2.2.2) of a suffixed causative derivation. However, the negative forms have no attested counterparts.

kànû: ‘it is do-able, it can be done’, the final-long-vowel imperfective of *kán* /kání/ ‘do’, may combine with a preceding verb (with subordinator *ẃⁿ*) to create a more productive ‘be VERB-able’ pattern, see §10.5.3.

For mediopassives with *-yè* ~ *-yɛ̀*, see the following section. For resultative passive with *-ɛ́:* ~ *-é:* ~ *-í:* plus *bò*, see §10.4.1.2.

9.4 Mediopassive *-yè* ~ *-yè* and transitive *-rè-* ~ *-rɛ̀* (*-dè* ~ *-dɛ̀*)

There is a fairly productive alternation of mediopassive *-yè* ~ *-yɛ̀* and transitive *-rè-* ~ *-rɛ̀*. There are also some unsuffixed intransitives that have transitive counterparts with *-rè-* ~ *-rɛ̀*.

Transitive *-rè-* ~ *-rɛ̀* is easily distinguished in Penange from reversive *-lè* ~ *-lɛ̀*, which can occur with some of the same verb stems (§9.1), and from reciprocal allomorph *-lè* (§9.5). The transitive suffix has a variant *-dɛ̀* ~ *-dè* after some consonants (205d below).

Mediopassive *-yè* ~ *-yɛ̀* is distinct from 3Pl subject suffix *-yè* ~ *-yɛ̀* in perfective positive verbs, which is always word-final as in *tíb-yɛ̀* ‘they fell’ (§10.3.1, §10.2.1.1).

The mediopassive denotes an internally experienced event (voluntary or not), while the corresponding transitive adds an external agent. The transitive is therefore essentially the causative of the mediopassive. Some mediopassives, especially verbs of carrying, are syntactically transitive and have direct objects. In this case, the form with *-rè-* ~ *-rɛ̀* is ditransitive, again adding an external agent.

(205) organizes data by semantic fields. Some verbs in each category have suffixed mediopassive and transitive forms, and lack unsuffixed forms. Other verbs have unsuffixed intransitives and suffixed transitives. In some cases it is difficult to determine whether the intransitive form is underived or contains a mediopassive suffix. *ínjɛ̀* ‘stand up, stop’ might be segmented as /iŋg-yɛ̀/, but this is not transparent synchronically (its 3Pl subject form is *ínj-yɛ̀* ‘they stood’).

(205)

MP/Intr	gloss	Tr	gloss
a. stance			
bí-yè	‘lie down’	*bí:-rè*	‘have lie down, put to sleep’
ínjɛ̀	‘stand up, stop’	*íŋgí-rè*	‘stop (sth)’
sómb-yè	‘squat’	*sómbú-rè*	‘cause to squat’
b. wearing clothes			
ámb-yè	‘put on (clothes)’	*ámbú-rè*	‘put (clothes) on (sb)’
dómb-yè	‘put on (headware)’	*dómbú-rè*	‘put (headware) on (sb)’
íb-yè	‘tie on (wrap)’	*íbí-rè*	‘tie (wrap) on (sb)’
túlé	‘put on (shoe)’	*tú:-rè*	‘put (shoe) on (sb)’
c. carrying/holding			
bámb-yɛ̀	‘carry on back’	*bámbú-rè*	‘put on (sb’s) back’
dú-yɛ́	‘carry on head’	*dú:-rè*	‘put on (sb’s) head’
d. other			
transitive suffix with r			
mì: dú-yɛ́	‘bathe’	*mì: dú:-rɛ̀*	‘bathe (sb)’ (*mì:* ‘water’)
númb-yè	‘rub (oil, on self)’	*númbú-rè*	‘rub (oil, on sb)’
kúyɛ́	‘hide (oneself)’	*kúy-rè*	‘hide (sth, sb)’

transitive suffix with d

úr(í)-yè	'get sick'	*úr-dè*	'make (sb) sick'
dábálè	'whisper'	*dábál-dè*	'whisper to (sb)'

The second syllables in *bí-yè* 'lie down' (205a) and *dú-yé* 'carry on head' or 'bathe (sb)' (205c,d) could be taken either as the mediopassive suffix (following an atypically subminimal *Cv-* root), which is etymologically correct, or as part of the stems (which are then typical bimoraic bisyllabics), which may be more reasonable synchronically. In the latter analysis, irregular phonological reductions of the second syllable before the transitive suffix would have to be posited, e.g. /dú-yɛ́-rɛ̀/ → *dú:-rɛ̀* (medial *C* deleted, with *vv*-contraction §3.4.4.2 or compensatory lengthening).

This would be parallel to deletion of medial *l* in 'put (shoe) on (sb)' in (205b). Another example of deletion of medial *l* is seen in the pair *gálé* 'put (sth) in (sth)', already transitive, and its derivative *gá:-rè* 'put (sth) in (sth) for (sb)', which adds a benefactive indirect object. An example of apparent deletion of a medial semivowel is the pair *dâ:y^{n}* /dá:y^{n}ì/ 'sit down' and *dá:-ndè* 'cause to sit' in (203a) in §9.2.3.

Already transitive *íŋgí-rè* 'stop (sth)' in (205a) has its own apparently transitive or causative derivative *íŋgí-r-dɛ̀* 'have (sb) stop (sth)'.

dúgú-rè 'run' is only weakly segmentable by comparison with the cognate nominal *dúgú* 'running'. There are many verbs ending in *-rè* or *-rɛ̀* that may have originated as suffixal derivatives but that are now isolated.

9.5 Reciprocal (*-gè*, *-lè*)

The reciprocal verb form has suffix *-gè* after prosodically light stems, and suffix *-lè* after heavy stems. These are the perfective forms. The verb is in the A/O-stem, often favoring +ATR-compatible vocalism in nonfinal syllables. As elsewhere (i.e. tones for 3Sg perfective, tones for imperative), the light/heavy distinction treats *Cv*, *Cv:*, *CvCv*, and most *CvNCv* with homorganic nasal/voiced-stop cluster as light, and treats the remaining *CvCCv* along with *Cv:Cv* and all trisyllabic and longer stems as heavy. The verb is optionally preceded by *bòw^{n}* 'reciprocally, together'.

(206) a. *(bòw^{n})* *ŋ̀* / *à* *málgá-lè*
(together) 1PlSbj / 2PlSbj see-Recip.Pfv
'We/You-Pl saw each other.'

b. *(bòw^{n})* *málgá-l-yè*
(together) see-Recip.Pfv-3PlSbj
'They saw each other.'

c. *málgá-lò* *ŋ̀* *bò*
see-Recip.Ipfv 1PlSbj Ipfv
'We will see each other.'

Textual examples: (554) in Text 2 ('saw each other'), (563) in Text 3 ('understand each other'), and (574) in Text 4 ('disagree with each other').

Since *-lè* ~ *-lɛ̀* is also one variant of the reversive suffix (i.e. after +ATR stems), parsing tips may be useful to readers. The reciprocal and reversive are in lexical complementary

distribution, since reversive *-lè* ~ *-lɛ̀* is added to prosodically light stems, while reciprocal allomorph *-lè* occurs only with heavy stems. In addition, the reciprocal is always +ATR *-lè*.

Likewise, reciprocal allomorph *-gè* is homonymous with a causative-like suffix *-gè* used with a small set of impact transitives like 'puncture' and 'shatter' (§9.2.2). Since the underived verbs that can add causative *-gè* are intransitive, while those that can add reciprocal *-gè* are transitive, there is little danger of confusion.

Some further examples of reciprocal forms are in (207). As usual the perfective 3Sg is the citation form. However, in the case of reciprocals a plural subject is required, so in citing forms that are actually in use one can either add 1Pl *ŋ̀* or 2Pl *à* (e.g. *ŋ̀ sójá-gè* 'we tied each other') or replace *-gè* and *-lè* with 3Pl *-g-yè* and *-l-yè* (*sójá-g-yè* 'they tied each other').

(207)

input	gloss	reciprocal ('each other')
a. prosodically light		
twɛ́:ⁿ	'step on'	*twá:ⁿ-gè*
sɔ́jɛ́	'tie (up)'	*sɔ́já-gè* ~ *sójá-gè*
gíyɛ́	'kill'	*gíyá-gè*
dúgɛ́	'insult'	*dúgá-gè*
tábé	'give (to)'	*tábá-gè*
káyé	'shave'	*káyá-gè*
náré	'touch'	*nárá-gè*
búndé	'hit'	*búndó-gè*
dúndé	'look for'	*dúndá-gè*
b. prosodically heavy		
bárgè	'help'	*bárgá-lè*
kábájè	'scratch'	*kábájá-lè*
pábálè	'massage'	*pábálá-lè*
yígírè	'shake'	*yígíró-lè*

There are two semantically related (antonymous) verbs, structurally quadrisyllabic, that end in *gè* and have more or less reciprocal sense built in: *ségál(í)gè* ' (people, animals) assemble, come together', which occurs in (562) in Text 3, and *píjól(í)gè* 'scatter, disperse [intr]'. The morphological structure is not transparent synchronically in the absence of corresponding underived input forms.

9.6 Deadjectival inchoative and factitive verbs

All adjectives denoting states have some way to indicate a transition into that state or an intensification/increase of that state. Typically the modifying adjective is paired with an inchoative verb of the sense 'become ADJ(-er)', cf. English (intransitive) *redden* (or *blush*), *grow* (or *expand*), *fill up*, and so forth. In some cases the relationship between the paired adjective and inchoative verb is irregular or suppletive, and in others an auxiliary verb like 'do' is added directly to the adjective. The data in this section are organized by formal relationships.

In (208), the modifying adjective is identical segmentally to the perfective (and citation form) of the inchoative verb, if we factor out the vocalism-stem changes affecting the final vowel of the verb. The perfective citation form of the verb must end in {*i e ɛ*}. One is tempted to analyse the "adjective" as the perfective participle of the verb as in a relative

clause (‘a dry garment’ < ‘a garment that has dried’). However, this does not quite work. The relative clause would have to be a subject relative, but perfective participles in subject relatives are {H}-toned, see (415c-d) in §14.4.2). Furthermore, true relative clauses allow additional constituents, both before the head noun and between it and the verbal participle, and this is not observed in normal N-Adj combinations. So I take the adjectives and inchoatives in (208) to have independent status within their shared word-families, rather than deriving one from the other.

(208)

modifying	inchoative	gloss of adjective
a. adjective ends in {*i e ɛ*}		
bɔ̀rɛ̀	*bɔ́rɛ́*	‘cooked’
dɛ̀mɛ̀	*dɛ́mɛ́*	‘ripe (grain)’
ɛ̀mbɛ̀	*ɛ́mbɛ́*	‘wet’
gɔ̀mɛ̀	*gɔ́mɛ́*	‘rotten (meat, fruit)’
kàmmì	*kámmì*	‘hard (e.g. rock, wood)’
kùnɛ̀	*kúnɛ́*	‘plump, fatty’
kùrɛ̀	*kúrɛ́*	‘undiluted, full-strength (e.g. milk)’
jwɛ̀:	*jwɛ́:*	‘full’
mɛ̀:	*mɛ́:*	‘dry’
ɲàm	*ɲám(í)*	‘malfunctioning, ruined’
ɔ̀njɛ̀	*ɔ́njɛ́*	‘lean (animal, meat)’
sɛ̀lɛ̀	*sɛ́lɛ́*	‘diluted (e.g. milk)’
ùlɛ̀	*úlɛ́*	‘worn-out’
ùlgɛ̀	*úlgɛ̀*	‘ripe (fruit)’
b. irregular		
nwá:gá	*nú:gɛ̀*	‘hot’
"	*nwá:jɛ̀*	‘fast’
jámá	*jámmì*	‘close, nearby’

In (209), an inchoative suffix *-yɛ̀* ~ *-yɛ̀* (becoming *-jɛ̀* ~ *-jɛ̀* after *g*) is added to a syncopated form of the adjective. The inchoative suffix may be related to the mediopassive derivational suffix for verbs. Presumably the stem-final vowel in bisyllabic adjectives is raised to *i* or *u* before being syncopated.

(209)

modifying	inchoative	gloss of adjective
a. *-yɛ̀* ~ *-yɛ̀* after vowel or nonnasal sonorant		
after vowel		
nsì:^{n}	*nsí-yé*	‘sweet’ or ‘sharp (blade)’
after l		
ɛ̀lɔ̀	*ɛ́l-yɛ̀*	‘delicate (fabric)’
kòlò	*kól-yɛ̀*	‘fresh; raw’
b. *-jɛ̀* ~ *-jɛ̀* after *g*, see §3.4.3.4		
/g-y/ *becoming j-j*		
yágá	*yáj-jɛ̀*	‘pretty’
wàgɛ̀	*wáj-jɛ̀*	‘distant’
má:gá	*má:j-jɛ̀*	‘difficult (work)’

/ŋg-y/ reducing to n-j

dɔ́ŋgá	*dón-jè*	‘heavy’
ɲɔ̀ŋgɔ̀	*ɲɔ́n-jɛ̀*	‘thin, slender’

In (210), the inchoative suffix is *-gè* ~ *-gɛ̀*

(210)

modifying	inchoative	gloss of adjective
a. after vowel		
stem-final vowel already u		
kùrjù	*kúrjú-gè*	‘coarse’
pɛ̀mbù	*pɛ́mbú-gè*	‘cramped’
stem-final u shifted from another vowel		
tòmbò	*tómbú-gè*	‘white’
bámbá	*bámbú-gè*	‘wide, spacious’
sùmbè	*súmbú-gè*	‘deep’
bɔ̀mbɛ̀	*bɔ́mbú-gɛ̀*	‘red’
stem-final u syncopated after unclustered sonorant		
tà:mì	*tá:m-gè*	‘slow’
irregular with ATR-harmonic shift		
yɔ́rdɛ́	*yɔ́rádí-gè*	‘black’
b. after consonant		
unsyncopated		
bày^{n}	*báy^{n}-gè*	‘big’
syncopated		
gòlò	*gól-gè*	‘long, tall’
gà:là	*gá:l-gè*	‘bitter’
bàgàlà	*bágál-gè*	‘big, fat, massive’
ɔ̀nànà	*ɔ́nán-gè*	‘smooth, sleek’
irregular		
tàyè	*támál-gè*	‘cold’
diminutive adj		
dùŋgùrí-yè	*dúŋgúr-gè*	‘short’
ŋkà:lí-yè	*ŋká:l-gè*	‘small’

Of morphological interest is the fact that several adjectives with obligatorily iterated stems correspond to inchoatives that are based either on uniterated versions of the stem (211a-b), or on a special final-reduplicated CvC_2vC_2- stem (211c).

(211)

modifying	inchoative	gloss of adjective
a. unsuffixed, perfective-like inchoative		
tóm-tóm	*tómí*	‘sour’
b. inchoative with *-yè* ~ *-yɛ̀*		
yáw-yáw	*yáw-yè*	‘lightweight’
c. inchoative with final-reduplicated stem and *-gè*		
ɛ̀b-ɛ̀b	*ɛ́báb-gè*	‘supple’
sém-sém	*sémém-gè*	‘pointed’
búlá-búlà	*búlál-gè*	‘blue’

One adjective has a suppletive inchoative (*yé:* 'become good') when the referent is inanimate.

(212)

modifying	inchoative	gloss of adjective
pɔ́:lɔ́	*yé:* (inanimate) *pɔ́:l-gè* (animate)	'good'

Adjectives that appear in regular modifying-adjectival form before an auxiliary verb are in (213).

(213)

modifying	inchoative	gloss of adjective
a. with *bílé* 'become'		
kárá-kárá	*kárá-kárá bílé*	'bitter'
kándá	*kándá bílé*	'new'
b. with *kán* 'do'		
ká:mnɔ́	*ká:mnɔ́ kán*	'old (person)'
c. with *nɛ́* 'say'		
yáw-yáw	*yáw-yáw nɛ́*	'lightweight' (alongside *yáw-yè*)

The factitive 'make (sth) ADJ (or ADJ-er)' is the causative of the inchoative (214).

(214)

factitive	gloss	inchoative
a. *dón-jó-mì*	'make heavy, weigh down'	*dón-jò*
b. *ŋká:l-gá-mì*	'make small(er), shrink'	*ŋká:l-gè*
c. *yó:-mì*	'make better, improve'	*yé:*
d. *yáw-yá ná-mì*	'make lighter, lighten'	*yáw-yáw nɛ́*

10 Verbal inflection

10.1 Inflection of regular indicative verbs

Each indicative verbal category is expressed by a combination of an ablauted vocalism stem (§3.3.6) and, for active (non-stative) verbs, an aspect-negation (AN) suffix or auxiliary verb. The perfective positive is unmarked suffixally; it is distinguished from the equally unsuffixed imperative by stem ablaut. Derived stative indicative verbs lack aspect marking but distinguish polarity (positive, negative). There is a capacitative inflection ('can VP'). The past clitic *=ye* (§10.6.1) may be added to an AN suffix or auxiliary or to a stative or capacitative verb. Deontic modal categories (imperative, hortative) distinguish mood, polarity, and usually addressee number, which in the case of hortatives is distinct from (usually 1Pl) subject. Deontics and their special quoted forms are treated separately at the end of this chapter.

The pronominal subject category for indicative categories is marked by a suffix for 3Pl (following any AN suffix or auxiliary, and preceding the past clitic), by proclitics for 1st/2nd persons, and by zero for 3Sg (transcribed as suffixed *-∅*). For the deontic moods, plural addressee is marked suffixally.

Verbs in relative clauses have special tonal and/or (participial) suffixal forms, see §14.4.

10.1.1 Overview of indicative (aspect-negation) categories

The nonpronominal inflectional categories marked on verbs in indicative clauses are those in (215), which is organized into four groups based on aspect and polarity.

(215) a. perfective positive system

perfective	E/I-stem, no AN suffix
experiential perfect	A/O-stem plus *-tê:*

b. imperfective positive system

imperfective	O-stem plus *bò* ~ *wò*
progressive	O-stem plus *bô* 'be'

c. perfective negative system

perfective negative	E/I-stem plus *-l* (3Pl: A-stem plus *-ndá*)
experiential perfect negative	A/O-stem plus *-té:-ndí*

d. imperfective negative system

imperfective negative	O-stem plus *-ndí* ~ *-l* ~ *-lí*
progressive negative	O-stem plus *wǒl* 'not be'

Unusual in Dogon is the fact that the Penange perfective negative is based on the same E/I-stem as the corresponding positive. Therefore the E/I-stem and the O-stem function in Penange as perfective and imperfective, respectively, regardless of polarity. On the other hand, the experiential perfect has a distinctive vocalism stem (A/O), and its negative form does not (synchronically) end in the regular perfective negative suffix. Therefore the

relationship of the experiential perfect and the perfective systems is weaker in Penange than in most other Dogon languages.

However, in Penange the perfective/imperfective division is also marked by the position of 1st/2nd person subject pronominals. In the perfective systems, positive and negative, these pronominals precede the verb with its aspect-negation marking: Pron Verb-AN. This includes the experiential perfect (positive and negative), which I therefore place with perfectives rather than imperfectives in spite of the vocalism. By contrast, 1st/2nd person subject pronominals intervene between the verb and the following suffix (or auxiliary) in the imperfective systems (including progressive). Examples with 1Sg *ŋ́* and allomorphs are in (216), using *égé* 'come'.

(216) a. perfective system (positive and negative)

ŋ́ yègè	'I came'	perfective
ŋ́ yègè-l	'I did not come'	perfective negative
ŋ́ yègò-tê:	'I have (once) come'	experiential perfect
ŋ́ yègò-té:-ndí	'I have never come'	experiential perfect negative

b. imperfective system (positive and negative)

égó ŋ́ bò	'I will come'	imperfective
ègó-ò-l	'I will not come'	imperfective negative
ègó ŋ́ bò	'I am coming'	progressive
ègó ŋ́ wòl	'I am not coming'	progressive negative

Other indicative categories that do not fit into these four systems are the derived stative (e.g. 'be sitting' from active verb 'sit down'), which is marked primarily by vocalic ablaut, and the capacitative ('can VP') with suffix *-má-*. Based on the position of 1st/2nd person subject pronominals, the capacitative is affiliated with the perfective systems. This test works less cleanly for the stative, which (in the positive) has a preceding reduplicative proclitic instead of an aspectual suffix, and a 1st/2nd person pronominal occurs between the proclitic and the stem. However, the pronoun precedes the verb in the (uniterated) stative negative, so a (weak) case can be made for aligning the stative with the perfective systems.

(217) a. capacitative

ŋ́ bì-yò-má	'I can lie down'	capacitative
ŋ́ bì-yò-má-ndà	'I cannot lie down'	capacitative negative

b. stative (positive and negative)

bì ŋ́ bì-yà	'I am lying down'	stative (reduplicated)
ŋ́ bìyà-ndà	'I am not lying down'	stative negative

Past clitic *=ye* can be added to an AN suffix or auxiliary, or to a stative or capacitative verb. It follows a 3Pl subject suffix. The past imperfective (§10.6.1.4) is different in form from the (nonpast) imperfective.

10.1.2 Verb stem shapes

The stem-classes for verbs (based on syllabic shape and on stem-final high versus nonhigh vowel) will be described in the sections below (§10.1.2.1-10). All actually occurring verb forms involve a specific vocalism stem (there are no unablauted stems), I use the perfective positive (E/I-stem) as citation form, which at least clearly brings out the stem's ATR value.

The sections on stem-classes just below (§10.1.2.1-10) are followed by sections on each indicative aspect-negation (AN) paradigm (§10.2.1-3).

10.1.2.1 *Cv* verb (*nɛ́* 'say')

I can cite only *nɛ́* 'say' as a short-voweled monosyllabic verb. It competes with *dám* 'speak, say'. In partial paradigms like that in (218), unless otherwise indicated, the form shown (especially tonal) of the stem is for 3Sg subject. The E-stem is *nɛ* and the O-stem is *nɔ*.

(218)

form	category
nɛ́	perfective (3Pl *níy-yⁿɛ̀*, 1Pl *ŋ̀ nɛ̂*)
nɛ̀-l	perfective negative (3Pl *ná-ndá*)
ná	imperative
nɔ́ bɔ̀	imperfective
nɔ̀-ndí	imperfective negative

nɛ́ owes its subminimal shape to elision of an original first syllable. Its cognates include Bunoge *ʔúnɛ̀* and Mombo *gúnɛ́*.

10.1.2.2 *Cv:* verbs

The known *Cv:* verbs are listed in (219) in the primary vocalism stems. Tones are omitted. All known examples have {*e ɛ*} rather than *i* in the E/I-stem; i.e. there are no final-high-vowel *Cv:* stems. *Cv:ⁿ* with nasalized vowel is attested but rare. I know of no *Cv:* stems with irregular inflectional morphology, though *gwɛ́:* 'go out' has some variant stems (§10.1.2.3 just below). The consonantal onset of the E/I-stem for -ATR verbs (*Cwɛ:-* versus *Cɛ:-*) depends on the point of articulation of the initial *C*, palatoalveolar {*y ɲ*} versus other (alveolar or *w*), except that 'drink' with initial alveolar *n* is treated as though having initial *ɲ*, which distinguishes it (except in the O-stem) from 'sing' and 'go in'.

(219) *Cv:* verbs

vocalism stems						gloss
O	A/O	A	E	I	U	
a. -ATR						
Cw onset in A/O- and E/I-stems, u: in U-stem						
dɔ:	*dwa:*	*dwa:*	*dwɛ:*	*duy*	*du:*	'pound'
nɔ:	*nwa:*	*nwa:*	*nwɛ:*	*nuy*	*nu:*	'sing'
nɔ:	*nwa:*	*nwa:*	*nwɛ:*	*nuy*	—	'go in'
sɔ:	*swa:*	*swa:*	*swɛ:*	*suy*	—	'vomit'
tɔ:	*twa:*	*twa:*	*twɛ:*	*tuy*	*tu:*	'make bunches'
C onset in A/O- and E/I-stems, i: in U-stem						
ɲɔ:	*ɲa:*	*ɲa:*	*ɲɛ:*	*ɲiyⁿ*	*ɲi:*	'eat (meal)'
yɔ:	*ya:*	*ya:*	*yɛ:*	—	—	'(day) break'
nɔ:	*na:*	*na:*	*nɛ:*	*niyⁿ*	*ni:*	'drink'

labial-initial

wɔ:	*(w)wa:*	*(w)wa:*	*(w)wɛ:*	*wiy*	*wu:*	‘weep’ (noun *wɔ̀:*)

b. +ATR

Cw onset in E/I-stem

jo:	*jo:*	*jwa:*	*jwe:*	*juy*	—	‘(sth) fill up’
go:	*go:*	*gwa:*	*gwe:*	*guy*	—	‘go out; (sun) rise’
ko:	*ko:*	*kwa:*	*kwe:*	*kuy*	*ku:*	‘sew’

w-initial

wo:	*wo:*	*(w)wa:*	*(w)we:*	*wuy*	*wu:*	‘draw (water)’

y-initial

yo:	*yo:*	*ya:*	*ye:*	*yiy*	—	‘be fixed; turn out well’

c. *Cv:^{n}* with long nasal vowel

Cw onset in A/O- and E/I-stems

mɔ:^{n}	*mwa:^{n}*	*mwa:^{n}*	*mwɛ:^{n}*	*mwiy^{n}*	*mu:^{n}*	‘be sprained’ (cf. noun *mòy^{n}*)
tɔ:^{n}	*twa:^{n}*	*twa:^{n}*	*twɛ:^{n}*	*twiy^{n}*	*tu:^{n}*	‘step on’ or ‘(God) create’

d. *Ci:-* in E/I-stem

[none]

For *mɛ́:* ‘dry, become dry’ and *gɛ́:^{n}* ‘fart’, which are partly monosyllabic and partly bisyllabic, see §10.1.2.5.

10.1.2.3 *gwé:* ‘go out’ and its relatives

gwé: ‘go out’ co-occurs with two bisyllabic near-synonyms (220). The morphology is obscure, but a similar trio of forms occurs in Bunoge. The two bisyllabic versions appear to distinguish viewers’ perspectives (inside the enclosed space, or outside it).

(220)

Pfv 3Sg	imperative	gloss
gwé:	*gó:*	‘leave, go away’ (Fr *quitter*)
gú:ndè	*gù:ndó*	‘go out, exit (from a structure)’
gó:ŋgè	*gò:ŋgó*	‘come (back) out, (re-)emerge’

The causatives are in (221).

(221)

Pfv 3Sg	imperative	gloss
gó:-mì	*gò:-mú*	‘take out, remove (sth)’ (Fr *enlever*)
gó-m-dè	*gò-m-dó*	‘cause (sb/sth) to go out, expel’
gó-m-gè	*gò-m-gó*	‘take/bring out (of a container)’

10.1.2.4 Lexically *CvC* verb stems absent

No lexically *CvC* stems have been observed. Some *CvCv* verbs with final high vowel have a surface form *CvC*, either word-final or presuffixal, due to apocope or syncope from /CvCi/ or /CvCu/. An example is *jáy^{n}* ‘fight’, which is often collocated with cognate nominal *jòy^{n}*

'fighting, (a) fight'. As shown in (222), some inflected forms have *CvC* (222b), but others are based on bisyllabic *CvCv* (222a).

(222)

form	category
a. bisyllabic stem	
jáy^{n}á	imperative (A/O-stem)
jày^{n}ù-ndí	imperfective negative (U-stem)
b. syncopated/apocopated to *CvC*	
jáy^{n}(í)	perfective (I-stem)
jáy^{n}-lì	perfective negative (I-stem)
jây^{n} bò	imperfective (U-stem)
jày^{n}-mâ: bò	capacitative ('can')

10.1.2.5 *mɛ́:* 'dry, become dry' and *gɛ́:^{n}* 'fart' (mixed *Cv:* / *Cvv*)

mɛ́: 'dry, become dry', which is related to the adjective *mɛ̀:* 'dry', behaves like a monosyllabic verb in the E, I, and (presumably) U stems, but as a bisyllabic in the other attested stems. The same is true of *gɛ́:^{n}* 'fart', which is related to the noun *gɛ̀:^{n}* '(a) fart'. In (223), which shows the vocalism stems (without tones), we can see that the regular monosyllabic verb 'drink' has the same shapes as 'dry' and 'fart' in the E, I, and U stems, i.e. those stems that (for such verbs) end in a front vowel. By contrast, 'drink' is monosyllabic in the O, A/O, and A stems, while 'dry' and 'fart' have vowel sequences in these stems.

(223)

	vocalism stems						gloss
	O	A/O	A	E	I	U	
a. typical *Cv:* stem							
	nɔ:	*na:*	*na:*	*nɛ:*	*niy^{n}*	*ni:*	'drink'
b. mixed *Cv:* / *Cvv* stem							
	mɛɔ	*mɛa*	*mɛa*	*mɛ:*	*miy^{n}*	—	'dry'
		~ *mea*	~ *mea*				
	gɛɔ^{n}	*gɛa^{n}*	*gɛá^{n}*	*gɛ:^{n}*	*giy^{n}*	*gi:^{n}*	'fart'
		~ *gea^{n}*	~ *gea^{n}*				

It is likely that 'dry' and 'fart' were original *Cvy^{n}v stems whose *y^{n} was elided. Cognates of the verb 'dry' include Toro Tegu and Jamsay *mày^{n}á* and Mombo *máyé*. Cognates of the verb 'fart' include Nanga *gìy^{n}ɛ́* and Mombo *gy^{n}ɛ́:* . A few complete inflectable O-, A/O-, and A-stems for 'dry' and 'fart' are in (224). Since the stems are -ATR their A/O- and A-stems are homophonous. The sequence shown here as *ea* can be heard as *ɛa* in careful pronunciation.

(224)	type	‘dry’	‘fart’	category
	O	*méɔ̀ bò-∅*	*géɔ̀^{n} bò-∅*	imperfective (3Sg)
	A/O	*méá* *méá-mì-∅*	*géá^{n}* *géá^{n}-mì-∅*	imperative (singular addressee) causative (3Sg perfective)
	A	*mèà-y^{n}*	*gèà^{n}-y*	imperative (plural addressee)

10.1.2.6 *NCv-* verb (*ŋké* ‘be depleted’)

The only Penange *NCv-* verb known to me is *ŋké* ‘be depleted, exhausted, used up’ (as in the context: we’re out of sugar). Since in practice it always has a third person subject, the otherwise high risk of confusion with 1Sg and 1Pl subject proclitics does not arise.

Basic paradigmatic forms are in (225). Postpausally, the tone of the nasal is polarized to the following tone, as indicated in the bracketed IPA transcriptions.

(225)	3Sg		3Pl	
perfective	*ŋké*	[ŋ̀ké]	*ŋkíy-yè*	[ŋ̀kíjjè]
perfective negative	*ŋkè-lì*	[ŋ́kèlì]	*ŋky-ándá*	[ŋ̀kjándá]
imperfective	*ŋkó bò*	[ŋ̀kóbò]	*ŋkó b-yà*	[ŋ̀kóbjà]
imperfective negative	*ŋkò:-ndí*	[ŋ́kò:ndí]	*ŋkò:-nd-yà*	[ŋ́kò:ndjà]

An initial *NC* cluster was observed in one bisyllabic verb stem: *ŋkíndɛ̀* ‘(person) die’. ‘Give’, which has *NCv-* shape in some Dogon languages, is *tábé* in Penange.

10.1.2.7 Bisyllabic stems with final nonhigh vowel

Bisyllabic verbs may be *CvCv*, *CvCCv*, *Cv:Cv*, or in a few cases *Cv:NCv* (*Cv:ndv* or *Cv:ŋgv*). The initial *C* position may be vacant (vowel-initial stems). Most bisyllabic verbs end in a nonhigh vowel in all vocalism stems. There is a small class of bisyllabic verbs that end in a high vowel (subject to deletion) in some inflectional categories.

Cv:NCv verbs appear to derive in at least some cases from trisyllabic etyma. An example is *já:ndɛ̀* ‘put (sth) up on (sth)’, perhaps from *jáŋgú-lɛ̀, cf. the reversive antonym *jáŋgú-lɛ̀* ‘take (sth) down from up on (sth)’. For *gú:ndɛ̀* ‘go out’ and *gó:ŋgɛ̀* ‘come (back) out, emerge’ see §10.1.2.3.

Most bisyllabic verbs belong to the final-nonhigh-vowel class (226 below). These verbs do not allow syncope/apocope of the final vowel in any inflected form. The 3Sg perfective (E/I-stem) is the citation form. Verbs of this class are either +ATR or -ATR. The majority are lexically -ATR, but often become +ATR in the A/O-stem, e.g. in the imperative. -ATR verbs have the vowel sequences (in the perfective) *ɛ…ɛ*, *ɔ…ɛ*, *i…ɛ*, and *u…ɛ*. +ATR verbs have the sequences *e…e*, *o…e*, *i…e*, *u…e*, and *a…e*. Bisyllabic verbs with *a* in the initial syllable are always +ATR.

In (226) the attested vowel sequences for bisyllabic verbs are illustrated. If no unsegmentable stem is known, a suffixally derived stem may be given. A dash — means there

no attestations in my current working lexicon. The gaps reflect the relative rarity of long vowels and are unlikely to be due to hard constraints.

(226) Final-nonhigh-vowel class (one example per vowel sequence)

stem	gloss
a. *CvCv*	
-ATR	
nɛmɛ	‘pick up’
sɔgɛ	‘buy’
simɛ	‘build’
dugɛ	‘insult’
+ATR	
yele	‘drape (sth, over sth)’
pole	‘lay (egg)’
nare	‘touch’
giye	‘harvest (millet)’
guye	‘steal’
b. *CvCCv*	
-ATR	
pɛnjɛ	‘milk (a cow)’
jɔŋgɛ	‘treat (medically)’
gimbɛ	‘pull’
dundɛ	‘look for’
+ATR	
tembe	‘find’
tombe	‘jump’
imbe	‘catch’
bunde	‘hit’
ande	‘go’
c. *Cv:Cv*	
-ATR	
tɛ:-rɛ	‘cover’
(Cɔ:Cɛ)	—
twi:^{n}-lɛ	‘remove foot from’
tu:gɛ	‘throw’
+ATR	
(Ce:Ce)	—
no:ye	‘sleep’
si:re	‘point at’
tu:-gɛ	‘dump’
na:le	‘think’

d. *Cv:CCv* (mostly *Cv:NCv*)

-ATR	
dɛ:ndɛ	‘abandon’
(Cɔ:CCɛ)	—
(Ci:CCɛ)	—
(Cu:CCɛ)	—
+ATR	
Ce:CCe	—
Co:CCe	—
gi:-nde	‘sniff’
gu:nde	‘go out’
go:ŋge	‘come (back) out, emerge’
na:nde	‘taste’
ba:nde	‘lock up, confine’
ja:nde	‘put (sth) up on (sth)’

The major vocalism stems are illustrated for representative *CvNCv* verbs in (227). *CvCv*, *Cv:Cv*, and *Cv:CCv* verbs follow the same vocalism patterns. The A/O-, A-, and U-stems favor +ATR-compatible vocalism in nonfinal as well as final syllables, as seen in ‘milk (a cow)’ and ‘treat (medically’).

(227) Final-nonhigh-vowel *CvNCv* vocalism stems treated as prosodically light

	vocalism stems					gloss
O	A/O	A	E/I	I	U	
a. -ATR						
pɛnjɔ	*penja*	*penja*	*pɛnjɛ*	*pɛnji*	*penju*	‘milk (a cow)’
jɔŋgɔ	*joŋga*	*joŋga*	*jɔŋgɛ*	*jɔŋgi*	*joŋgu*	‘treat (medically)’
gimbɔ	*gimba*	*gimba*	*gimbɛ*	*gimbi*	*gimbu*	‘pull’
dundɔ	*dunda*	*dunda*	*dundɛ*	*dundi*	*dundu*	‘look for’
b. +ATR (vowel other than *a* in penult)						
tembo	*tembo*	*temba*	*tembe*	*tembi*	*tembu*	‘find’
tombo	*tombo*	*tomba*	*tombe*	*tombi*	*tombu*	‘jump’
imbo	*imbo*	*imba*	*imbe*	*imbi*	*imbu*	‘catch’
bundo	*bundo*	*bunda*	*bunde*	*bundi*	*bundu*	‘hit’
c. +ATR (*a* in penult)						
ando	*anda*	*anda*	*ande*	*andi*	*andu*	‘go’

The O- and A/O-stems are identical for the +ATR stems in (227b), but not for the -ATR stems in (227a) or for the a-initial stems in (227c). For discussion, see §3.3.6.

There are two types of *CvCCv* verb with different tonal properties due to the way prosodic weight is calculated. One type consists entirely of *CvNCv* verbs with medial homorganic nasal plus voiced stop cluster {*mb nd nj ŋg*}. This type behaves tonally exactly like *CvCv*, i.e. as prosodically light (§3.1.3). All of the examples in (227) above are of this type.

The other consists mainly of *CvCCv* verbs that have various other medial *CC* clusters such as *lg*, *rg*, *ld*, *yr*, *mj*, and *by* (arguably syncopated from /CvCvCv/). There is also one case

each with *nd* (‘go’, §10.102.9) and *nj* (‘stand, stop’). These verbs behave tonally like *CvCvCv* (and *Cv:Cv*) verbs, i.e. as prosodically heavy. Examples of this class are in (228).

(228)

	cluster	gloss	perfective	imperative
a. *CvCCv* treated tonally as prosodically heavy like *CvCvCv*				
medial homorganic nasal-stop cluster				
	nd	‘go’	*ándɛ̀*	*àndà*
	nj	‘stand, stop’	*ínjɛ̀*	*ìnjà*
medial geminate				
	ll	‘escape’	*póllɛ̀*	*pòllò*
other medial clusters				
	lg	‘dispossess’	*wɛ́lgɛ̀*	*wɛ̀lgà*
	rg	‘help’	*bárgɛ̀*	*bàrgà*
	ld	‘forget’	*íldɛ̀*	*ìldà*
	yr	‘add’	*báyrɛ̀*	*bàyrà*
	mj	‘squeeze’	*kámjɛ̀*	*kàmjà*
	by	‘arrive’	*túbyɛ̀*	*tùbyà*
b. *CvCCv* treated tonally like *CvCv*, see (226b), (227) above				
	nd	‘hit’	*búndé*	*búndó*
c. irregular *CvCCv* intermediate between (a) and (b)				
	nd	‘convey’	*síndé*	*síndò*

ándɛ̀ ‘go’ (228a) has a long vowel in forms like *ŋ́ ɲ-ǎ:ndɛ̀* ‘I went’, and a reconstructed *a:nde would have a heavy shape. *ínjɛ̀* ‘stand, stop’ (228a) is contracted from *iŋg(i)-yɛ, also a heavy shape.

The difference between the *CvCCv* type in (228a) and other *CvCCv* verbs is observed in the tones of the perfective (positive) and the imperative. The light *CvNCv* verbs with homorganic nasal-stop cluster have {H} overlay in both the 3Sg perfective and the imperative, like *CvCv* and other light verbs. The idiosyncratically heavy *CvNCv* verbs ‘go’ and ‘stand, stop’ in (228a) have {HL} overlay in the 3Sg perfective and {L} in the imperative, as with heavier verbs. See §3.1.3 for discussion.

Irregular verb *síndé* ‘convey, take (away)’ (228c) has {H} overlay in the perfective, but {HL} in the imperative, so it straddles the line between the two types.

10.1.2.8 Bisyllabic stems with final high vowel

Final-high-vowel verbs are a small minority of *CvCv*, *CvCCv*, and *Cv:Cv* verbs. Some verbs that belong to this class in closely related Dogon languages are regular final-nonhigh-vowel verbs in Penange: *nímbé* ‘fire die out’, *túlé* ‘put (object) in’, *gálé* ‘put (liquid, grain) in’.

In Penange the final *i* or *u* is often lost by syncope/apocope, since it is preceded by an unclustered sonorant in many cases. After syncope/apocope, the verbs appear in the form *CvC* or *Cv:C*. Partial paradigms are in (229).

(229)

gloss	Pfv	PfvNeg	Imprt	Ipfv	IpfvNeg
a. first syllable has nonlow vowel, imperative ends in *u*					
final C is a sonorant, allows syncope/apocope					
'look'	*sé:m(ì)*	*sè:mì-l*	*sè:mù*	*sê:m bò*	*sè:mù-ndí* ~ *sè:m-dí*
nv-final, perfective negative -lì					
'scoop'	*kín(í)*	*kìn-lì*	*kínú*	*kîn bò*	*kìnù-ndí* ~ *kìn-dí*
perfective negative (i)-l					
'clench fist'	*kúmí*	*kùmì-l*	*kúmó*	*kûm bò*	*kùmù-ndí* ~ *kùm-dí*
b. first syllable has *a*, imperative ends in *a*					
perfective negative (ì)-l					
'speak'	*dám*	*dàmì-l*	*dámá*	*dâm bò*	*dàmù-ndí* ~ *dàm-dí*
nv-final, perfective negative -lì					
'do'	*kán*	*kàn-lì*	*káná*	*kân bò*	*kànù-ndí* ~ *kàn-dí*

All known stems of this class have a medial nasal {*m n ŋ ɲ* y^n} or geminated *mm*. For most of the verbs, the final high vowel surfaces reliably in the perfective negative (*dàmì-l*, *dà:*y^n*ì-l*). A few like 'do' and 'scoop', of shape *Cvn(i)*, have irregular perfective negatives with syllabic suffix allomorph *-lì* after a syncopated syllable. The syncope is attributable to attraction between the two flanking alveolars *n* and *l*.

Stems of this class also have a distinctive 3Pl perfective where the final-syllable nasal is geminated and followed by *i(:)*, e.g. *dám-mì(:)* 'they spoke'.

The full set of underived (i.e. non-causative) verbs with final high vowel is (230). An open-ended source of derived final-high-vowel verbs is causatives with suffix *-mì* (perfective), see §9.2.1.

(230) List of final-high-vowel verbs (except causatives)

Pfv	PfvNeg	imperative	gloss
a. penult has non-low vowel			
i. imperative ends in *u* or is unattested, perfective negative *…Ci-l*			
sé:mì	*sè:mì-l*	*sè:mù* ~ *sè:m*	'look'
gé:lì	*gè:lì-l*	—	'belch'
yé:rì	*yè:rì-l*	—	'be ashamed'
gí:y^n*ì*	*gì:*y^n*ì-l*	—	'(sth) be smelly'
tómí	*tòmì-l*	—	'become sour'
dímí	*dìmì-l*	*dímú*	'transplant'
júní	*jùnì-l*	*júnú*	'doze' (w. noun *nò:rè*)
úní	*ùnì-l*	*únú*	'walk'
ii. like (i), but perfective negative *…C-lì*			
kíní	*kìn-lì*	*kínú*	'scoop'
síní	*sìn-lì*	—	'be sated'
píní	*pìn-lì*	*pínú*	'wring'
iii. imperative ends in nonhigh vowel			
kúmí	*kùmì-l*	*kúmó*	'clench (fist)'

b. penult has *a* (long or short)

i. regular (perfective negative *…Cì-l*)

dám	*dàmì-l*	*dámá*	‘speak’
ɲám(í)	*ɲàmì-l*	*ɲámá*	‘malfunction’
námí	*nàmì-l*	*námá*	‘stone-grind’
kámí	*kàmì-l*	*kámá*	‘squeeze’
sá:lì	*sà:lì-l*	*sà:là*	‘stone-grind lightly’
wá:ɲì	*wà:ɲì-l*	*wà:ɲà*	‘come to a boil’
kámmì	*kàmmì-l*	—	‘become tight, hard’
ámmì	*ámmì-l*	—	‘(wound) swell’

ii. *y*^{n}-final, perfective negative *…C-lì* ~ *…C-lì*

jáy^{n}*(í)*	*jày*^{n}*ì-l* ~ *jày*^{n}*-lì*	*jáy*^{n}*á*	‘fight’
páy^{n}*(í)*	*pày*^{n}*ì-l* ~ *pày*^{n}*-lì*	*páy*^{n}*á*	‘put across’
dâ:y^{n} /dá:y^{n}ì/	*dà:y*^{n}*ì-l* ~ *dà:y*^{n}*-lì*	*dà:y*^{n}*à*	‘sit’

iii. *nv*-final, perfective negative *…C-lì*.

kán /kání/	*kàn-lì*	*káná*	‘do’

10.1.2.9 ‘Come’, ‘bring’, and ‘go’

‘Come’ and ‘bring’, which are semantically related as intransitive and transitive, have mixed paradigms. They have some final-nonhigh-vowel and some final-high-vowel features. Both verbs have medial consonantism (stop or *CC* cluster) that blocks syncope/apocope, whereas most verbs of the final-high-vowel class have a medial unclustered sonorant and some do allow syncope/apocope. In (231), the perfective and perfective negative are of the final-nonhigh-vowel type, but the imperative ends in *u*, like some final-high-vowel verbs with nonhigh vowel in the penult. Further comments about ‘come’ and ‘bring’ occur in the subsections on specific AN inflections.

(231) ‘Come’ and ‘bring’

Pfv	PfvNeg	imperative	gloss
medial obstruent or *CC* cluster (no syncope/apocope)			
égé	*ègè-l*	*égù*	‘come’
sóŋgé	*sòŋgè-l*	*sóŋgù*	‘bring’

ándé ‘go’ is regular, except that it has a long-voweled form when epenthetic *ɲ-* is prefixed to it following a 1st/2nd person proclitic, as in *ŋ́ ɲ-ǎ:ndè* ‘I went’; see (236) in §10.2.1.1. Related to this is the fact that *ándé* is treated as a prosodically heavy stem, i.e. it is treated like /á:ndé/ rather than like /ándé/ for morphophonological purposes.

10.1.2.10 Trisyllabic stems

Common trisyllabic shapes are *CvCvCv*, *CvCCvCv*, and *Cv:CvCv*, though a few others are attested (especially when denominal). Many trisyllabic verbs end in a derivational suffix, which affects vocalism (especially the medial vowel). Causatives with *-mì* and reciprocals with *-gè* or *-lè* are added to the A/O stem. Causatives with *-gè* are added to the A-stem or the I/U-stem depending on the verb. Reversive, mediopassive, and transitive derivatives generally require raising of the medial vowel to *i* or *u* (mimic-ing the I/U-stem) because of its weak

metrical position. The raised medial vowel can then be syncopated. Suffixally derived verbs belong to the final-nonhigh-vowel class of verbs, except for *-mì* causatives which belong to the final-high-vowel class.

Trisyllabic verbs that are not obviously derived usually end (in the perfective) in *rE*, *(n)dE*, *yE*, *jE*, *gE*, or *lE* (*E* = *e* or *ɛ*). They may have originated as suffixal derivatives, and it is possible that native speakers treat them morphophonologically as derivatives. Trisyllabics beginning with -ATR *Cɔ* and *Cɛ* show the same medial raising as in reversive, mediopassive, and transitive derivatives.

The difference between underived and suffixally derived trisyllabics is especially important for stems beginning in +ATR *Co* or *Ce* (those in *Co* are much more common). Underived stems of this type copy the initial vowel onto the medial syllable, hence perfective *CóCóCè* and *CéCéCè*. They contrast with suffixally derived *CóC(ú)-Cè* and *CéC(í)-Cè* (reversive, mediopassive, transitive).

Trisyllabics beginning with *Ci* or *Cu* mostly repeat the same high vowel quality in the medial syllable, whether by raising or copying: perfective *CíC(í)Cè*, *CíC(í)Cè*, *CúC(ú)Cè*, *CúC(ú)Cè*. However, a minority of trisyllabics beginning with *Ci* or *Cu* have a nonhigh medial vowel (*o* or *a*) suggestive of the A/O-stem.

Trisyllabics beginning with *Ca* either raise the medial vowel or copy the *a* quality onto the medial. An interesting pair is *nágálè* 'load (sth)' and its reversive *nágú-lè* 'unload'.

(232) gives one perfective example for each attested vowel-quality sequence. Tones are omitted. Some derivatives are included.

(232) Trisyllabic stems

stem	gloss
a. initial high vowel	
medial vowel is high (or syncopated)	
sigirɛ	'brew (beer)'
tubyɛ	'arrive at'
yigire	'shake'
yugure	'flip, invert'
medial vowel is nonhigh	
kiyale	're-harvest (after the main harvest)'
kindo:ŋge	'miss (sb, nostalgically)' (cf. noun *kíndó:ŋgé* 'nostalgia')
kumboje	'poke (with finger)'
b. initial mid-height vowel	
medial vowel is high (or syncopated)	
ɛnjigɛ	'spread (both arms)'
tɔbu-rɛ	'roll a turban on (sb)'
yel-le	'unhook' (reversive < *yélé* 'hook')
konju-le	'unroll (pants)' (reversive < *kónjé* 'roll up [pants]')
medial vowel is copy of initial +ATR vowel	
korode	'cough' (cf. noun *kòròdì*)
yele-nde	'carry (sth, by holding its strap)'

c. initial *a* (stem treated as +ATR)
medial vowel is high (or syncopated)
bamb(i)-ye 'carry (on back)'
ɲaŋgure 'send'
medial a
wabale '(snake) slither along'

Trisyllabic causatives with suffix *-mì* or *-gè* have different vocalism, frequently with a nonhigh vowel in the medial syllable: *égó-mì* 'cause to come', *tébá-gè* 'shatter (sth)'. See §9.2.1-2 for details.

10.2 Positive indicative AN categories

10.2.1 Perfective positive system (including perfect)

Perfective positive categories are associated with the E/I-stem, i.e. with stem-final front vowel. For the predominant final-nonhigh-vowel verb class, the E/I-stem ends in *e* or *ɛ* depending on the ATR-harmonic class of the stem. For the small number of final-high-vowel verbs, the E/I-stem ends in *i*, which is often apocopated (§3.4.2.3).

10.2.1.1 Perfective (E/I-stem, no aspectual suffix)

The simple perfective positive has no suffix. Instead, it is characterized by final {*e ɛ*} replacing the stem-final {*o ɔ*} for the majority final-nonhigh-vowel class (E-stem), and by final *i* replacing *u* (or zero after apocope/syncope) for the minority final-high-vowel class (I-stem). I refer to the combination of E-stem and I-stem in the two verb classes as the E/I-stem.

Since the stem-final vowel is regularly syncopated in the 3Pl form even for final-nonhigh-vowel verbs, it may be that the 3Pl perfective for those verbs is really based on the I-stem. This is because syncope normally applies only to short high vowels.

The tones of the stems depend not only on the pronominal subject, but also on the prosodic weight of the verb itself. *Cv*, *Cv:*, *CvCv*, and most *CvNCv* with homorganic nasal plus voiced stop cluster are prosodically light. Two exceptional *CvNCv* verbs (*ándè* 'go', *ínjè* 'stand/stop'), along with *CvCCv* verbs with other cluster types and all verbs with three or more vocalic moras (*Cv:Cv*, *CvCvCv*, etc.), are prosodically heavy. For the split in *CvNCv* verbs see (227-228) in §10.1.2.7 above. The tones of the verbs are as indicated in (233).

(233)

	1Sg/2Sg	1Pl/2Pl	3Sg	3Pl
light	{L}	{HL}	{H}	{H}-
heavy	{LHL}	"	{HL}	{H(L)}- (syncopated)

If we include the 1st/2nd person proclitics and the 3Pl suffix in the tonal formulae, we can better capture the tonal rhythms (234). In particular, the initial tone of the verb is polarized to that of a preceding H or L 1st/2nd person proclitic.

(234)

	1Sg/2Sg	1Pl/2Pl	3Sg	3Pl
light	H{L}	L{HL}	{H}	{H}-L
heavy	H{LHL}	"	{HL}	{H(L)}-L (syncopated)

The 3Pl suffix is L-toned suffix *-yè* ~ *-yɛ̀* with the vowel quality depending on the ATR-harmonic class of the verb. Before this 3Pl suffix, a stem-final vowel is syncopated, presumably after being raised to a short high vowel in this weak metrical position. 3Pl *-yè* ~ *-yɛ̀* is distinct from mediopassive derivational suffix *-yè* ~ *-yɛ̀* (§9.4).

(235) presents paradigms for prosodically light stems. Featured are a -ATR verb ('fall'), a +ATR verb ('come'), and a final-high-vowel verb ('do'), all of which have lexical *CvCv-* shape, plus a representative *Cv:* verb ('drink') and the only known *Cv* verb ('say'). For these prosodically light stems, the verb is {H}-toned in the 3Sg and {L}-toned in the 1Sg/2Sg. 'Drink' and 'say' are homophonous in the 3Pl. 1Pl *ŋ̀ nɛ̂* 'we said' and 2Pl *à nɛ̂* 'you-Pl said' are rare examples of word-final <HL>-toned monomoraic *Cv* syllables. 'Do' illustrates the distinctive 3Pl perfective of final-high-vowel stems; see (238) below.

(235) Perfective of prosodically light verbs

subject	schema	'fall'	'come'	'do'	'drink'	'say'
1Sg	*ń* {L}	*ń tìbɛ̀*	*ń yègè*	*ń kàn*	*ń nɛ̀:*	*ń nɛ̀*
1Pl	*ŋ̀* {HL}	*ŋ̀ tíbɛ̀*	*ŋ̀ yégè*	*ŋ̀ kân*	*ŋ̀ nɛ̂:*	*ŋ̀ nɛ̂*
2Sg	*á* {L}	*á tìbɛ̀*	*á yègè*	*á kàn*	*á nɛ̀:*	*á nɛ̀*
2Pl	*à* {HL}	*à tíbɛ̀*	*à yégè*	*à kân*	*à nɛ̂:*	*à nɛ̂*
3Sg	{H}	*tíbɛ́-∅*	*égé-∅*	*kán(í)-∅*	*nɛ́:-∅*	*né-∅*
3Pl	{H}*-yɛ̀* / *-yè*	*tíb-yɛ̀*	*ég-yè*	*kán-nì(:)*	*níy^{n}-y^{n}ɛ̀*	*níy^{n}-y^{n}ɛ̀*

Prosodically heavy verbs are illustrated in (236). The verb is now {HL}-toned in the 3Sg and {LHL}-toned in the 1Sg/2Sg. For trisyllabics, the {HL} overlay is realized as H.H.L. The 3Pl is superficially {H}-toned before an L-toned suffix. However, the syncopated stem-final vowel is likely L-toned (e.g. /túmbúgì-yè/, making 3Pl {HL}-toned like 3Sg.

(236) Perfective of prosodically heavy verbs

subject	schema	'push'	'think'	'go'
1Sg	*ń* {LHL}	*ń tùmbúgè*	*ń nă:lè*	*ń ɲ-ă:ndè*
1Pl	*ŋ̀* {HL}	*ŋ̀ túmbúgè*	*ŋ̀ ná:lè*	*ŋ̀ ɲ-á:ndè*
2Sg	*á* {LHL}	*á tùmbúgè*	*á nă:lè*	*á ɲ-ă:ndè*
2Pl	*à* {HL}	*à túmbúgè*	*à ná:lè*	*à ɲ-á:ndè*
3Sg	{HL}	*túmbúgè-∅*	*ná:lè-∅*	*ándè-∅*
3Pl	{H}*-yɛ̀* / *-yè*	*túmbúg-yè*	*ná:l-yè*	*ánd-yè*

Array (237) gives further examples of verbs of various syllabic shapes in the majority final-nonhigh-vowel class. The 3Pl suffix *-yè* ~ *-yɛ̀* requires a special syllabification of *Cv:* stems in the form *Cúy-* or *Cíy-*, which makes these 3Pl forms of *Cv:* verbs resemble their

counterparts among *CvCv* verbs after the final vowel is syncopated. For *gwé:* 'leave' I have also heard *gwíy-yè* alongside *gúy-yè*. The resulting *y-y* cluster is nasalized to y^n-y^n if the stem begins with a nasal (see 'sing'/'go in', 'drink', and 'eat').

(237) Perfective of final-nonhigh-vowel verbs

3Sg	3Pl	gloss
a. monosyllabic *Cv:-* (all known examples)		
-ATR stems, initial Cw from alveolar C		
dwé:-∅	*dúy-yè*	'pound'
nwé:-∅	*núy^n-y^{n}è*	'sing' or 'go in'
swé:-∅	*súy-yè*	'vomit'
twé:-∅	*túy-yè*	'make bunches'
twé:^{n}-∅	*túy^n-y^{n}è*	'step on'
-ATR stems, initial Cw from w		
(w)wɛ́:-∅	*wúy-yè ~ wíy-yè*	'weep'
-ATR stems, initial C from alveolar C (only example)		
né:-∅	*níy^n-y^{n}è*	'drink' (see comments below)
-ATR stems, initial C (non-alveolar)		
gé:^{n}-∅	*gíy^n-y^{n}è*	'fart'
ɲé:-∅	*ɲíy^n-y^{n}è*	'eat (meal)'
yé:-∅	—	'day break'
+ATR stems, initial Cw		
gwé:-∅	*gúy-yè ~ gwíy-yè*	'leave, come out'
jwé:-∅	*júy-yè*	'fill up'
kwé:-∅	*kúy-yè*	'sew'
(w)wé:-∅	*wúy-yè*	'draw water'
+ATR stems, initial C (alveolar or palatal)		
yé:-∅	*yíy-yè*	'be fixed'
b. *CvCv*		
-ATR stems		
gíyɛ́-∅	*gíy-yè*	'kill'
dúgɛ́-∅	*dúg-yè*	'insult'
sɔ́gɛ́-∅	*sɔ́g-yè*	'buy'
sɛ́mɛ́-∅	*sɛ́m-yè*	'slaughter'
+ATR stems		
nálé-∅	*nál-yè*	'give birth'
gújé-∅	*gúj-yè*	'throw'
sígé-∅	*síg-yè*	'go down'
yélé-∅	*yél-yè*	'drape (sth, over sth)'
c. *CvCCv*		
prosodically light, most CvNCv with homorganic nasal-stop		
búndé-∅	*búnd-yè*	'hit'
treated as prosodically heavy, CvNCv		
ínjè-∅	*ínj-yè*	'stand/stop'

prosodically heavy, medial CC other than nasal-stop

wɛ́lgè-∅	*wɛ́lg-yè*	‘dispossess’

d. three or more vocalic moras

yígírè-∅	*yígír-yè*	‘shake’
púrúgè-∅	*púrúg-yè*	‘cut’
sógú-lè-∅	*sógú-l-yè*	‘sell’ (reversive of ‘buy’)
ɲáŋgúrè-∅	*ɲáŋgúr-yè*	‘send’
bámb-yè-∅	*bámbí-y-yè*	‘carry (on back)’
causatives		
tébá-gè-∅	*tébá-g-yè*	‘shatter (sth)’

In (237a), *(w)wɛ́:-∅* ‘weep’ and *wwɛ́:-∅* ‘he/she drew water’ are pronounced with a lengthened initial semivowel. A transcription *wo̱ɛ́:* would be phonologically more revealing.

‘Drink’ diverges from other *Cv:* verbs with nonpalatal *C* in lacking the *Cw* onset before unrounded vowels and lacking medial *u* in the 3Pl (*Cúy-yè/-yè*). For ‘drink’ the forms are *nɛ́:-∅* ‘he/she drank’ and 3Pl *níy^{n}-y^{n}ɛ̀*. Comparison with ‘eat (meal)’ and (in part) ‘day break’ suggests that the alveolar *n* of ‘drink’ is treated phonologically as though palatal (compare *ɲɛ́:* ‘he/she ate’), in contrast to the “same” alveolar *n* in ‘sing’ and ‘go in’ (perfective 3Sg *nwɛ́:-∅*, 3Pl *núy^{n}-y^{n}ɛ̀*). Indeed, ‘drink’ and ‘eat (meal)’ have merged completely into a single ‘consume (without heavy chewing)’ verb with initial palatoalveolar nasal in at least two western Dogon languages, Tiranige (*ɲɔ́:*) and Tebul Ure (*ɲɛ̌:*).

Verbs of the final-high-vowel class are in (238). They are sharply differentiated from the final-nonhigh-vowel class. In the 3Pl form, the final nasal is geminated and followed by *i(:)*.

(238) Perfective of final-high-vowel verbs

3Sg	3Pl	gloss
a. penult with *a*		
kán-∅	*kán-nì(:)*	‘do’
dám-∅	*dám-mì(:)*	‘speak’
ɲám(í)-∅	*ɲám-mì(:)*	‘malfunction’
námí-∅	*nám-mì(:)*	‘stone-grind’
dâ:y^{n}-∅	*dá:y^{n}-y^{n}ì(:)*	‘sit’
jáy^{n}-∅	*jáy^{n}-y^{n}ì(:)*	‘fight’
b. penult with nonlow vowel		
kúmí-∅	*kúm-mì(:)*	‘clench (fist)’
sé:m(ì)-∅	*sé:m-mì(:)*	‘look’

For the 3Pl, before a pause I often hear (and transcribe) final short *ì*. However, the vowel is long before past clitic *=yè*, as in *kán-nì:=yè* ‘they had done’ (§10.6.1.5). The vowel is also long (and H-toned) when the verb is followed by nonpast anterior subordinator *né* ~ *nè*, as in *kán-ní: nè* ‘they will do and …’, (460) in §15.2.2.2.

‘Come’ and ‘bring’, which elsewhere have some morphological affinities with the final-high-vowel class, are treated like final-nonhigh-vowel verbs in the perfective paradigm.

(239) Perfective of ‘come’ and ‘bring’

3Sg	3Pl	gloss
égé-∅	*ég-yè*	‘come’
sóŋgé-∅	*sóŋg-yè*	‘bring’

10.2.1.2 Perfective plus *nèw* ‘first’ with near future sense

In one fairly uncommon construction with near-future sense, the perfective is combined with a clause-final particle *nèw* ‘first’. The clause in question denotes an event that must take place before some other event (whether overtly stated or implied), so it has some affinity to conditional antecedents.

(240) *hàyà* *ŋ́* *nà:lé* *nèw*
well 1SgSbj think.Pfv **first**
‘Well, I’ll think it over first.’

10.2.1.3 Perfective-1a and -1b absent

Suffixally marked perfectives (as opposed to perfects) of the types found widely in eastern Dogon languages and Tebul Ure (perfective-1a *-yà-*, perfective-1b *-tì-*, etc.) have not been observed in Penange.

10.2.1.4 Experiential perfect ‘have ever’ (A/O- or U-stem, *-tê:*)

This form is used in contexts like ‘have you ever (been to Paris, seen an elephant, etc.)?’ Suffix *-tê:* is added to the A/O-stem of the verb for final-nonhigh-vowel verbs, and (arguably) for some final-high-vowel verbs. A textual example is ‘he had (once) beaten and killed …’ in (598) in Text 4.

The paradigm is (241). 1st/2nd person subject pronominals precede the verb. The stem is {H}-toned after the L-toned 1Pl and 2Pl pronominals, otherwise {L}-toned. The suffix is <HL>-toned throughout, and is unaffected by tonal interactions between proclitics and the verb stem.

(241) Experiential perfect

subject	schema	‘have (ever) seen’	‘have (ever) gone’
1Sg	*ŋ́* {L}*-tê:*	*ŋ́ màlgà-tê:*	*ŋ́ ɲ-à:ndà-tê:*
1Pl	*ŋ̀* {H}*-tê:*	*ŋ̀ málgá-tê:*	*ŋ̀ ɲ-á:ndá-tê:*
2Sg	*á* {L}*-tê:*	*á màlgà-tê:*	*á ɲ-à:ndà-tê:*
2Pl	*à* {H}*-tê:*	*à málgá-tê:*	*à ɲ-á:ndá-tê:*
3Sg	{L}*-tê:-∅*	*màlgà-tê:-∅*	*àndà-tê:*
3Pl	{L}*-té:-yà*	*màlgà-té:-yà*	*àndà-té:-yà*

A few more examples of the 3Sg form are in (242). These are all final-nonhigh-vowel verb stems.

(242)	3Sg Pfv	3Sg ExpPrf	gloss
a. with final *a*			
lexically -ATR			
	né	*nà-tê:*	‘say’
	dwɛ́:	*dwà:-tê:*	‘pound’
	né:	*nà:-tê:*	‘drink’
	yɛ́bɛ́	*yɛ̀bà-tê:* ~ *yèbà-tê:*	‘dance’
	tɔ́lɛ́	*tɔ̀là-tê:* ~ *tòlà-tê:*	‘butcher’
nonfinal a			
	ná:ndɛ̀	*nà:ndà-tê:*	‘taste’
	bárgɛ̀	*bàrgà-tê:*	‘help’
b. with final *o* (lexically +ATR, nonfinal nonlow vowels)			
	gwé:	*gò:-tê:*	‘go out’
	yélé	*yèlò-tê:*	‘drape (sth, over sth)’
	sógú-lɛ̀	*sògù-lò-tê:*	‘sell’

For final-high-vowel verbs, we get forms like those in (243). If the stem has *a* in the initial or penult, it also has final *a* in this inflection, which could be taken either to be the A/O-stem (as for the final-nonhigh-vowel verbs) or else to be the A-stem (243a). Other final-high-vowel verbs have what is probably the U-stem, with the /u/ apocopated (243b).

(243)	3Sg Pfv	3Sg ExpPrf	gloss
a. nonfinal *a*			
	dám	*dàmà-tê:*	‘speak’
	kán	*kànà-tê:*	‘do’
b. nonfinal nonlow vowel			
	sé:mì	*sè:m-tê:*	‘look’

The negative counterpart is common (‘have never VPed’); see §10.2.3.2. For the past-time experiential perfect, see §10.6.1.6.

10.2.1.5 Recent perfect and active resultative absent

No recent perfect category (‘has recently VPed’ or ‘has recently finished VPing’) or similar active (non-passivizing) resultative construction has been observed in Penange. The derived stative (e.g. ‘be seated’, ‘be asleep’) expresses roughly similar situations for some types of verb. For the resultative passive, see §10.4.1.2.

10.2.1.6 Reduplicated perfective

Reduplicated perfectives were elicitable. They probably involve verb focalization or intensification, but I lack sufficient textual examples to show this. The reduplicant is L-toned *Cv̀* copying the onset of the base. 1st/2nd person proclitics are intercalated between the reduplicant and the base stem. The paradigm is (244), illustrated with 'fall'. The verb proper has the same tones as in the simple perfective, except that the 3Sg form for prosodically light stems is {HL}-toned (*tì tíbè-∅*) versus {H} in the simple perfective (*tíbé-∅*).

(244)

subject	schema	'fall'		
1Sg	Rdp *ŋ́* {L}	*tì*	*ŋ́*	*tìbè*
1Pl	Rdp *ǹ* {L}	*tì*	*ǹ*	*tíbè*
2Sg	Rdp *á* {L}	*tì*	*á*	*tìbè*
2Pl	Rdp *à* {L}	*tì*	*à*	*tíbè*
3Sg	Rdp {L}	*tì*		*tíbè-∅*
3Pl	Rdp {L}	*tì*		*tíb-yè*

Other examples (3Sg) are *kà kân-∅* 'he/she did', *è égè-∅* 'he/she came'. With a trisyllabic stem: *tù túmbúgè-∅* 'he/she pushed', *tù ŋ́ tùmbúgè-∅* 'I pushed'.

The epenthetic onset (*y-*, *ɲ-*) for vowel-initial verbs after 1st/2nd person proclitics is copied in the reduplicant (as in the reduplicated imperfective): *yè ŋ́ y-ègè* 'I came', *ɲà ŋ́ ɲ-ă:ndè* 'I went'. This copying does not occur in the only attested reduplicated stative based on a vowel-initial verb, see (29) in §3.5.2.

10.2.2 Imperfective positive system

10.2.2.1 Imperfective (*bò* ~ *wò*)

The basic imperfective (positive) verb form ends in *bò*, an auxiliary verb that is historically related to the quasi-verb *bô* 'be (somewhere)' (§11.2.2.2), though the synchronic relationship is attenuated due to phonological divergences. 1st/2nd person subject pronouns intervene between the verb and *bò*. Unlike *bô* 'be (somewhere)' and progressive auxiliary *bô* (§10.2.2.4), imperfective auxiliary *bò* lenites to *wò* systematically after 2nd person pronominals. I have also heard lenition in the 3Sg form, but unlenited *bò* is usual in elicitation. The progressive and imperfective auxiliaries are also distinct tonally.

The verb is in the O/U-stem, i.e. the O-stem for final-nonhigh-vowel verbs and the U-stem for final-high-vowel verbs. The O-stem ends in *o* or *ɔ* depending on the ATR-harmonic class of the verb. The stem-final {*o ɔ*} or *u* contracts with second person *a* morphemes and with 3LogoSg *à* to form a long [a:] that is transcribed here as hyphenated *a-a* to make the morphological structure clearer. 3LogoPl has the full independent 3Pl form *ŋké*, which is not otherwise used for 3Pl in this paradigm. The verb stem has {HL} tone pattern for 3Sg and 3Pl, realized as H.H.L on trisyllabic verbs. Before an H-toned pronominal (1Sg or 2Sg), the stem has {H} overlay. Before an L-toned pronominal (1Pl or 2Pl) and before logophorics, the maximal overlay is {LHL}, realized fully with trisyllabic 'shake', but reduced to H.L for bisyllabics like 'slaughter' and to H for monosyllabics like 'go in'.

(245) Imperfective paradigm

subject	schema (maximal)		‘go in’	‘slaughter’	‘shake’
1Sg	{H}	*ŋ̀ bò*	*nɔ́: ŋ̀ bò*	*sémɔ́ ŋ̀ bò*	*yígíró ŋ̀ bò*
1Pl	{LHL}	*ŋ̀ bò*	*nɔ́: ŋ̀ bò*	*sémɔ̀ ŋ̀ bò*	*yìgírò ŋ̀ bò*
2Sg	{H}*-á*	*wò*	*nwá-á wò*	*sémá-á wò*	*yígírá-á wò*
2Pl	{LHL}*-à*	*wò*	*nwá-à wò*	*sémà-à wò*	*yìgírà-à wò*
3Sg	{HL}	*bò-∅*	*nɔ̂: bò-∅*	*sémɔ̀ bò-∅*	*yígírò bò-∅*
3Pl	{HL}	*b-yà*	*nɔ̂: b-yà*	*sémɔ̀ b-yà*	*yígírò b-yà*
3LogoSg	[same as 2Pl]				
3LogoPl	{LHL} *ŋké*	*bò*	*nɔ́: ŋ̀ké bò*	*sémɔ̀ ŋké bò*	*yìgírò ŋké bò*

Verbs with nonfinal -ATR vowels {*ɛ ɔ*} may shift them to +ATR {*e o*} when the stem-final contracts with 2nd person *a*. My assistant’s intuition is that the vowel remains -ATR, and I did hear it as -ATR in elicitation. In unmonitored speech my impression was that the vowel shifted to +ATR in the 2Sg and 2Pl in stems like ‘slaughter’, hence *sémá-á*, *sémà-à*.

Further examples of the 2Sg, 1Pl, and 3Sg imperfectives of final-nonhigh-vowel verbs are in (246). The 3Sg perfective (left column) is included for comparison. The imperfective paradigm of ‘drink’ in (246a) is identical to that of ‘go in’ in (245) above in the first and third but not second persons (consonantal onset *nw* versus *n*). The imperfective paradigm of ‘say’ at the top of (246) is distinct from those of both ‘drink’ and ‘go in’ in the first and third persons (where *Cv* remains distinct from *Cv:*). However, the vocalic contraction in the second person forms results in homophony between ‘say’ and ‘drink’ (but not ‘go in’).

(246) Imperfective (final-nonhigh-vowel class)

Pfv 3Sg	imperfective 2Sg	imperfective 1Pl	imperfective 3Sg	gloss
a. *Cv* and *Cv:*				
Cv				
né	*ná-á wò*	*nɔ́ ŋ̀ bò*	*nɔ́ bò-∅*	‘say’
Cv:				
dwé:	*dwá-á wò*	*dɔ́: ŋ̀ bò*	*dɔ̂: bò-∅*	‘pound’
twé:^{n}	*twá^{n}-á^{n} wò*	*tɔ́:^{n} ŋ̀ bò*	*tɔ̂:^{n} bò-∅*	‘step on’
ɲé:	*ɲá-á wò*	*ɲɔ́: ŋ̀ bò*	*ɲɔ̂: bò-∅*	‘eat’
né:	*ná-á wò*	*nɔ́: ŋ̀ bò*	*nɔ̂: bò-∅*	‘drink’
gwé:	*gwá-á wò*	*gó: ŋ̀ bò*	*gô: bò-∅*	‘come out’
b. bisyllabic				
sɔ́gɛ́	*sɔ́gá-á wò* ~ *sógá-á wò*	*sɔ́gɔ̀ ŋ̀ bò*	*sɔ́gɔ̀ bò-∅*	‘buy’
yɛ́bɛ́	*yɛ́bá-á wò* ~ *yébá-á wò*	*yɛ́bɔ̀ ŋ̀ bò*	*yɛ́bɔ̀ bò-∅*	‘dance’
gújé	*gújá-á wò*	*gújɔ̀ ŋ̀ bò*	*gújò bò-∅*	‘throw’
sígé	*sígá-á wò*	*sígò ŋ̀ bò*	*sígò bò-∅*	‘go down’

ándè	*ándá-á wò*	*ándò ŋ̀ bò*	*ándò bò-∅*	‘go’
ná:lè	*ná:lá-á wò*	*ná:lò ŋ̀ bò*	*ná:lò bò-∅*	‘think’

e. trisyllabic

yígírè	*yígírá-á wò*	*yìgírò ŋ̀ bò*	*yígírò bò-∅*	‘shake’
tébá-gè	*tébá-gá-á wò*	*tèbá-gò ŋ̀ bò*	*tébá-gò bò-∅*	‘shatter (sth)’

Stems with final high vowel are illustrated in (247). The verb is in the U-stem, but the final /u/ is only reliably audible in the first person forms due to *vv*-Contraction in the second person forms and due to syncope in the third person.

(247) Imperfective (final-high-vowel class)

Pfv 3Sg	imperfective			gloss
	2Sg	1Pl	3Sg	
a. nonfinal nonlow vowel				
sé:mì	*sé:má-á wò*	*sé:mù ŋ̀ bò*	*sé:m bò-∅*	‘look’
b. nonfinal *a*				
dám	*dámá-á wò*	*dámù ŋ̀ bò*	*dám bò-∅*	‘speak’
dâ:y^{n}	*dá:y^{n}á-á wò*	*dá:y^{n}ù ŋ̀ bò*	*dá:y^{n} bò-∅*	‘sit’
kán	*káná-á wò*	*kánù ŋ̀ bò*	*kán bò-∅*	‘do’

‘Come’ and ‘bring’ follow the lead of the final-nonhigh-vowel class.

(248) Imperfective (‘come’ and ‘bring’)

Pfv 3Sg	imperfective			gloss
	2Sg	1Pl	3Sg	
égé	*égá-á wò*	*égò ŋ̀ bò*	*égò bò-∅*	‘come’
sóŋgé	*sóŋgá-á wò*	*sóŋgò ŋ̀ bò*	*sóŋgò bò-∅*	‘bring’

This is a broad imperfective that is sometimes used as a general (i.e. habitual) present (‘I work here’), but it is especially common as a future (‘I will go there tomorrow’).

While most aspect-negation categories simply add clitic *=ye* to shift the temporal reference point to the past, the imperfective (positive) has a special past construction (§10.6.1.4).

10.2.2.2 Final-long-vowel imperfective

An alternative imperfective is formed by lengthening a stem-final vowel with falling tone and positioning 1st/2nd person proclitics preverbally. For final-nonhigh-vowel verbs (‘go in’, ‘slaughter’, ‘shake’), this form is based on the O-stem. For final-high-vowel verbs (‘do’), it is based on the U-stem. I refer to this combination loosely as the O/U-stem. The word-level tone pattern (including the 3Pl suffix if present) is {LHL} except in the 1Pl/2Pl forms, which are {HL}. The {LHL} pattern, however, is realized in this paradigm as L.<HL> on bisyllabics

and as L.L.<HL> on trisyllabics, unlike {LHL} in other paradigms. In my data, the final-long-vowel imperfective is mainly a general (i.e. habitual) imperfective rather than a future.

(249)

subject	schema	'go in'	'slaughter'	'shake'	'do'
1Sg	*ŋ́* {LHL}	*ŋ́ nɔ̌:*	*ŋ́ sèmɔ̂:*	*ŋ́ yìgìrô:*	*ŋ́ kànû:*
1Pl	*ǹ* {HL}	*ǹ nɔ̂:*	*ǹ sémɔ̀:*	*ǹ yígírò:*	*ǹ kánù:*
2Sg	*á* {LHL}	*á nɔ̌:*	*á sèmɔ̂:*	*á yìgìrô:*	*á kànû:*
2Pl	*à* {HL}	*à nɔ̂:*	*à sémɔ̀:*	*à yígírò:*	*à kánù:*
3Sg	{LHL}*-∅*	*nɔ̌:-∅*	*sèmɔ̂:-∅*	*yìgìrô:-∅*	*kànû:-∅*
3Pl	{L}*-â:*	*nw-â:*	*sèm-â:* ~ *sèm-â:*	*yìgìr-â:*	*kàn-â:*

Textual examples are *àrg-â:* 'they replaster' in (539) in Text 1, and *bèlɔ̂:-∅* 'will suffice' in (559) in Text 2. For the 'be able (i.e. be in a position) to VP' construction with e.g. 3Sg *dìnɔ̂:-∅* 'gets', see §10.5.2.

This imperfective form is also common with the verb 'be afraid', see §17.4.7 for examples. It is also found in different-subject purposive clauses before *lè* (§17.5.2).

The passive verb derivation with *-m-û:* (§9.3) can be analysed morphologically as the final-long-vowel imperfective of a homophone of causative *-mì*. This would fit a widespread Dogon pattern where the passive and causative suffixes are identical in form. The difference is that in Penange the passive function requires the final-long-vowel imperfective, and so is always distinguishable from the causative function.

The frame 'every day I __' regularly elicited this form rather than the *bò* imperfective (preceding section), though in this case lengthened final vowel is L-toned.

(250)

[wá:	*sèlè]*	*sèm-à:*	/ *ŋ́*	*sèmɔ̀:*
[day	all]	slaughter.**Ipfv**-3PlSbj	/ 1SgSbj	slaughter.**Ipfv**

'Every day they slaughter / I slaughter (sc. an animal).'

A superficially similar verb form, but without pronominal-subject marking and based on the A/O- or U-stem rather than just on the O-stem, functions as an imperfective subordinator in same-subject clauses (§15.2.1.2).

A tonally slightly different form of the final-long-vowel imperfective occurs in a purposive clause construction (§17.5.2).

10.2.2.3 Reduplicated imperfective

An occasional reduplicated imperfective has been observed in texts. See *gì gíyà-à wò* '(he said) he would kill' in (583) in Text 4 and a similar example with the same verb in (588) in Text 4. The rather dramatic context suggests that the verb is focalized or intensified in some way.

The paradigm is (251). The forms are the same as those of the regular imperfective except for the reduplicant.

(251)

subject	schema		‘kill’		
1Sg	Rdp {H}	*ŋ́ bò*	*gì*	*gíyɔ́*	*ŋ́ bò*
1Pl	Rdp {HL}	*ŋ̀ bò*	*gì*	*gíyɔ̀*	*ŋ̀ bò*
2Sg	Rdp {H}*-á*	*wò*	*gì*	*gíyá-á*	*wò*
2Pl	Rdp {HL}*-à*	*wò*	*gì*	*gíyà-à*	*wò*
3Sg	Rdp {HL}	*wò-∅*	*gì*	*gíyɔ̀*	*bò*
3Pl	Rdp {HL}	*b-yà*	*gì*	*gíyɔ̀*	*b-yà*

10.2.2.4 Progressive (*bô*)

This is one of two progressive constructions. The other has auxiliary *túlá* (§10.2.2.5 below).

Except in the second person forms, the progressive with auxiliary *bô* is segmentally identical to the regular imperfective (§10.2.2.1 above). The verb has the same O/U-stem in both combinations. However, in the second person, *bô* does not lenite to #*wô* in the progressive. This suggests that the synchronic relationship to quasi-verb *bô* ‘be (somewhere)’ is stronger for the progressive than for the imperfective. This conclusion is supported by the fact that the progressive, but not the imperfective, is negated by replacing *bô* ‘be (somewhere)’ by its suppletive negative counterpart *wǒl* ‘be absent, not be (somewhere)’, see §10.2.3.4 below.

The progressive is always distinguishable from the imperfective by tones. Among other differences, the verb always begins with an H-tone in the imperfective. By contrast, the progressive verb stem is entirely {L}-toned, except for a final H-tone before tautosyllabic H-toned 1Sg and 2Sg pronominals. The auxiliary *bô* is <HL>-toned, except L-toned *bò* after an H-toned 1Sg or 2Sg pronominal.

(252) Paradigm of the progressive with *bô*

subject	schema	‘go in’	‘drape (sth)’	‘shake’
1Sg	{L} *ŋ́ bò*	*nɔ̀: ŋ́ bò*	*yèlò ŋ́ bò*	*yìgìrò ŋ́ bò*
1Pl	{L} *ŋ̀ bô*	*nɔ̀: ŋ̀ bô*	*yèlò ŋ̀ bô*	*yìgìrò ŋ̀ bô*
2Sg	{L}*-á bò*	*nwà-á bò*	*yèlà-á bò*	*yìgìrà-á bò*
2Pl	{L}*-à bô*	*nwà-à bô*	*yèlà-à bô*	*yìgìrà-à bô*
3Sg	{L} *bô-∅*	*nɔ̀: bô-∅*	*yèlò bô-∅*	*yìgìrò bô-∅*
3Pl	{L} *bí-yà*	*nɔ̀: bí-yà*	*yèlò bí-yà*	*yìgìrò bí-yà*

As usual, the contracted *a-a* in second person forms favors +ATR compatible vocalism in preceding syllables (see ‘buy’ below).

Representative 2Sg and 3Sg forms for verbs ending in nonhigh vowel are displayed in (253).

(253) Progressive (final-nonhigh-vowel class)

Pfv 3Sg	progressive 2Sg	progressive 1Pl	progressive 3Sg	gloss
a. *Cv:*				
nwɛ́:	*nwà-á bò*	*nɔ̀: ŋ̀ bô*	*nɔ̀: bô-∅*	‘go in’
gwé:	*gwà-á bò*	*gò: ŋ̀ bô*	*gò: bô-∅*	‘go out’
ɲé:	*ɲà-á bò*	*ɲɔ̀: ŋ̀ bô*	*ɲɔ̀: bô-∅*	‘eat’
b. bisyllabic				
-ATR				
yɛ́bɛ́	*yɛ̀bà-á bò* ~ *yèbà-á bò*	*yɛ̀bɔ̀ ŋ̀ bô*	*yɛ̀bɔ̀ bô-∅*	‘dance’
sɔ́gé	*sɔ̀gà-á bò* ~ *sògà-á bò*	*sɔ̀gɔ̀ ŋ̀ bô*	*sɔ̀gɔ̀ bô-∅*	‘buy’
+ATR				
gújé	*gùjà-á bò*	*gùjò ŋ̀ bô*	*gùjò bô-∅*	‘throw’
nálé	*nàlà-á bò*	*nàlò ŋ̀ bô*	*nàlò bô-∅*	‘give birth’
ná:lè	*nà:là-á bò*	*nà:lò ŋ̀ bô*	*nà:lò bô-∅*	‘think’
c. trisyllabic				
sógú-lè	*sògù-là-á bò*	*sògù-lò ŋ̀ bô*	*sògù-lò bô-∅*	‘sell’

Progressives from verbs with final high vowel are in (254). The verb takes the U-stem, but the final /u/ is only audible in the first person forms. It contracts with *á* (2Sg) or *à* (2Pl), and it is syncopated in the third person forms.

(254) Progressive (final-high-vowel class)

Pfv 3Sg	progressive 2Sg	progressive 1Pl	progressive 3Sg	gloss
a. nonfinal nonlow vowel				
sé:mì	*sè:mà-á bò*	*sè:mù ŋ̀ bô*	*sè:m bô*	‘look’
b. nonfinal *a*				
dám	*dàmà-á bò*	*dàmù ŋ̀ bô*	*dàm bô*	‘speak’
dâ:y^{n}	*dà:y^{n}à-á bò*	*dà:y^{n}ù ŋ̀ bô*	*dà:y^{n} bô*	‘sit’
kán	*kànà-á bò*	*kànù ŋ̀ bô*	*kàn bô*	‘do’

Progressives from ‘come’ and ‘bring’ (255) follow the model of the final-nonhigh-vowel class in using the O-stem.

(255) Progressive (‘come’ and ‘bring’)

Pfv 3Sg	progressive 2Sg	progressive 1Pl	progressive 3Sg	gloss
égé	*ègà-á bò*	*ègò ŋ̀ bô*	*ègò bô*	‘come’
sóŋgé	*sòŋgà-á bò*	*sòŋgò ŋ̀ bô*	*sòŋgò bô*	‘bring’

Examples of the progressive are in (256).

(256) a. *ɲă:* *ɲɔ̀:* *ŋ́* *bò*
meal eat 1SgSbj be
'I am eating.' (< *ɲà:*)

b. *kăy^{n}* *kànù* *ŋ̀* *bô*
work(n) do.Prog 1PlSbj Prog
'We are working.' (< *kày^{n}*)

c. *sɛ̀ndí* *kàn* *bô-∅*
prayer do.Prog Prog-3SgSbj
'He/She is praying.'

For the past progressive with additional clitic *=ye-*, see §10.6.1.4.

10.2.2.5 Progressive with *túlà*

This construction competes with progressive *bô*. The verb has the same form before *túlà* as it does before *bô*. The basic form of the auxiliary is *túlà* with {HL}-contour, dropping to {L} after H-toned pronominals (1Sg, 2Sg). In 3Pl *túlá-yà*, regular Rightward H-Spreading has occurred.

Unlike the progressive with *bô*, that with *túlà* requires *-n* suffix on the verb in third person subject combinations. The (accidental) effect is that there is no clearly audible distinction between the 1Pl and 3Sg forms, although they can be distinguished orthographically, e.g. 1Pl *nɔ̀: ŋ̀ túlà* versus 3Sg *nɔ̀:-n túlà-∅* in (257).

(257) Paradigm of the progressive with *túlà*

subject	schema	'go in'	'drape (sth)'	'shake'
1Sg	{L} *ŋ́ tùlà*	*nɔ̀: ŋ́ tùlà*	*yèlò ŋ́ tùlà*	*yìgìrò ŋ́ tùlà*
1Pl	{L} *ŋ̀ túlà*	*nɔ̀: ŋ̀ túlà*	*yèlò ŋ̀ túlà*	*yìgìrò ŋ̀ túlà*
2Sg	{L}*-á tùlà*	*nwà-á tùlà*	*yèlò á tùlà*	*yìgìrò á tùlà*
2Pl	{L}*-à túlà*	*nwà-à túlà*	*yèlò à túlà*	*yìgìrò à túlà*
3Sg	{L}*-n túlà-∅*	*nɔ̀:-n túlà-∅*	*yèlò-n túlà-∅*	*yìgìrò-n túlà-∅*
3Pl	{L}*-n túlá-yà*	*nɔ̀:-n túlá-yà*	*yèlò-n túlá-yà*	*yìgìrò-n túlá-yà*

túlà in this construction is likely related to a verb (perfective *túlé*) meaning 'put (sth, in sth)'. It also occurs in a number of collocations such as *kámbá túlé* 'take a step' and *tájjé túlé* 'put shoes on'.

Morphologically, *túlà* and the rest of its paradigm in (258) is an A-stem verb with imperfective positive sense. For more on this see the following section.

10.2.2.6 A-stem imperfective

A special A-stem imperfective is regular in 'before …' constructions with clause-final *kégù* (§15.2.3). It is also regular before imperfective subordinator *w^n* ~ *ŋ* (§15.2.1.3). It is attested (though not required) in conditional consequent clauses, as in *ŋ̀ tégà* 'we will head for' in (469d) in §16.1. The usual 3Pl form has suffix *-yà*. A 3Pl subject form *tégá-yá* 'they are/were heading for' occurs in a quoted 'where?' interrogative in (535) in Text 1.

The A-stem imperfective is probably an extension of the derived stative form, which is typical of certain semantic classes including as stance verbs ('sit', 'stand', 'lie down', see §10.4), to all verbs in the specific constructions just mentioned. It may be that this spread was triggered by incompatibility of the periphrastic imperfective with auxiliary *bò* ~ *wò* (§10.2.2.1) with these constructions. The A-stem imperfective was never volunteered by my assistant in ordinary main-clause contexts, where the periphrastic imperfective and progressive are normal.

10.2.2.7 Future tense absent

There is no categorial distinction between present and future tense. The imperfective is often used for future time reference but can also be a general present. For an uncommon immediate future construction involving a perfective verb and *nèw* 'first' see §10.2.1.2.

10.2.3 Negation of indicative verbs

10.2.3.1 Perfective negative (*-l*, 3Pl *-ndá*)

The perfective negative suffix is *-l*, except for a 3Pl subject portmanteau *-ndá*. As with the (positive) perfective, 1st/2nd person subjects are expressed by proclitics, 3Sg is unmarked, and 3Pl is suffixal. Except in the 3Pl subject form, the verb appears in the same E/I-stem as the (positive) perfective. In the divergent 3Pl form, the verb is in the A-stem, which favors +ATR-compatible vocalism throughout the stem (but not always in careful pronunciation). The verb is {L}-toned in the singular-subject forms. It is {H}-toned in the plural-subject forms. Sample paradigms are in (258).

(258) Paradigm of perfective negative

subject	PfvNeg	'go in'	'dance'	'shake'
1Sg	*ŋ́* {L}*-l(ì)*	*ŋ́ nwè:-l(ì)*	*ŋ́ yèbè-l(ì)*	*ŋ́ yìgìrè-l(ì)*
1Pl	*ŋ̀* {H}*-l(í)*	*ŋ̀ nwé:-l(í)*	*ŋ̀ yébé-l(í)*	*ŋ̀ yígíré-l(í)*
2Sg	*á* {L}*-l(ì)*	*á nwè:-l(ì)*	*á yèbè-l(ì)*	*á yìgìrè-l(ì)*
2Pl	*à* {H}*-l(í)*	*à nwé:-l(í)*	*à yébé-l(í)*	*a yígíré-l(í)*
3Sg	{L}*-l(ì)-∅*	*nwè:-l(ì)-∅*	*yèbè-l(ì)-∅*	*yìgìrè-l(ì)-∅*
3Pl	{H}*-ndá*	*nwá:-ndá*	*yébá-ndá* ~ *yébá-ndá*	*yígírá-ndá*
LogoSg	[same forms as 2Pl]			

The imperfective negative 1Sg/2Sg subject forms also end in *-l*, but they lack the proclitic subject pronominal, and they are based on the O-stem with lengthened final vowel (§10.2.3.3 below).

3Pl perfective negative portmanteau *-ndá* should be distinguished from stative negative allomorph *-ndá* ~ *-ndà* used (for all pronominal categories) to negate derived statives (§10.4.2.1) and two lexical statives, 'have' (§11.5.1) and 'resemble' (§11.2.5.3).

Further examples of the final-nonhigh vowel perfective negative (3Sg, 3Pl) are in (259). The 3Sg positive perfective is given on the left for comparison.

(259) Perfective negative (final-nonhigh-vowel class)

Pfv (3Sg)	PfvNeg 3Sg	3Pl	gloss
a. *Cv* and *Cv:*			
Cv			
né	*nè-l*	*ná-ndá*	'say'
-ATR, *Cw* onset			
dwɛ́:	*dwɛ̀:-l*	*dwá:-ndá*	'pound'
twɛ́:^{n}	*twɛ̀:^{n}-l*	*twá:^{n}-ndá*	'step on'
-ATR, *C* onset			
yɛ́:	*yɛ̀:-l*	*yá:-ndá*	'day break'
né:	*nè:-l*	*ná:-ndá*	'drink'
ɲé:	*ɲè:-l*	*ɲá:-ndá*	'eat (meal)'
+ATR, *Cw* onset			
gwé:	*gwè:-l*	*gwá:-ndá*	'come out'
wwé:	*wwè:-l*	*wwá:-ndá*	'draw water'
b. bisyllabic			
-ATR			
sɛ́mɛ́	*sɛ̀mɛ̀-l*	*sɛ́má-ndá* ~ *sɛ́má-ndá*	'slaughter'
sɔ́gɛ́	*sɔ̀gɛ̀-l*	*sɔ́gá-ndá* ~ *sɔ́gá-ndá*	'buy'
+ATR			
sígé	*sìgè-l*	*sígá-ndá*	'go down'
ábé	*àbè-l*	*ábá-ndá*	'accept'
nó:yè	*nò:yè-l*	*nó:yá-ndá*	'sleep'
ná:lè	*nà:lè-l*	*ná:lá-ndá*	'think'
íldè	*ìldè-l*	*íldá-ndá*	'forget'
c. trisyllabic			
dúgú-rè	*dùgù-rè-l*	*dúgú-rá-ndá*	'run'
tébá-gè	*tèbà-gè-l*	*tébá-gá-ndá*	'shatter (sth)'

Examples for final-high-vowel verbs are in (260). Stem-final *i* surfaces before *-l*, except that irregular 'do' adds a syllabic allomorph *-lì*, which syncopates the stem-final *i*, resulting in *kàn-lì*. The homorganicity of *n* and *l* may have favored syncope.

(260) Perfective negative (final-high-vowel class)

Pfv (3Sg)	PfvNeg 3Sg	PfvNeg 3Pl	gloss
a. regular, final *ì* before *-l* in 3Sg			
sé:m(ì)	*sè:mì-l*	*sé:má-ndá*	‘look’
dám	*dàmì-l*	*dámá-ndá*	‘speak’
dâ:y^{n}	*dà:y^{n}ì-l*	*dá:y^{n}á-ndá*	‘sit’
b. irregular, final vowel syncopated before *-lì* in 3Sg			
kán	*kàn-lì*	*káná-ndá*	‘do’

The two irregular verbs in (261) have the same forms as final-nonhigh-vowel verbs.

(261) Perfective negative (‘come’ and ‘bring’)

Pfv	PfvNeg 3Sg	PfvNeg 3Pl	gloss
égé	*ègè-l*	*égá-ndá*	‘come’
sóŋgé	*sòŋgè-l*	*sóŋgá-ndá*	‘bring’

10.2.3.2 Experiential perfect negative (*-te:-ndi*)

This is the normal way to express ‘have never VP-ed’, denying any occurrence of the VP event type during the lifetime of the subject (263a-b below).

Experiential perfect *-tê:-* is negated as *-té:-ndí* ~ *-tè:-ndì*. The final *-ndi* may have originated as an allomorph of perfective negative *-l*, given the history of *l* ~ *nd* alternations in Dogon languages. The most similar negative suffix elsewhere in verbal morphology is 3rd person imperfective negative *-ndí* (3Pl *-nd-yá*), though the parallelism does not extend to 1st/2nd person forms. This raises the possibility that, unlike the case in most Dogon languages, the experiential perfect in Penange has affinities to both the imperfective and perfective systems. However, the position of 1st/2nd person subject pronominals before the verb aligns the experiential perfect with the perfective system.

The vocalism and tones of the verb are the same as for the positive counterparts: A/O-stem, {L}-toned in 3Sg, 3Pl, 1Sg, and 2Sg, {H}-toned in 1Pl and 2Pl. The aspectual suffix is H-toned *-té:-* after {L}-toned stem in the 3rd person forms. In the 1st/2nd person forms, the tone of the verb spreads to the aspectual suffix. The paradigm is (262).

(262) Experiential perfect negative

subject	schema	‘see’	‘go’
1Sg	*ŋ́* {L} *-tè:-ndì*	*ŋ́ màlgà-tè:-ndì*	*ŋ́ ɲ-à:ndà-tè:-ndì*
1Pl	*ŋ̀* {H} *-té:-ndí*	*ŋ̀ málgá-té:-ndí*	*ŋ̀ ɲ-á:ndá-té:-ndí*
2Sg	*á* {L} *-tè:-ndì*	*á màlgà-tè:-ndì*	*á ɲ-à:ndà-tè:-ndì*
2Pl	*à* {H} *-té:-ndí*	*à málgá-té:-ndí*	*à ɲ-á:ndá-té:-ndí*

3Sg	{L}*-té:-ndí-∅*	*màlgà-té:-ndí-∅*	*àndà-té:-ndí-∅*
3Pl	{L}*-té:-ndí-yà*	*màlgà-té:-ndí-yà*	*àndà-té:-ndí-yà*

Examples are in (263).

(263) a. *nìgé* *màlgà-té:-ndí-∅*
elephant see-**ExpPrf-Neg**-3SgSbj
'He/She has never seen an elephant.' (*nìgè*)

b. *bàmàkó* *ŋ́* *ɲ-à:ndà-tè:-ndì*
B 1SgSbj Epen-go-**ExpPrf-Neg**
'I have never gone to Bamako.' (*bàmàkò*)

10.2.3.3 Imperfective negative (*-ndí*, *-l*, *-li*)

The imperfective negative has the following suffix allomorphs: L-toned *-l* ~ *-lì* (1Sg, 2Sg), H-toned *-lí* (1Pl, 2Pl), and *-ndí* (3rd person, becoming 3Pl *-nd-yá*). The nonsyllabic 1Sg/2Sg *-l* allomorph is L-toned, but since the L-tone diacritic accent doesn't work typographically on *l* it is indicated as falling tone on the preceding vowel. The morphology is parallel to that of the imperfective positive. Specifically, the verb is in the O/U-stem, i.e. the O-stem for final-nonhigh-vowel verbs and the U-stem for final-high-vowel verbs. This is the same stem-vocalism seen in the imperfective positive (and in the corresponding progressives). 1st/2nd person subject pronominals intervene between the verb and the suffix, and second person *a* contracts with the verb-final {*o ɔ*} or *u* to form a long *a:* that is here transcribed as hyphenated *a-a*.

However, there are some unique details not shared with the imperfective positive. The final {*o ɔ*} but not *u* is lengthened in the 3rd person forms, where (unlike the 1st/2nd forms) there is no pronominal morpheme that could explain the long vowel as due to contraction. One might posit an underlying 3rd person suffix /-vndí/ with some vowel *v* that contracts with the preceding vowel. However, *né* 'say' has unlengthened 3Sg *nɔ̀-ndí* (compare 2Sg *nă-à-l* with long vowel), and final-high-vowel verbs do not lengthen the stem-final *u*, which is therefore subject to optional syncope.

The first person forms are unusual. Instead of the normal *ŋ* pronominal, the first person forms simply lengthen the verb-final {*o ɔ*}. Presumably *ŋ* would be awkward phonetically before the final suffix *-l* or *-lí*. It is possible that the first person forms were originally more regular, e.g. 1Sg *CvCò ŋ́ lì and 1Pl *CvCò ŋ̀ lí. If so, the shift to 1Sg *CvCó-ò-l* and 1Pl *CvCò-ò-lí* might be attributed to two factors: a) the awkwardness of the *ŋl cluster, whose *ŋ might have weakened to just lengthening and nasalization of the preceding vowel, and b) imitation of the corresponding second person forms with their vocalic contractions. I transcribe the first person forms with hyphenated *o-o* or *ɔ-ɔ* to bring out this parallelism.

The verb is {L}-toned before H-toned suffix in the 3Sg and 3Pl. Similarly, the combination of verb plus infixed subject pronominal is {L}-toned before H-toned suffix in the 1Pl and 2Pl. The suffixal H-tone for 3Sg, 3Pl, 1Pl, and 2Pl is clearly audible in isolation and before *wàgà→* 'or', but before some other elements or at the end of a long clause it may be indistinguishable from L-tone. The 1Sg and 2Sg forms have a rising {LH} overlay on the verb-pronoun combination, followed by L-tone on the suffix. If the suffixal vowel is apocopated, as it usually is, this suffixal L-tone is realized at the end of the verb-pronominal combination. For a monosyllabic verb like 'go in' in (264), the 1Sg and 2Sg forms end up with a bell-shaped <LHL> tone, e.g. *nɔ̌-ɔ̀-l* 'I don't go in', pronounced [nɔ̃ːl]. Pronunciations

with syllabic *-lì* in 1Sg/2Sg combinations are also attested, e.g. *nwà-á-lì* alongside *nwǎ-à-l* 'you-Sg don't go in'.

(264) Paradigm of imperfective negative

subject	schema	'go in'	'drape (sth)'	'shake'
1Sg	{LH} *-ò/ɔ̀-l*	*nǎ-ɔ̀-l*	*yèlǒ-ò-l*	*yìgìrǒ-ò-l*
"	{LH} *-ó/ɔ́-lì*	~ *nɔ̀-ɔ́-lì*	~ *yèlǒ-ó-lì*	~ *yìgìrǒ-ó-lì*
1Pl	{L} *-ò/ɔ̀-lí*	*nɔ̀-ɔ̀-lí*	*yèlò-ò-lí*	*yìgìrò-ò-lí*
2Sg	{LH} *-à-l*	*nwǎ-à-l*	*yèlá-à-l*	*yìgìrá-à-l*
"	{LH} *-á-lì*	~ *nwà-á-lì*	~ *yèlá-á-lì*	~ *yìgìrá-á-lì*
2Pl	{L} *-à-lí*	*nwà-à-lí*	*yèlà-à-lí*	*yìgìrà-à-lí*
3Sg	{L}:*-ndí-∅*	*nɔ̀:-ndí-∅*	*yèlò:-ndí-∅*	*yìgìrò:-ndí-∅*
3Pl	{L}:*-nd-yá*	*nɔ̀:-nd-yá*	*yèlò:-nd-yá*	*yìgìrò:-nd-yá*

Clause-finally before a pause, the final H-tone in 1Pl, 2Pl, 3Sg, and 3Pl subject forms may be inaudible due to downdrift. This should cause no confusion. 1Pl and 2Pl are distinguished from their singular counterparts by medial tones. 3Sg and 3Pl have unmistakable suffixes.

In the second person forms of nonmonosyllabic stems, contracted *a-a* may induce a shift of nonfinal -ATR {*ɛ ɔ*} to +ATR {*e o*}. For example, *tɛ́mɛ́* 'eat (meat)' produces 3Sg *tɛ̀mɔ̀:-ndí-∅* and 1Sg *tɛ̀mɔ́-ɔ̀-l*, but the 2Sg form can be pronounced either as *tɛ̀má-à-l* with *e* replacing *ɛ* or (in careful pronunciation) as *tɛ̀má-à-l*. See comments at the end of §3.3.5.

A sample of 2Sg and 3Sg imperfective negative forms from verbs ending in nonhigh vowels is in (265). In the *Cv:* stems, the distribution of *Cw* onset in the 2Sg is the same as that of *Cw* in the 3Sg perfective.

(265) Imperfective negative (final-nonhigh-vowel class)

Pfv 3Sg	imperfective negative 2Sg	3Sg	gloss
a. *Cv* and *Cv:*			
Cv			
né	*nǎ-à-l*	*nɔ̀-ndí-∅*	'say'
-ATR with alveolar initial C, and Cw onset before unrounded vowel			
dwɛ́:	*dwǎ-à-l*	*dɔ̀:-ndí-∅*	'pound'
nwɛ́:	*nwǎ-à-l*	*nɔ̀:-ndí-∅*	'go in' or 'sing'
swɛ́:	*swǎ-à-l*	*sɔ̀:-ndí-∅*	'vomit'
twɛ́:	*twǎ-à-l*	*tɔ̀:-ndí-∅*	'make bunches'
twɛ́:^{n}	*twǎ-à^{n}-l*	*tɔ̀:^{n}-ndí-∅*	'step on'
-ATR with initial alveolar initial C, and C onset before unrounded vowel			
né:	*nǎ-à-l*	*nɔ̀:-ndí-∅*	'drink'
yɛ́:	—	*yɔ̀:-ndí-∅*	'day break'
-ATR with initial nonalveolar initial C, and C onset before unrounded vowel			
ɲɛ́:	*ɲǎ-à-l*	*ɲɔ̀:-ndí-∅*	'eat (meal)'

+ATR with Cw onset before unrounded vowel			
jwé:	*jwă-à-l*	*jò:-ndí-∅*	‘fill up’
gwé:	*gwă-à-l*	*gò:-ndí-∅*	‘come out’
wwé:	*wwă-à-l*	*wò:-ndí-∅*	‘draw water’
b. bisyllabic			
-ATR with nonlow penult vowel			
sógɛ́	*sògá-à-l*	*sògò:-ndí-∅*	‘buy’
	~ sògá-à-l		
dígɛ́	*dìgá-à-l*	*dìgò:-ndí-∅*	‘go up’
tú:gɛ̀	*tù:gá-à-l*	*tù:gò:-ndí-∅*	‘pour out’
+ATR with nonlow penult vowel			
yélé	*yèlá-à-l*	*yèlò:-ndí-∅*	‘drape (sth, over sth)’
sígé	*sìgá-à-l*	*sìgò:-ndí-∅*	‘go down’
nó:yè	*nò:yá-à-l*	*nò:yò:-ndí-∅*	‘sleep’
+ATR with penult a			
nálé	*nàlá-à-l*	*nàlò:-ndí-∅*	‘give birth’
ná:lè	*nà:lá-à-l*	*nà:lò:-ndí-∅*	‘think’
bá:-ndè	*bà:-ndá-à-l*	*bà:-ndò:-ndí-∅*	‘shut (door)’
c. trisyllabic and longer			
+ATR			
púrúgè	*pùrùgá-à-l*	*pùrùgò:-ndí-∅*	‘cut’
sógú-lè	*sògù-lá-à-l*	*sògù-lò:-ndí-∅*	‘sell’
tébá-gè	*tèbà-gá-à-l*	*tèbà-gò:-ndí-∅*	‘shatter (sth)’

Verbs ending in a high vowel are illustrated in (266). ‘Look’, which has +ATR mid-height *e* in the first syllable, uses the O-stem in the first person and the U-stem in the third. The verbs in (266a), which have *a* in the first syllable, use the U-stem in both first and third persons.

(266) Imperfective negative (final-high-vowel class)

Pfv 3Sg	IpfvNeg 2Sg	1Pl	3Sg	gloss
a. nonfinal nonlow vowel				
sé:m(ì)	*sè:má-à-l*	*sè:mò-ò-lí*	*sè:mù-ndí*	‘look’
			~ sè:m-dí	
b. nonfinal *a*				
dám	*dàmá-à-l*	*dàmù-ù-lí*	*dàmù-ndí*	‘speak’
			~ dàm-dí	
dâ:y^{n}	*dà:y^{n}á-à-l*	*dà:y^{n}ù-ù-lí*	*dà:y^{n}ù-ndí*	‘sit’
			~ dà:y^{n}-dí	
kán	*kàná-à-l*	*kànù-ù-lí*	*kànù-ndí*	‘do’
			~ kàn-dí	

‘Come’ and ‘bring’ behave as final-nonhigh-vowel verbs, with O- rather than U-stem.

(267) Imperfective negative (‘come’ and ‘bring’)

Pfv 3Sg	IpfvNeg			gloss
	2Sg	1Pl	3Sg	
égé	*ègá-à-l*	*ègò-ò-lí*	*ègò:-ndí*	‘come’
sóŋgé	*sòŋgá-à-l*	*sòŋgò-ò-lí*	*sòŋgò:-ndí*	‘bring’

In the nonsubject-focus construction, the imperfective negative seems to have fused with the progressive negative; see (388b) in §13.1.1.5.

10.2.3.4 Progressive negative with *wǒl* ‘not be’

The progressive negative replaces *bô* ‘be’ in the positive progressive by *wǒl*, the suppletive ‘not be (somewhere), be absent’ quasi-verb (§11.2.2.3). The form of the verb is the same as in the positive: O/U-stem, {L}-toned. For final-nonhigh-vowel verbs, this means the O-stem (268).

(268) Paradigm of progressive negative with *wǒl* (final-nonhigh-vowel)

subject	schema	‘go in’	‘drape (sth)’	‘shake’
1Sg	{L} *ŋ́ wòl*	*nɔ̀: ŋ́ wòl*	*yèlò ŋ́ wòl*	*yìgìrò ŋ́ wòl*
1Pl	{L} *ǹ wǒl*	*nɔ̀: ǹ wǒl*	*yèlò ǹ wǒl*	*yìgìrò ǹ wǒl*
2Sg	{L}*-á wòl*	*nwà-á wòl*	*yèlà-á wòl*	*yìgìrà-á wòl*
2Pl	{L}*-à wǒl*	*nwà-à wǒl*	*yèlà-à wǒl*	*yìgìrà-à wǒl*
3Sg	{L} *wǒl-∅*	*nɔ̀: wǒl-∅*	*yèlò wǒl-∅*	*yìgìrò wǒl-∅*
3Pl	{L} *wǒl-yà*	*nɔ̀: wǒl-yà*	*yèlò wǒl-yà*	*yígírò wǒl-yà*

For final-high-vowel verbs, the U-stem is the basis for the paradigm, most clearly in the first person forms (third-person forms often syncopate the /u/).

(269) Paradigm of progressive negative with *wǒl* (final-high-vowel)

subject	schema	‘speak’	‘do’	‘look’
1Sg	{L} *ŋ́ wòl*	*dàmù ŋ́ wòl*	*kànù ŋ́ wòl*	*sè:mù ŋ́ wòl*
1Pl	{L} *ǹ wǒl*	*dàmù ǹ wǒl*	*kànù ǹ wǒl*	*sè:mù ǹ wǒl*
2Sg	{L}*-á wòl*	*dàmà-á wòl*	*kànà-á wòl*	*sè:mà-á wòl*
2Pl	{L}*-à wǒl*	*dàmà-à wǒl*	*kànà-à wǒl*	*sè:mà-à wǒl*
3Sg	{L} *wǒl-∅*	*dàm wǒl-∅*	*kàn wǒl-∅*	*sè:m wǒl-∅*
3Pl	{L} *wǒl-yà*	*dàm wǒl-yà*	*kàn wǒl-yà*	*sè:m wǒl-yà*

An example of the progressive negative is (270).

(270) *má:ŋgórò* *ɲɔ̌:* *ŋ́* *wòl*
mango eat 1SgSbj **not.be**
'I am not (engaged in) eating mangoes.'

10.2.3.5 Progressive negative with *túlá-ndà*

The progressive negative construction with *túlà* is negated by adding the stative negative morpheme *-ndà*. Rightward H-Spreading applies in 3Pl *túlá-ndá-yà*. As in the positive construction with *túlà*, the main verb ends in *-n* for 3Sg and 3Pl.

(271) Paradigm of the progressive negative with *túlá-ndà*

subject	schema	'go in'	'drape (sth)'
1Sg	{LH} *ŋ́ tùlà-ndà*	*nɔ̀: ŋ́ tùlà-ndà*	*yèló ŋ́ tùlà-ndà*
1Pl	{L} *ŋ̀ túlá-ndà*	*nɔ̀: ŋ̀ túlá-ndà*	*yèlò ŋ̀ túlá-ndà*
2Sg	{LH} *-á tùlà-ndà*	*nwà-á tùlà-ndà*	*yèlá-á tùlà-ndà*
2Pl	{L} *-à túlá-ndà*	*nwà-à túlá-ndà*	*yèlà-à túlá-ndà*
3Sg	{L} *-n túlá-ndà-∅*	*nɔ̀:-n túlá-ndà-∅*	*yèlò-n túlá-ndà-∅*
3Pl	{L} *-n túlá-ndá-yà*	*nɔ̀:-n túlá-ndá-yà*	*yèlò-n túlá-ndá-yà*

10.3 Pronominal paradigms for non-imperative verbs

This section summarizes data on pronominal elements that have already been presented above or that will be presented in chapter 11.

10.3.1 Subject pronominal suffixes

1st/2nd person subject categories are expressed by proclitics. In the perfective system, they precede the verb. 3Sg is unmarked; I often make this overt by transcribing *-∅* suffix. 3Pl is marked by a variable suffix, often *-yà*, but see (274) below. 1Sg and 1Pl are segmentally identical, as are 2Sg and 2Pl. Segmentally, the first person pronominals are both *ŋ*, really an underspecified nasal that assimilates in position to a following consonant. The second person pronominals are both segmentally *a*.

(272) Subject pronominals in perfective main clauses

subject	schema
1Sg	*ŋ́* VERB
1Pl	*ŋ̀* VERB
2Sg	*á* VERB
2Pl	*à* VERB

3Sg	VERB
3Pl	VERB*-yà* / *-yɛ̀* (or other suffix)

In the imperfective systems, the 1st/2nd person pronominals intervene between verb and suffix/auxiliary. In the imperfective positive, the pronominal forms are the same as those in (272). In the imperfective negative, the first person forms in effect lengthen the stem-final {*o ɔ*} rather than adding a nasal segment: *yèló-ò-l* 'I will not hang up'.

In nonsubject relatives (§14.3), a pronominal subject is expressed in the same way for 1st/2nd person categories. However, 3Pl is expressed by a proclitic *ŋké*, and 3Sg by a postverbal *nà* ~ *ná*. The resulting paradigm resembles that for possessors (§6.2.2.1).

(273) Subject pronominals in nonsubject relatives

subject	schema
1Sg	*ŋ́* VERB
1Pl	*ŋ̀* VERB
2Sg	*á* VERB
2Pl	*à* VERB
3Sg	VERB *nà* ~ *ná*
3Pl	*ŋké* VERB

The 3Pl category is the most irregular, though less so that in some other Dogon languages. The various forms are listed in (274).

(274) 3Pl subject

a. *-ya*

L-toned

-yà	derived statives (with final *a*)
-yà	'have' (*sá:^{n}-yà*)
-yà	'be' (*bô* → *bí-yà*) and related inflections (imperfective, progressive, some lexical statives, capacitative)
-yà	progressive (*túlá-yà*)
-yà	experiential perfect (*-té:-yà*)
-yà	experiential perfect negative (*-té:-ndí-yà*)

H-toned

-yá	imperfective negative (*-nd-yá* from *-ndí*)

b. *-yè* ~ *-yɛ̀* perfective (after syncopated stem-final vowel)

c. *-ndá* perfective negative portmanteau (replacing *-l*)

d. *-Cì(:)* (with preceding *C* doubled) perfective of most final-high-vowel bisyllabic verbs

10.3.2 Tones of subject pronominals

1Sg *ŋ́* and 2Sg *á* are H-toned, versus L-toned 1Pl *ŋ̀* and 2Pl *à*. The tonal distinction is clear except in the morphologically rather messy imperfective negative, where suffix allomorph *-l̀* has been apocopated from L-toned *-lì. The upshot is that e.g. 1Sg *yèló-ò-l̀* 'I do/will not hang up', whose morphemic segmentation is problematic, has a final falling tone pattern.

The tone overlay on the stem depends on the aspect-negation (or other inflectional) category, and on the subject category. The 1Sg and 2Sg forms are always parallel, as are the 1Pl and 2Pl forms. Typically we get an {L}-toned verb after an H-toned 1Sg/2Sg pronominal, and an {H}-toned verb after an L-toned 1Pl/2Pl pronominal, but the details for particular AN categories may be more complex. The tonal relationship between 3rd person and either 1Sg/2Sg or 1Pl/2Pl also depends on the inflectional category.

The summary formulae below show the stem's tone pattern in curly brackets. Tones are marked by accents on *x* (aspect-negation suffix, if present), *y* (1st/2nd person pronominal), and *z* (3Pl suffix). Absence of a tone indicates atonality (e.g. a consonant). Unhyphenated *xz* in 3Pl forms indexes fusion into one syllable or into a portmanteau.

(275)

category	1Sg/2Sg	1Pl/2Pl	3Sg	3Pl
a. perfectives and affiliates (1st/2nd pronominal *y* precedes verb)				
L - HL - H - H				
Pfv (prosodically light)	*ý* {L}	*ỳ* {HL}	{H}	{H}*-ż*
'not know' (*índó*)	*ý* {L}	*ỳ* {HL}	{H}	{H}*-ż*
'not resemble' (*pímá-ndá*)	*ý* {L-L}	*ỳ* {H-L}	{H-H}	{H-H}*-ż*
derived stative negative	*ý* {L-L}	*ỳ* {H-L}	{H-H}	{H-H}*-ż*
L - HL - HL - HL statives without Aux				
'be (somewhere)' (*bô*)	*ý* {L}	*ỳ* {HL}	{HL}	{H(L)}*-ż*
'have' (*sâ^n*)	*ý* {L}	*ỳ* {HL}	{HL}	{H(L)}*-ż*
derived stative	*ý* {L}	*ỳ* {HL}	{HL}	{H(L)}*-ż*
L - HL - HL - HL stativeswith bò as Aux in 3rd person only				
'know' (*nêy^n*)	*ý* {L}	*ỳ* {HL}	{HL} L	{HL} L-*ż*
'want' (*kêy^n*)	*ý* {L}	*ỳ* {HL}	{HL} L	{HL} L-*ż*
'resemble' (*pímà*)	*ý* {L}	*ỳ* {HL}	{HL} L	{HL} L-*ż*
others				
PfvNeg (*-l*, 3Pl *-ndá*)	*ý* {L}*-x*	*ỳ* {H}*-x*	{L}*-x*	{H}*-x́ź*
ExpPrf (*-tê:*)	*ý* {L}*-x̂*	*ỳ* {H}*-x̂*	{L}*-x̂*	{L}*-x́-ż*
Pfv (prosodically heavy)	*ý* {LHL}	*ỳ* {HL}	{HL}	{H(L)}*-ż*
'not want' (*kéy-là*)	*ý* {LH-L}	*ỳ* {H-L}	{H-L}	{H(-L)}*-ż*
'not be' (*wǒl*)	*ý* {L}	*ỳ* {LH}	{LH}	{LH}*-ż*
progressive negative (*wǒl*)	*ý* {L}	*ỳ* {LH}	{LH}	{H}*-ż*
b. imperfectives and affiliates (1st/2nd pronominal *y* follows verb)				
Ipfv (verb + *bò* ~ *wò*)	{H} *ý x̀*	{HL} *ỳ x̀*	{HL} *x̀*	{H} *xż*
Prog (verb + *bô*)	{L} *ý x̀*	{L} *ỳ x̂*	{L} *x̂*	{L} *x́-ż*
IpfvNeg (*-ndí, -l, -lí*)	{LH}*-ỳ-x*	{L}*-ỳ-x́*	{L}*-x́*	{L}*-xź*

In (275a), the major observation is that an H-toned 1Sg/2Sg pronominal (symbol *ý*) requires a following verb beginning with an L-tone, while an L-toned 1Pl/2Pl pronominal (*ỳ*) almost always requires a verb beginning with an H-tone (there is one case of rising tone, 'not be'). In (275b), the same inverse relationship applies to the combination of the 1st/2nd person pronominal (*y*) with the following suffix or auxiliary (*x*). Another regularity in both (275a)

and (275b) is that the 3Pl form is generally based tonally on the 3Sg, the glaring exception being the perfective negative with its 3Pl portmanteau.

10.4 Derived stative form of verbs

This section covers stative forms derived from dyanmic verbs (i.e. from active verbs that are elsewhere marked for perfective-imperfective aspect). For lexically stative (quasi-)verbs that do not have dynamic forms, notably 'be (somewhere)', 'have', 'want', 'know', and 'resemble', see Chapter 11.

10.4.1 Stative positive

10.4.1.1 Type with final *a*

Statives are derived from regular aspect-marking verbs to denote a continuing state that has resulted from an event of motion, of taking hold, of perception ('see', 'hear'), or the like. Statives do not distinguish perfective from imperfective. Perception statives have senses like '(can) see/hear', as in 'I can see (i.e. I am not blind)'.

In positive unfocalized main clauses, statives require either an initial *Cv̀* reduplicative proclitic or the existential proclitic *è^{n}*, but do not allow both: *nò nóyà-∅* or *è^{n} nóyà-∅* 'he/she is asleep'. If there is a 1st/2nd person subject pronominal, it intervenes between the reduplicant or proclitic and the base.

Derived statives are bisyllabic, are based on the A-stem, have {HL} overlay, and require short vowels. Medially, they allow only an unclustered *C*, or else an *NC* cluster of nasal plus homorganic voiced stop (such *NC* clusters are often treated like unclustered *C*'s elsewhere, e.g. in determining prosodic weight of *CvNCv* stems).

The only exception to the bisyllabic norm for derived statives is *dâ^{n}* 'be sitting', from input *dâ:y^{n}* /dá:y^{n}ì/ (3Sg perfective) 'sit down'. Aside from 'be sitting', if the input stem does not satisfy the prosodic and vocalic requirements, adjustments must be made. Many of the inputs are mediopassives with suffix *-yv* (3Sg perfective *-yè*), e.g. *sáŋg-yè* 'become on (i.e. go up on, take position on)'. Prior to syncope, forms like this (< /sáŋgí-yè/) are structurally trisyllabic, so the mediopassive suffix must be lopped off to achieve the true bisyllabic target *sáŋgà* (reduplicated *sà sáŋgà* or existential *è^{n} sáŋgà* 'be on'). In the one *Cv-yv* mediopassive (*bí-yé* 'lie down'), the mediopassive suffix is retained to achieve the bisyllabic target (stative *bí-yà*). A result of this is that the segmentability of *bí-yé* is nontransparent to native speakers and to linguists. Examples of inputs and statives are in (276). The inputs are active, i.e. they denote changes of state.

(276)

	gloss	input (active)	stative
a. from a bisyllabic stem that is not obviously segmentable			
phonologically regular			
	'hear'	*núndé*	*núndà*
shifted from -ATR to +ATR			
	'be tilted'	*gɛ́njɛ̀*	*gɛ́ŋgà*
adjusted to CvCv by shortening a long vowel			
	'sleep'	*nó:yè*	*nóyà*

adjusted to CvCv by reducing nonhomorganic CC to C

'see'	*málgè*	*málà* (but cf. §9.2.2)

irregular

'sit'	*dâ:y^{n}* /dá:y^{n}ì/	*dâ^{n}*
'stand'	*ínjè*	*íŋgà*

b. from mediopassive

bisyllabic mediopassive after syncope (-yv suffix omitted in stative)

'squat'	*sómb-yè*	*sómbà*
'carry on back'	*bámb-yè*	*bámbà*
'bow'	*kúnd-yè*	*kúndà*
'be on'	*sáŋg-yè*	*sáŋgà*
'lower head'	*túmb-yè*	*túmbà*
'be on (wall)'	*yáb-yè*	*yábà*
'be hung'	*yél-yè*	*yélà*

Cv-yv mediopassive (-yv suffix retained, no longer transparently segmentable)

'lie down'	*bí-yé*	*bí-yà*

The *g-j* alternations for 'be tilted' and 'stand' in (276a) probably reflect irregular post-syncope contractions involving an original mediopassive suffix (*gɛ́ŋgí-yɛ̀, *íŋgí-yɛ̀).

The stative paradigm is (277). Since 'stand' is vowel-initial, it is subject to *y/ɲ*-Epenthesis after a 1st/2nd person pronominal. Unlike the case with reduplicated perfectives and imperfectives, the epenthetic consonant does not also appear on the reduplicant in statives, though it should be mentioned that 'stand' is the only vowel-initial verb that has a stative. The verb is {L}-toned after H-toned 1Sg/2Sg pronominals. In other combinations the verb is {HL}, or compatible with {HL} in the case of 3Pl, allowing for the effects of Rightward H-Spreading.

(277) Stative positive paradigm

subject	schema	'stand'	
		reduplicated	existential
1Sg	*ŋ́* {L}	*ì ŋ́ ɲ-ìŋgà*	*ɛ̀^{n} ŋ́ ɲ-ìŋgà*
1Pl	*ǹ* {HL}	*ì ǹ ɲ-íŋgà*	*ɛ̀^{n} ǹ ɲ-íŋgà*
2Sg	*á* {L}	*ì á ɲ-ìŋgà*	*ɛ̀^{n} á ɲ-ìŋgà*
2Pl	*à* {HL}	*ì à ɲ-íŋgà*	*ɛ̀^{n} à ɲ-íŋgà*
3Sg	{HL}*-∅*	*ì íŋgà-∅*	*ɛ̀^{n} íŋgà-∅*
3Pl	{H(L)}*-yà*	*ì íŋgá-yà*	*ɛ̀^{n} íŋgá-yà*

The proclitic (reduplication or existential) is not allowed under negation, in the presence of a focalized constituent, or in relative clauses.

The stative formation is not possible in simple main clauses with verbs that do not fit into the semantic classes mentioned above, such as stance, holding, and perception. However, certain more complex constructions require or allow the A-stem imperfective, which represents an extension of the derived stative to any verb (§10.2.2.6 and references there).

For the negative form of derived statives, see §10.4.2 below. For the past stative with clitic *=ye*, see §10.6.1.3.

10.4.1.2 Resultative passive *-ɛ:* ~ *-e:* ~ *-i:* plus *bò*

The resultative passive construction consists of an L-toned verb stem plus L- or H-toned suffix *-ɛ:* ~ *-e:* ~ *-i:*, followed by L-toned auxiliary *bò* 'be'. The verb with *-ɛ:* ~ *-e:* ~ *-i:* is closely related to the perfective positive (E/I-stem), but ends in a long vowel.

The construction denotes the resulting state of the theme, without explicit reference to agency. For example, (278a) denotes the state of a door being shut, usually as the result of an agentive action that can be overtly stated as (278b). The plural counterpart of (278a) is (278c), where just the auxiliary agrees with the 3Pl subject.

(278) a. *[è* *H+bôwⁿ]* *bà:yⁿ-í:* *bò-∅*
[Def H+door] shut-ResPass be-3SgSbj
'The door is shut.' (< *bòwⁿ*)

b. *[è* *H+bôwⁿ]* *bă:-nd-yè*
[Def H+door] shut-Tr.Pfv-3PlSbj
'They shut-Past the door.'

c. *[è* *H+bóⁿ-gè]* *bà:yⁿ-í:* *b-yà*
[Def H+door-Pl] shut-ResPass be-3PlSbj
'The doors are shut.'

Another example is (510) in §17.5.4.

A fuller list of resultative passive verb forms is on the right-hand side of (279). The input verb, shown in the left column, can be transitive as in 'cut (meat)' or intransitive as in 'become tired'. The resultative passive denotes states, not transitions. In (279c), the resultative passive is based on the mediopassive stem (suffix *-yè* ~ *-yɛ̀*).

(279)		Pfv 3Sg	gloss	ResPass	gloss
	a.	*sɛ́mɛ́*	'cut (meat)'	*sɛ̀m-ɛ́: bò*	'(meat) be cut'
		púré	'be cut (rope)'	*pùr-é: bò*	'(rope) be cut'
		néné	'become tired'	*nèn-é: bò*	'be tired'
		gílɛ́	'snap (intr)'	*gìl-ɛ́: bò*	'be snapped'
		báŋgú-lè	'open (door)'	*bàŋgù-lé: bò*	'(door) be open'
	b.	*ɲám(í)*	'malfunction'	*ɲàm-í: bò*	'be disfunctional, ruined'
		bá:yⁿì	'(door) close [intr]'	*bà:yⁿ-í: bò*	'(door) be shut'
	c.	*púnd-yé*	'roll or curl self up'	*pùnd-yé: bò*	'be rolled up'
		yélé	'cling to, drape self over'	*yèl-yé: bò-*	'be draped'
		gór-yè	'become hung/hooked'	*gɔ̀r-yé: bò-*	'be hung (on sth)'

For most resultative passive verbs, like '(meat) be cut', the subject is always nonhuman and therefore third person. For 'be tired', however, human and therefore also 1st/2nd person subjects are possible. Paradigms are in (280).

(280)

subject	‘(meat) be cut’	‘be tired’
1Sg	—	*nèn-è: ŋ́ bò*
1Pl	—	*nèn-é: ŋ̀ bò*
2Sg	—	*nèn-è: á bò*
2Pl	—	*nèn-é: à bò*
3Sg	*sèm-é: bò-∅*	*nèn-é: bò-∅*
3Pl	*sèm-é: b-yà*	*nèn-é: b-yà*

The negative counterpart replaces *bò* ‘be’ with *wǒl* ‘not be’ (3Sg *wòl-∅*, 3Pl *wòl-yà*, 1Pl *ŋ̀ wòl*, etc.).

10.4.2 Stative negative

10.4.2.1 Stative negative (*-nda*)

Stative negative suffix (or enclitic) *-nda* is added to derived stative verbs, which are almost always bisyllabic and end in *a*. The stem and suffix are {L}-toned in the 1Sg and 2Sg, but {H}-toned in the 3Sg and 3Pl. In the 1Pl and 2Pl, the stem is {H}-toned but the suffix is L-toned. There is no reduplication or existential proclitic.

(281) Stative negative paradigm

subject	schema	‘not be standing’
1Sg	*ŋ́* {L}*-ndà*	*ŋ́ ɲ-ìŋgà-ndà*
1Pl	*ŋ̀* {H}*-ndà*	*ŋ̀ ɲ-íŋgá-ndà*
2Sg	*á* {L}*-ndà*	*á ɲ-ìŋgà-ndà*
2Pl	*à* {H}*-ndà*	*à ɲ-íŋgá-ndà*
3Sg	{H}*-ndá-∅*	*íŋgá-ndá-∅*
3Pl	{H}*-ndá-yà*	*íŋgá-ndá-yà*

From the irregular positive stative *dâ^{n}* ‘be sitting’, the negative is 3Sg *dá:^{n}-ndá-∅* etc. with lengthened vowel.

-nda with derived statives is one of several allomorphs of the general stative negative suffix. The full set is (282).

(282)
a. *-nda* — derived stative (this section)
sá:-ndá ‘not have’ (§11.5.1)
(m)pímá-ndá ‘not resemble’ (§11.2.5.3)

b. *-là* — *kéy-là* ‘not want’ (§11.2.5.2)
X = là ‘it is not X’ with NP (§11.2.1.2)

c. suppletive — *índó* ‘not know’ (§11.2.5.1), arguably *í-ndó*
wǒl ~ *wòl* ‘not be (somewhere)’ (§11.2.2.3)

There is some risk of confusion between the 3Sg stative negative *-ndá-∅* and the 3Pl (nonstative) perfective negative *-ndá* (§10.2.3.1). In both cases the stem is {H}-toned and has A-stem vocalism. However, some derived statives have additional stem modifications that distinguish the two forms, for example *nóyá-ndá-∅* 'he/she is not asleep' versus *nó:yá-ndá* 'they didn't sleep', or *íŋgá-ndá-∅* 'he/she is not standing' versus *ínjá-ndá* 'they didn't stand up'. Many verbs do not have a derived stative, and for them there is no issue.

For past stative negative forms, see §10.6.1.3. For lexicalized negative adjectives (e.g. 'no good'), see §4.5.4. For negative adjectival predicates with *wǒl*, see §11.4.2.

10.5 Predications of capability

10.5.1 Capacitative (*-ma:*)

Ability to perform an action ('can VP, is able to VP') is expressed by capacitative *-ma:* or allomorph added to the O/U-stem, specifically the O-stem of final-nonhigh-vowel verbs and the (syncopated) U-stem of final-high-vowel verbs. The lexical ATR class of the verb is respected. With third person subjects only, *bò* is added as an auxiliary (3Sg *bò-∅*, 3Pl *b-yà*). This morphosyntactic pattern is also found with lexical statives 'know', 'want', and 'resemble' (§11.2.5.1-3). My assistant pronounced *mà(:)* in 1Sg/2Sg forms with variable vowel duration, but always pronounced 1Pl/2Pl forms with *-mà:*. The corresponding negation ('cannot VP') is based on *-má-ndà*, including stative negative *-ndá* in L-toned form.

Sample positive and negative paradigms are in (283).

(283) Capacitative of *gɛ́:n-yɛ̀* 'sweep'

subject	'can sweep'	'cannot sweep'
1Sg	*ŋ́ gɛ̀:n-yɔ̀-mà(:)*	*ŋ́ gɛ̀:n-yɔ̀-má-ndà*
1Pl	*ǹ gɛ́:n-yɔ̀-mà:*	*ǹ gɛ́:n-yɔ̀-má-ndà*
2Sg	*á gɛ̀:n-yɔ̀-mà(:)*	*á gɛ̀:n-yɔ̀-má-ndà*
2Pl	*à gɛ́:n-yɔ̀-mà:*	*à gɛ́:n-yɔ̀-má-ndà*
3Sg	*gɛ̀:n-yɔ̀-mâ: bò-∅*	*gɛ̀:n-yɔ̀-má-ndà*
3Pl	*gɛ̀:n-yɔ̀-má: b-yà*	*gɛ̀:n-yɔ̀-má-ndá-yà*

A few additional positive 3Sg forms are in (284). In (284a), 'go in' and 'drink' are homophonous in the capacitative but not in the perfective.

(284) Capacitative verbs

gloss	3Sg perfective	3Sg capacitative
a. monosyllabic final-nonhigh-vowel verbs		
Cv		
'say'	*nɛ́*	*nɔ̀-mâ: bò-∅*
-ATR		
'pound'	*dwɛ́:*	*dɔ̀:-mâ: bò-∅*
'go in'	*nwɛ́:*	*nɔ̀:-mâ: bò-∅*

‘drink’	*nɛ́:*	*nɔ̀:-mâ: bò-∅*
‘eat (meal)’	*ɲɛ́:*	*ɲɔ̀:-mâ: bò-∅*
+ATR		
‘go in’	*gwé:*	*gò:-mâ: bò-∅*

b. bisyllabic final-nonhigh-vowel verbs

-ATR		
‘buy’	*sɔ́gɛ́*	*sɔ̀gɔ̀-mâ: bò-∅*
‘dance’	*yɛ́bɛ́*	*yɛ̀bɔ̀-mâ: bò-∅*
+ATR		
‘drape (sth)’	*yélé*	*yèlò-mâ: bò-∅*
‘go down’	*sígé*	*sìgò-mâ: bò-∅*

c. trisyllabic final-nonhigh-vowel verbs

‘shake’	*yígírè*	*yìgìrò-mâ: bò-∅*
‘shatter (sth)’	*tébá-gè*	*tèbà-gò-mâ: bò-∅*

d. final-high-vowel verbs

‘do’	*kán* /kání/	*kàn-mâ: bò-∅*
‘sit’	*dâ:y^{n}* /dá:y^{n}ì/	*dà:y^{n}-mâ: bò-∅*

e. ‘come’

‘come’	*égé*	*ègò-mâ: bò-∅*

For past-time counterparts (‘could, was able to’), see §10.6.1.7. For a predicative adjective *-mà bó* that may be related to capacitative *-mâ:*, see §4.5.6.

Capacitative *-mâ:* has cognates in some other western Dogon languages (at least Tiranige, Mombo, and Bunoge).

10.5.2 ‘Can (=be in a position to) VP’ (*w^{n}* plus *dìnɔ̂:* ‘get’)

This is a two-verb construction but it is included here because of its semantic proximity to the capacitative suffixal derivation. It denotes ability in the sense of having the time and the wherewithal (e.g. equipment) to perform a task. The main clause has a conjugated form of *dínɛ́* ‘get, obtain’. The semantic connection between ‘get’ and ‘be in a position (to VP)’ is fairly common in the region (e.g. Songhay).

For completed events (‘I was able/had the time to cook the food’), the regular perfective stem *dínɛ́* ‘got’ is used. The perfective negative and imperfective negative are also the same as in canonical ‘get’ clauses.

In imperfective (positive) contexts, as in ‘I will be able/will have the time to cook the food’, the form used in this construction is the final-long-vowel imperfective (§10.2.2.2), e.g. 3Sg *dìnɔ̂:-∅* ‘is able (=is in a position) to’, rather than the bipartite imperfective *dínɔ̀ bò-∅* ‘gets, will get’. The final-long-vowel imperfective paradigm of *dínɛ́* ‘get, obtain’ is (285).

(285) ‘Be able (in a position) to’

subject	form
1Sg	*ŋ̀ dìnɔ̂:*
1Pl	*ŋ̀ dínɔ̀:*
2Sg	*á dìnɔ̂:*
2Pl	*à dínɔ̀:*
3Sg	*dìnɔ̂:-∅*
3Pl	*dìn-â:*

In the ‘can (=be in a position to) VP’ construction, *dìnɔ̂:* follows the subordinated clause that denotes the action to be accomplished. The subordinated verb is {L}-toned and its form is that of the O-stem for final-nonhigh-vowel verbs, and the U-stem for final-high-vowel verbs. It is followed by subordinator *w*^{n} regardless of the aspect or polarity of the main clause. The form with ‘come’ is *ègò w*^{n} (O-stem) that with ‘do’ is *kànù w*^{n} (U-stem). The *w*^{n} becomes H-toned before an L-tone by Final Tone-Raising (§3.6.3.1), as in (286a-c). The O/U-stem plus *w*^{n} also occurs in same-subject purposive clauses (§17.5.1), and I gloss *w*^{n} accordingly in these examples. The similarity between *w*^{n} in these constructions and imperfective subordinator *w*^{n} (§15.2.1.3) is superficial and deceptive, since the two constructions differ in verbal stem-type and in conjugatability.

(286) a. *[ɲǎ:* *dɔ̀ŋgɔ́* *ẃ*^{n}*]* *dìnɔ̂:-∅* / *dìn-â:*
[meal cook(v) Purp] **get**.Ipfv-3SgSbj / -3PlSbj
He-or-she/They can (=are in a position to) cook a meal.’ (< *ɲà:*)

b. *[ɲǎ:* *dɔ̀ŋgɔ́* *ẃ*^{n}*]* *dìnɔ̀:-ndí-∅*
[meal cook(v) Purp] **get**-IpfvNeg-3SgSbj
He/She can’t cook a meal (now).’

c. *[ɲǎ:* *dɔ̀ŋgɔ́* *ẃ*^{n}*]* *ŋ̀* *dínɔ̀:*
[meal cook Purp] 1PlSbj **get**-Ipfv
‘We can (=have the time to) cook a meal.’

Other cases of unconjugated *w*^{n} clauses with O- or U-stem verb are in the following section, and with ‘help’ as main verb in (504) in §17.4.11. All of these can be taken as special uses of the same-subject purposive clause construction described in §17.5.1.

10.5.3 ‘Be VERB-able’ (*w*^{n} plus *kànû:*)

The final-long-vowel imperfective form of *kán* /kání/ ‘do’ can be combined with another verb in the sense ‘be regularly VERBed’, ‘be VERB-able’. The 3Sg positive form is *kànû:-∅*. The corresponding negative form has the regular imperfective negative paradigm. The preceding ‘do’ clause has the same purposive *w*^{n} after unconjugated {L}-toned O- or U-stem verb described and illustrated in the preceding section, which I have attributed to the same-subject purposive construction (§17.5.1). The subordinator *w*^{n} is pronounced [ŋ] before *k*.

(287) a. *[ɲɔ̀:* / *kànù* *ẃⁿ]* *kànû:-∅*
[eat.meal / do Purp] **do**.Ipfv-3SgSbj
'It is edible (=regularly eaten)/doable.'

b. *[ɲɔ̀:* *ẃⁿ]* *kàn-ndí-∅*
[eat.meal Purp] **do**-IpfvNeg-3SgSbj
'It is not edible (=is inedible).'

c. *[[íní* *L+nàmà]* *tèmɔ̀* *ẃⁿ]* *kà-ndí-∅*
[[Prox L+meat] eat.meat Purp] **do**-IpfvNeg-3SgSbj
'This meat is not edible.'

Likewise *[nɔ̀: ẃⁿ] kànû:* 'it is drinkable (potable)', *[ùmyɔ̀ ẃⁿ] kànû:* 'it is endurable'.

Another 'be VERB-able' construction, attested with only three verbs, also ends in *û:* . See passive *-m-û:* or *-û:* in §9.3.

10.6 Nonpast versus past time

10.6.1 Past clitic (*=ye*)

Superimposed on the regular aspectual and state categories is past enclitic *=ye* (atonal). It is replaced by *mbɛ̀* in focalized and relative clauses, see §14.4.8 and (392) in §13.1.1.5.

The past morpheme shifts the temporal reference point from the moment of speaking to some point in the past, often generalized ('I used to know'). Stative verbs, which do not mark aspect, can be shifted into past time. Regular aspect-marking (dynamic) verbs, can form past imperfectives ('used to run'), past progressives ('was running'), and past perfects ('had run').

If the moment of speaking remains the temporal reference point, reports of already completed events are normally expressed in the perfective aspect, without the past clitic.

Morphologically, it is notable that *=ye* follows 3Pl suffixes, which are the only pronominal-subject suffixes in Penange verb morphology. Therefore I take past *=ye* to be an enclitic, and by analogy to the 3Pl I transcribe the 3Sg past as *-∅=ye* rather than as *=ye-∅*.

=ye gets its tone by spreading from the preceding tone: *v́=yé*, *v̀=yè*, and (from /v̂/) *v́=yè*, where *v* is a vowel. In most combinations it is L-toned *=yè*. 3Sg *bɔ̀-∅* in stative paradigms is treated as though *bɔ̂-∅* for this purpose, with the original falling tone restored, hence *bɔ́-∅=yè*. After acquiring an L-tone by spreading, *=yè* does not condition any further Rightward H-Spreading on the preceding syllable, so we get e.g. *bí-yà=yè* 'they were' rather than #*bí-yá=yè*.

In 1Sg/2Sg forms like *ŋ́ kèyⁿ=yè* 'I wanted', my assistant often pronounced *=yé* with high pitch after an {L}-toned verb in elicitation. However, the "H-tone" disappeared when it was put in a larger sentence, or was followed by a clause-final particle like 'if'.

10.6.1.1 Past *bo=yè* 'was (somewhere)'

Locational-existential *bɔ̂* 'be (somewhere)', see §11.2.2.2, has a past form *bɔ́=yè* or *bɔ̀=yè*. The syntax is the same as for the non-past form. The paradigm is (288). As usual, existential proclitic *ɛ̀ⁿ* is present (in positive unfocalized main clauses) if there is no other overt locational, and is pronounced *èⁿ* by irregular ATR-harmony when directly before *bɔ́* (§10.6.1.1, §11.2.2.1-2), which is the case in the 3Sg form.

(288) Past ‘was/were (in a place)’ or ‘existed’

subject	after locational X	with existential
1Sg	X *ŋ́ bò=yè*	*è^{n} ŋ́ bò=yè*
1Pl	X *ŋ̀ bó=yè*	*è^{n} ŋ̀ bó=yè*
2Sg	X *á bò=yè*	*è^{n} á bò=yè*
2Pl	X *à bó=yè*	*è^{n} à bó=yè*
3Sg	X *bó-∅=yè*	*è^{n} bó-∅=yè*
3Pl	X *bí-yà=yè*	*è^{n} bí-yà=yè*

Examples are in (289). See also 3Pl *bí-yà=yè* in (575) in Text 4.

(289) a. *gò:lì* *bàmàkɔ̀* *ŋ́* *bò=yè*
last.year B 1SgSbj be=Past
‘Last year I was in Bamako (city).’

b. *nùw^{n}* *bó-∅=yè→ˀ*
here be-3SgSbj=PastQ
‘Was he/she here?

c. *nùw^{n}* *bí-yà=yè*
here be-3PlSbj=Past
‘They were here.’

10.6.1.2 Past *wòl=yé* ‘was not’

The past form of *wòl-* ‘is not (in a place)’, see §11.2.2.3, is *wòl=ye*. The existential morpheme is not allowed in negative clauses. The paradigm is (290).

(290) Past ‘was/were not (in a place)’ or ‘did not exist’

subject	with or without locational X
1Sg	(X) *ŋ́ wòl=yè*
1Pl	(X) *ŋ̀ wǒl=yé*
2Sg	(X) *á wòl=yè*
2Pl	(X) *à wǒl=yé*
3Sg	(X) *wǒl-∅=yé*
3Pl	(X) *wǒl-yà=yè* ~ *wòlí-yà=yè*

Examples are in (291).

(291) a. *á* *wòl=yè→ˀ*
2SgSbj not.be=Past.Q
‘Weren’t you-Sg present?’

b. *gò:lì* *té:* *wòl-∅=yè*
last.year tea not.be-3SgSbj=Past
'Last year there was no tea.'

c. *bàmàkɔ̀* *ŋ́* *wòl=yè*
Bamako 1SgSbj not.be=Past
'I was not in Bamako.'

10.6.1.3 Past forms of other statives

Past forms of 'have' and 'have not' (§11.5.1) are in (292).

(292)

subject	'had'	'had not'
1Sg	*ɛ̀ⁿ ŋ́ sà:ⁿ=yè*	*ŋ́ sà:-ndà=yè*
1Pl	*ɛ̀ⁿ ŋ̀ sâ:ⁿ=yè*	*ŋ̀ sá:-ndà=yè*
2Sg	*ɛ̀ⁿ a sà:ⁿ=yè*	*á sà:-ndà=yè*
2Pl	*ɛ̀ⁿ à sâ:ⁿ=yè*	*à sá:-ndà=yè*
3Sg	*ɛ̀ⁿ sâ:ⁿ-∅=yè*	*sá:-ndá-∅=yé*
3Pl	*ɛ̀ⁿ sá:ⁿ-yà=yè*	*sá:-ndá-yà=yè*

Past forms of 'know' (§11.2.5.1) are in (293).

(293)

subject	'knew'	'did not know'
1Sg	*ŋ́ ɲɛ̀yⁿ=yè*	*ŋ́ ɲ-ìndɔ̀=yè*
1Pl	*ŋ̀ ɲɛ̂yⁿ=yè*	*ŋ̀ ɲ-índɔ̀=yè*
2Sg	*á ɲɛ̀yⁿ=yè*	*á ɲ-ìndɔ̀=yè*
2Pl	*à ɲɛ̂yⁿ=yè*	*à ɲ-índɔ̀=yè*
3Sg	*ɛ́ɲɔ̀ bó-∅=yè*	*índó-∅=yé*
3Pl	*ɛ́ɲɔ̀ bí-yà=yè*	*índó-yà=yè*

Past forms of 'want' and 'not want' (§11.2.5.2) are in (294).

(294)

subject	'wanted'	'did not want'
1Sg	*ŋ́ kèyⁿ=yè*	*ŋ́ kěy-là=yè*
1Pl	*ŋ̀ kêyⁿ=yè*	*ŋ̀ kéy-là=yè*
2Sg	*á kèyⁿ=yè*	*á kěy-là=yè*
2Pl	*à kêyⁿ=yè*	*à kéy-là=yè*
3Sg	*kɛ́ɲù bó-∅=yè*	*kéy-là-∅=yè*
3Pl	*kɛ́ɲù bí-yà=yè*	*kéy-lá-yà=yè*

Past forms of 'resemble' and 'not resemble' (§11.2.5.3) are in (295).

(295)

subject	'resembled'	'did not resemble'
1Sg	*ŋ́ (m)pìmà = yè*	*ŋ́ (m)pìmà-ndà = yè*
1Pl	*ǹ (m)pímà = yè*	*ǹ (m)pímá-ndà = yè*
2Sg	*á (m)pìmà = yè*	*á (m)pìmà-ndà = yè*
2Pl	*à (m)pímà = yè*	*à (m)pímá-ndà = yè*
3Sg	*(m)pímà: bó-∅ = yè*	*(m)pímá-ndá-∅ = yé*
3Pl	*(m)pímà: bí-yà = yè*	*(m)pímá-ndá-yà = yè*

There is no direct past-tense form of the 'it is' or 'it is not' clitics. Instead, they are replaced by 'was (somewhere)', e.g. 3Sg *bó-∅ = yè*, and 'was not (somewhere)', e.g. 3Sg *wòl-∅ = yè*.

Derived statives like *bámbà* 'be carrying (on back)' and their negations (§10.4.1-2) are shifted to past time in (296).

(296)

subject	'was carrying on back'	'was not carrying on back'
1Sg	*ŋ́ bàmbà = yè*	*ŋ́ bàmbà-ndà-yè*
1Pl	*ǹ bámbà = yè*	*ǹ bámbá-ndà-yè*
2Sg	*á bàmbà = yè*	*á bàmbà-ndà-yè*
2Pl	*à bámbà = yè*	*à bámbá-ndà-yè*
3Sg	*bámbà-∅ = yè*	*bámbá-ndá = yé*
3Pl	*bámbá-yà = yè*	*bámbá-ndá-yà = yè*

10.6.1.4 Past imperfective and past progressive

Positive past imperfectives with contextual senses like 'used to go in/dance' and 'was about to go in/dance' are in the first two data columns in (297). These are quite distinct morphologically from ordinary (nonpast) imperfectives (§10.2.2.1), which put 1st/2nd person pronominals between the verb and the following auxiliary *bò*. A basic {LHL} overlay is seen in the past imperfective, becoming {HL} after 1Pl/2Pl pronominals. The corresponding negative, on the other hand, is directly based on the regular (nonpast) imperfective negative (§10.2.3.3). *-l = yè* in the 1Sg/2Sg forms reflects the L-tone of the suffix allomorph *-l*.

(297) Past imperfective paradigm

subject	'used to go in'	'used to dance'	'did not use to go in'
1Sg	*ŋ́ nɔ̌: = yè*	*ŋ́ yɛ̀bɔ̂: = yè*	*nɔ̌:-l = yè*
1Pl	*ǹ nɔ̂: = yè*	*ǹ yɛ́bɔ̀: = yè*	*nɔ̀:-lí = yé*
2Sg	*á nɔ̌: = yè*	*á yɛ̀bɔ̂: = yè*	*nwà-á-l = yè*
2Pl	*à nɔ̂: = yè*	*à yɛ́bɔ̀: = yè*	*nwà-à-lí = yé*
3Sg	*nɔ̌:-∅ = yè*	*yɛ̀bɔ̂:-∅ = yè*	*nɔ̀:-nd(ì) = yé*
3Pl	*nwǎ-à = yè*	*yɛ̀bá-à = yè* ~ *yɛ̀bá-à = yè*	*nɔ̀:-nd-yà = yé*

The progressive with auxiliary *bô-* forms a past progressive by switching the auxiliary to its past-tense form, e.g. 3Sg *bó-∅=yè*. The form of the verb is the same as in the nonpast progressive (§10.2.2.4).

The alternative progressive with *túlà* likewise adds *=ye* to the auxiliary, with regular tonal adjustments. *túlà* becomes *túlà=yè* (3Sg *túlà-∅=yè*), *tùlà* becomes *tùlà=yè* (1Sg/2Sg), and 3Pl *túlá-yà* becomes *túlá-yà=yè*.

10.6.1.5 Past perfect

The morphologically past form of the simple perfective ('he ran') functions as a past perfect ('he had run'), denoting an event that had been completed prior to the past-time temporal reference point. The phonology is unproblematic, as *=ye* is simply added to the regular perfective forms. Sample paradigms are in (298).

(298)

subject	'had fallen'	'had done'
1Sg	*ŋ́ tìbɛ̀=yè*	*ŋ́ kàn=yè*
1Pl	*ǹ tíbɛ̀=yè*	*ǹ kân=yè*
2Sg	*á tìbɛ̀=yè*	*á kàn=yè*
2Pl	*à tíbɛ̀=yè*	*à kân=yè*
3Sg	*tíbɛ́-∅=yé*	*kán-∅=yé*
3Pl	*tíb-yɛ̀=yè*	*kán-nì:=yè*

10.6.1.6 Past experiential perfect (*-tê:=yè*)

Experiential perfect *-tê:* (§10.2.1.4) has past-tense versions illustrated in (299). In the positive 'had (once) seen' paradigm, tonal interactions between 1st/2nd person proclitics and the verb do not extend to *-tê:=yè*. They do extend to negative *-tè:-ndì=yè* or *-té:-ndí=yé*. These tonal patterns are carried over from the (nonpast) experiential perfect, positive and negative.

(299)

subject	'had (once) seen'	'had never seen'
1Sg	*ŋ́ màlgà-tê:=yè*	*ŋ́ màlgà-tè:-ndì=yè*
1Pl	*ǹ málgá-tê:=yè*	*ǹ málgá-té:-ndí=yé*
2Sg	*á màlgà-tê:=yè*	*á màlgà-tè:-ndì=yè*
2Pl	*à málgá-tê:=yè*	*à málgá-té:-ndí=yé*
3Sg	*màlgà-tê:-∅=yè*	*màlgà-té:-ndí-∅=yé*
3Pl	*màlgà-té:-yà=yè*	*màlgà-té:-ndí-yà=yè*

10.6.1.7 Past capacitative (*-mâ: bò-∅=yè*, *-ma:=yé*)

The past version of capacitative *-mâ: (bò)* is *-mâ: bò-∅=yè* (3Sg) and so forth, with the past clitic added to the regular capacitative form (§10.5.1). Similarly, negative forms add the past

clitic to the regular capacitative negative form. Sample positive and negative paradigms are in (300). The tonal patterns are the same as in the nonpast paradigms.

(300)

subject	'could sweep'	'could not sweep'
1Sg	*ŋ́ gɛ̀:n-yɔ̀-má:=yé*	*ŋ́ gɛ̀:n-yɔ̀-má-ndà=yè*
1Pl	*ŋ̀ gɛ́:n-yɔ̀-mà:=yè*	*ŋ̀ gɛ́:n-yɔ̀-má-ndà=yè*
2Sg	*á gɛ̀:n-yɔ̀-má:=yé*	*á gɛ̀:n-yɔ̀-má-ndà=yè*
2Pl	*à gɛ́:n-yɔ̀-mà:=yè*	*à gɛ́:n-yɔ̀-má-ndà=yè*
3Sg	*gɛ̀:n-yɔ̀-mâ: bò-∅=yè*	*gɛ̀:n-yɔ̀-má-ndà=yè*
3Pl	*gɛ̀:n-yɔ̀-mâ: b-yà=yè*	*gɛ̀:n-yɔ̀-má-ndá-yà=yè*

10.6.2 'Has not yet VPed' (*-n sɛ̀:-ndì*)

In this construction, the main verb ends in *-n* and is followed by *sɛ̀:-ndì*. The latter is invariable in form, except for 3Pl *sà:-ndà*, and is not otherwise attested. The main verb is conjugated (regular 1st/2nd person subject proclitics), but {L}-toned. The main verb has the vocalism of the E/I-stem as in the perfective, except that the 3Pl subject form shifts to the A-stem. The paradigm of 'have not yet danced' with *yɛ́bɛ́* 'dance' is (301).

(301)

subject	'have not yet danced'
1Sg	*ŋ́ yɛ̀bɛ̀-n sɛ̀:-ndì*
1Pl	*ŋ̀ yɛ̀bɛ̀-n sɛ̀:-ndì*
2Sg	*á yɛ̀bɛ̀-n sɛ̀:-ndì*
2Pl	*à yɛ̀bɛ̀-n sɛ̀:-ndì*
3Sg	*yɛ̀bɛ̀-n sɛ̀:-ndì*
3Pl	*yɛ̀bà-n sà:-ndà*

For *kán(í)* 'do', the 3Sg form is *kànì-n sɛ̀:-ndì*, illustrating the final *i* in the E/I-stem of final-high-vowel verbs. The 3Pl form is *kànà-n sà:-ndà*.

The *-n* element is difficult to analyse. Perhaps the most likely connection is with imperfective subordinator $w^n \sim ŋ$ (§15.2.1.3), which would be heard as *n* before another alveolar. The other known cases of *-n* suffix on verbs are limited to third-person forms; see *-n nàgà* comparative predicates (§12.1.2) and progressive *-n túlà* (§10.2.2.5).

10.7 Imperatives and hortatives

10.7.1 Imperatives and prohibitives

10.7.1.1 Imperative (A/O- or U-stem, plural A-stem plus *-ỳ^n*)

The singular- and plural-addressee imperatives are distinct both vocalically and (most systematically for light stems) tonally, on top of the fact that plural-addressee has a suffix *-ỳ^n*.

The singular-addressee imperative consists segmentally of the A/O-stem (for some final-high-vowel verbs, the U-stem) with no affix. The tone overlay is {H} for prosodically light

verbs: *Cv*, *Cv:*, *CvCv*, and most *CvNCv* with homorganic nasal/voiced-stop cluster. Prosodically heavy verbs (the remaining *CvCCv* stems plus all *Cv:Cv*, *CvCvCv*, and similar multisyllabic verbs) have {L} overlay. The two *Cv-yv* mediopassives ('lie down', 'carry on head/bathe') are treated as heavy and have {L}-toned imperatives *Cù-yv̀*. My assistant sometimes pronounced {L}-toned imperatives with a final pitch rise, but I believe this to be intonational.

For other irregularities see 'come' and 'bring' in (304) near the end of this section.

The plural-addressee imperative is based on the A-stem and has *-y*^{n} suffix. The tone pattern is {L} on prosodically light stems, but my assistant pronounced trisyllabics and (sometimes) heavy bisyllabics with {LHL} overlay (with the final L realized on the *-y*^{n} suffix).

Examples for final-nonhigh-vowel verbs are in (302). The 3Sg perfective is given for comparison (leftmost data column).

(302) Imperative of final-nonhigh-vowel verbs

gloss	Pfv 3Sg	imperative	
		singular addressee	plural addressee
a. monosyllabic			
Cv			
'say'	*nɛ́*	*ná*	*nà-y*^{n}
-ATR			
'drink'	*nɛ́:*	*ná:*	*nà:-y*^{n}
'eat'	*ɲɛ́:*	*ɲá:*	*ɲà:-y*^{n}
'go in'	*nwɛ́:*	*nwá:*	*nwà:-y*^{n}
+ATR			
'go out'	*gwé:*	*gó:*	*gwà:-y*^{n}
'draw water'	*wwé:*	*wó:*	*wwà:-y*^{n}
b. bisyllabic, prosodically light			
-ATR			
'slaughter'	*sɛ́mɛ́*	*sɛ́má* ~ *sɛ́má*	*sɛ̀mà-y*^{n} ~ *sɛ̀mà-y*^{n}
'buy'	*sɔ́gɛ́*	*sɔ́gá*	*sɔ̀gà-y*^{n}
'build'	*símɛ́*	*símá*	*sìmà-y*^{n}
'pull'	*gímbɛ́*	*gímbá*	*gìmbà-y*^{n}
'go down'	*sígɛ́*	*sígó*	*sìgà-y*^{n}
-ATR			
'shave'	*káyɛ́*	*káyá*	*kàyà-y*^{n}
'jump'	*tómbɛ́*	*tómbó*	*tòmbà-y*^{n}
{L} toned singular imperative (mediopassives, treated as though heavy)			
'lie down'	*bí-yɛ́*	*bì-yò*	*bì-yà-y*^{n}
'carry on head'	*dú-yɛ́*	*dù-yà*	*dù-yà-y*^{n}
c. bisyllabic, prosodically heavy (or treated as such)			
'go'	*ándɛ̀*	*àndà*	*àndà-y*^{n}
'stand, stop'	*ínjɛ̀*	*ìnjà*	*ìnjà-y*^{n}
'shut (door)'	*bá:-ndɛ̀*	*bà:-ndà*	*bà:-ndà-y*^{n}
'sleep'	*nó:yɛ̀*	*nò:yò*	*nò:yà-y*^{n} ~ *nò:yá-ỳ*^{n}

d. trisyllabic

‘shake’	*yígírè*	*yìgìrò*	*yìgìrá-y^{n}*
‘shatter’	*tébá-gè*	*tèbà-gà*	*tèbà-gá-y^{n}*

Imperatives of verbs with final high vowels are in (303). The tone overlays are the same as for final-nonhigh-vowel verbs. Verbs in (303a) with an *a*-vowel in the penult have final *a* in the singular-addressee imperative. This is consistent with the A/O-stem, as in imperatives of the final-nonhigh-vowel class, though it could also be taken as the A-stem. Verbs in (303b) with a nonlow vowel in the penult have final *u* (U-stem) in the singular-addressee imperative. For both subsets in (303), the plural-addressee imperative is formed in the same way as with final-nonhigh-vowel verbs.

(303) Imperative of final-high-vowel verbs

gloss	Pfv 3Sg	imperative	
		singular addressee	plural addressee
a. *a*-vowel in penult (A/O-stem)			
{H}-toned singular imperative, prosodically light			
‘do’	*kán*	*káná*	*kànà-y^{n}*
‘speak’	*dám*	*dámá*	*dàmà-y^{n}*
{L}-toned singular imperative, prosodically heavy			
‘sit’	*dâ:y^{n}*	*dà:y^{n}à*	*dà:y^{n}à-y^{n}*
‘feed’	*ɲá:-mì*	*ɲà:-mà*	*ɲà:mà-y^{n}*
b. nonlow vowel in penult (U-stem)			
{L}-toned singular imperative, prosodically heavy			
‘look’	*sé:mì*	*sè:mù*	*sè:mà-y^{n}*
‘take down’	*sígó-mì*	*sìgò-mù*	*sìgò-mà-y^{n}*

Though not usually final-high-vowel stems, ‘come’ and ‘bring’ are treated like ‘look’ and ‘take down’ (303b) in their imperatives, except that the singular-addressee form is idiosyncratically {HL}-toned.

(304) Imperative of ‘come’ and ‘bring’

gloss	Pfv 3Sg	Sg imperative	Pl imperative
‘come’	*égé*	*égù*	*ègà-ỳ^{n}*
‘bring’	*sóŋgé*	*sóŋgù*	*sòŋgà-ỳ^{n}*

Imperatives of ‘go’ and ‘come’ may combine with another verb. Both verbs in such pairings are then imperative in form (305). This double-imperative construction is unusual in Dogon languages, which prefer chains where nonfinal verbs are uninflected. The double-imperative construction is, however, consistent with the double-perfective constructions described in §15.2.2 below. In (305d), the {HL}-toned imperative of ‘come’ is flattened to H-toned before an L-tone by Rightward H-Spreading.

(305) a. *àndà* *ɲá:*
go.Imprt eat.Imprt
'Go-Sg eat!'
[plural: *àndà-ý^{n} ɲà:-y*]

b. *àndá* *bì-yò*
go.Imprt lie.down-MP.Imprt
'Go-Sg (there) and go to bed!'

c. *égú* *[ɲà:* *ɲá:]*
come.Imprt [meal eat.Imprt]
'Come-Sg eat!' (< *égù*)
[plural: *ègá-y^{n} ɲă: ɲà:-y^{n}*]

d. *égú* *bì-yò*
come.Imprt lie.down-MP.Imprt
'Come-Sg and go to bed!'
[plural: *ègá-y^{n} bì-yà-y^{n}*]

The syntactic treatment of subject and object in imperatives is described in §11.1.1.3.

10.7.1.2 Prohibitive (A-stem plus *-ndà*, plural *-ndé-ỳ^{n}*)

For all verbs, the prohibitive ('don't go!') is formed from the A-stem, like the plural-addressee imperative. The stem is {L}-toned. The prohibitive suffix is *-ndà* for singular addressee. Plural addressee is expressed by suffix complex *-ndé-ỳ^{n}*, which includes the same plural-addressee suffix *-ỳ^{n}* seen above in the (positive) imperative. *-ndà* resembles the stative negative suffix *-nda* (§10.4.2), and plural *-ndé-ỳ^{n}* resembles the quoted prohibitive *-ndè-y^{n}* ~ *-ndé-ỳ^{n}* (§10.7.3.2).

Although there is no difference between verbs with final nonhigh and high vowels, I follow the usual division for purposes of presentation.

(306) Prohibitive of final-nonhigh-vowel verbs

gloss	Pfv 3Sg	prohibitive	
		singular addressee	plural addressee
a. monosyllabic			
Cv			
'say'	*nɛ́*	*nà-ndà*	*nà-ndé-ỳ^{n}*
-ATR			
'drink'	*nɛ́:*	*nà:-ndà*	*nà:-ndé-ỳ^{n}*
'eat'	*ɲɛ́:*	*ɲà:-ndà*	*ɲà:-ndé-ỳ^{n}*
'go in'	*nwɛ́:*	*nwà:-ndà*	*nwà:-ndé-ỳ^{n}*
+ATR			
'go out'	*gwé:*	*gwà:-ndà*	*gwà:-ndé-ỳ^{n}*
'draw water'	*wwé:*	*wwà:-ndà*	*wwà:-ndé-ỳ^{n}*
b. bisyllabic			
'build'	*símɛ́*	*sìmà-ndà*	*sìmà-ndé-ỳ^{n}*
'go down'	*sígé*	*sìgà-ndà*	*sìgà-ndé-ỳ^{n}*

‘shave’	*káyé*	*kàyà-ndà*	*kàyà-ndé-ỳ^{n}*
‘pull’	*gímbé*	*gìmbà-ndà*	*gìmbà-ndé-ỳ^{n}*
‘jump’	*tómbé*	*tòmbà-ndà*	*tòmbà-ndé-ỳ^{n}*
‘shut (door)’	*bá:-ndè*	*bà:-ndà-ndà*	*bà:-ndà-ndé-ỳ^{n}*
‘sleep’	*nó:yè*	*nò:yà-ndà*	*nò:yà-ndé-ỳ^{n}*
‘go’	*ándè*	*àndà-ndà*	*àndà-ndé-ỳ^{n}*
‘stand, stop’	*ínjè*	*ìnjà-ndà*	*ìnjà-ndé-ỳ^{n}*
c. trisyllabic			
‘shake’	*yígírè*	*yìgìrà-ndà*	*yìgìrà-ndé-ỳ^{n}*
‘shatter’	*tébá-gè*	*tèbà-gà-ndà*	*tèbà-gà-ndé-ỳ^{n}*

Prohibitives of verbs with final high vowels are in (307).

(307) Prohibitive of final-high-vowel verbs

gloss	Pfv 3Sg	prohibitive	
		singular addressee	plural addressee
a. *a*-vowel in penult			
‘sit’	*dâ:y^{n}*	*dà:y^{n}à-ndà*	*dà:y^{n}à-ndé-ỳ^{n}*
‘do’	*kán*	*kànà-ndà*	*kànà-ndé-ỳ^{n}*
		~ *kà:-ndà*	~ *kà:-ndé-ỳ^{n}*
‘speak’	*dám*	*dàmà-ndà*	*dàmà-ndé-ỳ^{n}*
‘feed’	*ɲá:-mì*	*ɲà:-mà-ndà*	*ɲà:mà-ndé-ỳ^{n}*
b. nonlow vowel in penult			
‘look’	*sé:mì*	*sè:mà-ndà*	*sè:mà-ndé-ỳ^{n}*
‘take down’	*sígó-mì*	*sìgò-mà-ndà*	*sìgò-mà-ndé-ỳ^{n}*

For ‘do’ in (307a), the optional (but frequent) contracted pronunciation *kà:-ndà* ‘don’t do!’ is regrettably homophonous with the (positive) imperative of *ká:-ndè* ‘do (sth) for (sb)’.

Prohibitives of ‘come’ and ‘bring’ are in (308).

(308) Prohibitive of ‘come’ and ‘bring’

gloss	Pfv 3Sg	prohibitive	
		singular addressee	plural addressee
‘come’	*égé*	*ègà-ndà*	*ègà-ndé-ỳ^{n}*
‘bring’	*sóŋgé*	*sòŋgà-ndà*	*sòŋgà-ndé-ỳ^{n}*

The syntax of the prohibitive is the same as that of the positive imperative regarding accusative case-marking and reflexive objects.

(309) a. *mì-ŋ́* *sè:mà-ndà*
1Sg-Acc look.at-Proh
‘Don’t look-2Sg at me!’

b. *[[á* *kŏ:-w^{n}]* *sè:mà-ndà*
[[2SgPoss head-Acc] look.at.Proh
‘Don’t look at yourself!’

10.7.2 Hortatives

10.7.2.1 Hortative (E/I-stem, singular *-yà*, plural *-y^{n}-yà*, indefinite *-y^{n}*)

Hortatives of the 'let's go!' type, i.e. with first person inclusive prospective agent, require an overt 1Pl subject pronominal *ŋ̀*. In the case of 'go', there is a distinction between singular-addressee (NOT singular-subject), plural-addressee, and unspecified-number addressee forms. The singular-addressee hortative ends in *-yà* (310a) after a stem-final *i* that is often syncopated (310a). The plural-addressee hortative of 'go' has the E-stem of the verb, a morpheme *-y^{n}-* (equatable with the plural-addressee suffix in imperatives and prohibitives), and finally *-yà* (310b). For 'go', there is also an indefinite-number hortative with {H}-toned E-stem and suffix *-y^{n}* (310c).

(310) a. *ŋ̀* *ɲ-â:nd(ì)-yà*
1PlSbj Epen-go-Hort
'Let's (you-Sg and me) go!'

b. *ŋ̀* *ɲ-á:ndè-y^{n}-yà*
1PlSbj Epen-go-PlAddr-Hort
'Let's (you-Pl and me) go!'

c. *ŋ̀* *ɲ-á:ndé-y^{n}*
1PlSbj Epen-go-Hort
'Let's go!' (addressee number unspecified)

For verbs other than 'go' I was able to elicit only one hortative type, structurally parallel to the plural-addressee 'let's go!' type (310b). However, in quoted hortatives the construction in (310c) is regular for all verbs regardless of addressee number (§17.1.2.2).

In the productive hortative type, the verb is in the E/I-stem, i.e. the E-stem for final-nonhigh-vowel verbs and the I-stem for the final-high-vowel class. The verb has {HL} overlay before the suffix complex *-ỳ^{n}-yà*, and this melody is realized as H.H.L on a trisyllabic stem. Examples for final-nonhigh-vowel verbs, showing the E-stem, are in (311). The stem vocalism is the same as for the 3Sg perfective, which is shown for comparison.

(311) Hortative of final-nonhigh-vowel verbs

gloss	Pfv 3Sg	hortative
a. monosyllabic		
-ATR		
'drink'	*nɛ́:*	*ŋ̀ nɛ̂:-ỳ^{n}-y^{n}à*
'eat'	*ɲɛ́:*	*ŋ̀ ɲɛ̂:-ỳ^{n}-y^{n}à*
'go in'	*nwɛ́:*	*ŋ̀ nwɛ̂:-y^{n}-yà*
+ATR		
'go out'	*gwé:*	*ŋ̀ gwê:-y^{n}-yà*
'draw water'	*wwé:*	*ŋ̀ wwê:-y^{n}-yà*
b. bisyllabic		
'build'	*símɛ́*	*ŋ̀ símɛ̀-ỳ^{n}-yà*
'go down'	*sígé*	*ŋ̀ sígè-ỳ^{n}-yà*

c. trisyllabic

'shake'	*yígírè*	*ŋ̀ yígírè-ỳⁿ-yà*

Hortatives of verbs with final high vowels are based on the I-stem. Again the stem vocalism of the hortative matches that of the 3Sg perfective, after factoring out loss of final /i/ in the perfective, e.g. *dâ:yⁿ* from /dá:yⁿì/ (312).

(312) Hortative of final-high-vowel verbs

gloss	Pfv 3Sg	hortative
'sit'	*dâ:yⁿ*	*ŋ̀ dá:yⁿì-yⁿ-yà*
'do'	*kán*	*ŋ̀ kánì-yⁿ-yà*
'speak'	*dám*	*ŋ̀ dámì-yⁿ-yà*
'feed'	*ɲá:-mì*	*ŋ̀ ɲá:-mì-yⁿ-yà*
'look'	*sé:mì*	*ŋ̀ sé:mì-yⁿ-yà*
'take down'	*sígó-mì*	*ŋ̀ sígó-mì-yⁿ-yà*

Hortatives of 'come' and 'bring' are in (313). They follow the pattern of final-nonhigh-vowel verbs.

(313) Hortative of 'come' and 'bring'

gloss	Pfv 3Sg	hortative
'come'	*égé*	*ŋ̀ yégè-yⁿ-yà*
'bring'	*sóŋgé*	*ŋ̀ sóŋgè-yⁿ-yà*

10.7.2.2 Hortative negative (A-stem plus *-ndé-ỳⁿ-yà*)

A hortative negative can be formed by adding hortative *-yà* to the form otherwise used as the plural-addressee prohibitive, i.e. with *-ndé-ỳⁿ*. This form is used for singular as well as plural addressee. A putative singular-addressee #*-ndà-yà* was rejected by my assistant.

(314) *ŋ̀* *ɲ-á:ndá-ndé-ỳⁿ-yà*
1PlSbj Epen-go-Proh-PlAddr-Hort
'Let's (you-Sg/Pl and me) not go!'

10.7.2.3 Allative hortative 'let's go VP!' (A-stem, *-máyⁿ*)

Suffix *-máyⁿ* added to the {H}-toned A-stem produces a hortative that explicitly includes a motion event. There is no distinction of addressee number.

(315) a. *ŋ̀* *ɲá:-máyⁿ*
1PlSbj eat.meal-Allative.Hort
'Let's go eat!'

b. *móbêl* *ŋ̀* *túmbúgá-máy^{n}*
vehicle 1PlSbj push-Allative.Hort
'Let's go push the car!'

See also *sógú-lá-máy^{n}* 'let's go sell!' in (554) in Text 2.

Several Dogon languages have hortative suffixes (not specifying motion) that resemble *-máy^{n}* and are likely cognates.

10.7.3 Quoted imperatives and hortatives

10.7.3.1 Quoted imperatives (E/I-stem plus *-y^{n}*, I-stem plus *-yè* ~ *-yɛ̀*)

Two special verb forms, depending on pronominal category of subject, are used for quoted imperatives ('your father says for you to sweep', 'they told me to sweep') and in imprecations such as wishes, blessings, and curses ('may God make you arrive safely!').

For 1st/2nd person subject, the regular subject proclitics are present, and the verb takes the E/I-stem with {L} (singular) or {H} (plural) overlay before suffix *-y^{n}*. In (316c), the rising tone on *gwè:-ý^{n}* is due to Final Tone-Raising before an L-toned word. This tone sandhi rule does not apply before quotative particle *wà* in (316a), since *wa* is lexically atonal and gets its tone by spreading from the left, see §17.1.1.1-2.

(316) a. *ŋ́* *gwè:-y^{n}* *wà*
1SgSbj go.out-QuotImprt Quot
'(Someone) said for me to leave.'

b. *ŋ́* *gwè:-y^{n}* *né-∅*
1SgSbj go.out-QuotImprt say.Pfv-3SgSbj
'He/She told me to leave.'

c. *ŋ́* *gwè:-ý^{n}* *nè-l-∅*
1SgSbj go.out-QuotImprt say-PfvNeg-3SgSbj
'He/She didn't tell me to leave.'

d. *ŋ́* *gwè:-y^{n}→ˀ*
1SgSbj go.out-QuotImprt.Q
'(Did you say) for me to leave?' (with interrogative terminal intonation)

e. *ŋ̀* *gwé:-y^{n}* *né-∅*
1PlSbj go.out-QuotImprt say.Pfv-3SgSbj
'He/She told us to leave.'

For third person subject (including 'God' in wishes and imprecations), the verb takes the I-stem with {LH} overlay. The suffix is *-yè* ~ *-yɛ̀* after stem-final *i* (I-stem) for final-nonhigh-vowel verbs, which in this construction includes 'come' (317b-c). The choice of suffixal vowel depends on the ATR-harmonic class of the verb. For final-high-vowel verbs, the stem-final *i* is phonetically lengthened with falling tone (I transcribe …*Cí-ì*) (317d). The verb does not agree in number with the subject, and an overt subject NP or third person pronoun is optional. (317a-b) contrast the 1st/2nd and third person forms for the same verb ('come'). Further examples of third-person forms are (317c-d). In (317b-c), *ègí-yè* has phonetic realizations including [èg:jê].

(317) a. *ŋ́* *y-ègè-y^{n}* *wà*
1SgSbj Epen-come-QuotImprt Quot
'(Someone) said for me to come.'

b. *sɛ̌ydú* / ∅ *ègí-yè* *wà*
S / ∅ come-QuotImprt Quot
'(Someone) said for Seydou / for him to come.'

c. *[è* $^{H+}$*wé:-gè]* *ègí-yè* *wà*
[Def $^{H+}$child-Pl] come-QuotImprt Quot
'(Someone) said for the children to come.'

d. *àmànà* *[hè:là* *nì]* *ó-^{n}* *tùbyà-mí-ì*
God [peace Inst] 2Sg-Acc arrive-Caus-QuotImprt
'May God cause you-Sg to arrive safely!'
(said to a departing traveler)

e. *à* *y-égé-y^{n}* *wá*
2PlSbj Epen-come-QuotImprt Quot
'(Someone) said for you-Pl to come.'

Additional forms for stems with final nonhigh vowels are in (318). The phonetic distinction between *nɛ̌y^{n}-y^{n}ɛ̀* ('say') and *nɛ̌:-y^{n}ɛ̀* ('drink') is difficult to hear but my assistant claims they are distinct.

(318) Quoted imperative (final-nonhigh-vowel class)

Pfv 3Sg	QuotImprt 1st/2nd	QuotImprt 3rd	gloss
a. monosyllabic			
Cv			
né	*nè-y^{n}*	*nɛ̌y^{n}-y^{n}ɛ̀*	'say'
+ATR			
gwé:	*gwè:-y^{n}*	*gwɛ̌:-yè*	'go out'
-ATR			
dwɛ́:	*dwɛ̀-:ý^{n}*	*dwɛ̌:-yè*	'pound'
ɲɛ́:	*ɲɛ̀:-y^{n}*	*ɲɛ̌:-y^{n}ɛ̀*	'eat (meal)'
nɛ́:	*nɛ̀:-y^{n}*	*nɛ̌:-y^{n}ɛ̀*	'drink'
b. bisyllabic			
+ATR			
dágé	*dàgè-y^{n}*	*dàgí-yè*	'lay out'
bí-yé	*bì-yè-y^{n}*	*bì-yí-yè*	'lie down'
ná:lè	*nà:lè-y^{n}*	*nă:l-yè*	'think'
-ATR			
yɛ́bɛ́	*yɛ̀bɛ̀-y^{n}*	*yɛ̀bɛ́-yɛ̀*	'dance'
sɔ́gɛ́	*sɔ̀gɛ̀-y^{n}*	*sɔ̀gɛ́-yɛ̀*	'buy'
dɛ́:ndɛ̀	*dɛ̀:ndɛ̀-y^{n}*	*dɛ̀:ndɛ́-yɛ̀*	'leave'
c. trisyllabic			
yígírè	*yìgìrè-y^{n}*	*yìgìrí-yè*	'shake'
tébá-gè	*tèbà-gè-y^{n}*	*tèbà-gí-yè*	'shatter'

See also *nèjí-yè* and *bàŋgù-lí-yè* in (548) in Text 1.

Corresponding forms from verbs with final high vowels are in (319).

(319) Quoted imperative (final-high-vowel class)

Pfv 3Sg	quoted imperative		gloss
	1st/2nd	3rd	
dám	*dàmì-y^{n}*	*dàmí-ì*	'speak'
kán	*kànì-y^{n}*	*kàní-ì*	'do'
dâ:y^{n}	*dà:y^{n}ì-y^{n}*	*dà:y^{n}í-ì*	'sit'
sé:mì	*sè:mì-y^{n}*	*sè:mí-ì*	'look'
ɲá:-mì	*ɲà:-mì-y^{n}*	*ɲà:-mí-ì*	'feed'

'Come' and 'bring' are treated as final-nonhigh-vowel verbs for this purpose.

(320) Quoted imperative ('come' and 'bring')

Pfv 3Sg	quoted imperative		gloss
	1st/2nd	3rd	
égé	*(y)ègè-y^{n}*	*ègí-yè*	'come'
sóŋgé	*sòŋgè-y^{n}*	*sòŋgí-yè*	'bring'

In certain high-frequency, rather lexicalized wishes with 'God' as (usually unstated) agent, the entire verb including *-yè* becomes {H}-toned. See (531) and (532a,c) in §19.5, with e.g. *tá:r(í)-yé* for the usual *tà:rí-yè* 'may (he/she) show!'

For the use of 1Pl subject quoted imperative as a quoted hortative, see (481) in §17.1.2.2.

10.7.3.2 Quoted prohibitive (*-nde-y^{n}*)

The negative of the quoted imperative is *-nde-y^{n}* for all subject categories. It consists of quoted imperative *-y^{n}* and an allomorph of prohibitive *-ndà*. Except for being conjugated for subject, it is partially identical to the plural-addressee prohibitive form *-ndé-ỳ^{n}*. The paradigm for 'come' is (321), with quotative *wà* included.

(321) Quoted imperative paradigm

subject	'(he) told __ not to come'
1Sg	*ŋ́ y-ègà-ndè-y^{n} wà*
1Pl	*ŋ̀ y-égá-ndé-y^{n} wá*
2Sg	*á y-ègà-ndè-y^{n} wà*
2Pl	*à y-égá-ndé-y^{n} wá*
3Sg	*ègà-ndé-ỳ^{n} wà*
3Pl	*ègà-ndé-ỳ^{n} wa*

For a textual example see *bàŋgù-là-ndé-ỳ^{n}* in (548) in Text 1.

10.7.3.3 Quoted hortative (*-y^{n}*)

For the use of 1Pl subject quoted imperative as a quoted hortative, see (481) in §17.1.2.2.

In (577) in Text 4, *ŋké sé:má-máy^{n}-yà* '(he said) "let's go take a look …!" ' with updated 3Pl (for original 1Pl) is a quoted allative hortative, see §10.7.2.3 above. The additional *-yà* is an additional hortative morpheme.

11 Clause, VP, and predicate structure

11.1 Clausal constituents

As in most Dogon languages, linear order is SOV, where S(ubject) and O(bject) are nonpronominal NPs. Setting adverbs like 'yesterday' often precede the subject NP (322a). Other adverbials that do not establish settings follow the subject, and usually follow the object (322b).

(322) a. *yà:gú* *wè:-gé* *gà:^{n}* *sém-yè*
yesterday child-Pl cat slaughter.Pfv-3PlSbj
'The kids slaughtered a cat yesterday.' (< *yà:gù*)

b. *[è* *$^{H+}$óy^{n}]* *[[wótórò* *kò]* *w^{n}]* *tà:mmɔ́* *dù:ndò*
[Def $^{H+}$waterjar] [[cart head] Loc] gently lay.Imprt
'Lay-2Sg the waterjar gently on the cart!' (< *tà:mmɔ̀*)

Pronouns gravitate toward the verb. This is rigorous in the case of 1st/2nd preverbal proclitic subject pronominals (also 3Pl when proclitic in subordinated clauses). However, pronominal objects and PPs are also typically placed as close to the verb as possible. Compare (323), where the object is now immediately preverbal, with (322b) above.

(323) *[[wótórò* *kò]* *w^{n}]* *tà:mmɔ̀* *mì-ŋ* *dú:ndè-∅*
[[cart head] Loc] gently **1Sg-Acc** lay.Pfv-3SgSbj
'He/She laid me gently on the cart.'

11.1.1 Subjects

11.1.1.1 Subjects in indicative main clauses

Nonpronominal subject NPs are clause-initial, except for setting adverbs. Third person subject NPs require agreement in the verb, though 3Sg is the zero category. 1st/2nd person subjects, barring focalization, are expressed by preverbal proclitics (1Pl, 2Pl).

Subjects are the normal antecedents for reflexive objects. In Penange these are of the type 'my/your/his… head', see §18.1.1.

11.1.1.2 Subjects in relative and complement clauses

Subjecthood is relevant to some biclausal constructions, which often require coindexation of the subject of one clause with another NP (which may also be a subject) in the other clause. For same-subject perfective chains see §15.2.1.5. For verbal-noun complements of control-type verbs see e.g. §17.4.8 ('begin VPing').

In nonsubject relatives, 3Sg subject is expressed by postverbal enclitic *nà* instead of by zero, and 3Pl subject is expressed by a proclitic rather than by a suffix (§14.3). Subject

relatives lack pronominal-subject agreement. The same is true of non-subject focalized clauses (§13.1.1.4).

11.1.1.3 Subjects and addressees of imperative and hortative verbs

Although the second person agent of an imperative (§10.7.1.1) is normally unexpressed, in some ways it functions syntactically as a subject. A direct object has accusative marking in an imperative clause under the same conditions as in indicative clauses (324a). The second person subject can bind anaphoric reflexives (324b), which are of the 'your head' type rather than transpersonal reflexive pronouns of the sort found in Tomo Kan and Togo Kan.

(324) a. *mì-ŋ* *sè:mù*
1Sg-Acc look.at.Imprt
'Look-2Sg at me!'

b. *[[á* *kŏ:]-w^{n}]* *sè:mù*
[2SgPoss head]-Acc] look.at.Imprt
'Look at yourself!'

Ordinary hortatives ('let's go!') are more obviously main-clause-like. In addition to accusative objects and 'head' reflexives, the 1Pl subject *ŋ́* is overt (§10.7.2.1).

Both imperatives and hortatives mark addressee-number agreement. Therefore hortatives have both an overt 1Pl subject and either singular or plural addressee marking. For imperatives, addressee marking converges with subject.

11.1.1.4 Subjects of lexicalized subject-verb combinations

There are a few subject-verb collocations where either the subject NP or the verb has little independent semantic content beyond that supplied by the verb, or is unattested elsewhere.

(325)	collocation	gloss	related foms
a. cognate subject and verb			
	dógó dógé	'night fall'	*dógó* 'night', *dógé* not otherwise known
	yɔ̀: yɛ́:	'day break'	neither stem otherwise known
b. noncognate			
	kùmà:ŋgà (w)wɛ́:	'rain fall'	*kùmà:ŋgà* 'rain' cf. *wɔ̀: (w)wɛ́:-* 'weep'
	dè:ndà démɛ́	'afternoon arrive'	*dè:ndà* 'afternoon', *démɛ́* 'ripen'
	kùnà bálé	'give thanks'	*kùnà* 'oath', *bálé* verb with senses like 'beat (tomtoms)' and 'knock down'

Textual examples are *dógó dógé* in (582) in Text 4, *yɔ̀: yɛ́:* in (592) in Text 4, *dè:ndà démɛ́* in (571) in Text 3, and *kùnà bálé* in (562) in Text 3.

11.1.2 Simple transitives

11.1.2.1 Direct objects of simple transitives

Subjects and objects are clearly distinguished. Subjects normally precede objects if both are nonpronominal. Accusative pronouns are clearly distinguished from the clitics and (3Pl) suffixes that express pronominal-subject agreement in verbs.

On the other hand, there is no sharp difference between direct objects and dative-like indirect objects. This is especially noticeable with ditransitive verbs like 'give' (§11.1.3.3). Pronominal and human (direct or indirect) objects can be marked by postposition-like accusative *-ŋ* ~ *-ẁ*^{n} (§6.7) following the NP.

Perception verbs like *málgè* 'see' and *núndé* 'hear' are ordinary transitives with subjects and objects like those of canonical transitives.

Many activity verbs like 'dance' and 'cough' whose objects are not clearly separable from the activities themselves are marginally transitive, since they often occur with cognate nominals that function as objects, even if pro forma ('dance a dance', 'cough a cough'). See §11.1.2.5-6 below.

11.1.2.2 *kán(í)* 'do' with nouns and unconjugatable words

kán(í) 'do' can combine with nouns (especially borrowings) or semi-onomatopoeic elements ('hiccup', 'bellow') that cannot otherwise function as predicates. This construction is common in Penange. Examples are in (326).

(326)

a. *bàrù*	'discussion, meeting'
bàrù kán	'hold a discussion or meeting'
b. *bèlègè*	'noise'
bèlègè kán	'make noise'
c. *dí:dì*	'line (e.g. in sand)'
dí:dì kán	'draw lines'
d. *hɔ́:lá:rɛ̀*	'trust (n), confidence'
hɔ́:lì kán	'trust (sb)'
e. *kálbà*	'act of entrusting'
kálbà kán	'entrust (sb/sth, to sb)'
f. *lâ:m*	'command (n), political authority'
lâ:m kán	'govern, be in authority'
g. *mùy*^{n}	'patience'
mùy^{n} *kán*	'be patient, wait patiently'
h. *hár kán*	'obstruct, prevent'
i. *jɔ̀ŋgù-jɔ̀ŋgù kán*	'(quadruped) trot'

j. *ká:mnɔ́* ‘old (person)’
ká:mnɔ́ kán ‘become old, age (v)’

k. *káy*^{n} ‘work (n)’
káy^{n} *kán* ‘work (v), perform work’

l. *kɔ̀ndɔ̀* ‘failure, inability’
kɔ̀ndɔ̀ kán ‘fail’

m. *sábà* ‘writing (n)’
sábà kán ‘write’

n. *sɛ́ndí* ‘prayer’
sɛ́ndí kán ‘pray, perform a prayer’

11.1.2.3 *nɛ́* ‘say’ and factitive *ná-m-* with adverbials and onomatopoeias

Intransitive (mediopassive) *nɛ́* ‘say’ and its causative *ná-m* are observed in (327a-b) after an expressive adverbial (‘puffed up’), and in (328a-b) after an onomatopoeia (‘vroom’).

(327) a. *sɛ̌ydù* *dòn-nà* *bóŋgów*^{n} *ná-m-∅*
Seydou mouth-3SgPoss puffed.up **say-Caus**.Pfv-3SgSbj
‘Seydou puffed up his mouth (=cheeks, with air).’

b. *dòn-nà* *bóŋgów*^{n} *nɛ́-∅*
mouth-3SgPoss puffed.up **say**.Pfv-3SgSbj
‘His/her mouth (= cheeks) became puffed up.’

(328) a. *bŭ→m* *nɛ́-∅*
vroom **say**.Pfv-3SgSbj
‘It (e.g. motor) went vroom (= was revved up).’

b. *bŭ→m* *ná-m-∅*
vroom **say-Caus**.Pfv-3SgSbj
‘He/She make it (= motor) go vroom (= revved it up).’

11.1.2.4 Collocations with low-referentiality objects

Array (329) presents representative lexicalized verb-object collocations.

(329)

verb-object	gloss	components
mì: dú-yɛ́	‘bathe (oneself)’	*mì:* ‘water’, *dú-yɛ́* ‘carry’
tɛ́bɛ́ bálé	‘applaud’	*bálé* ‘beat (tomtom)’
sò:njì swɛ́:	‘spit’	*sò:njì* ‘saliva’
bàrù dá:-ndɛ̀	‘organize a debate’	*bàrù* ‘meeting’, *dá:-ndɛ̀* ‘cause to sit’
gɔ́rɔ́lɔ́ kɔ́mɛ́	‘snore’	*gɔ́rɔ́lɔ́* ‘snoring’, *kɔ́mɛ́* ‘shout’

dábál-yè túlé	'tell a story'	*dábál-yè* 'tale', *túlé* 'put'
píjó kín	'get pregnant'	*píjó* 'state of pregnancy', *kín(í)* 'scoop, take (liquid, grain) by scooping'

Cognate nominals may also be low in referentiality, see below.

11.1.2.5 Forms of cognate nominals associated with verbs

Examples of collocations involving a verb and a cognate nominal are in (330). They include many bodily-function phrases.

The nominals are of two main phonological types. One, which includes all trisyllabics and some bisyllabics, ends in a short high vowel, most often *u* in bimoraic *CvCu* and *i* in heavier stems (*CvCCi*, *Cv:Ci*, *CvCvCi*). The other, which includes all monosyllabics and some short-voweled monosyllabics, ends in a mid-height vowel, which for bisyllabics is rounded {*o ɔ*} and for monosyllabics is rounded if the perfective has *w*, otherwise it is unrounded (*gè:ⁿ* 'fart'). Some of the pairings show ATR or mid-low vocalic shifts (*e/ɛ*, *o/ɔ*, *o/a*, *ɔ/a*).

(330)

combination	gloss	vowel shift
a. *Cv:*		
Cv: with mid-height vowel		
gè:ⁿ gé:ⁿ	'fart'	
wɔ̀: (w)wé:	'weep (loudly)'	
sɔ́: swé:	'vomit'	
nɔ̀: nwé:	'sing (a song)'	
dɔ̀: dwé:	'pound (grain, in mortar)'	
Cv: with high vowel		
kù: kwé:	'sew' (but collocation uncommon)	
b. *CvCv*		
CvCu		
yèbù yébé	'dance (a dance)'	*e* / *ɛ*
nùgù núgé	'count (1, 2, 3, 4, …)'	
nùjù nújé	'groan, moan'	
sùjù sújé	'stutter'	
sàrù sáré	'ask a question'	
hégú hégé	'have hiccups'	
tùmù túmɛ́	'take a measurement'	
apocopated *Cvy*		
jòyⁿ jáyⁿ	'have a fight'	*o* / *a*
tòm tɔ́mɛ́	'slash earth (to plant)'	*o* / *ɔ*
CvCv with final mid-height vowel		
íjó íjé	'sneeze'	
gìyò gíyé	'harvest (with knife)'	
mèrɔ̀ méré	'have fun'	
búgɔ́ búgɛ́	'(dog) bark'	
dùgɔ̀ dúgɛ́	'insult'	
kɔ́mɔ́ kɔ́mɛ́	'give out a shout'	
kùbɔ̀ kúbɛ́	'do farm work, work in fields'	
sùgɔ̀ súgɛ́	'defecate'	

c. *CvCCv*
CvCCu
jòŋgù jɔ́ŋgɛ́ ‘practice healing’ *o* / *ɔ*
nèllù nɛ́llɛ́ ‘rest, take a break’ *e* / *ɛ*
CvCCi
mándí mándé ‘laugh’
CvCCv with final mid-height vowel
sàmbò sámbé ‘do the second round of weeding’

d. *Cv:Cv and Cv:CCv*
Cv:Cu
nà:lù ná:lè ‘think’
Cv:CCi
mɔ̀:njì mánjé ‘urinate’ *ɔ:* / *a*
other *Cv:(C)Cv*
[none]

e. trisyllabic
CvCvCi
kòròdì kóródè ‘cough, emit a cough’
apocopated *CvCvC*
àmbày ámbáyè ‘have a dream’
nèndìl néndílè ‘breathe’
other *CvCvCv*
[none]

The cognate collocation *kɔ́mɔ́ kɔ́mɛ́* ‘shout (=give out) a shout’ occurs in (588) and (593) in Text 4.

11.1.2.6 Grammatical status of cognate nominal

Cognate nominals in such collocations include some that denote a typical bounded activity unit (a song, a dance) and others that are more generic and indefinite (‘do farm work’). The cognate nominal usually occurs in bare form, but at least in the bounded-unit cases it can be made definite, quantified over (e.g. pluralized), or adjectivally modified.

(331) a. *mɛ̀rɔ̀-gè* *mɛ́rɛ́-∅*
amusement-Pl have.fun.Pfv-3SgSbj
‘He/She engaged in amusements, had lots of fun’

b. *[ìjò*^{L} *bàgàlà]* *íjé-∅*
[sneeze(n)^{L} big] sneeze.Pfv-3SgSbj
‘He/She let out a huge sneeze (=sneezed loudly).’

My assistant strongly preferred separate expression of numerical quantification, i.e. ‘he sneezed [three times]’ (with *sígó:-ŋgé* ‘times’) rather than ‘he sneezed [three sneezes]’, though he accepted the latter as grammatical.

11.1.3 Clauses with additional arguments and adjuncts

11.1.3.1 Syntax of expressive adverbials (EAs)

The use of EAs as manner adverbials is illustrated by *sòwěy^{n}→* '(rolling) on the ground' in (593) in Text 4. In this function EAs have no grammatical interaction with the verb or with other constituents.

An expressive adverbial like *bɔ̀jɛ́→* 'straight, direct (line or trajectory)' has the same range of predicative forms as in many other Dogon languages. Static quality is expressed by *bò* 'be (somewhere)' or by its negation *wǒl* 'not be (somewhere)', and transition to the state is expressed by a positive or negative form of the regular verb *bílé* 'become'.

(332) a. *bɔ̀jɛ́→* *bò-∅*
straight be-3SgSbj
'It (path, stick) is straight.'

b. *bɔ̀jɛ́→* *wǒl-∅*
straight not.be-3SgSbj
'It is not straight.'

c. *bɔ̀jɛ́→* *bìlè-∅*
straight become.Pfv-3SgSbj
'It became straight.'

In (332c), the final perfective verb is heard with low pitch, perhaps as an intonational framing effect (highlighting the final high pitch of the adverbial).

Some EAs and onomatopoeias can be conjugated with *né* 'say' or its causative *ná-m*, see §11.1.2.3.

As a nonpredicative adverbial phrase, my assistant rejected *bɔ̀jɛ́→* in the sense '(going) straight, directly (to a place)' in favor of constructions including a conjugated form of the related verb *bɔ́jɛ́* 'be/go straight' preceding the main verb (333).

(333) a. *[dùgù* *bà]* *[ŋ̀* *bɔ́jɛ̀]* *[ŋ̀* *ɲ-ă:ndè]*
[village Loc] [1PlSbj be.straight.Pfv] [go.Pfv Epen-go.Pfv]
'We went straight to the village.'

b. *[dùgù* *bá]* *[bɔ̀jɛ̀* *nà]* *ándè-∅*
[village Loc] [be.straight.Pfv 3SgSbj] go.Pfv-3SgSbj
'He/She went straight to the village.'

c. *[dùgù* *bá]* *bɔ̀j-jɛ̀* *ánd-yè*
[village Loc] be.straight.Pfv-3PlSbj go.Pfv-3PlSbj
'They went straight to the village.'

My assistant indicated that nonpredicative *bɔ̀jɛ́→* as adverb would suggest that the agent, not the trajectory, was straight.

From *jwá→* 'a lot, much' an inchoative *jwá→ né* 'become abundant' is attested, with the 'say' verb as auxiliary.

11.1.3.2 Adverbial phrases with verbs of motion, enclosure, and transfer

Motion verbs like 'go' and 'come' are intransitive and may combine with a locational adverb or adverbial phrase (PP or spatial relative clause).

(334) *[dùgù bà] ándè-∅*
[village Loc] go.Pfv-3SgSbj
'He/She went to the village.'

Place names are usually not overtly marked with a locative postposition in such clauses, but they are understood to be adverbial.

(335) a. *péná ándè-∅*
Pinia go.Pfv-3SgSbj
'He/She went to Pinia (village).'

b. *péná gwê:-∅*
Pinia go.out.Pfv-3SgSbj
'He/She left (or: came from) Pinia.'

'Put' verbs take a direct object and a locational expression.

(336) *má:ŋgórò [[tègèlè súgù] w^n] dú:ndè-∅*
mango [[waterjar under] Loc] put.down.Pfv-3SgSbj
'He/She put the mangoes under the waterjar.'

11.1.3.3 Ditransitives

tábé 'give' and *tá:rè* 'show' take two morphological direct objects. The recipient (usually human and often pronominal) is regularly marked by accusative *ŋ* ~ w^n. The theme (thing given or shown) is often not case-marked, see 'woman' in (337a), but a human pronominal direct object is accusative, see 'me' in (337b). This permits an opposition (though a phonetically subtle one) between (337b) and (337c).

(337) a. *[íní* $^{L+}$*yɔ̀:] mì-ŋ tábé-∅ / tá:rè-∅*
[Prox $^{L+}$woman] 1Sg-**Acc** give/show.Pfv-3SgSbj
'He gave/showed me this woman.'

b. *[íní* $^{L+}$*wàlà-ŋ] mì-ŋ tábé-∅ / tá:rè-∅*
[Prox $^{L+}$man-**Acc**] 1Sg-**Acc** give/show.Pfv-3SgSbj
'He gave/showed me to this man.'

c. *[íní* $^{L+}$*wàlà] mì-ŋ tábé-∅ / tá:rè-∅*
[Prox $^{L+}$man] 1Sg-**Acc** give/show.Pfv-3SgSbj
'He gave/showed this man to me.'

See also 'showed it to (other) people' in (592) in Text 4, and 'he gave them a meal' in (537) in Text 1.

11.1.3.4 Valency of causatives

Causatives can have two or even three object NPs, including the subject of the subordinated clause. In 'cause X to give Y to Z', both X and Z are normally human and are marked with accusative *ŋ*. The theme Y is usually inanimate and lacks accusative marking but is presumably also an object.

(338) *sěydù-ŋ* *á:mádù-ŋ* *wálé* *ŋ́* *tàbá-mì*
Seydou-**Acc** Amadou-**Acc** money 1SgSbj give-Caus.Pfv
'I had Seydou give (some/the) money to Amadou.'

11.1.4 Verb Phrase

The category VP is useful in connection with verb(-phrase) chains, where the subject is held constant over the two clauses (§15.2.1.5). It is also useful in the analysis of verbal nouns, which can function as subjectless VP complements and which can be accompanied by VP-internal constituents (objects, adjuncts) (§17.4).

11.2 'Be', 'become', 'have', and other statives and inchoatives

11.2.1 'It is' clitics

11.2.1.1 Positive 'it is' clitic *=yo* ~ *=ye* ~ *=(w)o*

The 'it is' clitic, used in identificational predicates ('it's me', 'it's a bird'), is also used to focalize a nonpredicative constituent (§13.1.1.2).

The clitic has several variants, all syllabic. After certain WH-interrogative words it is *=ye* (339a). After nouns, pronouns, and demonstratives the most common variant is *=yo*, but this varies with *=(w)o*, whose *w* is faint and perhaps epenthetic. The clitic is H-toned after tonally flat {H} and {L}-toned words, L-toned after contoured {HL}, {LH}, and {LHL}-toned words. After the plural or a lexically /L/-toned noun, the H-tone that elsewhere appears on plural *-gè* appears instead on the clitic, see 'they are cows' at the bottom of (339b). In (339b-d), the *=yo* that is shown is usually interchangeable with *=(w)o*.

(339) 'It is' (allomorphs *=ye* and *=yo*).

a. interrogative

à:=yé	'who is it?'
àŋgà=yé	'it is how many?'
njɛ́:=yè	'what is it?' (< *njɛ́*)

b. with noun */H/-toned*

úná=yó	'it's a goat'

/L/-toned

dèm = yó	'it's a house'
nà: = yó	'it's a cow'
àlàmùnɔ̀ = yó	'it's a sheep'
yɔ̀: = yó	'it's a woman'

/LH/-toned

nèjjé = yò	'it's a bird'
ŋ̀ [LH]bɔ̀bɔ́ = yò	'it's my father'

/HL/-toned

kó:tì = yò	'it's a tick' (< *kó:tì*)

/LHL/-toned

èjègɛ́lɛ̀ = yò	'it's a carp'

plurals

nà:-gè = yó	'they are cows'
úná-gé = yó	'they are goats'
kó:tí-gè = yò	'they are ticks'
nèjjé-gè = yò	'they are birds'

c. with pronoun

mí = yó	'it's me'
mbé = (y)ó	'it's us'
ó = yó	'it's you-Sg'
ábé = yó	'it's you-Pl'
ɔ̀nɔ̀ = yó	'it's him/her'
ŋ̀ké = yó	'it's them'

d. with personal or place name

/H/-toned

sídíbé = yò	'it's Sidibe'

/L/-toned

bàmàkɔ̀ = yó	'it's Bamako (city)'

/HL/-toned

á:mádù = yò	'it's Amadou'
sí:dì = yò	'it's Sidi'
há:wà = yò	'it's Hawa'
á:dámà = yò	'it's Adama'
díkò = yò	'it's Dicko'

e. demonstrative

ín = yò	'that's it' (< *ínì*, syncopated)

The topic referent may be expressed by a preceding NP or independent pronoun. The 'it is' clitic is not conjugated, but the topic may be a pronoun.

(340)

á:mádù èjjè = yó	'Amadou is a Dogon.'
mí èjjè = yó	'I am a Dogon.'
mbé èjjè-gè = yó	'we are Dogon.'
ó èjjè = yó	'you-Sg are a Dogon.'

11.2.1.2 'It is not' (*= là*)

The negative counterpart of the 'it is' clitic is *= là*. It replaces, rather than being added to, the positive clitic.

(341)

nà:= là	'It isn't a cow'
mí èjjè= là	'I am not a Dogon.'
mbé èjjè-gè= là	'we are not Dogon.'
ó èjjè= là	'you-Sg are not a Dogon.'

11.2.2 Existential and locative quasi-verbs and particles

11.2.2.1 Existential proclitic *ɛ̀ⁿ* ~ *èⁿ*

This proclitic is associated with statives, especially 'be' and 'have' quasi-verbs. It is always immediately preverbal, being separated from verbs only by 1st/2nd person subject proclitics.

The usual form is *ɛ̀ⁿ*. Variant *èⁿ* occurs in the specific combination *èⁿ bô-∅* 'he/she/it is there', where *ɛ* shifts to +ATR *e* before the +ATR vowel *o*. The nasal element is pronounced as vocalic nasalization in isolation, before the *s* of the 'have' quasi-verb, and before a vowel-initial verb (which develops an initial glottal stop: *ɛ̀ⁿ ʔíngà* 'he/she/it is standing'). Before the *b* of the 'be (somewhere)' quasi-verb it is heard as homorganic [m], hence *ɛ̀ⁿ bí-yà* [èmb(í)já] 'they are (present)'.

The existential particle occurs only in positive, unfocalized main clauses. In this context it is obligatory with quasi-verb *bô* 'be (somewhere)' in the absence of an overt locational phrase, i.e. it functions here as a default locational (a generalized 'be there/here', or just 'exist' or 'be present'). It is also required with *sâⁿ* 'have' even when another locational is present.

The particle is not allowed in negative clauses, in relative clauses, or in positive main clauses that contain a focalized constituent (so that the verb is defocalized). Using 'have' as the example, we see the particle in positive, unfocalized main clauses (342a-b). The particle is absent undere negation (342c), in the presence of a focalized WH-interrogative in (342d), and in the relative clause (342e).

(342)

a.

dĕm	*ɛ̀ⁿ*	*ŋ́*	*sàⁿ*
house	**Exist**	1SgSbj	have

'I have a house.' (< *dèm*)

b.

dĕm	*ɛ̀ⁿ*	*ŋ̀*	*sâ(:)ⁿ*
house	**Exist**	1PlSbj	have

'We have a house.'

c.

dèm	*ŋ́*	*sà:-ndà*
house	1SgSbj	have-StatNeg

'I do not have a house.'

d.

à:= yé	*dèm*	*sá:ⁿ*
who?=it.is	house	have.Defoc

'Who [focus] has a house?'

e. *ègé:ⁿ* *dèm* *ŋ́* *sì:yⁿà*
place house 1SgSbj have.Ppl
'the place where I have a house'

Examples with *bô* 'be (somewhere), be present, exist' and its suppletive negation are in (343). The combination of the existential proclitic and *bô* comes out as *èⁿ bô*. The proclitic is present in (343a) as the default locational, a vague or generalized 'here/there'. It it absent in (343b) in the presence of a more specific locational phrase. It is also absent in negatives (343c) and in focalized clauses (343d-e).

(343) a. *té:* *èⁿ* *bô-∅*
tea **Exist** **be**-3SgSbj
'There is some tea.'

b. *[[mbé* *dúgú]* *bà]* *bô-∅*
[[1PlPoss village] Loc] **be**-3SgSbj
'He/She is in our village.'

c. *té:* *wòl-∅*
tea **not.be**-3SgSbj
'There is no tea.'

d. *mbá* *bó-∅*
where? **be**-3SgSbj.Defoc
'Where [focus] is he/she?'

e. *à:yè* *bó-∅*
who? **be**-3SgSbj.Defoc
'Who [focus] is there?'

With derived statives (e.g. 'be sitting', §10.4.1.1), *èⁿ* is an optional alternative to the reduplicative proclitic preceding the stem. In positive, unfocalized main clauses, either *èⁿ* or the iteration is required (344a-b). (344c-e) are ungrammatical (symbol #) by themselves, (344c) because it needs either a reduplicant or a proclitic, and (344d-e) because they have both and can only have one.

(344) a. *dàⁿ* *ŋ́* *dàⁿ*
Rdp 1SgSbj sit.Stat
'I am sitting (am in seated position).'

b. *èⁿ* *ŋ́* *dàⁿ*
Exist 1SgSbj sit.Stat
[= (a)]

c. #*ŋ́* *dàⁿ*

d. #*dàⁿ* *èⁿ* *ŋ́* *dàⁿ*

e. #*èⁿ* *dàⁿ* *ŋ́* *dàⁿ*

11.2.2.2 ‘Be (somewhere)’ (*bô*)

The locational-existential stative quasi-verb ‘be (in a place), be present’ and by abstraction ‘exist’, is *bô*. The tone drops to *bò* after an H-toned 1Sg/2Sg subject pronominal. Less systematically, expected clause-final *bô* is often heard with low pitch due to downdrift, especially in longer clauses.

In the relevant sense, *bô* requires an overt locational phrase, with existential *ɛ̀ⁿ* ~ *èⁿ* as the default (see the preceding section). *bô* ‘be (somewhere)’ is historically related to *bò* ~ *wò* in the imperfective verb (§10.2.2.1), though the synchronic connection is muddied by phonological reductions in the imperfective. *bô* ‘be (somewhere)’ is more clearly synchronically related to *bô* in one of the progressive constructions (§10.2.2.4).

The paradigm is in (345).

(345) Nonpast ‘be (in a place)’ or ‘exist’

subject	after locational X	with existential
1Sg	X *ŋ́ bò*	*ɛ̀ⁿ ŋ́ bò*
1Pl	X *ŋ̀ bô*	*ɛ̀ⁿ ŋ̀ bô*
2Sg	X *á bò*	*ɛ̀ⁿ á bò*
2Pl	X *à bô*	*ɛ̀ⁿ à bô*
3Sg	X *bô-∅*	*èⁿ bô-∅*
3Pl	X *bí-yà*	*èⁿ bí-yà*

bô is one of the few cases where a monomoraic *Cv* syllable has falling tone. It is subject to Contour-Tone Resyllabication when followed by a tightly-phrased L-toned particle (346b).

(346) a. *bàmàkɔ̀* *bí-yà*
Bamako **be**-3PlSbj
‘They are in Bamako (city).’

b. *ɛ̀ⁿ* *à* *bó* *bɛ̀nɛ̀*
Exist 2PlSbj **be** if
‘if you-Pl are present’

For *bó=yè* ‘was’, see §10.6.1.1.

There is no clear synchronic connection between (stative) *bô* (or its variants) and (inchoative) *bílé* ‘become’ (§11.2.4.2).

11.2.2.3 Negative *wǒl* ‘not be (in a place)’

The negative counterpart of *bô* ‘be (in a place), be present’ is the suppletive *wǒl* ‘not be (present), be absent’. It takes L-toned form after the H-toned 1Sg and 2Sg proclitics. It may follow an overt locational phrase, or it may be used in isolation. Existential *ɛ̀ⁿ* is not allowed in negative clauses, so there is no default locational. The paradigm is (347).

(347) ‘Not be (in a place)’

subject	form (with or without locational)
1Sg	*ŋ́ wòl*
1Pl	*ŋ̀ wǒl*
2Sg	*á wòl*
2Pl	*à wǒl*
3Sg	*wǒl-∅*
3Pl	*wǒl-yà* ~ *wòlí-yà*

Examples are in (348). The polar interrogative (§13.2.1) in (348b) is evidence for a lexical (i.e. underlying) representation /wòlí/.

(348) a. *(nǔw^{n})* *ŋ́* *wòl*
(here) 1SgSbj **not.be**
‘I am not present (here).’

b. *té:* *wòlí-∅→*
tea **not.be**-3SgSbj.Q
‘Is there is no tea?’

wǒl is also part of the progressive negative construction (§10.2.3.4).

11.2.3 ‘Be in/on X’

‘Be in X’ and ‘be on X’ can be expressed by a locational (such as a locative PP) plus the regular ‘be (somewhere)’ quasi-verb *bò.*

(349) a. *bə̀ndə̂* *[[bí:ŋgò* *kò]* *ŋ]* *bò-∅*
shoulderbag [[mat **head**] **Loc**] **be**-3SgSbj
‘(the) shoulderbag is on the mat’

b. *tə̀gù-tə̀gù* *[[kɛ́rɔ́* *pâ]* *ŋ]* *bò-∅*
gecko [[wall **against**] **Loc**] **be**-3SgSbj
‘The gecko is on the wall.’

c. *mì:* *[óy^{n}* *jáŋà]* *ŋ]* *bò-∅*
water [waterjar **belly**] **Loc**] **be**-3SgSbj
‘The water is in the waterjar.’

Specialized stative verb forms are also available to express specific positions. The main ones are *yábà* ‘be against or on (vertical surface, e.g. wall)’ and *sáŋgà* ‘be on (horizontal surface)’ (§10.4.1.1). The same spatial postpositions as before are used.

(350) a. *tə̀gù-tə̀gù* *[[kɛ́rɔ́* *pâ]* *ŋ]* *yàbà-∅*
gecko [[wall **against**] **Loc**] **be.against**.Stat-3SgSbj
‘The gecko is on the wall.’

b. *bɔ̀ndɔ̀* *[[bíːŋgò* *kò]* *ŋ]* *sàŋgà-∅*
shoulderbag [[mat **head**] **Loc**] **be.on**.Stat-3SgSbj
'(the) shoulderbag is on the mat.' (cf. 349a)

11.2.4 'Become', 'happen', and 'remain' predicates

The focus in this segment is on 'become (sth)' and 'remain (somewhere)' verbs. For deadjectival inchoatives ('become red/long'), which are expressed by derivational suffixes, see §9.6. 'Remain' (§11.2.4.1) and 'become' (§11.2.4.2) are dynamic (i.e. aspect-marking) verbs, unlike defective stative quasi-verbs like 'be (somewhere)' and 'have' that are covered elsewhere in this chapter.54

11.2.4.1 'Remain' (*wánjé*)

'Stay, remain (somewhere)' is the dynamic verb *wánjé*. An imperfective example is (351).

(351) *dèm* *wánjó* *ŋ́* *bò*
house **remain**.Ipfv 1SgSbj Ipfv
'I will stay home.'

11.2.4.2 'Become, be transformed into' (*bílé*)

bílé 'become' or 'be transformed into' can combine with a noun or NP, which is often focalized, hence the {L}-toned perfective *bìlè* in (352a). *bílé* can also be used with adverbs and defective adjectives that have no other predicative form (352b), see also (213a) in §9.6.

(352) a. *nɛ̀jjé* *bìlè-∅*
bird **become**.Pfv-3SgSbj
'He became/was turned into a bird [focus].'

b. *kándá* *bilé-∅*
new **become**.Pfv-3SgSbj
'It became (like) new.'

For *kándá* 'new' see also (365b) in §11.4.1.5.

11.2.5 Lexical statives

'Know', 'want', and 'resemble' are lexically stative, i.e. they cannot mark perfective or imperfective aspect. The three have similar paradigms, notably in requiring *bò* 'be' (perhaps as imperfective auxiliary) in the positive third person forms only, as also in the capacitative paradigm (§10.5.1). The negative paradigms have various allomorphs of the stative negative suffix/clitic (§10.4.2.1).

11.2.5.1 ‘Know’ (*ɛ́ɲɔ̀ bò*, *ɲɛy*), ‘not know’ (*indò*)

This is an irregular stative verb with no aspectual marking. It means ‘know (a fact)’ or ‘know, be acquainted with (a person)’, i.e. French *connaître* as well as *savoir*. The object NP takes accusative marking: *mì-^{n} ɛ́ɲɔ̀ bò-∅* ‘he/she knows me’. The paradigms, positive and negative, are in (353). In active (aspect-marking) contexts the semantically relevant verb is *yáré* ‘find out, come to know; recognize’.

(353)

subject	‘know’	‘not know’
1Sg	*ŋ́ ɲ-ɛ̀y^{n}*	*ŋ́ ɲ-ìndò*
1Pl	*ŋ̀ ɲ-ɛ̂y^{n}*	*ŋ̀ ɲ-índò*
2Sg	*á ɲ-ɛ̀y^{n}*	*á ɲ-ìndò*
2Pl	*à ɲ-ɛ̂y^{n}*	*à ɲ-índò*
3Sg	*ɛ́ɲɔ̀ bò-∅*	*índó-∅*
"	*~ ɛ̂y^{n} bò-∅*	
3Pl	*ɛ́ɲɔ̀ b-yà*	*índó-yà*
"	*~ ɛ̂y^{n} b-yà*	

In the positive paradigm, the relationship of the third person and the 1st/2nd person forms is problematic. I take *ɲ* in the 1st/2nd person stem *ɲ-ɛy^{n}* to be epenthetic. Just comparing the 1st/2nd forms with the third person forms in the paradigm does not make this segmentation clear. However, *ɛ́y^{n}* is the subject relative participial form (§14.4.4), and this does support the segmentation of *ɲ-ɛy^{n}*. Etymologically, one can compare *ɲɛ̀y^{n}* with Bunoge *ʔɛ̀y^{n}*, Ampari *ɛ́y^{n}*, and Tiranige *yɛ̀y*.

Negative *indo* is also opaque. A segmentation *ín-dó* or *í-ndó*, intended to allow a comparison with the stative negative suffix in forms like *sá:-ndá* ‘not have’, is not completely out of the question, but it is doubtful since neither *i(n)-* ‘know’ nor negative allomorph *-ndó* is elsewhere attested. (Compare English contraction *dunno*.)

For past-tense forms of ‘know’, see (293) in §10.6.1.3. For ‘know’ in nonsubject relatives, see §14.4.4.

11.2.5.2 ‘Want, like’ (*kɛ́ɲù bò-, key^{n}*), ‘not want’ (*key-là*)

This lexically stative verb has *kɛ́ɲù ~ kéy^{n}* plus *bò* in the positive third person forms, and just *key^{n}* in positive 1st/2nd person forms. The *ɲ/y^{n}* alternation reflects the fact that *ɲ* does not occur word-finally in Penange. The negative forms have stative negative allomorph *-là* after oral (nonnasal) *y*. There are cognates in Tiranige and Najamba.

(354)

subject	‘want’	‘not want’
1Sg	*ŋ́ kɛ̀y^{n}*	*ŋ́ kěy-là*
1Pl	*ŋ̀ kɛ̂y^{n}*	*ŋ̀ kéy-là*
2Sg	*á kɛ̀y^{n}*	*á kěy-là*
2Pl	*à kɛ̂y^{n}*	*à kéy-là*

3Sg	*kéɲù bò-∅*	*kéy-là-∅*
"	*~ kéy^{n} bò-∅*	
3Pl	*kéɲù b-yà*	*kéy-lá-yà*
"	*~ kéy^{n} b-yà*	

For *kéy^{n}* and *kèɲà* in focalized clauses, see (390a) and (391a) in §13.1.1.5. For relative-clause participles, see §14.4.4 (positive) and §14.4.7 (negative). For past-time forms see (293) in §10.6.1.3. The verbal noun is *kéɲî-l* 'love, desire', competing with a cognate nominal *kèɲà* of similar sense. For clausal complements ('want to VP'), see §17.4.5.

11.2.5.3 'Resemble' (*[m]pímà: bò*), 'not resemble' (*[m]pímá-ndá*)

'(X) resembles Y' is expressed as a transitive verb. The object may take accusative marking. The positive form of the verb is *pímà: bò* for third person, *pimà* for 1st/2nd person. The negative is *(m)pima-nda*, with *-nda* allomorph of the stative negative. My assistant fluctuated between *mp* and *p* as the onset of the first syllable. With third person subject and human comparandum, the distinction is moot because of accusative *-ŋ* or variant on the comparandum NP or pronoun. The distinction is also moot after 1Sg or 1Pl pronominals (*ŋ́*, *ŋ̀*). It is likely that the *mp* variant reflects resegmentation of the nasal as part of the onset of the verb. The exact etymological relationship between this 'resemble' verb and *pínà* ~ *pínì* 'like' (§8.4.1) is unclear.

(355)

subject	'resemble'	'not resemble'
1Sg	*ŋ́ (m)pìmà*	*ŋ́ (m)pìmà-ndà*
1Pl	*ŋ̀ (m)pímà*	*ŋ̀ (m)pímá-ndà*
2Sg	*á (m)pìmà*	*á (m)pìmà-ndà*
2Pl	*à (m)pímà*	*à (m)pímá-ndà*
3Sg	*(m)pímà: bò-∅*	*(m)pímá-ndá-∅*
3Pl	*(m)pímà: b-yà*	*(m)pímá-ndá-yà*

An example is (356).

(356)

sěydù	*ò-^{n}*	*pímà:*	*bò-∅*
S	2Sg-Acc	**resemble**	be-3SgSbj

'Seydou resembles you-Sg.'

For past-tense forms see §10.6.1.3. For relative-clause participles see §14.4.4 (positive) and §14.4.7 (negative).

11.3 Quotative verb (*nɛ́*)

For AN inflections of *nɛ́* 'say' see §10.1.2.1. It is the only regularly conjugated monomoraic *Cv* verb. For the syntax of quoted clauses, see §17.1.

né occurs as an auxiliary with onomatopoeias, including direct imitations of sounds, cf. English *went* or (modern) *was like* in *It went "poof"* or *He was like "argh!"*. For *né* as an occasional inchoative auxiliary, see *yáw-yáw né* 'become lightweight' in (213c) in §9.6.

Forms of 'say' verbs in Dogon languages have a strong tendency to become subordinating particles. In Penange, *né* resembles conditional *né* ~ *nè* (chapter 16) and nonpast anterior (pseudo-conditional) subordinator *nɛ* (§15.2.2.2)

11.4 Adjectival predicates

Adjectival predicates described here denote states, rather than processes (transitions). For the latter, see the deadjectival inchoative verbs in §9.6.

11.4.1 Positive adjectival predicates

Adjectives (§4.5) can be organized into groups based on their form as predicates. They are followed by conjugated forms of 'be', with variants *bò*, *bó*, and *wò*. Negative predicates replace 'be' by a form of *wǒl* 'not be'.

11.4.1.1 Predicate adjectives with *-yà bó-∅* (3Sg)

Several adjectives have an {L}-toned predicative form with suffix *-yà* (after syncopated stem-final vowel), followed by a conjugated form of H-toned *bó* 'be'. *-yà* is likely the same morpheme as *-yà* in stative and imperfective participles, see (413) in §14.4.

(357)

modifying	predicate 3SgSbj	gloss
a. phonologically simple		
bámbá	*bàmb-yà bó-∅*	'wide, spacious'
jámá	*jám-yà bó-∅*	'nearby'
bàgàlà	*bàgàl-yà bó-∅*	'big, fat, massive, stout'
gòlò	*gòl-yà bó-∅*	'long, tall'
sùmbè	*sùmb-yà bó-∅*	'deep'
ɔ̀nànà	*ɔ̀nàn-yà bó-∅*	'smooth, sleek'
èlɔ̀	*èl-yà bó-∅*	'thin, delicate'
bɔ̀mbɛ̀	*bɔ̀mb-yà bó-∅*	'red, brown'
tòmbò	*tòmb-yà bó-∅*	'white, light-colored'
b. diminutive *-yè* absorbed by suffix *-yà*		
dùŋgùrí-yè	*dùŋgùr-yà bó-∅*	'short'
ŋkà:lí-yè	*ŋkà:l-yà bó-∅*	'small'
c. resyllabified to avoid *CCC* cluster		
yɔ́rdɛ́	*yɔ̀ràd-yà bó-∅*	'black, dark'

d. /gy/ → *(j)j* (§3.4.3.4)
intervocalic jj < /gy/

yágá	*yàj-jà bó-∅*	‘pretty’
wàgè	*wàj-jà bó-∅*	‘distant’

ŋj < /ŋgy/

dɔ́ŋgá	*dɔ̀n-jà bó-∅*	‘heavy’
ɲɔ̀ŋgɔ̀	*ɲɔ̀n-jà bó-∅*	‘thin, slender’

e. /y^{n}y/ → *ɲɲ*

bày^{n}	*bàɲ-ɲà bó-∅*	‘big (house, tree)’

The paradigm of ‘heavy’ in (357d) is spelled out in (358).

(358) adjectival predicate

subject	‘be heavy’
1Sg	*dɔ̀n-jà ŋ́ bò*
1Pl	*dɔ̀n-jà ǹ bó*
2Sg	*dɔ̀n-jà=á bò*
2Pl	*dɔ̀n-jà=à bó*
3Sg	*dɔ̀n-jà bó-∅*
3Pl	*dɔ̀n-jà bí-yá*

11.4.1.2 Other {L}-toned predicate adjectives with H-toned *bó-∅*

The adjectives in (359) have {L}-toned form in predicates, with no segmental change or with a change in final vowel quality, followed by H-toned *bó*.

(359)

modifying	predicate 3SgSbj	gloss
a. no change in final vowel		
kùrjù	*kùrjù bó-∅*	‘coarse (surface)’
b. final *a* → *e*		
nwá:gá	*nwà:gè bó-∅*	‘hot (water, food)’
"	*nwà:jè bó-∅*	‘fast’
má:gá	*mà:gè bó-∅*	‘difficult (work)’
dá:	*dà:yè bó-∅*	‘nasty, evil’
c. final *i:^{n}* → *a*		
nsì:^{n} [ńsì:^{n}]	*nsà bó-∅* [ńsàbó]	‘sweet, delicious’ or ‘sharp (blade)’

11.4.1.3 {LH}-toned predicate adjectives with L-toned *bò-∅*

For the stems in (360), the predicate is formed by overlaying {LH} on the adjective, and adding conjugated L-toned *bò* ‘be’. {LH} flattens to H-tone for monosyllabic stems (360a).

The final vowel of the adjective is lengthened in third-person subject forms. *tàyè* 'cold, cool' or 'slow' has two different forms, distinguishing the two senses.

(360)

modifying	predicate 3Sg	gloss
a. monosyllabic		
mè:	*mé: bò-∅*	'dry'
jwè:	*jwé: bò-∅*	'full (container)'
b. bisyllabic, final {*e ɛ*}		
kùrè	*kùré: bò-∅*	'undiluted'
sèlè	*sèlé: bò-∅*	'diluted'
dèmè	*dèmé: bò-∅*	'ripe (grain); cooked, done'
ùlgè	*ùlgé: bò-∅*	'ripe (fruit)'
bɔ̀rè	*bɔ̀ré: bò-∅*	'cooked, done'
ɔ̀njè	*ɔ̀njé: bò-∅*	'lean (animal)'
kùnè	*kùné: bò-∅*	'plump, fatty'
dɔ̀gè	*dɔ̀gé: bò-∅*	'dead'
gɔ̀mè	*gɔ̀mé: bò-∅*	'rotten'
tàyè	*tàyé: bò-∅*	'cold, cool'
"	*tà:mí: bò-∅*	'slow'
èmbè	*èmbé: bò-∅*	'wet'
c. bisyllabic, final {*o ɔ*}		
kòlò	*kòló: bò-∅*	'fresh, raw'
d. bisyllabic, final high vowel		
ɲàm	*ɲàmí: bò-∅*	'malfunctioning'
kàmmì	*kàmmí: bò-∅*	'hard'

Since *bò* is L-toned in this construction, one is tempted to account for the LH-L sequence as deriving from LL-L (see preceding section) plus Final Tone-Raising (LL#L-to-LH#L). However, for this to work we would have to explain why we have L-toned *bò* in (360) but H-toned *bó* after {L}-toned adjective in (359) above.

A sample paradigm is (361), using 'cold/slow' from (360b).

(361) adjectival predicate

subject	'be cold/slow'
1Sg	*tàyè ŋ́ bò*
1Pl	*tàyé ŋ̀ bò*
2Sg	*tàyà-á bò*
2Pl	*tàyá-à bò*
3Sg	*tàyé: bò-∅*
3Pl	*tàyé: b-yà*

This construction is related to the resultative passive construction with *bò* following an {LH}-toned verb based on the perfective stem (§10.4.1.2). The modifying adjectives predominantly end in {*e ɛ i*} and can therefore be analysed as perfective participles (§14.4.2).

11.4.1.4 {HL}-toned predicate adjectives plus *bò*

Two adjectives with lexical /H/ melody have {HL}-toned predicate forms. In (362a), 'good' also shortens its vowel in the predicative form. In (362b), 'empty' lengthens its final vowel.

(362)

	modifying	predicate 3SgSbj	gloss
a.	*pɔ́:lɔ́*	*pɔ́lɔ̀ bò-∅*	'good'
b.	*dóndó*	*dóndò: bò-∅*	'empty, deserted'

11.4.1.5 Predicative forms of iterated and composite adjectives

Most obligatorily iterated adjectives have a straightforward predicative form with 3Sg *bò-∅* after an H-tone and *bó-∅* after an L-tone (363a-b). Some iterated adverbials have *bò-∅* even after an L-tone (363c). Most of these examples end in a consonant.

(363)

	modifying	predicate 3SgSbj	gloss
a. adjective H-toned			
	kárá-kárá	*kárá-kárá bò-∅*	'bitter'
	sém-sém	*sém-sém bò-∅*	'pointed'
	yáw-yáw	*yáw-yáw bò-∅*	'lightweight'
	tóm-tóm	*tóm-tóm bò-∅*	'sour, acrid (like lemon)'
b. adjective L-toned			
	èb-èb	*èb-èb bó-∅*	'supple (e.g. goatskin)'
c. iterated adverbials (cf. *kán* 'do')			
	mɔ̌n-mɔ̀n kân	*mɔ̌n-mɔ̀n bò-∅*	'soft (skin)'
	tɔ̀gúl-tɔ̀gûl kân	*tɔ̀gúl-tɔ̀gûl bò-∅*	'spotted'

For a few other iterated adjectives (and adverbials), for "adjectives" in the form of composite exemplars, and for adjectives in the form of stative negative participles, the predicate adds *wò-* (lenited from *bò-*) (364). All of these examples are vowel-final, which may have facilitated the lenition.

(364)

	modifying	predicate 3SgSbj	gloss
a. iteration removed in predicate			
	búlá-búlà	*búlà wò-∅*	'blue'
b. noun-adjective or compound exemplars (§4.5.3)			
	pòrò-púnà	*pòrò-púnà wò-∅*	'yellow' (néré-tree powder)
	kɔ̀jì kòlò	*kɔ̀jì kòlò wò-∅*	'green' (fresh grass)
c. negative stative participles (§14.4.7)			
	nsì:^{n}-dì-gà	*nsì:^{n}-dì-gà wò-∅*	'blunt, not sharp (blade)'
	yágá-ndá-gà	*yágá-ndá-gà wò-∅* (~ *yàgà-nd-yà bó-∅*)	'ugly, not pretty'
	pɔ́:lɔ́ wɔ̌l-gà	*pɔ́:lɔ́ wɔ̌l-gà wò-∅*	'bad, no good'

‘Old’ and ‘new’ are not regular adjectives in Penange. *ká:mnɔ́* ‘old’ requires the ‘do’ verb as auxiliary (365a). *kándá* ‘new’ takes the normally postnominal ‘it is’ clitic (365b) to denote a state; see also aspect-marking *kándá bilé* ‘become (like) new’ in (352b) in §11.2.4.2.

(365)		modifying	predicate 3SgSbj	gloss
	a.	*ká:mnɔ́*	*ká:mnɔ́ kán*	‘old (person)’
	b.	*kándá*	*kándá = yó*	‘new’

11.4.2 Negative adjectival predicates

Adjectival predicates are negated by using *wǒl* ‘not be’ instead of *bò* ~ *bó* ‘be’ after the predicate adjective, which has the same form in negative as in positive clauses. *kándá* ‘new’ is again treated as a noun.

(366)	a.	*bɔ̀mb-yà wǒl*	‘not be red’
		bàŋŋà wǒl	‘not be big’
		mà:gè wǒl	‘not be difficult’
		bàgàl-yà wǒl	‘not be big’
		kùrjù wǒl	‘not be coarse’
	b.	*kándá = lá*	‘not be new’

11.5 Possessive predicates

11.5.1 ‘X have Y’ (*sa^{n}*, negative *sa:-nda*)

‘Have’ is an irregular quasi-verb (i.e. a defective lexical stative) *sa^{n}*, realized as *sâ(:)^{n}* or *sà^{n}*. The falling-toned variant is sometimes heard with lengthened vowel, though length is difficult to tease apart from nasalization.

As in English *X have Y*, the subject denotes the possessor. The vowel may be lengthened in plural-subject combinations. In unfocalized positive main clauses, existential proclitic *ɛ̀^{n}* is obligatory. The negative counterpart is *sa:-nda* with *-nda* allomorph of the stative negative.

(367)	subject	‘have’	‘have not’
	1Sg	*ɛ̀^{n} ŋ́ sà^{n}*	*ŋ́ sà:-ndà*
	1Pl	*ɛ̀^{n} ŋ̀ sâ(:)^{n}*	*ŋ̀ sá:-ndà*
	2Sg	*ɛ̀^{n} á sà^{n}*	*á sà:-ndà*
	2Pl	*ɛ̀^{n} à sâ(:)^{n}*	*à sá:-ndà*
	3Sg	*ɛ̀^{n} sâ(:)^{n}-∅*	*sá:-ndá-∅*
	3Pl	*ɛ̀^{n} sá:^{n}-yà*	*sá:-ndá-yà*

A combination of ‘have’ with ‘be’ (likely in imperfective or progressive sense) is attested in *sâ:^{n} bò = yè* ‘he had (elegance)’ in (575) in Text 4.

‘Have’ is transitive, but since the object is normally inanimate there is no accusative marking. For the syntax of existential *ɛ̀^{n}* see §11.2.2.1. For past-tense ‘had’ see §10.6.1.3. For

sá:ⁿ in subject relative clauses, and *sá:ⁿ* and *sí:ⁿyà* in nonsubject relatives, see (428-429) in §14.4.4.

11.5.2 'Y belong to X' predicates (*ɲé[:]*)

'Y belongs to X' or 'Y is X's' is expressed as a contracted, not entirely transparent construction 'Y is X's thing'. *yé:* 'thing' is modified to *ɲé*, and the 'it is' clitic appears as *=wò*. Compare *ǹ̀ ɲé=wò* 'it's mine, it belongs to me' with the fully transparent *[ŋ́ yě:] =yò* ~ *[ŋ́ yě:]=wò* 'it is my thing'. In spite of the phonological modifications, my assistant clearly recognized the relationship. He volunteered that *ǹ̀ ɲé=wò* was a reduced version that could be pronounced more carefully as *ǹ̀ ɲé:=wò-∅*, with the vowel length of the original preserved. One is initially tempted to take the *ɲ* as epenthetic, but this fleeting thought is nixed by the fact that the *ɲ* occurs in third person as well as 1st/2nd person subject forms.

The regular 1Sg and 2Sg proclitics are used, but they have L-tone instead of the usual H-tone. 1Pl, 2Pl, and 3Pl are preposed but in full independent form (avoiding ambiguity of 1Sg/1Pl and 2Sg/2Pl), while 3Sg has its usual suffix. Negation is by the 'it is not' clitic, after long-voweled *ɲɛ́:* . The paradigms in (368) are for singular theme ("subject").

(368)

subject	'it belongs to (me etc.)'	'it does not belong to (me etc.)'
1Sg	*ǹ̀ ɲé=wò*	*ǹ̀ ɲé:=là*
1Pl	*mbé ɲé=wò*	*mbé ɲé=là*
2Sg	*à ɲé=wò*	*à ɲé:=là*
2Pl	*ábé ɲé=wò*	*ábé ɲé=là*
3Sg	*ɲé:-nà=wò*	*ɲé:-ná=là*
3Pl	*ŋké ɲé=wò*	*ŋké ɲé=là*
NP	NP *ɲé:=wò*	NP *ɲé:=là*

If the theme is 3Pl, plural *-ŋgè* is added to the original 'thing' noun, and the result is (369).

(369)

subject	'they belong to (me etc.)'	'they do not belong to (me etc.)'
1Sg	*ǹ̀ ɲě:-ŋgé=wò*	*ǹ̀ ɲě:-ŋgé=là*
1Pl	*mbé ɲé:-ŋgé=wò*	*mbé ɲé:-ŋgé=là*
2Sg	*à ɲě:-ŋgé=wò*	*à ɲě:-ŋgé=là*
2Pl	*ábé ɲé:-ŋgé=wò*	*ábé ɲé:-ŋgé=là*
3Sg	*ɲé:-ná-ŋgé=wò*	*ɲé:-ná-ŋgé=là*
3Pl	*ŋké ɲé:-ŋgé=wò*	*ŋké ɲé:-ŋgé= là*
NP	NP *ɲé:-ŋgè=wò*	NP *ɲé:-ŋgé=là*

Examples are in (370). If the theme is overtly expressed as a plural NP, the unmarked "singular" forms in (368) above are often used, as in (370b). See also *ǹ̀ ɲé=wò* 'it is mine' in (579) in Text 4.

(370) a. *[ín(í) dèm]* / *[íní ŋkɛ̀]* *[ŋ̀* *ɲɛ́]=wò*
[Prox house] / Prox dog] [1SgPoss **thing**]=it.is
'This house/dog belongs to me (is mine).'

b. *[è* *óy^{n}-gè]* *[sèydù* *ɲɛ́]=wò*
[Def waterjar-Pl] [Seydou **thing**]=it.is
'The waterjars belong to Seydou.' (*sɛ̌ydù*)

12 Comparatives

12.1 Asymmetrical comparatives

nam 'more (than)', realized as *năm*, *nám*, or *nâm* figures prominently in this chapter. It follows an NP or pronoun, and behaves like a possessed noun. For the nonsingular pronouns, the independent form (e.g. 1Pl *mbé* instead of proclitic *ŋ̀*) is usual. The 1Sg and 2Sg pronouns, usually H-toned, are L-toned but remain distinct in this way from the 1Pl and 2Pl forms. The paradigm is (371).

(371)

subject	form
1Sg	*ŋ̀ năm*
1Pl	*mbé nám*
2Sg	*à năm*
2Pl	*ábé nám*
3Sg	*năm-nà*
3Pl	*ŋké nám*
NP	*X nâm*

In sentence contexts, tones are difficult. Variant *năm* is sometimes flattened to *nàm*, but the conditions are difficult to determine. *nâm* after NP can also flatten to *nám* in some contexts.

12.1.1 Predicative adjective with *nam* 'more' and comparandum

In this construction, *nam* is the key comparative word ('more'). Syntactically, *nam* is treated as a possessed noun, with the comparandum as possessor. It has rising tone after 1Sg/2Sg possessor. The adjective, here exemplified by 'long/tall', is clause-final and is conjugated for pronominal subject (372). 2Sg *á* and 2Pl *à* subject proclitics are phonetically lengthened after *nam* (372b,d). This suggests an underlying /namu/ or /nami/ whose final vowel contracts with the pronominal vowel, and is apocopated elsewhere. I will transcribe *nám=á:*, etc., with = indicating cliticization.

(372) a. *[sèydù*^{L} *nâm]* *ŋ̀* *gòlò*
[Seydou^{L} **more**] 1SgSbj long
'I am taller than Seydou (is).'

b. *[sèydù*^{L} *nám]=á:* *gòlò*
[Seydou^{L} **more**]=2SgSbj long
'You-Sg are taller than Seydou (is).'

c. *[sèydù*^{L} *nám]* *ŋ̀* *gólò*
[Seydou^{L} **more**] 1PlSbj long
'We are taller than Seydou (is).'

d. *[sèydù*^{L} *nám]=à:* *gólò*
[Seydou^{L} **more**]=2PlSbj long
'You-Pl are taller than Seydou (is).'

e. *sèydú* *[ŋ̀* *nǎm]* *gòlò-∅*
Seydou [1SgPoss **more**] long-3SgSbj
'Seydou is taller than than I (am).'

f. *sèydú* *[à* *nǎm]* *gòlò-∅*
Seydou [2SgPoss **more**] long-3SgSbj
'Seydou is taller than you-Sg (are).'

g. *sèydú* *[mbé* *nám]* *gòlò-∅*
Seydou [1PlPoss **more**] long-3SgSbj
'Seydou is taller than we (are).'

h. *wè:-gé* *[sèydù*^{L} *nám]* *gòlò-yà*
child-Pl [Seydou^{L} **more**] long-3PlSbj
'The children are taller than Seydou.' (< *nâm*)

i. *nǎm-nà* / *[ŋ̀ké* *nám]* *ń̀* *gòlò*
more-3SgPoss / [3PlPoss **more**] 1SgSbj long
'I am taller than he-or-she (is)/than they (are).'

Past clitic *=ye* can be added. For example, replacing *ń̀ gòlò* by *ń̀ gòlò=yè* in (372a) produces 'I was taller than Seydou.'

12.1.2 Verbal predicate with *(-n) naga* plus *nam* 'more'

In this construction, the asymmetry is again expressed by a "possessed" form of *nam*. The domain of comparison is conveyed by a form of the VP ending in conjugated *-n nàgà* (third person) or *naga* realized as *nágà* or *nàgà* (1st/2nd persons). *naga* is a derived stative verb, related to active verb *náj-jè* 'surpass' (§12.1.3).

(373) a. *sèydú* *[à* *nǎm]* *[ɔ̀rɔ̀-ɲá:* *ɲɔ̀:-ń* *nàgà]*
Seydou [2SgPoss **more**] [millet.cake eat.meal **surpass**.Stat]
'Seydou eats more than you-Sg (do).'

b. *[sèydù*^{L} *nám]* *[ɔ̀rɔ̀-ɲâ:* *ɲɔ̀:* *á* *nàgà]*
[Seydou^{L} **more**] [millet.cake eat.meal 2SgSbj **surpass**.Stat]
'You-Sg eat more than Seydou (does).' (< *nâm*)

A sample paradigm of *(-n) nàgà* is (374). The 1Sg and 3Sg forms are orthographically distinct but are homophonous.

(374) Paradigm of *(-n) nàgà*

subject	‘eat meal’
1Sg	*ɲɔ̀: ŋ́ nàgà*
1Pl	*ɲɔ̀: ǹ nágà*
2Sg	*ɲɔ̀: á nàgà*
2Pl	*ɲɔ̀: à nágà*
3Sg	*ɲɔ̀:-ń nàgà-∅*
3Pl	*ɲɔ̀:-ń nàgà-yà*

3Sg subject examples with longer verb stems: *kànù-ń nàgà-∅* ‘he/she does more’, *ùnú àndò-ń nàgà-∅* ‘travels more’, *tùmbùgò-ń nàgà-∅* ‘pushes more’. Collectively these also show that the verb is in the O/U-stem, i.e. the O-stem (preserving lexical ATR value) for final-nonhigh-vowel verbs and the U-stem for final-high-vowel verbs (§3.3.6).

12.1.3 ‘Surpass’ (*táŋgé*, *náj-jè*)

‘X surpass (be/do more than) Y’, especially denoting a transition that alters the relative position of the two arguments on a scale, can be expressed directly with the simple transitive verb *táŋgé* ‘pass, go past; surpass, exceed’. The alternative is a construction with possessed object: *[X nâm] náj-jè*, with possessed noun *nâm* (see beginning of chapter) and a verb *náj-jè* that can be analysed as a mediopassive /nág-yè/ related to (stative) *(-ń) nàgà* (§12.1.2). In both the *táŋgé* and *náj-jè* constructions, a constituent specifying the domain of comparison (e.g. running speed) may be added.

(375) a. *dúgú* *mí-ŋ* *táŋgé-∅*
running 1Sg-Acc **surpass**.Pfv-3SgSbj
‘He/She (has) surpassed me in running.’

b. *dúgú* *[ŋ́* *nǎm]* *náj-jè*
running [1Sg **more**] **surpass**
‘He/She (has) surpassed me in running.’

12.1.4 ‘Be better/bigger/more’

No distinct construction for ‘X be better than Y’ or ‘X be bigger than Y’ has been found. The same adjectival predicate type seen in §12.1.1 above is used, with ‘good’ and ‘big’ as the adjectives.

(376) a. *má:ŋgórò* *[lé:mbúrú* *nâm]* *pɔ́:lɔ́-∅*
mango [citrus **more**] good-3SgSbj
‘Mangoes are better than lemons.’

b. *móptí* *[péná* *nâm]* *bày^{n}-∅*
Mopti [Pinia **more**] big-3SgSbj
‘Mopti is bigger than Pinia.’

For ‘be more (numerous)’, the construction in (377) was obtained.

(377) *nìgé* *[nà:mbàlà-gè* *nám]* *jwá→* *nàgà-∅*
elephant [lion-Pl **more**] many **surpass**.Stat-3SgSbj
‘Elephants are more abundant than lions (are).’

12.1.5 ‘Best’ (*nàgà*)

There is no special superlative construction. If no specific comparandum is mentioned, an asymmetrical comparative may be interpreted as a superlative, i.e. as being valid for any comparandum in the relevant universe.

(378) *ɔ̀nɔ́* *yèbù* *nàgà-∅*
3Sg dance(n) **surpass**.Stat-3SgSbj
‘He/She is the best dancer.’

12.2 Symmetrical comparatives

12.2.1 ‘Equal; be as good as’ (*pɛ́:-pɛ́:*)

pɛ́:-pɛ́: ‘equal, at the same level’ can be used by itself as a predicate (379a). It can also take the ‘it is’ clitic (379b).

(379) a. *[mì* *ní]* *[sè:dú* *nì]* *pɛ́:-pɛ́:*
[1Sg and] [Sydou and] **equal**
‘Seydou and I are the same (equal, equivalent).’

b. *mbé* *pɛ́:-pɛ́:=yó*
1Pl **equal**=it.is
‘We are equal.’

[[X pâ] ŋ̀] *mílé* ‘reach the same level as X’ can be used to express a transition resulting in equality.

12.3 ‘A fortiori’ (*ságú*)

Clause-initial *ságú* ‘a fortiori’ (local French *à plus forte raison* or *ne parlons pas de*) is used in contexts like ‘I can’t even walk, never mind run’. It is the Penange variant of a regionally widespread form.

13 Focalization and interrogation

13.1 Focalization

13.1.1 Basic syntax of focalization

The focalized constituent is typically followed by the 'it is' clitic *=yo ~ =ye ~ =(w)o* (§11.2.1), which in this function is labeled Foc[us] in interlinears (§13.1.1.2). The focalized constituent remains *in situ*; it is not moved from the position it normally occupies as subject, object, or whatever (§13.1.1.3). If the focalized constituent is not the subject, a pronominal subject proclitic (or 3Sg enclitic) is required (§13.1.1.4).

13.1.1.1 Which constituents can and cannot be focalized?

The focalized constituent is usually an NP or adverb. It can be a nonpronominal NP, an independent pronoun, or a WH-interrogative. The focalized NP may be in subject (380a-c) or some nonsubject (380d) function.

(380) a. *sèydú=yò* *ándò* *bò*
Seydou=**Foc** go.Ipfv Ipfv
'It's Seydou [focus] who will go.'

b. *ó=yó* *ándò* *bò*
2Sg=**Foc** go.Ipfv Ipfv
'It's you [focus] who will go.'

c. *à:=yè* *ándò* *bò*
who?=**Foc** go.Ipfv Ipfv
'Who will go?'

d. *àlàmùnɔ̀=yò* *sɔ́gɔ́* *ŋ̀* *bì-yà*
sheep=**Foc** buy.Ipfv 1SgSbj Ipfv-Ppl
'It's a sheep [focus] that I will buy.'

The focalized constituent may also be an adverb or adverbial phrase. Most likely to be overtly focalized are noun-like lexical adverbs like 'yesterday' (381a) or 'here' (381b). PPs that are contextually focal are not usually overtly marked by the focus clitic, but such marking is allowed. Even when the focus clitic is absent, the form of the predicate, such as the presence of a pronominal-subject proclitic in (381c), can mark the clause as having a focalized constituent.

(381) a. *yà:gù=yò* *ŋ̀ké* *égé*
yesterday=**Foc** 3PlSbj come.Pfv
'It was yesterday [focus] that they came.'

b. *nù^{n}=yò* *ŋké* *nó:yé*
here=**Foc** 3PlSbj sleep.Pfv
'It was <u>here</u> [focus] that they slept.'

c. *[[dèm* *jáŋgà]* *ǹ](=yò)* *ŋké* *nó:yé*
[[house interior] Loc](=**Foc**) 3PlSbj sleep.Pfv
'It's <u>in the house</u> [focus] that they slept.'

However, spatiotemporal adverbials are often not treated as focal. Even 'where?' and 'when?' interrogatives do not usually trigger the changes in verb forms that object focalization requires. In practice, overt focalization occurs mainly with subject and object NPs.

13.1.1.2 Focus clitic identical to 'it is' *=yo* ~ *=ye* ~ *=(w)o*

The 'it is' clitic in its various allomorphs occurs in identificational and copular predicates of the types 'it's me' and 'Seydou is a farmer' (§11.2.1.1). The same clitic marks a focalized constituent, more or less as in cleft sentences in English (*it was <u>me</u> who[m] you saw*). In this context the morpheme is glossed as "Foc."

As a clause-final 'it is' clitic, *=yo* or variant becomes H-toned after an H- or L-toned word. As focus clitic, it again appears with H-tone after an H-toned word. However, after an L-toned word, the tone-raising on the clitic fails to occur before an H-toned syllable, such as an H-toned pronominal subject clitic. Examples (381a-c) in the preceding section exemplify this, compare identificational *nù^{n}=yó* 'it's here' and *yà:gù=yó* 'it was yesterday'.

The focus clitic occurs after focalized subjects (382a,c) and focalized nonsubjects such as objects (382b). It can follow nonpronominal NPs (382a) and pronouns (382b). The clitic, in the variant *=yè*, also occurs regularly in focal function in *à:=(y)è* 'who?' (382c), which is well along the road to fusion as an unsegmentable morpheme (§13.2.3). Other WH-interrogatives (e.g. 'what?', 'where?') generally do not take an overt focus clitic, which would be redundant since such words are intrinsically focal. Accusative *-w^{n}* (or variant) is not allowed in combination with the focus clitic (382b,d).

(382) a. *[è* *$^{H+}$wé:-gè]=yò* *mí=^{n}* *málgé* *[èbà* *bà]*
[Def $^{H+}$child-Pl]=**Foc** 1Sg-Acc see.Pfv [market Loc]
'It was <u>the children</u> [focus] who saw me in the market.'

b. *[è* *$^{H+}$wé:-gè]* *mí=yó* *ŋké* *málgé* *[ébá* *bà]*
[Def $^{H+}$child-Pl] 1Sg=**Foc** 3PlSbj see.Pfv [market Loc]
'It was <u>me</u> [focus] that the children saw in the market.'

c. *à:=yé* *[è* *$^{H+}$móbêl]* *sógú-lé*
who?=**Foc** [Def $^{H+}$vehicle] buy-Rev.Pfv
'Who sold the vehicle?'

d. *sèydú=yò* *gámbíyé* *ná*
Seydou=**Foc** encounter.Pfv 3SgSbj
'It was <u>Seydou</u> [focus] that he/she encountered.'

'When?' and 'where?' do take the 'it is' clitic in identificational predicates, as in 'where/when is it?', see (400d) and (401b) in §13.2.5-6 below.

The forms of focalized pronouns are in (383). They are the same as the predicative 'it is' forms (611.2.1.1).

(383)

	focalized	independent
1Sg	*mí=yó*	*mí*
1Pl	*mbé=yó*	*mbé*
2Sg	*ó=yó*	*ó*
2Pl	*ábé=yó*	*ábé*
3Sg	*ɔ̀nɔ̀=yó*	*ɔ̀nɔ̀*
3Pl	*ŋké=yó*	*ŋké*

13.1.1.3 No systematic movement of focalized constituent

There is no systematic linear repositioning of focalized constituents, either to clause-initial or to immediately preverbal position. Intrinsically focal 'who?' is therefore in the regular object position (following the subject) in (384a) but in the regular clause-initial subject position in (384b).

(384) a. *móbêl* *à:=yè* *dɔ́njɛ́* *ná*
vehicle who?=**Foc** bump.Pfv 3SgSbj
'Who(m) did (the) vehicle bump?'
(or: 'The vehicle, who(m) did it bump?')

b. *à:=yé* *[è* $^{H+}$*móbêl]* *sógú-lé*
who?=**Foc** [Def $^{H+}$vehicle] buy-Rev.Pfv
'Who sold the vehicle?'

c. *à:màdú=yò* *[è* $^{H+}$*móbêl]* *sógú-lé*
Amadou=**Foc** [Def $^{H+}$vehicle] buy-Rev.Pfv
'It was Amadou [focus] who sold the vehicle.'

d. *à:=yè* *ábé-^{n}* *búndé*
who?=**Foc** 2Pl-Acc hit.Pfv
'Who hit you-Pl?'

13.1.1.4 Subject pronouns in nonsubject focalizations

In unfocalized main clauses, only 1st/2nd person pronominal subjects are expressed as proclitics. In nonsubject focalized clauses, the same 1st/2nd person proclitics are joined by the 3Pl proclitic *ŋké*. In addition, 3Sg subject is expressed by an enclitic *na* following the verb, getting its tone by spreading from the left. 3Sg *na* is related to 3Sg possessor suffix *-na* on nouns (§6.2.2.2) and to 3Sg subject enclitic *na* in relatives (§14.3). The 3Sg and 3Pl clitics are required even when the subject is also expressed by a nonpronominal NP (385f-g).

(385) a. *njɛ́ / njɛ́:=yè* *ŋ́ / á* *sɔ̀gè*
what? / what?=**Foc** 1SgSbj / 2SgSbj buy.Pfv
'What did I/you-Sg buy?'

b. *ɲjɛ́ / ɲjɛ́ː=yɛ̀* *ŋ̀ / à / ŋkɛ́* *sɔ́gɛ́*
what? / what?=**Foc** 1PlSbj / 2PlSbj / 3PlSbj buy.Pfv
'What did we/you-Pl/they buy?'

c. *ɲjɛ́ / ɲjɛ́ː=yɛ̀* *sɔ́gɛ́* *ná*
what? / what?=**Foc** buy.Pfv 3SgSbj
'What did he/she buy?'

d. *àlàmùnɔ̀=yó* *ŋ́* *sɔ̀gɛ̀*
sheep=**Foc** 1SgSbj buy.Pfv
'It's a sheep [focus] that I bought.'

e. *àlàmùnɔ̀=yò* *sɔ́gɛ́* *ná*
sheep=**Foc** buy.Pfv 3SgSbj
'It's a sheep [focus] that he/she bought.'

f. *sɛ̌ydù* *àlàmùnɔ̀=yò* *sɔ́gɛ́* *ná*
Seydou sheep=**Foc** buy.Pfv 3SgSbj
'It's a sheep [focus] that Seydou bought.'

g. *wɛ̀ː-gɛ́* *àlàmùnɔ̀=yò* *ŋkɛ́* *sɔ́gɛ́*
child-Pl sheep=**Foc** 3PlSbj buy.Pfv
'It's a sheep [focus] that the children bought.'

Since the 1st/2nd person subject proclitics are identical to those in unfocalized main clauses, when the subject is one of these pronominals, the focus clitic on the focalized NP may be the only overt sign of focalization (385d).

13.1.1.5 Form of defocalized verb

The form of the verb depends on whether the subject or a nonsubject (e.g. object) is focalized. In both cases the verb is part of the defocalized background.

The forms of the defocalized verb for subject focalization are illustrated with the verb 'push' in (386). The verb has invariant form for each aspect-negation category under subject focalization; in other words, there is no pronominal-subject conjugation. The perfective subject-focus form is segmentally identical to the 3Sg main-clause form. However, it is {H}-toned throughout, even for a prosodically heavy trisyllabic stem like 'push'. The identity with the main-clause 3Sg form is complete in imperfective subject-focus forms, where the verb has {HL} tones before auxiliary *bò*.

In the corresponding negative categories, participial suffix *-gà* appears in the subject-focus construction, following the AN suffix. The verb, including the negative suffix, has the same perfective {H} tones and imperfective {HL} tones as in positive clauses. The vowel of perfective negative -lí- is optionally (but often) syncopated in the subject-focus construction (*-l-gà*), masking the H-tone of *-lí-*.

(386) Subject-focus forms of ‘push’

main clause 3Sg	subject focus	category
túmbúgè-∅	*túmbúgé*	perfective
túmbúgò bò-∅	*túmbúgò bò*	imperfective
tùmbùgè-l(ì)-∅	*túmbúgé-l(í)-gà*	perfective negative
tùmbùgò:-ndí-∅	*túmbúgó:-ndì-gà*	imperfective negative

For nonsubject focus, the verb is conjugated for pronominal-suffix category, and this entails tonal effects on the verb. 1st/2nd person subjects have their usual proclitic forms, as in main and relative clauses. Third person subjects have the same forms they have in relative (but not main) clauses: 3Pl proclitic *ŋké* and 3Sg enclitic *ná* ~ *nà*. A participial suffix *-yá* ~ *-yà* occurs in negative paradigms and in some imperfective positive forms.

(387a-b) present perfective positive and perfective negative nonsubject-focus verb forms. The E/I-stem is used. Both positive and negative paradigms have an {H}-toned stem for 1Pl, 2Pl, 3Sg, and 3Pl, versus {L}-toned stem for 1Sg and 2Sg. The tonally flat tone patterns are striking in comparison to the undulating tone patterns of the same verbs in main clauses. Participial *-yà* occurs in the perfective negative but not positive. It is raised to *-yá* before 3Sg enclitic *nà*, hence 3Sg *túmbúgé-lí-yá nà* in (387b), likely by Rightward H-Spreading (§3.6.3.5).

(387) Nonsubject-focus forms of ‘push’ (perfective)

main-clause	nonsubject focus	category
a. perfective		
{L}-toned for nonsubject focus		
ŋ́ tùmbúgè	*ŋ́ tùmbùgè*	1Sg
á tùmbúgè	*á tùmbùgè*	2Sg
{H}-toned for nonsubject focus		
ŋ̀ túmbúgè	*ŋ̀ túmbúgé*	1Pl
à túmbúgè	*à túmbúgé*	2Pl
túmbúgè-∅	*túmbúgé ná*	3Sg
túmbúg-yè	*ŋké túmbúgé*	3Pl
b. perfective negative		
{L}-toned for nonsubject focus		
ŋ́ tùmbùgè-l(ì)	*ŋ́ tùmbùgè-lì-yà*	1Sg
á tùmbùgè-l(ì)	*á tùmbùgè-lì-yà*	2Sg
{H}-toned before L-toned -yà for nonsubject focus		
ŋ̀ túmbúgé-l(í)	*ŋ̀ túmbúgé-lí-yà*	1Pl
à úmbúgé-l(í)	*à túmbúgé-lí-yà*	2Pl
tùmbùgè-l(ì)-∅	*túmbúgé-lí-yá nà*	3Sg
túmbúgá-ndá	*ŋké túmbúgé-lí-yà*	3Pl

Imperfective positive and imperfective negative nonsubject-focus verbs forms are in (388a-b). As in main clauses, the verb is in the O/U-stem. As in subject-focus perfectives, but in contrast to main-clause counterparts, most nonsubject-focus imperfectives have tonally flat {H} stems. Exceptions are some imperfective positive nonsubject-focus combinations (1Pl, 2Sg, 2Pl) in (388a) with {HL}-toned stem before an L-toned clitic. In this paradigm (388a),

auxiliary *bò* ~ *wò* is omitted in the second person and 3Sg forms. For the other subject categories, it takes the form *bí-yà* after L-toned proclitic (1Pl) and *b(ì)-yà* after H-toned proclitic (1Sg, 3Pl). 2Pl is distinguished from 2Sg by adding a suffix *-yà* that in this case indicates plural subject; compare plural-addressee *-ỳ*^{n} in imperatives. In the imperfective negative nonsubject-focus paradigm (388b), participial (not plural) *-yà* is present for all subject categories, as in the perfective negative. The singular imperfective negatives preserve the suffixal allomorphy of main-clause counterparts, but the plural forms end in *wòlí-yà*, based on *wǒl* 'not be'.

(388) Nonsubject-focus forms of 'push' (imperfective)

main-clause	nonsubject focus	category
a. imperfective		
with aux for nonsubject focus		
túmbúgó ŋ́ bò	*túmbúgó ŋ́ b(ì)-yà*	1Sg
túmbúgó ŋ̀ bó	*túmbúgò ŋ̀ bí-yà*	1Pl
túmbúgò b-yà	*túmbúgó ŋké b(ì)-yà*	3Pl
without aux for nonsubject focus		
túmbúgá-á wò	*túmbúgà-à*	2Sg
túmbúgá-à wó	*túmbúgà-à-yà*	2Pl
túmbúgò bò-∅	*túmbúgó nà*	3Sg
b. imperfective negative		
1Sg/2Sg		
tùmbùgó-ò-l	*túmbúgó-ó-lí-yà*	1Sg
tùmbùgá-à-l	*túmbúgá-á-lí-yà*	2Sg
3Sg		
tùmbùgò:-ndí-∅	*túmbúgó:-ndí-yá nà*	3Sg
plurals		
tùmbùgò-ò-lí	*túmbúgó ŋ̀ wòlí-yà*	1Pl
tùmbùgà-à-lí	*túmbúgá-à wòlí-yà*	2Pl
tùmbùgò:-nd(ì)-yá	*túmbúgó ŋké wòlí-yà*	3Pl

In main clauses, progressive is distinguishable from imperfective. In nonsubject focus clauses, the imperfective forms given above are used freely in either imperfective (including future and present habitual) contexts or in progressive contexts. Indeed, the contrast in the negative nonsubject focus forms in (388b) between singular *-lí-yà* (1Sg/2Pl) or *-ndí-yá nà* (3Sg) on the one hand, and plural *wòlí-yà* on the other, shows that this paradigm is morphologically mixed. The singular forms are directly related to the main-clause imperfective negatives to their left in (388b), whereas the plural forms with *wòlí-yà* are based on the main-clause progressive negative with *wǒl* (§10.2.3.4).

Unambiguously progressive nonsubject-focus clauses can be constructed from the alternative progressive with *túlà* (§10.2.2.5), which becomes *túl-yà* (3Pl, 1Pl, 2Pl), *tùl-yà* (1Sg, 2Sg), or *túl-yá* in 3Sg *túl-yá ná* (389a). A subject-focus example is (389b), showing the invariant form *túlá*.

(389) a. *njɛ́* *tùmbùgò-ǹ* *túl-yá* *ná*
what? push-Prog Prog-Ppl 3SgSbj
'What is he/she pushing?'

b. *á:=yé* *tùmbùgò-n* *túlá*
who?=**Foc** push-Prog Prog
'Who is pushing?'

Subject-focus forms of statives are {H}-toned, like those of perfectives. This applies both to derived statives like 'be squatting, be in squatting position' and to lexicalized stative quasi-verbs like 'have' and 'want' (390). The extra *bò-* in third person forms of some positive statives ('know', 'want', 'resemble') is omitted. Participial *-gà* is added to the negative subject-focus forms.

(390) Subject-focus forms of statives

main clause 3Sg	subject focus	gloss
a. positive		
sò/ɛ̀^{n} sómbà-∅	*sómbá*	'be squatting' (§10.4.1.1)
sâ^{n}-∅	*sá:^{n}*	'have'
bô-∅	*bó*	'be'
ɛ́ɲɔ̀ bò-∅	*ɛ́y^{n}*	'know'
kɛ́ɲù bò-∅	*kɛ́y^{n}*	'want'
(m)pímà: bò-∅	*mpímá*	'resemble'
b. negative		
sómbá-ndá-∅	*sómbá-ndá-gà*	'not be squatting'
sá:-ndá-∅	*sá:ndá-gà*	'have'
wǒl-∅	*wól-gà*	'not be'
índó-∅	*índó-gà*	'not know'
kɛ́y-là-∅	*kɛ́y-lá-gà*	'not want'
(m)pímá-ndá-∅	*mpímá-ndá-gà*	'not resemble'

Nonsubject-focus forms of statives are summarized in (391). X marks the position of the subject proclitic or 3Sg enclitic. For 'know' and 'not know', the initial *ɲ* occurs after 1st/2nd person proclitics. In the 3Sg negative forms, the L-toned *-yà* shown is raised to *-yá* before L-toned 3Sg *nà* (e.g. *wól-yá nà*).

(391) Nonsubject focus (positive statives)

1Sg/2Sg	1Pl/2Pl/3Pl	3Sg	gloss
a. positive			
X sòmb-yà	*X sómb-yà*	*sómb-yá X*	'be squatting'
X bì:-yà	*X bí:-yà*	*bí:-yá X*	'be (somewhere)'
X sì:^{n}-yà	*X sí:^{n}-yà*	*sí:^{n}-yá X*	'have'
(also contracted *s-yà^{n}* etc.)			
X ɲ-ɛ̀ɲà	*X (ɲ-)ɛ́ɲà*	*ɛ́ɲá X*	'know'
X kɛ̀ɲà	*X kɛ́ɲà*	*kɛ́ɲá X*	'want'
X pìm-yà	*X pím-yà*	*mpím-yá X*	'resemble'
b. negative			
X sòmbá-nd-yà	*X sómbá-nd-yà*	*sómbá-ndí-yà X*	'not be squatting
X wòl-yà	*X wól-yà*	*wól-yà X*	'not be'
X sà:-ndí-yà	*X sá:-nd-yà*	*sá:-nd-yà X*	'not have'

X ɲìndí-yà	*X (ɲ)índ-yà*	*índ-yà X*	‘not know’
X kèlí-yà	*X kél-yà*	*kél-yà X*	‘not want’
X pìmà-ndí-yà	*X pímá-nd-yà*	*pímá-nd-yà X*	‘not resemble’

The past clitic *=ye* (§10.6.1) is replaced in focalized clauses by *mbɛ̀*. My assistant did not distinguish between past imperfective and past progressive in focalized clauses. (392a-b) are subject relatives, while (392c) is a nonsubject relative.

(392) a. *à:* *yɛ́bɔ̀* *bò* *mbɛ̀*
who? dance.Ipfv Ipfv **Past**
‘Who [focus] was dancing?’

b. *à:* *yɛ́bɔ̀:-ndì-gá* *mbɛ̀*
who? dance-PfvNeg-Ppl **Past**
‘Who [focus] was not dancing?’

c. *nù^{n}=yò* *yɛ́bɔ̀* *nà* *mbɛ̀*
here=**Foc** dance.Ipfv 3SgSbj **Past**
‘It’s here [focus] that he/she was dancing.’

13.1.1.6 Existential *ɛ̀^{n}* and reduplication absent

Existential particle *ɛ̀^{n}* is not allowed in clauses with a focalized nonpredicative constituent. In ‘X have Y’ possessive predicates, *ɛ̀^{n}* is obligatory in unfocalized positive main clauses (393a). By contrast, it is disallowed (#) in the presence of a focalized constituent such as a WH-interrogative (393b-c).

(393) a. *dèm* *ɛ̀^{n}* *á* *sâ:^{n}*
house **Exist** 2SgSbj have.Q
‘Do you-Sg have a house?’

b. *njá=á* *(#ɛ̀^{n})* *sì:^{n}-yà*
what?=2SgSbj **(#Exist)** have-Ppl
‘What do you-Sg have?’

c. *à:=yé* *nà:* *(#ɛ̀^{n})* *sá:^{n}*
who?=Foc cow **(#Exist)** have
‘Who has a cow?’

Reduplication, which in unfocalized main clauses is an alternative to the existential proclitic for derived statives, is also not possible in clauses with a focalized constituent. Therefore both *sò sómbà-∅* and *ɛ̀^{n} sómbà-∅* ‘he/she is squatting’ become just *sómbá* after any focalized constituent, see (390a) above.

13.1.2 Subject focalization

Drawing together points made earlier, in subject focalization a) the subject (including independent pronouns) occurs in the regular clause-initial subject position and (except for several WH words) has the focus clitic; b) there is no additional overt pronominal-subject

marking (proclitic or 3Pl suffix) in the verb; c) the verb is segmentally identical to the main-clause 3Sg form in the positive (perfective/imperfective) but is raised to {H}-tone in the perfective positive; d) a negative verb adds participial *-gà*.

Examples are in (394), and in §13.2.3-9 with various WH-interrogative words.

(394) a. *ó=yó / sèydú=yò / wè:-gè=yò* *mì-ŋ* *málgé*
2Sg=**Foc** / S=**Foc** / child-Pl=**Foc** 1Sg-Acc see.Pfv
'It was you-Sg / Seydou / the children [focus] who saw me.'

b. *[è* $^{H+}$*wé:-gè]=yò* *wálé* *mì-ŋ* *tábé*
[Def $^{H+}$child-Pl]=**Foc** money 1Sg-Acc give.Pfv
'It was the children [focus] who gave me money.'

c. *ábé=yó* *káy^{n}* *kán-lí-gà*
2Pl=**Foc** work(n) do-PfvNeg-Ppl
'It's you-Pl [focus] who didn't work.'

d. *á:mádú=yò* *gɛ́:n-yɔ́:-ndì-gà*
Amadou=**Foc** sweep-MP-IpfvNeg-Ppl
'It's Amadou [focus] who doesn't sweep.'

13.1.3 Object focalization

To summarize points made earlier: in object focalizations, a) the focalized NP occurs in the usual post-subject position in the clause and (except for several WH words) has the focus clitic; b) overt accusative marking is absent; c) the pronominal-subject category is marked on the verb (proclitics, or 3Sg enclitic *ná*) even if if the clause begins with a full subject NP; d) perfective verbs are {L}-toned for 1Sg/2Sg, {H}-toned for other subjects; e) imperfective verbs omit *bò* for 2nd person and 3Sg, and replace it by *bí-yà* ~ *b(ì)-yà* for 1st person and 3Pl; f) negative verbs (perfective and imperfective) add participial suffix *-yà* after the aspect-negation suffix.

Examples are in (395), and with WH-interrogative words in §13.2.3-9.

(395) a. *mí=yó* *[á* *màlgè]* / *[à* *málgé]*
1Sg=**Foc** [2SgSbj see.Pfv] / [2PlSbj see.Pfv]
'It was me that you-Sg / you-Pl saw.'

b. *mí=yó* *[málgé* *ná]* / *[ŋké* *málgé]*
1Sg=**Foc** [see.Pfv 3SgSbj] / [3PlSbj see.Pfv]
'It was me that he-or-she/they saw.'

c. *sɛ̌ydù* *mí=yó* *málgé* *ná*
Seydou 1Sg=**Foc** see.Pfv 3SgSbj
'It was me that Seydou saw.'

d. *sɛ̌ydù* *mí=yó* *málgé-lí-yá* *nà*
Seydou 1Sg=**Foc** see-PfvNeg-Ppl 3SgSbj
'It was me that Seydou did not see.'

13.1.4 Focalization of PP or other adverb

A PP like 'in the fields' can be focalized. The unfocalized clause (396a) is converted into the adverbial-focus construction (396b) by adding the focus clitic to the initial PP and by slightly changing the tone of the verb from {LHL} to {L}.

(396) a. *[yàlà bá] [è* $^{H+}$*wógótórò] ŋ́ dɛ̌ːndɛ̀*
[field Loc] [Def $^{H+}$cart] 1SgSbj leave.Pfv
'I left the cart in the field(s).'

b. *[yàlà bà]=yó [è* $^{H+}$*wógótórò] ŋ́ dɛ̀ːndɛ̀*
[field Loc]=Foc [Def $^{H+}$cart] 1SgSbj leave.Pfv
'It's in the field(s) [focus] that I left the cart.'

13.2 Interrogatives

For quoted interrogatives with *-lɛ̀*, see §17.1.3.

13.2.1 Polar (yes/no) interrogatives (final pitch rise)

Polar interrogation can be expressed intonationally by prolonging the final syllable with rising pitch. In (397a), the predicate that is elsewhere *wòl-yé* is heard as [wòljèé]. In (397b), *bó-yè-∅* is modified to [bójèé]. The rising pitch, suggested by a final ˀ diacritic after the prolongation symbol →, masks the phonological H- or L-tone on the final syllable. I nevertheless transcribe the regular (noninterrogative) phonological tone to clarify the structure. In (397c), the verb is already {H}-toned, but the speaker lowers the overall pitch level except for the coda of the prolonged final syllable. In these examples, ".Q" in interlinears indicates the presence of interrogative intonation.

(397) a. *á wòl=yé→ˀ*
2SgSbj not.be=Past.Q
'Weren't you-Sg present?'

b. *nùw^{n} bó=yè-∅→ˀ*
here be=Past-3SgSbj.Q
'Was he/she here?'

c. *égé-∅→ˀ*
come.Pfv-3SgSbj.Q
'Did he/she come?'

13.2.2 'So-and-so' (*fìlá:nà*)

'So-and-so', i.e. a pro-form replacing specific personal names, is *ntá nì fìlá:nà*, or just *fìlá:nà*. This is ultimately from Arabic *fulaan-*.

13.2.3 'Who?' (*à:* or *à:=(y)è*)

à: 'who?' is exemplified in (398). It is normally marked by the focus clitic, in the form *à:=yè* or *à:=è*. Clause-finally (arguably due to interrogative intonation) and before L-tones I usually hear it as *à:=(y)é* with final H-tone. The segmentability of *à:=(y)è* as interrogative stem plus enclitic is synchronically questionable since the combination is so common. However, simple *à:* is regular in possessor function (398f), and it occurs occasionally in subject or object function, see (392a-b) in §13.1.1.5 above.

(398) a. *à:=(y)é*
who?=Foc
'Who is it?'

b. *à:=(y)è* *égé-∅*
who?=Foc come.Pfv-3SgSbj
'Who came?'

c. *à:=(y)è* *ándò* *bò-∅*
who?=Foc go.Ipfv Ipfv.3SgSbj
'Who will go?'

d. *à:=(y)è* *búndé* *ná*
who? hit.Pfv 3SgSbj
'Who(m) did he/she hit?'

e. *à:=(y)è=à* *búndé*
who?=Foc=2PlSbj hit.Pfv
'Who(m) did you-Pl hit?'

f. *[à:* *dém]=yè*
[**who?** house]=it.is
'Whose house is it?'

There is an optional, explicitly plural form *à:-yà=(y)è*, though if number is indefinite the morphological singular is normal.

13.2.4 'What?' (*njɛ́*), 'with what?', 'why?'

'What?' is *njɛ́* in isolation or before a verb phrase. It contracts with a following 2Sg or 2Pl proclitic (399a). It is lengthened to *njɛ́:* before plural *-gè* or the 'it is' clitic allomorph *=yè*, and to *njɛ̂:* before the instrumental postposition. The 'it is' clitic is regular for identificational predication (399e), but it is usually omitted as focus marker.

(399) a. *njá=á* *kèŋà*
what?=2SgSbj want
'What do you-Sg want?' (< *njɛ́ á*)

b. *njɛ́* *díné* *ná*
what? get.Pfv 3SgSbj
'What did he/she get?'

c. *njá = á* *sɔ̀gɛ̀*
what?=2SgSbj buy.Pfv
'What did you-Sg buy?'

d. *njɛ́* *ò-^{n}* *tíyò* *bò-∅*
what? 2Sg-Acc hurt.Ipfv Ipfv-3SgSbj
'What (e.g. which body part) hurts you-Sg?'

e. *ínì* *njɛ́: = (y)è*
Prox **what?**=it.is
'What is this/that?'

An optional explicit plural is *njɛ́:-gè*. 'With what?' is *njɛ̂: nì*. 'Why?' ('for what?') is *njɛ́ námù* ~ *njɛ́ nâm:* .

13.2.5 'Where?' (*mbá*)

'Where?' is *mbá*. Like all locational expressions, it may occur without additional morphology in locative, allative, and ablative contexts, since direction (if any) is specified by verbs. In 'where are you going?' the preferred verb is *téj-jé* 'head for' (in A-stem imperfective form *tégà*), rather than *ándè* 'go' in progressive contexts (400b). The verb often shows no sign of defocalization (400b-c).

(400) a. *mbá* *bó-∅*
where? be-3SgSbj
'Where [focus] is he/she-Sg?'

b. *mbá* *á* *tègà*
where? 2SgSbj head.for.Ipfv
'Where are you-Sg going?'

c. *mbá* *à* *gwê:*
where? 2PlSbj go.out.Pfv
'Where are you-Pl from?'

d. *mbá = yé*
where?=it.is
'It's where?'

13.2.6 'When?' (*wèn wàgâr*)

'When?' is *wèn wàgâr*, which includes *wàgàr* 'time, moment' with an apparent {LHL} overlay as in some possessive constructions (§6.2.2.1). Often the verb is not defocalized (401a).

(401) a. *[wèn* *wàgâr]* *égá-á* *wò*
[**which?** **time**] come.Ipfv-2SgSbj Ipfv
'When are you-Sg coming?'

b. *wèn* *wàgâr*
which? **time**
'When is it?'

13.2.7 'How?' (*wènɛ̀*)

Manner adverbial interrogative 'how?' is *wènɛ̀*. Often the verb is not defocalized (402a).

(402) a. *wènɛ̀* *dígá-á* *wò*
how? go.up.Ipfv-2SgSbj Ipfv
'How will you-Sg climb (up)?'

b. *wènɛ̀=yé*
how?-it.is
'How is it?'

13.2.8 'How much/many?' (*àŋgà*)

The usual sense of *àŋgà* is 'how many?' with countable nouns. *àŋgà* follows the noun, which has plural *-gè* if countable. The construction can be treated tonally as a possessive, in which case the form ends up as {HL}-toned *áŋgà* after an {L}-toned noun (403a). In distributive sense, *àŋgà* is optionally iterated (403c), see §4.7.1.6. The ordinal is *à:ŋgù-lò* (403d), cf. §4.7.2.2.

(403) a. *[ùnà-gè*^{L} ^{HL}*áŋgà]* *sógú-lé* *ná*
[goat-Pl^{L} ^{HL}**how.many?**] buy-Rev.Pfv 3SgSbj
'How many goats [focus] did he/she sell?' (< *úná-gé*)

b. *[wè:-gè*^{L} ^{HL}*áŋgà]* *á* *màlgè*
[child-Pl^{L} ^{HL}**how.many?**] 2SgSbj see.Pfv
'How many children [focus] did you-Sg see?' (*wè:-gé*)

c. *àŋgà(-áŋgà)* *sógú-lá-á* *wò*
how.many? buy-Rev.Ipfv-2SgSbj Ipfv
'For how many (currency units) each do you-Sg sell (them)?'

d. *dèm* *à:ŋgù-lò*
house^{L} **how.many?**-Ord
'how-many-eth house?' (reply: first, second, third, etc.)

e. *[[dùgù-gè*^{L} ^{HL}*áŋgà]* *jáŋgà]* *wwé:* *ná*
[[village-Pl^{L} ^{HL}**how.many?**] inside] rain.fall.Pfv 3SgSbj
'In how many villages [focus] did it rain?'

13.2.9 'Which?' (*wèn*)

wèn 'which?' precedes the noun. The construction functions tonally as a possessive, with {HL} overlay on the noun.

(404) a. *[wèn* HL*álámúnɔ̀]* *sɔ́gà-à*
[**which?** HLsheep] buy.Ipfv-2SgSbj
'Which sheep-Sg [focus] will you-Sg buy?' (variant *sógà-à*)

b. *[[[wèn* HL*dém]* *jáŋgà]* *ǹ]* *nɔ̌:yà-à* *wò*
[[[**which?** HLhouse] inside] Loc] lie.down.Ipfv-2SgSbj Ipfv
'In which house will you-Pl sleep?'

c. *[wèn* HL*ná:-ŋgè]* *sógú-là-à*
[**which?** HLcow-Pl] buy-Rev.Ipfv-2SgSbj
'Which cows [focus] will you-Sg sell?'

14 Relativization

14.1 Basics of relative clauses

The following is a brief summary of the major features of relative clauses.

- There is an internal head NP inside the relative clause;
- This internal head NP is maximally Poss/Det-N-Adj-Num;
- The internal head NP does not undergo further tonosyntactic modification, beyond the usual patterns internal to Poss/Det-N-Adj-Num;
- There is a default head *ɛ̀* 'that which' denoting a thing, when no more specific head NP is present;
- The verb takes participial form, and is marked for an indicative category (aspect, negation, past time, stative), more or less as in main clauses, but with some participial suffixes/enclitics (especially in negative and stative categories) and/or tonal changes;
- Subject relatives omit pronominal-subject clitics and suffixes on the verb;
- Nonsubject relatives have regular 1st/2nd person subject proclitics, but 3Sg subject has enclitic *na* and in some inflectional categories 3Pl subject has proclitic *ŋké* (compare nonsubject focalization);
- Plural suffix *-gè* quantifying over the head NP is expressed only on the participle (or on postparticipial 3Sg *na* if present), except that if the internal head contains a nonsingular numeral the plural suffix occurs on the word preceding the numeral and is optionally repeated on the participle;
- Universal quantifier *sèlè* 'all' with scope over the head NP follows the verb-participle.

14.2 Head NP

14.2.1 Head NP is internal to the relative clause

That the overt head is inside the relative is shown by object relatives that also have a nonpronominal subject like 'Seydou', such as (405).

(405) *sěydù* *[è* $^{H+}$*nâ:]* *sògù-lè* *nà*
Seydou [**Def** $^{H+}$**cow**] buy-Rev.Pfv.Ppl 3SgSbj
'the cow that Seydou sold'

Even subject relatives allow pre-subject spatiotemporal setting adverbs like *yà:gù* 'yesterday' to precede the subject head NP.

(406) *yà:gú* *[è* $^{H+}$*ntá]* ^{L}*ègè-gè*
yesterday [**Def** $^{H+}$**person**] ^{L}come.Pfv.Ppl-Pl
'the people who came yesterday'

In (405-6) above the head NP happens to be immediately preverbal, but this is accidental. (407) shows a subject head NP separated from the verb by a non-head object NP.

(407) *[è* $^{H+}$*ntá]* *àlàmùnɔ̀* *sógú-lé*
[**Def** $^{H+}$**person**] sheep buy-Rev.Pfv.Ppl
'the person who sold (the) sheep'

14.2.2 Form of internal head NP (Poss-N-Adj-Num)

In (408a-g), all components of the internal head are bolded in the interlinears. The internal head NP is maximally Poss/Det-N-Adj-Num. The prenominal as well as postnominal elements in this sequence must be adjacent; in particular, a possessor or determiner is part of the internal NP head and cannot be separated from the noun by an adverb or other element. Among NP components, only the 'all' quantifier regularly follows the verb rather than being part of the internal head (408g). The verb-participle is syntactically separate from the internal head NP, but it can be drawn into tonosyntactic relations with an adjacent head NP. The brackets in the Penange transcriptions in (408b-e) are tonosyntactic and will be explained below. The internal head NPs correspond to the string of bolded items in the interlinears and to the brackets in the free translations.

(408) a. *yà:gú* *[è* $^{H+}$*dêm]* ^{L}*tìbè(-gé)*
yesterday [**Def** $^{H+}$**house**] ^{L}fall.Pfv.Ppl(-Pl)
'[the house(s)] that fell (collapsed) yesterday'

b. *è* $^{H+}$*dêm* ^{L}*[bày^{n}* *tìbè](-gé)*
Def $^{H+}$**house** ^{L}[**big**] fall.Pfv.Ppl](-Pl)
'[the big house(s)] that fell'

c. *è* $^{H+}$*dém-gè* ^{L}*[nègà* *tìbè]*
Def $^{H+}$**house-Pl** ^{L}[**two** fall.Pfv.Ppl]
'[the two houses] that fell'

d. *è* $^{H+}$*dêm* ^{L}*[bày^{n}-ŋgè* *nègà* *tìbè]*
Def $^{H+}$**house** ^{L}[**big-Pl** **two** fall.Pfv.Ppl]
'[the two big houses] that collapsed'

e. *è* $^{H+}$*dêm* ^{L}*[bày^{n}* *yɔ̀rdè-gè* *nègà* *tìbè-gè]*
Def $^{H+}$**house** ^{L}**[big** **black-Pl** **two** fall.Pfv.Ppl]
'[the two big black houses] that collapsed'

f. *sèydù*^{L} ^{HL}*[dém* *báy^{n}-ŋgé* *négá* *tíbé-gè]*
Seydou^{L} ^{HL}[**house** **big-Pl** **two** fall.Pfv.Ppl-Pl]
'[Seydou's two big houses] that collapsed'

g. *è* $^{H+}$*dêm* ^{L}*tìbè-gé* *sèlè*
Def $^{H+}$**house** ^{L}fall.Pfv.Ppl-Pl all
'all [the houses] that fell'

Aside from the position of 'all', the only morphological difference in form between relative head NPs and main-clause NPs is that plural *-gè* is added to the verb-participle, and not to the internal head NP unless the head contains a numeral (§14.4.1 below).

Penange differs from many Dogon languages in not tone-dropping the final word(s) in an internal head NP, and also in including determiners in the head NP rather than placing them after the verb-participle. As a result, when there are two or more nonpronominal NPs in a relative clause, there may be ambiguity as to which is the head.

14.2.3 Restrictions on the head of a relative clause

There are no important syntactic restrictions on what can be the head NP. It can be a pronoun (409a-b), a personal name (409c), or a demonstrative (409d), instead of a nonpronominal NP as in most examples in this chapter. {L}-toned participial *bò* and plural *bò-gè* in (409a-c) contrast with main clause 3Sg *…bô-∅* '…is here' and 3Pl *…bí-yà* '…are here'.

(409) a. *mbé* *nùw^{n}* *bò-gè*
1PlSbj here be.Ppl-Pl
'we who are here'

b. *ó* / *ɔnɔ́* / *mí* *nùw^{n}* *bò*
2SgSbj / **3SgSbj** / **1SgSbj** here be.Ppl
'you-Sg who are here / he-or-she who is here / I who am here'

c. *sěydú* *nùw^{n}* *bò*
Seydou here be.Ppl
'Seydou who is here'

d. *ínì=[á* *màl-yà]*
Prox=[2SgSbj see.Stat-Ppl]
'this which you-Sg see'

However, whether pronouns are in common use as relative heads is unclear. In (570) in Text 3, instead of the contextually expectable 'you whose work they are doing' we get a construction with 'you' in apposition to 'the person'. A literal but awkward translation is "you (who are) [the person$_x$ (who) they are doing his$_x$ work]" (note "his" instead of "your"). In some other Dogon languages, such as Jamsay, such appositions are obligatory, since pronouns cannot head relatives.

14.2.4 Default nonhuman head *è* 'that which'

è 'that which' is a default nonhuman head when no more precise head NP is indicated. It may be related historically to *yɛ̀:* 'thing' and/or to determiners (definite *è*, discourse-definite *ê:*). Free translations can use 'what', as in '[what you don't know] can't hurt you.' Subject-relative examples are in (410). *è* has tone-dropping effects on some immediately following participles. If the participle is entirely {L}-toned, as in simple perfective positive subject relatives, *è* itself becomes H-toned, perhaps by a variant of Final Tone-Raising (410a).

(410) a. *ɛ́* plus {L}-toned participle
ɛ́ [L]*èɡè* ‘what came’

b. *ɛ̀* plus participle with initial L-tone but a following H-tone
ɛ̀ *èɡě-l-ɡà* ‘what didn’t come’
ɛ̀ *èɡò:-ndí-ɡà* ‘what will not come’

c. *ɛ̀* plus participle with regular tone
ɛ̀ *ɛ́ɡò bò* ‘what will come’, (532c) in §19.5

For nonsubject relatives see (433b-c) in §14.4.5. See also ‘all that they had replastered’ in (540) in Text 1.

The default human head is *ntá* ‘person’: *è ntá* [L]*èɡè* ‘the one (= person) who came’.

14.2.5 Conjoined NP as head

There is no syntactic constraint against a conjoined NP as the head of a relative. The main clause in (411a) is easily converted into the subject relative in (411b).

(411) a. *[yɔ̀:-ɡè* *nì]* *[wálá-ɡé* *ní]* *jáy^{n}-y^{n}ì*
[woman-Pl **and**] [man-Pl **and**] fight.Pfv-3PlSbj
‘Women and men fought (with each other).’

b. *[è* [H+]*yɔ́:-ɡè* *nì]* *[è* [H+]*wálá-ɡé* *ní]* *bòw^{n}* *jáy^{n}-ɡé*
[Def [H+]woman-Pl **and**] [Def [H+]man-Pl **and**] together fight.Pfv.Ppl-Pl
‘the women and men who fought’

14.2.6 Headless relative clause

Based on present data, completely headless relatives do not appear to be regular in Penange. Headless adverbial relatives, where e.g. ‘time’, ‘place’, or ‘manner’ is omitted, are nonsubject relatives, whose verb-participles are not always distinct in form from main-clause verbs. Even in relatives with overt participial marking (mostly negative relatives), my assistant rejected headless adverbial relatives.

14.2.7 Temporal head noun repeated as “possessed” noun after participle

Some Dogon languages make use of nouns following the verb-participle that effectively echo or double the internal head noun. In some of the languages this is limited to or most common in adverbial relatives where an internal head meaning ‘time’ (also ‘day’, ‘year’, etc.), ‘place’, or ‘manner’ can be repeated after the verb-participle, usually in the tonal form of a possessed noun. The construction is therefore of the type [[people time come.Pfv.Ppl] [POSS]time] meaning ‘(the time) when the people came’, where POSS is a tone overlay associated with possession. Usually the speaker has the option of omitting either the internal or the postparticipial occurrence of ‘time’. In some Dogon languages, such as Togo Kan, this construction is more productive and can extend to singular or plural human heads. Another detail is that the

doubled noun may be a synonym rather than an actual copy, especially for heads like ‘day’ or ‘year’.

Such doubling is not usual in Penange, but there are some examples of postparticipial temporal nouns ‘time’ or ‘year’, with {HL} overlay consistent with possessed status, in adverbial relatives that presuppose an omitted internal head noun with the same sense. See (452) in §15.2.1.1 below, and compare it to (437b-c) in §14.4.6 with ‘time’ as internal head and no doubling.

Manner adverbial relatives seem to have one or the other of bànà ‘manner’ as internal head, or postposition-like pínì ‘like’ after the verb-participle, rather than doubling bànà (§15.3.2.1-2).

I have not observed doubling with spatial nouns like ‘place’ as heads; instead, a locative postposition bà rather than a doubled head noun comes after the verb-participle, as in (465) in §15.3.1. However, {HL}-toned ^{HL}*gêŋ* ‘place’ is attested after a subordinated main-like clause as a ‘the fact of …’ complementizer before matrix-clause ‘know’, ‘hear’, or ‘forget’, see (483c) in §17.2.1, (486b) in §17.2.2.2, and (498) in §17.4.6.

14.3 Pronominal-subject clitics in nonsubject relative

If a nonsubject relative, such as an object relative, has a pronominal subject, it is expressed as a proclitic on the verb for 1st/2nd persons and for 3Pl, and as an enclitic to the verb for 3Sg. Proclitics in relative clauses affect the tones of the verb-participle. This is also true in main clauses (for 1st/2nd persons), but the tones of participles differ from those of main-clause verbs. 3Pl subject is expressed by a proclitic *ŋké* in relatives, but by suffixes in main clauses. 3Sg subject is expressed by enclitic *na* in relatives; its tone is carried over from those of the participle, which may be H or L depending on context.

(412) a. *[è* $^{H+}$*nâ:]* *á* / *ŋ́* / *ŋké* *sògù-lè*
[Def $^{H+}$cow] **2SgSbj** / **1SgSbj** / **3PlSbj** buy-Rev.Pfv.Ppl
‘the cow that you-Sg / I / they sold’

b. *[è* $^{H+}$*nâ:]* *à* / *ŋ̀* *sógú-lé*
[Def $^{H+}$cow] **2PlSbj** / **1PlSbj** buy-Rev.Pfv.Ppl
‘the cow that you-Pl / we sold’

c. *[è* $^{H+}$*nâ:]* ^{L}*sògù-lè* *nà*
[Def $^{H+}$cow] ^{L}buy-Rev.Pfv.Ppl **3SgSbj**
‘the cow that he or she sold’

In a few examples involving adverbial relatives, there is no pronominal (or other) overt marking of an impersonal-generic subject. See (466b) in §15.3.2.1 (‘how to go up there’).

14.4 Verbal participle in relative clause

Verbs in relative clauses function syntactically as nouns (or nominal modifiers), and can therefore take plural suffix *-gè* (§14.4.1 below). They can reasonably be called verb-participles. Some but not all of them have overt participial suffixes, which if present precede plural *-gè*. The main participial suffixes are *-gà*, *-yà*, and *-(m)bè*. A brief summary of their

contexts is in (413), distinguishing subject from nonsubject relatives. Nonsubject relatives also include pronominal-subject conjugation. Details are given in sections below.

(413) *-gà* subject relatives (negative only):
- perfective negative *-l-gà* (§14.4.5)
- experiential perfect negative: *-téː-ndí-gà* (§14.4.5)
- imperfective negative *-ndí-gà* (§14.4.6)
- progressive negative *wǒl-gà* (§14.4.6)
- stative negative *-ndá-gà* (§14.4.7)

-yà nonsubject relatives (some negative, some positive):
- positive:
  - experiential perfect *-téy-yà* (§14.4.2)
  - positive imperfective *b-yà* (1Sg, 1Pl, 3Pl) (§14.4.3)
  - positive imperfective *-yà* (2Sg, 2Pl) (§14.4.3)
  - stative *-yà* (§14.4.4)
- negative:
  - perfective negative *-lí-yà* (§14.4.5)
  - stative negative *-nd-yá* (§14.4.7)

-(m)bɛ̀ subject and nonsubject relatives:
- past (replacing *=ye*) (§14.4.8)

(none) subject relatives:
- perfective positive, stem {H}-toned (§14.4.2)
- experiential perfect *-tɛ̀* (§14.4.2)

nonsubject relatives:
- perfective positive (§14.4.2)

14.4.1 Position of plural *-gè*

The best evidence for participial status of the relative-clause verb is that plural *-gè* is added to it rather than to the internal head NP, with minor exceptions.

(414a) is a main clause with plural subject. (414b) is the corresponding subject relative. The only sign that 'dog(s)' is plural in (414b) is plural suffix *-gè* on the verb, which can therefore be analysed as a morphological participle. This is also the case in the object relative (414c), which also shows that *-gè* follows postparticipial 3Sg subject enclitic *na*. Comparing (414a) with relative clauses (414b-c), *-gè* seemingly jumps from the head NP to the verb-participle. Things are slightly different when the head NP contains a nonsingular numeral. In simple NPs of the form (Det-)N-Num or (Det-)N-Adj-Num, plural *-gè* is added to the word preceding the numeral: (Det-)[N-*gè*]-Num or (Det-)-N-[Adj-*gè*]-Num. This form is retained without change when (Det-)[N-*gè*]-Num or (Det-)-N-[Adj-*gè*]-Num functions as the internal head of a relative (414d-e). Obviously, if the listener correctly identified 'the three dogs' or 'the three women' in these examples as the internal heads, plural marking on the verb-participle is redundant. Such a redundant *-gè* is allowed, but optional.

(414) a. *[è* H+*ŋkɛ́-gɛ́]* *yɔ̀:-gè* *núŋg-yɛ̀*
[Def H+dog-**Pl**] woman-Pl bite.Pfv-3PlSbj
'The dogs bit the women.'

b. *[è* H+*ŋkɛ́]* *mì-ŋ* *núŋgɛ́-gɛ́*
[Def H+dog] 1Sg-Acc bite.Pfv.Ppl-**Pl**
'the dogs that bit me'

c. *[è* H+*ŋkɛ́]* *[è* H+*yɔ̂:]* L*nùŋgɛ̀* *ná-gè*
[Def H+dog] [Def H+woman] Lbite.Pfv.Ppl 3SgSbj-**Pl**
'the women who(m) the dog bit'

d. *[è* H+*ŋkɛ́-gè* *tá:ndì]* *mì-ŋ* *núŋgɛ́(-gɛ́)*
[Def H+dog-**Pl** three] 1Sg-Acc bite.Pfv.Ppl-**Pl**
'the three dogs that bit me'

e. *[è* H+*ŋkɛ́]* *[è* H+*yɔ́:-gè* *tá:ndì]* L*nùŋgɛ̀* *nà* / *ná-gè*
[Def H+dog] [Def H+woman-**Pl** three] Lbite.Pfv.Ppl 3SgSbj(-**Pl**)
'the three women who(m) the dog bit'

Lexically plural pronouns are acceptable as head NPs, but require plural suffixation on the participle; see 'we who are here' (409a) in §14.2.3.

There is some evidence that head NPs can be treated as morphosyntactically singular even when the pluralized participle shows that the referent in question is plural. We will see later that when a possessor is head NP, the possessum takes 3Sg rather than 3Pl pronominal possessor "agreement" even when an overtly pluralized participle reveals that the possessor is referentially plural; see especially (448b) in §14.7.3.

14.4.2 Participles of positive perfective-system verbs

Examples (415a-b) are perfective positive main clauses with 3Sg and 3Pl subject, respectively. The subject relative based on them is in (415c), in singular and plural versions distinguished by presence/absence of *-gè* (here in the form *-gɛ́*) on the verb-participle. Another subject relative is (415d). The participle in such relatives consists of the E/I-stem as in main-clause 3Sg subject perfectives. The participle is {H}-toned in these examples. When the verb stem is prosodically light, the participle is identical segmentally and tonally to the 3Sg-subject main-clause verb, as with *núŋgɛ́* 'bit' in (415a,c). However, even trisyllabic participles are fully {H}-toned, like *yígíré* in (415d), versus {HL} for the 3Sg main-clause verb (*yígírè-∅* 'he/she shook'). Even in the case of *núŋgɛ́* the verbal and participial functions are easily distinguished when the subject is 3Pl, making the verb-participle trisyllabic at word level; compare (415b) with the plural version of (415c) that includes H-toned plural *-gɛ́* on the verb-participle.

(415) a. *ŋkɛ̀* *mì-ŋ* *núŋgɛ́-∅*
dog 1Sg-Acc bite.Pfv.Ppl-3SgSbj
'A/the dog bit me.'

b. *ŋkɛ̀-gè* *mì-ŋ* *núŋg-yɛ̀*
dog-Pl 1Sg-Acc bite.Pfv.Ppl-3PlSbj
'(The) dogs bit me.'

c. *[è* [H+]*ŋkɛ́]* *mì-ŋ* *núŋgɛ́(-gé)*
[Def [H+]dog] 1Sg-Acc bite.**Pfv.Ppl**(-Pl)
'the dog(s) that bit me'

d. *wálá* *mì-ŋ* *yígíré*
man 1Sg-Acc shake.**Pfv.Ppl**
'a/the man who shook me'

{H}-toned perfective verb-participles are usual in subject relatives when they follow non-head constituents, as in these examples. By contrast, in §14.2.4 above we saw that the default nonhuman head *ɛ́* is followed by an {L}-toned perfective (*ɛ́ ègè* 'what came'). Definite head NPs like *è* [H+]*dém* 'the house' (< *dèm*) and *è* [H+]*álàmùnɔ̀* 'the sheep-Sg' are likewise followed by {L}-toned perfective participles, as in (408a,g) in §14.2.2 and (406) in §14.2.1. The same is true when an adjectival and/or numeral modifier follows the definite noun, as in (408b-e). Contrast the possessed NP with {H}-toned modifiers and {H}-toned participle in (408f). This suggests that the participle is drawn into the target domain of tonosyntactic operations controlled by an NP-initial determiner if the head and the participle are adjacent. However, in combinations involving heavy NPs and clause-final participles, teasing apart a final {L} overlay from phonetic downdrift is difficult, and more data are needed on this point.

Nonsubject relatives are in (416). Whereas subject relatives have no pronominal-subject clitics, nonsubject relatives require them, even if the subject has been specified by a clause-initial nonpronominal NP. For example, the subject '(the) dog' in (416a,c) is doubled by a 3Sg enclitic *ná*, and the subject '(the) dogs' in (416b) is doubled by 3Pl proclitic *ŋkɛ́*. When the head is plural, there is some variability as to whether its plurality is expressed by *-gè* in the head noun, on the verb-participle, or both (416d).

(416) a. *[è* [H+]*dénì]* *ŋkɛ̀* *mì-ŋ* *núŋgɛ́* *ná*
[Def [H+]day] dog 1Sg-Acc bite.**Pfv.Ppl** 3SgSbj
'the day a/the dog bit me'

b. *[è* [H+]*dénì]* *ŋkɛ̀-gè* *mì-ŋ* *ŋkɛ́* *núŋgɛ́*
[Def [H+]day] dog 1Sg-Acc 3PlSbj bite.**Pfv.Ppl**
'the day (the) dogs bit me'

c. *[è* [H+]*wɛ̂:]* *ŋkɛ̀* *núŋgɛ́* *ná*
[Def [H+]child] dog bite.**Pfv.Ppl** 3SgSbj
'the child who(m) a/the dog bit'

d. *[è* [H+]*wɛ̂:* / [H+]*wɛ́:-gè]* *ŋkɛ̀-gè* *ŋkɛ́* *núŋgɛ́(-gé)*
[Def [H+]child / [H+]child-Pl] dog-Pl 3PlSbj bite.**Pfv.Ppl**(-Pl)
'the child/children who(m) (the) dogs bit'

The paradigms of 'bite' and 'shake' in nonsubject perfective relatives are in (417). The 3Sg form sometimes sounds low-pitched in long relative clauses, but it behaves as structurally {H}-toned.

(417)

	‘(the one that) __ bit’	‘(the one that) __ shook’
1Sg	*ŋ̀ nùŋgɛ́*	*ŋ̀ yìgìré*
1Pl	*ǹ núŋgɛ́*	*ǹ yígíré*
2Sg	*á nùŋgɛ́*	*á yìgìré*
2Pl	*à núŋgɛ́*	*à yígíré*
3Sg	*núŋgɛ́ ná*	*yígíré ná*
3Pl	*ŋké núŋgɛ́*	*ŋké yígíré*

The danger of confusing such participles with regular main-clause verbs is obviated by tonal differences. 1Sg and 2Sg participles in (417) have {LH} overlays, versus {L} or for heavy verbs {LHL} in main clauses. 1Pl and 2Pl participles in (417) have {H} overlays, versus {HL} in main clauses (§10.2.1.1). In the 3Sg subject combination, the only one in (417) that has no preverbal proclitic, it appears that the tones are dropped to {L} by a preceding definite NP (with or without modifiers). Relevant examples are (414c,e) in §14.4.1 and (412c) in §14.3. Further study is needed on this point.

In (588) in Text 4, *kɔ́mɔ́ kɔ̀mɛ́ sèlè* ‘anybody who shouts’ has an impersonal subject that does not require an overt 3Sg pronominal *ná*.

The experiential perfect is illustrated in a subject relative (418a) and in a nonsubject relative (418b). The latter shows participial *-yà* as with statives (and negatives).

(418) a. *ntá* *nìgè* *màlgà-tè(-gé)*
person elephant see-**ExpPrf.Ppl**(-Pl)
‘a person/people who has/have (once) seen an elephant’

b. *yè:* *ŋ̀* *màlgà-téy-yà*
thing 1SgSbj see-**ExpPrf-Ppl**
‘a thing/things that I have (once) seen’

The paradigm for experiential perfective nonsubject relatives is (419). The tonal effect of proclitics is limited to the main verb stem, as in main clauses (§10.2.1.4).

(419)

	‘(a thing that) __ has (once/ever) seen’
1Sg	*ŋ̀ màlgà-téy-yà*
1Pl	*ǹ málgà-téy-yà*
2Sg	*á màlgà- téy-yà*
2Pl	*à málgà-téy-yà*
3Sg	*màlgà-téy-yá nà*
3Pl	*ŋké málgá-téy-yà*

14.4.3 Participles of positive imperfective-system verbs

Subject relatives based on the main imperfective positive type with auxiliary *bò* are in (420). The main verb is {HL}-toned, with the H-toned element limited to the first syllable (or first mora of monosyllabics).

(420) a. *[è* $^{H+}$*yɔ̂:]* *nùw^{n}* *káy^{n}* *kân* *bò*
[Def $^{H+}$woman] here work(n) do.Ipfv **Ipfv.Ppl**
'the woman who works here'

b. *ntá* *kɔ̀njɛ̀* *nɔ̂:* *bò-gè*
person beer drink.Ipfv **Ipfv.Ppl**-Pl
'people who drink beer'

c. *ntá* *nàmà* *sógù-lò* *bò-gè*
person meat buy-Rev.Ipfv **Ipfv.Ppl**-Pl
'people who sell meat'

There is no difference between imperfective and progressive relatives. The subject relatives in (421) were elicited as progressives (e.g. *des gens qui sont en train de ...*) but have the same form as imperfectives. This is the same situation as with focalized clauses.

(421) a. *ntá* *káy^{n}* *kân* *bò-gè*
person work(n) do.Ipfv **Ipfv.Ppl**-Pl
'people who are working'

b. *ntá* *nàmà* *sógù-lò* *bò-gè*
person meat buy-Rev.Ipfv **Ipfv.Ppl**-Pl
'people who are selling meat'

Nonsubject relatives are in (422).

(422) a. *[yɔ̀:-gé* *géŋ* *ándò* *ŋké* *b-yà* *[wàj-jà* *bó-∅]*
[woman-Pl place go.Ipfv 3PlSbj **Ipfv-Ppl**] [far-Pred be-3SgSbj]
'The place where (the) women go is far away.'

b. *kɔ̀njɛ̀* *nà-á-yà*
beer drink.**Ipfv**-2SgSbj-**Ppl**
'the beer that you-Sg drink'

The paradigm for nonsubject relatives is (423), using 'go'. Forms that do not include auxiliary *bò* are flagged by (!). Participial *-yà* (also used in statives and negatives) is present except in the 3Sg form, but in the 1Sg, 1Pl, and 3Pl it is added to *bò* (hence *b-yà* or *bí-yà*), whereas in the 2Sg and 2Pl *-yà* is added directly to the second person proclitic. In the main-clause paradigm, the second person proclitics induce lenition of *bò* to *wò* but do not delete it.

(423) '(a place where) __ go(es)/will go'

1Sg	*àndò ŋ́ b-yà*		
1Pl	*ándò ŋ̀ bí-yà*		
2Sg	*àndà-á-yà*	(!)	
2Pl	*ándà-à-yà*	(!)	
3Sg	*àndò nà*	(!)	
3Pl	*ándò ŋké b-yà*		
LogoSg	*ándà-à-yà*	(!)	(homophonous with 3Pl)

Paradigms of nonsubject imperfective participles for various verbs are in (424).

(424)

subject	'go in'	'do'	'dance'	'shatter'
1Sg	*nɔ̀: ŋ́ b-yà*	*kànù ŋ́ b-yà*	*yɛ̀bɔ̀ ŋ́ b-yà*	*tèbà-gò ŋ́ b-yà*
1Pl	*nɔ̂: ŋ̀ bí-yà*	*kánù ŋ̀ bí-yà*	*yɛ́bɔ̀ ŋ̀ bí-yà*	*tébá-gò ŋ̀ bí-yà*
2Sg	*nɔ̀-á yà*	*kànà-á yà*	*yɛ̀bà-á yà*	*tèbà-gà-á yà*
2Pl	*nɔ́-à yà*	*kánà-à yà*	*yɛ́bà-à yà*	*tébá-gà-à yà*
3Sg	*nɔ̀: nà*	*kàn nà*	*yɛ̀bɔ̀ nà*	*tèbà-gò nà*
3Pl	*nɔ̂: ŋké b-yà*	*kánù ŋké b-yà*	*yɛ́bɔ̀ ŋké b-yà*	*tébá-gò ŋké b-yà*
LogoSg	(= 2Pl in form)			

For apparently subjectless manner adverbials in impersonal-subject contexts, see *bànà dìgɔ̀ b-yá* 'how to go up' in (466b) in §15.3.2.1, and *bànà kàn bí-yà* 'how to do (it)' in (567) in Text 3.

14.4.4 Participles of positive stative verbs

Derived stative verbs are {L}-toned in the subject relatives in (425).

(425) *[è* $^{H+}$*wálá]* *èm-bà* *sòmbà* / *dà:*^{n}
[Def $^{H+}$man] there squat.**Stat.Ppl** / sit.**Stat.Ppl**
'the man who is squatting/sitting over there'

Nonsubject stative relatives are in (426). Participial *-yà* is typical of such relatives.

(426) *géŋ* *dà:*^{n}*-yà* / *sòmb-yà* *nà*
place sit.**Stat-Ppl** / squat.**Stat-Ppl** 3SgSbj
'(the place) where he/she is sitting/squatting'

The paradigm for 'be squatting' in nonsubject stative relatives is (427). Although the medial tone in plural-subject participles like 1Pl *ŋ̀ sómb-yà* is disguised by syncope, the verb stem is likely {HL} rather than {H}. Compare the {HL}-toned stems in plural-subject imperfective and underived stative nonsubject participles in (423) above and (429) below. I therefore suggest underlying /sómbì-yà/ for the 1Pl, 2Pl, and 3Pl participles in (427).

(427)

	'(where) __ is squatting'
1Sg	*ŋ́ sòmb-yà*
1Pl	*ŋ̀ sómb-yà*
2Sg	*á sòmb-yà*
2Pl	*à sómb-yà*
3Sg	*sòmb-yà nà*
3Pl	*ŋké sómb-yà*

The forms used in subject relatives of defective stative (quasi-)verbs are in (428). These participles are {H}-toned. Forms for 'know' and 'want' are based on the morphologically simple form of the stem used (in main clauses) in 1st/2nd person subject contexts (1Sg *ŋ́ ɲèy^{n}* 'I know', *ŋ́ kèy^{n}* 'I want'), see §11.2.5.1-2.

(428)	stative (3Sg)	subject relative	gloss
	bô-∅	*bó*	'be (somewhere)'
	sâ^{n}-∅	*sá:^{n}*	'have'
	ɛ́ɲɔ̀ bò-∅	*ɛ́y^{n}*	'know'
	kɛ́ɲù bò-∅	*kɛ́y^{n}*	'want'
	(m)pímà: bò-∅	*(m)pímá*	'resemble'

Participial forms of the defective statives in nonsubject relatives are in (429). There are significant irregularities except for 'resemble'. 'Be' and 'resemble' have transparent participial *-yà*, as in derived statives. The other three statives in (429) are less transparent but probably have a phonologically disguised *-yà. The forms for 'know' and 'want' are similar to the forms (*ɛ́ɲɔ̀* 'know', *kɛ́ɲù* 'want') that are used in main clauses with third person subjects, before the 'be' auxiliary. 'Have' fluctuates between *sa:^{n}* and *sí:^{n}yà* in several combinations.

(429) Nonsubject relatives of defective statives

	'be'	'have'	'know'	'want'	'resemble'
1Sg	*ŋ́ bì-yà*	*ŋ́ sà:^{n}* ~ *ŋ́ sì:^{n}yà*	*ŋ́ ɲ-èɲà*	*ŋ́ kèɲà*	*ŋ́ (m)pìm-yà*
1Pl	*ŋ̀ bí-yà*	*ŋ̀ sí:^{n}yà*	*ŋ̀ ɲ-ɛ́ɲà*	*ŋ̀ kɛ́ɲà*	*ŋ̀ (m)pím-yà*
2Sg	*á bì-yà*	*á sà:^{n}* ~ *á sì:^{n}yà*	*á ɲ-èɲà*	*á kèɲà*	*á (m)pìm-yà*
2Pl	*à bí-yà*	*à sí:^{n}-yà*	*à ɲ-ɛ́ɲà*	*à kɛ́ɲà*	*à (m)pím-yà*
3Sg	*bì-yà nà*	*sá:^{n} ná* ~ *sí:^{n}yá ná*	*èɲà nà*	*kèɲà nà*	*(m)pìm-yà nà*
3Pl	*ŋké bí-yà*	*ŋké sâ:^{n}* ~ *ŋké sí:^{n}yà*	*ŋké ɛ́ɲà*	*ŋké kɛ́ɲà*	*ŋké (m)pím-yà*

Impersonal-subject relatives based on the imperfective auxiliary related to 'be' end in *bí-yà* without an overt 3Pl *ŋké* (§5.1.10).

14.4.5 Participles of negative perfective-system verbs

Perfective negative subject relatives have *-l-gà*, consisting of perfective negative suffix *-l(ì)* and subject-relative negative participial *-gà*. The verb stem is the E/I-stem, with {H} tones. The plural is *-l-gá-gè*.

(430) a. *[è* H+*ŋkɛ́]* *mì-ŋ* *núŋgɛ́-l-gà* / *núŋgɛ́-l-gá-gè*
[Def H+dog] 1Sg-Acc bite-PfvNeg-**Ppl.Neg** / …-Pl
'the dog(s) that didn't bite me'

b. *[è* H+*wê:]* *kùbɔ̀* *kúbɛ́-l-gà*
[Def H+child] farming(n) do.farming-PfvNeg-**Ppl.Neg**
'the child who didn't do farm work'

Nonsubject relatives have a conjugated form of *-lí-yà*, which ends in the nonsubject-relative version of the negative participial suffix (431).

(431) a. *[è* H+*dên]* *á* *y-ègè-lí-yà*
[Def H+day] 2SgSbj Epen-come-PfvNeg-**Ppl.Neg**
'the day you-Sg didn't come'

b. *[è* H+*álàmùnɔ̀]* *ŋ̀* *sɔ́gɛ́-lí-yà*
[Def H+sheep] 1PlSbj buy-PfvNeg-**Ppl.Neg**
'the sheep-Sg that we didn't buy'

The paradigm for nonsubject 'didn't come' is (432).

(432) '(the day) __ didn't come'

1Sg	*ŋ̀ y-ègè-lí-yà*
1Pl	*ŋ̀ y-égé-lí-yà*
2Sg	*á y-ègè-lí-yà*
2Pl	*à y-égé-lí-yà*
3Sg	*ègè-l-yá nà*
3Pl	*ŋké égé-lí-yà*

The experiential perfect has *-ndi* as negative suffix, rather than *-li*, in main clauses. In relative clauses, this *-ndi* is followed by the regular negative participial suffixes, *-gà* for subject relative and *-yà* for nonsubject relative.

(433) a. *[è* H+*wálá]* *nìgè* *málgá-té:-ndí-gà*
[Def H+man] elephant see-ExpPrf-Neg-**Ppl.Neg**
'the man who has never seen an elephant'

b. *ɛ̀* *nùndò-tè:-ndì-yá* *nà*
what hear-ExpPrf-Neg-**Ppl.Neg** 3SgSbj
'something that he/she has never heard'

c. *ɛ̀* *ŋké* *nùndò-tè:-ndí-yà*
what 3PlSbj hear-ExpPrf-Neg-**Ppl.Neg**
'something that they have never heard'

14.4.6 Participles of negative imperfective-system verbs

Imperfective negative subject relatives are in (434). Imperfective negative *-ndí-* (identical to the 3Sg form in the main-clause paradigm) is followed by negative participial *-gà*.

(434) a. *ŋkɛ̀* *nùŋgɔ̀:-ndí-gà*
dog bite-IpfvNeg-**Ppl.Neg**
'a dog that doesn't bite'

b. *[è* *wê:]* *àndɔ̀:-ndí-gà(-gè)*
[Def child] go-IpfvNeg-**Ppl.Neg**(-Pl)
'the child(ren) who won't go'

Nonsubject relatives are in (435). Except for the 3Pl subject form (435b), they are based on the regular main-clause conjugated forms, plus negative participial *-yà*.

(435) a. *nàmà* *tɛ̀mɔ́-ɔ́-l-yà*
meat eat.meat-1SgSbj-IpfvNeg-**Ppl.Neg**
'meat that I do not eat'

b. *nàmà* *tɛ̀mɔ̀:-nd-yá-gà*
meat eat.meat-IpfvNeg-3PlSbj-**Ppl.Neg**
'meat that they don't eat'

The paradigm for nonsubject relatives with 'eat meat' is (436). The 3Pl subject form is notable for not involving 3Pl subject proclitic *ŋkɛ́*. Rather, it is based directly on the main-clause 3Pl imperfective negative (*tɛ̀mɔ̀:-nd-yá* 'they do not eat meat'). Instead of adding the usual nonsubject-relative negative participle *-yà*, resulting in a #-ya-ya suffix sequence, it adds the other (i.e. usually subject-relative) negative participial suffix *-gà*.

(436) '(the meat that) __ don't eat'

1Sg	*tɛ̀mɔ́-ɔ́-l-yà*
1Pl	*tɛ́mɔ̀-ɔ̀-lí-yà*
2Sg	*tɛ̀má-á-l-yà*
2Pl	*tɛ́mà-à-lí-yà*
3Sg	*tɛ̀mɔ̀:-nd-yá nà*
3Pl	*tɛ̀mɔ̀:-nd-yá-gà* (!)

For the progressive negative with 'be' auxiliary, (437a) is a subject relative, and (437b) is a nonsubject relative.

(437) a. *yɔ̀:* *ɲɔ̀:* *wɔ̌l-gà*
woman eat.Ipfv not.be-**Ppl.Neg**
'a woman who is not eating'

b. *[è* *H+wágàr]* *ɲɔ̀:* *ŋ́* *wòlí-yà*
[Def H+time] eat.Ipfv 1SgSbj not.be-**Ppl.Neg**
'the time when I am not eating'

c. *[è* H+*wágàr]* *ɲɔ̀:* *ŋké* *wòlí-yà*
[Def H+time] eat.Ipfv 3PlSbj not.be-**Ppl.Neg**
'the time when they are not eating'

14.4.7 Participles of negative stative verbs

A subject relative with a negative form of a derived stative is (438).

(438) *[è* H+*wálá]* *èm-bà* *sòmbá-ndá-gà*
[Def H+man] there squat-StatNeg-**Ppl.Neg**
'the man who is not squatting/sitting over there'

A nonsubject relative is (439).

(439) *géŋ* *sòmbà-nd-yá* *nà*
place squat-StatNeg-**Ppl.Neg** 3SgSbj
'where he/she is sitting/squatting'

The paradigm for 'not be squatting' in nonsubject stative relatives is (440).

(440) '(where) __ is not squatting'

1Sg	*ŋ̀ sòmbá-nd-yà*
1Pl	*ŋ̀ sómbá-nd-yà*
2Sg	*á sòmbá-nd-yà*
2Pl	*à sómbá-nd-yà*
3Sg	*sòmbà-nd-yá na*
3Pl	*ŋké sòmbá-nd-yà*

Negative subject-relative participles of defective statives are in (441).

(441)

stative (3Sg)	subject relative	gloss
wǒl-∅	*wól-gà*	'not be (somewhere)'
sá:-ndá-∅	*sá:-ndá-gà*	'not have'
índó-∅	*índó-gà*	'not know'
kéy-là-∅	*kéy-lá-gà*	'not want'
(m)pímá-ndá-∅	*(m)pímá-ndá-gà*	'not resemble'

Nonsubject counterparts are in (442).

(442) Negative nonsubject relatives of defective statives

	‘not … … be’	… have’	… know’	… want’
1Sg	*ŋ̀ wòl-yà*	*ŋ̀ sǎ:-nd-yà*	*ŋ̀ ɲ-ǐnd-yà*	*ŋ̀ kěy-l-yà*
1Pl	*ǹ wǒl-yà*	*ǹ sá:-nd-yà*	*ǹ ɲ-índ-yà*	*ǹ kéy-l-yà*
2Sg	*á wòl-yà*	*á sǎ:-nd-yà*	*á ɲ-ǐnd-yà*	*á kěy-l-yà*
2Pl	*à wǒl-yà*	*à sá:-nd-yà*	*à ɲ-índ-yà*	*à kéy-l-yà*
3Sg	*wòl-yá nà*	*sà:-nd-yá nà*	*ìnd-yá nà*	*kèy-l-yá nà*
3Pl	*ŋké wǒl-yà*	*ŋké sá:-ndy-à*	*ŋké índ-yà*	*ŋké kéy-l-yà*

14.4.8 Participle of past-time forms

The participial suffix corresponding to past clitic *=ye* in main clauses is *-bɛ̀*, sometimes extended as *-mbɛ̀*. It occurs in subject relatives (443a-b) and, with conjugated verb-participles, in nonsubject relatives (443c).

(443) a. *yɔ̀:* *nùŋ* *bó-mbɛ̀*
woman here be-**Ppl.Past**
‘the woman who was around here (not far away)’

b. *ntá* *dèm* *sá:^{n}-bɛ̀*
person house have.Ppl-**Ppl.Past**
‘the person who had a house’ (plural *sá:^{n}-bé-gè*)

c. *géŋ* *dèm* *ŋ̀* *sǎ:^{n}-bɛ̀*
place house 1SgSbj have-**Ppl.Past**
‘the place where I had a house’

14.5 Relative clause involving verb- or VP-chain

When a relative clause is based on a complex construction (tight or loose) containing a final verb and one or more nonfinal verbs, only the final verb is participialized, and only it can be morphologically pluralized (suffix *-gè*). The nonfinal verb has the same form as in non-relative main clauses (chapter 15).

(444) a. *[è* *$^{H+}$yɔ̂:]* *yèbù* *yèbà→* *nàyè-gè,*
[Def $^{H+}$woman] dance(n) dance-**Ipfv** spend.night.**Pfv.Ppl-Pl**,
mbá *bí-yà*
where? be-3PlSbj
‘Where are [the women who spent the night dancing]?’
(for *yèbà→* see §15.2.1.2)

b. *mbá* *[[è* *$^{H+}$ntá]* *[ɲǎ:* *sòŋgè* *nà]* *ɲé:-gé]*
where? [[Def $^{H+}$person] [meal bring.**Pfv** 3SgSbj] eat.**Pfv.Ppl-Pl**]
‘Where are the people who brought meals and ate?’
(for *sòŋgè nà* see §15.2.2.1)

14.6 Late-NP elements that follow the verb (or verbal participle)

14.6.1 Plural (*-gè*)

As noted in §14.4.1, when the head NP is plural, the plural suffix *-gè* is added to the participle, not to the internal head. The exception is that if the internal head includes a nonsingular numeral, plural *-gè* occurs as usual on the word that precedes the numeral (noun or postnominal adjective), and is optionally expressed on the participle as well. Examples of plural *-gè* on participles are in §14.4.1 and scattered throughout this chapter.

14.6.2 Position of 'all' quantifier

sèlè 'all' follows the verbal participle. If the referent is countable, the participle is normally pluralized (suffix *-gè*) for universal quantification (445a), but not for distributive quantification (445b).

(445) a. *[nà: á sɔ̀gɛ̀-gé sèlè] mì-ŋ tà:rà*
[cow 2SgSbj buy.Pfv.Ppl-Pl **all**] 1Sg-Acc show.Imprt
'Show me all the cows that you-Sg bought.' (< *sɔ̀gɛ́-gè*)

b. *[yɔ: ègé sèlè] [tɛ̂:mdɛ́ré-gè nègà] tábá*
[woman come.Pfv.Ppl **all** [hundred-Pl two] give.Imprt
'Give-2Sg two hundred (i.e. 1000 francs CFA) to each woman who comes!'

14.7 Grammatical relation of relativized-on NP

In examples in the following subsections, the internal head NP is bolded in interlinears. Most aspects of the form of these relatives have been covered in the preceding sections.

14.7.1 Subject relative clause

Further examples of subject relatives are in (446). If the head NP is plural, suffix *-gè* is added to the verb-participle.

(446) a. *[è* $^{H+a}$*wê:] ò-*^{n} *núŋgɛ́(-gé)*
[**Def** $^{H+}$**child**] 2Sg-Acc bite.Pfv.Ppl(-Pl)
'the child(ren) who bit you-Sg'

b. *ògà [è* $^{H+}$*wê:] dùgù-rò bó* / *bò-gé*
tomorrow [**Def** $^{H+}$**child**] run.Ipfv Ipfv.Ppl(-Pl)
'the child(ren) who will run tomorrow'

c. *[è* $^{H+}$*wê:] ŋkìndɛ̀(-gé)*
[**Def** $^{H+}$**child**] die.Pfv.Ppl(-Pl)
'the child(ren) who died'

14.7.2 Object relative clause

Further examples of object relatives are in (447). Forms for singular and plural object head NPs are distinguished by the final plural *-gè* on the participle, under the same conditions as for subject head NPs.

(447) a. *á:mádù* *[è* *$^{H+}$nâ:]* *sògù-lè* *nà* / *ná-gè*
Amadou [**Def** $^{H+}$**cow**] buy-Rev.Pfv.Ppl 3SgSbj(-Pl)
'the cow/cows that Amadou sold'

b. *[è* *$^{H+}$nâ:]=á* *sògù-lè* / *sògù-lé-gè*
[**Def** $^{H+}$**cow**]=2SgSbj buy-Rev.Pfv.Ppl(-Pl)
'the cow/cows that you-Sg sold'

c. *[è* *$^{H+}$nâ:]* *ò-^{n}* *ŋ́* *sógú-lé* / *sógú-lé-gè*
[**Def** $^{H+}$**cow**] 2Sg-Acc 1PlSbj buy-Rev.Pfv.Ppl(-Pl)
'the cow/cows that we sold you-Sg'

d. *á:mádù* *[è* *$^{H+}$wê:]* *sòŋè* *nà* / *ná-gè*
Amadou [**Def** $^{H+}$**child**] bring.Pfv.Ppl 3SgSbj(-Pl)
'the child/children whom Amadou brought'

e. *[è* *$^{H+}$ʔálámúnɔ̀]* *sògù-lé-l* *ŋ́* *dùndɛ̀* / *dùndɛ́-gè*
[**Def** $^{H+}$**sheep**] buy-Rev-VblN 1SgSbj look.for.Pfv.Ppl(-Pl)
'the sheep(-Pl) that I sought (=tried) to sell'

f. *[è* *$^{H+}$ʔálámúnɔ̀]* *ògà* *sògù-lé-l* *ŋ́* *kɛ̀ŋà* / *kɛ̀ŋá-gè*
[**Def** $^{H+}$**sheep**] tomorrow buy-Rev-VblN 1SgSbj want.Ppl(-Pl)
'the sheep(-Pl) that I want to sell tomorrow'

14.7.3 Possessor relative clause

The available examples of possessor relatives have are of the type '[the person] [whose house] fell', where the possessed NP is subject of a perfective positive verb-participle (448). The participle is in {L}-toned form. The possessive relationship is expressed directly by 3Sg possessor suffix *-nà* on the possessum. "3Sg" *-nà* is used even for plural possessors, since plurality of the referent (coindexed with the clause-internal possessor) is expressed by plural *-gè* on the participle (448b). As usual, if the head noun contains a nonsingular numeral, the head noun has plural suffix preceding the numeral (448c). If the possessum is plural, *-gè* may be added to it (448d), but there is some messiness in the data, especially in contexts where possessor number is expected to correlate one-to-one with possessed-entity number.

(448) a. *[[è* *$^{H+}$ntá]* *dèm-ná* *tìbɛ̀]* *mbá* *bó-∅*
[[**Def** $^{H+}$**person**] house-**3SgPoss** fall.Pfv.Ppl] where? be-3SgSbj
'Where is the person whose house fell?'

b. *[[è* *$^{H+}$ntá]* *dèm-nà* *tìbɛ̀-gé]* *mbá* *bí-yà*
[[**Def** $^{H+}$**person**] house-**3SgPoss** fall.Pfv.Ppl-**Pl**] where? be-3PlSbj
'Where are the people whose house(s) fell?'

c. *[[è* H+*ntá-gé* *nègà / tá:ndì]* *dèm-nà* *tìbè-gé]*
[[**Def** H+**person** **two/three**] house-**3SgPoss** fall.Pfv.Ppl-**Pl**]
mbá *bí-yà*
where? be-3PlSbj
'Where are the two/three people whose house(s) fell?'

d. *[è* H+*ntá]* *wè:-nà-gè* *dɔ̀gè]* *mbá* *bó-∅*
[**Def** H+**person**] child-**3SgPoss**-Pl die.Ppl.Pfv] where? be-3SgSbj
'Where is the person whose children died?'

See also '(you) the person whose work they are doing' in (570) in Text 3, where the possessed NP is the object of an imperfective verb-participle.

14.7.4 Relativization on the complement of a postposition

(449a) is a simple main clause with a purposive PP. The corresponding relative in (449b) has a literal structure roughly of the form "[[the honey$_x$] they came-Ppl [for it$_x$] yesterday] …", with 3Sg possessor *-nà* resuming 'the honey'.

(449) a. *[ìgè* *nâm]* *ég-yè*
[honey **Purp**] come.Pfv.Ppl-3PlSbj
'They have come for (the) honey.' (< *námù*)

b. *[[è* H+*ígè]* *yà:gù* *nǎm-nà* *ŋké* *égé]*
[[**Def** H+**honey**] yesterday **Purp-3SgPoss** 3PlSbj come.Pfv.Ppl]
mbá *bó-∅*
where? be-3SgSbj
'Where is the honey that they came for yesterday?'

The pattern of separating the relativized-on NP from a resumptive PP is also found with instrumental postposition *nì*. (450a) shows the relevant main clause, with *nì* directly following the complement NP. When the complement NP is relativized on, it is separated from the postposition, which therefore requires a resumptive discourse-definite demonstrative *ê:* (450b).

(450) a. *[[ín* L+*tàlà]* *nì]* *nàmá* *ŋ́* *sɛ̀mɛ̀*
[[Prox L+knife] Inst] meat 1SgSbj cut.Pfv
'I cut the meat <u>with that knife</u> [focus].' (*nàmà*)

b. *[[è* H+*tálà]* *[é:* *nì]* *nàmá* *ŋ́* *sɛ̀mɛ̀]*
[[**Def** H+**knife**] [**DiscDef** **Inst**] meat 1SgSbj cut.Pfv.Ppl]
mbá *bó-∅*
where? be-3SgSbj
'Where is the knife with which I cut-Past (the) meat.' (*ê:*, §4.4.1.2)

15 Verb (VP) chaining and adverbial clauses

15.1 Direct chains with bare nonfinal verb stems are absent

In grammars of other (mostly eastern) Dogon languages I have used the expression "direct chain" to denote sequences of one or more bare verb stems leading up to a final, regularly inflected verb. Direct chains in this sense are not attested in Penange, whose functionally comparable constructions involve either overt subordination of the first verb/VP (§15.2.1.3, §15.2.2.2) or parallel pronominal-subject conjugation of both verbs (§15.2.1.5).

15.2 Temporal adverbial clauses

15.2.1 Adverbial clauses expressing temporal overlap

15.2.1.1 Noun-headed temporal relative clause ('[at] the time when …')

Noun-headed temporal relative clauses are of the type '(at/on) the time/year/month/day (when) …'. The temporal noun is the head of a nonsubject relative. In (451), 'year' is the head and 'sow' is the (nonsubject) participle.

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(451)

wàyà	*númgé*	*ŋ́*	*tɔ̀mɛ̀,*
year	cowpeas	1SgSbj	sow.Pfv.**Ppl**,
kùmà:ŋgá	*wɛ̀:-l-∅*		
rain(n)	rain.fall-PfvNeg-3SgSbj		

'(In) the year when I planted cow-peas, the rain didn't fall.' (< *kùmà:ŋgà*)

It is also possible to express the temporal noun as a "possessed" noun, with {HL} overlay, following the clause denoting the relevant eventuality, which is therefore structurally the "possessor". (452) is therefore literally "(the) time/year [of [I came]]." The construction resembles adverbial relatives in some other Dogon languages where the postparticipial noun (e.g. 'time') is a copy or synonym of an internal head NP, as in "(the) year [of [the year when I came]]" (§14.2.7).

(452)

ŋ́	*y-ègɛ̀*	^{HL}*wâ:r* ~ ^{HL}*wá:rù* / ^{HL}*wáyà*
1SgSbj	Epen-come.Pfv	^{HL}**time** / ^{HL}**year**

'(at/in) the time/year when I came, …'

15.2.1.2 Imperfective subordinate clause with prolonged A/O- or U-stem

In (453a-f), the clause with prolonged final *a→*, *o→* , or *u→* on the {L}-toned verb denotes a continuous activity whose time interval overlaps with that of the main-clause eventuality. The subjects are coindexed and the prolonged verb is not conjugated for pronominal subject. The prolonged vowel is usually L-toned like the rest of its word, but it undergoes Final

Tone-Raising (§3.6.3.1) before L-toned 3Sg subject forms (453e). Whether the final vowel is "long" (a phonological feature) or "prolonged" (intonationally) is a tricky question. Exaggerated prolongation going beyond normal vowel length is certainly possible, emphasizing extended duration (453f).

(453) a. *[yèbù* *yɛ̀bà→]* *ŋ́* *nàyè*
[dance(n) dance.**while**] 1SgSbj spend.night.Pfv
'I spent the night dancing.' (i.e. 'I danced all night.')

b. *[yèbù* *yɛ̀bà→]* *náy-yè*
[dance(n) dance.**while**] spend.night.Pfv-3PlSbj
'They spent the night dancing.' (i.e. 'They danced all night.')

c. *[té:* *jà:ndà→]* *dɛ́nɔ̀* *bò-∅*
[tea put.up.on.**while**] spend.midday-Ipfv Ipfv-3SgSbj
'He will spend the mid-day making tea (on a burner).'

d. *dùgù-r-ò→* *núy^{n}-y^{n}ɛ̀*
run-Verb.**while** go.in.Pfv-3PlSbj
'They ran in.' (lit. "They went in running.")

e. *dùgù-r-ó→* *nwɛ̀:-l-∅*
run-Verb.**while** go.in-PfvNeg-3SgSbj
'He/She didn't run in.'

f. *ùnù→* *hâl* *wáj-jí-yè*
walk.**while** until distant-Inch.Pfv-3PlSbj
'They walked (and walked) until they had gone far away.'

See also *nùn nèmà→* 'taking (it) now' in (569) and *bògò→* 'while breaking (rocks)' in (571), both in Text 3.

The unconjugated verb form with final prolongation in this construction is somewhat similar to, but distinguishable (by vocalism and/or tone) from, certain conjugated verb forms with final long vowel. These include both versions of the final-long-vowel imperfective (§10.2.2.2) and a verb form used in purposive clauses before *lɛ̀* (§17.5.2).

15.2.1.3 Imperfective subordinate clause with *w^{n}* ~ *ŋ* after conjugated A-stem

If the subjects are disjoint, the 'while' clause has conjugated imperfective subordinator *w^{n}* ~ *ŋ*. The verb is in the A-stem imperfective (§10.2.2.6).

(454) *yà:gù* *[mbé* *káy^{n}* *ŋ̀* *kánà* *w^{n}]* *nò* *nóyà=yè*
yesterday [1PlPoss work(n) 1PlSbj do.Ipfv **Ipfv**] Rdp sleep.Stat=Past
'Yesterday he was asleep while we worked.'

Representative paradigms are in (455). The 3Sg subject form has postverbal *nà*. This suggests a comparison with nonsubject relatives, but the other forms in the paradigm do not support this connection (for example, there is no 3Pl *ŋké* proclitic subject).

(455)

	‘come’	‘do’	‘go’	‘drink’
1Sg	*ŋ́ y-ègá wˀⁿ*	*ŋ́ kàná wˀⁿ*	*ŋ́ ɲ̀-à:ndá wˀⁿ*	*ŋ́ nă: wˀⁿ*
1Pl	*ŋ̀ y-égà wˀⁿ*	*ŋ̀ kánà wⁿ*	*ŋ̀ ɲ-á:ndà wˀⁿ*	*ŋ̀ ná: wˀⁿ*
2Sg	*á y-ègá wˀⁿ*	*á kàná wˀⁿ*	*á ɲ-à:ndá wˀⁿ*	*á nă: wˀⁿ*
2Pl	*à y-égà wⁿ*	*à kánà wˀⁿ*	*à ɲ-á:ndà wˀⁿ*	*à ná: wˀⁿ*
3Sg	*égá nà wˀⁿ*	*káná nà wⁿ*	*ándá nà wˀⁿ*	*ná: nà wˀⁿ*
3Pl	*ègá:-yà wˀⁿ*	*kàná:-yà wˀⁿ*	*àndá:-yà wˀⁿ*	*nă:-yà wˀⁿ*

Textual examples with 3Sg subject are *égá nà ŋ̀* ‘as he was coming’ in (584) in Text 4, and *káná nà ŋ* ‘while he was doing’ in (547) in Text 1. 3Pl forms include *àrgá:-yà ŋ* ‘while they were replastering’ in (540) and *ɲă:-yà ŋ* ‘while they were eating’ in (545), both in Text 1.

Imperfective *wⁿ ~ ŋ* subordinator may be related to verb-final *-n* (before another alveolar) in *-n nàgà* comparative predicates (§12.1.2) and/or in the *-n sè:-ndì* ‘has not yet VPed’ construction (§10.6.2).

Clauses with imperfective *wⁿ ~ ŋ* after a conjugated A-stem verb should be distinguished from purposive clauses with the “same” *wⁿ ~ ŋ* after an unconjugated O- or U-stem verb (§17.5.1).

15.2.1.4 ‘Since …’ clauses (*mbà-là*)

With an adverb X, ‘since X’ is *[X bà dígí]*, as in *yà:gù bà dígí* ‘since yesterday’. In the latter, *yà:gù* ‘yesterday’ is seemingly followed by locative *bà* and (emphatic) *dígí* ‘since, from’. However, ‘since’ particles with forms like *bà→* occur in some other Dogon languages.

A ‘since’ clause has *mbà-là* after a perfective verb.

(456) *[ŋ̀ y-ègé mbà-là],* *nàmà* *ŋ́* *tèmè-l*
[1SgSbj Epen-come.Pfv **since**], meat 1SgSbj eat.meat-PfvNeg
‘Since I came here I haven’t eaten any meat.’ (< *ŋ̀ y-égè*)

For 3Sg pronominal subject, replace *ŋ̀ y-ègé mbà-là* with *ègè-ná mbà-là*. The 3Pl form is *èg-yé mbà-là*, and the 1Pl form is *ŋ̀ y-égè mbà-là*.

One might also resegment these combinations as e.g. *ŋ̀ y-ègé-m bà-là*, where the nasal is a suffix or enclitic on the verb (assimilating to the labial position of *b*). However, I can find no similar nasal morpheme on subordinated perfective verbs.

15.2.1.5 Tightly chained perfectives (past same-subject co-events, 3Sg *nà*)

In this construction, both the nonfinal verb and the final verb are pronominally conjugated, but they are phrased prosodically as a unit. The nonfinal verb is perfective (E/I-stem). For 3Sg and 3Pl, the nonfinal verb is {L}-toned. The tone pattern distinguishes this construction from the loose perfective chains described in (§15.2.2.1) below, which denote chronologically sequenced events. Both the tight and loose perfective chains express 3Sg subject in the nonfinal clause by postverbal enclitic *nà* rather than by zero affix as in main clauses.

The tight perfective chain construction (457a-h) denotes a complex event that is decomposed into two co-events that have the same subject. The co-events are simultaneous, overlapping, or denote motion/transfer leading immediately into a primary event. The

complex event as a whole is perfective, i.e. it has already taken place. Therefore the final verb is also normally perfective. Where logically possible, adjuncts such as direct objects and adverbs precede both verbs (457e). However, if the adjunct is relevant only to the final verb it follows the nonfinal verb (457f).

(457) a. *[tìbɛ̀ nà] sígé-∅*
[fall.**Pfv** 3SgSbj] go.down.**Pfv**-3SgSbj
'He/She fell down.'

b. *tìb-yɛ̀ síg-yɛ̀*
fall.**Pfv**-3PlSbj go.down.**Pfv**-3PlSbj
'They fell down.'

c. *[ŋ́ tìbɛ̀] [ŋ́ sìgè]*
[1SgSbj fall.**Pfv**] [1SgSbj go.down.**Pfv**]
'I fell down.'

d. *[ŋ̀ tíbɛ̀] [ŋ̀ sígè]*
[1PlSbj fall.**Pfv**] [1PlSbj go.down.**Pfv**]
'We fell down.'

e. *[è* $^{H+}$*sátállà] [ŋ́ tyɛ̀:ⁿ] [ŋ́ dɛ̌:ndɛ̀]*
[Def $^{H+}$kettle] [1SgSbj set.down.**Pfv**] [1SgSbj leave.**Pfv**]
'I put the water kettle down and left it.' (< *sátállà*)

f. *[á ɲ-ǐnjɛ̀] [[è* $^{H+}$*ŋkɛ̂] [á bùndè]]*
[2SgSbj Epen-stand.**Pfv**] [[Def $^{H+}$dog] [2SgSbj hit.**Pfv**]]
'You-Sg stood up and (you) hit the dog.'

g. *[ɲă: sòŋgè nà] ɲé:-∅*
[meal bring.**Pfv** 3SgSbj] eat.meal.**Pfv**-3SgSbj
'He/She$_x$ brought a meal and (he/she$_x$) ate.'

h. *[ɲà: ŋ̀ sóŋgè] [ŋ̀ ɲɛ̂:]*
[meal 1PlSbj bring.**Pfv**] [1PlSbj eat.meal.**Pfv**]
'We brought a meal and we ate.'

This tightly chained perfective construction also occurs in the 'finish VPing' construction (§17.3.1) and in direct-perception 'see' complements of the type 'we saw Seydou fall' (§17.2.2.1). For 'go out' or 'take out' with a reversive verb, see (198a-b) in §9.1. An initial perfective verb can also be chained to an unconjugated verbal intensifier like *péw* 'entirely used up', see §8.4.5.1.

As noted above, the tight perfective chain construction can only be used when the entire complex event is completed. For similar constructions involving imperfective (e.g. future) contexts, the nonfinal clause occurs in the nonpast anterior subordinated form with *nɛ* (§15.2.2.2 below).

15.2.2 Adverbial clauses expressing chronological sequences

Constructions studied under this rubric involve clearly sequenced events. One construction with two loosely chained perfectives (§15.2.2.1 below) is of this type. It is similar in form to the construction described above (§15.2.1.5) where two more tightly chained perfectives denote simultaneous or overlapping co-events.

15.2.2.1 Loosely chained perfectives (same or different subject, anterior, 3Sg *nà*)

In narratives, this construction can function as the most common perfective clause type in an extended third-person narrative, alternating with regular perfective clauses. For example, (586) in Text 4 contains a sequence 'he arrived at the doorway, he opened the door, he took a step, …' where all three clauses are loosely chained. See also 'they arrested him, took him away, and imprisoned him' in (595) in Text 4.

The final clause in the sequence is an ordinary perfective main clause. The nonfinal clause has a perfective verb, with regular 1st/2nd (proclitic) or 3Pl (suffixal) pronominal-subject conjugation. 3Sg subject, on the other hand, is marked by postverbal *nà*. In this 3Sg form, the verb takes {HL} overlay, reduced to {H} for the only monomoraic *Cv* verb (*né nà* 'he/she said, and …'). In particular, *CvCv* stems that have {H}-tones in the regular 3Sg perfective (*tábé* 'he/she gave') have {HL} before *nà* in the loosely chained perfective construction described here, like. *tábè nà* in (458a). For trisyllabics like *sógú-lè nà* 'he/she sold and …', I variously hear H.H.L and stepwise H.M.L tone/pitch sequences on the verb before *nà*, but in view of 3Pl *sógú-l-yè* it appears that H.H.L is structurally basic.

When the subject is 3Sg or 3Pl, the presence of an H-tone in the verb stem distinguishes this construction from the tightly chained perfective construction described in §15.2.1.5 above. The two also differ in that the tightly chained construction requires coindexation of subjects. The loosely chained construction, by contrast, allows sequences with disjoint subjects (458a-c)

(458) a. *sěydù* *bòw^{n}-wê:* *mì-ŋ* *tábè* *nà,*
Seydou door-child 1Sg-Acc give.**Pfv** 3SgSbj,
ŋ́ *ɲ-ă:ndè*
1SgSbj Epen-go.**Pfv**
'Seydou gave me the key and I left.'

b. *[ɲă:* *sóŋg-yè]* *[ì̀* *ɲê:]*
[meal bring.**Pfv-3PlSbj**] [**1PlSbj** eat.meal.**Pfv**]
'They brought a meal and we ate.'

c. *[ɲă:* *ì̀* *sóŋgè]* *[wé:-gè* *ɲíy^{n}-y^{n}è]*
[meal **1PlSbj** bring.**Pfv**] [**child-Pl** eat.**Pfv**-3PlSbj]
'We brought a meal and the children ate.'

The subjects can also be coindexed, as long as the two clauses are not tightly connected prosodically and conceptually.

15.2.2.2 Nonfinal verb with *nɛ* (nonpast anterior, pseudo-conditional)

This construction is used in contexts similar to those of either tight or loose perfective chains (§15.2.1.5, §15.2.1.1), where the entire event is imperfective (e.g. future or habitual present) or deontic. The nonfinal verb is in the E/I-stem (i.e. the perfective) and is pronominally conjugated. This verb is followed by the nonpast anterior subordinating particle *né* ~ *nè*, here glossed 'and then'. This is identical in form to the conditional antecedent ('if') clause type (§16.1). The non-conditional use of *né* ~ *nè* is directly reminiscent of pseudo-conditional constructions in some other Dogon languages such as Togo Kan.

The final clause contains an imperfective or deontic modal (e.g. imperative) verb. The two clauses may have either coindexed or disjoint subjects. An example of the latter is (459e)

(459) a. *[ŋ́ ɲ-à:ndé nè] [égó ŋ́ bò]*
[1SgSbj Epen-go.Pfv **and.then**] [come.Ipfv 1SgSbj Ipfv]
'I will go and come (back).'

b. *[ɲà: ɲíy^{n}-y^{n}ɛ́ nè]*
[meal eat.meal.Pfv-3PlSbj **and.then**]
[bàmàkɔ̀ ándò b-yà]
[Bamako go.Ipfv Ipfv-3PlSbj]
'They will eat (a meal) and then go to Bamako.'

.

c. *[[nàmà á tèmé nè] àndà*
[[meat 2SgSbj eat.meat **and.then**] go.Imprt
'Eat some meat and then go!'

d. *[ándé-∅ né] [nà:ŋgòl égò bò-∅]*
[go.Pfv-3SgSbj **and.then**] [next.year come.Ipfv Ipfv-3SgSbj]
'He/She will go and come back next year.'

e. *[ɲà: sóŋgé-∅ né]*
[meal bring.Pfv-3SgSbj **and.then**]
[ɲɔ́: ŋ̀ bò]
[eat.Ipfv 1PlSbj Ipfv]
'He/She will bring the meal and we will eat.'

f. *[ŋ̀ tìbé nè] [sígò ŋ̀ bò]*
[1PlSbj fall.Pfv **and.then**] [go.down.Ipfv 1PlSbj Ipfv]
'We will fall down.'

Sample paradigms for verbs with *né* ~ *nè* are in (460). *kán* /kání/ 'do' represents the final-high-vowel class; note the long *i:* in the 3Pl form *kán-ní: nè* (likewise *dám-mí: nè* 'they will speak and …').

(460)

	nɛ̂: 'drink'	*tɛ́mɛ́* 'eat meat'	*túmbúgè* 'push'	*kán* 'do'
1Sg	*ŋ́ nɛ̌: nè*	*ŋ́ tɛ̀mɛ́ nè*	*ŋ́ tùmbùgé nè*	*ŋ́ kàní nè*
1Pl	*ŋ̀ né: nè*	*ŋ̀ tɛ́mɛ́ nè*	*ŋ̀ túmbúgé nè*	*ŋ̀ kání nè*
2Sg	*á nɛ̌: nè*	*á tèmé nè*	*á tùmbùgé nè*	*á kàní nè*
2Pl	*à né: nè*	*à tɛ́mɛ́ nè*	*à túmbúgé nè*	*à kání nè*

3Sg	*né:-∅ né*	*témé-∅ né*	*túmbúgé-∅ né*	*kání né*
3Pl	*níy^{n}-y^{n}ɛ́ nè*	*tém-yé nè*	*túmbúg-yé nè*	*kán-ní: nè*

The sequence /ni n/ in the forms of *kání* (rightmost column) is usually syncopated to *nn*, favored by the identical flanking nasals. If so it is realized as a long nasal consonant, e.g. 3Sg subject [kán:ɛ́].

For this clause type in the complement of 'want' with different subjects, see §17.4.5.2. For 'go out' or 'take out' with a reversive verb, see §9.1.

It is not presently clear whether *né* ~ *nè* is historically related to *né* 'say'. There are many other examples in Dogon languages (e.g. Jamsay) where a 'say' verb has acquired functions as a temporal subordinator. On the other hand, several Dogon languages also have temporal subordinators of similar shapes (e.g. *na*, *-n*) that are not obviously derived from a 'say' verb.

15.2.2.3 'Worked until got tired' = 'worked for a very long time'

In all attested examples of this construction, both clauses are perfective positive and have coindexed subjects. The first clause denotes a prolonged activity, usually but not always physically strenuous. 3Sg subject is expressed by enclitic *nà* after {L}-toned verb; 3Pl is an {L}-toned version of the regular suffixed 3Pl perfective form; 1st/2nd person subjects have the usual proclitics, and 1Sg/2Sg have {LH}-toned verb. These details are different from both main- and relative-clause perfectives.

The second clause begins with *hâl* 'until, to the point that'. In this clause, 3Sg and 3Pl subjects have the same segmental forms as in main clauses. After *hâl*, a 3Sg perfective verb is {L}-toned and a 3Pl perfective is {LHL}-toned (including the L-toned suffix).

(461) a. *[káy^{n} ŋ́ kàní] [hál ŋ́ nènè]*
[work(n) 1SgSbj do.Pfv] [**until** 1SgSbj **get.tired**.Pfv]
'I worked until I got tired.' (= 'I worked to the point of exhaustion.')

b. *[káy^{n} kànì nà] [hál nènè-∅]*
[work(n) do.Pfv **3SgSbj**] [**until** **get.tired**.Pfv-3SgSbj]
'He/She worked until he/she got tired.'

c. *[káy^{n} kàn-nì(:)] [hál nèní-yè]*
[work(n) do.Pfv-3PlSbj] [**until** **get.tired**.Pfv-3PlSbj]
'They worked until they got tired.'

Physical fatigue is not always central, but there has to be some element of fatigue for the construction to be felicitous. Verbs other than 'be tired' are usual when the activity (e.g. sleeping or eating) induces no physical fatigue (462a-b).

(462) a. *[nò:yè nà] [hál sìlè-∅]*
[sleep.Pfv **3SgSbj**] [**until** be.fed.up.Pfv-3SgSbj]
'He/She slept until he/she had had enough (sleep).'

b. *[ɲè: nà] [hál sìn(ì)-∅]*
[eat.meal.Pfv **3SgSbj**] [**until** be.sated.Pfv-3SgSbj]
'He/She ate until he/she was full.'

15.2.3 'Before …' clauses (*kɛ́gù*)

'Before …' clauses end in *kɛ́gù*. The main verb of the 'before' clause appears in the A-stem imperfective (§10.2.2.6). The 3Sg subject form has {L}-toned verb plus subject enclitic *nà* (463a). The 3Pl subject form is {L}-toned with suffix *-yà* (*tìbà-yà kɛ́gù* 'before they fall'). 1st/2nd person forms have the usual proclitics (463b-c).

(463) a. *[[è* $^{H+}$*dêm]* *tìbà* *nà* *kɛ́gù]* *[ŋ̀* *gú:ndè-y^{n}-yà]*
[[Def $^{H+}$house] fall.Ipfv **3SgSbj** **before**] [1PlSbj go.out.Hort]
'Let's go out, before the house falls!'

b. *[ŋ́* *tùbyà* *kɛ́gù]*
[1SgSbj arrive.Ipfv **before**]
[ŋ́ *nòló]* *ándé-∅*
[1SgPoss friend] go.Pfv-3SgSbj]
'Before I arrived, my friend (had) left.'

c. *[ɲă:* *ŋ̀* *ɲá:* *kɛ́gù]*
[meal 1PlSbj eat.meal.Ipfv **before**]
[káy^{n} *ŋ̀* *kánì-y^{n}-yà]*
[work(n) 1PlSbj do-Hort-Pl]
'Let's-Pl do the work before we eat.'

Example (463a) above shows that a 3Sg subject enclitic in the 'before' clause is required even when a nonpronominal subject NP is present clause-initially. Another example of this is (464a). If the nonpronominal subject is plural, we get a regular 3Pl-subject verb (464b). As mentioned above, 3Sg and 3Pl verbs are {L}-toned before *kɛ́gù*.

(464) a. *[kùmà:ŋgá* *wà:* *nà* *kɛ́gù]*
[rain(n) rain.fall.Ipfv **3SgSbj** **before**]
[ŋ̀ *nwɛ̂-y^{n}-yà]*
[1PlSbj go.in-PlAddr-Hort]
'Let's go in before the rain comes (down).'

b. *[wè:-gé* *ègà-yà* *kɛ́gù]*
[child-Pl come.Ipfv-**3PlSbj** **before**]
'before the children come'

15.2.4 Suffix (*-ɛ́:* ~ *-é:* ~ *-í:*)

For a resultative passive construction with this suffix on the verb, followed by auxiliary *bò*, see §10.4.1.2.

15.3 Spatial and manner adverbials

15.3.1 Spatial adverbial relative clause ('where …')

A transparent spatial adverbial relative clause 'at [the place where …]' features *gɛ́ŋ* 'place' as head NP. The relative clause proper may be followed by a locative postposition.

(465) *[[è* H+*gêŋ]* *ɲà:* *ɲɔ̂:* *ŋ̀* *bì-yà]* *bà*
[[Def H+**place**] meal eat.meal.Ipfv 1PlSbj Ipfv-**Ppl**] Loc
'at the place where we eat'

This construction is similar to temporal adverbial relative clauses (§15.2.1.1), but the temporal clauses normally do not have a locative (or other) postposition.

For "possessed" HL*gêŋ* as a kind of 'the fact of …' complementizer for matrix-clause 'know', see (483c) in §17.2.1.

15.3.2 Manner adverbial clause

15.3.2.1 'How …' clause (*bànà*)

The noun *bànà* 'way, manner' is the head of simple nonsubject relatives in (466a-b). My examples do not include a final postposition. The manner clause in (466b) appears to lack even a pronominal subject, reflecting its generic impersonal nature.

(466) a. *[è* H+*bánà]* *àlàmùnɔ̀* *sɛ́mà = à*
[Def H+**manner**] sheep slaughter.Ipfv.**Ppl**-2SgSbj
'the way you-Sg slaughter a sheep'

b. *[bànà* *dìgɔ̀* *b-yá]* *ŋ́* *ɲ-ìndò*
[**manner** go.up.Ipfv Ipfv-**Ppl**] 1SgSbj Epen-not.know
'I don't know how to go up there.'

The manner adverbial (466b) appears to have a covert, impersonal subject. A similar example is *bànà kàn bí-yà* 'how to do (it)' in (567) in Text 3.

For the use of this manner adverbial clause type as a subject-conjugated purposive clause, see §17.5.3.

15.3.2.2 'Like/as though' clause (*pínì*)

Postposition-like *pínì* 'like' (§8.4.1) can be used with an imperfective relative-clause (participial) complement. The clause can be translated more or less literally as 'as though'. Typical main clause verbs are 'say' and 'do' (i.e. 'act'), and the best free translation of the larger construction is sometimes 'pretend that …'. Since the weeping (or its appearance) was intentional, logophoric pronominals are used.

(467) a. *[wɔ̀:* *wá-à-yà* *pínì]* *kán-∅*
[weeping weep.Ipfv-LogoSgSbj-**Ppl** **like**] do.Pfv-3SgSbj
'He did like (=pretended) that he was weeping.'

b. *[wɔ̀:* *wɔ́:* *ŋ̀ké* *b-yà* *pínì]* *kán-nì:*
[weeping weep.Ipfv 3PlSbj Ipfv-**Ppl** **like**] do.Pfv-3PlSbj
'They did like (=pretended) that they were weeping.' (*ŋ̀ké* here in logophoric plural function)

A textual example is (544) in Text 1 ‘did as though he was picking up …’. An implied but covert pínì might be assumed for *mɔ̀:njì mánjà-à-yà* in (540) in Text 1, ‘(pretended) that he was urinating’.

15.3.3 ‘From … until …’

The full two-part versin of this construction is illustrated in (468). The first clause is a simple perfective indicative clause ‘they$_x$ were born’, phrased as ‘they$_y$ (=mothers or parents) gave birth to them$_x$ (=children)’. The second clause begins with *hâl* ‘until, all the way to’ and has a predicate with 3Pl subject proclitic and A- or perhaps A/O-stem verb.

(468) *ŋké-ŋ* *nál-yè,* *hâl* *ŋké* *dɔ́gá,*
3Pl-Acc give.birth.**Pfv**-3PlSbj, **until** 3PlSbj die.Ipfv,
dà:yè *b-yá*
evil.Pred be-3PlSbj
‘From (the time) when they were born, until they (will) die, they are wicked.’

16 Conditional constructions

16.1 Hypothetical conditional with *né* ~ *nè* (positive) or *bé-né* (negative)

This is the usual conditional. The antecedent denotes an uncertain eventuality. If, as usual, this eventuality is a potential time-bounded event located in the future, it is usually expressed by a perfective verb followed by *né* ~ *nè* 'if' (positive) or *bé-né* 'if' (negative). The positive forms with *né* ~ *nè* are identical to those used as nonpast anterior subordinators, which are presented (with paradigms) in §15.2.2.2.

If the consequent denotes a resulting future eventuality, it is expressed by an imperfective main clause. This is usually the periphrastic imperfective with bò/wò auxiliary (469a-d), but occasionally the (stative-like) A-stem imperfective (469e). The consequent may alternatively be a deontic modal such as an imperative or hortative. The subjects of the two clauses may be coindexed (469a,c) or disjoint (469b,d-e), but there is no morphological or syntactic marking of coindexation. (469e) illustrates *bé-né* with a negative antecedent.

(469) a. *á* *tìbé* *nè,* *bàrmì* *káná-á* *wò*
2SgSbj fall.Pfv **if**, injury do.Ipfv-2SgSbj Ipfv
'If you-Sg fall, you'll hurt yourself.'

b. *wè:-gé* *nùw^{n}* *ég-yé* *nè,* *ándó* *ŋ́* *bò*
child-Pl here come.Pfv-3PlSbj **if**, go.Ipfv 1SgSbj Ipfv
'If children come here, I'll go.'

c. *té:* *á* *nɛ̌:* *nè,* *úrí-yá-á* *wò*
tea 2SgSbj drink-Ipfv **if**, be.sick-MP.Ipfv-2SgSbj Ipfv
'If you-Sg drink (the) tea, you'll get sick.'

d. *kùmà:ŋgà* *wwé: -∅* *nè,*
rain(n) rain.fall.Pfv-3SgSbj **if**,
ògà *kòy^{n}* *ŋ́* *tégà*
tomorrow field 1PlSbj head.for.Ipfv
'If it rains, tomorrow we'll go to the field(s).'
(with A-stem imperfective *ŋ́ tégà* in the consequent)

e. *kùmà:ŋgá* *wwɛ̀:-l-∅* *bɛ́-né,*
rain(n) rain.fall-PfvNeg-3SgSbj **if**,
àndò-ò-lí
go-1PlSbj-IpfvNeg
'If it doesn't rain, we won't go.'

Paradigms showing perfective positive forms before *nè* 'if' are in (470). Identical paradigms for 'push' and 'drink' were given in (460) in §15.2.2.2, confirming that true conditional and pseudo-conditional (nonpast anterior subordination) are the same in form. However, pseudo-conditional clauses are always positive.

(470)

category	'push'	'think'	'drink'
1Sg	*ŋ́ tùmbùgé nè*	*ŋ́ nà:lé nè*	*ŋ́ nɛ̌: nè*
1Pl	*ŋ̀ túmbúgé nè*	*ŋ̀ ná:lé nè*	*ŋ̀ né: nè*
2Sg	*á tùmbùgé nè*	*á nà:lé nè*	*á nɛ̌: nè*
2Pl	*à túmbúgé nè*	*à ná:lé nè*	*à né: nè*
3Sg	*túmbúgé-∅ né*	*ná:lé-∅ né*	*né:-∅ né*
3Pl	*túmbúgí-yé nè*	*ná:lí-yé nè*	*níy^{n}-y^{n}ɛ́ nè*
LogoSg	[same forms as 2Pl]		
LogoPl	*ŋké túmbúgé né*	*ŋké ná:lé né*	*ŋké né: né*

For the phonology of *ŋ́ nɛ̌ nè* 'if I said' with ultra-short *Cv* verb, see §3.6.3.3.

The perfective negative has its regular main-clause form (§10.2.3.1) before *bɛ́-né*. The verb is {L}-toned for the three singular-subject forms, {H}-toned for the three plural-subject forms.

(471)

category	'push'	'think'	'drink'
1Sg	*ŋ́ tùmbùgè-l bɛ́-né*	*ŋ́ nà:lè-l bɛ́-né*	*ŋ́ nè:-l bɛ́-né*
1Pl	*ŋ̀ túmbúgé-l bɛ́-né*	*ŋ̀ ná:lé-l bɛ́-né*	*ŋ̀ né:-l bɛ́-né*
2Sg	*á tùmbùgè-l bɛ́-né*	*á nà:lè-l bɛ́-né*	*á nè:-l bɛ́-né*
2Pl	*à túmbúgé-l bɛ́-né*	*à ná:lé-l bɛ́-né*	*à né:-l bɛ́-né*
3Sg	*tùmbùgè-l-∅ bɛ́-né*	*nà:lè-l-∅ bɛ́-né*	*nè:-l-∅ bɛ́-né*
3Pl	*túmbúgá-ndá bɛ́-né*	*ná:lá-ndá bɛ́-né*	*ná:-ndá bɛ́-né*

A clause-final *sèlè* 'all' can be added after an 'if' morpheme. Here *sèlè* simply marks the right edge of the antecedent clause (or clause sequence), and does not have quantificational scope over a constituent or event. An example is (556) in Text 2. In (589) in Text 4, *sèlè* occurs in similar function without an overt 'if'.

16.2 Alternative 'if' particles

16.2.1 'Even if …' (*né pé*, *bɛ́-né pé*)

Adding *pé* 'also, even' to the 'if' particle emphasizes that the realization of the antecedent condition will not affect that of the consequent condition.

(472) *[sɛ̌ydù égé-∅ né pé] [ŋă: ŋɔ̀:-ndí-∅]*
[Seydou come.Pfv-3SgSbj **if** **even**] [meal eat.meal-IpfvNeg-3SgSbj]
'Even if Seydou comes, he won't eat (here).'

16.3 Counterfactual conditional

In counterfactual conditionals, the antecedent (positive or negative) ends in *bɛ́-nɛ́* 'if'. Both antecedent and consequent verbs are marked by the clitic *=ye* for past time. The antecedent is past perfect (morphologically, the past of the perfective, §10.6.1.5). The consequent is normally in the past imperfective in a sense like 'was going to VP' (§10.6.1.4). The presupposition is that the antecedent condition was not realized.

(473) *[sɛ́wá:rɛ̀ ŋ̀ wánjɛ̀=yɛ̀ bɛ́-nɛ́],*
[Sevare 1PlSbj remain.Pfv=**Past** **if**]
[mbé-ŋ gíy-yɛ̀=yɛ̀]
[1Pl-Acc kill.Pfv-3PlSbj=**Past**]
'If we had stayed in Sevare, they would have killed us.'

An example with two negative clauses is (474).

(474) *nɛ̀:-l-∅=yɛ̀ bɛ́-nɛ́,*
drink-PfvNeg-3SgSbj=**Past** **if**,
[è $^{H+}$*yɔ̂:-ⁿ] dɔ̀njɔ̀:-ndí-∅=yé*
[Def $^{H+}$woman-Acc] bump-IpfvNeg-3SgSbj=**Past**
'If he hadn't drunk (=been drinking), he would not have collided with the woman.'

17 Complement and purposive clauses

17.1 Quotative complements

17.1.1 Quoted indicative clauses

Quoted indicative clauses are marked as such by one or more of the following features:

- the conjugatable 'say' verb (perfective form *né*), which if present follows the quotation, §17.1.1.1;
- invariable quotative particle *wa* (§17.1.1.2) may be used instead of the conjugated 'say' verb, following a quotation;
- logophoric subject pronouns appear when the quoted speaker (author) is not a current speech-event participant and is coindexed with the subject of a quoted clause; the logophoric singular subject pronoun *à* is identical to 2Pl, and the logophoric plural subject pronoun *ŋké* is identical to the marked 3Pl pronoun used in nonsubject focalized and nonsubject relative clauses (§18.3);
- original addressees (2Sg or 2Pl), if not identical to current speaker or addressee, are converted to corresponding third person forms in quotations, so 'Seydou said "you-Pl will not go"' is expressed as 'Seydou [they will not go] said.'

For the shift from original addressee to quoted third person, see e.g. (553) in Text 2: 'The merchant said: "I will kill you" ' is expressed as 'The merchant said LogoSg will kill them'. Logophoric singular subject *à* and the 'say' verb *né* are illustrated in (475).

(475) *[à* *y-égò-mà-ndà]* *né-∅*
[**LogoSgSbj** Epen-come-Capac-StatNeg] **say**.Pfv-3SgSbj
'(He_x) said that he_x can't come.'

In a self-quotation ('I said that …'), the quotation has the same form as in an unquoted main clause. The final 'I said' may function merely as an emphatic, as in repeating a statement for insistance.

(476) *[ŋ́* *y-ègò-má-ndá]* *ŋ́* *nɛ̀*
[1SgSbj Epen-come-Capac-StatNeg] 1SgSbj **say**.Pfv
'I said that I can't (or: couldn't) come.'

AN categories (including aspect) are not reset when a clause is quoted.

17.1.1.1 'Say' verb (*né*)

The overt 'say' verb is perfective *né*. This is the only monomoraic *Cv* verb, but it does have regular aspect-negation (AN) and pronominal-subject inflections (§10.1.2.1). 3Sg perfective

né-∅ is often heard with low pitch as a kind of phonological enclitic to the final word in the quotation, but I transcribe it in its full form.

(477) a. *[ɔ̀nɔ̀ éjjè=yò] né-∅*
[3Sg Dogon=it.is] **say**.Pfv-3SgSbj
'He$_x$ said that he$_x$'s a Dogon.'

b. *[ŋ́ké éjjè-gè=yò] níy^n-y^{n}ɛ̀*
[3PlSbj Dogon-Pl=it.is] **say**.Pfv-3PlSbj
'They$_x$ said that they$_x$ are Dogon-Pl.'

c. *[égó ŋ́ bò] ŋ́ nɛ̀*
[come.Ipfv 1SgSbj Ipfv] 1SgSbj **say**
'I said that I will/would come.'

The 'say' verb is often omitted from quotations, since the quotative particle *wa* and other details often already identify a clause as quoted.

For *né* and its causative *ná-m* as auxiliary verbs with adverbials and onomatopoeias, see §11.1.2.3.

17.1.1.2 Clause-final quotative particle *wa*

This unconjugated particle follows the quoted clause, and may be repeated after each clause in a long quotation. It is not doubled after the subject as it is in some other Dogon languages. It gets its tone by spreading from the preceding syllable.

(478) a. *[á y-ègè-y^n] wà*
[2SgSbj Epen-come-QuotImprt] **Quot**
'(Someone) said for you to come.'

b. *[à wǒl-∅] wá*
[LogoSgSbj not.be-3SgSbj] **Quot**
'(He$_x$) says he$_x$ isn't there.'

c. *[sěydù [è $^{H+}$wé:-gè-w^n] búndé-∅ wá*
[Seydou [Def $^{H+}$child-Pl-Acc] hit.Pfv-3SgSbj **Quot**
'(Someone) said that Seydou hit the children.'

17.1.2 Jussive complement (reported imperative or hortative)

17.1.2.1 Quoted imperative (*-y^n*, *-yè* ~ *-yɛ̀*) and prohibitive (*-ndé-ỳ^n*)

There is a specialised verb form for quoted imperatives (§10.7.3.1). For 1st/2nd person imperative subject it is the E/I-stem plus *-y^n*, with the usual pronominal proclitic. For third person imperative subject it is *-yè* ~ *-yɛ̀* after stem-final *i* (I-stem). There is no overt 3Sg or 3Pl subject pronoun in this construction (479c).

(479) a. *nàmà* *ŋ́* / *á* *pùrgè-y^{n}* *wà*
meat 1SgSbj / 2SgSbj cut-**QuotImprt** Quot
'(He) said for me/you-Sg to cut the meat.'

b. *nàmà* *ŋ̀* / *à* *pùrgè-y^{n}* *wà*
meat 1PlSbj / 2PlSbj cut-**QuotImprt** Quot
'(He) said for us/you-Pl to cut the meat.'

c. *nàmà* *pùrgí-yè* *wà*
meat cut-**QuotImprt** Quot
'(He) said for him/her/them to cut the meat.'

Main-clause prohibitives (negative imperatives) have suffix *-ndà* for singular addressee and suffix complex *-ndé-ỳ^{n}* for nonsingular addressee (§10.7.1.2). In quoted prohibitives, *-ndé-ỳ^{n}* occurs for singular addressee (480) as well as for plural addressee.

(480) *sěydù* *ègà-ndé-ỳ^{n}* *wà*
Seydou come-**Proh-QuotImprt** Quot
'He says for Seydou not to come.'

One might conclude that *-ndé-ỳ^{n}* in (480) reflects categorial addressee-number neutralization in favor of the plural-addressee form. However, we may alternatively analyse *-ndé-ỳ^{n}* in (480) as containing the prohibitive suffix followed by quoted imperative suffix *-ỳ^{n}* (§10.7.3.2).

-ndé-ỳ^{n} occurs, again with singular as well as plural subject, in negative complements of 'be afraid (lest …)', see (500) in §17.4.7.

17.1.2.2 Quoted hortative

A hortative ('let's VP') may also be quoted. In this construction, a plural-subject proclitic is followed by a verb in the E/I-stem with quoted imperative suffix *-y^{n}* (§10.7.2.1, §10.7.3.3). The interpretation of this as a quoted hortative, as opposed to a quoted imperative with plural subject, depends on whether the quoted speaker is understood to be included in the plural subject. There is no distinction between singular and plural addressee forms of quoted hortatives. Either quotative particle *wa* or a conjugated form of 'say' may follow the quoted material.

(481) *sěydù* *[sìrgà* *ŋ̀* *sɔ́gé-y^{n}]* *nè-∅*
Seydou [chicken 1PlSbj buy-**QuotImprt**] say.Pfv-3SgSbj
'Seydou said, let's buy a chicken!'
(can also mean: 'Seydou told us to buy a chicken.')

In (481) the quoted verb has the form of the usual 1Pl subject quoted imperative. The same category is used in 'they decided to travel', literally "they$_x$ said, 'let's$_x$ go traveling' " in (534) in Text 1. Since the (overt) subject of the quoted clause is 3Pl, not including the current speaker or addressee, one might have expected the 3Pl subject quoted imperative *àndí-yè* 'that they go'. Instead, the phrasing is *ŋ̀ké ándé-y^{n}*, with overt 3Pl pronoun and with the verb form typical of the 1Pl quoted imperative (*ŋ̀ ándé-y^{n}*), parallel to *ŋ̀ sɔ́gé-y^{n}* in (481). Since the original direct quotation would have been 'let's go!' with 1Pl subject, it appears that the 1Pl

verb form is retained in the quotation even though the subject is updated to the deictic structure of the current speech event.

17.1.3 Quoted interrogatives with *lè*

Quoted interrogative clauses are marked with a particle *lè* following the predicate, compare English *whether*.

(482) a. *dĕm* *è^{n}* *ŋ́* *sá:^{n}* *lè* *wà*
house Exist 1SgSbj have **QuotQ** Quot
'(Someone) says/said (= asks/asked), do I have a house?' (< *dèm*, *è ŋ́ sà:^{n}*)

b. *ínì* *sònjòm = yó* *lè* *sálé-∅*
Prox horse=it.is **QuotQ** ask.Pfv-3SgSbj
'He/She asked, is this a horse?'

c. *mbá* *ŋ́* *tègà* *lè* *sálé-∅*
where 1SgSbj head.for.Ipfv **QuotQ** ask.Pfv-3SgSbj
'He/She asked, where am/was I going?' (= asked me where I was going)

A textual example of an overt quotation is at the end of (535) in Text 1.

The quotation may also be internal ('X wondered/checked [whether …]'), as in (591) in Text 4.

17.2 Factive complements

17.2.1 'Know that …' complement

Factive complements of 'know (that)' take the form of regular main clauses (e.g. with 3Sg subject *-∅* in several inflectional categories). With 'know', the factive clause occasionally ends in *géŋ* 'place' (by extension 'situation, state of affairs') in {HL}-toned form ^{HL}*gêŋ* (483c), suggesting that it is "possessed" by the factive clause, cf. *the fact of* ... in English and compare the head-noun doubling cases in §14.2.7. A nonpronominal subject of 'know' may precede either the factive clause (483e) or the final 'know'.

(483) a. *ègá-á-lì* *ŋ̀* *ɲêy^{n}*
come-2SgSbj-IpfvNeg 1PlSbj **know**
'We know that you-Sg are not coming.'

b. *[wè:-gè* *égá-ndá]* *ŋ̀* *ɲêy^{n}*
[child-Pl come-PfvNeg] 1PlSbj **know**
'We know that (the) children didn't come.'

c. *[[àlàmùnɔ́* *ŋ́* *sèmɛ̀]* ^{HL}*gêŋ]*
[[sheep 1SgSbj slaughter.Pfv] ^{HL}place]
[wè:-gè *êy^{n}* *b-yà]*
[child-Pl **know** be-3PlSbj]
'The children know that I (have) slaughtered a sheep.'

d. *[égá-á wò] ŋ́ ɲèy^{n}*
[come.Ipfv-2SgSbj Ipfv] 1SgSbj **know**
'I know that you-Sg will come.'

e. *sɛ̌ydù ègá-á-lì ɛ́ŋɔ̀ bò-∅*
Seydou come-2SgSbj-IpfvNeg **know** be-3SgSbj
'Seydou knows that you are not coming.'

See also 'knowing that she would not survive' in (596) in Text 4.

The same construction is used with *núndé* 'hear' (in the sense 'hear that', i.e. 'be told that') and with *tɛ́mé* 'find (a situation)'. My assistant rejects ^{HL}*gêŋ* with factive complements of *tɛ́mé* but allows it with *núndé* (as with 'know').

17.2.2 'See that …'

17.2.2.1 Direct-perception construction

When the complement of 'see' denotes an event or process directly observed (not just inferred) by the subject, two constructions are possible, depending on aspect (bounded event versus imperfective). For a bounded event, the complement has a perfective verb. 3Sg subject is expressed by postverbal enclitic *nà* (484a), and the perfective verb is {L}-toned for 3Sg and 3Pl subject. This is the tight perfective chain construction described in §15.2.1.5.

(484) a. *[sè:dú tìbɛ̀ nà] ŋ̀ málgè*
[Seydou fall **3SgSbj**] 1PlSbj **see**.Pfv
'We saw Seydou fall.'

b. *[wɛ̀:-gé tìb-yɛ̀] ŋ̀ málgè*
[Seydou fall-3PlSbj] 1PlSbj **see**.Pfv
'We saw the children fall.'

An imperfective complement, denoting a continuing activity or a recurrent event type, takes the clause-final imperfective subordinator w^{n} ~ *ŋ* (§15.2.1.3). The w^{n} is weakly articulated and may be inaudible. For example, in (485b) the sequence *ná* w^{n} *á* is usually contracted to phonetic [ná:]. w^{n} is also difficult to detect before a nasal, for example that of *málgé* 'see' or that of a first person subject proclitic like *ŋ́* in (485a).

(485) a. *[á yɛ̀bá ẁ^{n}] ŋ́ màlgè*
[2SgSbj dance Ipfv] 1SgSbj **see**.Pfv
'I saw you-Sg dancing.'

b. *[[è $^{H+}$wɛ̂:] yɛ̀bà ná w^{n}] á màlgè*
[[Def $^{H+}$child] dance.Ipfv 3SgSbj Ipfv] 2SgSbj **see**.Pfv
'You-Sg saw the child dancing.' (< *yɛ̀bá nà*)

c. *[wɛ̀:-gé yɛ̀bà-yá w^{n}] á màlgè*
[child-Pl dance.Ipfv-3PlSbj Ipfv] 2SgSbj **see**.Pfv
'You-Sg saw the children dancing.' (*yɛ̀bá-yà* w^{n})

d. *[ŋ́ yèbá wˇⁿ] màlíg-yè*
[1SgSbj dance Ipfv] **see**.Pfv-3PlSbj
'They saw me dance.'

17.2.2.2 Recognition construction

'Hear that' (hearsay) and 'see that' (involving an inference based on visual or other situational information) take main-clause complements. The 3Sg subject perfective verb has its usual main-clause form, without postverbal enclitic *nà*. Since the complement is more clearly an embedded proposition with 'hear' than with 'see', 'hear' complements often end with the possessed {HL}-toned form of *géŋ* 'place' (by extension 'situation, state of affairs') (486b). Another example of ^{HL}*gêŋ* in similar function is (483c) in §17.2.1. See the comments on relative-head doubling in §14.2.7.

(486) a. *[nàfòrò-gà á bìlè] [ŋ́ màlà]*
[wealth-Char 2SgSbj become.Pfv] [1SgSbj **see**.Stat]
'I see that you have become a rich person.'

b. *[[nàfòrò-gà bílé-∅] ^{HL}gêŋ] [ŋ́ nùndè]*
[[wealth-Char become.Pfv-3SgSbj] ^{HL}**place**] [1SgSbj **hear**.Pfv]
'I have heard that he/she has become a rich person.'

17.2.3 *tájjárà* 'certainly, definitely'

tájjárà (< Fulfulde) can be added, either by itself as a kind of adverb ('certainly, definitely') as in (487a-b) or as part of a phrase with *kàní→* (487c-d). The latter is related to the verb *kán* /kání/ 'do', but it behaves morphosyntactically as an expressive adverbial (§8.4.5). It is made predicative by *bò* 'be' or its negation *wǒl* (negative) (§11.1.3.1). The sense is '(someone) be certain (that …)'. The complement is a regular main clause, which may denote either a completed or a future eventuality.

(487) a. *tájjárà égò bò-∅*
certainly come.Ipfv Ipfv-3SgSbj
'He/She will certainly come.'

b. *tájjárá [è $^{H+}$wálè] gúyé-∅*
certainly [Def $^{H+}$money] steal.Pfv-3SgSbj
'He/She certainly stole the money.'

c. *[tájjárá kàní→ ŋ́ bò] égò bò-∅*
[**certainly** do 1SgSbj be] come.Ipfv impf-3SgSbj
'I'm sure that he/she will come.'

d. *tájjárá kàní→ wǒl-∅*
certainly do not.be-3SgSbj
'He/She is not sure (about sth).'

17.3 Chain-like complements (perfective or anterior)

17.3.1 'Finish' (*déŋgé*) with perfective or (nonpast) anterior complement

déŋgé 'finish' is treated as a separate subevent in a complex predication, as though immediately subsequent to the activity itself. Therefore 'finish VPing' is phrased as a chain 'VP and then finish'.

If the entire bounded event is completed, *déŋgé* is perfective in form and is preceded by a complement that contains a conjugated perfective verb. The construction is that of tight perfective chains (§15.2.1.5). 1st/2nd person subjects have the same verb forms as in perfective main clauses (488b). For 3Sg and 3Pl subject, the verb of the complement of *déŋgé* is {L}-toned, versus {H} or {HL} in main clauses. A preceding otherwise {L}-toned noun can then undergo Final Tone-Raising of its final syllable (or mora) before the L-toned verb (§3.6.3.1), as in (488a-b). 3Sg subject is expressed by *nà* following the verb (488a).

(488) a. *[ɲă:* *ɲè:* *nà]* *déŋgé-∅*
[meal eat.Pfv 3SgSbj] **finish**.Pfv-3SgSbj
'He/She has finished eating (a meal).' (< *ɲà:*)

b. *[àlàmùnɔ́* *tɔ̀l-yɛ̀]* *déŋg-yɛ̀*
[sheep butcher.Pfv-3PlSbj] **finish**.Pfv-3PlSbj
'They have finished skinning and butchering the sheep-Sg.' (< *àlàmùnɔ̀*)

c. *[káyⁿ* *à* *kánì]* *à* *déŋgɛ̀*
[work(n) 2PlSbj do.Pfv] 2PlSbj **finish**.Pfv
'You-Pl have finished doing (the) work.'

When the entire event including its completion is imperfective (future or recurrent), the complement has same-subject anterior subordinator *né* ~ *nɛ̀* following the perfective (E/I-stem) (§15.2.2.2). This clause type also occurs as the antecedent clause in conditionals (§16.1), but here it belongs to the nonpast anterior (pseudo-conditional) type that indicates temporal sequence rather than causality.

(489) a. *[ɲà:* *ɲé:-∅* *né]* *déŋgɔ̀* *bò-∅*
[meal eat.Pfv-3SgSbj **and.then**] **finish**.Ipfv Ipfv-3SgSbj
'He/She will finish eating (a meal).'

b. *[àlàmùnɔ̀* *tɔ́l-yé* *nɛ̀]* *déŋgɔ̀* *b(ì)-yà*
[sheep butcher.Pfv-3PlSbj **and.then**] finish.Ipfv Ipfv-3PlSbj
'They will finish skinning and butchering the sheep-Sg.'

c. *[káyⁿ* *à* *kání* *nɛ̀]* *déŋgà-à* *wò*
[work(n) 2PlSbj do.Pfv **and.then**] finish.Ipfv-2PlSbj Ipfv
'You-Pl will finish doing (the) work.' (pronounced […àkán:ɛ̀…]

17.4 Verbal noun (and other nominal) complements

The productive verbal noun has suffix *-ɔ̀l* (§4.2.4). Complements in the form of VPs ending in the verbal noun suffix, or some other noun (such as a cognate nominal) denoting an eventuality type, are required by some matrix-clause verbs. Compare English control verbs

with infinitival (*to VP*) complements. The logical subject of the complement VP is coindexed with the matrix subject, but is not overtly expressed.

17.4.1 Argument structure of verbal-noun complement

The verbal noun complement may contain nonsubject constituents that belong to the embedded clause. For example, accusative 'me' in (490a) is the object of 'kill', and 'Mopti' in (490b) functions as a locational complement of 'go'.

(490) a. *[è* *$^{H+}$ntá-gé]* *[mì-ŋ* *gíyɛ̂-l]*
[Def $^{H+}$person-Pl] [1Sg-Acc kill-**VblN**]
dúndɔ́ *ŋké* *b-yà*
seek 3PlSbj Prog-3PlSbj
'The people are seeking (trying) to kill me [focus].'

b. *[móttì* *ándê-l]* *ŋ́* *dùndɛ̀=yè*
[Mopti go-**VblN**] 1SgSbj seek.Pfv=Past
'I had wanted to go to Mopti.'

17.4.2 'Prevent' (*hár kánì*) with verbal-noun complement

This matrix-clause complex verb takes a verbal noun complement. The logical agent of the verbal noun appears as object of *hár kánì* in the matrix clause.

(491) a. *kùmà:ŋgà* *égê-l* *mì-ŋ* *hár* *kànì-∅*
rain(n) come-**VblN** 1Sg-Acc **prevent** do.Pfv-3SgSbj
'The rain prevented me from coming here.'

b. *bèlègè* *nó:yê-l* *mì-ŋ* *hár* *kán-lì-∅*
noise sleep-**VblN** 1Sg-Acc **prevent** do-PfvNeg-3SgSbj
'(The) noise did not prevent me from sleeping.'

c. *[ŋ́* *bɔ̀bɔ́]* *[bàmàkɔ̀* *ándê-l]*
[1SgPoss father] [Bamako go-**VblN**]
mì-ŋ *hár* *kànì-∅*
1Sg-Acc **prevent** do.Pfv-3SgSbj
'My father prevented me from going to Bamako.'

17.4.3 'Dare' (*ná:lè*) with verbal-noun complement

ná:lè 'think' may be used in the sense 'dare to VP, have the nerve/effrontery to VP'. The complement is in verbal noun form.

(492) *[nùw^{n}* *égê-l]* *á* *nă:lè*
[here come-**VblN**] 2SgSbj **think**.Pfv
'You-Sg have dared to come here?'

17.4.4 'Consent' (*ábé*) with verbal-noun complement

ábé 'accept, receive' may take a verbal-noun complement in the sense 'agree, consent (to do something)', when the subject of the embedded clause is coindexed with the matrix subject.

(493) *[ŋ́* *kó:-gè]* *égê-l* *áb-yè*
[1PlSbj head-Pl] come-**VblN** **accept**.Pfv-3PlSbj
'Our chiefs agreed to come.'

If the subjects are disjoint, the verbal noun takes the embedded-clause subject as possessor.

(494) *[ń́* *bɔ̀bɔ́]* *[bàmàkɔ́* *ń́* *ɲ-à:ndê-l]* *ábé-∅*
[1SgPoss father] [Bamako 1SgSbj Epen-go-**VblN**] **accept**.Pfv-3SgSbj
'My father agreed/consented that I go to Bamako.'
(lit. "… accepted my going to Bamako")

17.4.5 'Want' (*kéɲù* ~ *kéy*^{n}) complements

For defective stative *kéɲù* ~ *kéy*^{n} 'want' and its negation *kéy-là* see §11.2.5.2. The verb can take an NP object ('I want some sugar') or a clausal complement. The forms of clausal complements depend on whether the two clauses share the same subject.

17.4.5.1 'Want' with verbal-noun complement (coindexed subjects)

If the logical subject of the complement is coindexed with the matrix subject, 'want' takes an ordinary verbal noun (or similar nominal) complement (495). The coindexed subject is not overtly marked in the complement.

(495) a. *[bàmàkɔ̀* *ándê-l]* *kéy*^{n} *bò-∅*
[Bamako go-**VblN**] **want** be-3SgSbj
'He/She wants to go to Bamako.'

b. *[úná* *sógê-l]* *ń́* *kèy*^{n}
[goat buy-**VblN**] 1SgSbj **want**
'I would like to buy a goat.'

See also (447f) in §14.7.2.

17.4.5.2 'Want' with nonpast anterior complement (disjoint subjects)

If the subjects are disjoint, the complement of 'want' takes the form of a nonpast anterior clause with *né* ~ *nè* and a verb conjugated for pronominal subject (§15.2.2.2).

(496) *[ŋ́* *bɔ̀bɔ́]* *[bàmàkɔ́* *ŋ́* *ɲ-à:ndé* *nɛ̀]*
[1SgPoss father] [Bamako 1SgSbj Epen-go **and.then**]
kéy^{n} *bò-∅*
want be-3SgSbj
'My father wants me to go to Bamako.'

17.4.6 'Forget' (*íldɛ̀*) with verbal-noun complement

íldɛ̀ 'forget' can take an NP complement ('I forgot his name', 'they forgot me'). A clausal complement in the sense 'forget to VP' takes verbal-noun form.

(497) *égɛ̂-l* *íldɛ̀-∅*
come-**VblN** **forget**.Pfv-3SgSbj
'He/She forgot to come.'

'Forget' can of course also take a factive (propositional) complement. In (498), the complement has *gɛ́ŋ* 'place' (or more abstractly 'situation') as an {HL}-toned noun "possessed" by the embedded proposition, cf. *the fact that* in English (§14.2.7).

(498) *[[á* *y-ègè]* ^{HL}*gɛ̂ŋ]* *[ŋ́* *y-ĭldɛ̀]*
[[2Sg Epen-come.Pfv] ^{HL}**place**] [1SgSbj Epen-**forget**.Pfv]
'I forgot (the fact) that you-Sg have come.'

17.4.7 'Fear' (*ní:gɛ̀*) with verbal-noun or quoted imperative complement

An example is (499), where the subjects of the two clauses are the same. Other forms are 1Pl *ŋ̀ ní:gɔ̀:* 'we are afraid' and 1Sg past-time *ŋ́ nì:gɔ̂:=yɛ̀* 'I was afraid'.

(499) *[nùŋ* *égɛ̂-l]* *ŋ́* *nì:gɔ̂:*
[here come-**VblN**] 1SgSbj **fear**.Ipfv
'I am afraid to come here.'

When the subjects of the two clauses are different, the result is a construction with quoted prohibitive verb (cf. English *lest*).

(500) *[mì-ŋ́* *bùndà-ndé-ỳ^{n}]* *ŋ́* *nì:gɔ̂:*
[1Sg-Acc hit-**Proh**-**QuotImprt**] 1SgSbj **fear**.Ipfv
'I am afraid lest he/she hit me.' (= 'I am afraid that he/she will hit me.')

nì:gɔ̂: 'is afraid, fears' in both examples is in the final-long-vowel imperfective form (§10.2.2.2).

17.4.8 'Begin' (*dɔ́gúlɛ̀*) with verbal-noun complement

dɔ́gúlɛ̀- 'begin' and its verbal-noun complement are illustrated in (501).

(501) *dúgú-rê-l* *ŋ́* *dɔ̀gúlɛ̀*
run-**VblN** 1SgSbj **begin**.Pfv
'I began to run.'

This was elicited. By contrast, in (549) in Text 1, the complement is imperfective with *w^{n}*. Compare English *begin to run* and *begin running*.

17.4.9 'Cease' (*íŋgí-rɛ̀*) with verbal-noun complement

íŋgí-rɛ̀ 'stop (sth)', transitive counterpart of *ínjɛ̀* 'stand, stop', can also mean 'cease, give up (an activity)', implying permanent behavior change. It can take a verbal noun complement.
.

(502) *[kɔ̀njɛ̀* *nɛ̂:-l]* *ŋ́* *ɲ-ìŋgí-rɛ̀*
[beer drink-**VblN**] 1SgSbj Epen-**stand-Tr**.Pfv
'I have stopped (= have renounced) drinking beer.'

17.4.10 'Look for, seek' (*dúndɛ́*) with verbal-noun complement

dúndɛ́ 'look for' can take a verbal-noun complement in the sense 'try to (VP)', compare English *seek* in *seek to (VP)*. An example is (447e) in §14.7.2.

17.4.11 'Help' (*bárgɛ̀*) with nominal or imperfective complement

bárgɛ̀ 'help' is a transitive verb that takes a (usually human) object. The relevant activity domain is expressed either by an NP or by an imperfective subordinated clause. The NP subtype is seen in (503a-b). (503a) has a cognate nominal related to the verb 'do farming', while (503b) has a verbal-noun phrase including an object..

(503) a. *á:mádù* *kùbɔ̀* *mì-ŋ* *bárgɛ̀-∅*
Amadou **farming(n)** 1Sg-Acc **help**.Pfv-3SgSbj
'Amadou helped me (with) farming.'

b. *[dèm* *símê-l]* *mì-ŋ* *báríg-yɛ̀*
[house build-**VblN**] 1Sg-Acc **help**.Pfv-3PlSbj
'They helped me build a/the house.'

The alternative is a clause with purposive subordinator *w^{n}*, see the following section. The subject of the embedded clause is expressed as the direct object of the 'help' clause (504).

(504) *[dɛ̌m* *sìmɔ̀* *ẃ^{n}]* *mì-ŋ* *báríg-yɛ̀*
[house build **Purp**] 1Sg-Acc **help**.Pfv-3PlSbj
'They helped me build the house.'

The construction [X help Y [to VP]] is arguably ambiguous as to whether the implied agent of the lower VP consists of Y or of the pair {X Y}. In the latter case, it would be useful to think of the verb 'help' as meaning 'join, become involved with', as in 'They joined me, building the house'.

bárgè ‘help’ has no obvious synchronic relationship to *báyrè* ‘add’ (the two senses are syncretic in some other Dogon languages). However, *báyrè* can take a clausal complement in a different sense, see (550) in Text 1.

17.5 Purposive and causal clauses

17.5.1 Same-subject purposive clause with *w^{n}* after unconjugated O/U-stem verb

This construction is attested with a motion verb in the main clause, whose subject is coindexed to that of the purposive clause. The verb in the purposive clause is unconjugated, and is in the {L}-toned O-stem (final-nonhigh-vowel class) or U-stem (final-high-vowel class). The verb is followed by purposive subordinator *w^{n}* (which becomes *ẃ^{n}* before an L-tone by Final Tone-Raising). This clause type also occurs with main-clause verbs ‘get’ (in the sense ‘be in a position to VP’) and ‘do’ (in the sense ‘be VERB-able’), see §10.5.2-3. See also (504) in the preceding section.

(505) a. *[ɲǎ: ɲɔ̀: w^{n}]* *égè-∅ / ég-yè*
[food eat **Purp**] come.Pfv-3SgSbj / -3PlSbj
‘He-or-she/They came to eat.’ (< *ɲà:*)

b. *[gěn nìmbù-gò w^{n}]* *gú:ndè-∅*
[fire fire.go.out-Caus **Purp**] go.out.Pfv-3SgSbj
‘He/She went out in order to put out the fire.’ (< *gèn*)

c. *[nò:yò w^{n}]* *égè-∅ / ég-yè*
[sleep(v) **Purp**] come.Pfv-3SgSbj / -3PlSbj
‘He-or-she/They came to sleep.’

d. *[mí-ŋ gìyɔ̀ w^{n}]* *égè-∅*
[1Sg-Acc kill **Purp**] come.Pfv-3SgSbj
‘He/She came to kill me.’

e. *[[ŋ́ sìrgá-gè] gùyò w^{n}]* *égè-∅*
[[1SgPoss chicken-Pl] steal **Purp**] come.Pfv-3SgSbj
‘He/She came to steal my chickens.’

f. *[[è sírgà] gùyò w^{n}]* *égè-∅*
[[Def chicken] steal **Purp**] come.Pfv-3SgSbj
‘He/She came to steal the chicken.’

Further examples of the form of the purposive-clause verb are in (506).

(506)

Pfv 3Sg	purposive	gloss
dwé:	*(dǔ:) dɔ̀: w^{n}*	‘pound’ (cognate nominal *dɔ̀:*)
né:	*(mǐ:) nɔ̀: w^{n}*	‘drink (water)’
kwé:	*kò: w^{n}*	‘sew’
gúyé	*gùyò w^{n}*	‘steal’
péɲjé	*pèɲjɔ̀ w^{n}*	‘milk (a cow)’
tómbé	*tòmbò w^{n}*	‘jump’

dɛ́:ndɛ̀	*dɛ̀:ndɔ̀ wⁿ*	'abandon'
sógú-lɛ̀	*sògù-lɔ̀ wⁿ*	'sell'
kán	*kànù wⁿ*	'do'
dàm	*dàmù wⁿ*	'speak'

This purposive clause type with *wⁿ* after unconjugated O- or U-stem verb should be distinguished from another with the "same" *wⁿ* but after a conjugated A-stem verb. Those clauses function as imperfective (not purposive) subordinated clauses (§15.2.1.3).

17.5.2 Different-subject purposive clause with *lɛ̀* after verb with {*o: ɔ: u:*}

This construction is attested with different-subject purposive clauses. The main clause can denote any purposeful action or activity. The purposive clause ends in *lɛ̀*. It follows a conjugated form of the verb that ends in long {*o: ɔ:*}, replaced by *a:* for 3Pl subject. This points to the final-long-vowel imperfective (§10.2.2.2). Examples are in (507a-b), the first of which also happens to contain a same-subject *wⁿ* purposive.

(507) a. *[bármà ŋké-ⁿ ŋ̀ tàbɛ̀]*
[pot 3Pl-Acc 1SgSbj give.Pfv]
[ɲă: dɔ̀ŋgɔ̀ ẃⁿ] dìnɔ́:-∅ / dìn-á: lɛ̀
[meal cook Purp] get.Ipfv-3SgSbj / -3PlSbj **Purp**
'I gave them a pot, so he-or-she/they would be able (=have the wherewithal) to cook meals.' ('get' = 'be able to, be in a position to', §10.5.2)

b. *mòtó-nà mì-ŋ tábé-∅,*
motorcycle-3SgPoss 1Sg-Acc give.Pfv-3SgSbj,
péná ŋ̀ ɲ-à:ndó: lɛ̀
Pinia 1SgSbj Epen-go.Ipfv **Purp**
'He gave me his motorcycle, so that I (might) go to Pinia.'

Paradigms for representative verbs are in (508).

(508)

subject	'go in'	'go'	'dance'	'shatter'	'do'
1Sg	*ŋ̀ nɔ̌: lɛ̀*	*ŋ̀ ɲ-à:ndó: lɛ̀*	*ŋ̀ yɛ̀bɔ́: lɛ̀*	*ŋ̀ tɛ̀bà-gó: lɛ̀*	*ŋ̀ kànú: lɛ̀*
1Pl	*ŋ̀̂ nɔ̂: lɛ̀*	*ŋ̀̂ ɲ-á:ndò: lɛ̀*	*ŋ̀̂ yɛ́bɔ̀: lɛ̀*	*ŋ̀̂ tébà-gò: lɛ̀*	*ŋ̀̂ kánù: lɛ̀*
2Sg	*á nɔ̌: lɛ̀*	*á ɲ-à:ndó: lɛ̀*	*á yɛ̀bɔ́: lɛ̀*	*á tɛ̀bà-gó: lɛ̀*	*á kànú: lɛ̀*
2Pl	*à nɔ̂: lɛ̀*	*à ɲ-á:ndò: lɛ̀*	*à yɛ́bɔ̀: lɛ̀*	*à tébà-gò: lɛ̀*	*à kánù: lɛ̀*
3Sg	*nɔ̌:-∅ lɛ̀*	*àndó:-∅ lɛ̀*	*yɛ̀bɔ́:-∅ lɛ̀*	*tɛ̀bà-gó:-∅ lɛ̀*	*kànú:-∅ lɛ̀*
3Pl	*nw-ă: lɛ̀*	*ànd-á: lɛ̀*	*yɛ̀b-á: lɛ̀*	*tɛ̀bà-g-á: lɛ̀*	*kàn-á: lɛ̀*

17.5.3 Different-subject purposive-manner clause with *bànà*

Another way to express a different-subject purposive clause is a manner adverbial clause headed by *bànà* 'way, manner' (§15.3.2.1). Compare English *in such a way that* or French *(faire) en sorte que* in goal-directed contexts. The verb has imperfective participial form

(§14.4.3). Two examples, both with *bànà yò: nà* 'so that it (=work) may turn out well', are in (563) and (567) in Text 3.

Paradigms for representative verbs in this construction with *bànà* are in (509).

(509)

subj	'go in'	'go'	'dance'	'shatter'	'do'
1Sg	*nɔ̀: ŋ́ b-yà*	*àndò ŋ́ b-yà*	*yɛ̀bɔ̀ ŋ́ b-yà*	*tɛ̀bà-gò ŋ́ b-yà*	*kànù ŋ́ b-yà*
1Pl	*nɔ̂: ŋ̀ bí-yà*	*ándò ŋ̀ bí-yà*	*yɛ́bɔ̀ ŋ̀ bí-yà*	*tɛ́bá-gò ŋ̀ bí-yà*	*kánù ŋ̀ bí-yà*
2Sg	*nɔ̀-á yà*	*àndá-á yà*	*yɛ̀bà-á yà*	*tɛ̀bà-gà-á yà*	*kànà-á yà*
2Pl	*nɔ́-à yà*	*ándà-à yà*	*yɛ́bà-à yà*	*tɛ́bá-gà-à yà*	*kánà-à yà*
3Sg	*nɔ̀: nà*	*àndò nà*	*yɛ̀bɔ̀ nà*	*tɛ̀bà-gò nà*	*kàn nà*
3Pl	*nɔ̂: ŋké b-yà*	*ándò ŋké b-yà*	*yɛ́bɔ̀ ŋké b-yà*	*tɛ́bá-gò ŋké b-yà*	*kánù ŋké b-yà*

An example, but with problematic verb form, is (594) in Text 4.

17.5.4 Causal ('because') clause (final *nâm→*)

Alongside clause-initial *pàskɔ́* (French *parce que*), which is ubiquitous in native languages of Mali as spoken by younger people, there is a native 'because' form *nâm→*, positioned clause-finally. It is evidently a variant of purposive-causal postposition *námù* (§8.3), but in this construction the final *u* is replaced by "intonational" prolongation of the *m*.

(510)

òjú	*ɲàm-í:*	*bò-∅*	*nâm→,*
road	ruin-ResPass	be-3Sg	**because**,
péná	*ŋ̀*	*ɲ-á:ndò-mà-ndà*	
Pinia	1Pl	Epen-go-Capac-StatNeg	

'We can't go to Pinia because the road is in bad shape.'
(for resultative passive, see §10.4.1.2)

17.5.5 Obligational 'must' construction with *wà:jíbì* 'obligation'

wà:jíbì 'obligation, duty' can be made into a predicate nominal with the 'it is' clitic allomorph *=yò* (§11.2.1.1). The subject (or theme) is then a possessed verbal noun.

(511)

[bàmàkɔ́	*ŋ́*	*ɲ-à:ndê-l]*	*wà:jíbì=yò*
[Bamako	1SgPoss	Epen-go-**VblN**]	**obligation**=it.is

'I must go to Bamako'.
(lit. "My going to Bamako is a duty.")

18 Anaphora

18.1 Reflexive

18.1.1 Reflexive object (‘my head’ etc.)

A possessed form of *kó:* ‘head’ is used for reflexive object, compare English *-self/-selves* reflexives.

(512) a. *kó:-ná* *sɛ́mɛ́-∅*
head-3SgPoss cut.Pfv-3SgSbj
‘He cut himself.’ or ‘She cut herself.’

b. *[ŋ́* *[L]kò:]* *ŋ́* *sɛ̀mɛ̀*
[1SgPoss [L]head] 1SgSbj cut.Pfv
‘I cut-Past myself.’

c. *[ŋ̀* *[H]kó:]* *ŋ̀* *sɛ́mɛ̀*
[1PlPoss [H]head] 1PlSbj cut.Pfv
‘We cut ourselves.’

These specialized reflexive combinations are not sharply different from regular possessed forms of ‘head(s)’ in the literal sense. There is no overt difference between ‘myself’ above and ‘my head’ in (513a). However, with plural pronominal possessor (and plural heads), the plural suffix *-gè* is optional in the literal sense, e.g. ‘our heads’ in (513b), but is absent in reflexive ‘ourselves’.

(513) a. *[ŋ́* *[L]kò:]* *mì-ŋ* *tíyò* *bò-∅*
[1SgPoss [L]head] 1Sg-Acc hurt.Ipfv Ipfv-3SgSbj
‘My head hurts.’

b. *[mbé* *[H]kó:(-gè)]* *yáw-yáw* *bô-∅*
[1PlPoss [H]head(-Pl)] lightweight be-3PlSbj
‘Our heads are light.’

For “middle” voice, see mediopassive (versus transitive) verbal derivatives in §9.4.

18.1.2 Reflexive possessor

There is no overt marking of reflexivity in possessors. A 3Sg or 3Pl possessor may or may not be coindexed with a third-person clausemate subject. (514a,c) are therefore ambiguous. ‘His dog’ has the same form in (514a), where coindexation with the clausemate subject is possible, as in (514b) with a clearly distinct first person subject.

(514) a. *úná-ná* *gíyɛ́-∅*
goat-3SgPoss kill.Pfv-3SgSbj
'He$_x$ killed his$_x$ (own) dog.'
'He$_x$ killed his$_y$/her$_y$ dog.'

b. *úná-ná* *ŋ́* *gìyɛ̀*
goat-3SgPoss 1SgPoss kill.Pfv
'I killed his/her goat.'

c. *sɛ̌ydù* *bɔ̀bɔ̀-nà* *málgɛ̀-∅*
Seydou father-3SgPoss see.Pfv-3SgSbj
'Seydou$_x$ saw his$_x$ (own)/his$_y$/her$_y$ father.'

18.2 Emphatic pronouns

'My head' and related forms can also be used adverbially, with an instrumental postposition, as equivalents of emphatic pronouns.

(515) a. *[[ŋ́* *^{L}kò:]* *nì]* *ŋ́* *sìmɛ̀*
[[1SgPoss ^{L}head] Inst] 1SgSbj build.Pfv
'I built (it) myself.'

b. *[[kó:-ná* *ní]* *símɛ̀-∅*
[[head-3SgPoss Inst] build.Pfv-3SgSbj
'He built (it) himself.'

18.3 Logophoric subject pronouns

There are no all-purpose logophoric pronouns as such. However, logophoricity (coindexation of an argument inside a quotation with the ascribed author of the quotation) can be expressed if the argument is subject of its clause, provided that the author is third person, i.e. neither the current speaker nor the current addressee.

Singular logophoric subject in this sense is expressed by a morpheme *à*, which is proclitic to the verb or (in imperfectives) sandwiched between verb and auxiliary, following the usual rules for subject pronouns. The homonym *à* expresses 2Pl subject.

(516) a. *sɛ̌ydù* *[à* *y-égɛ̀]* *nɛ́-∅*
Seydou [**3LogoSgSbj** Epen-come.Pfv] say.Pfv-3SgSbj
'Seydu$_x$ said that he$_x$ came.'
[identical to 'Seydou said that you-Pl came']

b. *sɛ̌ydù* *[à* *y-égé-l]* *nɛ́-∅*
Seydou [**3LogoSgSbj** Epen-come-PfvNeg] say.Pfv-3SgSbj
'Seydou$_x$ said that he$_x$ didn't come.'
[identical to 'Seydou said that you-Pl didn't come']

c. *sɛ̌ydù* *[égà-à* *wò]* *nɛ́-∅*
Seydou [come.Ipfv-**3LogoSgSbj** Ipfv] say.Pfv-3SgSbj
'Seydou$_x$ said that he$_x$ will come.'
[identical to 'Seydou said that you-Pl will come']

b. *sěydù* *ègà-à-l* *né-∅*
Seydou come-**3LogoSgSbj**-IpfvNeg say.Pfv-3SgSbj
'Seydou$_x$ said that he$_x$ will not come.'
[identical to 'Seydou said that you-Pl will not come']

My assistant occasionally attempted to audibly distinguish 2Pl from logophoric singular subject for some inflectional categories. For the imperfective positive, on one occasion the medial long [a:] was reduced to [a] for the logophoric, see (516c); this was also applied to the imperfective negative, see (516d). On another occasion, he used *bò* rather than *wò* for the logophoric singular imperfective positive, see (516c). However, at other times he acknowledged that there was no audible difference, and this is also my overall conclusion.

Plural logophoric subject is expressed by 3Pl pronoun *ŋké*, instead of the usual 3Pl subject suffix on the verb. This resembles nonsubject focus clauses with regular 3Pl subject. In the imperfective negative, *wòl* 'not be' is used instead of *-l* suffix (517d).

(517) a. *[è* $^{H+}$*wé:-gè]* *[ŋké* *égè]* *níy^{n}-yè*
[Def $^{H+}$child-Pl] [**3LogoPlSbj** come.Pfv] say.Pfv-3PlSbj
'The children$_x$ said that they$_x$ came.'

b. *[è* $^{H+}$*wé:-gè]* *[ŋké* *égé-l]* *níy^{n}-yè*
[Def $^{H+}$child-Pl] [**3LogoPlSbj** come-PfvNeg] say.Pfv-3PlSbj
'The children$_x$ said that they$_x$ didn't come.'

c. *[è* $^{H+}$*wé:-gè]* *[égò* *ŋké* *bò]* *níy^{n}-yè*
[Def $^{H+}$child-Pl] [come.Ipfv **3LogoPlSbj** Ipfv] say.Pfv-3PlSbj
'The children$_x$ said that they$_x$ will come.'

d. *[è* $^{H+}$*wé:-gè]* *[égò* *ŋké* *wòl]* *níy^{n}-yè*
[Def $^{H+}$child-Pl] [come.Ipfv **3LogoPlSbj** not.be] say.Pfv-3PlSbj
'The children$_x$ said that they$_x$ will not come.'

§15.3.2.2 includes examples involving the frame 'pretend that/act as though …' with subordinated clause. Although quotation as such is not involved, the feigned acts derive from the communicative intentions of the actor, and logophoric subjects occur (with participialized verbs).

There is no logophoric when the argument in the quoted clause is other than subject, e.g. direct object. In (518), the regular 3Sg pronoun *ɔ̀nɔ̀* is used, and there is no explicit indication of coindexation, so noncoindexed readings are possible.

(518) *sěydù* *[ɔ̀nɔ̀* *à* *búndè* *né-∅*
Seydou [**3Sg** 2PlSbj hit.Pfv] say.Pfv-3SgSbj
'Seydou$_x$ said that you-Pl hit him$_x$/ him$_y$-or-her$_y$.'

Likewise 'he$_x$ told the people to help him$_x$' in (594) in Text 4.

Logophoric subject is not expressed when the ascribed author is the current speaker or addressee. In these cases, the pronominal categories of the current speech event override logophoricity. The form for 2Sg subject (519b) is tonally distinct from the logophoric singular *égà-à wò*, as in (516c) above. The logophoric singular is, however, homophonous with the 2Pl subject form, see paradigm (245) in §10.2.1.1.

(519) a. *[égó ŋ́ bò] ŋ́ nɛ̀*
[come.Ipfv **1SgSbj** Ipfv] **1SgSbj** say.Pfv
'I said I am coming.'

b. *[égá-á wò] á nɛ̀*
[come-**2SgSbj** Ipfv] **2SgSbj** say.Pfv
'You-Sg said that you-Sg are coming.'

18.4 Reciprocal

The reciprocal ('they hit/saw each other') is expressed by a verbal derivation with suffix *-lɛ̀* added to an otherwise transitive verb with a referentially nonsingular subject (§9.5). The verb is optionally preceded by *bòw^{n}* 'together, reciprocally'.

19 Grammatical pragmatics

19.1 Topic

19.1.1 Topic (*gɔ̀n* ~ *gɔ̂n*)

The topic particle is *gɔ̀n* ~ *gɔ̂n*. It implies a contrast between the topicalized NP and other possible topics from the discourse or communicative context.

(520) *[mí gɔ̂n] àndó-ò-lì*
[1Sg **Topic**] go-IpfvNeg-1SgSbj
'As for me, I'm not going.'

Representative forms are in (521). The particle is *gɔ̂n* after an entirely H- or L-toned word, but *gɔ̀n* after any word with a contour tone. In *wè:-gè gɔ̂n* 'as for children' it appears that the final H-tone of *wè:-gé* has jumped onto the topic morpheme.

(521)

	input	gloss	'as for'
a. pronouns			
	mí	1Sg	*mí gɔ̂n*
	mbé	1Pl	*mbé gɔ̂n*
	ó	2Sg	*ó gɔ̂n*
	ɔ̀nɔ̀	3Sg	*ɔ̀nɔ̀ gɔ̂n*
	ŋké	3Pl	*ŋké gɔ̂n*
b.	*wè:*	'child'	*wè: gɔ̂n*
	è $^{H+}$*wê:*	'the child'	*è* $^{H+}$*wê: gɔ̀n*
	wè:-gé	'children'	*wè:-gè gɔ̂n*
	sɛ̌ydù	'Seydou'	*sɛ̌ydù gɔ̀n*
	úná	'goat'	*úná gɔ̂n*
	úná-gé	'goats'	*úná-gé gɔ̂n*

19.1.2 'Also' (*pé*)

pé is added to NPs including pronouns, and to adverbial phrases such as locative PPs (522a). It follows the accusative marker if present (522b). It may also occur clause-finally (522c).

(522) a. *[bàmàkɔ̀ bà pé] káy^{n} ŋ́ kàn(ù)*
[Bamako Loc **also**] work(n) 1SgSbj do.Pfv
'I worked <u>in Bamako too</u> [focus].'

b. *[è* $^{H+}$*wê:-ŋ pé] búndé-∅*
[Def $^{H+}$child-Acc **also**] hit.Pfv-3SgSbj
'He/She hit-Past the child also.'

c. *nɔ̌:* *nw-â:* *pé*
song sing.Ipfv-3PlSbj **also**
'They sing too.'

Pronominal combinations are *mí pé* (1Sg), *mbé pé* (1Pl), *ó pé* (2Sg), *ábé pé* (2Pl), *ɔ̀nɔ̀ pé* (3Sg), and *ŋké pé* (3Pl).

19.1.3 'Even' (*X pè*)

pè following a constituent expresses 'even X' (523a-b). H-toned *pé* occurs between L-tones.

(523) a. *[wè:* *pé]* *dìgɔ̀-mâ:* *bò-∅*
[child **even**] go.up-can be-3SgSbj
'Even a child can go up (=climb).'

b. *[wè:-ná-ŋgè* *pè]* *búndò* *bò-∅*
[child-3SgPoss-Pl **even**] hit.Ipfv Ipfv-3SgSbj
'He/She even hits his/her children.'

Clause-finally *pè* is a kind of emphatic, indicating that the proposition is surprising or otherwise noteworthy. See (569) in Text 3 and (574) in Text 4.

19.2 Preclausal discourse markers

19.2.1 'Well, …' (*hàyà*)

Preclausal *hàyà* 'well, …' or 'all right, …' occurs in Penange as in most languages of the area. It can be used to acknowledge comprehension of an interlocutor's utterance (524a) or to assent to a proposal (cf. English *very well*). It can also be a hesitation form suggesting lack of enthusiasm, like English preclausal *well*.

(524) a. *hàyà* *ŋ́* *nùndè*
well 1SgSbj hear.Pfv
'Okay, I have heard (understood).'

b. *hàyà* *ŋ́* *nà:lé* *nɛ̀w*
well 1SgSbj think.Pfv first
'Well, I'll think it over first.' (repeated from §10.2.1.2)

For assent to a proposal, see (540) in Text 1.

19.2.2 'But …' (*ŋgà*)

Clause-initial (or preclausal) *ŋgà* 'but' belongs to a regionally widespread complex. Other nearby languages have e.g. *kà:*, *gà:*, or *ŋkà*.

(525) *èm-bà* *ándó* *ŋ́* *bò,* *ŋgà* *wànjó-ó-lì*
there go.Ipfv 1SgSbj Ipfv, **but** stay-1SgSbj-IpfvNeg
'I am going there but I won't stay.'

19.3 'Only' (*tìrà→*)

tìrà→ 'only' is probably derived from an original numeral 'one' that does not otherwise survive in Penange (cf Ampari *tùdà*, Tebul Ure *túrè:*, Jamsay *túrú*, and other cognates). In Penange, 'one' is *tà:ŋgà* as modifier and *tè:dà* in the counting cycle.

The 'only' particle can be added to an NP or similar constituent, which is usually focal (526a), or it can occur clause-finally, especially when no suitable NP is present (526b).

(526) a. *[ín* *tìrà→]* *mì-ŋ* *tábé* *ná*
[Prox **only**] 1Sg-Acc give.Pfv 3SgSbj
'He/She gave me this only [focus].'

b. *nó:yá-á* *wò* *tìrà→*
sleep.Ipfv-2SgSbj Ipfv **only**
'You-Sg only sleep.'

Circumlocutions of the type 'they don't replaster walls, if it is not (=unless it is) with honey', i.e. 'they only use honey to replaster walls', also occur especially in narrative; see (539) in Text 1.

19.4 Phrase-final emphatics

19.4.1 Clause-final *kóy* 'sure' (firm agreement or reply)

The regionally widespread clause-final confirmational emphatic, in the form *kóy*, is in common use in Penange. It is used somewhat like English *sure* as in *It sure is hot today*, or abbreviated *It sure is* as an emphatic confirmational response to *It's hot today* or to the question *Is it hot today?*

(527) *nwà:gè* *bó-∅* *kóy*
hot be-3SgSbj **Emph**
'It sure is hot!'

19.4.2 Clause-final *dé* (admonitive)

Another regionally widespread clause-final emphatic takes the form *dé* in Penange. It has an admonitive or gently contradicting function. Cf. English low-pitched pragmatic *now* as in *Be careful now!*

(528) *nwà:gè* *bó-∅* *dé*
hot be-3SgSbj **Emph**
'(Watch out,) it (e.g. pot) is hot!'

19.5 Greetings

The metalinguistic terms are noun *tíyà-m* 'greeting (n)' and verb *tíyá-mì* 'greet (sb)'. For evening greetings the verb is *déná-mì* 'say good evening', as in (573) in Text 3.

A typical four-part ABAB greeting cycle for the morning is (529). My assistant takes *èlà* to be contracted from *hé:lá* 'welfare, well-being'. *náyé* is the verb 'spend the night'. In the second AB sequence, *èlà n nǎy-yè*, pronounced [èlàn:ǎj:è], the extra *n* might be reduced from instrumental *ni*, while *nǎy-yè* is the regular 3Pl subject perfective form of *náyé*.

(529) A: *èlà=á nàyè→* 'Did you-Sg spend the night well?'
èlá=à náyè→ 'Did you-Pl spend the night well?'

B: *èlà ŋ́ nàyè* '(Yes,) I spent the night well.'
èlà ŋ̀ náyè '(Yes,) we spent the night well.'

A: *[èlà n] nǎy-yè→* 'Did they (your family) spend the night well?'

B: *[èlà n] nǎy-yè* 'They spent the night well.'

Around mid-day the greeting changes (530). The constructions are exactly parallel, but the verb is now *déné* 'spend the (mid-)day'.

(530) A: *èlà=á dènè→* 'Did you-Sg spend the day well?'
èlà=à dénè→ 'Did you-Pl spend the day well?'

B: *èlà ŋ́ dènè* '(Yes,) I spent the day well.'
èlà ŋ̀ dénè '(Yes,) we spent the day well.'

A: *[èlà n] děn-yè→* 'Did they (your family) spend the day well?'

B: *[èlà n] děn-yè* 'They spent the day well.'

A simple 'hello' type greeting, e.g. to someone encountered while one individual or the other is walking, is *tíyá→* (to one person), *tíyá yà* (to more than one person). The reply is *ò:wá→*.

A departing traveler is sent off with (531). The reply to this and similar invocations is the Arabic *ʔàmí:nà* 'amen!'. The verb 'cause to arrive' is in quoted imperative form, in {H}-toned form.

(531) *[èlà n] túbyá-mí* 'May (God) make (you) arrive in well-being!'

On Muslim holy days and some other celebrations such as weddings, standard wishes to other villagers are those in (532). In the abbreviated form (532a), the quoted imperative verb is {H}-toned (532a), as in (531) above. When an accusative pronoun is added to specify the recipient of 'show', the quoted imperative verb is {LHL}-toned (532b). A variant of (532a) is (532c).

(532) a. *nà:ŋgòl* *tá:r(í)-yé*
next.year show-QuotImprt
'May (God) show (you/us) next year!'

b. *ʔàmànáː* *nàːŋgòl* *ábé-ⁿ* *tàːrí-yè*
God next.year 2Pl-Acc show-QuotImprt
'May (God) show (you/us) next year!'

c. *[è* *égò* *bò]* *táːr(í)-yé*
[thing come.Ipfv Ipfv.Ppl] show-QuotImprt
'May (God) show (you/us) what is coming (=the future)!'

Texts

Text 1: Hyena, hare, and the honey (tale)

(533) A: *dábál-yè* *ŋ́* *tùlè*
tale 1SgSbj put.Pfv
B: *ná:m*
all.right
A: I have put (=I propose) a tale.
B: All right.
[standard tale opening AB sequence; remainder of text is told by A; *dábál-yè* with diminutive *-yè* §5.1.5; *ná:m* is a formal, 'amen'-like response]

(534) *[tà:* *nì]* *[jɔ́mɛ̀* *nì],*
[hyena and] [hare and],
[ŋké *dúgú]* *má:gá* *kân* *nà,*
[3PlPoss village] difficulty happen.Pfv 3SgSbj,
ɲɔ̀:njí *má:j-jè* *nà,*
food be.difficult-Inch.Pfv 3SgSbj,
dágúr-yè *[[gándà* *ŋké* *ándé-y^{n}]* *níy^{n}-y^{n}è],*
get.ready.Pfv-3PlSbj [[travel 3PlSbj go-QuotImprt] say.Pfv-3PlSbj],
'Hyena and hare. A crisis occurred in their village. Food was difficult (to find). They got ready (i.e. packed up), they decided to travel (= they said: let's go traveling!).'
[NP conjunction §7.1.1; *ŋké* *dúgú* with possessed {HL} overlay realized as {H} §6.2.2.1; *kân nà* and *má:j-jè nà* loosely chained perfective clause, first of many in this text, §15.2.2.1; inchoative *má:j-jè* for *má:g-yè* §9.6; 3Pl perfective *-yè* ~ *-yè* §10.2.1.1, 1Pl quoted imperative *-y^{n}* §10.7.3.1, in quoted hortative even with updated 3Pl subject §17.1.2.2; *níy^{n}-y^{n}è* 'they said', 3Pl perfective of *né* §10.1.2.1]

(535) *èné* *gwíy-yè,* *ójú* *ímb-yè,*
thus leave.Pfv-3PlSbj, road catch.Pfv-3PlSbj,
ùnù→ *hâl* *wáj-jí-yè,*
walk.Ipfv until distant-Inch.Pfv-3PlSbj.
èné *[wàlà^{L}* *yɛ́:né],* *ŋké-ŋ* *málgè* *nà,*
thus [man^{L} a.certain], 3Pl-Acc see.Pfv 3SgSbj,
ŋké-ŋ *íŋgì-rè* *nà,* *sárè* *nà,*
3Pl-Acc stop-Tr.Pfv 3SgSbj, ask.Pfv 3SgSbj,
mbà *tégá-yá* *lè,*
where? head.for.Ipfv-3PlSbj QuotQ,
'Then they left (their village), they hit the road. They walked (and walked) until they had gone far away. Then a certain man saw them. He stopped them and asked, where were they going?'
[*èné* 'thus, like this' in the sense 'then' in narratives §4.4.2.3; *gwíy-yè* ~ *gúy-yè* 'they left' from verb *gwé:* §3.2.8.1, §10.2.1.1; *ùnù→* imperfective subordinate clause with

prolonged final vowel §15.2.1.2; *hâl* 'until' perfective clause, §15.2.2.3; *yé:né* 'a certain' §6.3.2; *tégá-yà* 3Pl imperfective, §10.2.2.6; quotative interrogative particle *lè* §17.1.3]

(536) *[è* H+*wálá-ŋ]* *jámb-yè,*
[Def H+man-Acc] reply.Pfv-3PlSbj,
ŋké *gôn,* *[ŋké* H+~~H~~*dúgú]* *má:gá* *kân* *nà,*
3Pl Topic, [3PlPoss H+~~H~~village] difficulty happen.Pfv 3SgSbj,
káy^{n} *dúndɔ́* *ŋké* *b-yà,*
work(n) look.for.Ipfv 3PlSbj Ipfv-3PlSbj,
'They replied to the man: as for them, a difficulty (=crisis) happened in their village, work [focus] was what they were looking for.'
[definite *è* §4.4.1.1; topic *gôn* §19.1.1; subject proclitic (*ŋké*) in focalized clause §13.1.1.4]

(537) *[è* H+*wálá]* *ènέ*
[Def H+man] thus
[dèm-nà *bà]* *ŋké-ŋ* *síndè* *nà,*
[house-3SgPoss Loc] 3Pl-Acc convey.Pfv 3SgSbj,
ɲà: *ŋké-ŋ* *tábè* *nà,* *ɲíy*^{n}*-y*^{n}*è,* *déŋg-yè* *wá:rù,*
meal 3Pl-Acc give.Pfv 3SgSbj, eat.Pfv-3PlSbj, finish.Pfv-3PlSbj time,
[ɔ̀nɔ̀ *gôn]* *[káy*^{n} *jwá→]* *à* *sâ*^{n}*,*
[3Sg Topic] [work(n) much] LogoSgSbj have,
kàn-má: *bì-yà* *bé-né,*
do-Capac be-3PlSbj if,
'Then the man took them to his house. He gave them a meal, they ate. When they had finished, (he said:) as for him, he had a lot of work, if they could do it.'
[*bà* locative postposition §8.2.3.1; *wá:rù* in temporal adverbial clause §15.2.1.1; *jwá→* 'a lot' §8.4.2; *káy*^{n} here is pronounced with lowered pitch before expressive *jwá→*; logophoric singular subject *à* §18.3; *sâ*^{n} 'have' §11.5.1; capacitative *-mâ:* §10.5.1; *bé-né* 'if' §16.1]

(538) *jámb-yè,* *[káy*^{n} *sî:]*
reply.Pfv-3PlSbj, [work(n) kind]
ŋké-ŋ *tábé* *ná* *sèlè,* *kánù* *ŋké* *bò,*
3Pl-Acc give.Pfv.Ppl 3SgSbj all, do.Ipfv 3PlSbj Ipfv,
[ê: *nâm]* *ég-yè,*
[DiscDef Purp] come.Pfv-3PlSbj,
'They replied: any kind of work that he gave them [focus] they would do; they had come for that.'
[compound *káy*^{n} *sî:* 'kind of work' §5.1.1; perfective nonsubject relative clause §14.4.2; *sèlè* 'all' at end of relative clause §14.6.2; discourse-definite demonstrative *ê:* §4.4.1.2; purposive postposition *námù* ~ *nâm* §8.3]

(539) *ènέ* *dèm-ná* *[è* H+*árgò]* *bí-yá=yò* *tá:rè* *nà,*
thus house-3SgSbj [Def H+replastering] be-Ppl=it.is show.Pfv 3SgSbj,
hâl *[é* *tà:ŋgà* *ní]* *àrgò:-nd-yà,*
until [Def one Inst] replaster-IpfvNeg-3PlSbj,
ìgè=là *kán-∅,*
honey=it.is.not do.Pfv-3SgSbj,

àrg-â: *bɛ́-nɛ́* *pɛ́,*
replaster.Ipfv-3PlSbj if even,
[ŋkɛ́ *nwɛ́:]* *nɛ̀lɔ̀:-nd-yà,*
[3PlPoss hand] lick-IpfvNeg-3PlSbj

'Then he explained that his house was due for replastering (with mud), (and said) you-Pl will not (=must not) replaster (houses) with anything other than honey; (and) if you-Pl replaster, you-Pl will not (=must not) lick your hands.'

[participle *-yà* in nonsubject imperfective relative §14.4.3; *=yo* 'it is' §11.2.1.1; *é tà:ŋgà* 'the one' §4.7.1.1; instrumental postposition *ni* §8.1.2; *àrgò-nd-yà* 3Pl imperfective negative, final low pitch likely due to downdrift as also with *nèlɔ̀-nd-yà* just below, §10.2.3.3; *=là* 'it is not' §11.2.1.2; third person pronouns for quoted second person §17.1.1; *àrg-â:* 3Pl final-long-vowel imperfective §10.2.2.2; *bɛ́-nɛ́ pɛ́* 'even if' §16.2.1]

(540) *hàyà* *yɛ́:* *níy^{n}-y^{n}ɛ̀,* *ɛ̀nɛ̀* *káy^{n}* *dɔ́gúl-yɛ̀,*
all.right yes say.Pfv-3PlSbj, thus work(n) begin.Pfv-3PlSbj,
àrgá:-yà *ŋ,*
replaster.Ipfv-3PlSbj Ipfv,
tă:^{n} *mɔ̀:njì* *mánjà-à-yà* *nɛ́-∅* *nɛ́,*
hyena urine urinate.Ipfv-LogoSgSbj-Ppl say.Pfv-3SgSbj and.then,
dáb-yɛ́ *nɛ́,* *nwɛ́:-nà* *nɛ́lɛ́-∅* *nɛ́,*
hide-MP.Pfv and.then, hand-3SgPoss lick.Pfv-3SgSbj and.then,
[ɛ̀ *ŋkɛ́* *árgɛ́* *sèlè]* *tíbɛ́-∅* *nɛ́,*
[what 3PlSbj replaster.Pfv.Ppl all] fall.Pfv-3SgSbj and.then,

'They said, okay yes.' Then they began the work. While they were replastering, hyena pretended that he was urinating (off to the side). He secretly ("in hiding") licked his hands. All that they had replastered fell off (the wall).'

[hyena pretended to go away to urinate but really wanted just to lick honey off his hand; *hàyà* 'all right' §19.2.1; *àrgá:-yà ŋ* with different-subject imperfective subordinator *ŋ* §15.2.1.3; *mɔ̀:njì* cognate nominal for verb *mánjé* 'urinate' §11.1.2.5; *mánjà-à-yà* is nonsubject relative with logophoric subject since (feigned) urination is part of the actors communicative intent, *pínì* 'like' is implied but omitted, §15.3.2.2; nonpast anterior subordinator *nɛ́* 'and then' §15.2.2.2; default nonhuman *ɛ̀* as head of relative §14.2.4]

(541) *jɔ́mɛ̀* *ɔ̀nɔ̀-ŋ* *sárɛ́-∅* *nɛ́,*
hare 3Sg-Acc ask.Pfv-3SgSbj and.then,
[à *nɛ́lɛ́-l]* *nɔ́* *bò-∅,*
[LogoSgSbj lick-PfvNeg] say.Ipfv Ipfv-3SgSbj,

'If (=when) hare asked him, he (=hyena) would say that he hadn't licked (his hand).'

[conditional *nɛ́* §16.1]

(542) *ɛ̀nɛ̀* *káy^{n}* *kán-nì* *dɛ̀ŋg-yɛ́* *sèlè,*
thus work(n) do.Pfv-3PlSbj finish.Pfv-3PlSbj all,
[ɛ̀ *wálá]* *wálé* *à* *sá:-ndà.*
[Def man] money LogoSgSbj have-not,
[ìgè *nì]* *ŋkɛ́-ŋ* *sójà-à* *wò,*
[honey Inst] 3Pl-Acc pay.Ipfv-LogoSgSbj Ipfv,

‘Then as soon as they had completed the work, the man (said) that he had no money, (so) he would pay them with honey.’

[3Pl perfective *kán-nì* §10.2.1.1; *sɔ́jà-à wò* 3LogoSg imperfective §10.2.2.1]

(543) *[ntá sèlè] pɔ́:, [[pô:y jáŋgà] w^{n}] gá:-rè nà,*
[person every] share(n), [[sack interior] Loc] put.in-Tr.Pfv 3SgSbj
[[ŋké $^{H\text{-}}$*dúgú] ŋ] kónd-yè,*
[[3PlPoss $^{H\text{-}}$village] Loc] go.back.Pfv-3PlSbj,

‘He put each person’s share (of honey) in his (=the person’s) sack. They went back to their village.’

[*sèlè* ‘all’ in distributive sense ‘each’; *gá:-rè* ‘put (sth) in (sth) for (sb)’ with benefactive, from *gálé* ‘put (sth) in (sth)’, §9.4.1]

(544) *ég-yè, [ŋké* ^{HL}*ntá-gè],*
come.Pfv-3PlSbj [3PlPoss ^{HL}person-Pl],
[è $^{H+}$*ígè] tá:r-yè,*
[Def $^{H+}$honey] show.Pfv-3PlSbj,
tà:^{n} ìgè-nà [[dèm jáŋgà] ŋ] nwá:-mì nà,
hyena honey-3SgPoss [[house inside] Loc] go.in-Caus.Pfv 3SgSbj,
jɔ́mé bágúlè nà, [è $^{H+}$*ígè] némè nà,*
hare go.around.Pfv 3SgSbj, [Def $^{H+}$honey] take.Pfv 3SgSbj,
[ɔ̀mbɔ̀gɔ̀nɔ̀ ^{HL}*wé:-gè] dú:ndè nà,*
[bees ^{HL}child-Pl] put.down.Pfv 3SgSbj,

‘They came (to the village). The showed the honey to their people (=kin). Hyena put his honey inside the house. Hare came around (stealthily). He took the honey, and put some bees (in hyena’s sack).’

[*[X jáŋgà] ŋ* ‘inside X §8.2.4; *ɔ̀mbɔ̀gɔ̀nɔ̀* ‘bees’ is collective, individuated by adding ‘child’ in possessive-type compound §5.1.5]

(545) *tà:^{n} dó:síŋé némè nà, [[jɔ̀mè* ^{HL}*dêm] ŋ̀]*
hyena metal.ladle take.Pfv 3SgSbj, [[hare ^{HL}house] Loc]
[gènì kíyá-yà pínì] kàn nè,
[fire pick.up.Ipfv-Ppl like] do.Pfv and.then,
[ìgé ɲă:-yà ŋ] tèmbè nè,
[honey eat.Ipfv-3PlSbj Ipfv] encounter.Pfv and.then,

‘Hyena took a metal ladle and did as though (=pretended that) he was picking up some fire (i.e. embers) at hare’s house. He (= hyena) encountered (= hare’s family) while (they) were eating honey.’

[*pínì* in ‘as though’ clause §15.3.2.2; *ɲă:-yà ŋ* 3Pl different-subject imperfective clause ‘while’ §15.2.1.3]

(546) *ɔ̀nɔ̀-ŋ gá:-r-yé nè, gú:-ndɛ́ né,*
3Sg-Acc put-Tr.Pfv-3PlSbj and.then, go.out.Pfv and.then,
[[[è $^{H+}$*gên] kò] w^{n}] mɔ̀:njì mánjé né,*
[[[Def $^{H+}$fire] head] Loc] urine urinate.Pfv and.then,
nímbú-gé né,
extinguish-Tr.Pfv and.then,
[è $^{H+}$*tó:] ɔ̀nɔ̀-ŋ gá:-r-yé nè,*
[Def $^{H+}$other] 3Sg-Acc put-Tr.Pfv-3PlSbj and.then,

'They (=hare's people) put (embers) in it for him, he (=hyena) went out, and he urinated on the fire (i.e. embers) and extinguished it. They gave him another (fire).'

[3Sg accusative *ɔ̀nɔ̀-ŋ* in benefactive sense §8.1.1; *[X kò] ŋ* 'on X' §8.2.7; *nímbú-gè* 'extinguish (fire)' from intransitive *nímbé* '(fire) go out' §9.2.2]

(547) *káná nà ŋ, [jɔ̀mɛ̀ HL ígè] ŋ̀kè nà,*
do.Ipfv 3SgSbj Ipfv, [hare HL honey] be.used.up.Pfv 3SgSbj,
[dɛ̀m-nà bá] ándè nà,
[house-3SgPoss Loc] go.Pfv 3SgSbj,
[wè:-ná-ŋgè nì] [ɔ̀nɔ̀ ní] [dèmù ŋ] núy^{n}-y^{n}è.
[child-3SgPoss-Pl and] [3SgSbj and] [house Loc] go.in.Pfv-3PlSbj,

'While he (=hyena) was doing (thus), hare's honey was used up. He (=hyena) went (back) to his house. His children and he went into the house.'

[tonosyntactically *jɔ̀mɛ̀* HL *ígè* with {HL} possessum overlay §6.2.2.1; *wè:-ná-(ŋ)gè* 'his/her children' with 3Sg possessor suffix intervening between noun and plural suffix §6.2.2.2; conjoined NPs §7.1.1]

(548) *[wè:-gè négá] [bándá ŋ] dɛ́:ndè nà,*
[child-Pl two] [outside Loc] leave.Pfv 3SgSbj,
[è H+ bów^{n}] nèjí-yɛ́ né nà,
[Def H+ door] press-QuotImprt say.Pfv and.then,
mʔm̀ à né nɛ̀, bàŋgù-là-ndé-ỳ^{n},
no! LogoSgSbj say.Pfv if, shut-Rev-Proh-PlSbj,
m̀hḿ à né nɛ̀, bàŋgù-lí-yɛ̀,
yes! LogoSgSbj say.Pfv if, shut-Rev-QuotImprt,

'He (=hyena) left two children outside (the house). He told them to push on the door; if he said 'unh-uhn!' (= no!) they should not open (it), (but) if he said 'unh-huh!' (= yes!) they should open it.'

[*négá* 'two' H-toned after L-toned noun §4.7.1.2; quoted imperative *-yè* ~ *-yɛ̀* (twice) §10.7.3.1; *bàŋgù-là-ndé-ỳ^{n}* quoted prohibitive §10.7.3.2]

(549) *[è H+ pô:y] tɛ́w-lɛ̀ nà,*
[Def H+ sack] cover-Rev.Pfv 3SgSbj,
[ɔ̀mbɔ̀gɔ̀nɔ̀ HL wé:-gè] gó:ŋg-yè jwá→,
[bees HL child-Pl] go.out.Pfv-3PlSbj a.lot
[ŋké-ŋ nùŋgɔ̀ ẁ^{n}] dɔ́gúl-yɛ̀,
[3Pl-Acc bite Purp] begin.Pfv-3PlSbj,
ń→ nɔ̀:-∅
"n-n-n" say.Ipfv-3SgSbj

'He (=hyena) opened the sack. Lots of bees came out, they began to bite them (hyena and his family members except the two who were outside). He was saying "n-n-n".

[*gó:ŋgè* 'go out' versus *gwé:* 'leave' §10.1.2.3; hyena's "*n→*", pronounced indistinctly while he is being attacked by bees, was an attempt to say 'yes' but came out sounding more like 'no']

(550) *[è H+ wé:-gè] nèjá→ bàyr-â:*
[Def H+ child-Pl] press.Ipfv add.Ipfv-3PlSbj
hâl dɔ́g-yɛ̀,
until die.Pfv-3PlSbj

‘The (two) children pushed harder (on the door), until they (=hyena and family) died.’

[3Sg equivalent *nèjá→ bàyrô:-∅* with final-lengthened A/O-stem on first verb < *nɛ́jɛ́* §15.2.1.2; *báyrè* ‘add’ as chained verb in the sense ‘VP more’]

(551) *dábál-yé [[géŋ ŋ́ tɛ̀mbɛ̀] ŋ̀] [ŋ́ dŭ:ndè]*
tale [[place 1SgSbj encounter] Loc] [1SgSbj put.down.Pfv]
‘I (have) put the tale down where I found it.’
[standard tale-ending phrase]

Text 2: Hyena and hare pay off a debt (tale)

(552) A: *dábál-yè* *ŋ́* *tùlè*
tale 1SgSbj put.Pfv
B: *ná:m*
all.right
A: I have put (=I propose) a tale.
B: All right.

(553) *[tà:* *nì]* *[jɔ́mɛ̀* *nì],*
[hyena and] [hare and],
[ègàgè^{L} *yɛ́:nɛ́]* *[[[sàbàl-kàn*^{L} *tà:ŋgà]* ^{HL}*kî:]* *ŋ],*
[morning^{L} a.certain] [[[merchant^{L} one] ^{HL}custody] Loc]
yòrì *nɛ́m-yè,* *[sɔ̀jɔ̀* *ŋ́]* *kɔ̀ndɔ̀* *kán-nì,*
credit take.Pfv-3PlSbj, [pay Purp] failure do.Pfv-3PlSbj,
[è $^{H+}$*sábàl-kàn],* *[ŋké-ŋ* *gíyà-à* *wò]* *né* *nà,*
[Def $^{H+}$merchant], [3Pl-Acc kill.Ipfv-LogoSgSbj Ipfv] say.Pfv 3SgSbj,
'Hyena and hare. One morning they took credit (=bought on credit) from a merchant. (Later) they were unable to repay him. The merchant said: I will kill you-Pl.'
[adjective *yɛ́:nɛ́* §6.3.2; adjective *tà:ŋgà* '1' §4.7.1.1; agentive *sàbàl-kàn* 'merchant' from *sàbàl kán(í)* 'do commerce' §5.1.4; *[X kî:] ŋ* 'in the custody of X' §8.2.13; *ŋ* purposive after O-stem §17.5.1; *kɔ̀ndɔ̀ kán* 'fail, be unable' §11.1.2.2; quoted "I will kill you-Pl" expressed as "LogoSg will kill them" §17.1.1; logophoric singular imperfective is homophonous to 2Pl §10.2.2.1]

(554) *ènɛ́* *bòw^{n}* *málgá-l-yè,*
thus reciprocally see-Recip.Pfv-3PlSbj,
[ŋké ^{HL}*ní:-ŋgè]* *ŋké* *sógú-lá-máy^{n},*
[3Pl ^{HL}mother-Pl] 3PlSbj buy-Rev-Allative.Hort,
'Then they (hyena and hare) saw each other. They decided to sell their mothers.'
[reciprocal verbal suffix *-lɛ́* and particle *bòw^{n}* §9.5; allative hortative §10.7.2.3]

(555) *jɔ́mɛ̀* *[[bòlè*^{L} *ɔ̀mbɛ̀]* *nì]* *ní:-ná-ŋ* *sɔ́jɛ̀* *nà,*
hare [[thread^{L} fragile] Inst] mother-3SgPoss-Acc tie.Pfv 3SgSbj,
tà:^{n} *[yɔ̀lɔ̀bù* *nì]* *ní:-ná-ŋ* *sɔ́jɛ̀* *nà,*
hyena [chain Inst] mother-3SgPoss-Acc tie.Pfv 3SgSbj,
'Hare tied his mother up with a fragile (=threadbare) thread. Hyena tied his mother up with a chain.'
[*bólé* 'thread']

(556) *jɔ́mɛ̀* *ní:-ná-ŋ* *dábál-dè* *nà,*
hare mother-3SgPoss-Acc whisper-Tr.Pfv 3SgSbj,
kɔ́mbɔ́lɔ́ *ŋké* *túbyɛ́* *né* *sèlè,*
outback 3PlSbj arrive if all,
[tɔ́njɛ́ *nɛ́]* *àndí-yè,*
[pull.off and.then] go-QuotImprt,

‘Hare whispered to his mother: as soon as they reached the outback (=brousse), she should pull it (=thread) off with a tug and go away.’

[*dábál-dè* ‘whisper to (sb)’ §9.4.1; *sèlè* ‘all’ at the right edge of a conditional antecedent, end of §16.1]

(557) *[kɔ́mbɔ́lɔ́ ŋ] túbyí-yɛ́ sèlè,*
[outback Loc] arrive.Pfv-3PlSbj all,
[jɔ̀mɛ̀^{L} *nî:]* *tɔ́njɛ̀ nà, dúgú-rè-∅,*
[hare^{L} mother] pull.off 3SgSbj, run-Tr.Pfv-3SgSb
ɔ̀nɔ̀ gɔ̂n, ní:-nà póllè-∅,
3Sg Topic, mother-3SgPoss escape.Pfv-3SgSbj
‘When they reached the outback, hare’s mother pulled it off with a tug and ran away. As for him (=hare), his mother escaped.’

(558) *tà:*^{n} *jámbè nà,*
hyena reply.Pfv 3SgSbj,
ní:-ná ŋké-ŋ bèlɔ̂:-∅,
mother-3SgSbj 3Pl-Acc suffice.Ipfv-3SgSbj,
ánd-yè, [tà:^{n} *nî:] sógú-l-yè,*
go.Pfv-3PlSbj, [hyena mother] buy-Rev.Pfv-3PlSbj,
[wàlè jwá→] dín-yè, [dèmù ŋ] kónd-yè,
[money a.lot] get.Pfv-3PlSbj, [house Loc] go.back.Pfv-3PlSbj,
‘Hyena spoke up, (saying) that his mother would be enough for them. They went and sold hyena’s mother. They got a lot of money. They went back home.’

[*bèlɔ̂:-∅* final-long-vowel imperfective §10.2.2.2; *jwá→* §8.4.2]

(559) *[è wálé]* *wélá-g-yè,*
[Def money] divide-Tr.Pfv-3PlSbj,
[[è sábàl-kàn] ɲɛ̂:] *táb-yè,*
[[Def merchant] thing] give.Pfv-3PlSbj,
ènɛ́ yòrì [[ŋké páró] *ŋ] gwé:∅,*
thus credit [[3PlPoss neck] Loc] leave.Pfv-3SgSbj,
‘They divided the money. They gave (=repaid) the merchants’ (share). In that way the credit (=debt) got off of their neck(s).’

[*ɲɛ̂:* default inanimate possessed noun, §6.2]

(560) *jɔ́mɛ̀, ntá-ná-gè kíyé b-yà,*
hare, person-3SgPoss-Pl complete be-3PlSbj,
[nàfòrò pé] díné-∅,
[wealth too] get.Pfv-3SgSbj,
tà:^{n} *nàfòrò díné-∅, [ní:-ná gɔ́] wǒl-∅*
hyena wealth get.Pfv-3SgSbj, [mother-3SgPoss Topic] not.be-3SgSbj
‘(As for) hare, his people (=family) was intact, and he got wealth (=became wealthy) too. (As for) hyena, he (too) got wealth, (but) his mother was no longer there.’

[*kíyé b-yà* ‘they are intact, complete’, negative *kíyé wǒl-yà* ; *gɔ́* shortened from *gɔ́n*]

(561) *dábál-yé* *[[géŋ* *ŋ́* *tèmbɛ̀]* *ŋ̀]* *[ŋ́* *dŭ:ndɛ̀]*
tale [[place 1SgSbj encounter] Loc] [1SgSbj put.down.Pfv]
'I put the tale down where I found it.'
[standard tale-ending phrase]

Text 3: Collective work

(562) *pòlbà* *káy^{n},*
collectivity work,
[ègàgè *pírígíl]* *[wálá-gé* *ní]* *[ságállá-gé* *ní],*
[morning early.morning] [man-Pl and] [youth-Pl and],
[ŋké ^{HL}*káy^{n}-gólyé-gè]* *káldí-yé* *nè,*
[3PlPoss ^{HL}work-gear-Pl] prepare.Pfv-3Pl and.then,
[[dèm-gè *túndù]* *bà]* *gú:ndí-yé* *nè,*
[[house-Pl behind] Loc] go.out-Intr.Pfv-3PlSbj and.then
ségál-gí-yé *nè,* *wálá-gé* ^{HL}*dígâm,*
assemble-Recip-3PlSbj and.then, man-Pl ^{HL}talk(n),
'Collective (volunteer) work. Early in the morning, men and youths get their work gear ready. They go out and assemble behind (=at the edge of) the houses (=village). (We're talking) talk about men.'
[*dígám* 'talk(n)']

(563) *[è* $^{H+}$*káy^{n}]* *bànà* *yò:* *nà,*
[Def $^{H+}$work(n)] manner be.good.Ipfv.Ppl 3SgSbj,
[dám-mí: *nè]* *bòw^{n}* *péjí-gí-yé* *nè,*
[speak-3PlSbj and.then] Recip understand-Recip-3PlSbj and.then,
ènέ *[è* $^{H+}$*káy^{n}]* *dɔ́gúlɔ̀* *b-yà,*
like.that [Def $^{H+}$work(n)] begin Ipfv-3PlSbj,
'So that the work may turn out well, they speak and come to a mutual understanding. Then they begin the work.'

(564) *[è* $^{H+}$*káy^{n}]* *kánù* *ŋké* *b-yà* *ê:,*
[Def $^{H+}$work(n)] do.Ipfv 3PlSbj Ipfv-Ppl that.Def,
kìnì-[bógê-l]=yò, *màrtó-gè* *nì,* *bàlàmîn* *nì,*
stone-[break-VblN]=it.is, hammer-Pl with, lever with,
kèmbù-[kèmbí-yè] *nì,*
pinching(n)-[pinch.Pfv-Inst] with,
ê: *nì,* *sìm-túmà* *nì,*
that.Def with, borassus.palm-wood with,
ê: *nì,* *púná* *nì,*
that.Def with, powder with,
'The work that they do (is) that (=whatchamacallit?), breaking rocks, with hammers, with levers, with tongs (to hold the rocks), with that (=whatchamacallit?) with borassus palm logs, with that (=whatchamacallit?), with powder (=explosives).'
[verbal noun compound *kìnì-[bógê-l]* §5.1.3; instrumental compound *kèmbù-[kèmbí-yè]*, for the morphology see (101) in §5.1.10; *sìm-túmà* compound from *sím* 'borassus palm' and the root for (diminutive) *tùmá-yè* twig, stick']

(565) *[è* $^{H+}$*káy^{n}]* *dɔ̀gùl-á:* *bè-nè,*
[Def $^{H+}$work(n)] begin.Ipfv-3PlSbj if,
búl *wélágí-yé* *nè,*
group(s) divide-3PlSbj and.then,

[bá:líkì-gè *tó:-nà]* *[wè:-gè* *tó:-nà]*
[adult-Pl apart] [child-Pl apart]
[ságállá-gé *tó:-nà],*
[youth-Pl apart],

'When they begin the work, they divide themselves into groups, adults apart (in one group), children apart (in another group), youths apart (in a third group).'

[< *dɔ̀gùl-â:* 3Pl final-long-vowel imperfective §10.2.2.2; *tó:-nà* §8.4.5.2]

(566) *kà:lɔ̀*[L] *wálá,*
griot[L] male,
[bólyé *ní]* *[[ŋké* *pâ]* *ŋ]* *díŋgà-∅*
[tomtom with] [[3PlSbj beside] Loc] follow-3SgSbj
wè:-gé *kɛ̀mbù-[kɛ̀mbí-yè]* *dínd-yê-l* *[ŋké* *[HL]káy[n]],*
child-Pl pinching(n)-[pinch.Pfv-Inst] hold-MP-VblN [3PlPoss [HL]work(n)],
ságállá-gé *[màrtô* *nì]* *bógê-l* *[ŋké* *[HL]káy[n]],*
youth-Pl [hammer with] hit-VblN [3PlPoss [HL]work(n)],

'A male griot goes along with them at their side with a tomtom. The work of children is to hold the tongs. The work of youths is to hit (the rock) with hammers.'

(567) *wàlà*[L] *ká:mnɔ́-gé,* *[bànà* *kàn* *bí-yà]* *nì,*
man[L] old-Pl, [manner do Ipfv-Pplj] with,
bànà *yò:* *nà* *nì,*
manner be.good.Ipfv.Ppl 3SgSbj with,
dágúrò *ŋké* *b-yà,*
prepare.Ipfv 3PlSbj Ipfv-Ppl,
kìnì, *[ɛ̀gàgɛ̀* *pírígíl]* *dɔ́gúlí-yé* *nɛ̀,*
stone, [morning early.morning] begin-3PlSbj and.then,
hâl *[dòyà:lò-gè* *[HL]wágâr],*
until [lunch-Pl [HL]time],

'Old men prepare (=instruct) them (=children and youths) as to the way to do (the work), so that it (=work) may turn out well. As for the rocks, they (=workers) begin early in the morning (and continue) until lunchtime.'

[*bànà kàn bí-yà* 'how to do (it)' §15.3.2.1; *dágúrò ŋké b-yà* is a headless relative-clause in form but can be freely translated as a main clause]

(568) *nɛ́llí-yɛ́* *nɛ̀,* *ɲà:* *ɲíy[n]-y[n]ɛ̀* *nɛ̀,*
rest.Pfv-3PlSbj and.then, meal eat.meal.Pfv-3PlSbj and.then,
sèndì *kán-ní:* *nɛ̀,*
prayer do.Pfv-3PlSbj and.then,
ènɛ́ *[nè:gù-lò]-pé,* *káy[n]* *dɔ́gúlɔ̀* *b-yà,*
like.that [two-Ord]-time, work(n) begin.Ipfv Ipfv-3PlSbj,

'They rest, they eat a meal (lunch), they pray (2 PM Muslim prayer). After that they begin work a second time.'

[ordinal *-lò* §4.7.2]

(569) *káy[n]* *kàn-á:* *bɛ̀-nɛ̀,*
work(n) do.Ipfv-3PlSbj if,
sàwlè-lmà *nì,* *ɲàŋgù-n-sìyà* *nì,* *kán* *b-yà,*
dynamic-Nom with, soul-happy with, do Ipfv-3Pl

nùn *nèmà→,* *hâl* *[[è* $^{H+}$*káy^{n}]* ^{HL}*ŋkê-l],*
now take.while, until [[Def $^{H+}$work(n)] ^{HL}finish-VblN],
[[gè:dènì^{L} *kúndú]* $^{H\!\!\!-}$*káy^{n}]=yò* *pè,*
[[day^{L} intact] $^{H\!\!\!-}$work(n)]=it.is even,

'When they work, they do (it) with vigor and happiness (=enthusiasm), all the way until the completion of the job. It's a whole day's work.'

[*sàwlè-lmà* §4.2.2; *ɲàŋgù-n-sìyà* with nasal linker §5.1.8; *nùn nèmà→* §15.2.1.2]

(570) *[è* $^{H+}$*káy^{n}]* *kàn-á:* *bè-nè,*
[Def $^{H+}$work(n)] do.Ipfv-3PlSbj if,
ó *[è* $^{H+}$*ntá]* *kày$^{n+H\!\!\!-}$-nà* *kánù* *ŋké* *b-yà,*
2Sg [Def $^{H+}$person] work(n)-3SgPoss do.Ipfv 3PlSbj Ipfv-Ppl,
[òmà *ní]* *[ɲà:* *nì]* *ŋké* *á* *dɔ̀ŋgù-rɛ́* *nè,*
[porridge and] [meal and] 3Pl(Obj) 2SgSbj cook-Tr.Pfv and.then,
yɔ̀:-gé, *[è* $^{H+}$*ɲâ:]* *dɔ́ŋgê-l* *[ŋké* $^{H\!\!\!-}$*káy^{n}],*
woman-Pl, [Def $^{H+}$meal] cook-VblN [3PlPoss $^{H\!\!\!-}$work]
[ɛ̂: *nì]* *[mì-wê-l* *nì],*
[that.Def and] [water-draw-VblN and],

'If they do the work, you (who are) the person whose work they are doing, you cook porridge and a meal for them. Women, their job is to cook the meal, that and to (go and) draw water (at the well).'

[*kày$^{n+H\!\!\!-}$-nà* §6.2.2.1; 2Sg *ó* in apposition to a third-person NP as relative head §14.2.3]

(571) *[ɛ̂:* *túndù* *ŋ],*
[that.Def after Loc]
wàlà-gé *kìnì* *bògò→* *dɛ́nɔ̀* *b-yà,*
man-Pl stone break.while pass.day.Ipfv Ipfv-3PlSbj,
hâl *dè:ndà* *dɛ́mɛ́-∅* *nɛ́,*
until afternoon afternoon.arrive-3SgSbj and.then,

'After that, the men (=youths) spend the day breaking rocks, until afternoon comes.'

[*bògò→* §15.2.1.2; collocation *dè:ndà dɛ́mɛ́* §11.1.1.4]

(572) *wàlà*^{L} *ká:mnɔ́-gé,* *ŋké-ŋ́* *ségálá-m-mí:* *nè,*
man^{L} old-Pl, 3Pl-Acc assemble-Caus.Pfv-3PlSbj and.then,
ŋké-ŋ *kùnà* *bál-yé* *nè,*
3Pl-Acc oath give.thanks.Pfv-3PlSbj and.then,
[ŋké ^{HL}*káy^{n}-gólyé-gè]* *nɛ́mí-yɛ́* *nè,*
[3PlPoss ^{HL}work(n)-gear-Pl] take.Pfv-3PlSbj and.then,
[dùgù *ŋ̀]* *dígí-ndí-yɛ́* *nè,*
[village to] go.up-Tr.Pfv-3PlSbj and.then,

'Old men assemble them (younger men) and give thanks to them. They (=workers) take their work gear and go (back) up to the village.'

[*kùnà bálé* 'give thanks' (cf. *kùnà kán* 'swear an oath') §11.1.1.4]

(573) *[[è* $^{H+}$*káy^{n}-nà]* *ŋké* *kán]* *démù* *ŋ̀,*
[[Def $^{H+}$work(n)-3SgPoss] 3PlSbj do] house at,
déná-m-mí: *nè,*
say.good.evening-Caus-Pfv.3PlSbj and.then,

ènè	*[ntá*	*sèlè]*	*[dèm-nà*	*ŋ̀]*	*ándò*	*bò-∅*
like.that	[person	all]	[house-3SgPoss	to]	go	Ipfv-3SgSbj

‘At the house of (the person) whose work they have done, they say good evening. Then everyone goes (back) to his (own) house.’

[*démù ŋ̀* has the tone patterns of a compound postposition, chapter 8]

Text 4: Brotherly love

(574) *wàyà*[L] *yé:né,* *[sú:ⁿ* [HL]*wê:]* *nì,*
year[L] a.certain, [fasting [HL]month] with,
[dé: *ní]* *[nɔ́bé* *ní],*
[elder.sib and] [younger.sib and]
bòwⁿ *tɛ́lálí-g-yè,*
Recip disagree-Recip.Pfv-3PlSbj,
wálé *nâm→,* *[nà:-ŋgè* *ní],* *[àlàmùnɔ̀-gè* *ní],*
money because.of, [cow-Pl and], [sheep-Pl and],
jwá→ *sáⁿ-yà=yè,* *dɛ̀mbɛ̀:-ŋgè=yó* *pè,*
a.lot have-3PlSbj=Past, blacksmith-Pl=it.is Emph,
'One year, during Ramadan (Muslim fasting month), an older brother and a younger brother had a disagreement, because of money. They had lots of cattle and sheep. They were of the blacksmith (metalworker) caste.'
[*[X* [HL]*wê:]* *nì* with instrumental *ni* in temporal function §8.1.2; clause-final *pè* §19.1.3]

(575) *[è* [H+]*nɔ́bé* *ê:]* *dàwlà* *sâ:ⁿ* *bò=yè,*
[Def [H+]younger.sib Def] elegance have Ipfv=Past,
[kán *ní]* *[wàlè-tòmbò* *nì],*
[gold and] [silver and],
dòjù-gè *bí-yà=yè,*
forging-Pl be-3PlSbj=Past,
'The younger brother was elegant (=popular with others). They (both brothers) forged (did metalwork) with gold and silver.'
[in *wàlè-tòmbò nì* the *nì* sounds H-toned, likely due to nonterminal intonation; *sâ:ⁿ bò=yè* with 'be' added to 'have' §11.5.1]

(576) *ɛ̀nɛ́* *[dɛ̀n*[L] *tà:ŋgà],* *[è* [H+]*dé:]*
like.that [day[L] one], [Def [H+]elder.sib]
[[[è *ŋké* [HL]*ná:-ŋgè]* *sôwⁿ]* *bà]* *àndô:-∅,*
[[[Def 3PlPoss [HL]cow-Pl] presence] Loc] go.Ipfv-3SgSbj
ìmbô:-∅ *sògù-lô:-∅* *kán* *bò-∅=yè,*
catch.Ipfv-3SgSbj buy-Rev.Ipfv-3SgSbj do Prog-3SgSbj=Past
hâl *[è* [H+]*dá:bá-gè]* *gámbúl-yè,*
until [Def [H+]animal-Pl] diminish.Pfv-3PlSbj,
'Then (starting) one day, the older brother was going among their afore-mentioned (jointly owned) cows. He was seizing (one cow at a time) and selling it, to the point where their animals (=herd) were reduced.'
[*[[è ŋké* [HL]*ná:-ŋgè* with both definite and possessor §6.5.2; complex postposition *[X sôwⁿ] bà* 'in the presence of; among' §8.2.11; *àndô:-∅*, *ìmbô:-∅*, and *sògù-lô:-∅* final-long-vowel imperfectives §10.2.2.2]

(577) *[è* $^{H+}$*nɔ́bé* *pé],* *dèn* *tà:ŋgà,*
[Def $^{H+}$younger.sib too], day one,
[[è $^{H+}$*dé:]* *pâ]* *^{n}]* *dágúrè* *nà,*
[[Def $^{H+}$elder.sib] beside] Loc] get.ready.Pfv 3SgSbj,
ŋké *ándé* *nè-∅,*
3Pl go.Pfv say.Pfv-3SgSbj,
[è $^{H+}$*dá:bá-gè]* *ŋké* *sé:má-máy^{n}-yà,*
[Def $^{H+}$animal-Pl] 3PlSbj look-Allative.Hort-PlAddr,
'The younger brother for his part, one day, he got ready (to go) with the elder brother. He said, "let's go take a look at the animals!" '
[*sé:má-máy^{n}-yà* quoted allative hortative §10.7.3.3]

(578) *ánd-yè,* *[è* $^{H+}$*dá:bá-gè]* *málig-yè,*
go.Pfv-3PlSbj, [Def $^{H+}$animal-Pl] see.Pfv-3PlSbj,
[è $^{H+}$*nɔ́bɛ́]* *[è* $^{H+}$*dá:bá-gè]*
[Def $^{H+}$younger.sib] [Def $^{H+}$animal-Pl]
[gìré-nà *ŋ̀]* *ŋká:líg-yè,* *jámbè* *nà,*
[eye-3SgPoss Loc] become.small.Pfv-3PlSbj, reply.Pfv 3SgSbj,
'They went and they saw the animals. (As for) the younger brother, the animals struck him ("were in his eye") as few. He spoke up.'

(579) *bòw^{n}* *sɔ́gɛ̀=yè* *[tùndù* *ŋ̀* *gɔ̀n],*
together buy.Pfv=Past [behind Loc exactly],
[è $^{H+}$*wánjè-gè]* *[ŋ́* *ɲɛ́=wò],*
[Def $^{H+}$remainder-Pl] [1Sg Poss=it.is],
[è $^{H+}$*dé:]* *ɔ̀nɔ̀-ŋ̀* *ntíyè-∅,*
[Def $^{H+}$elder.sib] 3Sg-Acc hurt.Pfv-3SgSbj,
dɔ̀: wê: *nɛ́mɛ̀* *nà,*
pestle pick.up.Pfv 3SgSbj,
[è $^{H+}$*nɔ́bɛ́-ŋ́]* *búndà* *wò-∅* *nɛ́* *nà,*
[Def $^{H+}$younger.sib-Acc] hit Ipfv-3SgSbj say.Pfv 3SgSbj,
'(Younger brother:) he had bought (the animals) jointly (with his brother). "The ones left belong to me.' (As for) the elder brother, (this) hurt him. He picked up a pestle, and said he would (=tried to) hit the younger brother (with it).'
[*bòw^{n}* 'together' with 3Sg (not 3Pl) *sɔ́gɛ̀=yè* 'he had bought it jointly with …'; *ɲɛ́=wò* in 'Y belongs to X' predicates §11.5.2; *dɔ̀: wê:* 'pestle' §5.1.5]

(580) *[ntà*^{L} *tó:-gé]* *ɔ̀nɔ̀-ŋ* *gámb-yè,*
[person^{L} other-Pl] 3Sg-Acc block.Pfv-3PlSbj,
àbè-l-∅, *jámb-yè,*
accept-PfvNeg-3SgSbj, reply.Pfv-3PlSbj,
ɔ̀nɔ̀-ŋ *á* *nàré* *nɛ̀,*
3Sg-Acc 2SgSbj touch.Pfv if,
ò-ŋ́ *ŋ̀* *dɛ̀:ndɔ̀-ɔ̀-lí,*
2Sg-Acc 1PlSbj abandon-1PlSbj-IpfvNeg,
'Other people restrained him, (but) he refused (to stop). They spoke up: "if you touch him, we will not (ever) leave you alone." '

(581) *[è* H+*dúgú* *ŋ́]* *gú:nd-yè,*
[Def H+village Loc] go.out.Pfv-3PlSbj,
[[ŋké H+~~H~~*démú]* *ŋ́]* *téj-jí-yè,*
[[3PlPoss H+~~H~~house] Loc] head.for-MP.Pfv-3PlSbj,
[è H+*dé:]* *[[gémbó* *jáŋgà]* *ŋ̀],*
[Def H+elder.sib] [[compound inside] Loc]
[nɔ̀bé-nà-ŋ] *nwá:-mî-l* *àbè-l-∅,*
[younger.sib-3SgPoss-Acc] go.in-Caus-VblN accept-PfvNeg-3SgSbj,
'They (=the two brothers) went outside the village. They headed for their house. The older brother refused to let his younger brother go inside the (housing) compound.'
[The two brothers shared a courtyard inside a walled compound.]

(582) *ènέ* *[[nòlò-nà* *sôw^{n}]* *bà]* *ándè* *nà,*
like.this [[friend-3SgPoss chez] Loc] go.Pfv 3SgSbj,
só:ndó→ *hâl* *dógó* *dógé-∅,*
converse.while until night night.fall.Pfv-3SgSbj,
[à *gwé:]* *né* *nà,*
[LogoSgSbj go.out] say.Pfv 3SgSbj,
'Then he (=younger brother) went to a friend's place. (They) conversed until night had fallen. He (=younger brother) said he was going out (=going back home).'
[*dógó dógé* §11.1.1.4]

(583) *[è* H+*nóló]* *jámbè* *nà,*
[Def H+friend] reply.Pfv 3SgSbj,
[ò *ní]* *[à* *dé:* *nì]* *bòw^{n}* *à* *jáy^{n},*
[2Sg and] [2SgPoss elder.sib and] Recip 2Pl fight.Pfv,
ò-ŋ́ *gì* *gíyà-à* *wò* *né-∅,*
2Sg-Acc Rdp kill.Ipfv-3LogoSgSbj Ipfv say.Pfv-3SgSbj,
[dèmù *á* *tègà]* *á* *nɛ̀,*
[house 2SgSbj head.for.Ipfv] 2SgSbj say.Pfv,
nùw^{n} *náyá,*
here spend.night.Imprt,
'The friend replied: "you and your older brother have fought. He said he would kill you. You said you would go home, (but instead of that) stay here for the night!" '
[*gì gíyà-à* reduplicated imperfective §10.2.2.3]

(584) *jámbè* *nà,*
reply.Pfv 3SgSbj,
àmànáá *bàŋŋà* *bó-∅,* *ŋ́* *ɲ-à:ndé* *nɛ̀,*
God great be-3SgSbj, 1SgSbj Aug-go.Pfv if
[ɛ̀ *kán* *ná* *sèlè]=yò,*
[what do.Pfv 3SgSbj all]=it.is,
'He (=younger brother) replied: "God is great. If I go (home), (what you have predicted) is all (=exactly) what he (=older brother) will do." '

(585) *ènɛ̀* *[ŋké* H+~~H~~*démú* *ŋ́]* *ègè-∅,*
like.that [3PlPoss H+~~H~~house Loc] come.Pfv-3SgSbj,
[égá *nà* *ŋ̀]* *[è* H+*dé:]*
[come.Ipfv 3SgSbj Ipfv] [Def H+elder.sib]

[[bòw^{n} túndù] ŋ̀] dáb-yè nà,
[[door behind] Loc] lurk-MP.Pfv 3SgSbj,
dùbɛ́ dì díndà→,
iron Rdp hold.Stat,

'Then he (=younger brother) came to their house. As he was coming (=approaching), the elder brother lurked behind the door. He was holding an iron (bar).'

[*égá nà ŋ̀* 'as he was coming' §15.2.1.3; *dùbɛ̀* 'iron']

(586) *[è* $^{H+}$*dɛ́:] *^{HL}*wê:,*
[Def $^{H+}$elder.sib] ^{HL}child,
kúyɛ̀ nà, [dógó ẃ^{n}] dígɛ̀ nà,
hide.Pfv 3SgSbj, [roof Loc] go.up.Pfv 3SgSbj,
[[[[è $^{H+}$*bɔ́bɔ́] *^{HL}*nɔ́bɛ̀] pá] ŋ̀]*
[[[[Def $^{H+}$father] ^{HL}younger.sib] side] Loc]
[à dɛ́:] è^{n} dábà, né nà,
[LogoSgPoss elder.sib] Exist lurk.Stat-3SgSbj, say.Pfv 3SgSbj,
kɔ̀ndɔ̀ kán-∅, nùndè-l-∅,
failure do.Pfv-3SgSbj, hear-PfvNeg-3SgSbj,

'(As for) the older brother's son, he hid. He went up onto the roof. He said (=tried to give a warning) next to his father's younger brother that his father was lurking (there). (But) he failed, he (=younger brother) didn't hear.'

(587) *ènɛ̀ [ígódóní ŋ́] túb-yɛ̀ nà,*
like.that [doorway Loc] arrive-MP.Pfv 3SgSbj
bòw^{n} báŋgúlè nà, [kàmbà^{L} *tà:ŋgà] tábè nà,*
door open.Pfv 3SgSbj, [step^{L} one] give.Pfv 3SgSbj,
[è $^{H+}$*dɛ́:] [[è* $^{H+}$*dúbɛ̀] nì]*
[Def $^{H+}$elder.sib] [[Def $^{H+}$iron] with]
kó:-ná póŋgè nà, tíbá-m̀ nà,
head-3SgPoss clobber.Pfv 3SgSbj, fall-Caus.Pfv 3SgSbj,

'Then he (=younger brother) arrived at the doorway. He opened the door and took a step (in). The older brother clobbered him on the head with the iron. He fell.'

(588) *[yɔ̀:-gè ní] [wè:-gè nì] kɔ́mɔ́ kɔ́m-yɛ̀,*
[woman-Pl and] [child-Pl and] shout(n) shout.Pfv.3PlSbj
jámbè nà, ɲjó,
reply.Pfv 3SgSbj, today,
[kɔ́mɔ́ kɔ̀mɛ́ sèlè] gì gíyà-à wò,
[shout(n) shout.Pfv.Ppl all] Rdp kill-3LogoSgSbj Prog,
[è $^{H+}$*nɔ́bɛ́] jámbè nà,*
[Def $^{H+}$younger.sib] reply.Pfv 3SgSbj,
[ɲjó gɔ̂n] [mí-ŋ gì gíyá-á wò] á nɛ̀,
[today exactly] [1Sg-Acc Rdp kill.Ipfv-2SgSgSbj Ipfv] 2SgSbj say.Pfv,

'Women and children (in the household) shouted. He (=older brother) spoke up: "Today, I will kill anybody who shouts." The younger brother spoke up: "Precisely today you said that you would kill me." '

[tonal difference in imperfectives between reduplicated logophoric *gì gíyà-à wò* and 2Sg *gì gíyá-á wò* ; cognate collocation *kɔ́mɔ́ kɔ́mɛ́* 'give out a shout' §11.1.2.5; *kɔ́mɔ́*

kɔ̀mɛ́ sèlè ‘anyone who …’ impersonal perfective relative clause §14.4.2; *gɔ̂n* ‘exactly, precisely’ §8.4.3.2]

(589) *ènɛ́ [è H+dɛ́:] [dèmù ŋ̀] nwɛ̂: nà,*
like.that [Def H+elder.sib] [house Loc] go.in.Pfv 3SgSbj,
tálá nɛ́mɛ̀ nà, égè nà,
knife pick.up.Pfv 3SgSbj, come.Pfv 3SgSbj,
[[[è H+nɔ́bɛ́] kó] wʼ"] ínjè nà,
[[[Def H+younger.sib] on] Loc] stand.Pfv 3SgSbj,
dìgàm dám-à: sèlè,
talk(n) speak.Ipfv-2SgSbj all,
[nàŋgù ní] á b-yà,
[soul with] 2SgSbj be-Ppl,
‘Then the older brother went into the house. He picked up a knife and came (back). He stood on (=over) the younger brother (and said:) “Since you-Sg are talking, you are (=must) (still) be alive.” ’

[*dám-à:* may be a contraction of *dámá-á wò* ‘you speak’, with auxiliary *wò* omitted before *sèlè* ‘all’]

(590) *[è H+nɔ́bɛ́-ŋ́] sɛ́mɛ̀ nà,*
[Def H+younger.sib-Acc] cut.throat.of.Pfv 3SgSbj,
kúgújè nà, [bándá bá] tú:gɛ̀ nà,
drag.Pfv 3SgSbj, [outside Loc] throw 3SgSbj,
[è H+bágá] kójɛ̀ nà,
[Def H+blood] scrape.Pfv 3SgSbj,
[bándá bá] tú:gè nà,
[outside Loc] throw.out.Pfv 3SgSbj
‘He slaughtered (=cut the throat of) the younger brother, and dragged him and threw him outside. He scraped (=cleaned) up the blood (on the ground), and threw it outside.’

(591) *[sɔ̀y-nà ní] [è H+dúbɛ́ ní] [è H+tálá ní],*
[boubou-3SgPoss and] [Def H+iron and] [Def H+knife and],
[[ɲɛ́gɛ́:rɛ̀ jáŋgà] ŋ̀] gálè nà,
[[toilet inside] Loc] put.in.Pfv 3SgSbj,
yɔ̀: yê: nà, gú:ndè nà,
daybreak day.break.Pfv 3SgSbj, go.out.Pfv 3SgSbj,
[ntá-gé málíg-yé lè] sê:m nà,
[person-Pl see.Pfv-3PlSbj QuotQ] look.at.Pfv 3SgSbj,
‘He put the (bloody) clothing and the iron (bar) and the knife inside the outhouse (toilet). At daybreak he went outside and looked (to check) whether people had seen (the corpse).’

[quoted interrogative ‘whether’ for an internal question, §17.1.3]

(592) *kóndè nà, ènɛ́ [sàgàllà^{L} tà:ŋgà],*
go.back.Pfv 3SgSbj, like.that [youth^{L} one],
[táŋgá nà ŋ́] málgè nà,
[pass.Ipfv 3SgSbj Ipfv] see.Pfv 3SgSbj,
ntá-gé-ŋ́ tá:rè nà, ég-yè,
person-Pl-Acc show.Pfv 3SgSbj, come.Pfv-3PlSbj,

'He went back (inside). Then a youth passing by saw (the corpse). He showed (=reported) it to (other) people and they came.'

(593) *bòw^{n}* *bál-yè,* *ŋké-ŋ́* *tá:r-yè,*
door knock.Pfv-3PlSbj, 3Pl-Acc show.Pfv-3PlSbj,
[è $^{H+}$*dé:]* *ɔ̀nɔ̀=là* *kán* *pínà→*
[Def $^{H+}$elder.sib] 3Sg=it.is.not do.Pfv like,
kómɔ́ *kɔ̀mɔ̂:* *sòwěy^{n}→* *bìndìlô:,*
shout(n) shout.Ipfv on.ground roll.around.Ipfv,
'They knocked on the door. They showed (=explained to) them (=the people in the household). The older brother acted as though it (=the murderer) was not him. He was crying out and rolling around on the ground (in feigned grief).'
[*kán pínà→* is invariant, not conjugated]

(594) *ènɛ̀* *ntá-gé* *yògónì*
like.that person-Pl fast
ɔ̀nɔ̀-ŋ́ *báríg-yé* *nɛ̀-∅,*
3Sg-Acc help.Pfv-QuotImprt say.Pfv-3SgSbj,
nɔ̀bɛ̀-ná *bànà* *díŋgá-yù* *ŋké* *b-yà,*
younger.sib manner bury-? 3PlSbj Ipfv-Ppl,
[ènɛ̀ *gón]* *yò:-ndì-∅* *níy^{n}-y^{n}è,*
[like.that exactly] be.good-Ipfv.Neg-3SgSbj say.Pfv-3PlSbj,
sèmbɛ̀-gé-ŋ́ *yál-yè,* *ég-yè* *sé:m-mì,*
power-Pl-Acc call.Pfv-3PlSbj, come.Pfv-3PlSbj look.Pfv-3PlSbj,
[è *kánù* *ŋké* *b-yà]* *kán-nì,* *ánd-yè,*
[what do.Ipfv 3PlSbj Ipfv-Ppl] do.Pfv-3PlSbj, go.Pfv-3PlSbj,
'Then he told the people to help him immediately, in order for them to bury the younger brother. They said, "(that) isn't good." They called police, they came and looked. They did what they (always) do and they went away.'
[*díŋgá-yù* for expected *díŋgò* in purposive *bànà* manner clause §17.5.3]

(595) *[dèn*^{L} *tà:ndì-lò]* *ég-yè,*
[day^{L} three-Ord] come.Pfv-3PlSbj,
ɔ̀nɔ́-ŋ *ímb-yè* *sínd-yè* *bá:-nd-yè,*
3Sg-Acc catch.Pfv-3PlSbj convey.Pfv-3PlSbj confine-Tr.Pfv-3PlSbj,
kùrá:^{n} *túl-yè,* *dámà-m-mì,*
electricity put.Pfv-3PlSbj, speak-Caus.Pfv-3PlSbj,
'The third day (=three days later) they (=police) came (back). They arrested him, took him away, and imprisoned him. They applied electricity (to him), they made him talk.'

(596) *[bànà* *kàn* *ná* *sèlè]* *dâm* *nà,*
[manner do.Pfv 3SgSbj all] speak.Pfv 3SgSbj,
ê: *kǎw^{n}wòlyô:,*
that.Def aside.from,
yɔ́:-nà *[[píjó* *ní]* *bó* *nà* *ŋ̀]* *búndè* *nà,*
woman-3SgPoss [pregnancy with] be 3SgSbj Ipfv] hit.Pfv 3SgSbj,
gàbò:-ndí-∅ *yárè* *nà,*
survive-IpfvNeg-3SgSbj know.Pfv 3SgSbj,

'He spoke about every way he had done (crimes). Aside from that (the murder of his younger brother), he had (previously) beaten his wife while she was pregnant, knowing that she would not survive.'

(597) *[ɲà: ní] [mì: nì] [mŭ:^{n}-nà ŋ] dú:ndè nà,*
[food and] [water and] [side-3SgPoss Loc] put.down.Pfv 3SgSbj,
[ójú-ná pâ^{n}] ándè nà,
[road-3SgPoss on] go.Pfv 3SgSbj,
[è $^{H+}$yô:] gàbè-l-∅,
[Def $^{H+}$woman] survive-PfvNeg-3SgSbj,
'He had put food and water down next to her and had gone on his way. The woman did not survive.'
[The food and water was to imply that he had left her with provisions before someone else came and killed her; *mù-nà ŋ* 'beside her' represents an otherwise unattested complex postposition]

(598) *[[ê: túndù] ŋ̀] [gòlgè^{L} ɲòŋgò] ê: nì,*
[[that.Def back] Loc] [gear^{L} small] that.Def with,
ntá-gé-ŋ gámbò b-yà,
person-Pl-Acc fend.off.Ipfv Ipfv-Ppl,
jwá→ sá:^{n}-∅=yè,
a.lot have-3SgSbj=Past,
[tà:lìbù^{L} yé:né-ŋ́] búndè nà gìyà tê:-∅,
[koranic.pupil^{L} a.certain-Acc] beat.Pfv 3SgSbj kill ExpPrf-3SgSbj,
'Aside from that, he had a lot of small items (knives, etc.) for fending off (=defending oneself against) people. He had (also) once beaten and killed a koranic-school pupil.'
['gear ... for fending off people', cf. instrumental compounds, §5.1.10]

(599) *[è $^{H+}$dé:-ŋ] sínd-yè, bá:-nd-yè,*
[Def $^{H+}$elder.sib-Acc] convey.Pfv-3PlSbj, confine-Tr.Pfv-3PlSbj,
[[[wàyà^{L} já:mbà] túndù] ŋ̀] dúj-yè,
[[[year^{L} many] back] Loc] release.Pfv-3PlSbj,
[[è $^{H+}$dúgù] ŋ̀] égè nà,
[[Def $^{H+}$village] Loc] come.Pfv 3SgSbj,
'They took the older brother away and imprisoned him. After many years they released him. He came (back) to the village.'

(600) *dùgù-nó-gè, jámb-yè,*
village-person-Pl, reply.Pfv-3PlSbj,
[[dùgù jáŋgà] ŋ̀] ɔ̀nɔ̀-ŋ ŋké málgé nè,
[[village inside] Loc] 3Sg-Acc 3PlSbj see if,
gíyɔ̀ ŋké bò,
kill.Ipfv 3PlSbj Ipfv,
[è $^{H+}$dúgù] dújè nà, [ínì $^{L+}$njò],
[Def $^{H+}$village] abandon.Pfv 3SgSbj, [Prox $^{L+}$today]
[[géŋ b-yà nà] ntá éy^{n}] wòl-∅
[[place be-Ppl 3SgSbj] person know.Ppl] not.be-3SgSbj

‘The villagers spoke: if they (ever) saw him inside the village, they would kill him. He abandoned the village (then). Nowadays, there is nobody who knows the place where he is.’

[*ŋké málgé* instead of 3Pl *málg-yè* because of logophoricity]

Abbreviations and symbols

Abbreviations

Acc	accusative
Adj	adjective
Addr	
ATR	advanced tongue root (vowel feature)
C	consonant (in formulae like *CvCv*)
Capac	capacitative, §10.5.1
Caus	causative
Char	characteristic nominal derivational suffix, §4.2.1
Def	definite clitic
Dem	demonstrative
Det	determiner (demonstrative or definite)
DiscDef	discourse-definite (‘that same …’)
Dist	distant (demonstrative)
EA	expressive adverbial
Emph	emphatic (clause-final particle)
Epen	epenthetic (stem-initial *n-* or *y-*)
Exist	existential particle
ExpPrf	experiential perfect
Foc	focus
H	high (tone)
Hort	hortative
Ipfv	imperfective
Imprt	imperative
Inch	inchoative (‘become’ with adjective)
Inst	instrumental postposition
L	a) low (tone)
	b) any sonorant (in e.g. *CvL*)
Loc	locative
Logo	logophoric
MP	mediopassive
N	a) noun (in e.g. “N-Adj”)
	b) nasal consonant (in e.g. *CvN*)
(n)	noun, in interlinear glosses like ‘work(n)’
Neg	negative
Nom	nominalization
NP	noun phrase
Num	numeral
O	object (in e.g. “SOV”)
Obj	object
Ord	ordinal adjective
Pass	passive

Pfv	perfective
Pl	plural
Poss	possessive, possessor
PP	postpositional phrase
Ppl	participle, in relative clauses
Pred	predicate (adjective)
Prf	perfect (in ExpPrf)
Prog	progressive
Pron	pronoun
Prox	proximal (demonstrative)
Proh	prohibitive
Purp	purposive
Q	question
Quot	quotative particle
Rdp	reduplication
Recip	reciprocal
ResPass	resultative passive, §10.4.1.2
Rev	reversive
S	subject (in e.g. “SOV”)
Sbj	subject
Sg	singular
Stat	stative
Tr	transitive derivational suffix, §9.4
V	a) verb (in e.g. “SOV”)
v	vowel (in e.g. *CvCv*)
Vb	verb
(v)	verb, in interlinear glosses like ‘fight(v)’
VblN	verbal noun
VP	verb phrase

Symbols

*	reconstructed
#	ungrammatical, unacceptable, unattested
á, à, â, ǎ, a̋	tones on vowels (or syllables), §3.7
x̄, x̀, x́, x̂	tone changes on stem in compounds, Chapter 5
/…/	a) lexical tone melody, e.g. /LH/, /H/
	b) underlying or lexical representation
{…}	a) tone overlay, e.g. {HL}, {H}, {L}
	b) enclosing any set, e.g. {*u a i*}
[…]	a) phonetic (IPA) representation, e.g. [bŭ:]; or phrasal grouping
˓	downstep
	see end of §5.1.3
[…]^{L}	{L} tone overlay controlled by an element to the right
[…]$^{L+H}$	like preceding but with extra H-tone on final syllable/mora
^{HL}[…]	{HL} tone overlay in compound finals and verbs in {L}-{HL} complements
^{L}[…]	{L} tone overlay controlled by a possessor to the left
⊂…⊃	tonosyntactic island
	see discussion of (148) in §6.5.3.2

→ (prolongation of final vowel or sonorant, no special pitch effect)

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derived stative negative (except 1Sg/2Sg), §10.4.2.1
subject-focus verb (except imperfective positive), (386) and (390) in §13.1.1.5
nonsubject-focus perfective (positive and negative) verb (except 1Sg/2Sg), (387a-b) in §13.1.1.5
nonsubject-focus imperfective positive (1Sg and third person) verb, (388a) in §13.1.1.5
nonsubject-focus imperfective negative verb, (388b) in §13.1.1.5
subject-relative perfective participle, §14.4.2
nonsubject-relative perfective participle (except 1Sg/2Sg), (417) in §14.4.2
subject-relative underived stative participle, (428) in §14.4.4
imperfective subordinate clause for 3Sg subject, §15.2.1.3

{H~~L~~} = {H} reduced from {HL}, §6.2.1.1

H+, extra H-tone at beginning of stem, §6.5.2

+H, extra H-tone at end of stem, see {L}+H above

{LH}

non-verb

predicate adjective before L-toned auxiliary *bò-*, §11.4.1.3
possessum (kin term with 1Sg or 2Sg possessor), §6.2.3.1
noun before *sèlè* 'all', §6.6.1

verb

imperfective negative, 1Sg/2Sg subject, §10.2.3.3
quoted imperative for third-person subject, §10.7.3.1
nonsubject-relative perfective for 1Sg/2Sg subject, (417) in §14.4.2
imperfective subordinate clause for 1Sg/2Sg and 3Pl subject, §15.2.1.3

{LHL}
non-verb
on heavy possessed noun after 1Sg/2Sg possessor, §6.2.2.1
verb
perfective of heavy verb with 1Sg/2Sg subject, §10.2.1.1
perfective verb as compound final before *-yè* in instrumentals, §5.1.10)
imperfective with 1Pl/2Pl subject, §10.2.2.1
final-long-vowel imperfective (except 1Pl/2Pl subject), §10.2.2.2, §10.5.2-3
past imperfective, §10.6.1.4
{HL}
non-verb
on possessum, §6.2.1.1, §6.2.3.1
predicate adjectives, §11.4.1.4
on compound final, §5.1.1, §5.1.3
on noun after demonstrative, §6.5.3.1
verb
perfective of any verb with 1Pl/2Pl subject, §10.2.1.1
perfective of heavy verb with third person subject, §10.2.1.1
imperfective with third-person subject, §10.2.2.1
final-long-vowel imperfective with 1Pl/2Pl subject, §10.2.2.2
A-stem imperfective (except 1Sg/2Sg), §10.2.2.5-6
derived stative, §10.4.1.1
hortative verb, §10.7.2.1
subject-focus imperfective positive verb before *bò*, (386) in §13.1.1.5
nonsubject-focus imperfective positive (1Pl and second person) verb, (388a) in §13.1.1.5
subject-relative imperfective positive verb before bò, (420) in §14.4.3
nonsubject-relative imperfective or (derived or underived) stative participle for plural subject, (423) in §14.4.3, (427) and (429) in §14.4.4
imperfective subordinate clause for 1Pl/2Pl subject, §15.2.1.3
loosely-chained perfective verb for third-person subject, §15.2.2.1

2. selected morphemes

notes:
in suffixes, “v” is a variable vowel;
alphabetization: *ɛ* follows *e*, *ɔ* follows *o*, *ɲ* then *ŋ* follow *n* ;
atonal morphemes are not tone-marked here;
lexical stems (nouns, verbs, etc.) are shown with lexical tones.

-∅ suffix
3Sg subject on verbs, §10.3.1
á 2Sg proclitic (subject, possessor), §4.3.1
-á suffix in imperfective, §10.2.2.1

à pronominal proclitic (subject, possessor)
2Pl, §4.3.1
-à suffix in imperfective, §10.2.2.1
logophoric singular subject, §18.3
-à suffix in imperfective, §10.2.2.1
-â: 3Pl final-long-vowel imperfective, §10.2.2.2
à: 'who?', §13.2.3
ábé 2Pl independent pronoun, §4.3.1
ándé 'go', §10.1.2.9
àŋgà 'how much?, how many?', §13.2.8
ba locative postposition, §8.2.3.1
part of complex postpositions, §8.2.2
bà:lè→ 'a little', §8.4.2
bànà 'way, manner'
in manner adverbial clause, §15.3.2.1
in different-subject purposive-manner clause, §17.5.3
bá:ŋgá 'owner'
compounds (*X* HL*bá:ŋgà* 'owner of X'), §5.1.7
bárgè 'help' (verb)
with complement clause, §17.4.11
*-bé frozen plural morpheme in 1Pl and 2Pl pronouns, §4.3.1
bɛ́-né 'if'
negative antecedent clause, (471) in §16.1
counterfactual, §16.3
bɛ́-né pé 'even if', §16.2.1
bílé 'become'
with NP or adjective, §11.2.4.2
with expressive adverbial, §11.1.3.1
bí-yà in instrumental compounds, §5.1.10
bo
bò ~ *bô* 'be (somewhere)', §11.2.2.2
past-time *bo＝yè* 'was (somewhere)', §10.6.1.1
as auxiliary verb
bò ~ *wò* imperfective auxiliary, §10.2.2.1
bô progressive auxiliary, §10.2.2.4
bò in resultative passive, §10.4.1.2
with expressive adverbial, §11.1.3.1
with predicative adjective, §11.4.1.1-5
bòw^{n} 'together', §8.4.6
with reciprocals, §9.5
b-yà 3Pl imperfective, §10.2.2.1
dá:y^{n}ì 'sit down', §9.2.3
de
dé clause-final admonitive particle, §19.4.2
-dè (variant of *-rè-* ~ *-rɛ̀*) transitive verbal derivation, §9.5
dèm 'house'
complex postposition *[X démù] ŋ* 'at the house of X', §8.2.11
dɛ́né 'spend the day(time)'
in greetings, (529) in §19.5

dɛ́ŋgɛ́ 'finish' with complement clause, §17.3.1
dígí
'since', §8.2.1, §15.2.1.4
'approximately', §8.4.3.1
díné 'get, obtain'
passive, §9.3
dinɔ̂: in 'can (=be in a position to) VP' construction, §10.5.2
dí:rɔ́ 'last' (ordinal), §4.7.2.1
dɔ́gúlɛ̀ 'begin'
with complement, §17.4.8
è ~ *é* definite, §4.4.1.1
-é: (see (-ɛ́:)
égé 'come', §10.1.2.9
èm-bà
'that' (deictic), §4.4.1.2, §6.5.3.1
'over there', §4.4.2.1
ɛ̀ 'that which', default nonhuman internal head of relative, §14.2.4
ɛ̂: 'that' (discourse-definite), §4.4.1.2, §6.5.3.1
-ɛ: ~ *-e:* ~ *-i:* (plus auxiliary *bò*) resultative passive, §10.4.1.2
ènɛ̀ ~ *ènɛ́* 'like this/that', §4.4.2.3
ɛ́ŋɔ̀ bò 'know', §11.2.5.1
è^{n} ~ *è^{n}* existential proclitic before stative verbs, §11.2.2.1
absent in focalized clauses, §13.1.1.6
è-w^{n} 'there' (discourse-definite), §4.4.2.1
fìlá:nà 'So-and-so', §13.2.2
-gà
in focalized and relative clauses
in negative subject-focus clauses, (386) and (390b) in §13.1.1.5
in negative adjectives, §4.5.4
in perfective negative subject relatives (*-l-gà*), §14.4.5
in imperfective negative subject relatives, §14.4.6
-yá-gà in 3Pl imperfective negative nonsubject relative, (436) in §14.4.6
-gà ~ *-ŋgà* characteristic (nominal derivative), §4.2.1
-ge
non-verbs
-gè ~ *-ŋge* plural, §4.1.1.1
in noun-numeral combinations, §4.7.1.3
for head of relative clause, §14.4.1
*-ge ~ *-ŋge frozen inanimate class-marker, §4.1.1.2
verbs
-gè ~ *-gɛ̀*, minor causative suffix, §9.2.2
-gè, reciprocal suffix with light verbs, §9.5
-gè ~ *-gɛ̀*, deadjectival inchoative suffix, (210) in §9.6
kándí-gè 'fix', §9.2.4
málgè 'see', end of §9.2.2, (276a) in §10.4.1.1
gɛ́ŋ 'place'
in spatial adverbial clause, §15.3.1
at end of 'hear that' clause, §17.2.2.2

gwé: ‘go out, exit’, §10.1.2.3
absence of ablative PPs, §8.2.1
with reversives, §9.1
derivatives
gó:-mì ‘take out, remove’, §10.1.2.3
gó-m-dè ‘cause to go out, cause to leave’, §10.1.2.3
gɔn
topic marker *gɔ̀n* ~ *gɔ̂n* ‘as for’, §19.1.1.
gɔ̂n ‘exactly’, §8.4.3.2
hâl ‘until, all the way to’ §8.2.1
clause-initial, §15.3.3, §15.2.2.3
hâl ‘until’
hàyà ‘well, …’, §19.2.1
-i: resultative passive, §10.4.1.2
ì^{n}hí^{n} presentative ‘here’s X!’, §4.4.3
íldè ‘forget’
complement, §17.4.6
indo ‘not know’ (arguably *i-ndo*), §11.2.5.1
ínì ‘this’, §4.4.1.2, §6.5.3.2
ínjè ‘stand’
stative *íŋgà* ‘be standing’, (276a) in §10.4.1.1
íŋgí-rè ‘stop (sth); cease’, §17.4.9
jàŋgà ‘belly’
complex postposition *[X jáŋgà] ŋ̀* ‘inside X’, §8.2.4
já:tì
emphatic with spatial adverbs, §4.4.2.2
-jè ~ *-jɛ̀* variant of suffix *-gè* ~ *-gɛ̀* after stop or nasal, (209b) in §9.6
jwá⟶ ‘a lot’, §8.4.2
predicate *jwá⟶ né*, §11.1.3.1
-kálmá in *-ŋ-kálmá* (variant of *-lmà*) abstractive nominal, §4.2.2
kándá ‘new’, (213a) in §9.6, (352b) in §11.2.4.2, (365b) in §11.4.1.5
kán(í) ‘do’
derivatives *ká:-ndè* ‘do for’ and *kándí-gè* ‘fix’, §9.2.4
kànû: in ‘be VERB-able’ construction, §10.5.3
in collocations, §11.1.2.2
kɛ́ŋù bò- ‘want, like’, §11.2.5.2
complement clause, §17.4.5
key-là ‘not want’, §11.2.5.2
key^{n} ‘want, like’, §11.2.5.2
complements, §17.4.5
kégù in ‘before’ clauses, §15.2.3
kɛ́jɔ́ ~ *kɛ̀jɔ̀* ‘4’ as modifier, §4.7.1.2
kɛ́:jɔ́ ‘4’ (in counting sequence), §4.7.1
kî:
complex postposition *[X kî:] ŋ̀* ‘in the possession/custody of X’, §8.2.13
kó: ‘head’
complex postposition *[X kò] ŋ* ‘on (the head of) X’, §8.2.7
complex postposition *[X kó:-lò] bà]* or *[X kó:-lò] w^{n}]* ‘above X’
in reflexives, §18.1.1

kó:-lò (see under kó:)
kóy ‘sure!’ (clause-final, emphatic agreement), §19.4.1
-l
ˋ-l verbal noun, §4.2.4
ˋ-l ~ ˊ-l
perfective negative (after verb stem), §10.2.3.1
imperfective negative (after 1st/2nd person clitic), §10.2.3.3
là negative (see also *-nda*)
= là ‘it is not X’ after NP, §11.2.1.2
kéy-là ‘not want’ §11.2.5.2
-lè ~ -lɛ̀
-lè ~ -lɛ̀ reversive derivation, §9.1
-lè, reciprocal suffix with heavy verbs, §9.5
lè clause-final particle in quoted interrogative, §17.1.3
lè clause-final particle in different-subject purposive clause, §17.1.3
-l(ì) ~ -l(í)
perfective negative (after verb stem), §10.2.3.1
imperfective negative (after 1st/2nd person clitic), §10.2.3.3
-lmà or *-ŋ-kálmá*, abstractive nominal, §4.2.2
-lò
ordinal suffix on numerals, §4.7.2.2
in *[X kó:-lò] bà* ‘above X’ and *sígó-lò bà* ‘above’, §8.2.5-6
-mà in derived adjectives, §4.5.6
-ma: capacitative (‘can’) derivative, §10.5.1
málgè ‘see’, §11.1.2.1
possible segmentation, end of §9.2.2
passive, §9.3
stative *mala*, §17.2.2.2
-màn- linker in iterative natural-species compounds (*X-màn-X*), §5.1.9
-máy^{n} allative-hortative, §10.7.2.3
mbá ‘where?’, §13.2.5
mbà-là ‘since’ clause, §15.2.1.4
mbé 1Pl independent pronoun, §4.3.1
mí ~ mì- 1Sg pronoun, §4.3.1
-mì, causative derivation, §9.2.1
mpímà: ~ pímà: ‘resemble’, §11.2.5.3
-m-û: passive (‘be VERB-able’), §9.3
-N- nasal linker in a few compounds, §5.1.8, §4.2.2
-n (suffix on verb stem)
in ‘has not yet VPed’ construction *-n sè:-ndì*, §10.6.2
in third person comparative predicate construction *-ń nàgà* (§12.1.2)
in third person progressive construction with *túlà* (§10.2.2.5)

na
3Sg pronominal *(see also ɔ̀nɔ̀)*
-nà ~ *-ná* 3Sg possessor, §6.2.2.1
in ordinary compounds, (91) in §5.1.1
in adjectival bahuvrihi compounds (ǹ-*nà*-à]), §5.2.1.1
nà ~ *ná* 3Sg subject in nonsubject-focus clauses, §13.1.1.4
nà ~ *ná* 3Sg subject in nonsubject relative, §14.3
nà in tightly chained 3Sg perfective, §15.2.1.5
nà in loosely chained 3Sg perfective, §15.2.2.`
nâ:
complex postposition *[[X nì Y] nâ:] ŋ* 'between X and Y', §8.2.12
naga (see under náj-jɛ̀)
náj-jɛ̀ 'surpass', §12.1.3
naga (stative) in comparatives, §12.1.2
nam 'more', §12.1.1, §12.1.4
námù ~ *nâm→* postposition 'for' or 'because of', §8.3
in 'because' clause, §17.5.4
náyé 'spend the night'
in greetings, (529) in §19.5
-nda negative
-ndá ~ *-ndà* stative negative, §10.4.2.1
-ndá 3Pl perfective negative, §10.2.3.1
-ndà prohibitive, §10.7.1.2
plural-addressee *-ndé-ỳ*^{n}, §10.7.1.2
quoted, §10.7.3.1, §17.1.2.1
-ndɛ̀ derivational suffix
minor causative suffix, §9.2.3
ká:-ndɛ̀ 'do for', §9.2.4
-ndí third-person imperfective negative, §10.2.3.3
3Pl *-nd-yá*, §10.2.3.3
in experiential perfect negative *-té:-ndí* ~ *-tè:-ndì* for all persons, §10.2.3.2
négá ~ *nègà* '2' as modifier, §4.7.1.2
né:ŋgá '2' (in counting sequence), §4.7.1
nɛ
né ~ *nɛ̀* 'if', §16.1 (see also *bɛ́-né*)
né pé 'even if', §16.2.1
né ~ *nɛ̀* nonpast anterior subordinator (pseudo-conditional), §15.2.2.2
né 'say', §10.1.2.1, §11.3, §17.1.1.1
with adverbials, §11.1.2.3
nɛ́nì 'like this/that', §4.4.2.3
nɛ̀w in near-future construction, §10.2.1.2
ni
instrumental postposition, §8.1.2
postposed 'and' conjunction, §7.1.1
in complex numerals, (81) in §4.7.1.3
in 'between X and Y', §8.2.12
ní in 'this/that way' adverbs, §4.4.2.2
ní:gɛ̀ 'fear'
with complement, §17.4.7

ŋjɛ́ ‘what?’, §13.2.4
nsâ→ ‘now’, (190a) in §8.4.4.1
ntá ‘person’, §4.1.2 *(see also ntă:-nà)*
ntă:-nà ‘some’, §6.3.2
nùw^{n} ‘here’, §4.4.2.1
ŋ (see also w^{n} ~ ŋ)
pronominal proclitic (subject, possessor)
ŋ́ 1Sg, §4.3.1, §10.3.1
ŋ̀ 1Pl, §4.3.1, §10.3.1
ŋgà
clause-initial ‘but’, §19.2.2
-ŋgà (~ *-gà*) characteristic (nominal derivative), §4.2.1
-ŋge
-ŋge minor nominal derivational suffix, §4.2.3
*-ŋge variant of nominal plural *-ge* in some combinations
definite plura *è-ŋgè*, end of §6.5.2, (78) in §4.7.1.2
sígó:-ŋgé ‘(X) times’, §11.1.2.6
after *ɲé:-* ‘belong to’, §11.5.2
-ŋ-kálmá (variant of *-lmà*) abstractive nominal, §4.2.2
ŋkɛ́
pronoun
3Pl independent pronoun, §4.3.1
3Pl subject in nonsubject-focus clauses, §13.1.1.4
3Pl subject proclitic in nonsubject relatives, §14.3
logophoric plural subject proclitic in quotations, (517) in §18.3
verb
‘be depleted’, §10.1.2.6
ɲ- epenthetic (Word-initial *y/ɲ*-Epenthesis), §3.4.4.1
ɲɛ́(:) ‘belong to’, §11.5.2
ɲɛy ‘know’, §11.2.5.1
ó 2Sg independent pronoun, §4.3.1
ɔ̀nɔ̀ 3Sg independent pronoun, §4.3.1
pă: ‘(be)side’
complex postposition *[X pâ] ŋ* ‘beside X’, §8.2.8
pɛ
pɛ́ ‘also’, §19.1.2
pɛ̀ ‘even’, §19.1.3
pɛ́ in conditional antecedent clauses (‘even if’), §16.2.1
páná ‘first’, §4.7.2
pɛ́lɔ́ ‘approximately’, §4.4.2.2
pɛ́:l(ú) ~ *pɛ̀:l(ù*) ‘10’, §4.7.1.2
pɛ̀:l- in decimal numerals, §4.7.1.3
pɛ́:-pɛ́: ‘equal; be as a good as’, §12.2.1
pímà: (see *mpímà:* ‘resemble’)
pínà (see also verb mpímà:)
complex postposition *[X pínà]=:* or *[X pínì]=:* ‘like X’, §8.4.1
pínì in ‘like/as though’ clause, §15.3.2.2
pínì (see pínà)

-rè- ~ *-rè* (variant *-dè* ~ *-dè*) transitive verbal derivation, §9.5
sâ(:)^{n} ~ *sà^{n}* 'have', §11.5.1
sa:-nda 'not have', §11.5.1
ságú 'a fortiori', §12.3
sáŋgà 'be on (horizontal surface)', §11.2.3
sè: 'grain'
in compounds denoting a small unit, (97) in §5.1.5
sèlè 'all' or 'each', §6.6.1
in relative clause, §14.6.2
sè:-ndì in 'has not yet VPed' construction, §10.6.2
sóŋgé 'bring', §10.1.2.9
sôw^{n}
complex postposition *[X sôw^{n}] bà* 'chez X', §8.2.11
sùgù 'base, bottom'
complex postposition *[X súgù] w^{n}]* or *[X súgù] bà]* 'under, at the base of X'
tábé 'give'
objects, §11.1.3.3
tájjárà 'certainly, definitely', §17.2.3
tà:ŋgà adjective '1' or 'same (one)', §4.7.1.1 *(see also tè:dà)*
táŋgé 'pass, go past; surpass, exceed', §12.1.3
-tê: experiential perfect, §10.2.1.4
-té:-ndí ~ *-tè:-ndì* experiential perfect negative, §10.2.3.2
-téy-yà, in relative clauses, (418-419) in §14.4.2
tè:dà '1' (in counting sequence), §4.7.1
tégó 'ahead, forward'
complex postposition *[X tégò] w^{n}* 'in front of X', §8.2.9
-téy-yà (see under -tê:)
témbè 'encounter'
passive, §9.3
tìrà→ 'only', §19.3
tíyá→ 'hello!', §19.5
tó: 'other', §4.7.1.1
tó:-nà 'apart, separate', §8.4.5.2
túlà progressive auxiliary, §10.2.2.5
negation, §10.2.3.5
tùndù 'rear (of sth)'
complex postposition *[X túndù] bà* 'behind X', §8.2.10
wa clause-final quotative particle, §17.1.1.2
in quoted deontics, §10.7.3.2
wàgà→ 'or', §7.2.1
wà:jíbì 'obligation', §17.5.5
wálá 'man', §4.1.2
compounds, §5.1.6
wánjé 'remain', §11.2.4.1
wè: 'child', §4.1.2
compounds, §5.1.5 *(see also "diminutive")*
wèn 'which?', §13.2.9
wèn wàgâr 'when?', §13.2.6
wènè 'how?', §13.2.7

wo
wò imperfective auxiliary with 2nd person subject, §10.2.2.1
replaced by form of *wǒl* 'not be' in
=(w)o (variant of *=ye* 'it is' clitic or focus marker)
wǒl 'not be (somewhere)' §11.2.2.3
past-time *wòl=yé* 'was not', §10.6.1.1
auxiliary in progressive negative, §10.2.3.4
auxiliary in nonsubject-focus imperfective/progressive negative, (388) in §13.1.1.5
with expressive adverbial, §11.1.3.1
wⁿ ~ ŋ
ẁⁿ ~ ŋ imperfective subordinate clause, §15.2.1.3
-ẁⁿ ~ -ŋ accusative at end of NPs, §6.7
wⁿ locative postposition, §8.2.3.2
part of complex postpositions, §8.2.2
wⁿ purposive subordinator, §17.5.1
with *dìnɔ̂:* in 'can (=be in a position to) VP' construction, §10.5.2
with *kànû:* 'be VERB-able', §10.5.3
with *bárgè* 'help', (504) in §17.4.11
y- epenthetic (Word-initial *y/ɲ*-Epenthesis), §3.4.4.1
yà (see also bí-yà , b-yà)
nominals
-yà in deadjectival extent nominals, §4.2.7
focalized and relative clauses
-yà in negative and some positive nonsubject-focus clauses, (387-388, 391) in §13.1.1.5
-yà in stative participles, §14.4.4
-lí-yà in perfective negative nonsubject relatives, (432) in §14.4.5
-yà in imperfective negative nonsubject relatives, §14.4.6
-téy-yà experiential perfect participle, (418-419) in §14.4.2
-yà, *b-yà*, and *bí-yà* in imperfective participles, (423) in §14.4.3
main-clause predicates
-yà 3Pl subject suffix on verbs, (274a) in §10.3.1
-yà singular-addressee hortative, §10.7.2.1
-yà bó- predicate adjectives, §11.4.1.1
yábà 'be against or on (vertical surface, e.g. wall)', §11.2.3
yè ~ yɛ̀
non-verbs
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