A Grammar of Nanga
(Dogon language family, Mali)

Jeffrey Heath
University of Michigan

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author’s email
schweinehaxen@hotmail.com

color codes
blue: transcription of Nanga forms
green: transcription of phonetic or underlying forms, reconstructions, forms from other languages
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1 Introduction

1.1 Dogon languages

The Dogon languages are spoken in an essentially contiguous block in eastern Mali, though this “Dogon country” also includes smaller Fulfulde-speaking communities and overlaps with or abuts a few ethnically cosmopolitan cities (Douentza, Bandiagara, Mopti-Sevare). The family as a whole has traditionally been included in the Niger-Congo phylum, but the relationship has not been demonstrated and not all Africanists are convinced. There are probably around 80 locally named varieties, including some associated with a single village or village cluster. Linguists have roughly grouped them into about 20 “languages,” but the language/dialect boundary is especially difficult in the Dogon case.

An approximate genetic subdivision of Dogon is in (1).

(1) a. eastern Dogon
  Toro Tegu
  Jamsay including Gourou and montane dialects like Perge Tegu
  Ben Tey, Bankan Tey, and Nanga
  Tommo So and Donno So
  Toro So (several varieties)
  southeastern Dogon
  Togo Kan, Tene Kan, Tengou Kan, Wolu Kan, Guimri Kan
  Tomo Kan

b. western Dogon
  Najamba-Kindigué (Bondu So)
  Dogul Dom
  Tiranige (Duleri)
  Yanda Dom
  Tebul Ure
  southwestern Dogon
  Bunoge, Penange, Ampari, Mombo (Kolu So)

1.2 Nanga language

The Nanga language (with “ng” pronounced as a velar nasal) is spoken in a relatively small area about halfway between Douentza and Bandiagara. The speakers of the language refer to themselves, and to their language, as nāŋjì.

Genetically, Nanga forms a subgroup of Dogon along with Ben Tey (spoken in Beni village and to a lesser extent Gamni village, see Heath 2015a,b) and Bankan Tey (Walo village, also spelled Oualo). An immediate giveaway to their genetic connection is their paradigm, unique among Dogon languages, of independent pronouns and of pronominal-subject suffixes on verbs. Nanga people, especially from Anda and Wakara, have some contact with Beni village, though in some recent years there have been serious land disputes.
between Beni and Wakara including occasional violence. There is virtually no direct contact between the Nanga-speaking zone well south of Douentza and Walo village north of Douentza.

The major contact languages are the Dogon languages Jamsay and Tommo So, and the Atlantic language Fulfulde. Most adult Nanga-L1 speakers also speak these three as second languages. Jamsay is spoken in most Dogon villages around Douentza, and seriously divergent dialects of Jamsay are spoken in Pergué and some nearby montane villages (Amba, Teminde, Aouguiné, Nende). There are close social relations including extensive intermarriage linking these montane Jamsay villages with the Nanga villages Anda and Wakara. There are some Jamsay-speaking dye-ers in Namakoro, originally from the villages of Sogou and Dianwely Maoudé.

Tommo So is the dominant language on the nearby high plateau, including the market towns of Mori and Kassa. There are also groups Tommo So-speaking dye-ers and leatherworkers resident in Namakoro, Kono, and Irani.

Fulfulde, the language of the Fulbe people, is also fairly well-known among Nanga speakers, particularly those who have had dealings with Fulbe herders or who frequent the markets. Fulfulde is the primary market language in Douentza and is also important in Bandiagara and Mopti-Sevare.

### 1.3 Environment

The Nanga-speaking villages are those in (1). The coordinates are in degrees, minutes, and decimal fractions (.000 to .999) of minutes.

<table>
<thead>
<tr>
<th>(1)</th>
<th>village</th>
<th>Nanga name</th>
<th>N latitude</th>
<th>W longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anda</td>
<td>àːndé</td>
<td>14 49.163</td>
<td>03 00.626</td>
<td></td>
</tr>
<tr>
<td>Boromi</td>
<td>bɔ̀rɔmí</td>
<td>14 49.128</td>
<td>03 01.316</td>
<td></td>
</tr>
<tr>
<td>Irani</td>
<td>ɪrànì</td>
<td>14 49.747</td>
<td>03 01.540</td>
<td></td>
</tr>
<tr>
<td>Kono</td>
<td>kɔːrɛ̃ś ~ kɔːpɛ̃</td>
<td>14 47.538</td>
<td>03 02.005</td>
<td></td>
</tr>
<tr>
<td>Namakoro</td>
<td>námákɔ̀rò ~ námbàkɔ̀rè</td>
<td>14 43.434</td>
<td>03 01.482</td>
<td></td>
</tr>
<tr>
<td>Ousse</td>
<td>ʊːsé</td>
<td>(unknown)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pergessa</td>
<td>pɛ̀gɛ́sá</td>
<td>14 48.233</td>
<td>03 01.780</td>
<td></td>
</tr>
<tr>
<td>Soroni</td>
<td>sɔ̀rɔ̀nì ~ sɔ̀rɔ̀nì</td>
<td>14 49.169</td>
<td>03 00.626</td>
<td></td>
</tr>
<tr>
<td>Wakara</td>
<td>wàkárà ~ wàɡári (Anda dialect)</td>
<td>14 49.304</td>
<td>03 04.732</td>
<td></td>
</tr>
</tbody>
</table>

There are two clusters of villages, separated by hills. One consists of Anda, Namakoro, Kono, and Pergessa; the other is Wakara, Boromi, Irani, Ousse, and Soroni.

Heading south from Douentza, one quickly bends around the cliffs at Fombori, then one goes south across the sandy plains including the village of Dianwely Kessel (Jamsay-speaking). To the left (east) one sees the long north-south inselberg with the sister village Dianwely Maoudé (Jamsay) at its northern base and a long, lower rocky shelf extending south on which are found the villages of Bení (Ben Tey) and Pergué (Pergué dialect of Jamsay). To the right (west) are more cliffs representing the edge of the main Dogon plateau, on which are the two villages that make up Panga (Tommo So).

At the end of the open sandy plain going south from Douentza, one continues southwest in a passage with some rocky sections, hugging a low inselberg to the right (north). The first Nanga village encountered is Anda, followed by nearby Namakoro and Kono. Pergessa is
south of Namakoro at the base of another inselberg. There is an old piste from Pergessa to Bandiagara.

The second group of Nanga-speaking villages is separated from the above by hills. Going south from Douentza, one branches off to the right (west) instead of proceeding through the Anda pass. One first reaches Wakara (the biggest village). The three villages Wakara, Boromi, and Irani are at the bases or on the lower slopes of inselbergs, while Ousse and Soroni are on the summits or upper slopes. There is reportedly a new piste from Wakara to Bandiagara.

The administrative geography has undergone many changes and more are on the way. As of 2013, the Nanga-speaking zone were still carved up between three districts (cercles), as the shift to the more up-to-date system of communes has been delayed by land disputes between the Wakara cluster and the Anda-Namakoro-Kono cluster. The Douentza cercle administered Soroni and Ouse, Koro cercle administered Kono, and Bandiagara cercle administered the rest (Anda, Wakara, Boromi, Irani, Namakoro, and Pergesa). As of 2015 these three cercles all belong to the région (province) of Mopti, but there were plans to separate Bandiagara into its own région.

There are markets in Wakara and Kono that participate in a regional five-day market-day cycle also involving the Tommo So speaking villages of Mori and Kasa, and the mostly Jamsay-speaking village of Pergué (not to be confused with Nanga-speaking Pergesa).

The Nanga-speaking zone is punctuated by inselbergs, mostly rather low in comparison to the imposing cliffs elsewhere in the zone. Sandy lowlands intervene between the inselbergs and provide farmable land. Historically, all of the villages were located on the slopes of the hills, for protection against Fulbe cavalry. During roughly the period 1970-2000, as security improved, several of the villages (Anda, Namakoro, Pergessa, Boromi, Irani) moved to lower ground to make it easier to reach fields in the plains. As of 2013, the villages of Soroni and Ouse remained mostly in their original elevated position. Wakara is now partly at the base (mostly Muslims) and partly on the inselberg slope (mostly traditional animists). Kono is mostly at the base, but there is a small rump village in the older location up above.

There is a small river fueled by springs that begins in Anda and (in season) empties into a pond at Beni. The other Nanga-speaking villages have wells, seasonal ponds, or mountain springs as water sources. The main productive activity is farming, chiefly pearl millet (Cenchrus spicatus) and sorghum as grain staples. Fonio (Digitaria exilis) was once widely grown but is now a minor crop. Maize and rice are grown in selected locations. Cow-pea (Vigna unguiculata) and roselle (Hibiscus sabdariffa) are planted in the same fields as the millet and sorghum. Other crops grown separately during the main farming season are sesame, peanut, groundnut (Vigna subterranea), and okra.

Off-season (contre-saison) gardening, where water is available, includes maize, onions, tomatoes, lettuce, okra, cassava, chile pepper, potato, and sweet potato. Sugar cane and watermelon are also grown in both seasons in favorable locations.

Fruit trees in the area include mango, papaya, banana, orange, lemon, grapefruit (elsewhere very rare in Dogon country), guava, tamarind, date, and native fruits such as zaban (Saba senegalensis), wild grape (Lannea microcarpa), and detarium (Detarium microcarpum).

1.4 Previous and contemporary study of Nanga

There is no previous published work on this language. It is mentioned briefly, without linguistic data, in the various overall surveys of Dogon languages.
1.4.1 Fieldwork

My data are from the village of Anda, which was relatively accessible from my former base in Douentza. The primary fieldwork was carried out around 2006-2010. Corrections and additions have been made from then until 2016.

1.4.2 Acknowledgements

The larger work on Dogon languages began with grant PA-50643-04 from the National Endowment for the Humanities (NEH) for solo fieldwork on Jamsay (2004-2006). Brief survey work of Douentza-area Dogon languages during that grant period led to the idea of a comparative Dogon linguistic project, eventually also including the genetic isolate Bangime. The Dogon-Bangime project has been supported by the National Science Foundation in three phases, grants BCS-0537435 (2006-09), BCS-0853364 (2009-13), and BCS-1263150 (2013-17).

The University of Michigan also provided important supplemental and bridging support.

I am indebted to the people of Anda village, including Aperou Moro (chef de village), Dogoyeri Moro, Mani Moro, Mandio Moro, and especially Seydou Moro. Many other villagers helped out the lexicographic work by bringing specimens of flora and fauna.
2 Sketch

2.1 Prosody and tonosyntax

Nanga has a typical Dogon stem-level tonal system, with at least one (lexical) high tone element per stem. At the level of syllables, tones are H[igh], L[ow], <HL> (falling), <LH> (rising), and bell-shaped <LHL>. There are no <HLH> syllables. The notation <...> is used for single-syllable contour tones like <HL>. Lexical tone melodies are represented in slashes /.../, e.g. /LH/, /HL/, /H/, and /LHL/. Stem-wide tone overlays conditioned by grammatical environment are represented in curly brackets {...}, e.g. /L/, /HL/.

Verb stems are lexically /LH/ or /H/. If the stem begins with an obstruent, its voicing determined the “lexical” melody. The melody is /LH/ if the obstruent is voiced, and /H/ if the obstruent is voiceless. For example, the lexical melodies of pégé- ‘(to) nail’ and dâgá- ‘(to) lock’ are predictable from their initial consonant. Infrequent exceptions like jâllî- ‘grab suddenly’ are mostly recent loanwords from Fulfulde. With other onsets (sonorants, vowels), the melody of the stem is a lexical choice. When a derivational suffix is added, the melody of the input stem is respected, as in reversives pégí-rí- ‘remove (nail)’ and dâgí-rí- ‘unlock’. In the verbal inflectional system, tones play an important role along with inflectional suffixes. Several suffixes impose specific tone overlays on the preceding stem, overriding lexical tones. For example, there are two distinct -so- suffixes, perfective-2 -só- and progressive -sò-, distinguished only by tone patterns on the stem and suffix and by the length of the stem-final vowel: súy-5-śó- ‘(has) hit’ (perfective-2) versus súy-5-śò- ‘is hitting’.

Nouns, adjectives, and numerals have little suffixal morphology, and what they do have is generally straightforward phonologically. As in other Dogon languages, though, these NP-inner words are subject to tonosyntactic processes, by which one word (or phrase) controls a tone overlay on one or more other words. Controllers are reference-restricting words (adjectives, determiners, relative clauses, possessors), but not numerals. In Nanga, definites pattern with demonstratives as controllers. For example, nèr’î ‘dog’ is lexically /LHL/, and remains so before a numeral: nèr’î nîmî: ‘five dogs.’ An {L} overlay on the noun (and any intervening modifiers) is controlled by a following reference-restricting modifier: nèr’î1 jèmî ‘black dog’, nèr’î1 wô-ṇ ‘that dog’, nèr’î1 nè ‘the dog’. After a possessor, the noun has {HL} or {L} overlay depending on the final tone of the possessor: sè’dû ‘nèr’î ‘Seydou’s dog’, yâ-ṇ him nèr’î ‘a woman’s dog’. The superscripts indicate the tone overlay, {L} or {HL}, and are positioned at the edge of the target domain that “points” left or right in the direction of the controller. They are not phonetic diacritics.

2.2 Inflectable verbs

The verb stem may be underived or suffixally derived (e.g. reversion, causative). In indicative inflections, the verb stem is followed by an aspect-negation (AN) suffix, then a pronominal-subject suffix, as in súy-5-śó-y ‘I hit’ (perfective-2), with verb súy-5-, perfective-2 -śó-, and 1Sg subject -y. There is no audible AN suffix in the {L}-toned simple perfective, so here the stem is followed by the usual pronominal-subject suffixes: súy-5-y ‘I hit’.
Negation is expressed by (mostly portmanteau) suffixes within the AN suffix system, not by external negative particles: sùyɔ̀-rí-y ‘I did not hit’. In the indicative, there are two basic negative AN forms, perfective negative and imperfective negative, compared to a somewhat richer set of distinctions in the positive AN suffixes.

There is a full set of imperative and hortative verb forms, positive and negative: sùyɔ̂ ‘hit’!, sùy(ɨ)-rä ‘don’t hit!’

In relative clauses (see below), the regular inflected verb is replaced by a participle that agrees with the head NP in nominal features (but not person). A perfective positive example is nụ̀ sùyɔ̀-sɛ̀ L nɛ́ ‘the man who hit’.

2.3 Noun phrase (NP)

Nouns and adjectives have no suffixal morphology. Unlike the more northerly Dogon languages, Nanga has no singular/plural distinction, nor a human/nonhuman or animate/inanimate distinction, within nominal or (modifying) adjectival morphology.

The core NP consists of a noun, which may be simple or compounded, plus any following modifying adjectives. The core NP may be preceded by a nonpronominal NP possessor or by definite demonstrative kù (originally a nonhuman or inanimate possessor). The core NP may be followed by a numeral, another quantifier (‘all’, ‘each’), and/or a determiner (definite morpheme or demonstrative pronoun). Unlike nouns, adjectives, and numerals, Nanga determiners distinguish animate singular, animate plural, inanimate singular, and inanimate plural, and are therefore the primary vehicle for expressing these categories.

For all nouns, a nonpronominal (i.e. noun-headed) possessor NP appears to the left of the possessed noun. For nouns other than kin terms, a pronominal possessor is expressed by postposing a pronominally possessed form of a semantically generic noun (‘thing’, ‘living being’) functioning here as a possessive classifier. Kin terms, unlike other nouns, allow pronominal possessors to precede the possessed noun directly, with no classifier.

Examples of multi-word unpossessed and possessed NPs are in (2a-b). The superscript L indicates that the {L} overlay has applied to the bracketed three-word target domain, and is controlled by the adjacent restrictive modifier (determiner or possessor).

(2)  a. [nɛ̀rⁿì dùgù tàndì] L wè: [dog big three] L Dem.AnPl ‘these three big dogs’

b. sè:dù L [nɛ̀rⁿì dùgù tàndì] Seydou [dog big three] ‘Seydou’s three big dogs’

2.4 Postposition phrase (PP)

Dative bay (realized as báy or báy), instrumental yàŋ, locative ga (with various realizations), and other postpositions directly follow an NP. The NP is phonologically independent of the postposition, but the form of certain postpositions is affected, tonally and/or segmentally, by (the end of) the NP.
2.5 Main clauses and constituent order

Main (and subordinated) clauses are verb-final, and more specifically SOV when nonpronominal subject and nonpronominal object are both overt. This is typical of Dogon languages (except Toro Tegu). A simple transitive example is (3).

(3) [b'à: yê:] pèrgé sémé-só-∅
    [father 1SgPoss.AnSg] sheep slaughter-Pfv2-3SgSbj
    ‘My father (has) slaughtered a sheep.’

2.6 Relative clauses

As in all Dogon languages, relative clauses are a distinctive and important syntactic construction. For example, some types of spatiotemporal and manner adverbial clauses are relative clauses in form (‘the time/place that …’), with or without an overt head. The syntax of relatives is similar to that of some other eastern Dogon languages (e.g. Jamsay, Ben Tey).

I posit an underlying structure of NP of the type Poss-N-Adj-Num-RelCl-Det-…, with the relative clause (RelCl) positioned between the numeral and the determiner as part of the larger NP. The Poss-N-Adj-Num sequence is thereby split from the late-NP coda including determiners, ‘all’, and discourse-function particles. The Poss-N-Adj-Num sequence surfaces inside the relative clause, constituting the internal head of the relative, but it is subject to a relative-controlled tone overlay as though it were still to the left of the relative clause. This suggests a movement analysis where Poss-N-Adj-Num takes its tonosyntactic form outside the relative clause, but then moves into the coindexed relativization site.

The verb of the relative clause is marked for aspect and negation, but has no agreement morphology except for 3Pl subject in negative nonsubject relatives. It does not agree with the head NP in nominal features, but it is usually followed by a determiner that does show such agreement.

In nonsubject relatives, if the subject is pronominal, it appears as a preverbal proclitic identical in form to the corresponding independent pronoun. For example, (540a) in §14.3, ‘the man who(m) I saw in the market’, can be marked up as [market Loc] man L 1SgSbj see-Participle.Pfv Def.AnSg. Here ‘man’ is the internal head NP and is tone-dropped; the 1Sg pronominal subject is proclitic to the verb (i.e. does not occur in the normal clause-initial subject position), the verb is participial (agreeing in animacy and number with the head NP), and the definite determiner is post-participial. Prior to movement this would be, schematically, [man L RelCl Def], i.e. an NP containing a relative clause (which tone-drops the noun ‘man’) and a determiner. The relative clause would be of the type […] H … verb-Ppl], where the relativization site H is coindexed to entire upstairs NP. Later, ‘man’ (and more generally the portion of the higher NP that originates to the left of the relative clause) moves into the relativization site H, becoming an “internal” head.
3 Phonology

3.1 General

Syllables and metrical structure are briefly covered in §3.2. Phonemic segments and some basic facts about their distribution and combinations are presented in §3.3 (consonants) and §3.4 (vowels). Segmental (i.e. nontonal) phonological rules are described in §3.5. Cliticization is briefly discussed in §3.6. Tonal and intonation matters are the subject of §3.7.

3.2 Internal phonological structure of stems and words

3.2.1 Syllables

Word-initial syllables may omit the consonantal onset. Therefore in the formulae given below, if the syllable in question is word-initial the initial C is optional.

Using v for a short vowel and v: for a long vowel, the normal shape of a monosyllabic stem is Cv: with long (oral or nasal) vowel (4a). True CvC, ending in a sonorant, is attested in a few cases (4b). True CvC also occurs in various expressive and emphatic elements, and in the more interjection-like cases the final C may even be an obstruent (4c). Many occurrences of phonetic CvC and Cv: C actually reflect apocope of a final high vowel, most clearly in the case of inflectable verb stems (4d). For Cuy and Ciy verbs, see discussion in §10.1.3.3.

<table>
<thead>
<tr>
<th>(4)</th>
<th>form</th>
<th>gloss</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>yî:</td>
<td>‘child’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pè:</td>
<td>‘get old’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tà:n</td>
<td>‘taboo’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dã:</td>
<td>‘the bush, outback’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ðe:</td>
<td>‘well(n)’</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>wòy</td>
<td>‘two’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nòy:n</td>
<td>‘four’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dèw</td>
<td>‘trap(n)’</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>sòy</td>
<td>‘all’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dôñ-dôñ</td>
<td>‘seething (mad)’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kêk</td>
<td>‘completely, every inch’</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>ðèw</td>
<td>‘purchase (n)’</td>
<td>variant ðèwí, cf. ðèwë ‘buy’</td>
</tr>
<tr>
<td></td>
<td>sèg</td>
<td>‘rope’</td>
<td>variant sègí</td>
</tr>
<tr>
<td></td>
<td>dèw</td>
<td>‘cover’</td>
<td>/dèwí/</td>
</tr>
<tr>
<td></td>
<td>bã:r</td>
<td>‘add’</td>
<td>/bã:ri/</td>
</tr>
<tr>
<td></td>
<td>nùy:n</td>
<td>‘enter’</td>
<td>/nùy:ní/</td>
</tr>
<tr>
<td></td>
<td>tûy-</td>
<td>‘put down (in pile)’</td>
<td>/tûyí/</td>
</tr>
</tbody>
</table>
The final syllable of a noncomposite multisyllabic word is \( Cv \) with short vowel (this is the only pattern allowed for verb stems), or \( CvC \) with a final sonorant.

### 3.2.2 Metrical structure

Segmental phonological rules generally point to a trochaic bias, i.e. bisyllabic [sw] with a strong followed by a weak. In most \( CvCvCv \) trisyllabic verbs (§10.1.3.6), the medial syllable of the bare stem and of phonologically related inflected forms has a short high vowel \( i \) or \( u \), which depending on consonantal environment may be subject to Post-Sonorant Syncope (§3.5.3.3). The phonology is clearest in \( CvCv-Cv \) suffixal derivatives of \( CvCv \) verb stems, e.g. \( 5y^\text{a}5\text{r} \) ‘braid (rope)’, reversive \( 5y^\text{a}5\text{r} \) ‘unbraid (rope)’ < \( /5y^\text{a}5\text{r}5\text{r}/ \).

Prosodic weight is a factor in some tonal and segmental (vocalic) processes. Overall prosodic weight is a factor in presuffixal vocalism as well as tones of verbs that have final \( i \) in the bare stem; see the imperfectives in (303) in §10.2.2.1. Prosodically light stems are \( Cv , \) \( CvCv \), and \( CvNCv \) (with homorganic nasal and voiced stop). Heavy stems are \( Cv:Cv , \) \( Cv:NCv \), other \( CvCCv \) (especially if syncopated), and trisyllabic and longer shapes. The division is therefore between stems with two vocalic moras and those with more than two.

In the quoted imperative positive for verb stems not ending in a high vowel, a final L-tone appears at the right edge only if the H-toned part of the stem otherwise occupies at least two vocalic moras (§10.6.4).

### 3.3 Consonants

The inventory of consonantal phonemes is (5). Single parentheses enclose marginal phonemes. Double parentheses enclose highly marginal phonemes.

\[
\begin{array}{cccccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\
\text{labial} & p & b & m & (f) & w & (w^a) \\
\text{alveolar} & t & d & n & s & l & r & (r^a) \\
\text{alveopalatal} & c & j & p & (\text{\(\text{\&}\)} & y & (y^a) \\
\text{velar} & k & g & \eta & & & & & (h) & (\text{\(\text{\&}\)} \\
\text{laryngeal} & & & & & & & & & \\
\end{array}
\]

\( c \) is IPA affricate [tf], \( j \) is affricate [dz], \( \delta \) is [f], \( y \) is [j].

key to columns: 1. aspirated voiceless stops (\( c \) is affricated); 2. voiced stops; 3.nasals, 4. voiceless fricatives (including sibilants); 5. laterals; 6-7. respectively unasinalized and nasalized sonorants; 8-9. laryngeals

#### 3.3.1 Alveopalatals \( (c, j, p) \)

As in the other languages of the region (Dogon, montane Songhay, etc.), before front vowels \{i e e\} there is occasional fluctuation between \( k \) and \( c \), and between \( g \) and \( j \). Thus \( g\text{\(\text{\&}\)}5\text{r}5\text{r} \) ~
3.3.2 Lenition of stops

3.3.2.1 Voicing of voiceless stops

Nanga has a tendency to voice original voiceless stops *{p t c k} to \{b d j g\} intervocally, specifically at the onset of the second syllable from the left. There is some variation in the pronunciation, especially in regionally widespread words whose counterparts in neighboring languages are unlenited. Most examples involve old loanwords, since intervocalic voiceless stops are uncommon in Dogon languages in native vocabulary. Examples: jád̩li ‘exactly’, cf. Fulfulde jaati and widespread Dogon já:i; pónd̩i ‘spike, nail’ (French pointe), cf. widespread Dogon pónti; sónd̩é- ‘be unsold’ (widespread sánté-).

We also observe voicing in cases where Fulfulde or other foreign f is nativized first as widespread Dogon p, then voiced (in Nanga) to b. Examples are bů→ ‘all’ from Fulfulde fū→ ‘all’ via pū→ (both pū→ and fū→ are attested as variants of bū→ in Nanga); márp̩a~màrb̩a ‘rifle’ (Arabic root ʿḍf̩), cf. Bambara marf̩a.

3.3.2.2 g not spirantized to y

Spirantization of g to [γ] in the frames a.a and c.a, i.e., between low back vowels, is not systematic in Nanga, and I transcribe g rather than y.

3.3.3 Back nasals (ŋ n)

Velar ŋ occurs intervocally in such words as náŋ ‘cow’, bàp̩a ‘owner’, dàŋßn̩di ‘console’, gāŋūri ‘circulate’, nūŋó-mi ‘turn on’, sūŋūri ‘ear’, and nūŋà nūŋ ‘sing a song’. In the clusters ng and ŋk, ŋ is an allophone of an underspecified nasal. For ŋk I can cite only rōŋké ‘fail’ (< Fulfulde) and jaj̩ãŋkó: ‘double grain spike’ (perhaps a frozen compound). ng is common intervocally, and there are some alternations (within Nanga or between it and nearby Dogon languages) between ŋ and ng. Examples are yōŋgi ‘soul’, bāŋgɔ ‘navel’, and dāŋgāra ‘thighbone’.

Palatoalveolar j is permitted word-initially (where y is unattested), as in jã: ‘meal’, nàmã ‘malfunction (v)’, jë̃r̩e ‘evil dwarf’, jùn̩ir̩i ‘be stationery’, jùr̩ì ‘summons (n)’, nār̩i ‘call, summon’, and jùmɔ ‘shake (e.g. branch)’. Some other word-initial cases are nèmã ‘reins’, nèn’é ‘toilet’ (< Bambara), and jùn̩ir̩i ‘quiver (v)’. j also occurs intervocally, but the examples are either composite (at least historically), as in ñgɔ-ŋɔmɔ ‘camel’, or they are likely borrowings: ṣpî ‘sag under a load’, tɔ:jnɛ ‘teasing (n)’. One caste of griots is called nè-né, and a term meaning ‘nonsense’ is nè-nèmè, both probably with intial Cv reduplication (§4.1.5). Interrogative ‘what?’ is based on jɛ, the actual form being either ŋɛ (plural) or kɔ-ŋɛ (§13.2.3).
3.3.4 Voiceless labials (p, f)

\( f \) is not a full-fledged phoneme in Nanga. It does occur in a small number of loanwords, but even here it is often replaced by \( p \). Examples are \( fû → \) varying with \( pû → \) ‘all’ (< Fulfulde), \( ná:git \) or \( ná:gi \) ‘trouble-maker’ (< Arabic via Fulfulde), and \( sátsâ:šëf \) ‘sergeant’ (< French sergent-chef). For \( *f > \*p > \*b \) in some cases of this type, see §3.3.2.1.

3.3.5 Laryngeals (h, \( \^r \))

\( h \) occurs stem-initially in numerous nouns and verbs, nearly all of them Fulfulde loanwords: \( hëyëndé \) ‘index finger’, \( há:diyë \) ‘stop (at border)’, \( hâmbë \) ‘chew (tobacco)’, \( hâkùm \) ‘tent’, \( hëbbë \) ‘be complete’, \( hôgô \) ‘herd’. The ubiquitous regional particle meaning ‘until’ or ‘all the way to’ appears as \( hâli \).

\( h \) is attested medially in the loanword \( jâhànâmà \) ‘hell’. It does not occur word- or syllable-finally.

3.3.6 Sibilants (s, \( \check{s} \))

There is no phonemic distinction between \( s \) and \( \check{s} \) (= IPA \( \check{f} \)). Words like \( gùsì \) ‘skin’ have (unpalatalized) alveolar \( s \) in spite of the high front vowel. Loanwords like \( sátsâ:šëf \) ‘sergeant’ (French sergent-chef) and \( ìnsâ:làw \) ‘maybe’ (< Arabic ‘if God wills’) are poorly-assimilated and usually have pronunciation variants.

3.3.7 Nasalized sonorants (\( r^n \), \( w^n \), \( y^n \))

\( r^n \) (nasalized tap) is a true phoneme, though it is limited to word-internal intervocalic position. It (therefore) does not occur initially, finally, or in consonant clusters. When a short vowel following \( r^n \) is syncopated, the \( r^i \) is converted to \( n \), thus \( sùgùr^i \) ‘ear’, \( sùgùr^n \) ‘nàr^n’ or syncopated \( sùjìn \) ‘his/her ear’.

\( r^n \) occurs independently of other nasals in unclustered intervocalic position, as in \( bá:nì \) ‘red’. If there is a preceding nasal in the stem or uncompounded word, \( r^n \) but not oral \( r \) may occur, so ‘ear’ is \( sùgùr^i \) and ‘give birth’ is \( nàr^n \). Sequences like \#…\( nùrì \) and \#\( nàrë \) with oral \( r \) are disallowed within uncompounded stems, and this constraint extends to any inflectional suffixes, so perfective negative suffix -\( r^i \) becomes -\( r^i \) in nasalized environments: \( nàr^n- \)\( r^i \) ‘she did not give birth’.

No conspicuous phonetic nasalization occurs in initial semivowels \( \{y \ w\} \) anticipating a following nasal with a separating vowel, e.g. in \( wàŋjë \) ‘change direction’, \( ýôŋgë \) ‘soul’.

\( y^n \) occurs independently of other nasals in intervocalic or word-final position: \( ðy^n \) ‘spin (cotton)’, \( wày^n \) ‘boil (v)’, \( sày^n \) ‘nauseating’, \( mûy^n \) ‘(joint) dislocation’, \( dûy^n-\check{d}ûy^n \) ‘red (intensifier)’. It also occurs in nasalizing environments, where \( y \) and \( y^n \) fall together as \( y^o \), as in \( mûy^o \) ‘this year’. Since \( p \) (§3.3.3) occurs chiefly in initial position (excluding composites and borrowings), there is a partial complementarity between \( p \) and \( y^n \) suggestive of an original phoneme split. However, I can cite no synchronic alternations between \( y^n \) and \( p \).

Unlike \( y^n \) and \( r^n \), \( w^n \) has a very limited distribution. Within stems, I can cite only \( âr^n:ùw^n \) variant of \( âr^{a:ù} \) ‘year’, \( têw/\check{j}ì \) ‘rejoin’, and the borrowing \( nìw^n \) ‘a cattle disease’. In these examples, there is either a preceding nasal, or an immediately following (clustered) nasal.
can find no examples of intervocalic $w^n$, nor for that matter of oral $w$ in a nasalizing environment.

Nanga has $m$ (along with Bankan Tey and Najamba) corresponding to autonomous $w^n$ in some neighboring languages (Jamsay, Ben Tey, Toro Tegu), e.g. *néném ‘taste (v)’ (Jamsay and Ben Tey *nëw*e), *námá ‘meat’ (Jamsay *nëw*â, Ben Tey *naw*â, Toro Tegu *nâw*â, but Bankan Tey *nàmâ: and Najamba *nâmâ*). Toro Tegu and Ben Tey have some synchronic alternations of $w^n$ (intervocalic) with $m$ (other positions). In all such alternations, *$m$ is the likely ancestral form.

3.3.8 Consonant clusters

3.3.8.1 Initial $nd$, $nn$, and other initial $NC$ clusters

Nanga and to a lesser extent Bankan Tey have $NC$ clusters corresponding to unclustered $l$ or $r$ in some other languages. An example involving medial position is (6).

(6) gloss Nanga comparative data

‘iron’ $i\text{n}dá$ Jamsay $i\text{r}°ë$ ~ $i\text{r}°ë$, Ben Tey $i\text{r}°ën$ ~ $i\text{r}°ën$, Bankan Tey

More interestingly, Nanga has a number of stems that begin with a $NC$ cluster ($nn$, $nd$, $nj$, $n$) where most Dogon languages have an initial short high vowel followed either by an unclustered coronal $C$ or occasionally by a $NC$ cluster. Some comparative data are in (7).

(7) gloss Nanga comparative data

a. ‘go up’ $\text{n}dé$ $r$ : Jamsay & Ben Tey $\text{ùr}é$, Bankan Tey $\text{ùr}á$
   $n$ : Toro Tegu $\text{ùn}á$
   $l$ : Pergue $\text{ùl}é$, Najamba $\text{ìl}é$, Yanda Dom $\text{ùl}é$
   Tommo So $\text{ùl}ó$

b. ‘house’ $\text{n}dô ~ \text{ìndô}$ $r$ : Ben Tey & Bankan Tey $\text{ùr}ò$, Jamsay $\text{ùr}ó$, Pergue $\text{ùr}é$
   $l$ : Toro Tegu $\text{ùl}ó$, Yanda Dom $\text{ùl}ó$, Najamba $\text{ól}é$

c. 3Sg pronoun $\text{n}né$ $r^n$ : Ben Tey $\text{ùr}²ë$
   $n$ : Jamsay $\text{èn}é$ (anaphoric), cf. also Jamsay $\text{ìn}é-n$
   ‘person’

d. ‘field’ $\text{n}né$ $r^n$ : Ben Tey $\text{ùr}²ë$, Bankan Tey $\text{pùr}²ë$

e. ‘tooth’ $\text{n}né ~ \text{ìné}$ $nn$ : Mombo $\text{ìnni}$
   $r^n$ : Jamsay $\text{ùr}²ë$, Ben Tey $\text{ùr}²u$, Jamsay $\text{ùr}²ë$
   $n$ : Yanda Dom $\text{ìn}ê$, Najamba $\text{ìn}ê$, Tomo Kan $\text{ìn}ê$,
   Tommo So $\text{ìnd}ê$, Yorno So $\text{èn}$
f. ‘go’  ŋné  
\[ nd : \text{Bankan Tey } ŋdō \]
\[ l : \text{Ben Tey } lō \]
\[ n : \text{Najamba } ĭn \| \text{ inē-} \]
\[ r\text{̀} : \text{Yanda Dom } ŋn- \| \text{ ŋr\text{̀}ē} \]

g. ‘seed’  ŋjā  
\[ s : \text{Ben Tey & Bankan Tey } isā ; \text{Jamsay } sē\text{̀} , \text{Toro Tegu } isēy , \text{Dogulu } sāy , \text{Najamba } sē ; \text{Tommo So } \]
i-sāy , Mombo si : 
\[ nj : \text{Dogul Dom } ŋnjè \]

h. ‘give’  ŋdí  
\[ nd : \text{Najamba } ŋdē , \text{Yanda Dom } ŋdē ; \text{Mombo } ŋdē \]
\[ n : \text{Ben Tey & Bankan Tey } nï \]

i. ‘name’  ŋnērți  
\[ n : \text{Ben Tey } inrți , \text{Najamba } ŋnèn , \text{Mombo } ŋnï \]
\[ (\text{nn}?) : \text{Bankan Tey } ŋninř ; \text{likely from syncopated } *{n}(ŋ)nīř : \]

j. ‘what?’  ŋnē  
\[ nj : \text{Ben Tey & Bankan Tey } ŋnè , \text{Tommo So } ŋnè , \text{Pergue } ŋnè , \text{Mombo } ŋnè \]
\[ ŋŋ : \text{Najamba } ŋnēŋę , \text{Mombo } ŋnï \]
\[ ŋ : \text{Jamsay } ŋnè ‘what?’, \text{Yanda Dom } ŋnè \]
\[ (\text{y}?) : \text{Toro Tegu } ŋè \]

An initial short \( i \) is occasionally heard in the Nanga forms (e.g. \( ŋdō \) for \( ŋdō \)). In these items, it may be that the cluster-initial nasal crept into and eventually occupied the moraic position of the original initial short vowel. Reduplications treat the verbs as vowel-initial, with \( i- \) as the reduplicative segment for the \( nn \) and \( nd \) verbs, as in imperfective \( i-\text{ŋnd}-\text{m-} \) ‘give’.

Closer phonetic study is needed of what I write as \( nd \) and \( nn \). It may be that “\( nd \)” is really \( [n^\text{u}] \), i.e., a single complex segment consisting of an \( n \) with a brief oral release. This type of complex segment is more apparent with labial [\( m^\text{u} \)], see below.

The stems with initial \( nn \) are often pronounced with \( [n^\text{u}] \), i.e. a preglottalized \( n \), after a vowel or semivowel (but not phrase-initially). For example, (8) is heard in a text as [\( i\text{jēnēn\text{̃mūmō} \)].

(8)  ĭyē  ŋnē  ŋnī-mō
\[ \text{again 3SgSbj go-while} \]
\[ ‘\text{Again she was going, …}’ \] (2004.02.03)

3.3.8.2 Initial \( mb \)

The verb \( mbō- \) occurs with the noun meaning ‘nose’ (or ‘snot’) in the phrase \( kīr\text{̄}ē mbō ‘\text{blow one’s nose}’. Cognates show that the \( mb \) was originally intervocalic. Examples are Najamba \( ŋbī , \text{Tomo Kan } hūmbī ~ hūmbī , \text{and Tommo So } ŋbō \) (and variants). In Nanga itself, reduplication treats the verb as beginning in \( u \), as in reduplicated imperfective \( u-\text{ŋmbō-r̥} - \).

\( mbūrā- \) (or \( mbū-\text{rā} -\)), likely containing a (stative) negative suffix \( -r̥ - \) but now probably frozen, means ‘not want, dislike’. Variant pronunciations are \( mı́r̥- , mı́bı́- , \) and \( mı́r̥ - \). The known cognates are Ben Tey \( mı́-\text{rā} - , \text{Bankan Tey } mı́bı́-\text{rā} - , \) and Tebul Ure \( mı́bı́-\text{lā} - , \) so in this case the ancestral form probably had initial rather than intervocalic \( *mb \).
I have no other cases of initial mb (or ng, other than grammatical formatives such as negative ḥgō- ‘not be (somewhere)’ (§11.2.2.2) and demonstrative ḥgú ‘this/that (inaniamte)’ (§4.4.1.2).

Based on impressionistic transcriptions, initial (and for that matter medial) “mb” has a range of articulations including [mʰ], i.e. an m with a faint oral release.

3.3.8.3 Medial geminated CC clusters

Geminated clusters are rare in Nanga. Based on a search of the lexicon (July 2008 version), only ll is well-attested medially within a stem. It occurs in jällé ‘grab suddenly’ (probable loanword), a few other loanwords, and a few irregular reversives (§9.1) like illí-ri ‘remember’ < iré- ‘forget’.

In loanwords I can also cite one example each of bb and yy: híbbé- ‘be complete’, héyvëndé ‘index finger’. I have no cases of {cc dd gg hh jj kk mm nn pp rr ss tt ww} within a stem. nn occurs medially in Fulfulde loans like hínné ‘quantity’. In native Dogon stems, it occurs initially (as in ìnó- ‘go’) where it probably reflects coalescence of an initial short high vowel with the following nasal (see §3.3.8.1 above), but not medially within a stem.

Some additional geminative clusters may arise at compound boundaries or due to Post-Sonorant Syncope. I can cite dëñ-ní: ’semen’ (< dër’í: ’penis’ and ní: ’water’).

Nanga tends to simplify even the few geminated clusters that do occur. I heard ḥóggò ‘animal pen’ (in some other Dogon languages ḥóggò, from Fulfulde). For síddì ‘sulphur’ (*sítti), bíjí ‘pilgrimage to Mecca’, and gálłò ‘house with walled courtyard’, the medial geminate was often simplified (sídì, bíjì, gálò), though the H-tone did not spread into the second syllable, as it typically does with true CvCv nouns and in ḥóggò. This degemination is consistent with the parallel tendency to lenite intervocalic voiceless stops to voiced stops (*t > d, etc.).

3.3.8.4 Medial non-geminate CC clusters

Homorganic nasal plus voiced stop clusters {mb nd ng} are common within stems, e.g. dùmbo- ‘(blade) be blunt’, dónôro ‘ball-shaped’, mènìrè- ‘shape into balls’. nd also occurs suffix-initially in inchoative derivatives, like gàrà-ndìyé- ‘become pungent’, and mb occurs in girè-mbí ‘blindness’.

Other medial clusters are mostly much less common. Excluding obvious borrowings and compound boundaries, we have the following.

Homorganic nasal plus voiceless stop. nt: àntòngò ‘residue after first winnowing of pounded grain’ (cognate verb tòngò), ìntò: ‘stick with hook’, and àntà:ní (variant àtà:ní) ‘hunt (n)’ may contain an original formative *àn-. ìnj in já-jàŋkò: ‘double millet grain spike’ may also involve an original boundary (cf. Najamba jànjà:n-kàbbá).

r plus consonant is found in a few items: rg in pérég ‘sheep’, (kŋɔ̃tɔ̃y-)dàrgá ‘breakfast’; ðŋ in bùŋŋ ‘group of travelers’ (etymology unknown); rs in kàrsi ‘gizzard’ (etymology unknown).

wr is well-attested: këwrí- ‘cut wood’ (cf. Jamsay cërëwë-) and kàwrí- ‘split (peanut)’ (Jamsay kàráwà-), sëwrí- ‘trim surface (of wood) with knife’, pɔwrí- ‘rub or scrape off’ (Jamsay pɔràwà-), kòwrí- ‘(handle) be broken’, kàwrà ‘shard’, jòwrí-ní: ‘sauce’. w in
éw-yé- ‘sit’ is perhaps still segmentable (an archaic causative éw-ré- is the only synchronic evidence).

yr occurs in bóyrè ‘porridge’, from Fulfulde.

Other non-geminate CC clusters are found in borrowings (chiefly from Fulfulde). Examples of such clusters include nasal plus sibilant ms, ns; rhotic plus various consonants rb, rd, rt, rk rm, rn; lateral plus various consonants lb, lp, lg, lk, lm, ls; semivowel plus various consonants wd, wt, ws, yb, yg, yk, yn.

3.3.8.5 Medial triple CCC clusters

Examples are few, and involve tap r or semivowel y followed by a homorganic nasal-stop sequence.

kàrmbí ‘horse’s mouth bit’ and kàrmbí ‘rope around donkey’s tail’ are heard with no clear vowel after the tap. However, representations of the type kàrìmbí with a medial short high vowel would not be far from the phonetic output.

háyndí ‘be amazing’ and related words and póyngól ‘light on the horizon’, both from Fulfulde, are my examples beginning with y.

3.3.8.6 Final CC clusters

None.

3.4 Vowels

Excluding tonal markings, the vowel segments are those in (9).

(9) short oral long oral nasalized

<table>
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<tr>
<th></th>
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<td>i</td>
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</tbody>
</table>

The vowel qualities {e o} are +ATR (advanced tongue root), while {ɛ ɔ} are -ATR. The two sets do not normally co-occur within a stem. Some verbal derivational suffixes harmonize to stem vowels (§3.4.5).

3.4.1 Short and (oral) long vowels

Except in loanwords like bɔmbɔŋ⁵ ‘candy’ (French bonbon) and some contractions involving affixes or clitics, all short vowels are oral. Long vowels in monosyllabic stems may be nasal (following section) or oral. There are also some long oral vowels in other syllables.
Vowel-final monosyllabic stems take the form \((C)v\): with long vowel: \(yí\): ‘see’, \(yì\): ‘child’, \(pé\): ‘old’, \(pē\): ‘get old’, \(yä\): ‘women’, \(dô\): ‘haunch’, \(tù\): ‘each other’, \(dō\): ‘arrive’, \(ò\): ‘place’, \(dè\): ‘mother’, \(pù\): ‘pick (fruit)’. 

In nonmonosyllabic stems, short vowels predominate. In verb stems (excluding borrowings), a long vowel is allowed only in the initial syllable, except insofar as a final /…iy/ contracts to …ī, as in əgī-yi ~ əg-ī: ‘become hot’ (compare imperative əgī-yà). Initial long vowels are illustrated by pà:rî ‘caress’, kò:sō ‘brush away’, bò:sî ‘mix (crushed millet) with water’. The long vowel is usually followed by a single consonant, but nasal-stop clusters are also allowed: ké:ndé ‘make (well)’. There are many trisyllabic verb stems with all-short vowels like jëŋir’ī ‘look’ and jígûrê ‘spin’.

Examples of long vowels in noun and other non-verb stems: tè:nè ‘wooden bed’, bà:sì ‘misfortune’, kà:sà ‘wool’ Monomorphemic stems like dòrò:sì ‘strap for slapping horse’, mûsû:rî ‘head shawl’ (French mouchoir), and gûrâ:nà ‘Coran (tome)’, with a long vowel in a medial syllable, are borrowings, usually from Fulfulde (or from Arabic via Fulfulde). In expressive adverbials such as pə$$→$$ ‘flat and small’, the lengthening of the final vowel is variable intonation-like prolongation rather than vowel length.

A final <HL>-tone does not require lengthening of a short vowel: kàrî ‘ax’, tà:rî ‘egg’, sàwà ‘grass’. In neighboring languages, either the vowel is long as in Ben Tey tà:rî: ‘egg’ and sàwà: ‘grass’, or the tone is simple an in Jamsay tà:rû ‘egg’. However, there are no final short rising-toned syllables in Nanga.

### 3.4.2 Nasalized Vowels

Vowel nasalization is limited in Nanga. Leaving aside loanwords, affixal contractions, and an occasional expressive reduplication like sò$$→$$sò ‘newborn’, nasalization is confined to long-vowel monosyllables, plus a few expressive adverbials (transcribed with \(\sim\) to indicate prolongation). The known examples are in (10a-b). The correlation with open vowels \(\{a\ \&\ e\}\) is typologically normal, but there are also a couple of cases with \(i\).

\begin{align*}
\text{(10) a. } & \text{tà:} & \text{‘(goat) stand on hind legs to browse’} \\
& pà$$\rightarrow$$ & \text{‘wide open’} \\
& pà: & \text{‘find a mate or double for’ (and other meanings)} \\
& jà: & \text{‘normal, right’} \\
& tà: & \text{‘shed (n)’} \\
& gà: & \text{‘onion’} \\
\text{b. } & \text{tè:} & \text{‘honeycomb’} \\
& sè$$\rightarrow$$ & \text{‘looking straight at’} \\
& kè: & \text{‘inheritance’} \\
\text{c. } & \text{pù:} & \text{‘fonio’ (grain)} \\
\text{d. } & \text{gù:} & \text{‘odor’} \\
& bù: & \text{‘cover up’}
\end{align*}

The ubiquitous yes/no and similar “grunted” utterances in (11) also show nasalization.
tá: ‘shoot and dë: ‘be tired’ are unnasalized, as in some other Dogon languages (but not Jamsay, which has tá:" and dë:"").

3.4.3 Initial vowels

The word-initial Cv (Cv; CvC) syllable may have its initial C position vacant, so there are many words beginning with a vowel. In an alphabetical printout of the lexicon (July 2008) I count 7.5 pages of entries beginning with a/a; 7 beginning with e/e: and e/e: combined, 2.5 with i/i, 9 with o/o: and o/o: combined, and 2.5 with u/u:. A few examples follow.

a/a: ãṇà ‘half-ripe’, ågí-yì ‘hold’, áñjì ‘yawn (v)’, âr’ì ‘shine’.

i/i: iřé ‘be better’, išì ‘fish’, i-rì ‘cause to stop’, índá ‘iron’.

o/o: õmbó ‘take off (garment)’, õmirì ‘parent-in-law’ õ:kì and variant õ:gi ‘tree sp. (Diospyros)’, õ:rö ‘hyrax, dassie (mammal)’

u/u: ãsì ‘day (unit); sun’, ãrò ‘skin and butcher’, ãn-yì ‘be afraid of’.

3.4.4 Stem-final vowels (u is rare, but …)

Any vowel quality may end a verb, noun, or other stem. However, stem-final u is effectively absent except in monosyllabic non-verb stems like kù: ‘head’, and in predicative forms of nonmonosyllabic adjectives whose modifying form ends in i. Nouns whose cognates in Jamsay etc. end in u have final i in Nanga: bùrí ‘bread’, òsi ‘road’, gùsì ‘skin’, etc. Likewise with adjectives in their basic modifying forms, e.g. dúsi ‘heavy’, dûgi ‘big, fat’. Adjectives are unusual in having grammatically conditioned i/u alternations (modifying versus predicative), see §4.5.1.1.

However, final short i is often realized as [u] in the presence of rounded vowels or w. For example, õsì ‘sun; day’ has final i in isolation, and in combinations like õsì sìyé- ‘day break(s)’, but it is heard with final u when phrased with a following word with rounded segments, as in õsù̀ L 3gí ‘hot sun (=mid-day)’. Nouns like tòndí ‘basket’ with a rounded vowel and final i are treated as having rounded vowels for purposes of vowel-copying into a following locative postposition: tòndù gò ‘in a basket’. Verbs like gònrì ‘go around, go in a circle’ show similar phonetic fluctuation between i and u, depending on the vocalism of inflectional suffixes and especially on the opposition between final 1Sg -y and 2Sg -w (and their plurals) in the simple perfective: 3Sg gònrì-ò, 1Sg gònrì-ò, 2Sg gònrì-ù-ù. Final short i is also highly subject to syncope or apocope after an unclustered sonorant.
3.4.5 ATR vowel harmony

+ATR \{e o\} and -ATR \{e ø\} constitute two opposed harmonic sets. Vowels of either set may co-occur with a, and with high vowels \{i u\}, which are therefore nonharmonic. In relics of the ablauted A/O-stem, namely the imperative and derived stative stems, stem-final -ATR e may shift to a, see especially (356a) for imperatives.

This type of vocalic harmony has little practical significance in Nanga. Within verb stems, the most important “harmonic” pattern is that exactly the same vowel quality is repeated, as in kémé ‘build’ and bógórá ‘bellow’. Verbal inflectional suffixes do not harmonize with their stems. For example, the imperfective negative suffix -ŋɔ̀- does not change to -ŋò- after an \{e o\} stem: (kóyò-kè:sì) kóyò-ŋɔ̀: ‘he/she doesn’t shout’. Causative suffix complex -ndiyé-mí likewise fails to harmonize with the preceding stem in e.g. kewé-ndiyé-mí ‘make equal’. Causative -mí has imperative -mò that disregards any preceding harmonic vowels: gö:-mí ‘cause to go in’, imperative gö:-mò.

However, some other verbal derivational suffixes do harmonize with stem vowels, especially with +ATR vowels. Reversive and transitive -rí-, and mediopassive -yí-, have variants -ró- (sometimes -rô- if stem-vowels are back rounded) and -yó- (never -yó-) if the stem contains +ATR vowels. Examples: nógí-ýé- ‘be caught in tree’ and its reversive nóngú-ró- ‘be un-caught (i.e. be extricated from being caught in the tree), yöfí-ýé ‘extend credit’ (Ben Tey and Bankan Tey yérí-ýé, Jamsay yènlé-ŋè), önji-ýé ‘be ashamed’ (Ben Tey ènjí-yé, Bankan Tey èzí-yé, Jamsay è:-ŋè). See §9.1 and §9.3.1 for more data.

Many loanwords, especially from Fulfulde, respect \{e o\} versus \{e ø\} vowel harmony. For example, in òsìpòré ‘forestry official’ (< French Eaux et Forêts), we see two o’s and an e (along with a nonharmonic high vowel), while in tòròtò or tòròdè ‘pestering’ two ø’s co-occur with an e.

In compounds the initial and the final are harmonically independent.

For a few cases where a verb and a cognate nominal differ in ATR value, see (390a,c) below.

3.4.6 Rounding harmony

There is no productive process by which a vowel in one syllable must share backness and rounding features with a vowel in an adjacent syllable. However, in CvCvCv sequences with metrically weak medial syllable, the vowel of this syllable is a short high vowel, and the choice between i and u can be affected by the backness and rounding value of either adjoining syllable. See for example, the discussion of adjectives followed by clitics in (63c) in §4.5.1.1.

3.4.7 Vocalic sound symbolism

Like the other nearby Dogon languages, Nanga has some word-families involving stems that are semantically related and have the same consonantal shell but differ in vowel quality. Generally \{e e\} suggests diminution and \{o ø\} suggests augmentation or intensification of some kind, but each relevant word-family deploys the variant forms for its own semantic purposes.

Expressive adverbials often foreground their sound, and are receptive to vocalic sound symbolism. An example is lèré-lèré ‘cleaned up’ with lòró-lòró ‘clean-shaven head’
Another set meaning ‘flat and wide’ with stems of the shapes $pv\acute{v}$ and iterated $p\acute{v}t\acute{v}\rightarrow$ is given in (66) in §4.5.2.

Similar cases can also be found among bisyllabic verb stems. One set is $p\acute{o}\acute{l}\grave{o}$ ‘cut off, sever (e.g. head’), $p\acute{e}\acute{l}\acute{e}$ ‘pull off (small twig)’, and $p\acute{e}\acute{l}\acute{l}\acute{i}$ ‘break off, cut off a piece of’.

Sound-symbolic variants involve stem-wide vowel mutations. Sound symbolism is quite different from horizontal (syntagmatic) alternations in iterated stems with $a$-vowels replacing other vowels in the second iteration. These are rhythmical rather than size- or intensity-related. See (37) in §4.1.7 for nouns and (232b) in §8.4.7.2 for EAs.

### 3.4.8 Vocalic stem-ablaut in verbs

Nanga verbs have a limited degree of stem-ablaut. Only the stem-final vowel is modified.

In the analysis I use, the **bare stem** ends in $i$ for one class of verbs. For other verbs, it ends in a non-high vowel $\{e\,e\,a\,o\}$. If the stem has any preceding vowels, the final non-high vowel is constrained by harmonic principles. The bare stem occurs in nonfinal position in verb chains, in most inflections in the perfective positive system, and for prosodically light stems in part in various imperfective categories.

Ablaut modifications of the bare stem are as follows.

**E/I-stem**: the 3Sg subject form of the simple perfective positive, which has no further suffix (§10.2.1.1). It matches the bare stem for the $i$-final verbs, but for other verbs it fronts the final vowel to $\{e\,\epsilon\}$, the choice depending on the ATR-harmonic class of the verb.

**I-stem**: in the quoted imperative, §10.6.1, and for most nonmonosyllabics before the prohibitive suffix. The stem ends in $i$ for nonmonosyllabics, and in the quoted imperative monosyllabics are $Cv\cdot y$.

**A/O-stem**: in the imperative stem (§10.6.1.1, unsuffixed for singular addressee), the derived stative stem (§10.4.1, no further AN suffix), and the 3Pl subject form of the simple perfective positive (§10.2.1.1). The stem ends in $\{a\,\varepsilon\,o\}$, the choice depending on nonfinal vowels and the ATR-harmonic class of the stem.

**Non-high stem**: for all verbs before the perfective negative suffix $-\text{r}i\acute{v}$ (§10.2.3.1) and before hortative suffixes (§10.6.2). Also, for prosodically heavy verbs, in the imperfective positive (§10.2.2.1) and imperfective negative (§10.2.3.4), for which light verbs have the bare stem. Also for nonmonosyllabic $i$-final verbs in imperfective participles with following determiner, see (512). The effect is that heavy $i$-final stems lower the $i$ to a harmonically acceptable non-high vowel.

A more detailed general treatment, with examples, is in §10.1.3. Details about specific derivations and inflections occur throughout chapters 9 and 10.

### 3.4.9 Diphthongs

Combinations of vowel plus $y$ or $w$ are common and have no special unitary character. More interesting diphthongs are $\acute{a}\ddot{e}$, $\ddot{a}\ddot{e}$, and $\ddot{e}\ddot{e}$ in the 3Sg, and $\ddot{e}\ddot{a}$ in the 3Pl of the simple perfective positive of monosyllabic verb stems, see (282a-b) in §10.2.1.1. $\ddot{e}\ddot{a}$ also occurs in the 3Pl form of the perfective negative, see (322a) in §10.2.3.1. These diphthongs occur when vowel-final ablaut, controlled by the inflectional category, collides with lexical vocalism. The diphthongal outputs make both ablaut and lexical vowel accessible to the listener.
3.5 Segmental phonological rules

3.5.1 Trans-syllabic consonantal processes

3.5.1.1 Nasalization-Spreading

With exceptions discussed below, a nasal \{m n ɲ j\} or nasalized sonorant \{rⁿ yⁿ wⁿ\} at the onset of a syllable, or a nasalized vowel within that syllable, induces nasalization on an intervocalic oral sonorant \{r y\} at the beginning of the following syllable. Phonetically, of course, the nasalization extends to adjoining vowels, so that in nářá ‘give birth’ all four segments are phonetically nasalized. Spreading is recursive, as we see most clearly when a suffix combination like -yè-rí- (mediopassive plus perfective negative) surfaces as -yⁿè-ríⁿ- after a nasal stem.

Syllable-final semivowels \{y w\} are also (phonetically) nasalized in Nv and Nvw syllables. This is true both stem-internally and in combinations of verb stems ending in Nv plus 1st/2nd person subject suffixes (e.g. 1Sg -y, 2Sg -w), as in tumó-yⁿ- ‘I measured’ (simple perfective). I know of no exceptions to nasalization of semivowels in this context. 

Semivowels (but not r) are inconsistently nasalized by an adjacent following nasal. My assistant nasalized the semivowels in póyⁿgòl ‘light on horizon’, háyⁿdè ‘amazement’ and in téwⁿíf- ‘rejoin’, but not noticeably in cases involving simple yn, viz. láyⁿ- ‘chant invocations’, dúmbó-kémèy-ní ‘skinny-buttocks’, ñyⁿ-ní ‘fatigue’, and sèyⁿ- ‘give good news’. These comments are based on the assistant’s artificially pronouncing póyⁿ, etc., as separate syllables, at the linguist’s direction.

Inside an unsegmentable stem, Nasalization-Spreading is a passive constraint, since the nasalized sonorants in question do not appear elsewhere in unnasalized form. A sequence like nvrⁿv (v = any vowel) as in nářá ‘give birth’ is acceptable, but a sequence #nvrv with oral r is not. Examples respecting the constraint are núyⁿáyⁿ ‘this year’, múrⁿá ‘sick person’, níyⁿⁿ ‘now’, and píwⁿ ‘a cattle disease’.

The exceptions that I have observed involve the stem-internal sequence mrv with unnasalized r. Alongside the “correct” mvrⁿv in e.g. dómóúmero ‘criticism’ and mòrⁿ ‘wild date’, there are several cases with “incorrect” mrv. Those known to me are múráⁿ- ‘not want’, dómúró ‘shave around the edges’, jómóró ‘foreskin’, ñómúró ‘tamarind’, támóró ‘dates’, pómúró ‘eke out’, kómúró ‘(finger-)nail’, múá ‘be lost’, múmúró ‘dip (food) deeply (in sauce)’, mèrᵉ-girë ‘abdomen’, and mèrëgë ‘evil dwarf’. The m in several of these words is optionally (or dialectally) pronounced with a brief oral release, e.g. kómë̀rá, and there is some comparative support for a reconstruction *mb (or *mb, especially from Bankan Tey, pà:mîrál ‘understanding’ is an unassimilated Fulfulde loanword and shows oral r, but note the parallel borrowing pà:mûtë ‘understanding’ (cf. verb pà:mb ‘understand’).

I know of no case where a verb ending in Nv (including mv, if consistently pronounced as such) fails to nasalize a suffixal sonorant. If there were formerly cases of this type, they have been leveled out. A possible example of this leveling is dúŋí-ríⁿ- ‘dress, put clothes on’ (in the phrase dúŋí dúŋí-ríⁿ- with cognate nominal). Bankan Tey noun dúŋóy ‘outfit, clothing (that one is wearing)’ suggests that the Nanga verb was originally *dúŋí-rí-. After the *ng cluster simplified to ŋ, it was treated like original *ŋ in terms of conditioning Nasalization-Spreading to the suffix. A similar case is tûŋí-yûⁿ- ‘kneel’ (paired with transitive tûŋí-ríⁿ- ‘cause to kneel’), compare Ben Tey tûŋû-yû-and Bankan Tey tûng-ř-. 


Nasalization-Spreading does not apply to $r$ at the beginning of a cluster, i.e. in a sequence $Nv_Cv$. This is not surprising since $r^o$ is disallowed as first member of a cluster. The examples in my data are märba (variant márpa) ‘rifle’ and mürsi ‘revolt’, both of which are regional words of non-Dogon origin.

Most syllabic derivational and inflectional verbal suffixes beginning with $rv$ or $yv$ (there are none beginning with $wv$) are subject to Nasalization-Spreading: perfective negative -$rì$-, reversive -$rì$-, transitive -$rì$-, and mediopassive or inchoative -$yì$-. However, suffix -$yé$, whether 3PI (with statives and adjectives) or passive, does not nasalize. Perfective-1a -$érè$-, the only suffix of -$vCv$- shape, also fails to nasalize. The suffixes that do not nasalize also do not harmonize vocally with the preceding stem, so they simply do not interact with the stem phonologically. This suggests that they were originally phonologically autonomous: a chained perfective-1a auxiliary (-$érè$-) or a loosely cliticized pronominal (-$yé$).

Perfective negative -$rì$- is illustrated by dàmá ‘speak’, dàmá-$rì$- ‘did not speak’, and by tá:$nì$- ‘spread out fingers’, tà:$nì$-$rì$- ‘did not spread out fingers’. In núy$à$-$rì$-, which can mean either ‘did not enter’ < stem núy$à$(í) or ‘did not hear’ < stem núy$à$(í), the $y$ is clearly nasalized.

Reversive derivational suffix -$rì$- is illustrated by kámá ‘crumple’ and kámí-$rì$í ‘uncrumple’, whose perfective negative kámí-$rì$à-$rì$í ‘did not uncrumple’ shows recursive application of the rule.

Transitive -$rì$- is often paired with mediopassive -$yì$-. Pairs showing suffixal nasalization are kúmí-$rì$í ‘(sb) shut (eye)’ and kúmí-$yì$í ‘(eye) shut’, and sǎnjí-$rì$í ‘embellish’ and sǎnjí-$yì$í ‘become embellished’. Deadjectival inchoatives with the same -$yì$- suffix also nasalize: tǎmí-$yì$í ‘become cold’.

Although I transcribe e.g. sǎnjí-$yì$í, the actual pronunciation reflects Monophthongization (§3.5.7.2): [sǎnjí:-]. The long [iː] is no more nasalized than in underlyingly monosyllabic stems like ní: ‘water’. Transcriptions like sǎnjí-$yì$í are therefore somewhat abstract, and are motivated by forms like perfective negative sǎnjí-$yì$é-$rì$í where a vocalic shift precludes Monophthongization, and where nasalization of $y^u$ is phonetically unmistakable (in this example it has transmitted Nasalization-Spreading into the final suffix). However, in the perfective-1a, where we would expect e.g. #sǎnjí-$yì$-érè- with nasalized $y^u$, we actually hear sǎnjí-$O$-érè- ‘was embellished’, parallel to e.g. tájì-$O$-érè- ‘put on (one’s) shoes’ from non-nasal tájì-$yì$, see $y$-Deletion §3.5.7.3.

Perfective-1a -$érè$ is not subject to Nasalization-Spreading even in núy-$érè$ ‘entered’ (stem núy$à$(í), contrast perfective negative núy$à$-$rì$í mentioned above), much less in e.g. mà:$érè$ ‘became dry’ where the source nasal is farther away. The perfective-1a suffix has an unusual bisyllabic shape suggesting that it is still treated phonologically as a separate word (compare Toro Tegu -wòrè).

3.5.1.2 Backward Nasalization

Backward (leftward) spreading of nasalization is not a regular process in Nanga. The only example, rather opaque, is nú-$nɔ$-, the highly irregular imperfective negative of $yì$- ‘see’ (§10.2.3.4), where the initial $p$ probably reflects *$y^u$.

Backward Nasalization is mildly productive in similar contexts in Toro Tegu, and a handful of frozen cases are known in Jamsay.
3.5.2 Vocalism of suffixally derived verbs

Most suffixally derived verbs have vocalism determined in part by spreading of vowel quality from stem to suffix. In effect, the vocalism of the suffixed verbs is subject to the same constraints that apply to underived stems of similar (usually trisyllabic) shape. The affected derivations are reversives, mediopassives and their paired transitives, verbs with some unproductive causative suffixes like -gí-, and some deadjectival inchoatives. Specifically, most of these suffixally derived verbs belong to a verb class with stem-final i or (by assimilation) final ø or i in the bare stem and related forms, and with non-high vowels in the various AN inflections. See, for example, the paradigms of reversives ‘untie’ and ‘unhook’ in (246) in §9.1.

Causative and passive -mf- and passive -yé are exceptions. They do not allow stem vowel quality to spread into suffixed forms.

3.5.3 Vocalic rules sensitive to syllabic or metrical structure

3.5.3.1 Vowel-lengthening

Nanga (and it alone) has small number of stems that appear to show historically secondary lengthening of a vowel before a nasal-stop cluster in the first syllable of a bisyllabic stem.

(12)  

a. nd

ká:ndó  ‘curved (stick)’  Yanda Dom kóndà, Tommo So kányó
kè:ndè  ‘cheek’  Ben Tey cèlé:, Bankan Tey kèndéy
dè:ndè  ‘night’  Tebul Ire dèndé, Yanda Dom dèndà:
ká:ndà  ‘melon’  Ben Tey kànàr“ày, Bankan Tey kàndîrâ

b. mb

ɔ́:mbɔ́  ‘chin’  Ben Tey ômbóy, Bankan Tey ɔmbɔ́y
sɔ́:mbɔ́  ‘earth’  Ben Tey sùmbɔ́y”, Bankan Tey sùmbɔ́y

c. nj

mè:njè  ‘thin’  Ben Tey mènjè-w, Bankan Tey mèzèy”

No cognate is known for either tì:njî ‘grub, larva’ or pà:ŋgɔ: ‘elephant’, for example, but they fit the same profile.

However, there is no synchronic rule of lengthening vowels before such clusters, and some native Dogon items retain short vowels in comparable syllabic positions: nèndè ‘tongue’, yùr-pèmbí ‘woman’s wrap’.

3.5.3.2 Epenthesis absent

No epenthesis processes have been observed.
3.5.3.3 Post-Sonorant Syncope (verbs)

Many verb stems of more than one syllable end in short \( i \) (sometimes varying with \( u \)). When followed by a C-initial inflectional suffix like perfective-2 -só- or perfective-1b -ti-, the short high vowel optionally deletes in allegro speech after an unclustered sonorant, e.g. \( ðàgírí-só-y \sim ðàgír-só-y \) ‘I got ready’. This optional syncope has no wider phonological consequences; in particular, rhotics do not assimilate to following coronals (§3.5.5.2).

3.5.4 Final-High-Vowel Apocope

Apocope of final short high vowels is not completely productive, but it can occur when the final vowel is preceded by an unclustered sonorant, under some conditions. That apocope is not fully productive is seen by the fact that final \( i/u \) alternations are grammatically important in adjectives, many of which are of the shape \( CvCi/u \) where \( C_2 \) is a sonorant. For example, ‘cold’ is \( támû \) as a modifying adjective within a NP, but \( támì \) as predicate. See §4.5.1.1 for a list of such examples, where \( C_2 \) can be \{\( r\ r^n\ ŋ\ \)\( m\)\} as well as \( m\).

In predicates, the distinction between final short \( i \) and \( u \) is also grammatically important. This is notably the case with imperfective positive -m, whose pronominal-subject paradigm includes 1Sg -m-i versus 2Sg -m-û. Actually, in this paradigm apocope may erode the final vowels, which speakers cope with by retaining the rounding of the 2Sg form: 1Sg variant \( -m\-ò \) versus 2Sg variant \( -m\-w\). Apocope (and Syncope, before a C-initial suffix) of final short high vowels is most common in bisyllabic and longer stems of the shapes \( Cv(:)wv \) and \( Cv(:)yv \). As a synchronic process it is only observed when both the full and apocopated variants occur overtly. An example involving medial \( w \) is the noun \( dëw \sim dëwí \) ‘roof’ and the related verb \( dëw\- \sim dëwí\- \)‘cover; put a roof over’. Medial \( y \) is very common in mediopassive and other verbs with shapes like /\( CvCi-yi-/\), which is heard as [\( CvCi:\)]. One possible analysis is that /iy/ apocopates to /iy/, then monophthongizes to /i/.

3.5.5 Local consonant cluster rules

3.5.5.1 Derhoticization (\( /r^n/ \) to \( n \)) in allegro speech style

In forms like \( kār̩-tì- \) ‘did’ (perfective-1b), Syncope of the medial vowel is not phonologically systematic; the tap \( r^n \) is released prior to the onset of the \( t \) in normal pronunciation. So there is no regular derhotization process. However, in allegro speech I have observed variation between e.g. \( sùņùr̩i\ nɔ̀ \) and syncopated \( sùņûn\ nɔ̀ \) ‘his/her ear’, the latter indeed showing \( /r^n/ \) to \( n \).

3.5.5.2 Rhotic Assimilation generally absent

In forms like \( târ̩-tì- \) ‘glued on’ (perfective-1b), Syncope of the medial vowel is not phonologically systematic (§3.5.3.3), and the tap \( r \) is released prior to the onset of the \( t \) in normal pronunciation. This is parallel to what was just observed concerning \( kār̩-tì- \) ‘did’ (preceding subsection). As a result, there is no general process assimilating \( r \) to following
coronal consonants after Syncope, as there is in some Dogon languages. See, however, the discussion of Rhotic-Cluster Lateralization, just below.

3.5.5.3 Rhotic-Cluster Lateralization (\(\text{rr} \to \text{l}l\))

Although there is no regular phonological rule to this effect, there are vestiges of a phonological development of the type …\(\text{rv-r}\)… \(\to \ldots\text{r-l}l\ldots\) (Syncope) \(\to \ldots\text{l}l\ldots\), and of the type \(\ldots\text{r}^{\text{n}}\text{r}^{\text{a}}\ldots \to \ldots\text{r}^{\text{n}}\text{r}^{\text{a}}\ldots\) (Syncope) \(\to \ldots\text{l}l\ldots\). If my interpretation of reversive derivatives is correct. For discussion of reversive \(\text{mål-}l\text{-}l\text{-}l\text{-}l\) ‘unseal’ from \(\text{mår}^{\text{n}}\text{r}^{\text{a}}\text{l}\text{-}l\text{-}l\) ‘seal up’, and of reversives like \(kól\text{ll}i\text{-}r\text{-}l\text{-}l\) ‘unhook’ from \(kó\text{r}^{\text{n}}\text{r}^{\text{a}}\text{-}l\text{-}l\) ‘hook, hang up’, see (245) in §9.1, below. Since the regular reverse suffix -\(r\text{-}l\) has been re-added to e.g. \(kól\text{ll}i\text{-}r\text{-}l\text{-}l\), native speakers may well interpret the phonological process here as one where medial \(r\) is converted to \(l\) before the suffix (a kind of double dissimilation, in segmental quality and length, to the \(r\) of the suffix).

3.5.6 Vowel-vowel and vowel-semivowel sequences

3.5.6.1 Vowel sequences in reduplications and 3Sg perfectives

Hiatus is not typical of Nanga phonology, but when a vowel-initial verb stem is reduplicated, the two occurrences of the same vowel are phonetically separated by a glottal stop. Example: \(\text{éw-yё}-\text{sit’}\), reduplicated imperfective \(\text{é-}\text{éw-yё-}^\text{-}\text{-}l\) ‘he/she will sit’.

In unreduplicated perfectives (§10.1.2.2) of monosyllabic stems, the 3Sg form may end in \(\ldots\text{o-}\text{-}l\text{-}l\), \(\ldots\text{a-}\text{-}l\text{-}l\), or \(\ldots\text{e-}\text{-}l\text{-}l\) of the suffix). The vowel is composite but has no hiatus. Examples: \(nó\text{-}\text{-}l\) ‘he/she drank’, \(sà\text{-}\text{-}l\) ‘he/she replied’, \(wó\text{-}\text{-}l\) ‘he/she caught’. Similar combinations occurs with perfective-1a \(-\text{êrê-}\) (§10.1.2.3), as in \(gó\text{-}\text{-}êrê-\) ‘went out’.

3.5.6.2 \(\text{vv-}\)Contraction

There are few situations in Nanga where two vowels come together at a word-internal boundary. As indicated in the immediately preceding section, some vowel sequences are tolerated, and others (involving reduplicative syllables) are protected by adding a glottal stop.

However, perfective-1a \(-\text{êrê-}\) (§10.2.1.2) follows verb stems, including motion verbs and mediopassives. Most, arguably all, verb stems end in a vowel. For some stems, a stem-final non-high vowel is dropped before the suffix-initial vowel of \(-\text{êrê-}\).

The data are summarized in (13). The duration of vowel sequences is not particularly longer than that of contracted \(ê\). A listener detects vowel sequences primarily by tones in cases like \(\text{irê-}ê\text{-rê-}\) where the stem already ends in \(e\), and by tones plus vowel qualities in cases like \(gó\text{-}ê\text{-rê-}\) and \(sìgê-ê\text{-rê-}\).

<table>
<thead>
<tr>
<th>(13)</th>
<th>stem</th>
<th>perfective-1a</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. contraction occurs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\text{dýdá-})</td>
<td>(\text{dý-}ê\text{-rê-})</td>
<td>‘get tired’</td>
<td></td>
</tr>
<tr>
<td>(\text{làwà-})</td>
<td>(\text{làw-}ê\text{-rê-})</td>
<td>‘go past’</td>
<td></td>
</tr>
<tr>
<td>(\text{kýyà-})</td>
<td>(\text{kýy-}ê\text{-rê-})</td>
<td>‘(wood) decay’</td>
<td></td>
</tr>
</tbody>
</table>
{H}-toned bisyllabic with initial high vowel

- tůwé- tůw-ërè- ‘die’
- kúmá- kúm-ërè- ‘(bone) break’
- nýⁿé- nýⁿ-ërè- ‘sleep’

b. no contraction

- gôː- gô-ërè- ‘go out’
- té- té-ërè- ‘sprout’

{H}-toned bisyllabic with double {e o}

- séré- séré-ërè- ‘be diluted’
- kóró- kóró-ërè- ‘become empty’

{H}-toned bisyllabic with initial high vowel

- sigé- sigé-ërè- ‘go down’

bisyllabic with medial cluster (after syncope), all +ATR

- éw-ŷé- éw-ŷé-ërè- ‘sit’
- kówró- kówró-ërè- ‘(rain) stop’
- kómjó- kómjó-ërè- ‘be crumpled’
- bínðé- bínðé-ërè- ‘go back’

{LH}-toned bisyllabic with double {a ɔ e}

- námá- námá-ërè- ‘be ruined’
- bâr’á- bâr’á-ërè- ‘redden’
- yâgä- yâgä-ërè- ‘run’
- jéme- jéme-ërè- ‘blacken’
- yëgë- yëgë-ërè- ‘fall’

{LH}-toned bisyllabic with initial high vowel or nasal

- dimé- dimé-ërè- ‘be finished’

other {LH}-toned bisyllables

- biyé- biyé-ërè- ‘lie down’

other {H}-toned bisyllables

- ámá- ámá-ërè- ‘become half-ripe’
- ūnë- ūnë-ërè- ‘go’ (§10.1.3.4)

Contraction is usual with {H}-toned CáCá-, CéCé-, and CâCâ₃- stems. It occurs less systematically in {H}-toned stems with initial {i u} followed by -ATR {e a}. For example, I recorded írë-ërè- ‘ripened’ but tůw-ërè- ‘died’, and there is some variation in the pronunciation of the latter. An issue with these stems is that loss of the stem-final vowel would delete any surface manifestation of its underlying vocalism.

Contraction does not occur with any {LH}-toned bisyllable, even CáCá-, CéCé-, and CâCâ₃-. It is also blocked in CvCC₃- stems with medial cluster, but this stem shape does not allow final {e a}, so all examples end either in i or in +ATR {e o}.

Trisyllabic stems have either H.H.H or L.H.H tone sequences, so the penult as well as the final syllable is H-toned (unless a tone overlay has applied to the stem). However, trisyllabics (other than causatives, which do not take the perfective-1a) cannot end in {e a}, so we get pairs like pé gé- ‘nail, drive in (nail)’, reversive pé gi-ré ‘remove (nail)’. They can end in {e o i}, but we have seen that these final vowels do not contract. The upshot is that no vv-Contraction occurs in trisyllabics before perfective-1a -ërè-. Examples: jígírë-ërè- from jígírë- ‘spin (turn)’,
3.5.6.3 Desyllabification

Optional desyllabification of stem-final \(i\) to \(y\) before perfective-1a \(-\dot{e}\dot{r}e\) can occur with stems whose preceding syllable is H-toned, as in \(\ddot{t}\acute{a}g\acute{y}-\dot{e}\dot{r}e\) \((\ddot{t}\acute{a}g\acute{y}-\) ‘become’). To some extent \(o\) can be desyllabified in the same context. For example, \(\ddot{t}om\ddot{b}o-\dot{e}\dot{r}e\) ‘jumped’ can be pronounced more or less as transcribed, or it can shade into \([\ddot{t}om\ddot{b}or\dot{e}r\acute{e}]\) or \([\ddot{t}om\ddot{b}or\ddot{e}r\acute{e}]\).

3.5.7 Local vowel-consonant interactions

3.5.7.1 Backness/rounding assimilations affecting \(i\) and \(u\)

Stem- or suffix-final short high vowels \(\{i\;u\}\) in verbal morphology usually assimilate in backness/rounding to a following suffixal non-homorganic semivowel. This happens, for example, when perfective-1b \(-\dot{t}i\-) is followed by 2Sg \(-w\) (or 2Pl \(-w:\)), and when \(\acute{b}u\dot{e}\) ‘be’ is followed by 1Sg \(-y\) (or 1Pl \(-y:\)). Thus \(-\acute{t}u-w\), \(\acute{b}i-y\), see §10.3.3.

These assimilations feed into Monophthongization, see just below.

3.5.7.2 Monophthongization (\(\acute{i}y/\) to \(\acute{i}\); \(\acute{u}w/\) to \(\acute{u}\))

In syllable-final position, \(\acute{i}y/\) and \(\acute{i}yi/\) are heard as \(\acute{i}\); and \(\acute{u}w/\) is heard as \(\acute{u}\). In my normal transcription I use the full spellings with vowel and semivowel.

For discussion of the phonological representation of verbs like \(\acute{t}fy(\acute{i})/\) (or \(\acute{t}f/\)) ‘send’, see §10.1.3.3.

Subject-pronominal suffixes like 1Sg \(-y\) and 2Sg \(-w\) are often involved in Monophthongization. Examples are 1Sg perfective negative \(-\acute{r}i-\acute{y} [\acute{r}i:]\) and 2Sg ‘be’ \(\acute{b}u\acute{w}\) [\(\acute{b}u\dot{e}\) ‘you are (somewhere)’. The number of forms that are subject to Monophthongization is swollen by the effects of vowel-semivowel assimilations, see the immediately preceding section. Thus \(\acute{g}\acute{o\:\acute{r}u-w\;} [\acute{g}\acute{o\:\acute{r}\acute{u}:}]\) ‘you-Sg did not go out’ from \(-\acute{r}i-w/\).

\(\acute{i}yi/\) occurs (arguably) in a few unsegmentable verb stems like \(\acute{t}fy(\acute{i})/\) (or \(\acute{t}f/\)) ‘send’, see §10.1.1, and (clearly) in a large number of derived verbs with mediopassive or inchoative \(-\acute{y}i\;\), e.g. \(\acute{p}\acute{e}mbi-\acute{y}i/\) [\(\acute{p}\acute{e}mbi:\) ‘gird oneself’. The trisyllabic nature of this stem is brought out in such forms as perfective negative \(\acute{p}\acute{e}mbi-\acute{y}e-\acute{r}i\;\), where the vocalic shift to \(\acute{e}\) pre-empts Monophthongization. I can hear no difference between \([\acute{i}]\) from \(\acute{i}y/\) and \([i]\) from \(\acute{i}yi/\). One interpretation of this is that \(\acute{i}yi/\) first reduces to \(\acute{i}y/\), then monophthongizes.

3.5.7.3 \(y\)-Deletion (before perfective-1a \(-\dot{e}\dot{r}e\))

The perfective-1a suffix \(-\dot{e}\dot{r}e\) is phonologically unusual in several ways. It has only limited phonological interaction with the stem, resisting Nasalization-Spreading (§3.5.1.1) and ATR harmony. However, since the preceding stem usually (arguably always) ends in a vowel, some sandhi-like adjustments occur at the boundary. A stem-final short vowel is deleted in some cases (§3.5.6.2), or a final vowel (especially \(i\)) may desyllabify (§3.5.6.3).

A slightly different treatment occurs when \(-\dot{e}\dot{r}e\) follows a trisyllabic (or longer) stem ending in \(\ldots\;C\acute{y}\dot{f}\) (or nasalized \(\ldots\;C\acute{y}\acute{f}\)). The output is \(\ldots\;C\acute{i}\dot{e}\dot{r}\acute{e}\). One can model this as the deletion of the stem-final vowel (independently attested in some other stems before this
suffix), resulting in /…Cíy-ërè/, followed by a special rule deleting the /y/. The resulting …Cí-ërè- may be pronounced as such, or it may additionally be desyllabified to …Cy-ërè-.

The stems subject to y-Deletion are mostly mediopassives (§9.3.1), whether transparently so or otherwise. Examples are in (14a). Not subject to y-Deletion are bisyllabic stems, including syncopated trisyllabics with Cy clusters like ‘sit’ (14b).

\[(14)\]

<table>
<thead>
<tr>
<th>stem</th>
<th>gloss</th>
<th>perfective-1a</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. y-Deletion occurs after i trisyllables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sáŋi-yí-</td>
<td>‘be embellished’</td>
<td>sáŋi-Ø-ërè- ~ sány-Ø-ërè-</td>
</tr>
<tr>
<td>táŋi-yí-</td>
<td>‘put on (one’s) shoes’</td>
<td>táŋi-Ø-ërè- ~ tágy-Ø-ërè-</td>
</tr>
<tr>
<td>b. y-Deletion fails to apply bisyllables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bi-yé-</td>
<td>‘lie down’</td>
<td>biyé-ërè-</td>
</tr>
<tr>
<td>íy-í-</td>
<td>‘stand’</td>
<td>íy-ërè-</td>
</tr>
<tr>
<td>nüy(í)</td>
<td>‘go in’</td>
<td>nüy-ërè-</td>
</tr>
<tr>
<td>úy-í-</td>
<td>‘fear’</td>
<td>úy-ërè-</td>
</tr>
<tr>
<td>y is clustered (syncopated trisyllabic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>éw-yé-</td>
<td>‘sit’</td>
<td>éw-yé-ërè-</td>
</tr>
</tbody>
</table>

3.6 Cliticization

There is no rigorous phonological difference between clitics, suffixes, and postposed particles such as postpositions. Stress and accent patterns, which in other languages of the world often bring out cliticization, are not relevant to Nanga. I use the term clitic (boundary symbol =) in cases where a morpheme (or morpheme cluster) that would on syntactic grounds be thought of as independent is attached to an independently occurring stem (noun, verb stem or inflected verb, etc.), with some evidence of phonological interaction.

I transcribe as enclitics the following: the conjugatable ‘it is’ morpheme =m (and variants), along with its negative counterpart =ndó(-) ‘it is not’ (see just below, and cf. §11.2.1.1-2); static negative =ńdó- (§10.4.2); locative =ỳè with place names (§8.2.4); and the conjugatable past morpheme =be- that is added to (partially) inflected verb forms. Based on phonological interactions, one could argue that other simple postpositions are also really clitics.

Candidates for status as preverbal proclitics are existential yá (§11.2.2.1) and the subject pronouns found in nonsubject relative clauses (§14.1.6). They directly precede the verb and interact with them tonally, but there are no segmental phonological interactions. I do not use = in transcriptions of these forms.

3.6.1 Phonology of ‘it is’ clitic (=m- and variants)

For the paradigm of this clitic, which allows pronominal inflections, see §11.2.1, below. The first and second person forms are based on =m-. The normal third person forms are 3Sg =ŋ ~ :=ⁿ ~ :=Ø, 3Pl =ỳè ~ =ỳè, and inanimate =w. These third person forms merge as =ỳè
~ =ye in postconsonantal position (this position is rare for this clitic since there are few truly C-final NPs).

Of phonological interest is the fact that, after a vowel, 1Sg =m-i frequently contracts to =ṃ, while 2Sg =m-û frequently contracts to =m-û. This results in a unique (for Nanga, and perhaps for Dogon generally) opposition of final plain versus labialized consonant. The labialization in the 2Sg form is difficult for the unpracticed ear to hear, but my assistant immediately corrects poorly pronounced versions.

Some imperfective inflected forms of verbs also end in an inflected form of =m, so the opposition of plain and labialized is quite important.

3.7 Tones

The tone of a Nanga syllable may be H, L, <HL>, <LH>, or <LHL>. Taking ma: as the segmental base, these would be transcribed má:, mà:, mà:, mà:, and mà:, respectively. (Not all of these are actual Nanga words.)

Contour-toned diphthongal syllables can be transcribed interchangeably as e.g. máy and máy. I often use the former method when the final semivowel is a suffix, especially one that comes with its own L-tone.

3.7.1 Lexical tone patterns

3.7.1.1 One H-tone in each stem

Regular stems (nouns, verbs, adjectives, numerals) have one H-tone component in their basic lexical forms. For example, a monosyllabic stem may be H-, <HL>- or <LH>-toned, but not entirely L-toned. As a result, when syntactically controlled tone-dropping applies to them, it is always audible. This is especially important in the context of NP-internal tonosyntax.

I use slashes /…/ to enclose stem-wide melody representations, {...} for overlays that replace the melody, and <…> for single-syllable contour tones.

Typical lexical melodies are /H/, /HL/, /LH/, and /LHL/, with a single H element. This H element may be spread over the entire stem (/H/ melody), or occupy just a part of it (/HL/ melody, etc.). Apparent /HLH/, /LHLH/, and /HLHL/ melodies, with two separate H elements, are very rare and involve borrowed nouns or multisyllabic nouns that are arguably treated phonologically as compounds.

Expressive adverbials (EA) do not fit into phrases (NP, PP) and are neither controllers nor targets of tonosyntactic processes. Some EAs have /L/ melody.

3.7.1.2 Lexical tone melodies of verbs

The lexical melody of a verb stem verbs may be /H/ (15a) or /LH/ (15b). As will soon be seen, the “lexical” melody in the case of verbs is partially predictable from the initial consonant.

/LH/ is realized as CV;y, CVy', CV CVy, CVCCV', CV'CV, and CV'CV CV'. Note in particular where the L to H break comes in the last two of these. While some other Dogon languages delay the tone break until the final syllable or mora of the stem (i.e. close to the right edge), in
Nanga the break occurs as close as possible to the left edge, i.e. midway through the long vowel of $Cv\,Cv$, and in the second syllable of $Cv\,Cv\,Cv$.

I hear no noticeable rise on the second consonant of lexical $Cv\,Cv\,Cv\,Cv$, though it is normally a sonorant, e.g. $nàmbí$ ‘stomp on’. In native Dogon vocabulary, a medial $CC$ is usually a homorganic nasal-stop cluster. The tonal pattern suggests that the syllabification here is $Cv\,Cv\,Cv\,Cv$, with an initial monomoraic syllable that is not capable of bearing an $<LH>$ tone.

Examples of the various melodies for verbs are in (15).

(15) stem gloss

<table>
<thead>
<tr>
<th>a. /H/ melody</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$tɔ́$</td>
<td>‘sow, plant (seeds)’</td>
</tr>
<tr>
<td>$núy^o(t)$</td>
<td>‘go in’</td>
</tr>
<tr>
<td>$súyọ$</td>
<td>‘hit’</td>
</tr>
<tr>
<td>$kìmè$</td>
<td>‘tremble’</td>
</tr>
<tr>
<td>$ké̖sé$</td>
<td>‘cut’</td>
</tr>
<tr>
<td>$núy^e$</td>
<td>‘sleep’</td>
</tr>
<tr>
<td>$kùwó-mí$</td>
<td>‘burn’ (also ‘give meat to’)</td>
</tr>
<tr>
<td>$éwré-ndíyé$</td>
<td>‘become small’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. rising-toned</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$gô$</td>
<td>‘go out’</td>
</tr>
<tr>
<td>$nô$</td>
<td>‘drink’</td>
</tr>
<tr>
<td>$wô$</td>
<td>‘catch’</td>
</tr>
<tr>
<td>$jâr^a$</td>
<td>‘tap’</td>
</tr>
<tr>
<td>$yègè$</td>
<td>‘fall’</td>
</tr>
<tr>
<td>$yɔ̀gɔ$</td>
<td>‘run’</td>
</tr>
<tr>
<td>$bâ-rí$</td>
<td>‘add’ (or ‘help’)</td>
</tr>
<tr>
<td>$yâ-sí$</td>
<td>‘scrub (one’s body)’</td>
</tr>
<tr>
<td>$dá:-ndí$</td>
<td>‘instruct’</td>
</tr>
<tr>
<td>$bâ-rá-mí$</td>
<td>‘have (sb) help (sb)’</td>
</tr>
<tr>
<td>$nàmbí$</td>
<td>‘stomp on (hide)’</td>
</tr>
<tr>
<td>$nàmbí-rí$</td>
<td>‘remove foot from’</td>
</tr>
<tr>
<td>$winjé-mí$</td>
<td>‘swing (a whip)’</td>
</tr>
<tr>
<td>$wègísí$</td>
<td>‘poke with fingers’</td>
</tr>
<tr>
<td>$dùgú-ndíyé$</td>
<td>‘become big’</td>
</tr>
</tbody>
</table>

In native vocabulary, if a verb stem begins with an obstruent, the voicing feature of the obstruent determines the “lexical” melody of the verb. An initial voiceless obstruent requires /H/. An initial voiced obstruent requires /LH/. Occasional exceptions involve loanwords like $jâjìyì$ ‘come back home from the pasture’ (< Fulfulde) and $gâpé$ ‘win (match or contest)’ (< French). If the stem begins with a sonorant or with no consonant (vowel-initial), there is a true lexical choice between /H/ and /LH/ melodies. For example, $má$- ‘become dry’ is /H/ while $mɔ̀$- ‘tie knot’ is /LH/.

Minimal pairs differing only in lexical melody are almost nonexistent in Nanga verbs, which is to be expected given the frequent overriding of lexical melodies by tone overlays in
various inflectional categories. However, there is one notable pair, núyⁿ(í) ‘go in’ versus núyⁿ(í) ‘hear’. However, there are many minimal pairs involving different inflected forms of the same verb stem. In particular, the bare stem (used in verb chains) and the imperative differ only in tones for some verbs: tíŋí ‘speak’, imperative tíŋí, see (357a-c) in §10.6.1.1.

Voiced obstruents are familiar “depressor consonants” in African tone systems. However, the effect of obstruent voicing on lexical melody does not operate anywhere near the phonetic level. Nouns, including cognate nominals that are phonologically related to verbs, completely disregard initial obstruent voicing in their own lexical melodies. Even for verbs, the melodies are constantly chipped away at or completely erased in inflected forms, except in the perfective positive system and the bare stem. The correlation between initial-obstruent voicing and tone applies only at the abstract (lexical) level of underlying melodies, and plays no role at the surface.

For vocalic sequences in verb stems, see §10.1.

3.7.1.3 Lexical tone melodies of unsegmentable noun stems

“Nouns” is interpreted broadly here, including some noun-like adverbs. Combining data from all syllable counts, the attested lexical melodies are /HL/, /LH/, /H/, /LHL/, and very rarely /HLH/, /HLHL/, and /LHLH/.

Monosyllabic nouns have at least two moras. Most have /HL/ or /LH/ melody. There are a few /LHL/ stems. /H/ is attested but rare.

(16) Monosyllabic nouns

<table>
<thead>
<tr>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. /H/</td>
<td>/H/ (rare)</td>
</tr>
<tr>
<td>gáyⁿ</td>
<td>‘courage’</td>
</tr>
<tr>
<td>b. /HL/</td>
<td></td>
</tr>
<tr>
<td>pî:</td>
<td>‘wealth’</td>
</tr>
<tr>
<td>jâ:ⁿ</td>
<td>‘just deserts’</td>
</tr>
<tr>
<td>gr̥:</td>
<td>‘large awl’</td>
</tr>
<tr>
<td>c. /LH/</td>
<td></td>
</tr>
<tr>
<td>tâ:ⁿ</td>
<td>‘shed’</td>
</tr>
<tr>
<td>sôŋ</td>
<td>‘horse’</td>
</tr>
<tr>
<td>jâ:</td>
<td>‘fence’</td>
</tr>
<tr>
<td>dô:</td>
<td>‘hip’</td>
</tr>
<tr>
<td>nâ:</td>
<td>‘hand’</td>
</tr>
<tr>
<td>d. /LHL/</td>
<td>(all known examples)</td>
</tr>
<tr>
<td>gr̥:</td>
<td>‘fire’</td>
</tr>
<tr>
<td>tê:ⁿ</td>
<td>‘honeycomb’</td>
</tr>
<tr>
<td>mê:</td>
<td>‘soft mud’</td>
</tr>
<tr>
<td>sô:</td>
<td>‘awareness’</td>
</tr>
<tr>
<td>gr̥yⁿ</td>
<td>‘last year’</td>
</tr>
<tr>
<td>dêw</td>
<td>‘trap’</td>
</tr>
</tbody>
</table>
See also the \textit{Cv-Cv} reduplicated nouns in (33) in §4.1.5.

For bisyllabic nouns, the lexical melody may be monotonally /H/, bitonally /HL/ or /LH/, or tritonally /LHL/. There is one possible case of /HLHL/ (‘ostrich’), which may have originated as a compound. For the contoured tones, the location of the tone break may vary, see §3.7.1.6-7 below.

(17) Bisyllabic nouns

<table>
<thead>
<tr>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. /H/</td>
<td></td>
</tr>
<tr>
<td>gírⁿá</td>
<td>‘harvest’</td>
</tr>
<tr>
<td>ségí</td>
<td>‘dues’</td>
</tr>
<tr>
<td>má:ndí</td>
<td>‘belief’</td>
</tr>
<tr>
<td>wé:ró</td>
<td>‘tendon’</td>
</tr>
<tr>
<td>tó:sí</td>
<td>‘testicles’</td>
</tr>
<tr>
<td>b. /HL/ realized as H.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>CvCv</td>
<td></td>
</tr>
<tr>
<td>pírⁿá</td>
<td>‘flour’</td>
</tr>
<tr>
<td>mírⁿá</td>
<td>‘voice’</td>
</tr>
<tr>
<td>tígá</td>
<td>‘griot’s calling out of lineage’</td>
</tr>
<tr>
<td>súgí</td>
<td>‘francolin’</td>
</tr>
<tr>
<td>kíyá</td>
<td>‘squirrel’</td>
</tr>
<tr>
<td>final heavy syllable</td>
<td></td>
</tr>
<tr>
<td>sápól</td>
<td>‘row’</td>
</tr>
<tr>
<td>kúmpám</td>
<td>‘curiosity’</td>
</tr>
<tr>
<td>sínwá:</td>
<td>‘Chinese (person)’  (French \textit{chinois})</td>
</tr>
<tr>
<td>báyká:</td>
<td>‘modern rifle (type)’</td>
</tr>
<tr>
<td>c. /HL/ realized as H.L</td>
<td></td>
</tr>
<tr>
<td>Cv:Cv</td>
<td></td>
</tr>
<tr>
<td>bú:dí</td>
<td>‘money’</td>
</tr>
<tr>
<td>CvCCv</td>
<td></td>
</tr>
<tr>
<td>témí</td>
<td>‘customary rite’</td>
</tr>
<tr>
<td>CvCCCv</td>
<td></td>
</tr>
<tr>
<td>háyⁿdè</td>
<td>‘amazement’</td>
</tr>
<tr>
<td>d. /LH/ realized as L.H</td>
<td></td>
</tr>
<tr>
<td>final Cv</td>
<td></td>
</tr>
<tr>
<td>kúwⁿá</td>
<td>‘crowned crane’ (bird)</td>
</tr>
<tr>
<td>lí:gi</td>
<td>‘bird’</td>
</tr>
<tr>
<td>pàndí</td>
<td>‘mourning’</td>
</tr>
<tr>
<td>nò:mbó</td>
<td>‘rainbow’</td>
</tr>
<tr>
<td>nè:ri</td>
<td>‘dog’</td>
</tr>
<tr>
<td>e. /LH/ realized as L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>final CvC</td>
<td></td>
</tr>
<tr>
<td>lèrèw</td>
<td>‘entirely’ (adverb)</td>
</tr>
</tbody>
</table>

31
f. /LHL/ realized as L.<HL>

<table>
<thead>
<tr>
<th>CvCv</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>jámâ</td>
<td>‘crowd’</td>
</tr>
<tr>
<td>dür“o</td>
<td>‘eagle-owl’</td>
</tr>
<tr>
<td>dùwà</td>
<td>‘act of forging’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CvCCv</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>màrpá</td>
<td>‘rifle’</td>
</tr>
<tr>
<td>tòndò</td>
<td>‘leech’</td>
</tr>
<tr>
<td>ènjê</td>
<td>‘chicken’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cv:CbV</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tâ:rê</td>
<td>‘egg’</td>
</tr>
<tr>
<td>kò:rò</td>
<td>‘kneading stick’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cv:CCV</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tì:njî</td>
<td>‘worm, grub’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CvCv:</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>èñjî</td>
<td>‘frog’</td>
</tr>
<tr>
<td>sàgô:</td>
<td>‘blue-eared starling’</td>
</tr>
</tbody>
</table>

g. /LHL/ realized as <LH>.<HL>

<table>
<thead>
<tr>
<th>CvCCv</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>dènjê</td>
<td>‘God’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cv:CbV</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>kè:rê</td>
<td>‘money’</td>
</tr>
<tr>
<td>sà:râ</td>
<td>‘steam-cooked millet meal’</td>
</tr>
<tr>
<td>sò:rò</td>
<td>‘young (person)’</td>
</tr>
</tbody>
</table>

h. /HLHL/ (?) realized as H.<LHL>

<table>
<thead>
<tr>
<th>CvCv:</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>sâkô:</td>
<td>‘ostrich’ (variant sâgô:)</td>
</tr>
</tbody>
</table>

Trisyllabics are in (18). For the location of the tone break(s) in (18d,f), see §3.7.1.6-7 below.

(18) Trisyllabic nouns

<table>
<thead>
<tr>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. /H/ realized as H.H.H

<table>
<thead>
<tr>
<th></th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tâ-tágá</td>
<td>‘arrogance’</td>
</tr>
<tr>
<td>pògírí</td>
<td>‘belly strap’</td>
</tr>
<tr>
<td>ádúr“o</td>
<td>‘life’</td>
</tr>
<tr>
<td>dângará</td>
<td>‘thigh’</td>
</tr>
</tbody>
</table>

b. /HL/ realized as H.H.L

<table>
<thead>
<tr>
<th></th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>final Cv</td>
<td></td>
</tr>
<tr>
<td>üsùr“o</td>
<td>‘wind’</td>
</tr>
<tr>
<td>sâmár“i</td>
<td>‘day laborer’</td>
</tr>
<tr>
<td>dúgírí</td>
<td>‘remorse’</td>
</tr>
<tr>
<td>dòró:sì</td>
<td>‘strap’</td>
</tr>
</tbody>
</table>
c. /HL/ realized as H.H.<HL>

final CV<

táglyêm ‘pot used to heat metal underneath’
kórósôl ‘first rains’
pá:mirâl ‘understanding’

final CV from *CV< or *CV:
súgulâ ‘remorse’ (variant súgulâm)
bálambâ ‘champion’ (variant bálambâŋ, cf. Ben Tey bálambâ):)
káráwâ ‘wooden milk bucket’ (variant kárá, Fulfulde karawal)

d. /LH/ realized as L.L.H

gásègé ‘domestic animal’
nâr”iy”é ‘orphan’
àr”aw”é ‘marabou stork’

e. /LHL/ realized as L.H.<HL>

dòndiyê ‘cat’
gòmbörô ‘chest’
sàriyê ‘Islamic law’
wòtümûbâ ‘mound’

f. /LHL/ realized as L.L.L.H

mârpâ-jìgiŋi ‘rifle-ock tightener’ (mârpâ ‘rifle’)
pi-pîrî ‘craziness’
sò-sòrî ‘branch whip’
dògøró ‘cave cemetery’
làsìri ‘finger’
bògørâ ‘hubbub’
pitòlô ‘pistol’
nèmbirê ‘act of pleading’

g. /LHL/ realized as L.H.L

làsì:si ‘modern rifle’

h. /LHLH/ realized as H.L.H (only example)

hèyyèndè ‘index finger’

i. /LHLH/ as <LH>L.H (only example)

màngòrô ‘mango’ (variant màngòrò)

Quadrisyllabics are typically treated like compounds, though some are borrowed (usually from Fulfulde). They can show tone sequences like L.L.H.H that seemingly violate the rule that tone breaks occur near the right edge. This is because rules that apply to unsegmentable stems do not apply across compound boundaries.
3.7.1.4 Lexical tone patterns for adjectives and numerals

Adjectives and numerals have basically the same tone types as nouns, allowing for gaps due to a limited inventory and due to a predominance of mono- and bisyllabic rather than longer stems.

Examples, beginning with monosyllabics, are in (19).

(19) Adjectives and Numerals

<table>
<thead>
<tr>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>monosyllabic, /LH/</td>
<td></td>
</tr>
<tr>
<td>pë:</td>
<td>‘old’</td>
</tr>
<tr>
<td>yâ:</td>
<td>‘female’</td>
</tr>
<tr>
<td>wôy</td>
<td>‘two’</td>
</tr>
<tr>
<td>bisyllabic, /H/</td>
<td></td>
</tr>
<tr>
<td>sôrô</td>
<td>‘straight’</td>
</tr>
<tr>
<td>ùmá</td>
<td>‘alive’</td>
</tr>
<tr>
<td>pîrí</td>
<td>‘white’</td>
</tr>
<tr>
<td>pë:ré</td>
<td>‘innocent’</td>
</tr>
<tr>
<td>nánányα</td>
<td>‘respectable’</td>
</tr>
<tr>
<td>bisyllabic, /HL/ realized as H.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>árⁿâ</td>
<td>‘male’</td>
</tr>
<tr>
<td>óřf</td>
<td>‘smooth, sleek’</td>
</tr>
<tr>
<td>kûrê</td>
<td>‘six’</td>
</tr>
<tr>
<td>bisyllabic, /HL/ realized as H.L</td>
<td></td>
</tr>
<tr>
<td>pë:rrù</td>
<td>‘ten’</td>
</tr>
<tr>
<td>bisyllabic /LH/, realized as L.H</td>
<td></td>
</tr>
<tr>
<td>nârⁿâ</td>
<td>‘easy’</td>
</tr>
<tr>
<td>kûnjû</td>
<td>‘middle-aged’</td>
</tr>
<tr>
<td>dùgî</td>
<td>‘big’</td>
</tr>
<tr>
<td>mûsû</td>
<td>‘thousand’</td>
</tr>
<tr>
<td>bisyllabic /LH/, realized as L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>nîmî:</td>
<td>‘five’</td>
</tr>
<tr>
<td>tè:šî:</td>
<td>‘nine’</td>
</tr>
<tr>
<td>bisyllabic /LHL/, realized as L.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>tègê</td>
<td>‘young’</td>
</tr>
<tr>
<td>nômî</td>
<td>‘difficult’</td>
</tr>
<tr>
<td>gòmî</td>
<td>‘bad’</td>
</tr>
</tbody>
</table>
3.7.1.5 Default H-tone, or autosegmental mapping?

Particularly for verbs, the effective restriction of lexical tone melodies to /H/ and /LH/ gives us the option of taking the H-tone element as a default that need not be specified lexically. In this view, the /LH/ verbs are those that also have an initial L-tone element.

It would be much more difficult to make such an analysis work for non-verb stems, which have a greater range of lexical tone melodies.

3.7.1.6 Tone-break location for bitonal non-verb stems

For monosyllabic stems, a contoured melody /HL/ or /LH/ is obviously realized on the single syllable: tάː “shed”, pίː “wealth”.

Bisyllabic and longer non-verb stems (nouns, adjectives, numerals) with /LH/ melody have the tone break as close as possible to the right edge: ČvČv, ČvCCCCv, ČČv, CČvČv, and ČvČvČv. Examples are kāwά “crowned crane”, pάnti “mourning”, nɔːmbɔ “rainbow”, gàːsɛː “animal”.

Bisyllabic and longer non-verb stems with /HL/ melody likewise have the break near the right edge. For prosodically light ČvCv and nCv stems (with short vowels), the usual pronunciations are ČvČv and nČv, with the H-tone component spreading into the onset of the second syllable. Bisyllabics with a final heavy syllable likewise have the tone break just before the final mora. Bisyllabics with a heavy first syllable and light second syllable have the break at the syllable boundary. Examples: súːgí “francolin”, búːdti “money”, sínwá “Chinese person”. Trisyllabics are usually H.H.L-toned if they have a final light syllable, and H.H.<HL>-toned if they have a final heavy syllable, but some loanwords (mostly from Fulfulde) that have lost a final sonorant are still pronounced with a final falling tone; see (18c) in §3.7.1.3.

The tendency of tone breaks in the basic lexical forms of noun, adjective, and numeral stems to occur as close as possible to the right edge is also observed with most {HL} and {LH} tonosyntactic or tonomorphological overlays (§3.7.2.2-3).

3.7.1.7 Tone-break location for tritonal non-verb stems

/HHL/ is very rare. I can cite hέyvěnďé “index finger”, which occurs with similar tones in some other languages. It is probably a loanword.

/LHL/ is more variable in tone-break location than the other melodies considered above. One consistent pattern is ČvČv for bimoraic ČvCv stems, where the final vowel has <HL> tone. Likewise ČvČv: when the first syllable is light and the second is heavy. Examples: dūːrās “eagle-owl”, ságō “starling sp.” However, ČvCCCCv can appear, depending on the lexical item, as ČvCČv or ČvCCCCv, compare tóndó “leech” and márpá “rifle” with dēnjé (variant jěn UNICODE) “God”. Likewise with ČvC(C)v stems: táːrì “egg” and kɔːrɔ “kneading stick”, but sɔːrɔ “young (person)” and kɛːrɛ “money”.

There is a similar lexical choice of tone-break location in /LHL/ trisyllabics, namely between L.H.<HL> with the tone break near the left edge and L.L.<HL> with the tone break as close as possible to the right edge. Examples are dɔndỳvê “cat” and nɛmbirê “act of pleading”. The /LHL/ melody realized as L.H.L when the medial syllable has a long vowel, as in lásáːsì “(modern) rifle”, is a variant on L.H.<HL>.
3.7.2 Grammatical tone patterns

Tonosyntactic overlays, usually {L} or {HL} in Nanga, are (optionally) indicated in transcriptions and interliners by a superscripted \(^{L}\) or \(^{HL}\) which is placed at the edge of the target domain “pointing” left or right toward the controller. These superscripts are not phonetic diacritics, and can be omitted without changing the pronunciation; they merely index the prior operation of a tonal overlay. In practice, I use these superscripts mainly for NP-internal tonosyntactic overlays with an overt controller (\(N^{L}\) Adj, Poss \(^{HL}\) N, etc.). Tonomorphological overlays occur in verb-suffix combinations in the morphology, in compounds, and in certain types of stem-iteration, but to avoid clutter I often omit the superscripts in these cases.

3.7.2.1 Grammatical tones for verb stems

Verbs are lexically \(/H/\) or \(/LH/\). The tone break in \(/LH/\) stems, as seen in the bare stem (e.g. in verb chains) and in positive perfective forms, is near the left edge: \(CV, CV\tilde{C}V, CV\acute{C}V, CV\breve{C}V\), etc. For examples see §10.1.3.

The lexical melody is overriden in some morphological combinations, though I do not usually indicate the overlay in superscripts. The details are idiosyncratic and are best presented in the sections on specific AN categories in chapter 10.

3.7.2.2 Grammatical tones for noun stems

When preceded by a possessor NP, the possessed noun is subject to an overlaid possessor-controlled tone overlay. This overlay is \({HL}\) if a preposed possessor ends in an H-tone, and \({L}\) (i.e. tone-dropping) if the possessor ends in an L-tone. This distinction applies to all types of preposed possessor (pronominal, simple core NP, determined or quantified-over NP).

The overlay erases the lexical melody. For example, \(\text{nér}^{r1}\) ‘dog’ becomes \(X^{\text{HL}}\text{nér}^{r1}\) or \(X^{\text{L}}\text{nér}^{r1}\), depending on what tone the possessor X ends in. The same is true with a preposed pronominal possessor in inalienable possession (kin terms): \(\text{lèsî}^{H}\) ‘maternal uncle’, \(\text{xû}^{\text{HL}}\text{lèsî}\) ‘your-Sg maternal uncle’.

However, alienable pronominal possessors follow the possessed NP. In this case there is no possessor-controlled overlay on the possessum, which has its regular tones: \(\text{nér}^{r1}\text{yê}^{1}\) ‘my dog’. This construction was originally appositional: ‘dog [my critter]’.

Trisyllabic possessed nouns are illustrated in (20). The distinction between \({HL}\) and \({L}\) overlays (20b-c) is amplified by the rightward extension of the H-tone element in \({HL}\) to the medial syllable.

\[
\begin{align*}
(20)\quad & a. \quad \text{dôndîyê} & \quad \text{‘cat’} \\
& \quad \text{dôndîyê yê}^1 & \quad \text{‘my cat’} \\
& b. \quad y\tilde{a}-\eta^{\text{HL}}\text{dôndîyê} & \quad \text{‘a woman’s cat’} \\
& c. \quad \text{áx}^{r1}\text{dôndîyê}^1 & \quad \text{‘a man’s cat’}
\end{align*}
\]

A fuller set of nouns is given in (21) to show the phonological realization of the basic \({HL}\) possessed-noun overlay. (21a) shows that a monosyllabic lexically /HL/-toned noun has no
audible change when the possessed-noun \{HL\} overlay is superimposed. In (21b), the overlay is subtly audible, from unpossessed H.<HL> to possessed H.L. In (21c), the noun has unpossessed and possessed H.H.L, so as in (21a) there is no audible difference. In (21d), the tonal contrast between unpossessed and possessed forms is also audible.

(21) gloss lexical form possessed (after yà-ŋ’a woman’)

a. ‘wealth’ pi: yà-ŋ ii\[3\] pi:

b. ‘house’ rûdô yà-ŋ ii\[3\] rûdô
   ‘money’ bû:di yà-ŋ ii\[3\] bû:di

c. ‘donkey’ sûmàŋà yà-ŋ ii\[3\] sûmàŋà

d. ‘dog’ nèr’i yà-ŋ ii\[3\] nèr’i
   ‘courtyard’ dàmbi yà-ŋ ii\[3\] dàmbi
   ‘blood’ gòndûgò yà-ŋ ii\[3\] gòndûgò
   ‘mother’ dë: yà-ŋ ii\[3\] dë:
   ‘hawk’ tè-tèw yà-ŋ ii\[3\] tè-tèw

As indicated above, all of the possessed forms drop to \{L\} when the preceding possessor NP ends in an L-tone component: ɛ̀r’i\[3\] gòndûgò ‘a man’s blood’, etc.

An unpossessed noun stem drops its tones to \{L\} when followed by a modifying adjective or by a determiner (definite or demonstrative). Thus nèr’i ‘dog’ becomes L-toned in nèr’i\[3\] êsì ‘a good dog’, nèr’i\[3\] nè ‘the dog’, and nèr’i\[3\] wò-ŋ ‘this dog’. See §6.1.4, §6.3, and §6.5 below.

An unpossessed noun (or noun-adjective sequence) does not interact tonally with a following cardinal numeral or other quantifier: nèr’i kûrê ‘six dogs’, nèr’i kérêw ‘all the dogs’.

A noun that has escaped tone-dropping within the core NP or from a possessor is tone-dropped as head of a relative clause: nèr’i\[3\] i: súyą-sè\[3\] nè ‘the dog that we hit-Past’. See §14.1.2.

There are some complexities involving multi-word NPs and relative clauses with competing tonosyntactic controllers, e.g. Poss-N-Adj-Num-Det (‘these three white dogs of Seydou’s’) or N-Adj-Num-Poss-Det (‘three white dogs of yours’). How these conflicts are worked out is discussed in §6.2.

3.7.2.3 Grammatical tones for adjectives and numerals

An adjective drops its tones when followed within the core NP by another modifying adjective. Thus nèr’i\[3\] bâr’i ‘a red (= brown) dog’ has an H-toned adjective bâr’i, but it is part of the target domain of \{L\} overlay controlled by a second adjective: [nèr’i bâr’i]\[3\] êsì ‘a good red (= brown) dog’.

A modifying adjective and/or a cardinal numeral following a noun is within the domain of the \{HL\} or \{L\} possessor-controlled overlay. The possessed noun appears with \{HL\} or \{L\} depending on the final tone of the possessor NP. An adjective or numeral that follows the noun appears as \{L\}. Thus yà-ŋ ii[3]\[3\] nèr’i bâr’i ‘a woman’s red (= brown) dog’ (bâr’i ‘red’), yà-ŋ ii[3]\[3\] nèr’i kûrê ‘a woman’s six dogs’ (kûrê ‘six’), yà-ŋ ii[3]\[3\] nèr’i bâr’i kûrê ‘a woman’s
six red (= brown) dogs’. Since a possessed NP always ends in an L-tone, it follows that recursive possessives of the type [[X’s Y]’s Z] always have an {L}-toned Z, as in [yə-ŋ HL yə] l̕ ndò ‘a woman’s child’.

An adjective or cardinal numeral within an unpossessed NP functioning as head NP of a relative drops its tones. [nèr’i bâr’i] l̕ i: sùyɔ̀-sè l̕ ne ‘the red (= brown) dog that we hit-Past’ (nèr’i l̕ bâr’i ‘red dog’), [nèr’i kûrè] l̕ i: sùyɔ̀-sè l̕ ne ‘the six dogs that we hit-Past’ (nèr’i kûrè ‘six dogs’).

3.7.2.4 Grammatical tones for postnominal determiners

As mentioned in §3.7.2.2 above, determiners (definite and demonstrative) are tonosyntactic controllers, inducing tone-dropping on preceding words in unpossessed NPs. However, when a possessor is added to the mix, the tables are turned and the determiner itself is tone-dropped. This is referred to as Determiner Tone-Dropping (§6.5.4).

Consider the formulae in (22), paying attention to the HL and L superscripts indicating overlays. X is a nonpronominal NP possessor ending in an H-tone. Det is any postnominal definite or demonstrative morpheme. In (22a), the determiner controls tone-dropping on the noun. In (22d–e), the determiner loses this control, and is tone-dropped by the possessor, whether the possessor is preposed or postposed to the possessed noun. The possessed noun is tûngûrì (~ tûngûrù by assimilation) ‘stool’.

(22)

a. tûngûrù l̕ gù / ŋû
tool l̕ Det.InanSg / Dem.InanSg
‘the/that stool’

b. [nû: l̕ wô-ŋ] HL tûngûrì
[person l̕ Dem-AnSg] HL stool
‘this person’s stool’

c. tûngûrù [ú HL gɔ̂]
stool [2Sg HL Poss.InanSg]
‘your-Sg stool’

d. [nû: l̕ wô-ŋ] HL tûngûrù l̕ gù / ŋû
[person l̕ Dem-AnSg] HL stool l̕ Det.InanSg / l̕ Dem.InanSg
‘the/that stool of this person’s’

e. tûngûrù [ú HL gɔ̂]
stool [2Sg HL Poss.InanSg] l̕ Det.InanSg / l̕ Dem.InanSg
‘the/that stool of yours-Sg’

The situation is more complex than this quick summary indicates. For more examples and discussion of fine points, see §6.5.2-3 below.
3.7.3 Tonal morphophonology

3.7.3.1 Autosegmental tone association (verbs)

Verbs have either all-high /H/ or rising /LH/ lexical melody. /H/ spreads over the entire verb stem, unless overridden by a grammatical overlay. /LH/ is realized as <LH> on monosyllabic stems, as L.H. on bimoraic bisyllabics (CvCv) and on CvCCv bisyllabics, as L.H.(H...) on trisyllabic or longer stems with initial short-voweled Cv or CvC syllable, and as <LH>-H.(H...) on bisyllabic or longer stems with initial-syllable long vowel. The generalization is that the break from L to H in /LH/ is before the second vocalic mora, i.e. near the left edge.

3.7.3.2 Break point in {HL} and {LH} overlays

This section considers the tonal break point between H and L when an {HL} or {LH} overlay is applied to a stem or word. The most revealing cases are trisyllabics, e.g. CvCvCv, since these stems allow us to determine whether the break point occurs near the left edge or near the right edge. The patterns are summarized in (23); see the indicated sections for the data. Except for one stylistically marked narrative verb-stem iteration, which limits the initial H of {HL} to one syllable, all overlaid {HL} and {LH} overlays have break points after the second syllable in trisyllabic stems. In other words, the location of tone break is defined with respect to the right, not left, edge.

(23) {HL} overlay tonal break point

<table>
<thead>
<tr>
<th>grammatical context</th>
<th>CvCvCv tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. {HL} overlay</td>
<td></td>
</tr>
<tr>
<td>break point up to 2 syllables from left</td>
<td></td>
</tr>
<tr>
<td>possessed noun after H-final possessor</td>
<td>[C̃CvC̃v][C̃v]</td>
</tr>
<tr>
<td>possessive-type (nh ̃h) compound (§5.1.4)</td>
<td>[C̃vC̃v][C̃v]</td>
</tr>
<tr>
<td>bahuvrihi (n̄̂n̄̂) compounds (§5.2.1)</td>
<td>[C̃vC̃v][C̃v]</td>
</tr>
<tr>
<td>imperative of (H)-toned stems (§10.6.1.1)</td>
<td>[C̃vC̃v][C̃v]</td>
</tr>
<tr>
<td>break point one syllable from left</td>
<td></td>
</tr>
<tr>
<td>first of 2+ iterated verb stems (§11.6.1)</td>
<td>[C̃v][C̃vC̃v]</td>
</tr>
<tr>
<td>b. {LH} overlay</td>
<td>[CvC̃v][Cv]</td>
</tr>
<tr>
<td>break point up to 2 syllables from left</td>
<td></td>
</tr>
<tr>
<td>agentive (x ō-Ppl) compounds (§5.1.5)</td>
<td>[CvC̃v][Cv]</td>
</tr>
</tbody>
</table>

When the relevant stem has only one or two syllables, the break point is positioned in such a way that the final tone element is not obliterated. For the narrative verb-stem iterations, this is an issue only for monosyllabic verbs, which have an <HL> tone on the first iteration, e.g. C̃v::C̃v::.

For the {HL} patterns that have trisyllabic H.H.L realizations, we again get <HL> tone on monosyllabics: C̃v:, C̃vC. Bisyllabics with heavy first syllable and monomoraic final syllable, i.e. C̃v:Cv, C̃vCCv, and C̃v:C̃v:Cv, position the tone break at the internal syllabic boundary (C̃v:C̃v, etc.). Bisyllabics with final bimoraic syllable, e.g. C̃vCvC, C̃vCv::,
\(CvCCvC\), have the tone break inside the second syllable (\(CvCvC\), etc.). Light bisyllabics with two monomoraic syllables, i.e. \(CvC\) and \(nCv\) (with syllabic nasal), are usually pronounced (prepausally) with the H-tone spilling into the second syllable, but not obliterating the terminal L-tone, resulting in a final \(<HL>\) tone: \(CvC\), \(nCv\). However, if such a light bisyllabic is a compound initial, or is followed by a modifying adjective, it is normally heard as \(CvCv\), \(nCy\).

For the \{LH\} overlay (deverbal agentives), monosyllabics have rising tone (\(Cy\)), and all bisyllabics have the break at the internal syllable boundary (\(CvC\)). Since the inputs here are verb stems, they are either \(Cv\): monosyllabics, or longer stems ending in a short \(Cv\) syllable, so they do not present the same full range of stem shapes as do nouns.

There are few non-verb stems that have four or more syllables and that are not treated phonologically as compounds. However, there are a few, and they too show the tone break near the right edge: \(\text{yà-ŋ} \text{bhísiyèmi} \) ‘a woman’s acacia’ (< \text{bhísiyèmi} ), see §6.2.1.1. Because derivational suffixes can be stacked up in verbs, it is easier to find quadrisyllabic and even longer verbs, and their imperative stems show the same right-edge tone break: \(\text{éwré-ndiyè-mò} \) ‘make (it) small(er)’.

Examples showing the primary tone-break patterns are in (24). \{HL\} is illustrated with bahuvrihis. The \{LH\} examples are agentives. The second stem in each compound is the relevant one.

\[(24)\]
\[
\begin{align*}
\text{a. monosyllabic} \\
\{HL\} & \quad \text{kú:-wóy} \quad \text{‘two-headed’} \quad (\text{wóy ‘two’}) \\
\{LH\} & \quad \text{tõndi-té}: \quad \text{‘basket-weaver’}
\end{align*}
\]

\[
\begin{align*}
\text{b. bisyllabic} \\
\{HL\} & \quad \text{kú:-dùgì} \quad \text{‘big-headed’} \quad (\text{dùgì ‘big’}) \\
& \quad \text{ná:-nìmì} \quad \text{‘five-armed’} \quad (\text{nìmì ‘five’}) \\
& \quad \text{sègè-mé:njè} \quad \text{‘thin-skeletoned’} \quad (\text{mè:njè ‘thin’}) \\
\{LH\} & \quad \text{námà-tùrì} \quad \text{‘meat-seller, butcher’}
\end{align*}
\]

\[
\begin{align*}
\text{c. trisyllabic} \\
\{HL\} & \quad \text{kú:-pùrúgi} \quad \text{‘with an off-white head’} \quad (\text{pùrúgi ‘off-white’}) \\
\{LH\} & \quad \text{bidígà-bidígì} \quad \text{‘magician’}
\end{align*}
\]

3.7.3.3 Tone-Polarization (decimal numerals)

\(\text{pèrù} \) ‘ten’ forms compounds with following single-digit numerals to produce ‘20’, ‘30’, ‘99’ (§4.7.1.3). The ‘ten’ word appears segmentally in these compounds as \(\text{peri-} \) (‘20’, before a \(y\)), \(\text{per-} \) (‘60’ through ‘90’, before velar or coronal \(k\ s \ t\)), and \(\text{pe-} \) (‘30’ through ‘50’, before coronal \(n\ t\)). There is a close, but not perfect, inverse correlation of the final tone of ‘ten’ with the initial tone of the following numeral. The correlation is seen in \(\text{peri-yé} \) ‘20’ (cf. \(\text{wóy ‘2’}\)), \(\text{pèr-tàndì: ‘30, pèn-nìsì} ‘40’, \(\text{pèn-nìmì} ‘50’, \text{pèr-kùrè ‘60, pèr-sùyé ‘70}, and
3.7.3.4 Atonal-Morpheme Tone-Spreading

Atonal morphemes (suffixes, clitics, particles, postpositions) acquire their surface tone by spreading from the final tone of the morpheme on the left. The morphemes in question are mostly monosyllabic, but *yána* ‘also, too’ is bisyllabic, and both of its syllables get their tones by spreading from the left. I distinguish spreading into atonal morphemes from the word-level tone overlays controlled by a word or phrase to the left. However, in Nanga the distinction is less sharp than in other Dogon languages, since possessor-controlled overlays (the only case of left-to-right control) are affected by the final tone of the possessor.

Atonal suffixes in verbal morphology are 1Sg *-y*, 2Sg *-w*, and some allomorphs of the 3Pl suffix. (3Sg suffix is zero, and 1Pl and 2Pl suffixes have their own unusual pitch contour.)

For nouns and pronouns, accusative suffix (or enclitic) *-ŋ* is atonal and therefore gets its tone by spreading.

Atonal enclitics are nonsyllabic forms of the ‘it is’ enclitic (*= m*, *= w*, etc.). For example, with *ná*: ‘hand’ we get *ná:* = *w* ‘it is a hand’, and with *námá*: ‘meat’ we get *námá* = *w*‘it is meat’ (§11.2.1.1).

Particles that get their tones by spreading include interrogative *ma*, quotative *wa*, same-subject subordinator *ŋ*, and *nde*: ‘if’). Interrogative *ma* in particular is highly subject to intonational modification, so (phonological) tone-spreading is not always clearly discernible on this morpheme.

When tones spread from a stem or word that ends in a vowel with a contour tone, and when the targeted suffix or clitic consists of just a consonant, the resulting *CvC* or *Cv:C* syllable may require a phonetic adjustment regarding the location of the tone break; see Contour-Tone Stretching (§3.7.4.2, below).

Certain H-toned morphemes systematically fail to spread their tone. Perfective-2 *-só*- (including conjugated forms like 1Sg *-só-y*) is followed by L-toned particles *má* (interrogative), *wá* (quotative), and *ndé*: ‘if’) (§10.2.1.3).

In other cases, failure of tone-spreading occurs in specific combinations only, and is not systematic. Pronouns, determiners, and WH-interrogatives ending in H-tone are followed by L-toned ‘it is’ clitic *= ŋ~ = ŋ*, which is elsewhere atonal (§11.2.1.1).

To a limited extent, the process is recursive insofar as an atonal suffix that gets H-tone by spreading can pass this tone to a particle. The only examples known to me involve a nonsyllabic suffix and a following particle. In *yè:-rú-w* ‘you-Sg did not come’, 2Sg *-w* gets its H-tone from the perfective negative suffix *-rú/-*, and this tone spreads to a following particle: *yè:-rú-w* *má* ‘did you-Sg not come?’, *yè:-rú-w* *wá* ‘it is said that you-Sg did not come’, *yè:-rú-w* *ndé* ‘if you did not come’.

In other cases, potential recursion fails. When accusative *-ŋ* becomes H-toned *-ŋ* by spreading, it does not pass the H-tone on to *yána* ‘also’, so we get e.g. *ńjí-ŋ* *yàngá* ‘me too’ (§19.1.3).

One way to model the tonal behavior of perfective-2 *-só*- and accusative *-ŋ* would be to attribute to them an underlying L-tone (perhaps a following floating L) which is realized (if at all) on a following morpheme. However, a purely phonological solution like this is ad hoc and (to me) unconvincing.

*pér-gá:ré* ‘80’, but the final decimal numeral in the series is an exception: *pér-tè:šè* ‘90’. Because numeral sequences like this are often recited in an incantational fashion, adjacent numerals often share phonological properties, and ‘90’ may simply be following the shape *pér-* of the three preceding members of the series.
Although interrogative ma and quotative wa individually acquire their tones by spreading when clause-final (prepausal), when they co-occur they appear with H-tones as má→ wá or less often mā→ wà, disregarding the tone of the preceding word (§13.2.1). In effect, when ma is not clause-final, a latent lexical H- or HL-tone appears, and it then spreads to the quotative morpheme.

Indeed, I know of no case where two separate syllabic atonal morphemes both acquire an H- or L-tone by spreading from the left. However, the significance of this is unclear since, except for interrogative-quotative, it is difficult to construct a context where two syllabic atonal morphemes are juxtaposed.

3.7.4 Low-level tone rules

3.7.4.1 Rising-Tone Mora-Addition

A final <HL> tone may occur on a short Cv syllable; there is no lengthening (mora-addition) of this vowel. In addition to ČVČV̂ and ČV̄:ČV̂ stems (lexical nouns, some imperative verb forms), where the final <HL> tone represents the spread of the preceding H-tone into the onset of the final syllable, there are nouns like ěsùrì ‘broom’ that clearly have an <HL> tone expressed entirely on the final short vowel.

However, a rising tone cannot be expressed on a single mora, i.e. in a Cv syllable with short vowel. A few nouns, notably nú: ‘person’ and yá: ‘woman’ (Sg yá-ŋ) are always pronounced with a long vowel in their bare form with <HL> tone, but shorten to Cv in some other contexts. nú: idiosyncratically becomes nú before numerals, as in nú tà:ndì: ‘three people’, and with tone-dropping as nú in nú-buy òmá ‘one person’ (‘one’ is treated as a modifying adjective) and in nú-buy kámá ‘everybody’. In other combinations it retains its vowel length, even when tone-dropped, as before adjectives (nú:-l mòsi ‘a nasty person’). So it is not quite correct that vowel length correlates with tone for this noun. yá: ‘woman’ is likewise always long-voweled when unsuffixed and <HL>-toned, for example before a numeral, but when tone-dropped it appears variously as yá:-l and yá- (the latter probably archaic, as in yá-gùnrè ‘young woman’).

So ‘person’ and ‘woman’ do not convincingly point to underlying /ČV̂/ that lengthens to ČV̄: when unsuffixed and when the tones are not altered. However, there are some nonmonosyllabic numerals ending in <HL>-toned long vowels that do seem to systematically shorten when the final tones shift, as in finals of bahuvrihi compounds with {HL} overlay (25), and as relative-clause heads (26).

(25) stem gloss with {HL}-overlay

númì: ‘five’ nù-únmì ‘five-armed’ (bahuvrihi)
tà:ndì: ‘three’ kù-tà:ndì ‘three-headed’ (bahuvrihi)

(26) [nàŋa]-L tà:ndì-L ù ẹwè-sè-L bá:-L
àrãňà  b-è
where? be-3PISbj
‘Where are the three cows that you-Sg bought?’
One could therefore argue for underlying /nimí/ ‘5’ and /tìndì/ ‘3’, leave the final vowels short when they surface with any tone other than <LH>, and lengthen them when <LH>-toned, by rule (27).

(27) Rising-Tone Mora Addition

In a final monomoraic Cv syllable, a rising tone forces addition of one mora (i.e. the vowel is lengthened).

Verb stems never meet the phonological conditions for the shortening.

There are no parallel cases of length alternations involving <HL> tone, so (27) is specifically formulated for rising tone.

3.7.4.2 Contour-Tone Stretching

The final syllable of a word may contain a Cv or CvC with a contour tone plus a suffixal or clitic sonorant consonant (atonal or tonal). A contour <HL> or <LH> tone in such a syllable is pronounced with the tone break near the end of the syllable.

For example, in combinations with the ‘it is’ clitic, the final semivowel bears the second tone component in combinations like nà:=wⁿ ‘it is a hand’ and nàmá= wⁿ ‘it is meat’. I transcribe the noun stem in such cases with its regular (word-final) tones, but the actual pronunciations are closer to [nà:wⁿ] and [nàmá:wⁿ]. So a minor rule stretching the tone break to just before the final mora is needed, strictly speaking.

3.7.4.3 Final-Tone Resyllabification

There are no combinations of a CvC or CvC stem with a vowel-initial clitic or suffix that would trigger a resyllabification and consequent tonal jump.

3.7.4.4 Rightward H-Spreading

Whether special tone-spreading rules are needed for Nanga depends on a number of analytical decisions. If we take lexical melodies to be ontologically separate from syllables and segments, we will need some rules or constraints to account for the surface tones. If the tones are already associated with segments or syllables in the lexicon, those rules are not needed. Similarly, how we analyse the imposition of possessed-noun tone overlays, and of tone-dropping and other tonosyntactic processes, determines the need for spreading rules and their precise formulation.

Here I will merely comment on one relatively tangible matter. Historically, *CvCv stems have shifted in Nanga to CvCv, and *Cv:Cv to Cv:Cv, as the H-tone spills over partially from the final (or sole) mora of the first syllable into the onset of the second, resulting in a short <HL>-toned short vowel that is a distinctive characteristic of Nanga. We also get CvCv when a CvCv stem has an [HL] overlay controlled by a preceding possessor. However, in this case, the output is CvCv when the stem is a compound initial or when it is modified by a following adjective (in either case, the following stem is tone-dropped). The alternation between CvCv and CvCv, and the absence of a lexical contrast between the two, raises the possibility that
CV.CV is derived by a synchronic phonological rule from /CVCV/, and (by extension) that CV.CV is derived from /CV.CV/, by a very limited Rightward H-Spreading process.

When atonal quotative wa follows a CV syllable, the result is CV wà, perhaps via /CV wà/. Here too the H-tone pushes an L-tone rightward, though only up to the word boundary.

3.7.4.5 Floating-Tone Linking

There are no systematic vowel-deletion rules (syncope, apocope), so there are no contexts where a tone stranded (de-linked) by such a deletion must relink to the left or right.

However, the 1Sg possessor morpheme is a floating L-tone preceding the possessive classifiers HL.gɔ̂ ~ HL.kɔ̂ (inanimate) and HL.yɛ̀ (animate). The resulting forms are kɔ̂ and yɛ̀, respectively, i.e. with <LHL> tones (§6.2.1.3, §6.2.2.1). They can be represented with superscripts as ^L+HL.gɔ̂, etc., where the + sign indicates that the peripheral tone element is confined to the edge.

3.7.4.6 Final-CV <LH>-to-H Reduction

I know of no clear cases where a final rising tone is reduced (e.g. in a monomoraic syllable) to an H-tone. This occurs in some other Dogon languages in nominal morphology, where a noun stem (arguably /CVCV/ lexically) is realized as CV.CV- without suffix and as CV.CV-x with a suffix consisting of a (nasal) consonant x. The only noun in Nanga that has such a suffix is yǎ ‘woman’, with its archaic singular yǎ-ŋ and its unsuffixed plural yǎ; but here (perhaps since the stem is monosyllabic) the unsuffixed form is lengthened, allowing full expression of the rising tone. See Rising-Tone Mora-Addition (§3.7.4.1, above).

3.8 Intonation contours

3.8.1 Phrase and clause-final nonterminal contours (’, →, →’, →+)

In texts, and to a lesser extent in elicited sentential examples, arrows can be used to indicate intonationally significant high (’) or low (’) terminal pitch, prolongation of the final syllable (→), or the combination of prolongation with either high (→’) or low (→+) terminal pitch. Prolongation and/or high terminal pitch are typical of nonfinal phrases or clauses in parallel with a final phrase or clause, which may have ordinary phrasal intonation or may have unusually low pitch. Intonational prolongation is also common with interrogative particle ma and ‘or’ disjunctive particle ma, which are not clearly separable.

3.8.2 Adverbials and particles with lexically specified prolongation (→)

Prolongation of the coda of the final syllable is also lexically baked into certain expressive adverbials (EAs). Examples of monosyllabic sonorant-final EAs are dém→ ‘straight (direction)’ and déyⁿ→ ‘apart, separate’, where the sonorant itself undergoes prolongation: [dêmmm], etc.
Prolongation occurs in numerous nonmonosyllabic expressive adverbials and adjectival intensifiers, e.g. *ké sé ké ré y* ‘very dry (intensifier)’, *pá t̖* ‘flat and small’, and *bêndé-bêndé* ‘brick-shaped’. See §8.4.7.1-5 for more examples.

3.8.3 Dying-quail intonational effect : (1Pl, 2Pl)

A dying-quail intonational effect, by which the final syllable of a word is prolonged and undergoes a slow pitch decline, has been found in Jamsay (most systematically at the end of each coordinand in a pronominal or NP conjunction). A variation on this occurs in Ben Tey, where it converts singular to plural pronominal categories for first, second, and 3Logophoric persons. The symbol for this is : , placed at the end of the word.

In Jamsay, only the coda of the final syllable of the word is affected, so if the word ends in a CvC syllable with final sonorant, as in *pê-m* ‘women’ as a coordinand, the prolongation and final pitch decline in the conjoined form *pê-m:* are realized on the *m*, not on the syllabic nucleus *e*. In Jamsay, the initial pitch of the relevant syllable respects the phonological tone, which may be H or L. If H, the pitch decline is conspicuous; if L, the main audible effect is prolongation.

In Nanga, I have occasionally observed a clause-final dying-quail effect in ‘whether’ clauses, as in (641) and (660e). However, the most systematic dying-quail pattern is in 1Pl and 2Pl subject forms of verbs and other predicates. Ben Tey has a similar 1Pl/2Pl pattern, but Nanga and Ben Tey differ in phonetic details.

Nanga independent pronouns, 1Pl *ê*: (cf. 1Sg *ê*), 2Pl *â*: (cf. 2Sg *â*), and 3Logophoric plural *â*: (cf. singular *â*) are (in part) tonal modifications of the singulars. However, in Nanga I did not observe exaggerated prolongation and corresponding slow pitch decline in these independent pronouns, as in the cases I consider to have the dying-quail feature.

In verbal inflections, by contrast, we do get terminal pitch patterns close to the dying-quail examples in the other languages. Consider the data in (28), where the transcriptions in square brackets simulate the phonetic pitch effects, and : in the phonological transcription indexes dying-quail intonation.

(28)  
1Sg        1Pl
2Sg        2Pl
a.  *sùyê*- ‘hit’ (simple perfective)  
   *sùyê-ê*  
   *sùyê-ê* : [sùjɔ́ɔ́]
   *sùyê-ê*  : [sùjɔ́]

b.  *sùyê-jê*- ‘have already hit’  
   *sùyê-jê-ê*  
   *sùyê-jê-ê* : [sújɔ́dʒɛ́ɛ́ɛ́]
   *sùyê-jê-ê*  : [sújɔ́dʒɛ́ɛ́ɛ́]

c.  *sùyê-só*- ‘hit’ (perfective-2)  
   *sùyê-só-ê*  
   *sùyê-só-ê* : [sújɔ́sɔ́ɔ́]
   *sùyê-só-ê*  : [sújɔ́sɔ́ɔ́]

In these transcriptions, : overrides the tone patterns shown in the final syllable (and earlier syllables under some conditions). Therefore we get phonetic LHL pitch not only in (28a-b),
where the singulars show L-toned final syllable, but also in (28c), where the singulars have H-toned final syllable.

Consider now (29). In these paradigms, observe in particular that the 1Pl and 2Pl forms show an H-tone on the penultimate syllable, including the nasal onset in (29a), in contrast to an L-tone in the 1Sg and 2Sg (and the third person forms, not shown). In addition, the stem-final vowel is lengthened in the perfective negative. The final syllable is realized with LHL or L pitch. I hear LHL in the final syllable of 1Pl and 2Pl ‘not be’ (29a) in careful pronunciation, but I have also heard L. I hear L in the final syllable of 1Pl and 2Pl ‘dislike’ and the perfective negative (29b-c).

(29) form 1Sg 2Sg 1Pl 2Pl

a. ŋ̀gó- ‘not be (somewhere)’
   ŋ̀gó-ý [ŋgóːd] ŋ̀gó-ý [ŋgóːd]  ŋ̀gó-w [ŋgóːw]

b. ŋ̀bùrà- ‘dislike’ (§11.2.6.3)
   ŋ̀bùrà-ý [ŋbúrāːj] ŋ̀bùrà-ý [ŋbúrāːj]
   ŋ̀bùrà-w [ŋbúrāːw]

c. sùyɔ-rí- ‘did not hit’
   sùyɔ-rí-ý [sùjɔːːːf] sùyɔ-rí-ý [sùjɔːːːf]

These forms create a transcriptional conundrum. One choice is to transcribe more or less phonetically, e.g. 1Pl sùyɔ-rí-ý for ‘we did not hit’. The other is to transcribe the 1Pl and 2Pl forms as intonational modifications of the corresponding singulars, e.g. 1Pl sùyɔ-rí-ý, bringing out the morpho-phonological structure but disguising the phonetics. I choose the latter course.

In (29a), the dying-quail intonation actually is quadripartite [H-LHL], with the initial high pitch realized on the penultimate syllable. In (29b-c), dying quail is [H-L] if analysed as being realized on the final two syllables, or [L-H-L] if analysed as being realized on the last three syllables.

In (29c), I can hear no lengthening of 1Pl -rì-ý [rìː] vis-à-vis 1Sg -rì-ý [rìː], the latter already being pronounced like a long vowel (as the /iy/ sequence monophthongizes). Likewise for 2Pl versus 2Sg.

The various realizations of dying-quail intonation are summarized in (30). The 2Pl forms, not shown, are parallel prosodically to the 1Pl forms shown. Verb stems used to illustrate the regular inflectional suffixes are sùyɔ- ‘hit’, supplemented by tůvé- ‘die’ (perfective-1a), nûy a ‘hear’ as an irregular imperfective negative, and a stative form of bâmbí-yf ‘carry on back’. The 1Pl (and 2Pl) imperfective positive do not have the usual bell-shaped tone on the final syllable, but the final vowel is effectively lengthened vis-à-vis the singulars.
Nanga dying-quail intonation with 1Pl -y:

a. [LHL] pitch, erasing input tone, on final syllable only

on otherwise L-toned final syllable

- perfective
  - simple  sùyò- y- : [sùjò̀òjı]
  - 1a tùwè- èrè- y- : [tùwèèréèèjı]
  - 1b sùyò- ti- y- : [sùjòótìì]
- stative
  - sùyò- jè- y- : [sùjòôjèèjı]
- progressive
  - (sù-)sùyò- -sò- y- : [(sù)sùjòòjìjì]
  - static bàbàmàbà- y- : [bàbàmàbààìì]
- imperfective negative
  - sùyò- ñjò- y- : [sùjòñjòììjı]
  - past
    - = bè- y- : [bèèèjı]
  - ‘have’
    - yá sò- y- : [sòòòjı]
  - ‘be present’
    - yá bi- y- : [yábiìì]
  - ‘we are Fulbe’
    - pirà = mi- y- n- : [miìì]
    - [cf. pirà = m-ì ‘I am a Fulbe’]

on otherwise H-toned final syllable

- perfective-2 -sò- sùyò- sò- y- : [sùjìsòòò̀jı]
  - ‘we are women’
    - yà: = mi- y- n- : [miìì]
    - [cf. yà-ì = m-ì ‘I am a woman’]

on otherwise <LH>-toned final syllable

- ‘it is not’
  - = ndò- y- : [ndòòòì]

b. […H-L] with [H] realized on the penult, both vowels lengthened

on otherwise L-toned penult and final

- progressive negative
  - sùyò- sò = ndò- y- : [sùyò: ñjòòòòjìjì]
  - on otherwise L-toned penult and H-toned final
  - static negative
    - bàmàbà = ndò- y- : [bàmàbààòòjìjì]
    - ‘not have’
      - sò = ndò- y- : [sòòòòjìjì]

[c. [H-L] with [H] realized on the penult, only the final lengthened

on otherwise L-toned penult and L-toned final

- imperfective
  - (sù-)sùyò- -mì- y- : [(sù)sùjòòmììjì]
  - on otherwise L-toned penult and H-toned final
    - irregular imperfective negative
      - ‘hear’
       - nù- ñjò- y- n- : [nùòòòòjìjì]

  - on otherwise H-toned penult and final
    - ‘love’
      - mbà = m- ìy- : [mbàmììjì]
    - ‘be small’
      - èwrè = m- ìy- : [èwrèmììjì]

d. [H-L] with H on penult (for monosyllables only at the end of the syllable), penult and (perhaps) ultimate lengthened

on otherwise H-toned final following {L}-toned stem

- perfective negative
  - sùyò- rì- y- : [sùjòòrììjì]
  - ‘tà- rì- y- : [tàòòrììjì]
e. [H-L] with H through onset of ultimate, ultimate lengthened
   on otherwise L-toned then <LH>-toned final
   ‘dislike’ (irregular)  ṭībùrá-yː  [ţībūráj]

f. [HLHL] pitch, with H on initial and LHL on ultimate
   ‘not be’  ŋō-ː  [ŋōːj]
4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

4.1.1 Simple nouns

With the exception of ‘woman’, discussed below (§4.1.2), nouns in Nanga have a single form that is used with both singular and plural reference. Number is therefore expressed not in the noun (or adjective), but in postnominal determiners (definite or demonstrative), which distinguish animate singular, animate plural, inanimate singular, and inanimate plural. ‘Dog’ and ‘tree’ illustrate animate and inanimate nouns, with and without definite determiners (31). As usual, superscripted $^L$ at the right edge of a word (or of a bracketed word string) indicates that tone-dropping has occurred, controlled by a word to the right.

(31) 
a. nɛ̀ rⁿ î 'dog; dogs'
nɛ̀ rⁿ î $^L$ né 'the dog' (singular)
nɛ̀ rⁿ î $^L$ bû: 'the dogs'
b. tûmá 'tree; trees'
tûmà $^L$ gú 'the tree'
tûmà $^L$ ý 'the trees'

In absolute form (free of modifiers), Cv: is an allowable nominal stem shape (32a). Short-voweled Cv is found as a free form only in the variant kɔ́ 'thing' and its suppletive plural yë (32b). The singular is more often kɔ́ŋ, or an expanded form kɔ́ $^L$ kámâ 'thing, anything’. A handful of nouns have Cv form certain combinations, likely archaic. nù: ‘person’ reduces to a short-voweled form nû before a quantifier, but does have a long vowel before a determiner (32c). Kin terms bâ: ‘father’ and dê: ‘mother’ have short forms in uncle/aunt terms with following ‘big’ or ‘small’, as in bâ $^L$ dîyâ ‘big father’, i.e. ‘father’s elder brother’ (§6.2.2). yâ: ‘woman’ has archaic singular variant yâ-$ŋ$ (32d), and reduces to yà- in two compounds (§5.1.7). ná ‘time(s)’ occurs only before a numeral or other quantifier (32e).

(32) 

<table>
<thead>
<tr>
<th>free</th>
<th>definite</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. kû:</td>
<td>kû:$^L$ gû</td>
<td>‘head’</td>
</tr>
<tr>
<td>jâ:</td>
<td>jâ:$^L$ gû</td>
<td>‘fence’</td>
</tr>
<tr>
<td>nɔ́:</td>
<td>nɔ́:$^L$ gû</td>
<td>‘mouth’</td>
</tr>
<tr>
<td>dɔ́:</td>
<td>dɔ́:$^L$ gû</td>
<td>‘rag cushion’</td>
</tr>
<tr>
<td>nâ:</td>
<td>nâ:$^L$ gû</td>
<td>‘hand’</td>
</tr>
<tr>
<td>pâ:</td>
<td>pâ:$^L$ gû</td>
<td>‘meal’</td>
</tr>
<tr>
<td>tâ:$^L$</td>
<td>tâ:$^L$ gû</td>
<td>‘taboo’</td>
</tr>
<tr>
<td>dû:</td>
<td>dû:$^L$ gû</td>
<td>‘load’</td>
</tr>
<tr>
<td>ɔ́:</td>
<td>ɔ́:$^L$ gû</td>
<td>‘medication’</td>
</tr>
<tr>
<td>ɔ̄:</td>
<td>ɔ̄:$^L$ gû</td>
<td>‘place’</td>
</tr>
<tr>
<td>ɛ́:</td>
<td>ɛ́:$^L$ gû</td>
<td>‘well’</td>
</tr>
</tbody>
</table>
Some nouns have Cv: free forms but appear in at least some compounds as Cv-. For short-vowelled yà- ‘woman’ in certain compounds, see §5.1.7. bà: ‘father’ and dè: ‘mother’ occur with short vowels in parallel uncle/aunt terms (the finals are the adjectives ‘big’ and ‘small’): bà: dyà ‘father’s elder brother’, bà: têgê ‘father’s younger brother’, dè: dyà ‘mother’s elder sister’, dè: têgê ‘mother’s younger sister’. The terms for two types of hide shoulderbag, nà-pë:ré (variant nà-pëgiré) and nà-kàmbô are suggestive of a similar relationship to nà: ‘hand’, but both are etymologically obscure and the connection with ‘hand’ is doubtful.

4.1.2 Animate singular -ŋ (yà-ŋ ‘woman’), animate plural -yè

For ‘woman’ (and ‘wife’ when possessed), the basic form is yà:, which by itself functions as the plural ‘women’. yà: is also the basis for combinations (even with singular reference) with a following word or particle within the NP or with a preceding or following possessor: yà: tûmä ‘one woman’, yà: kâmä ‘each woman’, yà: ësi ‘(a) good woman’, yà: né ‘the woman’, yà: wô-ŋ ‘this woman’, yà: nô ‘his wife’, yà: [ú] yè ‘your-Sg wife’. See also the compounds in §5.1.7, below. However, as an unmodified simple noun (e.g. indefinite), the singular is yà-ŋ, as in yà-ŋ gô-érer-ê ‘a woman went out’. This is the only regular noun stem that preserves animate singular -ŋ.

The suffix also occurs in the demonstrative-like wà-ŋ ‘the counterparty’ versus plural wä: or wà:-yè (§4.1.4.5), in ë-ŋ ‘who?’ versus plural ë:-yè (§13.2.2), and in somewhat frozen form in demonstrative wô-ŋ ‘this, that (animate)’ versus plural wë: or wô:-yè (§4.4.1.2). In these cases, except ‘woman’, animate singular -ŋ is paired with plural (usually but not always animate) suffix -yè. This plural suffix also appears in gâmbi-yè ‘some (ones), certain ones’ (§6.3.2) and in ëgû-yè ‘these/those (inanimate)’.

Nanga -ŋ and Ben Tey/Bankan Tey -m likely reflect *-n (from earlier *-nu), related to an old Dogon word for ‘person’, cf. e.g. Jamsay -n, Toro Tegu -rû.

The shift of animate singular *-n to *-m had already taken place in the proto-language for Nanga, Ben Tey, and Bankan Tey. The further lenition of *-m to -ŋ in Nanga (often weakening further to vocalic nasalization, or disappearing entirely) has parallels in verbal morphology. Imperfective *-m- appears in Nanga as -m- before vocalic suffixes (e.g. 3Pl -m-è) but as -ñ in the otherwise unsuffixed 3Sg form. Hortatives -má or -mày in main clauses correspond to shortened -ñ (presumably from *-m) in quoted hortatives. In the case of nouns and demonstratives, a further catalyst may have been cluster assimilation followed by morphemic resegmentation in combinations including the ‘it is’ clitic, which in Nanga has primary allomorphs =m- and =ñ- (§11.2.1.1).
Curiously, while -ŋ occurs chiefly in animate singular forms, it seems to be optionally present in k3-ŋ ~ k3 ‘thing’, see §4.1.3 just below. It is possible that in this case -ŋ was added to a subminimal Cv noun stem to make it prosodically more respectable.

4.1.3 Other basic nouns (‘child’, ‘person’, ‘thing’)

‘Child’ is yi: (for its compounds, see §5.1.6). Examples with following elements include yi: l ēsì ‘(a) good child’, yi: l ně ‘the child’, and yi: l tūmā ‘one child’. The plural ‘children’ is yi-tègè, a somewhat frozen and semantically specialized combination with tègè ‘small’ (whose more common synonym is èwré), cf. also noun tègè ‘childhood’.

nà: ‘person’ may have singular or plural reference. It shortens to nù or ná in combinations involving quantifiers internal to the N-Num sequence (this does not include ‘all’). I hear tone-dropped nùL in nùL kámà ‘everyone’, and H-toned nú before nonsingular cardinal numerals, as in nú tàːndi: ‘three people’. Elsewhere the vowel is long, as in nù: kéréw ‘all the people’, and even when tone-dropped as in nùL wóŋ ‘this person’, nùL ně ‘the person’, and nùL mòsì ‘nasty person’.

For ‘thing’, the singular form without a modifier is k3-ŋ or variant k3, with optional plural yé. The singular is k3 (or tone-dropped k3L) before a modifier: k3L gú ‘the thing’, k3L ēsì ‘a good thing’, and k3 tàːndi: ‘three things’. The combination k3L tūmà ‘one thing’ can mean ‘anything, each thing’ and, under negation, ‘(not) anything’. The suppletive plural yé ‘things’ optionally replaces k3 before nonsingular quantifiers, i.e. as an inanimate classifier: yé tàːndi: ‘three (things)’. The combination yéL kámà ‘any things’ is also possible.

k3-ŋ ~ k3 ‘thing’ is undoubtedly related historically to the inanimate singular pronoun kú, and to inanimate singular definite marker gú ~ kú ~ wí. Its plural yé is similarly related to inanimate plural definite y. k5-ŋ ~ k5 and plural yé are also the sources of possessive classifiers used with postposed pronominal possessors (§6.2.1.3).

4.1.4 ‘So-and-so’ (à-máːni and variants)

The ‘So-and-so’ word, used in generic contexts as a variable representing any personal name, is à-máːni ~ à-máːn ~ or máːni ~ máːn. For à see §4.1.7.

4.1.5 Initial Cv- and CvC- reduplications in nouns

Corresponding to Ci- reduplications in Jamsay and Ben Tey, Nanga (like some other languages of the zone) has Cv- with a copy of both the source consonant and vowel.

In (33), we see the different tonal patterns for a basic type with Cv: or CvC base and an initial Cv- reduplicant. All known examples are given. The reduplicant is L-toned except in the flagrantly onomatopoeic ‘crow’ (33b). The base is <HL> or <LHL>. In (33c), the ethnic term Bobo is perhaps an accidental member of this reduplicated class. (The so-called “Bobo” of Mali speak Bwamu, Gur language family, rather than one of the Bobo languages, Mande family, of Burkina Faso.) ‘Agama lizard’ seems to have mutated to fit the pattern of the other fauna terms. Its cognates are unreduplicated bisyllabics pointing to *kèngù or the like.
Cv-reduplications

<table>
<thead>
<tr>
<th>form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $C_1 \tilde{v}_1C_1 \tilde{v}_1$</td>
<td>body parts</td>
</tr>
<tr>
<td>$bè$-$bè$:</td>
<td>‘beard’</td>
</tr>
<tr>
<td>$kò$-$kô$:</td>
<td>‘back of skull above nape’</td>
</tr>
<tr>
<td>fauna</td>
<td></td>
</tr>
<tr>
<td>$kâ$-$kâ$:</td>
<td>‘grasshopper’ (all species)</td>
</tr>
<tr>
<td>$kè$-$kè$:</td>
<td>‘beetle, bug’ (all species)</td>
</tr>
<tr>
<td>$kè$-$kâ$:</td>
<td>‘agama lizard’ (multiple species)</td>
</tr>
<tr>
<td>$tâ$-$tâ$:</td>
<td>‘hyena’ (extends to leopard)</td>
</tr>
<tr>
<td>b. $C_1 \tilde{v}_1C_1 \tilde{v}_1$</td>
<td>fauna</td>
</tr>
<tr>
<td>$gá$-$gâ$:</td>
<td>‘crow’</td>
</tr>
<tr>
<td>c. $C_1 \tilde{v}_1C_1 \tilde{v}_1$</td>
<td>humans</td>
</tr>
<tr>
<td>$bɔ$-$bɔ$:</td>
<td>‘Bobo’ (ethnicity, Bwamu-speaking)</td>
</tr>
<tr>
<td>$gɔ$-$gɔ$:</td>
<td>‘griot (with war tomtoms)’</td>
</tr>
<tr>
<td>d. $C_1 \tilde{v}_1C_1 \tilde{v}_1$</td>
<td>fauna</td>
</tr>
<tr>
<td>$tè$-$tê$:</td>
<td>‘large raptor’ (multiple species)</td>
</tr>
<tr>
<td>e. $C_1 \tilde{v}_1C_1 \tilde{v}_1$</td>
<td>topography</td>
</tr>
<tr>
<td>$jà$-$jâ$:</td>
<td>‘slope’</td>
</tr>
</tbody>
</table>


H-toned reduplicants occur in $tû$-$tûgûrõ$ ‘bush sp. (Tephrosia mossiensis; cf. verb tûgûrõ ‘retract a curse’), $gõ$-$gõmĩ$ ‘cliff’, $sã$-$sãnãrã$ ‘tall herb sp. (Aeschynomene)’, $jũ$-$jũnãgĩ$ ‘protrusion (in tree)’, and the final of $sãmĩrã$-[bû$-$bũrũ] ‘grass sp. (Cenchrus pedicellatus)’, cf. $bũrũ$ ‘soft’ (initial < $sãmĩrã$ ‘soap’).

CVC-reduplication is sparsely attested (34). The one in (34a) could also be analysed as full-stem iteration. The examples in (34b) have exact matches or close parallels in Jamsay and other nearby Dogon languages.
(34) CvC-reduplications

<table>
<thead>
<tr>
<th>form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $C_1\breve{y},C_2-\breve{c}C_1\breve{y},C_2$</td>
<td>‘giant millipede’</td>
</tr>
<tr>
<td>b. $k\breve{y},w^n-k\breve{r},k^n,w^n$ (onomatopoeic, for two noisy bird spp.)</td>
<td>‘lapwing (Vanellus tectus)’</td>
</tr>
<tr>
<td>$k\breve{w}^-n-k\breve{r}^-n\breve{w}$</td>
<td>‘white-bellied bustard (Eupodotis)’</td>
</tr>
</tbody>
</table>

4.1.6 Final partial reduplications in nouns

The known examples of nouns with a partial final reduplication, all of them flora-fauna terms, are given in (35). In most cases the reduplicant is a single heavy syllable, but there is one bisyllabic case (35d).

(35) Final reduplication (nouns)

<table>
<thead>
<tr>
<th>form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. …-C$\breve{y}$;</td>
<td>initial {LH}-toned</td>
</tr>
<tr>
<td>bègirì-bè:</td>
<td>‘stone partridge’</td>
</tr>
<tr>
<td>initial {L}-toned</td>
<td></td>
</tr>
<tr>
<td>sügì bégèrè-bè:</td>
<td>‘sandgrouse’</td>
</tr>
<tr>
<td>gögòrò-gō:</td>
<td>‘sickle’</td>
</tr>
<tr>
<td>kɔ̀rɔ̀-kɔ̀:</td>
<td>‘louse’</td>
</tr>
<tr>
<td>b. … C$\breve{y}$;</td>
<td>initial {L}-toned</td>
</tr>
<tr>
<td>bègirì-bè:</td>
<td>‘hiccup (n)’, see (391e) in §11.1.5.1</td>
</tr>
<tr>
<td>c. … C$\breve{y}$;</td>
<td>initial {H}-toned</td>
</tr>
<tr>
<td>pètè-pèy</td>
<td>‘grasshopper sp. (Oedaleus)’</td>
</tr>
<tr>
<td>sèngèr-sèy$n$</td>
<td>‘grasshopper sp. (Kraussella)’</td>
</tr>
<tr>
<td>pɔ̀rɔ̀-pɔ̀y$n$</td>
<td>‘trailing vine sp. (Rhynchosia)’</td>
</tr>
<tr>
<td>kɔ̀gɔ̀rɔ̀-kɔ̀y</td>
<td>‘hooded vulture (Necrosyrtes)’</td>
</tr>
<tr>
<td>d. … C$\breve{y}$; C$^{-}\breve{y}$</td>
<td>yàgàrà-yàgì</td>
</tr>
<tr>
<td></td>
<td>cf. verb yàgì-ří-‘itch’</td>
</tr>
</tbody>
</table>

Alternatively, -kɔ̀: in the term for ‘louse’ (35a) could be taken as derived from kɔ̀: ‘eat (meal)’. The term for ‘stone partridge’ is onomatopoeic, so any semantic connection to verbs bègirì-‘shake (grain)’ and bè:-‘cut off the end of’ is incidental.
kà:mbà-kè: ‘scrambling shrub sp. (Strophanthus)’ might be added to (35a), but it has no carryover of vowel quality. This term has a cognate in the Pergué variety of Jamsay, where however it denotes another species (Loeseneriella, a woody liana).

4.1.7 Nouns with full-stem iteration

Several patterns are at least vaguely onomatopoeic. There is usually no unreduplicated counterpart with related meaning.

In (36), the vocalism is identical in the two iterations. The tone sequence L.L-H.L occurs in several body-part terms (36a). The remaining examples are onomatopoeic or otherwise expressive and have various tone patterns.

(36) Full-stem iteration (nouns)

<table>
<thead>
<tr>
<th>form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. L.L-H.L or L.L-H.&lt;HL&gt; tones</td>
<td></td>
</tr>
<tr>
<td>L.L-H.L with -CVCCV final</td>
<td></td>
</tr>
<tr>
<td>kùnjò-kùnjò</td>
<td>‘knee’</td>
</tr>
<tr>
<td>L.L-H.&lt;HL&gt; with -CVCV final</td>
<td></td>
</tr>
<tr>
<td>kòrò-kòrò</td>
<td>‘bell’</td>
</tr>
<tr>
<td>kìsi-kìsì</td>
<td>‘edible winged termite; bat (mammal)’</td>
</tr>
<tr>
<td>nà-[tɔŋ-tɔŋ]</td>
<td>‘elbow’ (nà: ‘hand, arm’)</td>
</tr>
<tr>
<td>dùmò-dùmò</td>
<td>‘heel’</td>
</tr>
<tr>
<td>wàrâ-wàrâ</td>
<td>‘vine sp. (Cissus quadrangularis)’</td>
</tr>
<tr>
<td>wèrê-wèrê</td>
<td>‘swift (bird)’</td>
</tr>
<tr>
<td>lì:gi kù:-[gòrò-gòrò]</td>
<td>‘grey-headed sparrow’ (“bird head-…”’</td>
</tr>
<tr>
<td>b. all-H</td>
<td></td>
</tr>
<tr>
<td>sógy-sógy</td>
<td>‘rattling’</td>
</tr>
<tr>
<td>[tògó-tògó]-bàrìyè</td>
<td>‘praying mantis’</td>
</tr>
<tr>
<td>c. &lt;HL&gt;.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>wòw-wòw</td>
<td>‘bow-wow!’</td>
</tr>
<tr>
<td>sìw*-sìw</td>
<td>‘cheep!’ (birds chirping)</td>
</tr>
<tr>
<td>kòyô wò:y-wò:y</td>
<td>‘disconsolately weeping’ (kòyô ‘weeping’)</td>
</tr>
<tr>
<td>d. other</td>
<td></td>
</tr>
<tr>
<td>jùŋùdá-jùŋùdú</td>
<td>‘call of wild pigeon’</td>
</tr>
<tr>
<td>bìrírí-bìrírí</td>
<td>‘hawk-moth’ (wings make humming sound)</td>
</tr>
<tr>
<td>kòyô- bà:gà-bà:gà</td>
<td>‘sobbing’ (kòyô ‘weeping’ as possessor)</td>
</tr>
<tr>
<td>ɲàmà-ñámà</td>
<td>‘junk, bric-à-brac’</td>
</tr>
</tbody>
</table>

The examples in (37) below involve vocalic changes. In the single-iteration cases (37a-c), i.e. of type X-X’, one or both non-low vowels in the first occurrence are replaced by a-vowels in the second. pù:sù-pá:sù can be interpreted as apocopated < pù:sù-pá:sù. When both vowels, not just the first, are replaced by a-vowels (37c), there is also a tonal change. In the double
iteration type (37d), i.e. of type X-X’-X, the first and third occurrences are identical and each has at least one H-tone, while the medial occurrence has a-vowels and is all-L-toned.

(37)  

a. only vowel replaced by a  
  \textit{të:njè-[sè:]n-sà:ö}}  
  ‘five-lined skink’ (\textit{të:njè} ‘skink’)  

b. one of two vowels replaced by a  
  \textit{këndë-[pù:sù-pâ:s]}  
  ‘lungs’ (\textit{këndë} ‘liver, heart’)  
  \textit{sèrì-[bùndì-bândì]}  
  ‘cream of millet with tamarind’  

c. both vowels replaced by a  
  \textit{kôrô-kàrà}  
  ‘in clusters’  
  \textit{sùnjùr”|à-[gèrè-gàrà]}  
  ‘earring’ (\textit{sùnjùr”|} ‘ear’)  

d. triplets (double iterations) with medial a-vocalism  
  \texttt{L.H-L.L-H tone sequence}  
  \textit{kôrô-kàrà-kôrô}  
  ‘hubbub’  
  \texttt{H-L-H tone sequence}  
  \texttt{cf.} \texttt{“cà:”-cf.} \texttt{“}  
  ‘creaking sound’  
  \textit{hô:-hà:-hô:}  
  ‘loud chatter’  
  \texttt{ś:-ś:-ś:}  
  ‘(sound of bullfrog croaking)’  
  \texttt{L-L<} \texttt{L.H} \texttt{> tone sequence}  
  \texttt{di:”-dà:”-dà:”}  
  ‘shrub sp. (\textit{Euphorbia balsamifera})’

See also the expressive adverbial \textit{pèré-pàrá} ‘suddenly encountering’, (231a) in §8.4.7.1.

Bimoraic stems like \textit{bà-bà} ‘parrot’ and \textit{jà-jà} ‘longhorn beetle sp. (\textit{Crossotus})’ are less transparently iterative (or reduplicative) since neither segment has the minimal shape of a stem. \textit{të:-të:} ‘chestnut-bellied starling’, for example, is more transparently iterative (and onomatopoeic).

4.1.8 Frozen initial a- or an- in nouns

A considerable number of noun stems begin with \textit{à-} or \textit{àn-}, which might originally have been a segmentable affix. For example, the term for ‘stick with curved end’ is either \textit{bëré-c} \texttt{kò:nÀ} 
(with \textit{bëré} ‘stick’ followed by an adjective) or \texttt{à-kò:nÀ} (\texttt{à-kò:nÀ}). A fuller list of candidates for this segmentation is in (38). Though historically unrelated, the number of such cases is increased accidentally by loanwords of Arabic origin, a few of which are listed in (38c).

(38)  

<table>
<thead>
<tr>
<th>form</th>
<th>gloss</th>
<th>comment</th>
</tr>
</thead>
</table>
| a. with \textit{à}-  
  \texttt{forms with and without a- are attested}  
  \texttt{à-kò:nÀ}                         | ‘stick with curved end’  
  \texttt{kò:nÀ}                         | ‘curved’ 
  \texttt{à-tà:ndì}                       | ‘constellation with 3 stars’  
  \texttt{tà:ndì}                         | ‘three’ 
  \texttt{à-pétù}                        | ‘(a) jump’  
  \texttt{pétù}                         | ‘jump’ 
| no form without \textit{a-} is attested  
  \texttt{àbëlkà}                       | ‘game played with knife’ 
  \texttt{àdàŋ}                         | ‘somewhat deaf person’ |
àbà:ğir’ê ‘grass sp.’ (Rottboellia)
àmìy’ê ‘inflection’
àpûm ‘mumps’
àsìmá ‘dandy’

b. with àn-
àndìrí ‘rival’
àndêngè kèsí ‘baggy pants’
ànjérí ‘wrestling’
àntâ:rí ‘hunt (n)’ variant àtá:rí
àntô: ‘stick with hooked end’
àntôngó ‘grains left after first winnowing’

c. Arabic loans (vowel-initial or with definite *al-), selected examples
àmá:nà ‘promise, vow’
ànsá:rá ‘white person’

à- is also segmentable in (à-)má:nì ‘So-and-so’ (§4.1.3), where it is optional. It is also possibly recognizable in several WH interrogative forms (§13.2) such as àmày’ ‘how?’, compare may’ ‘like’ (§8.4.1). However, it may be that the initial à- in these cases was originally an interrogative morpheme (e.g. ‘like what?’) that was etymologically unrelated to the other à- cases.

4.1.9 Collective -à:ndì

The noun pírâ ‘Fulbe person (Pullo)’ has a special collective form pírâ:ndì ‘Fulbe (people)’, which can take plural agreement. It can also be used as a generic ‘a Fulbe (in general)’, in which case it takes singular agreement (39). No other such form is known.

(39) pírâ:ndì dôgà mbù-rá-Ø
Fulbe Dogon want-StatNeg-3SgSbj
‘A Fulbe person does not like (a) Dogon.’ (2004.01.10)
(i.e. ‘There is no love lost between Fulbe and Dogon.’)

4.1.10 Animacy

Although animacy is rarely marked on nouns themselves, it is important in concord, especially for determiners. “Animates” include humans, domestic animals, and most wild fauna. “Inanimates” include some lower animals, plants, inanimate objects such as rocks, and abstractions.

tènìè ‘story, tale’ (extended to ‘riddle’ especially by young speakers) and nùnà ‘song’ are sometimes treated as animate: nùnà: né ‘the song’, see (372) in §10.6.2.

Animacy is marked systematically in determiners. In the conjugated ‘it is’ clitic, inanimate = w and animate = g are not as consistently distinguished, probably because both can be reduced phonetically to vowel length. (The distinction is not made in corresponding negative ‘it is not’ forms.) For example, ‘viper’ regularly takes animate determiners, as in
kɔ̀-kɔ̀sì¹ wɔ-ŋ‘this viper’. However, ‘it is a viper’ can fluctuate between inanimate (?) kɔ̀-kɔ̀sú = ʋ, see (728a) in §19.5.1, and animate kɔ̀-kɔ̀sì = ŋ.

4.1.11 ̀arⁿá ‘year’ (̀arⁿ-à-wⁿ)

̀arⁿá ‘year’ is tonally distinct from ̀arⁿá ‘man’, but the two are in danger of confusion when tone-dropped by a modifier. The ‘year’ noun has a variant ̀arⁿ-à-wⁿ that avoids this potential homophony. I have observed ̀arⁿ-à-wⁿ in singular contexts (‘a year’) and with universal quantifiers (see end of §8.4.6.1). Simple ̀arⁿá is usual with numerals and modifying adjectives: ̀arⁿá tà:ndì: ‘three years’, ̀arⁿá ǹsù ‘a bad year’.

4.2 Derived nominals

4.2.1 Characteristic derivative (-gí)

A noun-to-noun derivation, denoting a person characterized by whatever the core noun denotes (such as a physical or mental handicap or a personality trait), is expressed by characteristic suffix -gí. The core noun drops its tones before the suffix. The characteristic derivative can also function as an adjective (or compound final), for example with the noun ‘person’, as in nù¹ jɔ̀-dɛ̀-gí ‘miserly person’.

(40)

<table>
<thead>
<tr>
<th>noun</th>
<th>gloss</th>
<th>characteristic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>̀amà-sɔ̀gɔ́</td>
<td>‘pity’</td>
<td>̀amà-sɔ̀gɔ́-gí</td>
<td>‘pitiable person’</td>
</tr>
<tr>
<td>bɔ:mbɔ́</td>
<td>‘stupidity’</td>
<td>bɔ:mbɔ́-gí</td>
<td>‘idiot’</td>
</tr>
<tr>
<td>ɗày</td>
<td>‘wealth’</td>
<td>ɗày-gí</td>
<td>‘rich person’</td>
</tr>
<tr>
<td>è:se</td>
<td>‘slyness’</td>
<td>è:se-gí</td>
<td>‘sly person’</td>
</tr>
<tr>
<td>gírè-mbì</td>
<td>‘blindness’</td>
<td>gírè-mbì-gí</td>
<td>‘blind person’</td>
</tr>
<tr>
<td>gùmjà́</td>
<td>‘hump’</td>
<td>gùmjà́-gí</td>
<td>‘hunchback’</td>
</tr>
<tr>
<td>jɔ̀-dè</td>
<td>‘stinginess’</td>
<td>jɔ̀-dè-gí</td>
<td>‘miser’</td>
</tr>
<tr>
<td>là:lì</td>
<td>‘joking (n)’</td>
<td>là:lì-gí</td>
<td>‘jokester’</td>
</tr>
<tr>
<td>mùnùr’ì</td>
<td>‘tolerance’</td>
<td>mùnùr’ì-gí</td>
<td>‘tolerant person’</td>
</tr>
<tr>
<td>mùrⁿá</td>
<td>‘disease’</td>
<td>mùrⁿá-gí</td>
<td>‘sick person’</td>
</tr>
<tr>
<td>tò:ri</td>
<td>‘fetish’</td>
<td>tò:ri-gí</td>
<td>‘fetishist (sorceror)’</td>
</tr>
<tr>
<td>ūwà</td>
<td>‘fear (n)’</td>
<td>ūwà-gí</td>
<td>‘coward; fearful one’</td>
</tr>
<tr>
<td>wà:rà</td>
<td>‘laziness’</td>
<td>wà:rà-gí</td>
<td>‘lazy person’</td>
</tr>
</tbody>
</table>

4.2.2 Verbal nouns

4.2.2.1 Regular verbal noun (-ndé)

The basic verbal noun formation has a suffix -ndé. The suffixal vowel is invariant and does not harmonize with stem vowels (41). The stem before -ndé gets {H} overlay, audible when the stem otherwise has a rising melody (41b).
### 4.2.2.2 Other abstractive deverbal nominals

I can cite tò-tòré ‘beginning’ from verb tòrò ‘begin’, its antonym dùmá ‘end (n), limit (n)’, from verb dimé ‘end, finish’, and kàrì́ ‘act, action’ from kàrí ‘do’. There are many other pairs of nouns and verbs under the rubric of cognate nominals, and some of the nouns could be considered abstractive (§11.1.5.1).

### 4.2.3 Instrument nominals (final ɪ̃)

Some uncompounded instrument nominals related to verbs are in (42). The basic form, also seen in the compounds, is with [L]-toned stem ending in ɪ̃. (42b) may be a case of apocope from *bùwì, with the tones shifted to the surviving syllable. An apparent alternation of ɔ with o occurs in (42c), but the nominal is historically related to kò:sì́ ‘brush away (trash)’, whose meaning has shifted (cf. Ben Tey kò:sí ‘scrape’). Nanga and other Dogon languages have numerous sound-symbolic alternations like ɔ/o, especially in bisyllabic action verbs.

(42)  

<table>
<thead>
<tr>
<th>verb</th>
<th>gloss</th>
<th>nominal</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>dì:si-</td>
<td>‘file’</td>
<td>dì:si</td>
</tr>
<tr>
<td></td>
<td>jù:ri-</td>
<td>‘turn (sth)’</td>
<td>jù:ri</td>
</tr>
<tr>
<td>b.</td>
<td>bùwì-</td>
<td>‘scrub’</td>
<td>bùw</td>
</tr>
<tr>
<td>c.</td>
<td>kò:sì́-</td>
<td>‘scrape’</td>
<td>kò:sì́</td>
</tr>
</tbody>
</table>

There are several other nominals of similar form, denoting instruments that have no synchronic relationship to a verb, e.g. gùsì́rì ‘pointed instrument for undoing braids’. There are also several other (non-instrument) nominals of similar shape, functioning as cognate nominals; see (389e) and (390b-c) in §11.1.5.1.

This morphological construction is likely cognate to the productive Ben Tey verbal noun construction with final -ɪ̀ after {L}-toned stem.
4.2.4 Uncompounded agentives

Agentive nominals are normally compounds, with incorporated object or other nominal as compound initial; see §5.1.5.

‘Hunter’ is àtà:rí (variant àntà:rí), the same form used as a cognate nominal ‘(the) hunt’ in the phrase àtà:rí tà:rí- ‘go on (= engage in) a hunt’.

4.2.5 Deadjectival nominals

The only known affixally marked deadjectival noun is (43a). Some adjectives are used without derivational modification as abstractive nouns denoting scalar dimensions (43b). These abstractives occur chiefly in comparatives, where it is sometimes difficult to distinguish deadjectival nouns from 3Sg adjectival predicates; compare (43b) with (442a) in chapter 12.

(43) adjective gloss noun gloss comment

a. ordinal

<table>
<thead>
<tr>
<th>suffix</th>
<th>adjective</th>
<th>gloss</th>
<th>noun</th>
<th>gloss</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>-w</td>
<td>kiyá</td>
<td>‘first’</td>
<td>kiyá-w</td>
<td>(in) the past, previously’</td>
<td>often adverbial</td>
</tr>
</tbody>
</table>

b. measurable dimension

<table>
<thead>
<tr>
<th>adjective</th>
<th>noun</th>
<th>gloss</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>sóñí</td>
<td>sóñí</td>
<td>‘deep’</td>
<td>‘depth’</td>
</tr>
<tr>
<td>güró</td>
<td>güró</td>
<td>‘long’</td>
<td>‘length’</td>
</tr>
<tr>
<td>gàw</td>
<td>gàw</td>
<td>‘wide’</td>
<td>‘width’</td>
</tr>
<tr>
<td>dúgú</td>
<td>dúgú</td>
<td>‘big, fat’</td>
<td>‘size’</td>
</tr>
<tr>
<td>dúsú</td>
<td>dúsú</td>
<td>‘heavy’</td>
<td>‘weight’</td>
</tr>
<tr>
<td>wàgá</td>
<td>wàgá</td>
<td>‘distant’</td>
<td>‘distance’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>suffix</th>
<th>adjective</th>
<th>noun</th>
<th>gloss</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>-nɔ́</td>
<td>gàwá</td>
<td>‘tall’</td>
<td>gàwá-nɔ́</td>
<td>‘height’</td>
</tr>
</tbody>
</table>

`gàwá-nɔ́` may co-occur with 3Sg possessor `nɔ́`, as in `gàwá-nɔ́ nɔ́` ‘its/his/her height’.

4.3 Pronouns

4.3.1 Basic personal pronouns

The morphological series are those in (44).

(44) a. independent, preverbal subject, and (optionally) object
b. accusative (optional)
c. pronominal-subject suffix on verbs
d. possessor, complement of postposition

The independent, pronominal-subject, and accusative forms are given in (45). 3AnSg and 3AnPl are animate categories (including humans and animals), while Inan[imate] applies to
plants and non-living things. Logophoric pronouns are coindexed to the attributed author of quoted speech or thought (§18.2.1).

The preverbal proclitic subject forms (“-_Vb” below), which occur in relative clauses, are identical to the independent forms. A slightly distinct set, all H-toned, is used in a construction with suffix -w on the verb (“-_Vb-w” below), see §15.2.8.5, and also in reciprocals (§18.3.1-2). In regular main clauses the pronominal subject category is expressed by a suffix on the verb (“Vb-”, rightmost column below). The accusative suffix (or enclitic) -ŋ is usually reduced to nasalization of the preceding vowel. It may be entirely inaudible, due either to phonetic erosion or to structural omission. In this case, there is no overt difference between accusative and independent (or preverbal subject) forms, except in the 1Sg which has a dedicated accusative form.

(45) Personal pronouns

<table>
<thead>
<tr>
<th></th>
<th>indep.</th>
<th>accus.</th>
<th>subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ _Vb]</td>
<td>[ _Vb-w]</td>
<td>[Vb- ]</td>
</tr>
</tbody>
</table>
| 1Sg | ū: | ū:ŋ | ū: | ū: -y: 
| 1Pl | ū: | ū:ŋ | ū: | ū: -y: : |
| 2Sg | ú: | ú:ŋ | ú: | ú: -w: |
| 2Pl | ú: | ú:ŋ | ú: | ú: -w: : |
| 3AnSg | áně: | áně-ŋ | áně: | — -Ø |
| 3AnPl | bû: | bû-ŋ | bû: | — [see below] |
| InanSg | kú: | kú-ŋ | kú: | — -Ø |
| InanPl | kú: | kú-ŋ | kú: | — =3AnPl |
| (for kú as strong discourse-definite pseudo possessor, see §4.4.1.3) |
| 3Logo/ReflSg | á: | á-ŋ | á: | á: -Ø |

Inanimate plural kú: is homophonous with kú: ‘head’, which also has grammatical functions (§8.2.5, §18.1.4.3). My texts have numerous occurrences of ‘head’ but none of the pronoun kú:. Inanimate singular kú frequently functions as a strong discourse-definite ‘that’, resuming a situation or other abstraction already described. For discourse uses of kú may “like that”, see §4.4.1.7. It can also be used as a (pseudo-)possessor of a NP in a similar strong discourse-definite function, see §4.4.1.3.

For analysis of the subject-pronominal suffixes, including the various 3Pl allomorphs (-à, -yà, -è, etc.), see §10.3.

Forms used as possessors and as datives, are in (46). The possessor forms except 3AnSg include a classifier whose basic form is ḳò: for inanimate singular and ḳò: for animate singular and all plural categories; see §6.2.1. The infrequently used inanimate true possessor forms are merged with the much more common 3AnSg and 3AnPl forms, but the animate/inanimate distinction is maintained in datives. There is a special 3Sg possessor form nò that does not allow a possessive classifier. In (46), the possessor forms are shown with N representing the preceding possessed noun, which retains its regular tones.
Possessor and dative pronouns

<table>
<thead>
<tr>
<th></th>
<th>AnSg/AnPl/InanPl</th>
<th>InanSg</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>possessor</strong></td>
<td><strong>dative</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>1Sg</td>
<td>N ṭɛ́</td>
<td>N kɔ́</td>
</tr>
<tr>
<td></td>
<td>1Pl</td>
<td>N ṭɛ́</td>
<td>N ṭɛ́</td>
</tr>
<tr>
<td>b.</td>
<td>2Sg</td>
<td>N ú HL yɛ́</td>
<td>N ú HL gɔ́</td>
</tr>
<tr>
<td></td>
<td>2Pl</td>
<td>N úHL yɛ́</td>
<td>N úHL gɔ́</td>
</tr>
<tr>
<td>c.</td>
<td>3AnSg</td>
<td>N nɔ̀</td>
<td>ńnɛ́ bã́y</td>
</tr>
<tr>
<td></td>
<td>3AnPl</td>
<td>N bû: L Ʉyɛ̀</td>
<td>N bû: L Ʉgɔ̀</td>
</tr>
<tr>
<td></td>
<td>InanSg</td>
<td>[=3AnSg]</td>
<td>kú bã́y</td>
</tr>
<tr>
<td></td>
<td>InanPl</td>
<td>[=3AnPl]</td>
<td>kû: bã́y</td>
</tr>
<tr>
<td>d.</td>
<td>3LogoSg/3ReflSg</td>
<td>[see below]</td>
<td>á bã́y</td>
</tr>
<tr>
<td></td>
<td>3LogoPl/3ReflSg</td>
<td>[see below]</td>
<td>á: bã́y</td>
</tr>
</tbody>
</table>

The third person anaphoric (logophoric-reflexive) pronouns have a slightly different morphosyntax as possessors. With kin terms and a few other human relationship terms (‘friend’), the anaphoric possessor precedes the possessed noun (N), which therefore takes the relevant possessum overlay, namely {HL} after singular á and {L} after plural â: . With other animate possessed nouns (e.g. ‘slave’, ‘sheep’), and with inanimates, the morphosyntax is the same as for the other pronouns (other than 3AnSg).

4.4 Determiners

4.4.1 Definite morphemes and demonstrative pronouns

4.4.1.1 Definite morphemes

The forms in (48) behave syntactically and tonosyntactically like demonstratives, but are best glossed with definite ‘the’ in English. They are weak (nonemphatic) discourse-definite markers. In the forms given, they require a preceding noun (or NP). In absolute function (i.e. without a noun), a third-person independent personal pronoun (§4.3.1) must be used. Except for inanimate plural, definite markers and third person pronouns are closely related in form.
These definite morphemes also occur at the end of (restrictive) relative clauses, agreeing with the head NP (§14.1.9).

Definite morphemes, like demonstratives, control tone-dropping on the preceding core NP (except when the determiner is tone-dropped, see below). Therefore N-Def is realized tonosyntactically as N\textsuperscript{L} Def (49a-d), and N-Adj-Def as [N Adj]\textsuperscript{L} Def with both noun and adjective tone-dropped (49f). In the latter case, it technically cannot be determined whether the noun is tone-dropped by the adjective at a lower tonosyntactic cycle, as in N\textsuperscript{L} Adj, or whether the noun is just part of the domain targeted by the higher controller (the determiner). The analysis could be hedged by parenthesizing the superscript on the inner noun, as in (49f), though I generally transcribe with just the outer superscript at the right bracket. Nouns in (49) are âr\textsuperscript{bâ} ‘man’ and béré \textsuperscript{stick}.

The fact that definite morphemes control tone-dropping distinguishes Nanga from Jamsay, Ben Tey, Najamba, and other Dogon languages where demonstratives but not definite morphemes control tone-dropping.

In recordings, this tone-dropping may be the most easily audible cue that \textsuperscript{w} or \textsuperscript{y} is present, especially after more-or-less homorganic stem-final vowels.

Definite morphemes also behave like demonstratives in that they themselves can be tone-dropped. The tone-dropped variants occur, for example, in NPs with a pronominal possessor, whether this possessor precedes or follows the possessed noun (or core NP), as in ü\textsuperscript{HL} lésî \textsuperscript{1nê ‘your-Sg (maternal) uncle’}. Nonpronominal (i.e. noun-headed) possessors do not induce this tone-dropping: [sùmâyâlâ \textsuperscript{1ódô kûj} ‘Soumila’s house’. See §6.2.1.2 for details.

The inanimate definite forms, singular kû ~ gû ~ \textsuperscript{w} and plural \textsuperscript{y}, interact phonologically with a following locative postposition. The latter has surface segmental variants \{ga go go Ọgọ Ọgọ\} after ordinary core NPs (e.g. nouns), and gets its tone by spreading from the final preceding tone. The combination of definite inanimate singular kû with the locative is the invariant portmanteau gá, after a tone-dropped core NP. This gá has the segments of the locative postposition but the tone (and tone-dropping control) of the definite. Historically it is presumably contracted from *kû gâ via syncopated *k gá. The combination of definite inanimate plural \textsuperscript{y} with the locative is \textsuperscript{y} gô. See §8.2.3.2 for examples and discussion. The locative postposition is not ordinarily used after animate NPs.

### Table 48

<table>
<thead>
<tr>
<th>Category</th>
<th>Regular</th>
<th>Tone-dropped (see below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>animate singular</td>
<td>\textsuperscript{ý}né</td>
<td>\textsuperscript{1nê}</td>
</tr>
<tr>
<td>animate plural</td>
<td>\textsuperscript{ý}bû:</td>
<td>\textsuperscript{1bû(:)}</td>
</tr>
<tr>
<td>inanimate singular</td>
<td>\textsuperscript{ý}gû ~ \textsuperscript{ý}kû ~ \textsuperscript{ý}w</td>
<td>\textsuperscript{1gû ~ 1kû ~ 1w}</td>
</tr>
<tr>
<td>inanimate plural</td>
<td>\textsuperscript{ý}y ~ \textsuperscript{ý}bû:</td>
<td>\textsuperscript{1y}</td>
</tr>
</tbody>
</table>

(49) a. \textsuperscript{ý}ar\textsuperscript{bâ} \textsuperscript{1nê} ‘the man’
    b. \textsuperscript{ý}ar\textsuperscript{bâ} \textsuperscript{1bû:} ‘the men’
    c. \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}gû ~ \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}kû ~ \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}w ‘the stick’
    d. \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}y ‘the sticks’
    e. \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}gûr\textsuperscript{ù} ‘(a) long stick’
    f. \textsuperscript{ý}bêr\textsuperscript{é} \textsuperscript{ý}gûr\textsuperscript{ù} (~ \textsuperscript{ý}kû ~ \textsuperscript{ý}w) ‘the long stick’
My working hypothesis is that Nanga definite markers have developed out of former Near-Distant demonstratives. This demonstrative category merge into discourse-definiteness in Dogon and other languages of the zone.

4.4.1.2 ‘This/that’ (deictic demonstrative pronouns)

There is no distinction between proximate and distant demonstratives. Instead, there is a single deictic demonstrative category (‘this’ or ‘that’). Demonstratives may be accompanied by a pointing gesture to make spatial distinctions. The forms are in (50).

(50) animate singular \( wô-\eta \)
animate plural \( wê: \sim wô:-yè \)
inanimate singular \( ŋgû \)
inanimate plural \( yêy \sim ŋgû:-yè \)

\( wô-\eta \) contains a somewhat frozen animate singular nominal suffix \(-\eta\), preserved elsewhere only in \( yâ-\eta \) ‘woman’, \( â-\eta \) ‘who?’, and \( wâ-\eta \) ‘the counterparty’ (§4.1.2 and references there). The equally unproductive variant plural ending \(-yè\) in \( wô:-yè \) and \( ŋgû:-yè \) in (50) is likewise limited to a handful of forms: \( â:-yè \) ‘who?-Pl’, \( wâ:-yè \) ‘the counterparties’, and \( gânû:-yè \) ‘some, certain ones’ (§6.3.2).

A preceding modified noun (or core NP) drops its tones. Examples with \( âr^n\) ‘man’ and \( bêrê \) ‘stick’.

(51) a. \( âr^n\)\(_L\) \( wô-\eta \) ‘this/that man’
b. \( âr^n\)\(_L\) \( wê: \sim wô:-yè \) ‘these/those men’
c. \( bêrê\)\(_L\) \( ŋgû \) ‘this/that stick’
d. \( bêrê\)\(_L\) \( yêy \sim ŋgû:-yè \) ‘these/those sticks’

Unlike definite morphemes, these deictics may also be used absolutely (i.e. with no overt preceding noun), see §6.1.2.

(52) a. \( wô-\eta \) \( jâr^n-\eta\eta^\eta\)
   Dem-AnSg like-1pfvNeg-1SgSbj
   ‘I don’t like that one (animate).’

b. \( ŋgû \) \( ñjí-\eta \) \( gôn\)
   Dem-InanSg 1Sg-Acc jab.Pfv-3SgSbj
   ‘That (object) jabbed (=pricked) me.’

For L-toned variants like \( ŋgû \), see §6.1.4.

4.4.1.3 Discourse-definite pseudo-possessor \( kû \) ‘that (same)’

\( kû \) is the regular inanimate singular independent pronoun, see (45) above. It is related to inanimate singular postnominal definite marker \( gû \sim kû \sim ù \), see (48) above.
As independent pronoun or object, *kú* may denote a specific inanimate entity, like English *it*, as in (569c) in §15.2.6.1 below. Alternatively, it may be used abstractly to resume a previously described state of affairs, like English *that* in *that’s* why I want to marry you. For the very common combination *kú mày* “like that”, see §4.4.1.7.

The strong discourse-definite function is also usual when pronoun *kú* functions syntactically as a preposed pseudo-possession, like the preposed pronominal true possessors of kin terms (§6.2.2.3). As a “possessor” ending in an H-tone, it controls {HL} overlay on the immediately following noun. The referent may be human, animate, or inanimate. A definite morpheme or other determiner with the appropriate animacy and number features follows the noun. The determiner usually takes L-toned form after other pronominally possessed nouns, at least when the tone overlay on the possessed noun is {HL} rather than {L}, by Determiner Tone-Dropping (§6.5.4). In (53a-f), pseudo-possession *kú* is glossed DiscDef, since it functions essentially as a nonpossessive strong discourse-definite marker.

(53) a. *kú* \(^{HL}tā·")\(^{1}gù\)  
DiscDef \(^{HL} shed\) \(^{1}Def.InanSg\)  
‘that (same) shed’ (tā·")

b. *kú* \(^{HL}ńdô\) \(^{1}gù\)  
DiscDef \(^{HL} house\) \(^{1}Def.InanSg\)  
‘that (same) house’ (ńdô)

c. *kú* \(^{HL}ńdô\) \(^{1}y\)  
DiscDef \(^{HL} house\) \(^{1}Def.InanPl\)  
‘those (same) houses’ (ńdô)

d. *kú* \(^{HL}nû:\) \(^{1}nè\)  
DiscDef \(^{HL} person\) \(^{1}Def.AnSg\)  
‘that (same) person’ (nû)

e. *kú* \(^{HL}yā:\) \(^{1}nè\)  
DiscDef \(^{HL} woman\) \(^{1}Def.AnSg\)  
‘that (same) woman’ (yā)

f. *kú* \(^{HL}yā:\) \(^{1}bù\)  
DiscDef \(^{HL} woman\) \(^{1}Def.AnPl\)  
‘those (same) women’ (yā)

See also the textual example *kú* \(^{HL}námá\) \(^{1}gù\) ‘that meat’ in (752) below.

Any such expression may be simplified by omitting the relevant common noun stem, using (possessed) \(^{HL}kā\) ‘thing’ (inanimate) or \(^{HL}yē\) ‘critter’ (animate) as a substitute; these generic morphemes are also used in pronominal-possession constructions (§6.2.1.3).

(54) a. *kú* \(^{HL}kā\) \(^{1}gù\)  
DiscDef \(^{HL} thing\) \(^{1}Def.InanSg\)  
‘that (same) one [inanimate]’
b. \( \text{kú} \)\( ^{\text{HL}} \)\( \acute{\text{yē}} \)\( ^{\text{l. nē}} \) \( \text{DiscDef} \)\( ^{\text{HL}} \)\( \text{critter} \)\( ^{\text{l. Def.AnSg}} \) ‘that (same) one [animate]’

\( \text{kú} \), in spite of its probable origin as a “possessor” of sorts (‘its …’), may co-occur with a true possessor NP (nonpronominal or pronominal, and preposed or postposed), as in (55a-c). For analysis see discussion of (156a-d) in §6.5.1.

(55) a. \( \text{kú} \)\( ^{\text{HL}} \)\( \acute{\text{idō}} \)\( ^{\text{[ú}^{\text{HL}} \text{g5]}^{\text{]}}} \)\( ^{\text{l. gù}} \) \( \text{DiscDef} \)\( ^{\text{HL}} \)\( \text{house} \)\( ^{\text{[2Sg}^{\text{HL}} \text{Poss.InanSg]}^{\text{]}}} \)\( ^{\text{l. Def.InanSg}} \) ‘that (same) house of yours-Sg’

b. \( \text{kú} \)\( ^{\text{[ú}^{\text{l. lésî]}^{\text{]}}} \)\( ^{\text{l. nē}} \) \( \text{DiscDef} \)\( ^{\text{2SgPoss}^{\text{HL}} \text{uncle}}^{\text{l. Def.AnSg}} \) ‘that (same) uncle of yours’

c. \( \text{kú} \)\( ^{\text{[á:mádù}^{\text{l. ñdò]}^{\text{]}}} \)\( ^{\text{l. gù}} \) \( \text{DiscDef} \)\( ^{\text{l. house}}^{\text{Amadou}} \)\( ^{\text{l. Def.InanSg}} \) ‘that (same) house of Amadou’s’

4.4.1.4 Anaphoric/logophoric demonstrative pronoun.

For the all-purpose anaphoric pronouns for third-person antecedents, singular \( \acute{\text{á}} \) and plural \( \acute{\text{â}} \); see chapter 18. There are no additional Jamsay-style logophoric demonstrative forms.

4.4.1.5 \( \text{wā-ŋ} \) ‘the counterparty’

Singular \( \text{wā-ŋ} \) or its plural \( \text{wāː} \) or \( \text{wāː-ŋē} \) is used in narratives where two comparable animate entities (such as two brothers X and Y) are alternately referred to. If X is the topic in a particular passage, Y may be reintroduced (or otherwise referred to) as \( \text{wā-ŋ} \).

The form \( \text{wā-ŋ} \) is interesting since it preserves an archaic animate singular suffix -\( \text{ŋ} \) (§4.1.2) also found in \( \text{yā-ŋ} \) ‘woman’ and in \( \text{ā-ŋ} \) ‘who?-Sg’, and in somewhat fused form in animate singular demonstrative \( \text{wō-ŋ} \).

There is an occurrence of \( \text{wā-ŋ} \) in text 2004.02.02. An orphaned goat has been separated from the herd of ewes: “… they were inside. The rain struck \( \text{wā-ŋ} \) (the counterparty, here the orphaned goat) over that way, he was shivering miserably.” There is an occurrence of plural \( \text{wāː} \) in text 2004.02.03, at a similar shift from one referent (orphan and camels) to another (giraffes), both of whom were already established as protagonists in the narrative. (These texts are not yet ready for publication.)

4.4.1.6 \( \text{ɛ́ndē} \) (proximate) and \( \text{sār”á} \) (obviative/distal)

These two words can be used to denote persons (other than the speech-event participants) in one’s physical or social environment without using their names or other explicit descriptions. The listener is expected to guess or infer the identities. \( \text{ɛ́ndē} \) functions as the proximate form
(‘the fellow’), and sārⁿá as the obviative or distal form (‘that other fellow’). Close friends and other regular interlocutors can adapt the use of the terms to their own situations.

My assistant claimed that both terms also occur in neighboring Tommo So. McPherson’s sentence examples include ēndé (2013: 205) and sáná (2013: 209-210) as personal names.

4.4.1.7 ‘Like this/that’ (kú máyⁿ“, ṭmáyⁿ“, ŋgú máyⁿ“)

kú máyⁿ“ like that, thus ( discourse-definite) is common in texts, resuming a situation just described, before introducing a new eventuality. It consists of discourse-definite kú (§4.4.1.3) and mayⁿ“ ‘like’ (§8.4.1). See (738), (746), (747), (751), (753), (755), and (756) in the sample text.

In deictic (as opposed to discourse-definite) contexts, there is a form ɱmáyⁿ“ ‘like this’ or spatial ‘on this side, this way’, which occurs several times in the texts. Elicitation brought out an opposition between ɱmáyⁿ“ and ŋgú máyⁿ“ ‘like that, in that way, thus’ or spatial ‘on the other side’. ŋgú máyⁿ“ is audibly distinct from the tonally regular PP ŋgú máyⁿ“ ‘like this (thing)’. A good textual example of the spatial use of ɱmáyⁿ“ as ‘(on) this side/way’ is (56). In the tale, the people need to get past some angry giraffes who are blocking the road. The people magically create a tall boulder between themselves and the giraffes. The giraffes come around one side of the boulder to try to catch the people, who go around on the other side and get through. ɱmáyⁿ“ functions like an adjective or compound final in this example, to judge by tone-dropped tāngⁿ¹. (56) [[tāngⁿ¹ ṭmáyⁿ“] ɲá å: bā:r-sè
[[side¹ like this] Loc] go.around-Pfv
ɡu-ndè] ˈlāw-ɛr-ā
and.then.Past] pass-Pfv1a-3PlSbj ‘They went around this (other) side and got through (safely).’ (2004.02.03)

4.4.2 Demonstrative adverbs

4.4.2.1 Locative adverbs

The simple spatial deictic adverbs, with stationery locative function (unless given ablative or allative function by a motion verb) are in (57). ɡá in ŋgá-gá is recognizable as the locative postposition. ŋgá ‘here’ is identical in form to the fusion of ŋgú ‘this’ (inanimate) and the same postposition. ká is probably likewise the fusion of kú (inanimate pronoun, often discourse-definite) plus the same postposition. See §8.2.3.2 for the fusions.

(57) a. ŋgá ‘here’

b ŋgá-gá ‘over there’ (pointing)

c. ká  yá ‘there’ (discourse-definite)
Another set of forms is used in the sense ‘(over) this/that way’ or ‘around here/there’, indicating direction of motion or approximate location. The suffix -rᵣ is added to the forms in (57). This is followed by ṣà, an allomorph of the locative postposition. The prolongation in the → variants perhaps reflects compensatory lengthening after the loss of this morpheme.

(58)  
a. ŋárᵣён ṣà  
     ŋárᵣî→  
     ‘this way, around here’

b. ũgà-sgi-ᵣён ṣà  
     ũgà-gáᵣᵣᵣè→  
     ‘(over) that way, around there’ (pointing)

c. kárᵣён ṣà  
     kárᵣî→  
     yárᵣён ṣà  
     yárᵣᵣᵣ→  
     ‘around there, in that direction (definite)’

4.4.2.2  Emphatic and approximative modifiers of adverbs

An emphatic particle té→ with prolonged vowel is used to insist on a specific location. A particle yàŋà is attested in approximative sense.

(59)  
a. ũgá té→
     here Emph
     ‘right here’

b. ũgá yàŋà
     here around
     ‘around here’

4.4.3  Presentatives (‘here’s …!’) (wûnéᵣé, wûné, wèré)

There are two basic presentative forms (60).

(60)  
a. Sg or Pl wûnéᵣé
     wûné
c. Pl only wèré
     ‘there they are’

wûnéᵣé and variant wûné are used, for example, when handing something to the addressee, while wèré is most often used to indicate that something lost or absent has just come into view. However, the distinction does not seem to be sharp.

When they have scope over an NP (‘here’s X!’), they may precede or follow the NP. For wûnéᵣé and wèré, pronominal conjugation may be added using bu- ‘be’ (61b-c). The presentative particles may also be used preclausally, with scope over the whole clause (61d-e); here the English free translation is awkward, but cf. French (e.g. les voilà qui dansent!).
4.5 Adjectives

Within an NP a modifying adjective, like a noun (except ‘woman’), lacks morphological marking of intrinsic categories (e.g. human, animate, plural). The adjective follows the head noun. An adjective and a numeral may occur in either order (§6.4.2). Both precede further modifiers such as determiners and ‘all’.

For adjectival intensifiers, see §8.4.7.2. For stative adjectival predicates, see §11.4. For inflectable adjectival verbs, see §9.5.

4.5.1 Types of adjectives

The word-class adjective can be defined operationally as a noun-like word that can follow a noun in modifying function, controlling tone-dropping on it, and that can also occur in predicates, specifically including negative predicates with stative negative = ǹdó- (§11.4.2). In modifying function, adjectives are indistinguishable from compound finals, specifically the finals in the compound type (ǹ ǹ) where the initial is tone-dropped (§5.1.2).

There are two subtypes of adjectives, based on the form of the positive predicate for 3Sg (including inanimate) subject. In the first main type, there is a special unsuffixed 3Sg predicative form. In the second main type, the ‘it is’ clitic is added to predicative adjectives in 3Sg as well as other forms. This second type effectively treats predicative adjectives like predicative nouns. It also has a wider range of prosodic stem shapes. Basic color adjectives are intermediate between the two types.

In the case of írè ‘ripe’ (postnominal in e.g. yù: írè ‘ripe millet’), in predicative function I could elicit only forms of the verb írè-, e.g. írè-èrè-Ø ‘it has ripened (=is ripe’).

Adjectives are clearly distinguishable from expressive adverbials (EAs), even though some EAs have adjective-like senses. EAs do not control tone-dropping on any other word. Unlike nouns and adjectives, they form predicates with bù- ‘be (somewhere)’ or its negation.
ŋ̀gō- ‘not be’ (§8.4.7). However, many adjectives can be converted into EAs by adding -ī→, in which case they take the regular EA predicative forms, §8.4.7.

4.5.1.1 Adjectives with simple 3Sg predicative form

The first type of adjective is illustrated in (62). In addition to a postnominal modifying form, these stems have a simple predicative form for 3Sg subjects (‘X is wide’, etc.). In practice, several of these adjectives are restricted to either inanimate or animate subjects (‘spacious’ to inanimates, ‘plump’ to animates), but those that can apply to both inanimate and animate entities have a single 3Sg predicative form.

If the modifying form of the adjective ends in a non-high vowel (62a) or in a semivowel (62b), the predicative form is identical to the modifying form. The same is true of the one Ci: adjective (62c), which is arguably also semivowel-final (/sîy/). If the adjective ends in a high vowel, we get final i in postnominal modifying function, and final u in predicative function (62d-f).

Of interest is the absence of H.H-toned bisyllabic adjectives (except for color adjectives, discussed below), and the absence of H-toned monosyllabic adjectives. The observed tone melodies are rising /LH/ realized as bisyllabic L.H, falling /HL/ realized as bisyllabic H.<HL> or monosyllabic <HL>, and one case of /LHL/ realized as L.<HL>. The switch between final modifying i and predicative u does not affect the lexical tone in the bitonal patterns. However, in the one case of tritonal L.<HL>, the final <HL>-toned i in modifying function corresponds to H-toned ũ in the predicative form (62f).

(62) Adjectives

<table>
<thead>
<tr>
<th>gloss</th>
<th>modifying</th>
<th>predicative 3Sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>final non-high vowel, no change from modifying to predicative</td>
<td></td>
</tr>
<tr>
<td>CvCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘distant’</td>
<td>wàgá</td>
<td>wàgá</td>
</tr>
<tr>
<td>‘tall’</td>
<td>gàwá</td>
<td>gàwá</td>
</tr>
<tr>
<td>‘long, tall’</td>
<td>gàrò</td>
<td>gàrò</td>
</tr>
<tr>
<td>‘big, grand; many’</td>
<td>ɔ̀wɔ́</td>
<td>ɔ̀wɔ́</td>
</tr>
<tr>
<td>CvCCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘small, young’</td>
<td>ëwré</td>
<td>ëwré</td>
</tr>
<tr>
<td>Cv:Cv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘easy, cheap’</td>
<td>nà:r¹́ä́</td>
<td>nà:r¹́ä́</td>
</tr>
<tr>
<td>b.</td>
<td>final semivowel, no change from modifying to predicative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘spacious’</td>
<td>gàw</td>
</tr>
<tr>
<td>c.</td>
<td>Ci: (arguably /Ci/), no change from modifying to predicative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘pointed’</td>
<td>sì:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[cf. verb sìyé-ndýé- ‘become pointed’]</td>
</tr>
</tbody>
</table>

69
d. final high vowel, H.<HL>, final modifying /i/ versus predicative /u/

\[\text{CvCv}\]

- ‘narrow’ \(\text{pë́ŋī} \quad \text{pë́ŋû}\)
- ‘short’ \(\text{dë́ŋī} \quad \text{dë́ŋû}\)
- ‘lightweight’ \(\text{érā̀} \quad \text{érầû}\)
- ‘cold; slow’ \(\text{tá́mī} \quad \text{tá́mû}\)
- ‘sweet; sharp’ \(\text{érī} \quad \text{érû}\)
- ‘bitter’ \(\text{gárī} \quad \text{gárû}\)
- ‘slightly coarse’ \(\text{yágī} \quad \text{yágû}\)
- ‘hard’ \(\text{má́rā̀} \quad \text{má́rầû}\)
- ‘slightly bitter’ \(\text{à́śī} \quad \text{à́sû}\)
- ‘salty, sour’ \(\text{párī} \quad \text{párû}\)
- ‘heavy’ \(\text{dá̃śī} \quad \text{dá̃śû}\)
- ‘soft (skin)’ \(\text{bá̃rī} \quad \text{bá̃rû}\)
- ‘hot, fast’ \(\text{ğī} \quad \text{ğû}\)
- ‘smooth, sleek’ \(\text{órī} \quad \text{órû}\)
- ‘deep’ \(\text{sónī} \quad \text{sónû}\)

\[\text{CvCCv}\]

- ‘coarse’ \(\text{kū́njī} \quad \text{kū́njû}\)

---

e. final high vowel, L.H, final modifying /i/ versus predicative /u/

\[\text{CvCv}\]

- ‘narrow’ \(\text{ḗmbī} \quad \text{ḗmbû}\)
- ‘good’ \(\text{ēśī} \quad \text{ēśû}\)
- ‘good-sized’ \(\text{àmī} \quad \text{àmû}\)
- ‘thick (liquid)’ \(\text{kù̀rī} \quad \text{kù̀rû}\)

\[\text{CvCCv}\]

- ‘narrow’ \(\text{ḗmbī} \quad \text{ḗmbû}\)

---

f. final high vowel, tritonal L.<HL>, final modifying /i/ versus predicative /u/

- ‘difficult, costly’ \(\text{ná́mī} \quad \text{ná́mû}\)

---

With other than 3Sg subject, the positive predicative form (‘I am __’, ‘they are __’, etc.) consists of the form used in modifying function plus the relevant conjugated form of the ‘it is’ clitic =\(m\)- (§11.2.1.1). The 3Pl is a suppletive form =\(yé\). All of the negative predicative forms (‘I am not __’, ‘they are not __’, ‘it/he/she is not __’) are formed by adding a conjugated stative negative =\(ǹdō\)- to the form of the stem used in modifying function (§11.4.2). This suggests that the modifying form is lexically basic, and I treat it accordingly in the lexicon.

(63) illustrates the treatment of final vowels for two adjectives ending in high vowels (‘heavy’, ‘lightweight’) and for one adjective ending in a stable non-high vowel (‘long, tall’). ‘Heavy’ furthermore illustrates Rounding Harmony before a nonzero clitic (63c), where the first-syllable /u/ seems to have been the catalyst.
4.5.1.2 Basic color adjectives

The three core color stems in (64) can pattern like the adjectives described in the preceding subsection. In particular, they have a special suffixless 3Sg predicative form. However, this 3Sg form was recorded only for inanimate subject (64a), and even for inanimates it is less common (with color adjectives) than a morphological construction with the relevant form of the ‘it is’ clitic, viz., inanimate = w, animate singular = ñ, or animate plural = ye (64b). Of interest is the fact that the modifying forms like bárⁿi ‘red’ and the predicative forms with clitics like bárⁿi = ḃⁿ ‘it is red’ are H.H-toned, while the simple 3Sg predicative forms like bárⁿ in (64a) are H.<HL>-toned following the pattern of (63b) above.

(64) Basic color adjectives

<table>
<thead>
<tr>
<th>gloss</th>
<th>modifying</th>
<th>predicative 3Sg/3Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>inanimate</td>
</tr>
<tr>
<td>a.</td>
<td>‘red’</td>
<td>bárⁿi</td>
</tr>
<tr>
<td></td>
<td>‘black’</td>
<td>jēmí</td>
</tr>
<tr>
<td></td>
<td>‘white’</td>
<td>pírí</td>
</tr>
<tr>
<td>b.</td>
<td>‘red’</td>
<td>bárⁿi</td>
</tr>
<tr>
<td></td>
<td>‘black’</td>
<td>jēmí</td>
</tr>
<tr>
<td></td>
<td>‘white’</td>
<td>pírí</td>
</tr>
</tbody>
</table>

These color adjectives are transitional between the two major types of adjectives, since they alternate between the two defining 3Sg predicative patterns.

4.5.1.3 Adjectives with ‘it is’ clitic in 3Sg predicative form

The stems in (65), below are common in postnominal modifying function. In predicative function I was only able to elicit the ‘it is’ clitic, even for 3Sg subject. These stems are therefore more “noun-y” than those in §4.5.1.1, above. The type with ‘it is’ clitic includes a wider range of stem-shapes than the first type; note the long vowels and the wide range of syllable counts in (65).
There is one consonant-final bisyllabic, \( nánáy \) ‘respectable’ (also ‘useful’, etc.); it is phonologically possible to add the 3Sg clitics to this stem, as shown (65f), but these combinations sound somewhat awkward, and one can alternatively use the auxiliary \( bú- \) ‘be’.

(65) Adjectives with obligatory ‘it is’ clitic in 3Sg predicative form

<table>
<thead>
<tr>
<th>gloss</th>
<th>modifying</th>
<th>predicative 3Sg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>inanimate</td>
</tr>
<tr>
<td>a. Cv:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘full’</td>
<td>bá:</td>
<td>bá: = ( w )</td>
</tr>
<tr>
<td>( &lt;HL&gt; )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘dry’</td>
<td>mā:</td>
<td>mā: = ( w^a )</td>
</tr>
<tr>
<td>‘old’</td>
<td>pē:</td>
<td>pē: = ( w )</td>
</tr>
<tr>
<td>b. CvCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘deserted, empty’</td>
<td>kóró</td>
<td>kóró = ( w )</td>
</tr>
<tr>
<td>‘living, alive’</td>
<td>ūmā</td>
<td>—</td>
</tr>
<tr>
<td>( L.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘runy’</td>
<td>kété</td>
<td>—</td>
</tr>
<tr>
<td>‘half-ripe’</td>
<td>āmâ</td>
<td>āmâ = ( w^a )</td>
</tr>
<tr>
<td>‘weak, diluted’</td>
<td>sērē</td>
<td>sērē = ( w )</td>
</tr>
<tr>
<td>‘ripe (fruit)’</td>
<td>bôrō</td>
<td>bôrō = ( w )</td>
</tr>
<tr>
<td>‘big; fat’</td>
<td>dügí</td>
<td>dügú = ( w )</td>
</tr>
<tr>
<td>‘nasty, ugly’</td>
<td>mɔsî</td>
<td>mɔsû = ( w )</td>
</tr>
<tr>
<td>( L. &lt;HL&gt; )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘no good’</td>
<td>gɔmī</td>
<td>gɔmû = ( w^a )</td>
</tr>
<tr>
<td>c. CvCCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H.L )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘new’</td>
<td>kàndà</td>
<td>kàndà = ( w )</td>
</tr>
<tr>
<td>( L.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘coarse’</td>
<td>kȗnjî</td>
<td>kȗnjû = ( w )</td>
</tr>
<tr>
<td>d. Cv:Cv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘innocent’</td>
<td>pè:ré</td>
<td>—</td>
</tr>
<tr>
<td>( L.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘unripe, raw’</td>
<td>kèsí</td>
<td>kèsû = ( w )</td>
</tr>
<tr>
<td>( &lt;HL&gt; . &lt;HL&gt; )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘young’</td>
<td>sò:rò</td>
<td>—</td>
</tr>
<tr>
<td>e. Cv:CCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H.H )-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘lean, emaciated’</td>
<td>kò:mbó</td>
<td>—</td>
</tr>
<tr>
<td>‘slender’</td>
<td>kè:mbè</td>
<td>kè:mbè = ( w )</td>
</tr>
</tbody>
</table>
4.5.2 Expressive adverbials with adjective-like sense (‘flat’)

Some apparent “adjectives” are really expressive adverbials (§8.4.7) morphosyntactically, like dém → ‘straight’ (§8.4.7.3).

The forms in (66) are also expressive adverbials (EAs) syntactically (they take bú- in predicative function), but translate as adjectives. Like other EAs they can occur in predicative function with a following bú- ‘be’ or its negation ŋgó- ‘not be’. Although EAs cannot directly modify nouns in the fashion of true adjectives, a relative clause based on bú- can translate the relevant sense, as in kù:₁ pété → bú-mi ‘flat-topped head’ (lit. “head that is flat”).

(66) form gloss
    pété→  ‘flat and wide’
    pštɛ→  ‘flat and small, but longer than wide (e.g. nose)’
    pštɔ-pštɔ→  ‘flat, wide, and moderately thick (e.g. tortoise, nose)’
    pátɑ-pátɑ→  ‘flat and wide (e.g. face, nose)’

The vocalic alternation reflects a minor sound-symbolic system also seen here and there among verbs and other EAs (§3.4.7). The final syllable is prolonged intonationally, as with several other EAs.

4.5.3 Iterative adverbials

A small set of iterative adverbials denoting unusual shapes is presented in (67). The tone sequence is L.L.H.H. The final syllable is prolonged. A single vowel is repeated in all four syllables.

(67) form gloss
    pɛmbɛ-pɛmbɛ→  ‘shaped like a flattened calabash’
    bɛndɛ-bɛndɛ→  ‘brick-shaped’
    sɔrɔ-sɔrɔ→  ‘elongated, ovoid, barrel-shaped’
    kɛbɛ-kɛbɛ→  ‘bar-shaped with flat sides’

A different pattern, with tone sequence L.L.H.L., is observed in (68). This sequence also occurs in several iterative noun stems denoting body parts (§4.1.7).
A form like *jinjá-jinjí* ‘noisy’ (noun or adjective) is to be taken not as a simple iteration, rather as an agentive with incorporated cognate object, cf. *jinjá-jinjí* ‘make noise’ (cognate nominal followed by verb).

4.6 Participles

In principle, the term participle should denote a noun- or adjective-like form of a verb. Several Dogon languages have clearcut participles replacing ordinary verbs in relative clauses. By “clearcut” is meant that the participles have suffixes agreeing in intrinsic categories (number, human/animate) with the head NP, and take little or no verbal inflection.

Nanga is not a clearcut case, but since nouns do not mark intrinsic categories anyway (except for singular in the noun ‘woman’), the fact that relative-clause verbs generally do not agree overtly with head NPs is not surprising. Actually, verbs in negative relative clauses do agree with an animate plural head NP (§14.1.7.3-4). I will refer to relative-clause verbs as verb-participles (or participles for short), but readers should understand that the noun-y quality of these relative-clause verbs is very limited.

See §14.1.7 for full coverage of participial forms.

4.7 Numerals

4.7.1 Cardinal numerals

‘1’ is expressed as an adjective *tùmá*. The preceding noun drops tones, as before normal modifying adjectives: [pèrgè]₇ *tùmá* ‘one sheep’ ([pèrgé], [yâ:]₇ *tùmá* ‘one woman’ ([yá-ŋ] ‘woman’, unmarked plural [yâ]). *tùmá* is also used in counting sequences (‘1, 2, 3, …’).

Adverbial phrase ‘one day’, introducing a specific but non-discourse-definite day, as in ‘one (fine) day I went hunting’, is [ùsù]₇ *tùmá*; with (surprising) lexical tone on [ùsù] ‘sun, day’ and with final long vowel on the numeral. As a measure of duration, ‘one day’ has the regular noun-adjective form [ùsù]₇ *tùmá*, with tone-dropped noun and with ‘one’ in its normal shape. [ɔ:]₇ *tùmá* ‘a certain place’ in (549b) below also introduces a new, but specific discourse referent, and here *tùmá* does function as an adjective. Similarly [ãø]₇ *tùmá* ‘a/one man’ as a new discourse reference in the extended passage (584) in §15.2.8.4.

*tùmá* may be followed by either of two intensifiers. One, [dèndè], behaves like an adjective; it controls tone-dropping on *tùmá*, as in [nù]₇ *[tùmá] [dèndè] ‘one single person’. The other is expressive adverbial *lék* (§19.4.2, §8.4.3.2), which does not interact tonally with preceding words: *tùmá* *lék* ‘a single one’.

For adverbial ‘alone, by oneself’ expressed by *tùmá* or variant *tùmá:y*, see §18.1.4.2. See also *tùmá(-yë) ‘nothing but, exclusively’ in §19.4.3.
The adjective for ‘other’ is either bindé or bèndí. In practice they are used in postnominal modifying function, but not as adjectival predicates: përgè¹ bèndí ~ përgè¹ bindé ‘a/the other sheep.’

4.7.1.2 ‘2’ to ‘10’

The numerals from ‘2’ to ‘10’ are in (69).

<table>
<thead>
<tr>
<th>(69)</th>
<th>gloss</th>
<th>form</th>
<th>melody</th>
<th>tone sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘2’</td>
<td>wòy  ~ bú-wòy</td>
<td>/LH/</td>
<td>&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘3’</td>
<td>tândîː</td>
<td>&quot;</td>
<td>L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘4’</td>
<td>nỳ⁴</td>
<td>&quot;</td>
<td>&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘5’</td>
<td>nìmîː</td>
<td>&quot;</td>
<td>L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘6’</td>
<td>kùrê</td>
<td>/HL/</td>
<td>H.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>‘7’</td>
<td>sùyê</td>
<td>&quot;</td>
<td>H.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>‘8’</td>
<td>gà:rê</td>
<td>&quot;</td>
<td>H.L</td>
<td></td>
</tr>
<tr>
<td>‘9’</td>
<td>tè:sǐː</td>
<td>/LH/</td>
<td>L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘10’</td>
<td>pè:rù</td>
<td>/HL/</td>
<td>H.L</td>
<td></td>
</tr>
</tbody>
</table>

For bú-wòy versus simple wòy, see §6.4.3.

Numerals can be added to pronouns as well as to nouns. An example is iː wòy ‘we two’, see (449a) in §12.2.2. Numerals may precede or follow modifying adjectives (§6.4.2).

4.7.1.3 Decimal multiples (‘20’, …) and combinations (‘29’, …)

The multiples of ‘10’ are in (70). The initial element is one variant or another of ‘10’, showing tonal and segmental modifications. The final element in ‘20’ through ‘90’ is the relevant single-digit numeral in its usual form.

<table>
<thead>
<tr>
<th>(70)</th>
<th>gloss</th>
<th>form</th>
<th>tones</th>
<th>tone sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘10’</td>
<td>pè:rù</td>
<td>/HL/</td>
<td>H.L</td>
<td></td>
</tr>
<tr>
<td>‘20’</td>
<td>pèr-yêy</td>
<td>{LH}-/LH/</td>
<td>L.H.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘30’</td>
<td>pè-tändîː</td>
<td>{H}-/LH/</td>
<td>H.L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘40’</td>
<td>pèn-nỳ⁴</td>
<td>{LH}-/LH/</td>
<td>&lt;LH&gt;,&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘50’</td>
<td>pèn-nìmîː⁴</td>
<td>&quot;</td>
<td>&lt;LH&gt;.L.&lt;LH&gt;</td>
<td></td>
</tr>
<tr>
<td>‘60’</td>
<td>pèr-kùrê</td>
<td>{L}-/HL/</td>
<td>L.H.&lt;HL&gt;</td>
<td></td>
</tr>
<tr>
<td>‘70’</td>
<td>pèr-sùyê</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>‘80’</td>
<td>pèr-gà:rê</td>
<td>&quot;</td>
<td>L.H.L</td>
<td></td>
</tr>
<tr>
<td>‘90’</td>
<td>pèr-tè:sǐː</td>
<td>{L}-/HL/</td>
<td>L.L.&lt;LH&gt;</td>
<td></td>
</tr>
</tbody>
</table>

For the tonal patterns, see Tone-Polarization §3.7.3.3. The forms with final H- or <LH>-tone (‘20-50’, ‘90’) are sometimes heard with final low pitch when phrase-final. However, the terminal H-tone is always audible in careful pronunciation, and when followed by sây ‘only’ or by an ‘it is’ clitic.
Combinations with a single-digit (‘1-9’) numeral, like ‘11’ and ‘59’, are expressed as shown in (71). The morpheme ságâ, used only with numerals, follows the single-digit numeral; I gloss it as ‘plus’. Obviously ‘one’ in (71a) does not modify ‘ten’, so there is no tonosyntactic interaction.

\[(71)\]

\[
\begin{array}{llll}
\text{a.} & \text{pè:r} & [\text{tùmā} & \text{ságâ}] \\
& \text{ten} & \text{one} & \text{plus} \\
& \text{‘eleven’} \\
\text{b.} & \text{pè-nìmì} & [\text{tè:sì} & \text{ságâ}] \\
& \text{ten-five} & \text{nine} & \text{plus} \\
& \text{‘fifty-nine’} \\
\text{c.} & \text{ùsù} & [\text{pè-tà:ndì} & \text{tà:ndì} & \text{ságâ}] \\
& \text{day} & \text{ten-three} & \text{three} & \text{plus} \\
& \text{‘thirty-three days’} \\
\end{array}
\]

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

The stems in (72) are nouns.

\[(72)\]

<table>
<thead>
<tr>
<th>gloss</th>
<th>form</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘hundred’</td>
<td>té:mdérê</td>
</tr>
<tr>
<td>‘thousand’</td>
<td>mûsû</td>
</tr>
<tr>
<td>‘million’</td>
<td>mîly:</td>
</tr>
</tbody>
</table>


Numerals involving more than one level (‘1-99’, hundreds, thousands) did not require repetition of the modified noun in elicited examples, which occurred just once, at the beginning, like ‘sheep’ in (73). Instead, the nonfinal segments showed prosodic prolongation (→).

\[(73)\]

\[
\begin{array}{llll}
\text{[pèrgé} & \text{mûsû} & \text{wôy→]} & \text{[té:mdérê} & \text{nìmì→]} \\
\text{[sheep} & \text{thousand} & \text{two]} & \text{[hundred} & \text{five]} \\
\text{[pèrì-yêy]} & \text{[ten-two]} \\
& \text{‘two thousand, five hundred, (and) twenty sheep’} \\
\end{array}
\]

For sèŋî ‘80’ or ‘100’ in currency terms, see just below.

4.7.1.5 Currency

The currency unit used in markets is bú:du, equivalent to five CFA francs.

sèŋî is an archaic term meaning ‘100’ still used by older people in connection with currency, hence ‘500 CFA francs’ (synonym: bú:di té:mdérê).

dôgô-sèŋî ‘Dogan hundred’ means ‘80 (riyals)’, i.e. ‘400 CFA francs’.

76
4.7.1.6 Distributive numerals

‘One at a time’, ‘one apiece’, and similar distributive phrases are expressed as tûmá-tûmá. Other adverbial distributives are likewise formed by iterating the numeral. See (169a-b) for additional examples.

4.7.2 Ordinal adjectives

In addition to the regular ordinals based on numerals (see below), that for ‘how many?’ (§13.2.7) is à:ŋgây-nɔ̌:.

4.7.2.1 ‘First’ and ‘last’

The basic forms are in (74).

(74)  kiya  ‘first’
      dùmá  ‘last’

Examples: ŋdò L kiya ‘(the) first house’, ŋdò L dùmá ‘(the) last house’ (cf. ŋdò ‘house’).

kiya is irregularly related to the adverb kiya-w ‘previously, in the old days, long ago’ (43a).

4.7.2.2 Other ordinals (suffix -nɔ̌:)

Other ordinals are formed by adding -nɔ̌: to the numeral, whose tones are dropped. There are irregular forms for ‘second’, ‘third’, and ‘fourth’.

(75)  form   gloss
a. single-digit numeral
   irregular
   wònjò-nɔ̌: (or: wònjiw)  ‘second’
   tändà-nɔ̌:  ‘third’
   nɔ̀rⁿ-nɔ̌:  ‘fourth’
   regular
   nimi:-nɔ̌:  ‘fifth’
   kùrè-nɔ̌:  ‘sixth’
   sùyè-nɔ̌:  ‘seventh’
   gà:rè-nɔ̌:  ‘eighth’
   tè:sì:-nɔ̌:  ‘ninth’
   pè:r-nɔ̌:  ‘tenth’

b. decimal
   pèr-iɣèy-nɔ̌:  ‘twentieth’

c. decimal plus single-digit numeral
\[
\text{pɛ́r tɔmɔ̀ sàgà-nɔ́:} \quad \text{‘eleventh’}
\]
d. hundred
\[
tɛ́mdɛ̀rɛ̀-nɔ́: \quad \text{‘hundredth’}
\]
e. hundred plus ‘1-99’ numeral (two levels)
\[
tɛ́mdɛ̀rɛ̀ pɛ́r-yɛ̀-nɔ́: \quad \text{‘hundred and twentieth’}
\]

In (75c,e), I did not observe tone-dropping on the first part of the complex numeral, indicating that they are outside of the tonomorphologically targeted domain. In (75b), the two components of the numeral are tightly fused and are treated as a frozen unit, so the whole sequence drops tones.

4.7.3 Fractions and portions

\[\text{pɛ́jɛ́rɛ̀} \text{ commonly means (one) half}. \text{ Other (equal) fractions may be described generically as gósɔ̀ ‘portion, division’}.\]
5 Nominal and adjectival compounds

5.1 Nominal compounds

The notation used here indicates tone changes. \( x \) is a stem-class variable including n[oun], adj[ective], and num[eral]. \( \tilde{x} \) means no change in lexical tone, \( \check{x} \) means shift to \{H\} overlay, \( \check{x} \) means shift to \{L\}, \( \tilde{x} \) means shift to \{LH\}, and \( \check{x} \) means shift to \{HL\}.

5.1.1 Compounds of type (\( \mathbf{n} \mathbf{n} \))

Compounds of two nouns (one or both of which may be internally composite) where both the initial and the final have their regular tones are rare. I can, however, cite \( \text{kágê mútůkâl} \), literally “gold[metal] bushel,” which denotes an ornament, shaped like a grain measuring container, worn on the top of the ear as a pendant to an earring.

5.1.2 Compounds of type (\( \mathbf{n} \mathbf{̄} \mathbf{n} \))

One of the two most common noun-noun compound types has \{L\}-toned nominal initial (in some cases itself compounded) and a nominal final with its regular tones. This pattern competes most directly with the possessor-type compounds (§5.1.4, below). In general, the more established and lexicalized a noun-noun compound is, the more likely it is to take the tonal form (\( \mathbf{n} \mathbf{̄} \mathbf{n} \)) rather than the possessor-type compound pattern.

Examples with initial from \( \text{ɛ̀nj} \) ‘chicken’ are in (76).

(76) \( \begin{align*}
\text{ɛ̀njè-tóndî} & \quad \text{‘chicken basket’ (i.e. wicker chicken coop)} \\
\text{ɛ̀njè-ńdô} & \quad \text{‘chicken coop (constructed with bricks or stones’)} \\
\text{ɛ̀njè-biyè} & \quad \text{‘chicken’s roosting place’} \\
\text{ɛ̀njè-têŋñ} & \quad \text{‘chicken’s drinking pan’} \\
\text{ɛ̀njè-gùwá} & \quad \text{‘chicken’s foot’ (by extension ‘cock of musket’)} \\
\text{ɛ̀njè-káwsá} & \quad \text{‘chicken lice’ (name of a disease with skin sores)} \\
\text{ɛ̀njè-kámsɔɔ} & \quad \text{‘chicken finger’ (name of a tree \text{[Piliostigma]})} \\
\text{ɛ̀njè-kéwré} & \quad \text{‘chicken eggplant’ (name of a bush sp. \text{[Solanum]})}
\end{align*} \)

5.1.3 Compounds with final verbal noun, type (\( \mathbf{n} \mathbf{̄} \mathbf{n} \))

Verbal nouns take direct-object complements in the form of regular NPs (77). I do not consider them to be compounds, but if they are classified as compounds they would belong to the (\( \mathbf{n} \mathbf{̄} \mathbf{n} \)) type (§5.1.1).

(77) \( \begin{align*}
\text{yû:} & \quad \text{gírè-ndê} & \quad \text{nɔmû} \\
\text{mîllet} & \quad \text{havest-VblN} & \quad \text{be.difficult}
\end{align*} \)

‘Harvesting millet is difficult.’
An alternative construction is a compound type with \{L\}-toned initial representing an incorporated object, and \{HL\} toned verb stem in nominal function (78). The compound initial in this case (unlike the verbal-noun construction) cannot be expanded with a determiner or quantifier.

(78) a. \text{yù:\text{-}L\text{-}\text{HL} \text{bárâ}}
millet\text{-}\text{HL} gather.Nom
‘act of gathering millet after the harvest (and taking it to the village) (cf. verb \text{bárâ} ‘gather’)’

b. \text{yù:\text{-}L\text{-}\text{HL} [dá:-yê]}
millet\text{-}\text{HL} [carry.on.head-MP.Nom]
‘act of carrying millet on the head (from the field to the village)’

c. \text{ǹjà\text{-}L\text{-}\text{HL} \text{bégiré}}
grain\text{-}\text{HL} winnow.Nom
‘winnowing grain’.

Further examples are \text{lé:\text{-}L\text{-}\text{HL} tágá} ‘letter-writing’, \text{pèrège\text{-}L\text{-}\text{HL} sémé} ‘slaughtering sheep’, and \text{ná:\text{-}L\text{-}\text{HL} págá} ‘tying up cow(s)’. Such compounds also occur as locative postpositional complements for the verb \text{bá:\text{-}rî} ‘help’, see (670) in §17.5.1.

5.1.4 Possessive-type compounds (ǹ ñ) ~ (ǹ ñ)

In this compound type, the initial is treated as a possessor and the final as a possessum. That is, the initial has its regular tones, while the final has either \{HL\} or \{L\} overlay, depending on whether the initial ends in H or L tone. When eliciting new compounds, I found that my assistant often fluctuated between this pattern and the (ǹ ñ) type (§5.1.2, above). The more lexicalized compounds in common use are generally (ǹ ñ).

Because there is no sharp distinction between possessor-possessed sequences and possessive-type compounds, I do not hyphenate the latter. Compare the compound (79a) to the clearly possessive construction (79b). The \{HL\} overlay produces \text{HL dūgá-njå}. The fact that the final dūgá-njå: is already a (somewhat frozen) compound of (ǹ ñ) type is not relevant here.

(79) a. \text{ná:\text{-}L\text{-}\text{HL} dūgá-njå}
hand \text{HL} necklace
‘hand-necklace’ (term for ‘thin bead bracelets’)

b. \text{yā\text{-}ñ:\text{-}L\text{-}\text{HL} dūgá-njå}
woman-Sg \text{HL} necklace
‘a woman’s necklace’

More examples are in (80). In (80a), the \{HL\} overlay on the already /HL/-toned mūşárâ produces no audible change.
5.1.5 Agentive compounds of type (x y)

Most agentive nominals are compounds including an incorporated compound initial, usually a noun denoting a typical direct object of the action, or a cognate nominal of the verb. The initial is L-toned. The agentive form of the verb has \{LH\} overlay realized as <LH>, L.H, or L.L.H depending on syllable count. The agentive form ends in i (always H-toned), except for monosyllabic stems, which have their regular lexical vowel. In (81), the form of the inflectable verb with its typical object is given in parentheses after the free gloss. The monosyllabic finals are (81f-g).

(80)  a. \([\text{yùgùsì}^L \text{jém}]^\text{HL mûsù:rò}^\text{Hl. shawl}\)
[velvet^L black] \text{HL shawl}
‘(woman’s) head shawl of black velvet’ (< \text{yùgùsì, mûsù:rò})

b. \(\text{gô:}^L \text{ômìr}^n^i\)
fire \text{HL parent.in.law}
‘fire’s in-law’ (a plant, \text{Waltheria}) (< \text{ômìr}^n^i)

c. \(\text{bôndí}^\text{HL lé:gi}\)
rain \text{HL bird}
‘rain-bird’ (i.e., ‘cuckoo’) (< \text{lé:gi})

(81)  a. \(\text{kù: kùwí}\)
sorcery-practice.sorcery.Agent
‘sorcerer’ (< \text{kù: kùwó-})

b. \(\text{bidigà-bidigí}\)
magic.tricks-do.magic.Agent
‘magician’ (< \text{bidigà bidigí-})

c. \(\text{dàwà:rí-bírí}\)
magical.solution-work.Agent
‘magician (generally maleficent)’ (< \text{dàwà:rí bírí-})

d. \(\text{nàmà-tûrí}\)
meat-sell.Agent
‘butcher’ (meat-seller) (< \text{nàmà tûrí-})

e. \(\text{ǹdò-kèmí}\)
house-build.Agent
‘construction worker, mason’ (< \text{ǹdò kèmí-})

f. \(\text{tóndì-tè:}\)
basket-weave.Agent
‘basket-weaver’ (< \text{tóndì tè-})
g.  kènjiô-nô:
millet.beer-drink.Agent
‘drinker of millet beer’ (< kènjiô nô:>)

h.  ürî-àrí
breast-suckle.Agent
‘baby who still suckles (not yet weaned)’ (French nourrisson) (< ürî àrà)

The initial may itself be compound, as long as it has no determiner.

(82)  a.  [nà:-bîrà]-bîrî
[hand-work(n)]-work(v).Agent
‘manual worker’ (< nà:-bîrà bîrî-)

b.  [sàgi-nî]-nô:
[dried.wild.grapes-water]-drink.Agent
‘drinker of wild-grape juice’ (< sàgi-nî: nô:)

A different tonal pattern is found in jôrîyè¹-jôrîyè ‘fighter’, alongside the regular agentive compound jôrîyè¹-jôrîyì ‘fighter’, both based on jôrîyè jôrîyè- ‘fight a fight’.

5.1.6  Compounds with yi: ‘child’ and ǹjâ or nàr”á ‘fruit’

The noun yi: ‘child’ (irregular plural yi-têgè ‘children’) can be possessed, generally in the sense ‘son or daughter (of someone)’. In cases like âmbèri¹ yi: ‘chief’s child’, if the possessor is understood to be generic (‘a/any chief’s child’) the construction fits the form and meaning of possessive-type compounds (§5.1.4).

An important compound of the (ǹ ñ) tone pattern (§5.1.2) is bà:-yi: ‘child of the same agnatic family (e.g. offspring of one’s father’s brother)’. This compound is itself usually possessed, as in bà:-yi: yè: ‘my …’. Also in common use are cousin terms like tûsà-yi: ‘father’s sister’s child’ (< tûsà ‘father’s sister’).

In other compounds with this (ǹ ñ) tone pattern, the initial is not a possessor, rather a noun that defines the category that the child belongs to: tà:lìbù-yi: ‘child beggar (koranic-school pupil)’, [kè-kêrì]-yi: ‘recently circumcised boy’, lêkôl-yi: ‘school child (pupil in public school)’. In these cases the plural is with -yi-têgè. Similar compounds are used to denote the young of animals, e.g. bër-yi: ‘goat kid’, ènje-yi: ‘chick’.

For ‘girl’ and ‘boy’, see §5.1.7, just below.

With flora terms as initials, -yi: as final is a diminutive, denoting young plants (e.g. saplings) rather than fruits or other products. Thus tûmà-yi: ‘sapling (of tree)’, tô:-yi: ‘sprout’ (tô: ‘sown seeds’). My assistant accepted plurals with -yi-têgè.

For other inanimate referents, I can cite the pairs a) sèrî ‘mound of excavated earth (at a burial)’ and sèrî-yi: ‘small pit dug for corpse inside larger burial pit’; b) kês-kêrô ‘bobbin (in the shuttle of a weaver’s loom)’ and [kês-kêrô]-yi: ‘thin wooden rod on which the bobbin rotates’; and c) bërè ‘stick, wood’ and bërè-yi: ‘small stick, twig’. Again, my assistant accepted plurals with -yi-têgè.

yi: ‘child’ is not used as a compound final in the sense ‘fruit (of a specific plant)’. For this sense, the compound final is either ǹjâ ‘seed’ (e.g. for nut-like fruits) or more often nàr”á ‘fruit’ (cf. verb nàr”á- ‘give birth, bear’).
5.1.7 ‘Man/male’ (ùràá, áràá), ‘woman/female’ (yàá, yàá)

The adjectives that are used after terms for animal species, generally denoting actual biological sex, are áràá ‘male’ and yàá ‘female’. These gender terms are also used to differentiate closely related or similar plant species. For example, both local trees of the family Bignoniaceae can be called pò-bògórò, but they can be distinguished as pò-bògóròâ áràá (Kigelia africana) versus pò-bògóròâ yàá: (Stereospermum kunthianum). Likewise, the two local Cleome spp. can be called jà:²-mísírí (lit. “leatherworker-she.a.butter”), or distinguished as jà:²-mísíríâ áràá (C. viscosa) versus jà:²-mísíríâ yàá: (C. gynandra). In such cases one species is more common or more conspicuous than the other and is the most common referent in the absence of modifiers. The criteria for gender assignment is some combination of size (big = male) and shape (long & thin = male).

yàá- ‘woman’ (plural yàá) is phonologically regular before numerals and adjectives. It appears as yàá: before numerals (from ‘2’ up) as in yàá: wòy ‘two women’, and as tone-dropped yàá: before modifying adjectives: yàá: tùmá ‘one woman’ (‘1’ is an adjective), yàá: êsì ‘pretty woman’, yàá- with short vowel is the initial in certain compounds: yàá-gùrš ‘young adult woman’, yàá-wò ‘woman who has just given birth’, and yàá-nàr ‘co-wife’.


Compounds for ‘girl’ and ‘boy’ are slightly irregular. ‘Girl’ is yàá-y, while ‘boy’ is áràá-y. The final in both cases is a reduced variant of yì: ‘child’, see §5.1.6. Plurals: áràá-(y)hègè ‘boys’ and yàá-(y)hègè, with the medial morpheme often omitted.

5.1.8 Compounds with bànąá ‘owner’

The regular ‘owner of X’ construction is a possessive-type compound with final hitl: bànąá or l‘bànąá ‘owner(s)’, the tones depending on whether the initial ends in H or L tone. Simple examples are nòdó l‘bànąá ‘house owner’ and nàjá hitl: bàentiful ‘cow owner’. The unpossessed form is bàentiful ‘owner, master’.

The initial is an NP in form and may be expanded (e.g. with a determiner), as in [nàjál wò-ŋ] hitl: bà plentiful ‘the owner of this cow’.

The construction with bàнный as final may be used to define a person or object on the basis of a conspicuous attribute. An example is gùmjé hitl: bàнный ‘person with curved (hunched) back’, based on the noun gùmjé ‘curved back’. Other examples include kìyá hitl: bàнный ‘hair-owner’ (= ‘hairy person’), yàá hitl: bàнный ‘sky-owner’ (= ‘lightning jolt’), lèwè hitl: bàнный ‘owner of
sacrificial altar’ (= member of a founding family of the village), *isè bânjà ‘village-owner’ (= aboriginal, old-stock), and *tûrâ:bi bânjà ‘divination owner’ (= ‘Muslim fortune teller’).

The ‘owner’ construction competes with the characteristic suffix -*gí* (§4.2.1).

5.1.9  Loose and tight compounds with *dé*: (‘authentic’, ‘entire’)

Adjective *dé*: ‘authentic, prototypical’ is distinct tonally from *dè*: ‘mother’, but H-toned adjective *dè*: occurs with animal terms in e.g. *nànjà L dé* ‘cow that has calved at least once’ (*nànjà ‘cow’*). The senses ‘mother’ and ‘authentic’/‘entire’ are associated in other Dogon languages. The similarity to *dè-dè*: ‘papá!’, a respectful address form, may be accidental; *dè-dè*: is considered by my assistant to be derived from *dârè ‘elder sibling’*.

*dé*: was recorded as an adjective specifying the prototypical member of a multi-member category in connection with the taxon *G. bicolor*. Each included species can be individually denoted by adding an adjective or compound final (*G. bicolor*, *G. flavescens*, *G. jàmgà* *G. tenax*, *G. sòdè*: *G. villosa*). I recorded *G. bicolor* *dé*: ‘prototypical Grewia’ for *G. lasiodiscus*. There is, however, some disagreement among informants as to the species-specific epithets.

*kùmbì* *Dé*: ‘prototypical (broad-leaved) fig tree’ is a synonym for *kùmbì* *pírì ‘white fig tree’*, denoting the mountain fig *Ficus abutilifolia*. The other species called *kùmbì* is *F. platyphylla*, which can be specified as *kùmbì* *bárì ‘red fig tree’*.

A non-prototypical variant of a species may alternatively be named after the prototypical species, by adding adjective *sàndà*, glossable as ‘false’ (though ‘second-string’ as used in baseball is closer to the Nanga sense). My only examples are these: *kûrî ‘wild-grape tree’* (*Lannea microcarpa*) and *kûrî* *sàndà* (*L. acida*); *wèrè-wèrè ‘swift or swallow’* (focally a large swift) and *wèrè-wèrè* *sàndà ‘small swift or swallow’*.

*Dé*: is also used productively in the sense ‘entire (plant)’, distinguishing this from a fruit or other part that is also denoted by the same name. Thus *màngòrò* *Dé*: ‘mango tree’ (*màngòrò*).

5.1.10  Natural-species iterative compounds with medial linking element

There is a possible case of *X-dòŋ-X* in one bird name, viz., *pún-dòŋ-póriyè ‘bulbul’*.

*bárì-dìnji-bàrá* ‘mud-dauber wasp (Delta)’ is an apparent X-Y-X compound, but *dìnji*- is too heavy to be considered a simple linking element. *bárà*- means ‘gather’ (among other things) and here refers to the mud-dauber’s incessant collecting of bits of mud to construct its nest on walls. *dìnji*- is somewhat obscure but is probably related to the medial element in *sàgà-dìnji-bàrá* ‘stump of cut-down millet stem’ (with *sàgà ‘stem’*), cf. (with different vowel) *tûmbà-[dû-dàŋjû] ‘tree stump’*.

I did not observe any instances of flora-fauna (or other) nouns of the type X-L-X with an iterated segment X flanking a simple linking element related to Jamsay *-na-*, Tommo So *-ma-*, Yanda Dom *-mà- ~ -nà-, and cognates. However, *kûmbmà* ~ *kûmbmà* ~ *kûmbmà*, denoting certain annual vines of the genus *Ipomoea* (at least *I. coscinosperma* and *I. dichroa*, and probably others), is recognizably related to the verb *kûmbi- ‘climb’*. The final syllable of the noun is possibly related to the Tommo So linking morpheme. Alternatively, it could be related to causative *-mì-*. 

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The hoopoe bird (*Upupa*) is called goró-màsógaró or goró-màsogóró. A connection of this -mà- with the linker in the widespread X-nàc(-)X or X-nàc(-)X type of iterative compound is possible but uncertain. The first element is understood by native speakers to mean ‘nape’ (more accurately, ‘back of skull just above nape’), which is expressed by goró in Jamsay, but as kò-kò: in Nanga. The final is understood to mean ‘peck, eat by pecking’, the idea being that the hoopoe’s extravagant nape crest can be used to peck at food. ‘Peck’ is só-gó in Nanga, and sógó pronounced [sóyó] in Jamsay. Overall it looks like the Jamsay form is an adaptation of some variant of the Jamsay term for hoopoe, [[kà:-lè]-sóyóyó],[[goró-lè]-sóyóyó], which is slightly irregular for ‘peck with mouth, peck with nape’. The medial -mà- in the Nanga term may therefore be the Jamsay possessive morpheme mà.

5.1.11 Instrumental relative compounds (‘oil for rubbing’) In this construction, the noun is head of a relative clause (with imperfective participle) describing the function, e.g. ‘water that one drinks’. A nonspecific human subject (‘they’ or ‘one’) is understood.

(84) a. ni:\(1\) náj-\(1\)mi water drink-Ppl.Ipfv ‘water for drinking’

b. ni\(1\) diày\(1\)mi water\(1\) bath-Ppl.Ipfv ‘water for bathing’

Stems of the scrambling liana *Cynanchum viminalis* are used as a treatment for sore necks. The plant is called kòrò\(1\) mámyé-mì, which contains kòrò ‘neck’ and an imperfective participle (not otherwise in use) related to màmbi→‘tilted’.

This instrumental construction is tonally distinct from a construction with the agentive form of a causative verb and an incorporated object noun. The latter is of (x, y) type, like other agentive compounds. For example, a harmful wood-boring larva is denoted by the compound i:jì\(1\) [hò-[kòyò-mì]], literally “grub” [house-[decay-Caus.Agent]]. Here the agentive compound functions as a modifier for ‘grub’.

5.1.12 Other phrasal compounds

Clause-like phrasal compounds occur here and there.

A “false” indigo bush, *Indigofera omissa*, is called gará gà-là (“indigo put.in-Reverse.imp”) i.e. “take (the) indigo out (after putting it in)!” It is based on verb garà\(i\): ‘put (liquid, grain) in (container)’.

The scolopender (*Scolopendra sp*), a centipede whose bite is widely believed to be lethal to young women, is called [yà-gòrò]-kùwò-\(j\): “[young woman]-bite-kill.”

A tall erect herb with sharply pointed spines on its fruits, *Rogeria adenophylla*, is called gà:kà: [wù déy → kiyé-η-è:], slightly irregular (or dialectal) Nanga for “if it has pricked, they don’t say ‘oh mother!’ ”

kà-kà: dè:rè-w (“bigger than a grasshopper”) is the name for the smallest bird in the zone, the cricket warbler.
Other phrasal compounds are borrowed, in full or in part, from other languages.

**tāgā**1 [mōtī yā:tā] denotes a plastic man’s shoe with raised top. tāgā ‘shoe’ has as compound-like modifier a Fulfulde phrase *mooti yaata* ‘(it) doesn’t go to Mopti’. Other nearby Dogon languages (Bankan Tey, Najamba, Tommo So) also have terms based on this Fulfulde phrase.

A lightweight woman’s plastic shoe is called *jēnēbā-[yērē-yērē]*, which is said to mean “Djēnēbâ [woman’s name] is shaking” in Bambara.

A grass whose whitish seeds are difficult to pick off, *Elionurus elegans*, is called by the Jamsay phrase *{ŋy: bērē} [nāng yōw-ŋ]*, “(if you) can pick (it), receive (i.e. you win) a cow.” Similar names occur in some other Dogon languages.

A tenacious weedy grass of cultivation, *Eragrostis tremula*, is called by the Jamsay phrase *âsîmâ lê:-gô*, “Asima (name) does not fear.”

A trunkfish (*Marcusenius*) whose flesh contains bones that are dangerous for children is called by the Tommo So phrase *{ŋ: mɔ̀ dây ɔbɔ̀}, literally ‘kill my child for me!’

### 5.2 Adjectival compounds

#### 5.2.1 Bahuvrihi (“Blackbeard”) compounds ( possui)

Here the initial is a noun that denotes an attribute of the referent. The final is an adjective or cardinal numeral that describes or quantifies the attribute. The compound as a whole may be used as a modifying adjective, or absolutely as a stand-alone noun.

The initial noun keeps its regular tones. The final has {HL} overlay, expressed as <HL>, H.<HL>, H.L, or H.H.L depending on syllable count. If the initial ends in an H-tone, the tonal pattern of the bahuvrihi is the same as for possessive-type compounds. However, in the bahuvrihi, the final has {HL} overlay even if the initial ends in L-tone.

I transcribe bahuvrihis as hyphenated compounds.

#### 5.2.1.1 With adjectival compound final

Examples are in (85). The initial, which often denotes a body part, has its regular tones. The adjectival final has {HL} overlay. For the location of the tone break cf. §3.7.3.2. The regular form of the adjective showing its lexical melody is given in parentheses.

(85)  

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Tonal Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>bēndé-dûgî</td>
<td>‘big-bellied’</td>
<td>(&lt; dûgî)</td>
</tr>
<tr>
<td>kû:-dûgî</td>
<td>‘big-headed’</td>
<td>(&lt; dûgî)</td>
</tr>
<tr>
<td>kû:-mê:njî</td>
<td>‘small-headed’</td>
<td>(&lt; mè:njî)</td>
</tr>
<tr>
<td>sègê-mê:njî</td>
<td>‘skin-and-bones’ (lit. “skeleton-thin”)</td>
<td>(&lt; mè:njî)</td>
</tr>
<tr>
<td>gèsi-bùrî</td>
<td>‘soft-bodied’ (= ‘soft-skinned’)</td>
<td>(&lt; bùrî)</td>
</tr>
<tr>
<td>kî:rê:-sî</td>
<td>‘pointy-nosed’</td>
<td>(&lt; sî)</td>
</tr>
<tr>
<td>kû:-pûrûgî</td>
<td>‘with an off-white head’</td>
<td>(&lt; pûrûgî)</td>
</tr>
<tr>
<td>lî:gi dûrâ-gûrî</td>
<td>‘long-tailed bird (e.g. whydah, starling)’</td>
<td>(&lt; gûrî)</td>
</tr>
</tbody>
</table>

One of two terms for (edible) grasshoppers of the genus *Acorypha* is the double bahuvrihi *[tëw-dûgû]-*[nûw“s-ërû]*, literally “hind.leg-fat, meat-delicious,” probably borrowed with little or no change from dialectal Jamsay, cf. mainstream Jamsay *[tûm-dûgû]-*[nûw“s-ërû].
5.2.1.2 With numeral compound final

Examples are in (86), with the regular form of the numeral in parentheses. In the compound, the numeral has the same \{HL\} overlay as in the adjectival examples given above.

(86) 
\begin{align*}
\text{kû-} & \text{-wôy} \quad \text{‘two-headed’} \quad (< \text{wôy}) \\
\text{kû-} & \text{-tâ:ndî} \quad \text{‘three-headed’} \quad (< \text{tâ:ndî}) \\
\text{nâ-} & \text{-nîmî} \quad \text{‘five-armed’} \quad (< \text{nîmî}) \\
\text{nâ-} & \text{-kûrê} \quad \text{‘six-armed’} \quad (< \text{kûrê})
\end{align*}

5.2.1.3 Alternative bahuvrihi with \text{-nî} suffix

I also recorded a minor compound construction with bahuvrihi-like sense but with a different form, including a terminal suffix \text{-nî} following the adjective. The only two examples I have are in (87). Each shows a vowel-length and tonal change vis-à-vis the normal form of the adjective. As the glosses suggest, these belong to a slangy, insult-prone register.

(87) 
\begin{align*}
\text{dûmbô-} & \text{kêmbêy-} \text{nî} \quad \text{‘having skinny buttocks’} \quad (< \text{kê:mbê \text{‘slender [person]’}}) \\
\text{dûmbô-} & \text{tâsirây-} \text{nî} \quad \text{‘having flat buttocks’} \quad (< \text{tâsirî \text{‘flat and small’}})
\end{align*}

5.2.2 Compounds of \text{\ddot{s}:- ‘very’ plus adjective}

The initial element \text{\ddot{s}:-} may occur with a following adjective in L-toned form, as one way of emphasizing the extent of the quality. It is used in predicates with the \text{‘it is’} clitic (my assistant balked at suggested examples as part of a nonpredicative NP). Examples: \text{\ddot{s}:-dûgû = \emptyset \text{‘he/she is very fat’}, \ddot{s}:-dûgû = m-û \text{‘you-Sg are very fat’}; \ddot{s}:-bârûtû = \emptyset \text{‘it is very red’}.

See also the adjectival intensifiers in §8.4.7.2.
6 Noun Phrase structure

6.1 Organization of NP constituents

6.1.1 Linear order

The basic ordering of elements within NPs is (88).

(88) Order within NP (first approximation)

a. strong discourse-definite demonstrative *kú* ‘that (same) …’ (§6.5.1)

b. preposed possessor
   b1. possessor NP
   b2. pronominal possessor (inalienable, except 1Sg and 3Sg)

c. noun

d. pronominal possessor (inalienable, 1Sg or 3Sg, optionally)

e. modifying adjective(s)

f. cardinal numeral or distributive
   (may switch position to precede e or to follow g)

g. pronominal possessor (all categories, especially alienable)

h. determiners
   h1. deictic demonstrative pronoun ‘this/that’
   h2. definite morpheme

i. non-numeral quantifiers
   universal quantifier ‘all’ (*kéréw*)
   distributive quantifier ‘each’ (*kámá, kêw*)

Examples are in (89). After the free translation of each example, an indication of which positions in (88) above are filled is given in curly brackets.

(89)  

a. *kú á:mádù lńdó*  
   DiscDef Amadou lhouse  
   ‘that (same) house of Amadou’s’ {abc_____}

b. *kú ú lèsí lńè*  
   DiscDef 2SgPoss uncle lDef.AnSg  
   ‘that (same) uncle of yours-Sg’ {abc_____ h_}
c. [nèr³i tà:ndì]¹⁺ bù:
[dog three]¹⁺ Def.AnPl
‘the three dogs’  {__c__f_h_}

d. [nèr³i tà:ndì]¹⁺ wè:
[dog three]¹⁺ Dem.AnPl
‘these three dogs’  {__c__f_h_}

e. [pèrgé¹⁺ bù: kéréw] ̀ńné-ér-à
[sheep Def.AnPl all] go-Pfv1a-3PlSbj
‘All the sheep went.’  {__c____hi}

f. ñdò tà:ndì: [ù ₁HL.yè] ¹⁺ Lý kéréw
house three [2Sg ₁HL.Poss.InanPl] ¹⁺ Def.InanPl all
‘all three of your-Sg houses’  {__c__fgh_}

g. ñdò¹⁺ ñwó [ù ₁HL.gá] ¹⁺ ñgu
house¹⁺ big [2Sg ₁HL.Poss.InanSg] ¹⁺ Def.InanSg
‘your-Sg big house’  {__cdef__}

h. ñdò¹⁺ ñwó gá:ré: [ù ₁HL.yè] ¹⁺ Lý
house¹⁺ big eight [2Sg ₁HL.Poss.InanPl] ¹⁺ Def.InanPl
‘your-Sg eight big houses’  {__c_egfh_}

i. lèsí nà mòsí rú:kè
uncle 3SgPoss bad six
‘his/her six bad (maternal) uncles’  {__cdegf_}

kámá ‘each’ is somewhat problematic in terms of ordering. It is usually combined with a simple noun: ‘each house’ (ñdò¹⁺ kámá), ‘each person’ (nù¹⁺ kámá). It does not co-occur with the universal quantifier ‘all’ for logical reasons.

However, kámá may follow a cardinal numeral that has summative (rather than distributive) sense. Therefore (90a) means ‘each of the three has two women’ rather than ‘each (group of) three has two women’. My assistant had difficulty with elicitation of distributive examples, but in (90b) he eventually settled on a construction with kèw, a less common ‘each/every’ expression that is syntactically adverbial and whose core sense is ‘equally’ (cf. Jamsay cèw).

(90) a. [ár³à tà:ndì]¹⁺ kámá] [yà: wòy] sò-Ø
[[man three]¹⁺ each] [woman two] have-3SgSbj
‘Each of the three men has two women.’

b. [ár³à tà:ndì:] kèw [kilò¹⁺ tùmá] bérè-m-è
[man three] equally [kilo¹⁺ one] get-Ipfv-3PlSbj
‘Each/Every (group of) three men gets one kilo.’

Kámá may co-occur with a possessor, though the combination is somewhat awkward. The sense is generally partitive (91). Kèw is more freely used in such contexts, see §6.6.2.
It may also follow a determiner (92).

(92) \[yì-tēgē\quad wē:\]\Lkámá\quad each
‘each of these children’

Numerals often precede postnominal possessors (93a). However, care should be taken to distinguish this NP construction from a clause with an unquantified possessed NP as subject and with a numeral as predicate (93c).

(93) a. \(pērgē\quad kūrē\quad [ú\quad [2Sg\quad yê]]\quad [2Sg\quad yê]\)
‘your six sheep’

b. \(pērgē\quad [ú\quad yê]\quad kūrē\[
‘six sheep’

[=a)]

[c. \([pērgē\quad [ú\quad yê]]\quad kūrē=yê\][
‘Your sheep are six (in number)’.

6.1.2 Headless NPs (absolute function of demonstratives, etc.)

Deictic demonstrative pronouns (§4.1.2), universal quantifiers (‘all’, §6.8.1), and bipartite pronominal possessors can be used absolutely (i.e. without a noun).

(94) a. \(ŋ̀gû\quad ọ̀gà\quad ọ̀gà\)
‘I won’t eat that.’

b. \(kérọ̀\quad ọ̀\quad jè-Ø\)
‘He/She ate everything.’

c. \(á\quad gà\)[
‘his (own) thing’, as direct object, from (744) in the sample text
6.1.3 Apparent bifurcation (in relatives)

Possessors (preceding or following the head noun), modifying adjectives, and cardinal numerals remain with the noun to form the internal head NP of a relative. Determiners (demonstrative pronouns, definite morphemes), non-numeral quantifiers (‘each’, ‘all’), and discourse particles like the topic particle follow the verb-participle, and may therefore be separated from the internal head NP by various other constituents. This apparent bifurcation is best analysed as a consequence of an underlying NP structure wherein a relative clause is positioned between numerals and determiners, and where the elements to its left move into the relativization site, see chapter 14.

6.1.4 Internal bracketing and tone-dropping in unpossessed NPs

Within an NP that does not contain a preposed possessor, an \{L\} overlay (tone-dropping) is imposed on the X, which is either a simple noun or a word-string beginning with a noun, in the constructions shown in (95). NPs that do contain a possessor are covered in §6.2 below.

(95) Tone-Dropping within NP

a. \([X^L + \text{adjective}]\) (“adjectives” includes ordinals)
b. \([X^L + \text{káma ‘each, any’}]\)
c. \([X^L + \text{postnominal determiner}]\)

The tonosyntactic controllers (adjectives, ‘each’, determiners) are the reference-restricting elements that may follow a noun within the NP. Possessors and relative clauses are also reference-restricting and they too control tones on NPs.

Tone-dropping is indexed by superscript \(^L\) on the side (left or right) of the targeted word or bracketed word string that “points” toward the controller. Examples: ǹdò ‘house’ drops tones to ǹdò\(^L\) before a modifying adjective in (96a), a demonstrative pronoun in (96b), a definite morpheme in (96c), and distributive quantifier kámá ‘each’ in (96d).

(96) a. \([ǹdò^L \ ɛ̀sí\ yā \ sò-y] \ [\text{house}^L \text{ good}] \text{ Exist have-1SgSbj} ‘I have a good house.’

b. \(ǹdò^L \ ŋú\) \ [\text{house}^L \text{Dem.InanSg}]

‘this house’

c. \(ǹdò^L \ gú\) \ [\text{house}^L \text{Def.InanSg}]

‘the house’

d. \(ǹdò^L \ kámá\) \ [\text{house}^L \text{each}]

‘each house’

Recursive tone-dropping has arguably applied in (97), which has two adjectives.
In a cyclical model, ‘red’ controls tone-dropping on ‘house’, and is then itself tone-dropped by the following adjective following ‘good’.

Recursion is also a possibility in (98), where kámâ ‘each’ controls tone-dropping on the demonstrative pronoun wè: ‘these’, which has already induced tone-dropping on ‘children’. Again, the alternative analysis is that kámâ controls one-step tone-dropping on the two preceding words.

But it is more likely that the final adjective ‘good’ in (97), and ‘each’ in (98), simultaneously tone-drop both preceding words in a single step. There is clear evidence for multi-word tonosyntactic targets of a single controller in examples like (101a-c) and (102) below. I will therefore generally not include the parenthesized \(^{(L)}\) superscript in transcriptions.

Tone-dropping does not apply to X in the combinations in (99) within an NP. Numerals and quantifiers are not reference-restricting; they may maximize reference (‘all’) and in any event they do not divide a set into subsets of excluded and potentially included specific individuals. Postnominal pronominal possessors may restrict reference, but most of them originated as appositions (‘house my-thing’ = ‘my house’), and in Nanga they still have an apposition-like feel. Discourse-functional morphemes do not alter reference.

(97) \[[\text{ǹdò}^{(L)} \ bár'i]^{L} \ ësì] \ yá \ sò-y \ [\text{house}^{(L)} \ \text{red}]^{L} \ \text{good}] \ \text{Exist} \ \text{have-1SgSbj} \n\]

‘I have a good red house.’ (ǹdò, bár'i)

(98) \[[\text{yì-tègé}^{(L)} \ wè:]^{L} \ \text{kámâ} \ [\text{child-Pl}]^{(L)} \ \text{DemAnPl}]^{L} \ \text{each} \n\]

‘each of these children’ (yì-tègé, wè)

Examples are in (100). In (100b-c) ‘house’ is tone-dropped by the demonstrative, and the following quantifiers have no tonal effect.

(99) No Tone-Dropping

a. [X + cardinal numeral]  
   b. [X + universal quantifier kéréw ‘all’]  
   c. [X + adverbial quantifier kèw ‘each, all’]  
   d. [X + postnominal pronominal possessor]  
   e. [X + discourse-function morpheme (topic, ‘also’, ‘even’, ‘only’, etc.)]

Examples are in (100). In (100b-c) ‘house’ is tone-dropped by the demonstrative, and the following quantifiers have no tonal effect.

(100)  

a. ǹdò \ t'à:ndí:
   \text{house} \ \text{three}  
   ‘three houses’

b. ǹdò^{L} \ \text{yè} \ \text{kéréw} \  
   \text{house}^{L} \ \text{Dem.InanPl] \ \text{all}  
   ‘all of these/those houses’

c. ǹdò^{L} \ \text{yè} \ \text{kèw} \  
   \text{house}^{L} \ \text{Dem.InanPl] \ \text{each}  
   ‘each of these/those houses’
This raises the question of what happens when a sequence of tonally independent words like those in (100) is itself followed by a tone-dropping controller, such as a determiner. kèrèw ‘all’ cannot be followed by anything within the NP, but numerals and possessors can be.

In the absence of a possessor, when N-Num is followed by a determiner, both the noun and the numeral are tone-dropped. This is shown by bracketing the two words and placing the \(^1\) superscript on the right bracket. The determiner has its normal pronunciation including a \(^1H\)-tone (101a-c).

\[
\text{(101) a. } [\text{ǹdô} \quad \text{tà:ndì}]^L \quad \text{yēy} \\
\quad [\text{house} \quad \text{three}]^L \quad \text{Dem.InanPl} \\
\quad \text{‘these three houses’ (ǹdô)} \\
\]

\[
\text{b. } [\text{yà:} \quad \text{wòy}]^L \quad \text{bù:} \\
\quad [\text{woman} \quad \text{two}]^L \quad \text{Def.AnPl} \\
\quad \text{‘the two women’ (yà:, wòy)} \\
\]

\[
\text{c. } [\text{yà:} \quad \text{wòy}]^L \quad \text{wē:} \\
\quad [\text{woman} \quad \text{two}]^L \quad \text{Def.AnPl} \\
\quad \text{‘these two women’} \\
\]

Distributive quantifier kámá ‘each’ can also control simultaneous tone-dropping on a noun and a numeral (102).

\[
\text{(102) } [[\text{mù} \quad \text{tà:ndì}]^L \quad \text{kámá}] \\
\quad [[\text{person} \quad \text{three}]^L \quad \text{each}] \\
\quad \text{[kilo}\quad \text{tùmá-tùmá]} \\
\quad \text{[kilo}\quad \text{one-one]} \\
\quad \text{‘one kilo for each three persons’} \\
\]

Given the clear evidence that a controller can target a multi-word domain, I reject the cyclical model suggested above for (97) and (98).

We will see below that things change when a possessor is added to the mix in (101a-c); in this case, the determiner is itself tone-dropped (with some exceptions) and then has no tonal effect on the preceding words; see §6.5.2.

### 6.2 Possessives

Nonpronominal possessors always precede the possessed noun (and the latter’s modifiers). Pronominal possessors also precede the possessed noun in the case of inalienable possession (‘your uncle’), except for 1Sg and 3Sg, which always follow. With alienables (everything except kinship and similar relationships), all pronominal possessors follow the noun and its inner modifiers.

Preposed (but not postposed) possessors control a tone overlay on the noun and (usually) the modifiers. The overlay is \{HL\} if the possessor ends in an H-tone, \{L\} if it ends in an L-tone. Superscripts \(^1H\) and \(^1L\) indexing the prior application of these overlays are placed on the left edge of the targeted word or word-string, “pointing” to the preposed possessor.
Inalienable possessives are quirky when modifiers are included and the possessor is pronominal (‘your nasty uncle’, ‘your six nasty uncles’). The domain of the possessor-controlled overlay can be narrowed to just the noun, and the postposed 1Sg and 3Sg possessors may shift to immediate postnominal position.

When there is both a preposed possessor and a postnominal reference restrictor, a tonosyntactic conflict occurs. This is the case with Poss-N-Adj and Poss-N-Det combinations. In many cases, the preposed possessor trumps the right-to-left controller. This happens not only with Poss-N-Adj, but also (usually) with Poss-N-....-Det. This priority is most easily observable when the possessor-controlled overlay is {HL}, since the only overlay controlled by right-to-left controllers is {L}, i.e. tone-dropping. The unsuccessful right-to-left controller drops its own tones, with some exceptions. This happens to determiners even when the possessor is postposed to the noun; see §6.5.4.

However, a preposed or postposed pronominal possessor in inalienables is sometimes itself absorbed into the domain of a right-to-left controller. In this case, the right-to-left controller keeps its tones, and the possessor (along with the noun and its modifiers) is tone-dropped. The prosodic lightness of such Poss-N combinations (often two or three total syllables) may be a factor in this respect.

A Poss-N-Adj sequence appears as [Poss\\(^{\text{HL}}\)N Adj]. The choice between {HL} and {L} overlay depends on the final tone of the possessor. The adjective is {L}-toned in either case, confirming that the possessor is the dominant tonosyntactic controller in this combination.

\[
\begin{align*}
&\text{a. } \hat{u}: \text{HL} [lèsì] \text{HL mòsi} \text{HL bad} \\
&\quad \text{2SgPoss [uncle bad]} \\
&\quad \text{‘your-Sg bad uncle’ (mòsi)} \\
&\text{b. } \hat{u}: \text{L} [lèsì] \text{L kàndà} \\
&\quad \text{2PlPoss [uncle new]} \\
&\quad \text{‘your-Pl new uncle’ (kàndà)}
\end{align*}
\]

When a pronominal possessor follows the possessed noun, it comes at the end of the core NP (following any adjectives), and there is no tonal interaction between the possessor (with its possessive classifier) and the core NP. In (104a-b), the N-Adj combination has the same form it would have without the possessor.

\[
\begin{align*}
&\text{a. } lèsì \text{L mòsi yè:)} \\
&\quad \text{uncleL bad 1SgPoss.AnSg} \\
&\quad \text{‘my bad uncle’} \\
&\text{b. } [̀dò \text{L} wàs] [ù \text{HL gò}] \\
&\quad [\text{houseL big}] [\text{2Sg HL Poss.InanSg}] \\
&\quad \text{‘your-Sg big house’}
\end{align*}
\]

6.2.1 Alienable possession

For special features of kin terms (with pronominal possessor), see §6.2.2 (inalienable possession). In this section I cover the productive possessed NP construction applicable to the great majority of possessed nouns.
6.2.1.1 Nonpronominal NP as preposed possessor

As shown in §6.2.2.1 below, there is no difference between alienable and inalienable possessives when the possessor is a nonpronominal NP and the possessum is a simple noun. Nonpronominal possessors always precede the possessed NP.

The possessed noun has either of two possessor-controlled overlays. If the possessor ends in an L-tone (including falling <HL> and bell-shaped <LHL>), the possessor-controlled contour is {L}. This word-level tone-dropping is indicated by \(^L\) superscript at the left edge of the target domain (105).

There is no overt genitive linker between the possessor and the possessed noun. See (684) in §17.6.3 for a textual occurrence of an apparent linker \(m\) that may be cognate to genitive linkers in a few other Dogon languages.

(105) a. \(sùm\áyl\á \L dò\)
   Soumaila \L house
   ‘Soumaila’s house’ (< \(dò\))

b. \(sùm\áyl\á \L pèrgè\)
   Soumaila \L sheep
   ‘Soumaila’s sheep-Sg’ (< \(pèrgè\))

c. \([b\á : yè:\]\)
   [father 1SgPoss.AnSg] \L sòm
   ‘my father’s horse’ (< \(sòm\))

If the possessor ends in an H-tone, the possessor-controlled overlay is {HL}. The tone break on the possessed noun occurs near the right edge of the stem but does not obliterate the L-tone: \(C\tilde{V}, CV\tilde{C}\tilde{V}\) (with final falling tone), \(CV\tilde{C}\tilde{V}C, CV\tilde{C}\tilde{V}, CV\tilde{C}\tilde{V}\tilde{C}, CV\tilde{C}\tilde{V}C\tilde{V}\), etc. This overlay is indicated by an \(^{HL}\) superscript at the left edge of the target domain. Examples are in (106), with the lexical form of the noun shown in parentheses after the gloss.

(106) {HL}-toned possessed noun after final-H-toned possessor

a. possessor is \(y\á-\eta\) ‘a woman’
   \(y\á-\eta\) \(^{HL}\) sòm
   ‘a woman’s horse’ (< \(sòm\))
   \(y\á-\eta\) \(^{HL}\) k\á\¡\ì
   ‘a woman’s calabash’ (< \(k\á\¡\ì\))
   \(y\á-\eta\) \(^{HL}\) gúl\á\¡\ir\ì
   ‘a woman’s ax’ (< \(gúl\á\¡\ir\ì\))
   \(y\á-\eta\) \(^{HL}\) t\üng\ü\¡\ir\ì
   ‘a woman’s stool’ (< \(t\üng\ü\¡\ir\ì\))
   \(y\á-\eta\) \(^{HL}\) gú\sj\ir\ì
   ‘a woman’s de-braiding tool’ (< \(gú\sj\ir\ì\))
   \(y\á-\eta\) \(^{HL}\) b\is\i\¡\ý\em\ì
   ‘a woman’s acacia’ (< \(b\is\i\¡\ý\em\ì\))

b. possessor is \(y\á: w\ö\ý\) ‘two women’
   \([y\á: w\ö\ý]\) \(^{HL}\) sòm
   ‘a horse of two women’

c. possessor is \(y\á: \L n\á\) ‘the woman’
   \([y\á: \L n\á]\) \(^{HL}\) sòm
   ‘the woman’s horse’

d. possessor is \(y\á: \L w\ö-\eta\) ‘this woman’
   \([y\á: \L w\ö-\eta]\) \(^{HL}\) sòm
   ‘this woman’s horse’
e. possessor is yà-ŋ kérêw 'every woman'

[yà-ŋ kérêw] ℳ som ‘every woman’s horse’

As shown especially by the longer possessed nouns like ‘acacia’ at the bottom of (106a), the tone break in {HL} occurs close to the right edge of the stem. However, most quadrisyllabic noun stems can be treated phonologically as compounds, unlike ‘acacia’ in (106a), whether or not they actually originated as compounds. If so, the {HL} overlay is completed on the compound initial, with the compound final then continuing the L-tone (107). CvCv- initials are realized as CvCV- instead of as CvCV-, since a falling tone cannot occur in a word-medial syllable. (107) also shows alternative pronunciations not involving a compound break, i.e. treating ‘perfume’ and ‘Albizia tree’ as unsegmentable quadrisyllabics.

\[(107)\]

\[a. \ yà-ŋ \begin{array}{l} \text{HL} \\ \text{lăsǐ-kăr̥} \end{array} \ 'a \text{woman’s perfume}' (\begin{array}{l} < \text{lăsǐ-kăr̥} \end{array}) \]

\[\text{or:} \ yà-ŋ \begin{array}{l} \text{HL} \\ \text{lăsĭkăr̥} \end{array} \]

\[b. \ yà-ŋ \begin{array}{l} \text{HL} \\ \text{sūǧ-pàpà} \end{array} \ 'a \text{woman’s Albizia tree}' (\begin{array}{l} < \text{sūǧ-pàpà} \end{array}) \]

\[\text{or:} \ yà-ŋ \begin{array}{l} \text{HL} \\ \text{sūǧp̌pàpà} \end{array} \]

6.2.1.2 Tones of modifiers following an alienably possessed noun

If the possessor is nonpronominal, there is no difference between alienable and inalienable possession in the tonal treatment of modifiers. The comments in this section on alienables will therefore apply to both. See §6.2.2.2 for specific material on inalienables.

If the noun that heads the possessum is followed by a modifying adjective, tone-dropping controlled by the preposed possessor extends to that modifier as well. In (108a-b), both ‘big’ and ‘house’ undergo tone-dropping. Phonologically, the tone overlay is first applied to the noun, so that the L-tone portion of the {HL} contour is audible on the final syllable or mora of the noun. This is also the case with the compounds described in the preceding section. A light bisyllabic (CvCv, nCv) with {HL} overlay is realized as CvCv or nCv before an adjective, though this can be pronounced CvCV or nCv to avoid a contour tone in a medial syllable in the noun-adjective sequence. Then the L-tone of the overall {HL} extends to the end of the adjective. If the noun and adjective were treated as an undifferentiated syllable string, the tone break in the {HL} overlay would occur at the final syllable break in the adjective, giving e.g. the incorrect #yà-ŋ [\text{HL}[n̥dō \ \text{sw̃}]] in (108b). In other words, word-boundaries within the tonosyntactically targeted string remain “visible.”

\[(108)\]

\[a. \ [\text{sʊm̃ryà} \begin{array}{l} \text{L} \\ \text{n̥dō \ \text{sw̃}} \end{array}] \ \text{ār̥̃n̄à \ bʊ-Ø} \]

[Soumaila \begin{array}{l} \text{L} \\ \text{[house \ big]} \end{array}] \ \text{where?} \ \text{be-3SgSbj} \]

‘Where is Soumaila’s big house?’ (< n̥dō, sw̃)

\[b. \ [yà-ŋ \begin{array}{l} \text{HL} \\ \text{n̥dō \ \text{sw̃}} \end{array}] \ \text{ār̥̃n̄à \ bʊ-Ø} \]

[w̃oman \begin{array}{l} \text{HL} \\ \text{[house \ big]} \end{array}] \ \text{where?} \ \text{be-3SgSbj} \]

‘Where is a woman’s big house?’ (< n̥dō, sw̃)

In the absence of the possessor, the adjective would have controlled tone-dropping on the noun in such examples. As in similar previous cases, one could argue for a cyclical tonosyntactic derivation, whereby first N-Adj becomes [N^l Adj], then the possessor-controlled overlay produces [Poss ^l[HL][N^l Adj]] with the first-cycle {L} obliterated by the
final overlay (obliteration shown by double strike-through). Or one can posit a simpler, one-
step tonosyntax with just the possessor-controlled overlay: [Poss \(^{\text{H}}\)[N Adj]]. There is no
obvious way to resolve this question empirically, but I prefer the one-step model for reasons
given above.

Tone-dropping also targets a cardinal numeral following a possessed noun (or noun plus
adjective). For example, \(\text{kùrê} \) ‘six’ drops to \(\text{kùrê} \) in (109a-b), as part of the bracketed domain
targeted by the tonosyntactic controller ‘Soumaila’.

\[(109) \text{ a. } [\text{sùmàylà} \text{ L}{\text{nòdò} \text{ kùrê}}] \text{ ãr"ànà} \text{ bù-Ø}
\text{[Soumaila} \text{ L}[\text{house} \text{ six}]] \text{ where? be-3SgSbj}
\text{‘Where are Soumaila’s six houses?’ (\text{nòdò, kùrê})}
\]

\[(109) \text{ b. } [\text{sùmàylà} \text{ L}{\text{nòdò} \text{ òwɔ̀ kùrê}}] \text{ ãr"ànà} \text{ bù-Ø}
\text{[Soumaila} \text{ L}[\text{house} \text{ big} \text{ six}]] \text{ where? be-3SgSbj}
\text{‘Where are Soumaila’s six big houses?’ (\text{nòdò, òwɔ̀, kùrê})}
\]

Determiners may be added at the end. They are subject to Determiner Tone-Dropping (§6.5.4)
in the presence of a possessor, and they do not normally affect the tones of the preceding
words.

\(\text{kèrèw} \) ‘all’ may follow and is tonally free (110).

\[(110) [\text{sùmàylá} \text{ L}{\text{nòdò} \text{ kèrèw}}] \text{ èsì=ndò-Ø}
\text{[Soumaila} \text{ L}[\text{house} \text{ all}] \text{ good=it.is.not-3SgSbj}
\text{‘Every house of Soumaila’s is no good.’}
\]

6.2.1.3 Pronoun plus possessive classifier as postposed possessor

A pronominal possessor is expressed by juxtaposing an alienably possessed noun (essentially
anything but a kin term) in its regular form with a following pronominal possessor. The
normal linear ordering is N-Adj-Num-Poss-Det or inverted N-Num-Adj-Poss-Det (§6.4.2),
with the possessor following adjectives and numerals (111).

\[(111) \text{ a. } \text{nòdò} \text{ L} \text{ òwɔ̀} \text{ kùrê} \text{ ú} \text{ g₃}
\text{[2Sg} \text{ III.Poss.InanSg]}
\text{‘your-Sg big house’}
\]

\[(111) \text{ b. } \text{nòdò} \text{ kùrê} \text{ ú} \text{ y₄}
\text{[2Sg} \text{ III.Poss.InanPl]}
\text{‘your six houses’}
\]

\[(111) \text{ c. } \text{nòdò} \text{ L} \text{ òwɔ̀ kùrê} \text{ ú} \text{ y₄}
\text{[2Sg} \text{ III.Poss.InanPl]}
\text{‘your-Sg six big houses’}
\]

For 3Sg (including inanimate singular) possessor, there is a special invariant possessor
morpheme \(\text{nò} \). A [\(+\text{ATR}\) variant \(\text{nò} \) has been heard after \(+\text{ATR}\) stems, as in \(\text{nòdò} \text{ nò} \sim \text{nòdò} \text{ nò} \)
‘his/her house’, but the difference is phonetically subtle and transcription is difficult.
For all pronominal categories other than 3Sg, the postnominal possessor is bipartite, consisting of a pronominal morpheme plus a possessive classifier that originated as a generic noun meaning ‘thing’ (inanimate) or ‘critter’ (animate). To some extent the appositional character of this construction is still apparent. For all pronominal possessors, the pronoun plus classifier combination is used in predicates (‘belongs to X’). This applies even to 3Sg, which replaces nɔ̀ with a bipartite classifying form as predicate (§11.5.2).

There are two such classifiers, one used for inanimate singular (occasionally directly pluralized), and the other for everything else: animate singular, animate plural, inanimate plural. Arguably the second classifier is really a set of three homophones.

For inanimate singulars, the generic noun is H₅g₃ after H-tone or L₅g₃ after final L-tone (including <HL>-tone). These tones could be attributed to the preceding pronoun as possessor; I show this here with superscripts H₅ and L⁻, but elsewhere I often omit them. A variant with k instead of g is uncommon within NPs, though it was occasionally elicited. It is common, however, in predicates (§11.5.2).

The 1Sg form fuses the pronominal possessor with the <HL>-toned classifier. The resulting portmanteau is invariant k₅: with bell-shaped tone. Unlike other NP-internal pronominal possessives, k₅: is always pronounced with k rather than g.

The inanimate singular possessive classifier is related to the noun k₅ ‘thing’, whose regular post possessor form is H₅k₅, see (411b). Except for the irregular 3Sg form nɔ̀, all of the pronominal possessives reflect an appositional construction *[noun Pron thing]. The pronoun functioned directly as the possessor of ‘thing’, which therefore appeared with possessor-controlled tone as *k₅ ~ *k₃. The 1Sg form would have originally been *x₅k₃: with some L-toned 1Sg possessor morpheme *x that later disappeared segmentally, but left its L-tone behind, resulting in the attested k₅: with <LHL> tone. Nanga k₅: is almost exactly matched morphologically by Ben Tey k₅:n. In Ben Tey this is a predicative form (‘it is mine’), and the nasalization reflects the ‘it is’ clitic.

The paradigm for inanimate singular possessed nouns is (112).

(112) Pronominal possessor (following inanimate singular noun)

```
category          possessor form
1Sg         k₅:
1Pl         L₅g₃
2Sg         H₅g₃
2Pl         L₅g₃
3Sg         n₅ (but predicative ſ₅né H₅g₃=ŋ ‘is his/hers’)
Inan        n₅ (but predicative k₅ H₅g₃=ŋ ‘is its’)
3Pl         b₅: L₅g₃
InanPl      k₅: L₅g₃
3Refl/3LogoSg d₅ H₅g₃
3Refl/3LogoPl d₅: L₅g₃
```

‘House’, for example, occurs in combinations like those in (113a-c). The invariant 3Sg possessor n₅ is regular in NPs (113c), but in predicates it is replaced by 3Sg pronoun ſ₅né plus
The noun *kọ́* ‘thing’ may also be possessed, like any other inanimate noun (113e).

(113)  

a.  

\[\text{ǹdọ́} \quad \text{kọ́}\]  

house  

1SgPoss.InanSg  

‘my house’  

b.  

\[\text{ǹdọ́} \quad \text{[ú} \quad \text{gọ́]}\]  

house  

2Sg Poss.InanSg  

‘your-Sg house’  

c.  

\[\text{ǹdọ́} \quad \text{nọ́}\]  

house  

3SgPoss  

‘his/her house’  

d.  

\[\text{ǹdọ́}^\text{L} \quad \text{gú}\]  

[\text{ǹné} \quad \text{gọ́}]  

[\text{ńọ́} \quad \text{ńɛ́}]  

3Sg  

Poss.Inan] = ŋ́  

‘The house is his/hers.’  

e.  

\[\text{kọ́} \quad \text{ú} \quad \text{gọ́}\]  

thing  

2Sg Poss.InanSg  

‘your-Sg thing’

Inanimate plural is not always overtly distinguished from inanimate singular in possessives. For example, in (573) in §15.2.6.2 (giraffes), *dúrâ [bú:] ọ́* ‘their (i.e. giraffes’) tail(s)’ has plural possessor (*bú*: ‘their’) but inanimate singular classifier, though the reference is obviously to multiple tails.

However, inanimate plural is often marked. One way to mark it is to add definite inanimate plural ę́ (tone-dropped to ”ę́) to the relevant form of inanimate singular ọ́. This is exemplified in (114).

(114)  

a.  

\[\text{ǹdọ́} \quad \text{kọ́}\]  

house  

1SgPoss.InanSg  

1L ę́  

Def.InanPl  

‘my houses’ (definite)

c.  

\[\text{ǹdọ́} \quad \text{fiː} \quad \text{gọ́}\]  

house  

1Pl  

Poss.InanSg  

1L ę́  

Def.InanPl  

‘our houses’ (definite)

However, the regular process is to replace ọ́ by inanimate plural possessive classifier ę́. The same (or a homophonous) classifier ę́ is used for animate possessed noun (regardless of number), see below. The surface form for inanimate plural and for animate classifiers is ę́ after H-tone and ę́ after L-tone, with 1Sg ę́. The tones are parallel to those for the inanimate singular classifier described above. The invariant (nonclassifying) 3Sg possessor ọ́ occurs in NP-internal possessives, here as elsewhere.
(115) Pronominal possessor (after inanimate plural or animate singular or plural)

category | possessor form
---|---
1Sg | yê, ́yê
1Pl | ́, ́yê
2Sg | ú ́yê
2Pl | ú: ́yê
3Sg | nô (but predicative ūnê ́HL yê = ū)
InanSg | nô (but predicative kú ́HL yê = ū)
3Pl | bû: ́yê
InanPl | kû: ́yê
3Refl/3LogoSg | á ́HL yê
3Refl/3LogoPl | á: ́yê

Inanimate plural possessed nouns with ́HL yê ~ ́yê classifier are exemplified in (116).

(116) a. ūndô yê:
    house 1SgPoss.InanPl
    ‘my houses’

b. ūndô [ú ́HL yê]
    house [2Sg ́HL Poss.InanPl]
    ‘your-Sg houses’

c. ūndô [î: ́yê]
    house [1Pl ́Poss.InanPl]
    ‘our houses’

Animate singular possessed nouns are in (117). The possessive classifier is ́HL yê ~ ́yê, which in this case derives from an old Dogon noun for ‘critter, nonhuman animate being’. This stem is also preserved in yêbûmbá ‘(any) snake’, which combines cognates of Najamba yê: ‘critter’ and the Najamba suppletive plural bômbô ‘critters’. The singular/plural distinction is frequently made by a following determiner (not shown here).

(117) a. pérêgé yê:
    sheep 1SgPoss.AnSg
    ‘my sheep-Sg’

b. kôrójì [ú ́HL yê]
    family [2Sg ́HL Poss.AnSg]
    ‘your-Sg family’
c.  gùndá  [ɨː ɬyɛ̀]
slave  [1Pl ɬPoss.AnSg]
‘our slave’

The situation for 3Sg (and inanimate singular) possessor is more complex. With an animate singular possessed noun, the same nɔ̀ seen above (with inanimate singular possessed noun) is used postnominally. The expected, fully transparent predicative forms are also used. For inanimate plural possessed nouns, 3Sg possessor can again be expressed by nɔ̀, meaning that there is no distinction (so far) between singular and plural possessed noun. The distinction can be expressed by a following determiner, such as a definite morpheme (inanimate singular gù, inanimate plural ɬy, but here in L-toned form ɬgù and ɬɬy): ńdọ nɔ̀ ɬgù ‘the house of his/hers’, ńdọ nɔ̀ ɬɬy ‘the houses of his/hers’.

While nɔ̀ is the usual 3Sg/inanimate possessor form, it is also possible to revert to the more generally productive pattern for pronominal possessors, using 3Sg pronoun ñné as the possessor, with a following classifier. Thus ñné ɬlo g3 ‘his/her’ for inanimate singular possessed noun, and ñné ɬlɔ yɛ̂ for inanimate plural (as well as all animates). This construction is, however, mainly used in predicates, and within an NP it is limited to animate (usually human) possessors. My assistant rejected comparable forms with inanimate singular pronoun kú.

(118)  
a. usual invariant 3Sg/Inanimate possessor within NP

3Sg  nɔ̀ (but predicative ñné ɬlɔ yɛ̂ = ɬý)
InanSg  nɔ̀ (but predicative kú ɬlɔ yɛ̂ = ɬý)

b. alternative 3Sg possessor form with classifier

3Sg with inanimate singular  ñné ɬlɔ g3
3Sg with inanimate plural  ñné ɬlɔ yɛ̂

Examples of third person possessors of inanimate plural nouns are in (119). (119a) is the common 3Sg possessor form, with invariant nɔ̀. The optional bipartite form in (119b), with a possessive classifier, is less common but possible within an NP for animate possessors. The bipartite form is required in predicates (119c).

(119)  
a. ńdọ  nɔ̀
house  3SgPoss
‘his/her/its houses’

b. ńdọ  [ñné ɬlɔ yɛ̂]
house  [3Sg ɬlɔ Poss.InanPl]
‘his/her houses’

c. [ńdọɬ ɬɬgù-ɬyɛ̀]  [ñné ɬlɔ yɛ̂ = ɬý]
[houseɬ  Dem.InanPl]  [3Sg ɬlɔ Poss.InanPl]=it.is
‘These houses are his/hers.’

The forms for third person possessor of animate singular possessed noun in (120) are identical to the inanimate plural type just described. That nɔ̀, like other postnominal pronominal
In these combinations, ‘father’ and ‘mother’ irregularly shorten from ‘senior’ if not lexically distinct:

(120) a. pèrgé nò
   sheep 3SgPoss
   ‘his/her sheep-Sg’ = ‘its sheep’

   b. pèrgéL dígí nò
   sheepL big 3SgPoss
   ‘his/her big sheep-Sg’ = ‘its big sheep-Sg’

   c. [pèrgéL wò-ŋ] [ráné hl yè]=ŋ
      [sheepL Dem-AnSg] [3Sg hl Poss.AnSg]=it.is.3SgSbj
      ‘This sheep is his/hers.’

   d. [pèrgéL wò-ŋ] [kú hl yè]=ŋ
      [sheepL Dem-AnSg] [InanSg hl Poss.AnSg]=it.is.3SgSbj
      ‘This sheep is its (= belongs to it).’

If the possessed noun is animate plural, the same forms as for animate singular are used.

6.2.2 Inalienable possession

The main syntactic difference between inalienables (kin terma) and alienables (all other nouns) is that inalienables have preposed pronominal possessors without classifiers (except for 1Sg and 3Sg, which are postnominal). This contrasts with the postposed pronominal possessors for alienables, most of which are composite (pronominal plus classifier).

In addition, when modifiers are added to a pronominally possessed noun, the linear order and tonosyntax are different for alienables and inalienables. For inalienables, the pronominal possessor can appear adjacent to the kin term.

I have observed no difference between inalienable and inalienable possession when the possessor is a nonpronominal NP, which is always preposed.


Some non-kin relationship nouns are treated grammatically as inalienables: tiyá ‘friend’, tògírì ‘namesake’ (anyone with the same personal name), tô: ‘agemate’ (related to reciprocal tô: §18.3), kàdàgà ‘agamate group’, tà:mà ‘colleague’, and ìndírì ‘rival, competitor’.
‘Woman’ even in the sense ‘wife’, and ‘child’ even in the kinship sense, are regular alienable nouns, so pronominal possessors follow the noun: yə: [ù HL yɛ] ‘your-Sg wife’, yî: [ù HL yɛ] ‘your-Sg child’. My assistant also rejected preposed pronominal possessors for sã:rà ‘parent’ and yà-nɔ̝-rì ‘co-wife’.

Body parts are not treated as inalienable: nà: [ù HL gɔ̂] ‘your hand’, kû: [ù HL gɔ̂] ‘your head’.

6.2.2.1 Inalienables with nonpronominal possessor

Inalienables have the same Poss-N construction as alienables when the possessor is a nonpronominal NP. In both cases, the possessor precedes the possessed noun, with no intervening genitive marker, and the possessor controls a tone overlay on the noun, {HL} if the possessor ends in an H-tone and {L} if the possessor ends in an L-tone. Inalienable examples are in (121).

(121) a. sùmâylà bà:
Soumaila bà:  ‘Soumaila’s father’ (bà:)

b. àmbèrì dè:
chief dè:  ‘(a/the) chief’s mother’ (dè:)

c. [àmbèrì nè] HL dè:
[chief Def.AnSg] HL dè:  ‘the chief’s mother’

6.2.2.2 Tones of modifiers after nonpronominal inalienable possessors

Elicitation with my assistant produced no systematic difference between alienable and inalienable possession with regard to tonosyntactic treatment of postnominal modifiers when the possessor is a nonpronominal NP (as opposed to a pronoun). We get the same choice between {HL} and {L} overlays, based on the final tone of the possessor. A postnominal adjective or numeral is again {L}-toned in either case. As with alienable counterparts, the schemas are [Poss [HL][N Adj]] (122a-b), [Poss [HL][N Num]] (122c-d), [Poss [HL][N Adj Num]] (122e), and inverted [Poss [HL][N Num Adj]] (122f), in all cases with wide-domain tone overlay.

(122) a. sùmâylà [lèsì mɔ̝]-
S [uncle bad]
‘Soumaila’s nasty uncle’ (lèsì, mɔ̝)

b. [yà-ŋ wɔ̝-ŋ]-
[yà-ŋ wɔ̝-ŋ] [lèsì mɔ̝]-
[woman-Sg Dem-AnSg] [uncle bad]
‘this woman’s nasty uncle’ (lèsì, mɔ̝)
c. *sùmâylâ* [*dére* *kûrè*]
   S [*older.sibling* *six*]
   ‘Soumaila’s six older brothers’

d. *[àrⁿ àń wô-ŋ]* [*dére* *kûrè*]
   [man] [*Dem-AnSg*] [*older.sibling* *six*]
   ‘this man’s six older brothers’

e. *[yà-ŋ wô-ŋ]* [*lési* *mâsi* *kûrè*]
   [woman-Sg] [*Dem-AnSg*] [*uncle* *bad* *six*]
   ‘this woman’s six nasty uncles’

f. *[yà-ŋ wô-ŋ]* [*lési* *kûrè* *mâsi*]
   [woman-Sg] [*Dem-AnSg*] [*uncle* *six* *bad*]
   [=c]}

Determiners can be added at the end, often in tone-dropped form without affecting the tones of the preceding words; see §6.5.4, below.

6.2.2.3 Inalienables with pronominal possessor

As we have seen, with alienable nouns like ‘house’ and ‘dog’, pronominal possessors are expressed in a distinctive construction involving a postnominal possessive classifier: *ńdô [ú *gô]* “house [you(r) thing]” = ‘your house’. With kin terms as the possessed nouns, however, pronominal possessors (other than 1Sg and 3Sg/inanimate, on which see below) have the same prenominal position as do nonpronominal possessors: *lésî* (maternal) uncle, *ú *lésî* ‘your-Sg uncle’. The possessed noun, as usual, has {HL} overlay if the pronoun ends in an H-tone (2Sg *ú*, 3Logophoric singular *á*), and {L} overlay if the pronoun ends in an L-tone (1Pl *î:, 2Pl *û:, 3Pl *bû:, 3Logophoric plural *â:*)

For 3Sg (including inanimate) and 1Sg possessor, there is no difference between alienable and inalienable possessor. 3Sg possessor is expressed by the invariant postnominal morpheme *nà*, and 1Sg possessor is expressed by the relevant 1Sg form of the postnominal possessive classifier, which for kin terms (always animate) is *yê:* in both singular and plural.

The paradigm of *bâ:* ‘father’, organized by phonological form and linear order, is (123).

(123) category ‘X’s father’

a. preposed possessor ending in H-tone, {HL} overlay
   2Sg *ú* [*HL* *bâ:*]
   3LogoSg *á* [*HL* *bâ:*]

b. preposed possessor ending in L-tone, {L} overlay
   1Pl *î:* [*L* *bâ:*]
   2Pl *û:* [*L* *bâ:*]
   3Pl *bû:* [*L* *bâ:*]
   3LogoPl *á:* [*L* *bâ:*]
c. postnominal possessor with possessive classifier, lexical tone
   1Sg    bǎ: yě:

d. special 3Sg postnominal morpheme, lexical tone
   3Sg    bǎ: nɔ̀

Further examples of the full \{HL\} overlay with kin terms: HL\dê: ‘mother’ (< dě), HL\dérê ‘elder sibling’ (< děrê), HL\lɔ̂gɔ̀ ‘husband’ (< lɔ̀gɔ̀), and HL\ómì́r ‘parent-in-law’ (< ómì́rì).

6.2.2.4 Modifiers after pronominally possessed inalienable noun

In Poss-N-\textit{Adj} and Poss-N-Num sequences with pronominal possessor, the modifier can be tonosyntactically external to the domain of possessor control. However, variant tonal pronunciations turned up in elicitation with my assistant. There is probably significant interspeaker and subdialectal variation.

Consider Poss-N-\textit{Adj} combinations with inalienable pronominal possessor. (124a) follows the tonal pattern observed with nonpronominal possessors (alienable and inalienable), i.e. [Poss \{HL\}[N \textit{Adj}]]. However, there is an alternative (124b-c) where the adjective preserves its lexical tones, showing that the possessor here has narrow-domain control limited to the noun. This can be schematized as [Poss \{HL\}-N \textit{Adj}]. The narrow domain can be further brought out by using tonosyntactic island notation, as in [\[Poss \{HL\}-N \textit{Adj}\]], which emphasizes that the adjective cannot affect the tones of Poss-N. I have no meaningful statistics but my impression is that the type (124b-c) predominates over the type (124a) at least in fairly careful speech.

\begin{enumerate}
\item[(124)]
\begin{enumerate}
\item [a.] ú \{HL\}[lésì] mɔ̀sì
   \hspace{1cm} 2SgPoss \{HL\}[uncle] bad
   ‘your-Sg nasty uncle’
\item [b.] cù \{HL\}lésì mɔ̀sì
   \hspace{1cm} \[2SgPoss \{HL\}uncle\] bad
   \[=(a)\]
\item [c.] cù: \{L\}lésì mɔ̀sì
   \hspace{1cm} \[\text{2PlPoss} \{uncle\}\] bad
   ‘your-Pl nasty uncle’
\end{enumerate}
\end{enumerate}

There is also another tonosyntactic option, where the (prosodically light) possessor is itself included in the adjective-controlled overlay (125), the formula then being [[Poss N]\{L\} \textit{Adj}]. For a similar tonosyntactic pattern before \textit{kámà} ‘each’, see §6.6.2 below.

\begin{enumerate}
\item[(125)]
\begin{enumerate}
\item [a.] \[ù \{L\}lésì mɔ̀sì
   \hspace{1cm} [2SgPoss \{uncle\}] bad
   ‘your-Sg nasty uncle’
\item [b.] \[ù: \{L\}lésì mɔ̀sì
   \hspace{1cm} [2PlPoss \{uncle\}] bad
   ‘your-Pl nasty uncle’
\end{enumerate}
\end{enumerate}
For comparison, the corresponding adjectival predicate construction is (126). Here the adjective does not belong to the same syntactic or tonosyntactic phrase as the possessed noun.

\[(126) \quad \text{ú} \quad \text{HL} \quad \text{lési} \quad \text{mòsí = ŋ} \quad \text{HL} \quad \text{uncle} \quad \text{bad=it.is} \quad \text{2SgPoss} \quad \text{HL} \quad \text{your-Sg uncle is bad/nasty.} \]

If we substitute a numeral for the adjective in (124a-c) above, we get the same range of outputs (127a-c). The most unusual variant is (127c), where the numeral appears to control \{L\} on the preceding N-Adj string, though in general numerals do not interact with preceding words tonosyntactically. In effect, the distinction between adjective and numeral is partially neutralized in this context (i.e. with pronominal inalienable possessor), so (127c) has the same tonal structure as (125a) above.

\[(127) \quad \text{a. ú} \quad \text{HL} \quad \text{lési} \quad \text{kùrè} \quad \text{2SgPoss} \quad \text{HL} \quad \text{uncle} \quad \text{six} \quad \text{‘your-Sg six uncles’, compare (124a)} \]

\[\quad \text{b. [ú \quad \text{HL} \quad \text{lési}] \quad \text{kùrè} \quad \text{[2SgPoss \quad \text{HL} \quad \text{uncle} \quad \text{six} \quad [=\text{(a)}, \text{compare (124b-c)}] \]

\[\quad \text{c. [ù \quad \text{lési}]} \quad \text{L} \quad \text{kùrè} \quad \text{L} \quad \text{[2SgPoss \quad \text{uncle}]} \quad \text{six} \quad [=\text{(a)}, \text{compare (125a)}] \]

The combination Poss-N-Adj-Num is illustrated in (128a-c), which are tonosyntactically parallel to (127a-c) above, respectively, except that in (128c) the final numeral does not control \{L\} on the preceding adjective. The numeral is bolded in the interlears in (128) and later examples to emphasize its changing position.

\[(128) \quad \text{a. ú} \quad \text{HL} \quad \text{lési} \quad \text{mòsí} \quad \text{kùrè} \quad \text{2SgPoss} \quad \text{HL} \quad \text{uncle} \quad \text{bad} \quad \text{six} \quad \text{‘your-Sg six nasty uncles’} \]

\[\quad \text{b. cú} \quad \text{HL} \quad \text{lési ⇢} \quad \text{mòsí} \quad \text{kùrè} \quad \text{c ꞯSgPoss} \quad \text{HL} \quad \text{uncle⇢} \quad \text{bad} \quad \text{six} \quad [=\text{(a)}] \]

\[\quad \text{c. [[ù \quad \text{lési}]} \quad \text{L} \quad \text{mòsí} \quad \text{kùrè} \quad \text{[[2SgPoss \quad \text{uncle}]} \quad \text{bad} \quad \text{six} \quad [=\text{(a)}] \]

The combination Poss-N-Adj-Num is optionally inverted to Poss-N-Num-Adj, since possessors are licensors of Adjective-Numeral Inversion (§6.4.2). Inverted examples are in (129a-c). The adjective controls \{L\} on the immediately preceding numeral in (129b-c), whose tones therefore differ from those in (128b-c) above, respectively.
The most salient take-away from this section is that preposed pronominal possessors, which are only possible with inalienables, have only weak tonosyntactic control powers. Often a possessor-controlled overlay extends only to the immediately following noun. In other cases, the possessor has no effective control power at all, and is itself caught up in a modifier-controlled overlay. These factors suggest that preposed pronominal possessors tend to function within word-level tonomorphology rather than extended phrasal tonosyntax.

Determiners added at the end are often tone-dropped, and in this case they do not affect the tones of preceding words. For details, see §6.5.4.

6.2.3 Modifiers after nouns with following pronominal possessors

1Sg and 3Sg possessors are postnominal even for inalienable possession. When an adjective and/or a number are added, there is considerable variation in linear order. I will illustrate with a kin term, but the same patterns apply to alienables like ‘sheep’ and ‘house’.

6.2.3.1 Modifiers after nouns with following 1Sg possessors

We exemplify first with 1Sg possessors. In the absence of a modifier, the simple N-Poss combination has the same form for inalienable possession (130) as for alienable possession, cf. (117a) above.

\[(130) \quad \text{lèśì} \quad yě:\]
\[\text{uncle} \quad \text{1SgPoss.AnSg}\]
\‘my (maternal) uncle’

When (130) is complicated by adding an adjective and/or a numeral, the possessor may occur either immediately after the noun or after all modifiers. (131a-b) illustrate the alternatives N-Poss-Adj and N-Adj-Poss. The adjective controls tones to its left only.

\[(131) \quad \text{a.} \quad [\text{lèśì} \quad yě:]^L \quad mòsì]
\[\text{uncle} \quad \text{1SgPoss.AnSg}^L \quad \text{bad}\]
\‘my nasty uncle’
Examples (132a-b) illustrate the alternatives N-Poss-Num and N-Num-Poss. Numerals and postposed possessors are non-controllers of tone overlays. The possessor is bolded in the interlinear.

(132) a. \[lè\, yê\, kùrê\]  
[uncle \textbf{1SgPoss.AnSg}] six  
‘my six uncles’

b. \[lè\, kùrê\, yê\]  
uncle six \textbf{1SgPoss.AnSg}  
[= (a)]

Examples (133a-c) illustrate N-Poss-Adj-Num, varying with N-Adj-Num-Poss and N-Adj-Poss-Num. The adjective controls tones only to its left. In one elicitation session my assistant dispreferred (133c), where the possessor is sandwiched between the two other modifiers. On another occasion he accepted it along with the others.

(133) a. \[[lè\, yê\,]\, mɔ̀sì\, kùrê\]  
[[uncle \textbf{1SgPoss.AnSg}] bad] six  
‘my six bad uncles’

b. \[lè\, mɔ̀sì\, kùrê\, yê\]  
[uncle\textbf{1SgPoss.AnSg}] six \textbf{1SgPoss.AnSg}  
[= (a)]

\nc. \[lè\, mɔ̀sì\, yê\, kùrê\]  
[uncle\textbf{1SgPoss.AnSg}] six \textbf{1SgPoss.AnSg} six  
[= (a)]

Examples (134a-c) contain the same lexical material as (133a-c) above, but they show the effects of Adjective-Numeral Inversion, which is licensed (but not required) by the presence of a possessor (§6.4.2). The sequences are now N-Poss-Num-Adj, N-Num-Poss-Adj, and N-Num-Adj-Poss. The adjective controls tones to its left.

(134) a. \[[lè\, yê\,]\, kùrê\, mɔ̀sì\]  
[[uncle \textbf{1SgPoss.AnSg}] six] bad  
‘my six bad uncles’

b. \[lè\, kùrê\, mɔ̀sì\, yê\]  
[uncle six\textbf{1SgPoss.AnSg}] bad \textbf{1SgPoss.AnSg}  
[= (a)]

\nc. \[lè\, kùrê\, yê\, mɔ̀sì\]  
[uncle six \textbf{1SgPoss.AnSg}] bad \textbf{1SgPoss.AnSg}  
[= (a)]
6.2.3.2 Modifiers after inalienable noun with following 3Sg possessor

Examples like those just given for 1Sg, but now with 3Sg possessor, are presented in this section. Since 3Sg possessor ɬnɔ̀ is already L-toned, listeners cannot distinguish its regular and tone-dropped realizations. I assume (inaudible) tone-dropping on this morpheme when it is followed by an adjective, by analogy to the 1Sg possessor examples, where tone-dropped yɛ̀: is audibly distinct from regular yɛ́:.

(135) lèsí ɬnɔ̀
uncle 3SgPoss
‘his/her (maternal) uncle’

N-Poss-Adj and N-Adj-Poss, with the possessor bolded in interlinear.

(136) a. [lèsí ɬnɔ̀]L mɔ̀sí
[uncle 3SgPoss]L bad
‘his/her nasty uncle’

b. lèsíL mɔ̀sí ɬnɔ̀
uncleL bad 3SgPoss
 [= (a)]

N-Poss-Num and N-Num-Poss:

(137) a. [lèsí ɬnɔ̀]L kúrê
[uncle 3SgPoss]L six
‘his/her six uncles’

b. [lèsí kúrê]L ɬnɔ̀
[uncle six] 3SgPoss
 [= (a)]

Uninverted N-Poss-Adj-Num, varying with N-Adj-Num-Poss and N-Adj-Poss-Num:

(138) a. [lèsí ɬnɔ̀]L mɔ̀sí kúrê
[uncle 3SgPoss]L bad six
‘his/her six bad uncles’

b. lèsíL mɔ̀sí kúrê ɬnɔ̀
uncleL bad six 3SgPoss
 [= (a)]

c. lèsíL mɔ̀sí ɬnɔ̀ kúrê
uncleL bad 3SgPoss six
 [= (a)]

After optional Adjective-Numeral Inversion, these become N-Poss-Num-Adj varying with N-Num-Adj-Poss and N-Num-Poss-Adj:
6.3 Noun plus adjective

6.3.1 Noun plus regular adjective

Modifying adjectives (including ordinals) follow the noun. In the absence of a possessor, an adjective controls tone-dropping on the noun. Thus ñdò ‘house’ drops its tones to ñdòL in (140b-d).

(140) a. ñdò Lɛ̀sí ‘(a) house’
    b. ñdòL ësí Lmɔ̀sí ‘(a) good house’
    c. ñdòL pírí ‘(a) white house’
    d. ñdòL kìyá ‘(the) first house’

For the combinations Poss-N-Adj, N-Poss-Adj (inalienable), and N-Adj-Poss (alienable), see §6.2 above. For Adjective-Numeral Inversion, see §6.4.2.

Adjectives are themselves subject to tone-dropping as part of a target domain controlled by a following determiner or ‘each’ quantifier, or in the internal head NP of the relative. See (158b) for N-Adj-Definite, (159b) for N-Adj-Demonstrative, and (494b) for relative heads.

6.3.2 Adjective ñambi ‘certain (ones)’

The partitioning quantifier ñambi is most often used in the plural form ñambil-yê, meaning ‘certain (ones)’, i.e. a subset (with at least two members) of a larger collectivity. Singular ñambil ‘(a) certain (one)’ or ‘some (of a mass)’ is also possible. ñambil functions tonosyntactically as an adjective.

(141) a. nū: ‘(a) person’; ‘people’
    b. nūL ñambil ‘a certain person’
    c. nūL ñambil-yê ‘certain people’

(142) a. kù̀rɔ̀ ‘(a) stone’
    b. kù̀rɔ̀L ñambil ‘a certain stone’
    c. kù̀rɔ̀L ñambil-yê ‘certain stones’
A typical discourse context for gàmbí is a parallel construction contrasting an eventuality involving one subgroup with a contrary eventuality involving the complementary subgroup (143). The noun may or may not be repeated with the second occurrence of gàmbí.

\[
(143) \quad [nù:\L \quad \text{certain}] \quad \text{do.farming-Prog-3PlSbj},
\]

\[
[(nù:\L) \quad \text{certain}] \quad \text{farming} \quad \text{leave-Pfv1b-3PlSbj}
\]

‘Some people are (still) farming, (while) some (others) have given up farming.’

With mass nouns like ‘sugar’, gàmbí means ‘some of (X)’, denoting a portion of a larger quantity (144).

\[
(144) \quad [\text{sùkɔ̀rɔ̀} \L \quad \text{some}] \quad \text{eat.Pfv-1PlSbj} \quad \text{if}, \quad \text{some} \quad \text{hold-MP-Ipfv-1PlSbj}
\]

‘We’ll consume some of the sugar, and we’ll keep some (= the rest).’

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

An adjective may follow a sequence of a noun and one or more other adjectives. In this case, the final adjective retains its lexical tones, but all preceding words in the core NP are tone-dropped.

\[
(145) \quad a. \quad [nɛ̀ɾi\L \quad \text{big}] \quad \text{nasty}
\]

‘a big vicious dog’ (nɛ̀ɾi, dùgì)

\[
\]

\[
(145) \quad b. \quad [yɛ̀bùmbà \L \quad \text{red}] \quad \text{long}
\]

‘a long red (= brown) snake’ (yɛ̀bùmbà, bárì)

6.3.3.2 ‘Good to eat’

In the most transparent construction, the NP in question is the subject of an adjectival predicate (‘be good’ etc.), and the activity type is expressed by the locative form of a verbal noun. The adjectival predicate agrees with the subject (146a-b).

\[
(146) \quad a. \quad [tàgá \L \quad \text{water}] \quad [nɔ̀-\text{drink-VblN Loc}] \quad \text{be.good=it.is.not-3SgSbj}
\]

‘The water of the pond isn’t good to drink.’

\[
\]

\[
(146) \quad b. \quad yi-\text{tègè} \quad [kúwò-\text{eat.meat-VblN Loc}] \quad \text{be.sweet-Pl}
\]

‘Children are good to eat.’
A variation on this is with a form of the verb equivalent to the imperfective (but with no further pronominal suffixation) instead of the verbal noun.

(147) \textit{kisi-kisi} \textit{[kúwó-íh} \textit{gò]} \textit{èsú}  
winged.termite [eat.meat-\textit{lpf}v \textit{Loc]} be.good  
‘Winged termites are good to eat.’

These constructions are distinct from one where the verbal noun is the subject of the adjectival predicate (148). Here there is no agreement in the predicate with the subject of the verbal-noun complement (‘children’).

(148) \textit{[yì-tègê} \textit{ŋû”é-ndé]} \textit{érû}  
[children look-\textit{VblN}] be.good  
‘It’s good to look at children.’

6.4 Noun plus cardinal numeral

6.4.1 Noun (and adjective) plus cardinal numeral

Cardinal numerals follow the core NP, consisting of a noun plus any modifying adjectives. In the absence of a possessor, the numeral has its lexical tones, and it has no tonal interaction with the words in the core NP.

(149) a. \textit{ńdò} \textit{ńdò wòy}  
‘house’ ‘two houses’

b. \textit{ńdò_L ñwọ} \textit{ńdò_L ñwọ wòy}  
‘a large house’ ‘two large houses’

The numeral remains with the noun and other inner modifiers (adjective, possessor) when it functions as head NP of a relative, as in (497b-c) in §14.1.2. In this position the numeral is subject to tone-dropping. A numeral is also tone-dropped by a following determiner.

For combinations of the type Poss-N-(Adj-)Num, N-Poss-(Adj-)Num (inalienable), and N-(Adj-)Num-Poss, see §6.2 above. In the specific combination Poss-N-Num with pronominal possessor and inalienable noun, a numeral behaves like an adjective in (optionally) controlling tone-dropping, see (125b) in §6.2.2.4.

6.4.2 Adjective-Numeral Inversion

The sequence [N-Adj-Num], as in \textit{ńdò_L dụgí kúrë} ‘six big houses’ with mark-up [house_L big six], has fixed order when not further expanded (tone-dropping on the noun is controlled by the adjective). However, the adjective and numeral are optionally (but often) inverted when one of the following “inversion licensors” is also present in the NP: possessor (preposed or postposed), demonstrative, or relative clause (i.e. when the undetermined NP is head of a relative). A definite morpheme also seems to license inversion at least occasionally.
The motivation for inversion (in Nanga and other Dogon languages) is obscure, and formal modeling within an arboREAL syntactic representation would be difficult even for the most ingenious syntactician.

In the following examples, the numeral is bolded in interlinearS. The licensing element is a demonstrative in (150), a postposed pronominal possessor in (151), a preposed possessor in (152), and a relative clause in (153). When the numeral precedes the adjective, it is subject to adjective-controlled tone-dropping even in the absence of another tone-dropping controller. This shows that adjectives can only control tone-dropping on elements to their left. This can be seen clearly in (151b), since the postposed pronominal possessor licenses inversion but does not control tone-dropping on elements to its left. In (150b), (152b), and (153b), we cannot determine whether the adjective is responsible for tone-dropping the numeral, since a higher (wider-scope) tonosyntactic controller is also present.

(150) licensor is a demonstrative

a. \[\text{nòò} \quad \text{dùgi} \quad \text{kùrè}^{L} \quad \text{yèy}^{L}\]
   \[\text{house} \quad \text{big} \quad \text{six}^{L}\]  Dem.InanPl
   ‘these six big houses’

b. \[\text{nòò} \quad \text{kùrè} \quad \text{dùgi}^{L} \quad \text{yèy}^{L}\]
   \[\text{house} \quad \text{six} \quad \text{big}]^{L}\]  Dem.InanPl  [=\(a\)]

(151) licensor is a postposed pronominal possessor

a. \[\text{nòò}^{L} \quad \text{dùgi} \quad \text{kùrè} \quad [\text{ú}^{HL} \text{yè}]^{L} \quad \text{yèy}^{L}\]
   \[\text{house}^{L} \quad \text{big} \quad \text{six}^{L}\]  [2Sg \text{HL}^{Poss.InanPl}]^{L}  \text{Def.InanPl}
   ‘your-Sg six big houses’ (for L-toned \text{yè} see §6.2.1.3)

b. \[\text{nòò}^{L} \quad \text{kùrè}^{L} \quad \text{dùgi}^{L} \quad [\text{ú}^{HL} \text{yè}]^{L} \quad \text{yèy}^{L}\]
   \[\text{house}^{L} \quad \text{six}^{L} \quad \text{big}]^{L}\]  [2Sg \text{HL}^{Poss.InanPl}]^{L}  \text{Def.InanPl}  [=\(a\)]

(152) licensor is a preposed nonpronominal possessor

a. \[\text{sè:dù}^{L} [\text{nòò} \quad \text{dùgi} \quad \text{kùrè}]^{L} \quad \text{yè}]^{L}\]
   \[\text{Seydou}^{L} \quad [\text{house} \quad \text{big} \quad \text{six}]^{L}\]  Def.InanPl
   ‘Seydou’s six big houses’

b. \[\text{sè:dù}^{L} [\text{nòò} \quad \text{kùrè} \quad \text{dùgi}]^{L} \quad \text{yè}]^{L}\]
   \[\text{S}^{L} \quad [\text{house} \quad \text{six} \quad \text{big}]^{L}\]  Def.InanPl  [=\(a\)]

(153) licensor is a relative clause

a. \[\text{nòò} \quad \text{dùgi} \quad \text{kùrè}]^{L} \quad \text{yègè-sè}^{L} \quad \text{yè}\]
   \[\text{house} \quad \text{big-Inan} \quad \text{six}^{L}\]  fall-Ppl.Pfv^{L}  Def.InanPl
   ‘the six big houses that fell’
6.4.3  bú-wòy versus wòy ‘two’

The basic numeral ‘2’ is wòy. When it follows a noun, it is often extended as bú-wòy. Morphologically, bú- (cf. pronoun bú: ‘they’) resembles animate plural numeral-classifier prefixes of certain Dogon languages. For example, nàŋá bú-wòy ‘two cows’ can be compared to Yanda Dom nà-'mù bó-nô: (same gloss), with bó- (interchangeable with á-) as the animate numeral classifier (-mù is animate plural). However, Nanga bú-wòy can occur after inanimate as well as animate nouns, as in ŋdô (bú-wòy ‘two houses’, there being no Nanga counterpart to Yanda Dom inanimate numeral classifier yè-. Both bú-wòy and simple wòy are possible in all postnominal positions, regardless of Adjective-Numeral Inversion (preceding section).

An informant rejected bú- with other numerals such as ‘3’. In Yanda Dom, the classifiers are used systematically for ‘2’ through ‘10’ with nearly all nouns.

6.5  Noun plus determiner

For invariant preposed determiner kú (‘that same …’), see the following section. Preposed kú is normally paired with a postnominal determiner.

Postnominal determiners (definite or demonstrative) distinguish number and animacy, which are usually not expressed by preceding words in the NP. The simple combination N-Det takes the form N^L Det, with tone-dropped noun; see (49a-d) and (51a-d) in §4.4.1.1-2. Likewise, N-Adj-Det is realized as [N Adj]^L Det, see (49f) in §4.4.1.

When a determiner follows a possessed NP, Determiner Tone-Dropping is applied, see §6.5.4 below. Definite morphemes appear in this context as ^1nè, ^1bù:, ^1gù, and ^1yè, while demonstratives surface as ^1wò-ŋ, ^1wè:, ^1ŋgù, and ^1yèy. In these combinations, the determiner provides clearer information about animacy and number than does even a pronominal possessor (which contains a numeral classifier), since numeral classifier ill. yè can be singular (animate) or plural (animate or inanimate).

(154)

<table>
<thead>
<tr>
<th>Numeral</th>
<th>Determiner</th>
<th>Tone</th>
<th>Case</th>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>[pèrgé]</td>
<td>yè:</td>
<td>^1nè</td>
<td>gùró j-à</td>
</tr>
<tr>
<td></td>
<td>[sheep]</td>
<td>1SgPoss.An</td>
<td>^1Def.AnSg</td>
<td>steal RecPrf-3PlSbj</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘They stole my sheep-Sg.’ (&lt; nè)</td>
</tr>
<tr>
<td>b.</td>
<td>[pèrgé]</td>
<td>yè:</td>
<td>^1wò-ŋ</td>
<td>gùró j-à</td>
</tr>
<tr>
<td></td>
<td>[sheep]</td>
<td>1SgPoss.An</td>
<td>^1Dem-AnSg</td>
<td>steal RecPrf-3PlSbj</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘They stole this sheep of mine.’ (&lt; wò-ŋ)</td>
</tr>
<tr>
<td>c.</td>
<td>[pèrgé]</td>
<td>yè:</td>
<td>^1bù:</td>
<td>gùró j-à</td>
</tr>
<tr>
<td></td>
<td>[sheep]</td>
<td>1SgPoss.An</td>
<td>^1Def.AnPl</td>
<td>steal RecPrf-3PlSbj</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘They stole my sheep-Pl.’ (&lt; bù:)</td>
</tr>
<tr>
<td>d.</td>
<td>[pèrgé]</td>
<td>yè:</td>
<td>^1wè:</td>
<td>gùró j-à</td>
</tr>
<tr>
<td></td>
<td>[sheep]</td>
<td>1SgPoss.An</td>
<td>^1Dem.AnPl</td>
<td>steal RecPrf-3PlSbj</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘They stole these sheep of mine.’ (&lt; wè:)</td>
</tr>
</tbody>
</table>
Postposed determiners normally follow the N-Adj-Num-Poss sequence. They control tone-dropping on preceding words if there is no possessor, as in N-Adj-Num-Det. However, when a possessor is present, Determiner Tone-Dropping is often triggered (§6.5.4).

In relative clauses, the head NP is seemingly bifurcated into a clause-internal portion (maximally Poss-N-Adj-Num) and a tail (coda) that follows the verbal participle. Postposed determiners are included in the tail. They then control tone-dropping on the participle; see §14.1.9.

6.5.1 Preposed strong discourse-definite kú ‘that (same)’

There is also an invariant preposed determiner kú, etymologically an inanimate pronominal possessor. It functions as a strong discourse-definite determiner (‘that same X’), and requires a postnominal determiner, usually definite but occasionally demonstrative. See §4.4.1.3 for discussion and examples.

When it directly precedes the possessed noun, kú controls the same tone overlays as do (other) preposed possessors. Since it is H-toned, the overlay on the possessum is {HL}, in accordance with the usual rules for possessor-controlled overlays. As in true Poss-N-Det combinations, in the presence of a possessor the final determiner is subject to Determiner Tone-Dropping, which is favored by the {HL} overlay on the possessed noun (§6.5.4). The tone-dropping is systematic for definite markers (155a-d), less so for demonstratives (155e).

(155) a. kúrⁿô
    kúrⁿô L gú
    kú III kúrⁿô (L gú) ‘stone’

b. kúrⁿô L y
    kú III kúrⁿô (L y) ‘the stones’

c. nû: L né
    nû: L né
    kú III nû: L nè ‘person’

D. nû: L bû:
    nû: L bû:
    kú III nû: L bû: ‘the people’

e. kúrⁿô L ngú
    kú III kúrⁿô L ngú ‘this stone’ (variant kú III kúrⁿô ngú)

Although kú behaves much like a possessor syntactically, it can co-occur with a true possessor morpheme. In (156a), the possessor is a pronoun, and therefore (along with its possessive classifier) follows the noun. The L-tone of the final definite morpheme is attributable to pronominal possessor ú III g3, as the bracketing suggests. In (156b), kú precedes (and has broad semantic scope over) a sequence beginning in an indefinite possessor NP (‘woman’). kú here has no effect on this possessor NP (or on any other word). This construction is distinct from that in (156c), where kú has local scope over the immediately following possessor (again ‘woman’), and therefore controls the {HL} possessum overlay on
this noun. My assistant accepted (156d) as grammatical, though awkward; it combines two occurrences of definite kú, with broad and narrow semantic scope, respectively.

(156)  a. \( [kú \text{\_HL̃} \text{ǹdô}] [\text{DiscDef \_HL\_house}] [\text{\HL̃\_2Sg Poss.InanSg}] [\text{\_Def.InanSg}] \)

\( \) ‘that (same) house of yours-Sg’

b. \( \text{kú \text{\HL̃} \text{yâ-ŋ \_HL̃\_ǹdô}} [\text{DiscDef \_HL\_woman-Sg}] [\text{\_house}] [\text{\_Def.InanSg}] \)

‘that (same) house of (a/the) woman’

c. \( \text{kú \text{\HL̃\_yâ-ŋ \_LÑ\_ǹdô}} [\text{DiscDef \_HL\_woman-Sg}] [\text{\_house}] [\text{\_Def.InanSg}] \)

‘(a/the) house of that (same) woman’

d. \( \text{[kú \text{\HL\_yâ-ŋ \_LÑ\_ǹdô}} [\text{[DiscDef \_HL\_woman-Sg]}] [\text{\_house}] [\text{\_Def.InanSg}] \)

‘that (same) house of that (same) woman’

6.5.2 Postnominal definite morphemes

For NPs containing a possessor and a definite marker, see the preceding section. In the absence of a possessor, definite morphemes (§4.4.1) induce tone-dropping on the preceding noun and any intervening modifiers. In each pair of forms in (157), the second form is definite, versus the unmarked (often indefinite) first form. These examples are inanimate, with inanimate singular \( \text{gú} \sim \text{kú} \sim \text{w} \) and inanimate plural \( \text{y} \).

(157) Unpossessed inanimate definite NPs

a. noun

\( \text{ǹdô} \) ‘house’

\( \text{ǹdô\_L\_gú} \) ‘the house’

b. noun plus adjective

\( \text{ǹdô\_L\_wɔ́} \) ‘(a) big house’

\( [\text{ǹdô\_L\_wɔ́} \text{\_L\_gú}] \) ‘the big house’

c. noun plus numeral

\( \text{ǹdô wǒy} \) ‘two houses’

\( [\text{ǹdô wǒy\_L\_y}] \) ‘the two houses’

d. [noun adjective] numeral

\( [\text{ǹdô\_L\_wɔ́} \text{\_wɔ́} \text{\_wɔ́} \text{\_wɔ́} \text{\_wɔ́} \text{\_y}] \) ‘two big houses’

In the second items in (157b) and (157d), we again have the issue whether to recognize cyclical tone-dropping, or one-step tone-dropping where the highest controller imposes an overlay on the noun and all intervening words. Hence the parenthesized \( \text{\_L\_} \) superscripts. I
prefer the one-step analysis, since definite morphemes can clearly control \{L\} on strings of two or more words, for example on the adjective and the numeral in ‘the two big houses’ (157d).

Animate definite morphemes work the same way. (158) illustrates with animate singular \(n\)é and animate plural \(b\):.

(158) Unpossessed animate definite NPs

a. noun
\[
\begin{align*}
\text{n\(\text{è}́\)i} & & \text{‘dog’} \\
\text{n\(\text{è}́\) L\ n\é} & & \text{‘the dog’}
\end{align*}
\]

b. noun plus adjective
\[
\begin{align*}
\text{n\(\text{è}́\) L\ pi\(\text{r}\)í} & & \text{‘(a) white dog’} \\
\text{[n\(\text{è}́\) L\ pi\(\text{r}\)í\] L\ n\é} & & \text{‘the white dog’}
\end{align*}
\]

c. noun plus numeral
\[
\begin{align*}
\text{n\(\text{è}́\) L\ w\(\text{ò}\)y} & & \text{‘two dogs’} \\
\text{[n\(\text{è}́\) L\ w\(\text{ò}\)y\] L\ b\:} & & \text{‘the two dogs’}
\end{align*}
\]

d. [noun adjective] numeral
\[
\begin{align*}
\text{[n\(\text{è}́\) L\ pi\(\text{r}\)í\] L\ w\(\text{ò}\)y} & & \text{‘two white dogs’} \\
\text{[n\(\text{è}́\) L\ pi\(\text{r}\)í\] L\ w\(\text{ò}\)y\] L\ b\:} & & \text{‘the two white dogs’}
\end{align*}
\]

6.5.3 Postnominal demonstratives

A postposed demonstrative (undifferentiated ‘this/that’, generally deictic rather than discourse-definite §4.4.1.1), has the same syntax as a definite morpheme. It follows the noun and any modifiers (adjective, numeral, possessor). For NPs that include both a possessor (preposed or postposed) and a postposed demonstrative, see §6.5.1 above. In the absence of a possessor, the demonstrative controls tone-dropping on preceding words, viz., the final word in the N(-Adj) sequence and any numeral. Examples in (159) are inanimate, singular \(\text{ŋ\(\text{g}\)ú} and plural \(\text{y\(\text{è}\)}\).

(159) Unpossessed inanimate NPs with demonstratives

a. noun
\[
\begin{align*}
\text{\(\text{n\(\text{d}\)ód\) ó\(\text{ð}\)g\(\text{ú}\) & & \text{‘house’} \\
\text{\(\text{n\(\text{d}\)ód\) L\ ñg\(\text{ú}\) & & \text{‘this house’}
\end{align*}
\]

b. noun plus adjective
\[
\begin{align*}
\text{\(\text{n\(\text{d}\)ód\) L\ ɔ\(\text{w}\)ɔ\(\text{í}\) & & \text{‘(a) big house’} \\
\text{[\(\text{n\(\text{d}\)ód\) L\ ɔ\(\text{w}\)ɔ\(\text{í}\)] L\ ñg\(\text{ú}\) & & \text{‘this big house’}
\end{align*}
\]

c. noun plus numeral
\[
\begin{align*}
\text{\(\text{n\(\text{d}\)ód\) L\ w\(\text{ò}\)y} & & \text{‘two houses’} \\
\text{[\(\text{n\(\text{d}\)ód\) L\ w\(\text{ò}\)y\] L\ y\(\text{è}\) & & \text{‘these two houses’}
\end{align*}
\]
d. [noun adjective] numeral
[ǹdō₁ L ɔ̀wɔ̀] wòy
‘two big houses’
[ǹdō₃(L) ɔ̀wɔ̀ yọ̀] yẹy
‘these two big houses’

Animate counterparts are in (160).

(160) Unpossessed animate NPs with demonstratives

a. noun
nɛ̀rⁿì
‘dog’
nɛ̀rⁿì L wò-ŋ
‘this/that dog’

b. noun plus adjective
nɛ̀rⁿì L pírî
‘(a) white dog’
[nɛ̀rⁿì(L) pírî] L wò-ŋ
‘this/that white dog’

c. noun plus numeral
nɛ̀rⁿì wòy
‘two dogs’
[nɛ̀rⁿì L wòy] L wèː:
‘these/those two dogs’

d. [noun adjective] numeral
[nɛ̀rⁿì] pírî wòy
‘two white dogs’
[nɛ̀rⁿì(L) pírî wòy] L wèː:
‘these/those two white dogs’

6.5.4 Determiner Tone-Dropping

When a postposed demonstrative or determiner co-occurs with a possessor in an NP, the demonstrative loses its tonosyntactic control over the preceding possessed noun. On the contrary, in many cases the demonstrative itself is tone-dropped. If the possessor is preposed to the noun, the possessor-controlled {HL} or {L} overlay applies to the noun (161a). If the only possessor-controlled overlay were {L}, we would be unable to determine whether the possessor (on the left) or the demonstrative (on the right) is the effective controller. However, the occurrence in Nanga of an {HL} possessor-controlled overlay (when the possessor ends in an H-tone) decides the question at least for the noun, since {HL} rather than {L} appears on it. The examples in (161a-d) have demonstratives, those in (161a-d) have definite markers, and all involve alienable possession of a otherwise simple (unmodified) noun.

(161) Poss-N-Demonstrative

a. [Àrⁿà L nê] níę L tùngúrî L ńię
[man L Def.AnSg] HL stool IHL Dem.InanSg
‘this stool of the man(‘s)’

b. [Àrⁿà L nê] níę L tùngúrî L yèy
[man L Def.AnSg] HL stool IHL Dem.InanPl
‘these/those stools of the man’

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c. \( \text{ú} \) “HL lésî” “HL wô-ŋ”
   2SgPoss “HL uncle” 1Dem-AnSg
   “this/that uncle of yours-Sg” (wô-ŋ) (162) Poss-N-Definite

d. \( \text{ú} \) “HL lésî” “HL wè:”
   2SgPoss “HL uncle” 1Dem.AnPl
   “these/those uncles of yours”

In examples like those in (161-2), we could argue that the L-tone of the determiner is simply an extension of the {HL} overlay that the possessor controls on ‘stool’ and its modifiers (adjective, numeral). If this were all there were to it, we would simply define the domain of the possessor-controlled overlay to include the determiner, and no special rule would be needed for determiners. I return to this question below.

My assistant normally drops the tones of the determiners in the examples in (161-2). In these examples, the possessor-controlled overlay is {HL} because the possessor ends in an H-tone. By contrast, when the possessor-controlled overlay is {L}, he frequently fails to drop the tones of the determiner. An example is sùmâylâ “HL ñdô” “HL ŋgû” varying with sùmâylâ “HL ñdô ŋgû” ‘this house of Soumaila’. In the first variant, the {L} overlay of ñdô ‘house’ could be attributed to either the possessor-controlled {L}, as in sùmâylâ ñdô soumâila ‘Soumila’s house’, or to the demonstrative-controlled {L} in ñdô “HL ŋgû” ‘this house’. So the variation in the data may reflect a tug-of-war between two would-be controllers.

When the simple Poss-N-Det examples in (161-2) are expanded by adding postnominal modifiers (adjective and/or numeral), the lexical tones of the determiner may reappear. When this happens, as in Poss-N-Adj-Num-Det, the possessor and the determiner on the two flanks are tonal peaks, while everything in between is L-toned except for a possible initial H on the possessed noun. Examples of this pattern are in (163).

(163) a. \( \text{yâ-ŋ} \) “HL nér” “HL ñdô” “HL ɔ̀ wɔ̀ ŋgû”
   [woman-SgL] “Dem-AnSg] [HL house] “big” 1Def.InanSg
   ‘this/that big house of the woman’
b. \[ yà-ŋ \ L \ né \] \[ HL [lési \ mɔ́si] \ wò-ŋ \]
[woman-Sg \ L \ Def.AnSg] \[ HL [uncle \ bad] \ Dem-AnSg \]
‘this/that nasty uncle of the woman’

c. \[ yà-ŋ \ L \ né \] \[ HL [lési \ mɔ́si] \ bû: \]
[woman-Sg \ L \ Def.AnSg] \[ HL [uncle \ bad] \ Def.AnPl \]
‘the nasty uncles of the woman’

d. \[ ë:mádù \ L [nér`i \ kùrè \ mɔ́si] \ bû: \]
A \[ HL [dog \ six \ bad] \ Def.AnPl \]
‘the six nasty dogs of Amadou’

e. \[ yà-ŋ \ L \ wò-ŋ \] \[ HL [nédò \ piri \ kùrè] \ ý \]
[woman-Sg \ L \ Dem-AnSg] \[ HL [house \ white \ six] \ Def.InanPl \]
‘the six white houses of this woman’

f. \[ yà-ŋ \ L \ wò-ŋ \] \[ HL [nér`i \ piri \ kùrè] \ bû: \]
[woman-Sg \ L \ Dem-AnSg] \[ HL [dog \ white \ six] \ Def.AnPl \]
‘the six white dogs of this woman’

There are, however, other examples where the final determiner in such strings is L-toned. My impression is that this is more common for the singular definite morphemes (inanimate singular \( 껜\) and variants, animate singular \( 껜\)), as in (164a-b), than for the demonstratives and for the plural definites. However, there is likely to be considerable interspeaker variation.

(164) a. \[ yà-ŋ \ L \ wò-ŋ \] \[ HL [nédò \ piri] \ \[ L \ gù \]
[woman-Sg \ L \ Dem-AnSg] \[ HL [house \ white] \ Def.InanSg \]
‘this woman’s white house’

b. \[ yà-ŋ \ L \ wò-ŋ \] \[ HL [nér`i \ piri] \ \[ L \ nè \]
[woman-Sg \ L \ Dem-AnSg] \[ HL [dog \ white] \ Def.AnSg \]
‘this woman’s white dog’

Consider now the inalienables with preposed pronominal possessors in (165). In my assistant’s usual pronunciation, the N-Poss sequence is realized as though in isolation, the determiner similarly shows its lexical melody, and the intervening adjective and/or numeral are tone-dropped. Two analyses are possible. In one, N-Poss is a tonosyntactic island, and is followed by a second grouping in which the final determiner controls tone-dropping on the postnominal modifiers. Alternatively, we can attribute the tone-dropping on the postnominal modifiers to the possessor-controlled {HL} or \{L\} overlay. In such lengthy examples, my assistant usually did not drop tones on the Poss-N sequence, i.e. to \( ü \ lési\), in the same way as he did in comparable examples without the determiner (§6.2.2.4). Apparently the more lengthy NPs in (165) favor chunky phrasings with multiple tonal peaks.

(165) a. \[ <ù \ \[ HL [lési] \ mɔ́si\]\ L \ né \]
\[ \subset 2 \text{SgPoss} \ [HL [uncle] \ [bad] \ Def.AnSg] \]
‘the nasty uncles of yours-Sg’
[alternatively parsable as \[ <ù \ \[ HL [lési mɔ́si]\] \ né \]]
b. ñú Lési [mèsì kùrè]L bù(·)
2SgPoss uncle [bad six]L Def.AnPl
‘the six nasty uncles of yours-Sg’
[alternatively parsable as ñú Lési mèsì kùrè]L bù(·)]

(166a-d) exemplify the combination of a determiner with a postposed pronominal possessor, with or without other postnominal modifiers. The determiner is regularly tone-dropped in this combination. The fact that these possessors end in an L-tone may have been a factor historically.

a. Túngúri [ú ðL] g̀3 L̀yè
stool [2Sg Poss.InanSg] L̀yèy
‘this stool of yours-Sg’

b. ñdò [i: ðL] g̀3 L̀gù
house [1Pl Poss.InanSg] L̀Dem.InanSg
‘this house of ours’

c. Túngúri [ú ðL] yè
stool [2Sg Poss.InanPl] L̀Dem.InanSg
‘these stools of yours-Sg’

d. [ñdò L̀ pírí] kùrè [ú ðL] yè
‘your-Sg six white houses (definite)’

e. [ñdò L̀ pírí] [ú ðL] g̀3 L̀gù
[house white] [2Sg Poss.InanSg] L̀Def.InanSg
‘your-Sg white house (definite)’

To summarize: Determiner Tone-Dropping applies frequently in simple Poss-N-Det sequences, especially with {HL} overlay on the possessed noun, and reliably in N-…-Poss-Det combinations. In the more complex sequences also involving postnominal modifiers, determiners tend not to drop, and they arguably control tone-dropping on the modifiers.

Determiner Tone-Dropping might be compared with vaguely similar tone-dropping that occurs on the locative postposition, see (196) in §8.2.3.2.

6.6 Universal and distributive quantifiers

6.6.1 ‘All’ (kéréw, sóy, pú→)

Universal quantifier kéréw ‘all’ is added to the end of the NP. With inanimates, agreement is 3Sg rather than 3Pl (167a). With animates, agreement is plural. kéréw may be combined directly with an independent pronoun (167c), with appropriate person agreement. kéréw can also be used absolutely, in the sense ‘everything’ or ‘everyone’. There is no tonosyntactic interaction between kéréw and preceding words in the NP.
\(167\) a. \([\text{ǹdò}^L \text{́y} \; \text{kéréw}] \; \text{yègè-èrè-∅}\) \\
\([\text{house}^L \text{Def.InanPl} \; \text{all}] \; \text{fall-Pfv1a-3SgSbj}\) \\
‘All of the houses fell (=collapsed).’

b. \([\text{yì-tègé}^L \; \text{́bù:} \; \text{kéréw}] \; \text{́yá} \; \text{b-è}\) \\
\([\text{child-Pl}^L \text{Def.AnPl} \; \text{all}] \; \text{Exist} \; \text{be-3PlSbj}\) \\
‘All of the children are present.’

c. \([\text{́i:} \; \text{kéréw}] \; \text{́yá} \; \text{bù-}:\) \\
\([\text{1Pl} \; \text{all}] \; \text{Exist} \; \text{be-3PlSbj}\) \\
‘We are all present.’

d. \(\text{kéréw} \; \text{́n̩é-èr-à}\) \\
\(\text{all} \; \text{go-Pfv1a-3PlSbj}\) \\
‘Everyone went.’

e. \(\text{kéréw} \; \text{k̃̃-ti-yà}\) \\
\(\text{all} \; \text{eat-Pfv1b-3PlSbj}\) \\
‘They ate everything.’

It is also possible to use the more emphatic \(\text{sóy}\) in the same NP-final position (168a), and absolutely (168b). However, \(\text{sóy}\) can also be used phrase-initially, and in this case it may co-occur with \(\text{kéréw}\) (168c).

\(168\) a. \([\text{ǹdò}^L \text{́y} \; \text{sóy}] \; \text{̱ñ̩m̃é-èr-∅}\) \\
\([\text{house}^L \text{Def.InanPl} \; \text{all}] \; \text{be.ruined-Pfv1a-3SgSbj}\) \\
‘All of the houses were ruined.’

b. \(\text{sóy} \; \text{́n̩é-èr-à}\) \\
\(\text{all} \; \text{go-Pfv1a-3PlSbj}\) \\
‘Everyone went.’

c. \([\text{sóy} \; \text{́yì-tègé}^L \; \text{́bù:} \; \text{kéréw}] \; \text{́yá} \; \text{b-è}\) \\
\([\text{all} \; \text{child-Pl}^L \text{Def.AnPl} \; \text{all}] \; \text{Exist} \; \text{be-3PlSbj}\) \\
‘All of the children are present.’

A regionally ubiquitous ‘all’ expression \(\text{pú→}\) (variants \(\text{fü→}, \text{bú→}\)), pronounced emphatically and often prolonged intonationally, is common in texts at the end of an NP. It also occurs in ‘as soon as’ clauses (§15.4.2). For \(\text{kéréw}\) and \(\text{sóy}\) with negation, see §6.6.3, below. For emphatic \(\text{pés ‘(not) at all’}, see §19.2.4.

6.6.2 ‘Each’ (\(\text{kámà, kèw}\))

Distributive ‘each’ is \(\text{kámà}\). It forces tone-dropping on the preceding noun: \(\text{ǹdò ‘house’ but ǹdò}^L \text{kámà ‘each house’}, likewise \(\text{yà:}^L \text{kámà ‘each woman’}. Agreement is 3Sg. \(\text{kámà}\) cannot be directly attached to a personal pronoun, but an independent pronoun with nonsingular
reference may precede it apposititionally. In this case, agreement is still 3Sg regardless of the category of the pronoun (169c).

(169) a. [nù L kámá] [pèrgé wòy-wòy] ñíí-mi-y . :  
   [personL each] [sheep two-two] give-IPfv-1PISbj  
   ‘We will give two sheep (apiece) to each person.’

b. [nù L kámá]  
   [personL each]  
   [pèrgé L túnâ-túnâ] ñíjí-ŋ ñíí-ŋ  
   [sheepL one-one] 1Sg-Acc give-IPfv.3SgSbj  
   ‘Each person will give me one sheep.’

c. i: [nù L kámá]  
   1Pl [personL each]  
   [á HL gɔ̃] éwé-ŋ  
   [3RefIsg HL Poss.InanSg] pay-IPfv.3SgSbj  
   ‘Each of us will pay for his/her own (portion).’

The linear position of kámá is discussed in §6.1.1, above.  

kámá forces double tone-dropping on a preceding noun-numeral sequence, though the construction is construed as summative; see ‘each of the three men’ in (90a) in §6.1.1. kámá also controls tone-dropping on pronominally possessed nouns, targeting the pronoun as well as the noun. This applies to inalienables with preposed pronominal possessor (170a) and to any noun with postposed pronominal possessor (170b). Similar cases involving determiners as controllers have been presented above (§6.5).

(170) a. [ù L lèsi] kámá  
   [2SgPoss uncleL] each  
   ‘each uncle of yours-Sg’ (= ‘each of your uncles’) (< ù lèsi)

b. [ǹdò L [ù gɔ́]] kámá  
   [house [2Sg Poss.InanSg]]L each  
   ‘each house of yours-Sg’ (= ‘each of your houses’) (< ǹdò [ù HL gɔ́])

The expression kɔ̀ L kámá ‘each thing’ is commonly used under negation to mean ‘(not) anything’, i.e. ‘nothing’. It is a high-frequency expression and is often heard as [kɔ́kánma] with partial forward vocalic assimilation.

For ṛnà L kámá ‘next year’ (not ‘each year’), see (226c) in §8.4.6.1 below.

The basic sense of kew is ‘equal(ly)’, as seen clearly in its use in explicit comparatives. It is an adverb, and does not induce tone-dropping on a preceding NP. However, in many contexts ‘equally’ and ‘each’ overlap, as in ‘I gave them each/equally two cows.’ As an adverb, kew can be used in some contexts where the NP-internal kámá is awkward, as with preposed possessors (171b). See also (90b) in §6.1.1.

(171) a. [yà-ŋ HL lèsi] kew  
   [woman-Sg HL uncle] equally  
   ‘each uncle of a woman’
b. [árⁿ] wô-ŋ [man] Dem-AnSg lésî këw
\( \text{HL} \) 'each uncle of this man'
\( \text{HL} \) uncle equally

6.6.3 Universal and distributive quantifiers with negation

Of the two ‘all’ particles (universal quantifiers) described above (§6.6.1), the more emphatic sóy is most likely to have wide scope containing a negation. It therefore functions to emphasize the negation in (172).

(172) sóy këz-ŋò-w ndè, tû-tûwê-m-w
all eat-PfVNeg-2SgSbj if, RdP-die-Ipfv-2SgSbj
‘If you-Sg don’t eat at all, you will die.’

The more basic and unmarked universal quantifier kéréw is more usual in narrow-scope contexts, i.e. where the negation has wide scope (173).

(173) yù: [î: lô], kà-kä: gâmbî kûwô ñ, millet [1Pl lPoss.InanSg], RdP-grasshopper certain eat and.SS
gâmbî dô-gô-ñ, [kéréw gây] kûwô-ndû some leave.PfV-3PlSbj, [all Topic] eat-PfVNeg.3Pl
‘The locusts ate some of our millet and left some; they did not eat all (of it).’

6.7 Accusative -ŋ

The accusative suffix (or enclitic) -ŋ is added to NPs including pronouns in direct object function. It is common with animate referents. It is uncommon but possible with inanimates, especially in emphatic pronunciations; see e.g. ‘gear’ in line 2 of (584) below. When it occurs at the end of an NP it could be taken as a postposition, but there are some cases where it is NP-medial.

-ŋ usually reduces phonetically to nasalization and perhaps very slight lengthening of a preceding vowel, though I normalize transcription as -ŋ. When followed by a vowel-initial word, we might expect a loud and clear [ŋ]. However, the -ŋ in përgé-ŋ ‘sheep-Acc’ has the same phonetic reductions in e.g. përgé-ŋ ay-sô-ŋ ‘I picked up a sheep’ as it does before a consonant or prepausally. The suffix is often entirely inaudible in contexts where I suspect it is “present” grammatically. Inaudibility is common when the final syllable of the form is already nasal (kúrⁿô ‘stone’, árⁿâ ‘man’, nàmâ ‘meat’), but inaudibility is also fairly common even in more benign phonological environments. When there is no audible cue, it is difficult to determine whether the suffix is structurally absent (i.e. because it is optional), or has merely been reduced to zero phonetically. My practice is to omit it in transcriptions unless it has at least some audible trace (such as nasalization). However, (animate) pronouns seem to have (underlyingly) obligatory -ŋ in the relevant syntactic environments, and in the case of 1Sg ñjí-ŋ even the phonetic disappearance of -ŋ is recoverable from the change in pronominal allomorph (compare regular 1Sg pronoun ñ.:)

The suffix has no intrinsic tone, so the final tone of the noun or pronoun is extended to the suffix. (174a) show -ŋ after a simple animate noun stem. The pronominal version in
(174b) also shows -ŋ̣. A prenominal possessor is compatible with -ŋ̣ on the possessed noun (174c).

(174)  
a. ̀perg̣-ŋ̣ sèmê-sô-ý
sheep-Acc slaughter-Pfv2-1SgSbj
‘I slaughtered a sheep.’

b. ̀rimê-ŋ̣ sèmê-sô-ý
AnSg-Acc slaughter-Pfv2-1SgSbj
‘I slaughtered it (animate).’

c. [á HL bâ-ŋ̣] yî-sô-∅
[3RefIsgPoss HL father-Acc] see-Pfv2-3SgSbj
‘She saw her (own) father.’

d. bérê-ŋ̣ kësê-sô-ý
stick-Acc cut-Pfv2-1SgSbj
‘I cut a stick.’

A following yaga ‘also, even’ has L-tones, even when the accusative morpheme is H-toned, as in ṣũ-ŋ̣ yàŋa ‘me too’. This could be taken as evidence for an underlying L-tone of the accusative morpheme; see §3.7.3.4, §19.1.3.

If a noun is followed by a modifying adjective, accusative -ŋ̣ (if present at all) is attached to the adjective (175a-b). The same NP-final accusative is found when the noun precedes a pronominal possessor (which includes a possessive classifier) as in (175c). Accusative -ŋ̣ is not doubled on the noun in these combinations.

(175)  
a. [̀perg̣L èwrê-ŋ̣] sèmê-sô-ý
[sheepL small-Acc] slaughter-Pfv2-1SgSbj
‘I slaughtered a small sheep.’

b. [àrâ santé gàwâ-ŋ̣] súyô-sô-ý
[manL tall-Acc] hit-Pfv2-1SgSbj
‘I hit a tall man.’

c. [̀perg̣ [á HL yê-ŋ̣]] sèmê-sô-∅
[sheep [3RefIsg HL Poss.AnSg-Acc]] slaughter-Pfv2-3SgSbj
‘He slaughtered his (own) sheep.’

When a numeral greater than ‘one’, the universal quantifier kérêw ‘all’, distributive quantifier këw ‘each’, or sày ‘only’ follows an animate noun, accusative -ŋ̣ is suffixed to the noun (not to the quantifier) (176).

(176)  
a. [̀perg̣-ŋ̣ pé:r] sèmê-sô-ý
[sheep-Acc ten] slaughter-Pfv2-1SgSbj
‘I slaughtered ten sheep.’ (pë:rũ)
b. \([pērgē-ŋ \text{ kérēw}]\) \(sēmé-sō-ý\)
\([\text{sheep-Acc all}]\) \(\text{slaught-Pfv2-1SgSbj}\)
‘I slaughtered all the sheep.’

c. \([pērgē-ŋ \text{ kēw}]\) \([nā \text{ wōy-wōy}]\) \(sùyō-ý\)
\([\text{sheep-Acc each}]\) \([\text{time two-two}]\) \(\text{hit-Pfv-1SgSbj}\)
‘I hit each sheep twice.’

The distributive quantifier \(kämā\) is treated like a modifying adjective (in this as in other respects), so \(-ŋ\) in this case is added to the quantifier (177b). The numeral ‘one’ is also an adjective syntactically and takes \(-ŋ\) directly (177c).

\((177)\) a. \([pērgē-ŋ \text{ sāy}]\) \(sēmē-ý\)
\([\text{sheep-Acc only}]\) \(\text{slaught-Pfv-1SgSbj}\)
‘I slaughtered only a sheep.’

b. \([pērgē₁ \text{ kāmā-ŋ}]\) \([nā \text{ wōy-wōy}]\) \(sùyō-ý\)
\([\text{sheep each-Acc}]\) \([\text{time two-two}]\) \(\text{hit-Pfv-1SgSbj}\)
‘I hit each sheep twice.’

c. \([pērgē₁ \text{ tūmā-ŋ}]\) \(sāy \ sēmē-ýⁿ\)
\([\text{sheep one-Acc} \text{ only}]\) \(\text{slaught-Pfv-1SgSbj}\)
‘I slaughtered only one sheep.’

Accusative \(-ŋ\) can also attach to a postnominal determiner (178).

\((178)\) a. \([pērgē₁ \text{ nē-ŋ}]\) \(sēmē-sō-ý\)
\([\text{sheep Def.AnSg-Acc}]\) \(\text{slaught-Pfv2-1SgSbj}\)
‘I slaughtered the sheep-Sg.’

b. \([pērgē₁ \text{ èwrē-ŋ}]\) \(nē-ŋ\) \(sēmē-sō-ý\)
\([\text{[sheep small] Def.AnSg-Acc}]\) \(\text{slaught-Pfv2-1SgSbj}\)
‘I slaughtered the small sheep-Sg.’

c. \([kūrō₁ \text{ gū-ŋ}]\) \(gūyō-sō-ý\)
\([\text{stone Def.InanSg-Acc}]\) \(\text{break.up-Pfv2-1SgSbj}\)
‘I broke up the rock.’

d. \([ǹdō₁ \text{ ǹgū-ŋ}]\) \(éwē-sō-ý\)
\([\text{house Dem.InanSg-Acc}]\) \(\text{buy-Pfv2-1SgSbj}\)
‘I bought this house.’

However, the determiners that end in a consonant, namely \(wō-ŋ\) ‘this (animate)’, \(yēy\) ‘these’ (inanimate), and definite plural \(y\), do not occur with accusative \(-ŋ\) (or at least do not allow it to be audibly expressed).

Accusative \(-ŋ\) does not occur in my data with pro forma cognate-nominal objects (§11.1.5), like \(kō-kōsō\) ‘coughing’ in \(kō-kōsō \text{ kōsō-sō-ý} \) ‘I coughed (a cough)’. 

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A difficulty in parsing texts is that accusative -ŋ is phonologically indistinguishable from =ŋ, the 3Sg animate form of the ‘it is’ clitic, which is commonly added to nouns and NPs (§11.2.1.1).
7 Coordination

7.1 Conjunction

7.1.1 NP conjunction (‘X and Y’) with yò ~ yè

The basic ‘and’ conjunction is yò, following both coordinands (179). It is L-toned even after an H-tone. A variant yè is also recorded. L-toned conjunction yò is distinct from an apparent minor contrastive topic particle yó, with H-tone and not paired with a second conjunct, attested once in a text (179c), see §18.1.4.4.

(179) a. [ú yò] [I:a yò]
   [2Sg and] [1Sg and]
   ‘you-Sg and I’

b. [béři yò] [pèrgé yò]
   [goat and] [sheep and]
   ‘a goat and a sheep’

c. [mɔ̀rò gù] [I:a yó]
   [MoroL Def.InanSg] [1Sg Topic]
   [[tigáL gú] tígí-ri] bérê-m-Ø,
   [[surnameL Def.InanSg] recite.surnames-Tr] can.1pfv-1SgSbj]
   [tigáL gú] tígí-ri
   [surnameL Def.InanSg] recite.surnames-Tr.QuotImprt
   kiyè-w ndé gày
   said Topic
   ‘That Moro (surname), as for me, I can speak about the name, if you have said (=asked me) to speak about the name.’ (2004.01.06)

7.1.1.1 Ordering of coordinands

My assistant indicated that the coordinands can be ordered either way. He did, however, express a preference for ordering pronouns before names or other NPs. In combinations of two pronouns, he preferred ordering third person before second person (‘he/she and you’) and second before first (‘you and I’).

7.1.1.2 Conjunction with final quantifier

kéréw ‘all’ may appear at the end of a conjoined NP as a kind of right-edge marker.
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7.1.2 Conjunction with *yaŋa* ‘also’

Atonal *yaŋa* ‘also’ (§19.1.3) can be added to each NP in a list, including the first item. This is not the same morpheme as {L}- toned instrumental *yànà* ~ *ỳŋà*. The list may be brought to a clear end by a final *kéréw* ‘all’.

(180) [ú yò] [l: nyò] kéréw ñîné-mi-y:.
[2Sg and] [1Sg and] all go-Lpfv-1PlSbj
‘You-Sg and I are both going.’

7.1.3 Conjunction with animate plural definite *bû:

After a noun, *bû:* is elsewhere the animate plural definite morpheme (§6.2.2.3). It also occasionally functions as an alternative to *yò* and *yaŋa* in NP conjunctions.

In (182), two NPs that had been conjoined by *yaŋa* in the immediately preceding discourse are repeated, this time with just high nonterminal final pitch. Animate plural *bû:* is technically incorrect for the inanimate ‘the carts’, but its repetition here fits the usual pattern where an invariant ‘and’ or ‘also’ morpheme is repeated after each conjunct. *kéréw* ‘all’ concludes the phrase as a right-edge marker, as often in other types of NP conjunction.

(181) [ɔ̀gɔ̀ɲɔ̀ [p: r wò y ságà]] yànà,
[camel [10 2 plus]] also,
kànë yànà, jàmà yànà, yù: yànà,
gold also, diamonds also, millet also,
p:x: yànà, sà:yú: yànà,
fonio also, wild.fonio also,
bàrá à go-ndò-sè gu-ndè, ...
gather 3RefSg go-out-Caus-Ppl.Pfv and.then.Past, ...
‘She gathered up and brought out twelve camels, gold, diamonds, millet, fonio (a grain, *Digitaria exilis*), and wild fonio (*Panicum laetum*).’ (2004.02.03)

Another possible textual example is (183), though parsing it is difficult. *bû:* occurs only after what appears to be the right conjunct. It is tone-dropped to 1bû: after the pronominal possessor (§6.5.4), and it is combined with the ‘also’ particle.

(182) [ɔ̀gɔ̀ɲɔ̀1 bû:ʃ], [wògòtòrò1 bû:ʃ], kéréw
[camel1 Def.AnPl], [cart1 Def.AnPl], all
‘the camels and the carts’ (2004.02.03)

(183) yì-tégë [yì: yè: 1bû:] yànà,
child-Pl [child 1Sg.Poss.AnPl 1Def.AnPl] also,
[ñîné-w:š:], ndë] [kàl kàmà] bàrá jò:-ndì
‘(You) children (of the village) along with my children, (you-Pl) go, gather the various things, and bring (them)!’ (2004.02.03)
7.1.4 “Conjunction” of verbs or VP’s

The conjoined NP type *X yò [Y yò]* is not used with verbs, VP’s, or clauses (except when clauses are quoted and treated as NPs, as in ‘X said [“Y” and “Z”’]).

For various ways to chain verbs, VPs, and clauses, see chapter 15.

7.2 Disjunction

There is no sharp distinction between disjunctive ‘X or Y’ in indicative contexts, and polar (mainly yes/no) interrogatives (§13.2.1).

7.2.1 ‘Or’ (*mà*)

The simplest disjunctive phrase is of the type *X mà [Y mà]*, as in (184a). This is directly comparable to the conjunction type *X yò [Y yò]* described above. However, there is an asymmetry in the disjunctive construction, in that the first but not the second *mà* is subject to intonational prolongation, the effect of which is to make it difficult to bracket this *mà* with the first coordinand. Furthermore, the second *mà* is often omitted, as in (184b).

(184) a. àśù [pèrgé mà] [bérí mà] sèmè-mì-}: always [sheep or] [goat or] slaughter-Ifv-1PlSbj

‘We slaughter (either) a sheep or a goat always (= every day).’

b. [mà L bù: [nàŋ tà:ndì: mà] nòy’]

[person Def.AnPl] [cow three or] four

màrā-g-ā

be.lost-Caus.Pfv-3PlSbj

‘The people lost three or four cows.’

7.2.2 Clause-level disjunction

It is particularly difficult to keep clausal disjunction (which by definition allows two or more possibilities) distinct from polar interrogation. The examples in (185) were elicited as disjunctions. They show a single occurrence of *mà*—‘or’ between the two clauses, which is also possible with interrogatives (‘will we go to the market, or will we die?’). In the indicative disjunctive sense, my assistant showed a distinct preference for the simple perfective as opposed to the imperfective, for future as well as past time frames. Stative verbs are also possible (185c).


‘Tomorrow, (either) we’ll go to the market, or we’ll die.’

(lit. “… we’ll have gone … or we’ll have died”)
b. bəmàkɔ̀ ñné-w mà → ñgá bè-w
   B go.Pfv-2SgSbj or here stay.Pfv-2SgSbj
   ‘You-Sg will go to Bamako or you will stay here.’ (but e.g. you won’t go to Mopti)

c. [ò:̀] gó ñné-Ø mà → ni-niyà-Ø
   [field Loc] go.Pfv-3SgSbj or RdP-sleep.Stat-3SgSbj
   ‘Either he has gone to the field, or he’s sleeping.’ (one infers, since he doesn’t answer our knock at the door)

My assistant rejected disjunctions including morphological imperatives (either two imperatives, or a combination of some other verb form with a final imperative). (185b) can be used as a rough pragmatic equivalent to a disjunction of two imperatives (‘Go to Bamako, or stay here!’).
8 Postpositions and adverbials

8.1 Dative and instrumental

8.1.1 Dative bay (‘for’, ‘at the place of’)

This atonal postposition appears in two tonal variants, báy and bày, carrying over the final tone from the preceding morpheme.

(186) a. yùří [[[mùː t] pêː] báy] kēːr-só-ŷ
   garment [[person old] Dat] show-Pfv2-1SgSbj
   ‘I showed the garment to the old man.’

    b. kēːrê [[[aːmádù báy] ŋďï-só-ŷ
   money [Amadou Dat] give-Pfv2-1SgSbj
   ‘I gave the money to Amadou.’

    c. [[[ú HL bâː] báy] dámâ
   [[2SgPoss HL father] Dat] speak.Imprt
   ‘Speak-2Sg to your father!’

    d. nîː [[[lôːzí báy] ŋdî-ŷ
   water [visitor Dat] give.Pfv-1SgSbj
   ‘I gave some water to a visitor.’

With ‘give’ and ‘show’, datives are optionally replaced by accusatives, but ‘say’ requires that the addressee (if specified overtly) be in dative form.

This postposition can also be used like French chez X ‘at the place/house of X’.

(187) aːmádù [[[ú báy] bù-Ø
   A [[2Sg chez] be-3SgSbj
   ‘Amadou is at your-Sg place.’

Pronominal datives are repeated in (188) from §4.3.1. Except for the first singular portmanteau, the forms are transparent. 1Sg bâr’í arguably begins with a variant of báy followed by a 1Sg element (reversing the usual order), but the morphology here is opaque.

(188) Pronominal datives

    category    dative

    a. 1Sg       bâr’í [irregular]

    1Pl iː báy
b. 2Sg ú bán 
2Pl ù: bán

c. 3Sg ǹné bán 
3Pl bù: bán

d. InanSg kú bán 
InanPl kù: bán

e. 3Logo/3ReflSg á bán 
3Logo/3ReflPl á: bán

Further examples of pronominal datives are in (189).

(189) a. bàr′í ǹjènà:r′í dàmà-r′í-Ø
   1SgDat nothing speak-PfvNeg-3SgSbj
   ‘He/She said nothing to me.’

b. tègì [ú bán] dámà-rØ
   truth [2Sg Dat] speak-Pfv-1SgSbj
   ‘I will tell you-Sg the truth.’

8.1.2 Instrumental or comitative yàŋà (ŋà)

The basic instrumental postposition is {L}-toned yàŋà, optionally elided after a vowel to ŋà. It is distinct from yaŋa (atonal, hence either yàŋà or yàŋà) ‘also, even’ (§19.1.3).

(190) a. nàmà [pòrì yàŋà] késé-só-Ø
   meat [knife Inst] cut-Pfv2-3SgSbj
   ‘He/She cut the meat with a knife.’

b. [nè:mì yàŋà] nènì nèngírè-m-è
   [salt Inst] baobab.sauce cook.sauce-Pfv-3PlSbj
   ‘They will cook the sauce with salt.’

c. [kúr′ô yàŋà] ǹné-ʒí sùyɛ-y
   [stone Inst] 3Sg-Acc hit.Pfv-1SgSbj
   ‘I hit him/her with a stone.’

With pronouns: kú yàŋà, ǹné yàŋà, etc. With demonstratives: ñgú yàŋà, etc.

A fixed combination nìjëy yì ndì ‘now’ occurs in the texts, where the postposition adds no discernible incremental meaning to nìjë ì ‘now’. An example is at the end of (746) in the sample text.

If the complement denotes a human, the postposition can be comitative (‘with’ in the sense ‘together with’ or ‘in the company of’). Examples are ‘Who did they come with?’ (466e) in §13.2.2 and ‘they fought with each other’ in (706b) in §18.3.1.
8.2 Locational postpositions

8.2.1 Locative, allative, and ablative functions

Simple locative adverbials, including locative PPs, can be translated as (stationary) locatives, as allatives, or as ablatives (‘in/at X’, ‘to X’, ‘from X’). Directional senses (allative and ablative) are expressed by other words, primarily motion verbs. Ablative is expressed by gô: ‘go out, exit’, which can be chained to other verbs. Any other verb of motion or locomotion (‘go’, ‘run’) can be combined with a locative adverbial or place name to express the allative. For examples see §8.2.11, §15.1.6, and §15.1.9.

8.2.2 Simple and complex PPs

The complex PPs are parallel to English ‘in front of X’ or the like. In Nanga they involve a possessed noun expressing the spatial relation (‘over’, ‘under’, ‘front’, etc.). This possessed spatial noun is then followed by the simple locative postposition ga (§8.3.3). Since the spatial noun in question is possessed, it has its lexical melody when it precedes a pronominal possessor, and a possessor-controlled overlay {HL} or {L} when it follows a possessor (usually nonpronominal). The spatial noun may therefore have three distinct tone patterns: lexical, {HL} overlay, or {L} overlay. In practice, the {HL} overlay has generalized to become the lexical (as well as possessed) tone.

8.2.3 Locative postposition ‘in, on’

8.2.3.1 Forms of the postposition (ga, ña, go, ñɔ, go, ño)

The basic locative postposition has allomorphs {ga ña go ñɔ go ño}. Distributional asymmetries described below suggest that the oldest form is go or go, i.e. with oral stop and back rounded vowel, compare Ben Tey wo.

The postposition is used chiefly with inanimate NP complements, but not with toponyms, which instead have a clitic =yè that may reduce to just a tone element (§8.2.4, below). The opposition between a general inanimate category that is associated with a morpheme KO (K a velar, O a back or low vowel), and a toponym category associated with a morpheme YE, can be connected with Najamba nominal morphology, where a final E vocalism {ɛ ɛ} is associated with nouns denoting topographic features and liquids, while the more common final O vocalism {o o a} is found with most other inanimate nouns.

The NP preceding locative {ga ña go ñɔ go ño} has its regular tones (with exceptions noted below), and its final tone spreads to the postposition. There is a partial phonological basis for the allomorphs, but some nouns have unpredictable allomorph choices and there is some variation in my data. The following is a summary of what I think are the basic patterns.

Segmentally, one common allomorph of the postposition is ga. It is realized tonally as either gà or gá depending on the final tone of the noun. The stems with this allomorph generally have vowels from the set {a e i} and do not have a final nasal syllable (191).
The postposition is nasalized to after a nasalized vowel or after a syllable of the shape \( Nv \) with a nasal (or nasalized sonorant) followed by a phonemically oral vowel. A nasal earlier in the word does not have this effect; see cousinhood’ in (191), above. Examples with locative \( \eta \) are in (192).

The vowel of the postposition is often rounded to \( \sigma \) or \( o \). In many cases this is by assimilation to the final vowel of the preceding NP. If the final vowel is \( \sigma \), the postposition has \( \sigma \) (193a). If the final vowel is \( o \) or \( u \) (the latter is rare at the end of nonmonosyllabic noun stems), the postposition has \( o \) (193b). Stems ending in a sequence like \( \ldots oCi \) and \( \ldots \sigma Ci \) may appear as \( \ldots oCu \) and \( \ldots \sigma Cu \), respectively, before the postposition, and the \( o \) or \( \sigma \) vocalism may carry over into the postposition; it was noted in §3.4.4 that lexical final short \( u \) is rare, but that final short \( i \) often alternates with \( u \) in the presence of rounded vowels or \( w \). My assistant inconsistently distinguished the \( \eta o \) and \( \eta \sigma \) variants, tending to pronounce \( \eta o \) even in vocalic environments where \( \eta o \) is expected. Some but not all nouns containing a nasal require \( \sigma \) in the postposition even without a rounded vowel in the noun itself (193e). Stems with \( e \) also favor \( o \) in the postposition (193f). I flag idiosyncratic tonal shifts of the stem with ! to the right of the PP (explanations below).

<table>
<thead>
<tr>
<th>(191)</th>
<th>gloss</th>
<th>noun</th>
<th>‘in a(n) X’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘shop’</td>
<td>bitíkí</td>
<td>bitík gà</td>
<td>(syncopated)</td>
</tr>
<tr>
<td>‘pond; shoe’</td>
<td>tágá</td>
<td>tágá gà</td>
<td></td>
</tr>
<tr>
<td>‘cousinhood’</td>
<td>mágí</td>
<td>mágí gà</td>
<td></td>
</tr>
<tr>
<td>‘courtyard’</td>
<td>dambil</td>
<td>dambil gà</td>
<td></td>
</tr>
<tr>
<td>‘market’</td>
<td>ëwë</td>
<td>ëwë gà</td>
<td></td>
</tr>
<tr>
<td>‘afternoon’</td>
<td>dëndë-sì</td>
<td>dëndë-sì gà</td>
<td></td>
</tr>
<tr>
<td>‘leaves’</td>
<td>úwà</td>
<td>úwà gà</td>
<td></td>
</tr>
<tr>
<td>‘goat(s)’</td>
<td>bërlí</td>
<td>bërl gà</td>
<td>(syncopated)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(192)</th>
<th>gloss</th>
<th>noun</th>
<th>‘in a(n) X’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘shed’</td>
<td>tâ:”</td>
<td>tâ:” ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘man(-hood)’</td>
<td>är”á</td>
<td>är”á ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘word’</td>
<td>dâmá</td>
<td>dâmá ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘tree’</td>
<td>tûmá</td>
<td>tûmá ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘beam’</td>
<td>gà:”</td>
<td>gà:” ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘cow’</td>
<td>nànà</td>
<td>nànà ( \eta )</td>
<td></td>
</tr>
<tr>
<td>‘meal’</td>
<td>( ná: )</td>
<td>( ná: ) ( \eta )</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(193)</th>
<th>gloss</th>
<th>noun</th>
<th>‘in a(n) X’</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ( C\sigma ) after ( \sigma )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘immature pod’</td>
<td>( g\sigma:nj\sigma )</td>
<td>( g\sigma:nj\sigma ) ( g\sigma )</td>
<td></td>
</tr>
<tr>
<td>‘wide pond’</td>
<td>tágá ( òw\sigma )</td>
<td>tágá ( òw\sigma ) ( g\sigma )</td>
<td></td>
</tr>
<tr>
<td>‘mountain’</td>
<td>tør</td>
<td>tør ( g\sigma )</td>
<td></td>
</tr>
<tr>
<td>‘chaff’</td>
<td>( òy\sigma )</td>
<td>( òy\sigma ) ( \eta\sigma )</td>
<td></td>
</tr>
</tbody>
</table>
b. Co after o or u
‘criticism’ dómôr”ô dómôr”ô ñó
‘the bush, outback’ ò:-sóró ò:-sóró gó
‘fields, outback’ ò: ò: gó !
‘complex’ gálô gálô gó
‘head’ kú: kú: gó !

c. Co after o…i becoming o…u
‘toilet area’ sügô-gômí sügô-gômú ñó

d. Co after o…i or u…i becoming o/u…u
‘road’ ósí ósú gó !
‘mountain’ tôrô-kûndí tôrô-kûndû gó
‘rear’ tûndí tûndû gó
‘skin’ gûsí gûsú gó
‘forest’ ūndî ūndû gó

e. Co after unrounded vowels
‘meat’ nàmâ nàmà ñó
‘speech’ dàmá dàmà ñó
‘milk’ èmè èmè ñó
‘water’ ní: ní: ñó !

f. nouns with e
‘speech’ têgî têgî gó (or syncopated [têg:ô])
‘belly’ bêndé bêndé gó
‘eye’ giré giré gó
‘sauce’ nêñî nêñì ñó (syncopated [nêñ:ô])

Combined with Nasalization-Spreading (see above), the rounding of the postposition vowel accounts for the allomorphs go, ñó, go, and ñó.

In several high-frequency combinations, a final L- or <HL>-tone on the noun shifts to H-tone before the postposition (which then itself acquires the H-tone by spreading). This is the case with ‘head’, ‘road’, and ‘water’, which are flagged with ! in (193) above and are repeated in (194). In the case of go: ‘fire’, the same process is at work, but since the input stem is a <LHL> monosyllabic the output is <LH> (i.e. rising tone).

(194) gloss noun ‘in a(n) X’

a. final <HL> to H
‘farming’ wòrî wór gó
‘grass’ sàwá sàwá gó
‘house’ ñđô ñđô gó
‘road’ ósí ósú gó
‘head’ kú: kú: gó
‘water’ ní: ní: ñó
b. final <LHL> to <LH>
   ‘fire’  gò:  gò: gò

The raising of the final L-tone element in (194) is not a general phonological rule; several examples given above preserve a final L- or <HL>-tone before the postposition, which then itself has L-tone.

The common expression ‘in/to the field(s)’ is ò: gò, with an L-toned version of ò: ‘field(s)’. There is no general phonological rule converting an <LH>-toned monosyllabic to an L-toned one, compare ë: gá ‘in/to the well’.

8.2.3.2 Fusion of locative postposition with determiners (gá, ìgá)

The locative postposition (gá and variants) fuses with a preceding inanimate singular definite kú ~ gú ~ w to form invariant portmanteau gá, presumably contracted from *gù-gá either via syncope (*g-gá) or, less plausibly, via spirantization and deletion of intervocalic *g (*gú√ > *gúá). As with definite kú ~ gú ~ w by itself, the fused form gá induces tone-dropping on the preceding noun. For nouns that take simple (indefinite) locative allomorph gá, the tone-dropping on the noun distinguishes the simple locative from the definite locative (195a). No confusion is possible with nouns that take any simple locative allomorph other than gá. (195) summarizes the audible cues that distinguish ‘in X’ from ‘in the X’ for different nouns, and shows how ‘in the X’ is based on ‘the X’.

(195) gloss  noun  ‘in X’  ‘the X’  ‘in the X’

a. distinction made only by tone-dropping of noun

   ‘market’  éwé  éwé gá  éwé t gá  éwé t gá
   ‘courtyard’  dambil  dambil gá  dambil t gá  dambil t gá

b. distinction made only by form of postposition (only known example)

   ‘fields’  ô:  ô: t gá  ô: t gá  ô: t gá

c. distinction made by tone-dropping and by form of postposition

    L-toned gá
   ‘shop’  bitikì  bitik gá  bitik t gá  bitik t gá
   ‘calabash’  kósì  kósì gá  kósì t gá  kósì t gá

    rounded vowel
   ‘hide bag’  nákɔmbɔ  nákɔmbɔ gá  nákɔmbɔ t gá  nákɔmbɔ t gá
   ‘house’  ındò  ındò gá  ındò t gá  ındò t gá
   ‘forest’  ñndì  ñndì gá  ñndì t gá  ñndì t gá
   ‘river’  n:i:-bá:  n:i:-bá: gá  n:i:-bá: t gá  n:i:-bá: t gá
   ‘seeds’  tô:  tô: gá  tô: t gá  tô: t gá
   ‘village’  isé  isé gá  isé t gá  isé t gá

    η for g

    rounded vowel plus η for g
   ‘water’  n:i:  n:i: ηá  n:i: t gá  n:i: t gá

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A similar fusion occurs with the inanimate singular demonstrative pronoun ŋ hà, which has locative form ŋ gà. As with the fusion of definite gu and the locative into gà, the fused form ŋ gà requires tone-dropping on the preceding noun: ñdò L ŋ gà ‘in this house’. The plural is ñdò L yè̀ gò ‘in these houses’.

Without a preceding noun, ŋ gà functions as the regular ‘here’ demonstrative adverb. It is likely that kà ‘there (discourse-definite)’ is similarly reconstructible as the fusion of pronoun kú ‘it’ (in context often discourse-definite ‘that’) with the locative postposition. See §4.4.2.1 for these locative adverbs.

The inanimate plural definite is y (with tone-dropping on the noun), see §4.4.1.1. The locative postposition takes L-toned form gò after this, regardless of the vocalism of the noun. This tone-dropping is reminiscent of Determiner Tone-Dropping (§6.5.4).

<table>
<thead>
<tr>
<th>(196)</th>
<th>gloss</th>
<th>noun</th>
<th>‘the Xs’</th>
<th>‘in the Xs’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘stick’</td>
<td>bëré</td>
<td>bëré L y</td>
<td>bëré L y gò</td>
<td></td>
</tr>
<tr>
<td>‘house’</td>
<td>ñdò</td>
<td>ñdò L y</td>
<td>ñdò L y gò</td>
<td></td>
</tr>
<tr>
<td>‘field’</td>
<td>ò:</td>
<td>ò: L y</td>
<td>ò: L y gò</td>
<td></td>
</tr>
<tr>
<td>‘market’</td>
<td>èvé</td>
<td>èvé L y</td>
<td>èvé L y gò</td>
<td></td>
</tr>
<tr>
<td>‘writing’</td>
<td>tòpò</td>
<td>tòpò L y</td>
<td>tòpò L y gò</td>
<td></td>
</tr>
<tr>
<td>‘damage’</td>
<td>nàmá</td>
<td>nàmá L y</td>
<td>nàmá L y gò</td>
<td></td>
</tr>
</tbody>
</table>

After inanimate plural demonstrative yè̀ we get gà, as in ñdò L yè̀ gà ‘in those houses’.

Animate nouns are not commonly followed by the locative postposition, but the combination is attested. Most often it involves a plural noun, in partitive or spatial sense. The combinations are phonologically regular with no fusion. My assistant pronounced them as follows: definite animate singular nè ṭò, definite animate plural bù: gò (197), animate singular demonstrative wò-ny, animate plural demonstrative wè: gò.

<table>
<thead>
<tr>
<th>(197)</th>
<th>[[Jarò L bù:] gò], [nù L tùmà sày] ćù</th>
<th>[[man L Def.AnPl] Loc], [person L one only] good.Pred</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘In (= among) those men, only one is any good.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8.2.3.3 Semantics of locative postposition

In the examples given in the subsections above, the locative postposition can usually be glossed with ‘in’, since the reference entity is (potentially) a container or a bounded zone with an interior. The postposition can also mean ‘on X’ where X is an entity with an upper or lateral surface (‘rock’, ‘wall’). Examples (with the definite form of the postposition) are in (198).

<table>
<thead>
<tr>
<th>(198)</th>
<th>gloss</th>
<th>noun</th>
<th>‘on the X’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘rocky area’</td>
<td>pàpàgiri</td>
<td>pàpàgiri L gà</td>
<td></td>
</tr>
<tr>
<td>‘rock’</td>
<td>kùrò</td>
<td>kùrò L gà</td>
<td></td>
</tr>
<tr>
<td>‘wall’</td>
<td>ñdò-tùmì</td>
<td>ñdò-tùmì L gà</td>
<td></td>
</tr>
</tbody>
</table>

The ‘on X’ use of the postposition competes with fuller expressions of the type ‘on the head of X’ described below (§8.2.5).
The locative, or its fused definite form ǧā, may also be used with NPs denoting periods of time, such as seasons (199).

<table>
<thead>
<tr>
<th>(199)</th>
<th>gloss</th>
<th>noun</th>
<th>‘in X’</th>
<th>‘in the X’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘rainy season’</td>
<td>gěr̪̣é</td>
<td>gěr̪̣é ŋo</td>
<td>gěr̪̣é l ǧā</td>
<td></td>
</tr>
<tr>
<td>‘hot season’</td>
<td>ūsiye-bá̃r̪̣á</td>
<td>ūsiye-bá̃r̪̣à ŋà</td>
<td>ūsiye-bá̃r̪̣à l ǧą</td>
<td></td>
</tr>
</tbody>
</table>

However, time-of-day expressions such as ‘at night’ are normally expressed simply as nouns (‘night’). These nouns are interpreted adverbially unless the syntax of a given clause points in another direction.

<table>
<thead>
<tr>
<th>(200)</th>
<th>dẹ:ndẹ</th>
<th>biرع-ми-γ.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>night</td>
<td>work-Ipfv-1PlSbj</td>
<td></td>
</tr>
<tr>
<td>‘We work at night.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The precise gloss of the locative in context depends not only on the ‘in/on’ distinction (container versus surface), but also on the verb. As in the other languages of the zone, verbs rather than postpositions distinguish (static) locative (201a), allative (201b), and ablative (201c) relations.

<table>
<thead>
<tr>
<th>(201)</th>
<th>a. [ńdọ l ǧą]</th>
<th>nị̣ːr̪̣e-ㄇ-∅</th>
</tr>
</thead>
<tbody>
<tr>
<td>[house l Def.InanSg Loc]</td>
<td>sleep-Ipfv-1SgSbj</td>
<td></td>
</tr>
<tr>
<td>‘I will sleep in the house.’ (ńdọ)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b.</th>
<th>[ẹ́w̄e ǧą]</th>
<th>ńṇ-ㄇ-∅</th>
</tr>
</thead>
<tbody>
<tr>
<td>[market Loc]</td>
<td>go-Ipfv-1Sg</td>
<td></td>
</tr>
<tr>
<td>‘I am going to (the) market.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c.</th>
<th>[ōsu ǧo]</th>
<th>ɡo:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[road Loc]</td>
<td>go.out.Imprt</td>
<td></td>
</tr>
<tr>
<td>‘Get-2Sg out of the road!’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

tüyà-gá ‘bunch (unit of items for sale)’ is an apparent case where an original locative PP has become frozen into a noun. It can be followed by a numeral or other modifier: tüyà-gá wọ́y ‘two bunches’, tüyà-gá ɔ̀wọ́ ‘large bunch’. The composite origin of tüyà-gá is suggested by comparison with verb tüy ‘put down’.

The locative postposition is readily used with nouns denoting or implying actions: [ńạ: ǧą] ěw-γé- ‘sit down at (=for) a meal’, [dàmà ŋà] ěw-γé- ‘sit down at (=for) a talk’.

Subordinated clauses that contain the locative or a similar form include complements of ‘help’ (§17.4.1), and “pseudo-locative” purposive complements §7.6.3.

8.2.4 Locative clitic =yè (or final tone change) with place names

There are no Jamsay-style tonal locatives (locative forms of nouns marked only by a tonal change). However, there is a locative form of place names that is expressed by a final clitic, which in some cases reduces to a tonal change. The forms of the clitic are in (202).
The default allomorph, and the one that I take to be phonologically basic, is \( =yè \). It is required after \( i \) in a non-nasal syllable, and it occurs after other vowels in some place names (203a). If the preceding syllable is nasalized, the variant \( =y^nè \) is obligatory (203b). After heavy (i.e. quadrisyllabic) place names, \( =yè \) tends to contract with a stem-final vowel, resulting in either a long or a short vowel with falling tone, although the full pronunciation is also possible (203c).

<table>
<thead>
<tr>
<th>Location</th>
<th>Nanga Term</th>
<th>Locational Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Mopti</td>
<td>mó:ti</td>
<td>mó:ti=( =yè )</td>
</tr>
<tr>
<td>Wakara</td>
<td>wágárí</td>
<td>wágárí=( =yè )</td>
</tr>
<tr>
<td>Perge</td>
<td>pèrgé</td>
<td>pèrgé=( =yè )</td>
</tr>
<tr>
<td>Pergesa</td>
<td>pégésá</td>
<td>pégésá=( =yè )</td>
</tr>
<tr>
<td>b. Douentza</td>
<td>dúwánsár(^{&quot;i})</td>
<td>dúwánsár(^{&quot;i})=( =y^nè )</td>
</tr>
<tr>
<td>Boni</td>
<td>bó:ní</td>
<td>bó:ní=( =y^nè )</td>
</tr>
<tr>
<td>Ben Tey</td>
<td>bè:r(^{&quot;i})</td>
<td>bè:r(^{&quot;i})=( =y^nè )</td>
</tr>
<tr>
<td>Soro-ni</td>
<td>sóròní</td>
<td>sóròní=( =y^nè )</td>
</tr>
<tr>
<td>c. Namakoro</td>
<td>námbákòré</td>
<td>námbákòré=( =ê ) ~ námbákòré=( =yè )</td>
</tr>
<tr>
<td>Bandiagaran</td>
<td>bāngărā</td>
<td>bāngărā=( =ê ) ~ bāngărē=( =yè )</td>
</tr>
<tr>
<td>Bamako</td>
<td>bāmāk( õ)</td>
<td>bāmāk( õ)=( =) ~ bāmāk( õ)=( =yè )</td>
</tr>
<tr>
<td>Dianwely</td>
<td>jāw(^{&quot;l( e)})</td>
<td>jāw(^{&quot;l( e)})=( =) ~ jāw(^{&quot;l( e)})=( =)</td>
</tr>
<tr>
<td>Kono</td>
<td>kō:r(^{&quot;é( ñ)})</td>
<td>kō:r(^{&quot;é( ñ)})=( =)</td>
</tr>
<tr>
<td>Anda</td>
<td>á:ndé</td>
<td>á:ndé=( =)</td>
</tr>
</tbody>
</table>

This clitic is used with place names as locations, destinations (e.g. with a motion verb like ‘go’ or ‘go in’), or points of departure (with a motion verb like ‘go out, leave’).
8.2.5 ‘On (the head of) X’ ([X [H] kû:] gò)

The concept ‘on X’ is expressed as [[X [H] kû:] gà] or [[X  L kû:] gà], depending on whether the NP (X) ends in an H- or L-tone. It is based on possessed forms of kû: ‘head’ followed by the basic locative postposition ga. In some cases, when X is a human or animal, the literal sense ‘on the head of X’ may be pertinent.

(205) gloss noun ‘on X’

‘stool’ tûngûrí [[tûngûrí [H] kû:] gà
‘box’ gôngô [[gôngô [H] kû:] gà
‘cart’ wògôtórô [[wògôtórô [L] kû:] gà

The usual postnominal pronominal possessors are used, following the noun which has its regular tonal form (206).

(206) a. kû: kɔ᷈
head 1SgPoss.InanSg
‘my head’

b. [kû: kɔ᷈:]
gà
[head 1SgPoss.InanSg] Loc
‘on me’ (or: ‘on my head’)

8.2.6 ‘Next to, beside X’ ([X [H] kêrí] gà)

This concept is expressed using a possessed form of kêrí ‘side’ followed by locative ga. When X is a nonpronominal NP, the combination is heard as [[X [H] kêrí] gà] or [[X  L kêrí] gà], depending on whether X ends in H or L tone. The locative postposition is optional after a pronominal possessor (207b).

(207) a. [hûdɔ 1]
gù
[house 1 Def.InanSg] [H] kêrí
‘beside the house’

b. [kêrí kɔ᷈:]
gà
[side 1SgPoss.InanSg] Loc
‘beside me’

This complex postposition specifies that the topical entity (trajector) is next to the landmark, as with two persons sitting next to each other. For a looser spatial connection, as when the two persons are in the same setting but not directly next to each other, [[X [H] dòsû] gà] ‘under X’ (§8.2.9) can be used.
8.2.7 ‘In front of’ ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{girê} \) \( \text{gà} \) ])

With nonpronominal complement, ‘in front of X’ is expressed by a possessed form of \( \text{girê} \) ‘front’ (cf. \( \text{girê} \) ‘eye’), plus locative postposition \( \text{gà} \). When \( X \) is a nonpronominal NP, the result is ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{girê} \) \( \text{gà} \)]) or, if \( X \) ends in an L-tone, ([X \( ^{\text{L}} \) \( \text{girê} \) \( \text{gà} \)]. The final \( \text{gà} \) is optional after a pronominal possessor, which is preceded by \( \text{girê} \) in its lexical form (208b).

(208) a. \([\text{è}: \text{HL} \text{girê}] \text{gà} \) [well \( \text{HL} \) \( \text{front} \) ] \( \text{Loc} \)

‘in front of the well’

b. \([\text{girê} \text{ kş:] \text{LPoss.InanSg} \text{(Loc)} \) \( \text{gà} \) \)

‘in front of me’

c. \([\text{ń dó} \text{L} \text{girê}] \text{gà} \) [house \( \text{L} \) \( \text{front} \) ] \( \text{Loc} \)

‘in front of (a/the) house’

The corresponding adverb, with no landmark, is \( \text{girê gò} \) ‘ahead, in front’.

8.2.8 ‘Behind/after X’ ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{tündù} \) \( \text{gò} \)], ‘about’

‘About (=concerning) X’ is expressed with \( X \) as possessor of a verbal noun (or similar nominal), when the verb is ‘speak’. With other verbs, we get ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{tündù} \) \( \text{gò} \)]) or (if \( X \) ends in an L-tone) ([X \( ^{\text{L}} \) \( \text{tündù} \) \( \text{gò} \) ‘after X’, cf. noun \( \text{tündí} \) ‘back, rear’ and adverbial PP \( \text{tündú gò} \) ‘afterwards’).

(209) a. \([\text{émé} \text{L} \text{dámà}] \text{dámà-mì-y;} \) [milk \( \text{L} \) \( \text{talk} \) ] speak-Ipfv-1PlSbj

‘We will speak about milk.’ (lit. “… speak some milk’s talk”)

b. \([\text{émé} \text{L} \text{tündù] \text{gò]} \) mā:ndī = bē-y \) [milk \( \text{L} \) \( \text{rear} \) ] \( \text{Loc} \) think.Pfv=Past-1SgSbj

‘I thought about milk.’

c. \([\text{émé} \text{L} \text{tündù] \text{gò]} \) nṳṕu = b-á \) [milk \( \text{L} \) \( \text{rear} \) ] \( \text{Loc} \) sing.Pfv=Past-3PlSbj

‘They sang about milk.’

8.2.9 ‘Over X’ ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{tēmbê} \) \( \text{gà} \)], ‘under X’ ([X \( ^{\text{H}} \) \( ^{\text{L}} \) \( \text{dósù} \) \( \text{gò} \)]

There are complex postpositions with nouns \( \text{tēmbê} \) ‘top’ and \( \text{dósí} \) ‘bottom, underneath’, in possessed form with following locative postposition \( \text{gà} \), \( \text{gò} \). The forms with preposed \( X \) are ([X \( ^{\text{H}} \) \( \text{tēmbê} \) \( \text{gà} \)] or ([X \( ^{\text{L}} \) \( \text{tēmbê} \) \( \text{gà} \)], and ([X \( ^{\text{H}} \) \( \text{dósù} \) \( \text{gò} \)] or ([X \( ^{\text{L}} \) \( \text{dósù} \) \( \text{gò} \)], with the tone depending on whether \( X \) ends in H or L. As in other such complex postpositions, the locative postposition is optionally omitted after a pronominal possessor (210b,e).
Without an explicit landmark NP, we get pure adverbials těmbè gà ‘up above, overhead’ and dósú gö ‘down below, at the bottom, underneath’.

‘Under X’ can also be stretched to mean ‘beside, in the vicinity of (someone)’.

See also {dǔmbó nɔ} gà ‘at its base’ in (551) in §15.1.7.

8.2.10 ‘Between’ ([X (H) běrɛ-kɛndɛ] gà )

‘Between’ or ‘among/amidst’ is expressed by a complex postposition containing the noun běrɛ-kɛndɛ ‘middle’. The postposition, with noun X, appears as [[X (H) běrɛ-kɛndɛ] gà] or [[X běrɛ-kɛndɛ] gà] depending on whether X ends in H or L. The first of these (i.e. after a final H-tone) can also be pronounced [[X (H) běrɛ-kɛndɛ] gà], where the break in the {HL} tone overlay is delayed until the beginning of the final syllable of běrɛ-kɛndɛ. The difference between [[X (H) běrɛ-kɛndɛ] gà] and [[X (H) běrɛ-kɛndɛ] gà] is attributable to the ambiguous status of běrɛ-kɛndɛ as either a compound běrɛ-kɛndɛ or as an unsegmentable quadrisyllabic noun, since the application of {HL} overlays is sensitive to this distinction.

This complex postposition may take either a simple NP (with plural reference) or a conjoined NP as its complement.

(211) a. [iː běrɛ-kɛndɛ] gà
   [1Pl běrɛ-kɛndɛ] Loc
   ‘between/among us’

b. [[[yɔ] [iː yɔ]] běrɛ-kɛndɛ] gà
   [[[2SG and] [1SG and]] běrɛ-kɛndɛ] Loc
   ‘between you-Sg and me’
8.2.11 ‘From X to Y’

A complete locational ‘from X to Y’ expression requires two clauses, the first including go: ‘go out, leave’ to convey an ablative sense. bá→ ‘since, all the way from’ may be added (212).

(212) [(dùwánsárⁿí = yèè bá→) gôː ū]
[Loc=Loc all.the.way.from go.out and.SS]
[atts gô] móːti = yèè ūn-ò
‘They walked on foot from Douentza to Mopti.’

If the distance to the endpoint is emphasized, hálî ‘all the way to’ can be used; cf. §19.2.1.

(213) [hálî móːti = yè] [yògš jè→] ūn-∅
[all.the.way.to M=Loc run while.SS] go.Pfv-3PlSbj
‘He/She ran all the way to Mopti (city).’

8.3 Purposive-causal dèrⁿi ‘for’ or ‘because of’

This postposition has invariant segmental and tonal form. It does not behave tonally as a possessed noun or have any phonological interaction with the preceding complement NP. Examples with pronouns: kú dèrⁿi, ú dèrⁿi, ūnè dèrⁿi.

The postposition occurs in a range of purposive and causal senses. In (214a-b), the purposive sense is prospective, while the causal sense in (214c) and arguably that in the high-frequency phrase ‘for God’ in (214d) are retrospective.

(214) a. [fùːndò gû dèrⁿi] yū-ò:
[honey Def.InanSg Purp] come.Pfv-3PlSbj
‘They have come for the honey.’

b. [kèːre dèrⁿi] nûni-ŋ
[money Purp] sing-Lpfv.3SgSbj
‘He/She sings for money.’

c. [[[bòndì dùgù] gû] dèrⁿi] yòg-ʒ
[[rain big] Def.InanSg Purp] flee.Pfv-3PlSbj
‘They fled because of the great (= heavy) rain.’
The final H-tone of dër’i is sometimes not realized, see e.g. (447b). There is a regrettable homophone dër’i ‘penis’.

8.4 Other adverbials (or equivalents)

8.4.1 Similarity (mayⁿ ‘like’)

The atonal particle mayⁿ ‘like’ follows the argument that it has scope over (215). The final tone of the preceding word spreads into the particle.

(215) a. [tíné mayⁿ] bù-y
[3Sg like] be-1SgSbj
‘I am like him/her.’

b. [yâ-ŋ mayⁿ] dámâ-ðⁿ-"m
[woman-Sg like] speak-Lpfv-2SgSbj
‘You-Sg talk like a woman.’

c. [âr’â mayⁿ] bírê-ðⁿ-Ø
[man like] work-Lpfv-1Sg
‘I work like a man.’

Compare interrogative âmâyⁿ ‘how?’ (§13.2.6).

The very common expression kú mayⁿ ‘like that, thus (discourse-definite)’ from discourse-definite kú is an exception to the tone-spread pattern. From inanimate demonstrative ŋgú ‘this/that’ we get both regular ŋgú mayⁿ ‘like this/that (thing)’ and tonally irregular ŋgú mayⁿ ‘like that (deictic)’ or ‘on the other side’ (§4.4.1.7). Other pronouns are regular: ù mayⁿ ‘like you-Sg’, tíné mayⁿ ‘like him/her/it’.

8.4.2 Extent (‘a lot’, ‘a little’)

The adverb ësí→ ‘a lot’ can be used in a wide range of senses, ranging from quantity (‘a lot’ in the sense ‘a large amount’) to frequency or intensity of an event type (adverbial ‘a lot’ as synonym of ‘greatly’ or ‘frequently’). It is normally preverbal, but its position with respect to e.g. object nouns is variable, and it does not behave like an adjective (for example, it does not force tone-dropping on a preceding noun). ësí→ is related to adjective ësí ‘good’, and specifically to the latter’s EA predicative variant ës-ñ → (bù-Ø) ‘(it is) good’ (§8.4.7).

(216) a. bírá ësí→ bírê-ñ
work(n) a.lot work-Lpfv.3Sg
‘He/She works a lot.’
b. ɛ̀sí→ bírá bírɛ̀-ŋ̀
   [= (a), reordered]

c. ɛ̀sí→ isê-ŋ̀ ñd-à
   a.lot village.Acc give.Pfv-3PlSbj
   ‘They gave a lot (=a large amount) to the village.’

In the sense of ‘large amount’ (‘many’, ‘much’), other devices are also available. As predicate, there are several options (217).

(217) a. ɔːndó ɛ̀sí→ bù-∅
    honey a.lot be-3Sg
    ‘There is a lot of honey.’

b. ɔːndó jò-ɛ̀rɛ̀-∅
    honey be.much-Pfv1a-3SgSbj
    ‘There is a lot of honey.’ (lit. “Honey has become abundant.”)

c. ɔːndó sámá-ɛ̀rɛ̀-∅
    honey be.common-Pfv1a-3SgSbj
    ‘There is a lot of honey.’ (lit. “Honey has become common.”)

d. ɔːndó lɔ́gɔ́-ɛ̀rɛ̀-∅
    honey be.excessive-Pfv1a-3SgSbj
    ‘There is a whole lot of honey.’ (or: ‘There is too much honey’)

e. ɔːndó dǎyⁿ sò-ndó-∅
    honey limit(n) have-Neg-3SgSbj
    ‘There is a whole lot of honey.’ (lit. “The honey has no end.”)

Example (217a) is semantically unremarkable, merely stating a current abundance. (217b-c) imply that the element in question was previously less common. jò: ‘become much/many’ is otherwise semantically neutral, while sámá- ‘become common’ implies a loss of value due to abundance. (217d-e) are more emphatic in nature; (217d) can be pejorative.

(218) illustrates modifying function. In (218a), ɛ̀sí→ is still an adverb syntaxically, and has no tonal effect on ‘sheep’. In (218b), jò: is a regular modifying adjective, rather than an expressive adverbial, and it therefore controls tone-dropping on ‘sheep’. It is, however, often prolonged for emphasis. There is no significant difference in meaning between ɛ̀sí→ and jò: in such contexts.

(218) a. pèrgé ɛ̀sí→ tìw-à
    sheep a.lot die.Pfv-3PlSbj
    ‘A lot of sheep died.’

b. [pèrgé¹] jò:→ tìw-à
   [sheep¹ a.lot] die.Pfv-3PlSbj
   ‘Many sheep died.’
Antonyms (‘a little’ or ‘slightly’), translatable either as adverbs or as argument NPs, are expressed by dágáy ~ dákáy and démi→, which are basically adverbal. NP function can alternatively be expressed by the adjective èwré ‘small’ used as a noun. démi→ is best glossed ‘somewhat’, and suggests that the amount is adequate though not especially big, while dágáy is more emphatic, may be glossed ‘slightly’ when adverbial, and is more likely than démi→ to occur with sáy ‘only’.

(219) a. á:mádù dágáy (sáy) ǹd-à
    A a.little (only) give.Pfv-3PlSbj
    ‘They gave (only) a little to Amadou.’

    b. á:mádù démi→ ǹd-à
    A somewhat give.Pfv-3PlSbj
    ‘They gave a little to Amadou.’ (suggests adequacy)

    c. á:mádù èwré ǹd-à
    A small give.Pfv-3PlSbj
    [= (a)]

    d. dágáy iró-Ø
      a.little be.better-3SgSbj
    ‘It (e.g. illness) is a little (= slightly) better.’
      (i.e. ‘I’m feeling better’)

    e. démi→ iró-Ø
      somewhat be.better-3SgSbj
    ‘It (e.g. illness) is a somewhat better.’

8.4.3 Specificity

8.4.3.1 ‘Approximately’

bà→, which in other contexts can mean ‘all the way from (a starting point)’, can indicate approximateness of a numerical value.

(220) [pèrgé pé-ními:" bà→] màngá-s-é
      [sheep ten-five about] be.lost-Pfv2-3PlSbj
    ‘Around fifty sheep were lost (=died).’

An alternative is to use may‘like’, as in ‘I will buy like (= somewhere around) fifty sheep’.

8.4.3.2 ‘Exactly’ (lék, cšk, tê→)

lék is an interjection-like intensifier that can be used with numerals; see §19.4.2.
(221) \([\text{pèrgé} \ ¹\text{pè-nimì:n} \ ²\text{lèk}] \ ³\text{màrà-s-è}\\ [\text{sheep} \ ¹\text{ten-five} \ \text{exactly} \ \text{be.lost-Pfv2-3PlSbj}]\\ ‘Exactly fifty sheep were lost (=died).’

còk is another interjection-like particle used to indicate ‘exactly identical’ (on some measure, usually height). It can also be used to indicate that all members of a group are present.

Adverbial té\rightarrow can be used with time expressions: midî té\rightarrow ‘at noon sharp’. Its reduplication téːtéː is also in use in similar contexts. See also the following subsection.

To confirm the truth or correctness of what an interlocutor has just said, the particle jâːdî ‘exactly’ (i.e. ‘you’re exactly right’) is used; see §19.5.1.

8.4.3.3 ‘Specifically’ (té\rightarrow)

Adverbial particle té\rightarrow is also used in the sense ‘specifically’.

(222) ùːjú
 té\rightarrow
 ùdìː∅
2Sg-Acc specifically give.Pfv-3SgSbj
‘He/She gave (it) specifically to you-Sg.’

8.4.4 Evaluation

8.4.4.1 ‘Well’ and ‘badly’

The preferred construction equivalent to English evaluative manner adverbials is one with a complement NP (often containing a cognate nominal or similar noun) plus an evaluative adjective like ‘good’ or ‘bad’.

(223) a. \([\text{bìrà}^L] \ ⁰\text{èsì}] \ \text{bìrè-ìh}\\ [\text{work(n)}^L \ \text{good}] \ \text{work-Lpfv-1SgSbj}\\ ‘I do good work.’ (= ‘I work well.’)

b. \([\text{bìrà}^L] \ ⁰\text{màsì]} \ \text{bìrè-ìh}\\ [\text{work(n)}^L \ \text{bad}] \ \text{work-Lpfv-1SgSbj}\\ ‘I do bad work.’ (= ‘I work badly.’)

8.4.4.2 ‘Proper, right’

The adverbial jâːⁿ, generally predicative with following ‘it is’ clitic, characterizes an action or behavior pattern as normal or proper (respecting social norms), or as contextually appropriate. jâːⁿ also occurs in Jamsay.

(224) a. jâːⁿ = ∅
proper=it.is
‘It’s proper (right, normal, appropriate).’
b. \[kàrⁿ\] ú \[kàrⁿ-mü\] gú \[jà:ⁿ=ndó\]
[doing(n) 2SgSbj do-Ppl.Ipfv Def] \text{proper}=\text{it.is.not}-3SgSbj

‘What you are doing is not right.’

8.4.5 Manner

The equivalents of simple English manner adverbials (-ly) can be constructed using NP complements (with an adjective) as in (225a). Or an adverbial PP may be used if there is a suitable noun available, like \text{pàŋá} ‘strength, force’ in (225b).

(225) a. \[bìrà\] \[sgù\] bìrɛ̀-m\-Ø
[work(n) fast] work-Ipfv-1SgSbj

‘I do fast work.’ (= ‘I work fast.’)

b. \[pàŋá \ pά\] ñjí-Ø dàmbi-Ø
[strength Loc 1Sg-Acc push.Pfv-3SgSbj

‘He/She pushed me hard (with force).’

The noun ‘manner, way’ is \text{dáy}:. It also means ‘limit, outer bound’. For manner adverbial clauses, see §15.5.2.

8.4.6 Spatiotemporal adverbs

8.4.6.1 Temporal adverbs

Some of the major temporal adverbs are in (226). Note the tonal distinction between \text{fýě} ‘today’ and \text{ýě} ‘again’ (226a). \text{níjěy}º ‘now’ and \text{énděy} ‘day after tomorrow’ were heard with H.L tone sequence. ‘Today’, ‘yesterday’, and ‘tomorrow’ are often extended to mean ‘nowadays’, ‘in the old days’, and ‘in the future’. The traditional Dogon week, still used for small local markets, is five days.

(226) a. \text{fýě} ‘today; nowadays’
\text{ýě} ‘again’
\text{yě́ngiri}: ‘yesterday; formerly, in the old days’
\text{fýě tāndi} ‘day before yesterday’
\text{níjěy}: ‘now’

b. \text{é:ńi} ‘tomorrow; in the future’
\text{énděy} ‘day after tomorrow’
\text{énděyº tänděy} ‘second day after tomorrow’ (third from today)
\text{lég tàrà} ‘third day after tomorrow’ (fourth from today)
\text{júgú} ‘week’ ‘fourth day after tomorrow’ (fifth from today)
\text{júgú-jágú} ‘fifth day after tomorrow’ (sixth from today)
c. \( g\text{ò̃} \)  ‘last year’  
\( àr\text{à} \) \( \text{L} \)  \( k\text{ámå} \)  ‘next year’  
\( àr\text{à} \) \( \text{L} \)  \( \text{bindé} \)  ‘(cf. bindé ‘change; go back’)  
\( àr\text{à} \) \( \text{L} \)  \( \text{wônjów} \)  ‘(with wônjów ‘second’ [ordinal])  
\( n\text{ú} \) \( \text{ú} \text{y} \)  ‘this year’

In (226c), one would expect \( àr\text{à} \) \( \text{L} \)  \( k\text{ámå} \) to mean ‘each/every year’, cf. §6.6.2 above, but this sense is expressed instead by \( àr\text{à} \) \( \text{w} \) \( \text{ú} \text{y} \) \( \text{ú} \text{y} \) ké\text{ré}w or \( àr\text{à} \) \( \text{w} \) \( \text{ú} \text{y} \) \( \text{ú} \text{y} \) \( \text{ú} \text{y} \) pú –

8.4.6.2 ‘First’ (\( k\text{iyá} \))

Adverbial ‘first’ (‘firstly’, ‘at first’) is expressed by \( k\text{iyá} \), which (as in English) is identical to the ordinal adjective ‘first’. That \( k\text{iyá} \) is syntactically an adverb in (227), rather than a modifying adjective, is shown by the fact that it does not control tone-dropping on the noun \( b\text{ír}\) \( \text{á} \) ‘work (n)’.

\[(227)\]  
\( b\text{ír}\) \( \text{á} \)  \( k\text{iyá} \)  \( b\text{ír}\text{L} \)  \( \text{gåy} \),  \( \text{á} \text{a} \)  \( k\text{s-}\text{mî-}\text{y-}: \)  
work(n)  first  work(v)1  and.then.SS,  meal  meal-lpfv-1PISbj  
‘We’ll work first, then we’ll eat.’

8.4.6.3 Spatial adverbs

Nondemonstrative spatial adverbs, generally nouns and PPs, are in (228). Some of those in (228a) and (228c) are also part of complex postpositions. For spatial demonstrative adverbs, see §4.4.2.1.

\[(228)\]

a. \( t\text{émbè} \)  
\( d\text{ósi} \)  ‘above, (on) top, (at the) summit’  
‘below, (on the) bottom, down’

b. \( ù\text{sí-}\)\( [tùm-n]\),  \( ð\text{á} \)  \( g\text{irè} \)  
\( ù\text{sí-}\)\( [yè\text{gì-n}\) \( ] \)  
\( të\text{nì-}\text{dågå} \)  ‘east’  
\‘west’  
\( ð\text{ú}-\text{dågå} \)  ‘south’  
‘north’

c. \( tù\text{n-}\text{tùndè} \rightarrow \)  
\( tù\text{nìdù} \)  \( g\text{ó} \)  
\( g\text{irè} \)  \( g\text{ó} \)  ‘going backward, in reverse’  
‘in the rear’  
‘forward; in front’, cf. \( g\text{irè} \)  ‘eye’

\( ù\text{sí-}\)\( [tùm-n]\)  ‘east’  and \( ù\text{sí-}\)\( [yè\text{gì-n}]\)  ‘west’ are compounds containing \( ù\text{sí} \)  ‘sun’ plus nominals based on the verbs \( tù\text{mbo} \)  ‘(sun) rise’ and \( yè\text{gè} \)  ‘fall; (sun) set’, respectively. The term for ‘south’ is based on the location of the Tengou (southern Dogon sub-ethnicity around Bankass).

‘Left hand’ is \( n\text{á} \) \( \text{L} \)  \( b\text{àriyé} \), while ‘right hand’ is \( n\text{á} \) \( \text{L} \)  \( n\text{à} \) \( \text{y} \text{è} \text{y} \) \( \text{è} \)  ‘with \( n\text{á} \)  ‘hand’ plus a modifying adjective’.

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8.4.7 Expressive adverbials

Like other Dogon languages, Nanga has many expressive adverbials (EAs), defined as words that cannot be directly inflected but that can be made predicative by adding an auxiliary. The phonological form of EAs is usually distinctive, with full-stem iteration or final intonational prolongation (but usually not both). Many are also semantically colorful, evoking a visual image or other sensation, and they are similar to what are often referred to (in other languages) as mimetics or ideophones. I do not use these terms in the Dogon context, since they convey nothing about the grammatical properties of the forms, and since some EAs have prosaic senses like ‘straight’ (see below).

Some EAs have adjective-like senses, but they differ morphosyntactically from adjectives. EAs are not parts of NPs. They (therefore) have no tonal interactions with nouns or other NP words; they do not control tone-dropping and cannot themselves be tonosyntactically controlled. Like adjectives and nouns, EAs can also function in (stative or inchoative) predicates, but the forms of the predicates are different for the three word classes.

In a positive predicate denoting a state, the EA is followed by quasi-verb bù- ‘be (somewhere)’ for stative and durative senses. The negative counterpart of bù- is ŋó- ‘not be (somewhere), be absent’. Thus jèŋ → bù-Ø ‘it is tilting’, jèŋ → ŋó-Ø ‘it is not tilting’. In other words, these EAs pattern syntactically like spatial adverbials.

EAs with more active senses are made predicative by adding regular transitive verb kárⁿ- ‘do’, which has a fuller range of aspect-negation forms. EAs like yàl-yàl ‘flapping’ can take either: yàl-yàl kárⁿ-só-Æ ‘it flapped in the wind (perhaps briefly)’, yàl-yàl bù-Ø ‘it is flapping in the wind’.

In predicates denoting state changes (‘become’), the auxiliary verb used is the morphologically regular verb bë-, which in other contexts means ‘remain’. Its causative bë-m- can also combine with EAs, as a kind of factitive (‘cause to become’).

(229) illustrates nonpredicative adverbial function (229a), stative positive and negative predicates (229b-c), and dynamic (inchoative) predicates (229d).

(229)  a. dém → ló-èrè-Ø  
   straight  go-Pfv1a-3SgSbj  
   ‘He/She went straight (to somewhere).’

b. dém → bù-Ø  
   straight  be-3SgSbj  
   ‘It (e.g. stick) is straight.’

c. dém → ŋó-Ø  
   straight  not.be-3SgSbj  
   ‘It is not straight.’

d. dém → bë-èrè-Ø  
   straight  become-Pfv1a-3SgSbj  
   ‘It became straight.’

Many adjectives can be made into EAs, with little difference in sense, by adding a final -í-, which could be analysed as a suffix or as a stem-final mutation plus “intonational” prolongation. In most cases these function as predicates, with the auxiliary verbs or quasi-verbs mentioned above. Thus éṣí ‘good’, adjectival predicate éṣù ‘it is good’, derived EA
8.4.7.1 Forms of expressive adverbials

Examples of expressive adverbials without stem iteration are in (230). Only a handful, like ‘tilting’ (230a) and the two cases in (230c), are parts of larger word families. It is noteworthy that EAs, unlike nouns and adjectives, may be lexically /L/-toned.

(230)

<table>
<thead>
<tr>
<th>Form</th>
<th>Gloss</th>
<th>Related Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. H-toned, final prolongation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pó→</td>
<td>‘gaping (hole)’</td>
<td></td>
</tr>
<tr>
<td>pám→</td>
<td>‘wide open (doorway)’</td>
<td></td>
</tr>
<tr>
<td>kárás→</td>
<td>‘face to face’</td>
<td></td>
</tr>
<tr>
<td>/L/H/-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>káyⁿ→</td>
<td>‘wide open (eyes)’</td>
<td></td>
</tr>
<tr>
<td>jěŋí→</td>
<td>‘tilting’</td>
<td>jěŋí ‘tilt’</td>
</tr>
<tr>
<td>màmí→</td>
<td>‘with head tilting’</td>
<td></td>
</tr>
<tr>
<td>èndirí→</td>
<td>‘ajar (door)’</td>
<td></td>
</tr>
<tr>
<td>gògírǐ→</td>
<td>‘rickety, shaky, poorly encased’</td>
<td></td>
</tr>
<tr>
<td>/L/-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lòm→</td>
<td>‘froth forming’</td>
<td></td>
</tr>
<tr>
<td>dím→</td>
<td>‘towering, lofty’</td>
<td></td>
</tr>
<tr>
<td>sèm→</td>
<td>‘straight-nosed’</td>
<td></td>
</tr>
<tr>
<td>yòw→</td>
<td>‘slightly open (mouth)’</td>
<td></td>
</tr>
<tr>
<td>yèw→</td>
<td>‘slightly open (eyes)’</td>
<td></td>
</tr>
<tr>
<td>tárù→</td>
<td>‘fat (woman, cow)’</td>
<td></td>
</tr>
<tr>
<td>gènjèy→</td>
<td>‘motionless’</td>
<td></td>
</tr>
</tbody>
</table>

b. no final prolongation  

/H/-toned 

sómógó ‘(head) long and bending forward’

/L/-toned 

ràm ‘brief shower (rain)’

jùŋàyⁿ ‘fat and clumsy’

c. CuCuCôy  

lùgùsòy ‘chubby, puffy’ lùgùsì (adjective)  

yùgùsòy ‘woolly, disheveled’ yùgùsì ‘velvet’

The intonational prolongation is realized on the final segment. Therefore in e.g. sèm→ ‘straight-nosed’, the m but not the vowel is prolonged.

Examples of iterated adverbials involving “nonsense” stems (i.e. those whose uniterated form do not occur) are in (231).
8.4.7.2 Adjectival intensifiers

Like the other Dogon languages, Nanga has an abundance of uninflectable expressive adverbials used as intensifiers, primarily for adjectival but also for a few verb-like senses. For the discourse function, compare English brand new, blind as a bat, X stopped still (in his tracks), and the like. In most cases the intensifier has no phonological relationship to the semantically associated word(s), or to any other lexical stem. There is no sharp difference between intensifiers and (other) expressive adverbials.

Intensifiers (mostly adjectival in sense) are in (232). For the glosses, supply ‘very’ or the like for the intensifier. If there is no associated word that commonly co-occurs with the intensifier, the semantically closest word is given in parentheses. In èsè-[tèw-tèw] and bùdè-[tèw-tèw] (232a), there is (unusually) a \{L\}-toned compound initial corresponding to the associated word.

Vocalic sound symbolism (§3.4.7) is apparent in the alternation of lèré-lèré ‘cleaned up’ with lòró-lòró ‘clean-shaven head’.

Because of the frequency of collocations (associated word followed by intensifier), it is possible for a single form to serve as intensifier for unrelated senses, see kát-kát in (232a). It is also possible for a basic sense to have multiple intensifiers, normally used by different speakers, see kát-kát, kúsú-kúsú, and kùrù-kùrù for ‘black’ in (232a).

The data in (232) are organized by the phonological form of the intensifier.

<table>
<thead>
<tr>
<th>(232)</th>
<th>intensifier</th>
<th>gloss</th>
<th>associated word(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. iteration (no tonal or vocalic change)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one iteration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sɔ̂ⁿ-sɔ̂ⁿ</td>
<td>‘newborn’</td>
<td>bà-bà̀rì</td>
<td>‘newborn baby’</td>
</tr>
<tr>
<td>púl-púl</td>
<td>‘(brand) new’</td>
<td>kàndà</td>
<td>‘new’</td>
</tr>
<tr>
<td>bóm-bóm</td>
<td>‘stout’</td>
<td>dùgí</td>
<td>‘big’</td>
</tr>
<tr>
<td>dìm-dìm</td>
<td>‘straight’</td>
<td>dìm</td>
<td>‘straight’</td>
</tr>
<tr>
<td>dón-dón</td>
<td>‘furious’</td>
<td>kěndè bár”í</td>
<td>‘anger’</td>
</tr>
<tr>
<td>sél-sél</td>
<td>‘long; tall’</td>
<td>gurí</td>
<td>‘long’</td>
</tr>
<tr>
<td>géy-géy</td>
<td>‘tight-fitting’</td>
<td>pɔ̀rɔ̀</td>
<td>‘be tight-fitting’</td>
</tr>
<tr>
<td>kýú-kíú</td>
<td>‘stocky (person)’</td>
<td>děmbíré</td>
<td>‘stout’</td>
</tr>
<tr>
<td>kěy-kěy</td>
<td>‘hard’</td>
<td>mā:</td>
<td>‘hard, dry’</td>
</tr>
<tr>
<td>káy-káy</td>
<td>‘hard, dry’</td>
<td>mā:</td>
<td>‘hard, dry’</td>
</tr>
<tr>
<td>pěy-pěy</td>
<td>‘unripe’</td>
<td>ké:sí</td>
<td>‘unripe’</td>
</tr>
<tr>
<td>ký’-ký’n</td>
<td>‘emaciated’</td>
<td>kó:mbí-yé-</td>
<td>‘be lean’</td>
</tr>
<tr>
<td>sěy’séy’n</td>
<td>‘slender (person)’</td>
<td>kě:mbé</td>
<td>‘slender’</td>
</tr>
<tr>
<td>gáy’-gáy’n</td>
<td>‘tight; crowded’</td>
<td>ẹ:</td>
<td>‘tight’</td>
</tr>
<tr>
<td>jáy’-jáy’n</td>
<td>‘uncooked (red)’</td>
<td>bár’í</td>
<td>‘red’</td>
</tr>
<tr>
<td>táy’táy’n</td>
<td>‘sweet’</td>
<td>érí</td>
<td>‘sweet’</td>
</tr>
<tr>
<td>“</td>
<td>‘salty’</td>
<td>párí</td>
<td>‘salty’</td>
</tr>
<tr>
<td>dúy’dúy’n</td>
<td>‘red’</td>
<td>bár’í</td>
<td>‘red’</td>
</tr>
<tr>
<td>tǎw-tǎw</td>
<td>‘hot (weather)’</td>
<td>sỳ</td>
<td>‘hot weather’</td>
</tr>
<tr>
<td>jáw-jáw</td>
<td>‘hot (object)’</td>
<td>ọ́gí</td>
<td>‘hot; fast’</td>
</tr>
<tr>
<td>lǎw-lǎw</td>
<td>‘fast’</td>
<td>ọ́gí</td>
<td>‘hot; fast’</td>
</tr>
<tr>
<td>jěw-jěw</td>
<td>‘lightweight’</td>
<td>ër’í</td>
<td>‘lightweight’</td>
</tr>
<tr>
<td>‘esé-[těw-šéw]</td>
<td>‘unfertilized (field)’</td>
<td>ësé-</td>
<td>‘be unfertilized’</td>
</tr>
<tr>
<td>“</td>
<td>‘bland’</td>
<td>ǎy</td>
<td>‘bland’</td>
</tr>
<tr>
<td>bǔdè-[těw-šéw]</td>
<td>‘fine (powder)’</td>
<td>búté</td>
<td>‘fine, powdery’</td>
</tr>
<tr>
<td>“</td>
<td>‘supple’</td>
<td>búté</td>
<td>‘supple’</td>
</tr>
<tr>
<td>pěp-pěp</td>
<td>‘full’</td>
<td>bá:</td>
<td>‘full’</td>
</tr>
<tr>
<td>těk-těk</td>
<td>‘standing straight’</td>
<td>ì-yí-</td>
<td>‘stand, stop’</td>
</tr>
<tr>
<td>kàt-kàt</td>
<td>‘rotten’</td>
<td>ọ́mbí</td>
<td>‘rotten’</td>
</tr>
<tr>
<td>“</td>
<td>‘bitter’</td>
<td>gáří</td>
<td>‘bitter’</td>
</tr>
<tr>
<td>“</td>
<td>‘black’</td>
<td>jěmí</td>
<td>‘black’</td>
</tr>
<tr>
<td>pàr-pàrì</td>
<td>‘shiny new’</td>
<td>kándà</td>
<td>‘new’</td>
</tr>
<tr>
<td>píšì-píšì</td>
<td>‘lost’</td>
<td>maría-</td>
<td>‘be lost’</td>
</tr>
<tr>
<td>sěrì-sěrì</td>
<td>‘dusty’</td>
<td>kòngò</td>
<td>‘dust’</td>
</tr>
<tr>
<td>kúsú-kúsú</td>
<td>‘black’</td>
<td>jěmí</td>
<td>‘black’</td>
</tr>
<tr>
<td>“</td>
<td>‘glaring (at)’</td>
<td>běmbí-</td>
<td>‘glare (at)’</td>
</tr>
<tr>
<td>yágbó-yágbó</td>
<td>‘soft’</td>
<td>búrì</td>
<td>‘soft’</td>
</tr>
<tr>
<td>bǔdè-bǔdè</td>
<td>‘fine (powder)’</td>
<td>búté</td>
<td>‘fine, powdery’</td>
</tr>
<tr>
<td>“</td>
<td>‘supple’</td>
<td>búté</td>
<td>‘supple’</td>
</tr>
<tr>
<td>púlá-púlá</td>
<td>‘hot (object)’</td>
<td>ọ́gí</td>
<td>‘hot; fast’</td>
</tr>
<tr>
<td>pěrè-pèré</td>
<td>‘cold (weather)’</td>
<td>g̀jyɔ̀</td>
<td>‘(the) cold’</td>
</tr>
<tr>
<td>pášá-pášá</td>
<td>‘white’</td>
<td>pírì</td>
<td>‘white’</td>
</tr>
<tr>
<td>tège-tège</td>
<td>‘moon shining’</td>
<td>wà: pírì</td>
<td>‘moonlight’</td>
</tr>
<tr>
<td>lèrè-lèrè</td>
<td>‘cleaned up’</td>
<td>ësé-</td>
<td>‘be clean’</td>
</tr>
<tr>
<td>lòrò-lòrò</td>
<td>‘clean-shaven head’</td>
<td>kà:-</td>
<td>‘shave’</td>
</tr>
<tr>
<td>kúráà-kúráà</td>
<td>‘black’</td>
<td>jěmí</td>
<td>‘black’</td>
</tr>
<tr>
<td>gé rèn-gè rèn</td>
<td>‘inflated’</td>
<td>pfríyé-</td>
<td>‘be inflated’</td>
</tr>
<tr>
<td>kòrògò-kòrògò</td>
<td>‘loose-fitting’</td>
<td>kòrògò</td>
<td>‘loose-fitting’</td>
</tr>
<tr>
<td>gùsúrò-gùsúrò</td>
<td>‘fraying’</td>
<td>gùsúrò-</td>
<td>‘fray’</td>
</tr>
</tbody>
</table>

more than one iteration

| dòn dòn dòn | ‘pouting’ | nɔ: sómò- | ‘pout’ |
b. iteration (with vocalic and/or tonal change)

**tonal change only**

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>táy-táy</td>
<td>‘used up’</td>
</tr>
<tr>
<td>dìm-dìm-</td>
<td>‘be used up’</td>
</tr>
</tbody>
</table>

**tonal and vocalic change (high vowel to a)**

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>yúgúsí-yúgúsí</td>
<td>‘very woolly’</td>
</tr>
<tr>
<td>yúgúsí</td>
<td>‘furry, woolly’</td>
</tr>
<tr>
<td>bìrgì-bárgí</td>
<td>‘junk (in disorder)’</td>
</tr>
<tr>
<td>námá-námá</td>
<td>‘junk’</td>
</tr>
</tbody>
</table>

c. intonational prolongation

**simple**

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>dámr-dámr-</td>
<td>‘blind’</td>
</tr>
<tr>
<td>dìmr-dìmr-</td>
<td>‘thick’</td>
</tr>
<tr>
<td>pöm-pöm-</td>
<td>‘enormous’</td>
</tr>
<tr>
<td>dùgì-dùgì</td>
<td>‘big’</td>
</tr>
<tr>
<td>sëw-sëwⁿ-</td>
<td>‘tiny (eye)’</td>
</tr>
<tr>
<td>éwré-éwré</td>
<td>‘small’</td>
</tr>
<tr>
<td>tábì-tábì</td>
<td>‘full (eating)’</td>
</tr>
<tr>
<td>sìr“sìr“</td>
<td>‘be full, satisfied’</td>
</tr>
<tr>
<td>kày-kàyⁿ-</td>
<td>‘oversized (eye)’</td>
</tr>
<tr>
<td>(dùgì) (dùgì)</td>
<td>(‘big’)</td>
</tr>
<tr>
<td>këw-këwⁿ-</td>
<td>‘tiny (moon, eye)’</td>
</tr>
<tr>
<td>(éwré) (éwré)</td>
<td>‘small’</td>
</tr>
<tr>
<td>pùtúm-pùtúm</td>
<td>‘flowery’</td>
</tr>
<tr>
<td>pùr“pùr“</td>
<td>‘flower’</td>
</tr>
<tr>
<td>lèrè-lèrè</td>
<td>‘everything’</td>
</tr>
<tr>
<td>kéréw-kéréw</td>
<td>‘everything’</td>
</tr>
<tr>
<td>dù-dùyⁿ-</td>
<td>‘red’</td>
</tr>
<tr>
<td>bár“bár“</td>
<td>‘red’</td>
</tr>
</tbody>
</table>

**apparently compound**

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>késé-kérèw</td>
<td>‘dry’</td>
</tr>
<tr>
<td>mǎ:</td>
<td>‘hard, dry’</td>
</tr>
<tr>
<td>lërè-gérèw</td>
<td>‘everything’</td>
</tr>
<tr>
<td>kérèw</td>
<td>‘everything’</td>
</tr>
</tbody>
</table>

d. final reduplication

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>úsásá:</td>
<td>‘well-branched’</td>
</tr>
<tr>
<td>jǎmí-</td>
<td>‘ramify’</td>
</tr>
<tr>
<td>wúsúsú</td>
<td>‘long’</td>
</tr>
<tr>
<td>gùrṣ</td>
<td>‘long’</td>
</tr>
<tr>
<td>érélélé</td>
<td>‘sweet (abstract)’</td>
</tr>
<tr>
<td>érr</td>
<td>‘sweet’</td>
</tr>
<tr>
<td>dìmrámámá</td>
<td>‘stout’</td>
</tr>
<tr>
<td>dùgí</td>
<td>‘thick’, cf. dìm-</td>
</tr>
<tr>
<td>pàrálálá</td>
<td>‘sour’</td>
</tr>
<tr>
<td>pǎrì</td>
<td>‘sour’</td>
</tr>
<tr>
<td>mår“mànán</td>
<td>‘solid (no holes)’</td>
</tr>
<tr>
<td>(dĕŋ)</td>
<td>(‘hard, stiff’)</td>
</tr>
<tr>
<td>pěsěsě</td>
<td>‘cold (object)’</td>
</tr>
<tr>
<td>târn</td>
<td>‘cold’</td>
</tr>
<tr>
<td>pòsoʊsō</td>
<td>‘point of light’</td>
</tr>
<tr>
<td>ĕsē</td>
<td>‘light’</td>
</tr>
<tr>
<td>pàsásásā</td>
<td>‘point of light’</td>
</tr>
<tr>
<td>ĕsē</td>
<td>‘light’</td>
</tr>
<tr>
<td>dùsúsùs</td>
<td>‘heavy’</td>
</tr>
<tr>
<td>dúrŏ</td>
<td>‘heavy’</td>
</tr>
<tr>
<td>bùrùndùndù</td>
<td>‘red’</td>
</tr>
<tr>
<td>bár“bár“</td>
<td>‘red’</td>
</tr>
<tr>
<td>gòmómómó</td>
<td>‘rotten smelling’</td>
</tr>
<tr>
<td>Úmbí</td>
<td>‘rotten’</td>
</tr>
</tbody>
</table>

e. other

<table>
<thead>
<tr>
<th>Tang</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>mǎ:</td>
<td>‘pouring out’</td>
</tr>
<tr>
<td>t’àr-t’àr-</td>
<td>‘pour’</td>
</tr>
<tr>
<td>tẹ́p</td>
<td>‘full’</td>
</tr>
<tr>
<td>bá:</td>
<td>‘full’</td>
</tr>
<tr>
<td>lër</td>
<td>‘sole, only (one)’</td>
</tr>
<tr>
<td>tùmà</td>
<td>‘one’</td>
</tr>
<tr>
<td>kék</td>
<td>‘completely’</td>
</tr>
<tr>
<td>(kérèw) (kérèw)</td>
<td>(‘everything’)</td>
</tr>
<tr>
<td>këmr“këmr“</td>
<td>‘tiny (eye)’</td>
</tr>
<tr>
<td>(éwré) (éwré)</td>
<td>‘small’</td>
</tr>
<tr>
<td>kédégéy</td>
<td>‘short’</td>
</tr>
<tr>
<td>déŋí</td>
<td>‘short’</td>
</tr>
</tbody>
</table>
8.4.7.3 ‘Straight’ (dém→)

dém→ is the basic adverb for ‘straight’ in the sense of a direct trajectory (not the absence of crookedness in e.g. a stick). The m is prolonged intonationally.

(233) mò:ti dém→ íné-mi-y.:  
Mopti straight go-lpfv-1PISbj  
‘We’ll go straight (= directly) to Mopti.’

Iterated dém-dém can be used in the sense ‘straight ahead’ without an NP complement (French tout droit). As usual in iterations, there is no intonational prolongation.

(234) dém-dém ínô  
straight go-Imprt  
‘Go-2Sg straight (ahead)!’

8.4.7.4 ‘Apart, separate’ (dýⁿ→)

The adverbial dýⁿ→ is used in parallelistic constructions of the type ‘X is apart, Y is apart’ (meaning ‘X and Y are separated or distinct’). The yⁿ is intonationally prolonged.

(255) [pèrgèL bû:] dýⁿ→ b-è,  
[sheepL Def.AnPl] apart be-3P1,  
[bèrL bû:] dýⁿ→ b-è  
[goatL Def.AnPl] apart be-3Pl  
‘The sheep-Pl and the goats are apart (= separated or distinct).’

The iterated form dýⁿ-dýⁿ occurs in examples where the parallelistic phrasing is absent (236). There is no intonational prolongation.

(236) [[pèrgè yò] [bèrî yò]] dýⁿ-dýⁿ kúrû-mi-y.:  
[[sheep and] [goat and]] separated put-lpfv-1PISbj  
‘We’ll put sheep and goats in separate spots.’

8.4.7.5 ‘Always’ (àsú→), ‘never’ (à:bádá)

The adverbial ‘always’ is àsú→ (also found in Ben Tey and Najamba) (237a). It has an obscure resemblance to ûsú ‘day; sun’. The usual ‘never’ or ‘not on your life!’ particle is the regionally widespread à:bádá (ultimately < Arabic), which occurs in combination with a negated predicate (237b).

(237) a. àsú→ sígèrɔ̀ [íné báy] éwè-ĩ̀-Ø  
always sugar [3Sg Dat] buy-lpfv-1SgSbj  
‘I always buy sugar from him (= at his store).’
b. à:bádá sigórɔ́ [fínè báy] èwè-ɔ̀-y
neve rsugar [3Sg Dat] buy-IpfvNeg-1SgSbj
‘I never buy sugar from him (= at his store).’

8.4.7.6 ‘Exclusively, together’ (sá:-sá:)

The adverb sá:-sá: functions, for example, to indicate that a group is seated together (in a bus or concert). The context suggests both togetherness of the group and the exclusion of others from the zone occupied by the group.

(238) [kàdàgá yè:] sá:-sá: ńné-ɛ̀-
[agemate 1SgPoss.AnPl] together go-Ipfv-1PlSbj
‘Only I and my agemates will go.’

In many cases, ‘together’ is translated indirectly by a verb-chain (‘assemble and work’, §15.1.8), by a PP (‘beside each other’, §8.2.6), or by a numeral in the subject NP (‘[we two] work’). See also the construction with bèndèy (§18.3.2).

8.4.7.7 ‘All, entirely’ (kéréw, sóy)

The usual ‘all, entirely’ adverb is kéréw (239a-c). This is also the most common universal quantifier (‘all X’). A less common form with similar sense is sóy (239d). An intensifier for ‘all, entirely’ is tǎy (239e) or its iteration tǎy-tǎy.

(239) a. kéréw ńné-ɛ̀-à
all go-Pfv1a-3PlSbj
‘They all went (away).’

b. sigórɔ́ kéréw dimé-ɛ̀-à
sugar all be.finished-Pfv1a-3SgSbj
‘The sugar is all used up.’

c. [[fàr”à-y tàndì:] bà:] kéréw ńné-ɛ̀-à
[[man-child three] Def.Pl] all go-Pfv1a-3PlSbj
‘The three boys all went (away).’

d. sigórɔ́ sóy dimé-ɛ̀-à
sugar all be.finished-Pfv1a-3SgSbj
‘The sugar is all used up.’

e. sigórɔ́ tǎy dimé-ɛ̀-à
sugar all.Intens be.finished-Pfv1a-3SgSbj
‘The sugar is used up (to the last grain).’

The accusative suffix can be added to a noun or NP preceding an ‘all’ quantifier. This is also the case with numerals; see (176a-c) in §6.7.
Another adverb, *lèrèw*, is not commonly used with human referents. Its characteristic context is exemplified by e.g. ‘they swept the courtyard completely (= thoroughly)’. However, it was accepted by my assistant as an alternative to the ‘all, entirely’ adverbials in the ‘sugar’ examples (239b,d-e).

8.4.8 Derived iterated adverbials

8.4.8.1 Distributive adverbial iteration

Any numeral, or the quantificational interrogative ñgà ‘how many?’, can be iterated to form a distributive adverb with meanings like ‘six at a time’, ‘six apiece’, or ‘six by six’. Such phrases can be used, among other things, to specify the price per unit of a commodity for sale.

(240) a. tûyà-gá ñgà-ñgà má
   bunch  how.many?-how.many?  Q
   ‘How much per bunch (unit of sale)?’

   b. pèrf-yêy pèrf-yêy
   ten-two  ten-two
   ‘Twenty (riyals, = 100 francs CFA) each’

8.4.8.2 ‘Scattered, here and there’ (*kân-kân*)

This adverb, also found in Jamsay (and with phonological variations in other nearby Dogon languages) indicates irregular and sparse distribution.

(241) tò:  kân-kân  tê:-só-Ø
   seeds  here.and.there  sprout-Pfv2-3SgSbj
   ‘The (planted) seeds have sprouted here and there.’
9 Verbal derivation

The productive suffixal derivations (stem to stem) for verbs are the reversive (‘un-…’, ‘dis-…’) and the causative. There are a fair number of verbs with contrasting mediopassive and transitive (argument-adding) endings. There are two other passive constructions, one of which is morphologically identical to the causative but is attested with only two verbs. Adjectives have corresponding intransitive inchoative and transitive factitive verb forms, but these are not formed by adding suffixes directly to the adjective.

9.1 Reversive verbs (-rí-)

The reversive suffix is -rí- (or ATR-harmonized -rê-). It is common in verb pairs like ‘cover/uncover’ that denote complementary actions, one of which reverses or undoes the other. ‘Open’ is the reversive of ‘shut’, and ‘remember’ is the reversive of ‘forget’. The reversive usually keeps the valency of the input verb.

The reversive is sometimes chained with a following intransitive gó: ‘exit’ or transitive gó-ndo: ‘take out, remove’, which also helps to clarify the valency. Examples are níndí-ri gó-êřê-ô as an alternative to níndí-ri-ô-ô ‘it became untangled’, and níndí-ri gó-ndo-ti-ô as an alternative to níndí-ri-ti-ô ‘he/she untangled (it)’. The chain construction also makes it unambiguous that a reversive sense is intended (some reversives are homophonous with nonreversive transitives, which have a homophonous suffix -rí-, §9.3.1). For verbs that have no morphological reversive, the chain construction can be used as a periphrastic reversive.

A full inventory of attested reversives is in (242-5). The input must be mono- or bisyllabic, so the reversive is bi- or trisyllabic. Unlike the causative, the reversive usually respects tonal patterns, and restrictions on vowel sequences, that apply to underived trisyllabic verbs. This can be seen most clearly in (242a-b), where merely adding -rí- to the input stem would produce an incorrect vowel sequence like a…a…i. So the outputs shift to acceptable trisyllabic vowel sequences like a…i…i. In (242c), the input is already an i-final stem, so no observable change is needed in the vocalism when -rí- is added. In (242d), the initial-syllable stem vowel is shortened. In (242e), a reversive of the underlying shape /CïC-ri/- has undergone Post-Sonorant Syncope, resulting in a CïC-ri- output with <LH>-toned initial syllable. (242f) illustrates monosyllabic inputs.

(242) input gloss reversive gloss

a. non-high vocalism adjusted to acceptable trisyllabic pattern

| dágá-  | ‘lock (sth)’ | dágí-ri- | ‘unlock’ |
| pégé-  | ‘drive in (nail)’ | pégí-ri- | ‘remove (nail)’ |
| kóndó- | ‘fold (mat)’ | kóndó-ô- | ‘unfold (mat)’ |
| púndó- | ‘clump up (rope)’ | púndí-ô- | ‘un-clump’ |

b. like (a) but medial i in reversive is syncopated

| ɔ́ỹ-ô- | ‘braid (rope)’ | ɔ́ỹ-rî- | ‘unbraid (rope)’ |
c. the underived stem already ends in *i*

| gòñjí- | ‘surround’ |
| bèsi- | ‘bury’ |
| gìsì- | ‘immobilize’ |
| págí- | ‘tie (up)’ |
| lègí- | ‘insert’ |
| tènì- | ‘hobble (donkey)’ |
| tìmbí- | ‘put lid on’ |
| námìbí- | ‘step on’ |
| yèmbí- | ‘cover (person)’ |
| pémbí- | ‘press to wall’ |
| kèndì- | ‘roll up (pant)’ |
| mèndì- | ‘roll up’ |
| nómìbí- | ‘sag’ |

(243) shows suffix allomorph -rë- or -rò- with +ATR mid-height vowel instead of -rê-. These are regular adjustments to the vowel-sequence constraints on trisyllabics (§10.1.3.6). In (243a), the initial syllable has *o*, which induces a matching *o* rather than *i* in the third syllable. In (243b), the initial syllable has *i*, which is compatible with either *i...i...i* or *i...i...e* trisyllabic sequences, and the latter is required by the input bisyllabic sequence *i...e*.

(243)  

a. nòngí-yë- ‘become tangled’

b. wìré- ‘go into coma’

(243a) also illustrates the pattern whereby a mediopassive suffix *-yv* is dropped when reversive *-rì-* is added (there are no quadrisyllabic or longer reversives). More examples of this are in (244).

(244)  

| nùändì-yí- | ‘become tangled’ |
| pèmbí- yí- | ‘put on a wrap’ |

[pèmbí- rì- also transitive ‘put a wrap on (sb)’]
The phonologically most difficult reversives are those in (245). When -rí- is added to a stem of the shape (C)rvr- or (C)rhr-, the expected “regular” (C)rvr-rv- or (C)rhr-rhrv- with two rhotics does not occur. Rather, at least one of the rhotics becomes r. In (245a), after syncope, the expected rhotic cluster shifts to l. In (245b), there is some ambiguity as to the morphemic composition. In one analysis, reversive -rí- is added to a variant form of the stem with l instead of r (a kind of dissimilation to the suffixal rhotic). In the other analysis, the variant stem with l already contains the reversive morpheme (after Post-Sonorant Syncope), and the final suffix is transitive -rv-, which is elsewhere often paired with mediopassive -yv-. In (245c), because of the initial nasal, there are optional pronunciations with n or nd (via *nn or *nd) instead of l. The example in (245d) shows no syncope and shifts the stem’s rhotic to l while keeping the suffixal rhotic. My assistant struggled with several of these forms in elicitation.

(245) a. kóři-yí- ‘be hooked’ kóll-I (gó:-) ‘be unhooked’
gár-rí- ‘put in’ gál-I- ‘take out’
táí-yí- ‘be affixed’ tál-I-I-yí- ‘affixed item come off’
iré- ‘forget’ ill-I- ‘remember’ (variant 1)
b. kóři- ‘hook, hang’ kóll-I- ‘unhook’
iré- ‘forget’ ill-I- ‘remember’ (variant 2)
táí-I- ‘affix’ tál-I-I- ‘remove affixed item’
c. mà ‘seal up’ mál-I-I- ‘unseal’
ùní ‘become lost’ màní- (gó:-) ‘lost item be found’
— màllí- ‘recover lost item’
d. jùró- ‘fold up (rope)’ jùlú-ró- ‘unfold (rope)’

Some synchronically unsegmentable trisyllabic stems ending in -rí may have originated as reversives. Since -rv- is also a minor transitive (valency-increasing) suffix, we should be careful about identifying such trisyllabics as frozen reversives. One clear case is náángírí- ‘remember’ (synonym of illí-rí-), which is synchronically isolated but is an exact cognate of Jamsay náángá-r’á- ‘remember’, reverse of Jamsay náángá- ‘forget’.

Representative AN paradigms of two trisyllabic reversible verb stems (i.e. from bisyllabic inputs) are in (246). AN paradigms of two bisyllabic reversives, one from a monosyllabic input (‘open’) and the other a trisyllabic reversible that has undergone Post-Sonorant Syncope (‘uncover’), are in (247).

(246) bare stem imperative prohibitive perfective-1b perfective negative imperfective imperfective negative

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For the suffix sequence reversion-mediopassive, see the end of §9.3.1.

### 9.2 Deverbal causative verbs

#### 9.2.1 Productive causative with suffix \textit{-mí-}

The productive causative suffix added to verb inputs is \textit{-mí-}. It preserves the /H/ or /LH/ melody of the input (248), and more generally it has little phonological interaction with the stem.

(248) Causatives with \textit{-mí-} (input verb ends in non-high vowel)

<table>
<thead>
<tr>
<th>input</th>
<th>gloss</th>
<th>causative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. {H}-toned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kóyó</td>
<td>‘weep’</td>
<td>kóyó-\textit{mí-}</td>
<td>‘make weep’</td>
</tr>
<tr>
<td>kúwó</td>
<td>‘eat (meat)’</td>
<td>kúwó-\textit{mí-}</td>
<td>‘give meat to’</td>
</tr>
<tr>
<td>ñné</td>
<td>‘go’</td>
<td>ñné-\textit{mí-}</td>
<td>‘allow to go’ (with \textit{e})</td>
</tr>
<tr>
<td>tômbó</td>
<td>‘jump’</td>
<td>tômbó-\textit{mí-}</td>
<td>‘make jump’</td>
</tr>
<tr>
<td>kó</td>
<td>‘eat (meal)’</td>
<td>kó-\textit{mí-}</td>
<td>‘feed, nourish’</td>
</tr>
<tr>
<td>sírɛ́</td>
<td>‘be full (sated)’</td>
<td>sírɛ́-\textit{mí-}</td>
<td>‘make full (sated)’</td>
</tr>
<tr>
<td>éw-yé</td>
<td>‘sit down’</td>
<td>éw-yé-\textit{mí-}</td>
<td>‘make sit’</td>
</tr>
<tr>
<td>péré</td>
<td>‘jump off’</td>
<td>péré-\textit{mí-}</td>
<td>‘make jump off’</td>
</tr>
<tr>
<td>píríyé</td>
<td>‘be inflated’</td>
<td>píríyé-\textit{mí-}</td>
<td>‘inflate’</td>
</tr>
<tr>
<td>b. {LH}-toned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>júgɔ́</td>
<td>‘know’</td>
<td>júgɔ́-\textit{mí-}</td>
<td>‘in form’</td>
</tr>
<tr>
<td>c. monosyllabic \textit{C\textsuperscript{V}}:- verbs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dɔ́</td>
<td>‘arrive’</td>
<td>dɔ́-\textit{mí-}</td>
<td>‘cause to arrive’</td>
</tr>
<tr>
<td>nɔ́</td>
<td>‘drink’</td>
<td>nɔ́-\textit{mí-}</td>
<td>‘give drink to’</td>
</tr>
</tbody>
</table>

As the examples in (248) show, \textit{-mí-} does not force changes in the vowel qualities of the preceding stem, provided that the stem ends in a non-high vowel (i.e. in anything but \textit{i}). In other words, although most causatives are trisyllabic or longer, they are not subject to the constraints on vowel sequences that apply to underived trisyllabics and longer stems.

However, if the input stem ends in \textit{i}, this vowel must be changed before \textit{-mí-}, as shown in (249). If there is a preceding non-high vowel, which in practice is almost always from the set
{a e ø}, this vowel is copied on the final vowel of the input stem before -mí- (249a). If the stem has no non-high vowel, the default for the stem-final vowel is ø after u, and e after i (249b). I have also recorded e (as an optional variant of ø) after initial-syllable i under the influence of a preceding nasal (249c).

(249) Causatives with -mí- (input verb ends in i)

<table>
<thead>
<tr>
<th>input</th>
<th>gloss</th>
<th>causative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. input has preceding non-high vowel {a e ø}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bá:ří-</td>
<td>‘help’</td>
<td>bá:řá-mí-</td>
<td>‘make help’</td>
</tr>
<tr>
<td>děwí-</td>
<td>‘cover’</td>
<td>děwé-mí-</td>
<td>‘make cover’</td>
</tr>
<tr>
<td>sůří-</td>
<td>‘creak’</td>
<td>sůřɛ-mí-</td>
<td>‘make creak’</td>
</tr>
<tr>
<td>b. input has preceding {u i} only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>núyɛ-</td>
<td>‘enter’</td>
<td>núyɛ-mí-</td>
<td>‘make enter’</td>
</tr>
<tr>
<td>půří-</td>
<td>‘frisk’</td>
<td>půřɛ-mí-</td>
<td>‘make frisk’</td>
</tr>
<tr>
<td>tímí-</td>
<td>‘cover’</td>
<td>tímɛ-mí-</td>
<td>‘make cover’</td>
</tr>
<tr>
<td>pý˘ří-</td>
<td>‘shut’</td>
<td>pý˘řɛ-mí-</td>
<td>‘make shut’</td>
</tr>
<tr>
<td>jínji-</td>
<td>‘make noise’</td>
<td>jínɛ-mí-</td>
<td>‘cause to make noise’</td>
</tr>
<tr>
<td>c. input has preceding i only, nasal allows variant e</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tíŋį-</td>
<td>‘speak’</td>
<td>tíŋɛ-mí- ~ tíŋɛ-mí-</td>
<td>‘make speak’</td>
</tr>
<tr>
<td>jínį-</td>
<td>‘ride double’</td>
<td>jínɛ-mí- ~ jínɛ-mí-</td>
<td>‘have (them) ride double’</td>
</tr>
<tr>
<td>d. after mediopassive -yí-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tágré-</td>
<td>‘put on shoes’</td>
<td>tágré-mí-</td>
<td>‘put shoes on (sb)’</td>
</tr>
</tbody>
</table>

The causative stem has a distinctive conjugation (250). The vocalism of the suffix combinations is independent of that of the preceding input stem, with no ATR harmony. For example, kóyő-mí- ‘cause to weep’ from a +ATR stem has the same suffixal forms as núyɛ-mí- ‘cause to go in’ from a -ATR stem (250), e.g. imperative kóyő-mí. However, no other element (such as a preverbal subject pronoun in a nonsubject relative) may intervene between the stem and the causative suffix, so we cannot analyse the latter as being a chained auxiliary verb.

(250) Paradigm of causative (‘cause to go in’)

| a. nonfinite |
| núyɛ5-mí | bare stem |
| núyɛ5-mí-ndě | verbal noun |

| b. perfective system |
| núyɛ5-mí- | simple perfective |
| núyɛ5-m-tí- | perfective-1b |
| núyɛ5-m-só- | perfective-2 |
| núyɛ5-m-jě- | recent perfect |
| núyɛ5-m tá-só- | experiential perfect |
| núyɛ5-mé-rỳ- | perfective negative |
c. imperfective system

\[ \text{nú-núy}^{n-mé-\dagger} \] reduplicated imperfective
\[ \text{nú-núy}^{n-mé:-sò-} \] reduplicated progressive
\[ \text{núy}^{n-m-øj\-} \] imperfictive negative

d. deontic

\[ \text{núy}^{5-m\-} \] imperative
\[ \text{núy}^{5-m-ndà:} \] prohibitive
\[ \text{núy}^{5-m-ởy\-} \] hortative

The causative suffix can be followed by passive \(-yé\), as in \(\text{sàmbâ}^{L} \text{nó:-mí-yé} \) ‘poisoned spear’, which is based on \(\text{nó3-mí-} \) ‘cause to drink’. It cannot be followed by mediopassive \(-yí-,\) transitive \(-rǐ-,\) or reversive \(-rǐ-\).

Conversely, the causative suffix may follow mediopassive or inchoative \(-yí-,\) transitive \(-rǐ-,\) or reversive \(-rǐ-.\) The only combination of any frequency is with inchoative \(-yí-,\) as in \(\text{ções-yí-} \) ‘become hot’. Causatives of the other suffixal derivations are elicitable but uncommon, probably for semantic reasons. Transitive \(-rǐ-\) is a productive causative-like counterpart to mediopassive \(-yí-,\) making a \(-mí-\) causative generally superfluous.

Most \(-mí-\) causatives are formed from intransitive inputs, but some have transitive inputs, as already suggested by several examples in (248-9) above. In the textual example (251), the input is transitive \(\text{dùr}^{n-}\) ‘look for, seek’.

(251) \[ \begin{array}{l}
\text{d\-gí \-a:] \text{yá: \ wàrà-mì \ sày}} \\
\text{[Dogon \ place \ millet \ do.farming-Ppl.Ipfv \ only]} \\
\text{dùr^{n-}mí-} \\
\text{look.for-Caus-Ipfv.3SgSbj} \\
\end{array} \]

‘(That) would make (them) look just for (fields) where Dogon were farming millet.’
(2004.01.10)

In causatives of transitive inputs, both the lower subject and the lower object are treated as direct objects of the causativized transitive verb, see \$11.1.2.

9.2.2 Minor causative suffixes (\(-gí \sim -nį-, -ndé-\))

For transitive \(-rǐ-,\) which functions as a causative in some but not all cases, see \$9.2.3, below.

A suffix \(-gí \sim -nį-\) occurs with a few stems, mainly in causative function. All clear examples known to me are in (252). The variant \(-nį-\) occurs after nasal syllables. As with causative \(-mí-,\) adding \(-gí \sim -nį-\) does not alter the vocalism of the preceding stem (there is no conversion to canonical trisyllabic vowel-sequence patterns).

(252) \(-gí \sim -nį-\) in causative and other functions

a. causative

\(-gí-\) after nonnasal syllable
\(\text{pòšý-} \) ‘(sth) crumble’
\(\text{màrá-} \) ‘become lost’
\(\text{wòró-} \) ‘cave in’
\(\text{pòsý-gí-} \) ‘crumble (sth)’
\(\text{màrá-gí-} \) ‘get rid of’
\(\text{wòró-gí-} \) ‘demolish’
wùr-  ‘(sb) wake up’  wùr-gí-  ‘wake (sb) up’
pará-  ‘(sth) snap’  pará-gí-  ‘snap (sth)’
-ŋí- after nasal syllable
kúmó-  ‘(bone) break’  kúmó-ŋí-  ‘break (sth long)’
jiámá-  ‘malfunction’  jiámá-ŋí-  ‘damage, waste’

b. transitiveizing (causative-like)
éméi-  ‘be narrow, tight’  éméi-gí-  ‘hold (sth) in armpit (by squeezing)’

c. intensive
kárá-  ‘incise’  kárá-gí-  ‘rip, tear’

A suffix -nde- is attested in the archaic and irregular sí:-ndé- ‘take/bring down’, from intransitive sigé- ‘go down’. It resembles a minor factitive suffix -ndí- that is attested with two adjectival verbs (bák:-ndí- ‘fill, make full’ and é:-ndí- ‘tightly’), see §9.5, below.

9.3 Passive and transitive

9.3.1 Mediopassive -yí- and transitive -rí-

Alternations of mediopassive (MP) -yí- and transitive (Tr) -rí- occur chiefly with verbs of stance (253a), clothing (253b), and holding (253c). The examples given are representative rather than exhaustive. The y or r is subject to Nasalization-Spreading, and the i vowel may shift to e, under conditions described below.

For the stance verbs, the mediopassive denotes taking a position (change of state), while the form with transitive -rí- is causative. For the verbs of clothing and holding, the mediopassive is syntactically transitive but denotes an action that results in the agent being in a state (of wearing or holding something). In this case, the form with transitive -rí- denotes the act of placing an object in such a way that another person wears or holds it.

(253)  MP  gloss  stem  gloss

a. stance
biyé-  ‘lie down’  biyé-  ‘have (sb) lie down, put to sleep’
éw-yé-  ‘sit down’  éw-yé-  ‘have (sb) sit, seat’
i-ýí-  ‘stand up, stop’  i-ryí-  ‘stop (sth)’
túňí-yí-  ‘kneel’  túňí-ryí-  ‘cause (sb) to kneel’

b. wearing clothes
tángí-yí-  ‘put one’s shoes on’  tángí-rí-  ‘put shoes on (sb)’
dombí-yé-  ‘roll on one’s turban’  dombí-ryí-  ‘put turban on (sb)’
ków-yé-  ‘put one’s hat on’  ków-ryí-  ‘put hat on (sb)’
págí-yí-  ‘tie one’s belt on’  págí-rí-  ‘tie belt on (sb)’
(cf. pági- ‘tie’)

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c. carrying/holding

<table>
<thead>
<tr>
<th>Mediapassive</th>
<th>Transliteration</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bàmbí-yí-</td>
<td>bàmbí-ryí-</td>
<td>‘carry on back’</td>
</tr>
<tr>
<td>dũː-ːyí-</td>
<td>dũː-ːrí-</td>
<td>‘carry on head’</td>
</tr>
<tr>
<td>kómbí-yí-</td>
<td>kómbí-ryí-</td>
<td>‘cling to (sth)’</td>
</tr>
</tbody>
</table>

[see also §9.6]

Several mediopassives in the left column of (253) are transcribed with final ñ-ːyí- or ñ-ːyí-. These sequences monophthongize to [i] (§3.7.5.2). Monophthongization is pre-empted by final vowel ablaut before most inflectional suffixes, as in imperfective ágí-ê-yí-mí-ːyí-. ‘we’ll keep’ in (144) in §6.3.2.

The e in the variants -yé- and -rë- seen in some of these pairs is due to the +ATR vocalism of the stems, which contain {o e} and therefore trigger adjustments that reflect constraints on vowel sequences in +ATR trisyllabic stems. Likewise, the suffix-initial sonorant is subject to regular Nasalization-Spreading (§3.5.1.1), as in púní-ːyí- ‘be bruised’ and túní-ːrë- ‘cause to kneel’.

Segmentability of mediopassive -yí- is difficult in the case of biyé- ‘lie down’ (253a), and in those of diyé- ‘bathe’ and tíyé- ‘be spilled’ (253d), because of their initial short-voweled syllables. The corresponding transitives have a phonetic long [i:] that could easily be (re-)interpreted by native speakers as reflecting /y/ syncopated from /iy/, i.e. bìyé- and diyé-. In this interpretation, -rë- is still segmentable as a transitive suffix allomorph, but the stems can be taken as unsegmentable biyé- and diyé-. I therefore transcribe these stems without hyphens. A similarly problematic case is dũː-ːyí- ‘carry on head’ (253c), but here the transitive is dũː-ːrë-.

In some cases, the transitive form shown competes with a causative with suffix -mí- added to the mediopassive form, e.g. éw-ːyé-mí- ‘cause to sit’. This shows that the -yí-/rë- alternation is not quite as productive in Nanga as in Najamba, for example.

Of the two verbs with the general sense ‘put on clothes, get dressed’, one has the expected alternation: dünǖ yé-ːyí- ’get dressed’ versus dünǖ yúrí-ːrë- ’dress (someone)’ (shown with cognate nominal dünǖ). The alternative for ‘get dressed’ is yürü rë-ːyí- (with yürü ‘fabric, garment’), but the expected transitive #kůrî-ːrë- does not occur. Instead, the actual form is just yürü kůrî-ː ‘dress (someone)’. This suggests that transitive -rë- is not readily added to stems with a rhotic in the final syllable. Compare (245) above, which shows how reverse -rë- deals with rhotic-final input stems.

Mediapassive -yí- is readily added to a reversive suffix, resulting in double derivation (254). The simple reverse in these cases is usually transitive ‘(tie’, ‘hook’), so the mediopassive is useful as a nonagentive intransitive ‘(become untied’, ‘become unhooked’). The sequences transcribed -rë-ːyí- and -rë-ːyí- are phonetically monophthongized (§3.7.5.2) to [rë:] and [rëː].
(254) Reversive plus mediopassive

<table>
<thead>
<tr>
<th>Reversive</th>
<th>Gloss</th>
<th>Mediopassive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ( C_\text{v}:r^\text{t(i)} )- reversive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( pi:-r^\text{t(i)} )-</td>
<td>open (sth)’</td>
<td></td>
</tr>
<tr>
<td>( m\ddot{\text{i}}:-r^\text{t(i)} )-</td>
<td>undo (knot)’</td>
<td></td>
</tr>
<tr>
<td>b. trisyllabic reversive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( k\ddot{\text{önd}_{\text{ú}}-r\ddot{\text{ó}}- )-</td>
<td>unfold’</td>
<td></td>
</tr>
<tr>
<td>( d\ddot{\text{ági}-r\ddot{\text{í}}- )-</td>
<td>unlock’</td>
<td></td>
</tr>
<tr>
<td>( k\ddot{\text{ó}l}-l\ddot{\text{í}}-r\ddot{\text{í}}- )-</td>
<td>unhook’</td>
<td></td>
</tr>
</tbody>
</table>

\(-y\ddot{\text{i}}-\) cannot follow causative \(-m\ddot{i}-\) (which instead allows passive \(-y\ddot{\text{é}}\)). Conversely, the causative suffix readily follows and has scope over the mediopassive, as in \(î\ddot{\text{y}}-y\ddot{\text{é}}-m\ddot{i}-\) ‘cause to stand’ from \(î\ddot{\text{y}}-y\ddot{\text{é}}-\) ‘stand’, among other examples. The combination \(-y\ddot{\text{é}}-m\ddot{i}-\) is especially common in deadjectival factitives (§9.5).

9.3.2 Passive suffix \(-y\ddot{\text{é}}\)

A construction with passive \(-y\ddot{\text{é}}\) is an unusual feature, perhaps unique to Nanga. It allows, but does not require, an implicit but unexpressed agent. The passive was readily elicited from a range of transitive inputs (255).

The preceding stem shifts to \{H\}-tone. The change is audible with inputs that have /LH/ melody (255b). The suffix itself is not affected by phonological features of the stem. There is no Nasalization-Spreading, and no harmonizing of vowels.

(255) Input verb | Gloss | Passive | Gloss

| a. Input /H/-toned |
|-------------------|-------|---------|-------|
| \( k\ddot{\text{ár}}-i\,-\)- | ‘do’ | \( k\ddot{\text{ár}}-i-y\ddot{\text{é}}\) | ‘be done’ |
| \( t\ddot{\text{ö}i\,}-\)- | ‘speak’ | \( t\ddot{\text{ö}i\,-y\ddot{\text{é}}\) | ‘be said’ |
| \( t\ddot{\text{o}n}\,-\)- | ‘write’ | \( t\ddot{\text{o}n}-y\ddot{\text{é}}\) | ‘be written’ |
| \( k\ddot{\text{áw}r\ddot{\text{á}}}\,-\)- | ‘disperse’ | \( k\ddot{\text{áw}r\ddot{\text{á}}}-y\ddot{\text{é}}\) | ‘be dispersed’ |
| \( k\ddot{\text{é}m\ddot{\text{é}}}\,-\)- | ‘build’ | \( k\ddot{\text{é}m\ddot{\text{é}}}-y\ddot{\text{é}}\) | ‘be build’ |

| b. Input /LH/-toned |
|-------------------|-------|---------|-------|
| \( y\ddot{\text{í}}\,-\)- | ‘see’ | \( y\ddot{\text{í}}-y\ddot{\text{é}}\) | ‘be seen’ |
| \( g\ddot{\text{ü}r\ddot{o}}\,-\)- | ‘rob’ | \( g\ddot{\text{ü}r\ddot{o}}-y\ddot{\text{é}}\) | ‘be robbed/stolen’ |
| \( g\ddot{\text{önd}_{\text{ò}}}\,-\)- | ‘take out’ | \( g\ddot{\text{önd}_{\text{ò}}}\,-y\ddot{\text{é}}\) | ‘be taken out’ |
| \( n\ddot{\text{s}}\,-\)- | ‘drink’ | \( n\ddot{\text{s}}\,-y\ddot{\text{é}}\) | ‘(liquid) be drunk’ |

The passive is adjectival in form; more specifically, it has developed out of a participle (as shown below). It can still function as a modifying adjective, either with a semantically light stem filling the noun slot (256a), or with a more typical common noun (256b). In (256c), the passive adjective is tone-dropped under the control of the following demonstrative.
(256) a. [kɔ̀ ã gúrø-yɛ̂] éwɛⁿ-ŋò-yⁿ
    [thing steal-Pass] buy-IpfvNeg-1SgSbj
    ‘I don’t/won’t buy anything stolen.’

b. [mɔ̀biḶ gúrø-yɛ̂] éwɛⁿ-ŋò-yⁿ
    [vehicle steal-Pass] buy-IpfvNeg-1SgSbj
    ‘I don’t/won’t buy a stolen vehicle.’

c. gɔ̀rⁿ ã gúrø-yɛ̂ ñ y
    gear break-Pass Def.InanPl
    ‘the broken housewares’ (2004.02.03)

The passive adjective is, however, often predicative, in which case it is followed by the appropriate conjugated form of the ‘it is’ enclitic (§11.2.1). For example, ŋgú gúrø-yɛ̂ = ẃ ‘this is/was stolen’ can be said while pointing to an object of dubious provenance found in a thieves’ den. It can be negated with the conjugated ‘it is not’ clitic = ndọ’; as in ŋgú gúrø-yɛ̂-w = ndọ: ‘this is/was not stolen’.

The third plural forms end in -yɛ̂ = Ø instead of expected # -yɛ̂ = y. Some further examples are in (257); see also §17.2.2.2.

(257) a. kârⁿ-yɛ̂ = w
    do-Pass=it.is.InanSgSbj
    ‘It is (= has already been) done.’

b. təŋ-yɛ̂ = Ø
    write-Pass=it.is.InanPlS
    ‘They (e.g. books) are (= have already) been written.’

c. gúrí gúrø-yɛ̂ = mí-y
    robbery rob-Pass=it.is-1SgSbj
    ‘I have been robbed.’

That we are dealing with a participle, and therefore with a kind of relative construction, is suggested by the fact that the subject, when overtly expressed as a nonpronominal NP, undergoes tone-dropping. This is consistent with the tone-dropping on relative head NPs. Examples are in (258).

(258) a. pərgè sémé-yɛ̂ = ŋ
    sheep slaughter-Pass=it.is.3SgSbj
    ‘A/the sheep-Sg is (= has already been) slaughtered.’ (pərgè)

b. ârⁿà ã gúrí gúrø-yɛ̂ = ŋ
    man robbery rob-Pass=be.3SgSbj
    ‘A/the man has been robbed.’ (ârⁿå)

c. təŋ₃ writing = ŋ
    write-Pass=be.InanSbj
    ‘A/the book is (= has already been) written.’ (təŋ₃)
However, the passive-predicate construction differs from the true relative construction in that the subject NP may end in a determiner (259a-b). In relatives, determiners follow the participle. No tone-dropping of the subject NP (other than regular NP-internal tone-dropping of a noun before a definite or demonstrative determiner) occurs in this combination. Even an N-Num combination may escape tone-dropping (259c).

(259) a. [përge¹ bû:] sémé-yé = Ø
   [sheep¹ Def.AnPl] slaughter-Pass=it.is.3PlSbj
   ‘The sheep-Pl are (= have already been) slaughtered.’

   b. [àři² wô-ŋ] gûrí gûró-yé = ŋ
   [man Dem-AnSg] robbery rob-Pass=it.is.3SgSbj
   ‘This man has (already) been robbed.’

   c. [áři² gá:rè] gûrí gûró-yé = Ø
   [man eight] robbery rob-Pass=it.is.3PlSbj
   ‘Eight men have been robbed.’

Negative predicative forms of the passive can be formed by adding an inflected form of the negative ‘it is not’ clitic = ndô: (§11.2.1.2) to the passive suffix and the ‘it is’ clitic (260).

(260) tñô-yé = w = ndô:-Ø
   write-Pass=it.is.InanSbj=it.is.not-3SgSbj
   ‘It has not been written.’

Alternatively, -yé = plus the inflected form of the (positive) ‘it is’ clitic can be added to the perfective negative verb form with suffix -rî (261). In the case of 3Pl subject, both inanimate and animate, the 3Pl perfective negative -ndû- is the basis for the form, which is therefore doubly conjugated. -ndû- is pronounced -ndî- before -yé =. This construction could be parsed as addition of the ‘it is’ enclitic to a perfective negative participle (§14.1.7.3).

(261) a. tñô-ri-yé = w
   write-PfvNeg-Pass=it.is.InanSbj
   ‘It has not been written.’

   b. gûró-ri-yé = mî-y
   rob-PfvNeg-Pass=it.is-1SgSbj
   ‘I have not been robbed.’

   c. gûró-ndî-yé = Ø
   rob-PfvNeg.3PlSbj-Pass=it.is.3PlSbj
   ‘They have not been robbed.’

   d. tñô-ndî-yé = Ø
   write-PfvNeg.3PlSbj-Pass=it.is.3PlSbj
   ‘They have not been written.’

Both positive and negative predicative forms of the passive may combine with past clitic = be-. For examples, see §10.5.1.4.
Participle-like passive -yé is distinct from inflectable verbal suffix -yé- ‘be possible’ (§17.5.2.1), but a historical connection cannot be ruled out.

9.3.3 Minor passive suffix -mí-

One unproductive passive construction is a morphological mimic of the causative, using the same suffix -mí-. The two known examples are in (262). The best gloss is of the type ‘be Vb-able’, referring to the presence or distribution of the referent rather than to its inherent qualities.

(262) a. témbé- ‘encounter’ témbé-mí- ‘be found (often), findable’
   b. béré- ‘obtain’ béré-mí- ‘be gotten (often), available’

Examples: reduplicated imperfective tê-témbé-mê- ‘it is found (= possible to find, available)’, imperfective negative bêrê-mê- ‘it isn’t available, it can’t be gotten’.
No such form was elicitable for ‘be seen’ or ‘be heard’.

9.4 Ambi-valent verbs without suffixal derivation

Ambi-valent verbs, i.e. those used both transitively and intransitively, are not typical of Nanga. Intransitive/transitive pairs are normally expressed morphologically, by such suffixes as causative, transitive, and mediopassive. Many verbs (e.g. ‘eat’, ‘sing’) that are typologically low on transitivity (i.e. the object is obvious from the meaning of the verb, or is otherwise uninformative), have high-frequency cognate-nominal or other default nominal objects in Dogon languages (‘eat a meal’, ‘sing a song’), see §11.1.5.1.

9.5 Deadjectival inchoative and factitive verbs

In the tables in this section, the adjective is first given in its usual modifying form. It should be recalled, though, that many nonmonosyllabic adjectives with final i in this form also have a predicative form with final u. The adjective is followed by the inchoative verb (‘[sth] become ADJ’) and the factitive verb (‘make [sth] ADJ’). The factitive is the causative of the inchoative, and usually ends in causative suffix -mí- (there are also a few cases with -ndí-). The inchoative is therefore the lexically basic verb.

In the first set of examples, the inchoative verb has no segmentable derivational suffix. The inchoative verb and the adjective are independent members of the same word-family, rather than one being directly derived from the other. The phonological form of the verb respects the usual constraints on verb-stem shapes regarding tone and vocalism. Therefore the verb has /LH/ melody if it begins with a voiced obstruent, /H/ melody if it begins with a voiceless obstruent, and otherwise there is a lexical choice (§3.7.1.2). These constraints do not apply to the adjective.
The sequence \( y \) is regularly nasalized to \( y \) before the inchoative is replaced, before the causative suffix is added. This suffix requires the preceding bisyllabic stem to end in \( i \). The \( y \) of the inchoative is replaced, before the causative suffix is added, by a no vowel. One could therefore argue that the inchoative is formed by adding an inchoative suffix directly to the adjective. To make this work, the adjectival stem would have to be reshaped to fit the constraints on the phonological form of verbs, over and above simple addition of the derivational suffix.

In (264), the inchoative suffix is \(-yí-\), with harmonized variant \(-yé-\) after verbs with \(+\text{ATR}\ \{e\ o\}\) vowel. This suffix requires the preceding bisyllabic stem to end in \( i \). The \(-yí-\) variant shifts to \(-yé-\) before the causative suffix, while \(+\text{ATR} \ -yé-\) does not shift. The \( y \) is regularly nasalized to \( y^n \) after a nasal syllable, audibly in factitives like \( ná:r^n-y^n \), but the sequence \( i-y^n(\i) \) in inchoatives is heard as \([i:]\) due to Monophthongization (§3.5.7.2).

<table>
<thead>
<tr>
<th>(263)</th>
<th>gloss</th>
<th>adj</th>
<th>inchoative</th>
<th>factitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. factitive (-ndí-)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘full’</td>
<td>( bá: )</td>
<td>( bá:- )</td>
<td>( bá:-ndí- )</td>
<td></td>
</tr>
<tr>
<td>‘tight (screw)’</td>
<td>( ē: )</td>
<td>( ē:- )</td>
<td>( ē:-ndí- )</td>
<td></td>
</tr>
<tr>
<td>b. factitive with causative (-mí-, ) inchoative ends in non-high vowel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘tight (rope)’</td>
<td>( ē: )</td>
<td>( ē:- )</td>
<td>( ē:-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘old’</td>
<td>( pē: )</td>
<td>( pē:- )</td>
<td>( pē:-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘dry, hardened’</td>
<td>( mā: )</td>
<td>( mā:- )</td>
<td>( mā:-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘ripe (crop); fresh’</td>
<td>( īrē )</td>
<td>( īrē:- )</td>
<td>( īrē-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘half-ripe’</td>
<td>( āmá )</td>
<td>( āmá- )</td>
<td>( āmá-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘plump’</td>
<td>( āmí )</td>
<td>( āmí- )</td>
<td>( āmí-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘red’</td>
<td>( bár^n )</td>
<td>( bár^n:- )</td>
<td>( bár^n-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘empty, bare’</td>
<td>( kóró )</td>
<td>( kóró:- )</td>
<td>( kóró-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘weak, diluted’</td>
<td>( séré )</td>
<td>( séré- )</td>
<td>( séré-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘ripe (fruit)’</td>
<td>( bōrō )</td>
<td>( bōrō- )</td>
<td>( bōrō-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘black’</td>
<td>( jémí )</td>
<td>( jémí- )</td>
<td>( jémí-mí- )</td>
<td></td>
</tr>
<tr>
<td>c. factitive with causative (-mí-, ) inchoative ends in ( i )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘curved’</td>
<td>( gōndí )</td>
<td>( gōndí- )</td>
<td>( gōndí-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘narrow’</td>
<td>( ēmbí )</td>
<td>( ēmbí- )</td>
<td>( ēmbí-mí- )</td>
<td></td>
</tr>
<tr>
<td>‘tilted’</td>
<td>( jēnjí )</td>
<td>( jēnjí- )</td>
<td>( jēnjí-mí- )</td>
<td></td>
</tr>
</tbody>
</table>

In (263c), the final \( i \) of the inchoative is replaced, before the causative suffix, by a non-high vowel copied from the initial syllable.

In the remaining forms, the inchoative verb has a derivational suffix. One could therefore argue that the inchoative is formed by adding an inchoative suffix directly to the adjective. To make this work, the adjectival stem would have to be reshaped to fit the constraints on the phonological form of verbs, over and above simple addition of the derivational suffix.

| (264) Inchoative \(-yí-/ -yé-\) | | | | |
| gloss | adj | inchoative | factitive |
| a. \( Cv:C(C)v \) | | | | |
| ‘thin’ | \( kē:mbé \) | \( kē:mbé-yí- \) | \( kē:mbé-yé-mí- \) |
| ‘skinny’ | \( kō:mbó \) | \( kō:mbó-yé- \) | \( kō:mbó-yé-mí- \) |
| ‘young, adolescent’ | \( sō:rō \) | \( sō:rí-yé- \) | \( sō:rí-yé-mí- \) |
| ‘easy, cheap’ | \( nā:r^n \) | \( nā:r^n-y^n \) | \( nā:r^n-y^n-yé-mí- \) |
| ‘unripe, raw’ | \( kē:si \) | \( kē:si-yé- \) | \( kē:si-yé-mí- \) |
b. temperature adjectives

<table>
<thead>
<tr>
<th>English</th>
<th>támí</th>
<th>támí-yí-</th>
<th>támí-yé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cold’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘hot’</td>
<td>žgí</td>
<td>žgí-yí-</td>
<td>žgí-yé-mí-</td>
</tr>
</tbody>
</table>

The most common and productive inchoative suffix, however, is -ndíyé-. The e vowel is stable, occurring with any stem vocalism. The comments at the beginning of each group of examples in (265) suggest how one might derive the vocalism of the inchoative verb from that of the modifying adjective. This is unnecessary (and unwarranted) if one decides that the adjective and the inchoative are independent members of their word-families.

The tone pattern of the inchoative can again be predicted if the stem begins with an obstruent. Inchoatives beginning in a voiceless obstruent (stop or fricative) have /H/ melody, while those beginning in a voiced obstruent have /LH/ melody. The eight or so vowel-initial inchoatives also have /H/ melody. General constraints on verb-stem melodies do allow /LH/ for V-initial stems (cf. írè ‘forget’), but /H/ is considerably more common.

This leaves sonorant-initial stems, which in principle allow either tone melody in verbs, and might therefore clarify whether the adjective and the inchoative share a lexical melody. Here I find two cases of /LH/ in both the adjective and the inchoative (wágá ‘distant’, mòsí ‘bad/ugly’), one case with /HL/ in the adjective and /H/ in the verb (múrì ‘hard’), one case with /HL/ in the adjective and /LH/ in the verb (yágl ‘coarse’); and one with /LHL/ adjective and /H/ verb (nòmì ‘difficult/costly; this adjective has a predicative form nòmì with /HL/ melody). No clear pattern emerges.

(265) Inchoative -ndíyé-

a. stem ends in {e o a}, vocalism stable

<table>
<thead>
<tr>
<th>English</th>
<th>wágá</th>
<th>wágá-ndíyé-</th>
<th>wágá-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘distant’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘fat; numerous’</td>
<td>ɔwɔ̃</td>
<td>ɔwɔ̃-ndíyé-</td>
<td>ɔwɔ̃-ndíyé-mí-</td>
</tr>
<tr>
<td>‘small, young’</td>
<td>èwré</td>
<td>èwré-ndíyé-</td>
<td>èwré-ndíyé-mí-</td>
</tr>
<tr>
<td>‘long, tall’</td>
<td>gùrɔ̀</td>
<td>gùrɔ̀-ndíyé-</td>
<td>gùrɔ̀-ndíyé-mí-</td>
</tr>
</tbody>
</table>

b. CvC stem with non-high vowel extended to CvCv- by copying vowel

<table>
<thead>
<tr>
<th>English</th>
<th>gáw</th>
<th>gáw-ndíyé-</th>
<th>gáw-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘spacious’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘short’</td>
<td>déŋ</td>
<td>déŋ-ndíyé-</td>
<td>déŋ-ndíyé-mí-</td>
</tr>
</tbody>
</table>

c. stem has u…i (but predicative u…u) becoming u…u, stem CvCv

<table>
<thead>
<tr>
<th>English</th>
<th>dúgí</th>
<th>dúgí-ndíyé-</th>
<th>dúgí-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘big, fat’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘heavy’</td>
<td>dúší</td>
<td>dúší-ndíyé-</td>
<td>dúší-ndíyé-mí-</td>
</tr>
<tr>
<td>‘soft (skin)’</td>
<td>búrí</td>
<td>búrí-ndíyé-</td>
<td>búrí-ndíyé-mí-</td>
</tr>
</tbody>
</table>

d. stem has u…i becoming u…e, stem CvCCv

<table>
<thead>
<tr>
<th>English</th>
<th>kúnjì</th>
<th>kúnjì-ndíyé-</th>
<th>kúnjì-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘coarse’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. stem has i…i, vocalism stable

<table>
<thead>
<tr>
<th>English</th>
<th>pírí</th>
<th>pírí-ndíyé-</th>
<th>pírí-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘white’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

f. Ci: stem extended to Ciye-

<table>
<thead>
<tr>
<th>English</th>
<th>sì:</th>
<th>sì:y-ndíyé-</th>
<th>sì:y-ndíyé-mí-</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘pointed’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
g. stem ends in ì that is replaced by copy of non-high first vowel

- ‘bitter’ gáří gárá-ndíyé- gárá-ndíyé-mí-
- ‘salty, sour’ páří párá-ndíyé- párá-ndíyé-mí-
- ‘half-bitter’ áší ásá-ndíyé- ásá-ndíyé-mí-
- ‘hard’ máří már’á-ndíyé- már’á-ndíyé-mí-
- ‘coarse’ yáğí yágá-ndíyé- yágá-ndíyé-mí-
- ‘no good (garbage)’ gómí gómý-ndíyé- gómý-ndíyé-mí-
- ‘somewhat rotten’ gómí gómý-ndíyé- gómý-ndíyé-mí-
- ‘bad, ugly’ mósí mós-ndíyé- mós-ndíyé-mí-
- ‘difficult, costly’ nómí nóm-ndíyé- nóm-ndíyé-mí-
- ‘hot, fast’ ọ́gí ọ́gý-ndíyé- ọ́gý-ndíyé-mí-
- ‘deep’ sóńí sóń-ndíyé- sóń-ndíyé-mí-
- ‘smooth, sleek’ ọ́rí ọ́rý-ndíyé- ọ́rý-ndíyé-mí-
- ‘sensitive’ ọ́sí ọ́s-ndíyé- ọ́s-ndíyé-mí-
- ‘sweet; sharp’ ẹ́rī ẹ́r-ndíyé- ẹ́r-ndíyé-mí-
- ‘lightweight’ ér’âì ér’â-ndíyé- ér’â-ndíyé-mí-

There are also two cases known to me of inchoative -rí-. The adjective yáğí ‘coarse’ has been given above with its inchoative yágá-ndíyé- ‘become coarse’, but there is also a semantically specialized verb yágí-rí- ‘(skin) be itchy’. The adjective ọ́gí is also given above, in the sense ‘hot’, with inchoative ọ́gí-yrí-, and in the senses ‘hot/fast’, with inchoative ọ́gý-ndíyé-. However, for ‘become fast(er)’ (i.e. ‘speed up’), there is another verb, ọ́gí-rí-

Examples of adjectives (or adjective-like compound finals) that do not have an associated inchoative verb are in (266). For ‘other’ the problem is logical (‘become other’ makes little sense except in a postmodern context). ‘Become new’ is not much better, in the absence of cosmetic surgery and revitalizing skincare products. The other terms in (266) are noun-like.

<table>
<thead>
<tr>
<th>(266)</th>
<th>gloss</th>
<th>adjective</th>
<th>inchoative/factive</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘other’</td>
<td>bèndí</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>‘new’</td>
<td>kándá</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>‘young adult’</td>
<td>sátárá</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>‘living’</td>
<td>úmá</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>‘runty’</td>
<td>kèdè</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

### 9.6 Denominal verbs

There is no productive denominal verbalization. Some cases of verb-noun relationships where the noun is arguably lexically basic are listed with subheading comments in (267). As usual the verb is subject to phonological constraints on its tone melody while the noun is not.

<table>
<thead>
<tr>
<th>(267)</th>
<th>noun</th>
<th>gloss</th>
<th>verb</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. verb has transitive -rí-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dù:</td>
<td>‘load’</td>
<td>dù:-rí-</td>
<td>‘load (e.g. cart)’</td>
<td></td>
</tr>
<tr>
<td>tigá</td>
<td>‘family name’</td>
<td>tigí-rí-</td>
<td>(griot) chant the ancestry of (sb)</td>
<td></td>
</tr>
<tr>
<td>nèní</td>
<td>‘sauce’</td>
<td>nèngí-rí-</td>
<td>‘cook (sauce)’</td>
<td></td>
</tr>
</tbody>
</table>
b. verb has -gýé-
   ündì ‘forest’    ündú-gýé- ‘(zone) become dense (e.g. after rains)’

c. verb has mediopassive -yí-
   kúrí ‘(a) share’    kérí-yé- ‘share, divide up’
   lisígir⁺é ‘filth’    lisígir⁹⁷-yí- ‘become dirty, soiled’

noun resembles stative
   ùwá ‘fear’  ū:-yí- ‘be afraid’
   iýá ‘position’  í:-yí- ‘stand, be in a position’ (stative í-ʔìyà-)

d. verb has causative -mí-
   pó: (greeting)  pó:-mí- ‘greet’
   lisígir⁸é ‘filth’    lisígir⁸é-mí- ‘soil, make dirty’

e. verb has no suffix (Fulfulde borrowings)
   bármà ‘injury’  bármí- ‘injure, wound (someone)’

f. noun is reduplicated
   kà-kàrí ‘lie, untruth’  kárá- ‘lie, tell a lie’

The noun and verb co-occur in collocations in some cases, notably ‘chant the ancestry’, ‘cook the sauce’, and ‘tell a lie’. Syntactically, the nouns in these cases function as cognate nominals (§11.1.5).

dú:-rí- ‘load (cart)’ in (267a) is alternatively derivable from mediopassive dú:-yí- ‘carry (on head)’, see §9.3.1. This is probably correct historically, but the synchronic situation is more ambiguous.

9.7 Obscure verb-verb relationships

ná:-mí- in (268) looks like a causative but has a noncausative sense. For time-of-day greetings, see §19.7.1.

(268) verb gloss related verb gloss

ná:- ‘spend night’  ná:-mí- ‘greet in the morning’
10 Verbal inflection

10.1 Inflection of regular indicative verbs

Inflected indicative verbs are normally followed by an aspect-negation (AN) suffix, then an optional past clitic (or suffix), then a pronominal-subject suffix (including 3Sg zero). Verbs can be lexically i-final or non-i-final. In either case, they undergo final-vowel ablaut in some inflections.

Tense as such is not marked in the basic AN system, but a conjugatable past clitic may be added to several AN suffixes.

The modal categories (imperative, etc.) have distinctive morphology but are also suffixal, except that the singular imperative is marked only by tonal and vocalic changes.

10.1.1 Suffixes versus chained auxiliary verbs

As in other Dogon languages, in those categories where a nonzero AN morpheme follows the regular bare stem of the verb (with its regular tones), there is an issue as to whether the AN morpheme is a suffix or a chained auxiliary verb. Experiential perfect tâ:- is unmistakably an auxiliary verb, since it has its own perfective-2 suffix -só- in main clauses. Recent perfect jè- lacks such an inflectional suffix in main clauses, but both tâ:- and jè- are followed in relative clauses by perfective participle -sè, and both can be followed by perfective negative -rí-.

An important test for suffix (Vb-Y) versus auxiliary-verb (Vb Y) status is whether, in nonsubject relatives, a preverbal pronominal-subject proclitic (§14.1.6) precedes the main verb or intervenes between it and Y. Such pronominals do intervene between directly chained verbs (§14.1.8). The fact that they can likewise intervene between the main verb stem and the experiential perfect participle (tâ:-sè) and the recent perfect participle (jè-sè), see §14.1.7.1, supports the view that these latter are auxiliary verbs that combine with the main verb in direct chains.

Tone-dropping effects are also relevant. Determiners (‘the’, ‘this’, ‘that’) control tone-dropping on preceding words within the NP (including relative clause). In the relative clause constructions, if a determiner is added the outputs are Vb [tâ:-sè]₁ DET (experiential perfect) and Vb [jè-sè]₁ DET (recent perfect). Here determiner-controlled tone-dropping affects only the auxiliary verbs (audibly in [tâ:-sè]₁, inaudibly in [jè-sè]₁), and does not affect the preceding verb; see §14.1.7.1.

Based on these considerations, I transcribe (and analyse) tâ:-sò- and jè- as separate words. However, there is one piece of countervailing evidence suggesting that tâ:- is suffixal, or at least that it and the preceding verb constitute a word-like entity (a compound?). This is the fact that tone-dropping controlled by perfective negative -rí- extends to the main verb preceding the experiential perfect morpheme, resulting in Vb₁ tâ:-rí-, or more perspicuously Vb [tâ:]₁-ří-; see §10.2.3.2-3 for examples. Since this does not apply to the recent perfect, whose negation is Vb jè-ří- with no tone-dropping of the main verb, i.e. Vb [jè]₁-ří-, I regard it as a quirky, isolated feature of the experiential perfect negative.
Perfective-1b -tì- and perfective-2 -sò- might also be analysed as constituting separate words. Verbs have their bare stem before these suffixes, as we would expect in verb-chains. I have no other evidence in favor of taking perfective-2 -sò- as a separate word. If -sò- is equated with perfective participial -sè, there is evidence against separate-word status, since a preverbal subject pronominal cannot intervene between the verb stem and -sè, and since the verb stem is included along with -sè in the domain of determiner-controlled tone-dropping (§14.1.7.1).

With perfective-1b -tì- the situation is tricky. In relative clauses, the perfective-1b and other perfective positive forms are normally merged into a single participial category. It was possible to elicit one type of relative with -tì-sè gà, see (509) in §14.1.7.1 below. However, the only textual example I have where the perfective-1b morpheme is separated from the main verb is a combination with different-subject anterior subordinator nà, see §15.2.6. So whether -tì- is a suffix or a chained auxiliary verb is a borderline call. H-toned tì- does, however, occur as a true chained verb. It has unmistakably perfective flavor, but it occurs in this construction before imperfective -tì- (§15.1.10).

Perfective-1a -èrè- behaves somewhat similarly to perfective-1b -tì- in these respects. Like -tì-, it can be separated from the main verb by a preverbal subject pronoun when it is followed by different-subject anterior nà, see §15.2.6. In this case it takes the autonomous form yèrè. Also like -tì-, -èrè- has a {H}-toned form -èrè- that occurs between the main verb and imperfective inflections, see §15.1.10. However, -èrè- contracts with stem-final vowels in the same way as does perfective-1a -èrè-, making a verb-chain analysis more problematic.

Etymologically, all of these elements were probably chained auxiliaries. No clear etymology is available for experiential perfect tì-, but it has verb-like morphology, and since it occurs in most Dogon languages its origin is likely ancient. Perfective-1a -èrè- and prole cognates like Toro Tegu -wòrè - -wòrè have the bisyllabic shape typical of verbs. Recent perfect jè- is probably from a ‘take’ verb: Bankan Tey żè, Najamba jè, and other cognates, within Nanga jè:- ‘(man) marry (woman)’ and other related forms. Perfective-1b -tì- is from ‘send’: Nanga tìyì and numerous cognates. The transition from ‘send’ to perfective is in progress in Donno So. Perfective-2 -sò- is from ‘have’: Nanga só- and cognates.

10.1.2 Overview of categories

For regular (active or dynamic) verbs in the basic indicative mood, there is a fundamental aspectual split between perfective and imperfective aspectual systems, though each system consists of more than one AN category. The aspectual split crosses with a polarity split (positive/negative), so there are four divisions.

The aspectual split is neutralized in statives, which include stative paradigms derived from otherwise active verbs (§10.4) and various defective quasi-verbs like ‘be (somewhere)’ and ‘have’ (§11.2). It is also neutralized in the progressive (§10.2.2.3). Statives also have special negative forms distinct from those of active verbs.

Modal categories marked in the morphology are imperative, hortative (‘let’s …!’), and the quoted imperative (QuotImpmt) form used in wishes and imprecations. The imperative and hortative have special negative forms.
10.1.3 Verb stem shapes

There are two morphological verb classes, one \textit{i-final} and the other \textit{non-i-final}. They are distinct in the bare stem (see below) and some other forms, but merged in others. Prosodically heavy verbs are \textit{i-final}, except that the few heavy stems that are \textit{+ATR} have final \{e o\}. Light bisyllabics (\textit{CvCv, CvNCv}) are arbitrarily \textit{i-final} or non-\textit{i-final} (lexical choice). Monosyllabics (\textit{Cv}) are non-\textit{i-final}, except for yi\textit{-}’see’.

In addition to this lexical division, verb stems are subject to ablaut affecting the stem-final vowel in some inflections, whether or not an aspect-negation (AN) suffix follows. The following amplifies the brief overview in \S3.4.8. I take as lexically basic the bare stem of each verb, which occurs in nonfinal position in verb chains, in most perfective positive inflections, and (for light stems) in the imperfective positive and negative. This leads to the question, in some inflections, whether the “suffixes” might really be chained auxiliary verbs (\S10.1.1 just below). Other inflected forms use the segmental form (in particular, the vocalism) of the bare stem but apply tonal modifications.

What I call the \textbf{E/I-stem} occurs in the 3Sg subject form of the simple perfective positive. It consists of the \textbf{E-stem} of non-\textit{i-final} verbs, and the \textbf{I-stem} (identical to the bare stem) of \textit{i-final} verbs. The E-stem ends in \{e e\}, depending on ATR-harmonic class of the verb: d\text{g}\text{g}\text{e}\text{-}\text{Ø} ‘he/she left (sth)’, gu\text{r}\text{e}\text{-}\text{Ø} ‘he/she stole’. An example of the I-stem is ï\text{ñi}-\text{Ø} ‘he/she spoke’ (\S10.2.1.1). The E/I-stem also occurs, with lengthened final vowel, in a durative complement used with ‘be tired’ as main verb (\S15.2.5.1).

The overall \textbf{I-stem}, for both \textit{i-final} and non-\textit{i-final} verbs, including monosyllabic \textit{Cv-y}, occurs in the quoted imperative (\S10.6.4). For most nonmonosyllabics it also occurs before the prohibitive suffix (\S10.6.1.2).

The \textbf{A/O-stem} is used without further AN suffix as the imperative (singular), the derived stative stem, and the 3Pl subject form of the simple perfective positive (though in the latter case I treat the final vowel as a suffix). This stem ends in a \textit{a o}, depending on the nonfinal vocalism and ATR-harmonic value of the stem. Imperative examples are y\text{øg\text{ø}} ‘run!’, p\text{e}r\text{o} ‘jump off!’, and é\text{wâ} ‘buy!’.

The non-high stem can end in any short vowel except \textit{i} and \textit{u}. The non-\textit{i-final} verbs already satisfy this, so their non-high and bare stems are identical. The effect is that \textit{i-final} verbs must convert the \textit{i} to a non-high vowel that squares with the stem’s nonfinal vocalism (if any) and its ATR-harmonic class. All verbs must occur in the non-high stem before perfective negative suffix \textit{-ri} (\S10.2.3.1) and hortative suffixes (\S10.6.2). For example, y\text{øg\text{ø}} ‘run’ and \textit{i-final} pá\text{g}\text{i} ‘have perfective negatives y\text{øg\text{ø}}-\text{ri} and p\text{a}g\text{a}\text{-}\text{ri}. Only prosodically heavy verbs also require the non-high stem before imperfective (positive and negative) suffixes, while prosodically light verbs show up in their bare stems. Examples are regular stems y\text{øg\text{ø}} ‘run’ and m\text{ø}n\text{j}\text{úr}\text{ø} ‘dream’, and \textit{i-final stems k\text{á}r\text{\text{\text{-}}}tie’ and b\text{è}g\text{\text{\text{-}}}sift’, imperfective negatives y\text{øg\text{ø}}-\text{\text{-}n\text{\text{-}}}--, m\text{ø}n\text{j}\text{úr}\text{ø}--n\text{\text{-}}, and k\text{á}r\text{\text{-}n\text{-}n\text{-}--} with no stem change, but b\text{è}g\text{\text{-}n\text{-}n\text{-}--} with audible shift to non-high stem (\S10.2.3.4).

A possible revision of this analysis would be to take the non-high stem as lexically basic, and argue that the final \textit{i} of the bare stem for some verbs (including the I-stem portion of the E/I-stem) is due to ablaut. The challenge for this revision would be explaining why some verbs shift to \textit{i} while others do not. The good news is that there is a correlation of final \textit{i} with prosodic heaviness, observable in suffixal derivation: pég\text{-} ‘drive in (nail)’, reverse \textit{p\text{é}g\text{-}ri} ‘remove (nail)’. The bad news is that bisyllabics with similar nonfinal vocalism can be assigned by the lexicon to either regular or \textit{i-final} classes, e.g. b\text{á}y\text{á}- ‘be cured’ versus g\text{á}r\text{\text{-}i} ‘put’, t\text{é}r\text{-} ‘chop’ versus d\text{é}n\text{-} ‘tamp’, d\text{g}\text{g}\text{-} ‘leave’ versus b\text{á}g\text{-} ‘perpetrate (crime)’,
and *gùró-* ‘steal’ versus *dùŋ-* ‘put down’ (§10.1.3.5). If we take the bare stem as lexically basic, the final-vowel alternations are predictable.

The comments above are strictly about vocalism, i.e. segmental form. The various inflectional categories also require their own tonal patterns. Tones and vocalism (ablaut) are partially orthogonal, but there are some interactions of tone with vocalism (*i*-final versus other stems) in the imperative.

10.1.3.1 Cv:- verb stems

The Cv:- verbs known to me are in (269), which is organized by tone melody and vowel quality. The subsections are organized by vowel quality. The difference between H- and LH-toned Cv: onsets is subtle, since in /LH/-toned Cv: speakers waste little time in reaching a high pitch.

I have no example of a Cu:- verb. The verbs ‘go in’ and ‘hear’ are heard segmentally as [nujᵢ] but their paradigms point to /nuyᵢi/ (§10.1.3.3), in spite of cognates like Jamsay nú:- and Ben Tey nú: ‘See’ is the only example of Ci:- (§10.1.3.2).

(269) /H/   /LH/  gloss

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>á:-</td>
<td>/H/</td>
<td>‘uproot (peanuts)’</td>
</tr>
<tr>
<td>ká:-</td>
<td>/H/</td>
<td>‘shave’</td>
</tr>
<tr>
<td>má:-</td>
<td>/H/</td>
<td>‘become dry’</td>
</tr>
<tr>
<td>ná:-</td>
<td>/H/</td>
<td>‘spend night’</td>
</tr>
<tr>
<td>pá:-</td>
<td>/H/</td>
<td>‘chip off’</td>
</tr>
<tr>
<td>sá:-</td>
<td>/H/</td>
<td>‘reply’</td>
</tr>
<tr>
<td>sá:-</td>
<td>/H/</td>
<td>‘uproot (with a tool)’</td>
</tr>
<tr>
<td>sá:-</td>
<td>/H/</td>
<td>‘take (millet grain spikes) to pile’</td>
</tr>
<tr>
<td>sá:-</td>
<td>/H/</td>
<td>‘strain’</td>
</tr>
<tr>
<td>tá:-</td>
<td>/H/</td>
<td>‘shoot’</td>
</tr>
<tr>
<td>tá:-</td>
<td>/H/</td>
<td>‘(ripening fruit) begin to turn color’</td>
</tr>
<tr>
<td>bǎ:-</td>
<td>/LH/</td>
<td>‘be enough, be full’</td>
</tr>
<tr>
<td>dǎ:-</td>
<td>/LH/</td>
<td>‘learn’</td>
</tr>
<tr>
<td>dǎ:-</td>
<td>/LH/</td>
<td>‘endure’</td>
</tr>
<tr>
<td>dǎ:-</td>
<td>/LH/</td>
<td>‘patch up’</td>
</tr>
<tr>
<td>gǎ:-</td>
<td>/LH/</td>
<td>‘harvest (rice) with sickle’</td>
</tr>
<tr>
<td>gǎ:-</td>
<td>/LH/</td>
<td>‘be unaware’</td>
</tr>
<tr>
<td>jǎ:-</td>
<td>/LH/</td>
<td>‘fence in (with thorn branches)’</td>
</tr>
</tbody>
</table>

with aⁿ

|        |        |         |
| tá:ⁿ-  |       | ‘avoid (taboo)’ |
| tá:ⁿ-  |       | ‘build shed (thatched shelter)’ |
| pá:ⁿ-  |       | ‘take (step)’ |

with o

|        |        |         |
| kó:-   |       | ‘cover (e.g. box) with animal hide’ |
| kó:-   |       | ‘spit (wood)’ |
| kó:-   |       | ‘sew’ |
pó:-  ‘whistle’
pó:-  ‘replaster (mud wall)’
só:-  ‘dip’
tó:-  ‘hit hard (with stone)’
  bō:-  ‘sip’
dō:-  ‘wash (hands)’
gō:-  ‘go out’
wō:-  ‘catch, hold’

with ɔ
kɔ:-  ‘eat (meal)’
pɔ:-  ‘pick (fruits)’
pɔ:-  ‘leach, let ferment’
sɔ:-  ‘peck at’
tɔ:-  ‘sow, plant (seeds)’
tɔ:-  ‘roll (turban)’
tɔ:-  ‘take out (daily rations)’
tɔ:-  ‘(milk) fill up (in udder)’
bɔ̌:-  ‘unsheathe’
dɔ̌:-  ‘arrive’
dɔ̌:-  ‘burn (on fire)’
gɔ̌:-  ‘jab’
jɔ̌:-  ‘pick out delicately’
mɔ̌:-  ‘tie (knot)’
nɔ̌:-  ‘drink’
wɔ̌:-  ‘(rain) fall’

with e
kɛː:-  ‘(grasshopper) bite off’
tɛː:-  ‘(muddy water) become clear’
  bɛː:-  ‘remain’
jɛː:-  ‘bring’
yɛː:-  ‘come’

with e
ɛː:-  ‘become tight’
ɛː:-  ‘(woman) marry (man)’
tɛː:-  ‘lay out (mat)’
pɛː:-  ‘break off’
pɛː:-  ‘get old’
kɛː:-  ‘shine’
kɛː:-  ‘cut out (leather sections)’
sɛː:-  ‘trim (hair)’
  bɛː:-  ‘cut off end’
dɛː:-  ‘be tired’
jɛː:-  ‘(man) marry (woman)’
jɛː:-  ‘scoop up (hot coals, in a pottery shard)’
jɛː:-  (in ɛ́ɛ ɛ́:- ‘go away, get out’)
with \(i\) (see also \(Ci\)- stems, §10.1.3.3 below)
\[yǐ:- (yǐ-)
\]
  ‘see’ (§10.1.3.2, below)

with \(u\)
[none]

For the verbs in (269) other than ‘see’, the long vowel is consistent across all AN suffixal categories, with the following exceptions. Those that take perfective-1a -ěrě- instead of perfective-1b -tì- shorten the vowel, and may contract it with the initial \(e\) of the suffix into one syllable: \(gō:-\) ‘go out’, perfective \(gō-ěrě\) ‘went out’ (§10.2.1.2). In the imperative, \(Ce:\) verbs shift to \(Co;\) and \(Ce:\) verbs appear as \(Cēa\) with a diphthong (§10.6.1.1).

10.1.3.2 \(yǐ:-\) ‘see’

The only \(Ci:\) verb is \(yǐ:-\) ‘see’, and it is somewhat irregular. Specifically, the perfective negative \(yè-rī-\) suggests a short-voweled variant /\(yǐ-\)/, and also suggests that the \(i\) has affinities to the final short \(i\) of nonmonosyllabic verbs like \(kārⁿ-\) ‘do’, which also drops to a non-high vowel before the perfective negative suffix (\(kārⁿ-ěrⁿ-\) ‘did not do’). The other cases where the vowel of ‘see’ shifts from /\(i\)/ to \(e\) are certain hortative forms. Imperfective negative \(pù-ŋضة-\) (more common than the morphophonologically regular variant \(yǐ:-ŋضة-\)) not only shows a similar short stem vowel, but presents other irregularities (L-toned stem followed by H-toned suffix, short suffixal vowel) that are shared only with \(nùyⁿ\) ‘hear’ (on which see the following section). The other inflected forms are regular and are compatible with /\(yǐ-\)/. The paradigm is in (270). The perfective-1b is elicitable but uncommon, as the perfective-2 is the regular marked perfective of perception verbs.

(270) Paradigm of ‘see’

a. \(yǐ:\) bare stem
   \(yǐ-ndé\) verbal noun

b. \(yǐ:-\) simple perfective (3Pl \(y-á:\))
   \(yǐ-ːtī\) perfective-1b (uncommon)
   \(yǐ-ːsò\) perfective-2
   \(yǐ-ːjë\) recent perfect
   \(yǐ-ːtă-ːsò\) experiential perfect
   \(yè-ːfī\) perfective negative

c. \(yǐˌyǐ-ːdäh\) reduplicated imperfective
   \(yǐˌyǐ-ːsò\) reduplicated progressive
   \(pù-ŋضة-\sim yǐ-ːŋضة-\) imperfective negative

d. \(yǐ:\) imperative
   \(yǐ-ːrá\) prohibitive
   \(yè-ːndà\) quoted prohibitive
   \(yè-ːmâyⁿ\) hortative
10.1.3.3 *Cuy(i)*- and *Ciý(i)*- verbs

There is a difficulty in deciding whether the verbs in (271) are best represented as *Cvy*- (where “v” = a short high vowel *i* or *u*) or as bisyllabic *Cvyi*. In the cases where “v” is *i* (271c and in part 271b), the third possible representation is *Ci*:.

<table>
<thead>
<tr>
<th>(271)</th>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>múyⁿ⁽t⁾-</td>
<td>‘go in’</td>
</tr>
<tr>
<td></td>
<td>nûyⁿ⁽t⁾-</td>
<td>‘hear’</td>
</tr>
<tr>
<td>b.</td>
<td>túy⁽i⁾- ~ tîy⁽i⁾-</td>
<td>‘put down (in pile)’</td>
</tr>
<tr>
<td>c.</td>
<td>tíy⁽i⁾-</td>
<td>‘send’</td>
</tr>
<tr>
<td></td>
<td>bîyⁿ⁽t⁾-</td>
<td>‘put (earth in hole)’</td>
</tr>
</tbody>
</table>

The analytical problem is due to the fact that a final *i* is deleted in noninitial syllables after a semivowel, so there is no surface contrast between *Cuyi* and *Cuy*, and no surface contrast between *Ciý*, *Ciý*, and *Ci*:.

The best evidence for a bisyllabic representation is the form of the perfective negative and that of the hortative. A final *i* in a nonmonosyllabic stem shifts to a non-high vowel before perfective negative -rí- and hortative -mày-. The perfective negative forms of the verbs in question suggest lexical /Cvyi-/.

<table>
<thead>
<tr>
<th>(272)</th>
<th>stem</th>
<th>perfective negative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>nûyⁿ⁽t⁾-</td>
<td>nûyⁿ⁽3₉⁾⁽t⁾-</td>
<td>‘go in’</td>
</tr>
<tr>
<td></td>
<td>nûyⁿ⁽i⁾-</td>
<td>nûyⁿ⁽3₉⁾⁽i⁾-</td>
<td>‘hear’</td>
</tr>
<tr>
<td>b.</td>
<td>tûy⁽i⁾- ~ tîy⁽i⁾-</td>
<td>tûy⁽3₉⁾- ~ tîyᵉ-ří-</td>
<td>‘put down (in pile)’</td>
</tr>
<tr>
<td>c.</td>
<td>tîy⁽i⁾-</td>
<td>tîyᵉ-ří-</td>
<td>‘send’</td>
</tr>
<tr>
<td></td>
<td>bîyⁿ⁽t⁾-</td>
<td>bîyⁿ⁽œ₉⁾⁽t⁾-</td>
<td>‘put (earth in hole)’</td>
</tr>
</tbody>
</table>

However, other forms of these verbs are compatible with monosyllabic *Cvy*- representations. It is possible that native speakers have a phonological analysis of the perfective negative and the hortative (which are rather marked categories) that does not require positing a lexical representation with final *i*.

10.1.3.4 *nCv*- and *mCv*- verbs

The four verbs in (273) are bisyllabic (and treated as such morphophonologically), but their first syllable consists of just a nasal consonant, followed by a homorganic stop or nasal. The initial nasal may be H-toned (273a) or L-toned (273b-c).
For background on initial NC clusters, see §3.3.8.1-2.

In the reduplicated forms on the right in (273), a synchronic constraint requiring a vocalic nucleus in the reduplicant forces the stems in question to “grow” an initial i, which is then optionally copied in the reduplicant. There are also variants with the glottal-stop separator followed directly by the initial syllabic nasal.

The ‘go’ verb has somewhat irregular stem-final vowel-quality alternations, in addition to the regular shift of final e to o in the imperative and to i in the prohibitive. e occurs instead of e in several forms, including those with a suffix containing the vowel e or a, but also in the simple perfective and in the perfective negative (suffix -rí-). i occurs for expected e in the positive and negative imperfective forms.

(274)  Paradigm of ‘go’

<table>
<thead>
<tr>
<th>form</th>
<th>category</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. with e</td>
<td>bare stem (contrast ñné 3Sg pronoun)</td>
</tr>
<tr>
<td>ñné</td>
<td>perfective-2</td>
</tr>
<tr>
<td>ñné-só-</td>
<td>experiential perfect</td>
</tr>
<tr>
<td>ñné tá:-só-</td>
<td>hortative</td>
</tr>
<tr>
<td>b. with e</td>
<td>verbal noun</td>
</tr>
<tr>
<td>ñné-ndé</td>
<td>simple perfective (but 3Pl ñn-ò)</td>
</tr>
<tr>
<td>ñné-</td>
<td>perfective-1a</td>
</tr>
<tr>
<td>ñné-èrè-</td>
<td>recent perfect</td>
</tr>
<tr>
<td>ñné-jè-</td>
<td>perfective negative</td>
</tr>
<tr>
<td>ñné-r’ñ-</td>
<td></td>
</tr>
<tr>
<td>c. with i</td>
<td>reduplicated imperfective</td>
</tr>
<tr>
<td>i-ññí-ò</td>
<td>reduplicated progressive</td>
</tr>
<tr>
<td>i-ññí-ñí:-só-</td>
<td>imperfective negative</td>
</tr>
<tr>
<td>i-ññí-ñí-</td>
<td>prohibitive</td>
</tr>
<tr>
<td>d. with o</td>
<td>imperative</td>
</tr>
</tbody>
</table>
10.1.3.5 Regular bisyllabic stems

All nonmonosyllabic stems end in a short vowel. Bisyllabics are \( CvCv, Cv:Cv, CvCCv \), and rarely \( Cv:CCv \). The initial \( C \) position may be empty. Except in recent French or Fulfulde loanwords, there are tight restrictions on vowel sequences. For bisyllabics, there are two primary patterns, \( i \)-final and non-\( i \)-final.

In non-\( i \)-final stems, either the two vowels are identical non-high vowels, hence \{\( \text{e} \ldots \text{e}, \text{e} \ldots \text{i}, \text{a} \ldots \text{a}, \text{a} \ldots \text{u}, \text{o} \ldots \text{o} \}\) (275a), or there is an initial high vowel followed by a mid-height vowel with the same back/rounding value, hence \{\( i \ldots \text{e}, i \ldots \text{e}, u \ldots \text{o}, u \ldots \text{o} \}\) (275b). This is common but not required for light bisyllabics \( CvCv \) including \( CvNCv \), the latter with homorganic nasal-voiced stop cluster. For \( Cv:Cv \) and \( Cv:NCv \), which count as heavy, the non-\( i \)-final type is limited to +ATR stems ending in \( e \) or \( o \).

Curly brackets here simply enclose members of a set. There are therefore nine possible combinations of the seven vowel qualities, so we cannot quite reduce the vocalisms to single autosegments. However, all of the vowel-pairings are harmonic.

(275) stem gloss

a. identical non-high vowels
   \( \text{bàyá-} \) ‘be cured’
   \( \text{téré-} \) ‘chop’
   \( \text{kéndé-} \) ‘do well’
   \( \text{kóyó-} \) ‘weep’
   \( \text{dùgš-} \) ‘leave’

b. high vowel followed by non-high vowel
   \( \text{gùró-} \) ‘steal’
   \( \text{dùyš-} \) ‘insult’
   \( \text{bìndé-} \) ‘go back’
   \( \text{wisé-} \) ‘swing (arms)’

Verb loans from Fulfulde normally end in \( e \) regardless of other vowels in the stem, and unless further assimilated they often have vowel sequences that violate the tight patterns illustrated in (276a). The final \( e \) is also typical of French loans (276b), reflecting both an extension of the Fulfulde pattern to a wider range of loans, and the convenient fact that French verbs have several high-visibility forms ending in phonetic [\( \text{ɛ} \)] or [\( \text{ɛ} \)] (written -er, -ez, -ait, etc.). A further source of noncanonical vowel sequences is the tendency for *\( \text{iwv} \) to shift to u\( \text{uvv} \), notably in the word for ‘die’, \( \text{tíwɛ́-} \) or \( \text{túwɛ́-} \) (276c), where the usual reduplicated imperfective \( \text{tù-túwɛ́-m} \) shows that the representation with \( u \) now has the upper hand.

(276) stem gloss

a. \( \text{súré-} \) ‘pacify’
   \( \text{pálɛ́-} \) ‘box in’

b. \( \text{gáŋé-} \) ‘win (match, election)’ < gagner

c. \( \text{tíwɛ́-} \sim \text{tíwɛ́-} \) ‘die’
The second major pattern for bisyllabic stem vowelism is with final $i$ (in some environments varying with $u$). The preceding vowel quality is normally $\{i \ u \ e \ o \ a\}$, i.e. anything but $+$ATR, since initial-syllable $+$ATR $\{e \ o\}$ require a harmonizing stem-final vowel instead of $i$. The final $i$ is subject to syncope/apocope after an unclustered semivowel $w$ ($dewi$- ‘cover’) or $y$ ($fyi$- ‘stop’).

(277) stem gloss

<table>
<thead>
<tr>
<th>(277)</th>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>CvCl-</td>
<td>‘put’</td>
</tr>
<tr>
<td></td>
<td>gär‘i-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>jënfi-</td>
<td>‘cure’</td>
</tr>
<tr>
<td></td>
<td>bògi-</td>
<td>‘perpetrate (crime)’</td>
</tr>
<tr>
<td></td>
<td>dèw (&lt; /dèwi/)</td>
<td>‘cover’</td>
</tr>
<tr>
<td></td>
<td>dëñfi-</td>
<td>‘tamp’</td>
</tr>
<tr>
<td></td>
<td>dünfi-</td>
<td>‘put down’</td>
</tr>
<tr>
<td></td>
<td>tìñfi-</td>
<td>‘speak’</td>
</tr>
<tr>
<td>b.</td>
<td>Cv:Ci-</td>
<td>‘help’</td>
</tr>
<tr>
<td></td>
<td>bá:ři-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>gè:ři-</td>
<td>‘take away, convey’</td>
</tr>
<tr>
<td></td>
<td>fì:yi-</td>
<td>‘stop’</td>
</tr>
<tr>
<td>c.</td>
<td>Cv:CCi-</td>
<td>‘find’</td>
</tr>
<tr>
<td></td>
<td>tëmbi-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>gömbi-</td>
<td>‘open wide’</td>
</tr>
<tr>
<td></td>
<td>tìmbi-</td>
<td>‘put lid on’</td>
</tr>
<tr>
<td>d.</td>
<td>Cv:CCI-</td>
<td>‘gather’</td>
</tr>
<tr>
<td></td>
<td>mɔ̃:ndì-</td>
<td></td>
</tr>
</tbody>
</table>

The contrast of $tìmbi$- ‘put lid on’ with $tìmbé$- ‘lean on (cane)’ shows how one cannot always predict the final vowel from an initial high vowel.

10.1.3.6 Trisyllabic stems

Trisyllabic stems are often etymologically composite, but in individual cases it is difficult to demonstrate this in the absence of semantically and phonologically linked underived stems.. As with $Cv:Cv$ and $Cv:NCv$, the other heavy stem types, trisyllabics are non-$i$-final if they contain a $+$ATR vowel, of which the final vowel is usually a copy (278). The medial vowel is in a metrically weak position, and is usually raised to a high vowel (usually of the same backness/rounding value as the first value), and in some consonantal environments it can then be syncopated. A few $+$ATR stems keep medial $e$ or $o$ (278e).
(278)     stem     gloss

a. repeated +ATR \{e o\} vowels flanking medial high vowel
   \[ něngíyé- \quad \text{‘carry on head (without hands)} \]
   \[ bègírè- \quad \text{‘hiccup} \]
   \[ yègísè- \quad \text{‘cut up (into pieces)} \]
   \[ mọnjúrò- \quad \text{‘dream} \]

b. \((o…i…e)\)
   \[ dògíyé- \quad \text{‘look up at} \]

c. \((o…o after syncope)\)
   \[ kómró- \sim kómró- \quad \text{‘shell (peanuts)} (\text{and other senses}) \]
   \[ dòmró- \sim dòmró- \quad \text{‘shave around edges} \]

d. (initial and medial high vowels, final mid-height vowel)
   \[ pígírè- \quad \text{‘screw in} \]
   \[ wígírè- \quad \text{‘be dizzy} \]
   \[ lúgúrò- \quad \text{‘ransack} \]
   \[ dúsúrá- \sim dúsúró- \quad \text{‘pore} \]

e. medial non-high vowel (usually), +ATR
   \[ pénódré- \sim pénódré- \quad \text{‘squeeze out,} \text{ cf. pénódré ‘paint (sth)} \]
   \[ túnórá- \sim túnóbóró- \quad \text{‘tamp down} \]

Cognate nominals sometimes show three identical vowels with no weakening of the medial, e.g. \(mọnjóró\) ‘dream (n)’ versus verb \(mọnjúrò\). Infrequently, such a triple sequence occurs in a +ATR verb at least as a variant (278e).

In (278b), the pair of initial and final vowels is \(o…e\) rather than \(o…o\) or \(e…e\), but it respects ATR harmony. This uncommon pattern is probably a reflection of frozen suffixal derivations, in the case of \(dògíyé\) ‘look up at’ perhaps with mediopassive -\(y-v\).

The majority of trisyllabics are -ATR, and therefore belong to the \(i\)-final class. The medial vowel is raised (279a-c) and may syncopate (279c). The trisyllabic source is clear in the derived transitive verb \(dàw-ři\) ‘hide (sth)’ from /\(dawi-ri\)/, cf. \(dawi-\vär\) ‘hide (oneself)’. When the final syllable begins with \(y\), the resulting /\(…iy\)/ is heard as [i:] (279b), but the underlying trisyllabic form is revealed by inflected forms such as the imperative (\(iřýå\) ‘get up!’).

(279)     stem     gloss

a. initial vowel other than \{e o\}, final \(i\)
   \[ súmrí- \sim súmír-\quad \text{‘rest} \]
   \[ págísí- \quad \text{‘scrub} \]
   \[ ūghéři- \quad \text{‘accompany} \]
   \[ kēmíři- \quad \text{‘have fun} \]
   \[ ṣìghéři- \quad \text{‘go around} \]
   \[ bógísí- \quad \text{‘punch (< French boxer)} \]
   \[ dágírè- \quad \text{‘get ready} \]

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b. final …íyí heard as [iː]
   írí-íyí- [írí:] ‘get up’
   níndí-íyí- [níndí:] ‘be tangled’

c. syncope to CvCCI-
téwsi- ‘tamp down’

If we combine the trisyllabic data in (278) and (279), we can say that initial-syllable {u i} allow either a final i or a final {o e} (agreeing in rounding), while non-high initial-syllable vowels allow us to predict the final-syllable vowel. The allowable sequences (disregarding occasional assimilatory rounding of the medial vowel) are therefore u...i...i, u...u...o, í...í...í, é...é...é, o...u...o, e...i...i, o...í...í, and a...í...í. Factoring out i as the basic medial vowel, these sequences have a partial correspondence to those allowed in bisyllabic verbs. However, one notes the absence of #é...é...é and #ɔ...u...ɔ corresponding to bisyllabic é...é and ɔ...ɔ, of #e...i...i and #o...i...i corresponding to the (not very common) bisyllabic e...i and o...i, and of #a...a...a corresponding to bisyllabic a...a.

The preceding discussion of trisyllabic vowel sequences is somewhat idealized. However, the generalizations are valid for trisyllabic stems that are under no whiff of suspicion of including a derivational suffix. When we include stems that do seem to have such a suffix (even if frozen and no longer clearly segmentable), additional vowel sequences emerge. Consider the data in (280).

(280)      stem           gloss
  a.    jóríyé-         ‘fight’
  b.    làrágí-       ‘scrub lightly’
        ámbígí-       ‘hold on chest’
  c.    bɛ̀ndé-mí-    ‘hit hard’
        pínjé-mí-    ‘wring’

In (280a), an initial o or u co-occurs with a final e (instead of o). Since the cognate nominal is jóríyè ‘(a) fight’, one suspects that the verb is simply following the vocalism of the noun. An additional factor is that -yé- can be a derivational suffix (mediopassive), and there are some examples of this suffix after a stem containing o or u, e.g. nóngí-yé- ‘be caught (stuck)’, tóŋjí-yé- ‘be curved’, and pündí-yé- ‘be clumped’.

In (280b), the first two syllables of the stem have the correct vocalism for CvCv- stems. The following -gí- syllable resembles a minor causative allomorph -gí- which likewise does not alter the vocalism of a preceding CvCv- stem (§9.2.2). However, I know of no unsuffixed counterpart to làrágí-, and ámbí- is recorded only in the sense ‘apply (a compress)’.

Similarly, the productive causative suffix -mí- does not alter the vocalism of a preceding CvCv-. The forms in (280c) are phonologically compatible with causative morphophonology, though they do not function as causatives semantically and are only dubiously connected to pínjé- ‘(water) splash’ and bɛ̀ndí- ‘swim’.
10.2 Positive indicative AN categories

10.2.1 Perfective positive system (including perfect)

10.2.1.1 Simple perfective with \{L\}-toned stem

The simple perfective consists morphologically of the stem without audible AN suffix, except in the 3Sg and perhaps 3Pl, and with tones dropped. 1st/2nd persons add the relevant pronominal-subject suffix to what is segmentally the bare stem. In the 3Sg, the stem has final \{e e i\}, as in the more systematic E/I-stem of several other Dogon languages (§10.1.3). Non-i-final stems end in e or i depending on ATR-harmonic category of the stem. i-final stems end in i, identical segmentally to the bare stem. The 3Pl ends in \{o o a\}, which derives from the A/O-stem of many of the same languages, though (given that other inflections have a nonzero 3Pl suffix) this final vowel may be interpreted by native speakers as a suffix.

The simple perfective is typical of clauses that have a focalized constituent (other than the verb itself). “Focalized” can be construed loosely here, and the simple perfective is very common when any preverbal constituent is present.

Sample paradigms of non-i-final stems are in (281). The verbs are dɔgɔ- ‘leave’, tûwè- ‘die’, gûrò- ‘steal, rob’, and yè- ‘come’. The latter shows that a C:\> stem shortens its vowel before the consonant of a 1st/2nd person suffix.

(281) Unsuffixed perfective paradigm

category  | ‘leave’  | ‘die’   | ‘rob’   | ‘come’
-----------|----------|---------|---------|---------
1Sg        | dɔgɔ-ɭ | tûwè-ɭ | gûrò-ɭ | yè-ɭ   
1Pl        | dɔgɔ-ɭɭ | tûwè-ɭɭ | gûrò-ɭɭ | yè-ɭɭ 
2Sg        | dɔgɔ-ɭw | tûwè-ɭw | gûrò-ɭw | yè-w    
2Pl        | dɔgɔ-ɭw | tûwè-ɭw | gûrò-ɭw | yè-w    
3Sg/InanSg | dɔgɛ-Ø  | tûwè-Ø  | gûrè-Ø  | yè-Ø    
3Pl/InanPl | dɔg-Ø   | tûw-à   | gûr-ɗ   | y-ɗ    

Before ndɛ ‘if’, the 3Sg form reverts to bare-stem vocalism. In the case of ‘leave’, but not the three other verbs in (281), this accidentally results in homophony of 3Sg and 3Pl before the ‘if’ morpheme, though I put the hyphen in different places to distinguish them transcriptionally: dɔgɔ-Ø ndɛ ‘if/when he/she leaves’, dɔg-Ø ndɛ ‘if/when they leave’.

There is no AN suffix as such in this paradigm, hence the term “simple” (or “unsuffixed”) perfective. In the first and second person forms, the pronominal-subject suffix is added directly to the L-toned form of the stem, with the same vocalism (in particular, the same final vowel) as in the bare form.

The 1Pl and 2Pl subject forms are pronounced with a version of dying-quail intonational effect, see (28a) in §3.8.3. The stem-final vowel is prolonged. Having started out with L-tone, this vowel then raises its pitch slightly and then lowers it, resulting in a bell-shaped [LHL] pitch on this syllable. Therefore dɔgɔ-ɭɭ: ‘we left’ is realized phonetically as [dɔgɔɔɔj] or [dɔgɔɔj], and tûwè-ɭɭ: ‘you-Pl died’ is realized as [tûwɛɛɛɛ] or [tûwɛɛw]. In transcribing e.g. dɔgɔ-ɭɭ: and tûwè-ɭɭ:, instead of e.g. dɔgɔ-ɭ and tûwè-ɭ, I am suggesting a morphophonological analysis where the dying-quail intonation of the plural-subject forms is superimposed onto the already formed 1Sg and 2Sg forms.
The 3Sg and 3Pl forms of monosyllabic \( Cv: \) stems are illustrated in (282). Of particular interest are diphthongal \( ìè \), \( ɔ̀ɛ̀ \), and \( òè \) in the 3Sg, and \( ìè \) in the 3Pl. Unlike some other Dogon languages, Nanga does not desyllabify either vowel in such sequences. For example, in the case of \( ìè \) I hear \([\hat{\text{o}}\hat{\text{è}}]\) with two clear (though clipped) vowels, not \([\hat{\text{ø}}\hat{\text{è}}]\), \([\hat{\text{wè}}]\), \([\hat{\text{òe}}]\), or \([\hat{\text{òj}}]\).

(282) 3Sg versus 3Pl subject forms of simple perfective

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>3Sg Pfv</th>
<th>3Pl Pfv</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. non-( i )-final ( Cv: ) verbs</td>
<td></td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>‘reply’</td>
<td>( sá:- )</td>
<td>( và-)</td>
<td>( s-): (=( sà-)) etc.</td>
</tr>
<tr>
<td>‘go out’</td>
<td>( gö:- )</td>
<td>( gö-)</td>
<td>( gö-)</td>
</tr>
<tr>
<td>‘eat’</td>
<td>( kş:- )</td>
<td>( kš-)</td>
<td>( k-)</td>
</tr>
<tr>
<td>‘come’</td>
<td>( yè:- )</td>
<td>( yè-)</td>
<td>( y-)</td>
</tr>
<tr>
<td>‘lay out (mat)’</td>
<td>( tě:- )</td>
<td>( tě-)</td>
<td>( tě-)</td>
</tr>
<tr>
<td>‘avoid taboo’</td>
<td>( tá:”- )</td>
<td>( tá:”-)</td>
<td>( t-“-)</td>
</tr>
<tr>
<td>b. ( i )-final ‘see’</td>
<td>( yî:- )</td>
<td>( yî-)</td>
<td>( y-)</td>
</tr>
</tbody>
</table>

The verbs of type \( Cvy(i)\)-, which are arguably \( Cvyi \) bisyllabics (§10.1.3.3, above), have the simple perfectives in (283). \( túyí- \) ~ \( tíyí \)- ‘put down’ can be treated as in (283a) or as in (283b). In all of the forms shown, a final \( i \) syncopates or apocopates after \( y \), in the 3Sg forms (heard as \( núy”-\) etc.) as well as in the bare stem.

(283) Simple perfective of \( Cvyi \) stems

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>3Sg Pfv</th>
<th>3Pl Pfv</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ( Cvyi )</td>
<td></td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>‘hear’</td>
<td>( núy”-)</td>
<td>( núy”-)</td>
<td>( núy”-)</td>
</tr>
<tr>
<td>‘go in’</td>
<td>( núy”-)</td>
<td>( núy”-)</td>
<td>( núy”-)</td>
</tr>
<tr>
<td>b. ( Ciyi )</td>
<td></td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>‘send’</td>
<td>( tíyí- )</td>
<td>( tíyí-)</td>
<td>( tíy-)</td>
</tr>
<tr>
<td>‘put earth in’</td>
<td>( biy”-)</td>
<td>( biy”-)</td>
<td>( biy”-)</td>
</tr>
</tbody>
</table>

3Sg and 3Pl simple perfective forms of \( nCv- \) and other bisyllabics are in (284). There are no final diphthongs. The 3Sg ends in \{\( e \) \( e \)\} for non-\( i \)-final stems (284a-c), but in \( i \) for \( i \)-final stems (284d). The 3Pl ends in \{\( o \) \( a \) \( a \)\} for both verb classes, with \( a \) replacing \( e \). The three \( nCv- \) stems in (284e) have messy perfective forms. ‘Go’ behaves as though -ATR in the 3Sg but as +ATR in the 3Pl (and bare stem). ‘Give’ and ‘go up’ have homophonous 3Pl but not 3Sg forms.
(284) Simple perfective of bisyllabic stems

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>3Sg Pfv</th>
<th>3Pl Pfv</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. bisyllabics with repeated non-high vowel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘touch’</td>
<td>táwá-</td>
<td>táwɛ̀-Ø</td>
<td>táw-ä</td>
</tr>
<tr>
<td>‘get’</td>
<td>bɛ̀rɛ̀-</td>
<td>bɛ̀rɛ̀-Ø</td>
<td>bɛ̀r-ä</td>
</tr>
<tr>
<td>‘do well’</td>
<td>kɛ́ndɛ́-</td>
<td>kɛ́ndɛ̀-Ø</td>
<td>kɛ́nd-ò</td>
</tr>
<tr>
<td>‘weep’</td>
<td>kóyó-</td>
<td>kóyɛ̀-Ø</td>
<td>kóy-ò</td>
</tr>
<tr>
<td>‘leave’</td>
<td>dɔ́gɔ́-</td>
<td>dɔ́gɔ̀-Ø</td>
<td>dɔ̀g-ò</td>
</tr>
<tr>
<td>b. high vowel followed by non-high vowel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘steal’</td>
<td>gùró-</td>
<td>gùrɛ̀-Ø</td>
<td>gùr-ò</td>
</tr>
<tr>
<td>‘insult’</td>
<td>dùyɔ́-</td>
<td>dùyɛ̀-Ø</td>
<td>dùy-ò</td>
</tr>
<tr>
<td>‘return’</td>
<td>bìndɛ́-</td>
<td>bìndɛ̀-Ø</td>
<td>bìnd-ò</td>
</tr>
<tr>
<td>‘swing’</td>
<td>wìsɛ́-</td>
<td>wìsɛ̀-Ø</td>
<td>wìs-ò</td>
</tr>
<tr>
<td>‘spray’</td>
<td>písɛ́-</td>
<td>písɛ̀-Ø</td>
<td>pís-ò</td>
</tr>
<tr>
<td>c. final ɛ after a different vowel (loanwords)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘win’</td>
<td>gàpɛ́-</td>
<td>gàpɛ̀-Ø</td>
<td>gàp-ò</td>
</tr>
<tr>
<td>d. i-final bisyllabics with initial {i e a o u}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘put’</td>
<td>gàrɪ-</td>
<td>gàrɛ́-Ø</td>
<td>gàr-ò</td>
</tr>
<tr>
<td>‘cover’</td>
<td>dèwɛ́-[dɛ́w]</td>
<td>dèwɛ̀-Ø</td>
<td>dèw-ò</td>
</tr>
<tr>
<td>‘tamp’</td>
<td>dɛ́nɪ-</td>
<td>dɛ́nɪ-Ø</td>
<td>dɛ́n-ò</td>
</tr>
<tr>
<td>‘put down’</td>
<td>dùnɛ́-</td>
<td>dùnɛ̀-Ø</td>
<td>dùn-ò</td>
</tr>
<tr>
<td>‘speak’</td>
<td>tɪnɪ-</td>
<td>tɪnɪ-Ø</td>
<td>tɪn-ò</td>
</tr>
<tr>
<td>‘perpetrate’</td>
<td>bɔ́gɪ-</td>
<td>bɔ́gɪ-Ø</td>
<td>bɔ́g-ò</td>
</tr>
<tr>
<td>‘treat’</td>
<td>jɔ́nɪ-</td>
<td>jɔ́nɪ-Ø</td>
<td>jɔ́n-ò</td>
</tr>
<tr>
<td>e. nCv- verbs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-i-final</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘go’</td>
<td>ńnɛ́-</td>
<td>ńnɛ̀-Ø</td>
<td>ńn-ò</td>
</tr>
<tr>
<td>‘go up’</td>
<td>ńdɛ́-</td>
<td>ńdɛ̀-Ø</td>
<td>ńd-ò</td>
</tr>
<tr>
<td>i-final</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘give’</td>
<td>ńdɪ́-</td>
<td>ńdɪ́-Ø</td>
<td>ńd-ò</td>
</tr>
</tbody>
</table>

Trisyllabic examples are in (285). In the +ATR stems (285a), 3Sg ends in e and 3Pl ends in o, regardless of which of these two vowels the bare stem ends in. In the -ATR stems (285b-c), the 3Sg ends in i and the 3Pl ends in {o a a}.

(285) Simple perfective of trisyllabic stems

| gloss | bare stem | 3Sg Pfv | 3Pl Pfv |
a. final \{e o\}, +ATR

- cut up’ yègí- yègis-Ø yègis-ó
- dream’ mònìjàrì- mònìjàrì-Ø mònìjàrì-ó
- look up at’ dògìyè- dògìyè-Ø dògìyè-ó
- ransack’ lùgùrà- lùgùrà-Ø lùgùrà-ó

b. ñ-final, -ATR, no derivational suffix

- accompany’ ìngírì- ìngírì-Ø ìngírì-à
- have fun’ këmìr“ì- këmìr“ì-Ø këmìr“ì-à
- get ready’ dàgírì- dàgírì-Ø dàgírì-à
- punch’ bògìsì- bògìsì-Ø bògìsì-ó (< French boxer)
- scrub’ pùgùsì- pùgùsì-Ø pùgùsì-ó

c. trisyllabic derived verbs

- demolish’ wùrò-gì- wùrò-gì-Ø wùrò-gì-ó
- make go in’ nùy”s-mì- nùy”s-mì-Ø nùy”s-mì-ó
- make jump’ pèrè-mì- pèrè-mì-Ø pèrè-mì-ó
- recover’ màllì-ì- màllì-ì-Ø màllì-ì-à

Sentence examples containing simple perfectives are in (286). Interlines use “.Pfv” with no preceding hyphen.

(286) a. \(yë́ŋìr^{-nì}: yë-\ y\)
yesterday come.Pfv-1SgSbj
‘It was yesterday [focus] that I came.’

b. \(à-\ ng\) [\(yì: \ nè-\ ng\)] sùyè-Ø mà
who?-AnSg [child DefAnSg-Acc] hit.Pfv-3SgSbj Q
‘Who hit the child?’

c. \(àr^nì\nàngì \ nà-\ w^n\) mà
where? spend.night.Pfv-2SgSbj Q
‘Where did you-Sg sleep?’

10.2.1.2 Perfective-1a  -èrè-, perfective-1b  -tì-

The simple perfected is complements by three other marked perfective positive forms that have nonzero inflectional suffixes. Two of the suffixes are  -èrè-, which I label perfective-1a, and  -tì-, which I label perfective-1b. These two are in complementary distribution, the choice between them depending on the semantic class and valency of the verb. The suffixes follow the bare stem of the verb, without tonal change, though the stem-final vowel quality is masked by \(v\)-Contraction before  -èrè-.

The two perfective-1 suffixes compete most directly with the perfective-2, which has suffix  -sò-.

Perfective-1a  -èrè- combines with motion and stance verbs (‘go’, ‘sit down’), with dejectival inchoatives and other non-active intransitives, with a few low-impact transitives like ‘forget’, and optionally with transitive verbs of holding and clothing (which often contain mediopassive  -yì- ~  -yè-).
(287) Perfective-1a -èrè-

<table>
<thead>
<tr>
<th>gloss</th>
<th>stem</th>
<th>perfective-1a</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cv:-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘go out’</td>
<td>gò:-</td>
<td>gò-èrè-</td>
</tr>
<tr>
<td>‘arrive’</td>
<td>dɔ:-</td>
<td>dɔ-èrè-</td>
</tr>
<tr>
<td>‘spend night’</td>
<td>nà:-</td>
<td>nà-èrè-</td>
</tr>
<tr>
<td>‘come’</td>
<td>yè:-</td>
<td>yè-èrè-</td>
</tr>
<tr>
<td>b. nCv-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘go’</td>
<td>ñné-</td>
<td>ñné-èrè-</td>
</tr>
<tr>
<td>‘go up’</td>
<td>ñdè-</td>
<td>ñdè-èrè-</td>
</tr>
<tr>
<td>c. bisyllabic with final non-high vowel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>final {e a ø}, no medial cluster, {H}-toned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘die’</td>
<td>tʊwé-</td>
<td>tʊw-èrè-</td>
</tr>
<tr>
<td>‘go past’</td>
<td>lɔwá-</td>
<td>lɔw-èrè-</td>
</tr>
<tr>
<td>‘(wood) decay’</td>
<td>kɔyɔ-</td>
<td>kɔy-èrè-</td>
</tr>
<tr>
<td>others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘jump’</td>
<td>tɔmbó-</td>
<td>tɔmbó-èrè-</td>
</tr>
<tr>
<td>‘sit down’</td>
<td>ɛw-yɛ-</td>
<td>ɛw-yɛ-èrè-</td>
</tr>
<tr>
<td>‘lie down’</td>
<td>ɔiyɛ-</td>
<td>ɔiyɛ-èrè-</td>
</tr>
<tr>
<td>‘be finished’</td>
<td>dimɛ-</td>
<td>dimɛ-èrè-</td>
</tr>
<tr>
<td>‘run’</td>
<td>ɔgɔ-</td>
<td>ɔgɔ-èrè-</td>
</tr>
<tr>
<td>d. Cv yi- and …iyi-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘enter’</td>
<td>ɔn(y)i-</td>
<td>ɔn-èrè-</td>
</tr>
<tr>
<td>‘stand’</td>
<td>i-ɔyɛ-</td>
<td>i-ɔy-èrè-</td>
</tr>
<tr>
<td>e. bisyllabic with final i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘become’</td>
<td>ɔnpi-</td>
<td>ɔnpi-èrè- ~ ɔnpi-èrè-</td>
</tr>
</tbody>
</table>

-èrè- is not subject to Nasalization-Spreading even when the preceding stem ends in a nasalized syllable. In nùy-èrè-‘went in’, from nùy(y)i-, there is no nasality even in the first e, so I write y without the nasal diacritic.

The main phonological problem is how vv sequences are treated. The issue is possibly moot for (287d), if we argue that the stems are C-final. With Cv:-, the stem vowel is shortened and we get a surface bimoraic ve sequence (short vowel plus e) with both vowels clearly articulated, and without ATR harmony (gɔ-èrè, etc.). With bisyllabic and longer stems, a stem-final short {e a ø} disappears before -èrè- unless it is H-toned and not preceded by another H-toned syllable. A stem-final short i with such stems optionally desyllabifies to y, and o sometimes desyllabifies at least partially (§3.5.6.3).

A variant èrè with rising tone pattern is attested as a semi-equivalent of the perfective-1a suffix preceding the clause-final different-subject subordinator nà ‘then’. See ...gò: ñné èrè nà ‘(When hare) had gone out (completely), …’ in (747) in the sample text. In this example, èrè is separated from gò: ‘go out’ by an intervening 3Sg pronominal-subject proclitic. An H-toned variant (-)èrè- is also attested in a construction similar to a verb chain, with a following imperfective suffix, see (555) in §15.1.10.
Perfective-1b -tì- is used with most transitives, and with active intransitives denoting speech or thought. It is probably cognate to tíyí- ‘send’, but a direct synchronic connection is questionable. See the discussion of (509) in §14.1.7.1 below. An H-toned variant tì- occurs in verb-chains (§15.1.10) and in the uncommon combination with past clitic =bɛ- (§10.5.1.3).

(288) Perfective-1b -tì-

<table>
<thead>
<tr>
<th>gloss</th>
<th>stem</th>
<th>perfective-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. monosyllabic Cv-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘shave’</td>
<td>ká:-</td>
<td>ká:-tì-</td>
</tr>
<tr>
<td>‘catch’</td>
<td>wò:-</td>
<td>wò:-tì-</td>
</tr>
<tr>
<td>‘see’</td>
<td>yǐ:-</td>
<td>yǐ:-tì-</td>
</tr>
<tr>
<td>b. nCv-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘give’</td>
<td>ŋdí-</td>
<td>ŋdí-tì-</td>
</tr>
<tr>
<td>c. bisyllabic with final non-high vowel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘hit’</td>
<td>súyó-</td>
<td>súyó-tì-</td>
</tr>
<tr>
<td>‘shout’</td>
<td>kóyó-</td>
<td>kóyó-tì-</td>
</tr>
<tr>
<td>‘bathe’</td>
<td>díyé-</td>
<td>díyé-tì-</td>
</tr>
<tr>
<td>‘cut (slice)’</td>
<td>késé-</td>
<td>késé-tì-</td>
</tr>
<tr>
<td>d. bisyllabic with final i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘send’</td>
<td>tíyí- [tí:]</td>
<td>tíy-tì-</td>
</tr>
<tr>
<td>‘cover’</td>
<td>děwí- [děw]</td>
<td>děw-tì-</td>
</tr>
<tr>
<td>‘speak’</td>
<td>tíngí-</td>
<td>tíng-tì- ~ tíngí-tì-</td>
</tr>
<tr>
<td>‘think’</td>
<td>mā:ndí-</td>
<td>mā:ndí-tì-</td>
</tr>
<tr>
<td>‘laugh’</td>
<td>màndí-</td>
<td>màndí-tì-</td>
</tr>
</tbody>
</table>

Many nonmonosyllabic verbs that take -tì- (but not those that take -ērɛ-) end in a lexical i, and this vowel is usually syncopated before -tì- where syllabically possible, i.e. after a single C : lá:x-tì- ‘chased’ from lá:x-, pá:g-tì- ‘tied’ from pá:gí-. Pronunciations with the i are also possible, especially in careful speech.

Pronominal paradigms are in (289). The second person forms of -tì- show optional assimilation of the i to the following w (§3.5.7.1). Homorganic sequences of vowel and semivowel (i.e. /i/, /uw/) are monophthongized to long vowels [i:], [u:] (§3.5.7.2). The 1Pl and 2Pl forms have their usual prolongation and [LHL] pitch of the final syllable, reflecting the dying-quail effect, see (30a) in §3.8.3.

(289) Paradigms for perfective-1b and perfective-1a

<table>
<thead>
<tr>
<th>category</th>
<th>form of 1b -tì-</th>
<th>form of 1a -ērɛ-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>-tì- ū</td>
<td>-ērɛ- y</td>
</tr>
<tr>
<td>1Pl</td>
<td>-tì- y’ ~ [tiũ]</td>
<td>-ērɛ- y’ ~ [ērɛɛj]</td>
</tr>
<tr>
<td>2Sg</td>
<td>-tì- w ~ -tũ- w</td>
<td>-ērɛ- w</td>
</tr>
<tr>
<td>2Pl</td>
<td>-tì- w’ ~ -tũ- w’ [tũũũ]</td>
<td>-ērɛ- w’ ~ [ērɛɛw]</td>
</tr>
</tbody>
</table>
The distinction between perfective-1a -èrè- and perfective-1b -tì- is neutralized under negation, where both (and other perfective positives) are replaced by a perfective negative portmanteau (§10.2.1.3, below). The distinction is also generally neutralized in relative clauses, where perfective participial -sè replaces them (and perfective-2 -sò-). With some effort it was possible to elicit relatives with -tì-, see §14.1.7.1, below, but these did not occur spontaneously.

10.2.1.3 Perfective-2 (-sò-)

Another positive perfective-system form is expressed by H-toned suffix -sò-. This is the regular marked perfective of perception verbs ('see', 'hear'), but can be used with any verb and competes with the perfective-1a and -1b just described. It is the most common perfective form obtained in elicitation for verbs in general, using French past-tense cue sentences.

(290) a. ǹgí-∅ yì:-sò-∅
1Sg-Acc see-Pfv2-3SgSbj
‘He/She saw me.’

b. bɔ̀gɔ̀rɔ̀ nùyɔ̀-sò-y
noise hear-Pfv2-1SgSbj
‘I heard a noise.’

The suffix is added to the bare stem, with no tonal or segmental changes. Examples are in (291).

(291) gloss stem perfective-2

a. Cv:- monosyllabics
‘catch’ wò:- wò:-sò-
‘go out’ gò:- gò:-sò-
‘spend night’ ná:- ná:-sò-
‘see’ yì:- yì:-sò- (as in 290a)

b. nCv-
‘go’ ńné- ńné-sò-
‘go up’ ńdé- ńdé-sò-
‘give’ ńdí- ńdí-sò-

c. bisyllabics ending in non-high vowel
‘hit’ súyɔ̀- súyɔ̀-sò-
‘bathe’ diyɔ̀- diyɔ̀-sò-
‘run’ yɔ̀gɔ̀- yɔ̀gɔ̀-sò-
‘sit down’ ɛw-ye- ɛw-ye-sò-
d. bisyllabics ending in \( i \)

- ‘do’ \( \text{kár}^{\text{"i}}- \text{kár}^{\text{"i}}-\text{ só} \)
- ‘enter’ \( \text{núy}^{\text{"i}}- [\text{núj}^\text{"n}] \text{núy}^{\text{"n}}-\text{ só} \)
- ‘think’ \( \text{mândí- mändí- só} \)

The pronominal paradigm is (292). The 1Pl and 2Pl have their usual bell-shaped [LHL] pitch contour in the final syllable.

(292) category perfective-2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>-só-ý</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1Pl</td>
<td>-só-ý:</td>
<td>sòój</td>
<td></td>
</tr>
<tr>
<td>2Sg</td>
<td>-só-w</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Pl</td>
<td>-só-w:</td>
<td>sòów</td>
<td></td>
</tr>
<tr>
<td>3Sg/Inan</td>
<td>-só-Ø</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3Pl</td>
<td>-s-ê</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3Pl -s-ê is distinguishable tonally from perfective participial -sê, which occurs in relative clauses (§14.1.7.1).

Representative stem combinations are in (293), with the imperative and progressive for comparison.

(293) gloss imperative perfective-2 progressive

- ‘see’ \( \text{yî- yî- só- yî- yî- só-} \)
- ‘understand’ \( \text{pá:mq pá:mq só- pám:mq só-} \)
- ‘hit’ \( \text{súyí súyí só- súyí só-} \)
- ‘hear’ \( \text{núy{"i} [núy"n] núy{"n} só- núy{"n} só-} \)
- ‘tie’ \( \text{páqí páqí só- pámqí só-} \)
- ‘have fun’ \( \text{kémír{"a} kémír{"i} só- kě-kémír{"e} só-} \)

For progressive -só- see §10.2.4.4. The perfective-2 and the progressive both have -só- suffix but differ phonologically as indicated in (294). The 1Pl and 2Pl forms are disregarded in (294).

(294) feature perfective-2 progressive

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>suffixal tone</td>
<td>H</td>
<td>L</td>
</tr>
<tr>
<td>stem tone sequence</td>
<td>lexical</td>
<td>H, H.L., or H.H.L</td>
</tr>
<tr>
<td>stem-final vowel length</td>
<td>lexical</td>
<td>lengthened (in some cases optionally)</td>
</tr>
<tr>
<td>form of verb stem</td>
<td>bare stem</td>
<td>non-high stem</td>
</tr>
<tr>
<td>reduplication</td>
<td>none</td>
<td>yes, if clause-initial (focused)</td>
</tr>
</tbody>
</table>

The opposition is illustrated in (295a) versus (295b), and (295c) versus (295d-e).

(295) a. \( \text{nànjá yî: só-y} \)

- cow see-Pfv2-1SgSbj

‘I saw the cow.’
b. nàŋá yì-sò-ỳ
   cow see-Prog-1SgSbj
   ‘I see (=am seeing) the cow.’

c. sèmbí-sò-ỳ
   sweep-Pfv2-1SgSbj
   ‘I swept.’

d. sè-sèmbí(-)-sò-ỳ
   RdP-sweep-Prog-1SgSbj
   ‘I am sweeping.’ (verb focalized)

e. dàmbí sèmbí(:)-sò-ỳ
   courtyard sweep-Prog-1SgSbj
   ‘I am sweeping the courtyard.’ (verb not focalized)

Although perfective-2 -sò- is H-toned, and (as just shown) distinctively so, it does not spread its H-tone to a following atonal particle. Therefore quotative wa and yes/no interrogative ma have L-toned form after all inflected forms of -sò-. In other words, in these particular combinations, -sò- behaves as though it ended in an otherwise covert L-tone element (296). Compare the Ben Tey cognate -sô- with <HL>-tone.

(296) a. nàr’á-sò-Ø
   give.birth-Pfv2-3SgSbj Quot
   ‘It is said that she has given birth.’

b. [ǹněn nà gày] á-ŋ’ kíyé-s-é wà
   [name 3SgPoss Topic] 3LogoSg-Acc say-Pfv2-3PlSbj Quot
   ‘(She said), “they told me her name.”’ (2004.02.03)

c. ú-ŋ’ kíyé-sò-ỳ mà→
   2Sg-Acc say-Pfv2-1SgSbj Q
   ‘Did I tell you-Sg?’

10.2.1.4 Experiential perfect ‘have ever’ (tá:-sò-)

The suffix tá:- occurs before perfective-2 -sò- in the experiential perfect sense ‘have (once, ever) done’. This is most common in questions (‘have you ever …?’) like (297), but it can also be used in statements (‘I once …?’ or ‘I have …?’). The preceding main verb is often ‘see’ or ‘go (to somewhere)’, but any verb denoting an event that has an enduring effect (e.g. in memory or social status) can be used.

The negative counterpart means ‘have never VPed’, see §10.2.3.2.

I consider tá:- to be an auxiliary verb rather than a suffix, for reasons given in §10.1.1 above, not the least of which is that it is followed by perfective-2 -sò-. However, no strong candidates for etymologically related independent verbs are apparent to me.
10.2.1.5 Recent perfect (jé-)

The inflectable stem jé- indicates recency of the (positive) event denoted. It can often be translated with ‘already’ or ‘just’. However, it can also mean ‘have (just) finished VP-ing’ as in ‘we have (just) finished the work’, or ‘have (just) achieved VP-ing’ as in ‘I have (just) caught (=have achieved catching) it’. In other words, the emphasis can vary between recency as such, and completion as such.

It combines with the bare-stem form of the primary verb, with no change in tone or vocalism. It is transcribed as a separate (chained) verb rather than as a suffix, because a preverbal subject pronoun (e.g. in nonsubject relatives) intervenes between the primary verb and jé (298d). It also can be followed by modal suffixes, like the quoted imperative form in (298e).

(298) a. nàmá kúwó jé-y
    meat eat.meat RecPrf-1SgSbj
    ‘I have already eaten (or: I have finished eating) the meat.’

b. nàrⁿá jé-∅
    give.birth RecPrf-3SgSbj
    ‘She has (just) given birth.’

c. girⁿé jé-y:.
    harvest RecPrf-1PlSbj
    ‘We have (already) harvested.’

d. jà: wàgàdî¹ kó: i:n jé-sè gà
    meal time¹ eat 1SgSbj RecPrf-Pfv.Pfv Loc
    ‘at the time when I finished eating’

e. [dósi [à: ¹g3]] gò: jé-ŷ wá
    [bottom [3LogoPl ¹Poss.InanSg] go.out RecPrf-QuotImprt Quot
    ‘(They) said: so completely leave (=go far away from) our presence!’
    (2004.02.02)

The pronominal paradigm is (299). The dying-quail effect in the 1Pl and 2Pl results is expressed as [LHL] pitch on the final syllable.

(299) category recent perfect

1Sg jé-y
1Pl jé-y: [dʒɛɛɛj]
2Sg jé-w
2Pl jé-w: [dʒɛɛɛw]
3Sg/Inan  jè-∅
3Pl    j-à

10.2.1.6 Reduplicated perfective (Cv-)

An initial reduplication, with no further affixation, expresses another perfective category. It is not very common in my texts, but it is used in conversation in somewhat emphatic contexts. My assistant gave as one example ‘So-and-so has already eaten (plenty)’ (and therefore doesn’t need any more food).

The reduplicant has H-tone, while the following stem (the base) is {L}-toned. The stem has the same vocalism as in the simple perfective; it therefore ends in {e ɛ i} depending on the stem, and has the usual perfective diphthongs with Cv- stems. The pronominal-subject suffixes are the same as for the simple perfective.

(300) stem    gloss      Redup Pfv
a.  àgí-yí-     ‘hold’    á-àgí-yí-
dù:-yí-     ‘carry on head’  dù-dù:-yí-
núy"i-       ‘hear’      nú-núy"[301]
b.  níy"é-      ‘sleep’    ní-níy"é-
c.  kósó-       ‘cough’    kó-kósè-
d.  kɔ́:       ‘eat’      kɔ́-kɔ̀ɛ̀-
nɔ́:       ‘drink’    nɔ́-nɔ̀ɛ̀-
gɔ́:       ‘go out’    gɔ́-gɔ̀ɛ̀-
ká:-       ‘shave’    ká-kàè-

In each of (301a-b), two propositions differing only in verbs are contrasted, one being asserted and the other denied. (301) is a willy-nilly conditional antecedent. This suggests verb focalization as the semantic basis for reduplication, at least in these examples.

(301) a.  gèr"é  ké-kè:ndè-∅
      rainy.season  Rdp-be.good.Pfv-3SgSbj
      ná-nàmè-∅      céw
      Rdp-be.ruined.Pfv-3SgSbj all
      ‘whether the rainy season has been good or has been bad’

b.  nụ-núy³-∅  yè-ří-∅
      Rdp-hear-3SgSbj see-PfvNeg-3SgSbj
      ‘He has (definitely) heard of (it), (but) he hasn’t seen (it).’

A phonologically similar reduplicated stem, also without a final AN suffix but with telltale stem-final {a o} rather than {e e i}, is the reduplicated stative; see §10.3. There is also a reduplicated imperfective, which has an L-toned reduplicative syllable and an H-toned stem, see §10.2.2.3, below.
10.2.2 Imperfective positive system

In addition to the constructions described below, see the combination of imperfective subordinator -ŋ́ with bù- ‘be (somewhere)’ in §15.2.2.2.

10.2.2.1 Imperfective (positive) (-ṃ~ -ŋ́ ~ ŋ́n)

A suffix -ṃ occurs before a nonzero pronominal subject suffix in all forms except 3Sg subject. The 3Sg imperfective is a syncoponic portmantau -ŋ́, which likely reflects original word-final *-ṃ. The only segmental irregularity is ŋ́ for ŋ́n- ‘go’, see §10.1.3.4. The stem to which the suffixes are added has the segmental (but often not the tonal) form of the bare stem for prosodically light verbs, and of the non-high stem for heavy verbs.

A tonal feature of this inflectional category is that /H/-toned C CvC- (including C vNCv- with homorganic nasal/voiced-stop cluster) is merged tonally with /H/-toned C vCv-, Cv-, the other bimoraic type, is likewise merged with C v-, but with a slight twist (see below).

For all verbs, the 3Sg form requires a final H-tone on the stem, followed by the L-toned nasal of the suffix -ŋ́, as in dšgšŋ́ (- dšgšṃ-n) ‘he/she leaves’. The non-3Sg subject forms have (or are treated as having) L-toned syllabic suffixes, and the stem-final syllable preceding the suffix is often heard with an L-tone, or perhaps a mid pitch representing a stepwise progression from the H-tone of the stem to the L-tone of the final suffix. For example, what I write as 1Sg dšgšṃ-i (- dšgšṃ-H) with somewhat normalized tone marking is sometimes heard as [dšgšmi], which could arguably be phonemicized as /dšgš-ṃi/.

For /H/-melody Cv- stems, the falling stem-tone melody is clearly audible on the syllabically suffixed forms, as in ká:-ṃ-e ‘they shave’. However, for Cv: stems I do not hear the falling pitch except in deliberate speech style, and usually transcribe e.g. gó:-ṃ-e ‘they go out’ (rather than gó:-ṃ). However, my ears may deceive me on this point.

Similarly, ‘they go’ is ŋ́ṃ-e with {H}-toned stem, perhaps because the first n (as part of a geminate) is not a full-fledged syllable, contrast tíd̄-ṃ-e [tídɛ́ṃ] ‘they go up’ where the initial n is clearly its own syllable.

Examples showing the imperfective of non-ŋ́-final stems are in (302). For these verbs, the imperfective vocalism is that of the bare stem, except for the irregular shift of ŋ́n- ‘go’ to ŋ́n- (302b). /H/ and /H/-melodies merge as {H} in prosodically light stems (302b-d). The melodic distinction is maintained in heavy stems (302e-f).

(302) Imperfective (stem ends in non-high vowel)

<table>
<thead>
<tr>
<th>bare stem</th>
<th>imperfective 3Sg</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. monosyllabic Cv-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cv:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ká:-</td>
<td>ká:-ŋ́</td>
<td>‘shave’ (3Pl ká:-ṃ-e)</td>
</tr>
<tr>
<td>té:-</td>
<td>té:-ŋ́</td>
<td>‘lay out’ (3Pl té:-ṃ-e)</td>
</tr>
<tr>
<td>Cv:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gó:-</td>
<td>gó:-ŋ́</td>
<td>‘go out’ (3Pl gó:-ṃ-e)</td>
</tr>
<tr>
<td>bê:-</td>
<td>bê:-ŋ́</td>
<td>‘remain’ (3Pl bê:-ṃ-e)</td>
</tr>
<tr>
<td>yê:-</td>
<td>yê:-ŋ́</td>
<td>‘come’ (3Pl yê:-ṃ-e)</td>
</tr>
</tbody>
</table>
b. \textit{nCv-}

\begin{align*}
\text{ńmę} & \quad \text{ńnį-} \quad \text{‘go’ (3PI ńnį-m-ę)} \\
\text{ńdę} & \quad \text{ńdę-} \quad \text{‘go up’ (3PI ńdę-m-ę)}
\end{align*}

\textit{CvCv-} (bimoraic)

\begin{align*}
\text{dôgś} & \quad \text{dôgś-į} \quad \text{‘leave’} \\
\text{gùrö} & \quad \text{gùrö-į} \quad \text{‘steal’} \\
\text{nỳ} & \quad \text{nỳ-ę-į} \quad \text{‘sleep’} \\
\text{pîsę} & \quad \text{pîsę-į} \quad \text{‘spray’} \\
\text{gánę} & \quad \text{gánę-ę-į} \quad \text{‘win’} \\
\text{táwę} & \quad \text{táwę-ę-į} \quad \text{‘die’}
\end{align*}

\textit{irregular tone (old mediopassive)}

\begin{align*}
\text{biyę} & \quad \text{biyę-į} \quad \text{‘lie down’} \\
\text{diyę} & \quad \text{diyę-į} \quad \text{‘bathe’}
\end{align*}

d. \textit{CvNCv-}

\begin{align*}
\text{dòngó} & \quad \text{dòngó-į} \quad \text{‘rub on’} \\
\text{tímbę} & \quad \text{tímbę-į} \quad \text{‘lean on’}
\end{align*}

e. \textit{Cv:(N)Cv-}

\begin{align*}
\text{ké:ndę} & \quad \text{ké:ndę-į} \quad \text{‘do well’} \\
\text{yò:ró} & \quad \text{yò:ró-į} \quad \text{‘stalk’}
\end{align*}

f. \textit{trisyllabic}

\begin{align*}
\text{yègísę} & \quad \text{yègísę-į} \quad \text{‘cut up’} \\
\text{mònjúró} & \quad \text{mònjúró-į} \quad \text{‘dream’}
\end{align*}

The imperfective of -final stems has the same tone patterns as above, except that the lexical distinction between /LH/ and /H/ is respected not only in stems that have three or more moras, but also in monosyllabic and \textit{CvCv} stems. Therefore ‘see’ in (303a), and ‘hear’, ‘cover’, and ‘put down’ in (303c), begin with an L-tone in the imperfective, contrast ‘leave’ and ‘steal’ in (303c) above.

Segmentally, the final \textit{i} is preserved in stems of two vocalic moras (303c-d). However, in stems with three or more vocalic moras, including \textit{Cv:Cv-}, the non-high stem is required (303e-f). This means that the stem must produce a mid-height or low vowel, taking its cue from nonfinal vowels. If the only vowels in the stem are high, the non-high stem ends in \textit{ą} after \textit{u}, and \textit{ę} after \textit{i} in the available examples, suggesting that -ATR is predominant for these verbs. The imperfective of causative \textit{-mি-} is \textit{-mó-m} regardless of the vocalism or prosodic weight of the input stem (303g).
(303) Imperfective (stem ends in high vowel)

<table>
<thead>
<tr>
<th>bare stem</th>
<th>imperfective 3Sg</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. monosyllabic Ci-</td>
<td>yiː-</td>
<td>yiː-ŋ</td>
</tr>
<tr>
<td>nCi-</td>
<td>nǐdị-</td>
<td>nǐdị-ŋ</td>
</tr>
<tr>
<td>CvCi-</td>
<td>núyⁿi- [nűjⁿ]</td>
<td>núyⁿi-ŋ</td>
</tr>
<tr>
<td>dëwí- [dëw]</td>
<td>dëwí-ŋ</td>
<td>‘cover’</td>
</tr>
<tr>
<td>dűńi-</td>
<td>dűńi-ŋ</td>
<td>‘put down’</td>
</tr>
<tr>
<td>kárⁿi-</td>
<td>kárⁿi-ŋ</td>
<td>‘do’</td>
</tr>
<tr>
<td>d. CvCCi-</td>
<td>tímńi-</td>
<td>tímńi-ŋ</td>
</tr>
<tr>
<td>tèmńi-</td>
<td>tèmńi-ŋ</td>
<td>‘find’</td>
</tr>
<tr>
<td>dàmńi-</td>
<td>dàmńi-ŋ</td>
<td>‘push’</td>
</tr>
<tr>
<td>e. Cv:C(C)i-</td>
<td>bạ:rí-</td>
<td>bạ:rá-ŋ</td>
</tr>
<tr>
<td>tí:rí-</td>
<td>tí:ré-ŋ</td>
<td>‘pour over’</td>
</tr>
<tr>
<td>pẹːndí-</td>
<td>pẹːndé-ŋ</td>
<td>‘stimulate’</td>
</tr>
<tr>
<td>f. trisyllabic with final i</td>
<td>kémńi-</td>
<td>kémńi-ŋ</td>
</tr>
<tr>
<td>púgúsi-</td>
<td>púgúsi-ŋ</td>
<td>‘scrub’</td>
</tr>
<tr>
<td>bègírí-</td>
<td>bègírí-ŋ</td>
<td>‘winnow’</td>
</tr>
<tr>
<td>g. Causative -mí-</td>
<td>kọ:mí-</td>
<td>kọ:mé-ŋ</td>
</tr>
<tr>
<td>pẹrẹ:mí-</td>
<td>pẹrẹ:mé-ŋ</td>
<td>‘make jump’</td>
</tr>
<tr>
<td>núyⁿ5mí-</td>
<td>núyⁿ5mé-ŋ</td>
<td>‘make go in’</td>
</tr>
</tbody>
</table>

The pronominal paradigm is given in (304), with sample paradigms for ká: ‘shave’, wàrá ‘do farming’ and (i-final) dűńi ‘put down’.
In the 1Sg and 2Sg forms, my assistant wavered between syllabic variants (1Sg -mì, 2Sg -mù) and apocopated variants (1Sg -m, 2Sg -m”). In the shortened forms, 2Sg -m” was heard with slight rounding at the transition from the stem-final vowel to the nasal; in effect, the nasal is “prelabialized.” The corresponding plurals have long vowels, but the pitch of the final syllable is level low. Tone-ally, when a 1Sg or 2Sg form, e.g. kà:-mì’ ‘I shave’, loses its final vowel, the resulting monosyllabic form is pronounced [kà:m] with the pitch fall at the end of the syllable, following standard phonetic patterns; see §3.7.4.2.

The 1Pl and 2Pl forms are based on -mì-y and -mù-w, which are arguably the idealized full forms of the corresponding singulairs. Alternatively, we could posit underlying singulairs -mì and -mù and attribute the long vowel in the plural counterparts to prolongation as part of the dying-quail effect. However, these sound like ordinary long vowels rather than intonational prolongations of highly variable duration. The other manifestation of the dying-quail effect in these forms is that the stem ends in a clear H-tone before the 1Pl and 2Pl suffixes, versus lexically variable pitch in the singulairs. The dying-quail effect here is therefore best represented as an {HL} overlay with the H appearing on the penult (i.e. the stem-final) and the L on the suffixes, plus preservation of the full form of the suffixal syllables. See (30c) in §3.8.3.

Examples of the imperfective are in (305). As a reminder, 3Sg imperfective portmanteau -ù is optionally weakened to nasalization and falling tone on the preceding vowel (305c-d).

(304) Imperfective paradigms

<table>
<thead>
<tr>
<th>category</th>
<th>suffix</th>
<th>‘shave’</th>
<th>‘do farming’</th>
<th>‘put down’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>-mì</td>
<td>kà:-mì</td>
<td>wàrà-mì</td>
<td>dùnì-mì</td>
</tr>
<tr>
<td>1Pl</td>
<td>-mì-y</td>
<td>kà:-mì-y</td>
<td>wàrà-mì-y</td>
<td>dùnì-mì-y</td>
</tr>
<tr>
<td></td>
<td>(could be written -mì-y; phonetic [kà:mì], etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Sg</td>
<td>-mù</td>
<td>kà:-mù</td>
<td>wàrà-mù</td>
<td>dùnì-mù</td>
</tr>
<tr>
<td>2Pl</td>
<td>-mù-w</td>
<td>kà:-mù-w</td>
<td>wàrà-mù-w</td>
<td>dùnì-mù-w</td>
</tr>
<tr>
<td></td>
<td>(could be written -mù-w; phonetic [kà:mù], etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3Sg/Inan</td>
<td>-ù</td>
<td>kà:-ù</td>
<td>wàrà-ù</td>
<td>dùnì-ù</td>
</tr>
<tr>
<td></td>
<td>(often just a nasalized long vowel; falling tone)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3Pl</td>
<td>-mè</td>
<td>kà:-mè</td>
<td>wàrà-mè</td>
<td>dùnì-mè</td>
</tr>
</tbody>
</table>

In the 1Sg and 2Sg forms, my assistant wavered between syllabic variants (1Sg -mì, 2Sg -mù) and apocopated variants (1Sg -m, 2Sg -m”). In the shortened forms, 2Sg -m” was heard with slight rounding at the transition from the stem-final vowel to the nasal; in effect, the nasal is “prelabialized.” The corresponding plurals have long vowels, but the pitch of the final syllable is level low. Tonally, when a 1Sg or 2Sg form, e.g. kà:-mì’ ‘I shave’, loses its final vowel, the resulting monosyllabic form is pronounced [kà:m] with the pitch fall at the end of the syllable, following standard phonetic patterns; see §3.7.4.2.

The 1Pl and 2Pl forms are based on -mì-y and -mù-w, which are arguably the idealized full forms of the corresponding singulairs. Alternatively, we could posit underlying singulairs -mì and -mù and attribute the long vowel in the plural counterparts to prolongation as part of the dying-quail effect. However, these sound like ordinary long vowels rather than intonational prolongations of highly variable duration. The other manifestation of the dying-quail effect in these forms is that the stem ends in a clear H-tone before the 1Pl and 2Pl suffixes, versus lexically variable pitch in the singulairs. The dying-quail effect here is therefore best represented as an {HL} overlay with the H appearing on the penult (i.e. the stem-final) and the L on the suffixes, plus preservation of the full form of the suffixal syllables. See (30c) in §3.8.3.

Examples of the imperfective are in (305). As a reminder, 3Sg imperfective portmanteau -ù is optionally weakened to nasalization and falling tone on the preceding vowel (305c-d).

(305) a. àsù→ wòrí wàrà-mì-Ø
every.day farming farm-Ipfv-1SgSbj
‘I farm (=work in the field) every day.’

b. tè: dọgà-mì-Ø
tea leave-Ipfv-1SgSbj
‘I will leave (the) tea.’

c. èsì bìrè-ù
(or: bìrè-”)
good work-Ipfv-3SgSbj
‘He/She works well.’

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Further examples of imperfective suffixes are given in the following section on the reduplicated imperfective, which differs from the simple imperfective only in adding an initial reduplication.

10.2.2.2 Unsuffixed imperfective (absent)

There is no imperfective form of the Jamsay type that lacks a (segmental) imperfective suffix, i.e. with just a pronominal-subject suffix added directly to the verb (with perhaps a tone change on the verb).

However, in disjunctions of clauses with future-time reference (as well as past-time reference), the simple perfective (or a homophonous form) is in use. See §7.2.2, above.

10.2.2.3 Reduplicated imperfective (CV-)

The reduplicated imperfective has an initial L-toned (C)V- reduplicant. Its segmental form matches that of the reduplicated perfective and that of the reduplicated stative. The vowel of the reduplicant copies the quality features of the first stem vowel. If the stem is vowel-initial, so is the reduplicant, and a glottal stop separates the two vowels. Stems elsewhere beginning with NC clusters are sometimes treated as though beginning with iNC, see (273) in §10.1.3.4. The base (stem minus reduplicant) and suffixes are identical, segmentally and tonally, to those of the simple imperfective described above.

(306) gloss stem reduplicated imperfective 3Sg

<table>
<thead>
<tr>
<th>a. CV- monosyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘eat (meal)’</td>
</tr>
<tr>
<td>‘drink’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. /H/-melody bisyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘jump’</td>
</tr>
<tr>
<td>‘hit’</td>
</tr>
<tr>
<td>‘sit down’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. /LH/-melody bisyllabic shifting to all-high in imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘leave’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d. longer /LH/-melody stem preserving initial L-tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘laugh’</td>
</tr>
<tr>
<td>‘dream’</td>
</tr>
</tbody>
</table>
A sample paradigm (‘sit down’) is (307).

(307) ‘sit down’ (reduplicated imperfective)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>ę-ʔéw-yè-mè</td>
<td>ę-ʔéw-yè-mè</td>
</tr>
<tr>
<td>1Pl</td>
<td>ę-ʔéw-yè-mì-yː</td>
<td>[ěʔéwjémi:]</td>
</tr>
<tr>
<td>2Sg</td>
<td>ę-ʔéw-yè-mèw</td>
<td>ę-ʔéw-yè-mù</td>
</tr>
<tr>
<td>2Pl</td>
<td>ę-ʔéw-yè-mì-wː</td>
<td>[ěʔéwjémù:]</td>
</tr>
<tr>
<td>3Sg</td>
<td>ę-ʔéw-yè-ḅg</td>
<td>ę-ʔéw-yè-ːn</td>
</tr>
<tr>
<td>3Pl</td>
<td>ę-ʔéw-yè-m-è</td>
<td></td>
</tr>
</tbody>
</table>

The reduplicated imperfective can be distinguished from the reduplicated perfective by the presence of H-tones on the stem, and by the L-tone d reduplicant.

See also (637), and yì-yì-ḅg in (755).

10.2.2.4 Progressive (⁻sò⁻)

A verb form used in progressive contexts involves L-toned AN suffix -sò⁻, following a stem-ending in an L- or <HL>-toned vowel. A short stem-final vowel is also lengthened. The stem vocalism follows the pattern in the imperfective. Light i-final stems keep final i, while heavy i-final stems switch to the non-high stem.

This is likely a historical reflex of an original imperfective morpheme (*⁻m⁻ or *⁻ŋ⁻) added to the stem before *sò ‘have’. I have heard variant pronunciations that still include overt -ŋ⁻ in the progressive: ɠò:ŋ⁻sò⁻ ‘be going out’, variant of ɠò:-sò-. The fuller form suggests a two-word construction parallel to that with imperfective -ŋ⁻ (*m⁻) plus ɓu⁻ ‘be’, see §15.2.2.2. However, the fuller form is no longer in common use, at least in my assistant’s speech. See also the discussion of -m⁻sè in §15.2.3, below.

When the verb is clause-initial (i.e. in the absence of an object or other preverbal constituent), so that the verb is the only candidate for focalized status, reduplication (Cv⁻) is present.

Progressive forms of non-i-final stems are in (308). In monosyllabics and short bisyllabics, the lexical distinction between /H/ and /LH/ tones is neutralized, and we get an {HL} overlay on the (simple) progressive stem. In Cv:Cv⁻ bisyllabics and in all trisyllabics, the onset of the (simple) progressive stem respects the lexical melody, followed by {HL}. ‘Go’ shifts from e to i, as it does in the imperative, reflecting the hybrid status (final nonhigh or high vowel) of this stem (308b). I hear lengthening of a short stem-final vowel consistently in the nCv⁻ stems (308b), inconsistently in other stems (308c-d).

(308) Progressive of non-i-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>progressive simple</th>
<th>reduplicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. monosyllabic Cv⁻</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘eat’</td>
<td>kɔ⁻:</td>
<td>kɔ⁻:sò⁻</td>
<td>kɔ⁻kɔ⁻:sò⁻</td>
</tr>
<tr>
<td>‘lay out’</td>
<td>té⁻:</td>
<td>té⁻:sò⁻</td>
<td>té⁻té⁻:sò⁻</td>
</tr>
<tr>
<td>‘drink’</td>
<td>nɔ⁻:</td>
<td>nɔ⁻:sò⁻</td>
<td>nɔ⁻nɔ⁻:sò⁻</td>
</tr>
</tbody>
</table>
i-final stems are illustrated in (309). I hear consistent lengthening of the final vowel in the one 
Cl- verb (309b), and also in the lexically LH-toned CvCi- verbs ‘laugh’ and ‘push’ in 
(309d), which express the final <HL> characteristic of the progressive on the stem-final 
syllable (the first syllable carrying the lexical initial L-tone). In the other verbs, I heard 
sporadic but inconsistent lengthening of the stem-final vowel, except that the /Cvy/ (Cvy) 
verbs ‘go in’ and ‘hear’ were always heard as just Cvy (309c). Segmentally, the stem-final i is 
retained on light stems (309a-c), but heavy stems including Cv:Cv- switch to the non-high 
stem. If a heavy stem has an initial non-high vowel, its vowel quality is copied on the stem-
final, and if it has only high vowels the stem-final vowel is usually -ATR ə after u, or e after i.

(309) Progressive of i-final verb

gloss | stem | progressive simple | reduplicated
---|---|---|---
a. monosyllabic Cl- | ‘see’ | y̞ː| | y̞ː-y̞ː|-

b. nCl- | ‘give’ | ńdí | ńdí:-sò- | i-ńdí:-sò-

c. CvCi- | ‘do’ | kár°| | kár°(·)-sò- | kà-kár°(·)-sò-
‘cover’ | dëwí[-dëw] | dëwi(·)-sò- | dë-dëwí(·)-sò-
‘go in’ | nùy°[-nùy] | nùy°(·)-sò- | nù-nùy°(·)-sò-
‘hear’ | nùy°[-nùy] | nùy°(·)-sò- | nù-nùy°(·)-sò-

d. CvC Ci- | ‘grill’ | sìmbí | sìmbí(·)-sò- | sì-sìmbí(·)-sò-
‘laugh’ | màndí | màndí(·)-sò- | mà-màndí(·)-sò-
‘push’ | dàmbí | dàmbí(·)-sò- | dà-dàmbí(·)-sò-

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e. Cv:C(C)-i-
   ‘pour over’   tì:rí-
   ‘stimulate’   pë:ndë-
   ‘help’        bà:rà-
   f. trisyllabic
   ‘have fun’    kémìr“í
   ‘winnow’      bègìrë
   ‘scrub’       pùgùsì

The pronominal paradigm is (310). The 1Pl and 2Pl suffixes have LHL tone (or pitch) due to the dying-quail effect, see (30a) in §3.8.3, while all other forms have L-tone.

(310) category progressive

1Sg        -sò-ŷ
1Pl        -sò-ŷ : [sòóòj]
2Sg        -sò-ẁ
2Pl        -sò-ẁ : [sòóòw]
3Sg/Inan   -sò-∅
3Pl        -s-ê

Examples are in (311).

(311) a. bírá    bírë(-) -sò-ŷ
   work(n) work-Prog-1SgSbj
   ‘I am working.’

b. mùndì    mùndí:-sò-ŷ
   laughter laugh-Prog-1SgSbj
   ‘I am laughing.’

c. kémìrë    kémìrë(-) -s-ê
   fun have.fun-Prog-3PlSbj
   ‘They are having fun.’

d. tòmbì    tòmbò(-) -s-ê
   jump(n) jump-Prog-3PlSbj
   ‘They are jumping.’

A distinct construction with progressive-like sense is that with imperfective subordinator -ǐ (becoming -ì) plus auxiliary bù- ‘be’ (§15.2.2.2).

10.2.3 Negation of indicative verbs

Conjugated stative negative =ǹdó- (§10.4.2) can be added to the progressive suffix -sò (§10.2.3.5). Other than this, the regular negative counterparts of the perfective positive
system and of the imperfective positive system are portmanteaus that replace any positive inflectional suffixes.

Reduplication is not allowed in negative verb forms.

10.2.3.1 Perfective negative -rí- (3Pl -ndo-)

For practical purposes, there is a single negative perfective-system form, that with suffix -rí- added directly to the non-high stem of the verb (regardless of its prosodic weight). This can negate any of the positive perfective-system forms: simple perfective, reduplicated perfective, imperfective-1a -èrè-, imperfective-1b -rì-, imperfective-2 -sò-, and recent perfect jè-

(312) a. jà:   kɔ̀-rì-∅
    meal    eat-PfvNeg-3SgSbj
    ‘He/She hasn’t eaten (yet).’

b. 1:ⁿ   gò:-rí-y
    lSgSbj  go.out-PfvNeg-1SgSbj
    ‘I didn’t go (= haven’t gone) out.’

c. [kɔ́]:   ká:\mù   yè:-rí-y
[thing:\ each/any] see-PfvNeg-1SgSbj
    ‘I didn’t see anything.’

The plural-subject (1Pl, 2Pl, 3Pl) forms are structurally distinct from those for singular subjects. For 1Pl and 2Pl, the differences are tonal. For 3Pl, the differences are more substantial. The plural forms are covered at the end of this section, after the description of the singular forms.

In the singular-subject forms, the stem drops tones to {L} before the H-toned -rí-.

If the verb already ends in a non-high vowel {e a o o}, the only change to the stem is tone-dropping (313). The only exceptional stem is ‘go’, which shifts from +ATR e to -ATR e (313b).

(313) stem  perfective negative  gloss

a. monosyllabic Cv:

bè:-  bè:-rí-  ‘remain’
gò:-  gò:-rí-  ‘go out’
jè:-  jè:-rí-  ‘bring’
kà:-  kà:-rí-  ‘shave’
yè:-  yè:-rí-  ‘come’

b. nCv

ùdè:-  ùdè:-rí-  ‘go up’
irregular
ùnè:-  ùnè:-r“i-  ‘go’
c. bisyllabic

<table>
<thead>
<tr>
<th>Stem</th>
<th>Perfective Negative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yògò-</td>
<td>yògò-ri-</td>
<td>‘run’</td>
</tr>
<tr>
<td>tòmbò-</td>
<td>tòmbò-ri-</td>
<td>‘jump’</td>
</tr>
<tr>
<td>kè:ndé-</td>
<td>kè:ndé-ri-</td>
<td>‘make well’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>Perfective Negative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>mònjuró-</td>
<td>mònjuró-ri-</td>
<td>‘dream’</td>
</tr>
<tr>
<td>pigíré-</td>
<td>pigíré-ri-</td>
<td>‘screw in’</td>
</tr>
</tbody>
</table>

\(i\)-final verbs, whether light or heavy, must shift to the non-high stem. Verbs with only high vowels generally show final -ATR ɛ or ɔ in available examples (314b-e). The Cuy- and Ci- (Ci:) verbs likewise appear to add ɛ or ɔ before -ri- (314c). This could be considered evidence in favor of an otherwise doubtful bisyllabic representation for these stems. ‘See’ additionally shortens its vowel before -ri- (314e).

(314)  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Perfective Negative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. final (i), bisyllabic, lexical non-high vowel present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ññí-</td>
<td>ññí-ri-</td>
<td>‘urinate’</td>
</tr>
<tr>
<td>pàgi-</td>
<td>pàgà-ri-</td>
<td>‘tie’</td>
</tr>
<tr>
<td>dëwì ([dëw])</td>
<td>dëwè-ri-</td>
<td>‘cover’</td>
</tr>
<tr>
<td>dëñì-</td>
<td>dëñé-ri&quot;i-</td>
<td>‘tamp’</td>
</tr>
<tr>
<td>jòñì-</td>
<td>jòñì-ri-&quot;i-</td>
<td>‘cure’</td>
</tr>
<tr>
<td>b. final (i), bisyllabic, no lexical non-high vowel present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nùñì-</td>
<td>nùñ-ri&quot;i-</td>
<td>‘sing’</td>
</tr>
<tr>
<td>dùñì-</td>
<td>dùñ-ri&quot;i-</td>
<td>‘put down’</td>
</tr>
<tr>
<td>ñíñì-</td>
<td>ñíñ-ri&quot;i-</td>
<td>‘speak’</td>
</tr>
<tr>
<td>tìmbì-</td>
<td>tìmbè-ri-</td>
<td>‘put lid on’</td>
</tr>
<tr>
<td>c. Cuy(i)-, Ci-(Ci:) -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nùyùn(i)-</td>
<td>nùyùn-ri&quot;i-</td>
<td>‘hear’</td>
</tr>
<tr>
<td>nùyùn(i)-</td>
<td>nùyùn-ri&quot;i-</td>
<td>‘go in’</td>
</tr>
<tr>
<td>tùy(i)-</td>
<td>tùy-ri-</td>
<td>‘put down’</td>
</tr>
<tr>
<td>tìy(i)-</td>
<td>tìy-ri-</td>
<td>‘send’</td>
</tr>
<tr>
<td>d. nCi-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ñdì-</td>
<td>ñdì-ri-</td>
<td>‘give’</td>
</tr>
<tr>
<td>e. irregular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yì:-</td>
<td>yè-ri-</td>
<td>‘see’</td>
</tr>
</tbody>
</table>

Trisyllabics, all of them \(i\)-final, are in (315). Again, stems that have only high vowels mostly have final -ATR ɔ and ɛ (315b).
We now consider the ‘hear’, which are elsewhere distinguished tonally, merge in the perfective negative.

Causative -mí- becomes -mé- before -rí- (hence -mé-rí-), regardless of the vocalism of the preceding stem (316).

Stems ending in minor causative allomorphs, the reversive suffix, or the mediopassive suffix, are treated for inflectional purposes just like underrived trisyllabics.

The suffixal r of the perfective negative suffix is subject to Nasalization-Spreading (§3.5.1.1), hence -rí- after a nasal syllable (one containing a nasalized vowel, or beginning with a prevocalic nasal consonant or nasalized sonorant) (317a). The Cuyé verbs are expanded to Cuyé before - ré- (see above), and since two of them begin with r they expand as nuyóğí- in this inflection and therefore induce Nasalization-Spreading on the suffix (317b). ‘Go in’ and ‘hear’, which are elsewhere distinguished tonally, merge in the perfective negative.
is -rí-. In the 1Sg and 2Sg, the suffixal semivowel extends the H-tone of the AN suffix. 2Sg /-rí-w/ assimilates to -rú-w (phonetic [rú:]).

(318) category perfective negative

<table>
<thead>
<tr>
<th></th>
<th>1Sg</th>
<th>2Sg</th>
<th>3Sg</th>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-rí-ý</td>
<td>-rí-w</td>
<td>-rí-Ø</td>
<td>yí:-</td>
<td>‘see’</td>
</tr>
</tbody>
</table>

To complete the exposition of the singular-subject forms, sample paradigms are given in (319). ‘Go up’ (ǹdè-) and irregular ‘give’ (ǹdí-) have homophonic perfective negatives.

(319) Partial sample paradigms (perfective negative)

<table>
<thead>
<tr>
<th></th>
<th>1Sg</th>
<th>2Sg</th>
<th>3Sg</th>
<th>stem</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yè-rí-ý</td>
<td>yè-rú-w</td>
<td>yè-rí-Ø</td>
<td>yí:-</td>
<td>‘see’</td>
<td></td>
</tr>
<tr>
<td>yè-rí-ý</td>
<td>yè-rú-w</td>
<td>yè-rí-Ø</td>
<td>gò:-</td>
<td>‘come’</td>
<td></td>
</tr>
<tr>
<td>gò-rí-ý</td>
<td>gò-rú-w</td>
<td>gò-rí-Ø</td>
<td>yè:-</td>
<td>‘go out’</td>
<td></td>
</tr>
<tr>
<td>ñǹe-rí-n-ý</td>
<td>ñǹe-rú-w</td>
<td>ñǹe-rí-Ø</td>
<td>ñǹé-</td>
<td>‘go’</td>
<td></td>
</tr>
<tr>
<td>ñǹê-rí-ý</td>
<td>ñǹê-rú-w</td>
<td>ñǹê-rí-Ø</td>
<td>ñǹé-</td>
<td>‘go up’</td>
<td></td>
</tr>
<tr>
<td>ñǹdê-rí-ý</td>
<td>ñǹdê-rú-w</td>
<td>ñǹdê-rí-Ø</td>
<td>ñǹdi-</td>
<td>‘give’</td>
<td></td>
</tr>
<tr>
<td>báyà-rí-ý</td>
<td>báyà-rú-w</td>
<td>báyà-rí-Ø</td>
<td>báyà-</td>
<td>‘be cured’</td>
<td></td>
</tr>
<tr>
<td>gò-ndó-rí-ý</td>
<td>gò-ndó-rú-w</td>
<td>gò-ndó-rí-Ø</td>
<td>gò-ndó-</td>
<td>‘take out’</td>
<td></td>
</tr>
<tr>
<td>kúwò-mè-rí-n-ý</td>
<td>kúwò-mè-rú-w</td>
<td>kúwò-mè-rí-Ø</td>
<td>kúwò-mí-</td>
<td>‘burn’</td>
<td></td>
</tr>
<tr>
<td>táŋà-nà-rí-ý</td>
<td>táŋà-nà-rú-w</td>
<td>táŋà-nà-rí-Ø</td>
<td>táŋà-ná-</td>
<td>‘ignite’</td>
<td></td>
</tr>
<tr>
<td>gísè-rí-ý</td>
<td>gísè-rú-w</td>
<td>gísè-rí-Ø</td>
<td>gísè-</td>
<td>‘throw’</td>
<td></td>
</tr>
</tbody>
</table>

1Pl and 2Pl show vowel-length and tonal changes, but are otherwise segmentally identical to the corresponding singulars (with 1Sg -y and 2Sg -w). If not already long, the stem-final vowel is lengthened before the perfective negative suffix. The stem has {LH} overlay, which is realized as <LH> (rising) on a monosyllabic stem, as L.H on a bisyllabic, as L.L.H on a trisyllabic, etc. This {LH} can arguably be decomposed into a remnant of the {L} perfective negative overlay also seen in singular-subject forms, plus an additional stem-final H-tone. In this analysis, the 1Pl/2Pl version takes the 1Sg/2Sg input, applies an {HL} overlay on the portion of the word beginning with the final syllable (or monosyllabic mora) of the stem, and lengthens the stem-final vowel. For example, 1Sg yè-rí-ý ‘I did not see’ corresponds to 1Pl [jè:rí:]- ‘we did not see’. The latter is transcribed yè-rí-ý: to bring out the fact that it is an “intonational” modification of the 1Sg form. I do not hear 1Pl -rí-y or 2Pl -rú-w suffixes themselves as longer than their singular counterparts. See (30d) in §3.8.3.

Examples below of the 1Pl (320) and 2Pl (321) show the phonetic realizations in brackets.
negative
this type, might attribute the rounding to
They point to underlying
The preceding stem is
3Pl form
c. trisyllabic
kùwò-mè-r"i-y- y-.: [kùwòmèːrᵣᵣː] 'burn'
tànjà-ndà-rí-y- y-.: [tànjàndàːrᵣː] 'ignite'

(321) 2Pl (2Sg plus .: ) 2Pl phonetic gloss

a. monosyllabic
yè-rí-y- y-.: [jèːrᵣː] 'see'
yè:r'-r'-y- y-.: [jèːrᵣː] 'come'
gò:r-r'-y- y-.: [gòːrᵣː] 'go out'
tà:r-r'-y- y-.: [tàːrᵣː] 'shoot'
b. bisyllabic
ùnè-r'ù-r'-y- y-.: [ùnèːrᵣᵣː] 'go'
ùdè-rù-r'-y- y-.: [ùdèːrᵣː] 'go up'
ùdè-rù-r'-y- y-.: [ùdèːrᵣː] 'give'
bàyà-r'ù-r'-y- y-.: [bàyàːrᵣː] 'be cured'
gisè-rù-r'-y- y-.: [gisèːrᵣː] 'throw'
gò-ndò-r'ù-r'-y- y-.: [gòndòːrᵣː] 'take out'
c. trisyllabic
kùwò-mè-r"i-y- y-.: [kùwòmèːrᵣᵣː] 'burn'
tànjà-ndà-rí-y- y-.: [tànjàndàːrᵣː] 'ignite'

The 3Pl form diverges sharply from the rest of the paradigm, since the perfective negative portmanteau (elsewhere -ri-) combines with 3Pl to produce a higher-level portmanteau -ndú. The preceding stem is L-toned as in the singular-subject forms.

Additional segmental changes occur in the stem-final vowel before the 3Pl portmanteau. They point to underlying 3Pl suffix /-àndú/, with initial /a/ that is manifested in certain combinations. Cross-cutting this is a process by which final /e e/ are rounded to /o o/. One might attribute the rounding to the influence of suffixal u, but there is no productive rule of this type, and data from other Dogon languages point to stem-final ablaut in the 3Pl perfective negative. Moreover, in some cases it appears that -(à)ndú is added to a form of the stem
whose vocalism is consistent with that of the singular-subject perfective negative forms (i.e. before -\textit{rif}) rather than that of the bare stem, to the extent the two can be distinguished.

Regarding the possible allomorph /-\textit{àndú}/, note 3Pl \textit{Cè:ndú}- for the \textit{Cè:} stems ‘shine’ and ‘sproat’ in (322a), and the shift of final /e/ to a in most bisyllabic and longer stems, e.g. ‘obtain’ and ‘take handful’. The /e/ that shifts to a is specifically the /e/ of the perfective negative stem, not that of the bare stem form, for ‘give’ (322b), irregular ‘see’ (322c), and ‘fear’ and ‘take handful’ in (322e), all of which have final i in the bare stem. The alternative rounding and backing of {\textit{e e}} to {\textit{o o}} is relatively systematic in the case of /e/ > o, being obligatory in monosyllables, see ‘come’ and ‘bring’ in (322a), and common in spite of considerable phonetic variation (from my assistant) in the stem-final e of longer stems like those at the end of (322d). ‘Go’ (322b) shows the shift of /e/ to o in 3Pl \textit{hnò-ndú}, based on perfective negative \textit{hnò-r'f'}, already shifted from lexical e to e.

<table>
<thead>
<tr>
<th>(322)</th>
<th>stem</th>
<th>perfective negative</th>
<th>gloss</th>
<th>singular</th>
<th>3Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. monosyllabic \textit{Cv:-}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gô:-</td>
<td>gô:-\textit{rif}-</td>
<td>gô:-\textit{ndú}</td>
<td>‘go out’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jè:-</td>
<td>jè:-\textit{rif}-</td>
<td>jè:-\textit{ndú}</td>
<td>‘bring’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yè:-</td>
<td>yè:-\textit{rif}-</td>
<td>yè:-\textit{ndú}</td>
<td>‘come’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kà:-</td>
<td>kà:-\textit{rif}-</td>
<td>kà:-\textit{ndú}</td>
<td>‘shave’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tè:-</td>
<td>tè:-\textit{rif}-</td>
<td>tè:-\textit{ndú}</td>
<td>‘sproat’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kó:-</td>
<td>kó:-\textit{rif}-</td>
<td>kó:-\textit{ndú}</td>
<td>‘shine’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. \textit{nCv-}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ñnè-</td>
<td>ñnè-\textit{rif}-</td>
<td>ñnè-\textit{ndú}</td>
<td>‘go’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ñdè-</td>
<td>ñdè-\textit{rif}-</td>
<td>ñdè-\textit{ndú}</td>
<td>‘go up’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ñdì-</td>
<td>ñdè-\textit{rif}-</td>
<td>ñdè-\textit{ndú}</td>
<td>‘give’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. ‘see’ (irregular)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yì:-</td>
<td>yì:-\textit{rif}-</td>
<td>yì:-\textit{ndú}</td>
<td>‘see’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. bisyllabic or longer, ending in non-high vowel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bàyá-</td>
<td>bàyá-\textit{rif}-</td>
<td>bàyá-\textit{ndú}</td>
<td>‘be cured’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yògò-</td>
<td>yògò-\textit{rif}-</td>
<td>yògò-\textit{ndú}</td>
<td>‘tun’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gò-\textit{ndú}-</td>
<td>gò-\textit{ndú}-\textit{rif}-</td>
<td>gò-\textit{ndú}-\textit{ndú}</td>
<td>‘take out’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bérè-</td>
<td>bérè-\textit{rif}-</td>
<td>bérè-\textit{ndú}</td>
<td>‘obtain’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gisè-</td>
<td>gisè-\textit{rif}-</td>
<td>gisè-\textit{ndú} ~ gisè-\textit{ndú}</td>
<td>‘throw’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sígò-</td>
<td>sígò-\textit{rif}-</td>
<td>sígò-\textit{ndú} ~ sígò-\textit{ndú}</td>
<td>‘go down’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pèrè-</td>
<td>pèrè-\textit{rif}-</td>
<td>pèrè-\textit{ndú} ~ pèrò-\textit{ndú}</td>
<td>‘jump (off)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mènèrè-</td>
<td>mènèrè-\textit{rif}-</td>
<td>mènèrè-\textit{ndú}</td>
<td>‘make into balls’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. bisyllabic or longer, ending in high vowel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ù-\textit{yì}-</td>
<td>ù-\textit{yì}-\textit{rif}-</td>
<td>ù-\textit{yì}-\textit{ndú}</td>
<td>‘fear’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mò-\textit{n}-</td>
<td>mò-\textit{n}-\textit{rif}-</td>
<td>mò-\textit{n}-\textit{ndú}</td>
<td>‘hear’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pènì-</td>
<td>pènì-\textit{rif}-</td>
<td>pènì-\textit{ndú}</td>
<td>‘take handful’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kwò-\textit{m}-</td>
<td>kwò-\textit{m}-\textit{rif}-</td>
<td>kwò-\textit{m}-\textit{ndú}</td>
<td>‘burn’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tànò-\textit{ndi}-</td>
<td>tànò-\textit{ndi}-\textit{rif}-</td>
<td>tànò-\textit{ndi}-\textit{ndú}</td>
<td>‘ignite’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10.2.3.2 Experiential perfect negative $Vb^L$ tâ:-ří-.

For the sense ‘have never Vb-ed’, perfective negative -ří- is added to the auxiliary verb tâ-, which is chained to the preceding main verb (§10.1.2.3.2). A peculiarity of this combination, in Nanga and some other Dogon languages, is that the preceding main verb is also tone-dropped. A tonosyntactically revealing notation would be e.g. [ňné tâ:]-ří-y in (323a), but I generally use the more informal notation in (323a-c) to avoid word-internal superscripts.

(323) a. bàmàkɔ̀ ŋò̀นè $Vb^L$ tâ:-ří-y
   Bamako go$^L$ ExpPerf-PfvNeg-1SgSbj
   ‘I have never gone to Bamako.’ (< ꠇñé-)

b. yì: sùyɔ́ $Vb^L$ tâ:-ří-y.$^'$
   child hit$^L$ ExpPrf-PfvNeg-1PlSbj
   ‘We have never struck a child.’ (< sùyɔ́-)

c. pìr-à:ndì [pàŋ̃á nɔ̀] $Vb^L$
   Fulbe [power 3SgPoss],
   dɔ̀ŋɔ́-ŋ $Vb^L$ tâ:-ří-ɔ̀
   Dogon-Acc be.stronger$^L$ ExpPrf-PfvNeg-3SgSbj
   ‘Fulbe, their might was never stronger than Dogon.’ (2004.01.10) (< ꠇɔ̀ŋɔ́-)

10.2.3.3 Recent perfect negative (jè-ří-)

Recent perfect jè- (§10.2.1.5), which can also mean ‘have finished VP-ing’, is often negated by the simple perfective negative -ří- without jè-. In other words, in the negative it is not usually distinguished from other subtypes of the perfective. Therefore the usual negative answer to the question jà: kɔ́: jè-ɔ́h màn ‘have you-Sg already eaten a meal?’ is simply kɔ́:ří-y ‘I have not eaten’.

However, it is possible to elicit examples with recent perfect jè- followed by the perfective negative suffix to produce jè-ří-. The perfective negative form jè-ří- is usually understood to mean ‘have not finished (VP-ing)’, as in jà: kɔ́: jè-ří-y ‘I have not finished eating the meal’. The 3Pl subject form is jà: kɔ́: jà:-ndù ‘they have not finished eating’.

These examples show that the main verb is not tone-dropped in the negative. We therefore hear H-toned kɔ́: ‘eat’ in the negative examples just given, as in the corresponding positive (kɔ́: jè-ɔ́ ‘I have eaten’). In this respect, the recent perfect differs from the experiential perfect, which includes the main verb in the domain of tone-dropping (preceding section).

10.2.3.4 Imperfective negative -ŋɔ́(·)-

The all-purpose negation of imperfectives (‘doesn’t VP’, ‘isn’t VP-ing’, ‘will not VP’) is formed by adding the imperfective negative suffix to the bare stem of prosodically light verbs, and to the non-high stem of heavy verbs. This is the same stem vocalism as in the imperfective positive. The suffix has a long-voweled form -ŋɔ́- for third person categories.
(3Sg -ŋɔː-Ø, 3Pl -ŋ-è), but the 1st/2nd person forms are based on short-voweled -ŋɔː-, which is followed by the suffixal semivowel (1Sg -ŋɔː-yⁿ, 2Sg -ŋɔː-wⁿ).

The tones are the same as for the (positive) imperfective. Since the imperfective negative suffix is always syllabic, the comparison is with the suffixally syllabic imperfective forms (i.e. not with 3Sg). The mergers of /H/ and /LH/ light stems in imperfectives of the non-i-final class also apply in the imperfective negative.

The pronominal-subject paradigm of -ŋɔː- is given in (324), with ‘run’ as the example in the right-hand column. The :: symbol indicates dying-quail intonation in the 1Pl and 2Pl. In the imperfective negative, :: is expressed as prolongation and [LHL] pitch on the suffixal syllable, see (30a) in §3.8.3.

(324) category imperfctive negative ‘run’

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>-ŋɔː-yⁿ</td>
<td>yɔ́gɔː-ŋɔː-yⁿ</td>
</tr>
<tr>
<td>1Pl</td>
<td>-ŋɔː-yⁿ::</td>
<td>[ŋɔːɔː]</td>
</tr>
<tr>
<td>2Sg</td>
<td>-ŋɔː-wⁿ</td>
<td>yɔ́gɔː-ŋɔː-wⁿ</td>
</tr>
<tr>
<td>2Pl</td>
<td>-ŋɔː-wⁿ::</td>
<td>[ŋɔːɔw]</td>
</tr>
<tr>
<td>3Sg</td>
<td>-ŋɔː-Ø</td>
<td>yɔ́gɔː-ŋɔː-Ø</td>
</tr>
<tr>
<td>3Pl</td>
<td>-ŋ-è:</td>
<td>yɔ́gɔː-ŋ-è:</td>
</tr>
</tbody>
</table>

(325) shows that the imperfective negative, like the imperfective positive, merges /LH/ and /H/ melodies for light verbs.

(325) Imperfective negative (light non-i-final stem)

<table>
<thead>
<tr>
<th>stem</th>
<th>imperfctive negative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. monosyllabic /LH/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gɔː-</td>
<td>gɔː-ŋɔː-</td>
<td>‘go out’</td>
</tr>
<tr>
<td>nɔː-</td>
<td>nɔː-ŋɔː-</td>
<td>‘drink’</td>
</tr>
<tr>
<td>bɛː-</td>
<td>bɛː-ŋɔː-</td>
<td>‘remain’</td>
</tr>
<tr>
<td>jɛː-</td>
<td>jɛː-ŋɔː-</td>
<td>‘bring’</td>
</tr>
<tr>
<td>wɔː-</td>
<td>wɔː-ŋɔː-</td>
<td>‘catch’</td>
</tr>
<tr>
<td>yɛː-</td>
<td>yɛː-ŋɔː-</td>
<td>‘come’</td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tɔː-</td>
<td>tɔː-ŋɔː-</td>
<td>‘shoot’</td>
</tr>
<tr>
<td>tɔː-</td>
<td>tɔː-ŋɔː-</td>
<td>‘sow’</td>
</tr>
<tr>
<td>b. CvCv /LH/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yɔ́gɔː-</td>
<td>yɔ́gɔː-ŋɔː-</td>
<td>‘run’</td>
</tr>
<tr>
<td>dɔ́ɡɔː-</td>
<td>dɔ́ɡɔː-ŋɔː-</td>
<td>‘leave’</td>
</tr>
<tr>
<td>bàrɔː-</td>
<td>bàrɔː-ŋɔː-</td>
<td>‘gather’</td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pɛrɛ-</td>
<td>pɛrɛ-ŋɔː-</td>
<td>‘jump (off)’</td>
</tr>
<tr>
<td>tɔ́rɔ-</td>
<td>tɔ́rɔ-ŋɔː-</td>
<td>‘pound’</td>
</tr>
</tbody>
</table>
c. \(nCv\)
\(\text{/LH/ melody} \)
\(\text{ǹdè-} \quad \text{ǹdè-ŋɔ̀:} \)
‘go up’

d. \(CvCCv\)
\(\text{/LH/ melody} \)
\(\text{gòmbó-} \quad \text{gòmbó-ŋɔ̀:} \quad \text{‘pull in (stomach)’} \)
\(\text{gùnjó-} \quad \text{gùnjó-ŋɔ̀:} \quad \text{‘harvest (peanuts)’} \)
\(\text{/H/ melody} \)
\(\text{tónjó-} \quad \text{tónjó-ŋɔ̀:} \quad \text{‘bend, flex’} \)
\(\text{éw-yè-} \quad \text{éw-yè-ŋɔ̀:} \quad \text{‘sit down’} \)

Heave non-\(i\)-final verbs maintain the lexical distinction of /H/ and /LH/ melodies (326).

(326) Imperfective negative (heavy stem ending in non-high vowel)

\begin{tabular}{lll}
stem & imperfective negative & gloss \\
\hline
\(\text{a. Cv:Cv} \) & & \\
\(\text{/LH/ melody} \) & & \\
\(\text{yò:rò-} \quad \text{yò:rò-ŋɔ̀:} \quad \text{‘stalk’} \) & & \\
\(\text{/H/ melody} \) & & \\
\(\text{sè:ré-} \quad \text{sè:ré-ŋɔ̀:} \quad \text{‘encounter’} \) & & \\
\hline
\(\text{b. trisyllabic} \) & & \\
\(\text{/LH/ melody} \) & & \\
\(\text{mònjúrò-} \quad \text{mònjúrò-ŋɔ̀:} \quad \text{‘dream’} \) & & \\
\(\text{/H/ melody} \) & & \\
\(\text{pígírè-} \quad \text{pígírè-ŋɔ̀:} \quad \text{‘screw in’} \) & & \\
\hline
\end{tabular}

\(i\)-final verbs respect the lexical /H/ versus /LH/ distinction, even for light stems. As in the imperfective positive, light stems of this class keep the final \(i\) (327).

(327) Imperfective negative (\(i\)-final light stem)

\begin{tabular}{lll}
stem & imperfective negative & gloss \\
\hline
\(\text{a. Cvy} \) & & \\
\(\text{/H/ melody} \) & & \\
\(\text{núy\(^{\text{a}}\)-} \quad \text{núy\(^{\text{a}}\)-ŋɔ̀:} \quad \text{‘go in’} \) & & \\
\(\text{túy-} \quad \text{túy-ŋɔ̀:} \quad \text{‘put down’} \) & & \\
\(\text{/LH/ melody} \) & & \\
\(\text{[for núy\(^{\text{a}}\)- ‘hear’ see (328a) below]} \) & & \\
\hline
\(\text{b. nCi} \) & & \\
\(\text{/H/ melody} \) & & \\
\(\text{ńdí-} \quad \text{ńdí-ŋɔ̀:} \quad \text{‘give’} \) & & \\
\(\text{/H/ melody, irregular, NCé- shifting to NCí-} \) & & \\
\(\text{ńné-} \quad \text{ńné-ŋɔ̀:} \quad \text{‘go’} \) & & \\
\end{tabular}

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Quite irregular are two perception verbs (yǐ- ‘see’ and nùyⁿ- ‘hear’). Each of these has an L-toned stem and an H-toned imperfective negative suffix. In addition, the stem is shortened to Cv- and the suffix has a short vowel even in the third person (328). For ‘see’, the initial y is nasalized to n by a unique (for Nanga) case of Backward Nasalization (§3.5.1.2), and the vowel is irregularly backed and rounded to u, perhaps by analogy to the corresponding form of ‘hear’.

(328) stem imperfective negative gloss

a. Cv:y
/LH/ melody
nùyⁿ- nù-ŋⁿ- ‘hear’
(alongside regular variant nùyⁿ-ŋⁿ-)

b. Cv:
/LH/ melody
yǐ- nù-ŋⁿ- ‘see’
(alongside regular variant yǐ-ŋⁿ-)

In heavy i-final stems, the /LH/ versus /H/ melodic distinction reappears. These heavy stems switch to the non-high stem before -ŋⁿ-, as in other imperfective inflections (329).

(329) Imperfective negative (i-final heavy stem)

stem imperfective negative gloss

a. Cv:Ci
/LH/ melody
dā:rí- dā:rá-ŋⁿ- ‘dare’
gě:rⁿ- gě:rò-ŋⁿ- ‘take away, convey’
/H/ melody
ká:rí- ká:rá-ŋⁿ- ‘rip’
tó:rí- tó:rò-ŋⁿ- ‘authorize’
b. trisyllabic, final i, non-high vowel in stem

/LH/ melody

| bègìrí- | bègìrí-ŋɔː- | ‘sift’ |
| jèmbìrí- | jèmbìrí-ŋɔː- | ‘hit off-center’ |
| wùrɔ-ŋì- | wùrɔ-ŋò-ŋɔː- | ‘awaken’ |
| gàgìrí- | gàgìrí-ŋɔː- | ‘rub into the ground’ |

/H/ melody

| tìgì-ří- | tìgì-ř-ŋɔː- | ‘(griot) call out names’ |
| kégìrí- | kégìrí-ŋɔː- | ‘trim off’ |

As in other imperfectives, an i-final stem with only high vowels usually has final -ATR ɛ or ɔ before the suffix (330).

(330) Imperfective negative (heavy stem with high vowels and final i)

<table>
<thead>
<tr>
<th>stem</th>
<th>imperfective negative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. with ɛ</td>
<td>ɛ-ří-</td>
<td>ɛ-ř-ŋɔː-</td>
</tr>
<tr>
<td></td>
<td>yùrùmí-</td>
<td>yùrùmí-ŋɔː-</td>
</tr>
<tr>
<td>b. with ɔ</td>
<td>pù:ří-</td>
<td>pù:ř-ŋɔː-</td>
</tr>
<tr>
<td></td>
<td>sùmúrŘ-</td>
<td>sùmúrŘ-ŋɔː-</td>
</tr>
</tbody>
</table>

10.2.3.5 Progressive negative -sò = ndò-

Progressive -sò- does have a special negative form -sò = ndò-, ending with an L-toned version of the conjugatatable stative negative clitic = ndò- (§10.4.2).

(331) [kɔ̃L] kámâ [thingL] yì: -sò = ndò-ŷ

[each/any] see-Progr=StatNeg-1SgSbj

‘I don’t see anything.’

The stem has the same form as in the positive progressive. The -sò- suffix is invariant in this construction, except that the 3Pl subject is doubly marked, both with -sò- and with the following clitic, resulting in -s-ɛ = nd-ɛ. In the 1Pl and 2Pl forms, -sò = ndò- plus dying-quail intonation is realized as [-sòóndò-], as both the penult and the final are lengthened, and as the […]HL pitch of the dying-quail effect is expressed as […]H on the penult and L on the final. See (30b) in §3.8.3. The full paradigm is (332).

(332) category | form | with ‘see’ | with ‘hit’
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>-sò = ndò-ŷ</td>
<td>yì: -sò = ndò-ŷ</td>
<td>sùyقلب: -sò = ndò-ŷ</td>
</tr>
<tr>
<td>1Pl</td>
<td>-sò = ndò-ŷ : [-sòóndò]</td>
<td>yì: -sò = ndò-ŷ :</td>
<td>sùyقلب: -sò = ndò-ŷ :</td>
</tr>
<tr>
<td>2Sg</td>
<td>-sò = ndò-ŵ</td>
<td>yì: -sò = ndò-ŵ</td>
<td>sùyقلب: -sò = ndò-ŵ</td>
</tr>
</tbody>
</table>

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10.3 Pronominal paradigms for indicative verbs

10.3.1 Subject pronominal suffixes

The forms used to index subject pronominal category on verbs and some other predicators are in (333). The third person forms are used for inanimate as well as animate referents. The symbol \( \vdash \) refers to the dying-quail intonational effect, which converts 1Sg to 1Pl and 2Sg to 2Pl, by applying duration and pitch modifications to the singulars, with some details specific to particular inflectional categories (§3.8.3).

(333) category suffix

| 1Sg   | -y   |
| 1Pl   | -yː  |
| 2Sg   | -w   |
| 2Pl   | -wː  |
| 3Sg   | -Ø, except 3Sg imperfective portmanteau -ŋ |
| 3Pl   | [see below] |

The third person forms are more difficult to analyse. The 3Sg can generally be taken as -Ø, but in the positive imperfective we get a kind of portmanteau -ŋ (or just -ₐ, i.e. vowel nasalization) rather than the expected #-m-Ø. I have analysed the 3Sg perfective positive as having -Ø added to the E-stem for some verbs, but one might argue instead for a suffix -e ~ -e.

The 3Pl category is expressed in a variety of ways that resist unified treatment. Using 1Sg and 1Pl for comparison (2Sg -w and 2Pl -wː are exactly parallel), note the 3Sg versus 3Pl alternations across various AN categories in (334). The -\( \ddot{\text{a}} \) ~ \( \ddot{\text{a}} \) ~ \( \ddot{\text{a}} \) 3Pl ending in the simple perfective has an interesting resemblance to the A/O-stem in the imperative (§10.6.1.1). However, 3Pl -\( \ddot{\text{a}} \) or even -\( \ddot{\text{y}} \) elsewhere follows suffixes (perfective-1a/-1b, recent perfect, past), eliminating stem-ablaut as a general explanation for 3Pl forms.

(334) category suffix

<table>
<thead>
<tr>
<th>1Sg</th>
<th>1Pl</th>
<th>3Sg</th>
<th>3Pl</th>
<th>suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>unsuffixed Pfv</td>
<td>-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{y}} )ː</td>
<td>(è( \ddot{\text{è}} )à)Ø</td>
<td>-( \ddot{\text{y}} )Ø</td>
</tr>
<tr>
<td>perfective-1a</td>
<td>-( \ddot{\text{ër}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{ër}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{ër}} )-Ø</td>
<td>-( \ddot{\text{ër}} )-Ø</td>
</tr>
<tr>
<td>perfective-1b</td>
<td>-( \ddot{\text{ti}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{ti}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{ti}} )-Ø</td>
<td>-( \ddot{\text{ti}} )-Ø</td>
</tr>
<tr>
<td>perfective-2</td>
<td>-( \ddot{\text{sò}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{sò}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{sò}} )-Ø</td>
<td>-( \ddot{\text{sò}} )-Ø</td>
</tr>
<tr>
<td>recent perfect</td>
<td>-( \ddot{\text{jè}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{jè}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{jè}} )-Ø</td>
<td>-( \ddot{\text{jè}} )-Ø</td>
</tr>
<tr>
<td>PfvNeg</td>
<td>-( \ddot{\text{ri}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{ri}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{ri}} )-Ø</td>
<td>-( \ddot{\text{ri}} )-Ø</td>
</tr>
<tr>
<td>imperfective</td>
<td>-( \ddot{\text{mù}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{mù}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{mù}} )-Ø</td>
<td>-( \ddot{\text{mù}} )-Ø</td>
</tr>
<tr>
<td>progressive</td>
<td>-( \ddot{\text{sò}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{sò}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{sò}} )-Ø</td>
<td>-( \ddot{\text{sò}} )-Ø</td>
</tr>
<tr>
<td>IpfvNeg</td>
<td>-( \ddot{\text{ŋè}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{ŋè}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{ŋè}} )-Ø</td>
<td>-( \ddot{\text{ŋè}} )-Ø</td>
</tr>
<tr>
<td>past</td>
<td>-( \ddot{\text{bè}} )-( \ddot{\text{y}} )</td>
<td>-( \ddot{\text{bè}} )-( \ddot{\text{y}} )ː</td>
<td>-( \ddot{\text{bè}} )-Ø</td>
<td>-( \ddot{\text{bè}} )-Ø</td>
</tr>
</tbody>
</table>

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3Pl subjects also allow verb agreement in some constructions that do not allow it for any other subject category. This is the case in factive complements of verbs like ‘know’, see (634c) in §17.2.1. Similarly, some types of relative clauses allow participial animate plural agreement with animate plural head NPs, see (519b) in §14.1.7.3.

10.3.2 Nonhuman/inanimate versus 3Sg subject

There is no distinction between animate 3Sg and nonhuman or inanimate third person subjects in ordinary verbal inflection.

However, the ‘it is’ clitic has an inanimate subject form =w (§11.2.1.1). ‘It is’ clitics are also part of the passive construction, so inanimate =yè-w is part of its paradigm (§10.5.1.4).

10.3.3 Vowel-semivowel interactions of AN and pronominal suffixes

What I write as uw and iy are, in syllable-final position, pronounced [u:] and [i:] by Monophthongization (§3.5.7.2). Assimilations of a short high vowel to a nonhomorganic following semivowel (§3.5.7.1) can feed into Monophthongization.

Perfective-1b -ti- combines with 2Sg -w as -tù-w more often than as -ti-ì. Likewise, perfective negative -ri- has a 2Sg form -rù-w. The 2Pl forms have the same vowel quality.

Quasi-verb bù- ‘be’ combines with 1Sg -y as bi-ý ~ bù-ý. The 1Pl form has the same vowel qualities (§11.2.2.2).

10.3.4 Tones of pronominal-subject suffixes

Pronominal-subject suffixes that occur in indicative categories lack intrinsic tones. The nonzero suffixes except 3Pl each consist of a sonorant -y or -w, whose tone is acquired by spreading from the preceding vowel. 3Pl variants, including the only syllabic allomorph (-yà in perfective-1b -ti-yà), can also be analysed as atonal, getting their surface L-tone by spreading from the left. The same is true of imperative plural-addresssee -ndì.

10.4 Stative form of verbs (reduplicated and unreduplicated)

10.4.1 Stative positive

Verbs of stance (sitting, standing, etc.), holding and carrying, and certain others like ‘be closed’, are used in both active (‘sit down’) and stative (‘be sitting, be seated’) contexts. The regular indicative conjugations (perfective and imperfective) are used in the active sense. In stative function, denoting a stable position, the (reduplicated or unreduplicated) stative inflection is used. Statives make no aspectual distinctions, falling outside of the perfective and imperfective systems that apply to active verbs.

The reduplicated stative has an initial Cv- reduplication (H-toned), followed by an L-toned form of the A/O-stem. The final vowel is o for +ATR stems. It is a or ñ for -ATR stems, with ñ only used following another ñ in the stem, so a is the default.

For those stems that contain a transparent -yv- suffix in the active forms, the suffix is omitted in the reduplicated stative. The criterion for transparency is syllabic in nature; the
stem minus the -\textit{yy}- formative must be \textit{CvCv-} or \textit{CvC-} (335b-c). Original *\textit{Cv-yy-} derivatives with just a monomoraic *\textit{Cv-} stem have arguably become unsegmentable \textit{Cvyv-}, and in any event maintain the second syllable in the stative form to satisfy the bisyllabic shape requirement (335d). This is also arguably the case with some of the *\textit{Cv-yy-} stems in (335e), but ‘fear’ in particular suggests that in these verbs the initial \textit{Cli-} or \textit{Cu-} splits into \textit{Ciya-} and \textit{Cuwa-}, in which case there is no need to assume the presence of the *-\textit{yy-} formative in the stative.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
(335) & gloss & imperative & perfective-1a & reduplicated stative \\
\hline
a. bisyllabic stem (unsegmentable) & \null & \null & \null & \null \\
\hline
‘lean (on)’ & \textit{tíṣò} & \textit{tíṣé-èrè} & \textit{títíṣò-} & \null \\
\hline
b. bisyllabic stem plus mediopassive -\textit{yy-} & \null & \null & \null & \null \\
\hline
‘lean back’ & \textit{disí-yó} & \textit{disí(\text{-}y)-èrè} & \textit{dítí-disò} & \null \\
‘kneel’ & \textit{tíújí-y”á} & \textit{tíújí(\text{-}y)-èrè} & \textit{títíújí-ò} & \null \\
‘hold’ & \textit{ágí-yá} & \textit{ágí(\text{-}y)-èrè} & \textit{ágítí-agá-} & \null \\
‘be hooked’ & \textit{kúmbí-yó} & \textit{kúmbí(\text{-}y)-èrè} & \textit{kútí-kúmbó-} & \null \\
‘grip’ & \textit{bímbí-yó} & \textit{bímbí(\text{-}y)-èrè} & \textit{bítí-bímbó-} & \null \\
‘carry on back’ & \textit{bámbí-yá} & \textit{bámbí(\text{-}y)-èrè} & \textit{bátí-bámbó-} & \null \\
\hline
c. \textit{CvC-} stem plus mediopassive -\textit{yy-} & \null & \null & \null & \null \\
\hline
‘sit’ & \textit{éw-yó} & \textit{éw-yé-èrè} & \textit{é-òewò-} & \null \\
‘squat’ & \textit{sów-yó} & \textit{sów-yó-èrè} & \textit{sósí-òwò-} & \null \\
‘perch’ & \textit{téw-yó} & \textit{téw-yé-èrè} & \textit{tétí-téwò-} & \null \\
\hline
d. \textit{Cvyv-} stem (with frozen mediopassive *-\textit{yy-}) & \null & \null & \null & \null \\
\hline
‘sleep’ & \textit{ný”á} & \textit{ný”-èrè} & \textit{ní-ný”-à} & \null \\
‘lie down’ & \textit{bíyó} & \textit{bíyé-èrè} & \textit{bí-bíyó-} & \null \\
\hline
e. \textit{Cvyv-} stem (with frozen mediopassive *-\textit{yy-}) & \null & \null & \null & \null \\
\hline
‘be closed’ & \textit{pí”-y”á} & \textit{pí”(\text{-}y”)-èrè} & \textit{pí-òply”-à} & \null \\
‘stand’ & \textit{i”-yá} & \textit{i”-y-èrè} & \textit{i”-òlyá-} & \null \\
‘fear’ & \textit{ú”-yá} & \textit{ú”-yé-èrè} & \textit{ú”-òwùá-} & \null \\
\hline
\end{tabular}
\caption{The pronominal-suffix paradigm is (336), with ‘be sitting’ as the example.}
\end{table}

In 3\textit{Pl ëwè-yè,} what appears in the rest of the stative paradigm as stem-final \textit{o} has shifted back to \textit{e}. A similar example is stative \textit{bí-bíyó} ‘is lying down’, 3\textit{Pl bí-bíyè-yè}. However, there
is no back-shift in tünde ‘be kneeling’, 3Pl tünde-yè, or in ñwà-yè ‘they fear’. It seems that the vocalism of the preceding stem syllable, as well as that of the suffix -yè, are influencing the stem-final vowel. But there may also be a tendency here to mark 3Pl doubly, as in some negative paradigms.

tünde-yè ‘they are kneeling’ also shows that 3Pl -yè is not subject to Nasalization-Spreading. Another example of this ni-niyà-yè ‘they are asleep’.

The full reduplicated form of the stative stem is used when no location is overtly specified, so that the verb itself is arguably focal. When the verb is preceded by a locational adverb, the reduplicant is optionally (but usually) omitted (337a-c).

(337) a. ñgà-gá èwò-Ø
     there sit.Sta-3SGs
     ‘He/She is sitting over there.’

b. ñgà-gá iyà-yè
     there stand.Sta-3PSb
     ‘They are standing there.’

c. [ñdó gó] biyò-Ø
     [house Loc] lie.down.Sta-3SGs
     ‘He/She is lying down over there.’

Existential particle yá may precede a stative positive verb, as an alternative to reduplication. The combination with yá implies a specific location, though the latter is not otherwise overtly specified. The reduplication is used in a broader range of contexts.

(338) a. yá èwò-Ø
     Exist sit.Sta-3SGs
     ‘He/She is sitting (e.g. over there).’

b. é-ʔwò
     Rdp-sit.Sta-3SGs
     ‘He/She is sitting.’

10.4.2 Stative negative ( =ñdó-)

The negative forms are based on stative negative clitic =ndó-. The paradigm, and the forms for ‘not be sitting’, are in (339). The 3Pl form =nd-è has a -ATR vowel, unlike the +ATR of =ndó-. With ‘sit’, the stem-final /o/ shifts to e before the 3Pl form, as in the positive paradigm. Reduplication is absent.

(339) category stative negative ‘not be sitting’

<table>
<thead>
<tr>
<th></th>
<th>=ndó-ý</th>
<th>èwò = ndó-ý</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>=ndó-y</td>
<td>èwò = ndó-y</td>
</tr>
<tr>
<td>1Pl</td>
<td>=ndo-y</td>
<td>èwò = ndó-y</td>
</tr>
<tr>
<td></td>
<td>[èwòóndòój]</td>
<td></td>
</tr>
<tr>
<td>2Sg</td>
<td>=ndó-w</td>
<td>èwò = ndó-w</td>
</tr>
<tr>
<td>2Pl</td>
<td>=ndo-w</td>
<td>èwò = ndó-w</td>
</tr>
<tr>
<td></td>
<td>[èwòóndòòw]</td>
<td></td>
</tr>
</tbody>
</table>
3Sg/Inan  = ndó-Ø  èwò = ndó-Ø
3Pl = nd-é  èwè = nd-é

10.5  Past and present

10.5.1  Conjugated past clitic (=bɛ-)

The conjugatable past clitic (or suffix) = bɛ- carries over the preceding tone (subject to further tonal processes involving a following pronominal suffix). We therefore get e.g. -m̩ = bɛ̂- with L-tone but e.g. -ři = bɛ̃- with H-tone. Perfective-1b -ṯi- takes H-toned form -ṯi- in this combination (as it does in some verb-chains, §15.1.10), resulting in -ṯi = bɛ̃ê-. The past clitic combines with certain AN forms of the verb, and is itself conjugated for pronominal subject. The combinations with preceding AN suffixes are given in (340).

(340)  AN category  AN suffix  AN + past

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>imperfective</td>
<td>-m̩-</td>
<td>-m̩ = bɛ̂-</td>
</tr>
<tr>
<td>progressive</td>
<td>-sɔ̀-</td>
<td>-sɔ̀ = bɛ̀-</td>
</tr>
<tr>
<td>simple perfective</td>
<td>(zero)</td>
<td>= bɛ̀- (past perfect)</td>
</tr>
<tr>
<td>perfective-1b</td>
<td>-ṯi-</td>
<td>-ṯi = bɛ̃-</td>
</tr>
<tr>
<td>perfective-1a</td>
<td>-řeṟ-</td>
<td>-řeṟ = bɛ̃-</td>
</tr>
<tr>
<td>perfective-2</td>
<td>-sɔ̀-</td>
<td>-sɔ̀ = bɛ̀-</td>
</tr>
<tr>
<td>recent perfect</td>
<td>-j̱e-</td>
<td>-j̱e = bɛ̀-</td>
</tr>
</tbody>
</table>

negative

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>perfective</td>
<td>-ři-</td>
<td>-ři = bɛ̃-</td>
</tr>
<tr>
<td>imperfective</td>
<td>-ŋɛ́:</td>
<td>-ŋɛ́: = bɛ̃-</td>
</tr>
</tbody>
</table>

The past clitic is also used with statives, both those derived from regular verbs (‘be sitting’, ‘be afraid’) and defective quasi-verbs like ‘be (somewhere)’ (§11.2.2.2), ‘have’ (§11.5.1), and ‘love’ (§17.2.5). The past morpheme is especially useful for statives since they do not make aspectual distinctions.

= bɛ- is followed by the usual 1st/2nd person subject pronominals, and has the usual zero 3Sg form. The 3Pl form is = b-ā. The paradigm is given in (341) in two tonal variants, correlated with the preceding tone. The tonal variants are not audibly distinguished in the 1Pl and 2Pl, which impose their bell-shaped [LHL] pitch, see (30a) in §3.8.3.

(341)  category  form with = bɛ- after H-tone  after L-tone

<table>
<thead>
<tr>
<th></th>
<th>= bɛ-</th>
<th>= bɛ-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>= bɛ̐-y</td>
<td>= bɛ̐-y</td>
</tr>
<tr>
<td>1Pl</td>
<td>= bɛ̐-y.ː</td>
<td>= bɛ̐-y.ː</td>
</tr>
<tr>
<td>2Sg</td>
<td>= bɛ́-w</td>
<td>= bɛ́-w</td>
</tr>
<tr>
<td>2Pl</td>
<td>= bɛ́-w.ː</td>
<td>= bɛ́-w.ː</td>
</tr>
<tr>
<td>3Sg</td>
<td>= bɛ-Ø</td>
<td>= bɛ-Ø</td>
</tr>
<tr>
<td>3Pl</td>
<td>= b-ā</td>
<td>= b-ā</td>
</tr>
</tbody>
</table>
The past clitic itself is not directly negated. Instead, negation is marked in the preceding verb or other predicate (perfective negative, imperfective negative, stative negative, ‘it is not’), and this combination is followed by the conjugated forms of =be- in (341).

Double pronominal conjugation, whereby the subject is marked both on the past clitic and on the preceding verb, is regular for 3Pl in negative inflections, see (343d) and (347c). Double conjugation is is attested as a variant for 1st/2nd person subject categories in these negative inflections, see (343a,c). The issue is moot for the unmarked 3Sg.

10.5.1.1 Past imperfective (positive and negative)

A past imperfective (positive) is formed with the complex =m=bè-. Here =m- is equatable with the imperfective suffix -m- seen above. This leaves =bè- as the specifically past morpheme. The 3Sg form is =m=bè-∅ (compare 3Sg nonpast imperfective -ŋ). The 3Pl form is =m=b-à.

(342) a. àmâyⁿ-àmâyⁿ  ká  kárⁿ-ì=m =bè-à : how? how? there do-Ipfv=Past-2PlSbj ‘What did you-Pl use to do there (= about it)?’

b. kiyā-w [nđòância]  sígè-ì=m =bè-y
   previously [house-]  Dem.InanSg.Loc go.down-Ipfv=Past-1SgSbj
   ‘I used to go down (= lodge) in this house.’

c. bàmâkɔ́  ńmí-ì=m =bè-∅
   Bamako  go-Ipfv=Past-3SgSbj
   ‘He/She used to go to Bamako.’

d. bàmâkɔ́  ńmí-ì=m =b-à
   Bamako  go-Ipfv=Past-3PlSbj
   ‘They used to go to Bamako.’

The past imperfective negative combines the imperfective negative suffix -ŋɔ̀- with the inflected form of =be-. In the 3Pl, both -ŋɔ̀- and =bè- are conjugated, so the 3Pl form is doubly marked (343d). For other nonzero categories, i.e. first and second persons, =bè- is conjugated, and my assistant occasionally also conjugated -ŋɔ̀-, but it seems that the singly-conjugated variants in (343a,c) are preferred. The issue is undecidable for the zero 3Sg subject (343b).

(343) a. kiyā-w [nđòância]  ŋgá
   previously [house-]  Dem.InanSg.Loc
   sígè-ŋɔ̀=bè-y
   or: sígè-ŋɔ̀=y =bè-y
goto-down-IpfvNeg(-1SgSbj)=Past-1SgSbj
   ‘I did not use to go down (= lodge) in this house.’

b. sígè-ŋɔ̀=∅ =bè-∅
go.down-IpfvNeg-3SgSbj=Past-3SgSbj
   ‘He/She did not use to go down.’
c. \( \text{sígè-ŋə} = \text{bè-w}. \)

or: \( \text{sígè-ŋə-w} = \text{bè-w}. \)

go.down-lpfvNeg(-2PlSbj)=Past-2PlSbj

‘You-Pl did not use to go down.’

d. \( \text{sígè-ŋ-ɔ̀} = \text{bɛ̀-w}. \)

go.down-lpfvNeg-3PlSbj=Past-3PlSbj

‘They did not use to go down.’ (double conjugation required)

10.5.1.2 Past forms of stative quasi-verbs and derived statives

The stative quasi-verbs \( \text{bù-} \) ‘be’ (existential-locational) and \( \text{sò-} \) ‘have’, which do not make the perfective/imperfective aspectual distinction, take \( -\text{m}=\text{bɛ̀-} \) for past time reference (\( \text{bù-m}=\text{bɛ̀-}, \text{sò-m}=\text{bɛ̀-} \)). The \( -\text{m} \) is unusual for these quasi-verbs, but suggests a crypto-connection (made overt in the past only) between these statives and the imperfective category of active verbs. However, I will gloss it as Stat[ive] to avoid confusion. Derived statives omit the \( -\text{m} \) in this construction.

The special negative forms of ‘be’ and ‘have’, as well as derived statives, directly take \( =\text{bɛ́-} \), without \( -\text{m}\)-

\begin{align*}
\text{gloss} & \quad \text{regular form} & \text{past} \\
\text{positive} & \quad \text{quasi-verbs (defective, static only)} \\
\text{‘be’} & \text{bù-} & \text{bù-m}=\text{bɛ̀-} \\
\text{‘have’} & \text{sò-} & \text{sò-m}=\text{bɛ̀-} \sim \text{sò}=\text{bɛ̀-} \\
\text{derived statives (reduplicated version)} & \text{‘be sitting/seated’} & \text{éʔèwò-} & \text{éʔèwò}=\text{bɛ̀-} \\
\text{‘want’} & \text{nà-nàmà-} & \text{nà-nàmà}=\text{bɛ̀-} \\
\text{negative} & \text{‘not be’} & \text{ŋgò-} & \text{ŋgò}=\text{bɛ̀-} \\
\text{‘not have’} & \text{sò-ndò-} & \text{sò-ndò}=\text{bɛ̀-} \\
\text{‘not be sitting/seated’} & \text{èwò-ndò-} & \text{èwò-ndò}=\text{bɛ̀-} \\
\text{‘not want’} & \text{nàmà-ndò-} & \text{nàmà-ndò}=\text{bɛ̀-} \\
\end{align*}

For 3Pl, ‘they were not’ is usually the doubly conjugated \( \text{ŋg-å}=\text{bå-} \). ‘They did not have’ is usually the doubly (actually, triply) conjugated \( s\text{-nd-å}=\text{bå-} \). However, singly conjugated 3Pl \( \text{sò-m}=\text{bå-} \) is also attested. Positive 3Pl forms are \( s\text{-å}=\text{bå-} \sim \text{sò-m}=\text{bå-} \) ‘they had’ and \( \text{bù-m}=\text{bå-} \) ‘they were’.

For (positive) ‘have’, the variant without \( -\text{m} \) is used in 3Sg variant \( sò=\text{bê-å} \). For (positive) ‘be’, the \( -\text{m} \) is required in all forms, including 3Sg \( \text{bù-m}=\text{bê-å} \).

10.5.1.3 Past perfect (positive and negative)

The past clitic \( =\text{bɛ̀-} \) can directly follow the bare stem (with lexical tone melody and vocalism), or a suffixed perfective form, in past perfect (positive) sense (‘X had Vb-ed’). This
requires establishment of a separate temporal reference point, before which the eventuality in
question occurred.

In the version without an overt perfective suffix, the bare stem functions as a substitute
for the simple perfective, which does not itself combine with =bê-. The bare stem likewise
replaces the simple perfective before the ‘if’ particle, see discussion following (281) in
§10.2.1.1. The bare stem and the simple perfective are partially identical anyway, except in
the 3Sg form where the simple perfective is the original E/I-stem.

Examples follow with the bare stem (345a), perfective-1a -êrê- (345b),
perfective-1b -tî- (345c), perfective-2 -sô- (345d), and recent perfect jê- (345e).
Perfective-1b -tî- occurs here in H-toned form, as in some verb-chains (§15.1.10).

(345)    a.  bâyâ = bê-y
        be.cured=Past-1SgSbj
        ‘I had been cured.’

    b.  gõ-êrê = b-å
        go.out-Pfv1a=Past-3PlSbj
        ‘They had gone out.’

    c.  ńjì-ŋ    sùyâ-ti = bê-∅
        1Sg-Acc    hit-Pfv1b=Past-3SgSbj
        ‘He/She had hit me.’

    d.  ńjì-ŋ    yi:sô = bê-∅
        1Sg-Acc    see-Pfv2=Past-3SgSbj
        ‘He/She had seen me.’

    e.  wàgàtì=  ŋné    ye:s-m=sè        gà,
        timeL=  3SgSbj    come-Pfv-while.Past    in,
        jà:       kɔ́:   jê = bê-y:.
        meal    eat    RecPrf=Past-1PlSbj
        ‘When he was coming, we had already eaten.’

The past perfect negative is formed by adding conjugated =bê- to perfective negative
suffix -rî-. The latter takes its usual 3Pl form -ǹdú-, but is otherwise invariant before =bê-.
The paradigm is therefore (346).

(346) category        past perfect negative

    1Sg     -rî = bê-y
    1Pl     -rî = bê-y:.
    2Sg     -rî = bê-w
    2Pl     -rî = bê-w:.
    3Sg     -rî = bê-∅
    3Pl     -ǹdú = b-å

Examples are in (347).
(347) a. wàgàtì time: 3SgSbj come-Ipfv-while.Past Loc
     ñà: kɔ̀-rf = bè-y-Ø
     meal eat-PfvNeg=Past-1PlSbj
     ‘When he came, we had not (yet) eaten.’

b. ñà: kɔ̀-rf = bè-∅
     meal eat-PfvNeg=Past-3SgSbj
     ‘He/She had not (yet) eaten.’

c. ñà: kɔ̀-ndú = bè-
     meal eat-PfvNeg,3PlSbj=Past-3PlSbj
     ‘They had not (yet) eaten.’

Past perfect verb forms with = bè- are also used in both the antecedent and consequent clauses of counterfactual conditionals (§16.4), as in (348).

(348) ó: ñy = bè-y ndè, bàyá-èrè = bè-y
     medication take=Past-1SgSbj if, be.cured-Pfv1a=Past-1SgSbj
     ‘If I had taken the medicine, I would have been cured.’

10.5.1.4 Past passive (positive and negative)

The past passive consists morphologically of H-toned passive -yè= (§9.3.2), imperfective -m- (< /-m/-) except in the 3Pl, and the conjugatable past clitic = bè-. The past clitic is L-toned here, reflecting the underlying L-tone of /-m/-.

The pronominal paradigm is (349).

(349) category past passive

1Sg -yè=m=bè-y
1Pl -yè=m=bè-y-Ø
2Sg -yè=m=bè-w
2Pl -yè=m=bè-w-Ø
3Sg -yè=m=bè-Ø (< /= ŋ= bè-Ø)
3Pl -yè=Ø=bè-à
InanSg -yè=ù=bè-à
InanPl -yè=ù=bè-à (or same as 3Pl)

Pronominal-subject inflection occurs on past = bè-, and for inanimates and for 3Pl also on passive -yè=. The expected #=ŋ= bè- sequence (3SgSbj plus Past) is pronounced =m=bè- with Nasal-Assimilation, and therefore falls together with =m=bè- in the first and second person forms.

Examples of the past passive are in (350).
(350)  a. ſ̄dōL kémé-yé = w̄ = b̄̄-Ø
    houseL build-Pass=it.is.InanSbj=Past-3SgSbj
    ‘A/The house had been built.’

    b. tŋ̄-yé = Ø = b̄-à
    write-Pass=it.is.3PlSbj=Past-3PlSbj
    ‘They (= books) had been written.’

    c. p̣rg̣L sémé-yé = þ̄ = b̄-Ø
    sheepL slaughter-Pass=it.is.3SgSbj=Past-3SgSbj
    ‘A/The sheep-Sg had been slaughtered.’ (from /… = ŏ̄ = b̄-/)

    d. [p̣rg̣L bû:] sémé-yé = Ø = b̄-à
    [sheepL Def.AnPl] slaughter-Pass=it.is.3PlSbj=Past-3PlSbj
    ‘The sheep-Pl had been slaughtered.’

The past passive negative is based on combining either of the two passive negative constructions, see (350) with past = b̄- (351a-b).

(351)  a. tŋ̄-yé = w̄ = ndō-Ø = b̄-Ø
    write-Pass=it.is.InanSbj=it.is.not-Past-3SgSbj
    ‘It had not been written.’

    b. tŋ̄-r̄i-yé = w̄ = b̄-Ø
    write-PfvNeg-Pass=it.is.InanSbj=Past-3SgSbj
    ‘It has not been written.’

10.5.2 ‘Still’, ‘up to now’, (not) yet’

‘Still’ and ‘up to now, for the present, so far’ can be expressed by [nīg̣eȳ a yŋ̄a], instrumental PP (§8.1.2) from nīg̣eȳ ‘now’. If the predicate is negative, the idiomatic translation is ‘not (yet)’.

(352)  a. [nīg̣eȳ a yŋ̄a] [ð̄L gō] bű-Ø
    [now Inst] [fieldL Loc] be-3SgSbj
    ‘He/She is still in the fields.’

    b. [nīg̣eȳ a yŋ̄a] yè-r̄i-Ø
    [now Inst] come-PfvNeg-3SgSbj
    ‘Up to now he/she hasn’t come.’
    (= ‘He/She hasn’t come yet.’)
10.6 Imperatives and hortatives

10.6.1 Imperatives and prohibitives

10.6.1.1 Positive imperatives (imperative stem, plural -ndì)

Positive imperatives have distinctive forms for 2Sg and 2Pl subject. Comparison with the hortative suggests that the proper category is addressee number (singular versus plural) rather than subject.

The singular-addressee imperative is segmentally the A/O-stem, with no suffix, except for light i-final verbs, which keep the final i (as in the bare stem). Tonally, the imperative ends in an HL-pattern. For heavy non-i-final verbs, and for substantially all i-final verbs, the onset respects the /H/ versus /LH/ melodic distinction, resulting in {HL} versus {LHL} imperatives. Light non-i-final verbs, on the other hand, merge /LH/ into /H/ and have {HL} imperatives.

The plural-addressee imperative adds suffix allomorph -ndì to the singular imperative; it has also been heard as -nì after longer stems (353). I gloss it as “PlAddr” in interlinears.

(353) number imperative singular addressee plural addressee

a. ‘run’ yógɔ́ yógɔ́-ndì [jáŋgɔ́ndì]
   ‘go out’ gò: gò:-ndì
   ‘buy’ éwā éwā-ndì
   ‘go’ ńnō ńnō-ndì

b. ‘make weep’ kóyó-mɔ̂ kóyó-mɔ̂-ndì
   ‘return’ bïndò bïndò-ndì
   ‘open’ pï:.rɔ̂ ńnì-ndì

Examples with objects, showing that transitive verbs remain transitive in imperative clauses, are in (354). In the free translation, -2Sg or -2Pl is added to the verb to indicate subject number.

(354) a. ńjì-ń júrɔ́
   1Sg-Acc look.at.Imprt
   ‘Look-2Sg at me!’

b. ńnë-ń gúyɔ́-ndì
   3Sg-Acc hit.Imprt-PlAddr
   ‘Hit-2Pl him/her/it!’

Both light and heavy non-i-final stems with +ATR vocalism have imperatives ending in o (355). These examples are compatible with the A/O-stem and with the tonal patterns described above, though not all input types are represented here.

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Non-\(i\)-final verbs of two or more syllables whose base stem ends in \(e\) shift it to \(a\) in the imperative, as usual in the A/O-stem. \(\text{ǹdè\ 'go up'}\) is counted as bisyllabic for this purpose (356a). Monosyllabic \(\text{Cè\ 'go up'}\) have diphthongal imperatives of the form \(\text{Cèa}\). One seemingly monosyllabic verb, \(\text{tè\ 'lay (mat)'}\), also has a bisyllabic imperative variant \(\text{Cèy(a)}\) (356b). Cognates of \(\text{tè\ 'lay (mat)'}\) in some closely related languages have a medial semivowel and count as bisyllabic, e.g. Ben Tey \(\text{tèy}(i)\). Light verbs with /LH/ melody (‘go up’, ‘fall’, ‘look’) merge with /H/ melody tonally.

\[\begin{array}{|l|l|l|}
\hline
\text{355} & \text{gloss} & \text{bare stem} & \text{imperative} \\
\hline
a. ‘bring’ & jè: & jò: \\
‘come’ & yè: & yò: \\
\hline
b. ‘go’ & ñnè & ñnò \\
\hline
c. ‘do well’ & kè:ndè & kè:ndò \\
‘fight’ & jòríyè & jòríyô \\
‘jump off’ & pèré & pèrò \\
\hline
\end{array}\]

\(i\)-final verbs are featured in (357). Light stems keep the final \(i\) in the imperative, while heavy stems shift to the A/O-stem. The difference in onsets between /LH/ and /H/ melodies is respected in imperatives of both light and heavy verbs, resulting in \{LHL\} and \{HL\} imperatives. ‘See’ (357a) has \<LHL\> in a single syllable.

\[\begin{array}{|l|l|l|}
\hline
\text{356} & \text{gloss} & \text{bare stem} & \text{imperative} \\
\hline
a. ‘go up’ & ñdè & ñdà \\
‘build’ & kèmè & kèmà \\
‘fall’ & yègè & yègà \\
‘look’ & ñìrèè & ñìrèà \\
\hline
b. ‘lay (mat)’ & tè: & tèyà ~ tèá \\
‘shine’ & kè: & kèà \\
‘knock off’ & pè: & pèà \\
‘get old’ & pè: & pèà \\
\hline
\end{array}\]

\(i\)-final verbs are featured in (357). Light stems keep the final \(i\) in the imperative, while heavy stems shift to the A/O-stem. The difference in onsets between /LH/ and /H/ melodies is respected in imperatives of both light and heavy verbs, resulting in \{LHL\} and \{HL\} imperatives. ‘See’ (357a) has \<LHL\> in a single syllable.

\[\begin{array}{|l|l|l|}
\hline
\text{357} & \text{Imperatives of } i\text{-final verbs} \\
\hline
\text{gloss} & \text{bare stem} & \text{imperative} \\
\hline
a. \text{Ci\ and Ciy(i)} & \\
/LH/ melody & \text{yì:} & \text{yì:} \\
\text{‘see’} & \text{tìyì} [tì:] & \text{tìy} [tì:] \\
/H/ melody & \\
\text{‘send’} & \\
\hline
\end{array}\]
b. CvCi and CvCCi
   /LH/ melody
   ‘cure’ jəŋí jəŋí
   ‘sing’ nʊŋí nʊŋí
   ‘cover’ dɛw (< /dɛw/) dɛwí
   ‘laugh’ måndí måndí
   ‘step in’ nàmbí nàmbí
   /H/ melody
   ‘speak’ tịŋí tịŋí
   ‘put’ kúrⁿí kúrⁿí
   ‘tie’ págí págí
   ‘do’ kúrⁿí kúrⁿí
   ‘put up’ nàŋí nàŋí
   ‘find’ tèmbí tèmbí
   ‘put lid’ tǔmbí tǔmbí
   ‘urinate’ ɔ́njí ɔ́njí

c. nCi
   /H/ melody
   ‘give’ ńdí ńdí

d. Cv:Ci
   underived, /LH/ melody
   ‘call’ nà:rⁿí nà:rⁿí
   ‘help’ bà:rí bà:râ
   ‘take away, convey’ gè:rⁿí gè:rⁿí
   ‘gather’ mɔ:ndí mɔ:ndɔ
   ‘think’ mà:ndí mà:ndà
   mediopassive, /LH/ melody
   ‘carry on head’ dù:yí dù:yâ

e. trisyllabic
   /LH/ melody
   ‘go around’ gəŋírⁿí gəŋírⁿí
   ‘winnow’ bègírí bègírá ~ bègíº
   ‘get ready’ dàgírí dàgírá
   ‘get rid of’ màrà-gí màrà-gâ
   ‘remember’ ɪlì-rí ɪlì-râ
   /H/ melody
   ‘rest’ súmírⁿí súmírⁿí
   ‘demolish’ wòrò-gí wòrò-gô
   ‘get up’ ɪrí-yí [ɪfr:] ɪrí-yâ
   ‘have fun’ kɛmírⁿí kɛmírⁿí ~ kɛmírⁿº

If the bare stem of an i-final verb contains only high vowels in the bare stem, the imperative ends in a vowel from the A/O-stem trio \{a ɔ o\} (358).
(358) Imperatives of stems with only high vowels
gloss bare stem imperative

a. imperative ends in \( a \)
   ‘remember’ \( iñ-\text{rì} \) \( iñ-\text{râ} \)
   ‘get up’ \( ír-\text{î} \) (\( <ír-\text{îyî} \)) \( ír-\text{yâ} \)
   ‘accompany’ \( íñ-\text{gîrî} \) \( íñ-\text{gîrâ} \)

b. imperative ends in \( o \)
   ‘rest’ \( sùmûr-\text{î} \) \( sùmûr-\text{o} \)

c. imperative ends in \( ɔ \)
   ‘skim’ \( kùgîrî \) \( kùgûro \)

Verbs that already end in \( \{ o \ ɔ \ a \} \) are segmentally stable as we go from the bare stem to the imperative. This remark applies to monosyllabics (359a) as well as to heavier stems (359b).

(359) gloss bare stem imperative

a. ‘drink’ \( nɔː \) \( nɔː \)
   ‘reply’ \( sá \) \( sá \)
   ‘go out’ \( gõː \) \( gõː \)

b. ‘run’ \( Ỹgõː \) \( Ỹgõː \)
   ‘bite’ \( kùwó \) \( kùwô \)
   ‘touch’ \( tâwâ \) \( tâwâ \)

More examples of light non-\( i \)-final stems, showing the \( \{\text{HL}\} \) overlay overriding the lexical melody, are in (360).

(360) Imperatives of light non-\( i \)-final verbs showing tones
gloss bare stem imperative

a. \( \text{Cv:} \)
   /\( H \)/ melody
   ‘reply’ \( sá \) \( sá \)
   /\( LH \)/ melody
   ‘go out’ \( gõː \) \( gõː \) (contrast \( gõː \) ‘fire’)
   ‘drink’ \( nɔː \) \( nɔː \)

b. \( \text{CvCv (including nCv)} \)
   /\( H \)/ melody
   ‘go’ \( Ỹnë \) \( Ỹnö \)
   ‘get bogged’ \( pûdë \) \( pûdë \)
The two verbs in (361a) are, or at least were, Cv-(N)CV stems including a submiminal Cv-stem and a derivational suffix. They are irregular in preserving the initial L-tone in the imperative. Other Dogon cognates of ‘take out’ have similar tonal peculiarities.

The two verbs in (371b) are CvCCV stems with nonhomorganic medial CC cluster, usually a sign of syncope from a trisyllabic input. Some cognates remain trisyllabic: for ‘sit down’, Najamba óbíyíóbíyè, Yanda Dom óbí-yó-; for ‘crumple’, Jamsay kómóñó-, Togo Kan kúmjó-, Toro Tegu kúmjó (imperative kúmjó). In Nanga they seem to be treated like CvNCV stems with homorganic nasal-voiced stop clusters, hence prosodically light.

(361) Tonally irregular imperatives of CvCv and CvCCv stems

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. initial L-tone of lexical {LH} verb preserved mediopassive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘lie down’</td>
<td>bi-yé</td>
<td>bi-yé</td>
</tr>
<tr>
<td>Cv-ndv (frozen causative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘take out’</td>
<td>gó-ndó</td>
<td>gó-ndó</td>
</tr>
<tr>
<td>b. H.&lt;HL&gt; instead of H.L sequence for CvCCv mediopassive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘sit’</td>
<td>éw-yé</td>
<td>éw-yó</td>
</tr>
<tr>
<td>Cvnmjv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘crumple’</td>
<td>kúmjó</td>
<td>kúmjó</td>
</tr>
</tbody>
</table>

+ATR heavy stems are in (362). As usual, these stems reject final i in the bare stem and imperative, and have imperatives ending in o.

(362) Imperatives of heavy non-i-final verbs (+ATR)

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cv:Cv and Cv:CCv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘weigh’</td>
<td>pè:sé</td>
<td>pè:sò</td>
</tr>
<tr>
<td>‘do well’</td>
<td>kè:ndé</td>
<td>kè:ndó</td>
</tr>
</tbody>
</table>
\(/\text{LH/ melody}\)

- ‘stalk’ \(yõːrõ\)
- ‘file’ \(dî:sô\)

b. \(\text{CvCvCv}\)
\(/\text{H/ melody}\)

- ‘screw in’ \(pîgîrõ\)
- ‘rub’ \(lîgîsô\)

\(/\text{LH/ melody}\)

- ‘fight’ \(jîrîyõ\)
- ‘lean’ \(dîsîyõ\)

More \(i\)-final verbs are in (363). Those with /LH/ meolody keep the initial L-tone in the imperative. Light verbs have imperatives segmentally identical to the bare stem; heavy verbs switch to the A/O-stem. Causative -\(mî\) is discussed separately below.

(363) Imperative of \(i\)-final verbs showing tones

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>imperative</th>
</tr>
</thead>
</table>
| a. \(\text{Cvyi}\), tonally irregular imperatives
\(/\text{H/ melody}\)
- ‘go in’ \(nûyⁿ\)
- ‘hear’ \(nûyⁿ\)
| b. \(\text{CvCi}\)
\(/\text{H/ melody}\)
- ‘cross’ \(tânj\)
- ‘affix’ \(tǎrî\)
- ‘put up on’ \(nânj\)
- ‘cure’ \(jânj\)
- ‘cover’ \(dēw (\text{< /dēw/})\)
| c. \(\text{CvCCi}\)
\(/\text{H/ melody}\)
- ‘pinch’ \(kémñi\)
- ‘laugh’ \(màndî\)
| d. \(\text{Cv:Ci and Cv:CCi}\)
\(/\text{H/ melody}\)
- ‘scratch’ \(kâ:sî\)
- ‘chase’ \(lâ:rî\)
- ‘mix’ \(gâ:r^nî\)
- ‘take away, convey’ \(gê:r^nî\) |
‘call’  
‘gather’

\begin{tabular}{ll}
\hline
\text{e. trisyllabic} & \text{/H/ melody} \\

text & text \\
\hline
‘have fun’ & kěmír\text{’}á \\
\hline
‘winnow’ & bègír\text{’}á \\
\end{tabular}

Causative suffix -\text{mí} is treated tonally like a chained verb stem in the imperative. For example, in imperative kóyó-mə ‘make-2Sg weep!’ and its suffixed plural-addresssee form kóyó-mə-
\text{ndi}, the causative suffix has its own \{HL\} tone overlay, while the preceding stem has the same form it would have as a bare stem. If kóyó-mə ‘make weep’ were treated as an ordinary trisyllabic, the H-tone would extend from the left edge only to the second syllable, giving the incorrect #kóyó-mə, #kóyó-mə-
\text{ndi}.

\subsection*{10.6.1.2 Prohibitives (-\text{rá}, -\text{ndá}, -\text{ndà}:)}

The prohibitive is the negative imperative.

\begin{itemize}
\item (364)  
té: nɔ:-\text{r}‘â-\text{ndi}  
tea drink-Proh-Pl.Addr  
‘Don’t-2Pl drink the tea!’
\end{itemize}

The prohibitive is formed from mono- and bisyllabic stems with a suffix -\text{rá} that has a variant -\text{ndá}. The form -\text{rá} is usual in Anda, but a Wakara informant generally used -\text{ndá}. This suffix is distinct in form from other negative suffixes on verbs (perfective negative -\text{rí}-, imperfective negative -ŋɔ̀:). The suffix -\text{rá} undergoes Nasalization-Spreading to -\text{r}‘â under the influence of a preceding nasal or nasalized segment, as does perfective negative -\text{rí}-. For allomorph -\text{ndá}: with longer stems, see below.

The plural prohibitive adds plural-addresssee -\text{ndi}, sporadically reduced to -nì, to the singular prohibitive.

Examples with monosyllabic stems are in (365). The lexical tone melody, /H/ versus /LH/, is respected in the prohibitive.

\begin{itemize}
\item (365)  
gloss & bare stem & imperative  
singular addresssee & plural addresssee  
\hline
‘go out’ & gò: & gò:-râ & gò:-râ-\text{ndi}  
‘drink’ & nɔ: & nɔ:-\text{r}‘â & nɔ:-\text{r}‘â-\text{ndi}  
‘bring’ & jè: & jè:-râ & jè:-râ-\text{ndi}  
‘see’ & yì: & yì:-râ & yì:-râ-\text{ndi}  
‘reply’ & sà: & sà:-râ & sà:-râ-\text{ndi}  
‘lay (mat)’ & té: & té:-râ & té:-râ-\text{ndi}  
\end{tabular}

Since the plural-addresssee form is always easily predictable from the singular, I will omit the plurals in the remaining tables.
For bisyllabics with just two vocalic moras (no long vowel), the stem-final vowel is replaced by i (366a-b). The i is usually syncopated when the syllabic and segmental conditions permit, i.e., after certain unclustered sonorants, especially semivowels and r (366c). The suffix is usually heard as -ndá after a rhotic (366c). A syllable-final /iy/ resulting from syncope contracts phonetically to a long [iː] (366d) by Monophthongization. Likewise, a syllable-final /uw/ resulting from syncope contracts to a long [uː], though in one case (‘bite’) my assistant preferred a variant with [u] (‘bite’, 366e). Throughout (366), the lexical tone is respected in the prohibitive.

(366) Prohibitive of light non-i-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ‘tie’</td>
<td>págí-</td>
<td>págí-rá</td>
</tr>
<tr>
<td>‘cut’</td>
<td>késé-</td>
<td>késí-rá</td>
</tr>
<tr>
<td>‘build’</td>
<td>kémé-</td>
<td>kémí-r“á</td>
</tr>
<tr>
<td>‘throw’</td>
<td>gisé-</td>
<td>gisi-rá</td>
</tr>
<tr>
<td>‘run’</td>
<td>yɔ́ɡɔ-</td>
<td>yɔ́ɡí-rá</td>
</tr>
<tr>
<td>‘fall’</td>
<td>yègè-</td>
<td>yègí-rá</td>
</tr>
<tr>
<td>‘go back’</td>
<td>bìndé-</td>
<td>bìndí-rá</td>
</tr>
<tr>
<td>‘nibble’</td>
<td>jàmb-</td>
<td>jàmbí-rá</td>
</tr>
<tr>
<td>‘dig’</td>
<td>gùnjó-</td>
<td>gùnji-rá</td>
</tr>
</tbody>
</table>

| b. ‘go’    | ònè-      | ònì-r“á    |
| ‘go up’   | òndé-     | òndì-rá    |
| c. ‘work’  | bìrè-     | bìr-ndá    |
| ‘begin’   | tɔ́rɔ-     | tɔ́r-ndá   |
| ‘sell’    | tùrɔ-     | tùr-ndá    |
| ‘skin’    | ūrɔ-      | ūr-ndá     |
| ‘hit’     | súyɔ-     | súy-rá     |
| ‘buy’     | éwɛ́-     | éw-rá      |
| ‘look’    | ɲìrɔ̄́kɛ́- | ɲìrɔ́̄’i-rá |
| ‘give birth’ | nàrɔ́-   | nàrɔ́i-rá～ nàn-ðá |
| d. ‘kill’  | giyè-     | giy-rá     | [giːr] |
| ‘lie down’ | biyè-     | biy-rá     | [biːˌr] |
| e. ‘fan’   | jùwɔ́-     | jùw-rá     | [dʒʊːr] |
| ‘brush’   | bùwɔ́-     | bùw-rá     | [bʊːr] |
| ‘bite’    | kùwɔ́-     | kùy-rá     | (kùw-rá OK but dispreferred) |

Heavy stems, those with three or more vocalic moras (Cv:Cv-, CvCvCv-), that end in a non-high vowel are in (367). All have +ATR vowels. The prohibitive suffix in this case is -ndá; which is heard in L-toned form word-finally. It combines with the plural suffix as -ndá-nd, bringing out a latent rising tone that is also heard when a clause-final particle is added. The final vowel of the stem is not shifted to i.
(367) Prohibitive of heavy non-\(i\)-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ‘do well’</td>
<td>ké:ndé-</td>
<td>ké:ndé-ndâ:</td>
</tr>
<tr>
<td>b. ‘dream’</td>
<td>mònjúró-</td>
<td>mònjúró-ndâ:</td>
</tr>
<tr>
<td>‘hiccup’</td>
<td>bègíré-</td>
<td>bègíré-ndâ:</td>
</tr>
<tr>
<td>c. ‘screw in’</td>
<td>pígíré-</td>
<td>pígíré-ndâ:</td>
</tr>
<tr>
<td>‘poke’</td>
<td>dúsúró-</td>
<td>dúsúró-ndâ:</td>
</tr>
</tbody>
</table>

\(i\)-final stems are in (368). The tonology and suffixal allomorphy are consistent with those seen above for non-\(i\)-final verbs. The suffix is -ná (nasalized to -nâ after a nasal syllable) occurs with light stems, including CvCCv-, but -ndâ: after heavy stems, including Cv:Cv-. Causative -mî- tends to be reduced to segmental zero before -ndâ:, though a fuller pronunciation as -m-ndâ: is also possible (368g).

(368) Prohibitive of \(i\)-final verbs

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ‘give’</td>
<td>ŋdí-</td>
<td>ŋdí-rá</td>
</tr>
<tr>
<td>b. ‘speak’</td>
<td>tíŋí-</td>
<td>tíŋí-r(i)á</td>
</tr>
<tr>
<td>‘perpetrate’</td>
<td>bògí-</td>
<td>bògí-rá</td>
</tr>
<tr>
<td>c. ‘cover’</td>
<td>dëwí-</td>
<td>dëw-rá</td>
</tr>
<tr>
<td>‘go in’</td>
<td>nüy(i)í-</td>
<td>nüy(i)í-r(a)á</td>
</tr>
<tr>
<td>‘hear’</td>
<td>nüy(i)í-</td>
<td>nüy(i)í-r(a)á</td>
</tr>
<tr>
<td>d. ‘open wide’</td>
<td>gòmbí-</td>
<td>gòmbí-rá</td>
</tr>
<tr>
<td>‘find’</td>
<td>tèmbí-</td>
<td>tèmbí-rá</td>
</tr>
<tr>
<td>e. ‘help’</td>
<td>bâ:rö-</td>
<td>bâ:rö-ndâ:</td>
</tr>
<tr>
<td>‘stop’</td>
<td>ë-ë-yí-</td>
<td>ë-ë-yâ-ndâ:</td>
</tr>
<tr>
<td>‘gather’</td>
<td>më:ndi-</td>
<td>më:ndi-ndâ:</td>
</tr>
<tr>
<td>‘open’</td>
<td>pí-ë(i)í-</td>
<td>pí-ë(i)í-ndâ:</td>
</tr>
<tr>
<td>f. ‘uncover’</td>
<td>tímbí-rí-</td>
<td>tímbí-r-ndâ:</td>
</tr>
<tr>
<td>‘accompany’</td>
<td>ìngírî-</td>
<td>ìngírî-ndâ:</td>
</tr>
<tr>
<td>‘scrub’</td>
<td>púgúsí-</td>
<td>púgúsí-ndâ:</td>
</tr>
<tr>
<td>‘get ready’</td>
<td>dàgírî-</td>
<td>dàgírî-ndâ:</td>
</tr>
<tr>
<td>g. ‘make go out’</td>
<td>gó:úmeros</td>
<td>gó:úmeros-ndâ:</td>
</tr>
</tbody>
</table>
10.6.2 Positive hortatives (-má, plural -màyⁿ)

For singular addressee (speaker and one addressee), the hortative (‘Let’s …!’) is expressed by suffix -má added to the non-high stem. For larger numbers (speaker and two or more addressees), the form is -màyⁿ. Since this marks addressee (rather than subject) number, subject (usually but not always 1Pl) and addressee must be distinguished. Both imperatives and hortatives have morphologically marked addressees. Hortatives, but not imperatives, may also have an overt subject.

<table>
<thead>
<tr>
<th>(369) gloss</th>
<th>hortative singular addressee</th>
<th>plural addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘run’</td>
<td>yɔ̀gɔ́-má</td>
<td>yɔ̀gɔ́-màyⁿ</td>
</tr>
<tr>
<td>‘go out’</td>
<td>gɔ̀-má</td>
<td>gɔ̀-màyⁿ</td>
</tr>
<tr>
<td>‘buy’</td>
<td>ɛ́wɛ́-má</td>
<td>ɛ́wɛ́-màyⁿ</td>
</tr>
<tr>
<td>‘go’</td>
<td>ńné-má</td>
<td>ńné-màyⁿ</td>
</tr>
</tbody>
</table>

Further examples showing the hortative of verbs with final non-high vowel are in (370). As the singular-addressee form is predictable from the more common plural-addressee hortative, only the latter is shown. The hortative requires the non-high stem, which for non-ᵢ-final verbs is identical to the bare stem (370).

(370) Hortative of non-ᵢ-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>stem</th>
<th>hortative (plural addressee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ‘shave’</td>
<td>ká:-</td>
<td>ká:-màyⁿ</td>
</tr>
<tr>
<td>‘drink’</td>
<td>nʒ:-</td>
<td>nʒ:-màyⁿ</td>
</tr>
<tr>
<td>‘come’</td>
<td>yɛ:-</td>
<td>yɛ:-màyⁿ</td>
</tr>
<tr>
<td>b. ‘go’</td>
<td>ńné-</td>
<td>ńné-màyⁿ</td>
</tr>
<tr>
<td>‘go up’</td>
<td>ńdɛ́-</td>
<td>ńdɛ́-màyⁿ</td>
</tr>
<tr>
<td>c. ‘steal’</td>
<td>gùrọ́-</td>
<td>gùrọ́-màyⁿ</td>
</tr>
<tr>
<td>‘run’</td>
<td>yɔ̀gɔ́-</td>
<td>yɔ̀gɔ́-màyⁿ</td>
</tr>
<tr>
<td>‘spray’</td>
<td>písé-</td>
<td>písé-мàyⁿ</td>
</tr>
</tbody>
</table>

ᵢ-final verbs, whether light or heavy, shift to the non-high stem. Stems with only u have final ə, and those with only i have final e (371). The lexical tone melody is respected.

(371) Hortative of ᵐ-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>stem</th>
<th>hortative (plural addressee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ‘see’</td>
<td>yɛ́-</td>
<td>yɛ́-màyⁿ</td>
</tr>
</tbody>
</table>
b. ‘give’  ǹdí-  ñdí-màýn

c. ‘go in’  núy”(i)-  nụ́y”n-màýn
‘hear’  núy”(i)-  nụ́y”s-màýn
‘speak’  tý(i)-  tíyé-màýn
‘cover’  děwí-  děwé-màýn
‘perpetrate’  bōgí-  bōgós-màýn
‘put down’  dúŋí-  dúŋő-màýn

d. ‘find’  těmbí-  těmbé-màýn
‘open wide’  gəmbí-  gəmbó-màýn
‘put lid on’  tímbí-  tímbé-màýn

e. ‘help’  bá:rí-  bá:rá-màýn
‘take away, convey’  gě:r”i-  gě:r”e-màýn
‘stop’  i:-yí-  i:-yé-màýn
‘gather’  mũ:ndí-  mũ:ndí-màýn

f. ‘scrub’  pũgúṣí-  pũgúsós-màýn
‘have fun’  kémír”i-  kémír”e-màýn
‘get ready’  dágírí-  dágírá-màýn

The implied subject is normally the speaker and one or more listeners. However, a subject of another category (expressed overtly by a preverbal subject pronoun) is allowed, as long as the authorization for the event is controlled by the joint will of speaker and listener(s). For example, in K’s turn in (372) we have a 3Sg subject pronoun referring to a song that the interlocutor C has offered to sing. Background note to (372): telling a story or a riddle, or singing a song, is preceded by a request for authorization by the audience.

(372) C:  núŋá nxé  núŋí-m-Ø
[Def.AnSg] sing-Ipfv-1SgSbj
‘I’ll sing the song.’

K:  á:  núŋá nxé  ńné  ńné-mà ah!  3SgSbj  go-Hort
[Def.AnSg]  song
‘Ah, let’s (let) that song go (ahead)!’ (2004.02.02)

This is not the same as the quoted imperative verb form (§10.6.4), which is used in wishes that involve a distinct agent not directly under the control of the current speech-event participants, and in quoted imperatives.

For quoted hortatives with -ŋ replacing hortative -má or -mánýn, see §10.6.5.

10.6.3  Hortative negative (-rá-má and variants, plural -rá-màýn)

The prohibitive (i.e. negative imperative) form of the verb, with suffix -rá-, -ndá-, or -ndà:- (word-final ndà:), is followed by the (positive) hortative suffix -má (singular addressee) or -mánýn (plural addressee) to form the hortative negative. Some examples showing the morphological connection to the (singular-addressee) prohibitive are in (373).
### Examples are (374).

<table>
<thead>
<tr>
<th>(373)</th>
<th>gloss</th>
<th>bare stem</th>
<th>prohibitive</th>
<th>hortative negative (plural addressee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>‘go out’</td>
<td>gô:</td>
<td>gô:-rá</td>
<td>gô:-rá-mây&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>‘drink’</td>
<td>nô:</td>
<td>nô:-r’á</td>
<td>nô:-r’á-mây&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>‘tie’</td>
<td>págí-</td>
<td>págí-rá</td>
<td>págí-rá-mây&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>‘go’</td>
<td>ŋńí-</td>
<td>ŋńí-r’á</td>
<td>ŋńí-r’á-mây&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>‘begin’</td>
<td>tór-</td>
<td>tór-ndxá</td>
<td>tór-ndxá-mây&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>c.</td>
<td>‘screw in’</td>
<td>pígíré-</td>
<td>pígíré-ndxá:</td>
<td>pígíré-ndxá:-mây&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

For quoted negative hortatives with -ndà: replacing hortative negative -ndà:-má or (-ndà:-mây<sup>a</sup>, see §10.6.5.

### 10.6.4 Quoted imperative (I-stem)

The quoted imperative (QuotImprt) verb form occurs in imprecations, i.e. wishes, blessings, and curses involving third-person agents, e.g. the type ‘may God (Verb) you!’ It is also the regular form of the verb in jussive complements (quoted imperatives), as in ‘He tells (commands) you/me/him to come’. Imprecations may also be modeled as covert quoted imperatives, with some peculiarities. The quoted imperative (unlike the regular imperative) is often followed by quotative particle wa. The tone of wa is useful in determining the underlying tone of the final vowel of the verb, as CÎ becomes CÎ wà, while CÍ becomes CÍ wá, cf. Atonal-Morpheme Tone-Spreading (§3.7.4.4). Actually, the i often assimilates and appears as û before wà or wá.

The subject of a quoted imperative verb may be of any pronominal person, and no distinction is made in the verb between singular or plural (subject or addressee). For example, the quoted imperative can be used to request confirmation or clarification of commands addressed by someone else to the current speaker. If someone signals to X at a distance or makes an unclear verbal command to X, X can inquire: (I."") mângörô jê-y mâ ‘(do you command/request/want) me to bring mangoes?’

The positive quoted imperative consists of the I-stem, but ends in e for most nonmonosyllabic +ATR stems. The monosyllabic version is Cv-y. For many verbs, the quoted imperative differs segmentally from the regular imperative. The quoted imperative respects the distinction between /LH/ and /H/ melodies. For non-i-final verbs, the tonal outputs are {H}, {HL}, {LH}, and {LHL}. {H} is limited to /H/-class monosyllabics of the form Cv-y. {LH} is limited to light Cv-y and CvCÍ forms, i.e. those where the H-tone
occupied only one mora. Longer stems are \{HL\} or \{LHL\} depending on their lexical melody. For these stems, the final syllable is \(<HL>\) if preceded by just one H-toned mora, and L if preceded by more than one. All \(i\)-final verbs have a final L-tone element, so their only possibilities are \{HL\} and \{LHL\}, depending on lexical melody. The irregular stem ‘bring’ has \(<LHL>\)-toned imperative \(jě:y\) (375b).

(375) Quoted imperative positive for non-\(i\)-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>QuotImprt</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. (Cv:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘shave’</td>
<td>(ká:-)</td>
<td>(ká-y)</td>
</tr>
<tr>
<td>‘spend night’</td>
<td>(ná:-)</td>
<td>(ná-y^#)</td>
</tr>
<tr>
<td>‘reply’</td>
<td>(sá:-)</td>
<td>(sá-y)</td>
</tr>
<tr>
<td>‘eat’</td>
<td>(kš:-)</td>
<td>(kš-y)</td>
</tr>
<tr>
<td>b. (Cē:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘arrive’</td>
<td>(dš:-)</td>
<td>(dš-y)</td>
</tr>
<tr>
<td>‘go out’</td>
<td>(gō:-)</td>
<td>(gō-y)</td>
</tr>
<tr>
<td>‘come’</td>
<td>(yē:-)</td>
<td>(yē-y)</td>
</tr>
<tr>
<td>irregular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘bring’</td>
<td>(jē:-)</td>
<td>(jē-y)  (with enclitic: (jē:wà))</td>
</tr>
<tr>
<td>c. (nCv:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘go’</td>
<td>(ńné:-)</td>
<td>(ńńi)</td>
</tr>
<tr>
<td>‘go up’</td>
<td>(ńdē:-)</td>
<td>\ńdî</td>
</tr>
<tr>
<td>d. (CvCv:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘spray’</td>
<td>(písé-)</td>
<td>(písí)</td>
</tr>
<tr>
<td>‘pound’</td>
<td>(tóró-)</td>
<td>(tóři)</td>
</tr>
<tr>
<td>‘jump off’</td>
<td>(péré-)</td>
<td>(pérí)</td>
</tr>
<tr>
<td>/LH/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘steal’</td>
<td>(güró-)</td>
<td>(gürí)</td>
</tr>
<tr>
<td>‘run’</td>
<td>(yṓgš-)</td>
<td>(yṓgí)</td>
</tr>
<tr>
<td>e. (CvCCv:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘lift up’</td>
<td>(ńdē-)</td>
<td>(ńdí)</td>
</tr>
<tr>
<td>/LH/ melody, syncopated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘go back’</td>
<td>(bindé-)</td>
<td>(bindí)</td>
</tr>
<tr>
<td>/LH/ melody, irregular (old causative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘turn over’</td>
<td>(jūw-ró-)</td>
<td>(jūw-rí)</td>
</tr>
<tr>
<td>‘take out’</td>
<td>(gō-ndó-)</td>
<td>(gō-ndê)</td>
</tr>
<tr>
<td>f. (Cv:(C)Cv:)-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/H/ melody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘do well’</td>
<td>(ké:ndé-)</td>
<td>(ké:ndê)</td>
</tr>
</tbody>
</table>
All *i*-final verbs show a final L-tone element (376).

(376) Quoted imperative positive of *i*-final verb

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>QuotImprt</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. <strong>Ci</strong>-</td>
<td>'see'</td>
<td><em>yǐ</em>-</td>
</tr>
<tr>
<td>b. <strong>nCi</strong>-</td>
<td>'give'</td>
<td><em>ńdí</em>-</td>
</tr>
<tr>
<td>c. <strong>CvCi</strong>-</td>
<td>'go in'</td>
<td><strong>núy</strong>&quot;i&quot;- [núy&quot;i&quot;]</td>
</tr>
<tr>
<td></td>
<td>'send'</td>
<td><em>tíy</em>- [tí:]</td>
</tr>
<tr>
<td></td>
<td>'tie'</td>
<td><em>págí</em>-</td>
</tr>
<tr>
<td></td>
<td>'do'</td>
<td><strong>kár</strong>&quot;i&quot;-</td>
</tr>
<tr>
<td></td>
<td>'hear'</td>
<td><strong>núy</strong>&quot;i&quot;- [núy&quot;i&quot;]</td>
</tr>
<tr>
<td></td>
<td>'cover'</td>
<td><strong>dēwí</strong>-</td>
</tr>
<tr>
<td></td>
<td>'perpetrate'</td>
<td><em>bógí</em>-</td>
</tr>
<tr>
<td></td>
<td>'put down'</td>
<td><em>dùní</em>-</td>
</tr>
<tr>
<td>d. <strong>CvCCi</strong>-</td>
<td>'find'</td>
<td><em>těmbí</em>-</td>
</tr>
<tr>
<td></td>
<td>'put lid on'</td>
<td><em>tímbi</em>-</td>
</tr>
<tr>
<td></td>
<td>'open wide'</td>
<td><em>gómbi</em>-</td>
</tr>
<tr>
<td></td>
<td>'go back'</td>
<td><em>bǐndí</em>-</td>
</tr>
<tr>
<td>e. <strong>Cv:(C)Ci</strong>-</td>
<td>'stop'</td>
<td><em>ǐ-yī</em>-</td>
</tr>
</tbody>
</table>
Causatives are fairly common in the quoted imperative construction, since wishes like ‘let him jump off!’ can be expressed as ‘may God make him jump off!’ (dēnjē ūnē-ŋ péřē-m-i).

The elicited negative counterparts (quoted prohibitive) end in -rā, -ndā, or -ndāː: for original singular addressee. The corresponding plural-addressee forms are -rā-ndi, -ndā-ndi, and -ndāː:-ndi. These forms are related to those of the prohibitive (=imperative negative), but are L-toned in the singular-addressee form, and the stem vocalism differs significantly in the two morphological categories. There is probably dialectal and even idiolect-internal variation in the allomorphy, here as with the prohibitive. For my assistant, quoted prohibitive -ndāː: occurs with far more types of verbs than does the similar prohibitive allomorph -ndāː. Many short stems have quoted imperative -ndāː: but prohibitive -rā. A generous set of forms is given in (377). Note -ndāː: after all non-i-final verbs (377a), as well as with many i-final stems (377b). -rā was recorded with CvCi- and nCi- stems (377c), and -ndā (note the short vowel) after CvCvCi- stems (377d).

(377) Quoted prohibitive (verb ending in non-high vowel)

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>quoted prohibitive Sg addressee</th>
<th>Pl addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. final non-high vowel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘shave’</td>
<td>káː-</td>
<td>káː:-ndāː:</td>
<td>káː:-ndāː:-ndi</td>
</tr>
<tr>
<td>‘eat’</td>
<td>kōː-</td>
<td>kōː:-ndāː:</td>
<td>kōː:-ndāː:-ndi</td>
</tr>
<tr>
<td>‘arrive’</td>
<td>dōː-</td>
<td>dōː:-ndāː:</td>
<td>dōː:-ndāː:-ndi</td>
</tr>
<tr>
<td>‘bring’</td>
<td>jēː-</td>
<td>jēː:-ndāː:</td>
<td>jēː:-ndāː:-ndi</td>
</tr>
<tr>
<td>‘go’</td>
<td>ūnēː-</td>
<td>ūnēː:-ndāː:</td>
<td>ūnēː:-ndā:-ndi</td>
</tr>
<tr>
<td>‘go up’</td>
<td>ĕndêː-</td>
<td>ĕndêː:-ndāː:</td>
<td>ĕndêː:-ndā:-ndi</td>
</tr>
<tr>
<td>‘steal’</td>
<td>gūrōː-</td>
<td>gūrōː:-ndāː:</td>
<td>gūrōː:-ndā:-ndi</td>
</tr>
<tr>
<td>‘pound’</td>
<td>tōrōː-</td>
<td>tōrōː:-ndāː:</td>
<td>tōrōː:-ndā:-ndi</td>
</tr>
<tr>
<td>‘dream’</td>
<td>mɔnjuːrōː-</td>
<td>mɔnjuːrō:-ndāː:</td>
<td>mɔnjuːrō:-ndā:-ndi</td>
</tr>
</tbody>
</table>

b. final high vowel

<table>
<thead>
<tr>
<th>gloss</th>
<th>bare stem</th>
<th>quoted prohibitive Sg addressee</th>
<th>Pl addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘see’</td>
<td>yēː-</td>
<td>yēː:-ndāː:</td>
<td>yēː:-ndā:-ndi</td>
</tr>
<tr>
<td>‘go in’</td>
<td>nūỵ′-</td>
<td>nūỵ′-ndāː:</td>
<td>nūỵ′-ndā:-ndi</td>
</tr>
<tr>
<td>‘find’</td>
<td>tēmbiː-</td>
<td>tēmbiː-ndāː:</td>
<td>tēmbiː-ndā:-ndi</td>
</tr>
<tr>
<td>‘open wide’</td>
<td>gɔmbiː-</td>
<td>gɔmbiː-ndāː:</td>
<td>gɔmbiː-ndā:-ndi</td>
</tr>
<tr>
<td>‘gather’</td>
<td>mʒ:ndiː-</td>
<td>mʒ:ndi:-ndāː:</td>
<td>mʒ:ndi:-ndā:-ndi</td>
</tr>
</tbody>
</table>

241
take away, convey’ gĕ:r⁴-⁴ gĕ:r⁴-⁴-ndà: gĕ:r⁴-⁴-ndà:-ndì
take away, convey’ gĕ:r⁴-⁴ gĕ:r⁴-⁴-ndà: gĕ:r⁴-⁴-ndà:-ndì
c. CvCi- and nCi-
give’ nú- nú-rà nú-rà-ndì
give’ nú- nú-rà nú-rà-ndì
c. CvCi- and nCi-
c. CvCi- and nCi-
cover’ dèwí- dèw-rà dèw-rà-ndì
c. CvCi- and nCi-
d. trisyllabic
‘scrub’ púgúsí- púgúsí-ndà púgúsí-ndà-ndì
d. trisyllabic
‘have fun’ kémír⁴-⁴ kémír⁴-⁴-ndà kémír⁴-⁴-ndà-ndì
d. trisyllabic

The variant -ndà: is homophonous with quoted hortative negative -ndà:, see the following section.

10.6.5 Quoted hortative (-ŋ́, negative -ndà:)

When a hortative (as opposed to an imperative) is subsequently quoted, it is expressed by -ŋ́ replacing the original hortative suffix -má or -màyⁿ (§10.6.2). The form of the verb stem before -ŋ́ is the same as that found before the hortative suffixes. Thus ŋné-ŋ́ kiyé-s₃-Œ ‘he/she said, let’s go!’ (likewise quoted dɔg³-ŋ́ ‘let’s abandon’, nɔ:-ŋ́ ‘let’s drink!’).

A following quotative particle wa takes L-toned form, hence -ŋ́ wa (§17.1.3).

It is a good bet that this -ŋ́ reflects an older *-m, which would have made the connections more transparent. Compare the alternation of m and ŋ in the imperfective conjugation, with 3Sg -ŋ́ versus suffixed forms based on -m- (e.g. 3Pl -m-è-). In both cases, word-final *m appears to have lenited to -ŋ́ (which is then often realized as vocalic nasalization).

Care should be taken to distinguish the occasional quoted hortative -ŋ́ from the very common same-subject anterior subordinator ŋ. I distinguish them orthographically (hyphen versus space), but in transcribing texts they are phonetically identical. Quoted hortative -ŋ́ is distinct tonally from 3Sg imperfective -ŋ́.

In quoted negative hortatives, -ndà:-mát or plural-addressee -ndà:-màyⁿ is likewise reduced to invariant -ndà:.

The abbreviation in interliners is QuotHort. A textual example is (378). Further examples (positive and negative) are in §17.1.4.2.

(378) ŋné-ŋ́ ŋné kiyé nà,
           go-QuotHort 3SgSbj say and.DS,
          ŋmí-ŋ₃-Œ kiyé-Œ ndè, gɔ̃-gɔ: jiyé-ŋ́
go-IpfvNeg-3SgSbj say.Pfv-3SgSbj if, Rdp-stab kill-Ipfv.3SgSbj
‘When he (=Fulbe) says, “let’s go!,” if he (=Dogon) says that he won’t go, he (Fulbe) will stab (him) to death.’ (2004.01.10)
11 VP and predicate structure

11.1 Regular verbs and VP structure

11.1.1 Verb types (valency)

Since Nanga clearly distinguishes subjects (clause-initial NPs, pronominal-subject agreement on verbs) from direct objects (accusative case suffix on animate nouns and pronouns), the prototypical transitive verbs are clearly identifiable from their morphosyntactic behavior. These include the usual impact verbs (‘hit’, ‘cut’), but also perception verbs (‘see’, ‘hear’), as in (379).

(379) a. ŋné-ŋ suy3-só-ŋ
    3Sg-Acc hit-Pfv2-1SgSbj
    ‘I hit him/her.’

c. ŋné-ŋ yì-só-ŋ
    3Sg-Acc see-Pfv2-1SgSbj
    ‘I saw him/her.’

Basic motion verbs (‘go’, ‘come’) are intransitive. Sentences like [físé gó] ŋné-ërê-ŋ ‘I went [to the village]’ have adverbal (e.g. PP) rather than simple NP complements, usually with locative ga or allomorph (go, etc.). Toponyms omit the locative postposition, so sentences like mó:tì ŋné-ërê-ŋ ‘I went [to Mopti]’ mimic transitives, but the adverbial nature of these place names is suggested by the fact that they correspond to ‘where?’ (árẫñá) rather than to ‘what?’ in questions, and by the fact that the place name cannot be replaced by an accusative pronominal.

ňdí- ‘give’ takes two direct objects, either or both of which may show accusative -ŋ. In the usual case where the recipient is animate and the theme is inanimate, accusative marking is much more common on the recipient than on the noun denoting the theme (380a), following the usual pattern with the accusative morpheme. When both NPs are animate, double accusative marking is common (380b).

(380) a. [båː yëċ-ŋ] kē:xê ŋdí-só-ŋ
    [father 1SgPoss.AnSg-Acc] money give-Pfv2-1SgSbj
    ‘I gave some money to my father.’

b. përgé-ŋ ú-ŋ ŋdí-só-ŋ
    sheep.Sg-Acc 2Sg-Acc give-Pfv2-1SgSbj
    ‘I gave you-Sg a sheep.’
(2004.02.03)

When she (= girl) had come to the house, she (= woman) gave her a meal, she gave her water. When she (= woman) had finished giving (them to her), …

The person addressed can appear with the dative postposition bay (381a), but in texts it is usually accusative.

(381) a. [[bá: yè:] bay]
[[father 1SgPoss.AnSg] Dat]
ŋ̱gú-ŋ̱ kiyé-rí-y̱
Dem.InanSg-Acc say-PfvNeg-1SgSbj
‘I didn’t say that to my father.’

b. [̃nën nà gáy] á-ŋ̱ kiyé-s-é wà
[name 3SgPoss Topic 3LogoSg-Acc say-Pfv2-3PlSbj Quot
‘(She) said: uh-huh, they told me her name.’ (2004.02.03)]

Verbs of putting like kúrⁿú- ‘put (object) in (a container)’, gàrⁿí- ‘put (e.g. liquid, grain) in (container)’, and náŋ- ‘put (object) up on (something)’ normally take a direct object and a locational expression, though the latter is sometimes obvious and can be omitted (‘I put the tea kettle on [i.e. up on the burner]’).

Except for basic motion verbs and deadjectival inchoatives, which are simple intransitives, the boundary between intransitive and transitive is blurred by the existence of many activity-denoting verbs that take a conventional or pro-forma complement, usually a cognate nominal. Syntactically, the cognate nominal can function as a direct object; see §11.1.6.2. However, it does not normally allow accusative -ŋ̱ and in some cases it does not allow determiners or quantifiers.

There are also some fixed subject-verb combinations whose subject NP does not to have full subject properties; see §11.1.4, below.

11.1.2 Valency of causatives and mediopassives

The subject (agent) of an intransitive clause becomes a direct object when the clause is causativized, and may therefore take accusative -ŋ̱.

(382) [dèré yè-ŋ̱] yè-m-só-y̱
[elder.sibling 1SgPoss.AnSg-Acc come-Caus-Pfv2-1SgSbj
‘I made/had my older sibling come.’
When an already transitive clause is causativized, the result is two direct objects, either or both of which may take accusative -ŋ (383).

(383) [dèré  yë:-ŋ]  pèrgé-ŋ
    [elder.sibling  1SgPoss.AnSg-Acc] sheep-Acc
sèmè-m-sò-ŷ
slaughter-Caus-Pfv2-1SgSbj
‘I had my older brother slaughter a sheep.’

The mediopassive (MP) with suffix -yí- and variants cuts across transitivity lines, as the relevant verbs are not only classic middles like ‘be hung up’, but also syntactic transitives denoting actions that create a state for the agent (verbs of carrying, clothing, etc.). A mediopassive verb, even if syntactically transitive, (384a) is often paired with a counterpart with “transitive” suffix -rí- that adds an external agent (384b). See §9.3.1 for more on these derivational suffixes.

(384) a. yí:-ŋ  bàmbí-y-só-ŷ
    child-Acc  carry.on.back-MP-Pfv2-1SgSbj
‘I carried/held a child on my back.’

b. yí:-ŋ  ñné-ŋ  bàmbí-rí-só-ŷ
    child-Acc  3Sg-Acc  put.on.back-Tr-Pfv2-1SgSbj
‘I put a child on him/her up on his/her back.’

11.1.3 Verb Phrase

The notion of VP is useful in connection with VP-chains, which are essentially chains of clauses with a shared subject; see §15.1. Verbal-noun complements (similar to English infinitival complements), however, are rather main-clause-like in Nanga. They are usually subjectless, so they constitute VPs, but objects are not forced into compound-initial form, and it is possible to add an overt subject (§17.3.1).

Quoted sentences are optionally divided into the subject (sometimes addressee) versus the remainder of the clause (VP including AN inflections), with quotative particle wa after both (§17.1.3).

11.1.4 Fixed combinations of verb and (pseudo-)subject

Fixed combinations of a subject NP and a verb are mainly found with meteorological and seasonal expressions (385a-b) and some emotional and medical expressons (385c).

(385) a. involving ùsí ’sun’ or variant (cf. ùsí-dèrⁿí ’daytime’)
     ùsí  sỳfè-  ‘day break’
     ùsí  dèrⁿé-  ‘night fall’ (cf. dèrⁿé- ’spend mid-day’)
     ùsfỳé  bàrⁿá-  ‘be summer’ (bàrⁿá- ‘become red’)
b. rain and rainy season

\[
\begin{align*}
yàrí & \quad dʒ:- & \text{‘rainy season be about to start’ (‘sky arrive’)} \\
yàrí & \quad gò:- & \text{‘be just after the harvest’ (‘sky go.out’)} \\
bòndì & \quad w̃:- & \text{‘rain fall’}
\end{align*}
\]

\[
\begin{align*}
yàrí \ gǒ & : & \text{‘be just after the harvest’ (‘sky go.out’)}
\end{align*}
\]

\[
\begin{align*}
bòndì \ w̃ & : & \text{‘rain fall’}
\end{align*}
\]

c. emotions and medical

\[
\begin{align*}
kɛ́ndɛ & \quad bãr⁴á- & \text{‘get angry’ (kɛ́ndɛ ‘heart/liver’, bãr⁴á- ‘redden; blaze’)} \\
kɪr⁴è-dér⁴i \ gō:- & \text{‘have a nosebleed’ (kɪr⁴è ‘nose’, gō:- ‘go out’)} \\
kɪr⁴è-dér⁴i \ dɛ́r̃ & : & \text{‘have a nosebleed’ (cognate verb)}
\end{align*}
\]

The nouns in these constructions tend not to have full subject properties, and may be referred to as pseudo-subjects. The noun usually occurs close to the verb, following spatiotemporal adverbs, whereas fully referential subject NPs often precede such adverbs. However, these are tendencies rather than strict rules.

The seasonal and meteorological expressions can occur in same-subject constructions containing two clauses denoting sequenced events (§15.2.7). This is possible since some cyclical sequences can be expressed by pairing combinations sharing a conventionalized subject (386).

(386) \[
\begin{align*}
[yàrí \ dʒ:] \ gō\ ŋ́ & \quad bùndé-ɛ̀rè-∅ \quad [\text{sky arrive and.SS}] \quad \text{go.back-Pfv1a-3SgSbj}
\end{align*}
\]

‘The sky (=cloudy weather of rainy season) arrived and left.’

With the emotional and medical expressions in (385c), the pseudo-subject (a bodily term) co-occurs with a human true subject. The construction suggests “possessor raising,” as the choice of verb makes most sense if selected by the bodily term (pseudo-subject). kɛ́ndɛ bãr⁴á- by itself would mean ‘heart/liver (seat of emotions) blaze (=be burning),’ and kɪr⁴è-dér⁴i gō:- would mean ‘nosebleed (nose blood) go out’. These would make good sense with if the subject were phrased as a possessed NP: ‘my heart became red’, ‘my nose-blood came out’. However, the actual constructions have human true subjects, not possessors. The verb agrees with this true subject (the human). The bodily term appears with its lexical tone melody, not with the overlay typical of possessums, and functions as a pseudo-subject, here a kind of adjunct (not a direct object).

(387) a. kɛ́ndɛ \quad bãr⁴á-só-y

\[
\begin{align*}
\text{heart/liver} & \quad \text{blaze-Pfv2-1SgSbj}
\end{align*}
\]

‘I got angry.’

b. á:mádù \quad kɛ́ndɛ \quad bãr⁴á-só-∅

\[
\begin{align*}
\text{A} & \quad \text{heart/liver} & \quad \text{get.red-Pfv2-3SgSbj}
\end{align*}
\]

‘Amadou got angry.’

c. kɪr⁴è-dér⁴i \quad gō-só-y

\[
\begin{align*}
nose-bleed & \quad \text{go.out-Pfv2-1SgSbj}
\end{align*}
\]

‘I had a nosebleed.’
11.1.5 Idiomatic and cognate objects

Many verbs are regularly combined with a default nominal, usually functioning as a default direct object, but omitted if a more concrete object NP is overt. In (388), the default object and the verb are non-cognate.

(388) noun verb gloss of combination

\[ n\dot{\acute{a}}: \quad k\ddot{\acute{a}}:- \quad \text{‘eat (a meal)’} \]
\[ n\dot{i}: \quad (\text{‘water’}) \quad d\ddot{\acute{y}}\dot{e}:- \quad \text{‘bathe’} \]
\[ n\dot{i}: \quad n\ddot{\acute{s}}:- \quad \text{‘drink (water)’} \]

11.1.5.1 Formal relationships between cognate nominal and verb

Many verbs have a lexicalized cognate nominal from the same word family. The present focus is on the relationship among the nominal and verbal forms. For the grammatical functions of the cognate object, see §11.1.5.2, below.

Any verb that does not have a lexicalized cognate nominal can simply use its regular verbal noun in -ndé. Example: játí-ndé játí- ‘do a calculation’. Such cases are not at issue in the present section since verbal nouns are predictable in form.

A generous set of examples of cognate noun-verb pairs is in (389). Since the tone melody is closely associated with its initial consonant for verbs, but not nouns, it seems most useful to organize the data around the tone melody (and syllable count) of the noun. Of interest is the distinction between dùrî dùró- ‘let out a groan’ (389e) and dùrî dùró- ‘(lion etc.) roar’ (389d), distinguished by the tone of the noun.

(389) noun verb gloss of combination

a. monosyllabic

/LH/ noun

\[ t\ddot{a}:-n \quad t\ddot{a}:-n \quad \text{‘build a shed (shelter)’} \]

\[ t\ddot{a}:-n \quad t\ddot{a}:-n \quad \text{‘avoid, respect (a taboo)’} \]

\[ m\ddot{s}:- \quad m\ddot{s}:- \quad \text{‘tie a knot’} \]

/HL/ noun

\[ p\ddot{b}:- \quad p\ddot{b}:- \quad \text{‘give out a whistle’} \]

b. bisyllabic, /H/ noun

\[ bír\acute{a}\quad bír\acute{e}- \quad \text{‘work, do a job’} \]

\[ gír\acute{a}\acute{\acute{y}} \quad gír\acute{e}\acute{\acute{y}}- \quad \text{‘harvest millet, do the millet harvest’} \]

\[ d\ddot{e}r\acute{a}\acute{i} \quad d\ddot{e}r\acute{e}\acute{e}- \quad \text{‘spend the mid-day’} \]

\[ d\ddot{o}m\ddot{b}ó \quad d\ddot{o}m\ddot{b}í\acute{e}\acute{y}- \quad \text{‘roll turban (on head)’} \]

\[ m\ddot{a}:n\ddot{d}í \quad m\ddot{a}:n\ddot{d}í- \quad \text{‘think a thought’} \]

c. bisyllabic, /LH/ noun

\[ t\ddot{u}w\ddot{a} \quad t\ddot{u}w\ddot{e}- \quad \text{‘(a) death occur’} \]

\[ òr\ddot{ó} \quad òr\ddot{ó}- \quad \text{‘make a heap’} \]

\[ èr\acute{e} \quad èr\acute{e}- \quad \text{‘be rivals, have a rivalry’} \]

\[ gíy\acute{e} \quad gíy\acute{e}- \quad \text{‘dance’} \]
giyé - ‘fart, let out a fart’
sügš - ‘defecate, take a shit’
dámá - ‘speak’
péw - ‘give a reprimand’
tir'ı - ‘go search for firewood’
tőŋí - ‘write, do some writing’
nũnjá - ‘sing, perform a song’
pšmbò - ‘compete, be in a race’
sāmbá - ‘do the second round of weeding’
jimbí - ‘double up, have two’

síbá - ‘give a description’
bigá - ‘chew cud’
bógí - ‘(dog) bark’
dùrî - ‘(lion, hyena, elephant) roar’
jíná - ‘(plant stem) split into two’
gósó - ‘divide into halves’
ísé - ‘sneeze’
tíná - ‘speak’
jígá - ‘belch, emit a belch’
úró - ‘vomit’
máŋí - ‘cook a dish including cottonseed’
béré - ‘gain, make a profit’
pútò - ‘foam, be frothy’
púdè - ‘foam up’
jíyrè - ‘poke fun at’
bémbe - ‘stutter’
jángè - ‘study, go to school’
sándí - ‘pray, perform the Muslim prayer’
tómbi - ‘jump, take a jump’
té:nà - ‘make a profit’
wá:jè - ‘preach a sermon’
wé:jò - ‘spend a half-day (morning)’
wá:tò - ‘swear an oath’ (< Fulfulde)
té:njè - ‘tell a story’

kòyô - ‘weep’
lagó - ‘count (recite numbers)’
bógš - ‘be deceptive, trick’
dúyâ - ‘make an insult’
dúwâ - ‘forge (tools)’
iyâ - ‘stand/ stop in a position’
kágâ - ‘clear one’s throat’
úsá - ‘ask a question’
pàrâ  párá-  ‘cook pàrâ (dish with cow-peas, or millet mixed with roselle leaves)’
à:njâ  ànñí-  ‘yawn, make a yawn’
dùrî  dùrò-  ‘let out a groan’
ɔ̀njì  ɔ́njí-  ‘urinate’
ɔ̀njî  ɔ́njí-  ‘spit, emit a spit’
jìnjâ  jìnjí-  ‘make noise’
tà:rî  tà:rí-  ‘lay egg’
sè:rî  sé:rí-  ‘(woman) emit cry of joy’

f. trisyllabic, /HL/ noun
kèmírîè  kèmírîi-  ‘have fun, stage festivities’
èmírîè  èmírîi-  ‘converse, chat’
sàlámî  sàlmi-  ‘utter a formal greeting’
bèrèmbî  bèrèmî-  ‘take animals to pasture’
(usually syncopated to bèrèm bèrèmi-)

Some of the trisyllabic examples above show distinctions between the noun and the verb in the treatment of the medial stem syllable (raised ì versus a repeated non-high vowel); see ‘(beggar) sing koranic verses’ and ‘dream a dream’ in (389g), and ‘have a discussion’, ‘make loud noises’, and ‘(animal) bellow’ in (389h).

In a few cases, there is an irregular vocalic change affecting the initial vowel. Some examples involve switches between +ATR {e o} in the noun, likely influenced by a following high vowel or semivowel, and -ATR {e ɔ} in the verb (390a). There are also several cases of {o ɔ} in the noun versus a in the verb (390b). The example in (390c) is similar but likely involves syncope of *g in addition to the vocalic change.
Vocalic changes in cognate verb/noun pairs

<table>
<thead>
<tr>
<th>noun</th>
<th>verb</th>
<th>gloss</th>
</tr>
</thead>
</table>
| a. ATR alternations $o \sim \partial, e \sim \varepsilon$  
  *noun ends in $i$*  
  jöŋí  jöŋí- | ‘treat (medically), provide care to’  
  yégí  yégé- | ‘fall down, take a fall’  
  séɡí  séɡí- | ‘pay dues, make a contribution’  
  yöɡí  yöɡí- | ‘run’  
  yémbí  yémbí-yí- | ‘cover oneself with blanket’  
  *noun formerly ended in a high vowel or *$y$*  
  jéw  jéwé- | ‘curse, utter a curse’  
  cf. Donno So jébù, etc.  
  tǒ:  tɔː:- | ‘sow (seeds); sow the seedstock’  
  cf. Jamsay tɔ́y, etc.  
| b. mɔ́ndì  mànɔ́ndí- | ‘laugh, let out a laugh’  
  bó:rì  bǎːrǐ- | ‘make an addition (top-off)’  
  yö́rì  yö́rǐ-yí- | ‘take a walk’  
  ò:rì  ò:rǐ-yí- | ‘crawl, drag oneself’  
  bómbí  bǎmbí-yí- | ‘hold or carry on one’s back’  
  wórı́  wârì- | ‘do (manual) farming (in field)’  
| c. sɔ́rì  sɔ́gírì- | ‘(sth unseen) make a noise’  

In (391), there is a partial cognate relationship. The default object nominal is a compound, whose initial or final is related to the verb.

<table>
<thead>
<tr>
<th>noun</th>
<th>verb</th>
<th>gloss</th>
</tr>
</thead>
</table>
| a. verb related formally to the final of a nominal compound  
  ye-kù:  kúwó- | ‘perform black magic’  
  gírè-nỳ’è  nỳ’è- | ‘sleep’ (< gírè ‘eye’)  
  âr’á-bó:rì  bǎːrǐ- | ‘provide assistance to’  
  âr’á-tɔ́:  tɔ́:- | ‘scold’  
  âr’á-pà:”  pà:”- | ‘take a step’  
  nɔː:-já:rà  jáːrǐ- | ‘emit some slobber, drool’ (< nɔː: ‘mouth’)  
  gɔː:-kɔndúgò  kɔndúgò- | ‘build a (Jamsay-style) conical granary roof’ (cf. Jamsay ɡɔː: ‘granary’)  
  nɔː:-pérè  pérè | ‘clap, applaud’ (< nɔː: ‘hand’)  
  nɔː:-tınjé  tınjé- | ‘draw a line (with the hand)’  
| b. [noun adjective] combination, verb based on adjective  
  ɲà: pírì  pírî- | ‘cook ɲà: pírì (lit. “white meal,” a dish)’  
| c. noun arguably with frozen *an- not included in verb (§4.1.8)  
  ântà:rì  âtà:rì  tà:rì- | ‘hunt, go on a hunt’  

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d. verb based on final … CvCv of trisyllabic noun

\[ ná:pìlà \quad pílɛ́ -' \]
‘perform an individual prayer’

\(< \text{Arabic root } \sqrt{\text{nfl}})\]

e. verb related formally to the initial of a nominal compound

\[ bègìrè-bè: \quad bègé- \]
‘hiccup’, see (35) in §4.1.6

\[ kòyò-kè:sí \quad kóyó- \]
‘give out a shout’

Some of the pairs of related noun and (arguably denominal) verb listed in §9.6 are also relevant, to the extent that the noun and verb occur in collocations. This is especially true for ‘chant the ancestry’, ‘cook the sauce’, and ‘tell a lie’.

11.1.5.2 Grammatical status of cognate nominal

Often the cognate nominal is rather pro forma, as in ‘dance (a dance)’ or ‘stutter (a stuttering)’. However, the cognate nominal may be quantified over or modified adjectivally where this makes sense semantically. If the activity is divisible into bounded units, these can be quantified over (392a). Evaluative or other adverbial modification normally takes the form of adding a modifying adjective to the nominal (392b).

(392)  
\begin{align*}
\text{a. } & [nùñá \quad tà:ndì:] \quad nùñí-só-∅ \\
& \text{[song three]} \quad \text{sing-Pfv2-3SgSbj} \\
& \text{‘He/She sang three songs.’} \\

\text{b. } & [nùñá L \quad ɛ̀sì] \quad nùñí-só-∅ \\
& \text{[song’ good]} \quad \text{sing-Pfv2-3SgSbj} \\
& \text{‘He/She sang well (‘sang a good song’).’}
\end{align*}

11.2 ‘Be’, ‘become’, ‘have’, and other statives

11.2.1 ‘It is’ clitics

11.2.1.1 Positive ‘it is’ enclitic ( = m-, = n-, = yê, = w)

The enclitic = m- ‘it is’ is added to NPs. It can be conjugated, and has the paradigm (393). The distinct postconsonantal forms are rare, see below, so for practical purposes the postvocalic paradigm is what one will find in texts. Except for 3Pl = ye and the special inanimate form = w, both of which suggest adjectival morphology, the paradigm resembles that of the imperfective suffix -m- (and 3Sg portmanteau -j) with regular verbs (§10.2.2.1). However, the pronominal endings with the imperfective suffix are shortened, e.g. 1Sg imperfective -m-∅ ~ -m-i versus 1Sg ‘it is’ clitic = mi-y, phonetic [mi:]. Some forms in (393) are atonal, acquiring surface tones from the left as explained below.
syllable, whose final have recorded both hosts.

by the ‘it is’ enclitic, or the enclitic itself has a tonally specified allomorph required by these (they are white person) when added to third person pronouns, demonstrative pronouns, and interrogative pronouns, their are L-toned even when the preceding form ends in an H-tone: kɔ̀ŋné = wⁿ ‘what is it?’ (< kɔ̀ŋnè), ǹnè = ǹ ‘it’s him/her’ (< ǹnè), ǹgù = w ‘it’s this/that’ (< ǹgù). This can be interpreted in two ways: the relevant hosts end in an otherwise covert L-tone that is revealed by the ‘it is’ enclitic, or the enclitic itself has a tonally specified allomorph required by these hosts.

The tonal behavior of 3Pl = ye is equivocal in my data. After a final-H-toned noun, I have recorded both = yè and = ye (the latter includes surface = yè after a rising-toned syllable, whose final H-tone element spills over), with = ye predominating. For ‘it’s women’
(stem yǎ), yǎ = ye is more common than yâ = yé, though my assistant accepts both. For ‘it’s white people’ (stem ãnsá:rá), only ãnsá:rá = yè was accepted. For ‘it’s sheep-Pl’ (pèrgé), both pèrgé = ye and pèrgé = yè were recorded.

3Pl = ye (like inanimate = w) also occurs in the inflection of stative verbs (§10.4.1). In that paradigm, = ye (like = w) is atonal, and therefore appears with H-tone when following a final-H-toned stem, as in ñba = yè ‘they love’ (§11.2.5.3). Incidentally, in these stative paradigms, the 3Sg form is zero (not = ñ).

3Pl = ye is not subject to Nasalization-Spreading: nù = ye ‘they are people’. It is also not subject to ATR harmony with the preceding stem.

For occasional extensions of = yè to 1Pl and 2Pl subjects (= yé = mi-y., = yé = mú-w.), see §11.2.1.4, below.

Examples with animate subjects are in (394). An initial independent pronoun (topicalized) is possible but not required.

(394) a. (í:) ñók3 = mi-y
   (1Sg) Dogon=it.is-1SgSbj
   ‘I am (a) Dogon.’

b. (í:) ñók3 = mi-y. [...mìi]
   (1Pl) Dogon=it.is-1PlSbj
   ‘We are Dogon.’

c. (íné) ñók3 = ñ
   (3Sg) Dogon=it.is.3SgSbj
   ‘He/She is Dogon.’

d. (bû:) ñók3 = yè
   (3Pl) Dogon=it.is.3PlSbj
   ‘They are Dogon.’

e. pèrgé = ñ
   sheep=it.is.3SgSbj
   ‘It is a sheep’

f. ñ-ñ = Ø
   who?.AnSg=it.is.3SgSbj
   ‘Who is it?’ (from ññ = ñ)

g. [á:mádù sày] = mi-y
   [Amadou only]=it.is-1SgSbj
   ‘I am (= it’s) just Amadou.’

h. ñné [fàtùmáta sày] = yè
   3Sg [Fatoumata only]=it.is.3SgSbj
   ‘She is (= it’s just) Fatoumata.’

i. bû: [yò:wàrí sày] = yè
   3Pl [millet-farm.Agent only]=it.is.3SgSbj
   ‘They are only millet farmers.’

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In identificational predicates with an animate pronoun (even a first or second person pronoun) as predicate, as in ‘it’s me’ (in answer to e.g. ‘who eats meat?’ or ‘who is that knocking at the door?’), the relevant pronominal category appears as the subject (expressed by pronominal-subject suffix) as well as the predicate (expressed as independent pronoun), hence literally ‘I am me’, etc. Recall the comment above that third person pronouns and demonstratives have a final L-tone in the ‘it is’ form; this accounts for 3Sg ŋnê = ŋ (395d). The 3Pl is bû = Ø with no overt clitic (395e).

(395) a. Ḣⁿ = mî-ũ
   1Sg=it.is-1SgSbj
   ‘It is me.’

b. ũ = mú-ũ
   2Sg=it.is-2SgSbj
   ‘It is you-Sg.’

c. Ḥ: = mî-ũ:
   1Pl=it.is-1PlSbj
   ‘It is us.’ (phonetic [iimi])

d. ŋnê = ŋ
   3Sg=it.is.3SgSbj
   ‘It is he/she.’

e. bû = Ø
   3Pl=it.is.3PlSbj
   ‘It’s them.’

Examples with inanimate subjects are in (396). =w is nasalized to =wⁿ by regular Nasalization-Spreading when preceded by a nasal syllable.

(396) a. nâm = wⁿ
    meat=it.is.InanSbj
    ‘It’s meat.’ (nâm)

b. pòrú = w
    knife=it.is.InanSbj
    ‘It’s a knife.’ (pòrí)

c. kûr⁰ô = wⁿ
    stone=it.is.InanSbj
    ‘It’s a stone.’ (kûrô)

d. tûmá = wⁿ
    tree=it.is.InanSbj
    ‘It’s a tree.’ (tûmá)
Identificational predicates with inanimate pronoun or demonstrative as predicate have =ŋ, i.e. 3Sg as subject, rather than the specifically inanimate =w. The same is true of interrogative pronouns. As noted above, some of these combinations are also irregular in having L-toned =ŋ after an H-tone. Perhaps the substitution was originally a device to avoid adding =w to any of the high-frequency grammatical morphemes already ending in u.

(397)  

a. \( kú=ŋ \)  
    InanSg=it.is.3SgSbj  
    ‘It is (= that is) it.’

b. \( kúː=ye \)  
    InanPl=it.is.3PlSbj  
    ‘It is (=that is) them-Inan.’

c. \( ãr”áŋá=ŋ \)  
    where?=it.is.3SgSbj  
    ‘It is where?’ (compare ãr”áŋá bù-∅ ‘Where is he/she/it?’)

d. \( ñgú=ŋ \)  
    Dem.InanSg=it.is.3SgSbj  
    ‘it’s this’

11.2.1.2 ‘It is not’ ( =ndó:, =ndó-)  

The negative counterpart of =m- ‘it is’ is =ndó(-) ‘it is not’. It has the same form after consonants and after vowels. It does not co-occur with plural -ye (cf. the following section). It is slightly distinct in tone and vowel length from stative negative =ǹdó- (§10.4.2, §11.5.1). It does not control tone-dropping on the preceding noun.  

=ndó(-) ‘it is not’ can be conjugated; the paradigm is (398). 3Sg (including inanimate) =ndó-∅, with long vowel, is the unmarked category. 3Pl form =nd-ɛː is arguably from suffixed / =nd̑-ɛ/, but in effect =nd-ɛː represents an ablaut-like vocalic mutation from the 3Sg form (compare 3Pl =ǹd-ɛ from stative negative =ǹdó-). The 1st/2nd person forms are based on =ndó- with short vowel. The nasal in =ndó- gets its tone (not marked in the transcription) from the preceding stem, which is not tone-dropped.
(398)  

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
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</tr>
<tr>
<td>1Pl</td>
<td>= ndô-y:</td>
</tr>
<tr>
<td>2Sg</td>
<td>= ndô-w</td>
</tr>
<tr>
<td>2Pl</td>
<td>= ndô-w:</td>
</tr>
<tr>
<td>3Sg, Inan</td>
<td>= ndô:-∅</td>
</tr>
<tr>
<td>3Pl</td>
<td>= nd-∅:</td>
</tr>
</tbody>
</table>

Examples are in (399).

(399)  

a.  

dôgô = ndô-y

Dogon-\textit{it.is.not}-1SgSbj

‘I am not a Dogon.’ (dôgô)

phonetic [dôgôndô]

b.  

wô-ŋà nàŋá = ndô:-∅

Dem-AnSg cow=\textit{it.is.not}-3SgSbj

‘That is not a cow.’

phonetic [nàŋándô]

c.  

ngú [nём sày]= ndô:-∅

Dem.InanSg [salt only]=\textit{it.is.not}-3SgSbj

‘That is not just salt.’ (nём:mí)

phonetic [sândô]

d.  

[ânsá:rá sày]= nd-∅:

[white.person only]=\textit{it.is.not}-3PlSbj

‘They are not only white people.’

phonetic [sândô]

In prepausal position, the final rise of the tone is usually not heard. One could therefore follow the phonetic pitch and transcribe 3Sg = ndô:, 1Sg = ndô-y, and so forth, in this position. The rising tone is clearly audible in nonprepausal position, for example before the question particle \textit{ma}. I therefore normalize the transcription as = ndô:, = ndô-y, etc.

11.2.1.3 Historical background to postconsonantal = ye to 1Pl and 2Pl subject

(393) above shows = ye as an allomorph of the ‘it is’ clitic, postconsonantal (a rare position) for all third person subjects, and in all positions for 3Pl subject (§11.2.1.1). Another example is (400).

(400)  

[bù: gày] [ânsá:rá sày]= ye

[3Pl Topic] [white.person only]=\textit{it.is.3SgSbj}

‘Them, they’re only white people.’
Since =ye is strictly 3Pl in the much more common postvocalic position, one might infer that it has spread from 3Pl to 3Sg and inanimate as a repair mechanism, in a phonological environment (postconsonantal) that did not permit the usual 3Sg and inanimate ‘it is’ forms.

However, there is comparative evidence that *ye originally doubled as plural (either general, or just inanimate) and as animate singular. The Nanga possessive classifier HI ye ~ ye still has this broad distribution, covering all plurals and animate singular, i.e. everything except inanimate singular, see (115) in §6.2.1.3. The Najamba cognates are animate singular or inanimate plural (but not animate plural). Therefore the use in Nanga of =ye as general third person form of the ‘it is’ enclitic in postconsonantal position may be an archaism.

11.2.1.4 Extensions of =yé=m- to 1Pl and 2Pl subject

There are occasional attestations of =yé- with a following =m- ‘it is’ and either a 1Pl or 2Pl pronominal subject suffix. The combinations are 1Pl =yé=mí-y:: and 2Pl =yé=mù-w::.

(401) a. [i: ânsá:rá sây]=mí-y::
    [1Pl white.person only]=it.is-1PISbj
    ‘We are only white people.’

b. i: ânsá:rá sây=ye=mí-y::
    1Pl white.person only=it.is=it.is-1PISbj
    [= (a)]

11.2.2 Existential and locative ‘be’ quasi-verbs and related particles

Quasi-verbs are defective stative-only predicates that have minimal paradigms, without aspectual distinctions, though they can be negated. They include ‘be (somewhere)’ and ‘have’, which are unusual in being L-toned in indicative main clauses. Loosely, the term can also be applied to the ‘it is’ clitic described above. ‘Want’ is expressed by either of two active (i.e. aspect-marking) verbs, though one (nàmà-) is usually in stative form, but a stronger sense ‘love, be very fond of (someone)’ is expressed by a quasi-verb mbá and variants (§11.2.5). ‘Know’ (§17.2.1) is an active verb in Nanga.

11.2.2.1 Existential (yá)

This proclitic particle occurs with statives, immediately preceding the predicate. It is required (except as specified below) before bû- ‘be (somewhere)’ (§11.2.2.2) and with locational stative ‘be (put) in/on’ verbs (§11.2.3), unless another locational expression is overt. It is also required before sô- ‘have’ (§11.5.1), regardless of whether a locational is co-present. With other statives, either yá or a reduplicant is required, but the two do not co-occur.

In all these cases, yá is strictly limited to positive non-relative clauses that have no focalized non-verb constituent. It is absent from negative clauses, from positive relative clauses, and from positive main clauses with a focalized constituent.
The distribution of *yá* suggests that it functions as a mix of default locational, notably with ‘be’ and other locational predicates, and verb/predicate focalizer. The two functions are closely related, assuming that any other overt locational is understood as focalized in the ‘be (somewhere)’ construction.

Cognates (*yá, ye, yó*) are found in many other Dogon languages with similar syntax. It is likely that the particle originated long ago as a discourse-definite ‘there’ adverb, cf. Togo Kan *ye* ‘there’.

11.2.2.2 Locational quasi-verb (*bù-* negative ŋó-)

The ‘be’ quasi-verb used in positive contexts with an overt or implied locational expression (‘be in the village’, ‘be here’, ‘be present’, etc.), or in general existential sense (‘exist, be somewhere’), is *bù*.

(402)  

<table>
<thead>
<tr>
<th>category</th>
<th>form</th>
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<tbody>
<tr>
<td>1Sg</td>
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</tr>
<tr>
<td>1Pl</td>
<td><em>bù-ỳː ~ bi-ỳː</em></td>
</tr>
<tr>
<td>2Sg</td>
<td><em>bù-w</em></td>
</tr>
<tr>
<td>2Pl</td>
<td><em>bù-wː</em></td>
</tr>
<tr>
<td>3Sg</td>
<td><em>bù-∅</em></td>
</tr>
<tr>
<td>3Pl</td>
<td><em>b-ɛ̀</em></td>
</tr>
</tbody>
</table>

Examples with specific locationals are in (403).

(403)  

a.  

[báː yeːɔː][isèːL gá] *bù-∅*  

[father 1SgPoss.AnSg] [village L Loc] be-3SgSbj  

‘My father is in (the) village.’

b. ŋóga-gá *bù-w* mà

there be-2SgSbj Q  

‘Are you-Sg over there?’

When there is no other locational complement, existential *yá* obligatorily precedes *bù*. In effect, *yá* here functions as a default locational.

(404)  

a.  

*yá* *bù-w* mà

Exist be-2SgSbj Q  

‘Are you-Sg present (here/there)?’

b.  

[nàmá][yá] *bù-∅*  

meat Exist be-3SgSbj  

‘There is some meat.’

With the past clitic the form is *bù-m=bè* ‘was (somewhere)’ including imperfective -m- (in cases like these extended to stative function), see §10.5.1.2.
The participle in relative clauses is *bú-mi* and variants, see §14.1.7.5. The closely related ‘while’ form, in backgrounded imperfective clauses, is *bú-mà*, see the end of §15.2.1. Note the H-toned *bú* in these forms. The other occurrences of H-toned *bú* in my data are in the pseudo-conditional phrase *bú ndè*, which belongs to the *Vb^H ndè* subtype of the uninflected pseudo-conditional (§15.2.8.3).

The negative counterpart of *bú-* is *ngó-* ‘not be (somewhere)’. Its paradigm is (405). The initial nasal is normally L-toned, but in the 1Pl and 2Pl it is high-pitched as part of a particularly complex realization of the dying-quail effect. The final syllable of the 1Pl and 2Pl forms is LHL-pitched in careful pronunciation, but can also be heard as more or less flat L-pitch; see (29) in §3.8.3.

(405) category form

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>1Sg</td>
<td>*ŋgó-*y</td>
</tr>
<tr>
<td>1Pl</td>
<td><em>ŋgó-y:</em></td>
</tr>
<tr>
<td>2Sg</td>
<td><em>ŋgó-w:</em></td>
</tr>
<tr>
<td>3Sg</td>
<td><em>ŋgó-∅</em></td>
</tr>
<tr>
<td>3Pl</td>
<td><em>ŋg-ē:</em> ~ <em>ŋg-ye</em></td>
</tr>
</tbody>
</table>

Existential *yá* is disallowed in negative clauses, including those with *ngó-*.

Examples of *ngó-* with and without an overt locational complement are in (406).

(406) a. *nàmà* [sà:g L gá] *ŋgó-∅* [ŋgŏōj] *not.be-3SgSbj* ‘There is no meat.’

b. *[ńdó gó]* [house Loc] [ŋgő-y] [ŋgŏōw] *not.be-1SgSbj* ‘I am not in the house.’

11.2.3 ‘Be put in/on’ (*kùrⁿò-, gàrⁿ à-, nàŋ₇*)

To say that a person, animal, or a large or whole object (e.g. a grain spike) is ‘in’ a container or, metaphorically, ‘in’ a situation (such as being in post-partum quarantine), but not e.g. being in a village or in a house, the stative verb *kùrⁿò-* ‘be in’ (also ‘be put in’) is used instead of *bú-. It is the stative form of active transitive verb *kùrⁿǐ-* ‘put (something) inside (a container)’. It occurs with an explicit locational in (407a), in which case existential *yá* is only optional. As default locational, *yá* is required in the absence of another marked locational (407b), except in syntactic environments that exclude *yá* (preceding section).

(407) a. *nàmà* [sà:g L gá] (yá) *kùrⁿ-∅* [ŋgŏōj] [ŋgŏōw] *not.be-3SgSbj* ‘The meat is in the sack.’ (sá:gi)
b. nàmà yá kùrⁿò-∅
meat Exist be.put.in.Stat-3SgSbj
‘The meat is within (it).’

To say that a liquid or granular substance (water, millet grain, flour, granulated sugar or salt), i.e. something that could be poured, is ‘in’ a container (waterjar, grain sack), a different stative verb gàrⁿò- is put to use. The corresponding transitive is gàrⁿò- ‘put, place’, which puts less emphasis on the ‘inside’ element. The syntax is the same as for kùrⁿò-.

(408) a. nî: [jìnjà L gá] (yá) gàrⁿò-∅
sugar [waterjar¹ Def.InanSg.Loc] (Exist) be.put.Stat-3SgSbj
‘The water is in the waterjar.’ (< jìnjà )

b. yû: [sà:g¹ L gá] (yá) gàrⁿò-∅
millet [sack¹ Def.InanSg.Loc] (Exist) be.put.Stat-3SgSbj
‘The millet (grain) is in the (grain) sack.’ (< sà:gi )

c. sígɔ̀r yá gàrⁿò-∅
sugar Exist be.put.Stat-3SgSbj
‘The sugar is in (it).’

To say that an object is ‘(up) on’ another object or raised surface, the stative verb used is nàŋà- ‘be (put) up on’. Contexts include putting a tea-kettle on a burner, putting a cooking pot on a raised (three-stone) hearth with fire underneath, and putting anything (mattress, peanuts) on a roof. The syntax is as before.

(409) a. màtìlâ: [dèw¹ L gá] (yá) nàŋà-∅
sugar [roof¹ Def.InanSg.Loc] (Exist) be.put.on.Stat-3SgSbj
‘The mattress is up on the roof.’ (< dèwí)

b. tê: yá nàŋà-∅
tea Exist be.put.up.on.Stat-3SgSbj
‘The tea (kettle) is up (on the burner).’

The three stative locational verbs described here are the most important alternatives to bú- ‘be’. However, the derived stative is fairly productive and many other such verbs occur to describe more specific positions (‘be hanging up’, ‘be lying down’, etc.)

11.2.4 Morphologically regular verbs

These verbs have some semantic connection to the ‘be’ quasi-verbs covered in this chapter. However, they are active (aspect-marking) verbs rather than defective stative quasi-verbs.

260
11.2.4.1 ‘Remain, happen’ (bê:-)

This active verb has a full set of AN stems including perfective-1a bê-érê-, perfective negative bê:-řî-, and imperfective bê-bê:-řî-. For present time (semantically stative), the perfective is used (410a).

(410) a. ké-kéw bê-ér-à
    Rdp-same remain-Pfv1a-3PISbj
    ‘They remain (= are) the same.’

b. ké-kéw bê-bê:-m-è
    Rdp-same Rdp-remain-lpfv-3PISbj
    ‘They will remain (= be) the same.’

In addition to the sense ‘stay, remain’, bê:- is also used as an auxiliary verb to make inchoative predicates (‘become X’) out of expressive adverbials, see §8.4.7. In the same vein, bê:- can mean ‘be done’ or ‘happen, take place’. ‘It can happen’ (hence ‘it is possible’) is bê: bé-ré-ò (§17.5.1).

11.2.4.2 ‘Become, happen’ (táŋj-)

This active verb has perfective-1a táŋj-érê- (or táŋy-érê-), perfective negative tã̂nâ-řî-, and imperfective tâ-táŋj-řî-. In the sense ‘become X’, the X is most often a noun or NP, but it can also be an adjective or a descriptive adverbial.

(411) a. yã-ŋ táŋj-ér-∅
    woman-Sg become-Pfv1a-3SgSbj
    ‘He/She has become a woman.’

b. [kɪ-yã- w ñ̂L kɔ̂ Lgũ] mây’n]
    [previously thing Def.InanSg] like]
    táŋj-ér-w
    become-Pfv1a-2SgSbj
    ‘You-Sg have become like before.’ (lit. “like before’s thing”)

For ‘become A’ with adjective A, the inchoative derived verb is common; see §9.5.

11.2.4.3 ‘Want, like’ (jɔ̀-ř-, nàmã-)

‘X want Y’ denoting a momentary wish may be expressed by the morphologically regular verb jɔ̀-ř-. This verb may also (in other contexts) be translated ‘like, love’, denoting an enduring attitude. An alternative is a verb that usually occurs in stative form as nàmã-, though imperfective stem námã-řî- is also attested.

(412) a. kɔ̀-ŋé nàmã-w” mà
    what? want.Stat-2SgSbj Q
    ‘What do you-Sg want?’
In positive utterances, stative nàmà- may be preceded by existential yá, or it may be reduplicated (ná-nàmà-), but not both. The combination with yá can only be used when the desire is specific in time in place, while ná-nàmà- can be used gnomically (generalizing across times and situations). In the negative, nàmà- takes stative negative =ndó-, without yá or the reduplication.

(413) a. nì: yá nàmà-ụn
    water Exist want.Stat-1SgSbj
    ‘I want (some) water.’

b. bu:di ná-nàmà-ụn
    money Rdp-want.Stat-1SgSbj
    ‘I (perhaps generally) want money.’

c. nì: nàmà =ndó-ụn
    water want=StatNeg-1SgSbj
    ‘I don’t want water.’

For negative ‘not want’ blending into ‘dislike’, see mbùrà in §11.2.5 below.

11.2.4.4 ‘Fear’ (ú:-yí, úwà-)

‘X fear Y’, ‘X be afraid of Y’ may be expressed by the morphologically regular verb ú:-yí-. It is syntactically transitive but it contains mediopassive -yí-.

(414) a. ŋné-ŋ ú:-yé-rí-ụ
    3Sg-Acc fear-MP-PfvNeg-1SgSbj
    ‘I was not afraid of him/her.’

b. ñjí-Ø ú:-y-êrè-Ø
    1Sg-Acc fear-MP-Pfv1a-3SgSbj
    ‘He/She was afraid of me.’

The stative form is úwà-. It may be reduplicated as ú-?ùwà- (§10.4), or it may be preceded by existential yá, but not both. The combination with yá suggests an immediate source of danger, while ú-?ùwà can be used to denote a generalized or chronic fearfulness. The negative has the regular stative negative suffix, and does not allow the existential particle or the reduplication. These stative forms are used for time intervals that encompass the present.

(415) a. ñjí-Ø yá úwà-yè
    1Sg-Acc Exist fear.Stat-3PlSbj
    ‘They are afraid of me.’
b. ǹjí-Ø  èwà = nd-é
1Sg-Acc  fear=StatNeg-3PlSbj
‘They are not afraid of me.’

The related noun èwá ‘fear’ resembles (in vocalism) the stative verb form. For ‘fear’ with a complement clause, see §17.3.9.

11.2.5 ‘Love, be very fond of (someone) (ǹbá, negative m̀ùrá-)

For ordinary ‘want’ see §11.2.4.3 above. In the stronger sense ‘love, be very fond of (someone)’, a stative quasi-verb ǹbá ~ ǹfá ~ ìmbá is also recorded: ì-ǹ ǹbá = m-í ‘I love you-Sg’, ǹjí ǹbá-Ø ‘he/she loves me’, ǹjí ǹbá = ye ‘they love me’. The paradigm, which has some unusual tonal features, is (416).

(416) ǹbá- ‘love’

category  form

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<td>[ǹbámì:]</td>
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<tr>
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<td>[ǹbámì:]</td>
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<tr>
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<td>[ǹbámú:]</td>
</tr>
<tr>
<td>2Pl</td>
<td>ǹbá = mú-wⁿ:j</td>
<td>[ǹbámù:]</td>
</tr>
<tr>
<td>3Sg/Inan</td>
<td>ǹbá-Ø</td>
<td></td>
</tr>
<tr>
<td>3Pl</td>
<td>ǹbá = ye</td>
<td></td>
</tr>
</tbody>
</table>

The regular stative negative of this is ǹbá = ndó- ‘not love’. A distinct, irregular negative stem m̀ùrá- ~ ǹbá- is more common, often being used as the negation of jòr, but tending toward a lexically separate sense ‘dislike, hate’ rather than the mere absence of liking. A segmentation as ǹbù-rá- is possible but not transparent. The final syllable is H-toned rá as its own syllable, becoming rising-toned with a syllabic coda semivowel (1Sg, 2Sg). The initial H-tone on the nasal in the 1Pl and 2Pl (dying-quail) forms is shared with ‘not be’, see (30e-f) in §3.8.3.

(417) ǹbùrá- ‘not want; dislike’

category  form

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>ǹbùrá-ỹ</td>
<td></td>
</tr>
<tr>
<td>1Pl</td>
<td>ǹbùrá-ỹ:j</td>
<td>[ǹbụràa]</td>
</tr>
<tr>
<td>2Sg</td>
<td>ǹbùrá-hör</td>
<td>[ǹbụràåj]</td>
</tr>
<tr>
<td>2Pl</td>
<td>ǹbùrá-hör:w</td>
<td>[ǹbụràåw]</td>
</tr>
<tr>
<td>3Sg/Inan</td>
<td>ǹbùrá-Ø</td>
<td></td>
</tr>
<tr>
<td>3Pl</td>
<td>ǹbùrá = ye</td>
<td></td>
</tr>
</tbody>
</table>
11.3 Quotative verb

11.3.1 ‘Say’ (kíyé-)

The fully inflectable active verb ‘say’ is kíyé-.

(418) a. [yèbùmbá<sub>L</sub> wò-ŋ], kɔ̀-kɔ́sí kíyè-m-è
[snake<sub>L</sub> Dem-AnSg], viper say-lpfv-3PlSbj
‘This snake, they call it “viper”.’

b. [kɔ̀<sub>L</sub> kàmâ] kíyè-rí-y
[thing<sub>L</sub> any] say-PfvNeg-1SgSbj
‘I didn’t say anything.’

c. [ńné<sub>L</sub> kíyè-sè-∅<sup>L</sup> ꜜ pú →]
[3SgSbj say-Ppl.Pfv<sup>L</sup> Def.InanSg all]
kà-kàrú = wè
Rdp-lic(n)=it.is.Inan
‘Everything he/she said, it is false.’

In normal perfective positive use (‘X said that …’), a common form of the verb is kíyè-sè wè-ndè or variant kíyè-sè gù-ndè. It is treated syntactically as a relative-clause participle, and therefore takes preverbal subject pronouns. For the morphology and syntax of this construction, see §15.2.8.3.

For quotative complements, see §17.1. For jussives (embedded imperatives), see §17.1.4.
For unconjugatable quotative particle wa, a high-frequency alternative to an inflectable ‘say’ verb, see §17.1.3.

11.4 Adjectival predicates

The predicates discussed here are aspectually stative in nature ‘X is heavy’, etc. Inchoatives (‘become heavy’) and factitives (‘make it heavy’) are expressed by fully inflectable derived verbs; see §9.5.

Negative predicates are the clearest way to distinguish adjectives (stative negative clitic = ñdò-, §10.4.2) from nouns (‘it is not’ clitic = ñdòt(-), §11.2.1.2) and from expressive adverbials (ŋgò- ‘not be’, §8.4.7). In positive predicates, adjectives and nouns overlap partially in form, but are distinct from expressive adverbials.

11.4.1 Positive adjectival predicates

11.4.1.1 Simple adjectives as 3Sg subject predicates

Some adjectives have a simple form, either identical to the modifying adjectival form or differing only by switching final i to u, that is used as a predicate with 3Sg subject. See §4.5.1.1 for a list. Even these adjectives switch to an alternative construction with a conjugated form of the ‘it is’ clitic when the subject is other than 3Sg.
11.4.1.2 With ‘it is’ clitic

When the pronominal-subject category is other than 3Sg, and for some stems even in the 3Sg, an adjective is made into a positive predicate by adding the appropriate conjugated form of the (positive) ‘it is’ clitic (§11.2.1). Positive adjectival predicates are therefore like nominal predicates.

3Sg subject predicates (for animate or inanimate subject) are of two types, depending on the adjective. In one, there is no suffix or clitic, but if the adjective ends in i it shifts to u. In the other type, the 3Sg ‘it is’ clitic, animate =ŋ or inanimate =w, is added to the stem. For color adjectives, both patterns are attested for inanimate 3Sg, while the ‘it is’ clitic is required for animate 3Sg. Fuller details and stem lists for the different types are given in §4.5.1-3. The basic predicative patterns are illustrated in (419).

<table>
<thead>
<tr>
<th>(419)</th>
<th>stem</th>
<th>gloss</th>
<th>1Sg</th>
<th>3AnSg</th>
<th>InanSg</th>
<th>3Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>düsî</td>
<td>‘heavy’</td>
<td>düsû = m-i { düsû }</td>
<td>düsû = yê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>pêː</td>
<td>‘old’</td>
<td>pêː = m-i pêː = ŏ pêː = ŏ pêː = yê</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>pîrî</td>
<td>‘white’</td>
<td>pîrî = m-i pîrî = ŏ pîrî = ŏ pîrî = yê ~ pîrû</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The shift of final i to u in stems like ‘heavy’ (419a) suggests that the 3Sg predicative form (here düsû) historically reflects one or more forms with suffixed or enclitic *{w m}, which have disappeared segmentally but left behind a souvenir in the form of backing and rounding of the stem-final vowel. The logical candidates are the inanimate ‘it is’ clitic =w still seen with the adjectives of type (419b), and the animate ‘it is clitic’ =ŋ, which may itself reflect earlier *=m.

3Pl ‘it is’ clitic -ye tends to contract with stem-final e, resulting in a final è: (420b).

<table>
<thead>
<tr>
<th>(420)</th>
<th>(bûː)</th>
<th>düsû=ye</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>(bûː)</td>
<td>düsû=ye</td>
</tr>
<tr>
<td></td>
<td>(3Pl)</td>
<td>heavy-it.is.3PlSbj</td>
</tr>
<tr>
<td></td>
<td>‘They are heavy.’</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>(bûː)</td>
<td>ëwrê=ye</td>
</tr>
<tr>
<td></td>
<td>(3Pl)</td>
<td>small-it.is.3PlSbj</td>
</tr>
<tr>
<td></td>
<td>‘They are small.’ [variant ëwrê:-Ø]</td>
<td></td>
</tr>
</tbody>
</table>

Some adjectives can take complements in predicative function. ërî ‘sweet, sharp’ can mean ‘pleasing (to X)’ as predicate, in which case it takes an accusative complement.

<table>
<thead>
<tr>
<th>(421)</th>
<th>[kàr’tá₃ [ù HLg5]] ŭjî-ŋ</th>
<th>érû</th>
</tr>
</thead>
<tbody>
<tr>
<td>[action [2Sg HLPoss.InanSg]]</td>
<td>1Sg-Acc sweet.Pred</td>
<td></td>
</tr>
<tr>
<td>‘Your act(ion) pleases me.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11.4.1.3 Dejectival expressive adverbial plus \textit{bù-}

In this construction, the adjective is converted into an expressive adverbial (§8.4.7) by modifying the final vowel. Then \textit{bù-} ‘be’ can be added, as it can be to any predicative EA. The modification from adjective to EA involves intonational prolongation (\(\rightarrow\)) of variable duration, and in some cases a shift in vowel quality to \(i\) or addition of -\(\_y\). (422a) shows adjectives whose corresponding EAs do not require stem-iteration. Variants with the stem iterated, not shown in (422a), are also possible. (422b) shows adjectives for which my assistant accepted only iterative EAs. A slightly irregular EA occurs in (422c). For some adjectives my assistant rejected any predicative construction with \textit{bù-} (422d).

(422) \begin{tabular}{lll}
adjective & EA predicate & gloss \\
\hline
a. uniterated stem possible & & \\
\textit{wàgá} & \textit{wàgá-}\_\textit{y} & ‘be distant’ \\
\textit{èwré} & \textit{èwré-}\_\textit{y} & ‘be small’ \\
\textit{nàmí} & \textit{nàmí-} & ‘be difficult’ \\
\textit{děfí} & \textit{děfí-} & ‘be short’ \\
\textit{dùsí} & \textit{dùsí-} & ‘be heavy’ \\
\textit{pìří} & \textit{pìří-} & ‘be white’ \\
\textit{màsí} & \textit{màsí-} & ‘be nasty, ugly’ \\
\hline
b. stem must be iterated & & \\
\textit{òwá} & \textit{òwá-}\_\textit{òwá-}\_\textit{y} & ‘be big’ \\
\textit{gáw} & \textit{gáw-}\_\textit{gáwí} & ‘be spacious’ \\
\textit{nà\_\textit{á}} & \textit{nà\_\textit{á-}\_\textit{nà\_\textit{á-}\_\textit{y}}} & ‘be easy, cheap’ \\
\hline
c. form irregular & & \\
\textit{kòmbó} & \textit{kòmbò-} & ‘be lean’ \\
\hline
d. not acceptable & & \\
\textit{kè\_\textit{sí}} & — & ‘be raw’ \\
\textit{mà\_} & — & ‘be dry’ \\
\textit{kàndà} & — & ‘be new’ \\
\end{tabular}

This construction was not the first form offered for adjectival predicates in elicitation. After it was stumbled upon, it was possible to elicit it for quite a few adjectives. It is presumably more expressive than the usual predicates, but its discourse functions and frequency are not well understood.

11.4.2 Negative adjectival and stative predicates (\(=\textit{ndó-}\))

Negative counterparts of the positive adjectival predicates with \textit{bù-} ‘be’, illustrated above, are formed by adding a conjugated form of stative negative clitic \(=\textit{ndó-}\) (§10.4.2) to the adjective stem, which drops its tones.
11.5 Possessive predicates

11.5.1 ‘Have’ (sò-, negative sò-ndô-)

Positive ‘(X) have Y’ is expressed as Y yá sò-, with existential particle yá and defective quasi-verb sò-. The latter takes pronominal subject suffixes but allows no overt marking of aspectual categories. Like other statives, it does combine with past = bê-, which in this combination requires “imperfective” -m- (424b) except in the 3Sg, see §10.5.1.2, above.

(424) a. lègèsô: yá sò-ý
   bicycle Exist have-1SgSbj
   ‘I have a bicycle.’

   b. lègèsô: yá sò-m = bê-ý
   bicycle Exist have-Lpfv=Past-1SgSbj
   ‘I had (= used to have) a bicycle.’

   c. yá: [ǹdó l ḍugi] yá s-ê
   woman.Pl [house l big] Exist have-3PlSbj
   ‘The women have a big house.’

sò- can be relativized on. The form of the participle is sò-mì. This is the only instance where it appears in H-toned form (sò-). Existential yá is omitted. For examples see §14.1.7.5. For sò-m-sè gá ‘when/while (X) had’, see (560c) in §15.2.3.

   The negative of sò- is sò-ndô-, cf. stative negative clitic = ǹdô-. Existential yá is not allowed in negatives (425). (425b) is one of the most common utterances in Nanga speech.

(425) a. lègèsô: sò-ndô-ý
   bicycle have-StatNeg-1SgSbj
   ‘I don’t have a bicycle.’
b.  
\[ \text{dáy}^n \quad \text{sò-ndó-Ø} \]
\begin{align*}
\text{limit} \quad \text{have-StatNeg-3SgSbj} \\
\text{‘It has no limit (= is abundant).’}
\end{align*}

The positive and negative paradigms are in (426).

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
\text{category} & \text{‘have’} & \text{‘do not have’} \\
\hline
1Sg & (yá) sò-ý & sò-ndó-ý \\
2Sg & (yá) sò-ðw & sò-ndó-ðw \\
3Sg/Inan & (yá) sò-Ø & sò-ndó-Ø \\
3Pl & (yá) s-è & sè-nd-è \\
\hline
\end{tabular}
\end{center}

The conjugated past clitic is regularly used with ‘have’, like other statives, to specify a past time frame: \text{sò-ndó = bê-ý ‘I didn’t have’}.

11.5.2  ‘Belong to’ predicates (\text{HL\;kð} = ŋ \quad \text{HL\;gð} = ŋ, \text{HL\;ŷ} = ŋ)

‘\text{X belongs to Y}’ is expressed as ‘\text{X, it is Y’s thing (possession)}’. The X NP is optional, and normally preposed (like a topic) when overt. Y appears in possessor form. If the possessed NP is inanimate singular, the inanimate singular possessive classifier \text{HL\;kð} \sim \text{HL\;gð} is used. Whereas the \text{HL\;gð} variant is predominant in NP-internal pronominal possessives (except for 1Sg), in predicates the \text{HL\;kð} variant is common. For animates, and usually for inanimate plurals, the classifier \text{HL\;ŷ} is used. For these possessive classifiers see §6.2.1.3.

In predicates, the 3Sg ‘it is’ clitic = ŋ, often reduced to a faint nasalization of the vowel, follows \text{HL\;kð} \sim \text{HL\;gð} and (in animate singular reference) \text{HL\;ŷ}. For plural reference, we would expect \#\text{HL\;ŷ} = ŷ ending with the 3Pl subject ‘it is’ clitic, or rather elided \#\text{HL\;ŷ} = \text{∅}, cf. the optional contraction in (420b) in §11.4.1.2. The form I actually hear is just \text{HL\;ŷ} (427f).

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
\text{category} & \text{3Sg} & \text{3Pl} \\
\hline
Dem.InanSg & [ŋgú]\text{HL\;kð}=ŋ & [ŋgú]\text{HL\;kð}=ŋ \\
\text{who?-AnSg} & [\text{HL\;Poss.InanSg}=\text{it.is.3SgSbj} \\
\text{‘That is whose (= belongs to whom)?’} & & \text{‘That is mine.’} \\
\hline
[\text{nàkɔmbà}^L] & [gú] & [á:mdù] \text{\text{HL\;kð}}=ŋ \text{\text{HL\;kð}}=ŋ \\
\text{shoulder.bag}^L & \text{Def} & \text{Amadou} \text{\text{HL\;Poss.InanSg}=\text{it.is.3SgSbj} \\
\text{‘The shoulder bag is Amadou’s.’} & & \text{‘The dog belongs to who(m)?’} \\
\hline
[\text{nɛ̃}^L] & [né] & [ã-ŋ] \text{\text{HL\;ŷ}}=ŋ \text{\text{HL\;ŷ}}=ŋ \\
\text{dog}^L & \text{Def.AnSg} & \text{\text{HL\;Poss.AnSg}=\text{it.is.3SgSbj} \\
\text{‘The dog belongs to who(m)?’} & & \text{‘That is mine.’} \\
\hline
\end{tabular}
\end{center}
11.6 Verb iteration

This section covers iterated sequences of bare verb stems. See §15.2.1 for iterated -mɔ̀ clauses.

11.6.1 Verb iteration with lexical tones

Verb stems may be iterated as though directly chained to each other, to indicate temporal prolongation or repetition of an event type. In such iterations the stem may retain its usual bare-stem tones. Normally the sequence is backgrounded, and the whole iterated sequence is nonfinal in the chain.

(428) a. [dɔ̀rìyé-dɔ̀rìyé] bù: láwá-mɔ̀
   go.through-go.through 3PlSbj pass-while
   [mì ní 3SgSbj ìmbì-Æ] wà
   go and.SS find.Pfv-3SgSbj Quot
   ‘She went and found two young men going back and forth through the hole (=eye) of a needle, it is said.’ (2004.02.03)

b. [bɔ̀rò ñíné-ñí gùnjó-gùnjó-gùnjó-gùnjó] …
   [pìt 3Sg-Acc dig-dig-dig-dig] …
   ‘(We) kept digging pits (and …)’ (2004.01.01), cf. (567) in §15.2.5.2

In (429), the first two iterations of gà:- are unmodified, while the third is heard with L-tone. This may just be a phonetic variant of unmodified iteration.

(429) [[gògòrò-gò: gò] ñíné ñí gà:-gà:-gà:
   [sìckle-Loc go and.SS] slash-slash-slash
   [[dà: gá] ñíné tíỳì-ýi: ndè]
   [flat.stone-Loc go put.in.pile.Pfv-1PlSbj if
   ‘We go with the sickle, we keep cutting (fonio stems, by slashing), and we put (the stems) on the flat rock, (then …).’ (2004.01.04)

11.6.2 Verb iteration of tonal type [ṽ₁-ṽ₁(-ṽ₁ …)]

In this construction (which also occurs in Jamsay), the first occurrence of the verb stem has {HL} tone overlay. It is optionally reduced to {H} on monosyllabic stems, including Cv"
syncopated from *Cvyi*. Noninitial iterations are \{L\}-toned. There is no suffixal inflection for aspect or pronominal-subject.

Examples are *kèmè* \( \text{HL}_{\text{L}} \text{kèmè} \) and *kèmè* \( \text{HL}_{\text{L}} \text{kèmè}^\text{L} \text{kèmè} \) ‘(they) kept building and building’ from *kèmè*, *jòrè* \( \text{HL}_{\text{L}} \text{jòrè}^\text{L} \text{jòrè}^\text{L} \text{jòrè} \) ‘(he) was looking and looking’ from *jòrè*, and *yè* \( \text{HL}_{\text{L}} \text{yè} \) ‘(as they) were coming’ from *yè:-*. The latter is optionally pronounced *yè:-yè:* . Facing superscripts \( \text{HL} \) and \( \text{L} \) at the first internal boundary show that there is no controller external to the word. In ordinary transcription in texts I often omit superscripts in such combinations.

With a trisyllabic or longer verb, the H-tone of \{HL\} is limited to the first syllable, resulting in an H.L.L syllable sequence: *bègirì* \( \text{HL}_{\text{L}} \text{bègirì}\text{L} \text{bègirì} \) ‘(they) kept winnowing’ from verb *bègirì*- . Another trisyllabic example is in (430). Elsewhere the usual realization of /HL/ melody or \{HL\} overlay on trisyllabics is H.H.L (§3.7.3.2).

(430) \[\text{úwà} \text{kèsè-kèsè} \] \[\text{gàńàrì}^\text{HL}_{\text{L}} \text{gàńàrì}\]
[leaf cut-cut go.around\text{HL}_{\text{L}}-\text{go.around}]
\[\text{i}: \text{lā:rà-mà-y}^\text{y}^\text{a}\]
\[1\text{PlSbj chase.away-while} \]
\[\text{go.Pfv-3SgSbj} \]
‘We were cutting off leaves (=leafy branches) and going around chasing them (=locusts), and they went (away).’ (2004.01.01)

Monosyllabics are in (431). The tone of the first iteration can flatten from <HL> to H, and transcription of rapidly spoken textual examples is difficult.

(431) a. \[\text{ày}^\text{HL}_{\text{L}} \text{ày} \] \[\text{ńdó} \text{gó} \] \[\text{jè}^\text{HL}_{\text{L}} \text{jè}: \]
[hold\text{HL}_{\text{L}}-\text{hold} [house Loc] bring\text{HL}_{\text{L}}-\text{bring}]
\[\text{dám}^\text{y}^\text{bí} \text{gá} \] \[\text{sóg}^\text{s}^\text{ó}^\text{s}^\text{ó} \]
[courtyard Loc dump-dump]
‘(We) keep picking up (stems) and bringing them to the house(s), bringing them and dumping (from head baskets) in the courtyard.’ (2004.01.03) (< àỳ, jè:-)

b. \[\text{ńè} \text{yó} \] \[\text{úwà} \text{pà}^\text{HL}_{\text{L}} \text{pà}: \]
[3Sg and] leaf \[\text{pick}^\text{HL}_{\text{L}}-\text{pick eat}^\text{HL}_{\text{L}}-\text{eat}]
\[\text{kù}^\text{y}^\text{ù}^\text{ù}^\text{ù} \text{nà} \]
[kà: \\text{làwè-}]
[head 3SgPoss] there pass.Pfv-3SgSbj
‘He would keep picking tree leaves and eating them, he would get by with it (in a famine).’ (2004.01.07) (< pà:, kúwò)

For chains of such iterations with following verbs, and for discourse functions and further examples, see §15.1.7.
12 Comparatives

12.1 Asymmetrical comparatives

12.1.1 Simple adjective with \( \text{dërê = w} \) ‘more than’ and comparandum

In the first comparative construction to be considered, the predicate is adjectival. The comparandum precedes the predicate, followed by \( \text{dërê = w} \) ‘more than’. This is an irregular form related to a conjugated predicate \( \text{dërê-} \) ‘be better, be more’ (§12.1.4). The final semivowel in \( \text{dërê = w} \) resembles the inanimate form \( =w \) of the ‘it is’ clitic (§11.2.1.1), but the formation is nontransparent.

For first and second person subject, the predicative adjective is followed by the appropriate conjugated form of \( =m- \) ‘it is’ clitic.

(432) a. [\( \text{ńně \ dërê = w} \)] \( \text{gàwá = mì-y} \)
\[\text{[3Sg more than] long=it.is-1SgSbj} \]
‘I am taller than he/she (is).’

b. \( \text{ńně \ dërê = w} \) \( \text{dúsù = mì-y} \)
\[\text{[1SgSbj \ [2Sg more than] heavy=it.is-1SgSbj} \]
‘I am heavier than you-Sg.’

c. \( \text{ńně \ dërê = w} \) \( \text{dùgú = mì-w.} \)
\[\text{[1Pl more than] fat=it.is-2PlSbj} \]
‘You-Pl are fatter than we (are).’

For 3Pl subject, the verb lacks \( =m- \) but is inflected with clitic \( =yɛ \) (433). This is the regular (non-comparative) 3Pl predicative form (as in ‘they are fat/heavy’).

(433) a. \( \text{ńně \ dërê = w} \) \( \text{dùgú = yɛ} \)
\[\text{[1Sg more than] fat=3PlSbj} \]
‘They are fatter than I (am).’

b. \( \text{ńně \ dërê = w} \) \( \text{dúsù = yɛ} \)
\[\text{[1Sg more than] heavy=3PlSbj} \]
‘They are heavier than I (am).’

For 3Sg subject, the bare adjective form is used. This is again the regular (non-comparative) predicative form. Arguably the adjective is predicative, with zero 3Sg subject. It could also be taken as an abstractive nominal that is zero-derived from the modifying adjective, see (43b) in §4.2.5.

(434) a. \( \text{pà:ngô: \ [tà-tã: \ dërê = w]} \) \( \text{dùgú} \)
elephant \ [Rdp-hyena more than] big
‘An elephant is bigger than a hyena (is).’

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For past time, the conjugated past clitic =be- is added. For first or second person subject, the result is either =be- or =m=be- plus the correct pronominal-subject inflection. =be- (as well as the optional =m-) acquires its tone from the final tone of the preceding morpheme. For 3Sg, the form is =be-Ø without =m-. For 3Pl, the form is (=ye) =b-à, where =ye- gets its tone from the left but where =b-à is always L-toned. A variant =ye =m=bà was recorded at one point but was later rejected by the same speaker. Excluding this doubtful variant, the paradigm is (435).

(435)  Past of comparative adjectival predicate

category | suffix-clitic complex (after adjective stem) | after H-tone | after L-tone
--- | --- | --- | ---
1Sg | (=m)=bé-ŷ | (=m)=bè-ŷ | |
1Pl | (=m)=bé-ŷ: | (=m)=bè-ŷ: | |
2Sg | (=m)=bé-ŵ | (=m)=bè-ŵ | |
2Pl | (=m)=bé-w: | (=m)=bè-w: | |
3Sg | =bé-Ø | =bé-Ø | |
3Pl | (=yè)=b-à | (=yè)=b-à | |

Examples of the past-time positive comparative are in (436).

(436) a. kìy- w [řně dě:rê = w] dûgû(=m)=bê-ŷ previously [3Sg more.than] fat(=it.is)=Past-1SgSbj
‘I used to be fatter than he/she (was).’

b. [ř:ⁿ dě:rê = w] gûr5 =bê-Ø [1Sg more.than] long=Past-3SgSbj
‘He/She was taller than I (was).’

c. [ř: dě:rê = w] jëmui(=yè)=b-à [1Pl more.than] black(=it.is.3Pl)=Past-3PlSbj
‘They were blacker (=darker) than we (were).’

d. [řnë dě:rê = w] dûsû(=m)=bê-ŷ [3Sg more.than] heavy(=it.is)=Past-1SgSbj
‘I used to be heavier than he/she (was).’

e. [ř:ⁿ dě:rê = w] dûsû =bê-Ø [1Sg more.than] heavy=Past-3SgSbj
‘He/She used to be heavier than I (was).’
The adjective may be directly negated with conjugatable stative negative = ndó-, which requires an L-toned stem. For the paradigm of = ndó-, see §10.4.2. The stem-final H-tone in the 1Pl and 2Pl forms before = ndó- is part of the dying-quail effect (437c), see §3.8.3.

(437) a. [i.° dě:rê = w]  gàwà = ndó-Ø
   [1Sg more.than] tall=StatNeg-3SgSbj
   ‘He/She is not taller than I (am).’

   b. [ú dě:rê = w]  dùgù = ndó-ý
   [2Sg more.than] fat=StatNeg-1SgSbj
   ‘I am not fatter than you-Sg (are).’

   c. [ù dě:rê = w]  dùgù = ndó-ý: pronounced [dügúndóóːj]
   [2Pl more.than] fat=StatNeg-1PlSbj
   ‘We are not fatter than you-Pl (are).’

   d. [i.° dě:rê = w]  dúsù = nd-ê
   [1Sg more.than] heavy=StatNeg-3SgSbj
   ‘They are not heavier than I (am).’

The past negative is = ndó = bé- with the usual morphology of past = be-. The paradigm is (438).

(438) Past negative of comparative adjectival predicate

category suffix-clitic complex (after adjective stem)

1Sg = ndó = bé-ý
1Pl = ndò = bé-ý:.
2Sg = ndó = bé-w
2Pl = ndò = bé-w:.
3Sg = ndó = bé-Ø
3Pl = nd-ê = b-á

Examples of the past negative are (439).

(439) a. [i.° dě:rê = w]  gàwà = ndó = bé-Ø
   [1Sg more.than] tall=StatNeg=Past-3SgSbj
   ‘He/She was not taller than I (was).’

   b. [i: dě:rê = w]  dúsù = nd-ê = b-á
   [1Pl more.than] heavy=StatNeg-3PlSbj=Past-3PlSbj
   ‘They were not heavier than we (were).’
12.1.2 Verbal predicate plus $děrě = ẁ$ ‘more than’

In (440), the predicate is a verb, imperfective (440a) or perfective (440b). $děrě = ẁ$ ‘more than’ follows the comparandum. The unmarked interpretation is ‘X VP’s more (than) Y’.

(440)  

a. [ú $děrě = ẁ$] $kɔ́-ŋ̀$  
   [2Sg more than] eat-Ipfv.3SgSbj  
   ‘He/She eats more than you (eat).’

b. [ú $děrě = ẁ$] $ńjí-ŋ̀$ $ńdi-∅$  
   [2Sg more than] 1Sg-Acc give.Pfv-3SgSbj  
   ‘He/She gave me more than you-Sg (gave me).’  
   or: ‘He/She gave me more than (he/she gave) to you.’

The comparandum may take the form of a PP, such as the dative in (441a), which is followed by $děrě = ẁ$. Accusative -$ŋ$ is optional before $děrě = ẁ$ when the form functions as direct object (441b). This theoretically allows the speaker to distinguish (441b) from (441c), but accusative -$ŋ$ is optional in (441b) as elsewhere, so this cue is far from reliable.

(441)  

a. [ú $báy$] $děrě = ẁ$ $bår'ŋ̀$ $kìyɛ́-só-∅$  
   [2Sg Dat more than] 1SgDat say-Pfv2.3SgSbj  
   ‘He/She said more to me than to you.’

b. [ú $ŋgàwá$ $láwá - ɛ̀r$ $ɛ̀-Æ$]  
   [2Sg more than] 1Sg-Acc hit-Pfv1a-3SgSbj  
   ‘He/She has surpassed me in tallness (= has become taller than me).’

c. [ú $ŋgìy$ $súy3-só-∅$]  
   [2Sg more than] 1Sg-Acc hit-Pfv2-3SgSbj  
   ‘He/She hit me more than you-Sg (hit me).’

12.1.3 ‘Surpass’ ($láwá$)

$láwá$- ‘pass (by)’ can be used in the sense ‘surpass, exceed’. It specifically denotes the transition from equality or inferiority to superiority in the relevant dimension. The latter is specified by a nonfinal adjective (442a) or by a nonfinal chained verb or VP (442b).

(442)  

a. $ńjí-ŋ̀$ $gàwá$ $láwá-ɛ̀r$-∅  
   1Sg-Acc be.tall $pass$-Pfv1a-3SgSbj  
   ‘He/She has surpassed me in tallness (= has become taller than me).’

b. $li:gí$ $ńjí-ŋ̀$ $giyé$ $láwá-só-∅$  
   bird 1Sg-Acc kill $pass$-Pfv2-3SgSbj  
   ‘He/She has surpassed me in killing birds.’
12.1.4 ‘Be better, more’ (dérè-)

In this construction, dérè- itself is conjugated by adding the ‘it is’ clitic =m- with first or second person inflection, or 3Sg =w or 3Pl =ye. If the other comparandum is pronominal, it takes independent (not accusative) form, see especially 1Sg iⁿ in (43c).

\[(443)\]

a. ú dérè = ml-y  
2Sg better=it.is-1SgSbj  
‘I am better than you-Sg (are).’  

b. mängórò kùrò dérè = ń  
mango wild.grape better=it.is.3SgSbj  
‘Mangoes are better than wild grapes (are).’

c. iⁿ dérè = yè  
1Sg better=it.is.PISbj  
‘They are better than I (am).’

For past time reference, the forms take past clitic =bè-, but there is some variation in the morphological construction in my data. My assistant preferred the paradigm in (444). However, for the first and second person forms, variants with =m̀ instead of =m- were also recorded.

\[(444)\]  ‘Was better than’

1Sg dérè = w = bè-ý  
1Pl dérè = w = bè-ý :  
[...bèèj]  
2Sg dérè = w = bè-w  
2Pl dérè = w = bè-w :  
[...bèèw]  
3Sg dérè = w = bè-Ø  
3Pl dérè = w = b-à

An example is (445).

\[(445)\]  ú dérè = w = bè-ý  
2Sg better=it.is=Past-1SgSbj  
‘I used to be better than you-Sg.’

12.1.5 ‘Best’ (kày)

The noun kày indicates that the referent in question is the best (of a set). The conjugation is the same as for dérè- except that 3Sg =w is not pronounced after the stem-final semivowel. The paradigm therefore consists of conjugated forms of =m- ‘it is’ for first or second person, zero for 3Sg, and =ye for 3Pl. Thus kày = m-ły ‘I am the best’, kày = Ø ‘he/she is the best’, kày = ye ‘they are the best’.

Past forms: kày = m̀ = bè-ý ‘I was the best’, kày = bè-Ø ‘he/she was the best’, kày = ye = b-à ‘they were the best’.  

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When the reference set is specified, it functions as possessor of \( kāy \), which therefore takes possessed-noun tone overlay, \{HL\} or \{L\} depending on whether the possessor ends in an H- or L-tone.

\[
\text{(446)} \quad \text{I.\textsuperscript{n}} \quad [[\text{wòrì-wàrì \quad pú→\text{L}}] \quad \text{h}^\text{L} \text{k}^\text{L} = \text{mì-} \text{y} \quad \text{HL}}
\]
\[1\text{SgSbj} \quad [[\text{farming-do.farming.Agent \quad all}] \quad \text{HL} \text{best}=\text{it.is-1SgSbj}\]

‘I am the best of all the farmers.’

12.1.6 \( gārā \) ‘more’

The adverb \( gārā \) ‘more’ (in context also ‘bigger’ or ‘better’), preceding the predicate, is optionally present when the domain of comparison is nonadjectival. It is unattested in the presence of \( děrɛ̃ = \text{w} \) or any explicitly comparative predicate. (447b) shows that it may co-occur with a distinct ‘than Y’ expression with postposition \( dɛ̀rⁿ\text{i} \) (elsewhere purposive-causal).

\[
\text{(447) a.} \quad [[\text{tò-} \quad \text{gú} \quad \text{té-ŋ}] \quad \text{HL}}
\]
\[\text{[seeds} \quad \text{Def.InanSg]} \quad \text{sprout-Ipfv.3SgSbj] \quad [[\text{yù-} \quad \text{gú} \quad \text{kù \quad gārā \quad kɛndé-ŋ} \quad \text{HL}}
\]
\[\text{[millet} \quad \text{Def.InanSg]} \quad \text{InanSbj \quad more \quad be.well.done-Ipfv.3SgSbj]} \quad \text{those seeds will sprout, the millet will turn out better (because of the manure).’ (2004.01.03)}
\]

\[
\text{b.} \quad [[\text{àlî-} \quad \text{dɛ̀rⁿ} \quad \text{mû:sà \quad gārā \quad yû: \quad wárà-ŋ}] \quad \text{HL}}
\]
\[\text{[A \quad than] \quad M \quad more \quad millet \quad cultivate-Ipfv.3SgSbj]} \quad \text{‘Moussa grows more millet than Ali (does).’}
\]

12.2 Symmetrical comparatives

12.2.1 ‘Equal; be as good as’ (\( bă:-\))

The verb \( bă:-\) ‘equal, be as much as’ most often occurs in negative sentences (‘not be as much as’ = ‘be less than’) (448a). When the domain of comparison is specified in a following expression, negation is expressed on the latter rather than on \( bă:-\) itself, which then morphs into the adverbiale \( bă→\) (448b)

\[
\text{(448) a.} \quad [\text{á} \quad \text{HL} \text{bă:}] \quad \text{bă:-ŋː-∅} \quad \text{HL} \text{father]} \quad \text{equal-IpfvNeg-3SgSbj]}
\]
\[\text{‘He/She isn’t as good as his father.’}
\]

\[
\text{b.} \quad [\text{á} \quad \text{HL} \text{bă:}] \quad \text{bă→ \quad gāwā-ŋː-∅} \quad \text{HL} \text{father]} \quad \text{from \quad be.tall-IpfvNeg-3SgSbj]}
\]
\[\text{‘He/She is not as tall as his/her father.’}
\]
12.2.2 ‘Same (equal)’ (*kèw*)

Another way to indicate equality of two entities along a scalar dimension is to use *kèw* ‘equal(ly)’ (§6.1.1, §6.6.2) as a predicate. It is related to the adverb *kè-kèw* ‘same, equal(ly)’. The predicative form is always *kèw=ỳè*. I am inclined to take the ending as the postconsonantal third-person (including 3Pl) form of the ‘it is’ clitic. This seems more reasonable than identifying the final morpheme as adjectival plural -ỳè.

(449) a. [ìː  wọỳ] ígírí  *kèw=ỳè*
    [1Pl two] height *equally=it.is.3PlSbj*
    ‘We two are of the same height.’

b. [sẹ̀n̩1  ý] [āː  wọỳ] gùr̩  *kèw=ỳè*
    [rope Def.InanPl] [3RefPl two] long *equally=it.is.3PlSbj*
    ‘The two ropes are of the same length.’

12.2.3 ‘Arrive, come up to; equal’ (*d̩ɔː-*)

d̩ɔː- ‘reach, arrive at, come up to (a place)’ can be used in the abstract sense ‘attain the level of (someone, in some respect).’ It denotes the transition from inferiority to equality. The domain of comparison may be specified by a chained VP or verb.

(450) ājì-ỳ  dùsù-ndìy̩  dɔ̀-èr̩-Ω
    1Sg-Acc heavy-Inch reach-Pfv1a-3SgSbj
    ‘He/She has become equally heavy as me.’

The 3Sg imperfective form dɔ̀-ỳ̩, literally ‘it arrives/reaches’, can be combined with a phrase denoting an extended time span. A free translation like ‘up to’ or ‘as long as’, emphasizing the considerable duration, is appropriate.

(451) [àmáy̩2  gàːrdè  gáy̩]
    [how? keep and.then.SS]
    [àr̩-ǎ  wọỳ  mà→  tà:ndìj] dɔ̀-ỳ̩
    [year two or three] reach-Ipfv.3SgSbj
    ‘How does it (=stored fonio grain) keep for up to two or three years?’ (2004.01.04)

12.3 ‘A fortiori’ (*sàkɔ, yè:*)

The ‘a fortiori’ expression (i.e. ‘much less …’, ‘not to mention …’, or ‘never mind …’ as part of a comparison) is either *sàkɔ* (regional, likely from Fulfulde) at the end of the second phrase, or *yè* (shared with Jamsay) at the beginning of the second phrase. This phrase may also contain the possessed noun *dàmá* ‘talk (of …)’ or some similar expression (cf. local French *ne parlons pas de …* as an ‘a fortiori’ expression). With *yè* the second phrase specifies a far greater or more difficult task (452a). With *sàkɔ* the second phrase may be of this type, or it may simply describe a less likely or less appropriate task (452b).
(452) a. \([kɛːrɛ^{L}\ bɛrî\ ɛwɛ-mi\ sɔ̃-ndô-ý}\]  
\([\text{money}^{L}\ \text{goat} \text{buy-Ppl.lpfv} \text{have-Neg-1SgSbj}]\]  
\([yɛ:\ nàgà^{\text{ill.dâmâ}} = ̃w^{n}]\]  
\([\text{a.fortiori}\ \text{cow}^{\text{ill.talk(n)}} \text{it.is.Inan}]\]  
‘I don’t have the money to buy a goat, much less (talk of) a cow.’

b. \([kɔ:\ ɛwɛ \ bɛrɛ-rí-ý]\]  
\([1\text{SgPoss.InanSg} \text{buy} \text{get-PfvNeg-1SgSbj}]\]  
\([\text{ú}^{\text{ill.gɔ̂}} \text{sákô}]\]  
\([2\text{Sg}^{\text{ill.Poss.InanSg}} \text{a.fortiori}]\]  
‘I couldn’t (even) buy one for myself, never mind (me buying) one for you.’
13 Focalization and interrogation

13.1 Focalization

When a focalized constituent is present, it occurs in its normal position in the clause. The verb also retains its usual subject-pronominal inflection even under subject focalization. Therefore focalization is not marked by sharply etched morphosyntax.

WH interrogatives (‘who?’, ‘what?’, etc.) are intrinsically focal. So are independent subject pronouns (other than topics) which would not be needed in corresponding unfocalized clauses (since subject category is marked by suffixes on verbs). PPs and objects other than WH interrogatives are not obviously focalized or unfocalized. However, the fact that some overt preverbal constituent is at least weakly focalized is implied by verb defocalization.

Verb defocalization is indicated by the features in (453).

(453) Verb defocalization

a. the simple perfective (with all-L tones) replaces the suffixally marked perfective-1a/b and perfective-2;
b. verbs with perfective negative -rù- and imperfective negative -ŋà:- often drop all tones to {L};
c. existential particle yá and initial reduplication of the verb are omitted (§13.1.5)

Verb defocalization is easily detected in positive perfective clauses that have the simple perfective rather than a suffixally marked perfective. It is also easily recognized in positive stative clauses (including those with ‘be [somewhere]’, ‘have’, and other quasi-verbs) by the absence of yá and of reduplication. With other inflectional categories, including all negative clauses and positive imperfective clauses, the distinction between defocalized and regular verbs is difficult to make. Tone-dropping in negative verbs (453b) is the only relevant clue, and it may be gradient (i.e. a semi-grammaticalized downdrift). This is not a big problem since focalization is pragmatically awkward under negation (‘It was you [focus] who I didn’t see’). In positive imperfective examples like é:ŋí yè:-m-Ø ‘I will come tomorrow’, we cannot determine whether é:ŋí ‘tomorrow’ is focalized (‘It is tomorrow [focus] that I will come’) or unfocalized (‘I will come tomorrow’).

The simple perfective does not require that there be a strong focus of the sort expressed by heavy emphatic stress in English. In texts, the simple perfective is common in clauses that would be translated with unfocalized clauses, as long as there is at least one overt constituent preceding the verb.

Verb defocalization implies that there is another overt constituent that is at least somewhat focal, but does not tell us which one. If there is only one preverbal constituent, it is the only candidate for focus. If there are two or more, not including a subject pronoun or an interrogative, the listener must use context and native wit to infer which is focal.
13.1.1 Subject focalization

The verb has its usual pronominal subject suffix. Subject pronouns are easiest to identify as focalized, since bare independent pronouns (without topic marker) do not ordinarily occur in subject function in unfocalized main clauses (454a-b), except as part of a topic phrase with a particle (§19.1.1-3). In positive perfective clauses, the simple perfective is a reinforcing indicator that the verb is defocalized (454c-d).

(454) a. ĩ:ū′  sèmbi-ɪn-∅
     1Sg   sweep-Ipfv-1SgSbj
     ‘It’s I [focus] who will sweep.’

   b. ĩ:ū′  sèmbi-ɪ-y:.
     1Pl   sweep-Ipfv-1PlSbj
     ‘It’s we [focus] who will sweep.’

   c. ū  yègè-w
     2SgSbj fall.Pfv-2SgSbj
     ‘It’s you-Sg [focus] who fell.’

   d. ĩ:ū′  sùy-ŋ̀
     1SgSbj 2Sg-Acc hit.Pfv-1SgSbj
     ‘It was I [focus] who hit you-Sg.’

A nonpronominal subject NP does has no overt mark of focalization, so in the absence of overt verb defocalization there is no indication that the subject is focalized. One way to insure expression of focalization, especially useful in positive imperfective clauses, is to topicalize the subject NP and resume it with a subject pronoun (455).

(455) yi-tègè,  bû:  bùrè-m-ê
      child-Pl,  3Pl  work-Ipfv-3PlSbj
      ‘The children, it’s they [focus] who work.’

13.1.2 Object focalization

The object NP or pronoun remains in its regular linear position. Object pronouns occur in unfocalized as well as focalized clauses. Therefore object focalization (other than in content interrogatives) is difficult to recognize, unless the verb is overtly defocalized and there is no other candidate for focus.

In (456a-b), only context and perhaps articulatory emphasis indicate object focalization. In (456c-d), the verb defocalization (simple perfective) implies that the object is focal.

(456) a. ūgú  jàrù-sò-ŷ
      Dem.InanSg  look.for-Prog-1SgSbj
      ‘That [focus] is what I’m looking for.’
In elicitation, my assistant did suggest that the form of the object could be used to indicate focalized status at least probabilistically, in that “optional” accusative suffix -ŋ is typical of focalized objects. He therefore distinguished focalized (457a) with -ŋ from unfocalized (457b) without it. However, the simple perfective occurred in both, and I doubt that overt versus covert accusative marking really correlates well with focalization. In any event, -ŋ is not always audible due to phonetic attrition.

(457)  a. á:mádù ǹjí-ŋ sùyè-Ø
     A 1Sg-Acc  hit.Pfv-3SgSbj
     ‘I was me [focus] that Amadou hit.’

b. á:mádù ǹjí sùyè-Ø
     A 1Sg-Acc  hit.Pfv-3SgSbj
     ‘Amadou hit me.’

13.1.3 Focalization of PP or other adverbial

Adverbs including PPs can be focalized. (458a-b) show spatial and temporal adverbs, which in their respective discourse contexts were clearly focal but which have no overt marker of focalization since the verb is imperfective. Because linear order is not systematically correlated with focalization, (458b) could also be used with ‘to the field(s)’ rather than ‘tomorrow’ as focus.

(458)  a. [òː¹ L]  gó  ǹnì-m-Ø
       [field Loc]  go-IPfv-1SgSbj
     ‘It’s to the fields [focus] that I am going.’

b. è:ŋí [òː¹ L]  gó  ǹnì-m-Ø
    tomorrow [field Loc]  go-IPfv-1SgSbj
     ‘It’s tomorrow [focus] that I will go to the field(s).’

A dative example is (459a), and an instrumental example is (459b). The simple perfective is consistent with focalization of the PPs.
(459)  a.  [ú báy]  kiyê-ê
       [2Sg  Dat]  say.Pfv-1SgSbj
           ‘It’s to you-Sg [focus] that I said (it).’

       b.  [ŋ̀gú yàŋà]  bìrê-ê
           [Dem.InanSg  Inst]  work.Pfv-1SgSbj
           ‘It was with this [focus] that I worked.’

13.1.4  Focalization of postpositional complement

A PP is focalized as an intact unit. There is no way to overtly distinguish focalization of a PP from focalization of just its NP complement. In the examples of focalized PPs in the preceding section, the context usually involves NP complement focalization.

13.1.5  Reduplication and existential yá omitted

Two fairly common extensions of unfocalized positive main clause verbs are initial Cv-reduplication (§10.2.1.6, §10.2.2.2, §10.4.1) and the existential particle yá. One or the other occurs with unfocalized positive stative verbs in main clauses. Elsewhere, yá is required in ‘have’ predicates and (in the absence of a locational) with ‘be (somewhere)’ predicates.

Reduplication and yá disappear when another constituent is focalized. This suggests that reduplication and yá are associated with verb (or clause) focalization, and that when another constituent (a NP or adverb) is focalized, the predicate is ipso facto defocalized (and trimmed). In ‘be (somewhere)’ constructions, any overt locational can function as focalized for this purpose.

The stative form for ‘sit (down)’ is usually reduplicated é-ʔèwò- ‘be sitting, be seated’, though yá ęwò- is also possible. If there is a focalized constituent, the form is just ęwò- (460a). Likewise, stative ‘fear’ is usually reduplicated ú-ʔùwà-, but it reduces to ùwà- if a constituent is focalized (460b).

(460)  a.  Ĩⁿ  èwò-y
        1Sg    sit.Stat-1SgSbj
        ‘It’s [focus] who am sitting.’

         b.  yàrä = ŋ  ùwà-y
            lion.Acc  fear.Stat-1SgSbj
           ‘It’s lions [focus] that I am afraid of.’

Existential yá is absent before ‘be (somewhere)’ and ‘have’ because of the focalized constituents in (461a-c).

(461)  a.  Ĩⁿ  bù-y
        1Sg    be-1SgSbj
        ‘It’s [focus] who am here.’
b. ă-ŋ źdô  sô-Ø
who? AnSg house  have-3SgSbj
‘Who [focus] has a house?’

c. gúrî  sô-y
hut  have-1SgSbj
‘It’s a hut [focus] (not a house) that I have.’

13.2 Interrogatives

Several of the content (WH) interrogative stems begin with ă(ː), which may have originally been an interrogative morpheme. The relationship, if any, to a classifier-like initial a(n)- in a few nouns (§4.1.8) is unclear.

13.2.1 Polar (yes/no) interrogatives (ma)

Interrogative particle ma is added at the end of an otherwise indicate sentence. It is optionally prolonged (symbol →). It is of variable pitch because of intonational effects (see below on parallellistic constructions).

When it is clause-final, its phonological tone (before intonational embellishment) is copied from the final tone of the preceding word. It is heard as mà with L-tone after verbs, adjectives, and anything else that ends in an L-tone. Interestingly, it also has L-tone after verb forms containing perfective-2 -sô- in spite of their H-tones, like 2Sg -sô-w in (462c). The perfective-2 is the only positive indicative inflection with a final H-tone on the suffix, so one can generalize that all positive indicative verbs are followed by L-toned mà. The perfective-2 suffix has a similar tonal effect on quotative particle wa, see (614c) in §17.1.3.

(462) a. źːŋj yē-ːmː-ːw mà
tomorrow come-Lpfv-2SgSbj Q
‘Are you-Sg coming tomorrow?’

b. źːŋj yē-ːmː-ːw: mà
tomorrow come-Lpfv-2PlSbj Q
‘Are you-Pl coming tomorrow?’

c. yē-ːsː-ːw màn
come-Pfv2-2SgSbj Q
‘Did you come?’ (likewise 1Sg yē-ːsː-ːw màn, 3Sg yē-ːsː-ːt màn)

d. ńːsː màn
be-heavy Q
‘Is he/she heavy?’

e. yē-ːŋ3-ːw:n màn
come-LpfvNeg-2SgSbj Q
‘You-Sg will not come?’

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H-toned má occurs clause-finally after all other words ending in an H-tone. For example, it occurs after final-H-toned words containing (or ending in) any of the H-toned negative morphemes: perfective negative -rí-, ḣgó- ‘not be’, stative negative =ndó- (with adjectives or stative verbs), and =ndò- ‘it is not’ (with nouns).

(463)  

a.  yè:-rí-∅  má  come-PfvNeg-3SgSbj  Q  
‘Did he/she not come?’

b.  jàː  kò:-rí-̣w  má  
meal  eat-PfvNeg-2Sg  Q  
‘Have you-Sg not eaten?’

c.  ḣgá  ḣg-ेː  má  
here  not.be-3PlSbj  Q  
‘Are they not here?’

d.  dùsù =ndó-∅  má  
heavy=StatNeg-3SgSbj  Q  
‘Is he/she not heavy?’

e.  dòɡɔ =ndó-ːw  má  
Dogon=it.is.not-2SgSbj  Q  
‘You-Sg are not a Dogon?’

H-toned má also occurs after H-final predicative adjectives: dùgú má ‘is he/she big?’

The split into mà and má based on the final tone of the preceding word is limited to clause-final (prepausal) position. This is the normal position, but when a polar interrogative is quoted, mà is followed by quotative clitic wa. Both clitics are elsewhere atonal, but in this combination they are H-toned, even after a nL-tone. A reasonable interpretation is that when protected by a following morpheme, the latent underlying H-tone of mà is expressed.

(464)  

[ǐnè  wá] …  [ǐnèn  nà]  jùg-ػ  má → wá  
[3Sg  Quot] …  [name  3SgPoss]  know-Ipfv..3SgSbj  Q  Quot  
‘(She was asked): hey you, do you know her name?’ (2004.02.03)

In (464) original addressee is expressed as third person in a quotation (§17.1.1). Another example of mà→ wá is in (684) in §17.6.3 below.

When both polar alternatives are overt, mà appears after the first segment with pitch raised (symbol ’), a common nonterminal clause-final intonation effect, and often with its vowel prolonged (→). The second segment may be complete in form, structurally parallel to the first, but ending in mà without much intonational modification (465a). Alternatively, the second segment may omit mà (this is rather common), and it may also show other simplifications (465b).

(465)  

a.  ǐnì-ìw  mà →,  bè:-ìw  mà  
go-Ipfv-2SgSbj  Q,  stay-Ipfv-2SgSbj  Q  
‘Will you-Sg go, (or) will you-Sg stay?’
In embedded ‘whether’ clauses, the L- or H-tone of *ma* is overridden by a variant of the dying-quail effect (§3.8.3). In such cases I transcribe *má:* or *mà:*, showing the “correct” phonological tone which depends on the preceding tone. As usual, addition of *-ː* signals that the dying-quail effect modifies the phonological tone, in this case resulting in *[màːːː]*, combining lengthening with pitch movement. Examples are in (641) in §17.2.1 and (660e) in §17.3.7.

I did not observe any tag question constructions, except for a rhetorical tag-question with *là* (§13.2.9).

As also noted in (§7.2), there is no clear distinction between interrogative *má* and the ‘or’ disjunctive particle *mà* in such parallel polar interrogatives.

13.2.2 ‘Who?’ (*à-ŋ*, *à::yè*)

In WH-interrogatives, the interrogative particle *mà* occurs optionally (but redundantly) at the end of the clause. The WH-word is pragmatically focal, with implications for the form of a following perfective positive or stative positive verb (§13.1).

The ‘who?’ word is *à-ŋ*, ending in one of the few vestiges of an original animate singular suffix *-ŋ* (cf. *yà-ŋ* ‘woman’), likely from earlier *-m*. It is (less often) expanded as *nù:* *à-ŋ*, with the preadjectival form of *nù:* ‘person’. The *ŋ* is subject to assimilation to the position of a following consonant, hence [ə́ːŋ], [ə́ːŋ], and [ə́ːŋ] before various following consonants. In isolation it can be pronounced [əŋ] or [əː"] with vowel nasalization. I normalize transcription as *à-ŋ*.

(466)

a. [kɛ̀ːrɛ́L ɠú] [à-ŋ ɓáy] ǹdị-ːw
[moneyL Def.InanSg] [who?-AnSg Dat] give.Pfv-2SgSbj
‘To who(m) did you-Sg give the money?’

b. *à-ŋ ɲe:-ːØ* mà
who?-AnSg come.Pfv-3SgSbj Q
‘Who came?’

c. *àŋ ɲàŋà jè:-ːØ* mà
who?-AnSg cow bring.Pfv-3SgSbj Q
‘Who brought the cow?’

d. *àŋ ɲgà-gà yì:-w* mà
who?-AnSg there see.Pfv-2SgSbj Q
‘Who(m) did you-Sg see there?’

e. [nù:L əŋ] yàŋà ɲ-ːØ
[[personL who?-AnSg] Comit] come.Pfv-3PlSbj
‘Who did they come with?’
Predicative function (‘who is …?’) is expressed by \( \text{ā-ŋ} = \hat{ŋ} \) (pronounced [\( \text{āŋ} \)])). This presumably includes a 3Sg form of the ‘it is’ clitic (§11.2.1.1). One cannot reliably hear the second velar nasal segment. The only reliably audible indicator of predicative status is the \(<\text{LHL}>\) tone of the syllable, and there is evidence (see below) that a final L-tone element is the real morphological feature here.

\( \text{(467)} \)

a. \( \text{ā-ŋ} = \hat{ŋ} \)
   \( \text{who?}-\text{AnSg} = \text{it.is.3SgSbj} \)
   ‘Who is he/she?’

b. \( \text{ā-ŋ} = \hat{ŋ} \)
   \( \text{mà} \)
   \( \text{who?}-\text{AnSg} = \text{it.is.3SgSbj} \quad \text{Q} \)
   ‘Who is it?’ (pronounced [\( \text{āŋmà} \)])

If an overt “subject” NP is present, \( \text{ā-ŋ} \) is topicalized.

\( \text{(468)} \)

\( \text{wō-ŋ} \quad [\text{ā-ŋ} = \hat{ŋ} \quad \text{mà}] \)
\( \text{Dem-AnSg} \quad [\text{who?}-\text{AnSg} = \text{it.is.3SgSbj} \quad \text{Q}] \)
   ‘This/that (person), who is it?’ (‘Who is that?’)

There is a plural ‘who-Pl is/are …?’ form \( \text{ā-ŷè} \). Again, note the final L-tone. In predicative function with 3Pl subject, expected \( \text{ā-ŷè} = \text{ŷè} \) is simplified (by haplology) to \( \text{ā-ŷè} = \emptyset \).

\( \text{(469)} \)

\( \text{ā-ŷè} = \emptyset \quad \text{mà} \)
\( \text{who?.Pl-Pl} = \text{it.is} \quad \text{Q} \)
   ‘Who-Pl is it?’

With first or second person “subject,” we get forms like those in (470), where conjugated clitic = \( \text{m} \) ‘it is’ is added to \( \text{ā-ŋ} \). The \( \text{nù:} \)\(^{1}\) in (470a) is optional. Note especially the final falling tone in the 2Sg (470a) and 1Sg forms (470c), which are therefore followed by L-toned \( \text{mà} \). So there are clear indications that a final L-tone is characteristic of predicative forms of ‘who?’.

\( \text{(470)} \)

a. \( \text{ù} \quad [\text{mù:}^{\text{L}} \quad \text{ā-ŋ} = \text{mù-w}] \quad \text{mà} \)
   \( \text{2Sg} \quad [\text{person}^{\text{L}} \quad \text{who?-AnSg} = \text{it.is.2SgSbj} \quad \text{Q}] \)
   ‘Who are you-Sg?’

b. \( \hat{ù} \)
   \( \text{ā-ŷè} = \text{mù-w:.} \quad \text{mà} \)
   \( \text{2Pl} \quad \text{who?.Pl-Pl} = \text{it.is.2PlSbj} \quad \text{Q} \)
   ‘Who are you-Pl?’

c. \( \text{ì} \)
   \( \text{ā-ŋ} = \text{mǐ-y} \quad \text{mà} \)
   \( \text{1Sg} \quad \text{who?-AnSg} = \text{it.is.1SgSbj} \quad \text{Q} \)
   ‘Who am I?’

d. \( \hat{ì} \)
   \( \text{ā-ŷè} = \text{mǐ-y:.} \quad \text{mà} \)
   \( \text{1Pl} \quad \text{who?.Pl-Pl} = \text{it.is.1PlSbj} \quad \text{Q} \)
   ‘Who are we?’

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13.2.3 ‘What?’ (kɔ̀-ɲɛ́, ḳɲɛ́), ‘with what?’, ‘why?’

‘What?’ is kɔ̀-ɲɛ́ (471). The first syllable is presumably related to kɔ̀-ɲɛ́ ‘thing’, leaving -ɲɛ́ as the real interrogative element (diachronically). The combination is rather frozen synchronically.

(471) a. kɔ̀-ɲɛ́ bìrè:-sò-Ɂw
what? work-Prog-2SgSbj ‘What are you-Sg doing?’

b. kɔ̀-ɲɛ́ kɔ̂-mì-Ɂ.: what? eat-Ipfv-1PlSbj ‘What are we going to eat?’

‘With what?’ (instrumental) is kɔ̀-ɲɛ́ ųŋà, contracted from *kɔ̀-ɲɛ́ yàŋà.

(472) [kɔ̀-ɲɛ́ ųŋà] wárá-맞-Ɂw
[what? Inst] farm-Ipfv-2SgSbj ‘With what do you-Sg grow (cultivate)?’

‘For what?’ = ‘why?’ is kɔ̀-ɲɛ́ đẹ̀řì, with purposive postposition.

(473) [kɔ̀-ɲɛ́ đẹ̀řì] yè-w
[what? Purp] come.Pfv-2SgSbj ‘Why did you-Sg come?’

ɲɛ́ by itself can be used as the plural ‘what (things)?’, but it is fairly uncommon (474). The initial ɲp cluster is likely from *in; see §3.3.8.1.

(474) [ɲɲé ųŋà] wárá-맞-Ɂw
[what?.Pl Inst] farm-Ipfv-2SgSbj ‘With what (tools-plural) do you-Sg farm?’

The predicative form is illustrated in (475).

(475) kɔ̀-ɲɛ́ = Ɂwɑ
what?=it.is.Inan (mà) (Q) ‘What is it?’

The ending in kɔ̀-ɲɛ́ = Ɂwɑ is the inanimate conjugated form of the ‘it is’ clitic, namely =w, which elsewhere gets its tone from the preceding morpheme (§11.2.1.1). The fact that it appears as L-toned = Ɂwɑ in kɔ̀-ɲɛ́ = Ɂwɑ is more evidence for a final L-tone feature in predicative interrogatives; compare the predicative forms of ‘who?’ discussed in the preceding section.
13.2.4 ‘Where?’ (àrⁿáŋá)

‘Where?’ is àrⁿáŋá. It is arguably unsegmentable synchronically, but the final ñá may have originated as the locative postposition (§8.2.3), and native speakers might still discern this segmentation. Adverbial examples are in (476).

(476) a. àrⁿáŋá  ŋní-m-w
where?  go-Ipfv-2SgSbj
‘Where are you-Sg going?’

b. [yì-tègè l bû:] àrⁿáŋá yèg-à
‘The children [topic], where did they fall?’

Predicative ‘(someone/something) be where?’ is the same àrⁿáŋá plus the regular form of locational ‘be’ (§11.2.2.2), as in (477a-b). ‘Where is it?’ with unspecified topic is àrⁿáŋá = ṭ, with the by-now familiar final L-tone element (477c).

(477) a. bòndí  àrⁿáŋá  bû-Ø
rain(n)  where?  be-3SgSbj
‘The rain [topic], where is it?’ (=’Where is the rain?)

b. àrⁿáŋá  bû-w
where?  be-2SgSbj
‘Where are you-Sg?’

c. àrⁿáŋá = ṭ
where=it.is.3SgSbj
‘Where is it?’

13.2.5 ‘When?’ ([àŋgú HL tû:] gò, wàgàtì àrⁿáŋá)

‘When?’ is expressed as [àŋgú HL tû:] gò, which ends in locative gò. It begins with àŋgú ‘which?’, which however is elsewhere an adjective that follows its modified noun. This analysis suggests that tû: (perhaps a possessed noun?) should mean ‘time’, but no such noun with this meaning occurs elsewhere in Nanga. (Compare, however, Toro Tegu tòwɔ́ ‘time”.)

(478) a. á:mádù  [[àŋgú HL tû:] gò] yè:-ţ
A  [[which? HL time] Loc] come-Ipfv.3SgSbj
‘When is Amadou coming?’

b. [àŋgú HL tû:] gò  tɔ-ţ
[[which? HL time] Loc] sow.Pfv-3PlSbj
‘When did they sow (= plant the seeds?)’

An alternative ‘when?’ interrogative is wàgàtì L àrⁿáŋá, which consists of an L-toned form of wàgàtì ‘time, moment’, an Arabic loan that is widespread in languages of the zone (Fulfulde, Songhay, etc.), plus àrⁿáŋá ‘where?’.
13.2.6 ‘How?’ (àmâyⁿ, àmâyⁿ–àmâyⁿ– àmá-mâyⁿ)

‘How?’ can be expressed by the interrogative adverb àmâyⁿ, or its iteration àmâyⁿ–àmâyⁿ. The iterated form allows for multiple answers (‘in what ways?’). These forms are subject to phonetic attrition in sentential context; the yⁿ is often elided, and the iteration may be reduced to àmâyⁿ–mâyⁿ or àmá-mâyⁿ.

(480) a. àmâyⁿ ñí-ní-m– w
how? go-lpfv-2SgSbj
‘How will you-Sg go?’

b. tóndí àmâyⁿ–àmâyⁿ ké:ndé–m– h
basket how? how? fix-lpfv-2SgSbj
‘How are you-Sg going to fix the basket?’

àmâyⁿ is often combined with kårⁿ ‘do’ in the sense ‘do what?’ This phrase as a whole can be used in ‘how?’ interrogatives, in the same-subject subordinated forms kårⁿ í (for past time) or kårⁿ gáy (for imperfective contexts).

(481) a. [àmâyⁿ kårⁿí gáy] úmí lâ:râ-mi-y–.
[how? do and.then.SS] mosquito chase.away-lpfv-1PISbj
‘How (= [by] doing what?) will we chase away the mosquitoes?’

b. [àmâyⁿ kårⁿí í] [yê: í] èw-yê-Ø
[how? do and.SS] [come and.SS] sit-MP.Pfv-3SgSbj
‘Hw did it (=our village) come and settle?’ (2004.01.05)

àmâyⁿ is obscurely related to mayⁿ ‘like’ (§8.4.1).

13.2.7 ‘How much/many?’ (à:ngây)

‘How much?’ or ‘how many?’ is à:ngây. It function like a numeral, following a noun (without plural marking) that keeps its normal tones (482a). It can also be used absolutely (482b).

(482) a. [pêrgé à:ngây] sò–w
[sheep how.many?] have-2SgSbj
‘How many sheep do you-Sg have?’
A complement may also be expressed by a topicalized NP (483).

(483) màŋà yèː, àŋgà tàː ñà márà-∅
cow 1SgPoss.AnPl, how.many? be.lost.Pfv-3SgSbj
‘My cows, how many (of them) were lost?’

The distributive iteration, used in markets to indicate price per unit of sale, is àŋgà-àŋgà.

(484) [éwè gà] màŋgòrò àŋgà-àŋgà tûrɔ̀-mè
‘They sell mangoes for how much a piece in the market?’

13.2.8 ‘Which?’ (àŋgú)

As interrogative modifying adjective, ‘which?’ is expressed as àŋgú (485a). It may also be used absolutely (485b). Before a Cv onset it optionally syncopates to āŋ, and the velar nasal may then assimilate (485c).

(485) a. [màŋgòròL àŋgú] jórɔ̀-m̀-w
[mangoL which] want-Lpfv-2SgSbj
‘Which mango do you-Sg want?’

b. àŋgú jórɔ̀-m̀-w
which? want-Lpfv-2SgSbj
‘Which (one) do you-Sg want?’

c. [nàŋà [ú L yèː]] āŋ tûrɔ̀-m̀-w
‘Which of your cows are you-Sg selling?’
(can also mean ‘You will sell your cows to whom?’)

àŋgú gets some competition from other interrogatives. In (486a), ār“áŋá ‘where?’ is used as a modifier (or perhaps compound final), with preceding L-toned noun, since a fixed location is involved. In (486b), a possessive construction is used with kɔ̀-nɛ́ ‘what?’ as the possessor, since the question concerns the substance (i.e. fruit) from which the possessed noun is constituted.

(486) a. [ú L tìyà] [ńdòL ār“áŋá] sìgé-ŋ
[2SgPoss L friend] [houseL which?] go.down-Lpfv.3SgSbj
‘In which house does your-Sg friend go down (=lodge)?’

b. [kɔ̀-nɛ́ L mì:] kárɔ́-mì-yː.
‘Which juice (=juice of what) will we make?’

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13.2.9 Rhetorical tag question (là)

Clause-final là, probably related at least historically to negative morphemes (cf. = ndō: ‘it is not’, §11.2.1.2), is a rhetorical tag question marker. Usually no response from the listener is expected. là could be considered an enclitic, but I know of no phonological interactions with the preceding word.

(487) pír-à:ndî [kù mày"] gɔ̀ŋɔ́rⁿɔ́m = bè-∅ là
Fulbe [DiscDef like] go.around-Ipfv=Past-3SgSbj tagQ
‘Fulbe used to go around (acting) like that, did they not?’ (2004.01.10)

13.2.10 Embedded interrogatives

Embedded WH-interrogatives can take the same form as unembedded ones, with the original WH-interrogative word and with the interrogative particle, which is typically pronounced with some prolongation and with low or falling pitch in this construction.

(488) a. [à-ŋ yè:-∅ mà→] yè-rí-y
[who?-AnSg come.Pfv Q] see-PfvNeg-1SgSbj
‘I didn’t see who came.’

b. [àŋgày èwɛ-∅ mà→] júgɔ-ŋɔ-y
[how.much? pay.Pfv-3SgSbj Q] know-IpfvNeg-1SgSbj
‘I don’t know how much he/she paid.’

c. [àrⁿáŋá hnɛ-∅ mà→] júgɔ-ŋɔ-y
[where? go.Pfv-3SgSbj Q] know-IpfvNeg-1PlSbj
‘I don’t know where he/she went.’

The construction gets some competition from relative clauses, such as the object relative clause in (489). For -m-ɔ-sè, see the temporal adverbial clause type with -m-ɔ-gà (§15.2.3, below), which may be historically related to the progressive inflection (§10.2.2.4).

(489) [kɔ³⁻¹ ʃ.ⁿ jɔrⁿ-m-sè ¹gù]
[thing⁻¹ 1SgSbj look.for-Ipfv-Ppl.Pfv ¹Def]
iré bɛsɔ-y
forget bury.Pfv-1SgSbj
‘I have forgotten the thing which (=forgotten what) I was looking for.’
14 Relativization

14.1 Basics of relative clauses

Relative clauses have the features in (490).

(490)  a. the core of the head NP, maximally Poss-N-Adj-Num, occurs in its clause-internal position (internal head)
       b. the internal head, except a preposed possessor, is tone-dropped;
       c. the verb (functioning as a participle) is marked for a reduced set of AN categories, and may differ in form from a main-clause verb; participles usually do not agree morphologically with either the subject or the head NP; however, there is optional 3Pl subject agreement in imperfective positive participles, and optional but frequent animate plural head-NP agreement on negative participles;
       d. the head NP is (seemingly) bifurcated, i.e. determiners and non-numeral quantifiers follow the participle;
       e. if the overall NP (DP) is semantically definite, as it usually is, the verb-participle is followed by a determiner, agreeing in animacy and number with the head noun, and tone-dropping the verb-participle;
       f. pronominal subjects in nonsubject relatives are expressed by proclitics identical in form to independent pronouns but immediately preverbal;
       g. there is no relative marker as such, whether in the clause-internal head NP or at either edge of the clause.

The apparent bifurcation of the head is (I maintain) the result of movement of the pre-relative part of the overall NP into the relativization site within the relative clause. This assumes that the overall NP has the maximal form is Poss-N-Adj-Num-RelCl-Det-DiscFunct, where “RelCl” is the relative clause containing the coindexed copy. After tone-dropping, the Poss-N-Adj-Num string slides into the position of the coindexed copy. This analysis works for most Dogon languages; the case for it is stronger in Ben Tey where there is supporting morphological evidence.

14.1.1 Coordinated relatives with a shared head

In (491), the head noun (nū: ‘person’) appears once, but is understood to be the unexpressed head of the second relative clause (‘who go’) as well. The first relative clause is structurally complete, including a final definite morpheme. Plurality is indicated only by the definite morpheme. The second clause contains a resumptive 3Pl subject pronoun (bû).
In (492), even the main-clause verb (‘I dislike’) is adjacent to the first relative clause, suggesting a kind of extraposition of the second relative clause (or else gapping of a second ‘I dislike’).

A simpler construction occurs when the two co-events are merged into a chain, since here only the final verb is participialized.

For relatives with conjoined NPs as head, see §14.1.4, below.

14.1.2 Tone-dropping on final word(s) of internal head NP

The regular NPs in the left column in (494) are converted into the relative-clause head NPs in the right column.

In (494a-b), whether the NP is a simple noun or a noun-adjective pair, the final word has its regular tones when the NP is independent. In (494c-d), the last two words of the NP have
their regular tones. When the NP functions as relative head, everything from the noun to the final modifier is tone-dropped. In (494b,d) the noun is also tone-dropped by the adjective, so in the relative-clause versions one might argue for cyclical tone-dropping. My bracketing and superscripts are based on an alternative one-step model where the relative clause (as outermost or highest controller) imposes {L} in one fell swoop on the noun and its following modifiers. These tonosyntactic facts are parallel to those seen in Jamsay, Ben Tey, and several other Dogon languages.

It is also necessary to consider how possessed NPs behave when they function as head NPs. When the possessor is postnominal (i.e. a pronominal possessor plus possessive classifier, §6.2.1.3.), the possessum is not tone-dropped, either as independent NP or as relative head. Rather, the possessive classifier (originally a noun meaning ‘thing’ or ‘animate being’) is tone-dropped in relative heads, if not already L-toned. The tone-dropping is easiest to hear in the 1Sg forms, where the 1Sg possessor fuses with the classifier (adding only an initial L-tone to the basic {HL} possessum overlay of the classifier). The actual 1Sg possessor forms are kɔ̀: and ɣɛ̀:2, dropping to kɔ̀:1 and ɣɛ̀:1 (495d) at the end of relative heads. However, even possessors like 2Sg ú gɔ̀ in (495a) undergo tone-dropping as relative heads, in this case to ú gɔ̀:1 (495b). Since neither the possessum nor the 2Sg pronoun ú are tone-dropped, I indicate tonosyntactic islandhood (preventing tone-dropping) by «…» in these examples, though I usually omit these brackets in text transcriptions.

(495) a. ̀ndɔ̀ [ù Ḍl gɔ̀]
    house [2Sg Ḍl Poss.InanSg]
    ‘your-Sg house’

b. [̀ndɔ̀ [ù גɔ̀] yègè-se] gú
    [̀house [2Sg גɔ̀ Poss.InanSg]] fall-Ppl.Pfv Def.InanSg
    ‘your house that fell’

c. pɛ̀rgɛ̀ yɛ̀:
    sheep 1SgPoss.AnSg
    ‘my sheep-Sg’

d. [̀pɛ̀rgɛ̀ yɛ̀:] yègè-se nɛ̀
    [̀sheep גɔ̀ 1SgPoss.AnSg] fall-Ppl.Pfv Def.AnSg
    ‘my sheep-Sg that fell’

e. [[búrɔ̀ [ù גɔ̀] yɔ̀] ɔ̀ bù-mi y]
    [[pants [2Pl גɔ̀ Poss.InanPl]] dangling be-Ppl.Ppfv Def.InanPl]
    ‘Those pants (=loincloths) of yours-Pl that are dangling down’ (2004.01.09)

The island consists in each case of the possessum and the pronoun preceding the possessive animacy-number classifier (495b,e). There is no separate pronoun in the 1Sg possessor case (495d), but again the possessum is tonosyntactically free. The classifier, on the other hand, is exposed and is tone-dropped by the relative clause.

A prenominal possessor may be any nonpronominal NP, and it may be a pronoun in the case of inalienable possession (kin terms). The data in (496) show that the entire possessor-possessed NP is a tonosyntactic island with respect to relativization. Neither the possessor NP nor the possesum drops its tones. In (496a), ‘house’ is already tone-dropped within the possessed NP, since the possessor ends in an L-tone (§6.2). Therefore its L-tone is not
attributable to the relative construction. In the other examples in (496), the possessum has {HL} overlay since the possessor ends in an H-tone, and there is no change when the entire NP functions as relative-clause head.

(496)  a. [á:dámá  L hòdò] yègè- sêL guú
       [A  L 'house'] fall-Ppl.PfvL Def.InanSg
       ‘Adama’s house that fell.’

  b. <[yá-aa  HL pérgè]> yègè- sêL né
     <[woman-Sg  HL sheep] last-Ppl.PfvL Def.InanSg
     ‘a woman’s sheep that fell’

  c. <[àr'ṇ̃a  HL pérgè]> yègè- sêL né
     <[man  HL sheep] fall-Ppl.PfvL Def.InanSg
     ‘this man’s sheep-Sg that fell’

  d. <[ù  HL dérè]> bàmàk=fø  bù-miL né
     <[2SgPoss  HL elder.sib] B=Loc be-Ppl.StatL Def.InanSg
     ‘your-Sg elder sibling who is in Bamako’

We now consider what happens when modifying adjectives and/or numerals are added. If a postnominal pronominal possessor is present, a modifying adjective is adjacent to the noun, so e.g. ‘your big house’ is expressed by the linear sequence [house big] [2Sg Classifier]]. Since ‘big’ is tightly bound to the noun, it is included in the tonosyntactic island and is not tone-dropped in relatives (497a). A numeral may precede or follow a postnominal possessor. If the numeral precedes the possessor, it is internal to the tonosyntactic island and surfaces with lexical tones, like ‘six’ in (497b). If it follows the possessor, it is not protected and it is tone-dropped as part of the relative head (497c).

(497)  a. <[ùdò  L  ìwàJos [ù  gjàL] ] yègè- sêL guú
       <[house  L big [2Sg  Poss.InanSgL] ] fall-Ppl.PfvL Def.InanSg
       ‘your-Sg big house that fell’

  b. <[ùdò  kùrè [ù  yëL] ] yègè- sêL yù
     ‘your-Sg six houses that fell’

  c. <[ùdò  [ù  yëL] ] kùrèL yègè- sêL yù
     [= (b) ]

When an adjective is part of a possessed NP with a pronominal possessor (whether nonpronominal or pronominal), i.e. in Poss [HL][N Adj], the adjective is already tone-dropped as an extension of the {HL} or {L} possessum overlay controlled by the possessor. Therefore (498a,c) already end in an {L}-toned adjective, and no further tone-dropping is possible when these NPs function as relative heads (498b,d). I somewhat arbitrarily indicate the right edge of the island after the adjective in (498b,d), though it is quite possible that the relative clause would have tone-dropped at least the adjective if the latter were not already {L}-toned.
When a numeral follows a noun that has a prenominal possessor, whether the numeral must be tone-dropped under the influence of the possessor depends on whether the possessor is nonpronominal (obligatory tone-dropping, §6.2.2.2) or pronominal (optional tone-dropping, §6.2.2.4). In the former case, whether any further tone-dropping would occur when the NP is a relative head is moot. In the latter case, tone-dropping on the numeral is obligatory, not merely optional. An example is (499), where ‘six’ might have been tone-dropped by virtue of being part of the possessum (top mark-up), but would definitely be tone-dropped in a relative head (bottom mark-up, also followed in the interlinear). The notation follows the second interpretation (relative clause tone-drops numeral).

(499) \[[ū \quad \text{hl} [dérè \quad kùrè]] \supset \text{yègè-se}^L \quad \text{bù:} \]
\[[\subset \text{2sgposs} \quad \text{hl} \text{elder.sibling}] \quad \text{six}^L \quad \text{fall-ppl.pfv}^L \quad \text{def.anpl} \]
‘Your-Sg six older brothers who fell’ (\text{kùrè})

Determiners and non-numeral quantifiers are not relevant to this section, since they follow the verbal participle; see §14.1.9-10, below.

14.1.3 Restrictions on the head noun in a relative clause

A pronoun may not directly head a relative clause. Instead, \textit{nu}: ‘person’ (for humans) occurs as head NP (L-toned \text{nù}^L), and the pronoun is preposed, in apposition.

(500) \[\text{i}: \quad [ŋgá \quad \text{nù}^L \quad \text{b-è-m}^L \quad \text{bù:}] \]
\[\text{1pl} \quad \text{[here \quad person}^L \quad \text{be-3pl-ppl.stat}^L \quad \text{def.anpl]} \]
‘we who are here’ (lit. ‘we [the people who are here]’)

14.1.4 Relative clause with conjoined NP as head

A conjoined NP (§7.1.1) is a tonosyntactic island with respect to relative-clause tone-dropping, so there is no audible effect in cases like (501). However, the conjunction \textit{yò} is
already L-toned, so I cannot exclude the possibility that it is (covertly) tone-dropped as relative head.

\[(501) \quad [[[yː: \ yò] \ [á̈́r̥̂ĥ̥r̥̂ \ yò] \ j̕ò̕r̥̂y̕e\̕-s̕e^L \ b̕u:]\]
\[[[woman \ and] \ [man \ and]] \ fight-Ppl.Pfv^L \ Def.AnPl]\]
where \ b̕e-3PlSbj

‘Where are the men and the women who squabbled?’

14.1.5 Headless relative clause

In idiomatic Nanga, a relative head NP that is understood to refer to an animate or inanimate object is normally expressed by at least a semantically light noun, such as \ n̕ʊ̕: ‘person’, \ k̕ɔ́ ‘thing’, or \ y̕ɛ́ ‘things; critter’ (in L-toned form as \ n̕ʊ̕:^-\, \ k̕ɔ́^-\, \ y̕ɛ́^-\). However, relative clauses with no overt head are acceptable. In a case like \ j̕ò̕r̥̂y̕e\̕-s̕e^L \ b̕u: ‘the ones who squabbled’, the definite animate plural determiner at the end gives clues to the identity of the omitted head.

Headless relatives may also function as adverbial clauses, with a (sometimes vaguely) understood head like ‘time’, ‘place’, ‘manner’, or ‘situation’; see §15.5.3.

14.1.6 Preverbal proclitic subject pronominal in nonsubject relative

In nonsubject relative clauses, if the subject is a pronoun, it is expressed by an independent pronoun proclitic to the verb-participle. There are no phonological interactions between the clitic and the verb. In (502c), the subject pronoun follows a direct-object pronoun, confirming that the subject pronoun is proclitic to the verb. In (502d) the proclitic intervenes between two directly chained verbs, ‘fall’ and ‘go down’. The proclitics include 1Sg \ ǐ^n\ and 3Sg \ ǹn̕e\, which are unmistakably independent pronouns in form.

\[(502)\]
\[\begin{align*}
a. \quad & k̕ɔ́^-L \ \ ụ \ \ j̕ù̕g̕ɔ́-ŋ̕ɔ́: \\
& \text{thing}^L \ \ 2\text{SgSbj} \ \ \text{know-Ppl.IpfvNeg} \\
& \text{‘something that you-Sg do not know’}
\end{align*}\]
\[\begin{align*}
b. \quad & ụ̕s̕i^-L \ \ ǐ^n \ \ y̕eː-\text{s̕e}^L \ \ \text{gú} \\
& \text{day}^L \ \ \text{1SgSbj} \ \ \text{come-Ppl.Pfv}^L \ \ \text{Def.InanSg} \\
& \text{‘the day (when) I came’}
\end{align*}\]
\[\begin{align*}
c. \quad & ụ̕s̕i^-L \ \ ǹj̕i-ŋ̕ɛ́ \ \ ǹn̕e \ \ s̕ù̕y̕-\text{s̕e}^L \ \ \text{gú} \\
& \text{day}^L \ \ 1\text{Sg-Acc} \ \ 3\text{SgSbj} \ \ \text{hit-Ppl.Pfv}^L \ \ \text{Def.InanSg} \\
& \text{‘the day (when) he/she hit me’}
\end{align*}\]
\[\begin{align*}
d. \quad & ụ̕s̕i^-L \ \ y̕è̕g̕é \ \ ụ \ \ s̕i̕g̕è-\text{s̕e}^L \ \ \text{gú} \\
& \text{day}^L \ \ \text{fall} \ \ 2\text{SgSbj} \ \ \text{go.down-Ppl.Pfv}^L \ \ \text{Def.InanSg} \\
& \text{‘the day you-Sg fell down’}
\end{align*}\]

The ability of a preverbal subject pronominal to intervene between two words is a useful syntactic test in some contexts. See §14.1.8, below for more examples and discussion.

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§10.1.1, this is brought to bear on the issue of whether certain AN morphemes in the (positive) perfective system are suffixes or chained auxiliary verbs.

14.1.7 Verb-participle

As explained in §4.6, the term “participle” is less compelling for Nanga than for some other Dogon languages such as Jamsay, where relative-clause verb-participles show explicit suffixal agreement with head NPs in intrinsic nominal features (animacy/humanness and number). In Nanga, by contrast, nouns and adjectives have virtually no marking of such features even in isolation. Instead, the burden of expressing intrinsic features within NPs is borne by determiners. So to the extent that participles are nominal or adjectival syntactically, we would not expect them to be directly marked for intrinsic features of the head NP.

In relative clauses, determiners (definite, demonstrative) follow the participle. In Nanga these determiners are tonosyntactic controllers, so the participle is subject to tone-dropping.

Nanga participles make more or less the same AN distinctions that we find in main clause verbs, specifying aspect (perfective/imperfective) and polarity (positive/negative). There is some morphological reduction in relative clauses, and reduplication is disallowed. For the most part, participles cannot agree with subjects. The exception is that negative participles do agree with animate plural head NPs. With the possible exception of perfect participial suffix -sè, whose relationship to perfective-2 -só- is synchronically unclear, the participial endings and stem-tones are identical or similar to those for the corresponding main-clause AN suffixes.

(503) Participles (four basic suffixes)

<table>
<thead>
<tr>
<th>category</th>
<th>suffix</th>
<th>related AN suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>perfective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td>-sè</td>
<td>perfective-2 -só- (?)</td>
</tr>
<tr>
<td>negative</td>
<td>-rí</td>
<td>perfective negative -rí-</td>
</tr>
<tr>
<td>imperfective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td>-mì (~ -m)</td>
<td>imperfective -m- (~ -m-)</td>
</tr>
<tr>
<td>negative</td>
<td>-ŋɔ̀:</td>
<td>imperfective negative -ŋɔ̀(:)</td>
</tr>
</tbody>
</table>

Perfective participial -sè corresponds to the amalgamation the simple perfective (unsuffixed), perfective-1a -èrè-, perfective-1b -ù-, and perfective-2 -só-. It may also be added to recent perfect jè- to produce the sequence jè-sè, and to experiential perfect tò: to produce tò:-sè.

(Positive) imperfective participial suffix -mì (~ -m) likewise has a broader range than its inflectable counterpart. It is used with stative verbs and quasi-verbs, as well as with active verbs in imperfective aspect. It may also be added to a verb already containing progressive suffix -sò- to produce the suffix complex -sò-mì (note the change in tone).

Including these combinations, and some similar ones with negative participial suffixes, (503) can be expanded as (504).
Participles (all categories of active verbs)

<table>
<thead>
<tr>
<th>category</th>
<th>suffix(es)</th>
<th>similar AN morpheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>perfective</td>
<td>-sè</td>
<td>perfective-2 -sò- (?)</td>
</tr>
<tr>
<td>recent perfect</td>
<td>jè-sè</td>
<td>recent perfect jè-</td>
</tr>
<tr>
<td>experiential perfect</td>
<td>tàː-sè</td>
<td>experiential perfect tàː-</td>
</tr>
<tr>
<td>perfective negative</td>
<td>-rí</td>
<td>perfective negative -rí-</td>
</tr>
<tr>
<td>recent perfect negative</td>
<td>jè-rí</td>
<td>recent perfect negative jè-rí-</td>
</tr>
<tr>
<td>experiential perfect Neg</td>
<td>tàː-rí</td>
<td>experiential perfect negative tàː-rí-</td>
</tr>
<tr>
<td>imperfective</td>
<td>-mì ~ -mì́</td>
<td>imperfective -mì-</td>
</tr>
<tr>
<td>progressive</td>
<td>-sò-mì</td>
<td>progressive -sò-</td>
</tr>
<tr>
<td>imperfective negative</td>
<td>-ŋò:</td>
<td>imperfective negative -ŋò():</td>
</tr>
<tr>
<td>progressive negative</td>
<td>-sò-ndó</td>
<td>progressive negative -sò-ndó</td>
</tr>
</tbody>
</table>

14.1.7.1 Participles of positive perfective-system verbs (-sè )

Before getting into examples, it is necessary to point out that the participle is very frequently tone-dropped by a following determiner. Therefore the tones described here as basic are often overridden.

Examples of verbs with the basic perfective participial suffix -sè are in (505). The suffix is added to the bare stem (showing lexical vocalism and tone melody). When followed by a definite morpheme or other determiner, all tones in the participle including the verb stem drop, as in nùː¹ yèː-:sèː nè ‘the person who came’ (<yèː-:sèː ).

Perfective participial -sè is the relative-clause counterpart of the simple perfective, perfective-1a, perfective-1b, and perfective-2 forms in main clauses. In practice it is also the usual counterpart of recent perfect jè- as well.

In texts, it is distinguished by tone from main-clause 3Pl perfective-2 -s-é (§10.2.1.3). On the other hand, the participial suffix is homophonous to main-clause 3Pl progressive -s-è (§10.2.2.4). At word-level, the progressive can be recognized by the L- or <HL>-tone of the stem-final vowel, often accompanied by final-vowel lengthening and/or initial reduplication. The perfective participial has a stem ending in an H-toned vowel, does not lengthen final short vowels, and does not allow reduplication.

(505) Perfective participles

<table>
<thead>
<tr>
<th>bare stem</th>
<th>Pfv participle</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yèː-</td>
<td>yèː-sè</td>
<td>‘come’</td>
</tr>
<tr>
<td>göː-</td>
<td>göː-sè</td>
<td>‘go out’</td>
</tr>
<tr>
<td>yìː-</td>
<td>yìː-sè</td>
<td>‘see’</td>
</tr>
<tr>
<td>nùy&quot;-</td>
<td>nùy&quot;-sè</td>
<td>‘go in’</td>
</tr>
<tr>
<td>ìǹé-</td>
<td>ìǹé-sè</td>
<td>‘go’, for the vowels cf. (274)</td>
</tr>
<tr>
<td>yègèː-</td>
<td>yègèː-sè</td>
<td>‘fall’</td>
</tr>
<tr>
<td>kàr&quot;i-</td>
<td>kàr&quot;i-sè</td>
<td>‘do’</td>
</tr>
</tbody>
</table>
Examples are in (506). (506b) illustrates tone-dropping on the participle before a determiner.

(506) a. łyj- ły- 3PlSbj milk(v)-Ppl.Pfv

‘a cow (or: cows) that they milked’

b. łyj- j-Ł 3Sbj milk(v)-Ppl.Pfv Def.AnSg

‘the cow that I milked’

Recent perfect jë- has participial jë-sè. It is used sparingly, since perfective participial -sè is often used as a relative-clause counterpart of jë- in main clauses. Like inflected jë-, the participial complex jë-sè follows the bare stem with its lexical tones. When a determiner is added, there is no overt change to the tones. In other words, the tone-dropping effect of the determiner does not reach beyond the jë-, which is already L-toned. This is evidence that jë- is treated as a chained auxiliary verb, rather than a simple suffix. This view is reinforced by the fact that a subject pronominal intervenes between jë- and the preceding verb (507c).

(507) a. łyj- ły- 3PlSbj milk(v)-Ppl.Pfv

‘a man who has already eaten (or: who has finished eating)’

b. łyj- j-Ł 3Sbj milk(v)-Ppl.Pfv Def.AnSg

‘the man who has already eaten (or: who has finished eating)’

c. łyj- j-Ł 3Sbj milk(v)-Ppl.Pfv Def.AnSg

‘the man who(m) I have already hit (or: whom I have finished hitting).’

Experiential perfect tá:- with its long vowel is prosodically even more clearly a chained auxiliary verb. A simple example of a participle is (508a). If a determiner is added, tá:- is tone-dropped but the preceding verb is not (508b). A pronominal subject intervenes between the two verbs (508c).

(508) a. łyj- [łyj- gól] 3Sbj go ExpPrf-Ppl.Pfv

‘a woman who has (once/ever) gone to the village’

b. łyj- [łyj- gól] 3Sbj go ExpPrf-Ppl.Pfv Def.AnSg

‘the woman who has (once/ever) gone to the village’

c. łyj- ylı- j-Ł 3Sbj see ExpPrf-Ppl.Pfv Def.AnSg

‘the woman whom I have (once/ever) seen’
Although perfective-1b -tì- was not observed in spontaneously produced relative clauses, it was possible with some effort to elicit -tì- in relatives. In nonsubject relatives, my assistant tended to allow a preverbal subject pronominal to intervene between the main verb stem and tì-, suggesting that the latter is a separate word (i.e. a chained auxiliary verb) rather than a suffix (509). However, he sometimes repeated such elicited sentences with the subject pronominal preceding the main verb. The construction does not seem to be productive and it is not surprising that its syntax is inconsistent.

(509) \[\text{wàgàdì}^{L} \quad \text{ñjì-ŋ} \quad \text{sùyì} \quad \text{ùnè} \quad \text{tì-sè} \] \quad \text{gà}
\[\text{time}^{L} \quad \text{1Sg-Acc} \quad \text{hit} \quad \text{3SgSbj} \quad \text{Pfv1b-Ppl.Pfv} \] \quad \text{Loc}
\text{‘at the time when he/she hit me’}

Perfective participial -sè can be added to an imperfective form with -mè- to form a perfect version of the imperfective (510). This participial form appears to have no exact counterpart among main-clause verb forms, which do not distinguish the perfect of the imperfective from a simple past imperfective (-mè = bìè-).

(510) \text{pírà} \quad \text{èsi} \rightarrow \quad \text{nù}^{L} \quad \text{jìyè-mè-sè} \quad \text{bù}^{L}
\text{Fulbe} \quad \text{a.lot} \quad \text{person}^{L} \quad \text{kill-lpfv-Ppl.Pfv} \quad \text{Def.AnPl}
\text{‘people who had been killing lots of Fulbe’ (2004.01.10)}

14.1.7.2 Participles of positive imperfective-system and stative verbs (-mì)

Here the basic participial suffix is -mì with variants -mù and -m. The syllabic allomorphs are usual in simple participles not followed by a determiner. The nonsyllabic allomorph is usual before a determiner. -mè is an optional marked form for 3Pl subj (whether or not it is also the head NP).

Examples showing the stem-shapes of imperfective participles derived from verbs that end in a non-high vowel are in (511). The stem is segmentally identical in main-clause and participial forms. However, the participle is never reduplicated. The participles in (511) are also tonally identical to the regular imperfective stem, except when tone-dropped (512a).

(511) Imperfective participles for non-ì-final verb

<table>
<thead>
<tr>
<th>bare stem</th>
<th>imperfective participle</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yè-ci</td>
<td>yè-ci-mì</td>
<td>‘come’</td>
</tr>
<tr>
<td>gò-ci</td>
<td>gò-ci-mì</td>
<td>‘go out’</td>
</tr>
<tr>
<td>yègè-ci</td>
<td>yègè-ci-mì</td>
<td>‘fall’</td>
</tr>
</tbody>
</table>

For bisyllabic verb stems that end in i in the imperfective participle, the i shifts to a non-high vowel when a determiner is added, in addition to the tone-dropping (512a). This applies to i-final stems like ‘go in’ and ‘do’, as well as to ‘go’ which is partially i-final. The shifted variant is the non-high stem described in §3.4.8. I therefore add a second participial column in (512). Heavier verbs (those of more than two vocalic moras) whose stem ends in i have already shifted the i to a non-high vowel in the simple form of the imperfective participle, so for these verbs the stems have identical vocalism in the two participial columns (512b).
Imperfective participles (stem ends in /i/)

<table>
<thead>
<tr>
<th>Bare stem</th>
<th>Imperfective participle</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple</td>
<td>before determiner</td>
<td></td>
</tr>
</tbody>
</table>

a. two vocalic moras

<table>
<thead>
<tr>
<th>monosyllabic</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yi:</td>
<td>yi:-mi</td>
<td>yi:-m^L</td>
<td>'see'</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>bisyllabic</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>núy^n</td>
<td>núy^n-mi</td>
<td>núy^n-m^L</td>
<td>'go in’</td>
<td></td>
</tr>
<tr>
<td>ñné</td>
<td>ñné-mi</td>
<td>ñné-m^L</td>
<td>'go’</td>
<td></td>
</tr>
<tr>
<td>káर^n</td>
<td>káर^n-mi</td>
<td>káर^n-m^L</td>
<td>'do'</td>
<td></td>
</tr>
</tbody>
</table>

b. heavy stems (more than two vocalic moras)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bá:rí</td>
<td>bá:rí-mi</td>
<td>bá:rí-m^L</td>
<td>'help’</td>
<td></td>
</tr>
<tr>
<td>bégírí</td>
<td>bégírí-mi</td>
<td>bégírí-m^L</td>
<td>'winnow’</td>
<td></td>
</tr>
</tbody>
</table>

Examples are in (513). Two of them (513b,d) end in determiners.

(513) a. nàŋa^L | i:n   | émé-mi  
cow^L | 1SgSbj | milk(v)-Ppl.Ipfv
‘a cow (or: cows) that I will milk’

b. nàŋa^L | bú:    | émé-m^L | bú:
cow^L | 3PlSbj | milk(v)-Ppl.Ipfv^L | Def.AnPl
‘the cows that they will milk’

c. àr^n^L | núy^n-mi 
man^L | go.in-Ppl.Ipfv
‘a man who goes in’

d. àr^n^L | núy^n-m^L | nè
man^L | go.in-Ppl.Ipfv^L | Def.AnSg
‘the man who goes in’

The same imperfective participial suffix is used with stative verbs, which are (in other respects) aspect-neutral but generally include present-time reference (in the absence of the past clitic). Representative forms are in (514). Variant ̀ewè-mi ‘who is sitting’ has medial ę from /ò/ by assimilation to the flanking front vowels.

(514) Stative participles

<table>
<thead>
<tr>
<th>Bare stem</th>
<th>Stative participle</th>
<th>Stative participle</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>éw-żyé</td>
<td>é-ʔèwò</td>
<td>éwè-mi ~ éwò-mi</td>
<td>‘be sitting’</td>
</tr>
<tr>
<td>f:-yí</td>
<td>f-ʔìyà</td>
<td>fỳà-mi</td>
<td>‘be standing’</td>
</tr>
<tr>
<td>sów-żyé</td>
<td>só-sòwò</td>
<td>sówò-mi</td>
<td>‘be squatting’</td>
</tr>
<tr>
<td>ú:-yí</td>
<td>ú-ʔúwà</td>
<td>úwà-mi</td>
<td>‘be afraid’</td>
</tr>
</tbody>
</table>
Examples are in (515). A determiner controls tone-dropping on the participle including the verb stem (515b).

(515) a. ăr"âL úwà-mì
   manL fear.Stat-Ppl.Ipfv
   ‘a man who is afraid’

   b. ăr"âL úwà-mL né
   manL fear.Stat-Ppl.IpfvL Def.AnSg
   ‘the man who is afraid.’

Representative progressive participle forms are in (516). The stem has the same form as in the inflected progressive. Reduplication, which is normal in main clauses if the progressive verb is clause-initial, is disallowed in participles. The suffix -sò shifts to H-toned -só- in the participle.

(516) Progressive participles

<table>
<thead>
<tr>
<th>bare stem</th>
<th>progressive</th>
<th>progressive participle</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yè:-</td>
<td>yè-yè:-sò-</td>
<td>yè:-sò-mì</td>
<td>‘come’</td>
</tr>
<tr>
<td>gò:-</td>
<td>gò-gò:-sò-</td>
<td>gò:-sò-mì</td>
<td>‘go out’</td>
</tr>
<tr>
<td>yì:-</td>
<td>yì-yì:-sò-</td>
<td>yì:-sò-mì</td>
<td>‘see’</td>
</tr>
<tr>
<td>núy&quot;-</td>
<td>nú-núy&quot;-sò-</td>
<td>núy&quot;-sò-mì</td>
<td>‘go in’</td>
</tr>
<tr>
<td>ìmè-</td>
<td>ìmè:-sò-</td>
<td>ìmè:-sò-mì</td>
<td>‘go’</td>
</tr>
<tr>
<td>yègè-</td>
<td>yè-yègè(:)-sò-</td>
<td>yègè(:)-sò-mì</td>
<td>‘fall’</td>
</tr>
<tr>
<td>kār&quot;î-</td>
<td>kā-kār&quot;î(:)-sò-</td>
<td>kār&quot;î(:)-sò-mì</td>
<td>‘do’</td>
</tr>
<tr>
<td>bègèrì-</td>
<td>bè-bègèrì(:)-sò-</td>
<td>bègèrì(:)-sò-mì</td>
<td>‘help’</td>
</tr>
<tr>
<td>bègèrì-</td>
<td>bè-gèrì(:)-sò-</td>
<td>bègèrì(:)-sò-mì</td>
<td>‘winnow’</td>
</tr>
</tbody>
</table>

Examples are in (517). Tone-dropping forced by a determiner applies to -sò- (which reverts to -sòL) but not to the preceding verb stem (517b). A subject proclitic in a nonsubject relative does not intervene between the stem and -sò-mì, rather it precedes both (517c).

(517) a. yà:- gò:-sò-mì
   womanL go.out-[Progr-Ppl.Ipfv
   ‘a woman who is going out’

   b. yà:- gò-:[sò-m]L né
   womanL go.out-[Progr-Ppl.Ipfv]L Def.AnSg
   ‘the woman who is going out.’

   c. ì: L i:n gò-:[sò-m]L kù
   placeL 1SgSbj go.out-[Progr-Ppl.Ipfv]L Def.InanSg
   ‘the place where I am going out’
14.1.7.3 Participles of negative perfective-system verbs

The basic perfective negative suffix -rí- occurs in participles, but without a pronominal-subject suffix. As with the inflectable suffix (in the 1Sg, 2Sg, and 3Sg), the corresponding participles have an L-toned stem, and shift a stem-final i to a non-high vowel. As usual, the r is nasalized to rⁿ after a nasal syllable. When a determiner follows, the suffix -rí drops its tones (the stem is already L-toned so we cannot tell whether the determiner would have also dropped any H-tones on the stem). Some examples are in (518).

(518) a. nàŋá L  i:n  ëmè-rí
    cow L  1SgSbj  milk-Ppl.PfvNeg
    ‘a cow that I didn’t milk’

    b. nàŋá L  i:  ëmè-rí
    cow L  1Pl  milk-Ppl.PfvNeg L  Def.AnPl
    ‘the cows that we didn’t milk’

    c. yà: L  nàyía-rí
    woman L  go.in-Ppl.PfvNeg
    ‘a woman who didn’t go in’

    d. àrⁿà L  sóy  ndè-rí
    man L  all  give-Ppl.PfvNeg
    ‘a man who didn’t give anything’ (ńdî- ‘give’)

In the main-clause perfective negative, the 3Pl subject form is rather irregular, replacing -rí- by a 3Pl perfective negative portmanteau -(à)ndú, as in ëm-à:ndú ‘they didn’t milk (cow)’, cf. ëmè-rí-Ø ‘he/she didn’t milk (cow)’. This peculiarity extends to the corresponding participles, but here the unusual form is associated with an animate plural head NP (whether subject or not). Compare the participial forms in (519a), where the participle does not agree with a 3Pl subject, to (519b), where it does agree with an animate plural non-subject head NP.

(519) a. nàŋá L  bù:  ëmè-rí
    cow L  3PlSbj  milk-Ppl.PfvNeg
    ‘a cow that they didn’t milk’

    b. nàŋá L  bù:  ëm-à:ndú
    cow L  3PlSbj  milk-Ppl.PfvNeg AnPl
    ‘cows that they didn’t milk’

These are object relatives, but specifically animate plural forms of the perfective negative participle also occur in subject relatives; see ‘the people who didn’t hit me’, (539b) in §14.2 below.

There is no similar suffixal switch with inanimate head NPs. Therefore (520a) is ambiguous as to number, in the absence of a final determiner. (520b) adds an inanimate plural determiner and tone-drops the participle.
The recent perfect negative \( jè-ᵣí \), which often means ‘has not finished VP-ing’ (§10.2.3.3), can be participialized. The form of the stem is the same as in the main-clause paradigm; in particular, -ᵣí- (which forces tone-dropping on a preceding stem) does not affect the tones of the main verb preceding \( jè- \) (521a). (521b) has a final determiner, which tone-drops the animate plural form (elsewhere \( jà-ndù \)) of the participle.

The experiential perfect negative including the chained auxiliary verb \( tà: \) (§10.2.3.2) has a similar pattern. The negative inflectable form is \( tà:-ᵣí \), including perfective negative -ᵣí-, and this is copied in participial \( tà:-ᵣí \). The participle also follows the unusual tone-dropping pattern seen in main clauses, by which -ᵣí- induces tone-dropping not only on \( tà:- \) but also on the preceding verb stem (522a). I express this in (522a) by bracketing the preceding verb with the experiential perfect morpheme, though elsewhere I avoid word-internal superscrips. In (522b) the determiner accounts for (at least) the tone-dropping from -ᵣí to -ᵢᵢ.

14.1.7.4 Participles of negative imperfective-system and stative verbs

The imperfective negative suffix -\( ᵃᵢ \): is used in participles, with the same stem-shapes as with the inflected stems. A few examples are in (523). The participles show the same irregularities with ‘hear’, ‘see’, and ‘go’ that occur in the inflected forms, see (328) in §10.2.3.4. Agreement with an animate plural head NP is discussed below.
Imperfective negative participles

<table>
<thead>
<tr>
<th>bare stem</th>
<th>imperfective negative</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>gòː-</td>
<td>gòː-ŋòː-</td>
<td>‘go out’</td>
</tr>
<tr>
<td>ímé-</td>
<td>ímé-ŋòː-</td>
<td>‘go’</td>
</tr>
<tr>
<td>gèːr'í-</td>
<td>gèːr'ə-ŋòː-</td>
<td>‘take away, convey’</td>
</tr>
<tr>
<td>nỳʊ-</td>
<td>nù-ŋòː-</td>
<td>‘hear’</td>
</tr>
<tr>
<td>yìː-</td>
<td>nù-ŋòː-</td>
<td>‘see’</td>
</tr>
</tbody>
</table>

An example is (524a). When a determiner is added, the verb stem is tone-dropped (524b).

(524) a. nàŋà́L ü émè-ŋòː:
cowL 2SgSbj milk-Ppl.IpfvNeg
‘a cow that you-Sg do/will not milk’

b. nàŋà́L ü: émè-ŋòːL bù:
cowL 2PlSbj milk-Ppl.IpfvNegL Def.AnPl
‘the cows that you-Pl do/will not milk’

As with the perfective negative participle, there is a special form used for animate plural head-NP agreement with the imperfective negative participial. In the inflected paradigm, the 3Pl form of -ŋòː is -ŋ-ɛː, as in yéː-ŋ-ɛː ‘they don’t/won’t come’. The form -ŋ-ɛː is optionally used in the participles for animate plural head NPs.

(525) a. nàŋà́L ü émè-ŋ-ɛː:
cowL 2SgSbj milk(v)-Ppl.IpfvNeg-AnPl
‘cows that you-Sg will not milk’

b. nàŋà́L ü émè-ŋ-ɛːL bù:
cowL 2SgSbj milk(v)-Ppl.IpfvNeg-AnPlL Def.AnPl
‘the cows that you-Sg will not milk’

Likewise, in a subject relative, ‘the people who don’t hit me’, (539d) in §14.2 below.

Stative negative = ñdó- also has a participial counterpart with the identical ending, though without pronominal-subject agreement ( = ñdó ). This allows participles to be created from negative forms of stative verbs (526a) and of predicate adjectives (526b). Similarly, a participle can be directly constructed from ‘not be (NP)’ clitic = ndó- (526c).

(526) a. àr”àL èwò = ndó
manL sit.Stat=Ppl.StatNeg
‘a man who is not sitting’

b. àr”àL gàwà = ndó
manL tall=Ppl.StatNeg
‘a man who is not tall’
c. \( \text{á retrieves} \) \( \text{dog} = \text{ndó} \:
\begin{align*}
\text{man} & \quad \text{Dogon=Ppl.it.is.not} \\
\text{‘a man who is not a Dogon (person)’}
\end{align*}

The counterparts of (526a-c) with animate plural head NP are in (527). They show the usual imitation of the 3Pl subject form of the main-clause constructions.

(527) a. \( \text{á retrieves} \) \( \text{éwè = ndé} \:
\begin{align*}
\text{man} & \quad \text{sit.Stat = Ppl.StatNeg-AnPl} \\
\text{‘men who are not sitting’}
\end{align*}

b. \( \text{á retrieves} \) \( \text{gàwà = ndé} \:
\begin{align*}
\text{man} & \quad \text{tall=Ppl.StatNeg-AnPl} \\
\text{‘men who are not tall’}
\end{align*}

c. \( \text{á retrieves} \) \( \text{dog} = \text{ndé} : 
\begin{align*}
\text{man} & \quad \text{Dogon=Ppl.not.be-AnPl} \\
\text{‘men who are not Dogon (people)’}
\end{align*}

The progressive negative main-clause form ends in stative negative = \( \text{ndó} \) and is participialized accordingly (528). \( \text{só-ndó} \) ‘not have’ and other negative forms of stative verbs and quasi-verbs are also participialized in the same way.

(528) \( \text{á retrieves} \) \( \text{sémi-ndé} \quad \text{sémbi-só = ndó} \:
\begin{align*}
\text{man} & \quad \text{sweep-VblN} \\
\text{‘a man who is not sweeping’}
\end{align*}

14.1.7.5 Participles of quasi-verbs (‘be’, ‘have’)

Like statives derived from regular verbs, quasi-verbs ‘have’ and ‘be’ have participles with “imperfective” \( \text{-mì} \) (here extended to stative function). The suffix is often shortened to \( \text{-mì} \) before a clitic or determiner. The variant with optional agreement to a 3Pl subject is again \( \text{-m-é} \), as in \( \text{nù : l só-m-é} \) ‘people who have’ versus \( \text{nù : l só-mí} \) ‘a person who has’ or ‘people who have’.

Participles of \( \text{só} \) ‘have’ and \( \text{bù} \) ‘be’ are H-toned before \( \text{-mì sé} \) unless tone-dropped by a following determiner, in which case \( \text{-mì} \) usually shortens to \( \text{-mì} \). The ending \( \text{-mì} \) combines with past clitic = \( \text{be} \) to form \( \text{-mì = bé-sé} \), which is variably reduced to \( \text{-mì = bé-sé} \), \( \text{-mì = ò-sé} \), or \( \text{-mì = bé-s} \). A determiner following the past clitic drops its own tones and does not control tone-dropping on the participle, as with definite inanimate singular \( \text{gù} \) in (530c) below.

Existential \( \text{yá} \), which in unfocalized main clauses is obligatory for ‘have’, and is obligatory with ‘be’ unless there is another explicit locational, does not occur in relative clauses.

For \( \text{bù} \) ‘be (somewhere)’ (§11.2.2.2) the participles are \( \text{bù-mì} \) and, for past time, \( \text{bù-mì = bé-sé} \) or variant thereof. (529a) is a subject relative, (529b) is a nonsubject relative. (529c) is another subject relative, and also shows that \( \text{bù-mì} \) is realized as \( \text{bù-mí} \) before a determiner. (529d) is a textual example including the past clitic.
a. \( \text{àr}^a \text{L} \text{bú-mî} \)

\( \text{man} \text{L} \text{be-Ppl.Ipfv} \)

‘a man who is present (here/here)’

b. \( \text{àr}^a \text{L} \text{i} \text{m} \text{bú-mî} \)

\( \text{place} \text{L} \text{1SgSbj be-Ppl.Ipfv} \)

‘(the) place where I am’

c. \( \text{àr}^a \text{L} \text{bú-mî} \text{m} \text{n} \text{é} \)

\( \text{man} \text{L} \text{be-Ppl.Ipfv} \text{Def.AnSg} \)

‘the man who is here’

d. \[ \text{dày}^a \text{L} \text{u} \text{bú-mî} \text{bè-sè} \]

\[ \text{manner} \text{2PlSbj be-Ipfv=Past-Ppl.Pfv} \]

\( \text{yá} \text{bú-mî} \text{bè-sè} \)

\( \text{Exist} \text{be-Ipfv=Past-3SgSbj} \)

‘There was a way for you-Pl to be (=to live).’ (2004.01.07)

For \( \text{sò} \) ‘have’ (§11.5.1) the participle is \( \text{só-mî} \), becoming \( \text{sò-mî} \text{L} \) before a determiner. With past clitic we get \( \text{sò-mî} \text{bè-sè} \), which usually contracts to \( \text{sò-mî} \text{bè-sè} \), \( \text{sò-mî} \text{O-sè} \), or \( \text{sò-mî} \text{bè-sè} \). It does not drop its tones before a determiner, rather the determiner drops its own tones (530c), cf. §6.5.4.

(530)  

a. \[ \text{àr}^a \text{L [nîdô wòy] só-mî} \text{àgô-yî} \text{= ꙰} \]

\[ \text{man} \text{L [house two] have-Ppl.Ipfv} \text{chief-child=it.is.3SgSbj} \]

‘A man who has two houses is a rich person.’

b. \( \text{àr}^a \text{L} \text{mî} \text{nîdô} \text{i} \text{m} \)

\( \text{place} \text{L} \text{house} \text{1SgSbj have-Ppl.Ipfv} \)

‘(the) place where I have a house’

c. \[ \text{dày}^a \text{L} \text{mî} \text{nîdô} \text{i} \text{m} \text{gù} \]

\[ \text{year} \text{L} \text{house} \text{1SgSbj have-Ppl=Past-Ppl} \text{Def.InanSg} \]

‘the year when I had a house’

14.1.7.6 Participle of past \( = \text{be-} \)

Since everything else can be participialized, it is no surprise that verbs and other predicates with past clitic \( = \text{be-} \) can be participialized.

For positive categories, the relationship between the main-clause stem and the participle is summarized in (531). These are rather uncommon in actual use.
<table>
<thead>
<tr>
<th>(531)</th>
<th>AN category</th>
<th>main clause</th>
<th>participle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past imperfective</td>
<td>-ìn = bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past progressive</td>
<td>-sò = bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfect</td>
<td>= bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfective-1b</td>
<td>-tì = bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfective-1a</td>
<td>-èrè = bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfective-2</td>
<td>-sò = bè-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past recent perfect</td>
<td>jè = bè-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For negative forms of =bè-, the participial forms in (532) were recorded. The special animate plural head NP forms are in the far right column.

<table>
<thead>
<tr>
<th>(532)</th>
<th>AN category</th>
<th>inflected</th>
<th>participle</th>
<th>unmarked</th>
<th>animate plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>past perfect</td>
<td>-rí = bè-</td>
<td>-rí = bè-</td>
<td>-ànđú = b-à</td>
<td></td>
<td></td>
</tr>
<tr>
<td>past imperfective</td>
<td>-ɲɔ̀ = bè-</td>
<td>-ɲɔ̀ = bè-</td>
<td>-ɲɛ̀: = b-à</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.1.8 Relative clause involving verb- or VP-chain

When verbs (and VPs) are chained, only the final verb is participialized. In direct chains (those without a subordinating morpheme), the nonfinal verbs have their usual bare-stem form with lexical vocalism and tones. In a nonsubject relative, if a pronominal-subject proclitic is present, it intervenes between the penultimate verb in the chain and the final participle. In (533), ëwé ‘buy’ is the nonfinal verb, chained to ‘bring’, and the 1Sg subject proclitic intervenes.

(533) nàŋà l. ëwé I:n jèː-m l. né

cow L. buy 1SgSbj bring-Ppl.Ipfv L. Def.AnSg

‘the cow that I will buy and bring.’

A nonpronominal NP does not intervene between the verbs of a direct chain. However, in nonsubject relatives involving directly chained verbs (the final verb, therefore, being a participle), if the subject is a nonpronominal NP, it is optionally (but often) resumed by a 3Sg or 3Pl subject pronoun that directly precedes the final verb. In (534a-c) the optional pronouns shown in parentheses are coindexed with the subject NPs of the relative clause (‘the man’, ‘the women’, ‘the man’ again).

(534) a. nàŋà l. [àr’à-m l. né] ëwé (níné)

cow L. [man L. Def.AnSg] buy (3SgSbj)

jèː-sè l. né

bring-Ppl.Pfvl. Def.AnSg

‘the cow that the man purchased and brought’
14.1.9 Determiners following the participle

If the head NP (and therefore the entire NP including the relative) is definite, the relevant definite morpheme is added after the participle. Definite morphemes control tone-dropping on preceding words within simple NPs. This is also usually the case in relative clauses, where definite morphemes control tone-dropping on the immediately preceding participle. Examples of relative clauses with and without definite morphemes are given in the subsections of §14.1.7 above.

Less often, the definite marker (elsewhere H or HL-toned) surfaces in L-toned form, and the participle itself is not tone-dropped; cf. §6.5.4. An example of this is (530c) above.

Definite determiners are of course very common with relative clauses, which in Nanga are restrictive rather than parenthetical. Demonstratives (‘this’, ‘that’) are less common with relatives, but do occur. A demonstrative has the same tonosyntactic effects as a definite morpheme. In (535), the demonstrative has tone-dropped the participle.

(535) àrná à nà ëm rí mó
man 2SgSbj see-Ppl.Ipfv Dem-AnSg
‘this man whom you-Sg see’

14.1.10 Non-numeral quantifiers following the participle

Universal and distributive quantifiers (‘all’, ‘each’) also occur in postparticipial position. kéréw ‘all’ may be separated from the participle by a determiner (536a). kéréw is not a tonosyntactic controller. Distributive quantifier kámá ‘each’ directly follows the participle, and does control tone-dropping on it (536b-c).

(536) a. [nàñá ú ëm-rí tú bû: kéréw] jô:
‘Bring-2Sg all the cows that you-Sg have not milked!’

b. [ñòdò yègè-sè kámá],
[house fall-Ppl.Pfv each]
[mílyò wò jôrò-mí-y:] look.for-Ipfv-1PlSbj
‘(For) each house that fell, we are seeking two million (francs).’
14.1.11 Indefinite relatives

These relatives have no determiner and therefore normally end with the participle.

(537) a. \[[nàŋà \ú \èmè-\text{-}r\text{-}f]\ \ j\text{ʃr}ɔ\text{-}(-)\text{-}s\text{-}y\]  
[\text{cow}\ \text{2SgSbj} \ \text{milk(v)}\text{-}Ppl\text{.PfvNeg}] \ \text{look.for-\text{-}Prog-1SgSbj}  
‘I’m looking for a cow that you-Sg haven’t milked.’

b. \[[nàŋà \ wòy\ú \èmè-\text{-}r\text{-}f]\ \ j\text{ʃr}ɔ\text{-}(-)\text{-}s\text{-}y\]  
\text{[\text{cow} \ \text{two} \ \text{2SgSbj} \ \text{milk(v)}\text{-}Ppl\text{.PfvNeg}] \ \text{look.for-\text{-}Prog-1SgSbj}  
‘I’m looking for two cows that you-Sg haven’t milked.’

14.1.12 Doubling of head noun after relative clause

The noun \text{dày} has two meanings, ‘manner’ and ‘boundary’ (e.g. of a field). In the first sense, it can occur as the head (overt or covert) of a relative clause, followed by postposition \text{may} ‘like’. See (596b) and (597b) in §15.5.2-3 for the headed and headless versions, respectively.

In the main clausal ‘since …’ construction (§15.3.1), a headless nonsubject perfective relative clause is followed by \text{dày}\text{-}a. A ‘since …’ clause may be followed by a complementary ‘until …’ clause, which has exactly the same structure except that the participle is imperfective rather than perfective. The combination specifies beginning and ending points that bookend some eventuality, matching the semantics of \text{dày} ‘boundary’, applied here to time rather than to space. See (589) in §15.3.1 for a simple ‘since …’ adverbial clause, and (598) in §15.5.4 for the two-clause construction.

In the ‘since …’ and ‘until …’ temporal adverbial relatives, the post-relative \text{dày}\text{-}a functions almost like a postposition, as suggested by the English glosses with ‘since’ and ‘until’. In other words, \text{dày}\text{-}a functions in temporal adverbials the same way \text{may}\text{-}a functions in manner adverbials, and the same way the locative postposition functions in spatial adverbials headed by ‘place’. The only difference is that \text{dày}\text{-}a is recognizably an L-toned form of a noun, while \text{may}\text{-}a and other simple postpositions have no nominal counterparts.

The tone-dropping of \text{dày}\text{-}a in post-relative position suggests that it is syntactically a possesum, “possessed” by the relative construction (which is really an NP). Therefore ‘since they came’, (589) in §15.3.1, is phrased in Nanga as something like \text{[(the temporal boundary at which) they came]’s boundary’}. Insofar as the overt \text{dày}\text{-}a can be construed as being coindexed with the covert head of the relative, the construction can be analysed as an instance of head-doubling.

Similar doubling phenomena are more productive in some other Dogon languages such as Togo Kan. Doubling occurs there not only in adverbial relative clauses (time, space, manner) but also others with, for example, ‘person’ (in Togo Kan replaced by ‘owner’) as doubled head.
14.2 Subject relative clause

To summarize the comments scattered across several preceding sections, a subject relative is characterized by the following: a) the head NP is clause-internal but is marked by tone-dropping; b) no preparticipial subject pronominal is present; c) the verb is participialized and shows no subject or head-NP agreement, with some exceptions (animate plural agreement with head NP in negative participles); d) determiners and non-numeral quantifiers that have scope over the internal head NP follow the participle.

(538a-h) have positive participles. The internal head is bolded in the interlinears.

(538) a. \([\text{évé} \ gá] \ \text{ár}^{\text{a}} \ ṁ \ \text{ńjí-\-ý} \ yǐ-\-sè \ \text{né}\]
   [market \ Loc] \text{man} \ \text{1Sg-Acc} \ \text{see-Ppl.Pfv} \ \text{Def.AnSg}
   ‘the man who saw me in the market’

b. \([\text{évé} \ gá] \ \text{ár}^{\text{a}} \ ṁ \ \text{ńjí-\-ý} \ yǐ-\-sè\]
   [market \ Loc] \text{man} \ \text{1Sg-Acc} \ see-Ppl.Pfv
   ‘a man/some men who saw me in the market’

c. \([\text{kùr}^{\text{a}} \ Ṁ] \ \text{ńjí-\-ý} \ bār^{\text{a}} \ \text{imí-\-sè} \ \text{gú}\]
   [stone] \text{1Sg-Acc} \ injure-Ppl.Pfv \ \text{Def.InanSg}
   ār^{\text{a}} \ ãñà \ bù-∅
   where? \ be-3SgSbj
   ‘Where is the stone that injured me?’

d. \([\text{kùr}^{\text{a}} \ Ṁ] \ \text{ńjí-\-ý} \ bār^{\text{a}} \ \text{imí-\-sè} \ \text{y}]\]
   [stone] \text{1Sg-Acc} \ injure-Ppl.Pfv \ \text{Def.InanPl}
   ār^{\text{a}} \ ãñà \ b-ē
   where? \ be-3PlSbj
   ‘Where are the stones that injured me?’

e. \(\text{nù}: \ \text{ńjí-\-ý} \ sùy-\-sè\]
   \text{person} \ \text{1Sg-Acc} \ hit-Ppl.Pfv
   ‘a person/people who hit me’

f. \(\text{nù}: \ \text{ńjí-\-ý} \ sùy-\-sè \ \text{bù}:\]
   \text{person} \ \text{1Sg-Acc} \ hit-Ppl.Pfv \ \text{Def.AnPl}
   ‘the people who hit-Past me’

g. \(\text{nù}: \ \text{ńjí-\-ý} \ sùy-\-m} \ \text{né}\]
   \text{person} \ \text{1Sg-Acc} \ hit-Ppl.Ipfv \ \text{Def.AnSg}
   ‘the person who hits me’

h. \(\text{nù}: \ \text{ńjí-\-ý} \ súy-\-mǐ\]
   \text{person} \ \text{1Sg-Acc} \ hit-Ppl.Ipfv
   ‘a person (or: people) who hits me’

Negative participles have a distinctive form agreeing with an animate plural head NP, as in perfective (539b) and imperfective (539d). Factoring out tone-dropping controlled by a
following determiner, this animate plural form is identical to the 3Pl subject form of a main-clause perfective negative.

(539) a. nù: L ǹjí-ŋ sùyɔ̀-ŋ́ rì L né
   person L 1Sg-Acc hit-Ppl.PfvNeg L Def.AnSg
   ‘the person who didn’t hit me’

b. nù: L ǹjí-ŋ sùyɔ̀-ndù L bù:
   person L 1Sg-Acc hit-Ppl.PfvNeg-AnPl L Def.AnPl
   ‘the people who didn’t hit me’

c. nù: L ǹjí-ŋ sùyɔ̀-ŋɔ̀ L né
   person L 1Sg-Acc hit-Ppl.IpfvNeg L Def.AnSg
   ‘the person who doesn’t hit me’

d. nù: L ǹjí-ŋ sùyɔ̀-ŋ-ɛ̀ L bù:
   person L 1Sg-Acc hit-Ppl.IpfvNeg-AnPl L Def.AnPl
   ‘the people who don’t hit me’

14.3 Object relative clause

Again the verb is participialized. The head NP is tone-dropped, and any determiners or non-numeral quantifiers that have scope over the internal head NP follow the participle. There is no accusative marking on the head NP. If the subject is pronominal, it is expressed by an independent pronoun procliticized to the participle. This subject proclitic is optional after an overt nonpronominal subject (clause-initially). Positive examples are in (540). The internal head NP is bolded. (540g) has a covert head.

(540) a. [éwé gá] àrɔ̀-l I: n yì-sè L né
   [market Loc] man L 1SgSbj see-Ppl.Pfv L Def.AnSg
   ‘the man who(m) I saw in the market’

b. [éwé gá] àrɔ̀-l I: n yì-sè L bù:
   [market Loc] man L 1SgSbj see-Ppl.Pfv L Def.AnSg
   ‘the men who(m) I saw in the market’

c. [éwé gá] màngɔ́rɔ̀ l i: n yì-sè L gú
   [market Loc] mango L 1SgSbj see-Ppl.Pfv L Def.InanSg
   ‘the mango that I saw in the market’

d. [éwé gá] màngɔ́rɔ̀ L i: n yì-sè L ý
   [market Loc] mango L 1SgSbj see-Ppl.Pfv L Def.InanPl
   ‘the mangoes that I saw in the market’
e. [lè-gè-sò L ú è-wè-sè L gù] [bicycle L 2SgSbj buy-Ppl.Pfv L Def.InanSg] nàmá-èrè-Ø
be.ruined-Pfv1a-3SgSbj ‘The bike that you-Sg bought has malfunctioned.’

f. [lè-gè-sò L ì S è-wè-m L kù] ñgù kù=ŋ
[bicycle L 1SgSbj buy-Ppl.Ipfv L Def] Dem.InanSg DiscDef=it.is ‘This is the bike that I will buy.’

g. [ǐ: kò:-sè L gù] nàmá = w = ndò:
[1PlSbj eat-Ppl.Pfv L Def] meat=it.is=it.is.not nìmì = w nà
cow.pea=it.is rather ‘What we ate was not meat, rather it was cow-peas’.
(headless relative)

Negative examples are (541).

(541) a. kò:-L ì: kò:-ŋò:
thing L 2PlSbj eat-Ppl.IpfvNeg ‘what you-Pl do not eat’

b. nàŋà L ì: nìtur-ndù L bù:
cow L 1SgSbj sell-Ppl.PfvNeg.AnPl L Dem.AnPl ‘the cows that I did not sell’

14.4 Possessor relative clause

The possessor (always nonpronominal and always preceding the possessum) is tone-dropped as relative head. This frees the possessum from the tonosyntactic control of the possessor, so the possessum reverts to its unpossessed tonal form. This is the case with ‘house’ and ‘cow’ in (542a-b). Especially with kin and other inalienable relationship terms, a resumptive pronominal possessor may also appear following the possessed noun (542c-d). The possessor as head noun is bolded.

(542) a. àrwa L ǹdò yè-gè-sè L né
man L house fall-Ppl.Pfv L Def.AnSg ‘the man whose house fell’

b. àrwa L nàŋà sà:dì-sè L bù:
man L cow die.unslaughtered-Ppl.Pfv L Def.AnPl ‘the men whose cow died (naturally)’

c. àrwa L [bà: nà] ǹnè-sè L né
man L [father 3SgPoss] go-Ppl.Pfv L Def.AnSg ‘the man whose father has gone’
14.5 Relativization on the complement of a postposition

In (543a), the head NP is logically the dative indirect object, but there is no sign of the dative postposition \textit{bay}. Likewise, in (543b), ‘daba’ (native hoe) is logically instrumental, but the instrumental postposition \textit{yàgà} is absent. And in (543c), ‘honey’ is purposive, cf. (543a) in §8.3, above, but purposive postposition \textit{dèr'ì} is nowhere to be seen. Clearly the regular way to form a relative clause with the complement of a basic postposition as head NP is to delete the postposition entirely and then treat the head NP in the usual way.

\begin{itemize}
\item \textit{a.} \begin{center}
\begin{tabular}{llllllll}
\text{yà:} & \text{ŋù} & \text{i₆} & \text{kiyè-sè} & \text{nè} & \\
\text{woman} & \text{say-Ppl.Pfv} & \text{Def.AnSg}
\end{tabular}
\end{center}
\begin{center}
‘the woman to whom I said that’
\end{center}
\item \textit{b.} \begin{center}
\begin{tabular}{llllllll}
\text{wàrà} & \text{yù:} & \text{i₆} & \text{wàrà-ì} & \text{gú} & \\
\text{daba} & \text{do.farming-Ppl.Ipfv} & \text{Def.InanSg}
\end{tabular}
\end{center}
\begin{center}
‘the daba (hoe) with which I do farming’ (\textit{wàrà})
\end{center}
\item \textit{c.} \begin{center}
\begin{tabular}{llllllll}
\text{ò:ndò} & \text{bù:} & \text{yè-sè} & \text{gú} & \\
\text{honey} & \text{come-Ppl.Pfv} & \text{Def.InanSg}
\end{tabular}
\end{center}
\begin{center}
‘the honey for which they came’
\end{center}
\end{itemize}
15 Verb (VP) chaining and adverbal clauses

I use the term chain to denote a sequence of two or more verbs, or VPs, where the nonfinal verbs are not inflected for pronominal subject. Direct chains have nonfinal verbs in their bare form (with lexical tone and vocalism), usually directly adjacent to the following (often final) verb in the chain, except that in nonsubject relative clauses a subject pronominal may intervene. Looser chains, often involving more complete VPs or clauses, make use of VP-final chaining morphemes, which to some extent distinguish same-subject from different-subject clause sequences (switch-reference).

15.1 Direct chains (without chaining morpheme)

Direct chaining of verbs is fairly productive in Nanga. A direct chain in Nanga may correspond to a single clause with an adverbial phrase in English. Prototypically, the two verbs express simultaneous co-events abstracted from a single, well-integrated event scenario. An intransitive example is ‘fall’ plus ‘descend’ in tómbó sígé ‘fall down’, as in the fourth Nanga line in (738) in the sample text. A transitive example is ‘cut the throat of’ and ‘kill’ in sémé jīyé ‘slaughter (animal, by cutting its throat)’, as in the penultimate Nanga line in (743).

Some chains attested in texts stretch this by juxtaposing verbs that denote consecutive rather than simultaneous co-events, though they are still closely connected. X gò-ndó kūwó ‘take out and eat X’ occurs in the last line of (747). This is in effect a transitive version of the chain type including a motion verb (§15.1.6.1-3 below). Other sequential direct chains in the sample text include bàrá jě: ‘gather and bring’ and wǒ: kūwó ‘catch and eat’, both in (759). A more extreme and rather atypical example is the triplex párā-gí yóg màrá ‘snap (it) and run (away) and disappear’ in (757).

A special case of direct chain, with béré- ‘get’ in the sense ‘be able to’, is discussed in §17.5.1. For an occasional direct-chain construction with ‘begin’, see (665) in §17.3.10.

15.1.1 Verbal noun of directly chained verbs

When a direct verb chain is converted into a verbal noun, the verbal noun suffix -ndé is added to the final verb only. The nonfinal verbs have their regular form (there is no tone-dropping). Thus tómbó sígé-ndé ‘fall(ing) and going down’ = ‘falling down’.

15.1.2 Presence of AN suffix in nonfinal verb in direct chains

In a direct chain, a nonfinal verb is normally in bare-stem form, so it does not separately mark aspect or negation. Overt AN marking is therefore absent on the nonfinal verbs. Perfective negative -nú- and imperfective negative -ŋò:- do not occur in nonfinal verbs in chains.

In loose chains, an overt subordinator on the nonfinal clause or VP can mark temporal relations (as well as switch-reference category). Main-clause imperfective -m- (3Sg subject form -m-) corresponds to an imperfective subordinator -m used in durative clauses (§15.2.2,
below). Chronological sequence between nonfinal and final event is expressed by subordinators that are not closely related to main-clause perfective inflectonal suffixes.

Some of the main-clause positive perfective “suffixes” are better analysed as auxiliary verbs, combining with the main verb in a kind of direct chain. See §10.1.1 for discussion.

15.1.3 Arguments of directly chained verbs

Consider the chain consisting of two transitive verbs, with a shared direct object (bolded), in (544).

(544) ńpertęj ńsyę́j ńjỳę-Ø
sheep-Acc hit kill.Pfv-3SgSbj
‘He/She hit and killed the sheep.’

In effect, ‘hit’ and ‘kill’ fuse into a single event scenario, and it may not be meaningful to ask whether ‘sheep’ should be bracketed with ‘hit’ or with ‘kill’. My assistant rejected a version of (544) with ‘sheep’ intervening between the verbs (which would require bracketing specifically with ‘kill’). Replacing ‘sheep’ by a pronoun results in no change in order (ńú-ńjỳę́syę́j jỳę-ńę́ ‘he/she will hit and kill you-Sg’).

For combinations of an intransitive motion verb with a following transitive verb, see §15.1.6 below.

15.1.4 Negation of direct verb chains

Morphologically, a direct verb chain is negated as a whole. The negative AN inflection appears on the final verb, but usually has scope over the entire chain. For example, (545) does not mean ‘they jumped (but) didn’t go down’.

(545) ńtómbo ńsùgo-ńdú
jump go.down-PfvNeg.3PlSbj
‘They didn’t jump down.’

15.1.5 Direct chains including dągš- ‘leave’

As usual in Dogon languages, the transitive verb ‘leave, abandon’ is often added after another verb that states (or implies) fixing the position of the object NP. In a free English translation, ‘leave’ would usually be omitted.

(546) a. [ńjỳę́]-1 gù dỳgá dùŋ dągš-leave.Pfv-3PlSbj
[watjer.jar Def.InanSg] here put.down leave ‘They put down and left the water jar.’ (dùŋjì)

b. nàŋą pági dągš-só-ý
cow tie leave-Pfv2-1SgSbj
‘I tied up and left the cow.’
See also (679b), the third Nanga line in (747), and the fifth Nanga line in (750).

15.1.6 Direct chains including a motion verb

‘Come/go and VP’ can be expressed by a nonfinal motion verb plus a directly chained VP. The motion verb precedes the final verb, and if the latter is transitive the complements occur to the left of the two-verb chain. This construction is common in imperatives and hortatives, and in imperfective (future or generalized) contexts.

15.1.6.1 Chains with ŋné ‘go’

Direct chains with nonfinal ŋné ‘go’ are exemplified in (547).

(547)

a. ṭέ:́ pè́rɛ̀ ɲé sè́mà sheep-Acc go slaughter-Imprt ‘Go slaughter (the) sheep-Sg!’

b. ṭέ:́ pè́rɛ̀ ɲé sè́mè-mà “go slaughter-Sg! ’

c. ñí pè́rɛ̀ ɲé sè́mè-ò-u-Ø tomorrow sheep go slaughter-Itfv-1SgSbj ‘Tomorrow I will go and slaughter (a/the) sheep-Sg.’

In texts it can be difficult to distinguish simple chained ŋné from the overtly subordinated ŋné ŋ́, given that ŋ́ can be weakly articulated (e.g. as vowel nasalization) and can be indistinct in an already nasalized syllable. However, the distinction can be made in careful transcription, since the duration of the syllable nucleus in ŋné ŋ́ is longer even when ŋ́ is reduced to vocalic nasalization.

15.1.6.2 L-toned yè L ‘come’

yè:- ‘come’ takes the L-toned, short-voweled form yè in this type of chain.

(548)

a. ɲà: yè L kɔ̀: meal come L eat.Implr ‘Come eat (a meal)!’

b. hà: yè L láw(i) wá well come L pass.Implrt Quot ‘(They) said: well, come and pass (through)! ’ (2004.02.03)

This is easily distinguished from yè: ŋ́, as in (574a) in § 15.2.7.

Examples of yè L in the sample text involve a following motion verb. See segments (740), (741), and (742), all with following ‘go’, and (758) with following ‘go down’.
15.1.6.3  yè: dɔ̀: ‘come and arrive’

In this combination, yè: ‘come’ has its lexical tone. dɔ̀: ‘arrive, approach’ is heard as L-toned prepausally, but with lexical rising tone before other particles such as different-subject subordinator nà. The dɔ̀: may be followed by same-subject (SS) anterior subordinator ŋ (§15.2.7) as in (549a). ‘Come and arrive’ denotes movement to the immediate presence of a person, to the gate or door of a dwelling, or to the edge of a place. English come up to as in they came up to me (not in the vertical sense) gives the idea.

(549)  a.  [yè:  dɔ̀:  ŋ]  [bù:ŋ]  pò̌-mì  ŋ]
[come  arrive  and.SS]  [3Pl-Acc  greet  and.SS]
‘(She) came up (to where they were), (she) greeted them, …’ (2004.02.03)

b.  [íyè  [j:  tònà]  yè:  dɔ̀:]  sòrò=ù,
[again  [place  one]  come  arrive]  wilderness=it.is.Inan,
{sòrò  gà]  yè:  dɔ̀:  bù:  kàn  nà,
[wilderness  Def.Loc]  come  arrive  3PlSbj  do  then.DS,
ɔ̀-jèmì  ñènè  bìyè-mà
cobra  3SgSbj  lie.down.Stat-while
‘Again, they came up to a place, it was a remote wilderness. When they arrived in the wilderness, a spitting cobra was lying (there).’ (2004.02.03)

c.  [yè:  jè→  gò]  [sòrò  gò]
[come  while.SS  Topic]  [wilderness  Loc]
yè:  dɔ̀:  s-è  [nì:  ñgò→]
[come  arrive]-Pfv2-3PlSbj  [water  not.be]
‘As they were coming (=going), they came and arrived at a wilderness. There was no water.’ (2004.02.03)

15.1.7  Backgrounded durative verb-iterations [v̂1-v̂1(-v̂1  …)]

One type of durative adverbial clause (or its functional equivalent) is constructed by iterating the uninflected verb stem, with {HL} overlay on the first occurrence and {L} on the second and any later iterations. The {HL} can reduce to {H} on monosyllabic verbs. For the tonal patterns of this [v̂1-v̂1(-v̂1  …)] iteration, and for further examples, see §11.6.2.

The iterated verbs are chained to a following verb that denotes either a subsequent event or a simultaneous co-event, and usually has the same subject.

In (550), the initial giyè is a cognate nominal and is not part of the iteration, which begins with the following verb stem.

(550)  [giyè  giyè-giyè]  yè:-Ø
[dance(n)  danceHL-dance]  come.Pfv-3SgSbj
‘He/She came (while) dancing.’

(551) is another example.
Further examples are (430) and (431a-b) in §11.6.2.

15.1.8 Chains including mɔ̃ndí-yí- ‘be/do together’

By itself, mɔ̃ndí-yí- [mɔ̃ndi:] is an intransitive verb meaning ‘get together, assemble’. It occurs chained with another VP to translate adverbial ‘together’. Thus ‘work together’ is expressed as ‘get together and work’.

(552) a. mɔ̃ndí-yí  birè-m-è
gather-MP work-Ipfv-3PlSbj
‘They work together.’

b. mɔ̃ndí-yí  ūnì-m-è
gather-MP go-Ipfv-3PlSbj
‘They will go together.’

15.1.9 Chaining with jéjè→ go with’

jéjè→ is a specialized element (cf. Jamsay jëjë ) that functions syntactically like a transitive verb with a sense on the order of ‘have/take (something) with oneself, in one’s custody’. It occurs only in nonfinal position in chains, before motion verbs, so it cannot be directly inflected. It may take a direct object (denoting anything from an inanimate object to a human) that is not otherwise part of the argument structure of the following verb. The object may be marked accusative (553b).

(553) a. sùmáylà  pèrgé  jéjè→  ñnè-Ø
S  sheep  go.with  go.Pfv-3SgSbj
‘Soumaila went with (a/the) sheep.’
or: ‘Soumaila took (a/the) sheep along with him.’

b. [ñnè-Ø  jéjè→]  ñn-ò
[3Sg.Acc  go.with]  go.Pfv-3PlSbj
‘They took him/her along.’

jéjè→ is not transparently segmentable, nor is its syntactic status (verb, adverb) clear. A connection with same-subject subordinator jè→, which is likewise associated with following motion verbs (§15.2.4), is probable. If so, either jè→ is a reduced form of jéjè→, or jéjè→ consists of an otherwise unattested (and phonologically irregular) verb jè- ‘take’ plus the subordinator. Cognates of jè- ‘take’ include Bankan Tey zé and Najamba jè with the same
meaning. Nanga’s own recent perfect auxiliary jè- (§10.2.1.5) may also belong to this set etymologically.

15.1.10 Chains with perfective-1b tí- and perfective-1a (-éré-)

H-toned tí-, morphologically a verb but functioning more as a perfective aspectual element (cf. L-toned perfective-1b suffix -ti-), can be chained to certain preceding verbs. In (554), it emphasizes finality and definitiveness. In this construction, tí- is attested only with imperfective inflections.

(554) ńné è. L. ndè, [dɔŋɔ tí-ǹ-”]
3SgSbj be.tight.Pfv if, [leave Pf1b-lpfv-2SgSbj]
[náy” kè-kè: nút”-ŋɔ-ɔ] [now beetle go.in-lpfvNeg-3SgSbj]
‘It (=cow-peas covered in earth) becomes tightly packed. You-Sg (can) leave (it) once and for all, now the bugs won’t get into it.’ (2004.01.04)

tí- can also be elicited with its own perfective-1b suffix: Vb, tí-tí-. It is not clear that this would have more than a slightly more emphatic sense than the perfective-1b added directly to the main verb, and I have no textual examples.

tí- at the end of such a chain has a bisyllabic form tíyé- in hortatives, e.g. ńné sá: tíyé-máy” ‘let’s go and completely uproot (=destroy)!’ and quoted hortative ńné sá: tíyé-ŋ. The imperative stem is just tí. In Nanga there is no clear synchronic connection between this tí- and the transitive verb tíy(í)- ‘send’, but the two are likely related etymologically. (The connection is more obvious in Donno So.)

Perfective-1a -éré- has a similar {H}-toned form (-éré-) in chain-like constructions with following imperfective suffix. It occurs twice in (555). However, (-éré-) contracts with the stem-final vowel under the same conditions as does suffixed perfective-1a -éré-, as in kɔ-kɔy-éré-ŋ from kɔy- in this example. Such sandhi does not occur in true verb chains.

(555) [kú máy”] tumbò-rá-ú ndé, [DiscDef like] knock-PfvNeg-2SgSbj if,
kɔ-kɔy-éré-ŋ Rdp-be.infested-Pf1a-lpfv.3Sg
[kɔy-ɔ ndé] náy” pàmá-éré-ŋ [be.infested.Pfv-3SgSbj if] now be.ruined-Pf1a-lpfv.3Sg
‘If you-Sg don’t knock it (=tamp it down) like that, it will become infested (=bored into by bugs). If it is infested, now it will become ruined.’ (2004.01.04)

For the more general analysis of perfective-1a and -1b suffixes as possible chained auxiliary verbs, see §10.1.1.

15.2 Adverbal clauses with overt chaining or subordinating morpheme

This section begins with a number of durative or imperfective VP or clause types. See also the direct chain type with iterated uninflected verb (§15.1.7, above). After covering these
constructions, we look at others involving a temporal separation between the chained eventualities.

15.2.1 Backgrounded imperfective and stative clauses (-mɔ̀) ‘while’

-mɔ̀ is a variant form of the imperfective participial -mì. -mɔ̀ occurs instead of -mì in backgrounded imperfective clauses. An apparent variant -mɔ̀-yⁿ occurs in (430) in §11.6.2. The eventuality denoted by the -mɔ̀ clause is prolonged, and persists through a time interval (T) that leads up to or overlaps a following foregrounded event. With ‘come’ and ‘go’ it generally denotes a prolonged backgrounded motion event that leads up to (but does not overlap) the next event (see below). However, in complements of some verbs, e.g. with ‘find/see (sth happening)’ -mɔ̀ occurs instead of -mì in backgrounded imperfective clauses. An apparent variant -mɔ̀-yⁿ occurs in (430) in §11.6.2.

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The ɔ vowel is somewhat obscure grammatically. -mɔ̀ is added directly to the same form of the stem used before imperfective -m̀ (3Sg-ŋ̀). Some examples showing the stem form are in (556). As in the imperfective, /LH/ melody is raised to {H} in prosodically light (i.e. bimoraic) verb stems.

(556) bare stem with -mɔ̀ gloss

a. bimoraic

<table>
<thead>
<tr>
<th>Bare Stem</th>
<th>With -mɔ̀</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yê-</td>
<td>yê-mɔ̀</td>
<td>‘come’</td>
</tr>
<tr>
<td>yĩ-</td>
<td>yĩ-mɔ̀</td>
<td>‘see’</td>
</tr>
<tr>
<td>ǐnĩ-</td>
<td>ĩnĩ-mɔ̀</td>
<td>‘go’</td>
</tr>
<tr>
<td>yègẹ́-</td>
<td>yègẹ́-mɔ̀</td>
<td>‘fall’</td>
</tr>
</tbody>
</table>

b. heavier

<table>
<thead>
<tr>
<th>Bare Stem</th>
<th>With -mɔ̀</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>gùnjó-</td>
<td>gùnjó-mɔ̀</td>
<td>‘dig’</td>
</tr>
<tr>
<td>bá:rí-</td>
<td>bá:rá-mɔ̀</td>
<td>‘help’</td>
</tr>
<tr>
<td>bègírí-</td>
<td>bègíré-mɔ̀</td>
<td>‘winnow’</td>
</tr>
</tbody>
</table>

In elicited examples, the subjects of the -mɔ̀ clause and the following clause may or may not be coindexed. If they are, the subject is not repeated in the -mɔ̀ clause (557a). If the two subjects are disjoint, the subject of the -mɔ̀ clause is expressed overtly. If this subject is pronominal it takes the form of an independent pronoun (557b).

(557) a. yê:-mɔ̀ yèbùmbà yĩ:-só-ŷ
come-while snake see-Pfv2-1SgSbj
‘On my way (= while coming) here, I saw a snake.’

b. [ʔ] yẽ:-mɔ̀ [bõndí wɔ̀-ʔ] [1PlSbj come-while] [rain(n) rain.fall.Pfv-3SgSbj]
‘As we were on our way here, it rained.’

In the sample text, -mɔ̀ is associated with specific narrative contexts. An activity verb (such as a motion verb) is introduced in one clause (with its subject NP or pronominal), then from two to four iterated -mɔ̀ clauses occur with flat high-pitched background-clause intonation to
indicate prolongation of this activity (usually with no repetition of the subject pronominal),
then a new foregrounded event is introduced. The free translations of two passages are given
here; for full markup see the relevant excerpts from the text appended to this grammar.

‘The two of them were coming; come-mɔ̀, come-mɔ̀, come-mɔ̀ [= they kept coming and
coming]. (Then) a storm arose.’ (740)

‘The two of them come-mɔ̀, come-mɔ̀ [= were coming and coming], (and) when they had
gone a little way, he (= hyena) said to hare: …’ (744).

Like the regular imperfective participial -mì, -mɔ̀ is used with statives in addition to
imperfectives of active verbs. For example, it can be added to stative quasi-verb bu- ‘be’ to form
bú-mɔ̀ when ‘be’ functions as an auxiliary verb, following another imperfective verb. A
pronominal subject is again expressed by an independent pronoun. In the sample text we find
básá-ŋ́ tìné bú-mɔ̀ ‘while he (= hyena) was pulling’ (followed by: ‘the goat lay down
motionless’) (741, repeated in 743).

15.2.2 Imperfective -ŋ́ as subordinator

The L-toned ŋ́ described in the subsections below is distinct from the atonal same-subject
anterior subordinator ŋ (§15.2.7). The latter gets its tone by spreading from a preceding verb
in bare-stem form and is therefore usually H-toned. It is L-toned after a perfective auxiliary
like recent perfect jɛ̀, but imperfective -ŋ́ is incompatible with such auxiliaries.

15.2.2.1 Imperfective -ŋ́ on activity verb plus time-of-day verb

A time-of-day verb (‘spend the night’, ‘spend the mid-day’, etc.) may be chained to a
preceding activity VP. The verb of the activity VP takes imperfective subordinating suffix -ŋ́,
which is not inflected for pronominal subject. The verb stem has the same segmental and
tonal form as in the inflected imperfective.

(558) a. [giyé giyé-ŋ́] nàè-Ø
[dance(n) dance-Ipfv] spend.night.Pfv-3SgSbj
‘He/She spent the night dancing.’ (= ‘danced all night’)

b. [giyé giyé-ŋ́] nà-y
[dance(n) dance-Ipfv] spend.night.Pfv-1SgSbj
‘I spent the night dancing.’ (= ’danced all night’)

c. [wóri wárá-ŋ́] dirè-Ø
[farming do.farming-Ipfv] spend.midday.Pfv-3SgSbj
‘He/She spent the (mid-)day farming.’

15.2.2.2 Imperfective -ŋ́ (-mù) plus bu- ‘be’

This combination does not seem to be common, since there is a more productive progressive
verb form with sò- (§10.2.2.4). However, it was elicitable. From my assistant’s comments, the
bù- here has its literal sense ‘be present, be (in a place)’, so the -mù clause can be taken as
subordinated.
An example is (559a). When directly preceding *bù-, the imperfective subordinator is always pronounced [m], which I take to reflect assimilation to the following labial. The negative counterpart has [n] before ŋgô- ‘not be’, and the two velar nasals contract. This too could be a point-of-articulation assimilation. In view of the clear *ŋ before in time-of-day construction (§15.2.2.1, just above) I normalize the transcription as *ŋ.

(559) a. [[tìyá yĕ:] nà: kɔ́: bù-Øµ]
    [[friend 1SgPoss.AnSg] meal eat-Ipfv be-3SgSbj]
    ‘My friend is (present) eating a meal.’ phonetic [...kɔ̂:mbu]

b. [ŋǎ kɔ́: -ŋ̀] ŋgô-yì
    [meal eat-Ipfv not.be-1SgSbj]
    ‘I am not (present) eating a meal.’

15.2.3 Past imperfective adverbial clause with -m-sè gà (-m = bè-sè gà)

In this construction, the verb has imperfective-type tone overlay and ends in imperfective -m, followed by -sè gà. The less common full form is -m = bè-sè gà, which reveals the origin of the formation as a participle of the past imperfective. The clause is otherwise in relative-clause form, with wágáɗí (or wágăɗí) ‘time’ in L-toned form as the head NP. A pronominal subject is expressed as a preverbal pronoun.

The clause can be translated as ‘while’, with a progressive, stative, or other durative VP understood as referring to a past time frame. The -sè gà clause and the main clause may have coindexed or disjoint subjects. Morphologically, gà is presumably the locative postposition, here ‘at (the time when…)’.

A synchronic identification of -sè with the perfective participle might explain why -m-sè gà is associated with past time frames (‘while I was farming’), rather than being an all-purpose progressive or durative adverbial clause (‘while I am farming’). Moreover, the fact that -m-sè gà can be used with aspectually challenged stative quasi-verbs, like ‘have’ in só-m-sè gà ‘when I had …’ (560c), shows that it does not behave like a progressive synchronically.

I will gloss -m-sè as “-Ipfv-while.Past.”

(560) a. wágáɗì¹ yù: i:” wárá-m-sè gà,
    time¹ millet 1SgSbj do.farming-Ipfv-while.Past Loc,
    bôndì wè-Ø
    rain(n) rain.fall.Pfv-3SgSbj
    ‘While I was (in the fields) farming millet, it rained.’

b. [tègę gà] ū bù-m-sè gà,
    [childhood Loc] 2SgSbj be-Ipfv-while.Past Loc,
    ŋgá yè:-m = bè-w
    here come-Ipfv=Past-2SgSbj
    ‘When you were a child, you used to come here (often).’
c. [wàgàti¹⁴ lègèsò: i.⁰ sò-mi-sè gà] [time¹ bicycle 1SgSbj have-Pfv-while.Past Loc] [ásu→ á:ndé = Ø áńi-mi = bē-y] [always Anda go-Pfv=Past-1SgSbj] ‘When I had a bicycle, I used to go to Anda all the time.’

-mi-sè is also attested without gà, as in (489) in §13.2.10, above. Historically, -m-sè may have originated as a participial (i.e. relative-clause) form of the progressive. The latter is now expressed by a suffix -sò- following a form of the verb stem with lengthened final stem vowel with a final L-tone element, with a less common variant -sò-sè that retains an audible variant of imperfective -m ~ -n (§10.2.2.4). However, the progressive now has a distinct participial form in -sò-mi (§14.1.7.2), so there is no clear synchronic connection between it and -m-sè.

15.2.4 Same-subject ‘while’ subordinator jè→ before motion verb

A construction with jè→ added to a VP with its verb in bare-stem form, followed by a motion verb, denotes simultaneous co-events with the same subject. jè→ has a segmental resemblance to recent perfect jè- (§10.2.1.5), which also follows the bare stem, but it cannot be identified with any specific form of jè-. There is no obvious perfect-like semantics, since the co-events are simultaneous.

(561) a. [háli mó:ti=yè] [yàgàjì jè→] áńé~Ø [all.the.way.to M=Loc] [run while.SS go.Pfv-3SgSbj] ‘He/She ran all the way to Mopti.’
(lit. “He/She went all the way to Mopti while running.”)

b. [bàrkó dàmbí jè→] yè-y [gas.drum push while.SS] come.Pfv-1SgSbj ‘I came (here) pushing a gas drum (large metal barrel).’

c. [ńí]:ndì [gù] ìgbí-yí jè→ [clayL Dem.InanSg] hold.MP while.SS go.QuotImprt Quot ‘(They said:) keep the scrub-acacia seed and go with it!’ (2004.02.03)

téwè-jè→ ‘striding, walking fast’ is a lexicalized expressive adverbial that may have originated as a subordinated verb with jè→. Another possible case of this type is jéjé→ ‘have/take (something) with oneself’, which is also associated with motion verbs (§15.1.9).

In one textual example, the actions are not simultaneous co-events. Instead, they are sequenced, at least as I interpret the narrative. In this example, jè→ clearly has the sense of jéjé→ (accompanied motion).

(562) [ńí: wá] [pɔndì¹⁴ ìgbú] wàgájì jè→ [3Sg Quot] [clayL Dem.InanSg] scoop go.with [ńí: wá] go.QuotImprt Quot ‘(He said): hey you, scoop up (some of) this wet clay and go with it!’ (2004.02.03)
My assistant rejected combinations of \(jē\) with following non-motion verbs.

15.2.5 Durative clauses with prolonged final vowel

15.2.5.1 Durative \(-ē:\sim-ē\:\sim-ī:\sim-\emptyset\) in complement of \(dē:-\) ‘be tired’

The usual verb ‘become tired (weary)’ (or more generally ‘suffer physically’) is \(āyā:-\). Another verb, \(dē:-\), is used in contexts like ‘I worked until I got tired’, or more freely ‘I worked a very long time’, and it is this verb that interests us here.

In (563), from the sample text, the complement of \(dē:-\) is a verb with apparent suffix \(-ē:-\).

As we will see, the suffix is actually based (segmentally) on the E/I-stem (§10.1.3), which also occurs in the 3Sg subject form of the simple perfective (§10.2.1.1). This stem ends in \{e e l\} depending on the verb, and can be broken down into the E-stem \{e e\} of non-i-final verbs and the I-stem (identical to the bare stem) of i-final verbs. The complement of ‘be tired’ preserves lexical tone melodies, although these are neutralized to \{L\} in the simple perfective. For verb stems of one or two syllables, the final vowel is also lengthened. No lengthening occurs for trisyllabic and longer stems, whose complement form is therefore homophonous with the bare stem (I do, however, transcribe the complement verb with \(-\emptyset\)).

The interlinear gloss is “Dur[ative].”

(563) \[
\begin{array}{llll}
\text{[hi-ët:]} & \text{[bēr]} & \text{[ā]} & \text{[yēl]}
\end{array}
\]

\[
\begin{array}{llll}
\text{[goat]} & \text{[3ReflSg Poss.AnSg]} & \text{bās-ë:} & \text{āmē} & \text{dē:} & \text{nà]}
\end{array}
\]

\[
\text{[pull-Dur] 3SgSbj be.tired then.DS]} \quad \text{go-lpfvNeg-3SgSbj}
\]

‘Hyena tugged on his goat until he (= hyena) was exhausted (= for a long time), (but) it wouldn’t go.’

I have found no construction other than that with \(dē:-\) that elicits this form of the complement. However, with \(dē:-\) it was easy to elicit similar examples with a wide range of complement verbs denoting activities. They show that a pronominal subject is expressed by an independent pronoun in the complement, not as a pronominal-subject suffix on the \(dē:-\) verb (564). This suggests that even in (unsubordinated) main clauses, \(dē:-\) in this construction is impersonal, rather than constituting a typical verb-chain (with coindexed subjects).

(564) \[
\begin{array}{llll}
\text{[I:\textcircled{a}] bīrā} & \text{bir-ë:]} & \text{dē:-\emptyset}
\end{array}
\]

\[
\begin{array}{llll}
\text{[1Sg work(n)] work-Dur] be.tired.Pfv-3SgSbj}
\end{array}
\]

‘I worked until getting tired (= for a very long time).’

Forms of the complement verb are in (565). The lexical tone melody, /H/ or /LH/, of the stem is always preserved in the onset. The final vowel is lengthened in mono- and bisyllabic stems (565a-f), but not in trisyllabic and longer stems (565g-h).

(565) \[
\begin{array}{llllll}
\text{stem} & \text{3Sg perfective} & \text{before} & \text{dē:-} & \text{gloss}
\end{array}
\]

\[
\begin{array}{llll}
\text{a. bisyllabic, final} & \text{é:}
\end{array}
\]

\[
\begin{array}{llll}
bāsā: & bāsē-\emptyset & bās-ë: & \text{‘pull’}
bīrā: & bīrē-\emptyset & bīr-ë: & \text{‘work’}
sūyā: & sūyē-\emptyset & sūy-ë: & \text{‘hit’}
\end{array}
\]

326
b. bisyllabic, final é:

- kóyó- kóyè- kóy-é: ‘weep’
- péré- pèrè- pér-é: ‘jump off’
- günjó- günjè- günj-é: ‘dig’

c. bisyllabic, final í:

- pági- pági- pág-í: ‘tie’
- dèwí- [dēw] dèwi- dèw-í: ‘cover’

d. monosyllabic

- kɔ́: kɔ̀ɛ̀ kɔ́-ɛ́: ‘eat (meal)’
- kà- kà-ɛ̀ kà-ɛ́: ‘shave’
- nɔ́: nɔ̀ɛ̀ nɔ̀-ɛ́: ‘go in’
- gò- gò-ɛ̀ gò-ɛ́: ‘go out’
- tɛ́: tɛ́:- ɛ́: ‘lay out (mat)’
- yǐ- yǐ- ɛ́: ‘see’

e. Cv

- nùyⁿ- nùyⁿ- nùyⁿ- ɛ́: ‘hear’
- nùyⁿ- nùyⁿ- nùyⁿ- ɛ́: ‘go in’

f. nCV

- ñnè- ñnè- è- ñn-é: ‘go’
- ñdí- ñdí- ñd-í: ‘go’
- ñdè- ñdè- è- ñd-è: ‘go’

g. trisyllabic with final i

- bégírí- bégírí- bégírí- ɛ́: ‘winnow by shaking’
- yàgíbí- yàgíbí- yàgíbí- ɛ́: ‘shake (grain)’

h. trisyllabic with final e

- bògóro- bògóre- bògóré- ɛ́: ‘bellow’
- mònjùrò- mònjùrè- mònjùrè- ɛ́: ‘dream’

A negative counterpart can be formed by adding the same 3Sg perfective dè- ‘be tired’ to a pronominally conjugated perfective negative verb.

(566) [nàmá kùwò-ri-ý] dè:-ò
[meat eat-PfvNeg-1SgSbj] be.tired.Pfv-3SgSbj
‘I didn’t eat meat for a long time.’
(= ‘I went a long time without eating meat.’)

15.2.5.2 Other cases of prolonged final vowel of verb

In (567), which completes (428b) in §11.6.1 above, dèń- is intonationally prolonged and accompanied by a preverbal subject pronoun. This construction is possible with any
pronominal-subject category. My assistant accepted a version of this example with 3Sg ŋné in place of 1Pl ī:

(567) [bòrọ ŋné-ŋ̄ günjọ-günjọ-günjọ-günjọ]
[3Sg-Acc dig-dig-dig-dig]
[1PlSbj stamp] [1PlSbj stamp] [1PlSbj stamp] end-PfvNeg-3SgSbj
‘We kept digging (pits) and kept stamping on (the locusts), (but) they (=locusts) did not end.’ (2004.01.01)

When asked to adapt this construction to another verb, like súy ‘hit’ or pógó ‘tap’, my assistant used the -ŋ̀ subordinator (§15.2.2), e.g. î: súy ŋ̄-ŋ̀ ‘we kept hitting’.

(568) bû-ŋ̀ kǎwrù wà, bû-ŋ̀ ná- dru-,
3Pl-Acc excuse.me! Quot, 3Pl-Acc spend.night-Caus.Pfv,
 hà: ọsì = ̀wà well road=it.is.Inan Quot
‘(She) said: she said: “pardon me!” She said good day to them. (He) said: “well, it’s the road.”’ (2004.02.03)

15.2.6  Different-subject anterior ‘and then’

Under this rubric I treat nà ~ ná-ŋà (§15.2.6.1) and nà:yⁿ ~ ná-ŋàyⁿ ‘and then’ (§15.2.6.2).

15.2.6.1  nà ~ ná-ŋà ‘and then’ (different subject) or ‘rather (than)’

This clause-final subordinator is usually heard as nà, but an extended variant ná-ŋà is also attested.

Clauses ending in nà denote eventualities that precede in time the temporal reference point (in the main clause). The subject of the nà clause is referentially disjoint from that of the main clause. This different-subject (“DS”) subordinator follows a bare verb stem with lexical vocalism and tone, hence yì: nà ‘see and …’, ŋné nà ‘go and …’, bà:rì nà ‘help and …’, etc. A pronominal subject is required, even if a fuller subject NP is present, in the form of a preverbal proclitic pronoun. Examples are in (569); others are in the sample text.

(569) a. [á:mádù [sèŋ̄ L gú] ŋné básá nà]
[A [ropeL Def.InanSg] 3SgSbj pull and.DS]
pàrẹ-Ø
.snap.Pfv-3SgSbj
‘Amadou pulled the rope and (then) it snapped.’ (sèŋ̄)
(lit. “Amadou having pulled the rope, it snapped.”)
b. [áné ́bay] ú ́néné nà]  
[Dat 3Sg SBj go and.DS]  
[ù-ù ́ndé-rf-Ø]  
[2Sg-Acc give-Pfv-Neg-3SgSbj]  
‘You-Sg went to him, but (then) he didn’t give (it) to you.’

c. [kú ́néné-ŋ]  
[InanSg go-and.SS]  
[yà: ́néné ́rè nà]  
[millet 3SgSbj ripen and.DS]  
[ŋěy胞 yè-Ø]  
[PRON]  
‘They (=locusts) went (away), but when the millet had ripened, now (=right then) they came back.’ (2004.01.01)

In (569c), the first clause (‘they went’) is marked as same-subject since it has the same subject as the third clause (‘they came’). That is, the first and second clauses are both treated as independently subordinated to the final main clause.

The nà form is of considerable interest syntactically. Although it is normally preceded by a bare verb stem, it also allows combinations of bare stems plus independent forms of certain perfective auxiliaries (“suffixes”). These combinations are more emphatically perfective aspectually, and favor free translations of the type ‘after X had VPed’. The forms are shown in (570). For the perfective-1a, and (with marginal exceptions in relative clauses) for the perfective-1b, this is the only situation where the perfective suffix is separable from the stem.

(570) category in main clause with nà  
perfective-1a ̀érè- Vb PRON (y)érè nà  
perfective-1b ̀tí- Vb PRON tì nà

Textual example (571a) is interesting since simple main clause perfective-1a tûw-érè- is repeated as a subordinated clause with divided tûwé … yérè nà. (571b) is my only textual example involving the perfective-1a.

(571) a. [yà: ́L nè] tûw-érè-Ø,  
[womant Def.AnSg die-Pfv1a-3SgSbj,  
[yà: ́L nè] tûwé ́néné yérè nà,  
[womant Def.AnSg die 3SgSbj Pfv1a then.DS,  
[childt Def.AnSg Quot [childt orphan]=it.is Quot  
‘The woman died. When the woman had died, the child (=girl) was an orphan, it is said.’ (2004.02.03)

b. jìyé ́i: tì nà ́gay,  
[1PlSBj Pfv1b then.DS Topic,  
[PRON]  
‘After we had killed (some locusts), they (the rest) came back.’ (2004.01.01)
A somewhat similar example involving the recent perfect is in (741) in the sample text, where main-clause dé: jé-Ø ‘was calm’ is repeated as subordinated ñné dé: jé nà (3Sg subject ñné). Here, however, the subject pronoun precedes the main verb.

Instead of simple […] verb nà, a subject switch can also be made by chaining the main verb to ká́rí nà with the semantically light verb ká́rì- ‘do’ separated from the main verb by the subject pronoun. ká́rì nà usually contracts slightly to kán nà. Excerpt (572) begins a tale with such a construction, and ends with another example of yèrè nà as in (571a) above.

\[(572)\] bérì, [dê: nà] ñné-ŋí nàrí á ñné kán nà, goat, [mother 3Sp] 3Sp-Acc bear 3SpSbj do then.DS, [dágáy bérì kéré-sò→], túw-ërè-Ø, [a.little fodder begin.to.eat-Pfv2], die-Pfv1a-3SpSbj, [dë: 1 nè] tùwë ñné yèrë nà, … [mother 1 Def.AnSp] die 3SpSbj Pfv1a then.DS, … ‘A goat, after his mother gave birth (to him), he had begun (eating) a little grass (=had recently been weaned). She died. After the mother died, (he …)’ (2004.02.02)

An unusual feature of kán nà is that it can be added to a negative verb. An example is yè: ndé àwà-rí ñné kán nà ‘when (=after) it did not consent (=refused) to come’ in (743) in the sample text.

Clause-final nà can also be used to distinguish a correct proposition (usually an identificational predicate) from an incorrect one. In this construction, the relationship between the two eventualities is not sequential, rather mutual exclusivity. Free translations with ‘instead’ or ‘rather’ convey the basic idea. In (540g) in §14.3 (‘What we ate was not meat, rather it was cow-peas’), one proposition is negated, then corrected by a positive clause. A similar passage in (751) in the sample text also involves correcting a misidentification (sun rather than fire). In that example, nà→ is prosodically lengthened since here the positive clause precedes the negated one.

15.2.6.2 nàyⁿ ~ nà:yⁿ or nà-gàyⁿ ‘(and) then’ (different subject)

Less common than nà, but attested in texts, are variants nàyⁿ ~ nà:yⁿ and bisyllabic ná-gàyⁿ. All of these seem to be interchangeable. nàyⁿ occurs in, but is not limited to, narrative contexts where a clause is repeated as background for a new, chronologically sequenced event.

\[(573)\] [dùrà [bù: 1gà]] kàw kèsé-Ø, [tail 3Pl 1Poss.InanSp] with.one.chop cut.Pfv-3SpSbj, [dùrà 1gà] kàw ñné kèsé nàyⁿ, [tail 1 Def.InanSp] with.one.chop 3SpSbj cut then.DS, yàmjà wù: írì-yà giraffe hubbub get.up-MP.Pfv-3PlSbj ‘She cut off their tail(s) (with one stroke). After she cut off the tail(s) (with one stroke), the giraffe(s) got up with a hubbub.’ (2004.02.02)
15.2.7 Clauses with ŋ (same-subject, anterior)

ŋ appears at the end of a clause whose time frame precedes that of the main clause. It is atonal, getting its tone from the preceding verb, which has the bare stem form. Since bare verb stems always end in an H-tone, ŋ is (almost) always H-toned ŋ́. However, it can also be added to recent perfect jë, in which case we get jë ŋ́, as in (574c) below. By contrast, imperfective subordinator -ŋ is always L-toned and does not combine with jë.

The subjects are coindexed, and the interlinear gloss is ‘and.SS’ (for “same subject”). The subject is normally expressed only once in the two-clause sequence. ŋ is extremely common and it is clearly the basic same-subject subordinator involving chronologically sequenced past-time events.

yě: ‘come’ has a regular form yě: ŋ́. This verb also has an L-toned form yè in nonfinal position in some verb chains (§15.1.6.2). Aside from ‘come’, verbs show no tone changes or vocalic irregularities: wàrá ŋ́ ‘do farming …’, bà:rí ŋ́ ‘help and …’, yì: ŋ́ ‘see and …’, ñnè ŋ́ ‘go and …’. Examples are in (74). There are many others in the sample text, including four in (747) in that text. In (574c) the two subjects overlap referentially.

(574)  

a. [yě: ŋ́] èw-y-à  

[come and.SS] sit-MP.Pfv-3PlSbj  

‘They came and sat.’

b. [[ñné  báy] ñnè ŋ́] [ñné-ŋ́ tèmbè-rú-ẃ]  

[[3Sg Dat] go and.SS] [3Sg-Acc find-PfvNeg-2SgSbj]  

‘You-Sg went to him (= to his place), and (= but) you didn’t find him (there).’

c. kìwáří [á: wòy] kárí jè ŋ́,  

[greeting [3ReflPl two] do RecPrf and.SS,  

[ñné wá]  

[3Sg Quot]  

‘The two of them finished the greetings, then he said: hey you-Sg, …’  

(2004.02.03)

d. [[gàríí á yě] bàrá ŋ́]  

[[geat [3ReflSg Poss.AnPl]] gather and.SS]  

[kú mày’] làw-à wà  

[DiscDef like] pass.Pfv-3PlSbj Quot  

‘Having gathered her baggage, they went past (the cobra) at that point, it is said.’  

(2004.02.03)

15.2.8 Same-subject anterior subordinators for future time reference

15.2.8.1 gáy ‘and then’ (same-subject, future)

gáy is another same-subject subordinator. It can be glossed ‘and then’, and specifies that the events of the two chained clauses are temporally sequenced (but not separated by a lengthy interval). In elicitation, my assistant allowed it only in future contexts, above all when the subsequent clause is an imperative or hortative, but he also accepted indicative clauses as in (575b). See also (227) in §8.4.6.2 and (481a) in §13.2.6.
The verb in the *gáy* clause is in bare-stem form segmentally, but it drops its tones.

(575) a. \[nà: \quad kò:\text{-L} \quad gáy] \quad ñìnè-má
\[meal \quad eat\text{-t} \quad \text{then.SS} \quad \text{go-Hort.SgAddr} \]
‘Let’s eat and then go!’ (< *kò:\*)

\[wàrà\text{-L} \quad gáy] \quad ñíñì-
\[do.farming\text{-L} \quad \text{then.SS} \quad \text{go-Ipfv.3SgSbj} \]
‘He/She will work (= worked in the field) and then go.’ (< *wàrà*)

c. \[ñìgá \quad sèmbí\text{-L} \quad gáy] \quad ñnò
\[here \quad sweep\text{-t} \quad \text{then.SS} \quad \text{go.} \quad \text{Imprt} \]
‘Sweep up here and then go!’ (< *sèmbí*)

Verbs that show irregularities elsewhere have regular forms here: *yì:* *Lgáy* ‘(will) see and then …’, *ñìnè:* *gáy* ‘(will) go and then …’.

Textual examples are in (576a-b). Another example is (749) in the sample text.

(576) a. \[fò:\text{-L} \quad gö] \quad [ùwá \quad gáy] \quad yù: \quad wàrà\text{-L} \quad gáy \quad ñày
\[field\text{-Loc} \quad [fear \quad Loc] \quad \text{millet \quad farm(v)\text{-t} \quad \text{then.SS \quad now}] \]
\[nà: \quad bèrè \quad [ù \quad námá-\O \quad ñà] \quad \text{mà}
\[meal \quad get \quad [[\text{2SgSbj \quad want-Ppl.Ipfv} \quad \text{Loc} \quad \text{get(=be.able.to) \quad Rdp-eat-Ipfv-2SgSbj \quad Q} \]
‘After cultivating millet in the fields in (a state of) fear (of marauding Fulbe), would you-Sg (be able to) get meals as you-Sg would like?’ (2004.01.07)
\[námá-\O \quad \text{for \quad námá-\m \quad \text{stative participle with imperfective -\m}} \]

b. \[nìnè \quad bày] \quad ñìnè \quad [kò\text{-m}\text{-L} \quad gáy]
\[3Sg \quad Dat] \quad \text{go \quad [sew-Caus\text{-t} \quad \text{then.SS}] \quad \text{Quot}} \quad \text{wá}
\[come-QuotImprt \quad \text{Quot} \]
“(Someone) said: ‘Go to her, have (her) sew it up, and come (back)!’”’
(2004.02.03)

gáy competes to some extent with the pseudo-conditional *ndé* constructions to be described below. Both occur in nonfinal chained clauses in imperfective contexts. The main difference is that *gáy* occurs in brief single clauses tightly embedded into the higher clause, while pseudo-conditionals can be longer and more loosely chained. *gáy* is also more strict in requiring subject coindexation.

15.2.8.2 Conjugated imperfective anterior (pseudo-conditional) with *ndé*

In this construction, an \{L\}-toned inflected form of the \{L\}-toned simple perfective with its regular pronominal-subject suffixes is followed by *ndé*, so the formula is \text{Vb\text{-t} \quad ndé}. The H-tone on *ndé* is heard when the clause in question is quickly followed by the next clause with no conspicuous pause, otherwise (prepausally) it may have L-tone (or pitch).
This construction superficially resembles the usual conditional antecedent with *nde* ‘if’ added to a verb (often in one of the perfective-system inflections). The differences between the two constructions are summarized in (577). Both kinds of *nde* are cliticized or suffixed to the preceding predicate and may be transcribed accordingly. In addition to the two constructions compared here, there is also a third, namely a version of the pseudo-conditional with no pronominal-subject conjugation (§15.2.8.3 below).

(577) conditional antecedent clause

a. any main-clause predicate is allowed;

b. *nde* ‘if’ gets its tones by spreading from the left;

c. there is a causal and/or sequential relationship (‘if/when’) between the antecedent and consequent clauses;

d. the overall time frame may be past or non-past;

e. the modal and aspectual category of the consequent clause does not have scope over the antecedent clause;

f. there is no restriction on the subject of either clause, and no coindexation requirement.

conjugated pseudo-conditional clause

a. the predicate is an \{L\}-toned verb stem plus pronominal-subject suffix;

b. *nde* is H-toned after a 1Sg or 2Sg form, L-toned after a 1Pl or 2Pl form (with their dying-quail intonation);

c. this clause and the following clause denote closely spaced sequential events;

d. the time frame as defined primarily by the next main clause is imperfective (future, generalized time, or past imperfective/habitual);

e. the aspectual and modal category of the following clause has scope over the pseudo-conditional clause;

f. the subject of the pseudo-conditional clause is a first or second person pronominal category, and this subject is usually coindexed with that of the following clause (and often the preceding clause).

In (578), for example, a pseudo-conditional clause with suffixally marked 2Sg or 2Pl subject is followed by an imperative. (One can also use *gáy* instead of the pseudo-conditional.) It is understood that the first event is included in the scope of the imperative. In effect, the pseudo-conditional functions like a chained VP, so that the inflection of the following main-clause verb has scope over the pseudo-conditional as well. Likewise, in (578e), the first clause is included in the scope of the final negation.

(578)  

a. \([yèː-\textit{w} \quad \textit{ndé}] \quad \textit{bíndò}\)  
\[\text{come-2SgSbj} \quad \text{then} \quad \text{go.back.Imprt}\]

‘Come-2Sg (here) and then go back!’

b. \([\textit{ǹnè-\textit{w}}^{a} \quad \textit{ndé}] \quad \textit{yò}:\)  
\[\text{go-2SgSbj} \quad \text{then} \quad \text{come.Imprt}\]

‘Go-2Sg and then come (back)!’

c. \([\textit{ŋ̀gá} \quad \textit{dʒg3-\textit{w}} \quad \textit{ndé}] \quad \textit{bíndò}\)  
\[\text{here} \quad \text{leave-2SgSbj} \quad \text{then} \quad \text{go.back.Imprt}\]

‘Leave-2Sg (it) here then go back!’
d. \( [tòrò-\text{w}]. \quad ndé] \quad \text{różò ndì} \\
[pound-2PlSbj \quad \text{then}] \quad \text{go.Import-PlAddr} \\
\text{‘Pound-2Pl (in a mortar) and then go!’} \\

e. \ [yè-\text{w}] \quad ndé] \quad \text{bindé-ndá} \\
[come-2SgSbj \quad \text{then}] \quad \text{go.back-Proh} \\
\text{‘Don’t come-2Sg (here) and then go back!’} \\

See also (183) in §7.1.3. If the same constructions occurred in a past-time narrative, the first clause would take same-subject anterior \( \eta \) (§15.2.7) rather than \( \text{góy} \) or pseudo-conditional \( ndé \).

The pseudo-conditional can also be used with first person subjects in imperfective contexts. It is common in texts describing recurrent activities such as farming that involve several sequenced actions. Excerpt (579) contains four occurrences (bolded). In such passages, a paragraph-like group of clauses is structured as one or more pseudo-conditional culminating in a regular imperfective or deontic modal verb. In this passage the speaker pauses after the individual pseudo-conditional clauses, and \( ndé \) is heard with low pitch. The passage also includes one true conditional (\( dò-\emptyset \ ndé \), underlined not bolded).

\[
\begin{align*}
\text{579} & \quad \text{różò dà-yì} \quad jè:-jè:-, & \quad \text{[dàmbì gà]} \quad \text{gàr'í-mi-y-}, \ldots, \\
& \quad \text{go carry-MP} \quad \text{bring\textsuperscript{tL}-bring\textsuperscript{L}} [\text{courtyard Loc}] \quad \text{put.in-Ipfv-1PlSbj}, \\
& \quad [[\text{dàmbì gà}] \quad \text{gàr'í-ý}: \ldots \quad ndé], \\
& \quad [\text{courtyard Loc}] \quad \text{put.in-1PlSbj then}] \\
& \quad \text{[ràyì.\textsuperscript{L} \ \text{Loc}] \quad \text{różò dà-yì-y-}: \ldots \quad ndé}, \\
& \quad [\text{ràyì.\textsuperscript{L}} \ \text{Loc}] \quad \text{put.in-1PlSbj then}] \\
& \quad \text{[carry.on.head-MP-1PlSbj then]} \\
& \quad [[\text{ò:} \ \text{L}] \quad \text{kà}] \quad jè:-r'í-ý):-, \ldots \quad ndé], \\
& \quad [[\text{field\textsuperscript{L}} \ \text{Def.InanSg.Loc}] \quad \text{convey-1PlSbj then}] \\
& \quad \text{tùyì-mi-y-}, \ldots, \\
& \quad \text{put.down.in.pile-Ipfv-1PlSbj}, \\
& \quad \text{yù:} \quad [\text{dàmbò nà}] \quad [kà \ \text{mày}]: \quad \text{tù:-mi-y-}.
\end{align*}
\]

\text{We will carry them and bring them and we will put them in the courtyard (of the house). After we put them in the courtyard, once the beginning of the (next) rainy season has arrived, we will dig up the stems (which have been trampled into the ground) in the courtyard, we will carry them (on our heads) and bring them (back) to the field there (where they were cut), and put them down (as fertilizer). We will plant millet (seeds) at the base (=beside the old stems) like that.’ (2004.01.02)

In all of the 1st/2nd person examples given so far, the verb in the pseudo-conditional clause has exactly the same form as the simple perfective, namely, an \{\text{L}\}-toned form of the bare stem plus the pronominal-subject suffix. However, the true simple perfective occurs in sentences with a more or less focal preverbal constituent, while the pseudo-conditional may occur without any preverbal constituent whatever.

The fact that the inflected pseudo-conditional verb is not really the simple perfective is brought out when we look at third person subjects. The simple perfective uses the E/I-stem
for 3Sg (e.g. gòè-Ø ‘he/she went out’, tùwè-Ø ‘he/she died’), and ends in a back or low vowel for 3Pl (g-ò: ‘they went out’, tùw-à ‘they died’). Such forms do not occur in the pseudo-conditional, which instead has the {L}-toned bare stem for both 3Sg and 3Pl (gò: ndé ‘go out and…’, tùwè ndé ‘die and …’). In other words, while 1st/2nd person subjects are compatible with either the inflected or uninflected versions of the pseudo-conditional, third person subjects require the uninflected version, which is described in the following section.

15.2.8.3 Unconjugated imperfective anterior (pseudo-conditional) with ndè

A variation on the pseudo-conditional as described just above is a version without the suffixal pronominal-subject conjugation on the predicate. Instead, a pronominal subject is expressed by a preverbal subject pronoun, as in nonsubject relative clauses. The pronoun may occur even when the subject is also expressed as a full NP, but there are some examples in the texts without the pronoun. The unconjugated version is required with third person subjects, and occurs as an optional alternative to the conjugated version for first and second persons.

Simple third-person examples are in (580a-b).

(580)  
<table>
<thead>
<tr>
<th>Subject</th>
<th>Tense</th>
<th>Pronoun</th>
<th>Predicate</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 3SgSbj</td>
<td>then</td>
<td>ndé</td>
<td>nìy’è-ŋ̀</td>
<td>He/She will arrive (there) and then sleep.</td>
</tr>
<tr>
<td>b. 3PlSbj</td>
<td>then</td>
<td>ndé</td>
<td>nìy’è-m-è</td>
<td>They will arrive (there) and then sleep.</td>
</tr>
</tbody>
</table>

Here the verb ‘arrive’ is {L}-toned, and ndè is H-toned. This is the same tonal configuration we saw for the conjugated pseudo-conditional, in the absence of dying-quail intonation for 1Pl or 2Pl subject suffixes (which are not relevant to the unconjugated version). The formula is therefore subject pronoun plus VbL ndè.

The temporal and discourse context is the same as for the conjugated pseudo-conditional. For first and second persons, which have a choice between conjugated and unconjugated versions, the unconjugated version seems to be preferred in clauses that are more clearly backgrounded in the discourse.

Backgrounding (defocusing) can be of two types. In one, several events are run together, with no single event standing out much. This is illustrated by a passage with several VbL ndè clauses leading up to a final quoted imperative in (756) in the sample text: pàgìL ndé … jèL ndè … dò:L ndé … kúwí (“tie … bring … roast … devour”).

Another type of backgrounding is echoing the content of a just uttered clause, now serving as background to the next highlighted event. (581a) is a good example, with two unconjugated pseudo-conditional of this repetitive type. (581b) is similar, with a number of unconjugated pseudo-conditionals interspersed among three regular imperfectives.
(581) a. [yù:\small i
\text{L} \quad \text{gú}\small i
\text{L} \quad \text{nàr}\text{L}^α \quad \text{nàr}\text{L}^α-\text{ŋ̀}\small i
\text{L} \quad \text{ndé},
\text{millet}\quad \text{Def.InanSg}\quad \text{fruit}\quad \text{bear-Lpfv.3SgSbj},
\text{nàr}\text{L}^α \quad \text{ńné} \quad \text{nàr}\text{L}^α-\text{ŋ̀}\small i
\text{L} \quad \text{ndé},
\text{fruit}\quad \text{3SgSbj}\quad \text{bear}\small i
\text{L} \quad \text{then.SS},
\text{yù:-dō}: \quad \text{kìyá} \quad \text{iré-ŋ̀}\small i
\text{E} \quad \text{ndé},
\text{early.millet}\quad \text{first}\quad \text{ripen-Lpfv.3SgSbj},
[yù:-dō:\small i
\text{L} \quad \text{gú}\small i
\text{L} \quad \text{ńné} \quad \text{iré-ŋ̀}\small i
\text{E} \quad \text{ndé},
[yù:-dō:\small i
\text{L} \quad \text{Def.InanSg}\quad 3\text{SgSbj}\quad \text{ripen}\small i
\text{L} \quad \text{then.SS},
[yù:-dō:\small i
\text{L} \quad \text{gú}\small i
\text{L} \quad \text{tëngé} \quad \text{jè-ỳ}: \quad \text{ndé},
[yù:-dō:\small i
\text{L} \quad \text{Def.InanSg}\quad \text{hand.harvest}\quad \text{RecPrf-1PlSbj}\quad \text{if},
‘The millet will bear fruit. When it bears fruit, The early millet ripens first. When the early millet has ripened, we hand-harvest that early millet, …’ (2004.01.03)

b. [jìnjì\text{gá} \quad \text{gàn}\small i
\text{L} \quad \text{ndé},
\text{waterjar}\quad \text{Loc}\quad \text{put.in}\small i
\text{L} \quad \text{then},
[pù:\text{aL} \quad \text{gú}\small i
\text{L} \quad \text{dâńf-m-è} \quad \text{ndé},
[fônì\text{io} \quad \text{Def.InanSg}\quad \text{cook-Lpfv-3PlSbj}\quad \text{if},
[yàː \quad \text{kú-ŋ̀}\small i
\text{L} \quad \text{gò-ndò}\small i
\text{E} \quad \text{ndé},
\text{woman}\quad \text{InanSg}\quad \text{-Acc}\quad \text{go.out-Caus}\quad \text{then},
[tùndì\quad \text{gò}\small i
\text{L} \quad \text{pêśe-m-è},
[\text{mortar}\quad \text{Loc}\quad \text{pound-Lpfv-3PlSbj},
[bùː \quad \text{pêśe}\small i
\text{L} \quad \text{ndé},
3\text{PlSbj}\quad \text{pound}\small i
\text{L} \quad \text{then},
[kò-kòm \quad \text{nà}\small i
\text{L} \quad \text{gù}\small i
\text{L} \quad \text{lèrè-gèrèw→ gò-}\small i
\text{L} \quad \text{ndé}]
[\text{chaff}\quad 3\text{SgPoss}\quad \text{Def.InanSg}\quad \text{all}\quad \text{go.out}\quad \text{then}]
[\text{érì-yì-tì-yà}\quad \text{ndè}\quad [\text{pirì}\small i
\text{L} \quad \text{gú}\small i
\text{L} \quad \text{winnow-Pfv\quad 3PlSbj}\quad \text{if}]
[\text{white}\quad \text{Def.InanSg}\quad \text{ńné}\quad \text{wàsà}\small i
\text{L} \quad \text{ndé},
3\text{SgSbj}\quad \text{be.left}\small i
\text{L} \quad \text{then},
\text{jàː} \quad [\text{kú}\quad \text{mày}^\text{a}] \quad \text{dâńf-m-è}
\text{meal}\quad [\text{DiscDef}\quad \text{like}\quad \text{cook-Lpfv-3PlSbj},
‘After putting it in jars, if they are going to cook the fonio, the women take it out, they pound it in a mortar. When they pound it, all of its chaff comes off. When they have winnowed it (in the wind), the white part (=inner grains) remains. At that point they cook a meal.’ (2004.01.04)

The tonal pattern \text{Vb}\small i
\text{L} \quad \text{ndè} is not consistent. Other tonal patterns that occur in texts in clauses that otherwise have characteristics of unconjugated pseudo-conditions are (questionably) \text{Vb}\small i
\text{E} \quad \text{ndè} and (definitely) \text{Vb}\small i
\text{H} \quad \text{ndè}.

\text{Vb}\small i
\text{E} \quad \text{ndè} tonally splits the difference between the standard pseudo-conditional \text{Vb}\small i
\text{L} \quad \text{ndè} and true conditional antecedents. It may also be grammatically transitional between them. The presence of a (nonfocal) preverbal subject pronoun points to the pseudo-conditional rather than the true conditional. However, in (582a-b) the usual interclausal subject coindexation in pseudo-conditions is absent. A clause of this type arguably functions as a kind of conditional antecedent in a strongly imperfective (e.g. habitual) environment. However, to be honest, transcription of tones in textual occurrences, which requires factoring out intonational effects, is not always reliable, and I am not certain that \text{Vb}\small i
\text{L} \quad \text{ndè} is really distinct from \text{Vb}\small i
\text{H} \quad \text{ndè}.
(582) a. [ě́ř典雅́-tú-yà ${\text{ndè}}$] [winnow.in.wind-Pfv1b-3PlSbj if]
   [pìr|$^L$| ő́z| ő́z| wás| ő́z| ndè, [white| Def.InanSg] 3sgSbj remain| if/then,
   jà: [kà| mà-y"|] dàmì-mè
meal [NonhSg like] cook-Lpfv-3PlSbj
‘When they have winnowed it in the wind, the white part (=inner grains) remains.
At that point they cook a meal.’ (2004.01.04)

b. tò:-bòró tà:ndì-tà:ndì-tà:ndì tò:-mì-y:.,
seed-hole three-three-three sow-Lpfv-1PlSbj,
[î:| gù| wò|$^L$| ndè]
[3sgSbj 337 rain.-fall| then]
[te|-ŋ] [[seeds|$^L$| Def.InanSg] sprout-Lpfv-3sgSbj ]
‘We plant (seeds) in three spots for seeds (per area). After it rains, those seeds
will sprout.’ (2004.01.03)

The remaining tonal type, $V_b^H$ ndè, puts more emphasis on the temporal prolongation of the
denoted activity. Shifting the H-tones to the left in this construction may be compared to the
{HL}→{L} or monosyllabic {H}→{L} overlays on verb iterations denoting prolongation
(§11.6.2). In (583a), the verb glossed ‘cultivate’ refers to the first round of weeding around
and thinning out the planted crops, an arduous process that may take two weeks or longer. It
occurs first in a regular imperfective clause, and I suspect that the repetition of the clause as a
pseudo-conditional suggests prolongation. This tonal pattern also occurs when the pseudo-
conditional clause is itself iterated to express prolongation, as with ‘beat/thresh’ in (583b). These
passages additionally include a true conditional (underlined) with ‘finish’ in (583a), an
inflected pseudo-conditional with ‘take’ in (583b), and a regular uninflected pseudo-
conditional of the type $V_b^L$ ndè with ‘remain’ in (583b). (583c) illustrates H-toned $bù^H$ from $bù$- ‘be’.

(583) a. wà-wàrá-mì-y:., [í:| wàrá|$^H$| ndè]
Rdp-cultivate-Lpfv-1PlSbj, [1PlSbj cultivate$^H$ then],
wò| dìm-èrè-∅ ndè, sàmbá,
farming finish-Pfv1a-3sgSbj if, second.round,
ìâte [nà|$^L$| wònjiw:] sàmbi-mì-y:.
again [time|$^L$| second] do.second.round-Lpfv-1PlSbj
‘We cultivate (=do the first round of weeding). When we have cultivated (for a
long time) and the (first round of) cultivating is finished, again a second time we
do the second (and final) round of cultivating.’ (2004.01.02)

b. bèré əyi-y:.
stick take-1Psbj then,
[í:| súy|$^H$| ndè] [í:| súy|$^H$| ndè]
[1PlSbj beat| then] [1PlSbj beat$^H$ then]
[[pɔy:$^H$-ŋà|$^L$| ő́z] wás| ő́z| ndè]
[[fonio-seed|$^L$| Def.InanSg] remain$^L$ then]
‘We take a stick and we keep beating and beating (=threshing the fonio). The
fonio grains will remain (there) (and . . .)’ (2004.01.04)
c. ... sámbì-tì-ỳ: ndè,
... do.second.round-Pfv1b-1PlSbj if,
[ná gày], ì: bù ndè,
[now Topic], 1PlSbj be then,
[yù: 1] ì gù nàr nàr'á-ì́
[millet Def.InanSg] fruit bear-lpfv.3SgSbj
‘When we have done the second round of cultivating, now, we (just) stay (=wait),
the millet will bear fruit.’ (2004.01.03)

15.2.8.4 -sè gù-nde ‘and then’ (past)

This rather frozen combination is common in narrative texts. It appears to contain perfective participial -sè, plus a mysterious element gù- and an L- or H-toned variant of nde ‘if’ (conditional) or ‘and then’ (pseudo-conditional, see the preceding section). The verb stem is tone-dropped. The verb stem is tone-dropped. This suggests (faintly) that gù-nde might be synchronically parsable as definite plus ‘if; and then’. However, the construction is rather opaque morphologically (see below on etymology). I will gloss it as ‘and.then Past’ in interlinear.

As in relative clauses and in unconjugated pseudo-conditionals, pronominal subjects are expressed by preverbal pronouns, for example 1Sg ī“ or 2Pl ù; rather than by suffixes. If the subject is third person, the pronoun is always 3Reflexive (identical to logophoric) in form: á (Sg) or ì (Pl). This supports the view that -sè gù-nde is a relative clause syntactically, and further suggests that the subject is coindexed to that of another clause, see §18.2.2. Indeed, -sè gù-nde usually does occur in sequences of clauses (e.g. describing a complex activity) with the same subject. However, there is no hard requirement that the subject of -sè gù-nde be coindexed with the subject of the following clause. Instead, the coindexation is more systematic with the preceding clause, as will be shown just below. One frequent use of -sè gù-nde clauses in narrative is to echo, now in backgrounded form, the content of a previously uttered clause, as the narrator catches his or her breath before moving on to the next highlighted event (which may or may not have a different subject NP). However, -sè gù-nde may also be used in unpeated clauses within narrative sequences.

There are two instances of -sè gù-nde in textual excerpt (584) below. The protagonist who is indexed by the reflexive subject á in the -sè gù-nde clauses is referred to twice by the nonanaphoric 3Sg pronoun îné elsewhere in the passage; this shows that the excerpt as a whole is not logophoric. The second -sè gù-nde clause in the passage is an otherwise verbatim echo of the preceding perfective main clause; even the referent-introducing ‘a man’ is repeated as such, rather than being converted to discourse-definite ‘the man’. The female subject of this second -sè gù-nde clause is coindexed to the subject of the preceding clauses, not to the (male) subject of the following clause.
makes no verb rather than to a relative clause or other NP. So the literal gloss 
nde gù (definite perfective relative clauses in texts with (definite morpheme to follow 
infrequently, at the end of relative clauses, as NPs that include a possessor, see (155a) and (156a

In elicitation, kiyè-sè w-ndé and variant kiyè-sè gù-ndé are common forms of the ‘say’ verb kiyè- (§11.3.1). These forms occur in clauses that precede the actual quotation, see §17.1.2.

The key to the historical origin of the synchronically opaque -sè gù-ndé construction is the original morphemic identity of gù-. The only similar morpheme in Nanga is definite inanimate singular gù. This morpheme does indeed have an L-toned variant gù, at the end of NPs that include a possessor, see (155a) and (156a-c) in §6.5.1 above. gù also occurs, infrequently, at the end of relative clauses, as in (489) and (530c). It makes sense for a definite morpheme to follow perfected participial -sè, and there are many quite transparent definite perfected relative clauses in texts with (‘the day when I ran’, etc.). However, the -sè gù-ndé construction has no obvious semantic connection with definite participial -sè gù, and ndé (either conditional or pseudo-conditional) is normally added to a verb stem or an inflected verb rather than to a relative clause or other NP. So the literal glossing “-Ppl.Pfv Def-if/then” makes no compositional sense.
One historical possibility worth considering is that **gù-nde** originally meant 'say (and then)'. Throughout Dogon, forms of 'say' verbs routinely develop specialized functions as clausal subordinators (sequential, purposive). In Nanga, **gù**- is admittedly a poor phonological match for **kiyé**- 'say'. However, the connection looks better when we bring in the two languages most closely related genetically to Nanga. Ben Tey **gùy**- 'say' and Bankan Tey **gùn** 'said' are likely cognates to the mysterious **gù**- in Nanga **gù-nde**. Furthermore, Ben Tey has complex subordinators -**w kù dè** and -**w dè** that strikingly resemble Nanga **gù-nde**. The most likely historical scenario is that Nanga **gù-nde** and Ben Tey **kù dè** both derive from pseudo-conditional forms of 'say' (perhaps *gùn dê*), but that the combination became morphologically opaque already in their common ancestor and was subject to contamination with phonologically similar definite markers (Nanga **gù** ~ **gù**, Ben Tey **kù**, cf. Jamsay **kù**^v^).

15.2.8.5 -**w** clause with H-toned proclitics

Here -**w** is not the 2Sg subject suffix, as is shown by the presence of a preverbal proclitic subject pronoun of any category. The construction is therefore syntactically a type of nonsubject relative clause, though it translates as an ordinary backgrounded clause. I take -**w** to be a specialized participial ending (cf. Ben Tey inanimate perfective participial -**w**).

Unusually, the proclitic pronouns are **H-toned** in this construction: 1Sg **f**^:n^ (not **f**^n^), 1Pl **f** (not **f**^), 2Pl **ũ** (not **ũ**), 3ReflPl **d** (not **d**), as well as 2Sg **ũ** and 3ReflSg **a** which are already H-toned. The other case I know of where H-toned pronouns are required is in subject position in subject-object reciprocals (§18.3.1).

(586) occurs at the beginning of a typical Malian cruel-stepmother tale. A man has two wives, one of whom dies, leaving her orphaned child to be raised (and tormented) by the surviving co-wife.

(586) [ãrr**ã** ò. tûmâ] [yâ: wôy] à jê:-**w**
[man one] [woman two] 3ReflSgSbj marry-Ppl

'(Once) one man had married two women.' (2004.02.03)

In (586), the third person subject ('one man') is resumed as a 3Reflexive preverbal subject pronoun, as though coindexed to the subject of an adjacent main clause. There happens to be no adjacent clause with the same male referent as subject, but in my other textual examples the -**w** clause is part of a string of clauses with the same subject. All -**w** clauses with third-person subjects in my data have 3Reflexive pronouns exactly as in (586). Another example of this is (587a). First and second person subjects are also attested, as in (587b), where 1Pl **f** from **f** illustrates the H-toned pronoun.

(587) a. à:ndê mandê à gó:-**w**,
Anda Mande 3ReflSgSbj go.out-Ppl,
[yê: jê--] [yê: jê--] [yê: jê--]
[come while.SS] (repetitions)
[ni: á dímbi:-**w**],
[water 3ReflSgSbj follow-Ppl],
[njgá yê: ̣] goê-Ø
[here come and.SS] go.out.Pfv-3SgSbj

‘Anda (village), it (=its founding group) came from Mande. It kept coming, it followed the water (=river). It came out here.’ (2004.01.05)
b. [ó:ndí = yè] [nì: dimbí-ýí ŋ́] yē: ŋ́
[Old.Anda = Loc] [water follow-MP and.SS] come and.SS
[í: pásó-ýí],
[1P Sbj gush.out-Ppl]
ó:ndí = yè ęw-yé ć: dē:-sè
Old.Anda = Loc sit-MP 1P Sbj be.tired-Ppl.Pfv 1Def.InanSg ...
‘We followed (=were carried along by) the water and came and gushed out (like a spring) at Old Anda. We stayed (“sat”) at Old Anda until we were tired (=for a long time), (then …)’ (2004.01.06)

Also noteworthy is the fact that mediopassive -ýí- is omitted after a bisyllabic stem, therefore dimbí-w in (587a) above from dimbí-ýí- ‘follow’, which itself occurs in (587b). Compare stative di-dimbà ‘be following, tagging along’, also without the mediopassive suffix.

(588) stem with -w gloss

a. monosyllabic
lexical /H/ melody
ná:- ná:-w^n ‘spend night’
lexical /LH/ melody
jé:- jé:-w ‘(man) marry (woman)’

b. bisyllabic
lexical /H/ melody
túwé- túwé-w ‘die’
ńdí- ńdí-w ‘give’
kár^ní- kár^ní-w^n ‘do’
lexical /LH/ melody
dbgš- bgš-w ‘leave, abandon’
bíndé- bíndé-w ‘go back’
dùnjí- dùnjí-w ‘put down’
bá:rí- bá:rí-w ‘help’

c. trisyllabic
lexical /H/ melody
pigiré- pigiré-w ‘screw in’
kémír^ní- kémír^ní-w^n ‘have fun’
lexical /LH/ melody
mönjuró- mönjuró-w ‘dream’
gőnjír^ní- gőnjír^ní-w^n ‘go around’

Two possible etymological sources suggest themselves for -w. One is an inanimate agreement suffix, cf. the inanimate ‘it is’ clitic =w (§11.2.1.1). In Neighboring Ben Tey, suffix -w occurs on inanimate modifying adjectives, and (more relevantly here) as an inanimate perfective participial suffix. Some combination of adverbial perfective and perhaps stative participles, with covert inanimate head (‘situation’ or the like), could work as immediate prototypes for the Nanga construction. A less likely etymological possibility is the ‘say’ verb that I suspect survives as gù- in -sè gù-nédè (§15.2.8.3). Aside from phonological difficulties,
it would be difficult to explain how a bare ‘say’ verb came to be suffixed to another verb stem.

15.3 Other temporal adverbial clauses

15.3.1 ‘Since …’ clauses (-sè l díaⁿ)

The usual ‘since’ clause is a nonsubject perfective positive relative clause. The main verb has perfective participial suffix -sè. The verb-participle is optionally followed by l díaⁿ (cf. noun díaⁿ ‘limit, boundary, bounds’). The ‘since’ clause is positive in form. A negative ‘since’ clause can be constructed in back-door fashion, by combining an unconjugated perfective negative main verb with a positive ‘do’ participle (589c).

(589) a. [[bù: yè:sè] díaⁿ] [nì: diyò-ndú] [3PlSbj come-Ppl.Pfv l limit] [water bathe-PfvNeg.3PlSbj]
   ‘Since they came, they have not bathed.’

b. [[mùrⁿá jn-e-sè] l díaⁿ] go:-rí-Ø [sickness 3Sg.Acc catch-Ppl.Pfv l limit] go.out-PfvNeg-3SgSbj
   ‘Since she got sick (“sickness caught her”), she has not gone out.’

   ‘Since (the day when) they did not pass (= they failed exams), they haven’t gone out.’

For parallelistic ‘since/from the time that …, until …’, both clauses ending in l díaⁿ, see §15.5.4 below.

   ‘Since X’ with a temporal NP as X is expressed as X bã: or (less often) X (l)l díaⁿ. Thus yènjì: bã: ‘since yesterday’, less often yènjì: l díaⁿ. bã: may be intonationally prolonged as bà→.

15.4 Noun-headed temporal clause (‘the time when …’)

wágáñi ~ wágáñi ‘time, moment in time’ (a regional word ultimately from Arabic) can be used as the (L-toned) head of a relative clause that functions as a temporal adverbial clause. The relative clause as a whole takes the locative postposition, which fuses with a definite morpheme if there is one (e.g. /gú gá/ > gá, see §8.2.3.2). The tone-dropping on the participle is controlled by the definite morpheme.

(590) [wágáñi l añé yègè-sè l] gá [time l 3SgSbj fall-Ppl.Pfv l] Def.InanSg.Loc
   ‘at the time when he/she fell’ (= ‘when he/she fell’)
Of course any temporal noun such as ‘day’, ‘morning’, ‘month’, or ‘year’ can also be the head of a temporal adverbial relative clause.

15.4.1 Reverse anteriority clause with final múgò ‘before …’

‘Before’ clauses are expressed by clause-final múgò, with tone-dropping on the preceding bare verb stem. Although I struggle to segment or parse it, my assistant’s intuition is that múgò is the combination of imperfective participial -mí on the verb followed by locative gò. This makes sense semantically (‘at the time when X was about to VP’ = ‘before X VP’ed’), but all of the tones are wrong (tone-dropped verb, H-tone on -mí ~ -má, L-tone on locative postposition). The morphology is non-transparent, and I transcribe múgò as an unsegmentable word.

The subject may be expressed by a preverbal independent pronoun, like bû: ‘they’ in (591a). The subject is usually omitted when the subject of the ‘before’ clause and that of a juxtaposed main clause are coindexed (591b).

(591) a. [bindé bû: yè: 1 1 múgò] dåwí-yí-èrè
   [go.back 3PlSbj come 1 1 before] hide-MP-Pfv1a-1SgSbj
   ‘Before they came back, I hid (myself).’

    b. [ná: kó: 1 múgò] bìrè-mi-y.: 
       [meal eat 1 1 before] work-Ipfv-1PlSbj
       ‘We will work before eating.’

    c. [fì: yè: 1 1 múgò] ònè-èrè-ò] tèmbí-y 
       [1SgSbj come 1 1 before] go-Pfv1a-3SgSbj find-Pfv-1SgSbj
       ‘I found that he had left before I came.’

15.4.2 ‘No sooner …, than …’ (bú → pú → fú →)

In (592), the particle bú (variant pú → or fú →) with H-tone is added to a headless definite adverbial relative clause ending in definite inanimate singular gú. pú → varying with fú → (less often bú →) is elsewhere one of the ‘all’ quantifiers (§6.6.1). The pronominal subject of the ‘as soon as’ clause is expressed as an independent pronoun. The subjects of the two clauses may be coindexed (592a-b) or disjoint (592c).

In this construction, definite gú itself is pronounced with relatively low pitch. This could be interpreted as the L-toned variant of gú that is occasionally attested in some types of relative. But it may simply be an anticipatory intonational downstep on an element immediately preceding the emphatically pronounced bú →.

(592) a. [fì: yè:-sè 1 gú bú→] 
   [1Pl come-Ppl.Pfv 1 Def.InanSg all]
   bi-biyè-y.: 
   RdP-Is.down.Pfv-1PlSbj
   ‘As soon as we came (= arrived), we went to bed.’
b. [nà: ⃞ nà kə:-sə˨˧ gù ṣù →] ŋnè-yⁿ
[meal 1Sg eat-PPl.PfvɅ Def.InanSg all] go.Pfv-1SgSbj
‘As soon as I had eaten the meal, I went away.’

c. [ǐ: yè:-sə˨˧ gù ṣù →]
[1Pl come-PPl.PfvɅ Def.InanSg Pfv-3SgSbj]
‘As soon as we came, the rain fell.’

In (593), ṣù → (pù →) occurs at the end of a temporal clause with bare verb stem and different-subject subordinator nà. The pronominal subject of the ‘as soon as’ clause is expressed by an independent pronoun. This construction is only used when the subjects are disjoint and the time reference is past.

(593) [bùrâ: ⃞ nà tawá nà pù → kòyè-Ø]
[B 1SgSbj touch and.DS all] weep.Pfv-3SgSbj
‘As soon as I touched Boura (man’s name), he wept (=began weeping).’

In (594a-b), ṣù → with L-tone follows a regular inflected verb (perfective aspect). The subjects of the two clauses may be coindexed (594a,c) or disjoint (594b). This construction is used when the time frame is in the future or is gnomical/habitual (denoting a recurrent event).

(594) a. [séwá:re də-ərè-yˑ : ṣù →] biyé-mi-yˑ :
[S arrive-Pfv1a-1PlSbj all] lie.down-Pfvv-1PlSbj
‘As soon as we arrive in Sevare, we will go to bed.’

b. [bùrâ: tawá-tù-w ṣù →] kòyó-ŋ
[B touch-Pfv1b-2SgSbj all] weep-lpv.3SgSbj
‘As soon as you touch Boura, he will weep.’ (warning)

c. [fántà éw-yè-ərè-Ø ṣù →] níyɜ́-ŋ
[F sit-2Pfv1a-3SgSbj all] sleep-lpv.3SgSbj
‘As soon as Fanta sits down, she falls asleep.’ (general statement)

Other ‘all’ quantifiers (kérèw, bé:ndè) are more common in postnominal position than in clausal constructions. Variants of pù → or fù → occur in other languages of the zone in both ‘as soon as’ and ‘all’ functions (Jamsay, Fulfulde, etc.).

A less common ‘as soon as’ construction is with final tán (§16.2.2).

15.5 Spatial and manner adverbials

15.5.1 Spatial adverbial clause (‘where …’)

The noun ɔ: ‘place’ occurs in L-toned form as the relative head. In adverbial function, the relative is followed by a locative postposition. In (595b) the relative construction is subject of the higher clause.
15.5.2 Manner adverbial clause (‘how …’)

A relative clause with dáy⁶ ‘manner’ may function as an NP (596a). With may⁶ ‘like’ this can become a manner adverbial clause (596b).

(596) a. [[dáy⁶ ńnɛ́ yɛ̀gɛ̀-sɛ̀] ɛ̀sù = ndó-Ø] [manner³ 3SgSbj work-Ppl.Ipfv] be.good=it.is.not-3SgSbj
   ‘The way he/she works isn’t good.’

   b. [[dáy⁶ ńnɛ́ bɪ̀rɛ-ɔ] máy⁶] bɪ̀rɛ-ɔ-Ø [manner² 3SgSbj work-Ppl.Ipfv] like work-Lpfv-1SgSbj
   ‘I work the (same) way he/she works.’

15.5.3 Headless adverbial clause as spatiotemporal or manner clause

The ‘time’, ‘place’, or ‘manner’ head noun may be omitted. The result is a headless relative clause whose exact interpretation requires contextual decipherment. In some cases there may be no determinable specific head noun, and something like ‘situation’ may be useful in translation. In cases like (597a), my assistant preferred a temporal reading even though ‘be far’ might have hinted at a spatial reading. In (597b), the ‘like’ postposition forces a manner adverbial reading.

(597) a. [[ńnɛ́ yɛ̀gɛ̀-sɛ̀] gú] wàgá [3Sg fall-Ppl.Pfv] Def.InanSg be.far
   ‘(The time) when he/she fell is far away (= was long ago).’

   b. [[ńnɛ́ bɪ̀rɛ-ɔ] máy⁶] bɪ̀rɛ-ɔ-Ø [3SgSbj work-Ppl.Ipfv] like work-Lpfv-1SgSbj
   ‘I work like (the way) he/she works.’

15.5.4 ‘From/since X, all the way to/until Y’

Parallel adverbial relatives ending with dáy⁶ (possessed, L-toned form of dáy⁶ ‘limit, outer bound’) can be used to specify initial and terminal points of an extended duration. We have already seen ‘since …’ clauses of this type, with perfective participles (§15.3.1). hálé ‘all the
way to’ is optional at the beginning of the second clause. The regular 3Pl pronoun in the ‘since …’ clause binds a coindexed third-person reflexive subject in the second (§18.2.2-3).

(598) \[
\begin{align*}
&[[bû: \ bû-ŋ̀ nàr“á-sê]\ L ñè \ hálè]\ L ñè \ tûwâ-nî]\ L ñè \ mòsî-yê] \\
&[[3PlSbj \ 3Pl-Acc \ bear.child-Ppl.Pfv] \ L limit] \\
&[[hálè] \ 3ReflPl \ die-Ppl.Ipfv] \ L limit] \\
&be.bad-3PlSbj \\
\end{align*}
\]

‘From when they (= their mothers) bear them, until when they die, they are wicked.’

15.5.5 ‘As though …’ clause

A clause may be followed by *may* ‘like’ (§8.4.1) in an ‘as though’ manner adverbial. Since there is no subjunctive in Nanga, there is no distinction between ‘as/like …’ clauses and ‘as though …’ clauses (with the pragmatic implications of the latter). If the manner adverbial has a pronominal subject, it appears as an independent pronoun, and there is no pronominal-subject suffix on the verb (599a), except for 3Pl subject (599b). The independent pronoun need not be immediately preverbal, so this is not exactly a nonsubject relative clause.

(599) a. \[
\begin{align*}
&[[ú \ ña: \ kà-ři]\ máy] \ kóyò-sò-ù] \\
&[[2SgSbj \ meal \ eat-PfvNeg] \ like] \ weep-Progr-2SgSbj \\
\end{align*}
\]

‘You-Sg are crying as though you hadn’t eaten.’

b. \[
\begin{align*}
&[[ña: \ kà-ndú]\ máy] \ kóyò-sè] \\
&[[meal \ eat-PfvNeg.3PlSbj] \ like] \ weep-Progr-3PlSbj \\
\end{align*}
\]

‘They are crying as though they hadn’t eaten.’
16 Conditional constructions

16.1 Hypothetical conditional antecedent with *nde* ‘if’

In a hypothetical conditional, the antecedent clause ends in atonal *nde* ‘if’, following the verb or other predicate. *nde* is arguably an enclitic or suffix. When it follows any negative predicate ending in an H-toned vowel (forms of perfective negative -rő-, stative negative clitic = ǹdó-, ǹgó- ‘not be (present)’, or clitic = ǹdó: ‘it is not’), the H-tone spreads to *nde*, as in *yè:*-rú-w *nde* ‘if you don’t come’ and *yà-ŋ* = ǹdó:-O *nde* ‘if he/she is not a woman’. However, when *nde* is added to a positive predicate, *nde* has L-tone even when the predicate ends in an H-tone. The relevant cases are forms of perfective -2-só- as in kìyè-só-w *nde* ‘if you-Sg say’ (perfective-2), and some combinations with ‘it is’ enclitic, like *yà-ŋ* = ǹd ő: ‘if he/she is a woman’.

The 3Sg subject simple perfective, which elsewhere takes the form of an E/I-stem (final e, e, or i), reverts to lexical vocalism before *nde* (§10.2.1.1). An example is kòyè-Ø *nde* ‘if it is infested’ in (555) in §15.1.10, compare kòyè-Ø ‘it became infested’.

True conditional *nde* ‘if’ added to a fully inflected predicate is distinct from imperfective anterior *ndé ~ ndé* added to an uninflected verb stem, specifying sequential rather than causal relationships (§15.2.8.2). However, “true” conditional clauses can be interspersed with imperfective anterior clauses in texts.

*nde* ‘if’ should not be confused with phonologically similar but unrelated morphemes, including verbal noun suffix -ndé (§4.2.2.1) and the irregular causative suffix in st:-ndé- ‘take/bring down’ (§9.2.2).

16.1.1 Regular antecedent clause with fully inflected predicate

In simple hypothetical conditionals, the usual consequent clause is an imperative as in (600a), a hortative, or an imperfective clause as in (600b-c). The scope of the imperative or hortative is the consequent clause.

(600) a. [éwé  gá]  á:madù  yì:  jè-ŵ   *nde*,
[market Loc]  Amadou  see  RecPrf-2SgSbj  if,
yògà
flee. Imprt
‘If you-Sg see Amadou in the market, flee!’

b. [éwé  gá]  á:madù  yì:  jè-y    *nde*,
[market Loc]  Amadou  see  RecPrf-1SgSbj  if
yò-yògà-îm-Ø
Rdp-run-Impfv-1SgSbj
‘If I see Amadou in the market, I will flee.’
c. hâwâ pâ: kɔː-ŋɔ̀-ø ndè, tûw-ŋ

H eat-Neg-3SgSbj if, die-3SgSbj

‘If Hawa doesn’t won’t eat, she will die.’

The verb of the antecedent clause is most often in one or another AN category from the perfective-system arsenal, including the simple perfective (601a), perfective-1a -êrê-, perfective-1b -tì- (601b), recent perfect jè- (601e), and (for verbs like ‘see’ and ‘say’ that prefer this form) perfective-2 -só-. The verb may also be stative, for example with quasi-verb ‘be’ or ‘have’ (601c-d). (600c) above has an imperfective negative antecedent; in this example there is no clean temporal break between antecedent and consequent eventualities.

(601) a. á:mádù yi:-w ndè
Amadou see-Pfv-2SgSbj if

‘if you-Sg see Amadou’

b. yi: súy-tì-w ndè
child hit-Pfv1b-2SgSbj if

‘if you-Sg strike the child’

c. nàɲá yá sò-w ndè
cow Exist have-2SgSbj if

‘if you-Sg have a cow’

d. yá b-è ndè
Exist be-3PlSbj if

‘if they are (there)’

e. ñíj-ŋ yi: jè-í w ndè
1Sg-Acc see RecPrf-2SgSbj if

‘if you-Sg have just seen me’

f. [kɔː] kámâ sò-ndó-í w ndè
[thing] any have-Neg-2SgSbj if

‘if you-Sg have nothing’

g. dɔgɔ = ñdɔ-ø ndè
Dogon=it.is.not-3SgSbj if

‘if he/she is not a Dogon (person)’

As usual, pronominal-subject suffixes consisting of a semivowel (1Sg -y, 1Pl -y·:, 2Sg -w, 2Pl -w·:) monophthongize with a preceding homorganic vowel (i, u). In addition, before ndè ‘if’, 1Sg -y is sometimes monophthongized with a preceding {e e}, resulting in a long vowel with no clearly articulated upglide. The fact that ynd would be a rare triple cluster (§3.3.8.5) is undoubtedly behind this. In (602), 1Sg ñnê-êrê-ñ ndè varies with monophthongized ñnê-êrê-ø ndè. The latter is still audibly distinct both from 3Sg ñnê-êrê-ø ndè ‘if he/she goes’ and from 1Pl ñnê-êrê-y·: ndè ‘if we go’.
‘If I go to Anda (village), I will go down (= lodge) at the chief’s home.’

16.1.2  ndé yáŋá ‘even if/when’ (pseudo-conditional)

An extended form ndé yáŋá, with (atonal) yaja ‘also, even’ (§19.1.3), means ‘even if/when’. My textual example of this is really a pseudo-conditional (§15.2.8.3), with tone-dropped verb ‘go down’ and with preverbal proclitic subject pronoun.

‘Even when the rainy season comes down (=begins), in that way he (still) has (millet), …’ (2004.01.03)

See §16.2.1 below for ‘even if’ clauses that include postposition dèrì.

16.1.3  ‘Unless’ antecedent

This is simply a regular hypothetical conditional in which the antecedent clause is negative.

a. [bòndí  ësì→  wɔ̀-rì-Ø  ndé],
   [rain(n)  very.much  rain.fall-PfvNeg-3SgSbj  if],
   tɔː:  tɔː:  bérɛ-ŋɔ-y”.;
   sowing(n)  sow  can-IpfvNeg-1PlSbj
   ‘Unless the rain falls (“if the rain didn’t fall”) heavily, we cannot sow (millet).’

b. [ámbéri  ñg-é  ndé] [pèrgé  sémé  bérɛ-ŋɔ-y”.:]
   [chief  not.be-3PlSbj  if] [sheep slaughter can-IpfvNeg-1PlSbj]
   ‘Unless the chiefs are here (“if the chiefs are not present”), we cannot slaughter a sheep.’

c. [wàrə-rù-w  ndé]
   [do.farming-PfvNeg-2SgSbj  if]
   [ù  ámày’u  nàː  kɔ̀-m-“]
   [2Sg  how  meal  eat-Ipfv-2SgSbj]
   ‘Unless you-2Sg do (“if you-2Sg don’t do”) the farming, how will you eat?’
16.2 Alternative ‘if’ particles

16.2.1 ‘Even if …’ (dër’î, dër’î yánà)

Elicited ‘even if …’ examples have (what looks like) purposive postposition dër’î at the end of the ‘if’ clause, replacing the usual ‘if’ morpheme. In ‘even if’ clauses, dër’î is optionally extended by adding yánà ‘also’. The verb of the ‘even if’ clause has regular pronominal-subject conjugation (605a-c).

(605) a. [yę:-só-Ø dër’î] [ŋá: pà: kɔ̃-ŋɔ:-Ø]
   [come-Pfv2-3SgSbj even] [here meal eat-IpfvNeg-3SgSbj]
   ‘Even if he/she comes, he/she won’t eat here.’

   b. [yę:-sè dër’î] [ŋá: nà: kɔ̃-ŋɛ:-]
   [come-Pfv2-3PlSbj even] [here meal eat-IpfvNeg-3PlSbj]
   ‘Even if they come, they won’t eat here.’

   c. [yę:-sò-ú dër’î] [ŋá: nà: kɔ̃-ŋɔ-w]
   [come-Pfv2-2SgSbj even] [here meal eat-IpfvNeg-2SgSbj]
   ‘Even if you-Sg come, you won’t eat here.’

   d. [bòndí wɔ̃:-só-Ø dër’î (yánà)] ñí-même-y.: [go-Ipfv-1PlSbj]
   [rain rain.fal-Pfv2-3SgSbj even (also)]
   ‘Even if it rains, we’ll go.’

For a distinct pseudo-conditiona ‘even if’ construction, see §16.1.2 above.

16.2.2 ‘As soon as …’ (tán)

tán (variant tág) is a Fulfulde particle meaning ‘only’]. It is used in some nearby Dogon and Songhay languages, mainly as an alternative clause-final ‘if’ particle. It does not appear to be very common in Nanga, but examples were elicited, with the meaning ‘as soon as’. In this function it combines with preceding same-subject subordinator ñ or different-subject subordinator nà, depending on whether the two clauses have coindexed or disjoint subjects.

(606) [ú yę: nà tán] [2SgSbj come and.DS as soon as]
   [bòndí wɔ̃-nå tàrè-Ø] [rain(n) rain.fall-VblN begin.Pfv-3SgSbj]
   ‘As soon as you-Sg came, the rain began to fall.’

The more common ‘as soon as’ construction has clause-final bù ‘all’ (§15.4.2).

16.3 Willy-nilly and disjunctive antecedents (‘whether X or Y …’)

In this construction, two mutually incompatible conditions (both irrelevant to the consequent) are spelled out, sometimes with a final kẽw ‘each/all’ as right-edge marker. (607a) is a simple
example where the second condition is the negation of the first. In (607b), the two conditions are understood to be thought quotations from the reported agent’s perspective, and each of the conditions is framed by “he looks (= considers)”.

(607) a.  

\[
\begin{align*}
\text{[bòndí wɔː-ŋ] wɔː-ŋɔ-Ø kɛw]} \\
\text{[rain(n)] rain.fall-lpfv.3SgSbj rain.fall-lpfvNeg.3SgSbj all]}
\end{align*}
\]

go-lpfv-1PlSbj

‘Whether it rains or not, we are going.’

b.  

\[
\begin{align*}
\text{[[nú: HL gʒ]} \quad \text{ɲùre-ŋò-Ø]} \\
\text{[[[person HL Poss.InanSg] look-lpfvNeg.3SgSbj} \\
\text{[[á HL gʒ} \quad \text{ɲùre-ŋò-Ø]} \\
\text{[[3LogoSg HL Poss.InanSg] look-lpfvNeg.3SgSbj} \\
\text{[[nè gà] kérèw kò-kò:ŋ]} \\
\text{[3Sg Topic] all Rdp-eat-lpfv.3SgSbj}
\end{align*}
\]

‘He doesn’t look at (= care whether) “it’s somebody (else)’s,” he doesn’t look at “it’s mine,” as for him, he eats everything.’

16.4 Counterfactual conditional

In this construction, the antecedent clause has *nde* ‘if’ as with hypothetical conditionals. However, now both the antecedent and the consequent have past clitic = *be*. For active (nonstative) verbs, the antecedent is normally past perfect (§10.5.1.3), positive or negative, as in (608b), but it may also be a past stative (608a) or a past imperfective (608c). The consequent is usually past perfect (608a), but it may be past imperfective (608b-c).

(608) a.  

\[
\begin{align*}
\text{dʒɔtɔrə yà bù-m = bê-Ø ndè,} \\
\text{doctor Exist be-Stat=Past-3Pl if,}
\end{align*}
\]

bàyà-ɛ-rè = bê-ý

be.cured-Pfv=Past-1SgSbj

‘If the doctor had been there, I would have been cured.’

b.  

\[kà-kà: yò:-ndà = b-á \quad ndè,\]

Rdp-grasshopper come-PfvNeg.3PlSbj=Past-3PlSbj if,

\[\text{[tùrà gà] yà: èsì→ bérer-ṁ = bê-y.},\]

[granary Loc] millet very.much get-lpfv=Past-1PlSbj

‘If the locusts hadn’t come, we would have gotten (= were going to get) a lot of millet in the granary.’

e.  

\[
\begin{align*}
\text{[kɔmbɔ yà bù-m = bê-Ø] jùgɔ-ṁ = bê-y \quad ndè,} \\
\text{[war Exist be-lpfv=Past-3SgSbj] know-lpfv=Past-1SgSbj if,}
\end{align*}
\]

bàmàkɔ ñír-ŋò: = bê-ý

Bamako go-lpfvNeg=Past-1SgSbj

‘If I had known that there was a war, I would not have gone to Bamako.’
17 Complement and purposive clauses

17.1 Quotative complement

Quotations are marked as such by up to three distinct features:

(609) a. inflectable ‘say’ verb (kıyé-), preceding or following the quotation, §17.1.2;
b. invariable quotative particle wa (i.e. wà or wá) following the quotation (or segments thereof), §17.1.3;
c. logophoric pronouns substituting for (original) first person pronouns, §18.2.

17.1.1 Direct versus indirect in quotative complements

Direct quotation is not normal. Instead, quotations make systematic replacements of categories used in simple, unquoted clauses.

Quoted imperatives have their own morphological verb form, which is also used in wishes (‘may God [Verb] you!’). Quoted hortatives also have a special inflected form with suffix -ŋ. See §17.1.4-1-2 for these constructions.

A 1Sg or 1Pl pronoun in the original direct speech is normally replaced by corresponding logophoric pronouns, unless the quoted speaker (or thinker) is also the current speaker or listener. For logophorics, see §18.2.1.

An original 2Sg or 2Pl is normally replaced by regular (nonanaphoric) 3Sg or 3Pl, provided the original addressee is not the current speaker or addressee. In quoted imperatives and hortatives, these third person pronouns function as pro forma vocatives.

Schematically, direct speech [X said “I will see you-Sg tomorrow”] is expressed as indirect [X said 3LogoSg will see him/her tomorrow]. Similarly, [X said, “pick up your stick!”] comes out as indirect [X said, (hey) him/her!, may he/she pick up his/her (own) stick!]. Aspectual categories are unchanged from direct to indirect, and shifty adverbs need not be replaced (‘tomorrow’ can be stretched to mean ‘the following day’).

17.1.2 ‘Say that …’ with inflectable ‘say’ verb (kıyé-)

kıyé- ‘say’ (§11.3.1) may precede or follow the quotation. When it precedes, it is set off prosodically from the quotation. When it follows, there is no obligatory prosodic break.

In elicitation, one common form of this verb, when it occurs in a clause preceding the quoted matter, is kıyé-së ́w¬ndé and variant kıyé-së gù¬ndé. This is a specialized perfective relative-clause form, and takes preverbal subject pronominals rather than suffixes. For this construction, see §15.2.8.3.

This ‘say’ form is preceded by an independent pronoun, even when this pronoun merely resumes an immediately preceding nonpronominal NP. This suggests that the nonpronominal NP is topicalized, and provides further evidence that kıyé-së ́w¬ndé at least originated as a nonsubject relative (cf. ‘what I said [was]: …’).
The subject pronoun (imperfective of say) may also follow the quoted clause. This is usual when the ‘say’ verb itself is negated or hypothetical.

In imperfective positive (e.g. present or future) contexts, the morphologically regular imperfective of kiyé- is used (611). If a subject NP for ‘say’ is present, there is no resumptive subject pronoun (611b).

(610) a. [mõ:dibôL bû:] bû: kiyè-sè w-ndé
   [holy.manL Def.AnPl] 3PlSbj said
   Rdp-grasshopper come-lpfv-3PlSbj Quot
   ‘The holy men (= clerics) said that the locusts won’t/wouldn’t come (back).’

b. ñné kiyè-sè w-ndé, á ë:ñí ñní-ñ wà
   3Sg said, 3LogoSbj tomorrow go-lpfv.3SgSbj Quot
   ‘He said that he is going tomorrow/would go the next day.’

c. ñí:" kiyè-sè w-ndé, ñní-ñ-ñ-y" ñù
   1SgSbj said, go-lpfvNeg-1SgSbj
   ‘I said that I am not going.’

In imperfective positive (e.g. present or future) contexts, the morphologically regular imperfective of kiyé- is used (611). If a subject NP for ‘say’ is present, there is no resumptive subject pronoun (611b).

(611) a. ñné ki-kiyè-ñ, á mûr"á = ñ wà
   3SgSbj Rdp-say-lpfv.3SgSbj, 3LogoSbj sick.one=it.is.3SgSbj Quot
   ‘She will say that she is sick.’

b. nû: ki-kiyè-m-é, á: bûyá-érè wà
   person Rdp-say-lpfv-3PlSbj, 3LogoPlSbj be.cured-Pf1a Quot
   ‘(The) people will say that they are cured.’

The ‘say’ verb may also follow the quoted clause. This is usual when the ‘say’ verb itself is negated or hypothetical.

   [Rdp-grasshopper stand-MP-Caus can-lpfv-1SgSbj] say-PfNeg-1SgSbj
   ‘I didn’t say that I can stop the locusts.’

b. bû: [ë:" wà] [û dë:rè-w] kiyè-ñ-ë:
   3PlSbj [1SgSbj Quot] [2Sg more] say-lpfvNeg-3PlSbj
   ‘They don’t say that I am better than you-Sg.’

c. [nyé ŋgá kà-ñ-ñ-ë"] [ñné bû] kiyâ
   [today here eat-lpfvNeg-1SgSbj] [3Sg Dat] say.Imprt
   ‘Tell him/her that I will not eat here today.’

d. ñné [á sîr̃ë-só-Ø] kiyè-só-Ø ndé,
   3SgSbj [3LogoSbj be.sated-Pf2-3SgSbj] say-Pf2-3SgSbj if
   kà-kâr kàrá-ñ
   falsehood lie(v)-lpfv.3SgSbj
   ‘If he says that he is full (of food), he is lying.’ (kà-kâřī)
(613) a. kà-ŋé           kiy-à
    what?          say.Pfv-3PlSbj
    ‘What did they say?’

b. ṭgù            kiy-ru-w
    Dem.InanSg    say-PfvNeg-2SgSbj
    ‘You-Sg didn’t say that.’

The ‘say’ verb kiyé- is often omitted when the quotative particle wa (see below) is present. When entire back-and-forth conversations are quoted, as happens often in tales, kiyé- is largely absent, while wa recurs constantly.

17.1.3 Quotative clitic wa

This enclitic particle is very common when the quoted speaker is a third person. When the embedded quotation is propositional in nature, the particle can therefore have ‘hearsay’ evidential quality, suggesting that the present speaker does not vouch for the truth of the quoted proposition. The particle is also used with jussive complements (embedded imperatives), where truth is not at issue. It is also common in requests for confirmation or clarification: X wa? ‘(did you say/mean) X?’

The particle occurs at the end of the quotation, with no prosodic break. It is atonal and acquires its tone from the final tone of the preceding word, by Atonal-Morpheme Tone-Spreading (§3.7.3.4). The two known exceptions, where L-toned wà follows an H-tone, are inflected forms of perfective-2 -só- (the only H-toned positive indicative suffix) and quoted hortative -ŋ. This is illustrated for the 3Pl subject form of -só- in (614c) below; see also §10.2.1.3. For the quoted hortative, see e.g. yé-řńé-ŋ wà in the penultimate Nanga line in (742) in the sample text. The perfective-2 induces similar tonal behavior in interrogative ma, see (462c) in §13.2.1.

(614) a. řńé           kiyé-sè ṭ-w-nédé,
    3SgSbj    said,
    á           sikéró   sò-ndó-Ø  wà
    3LogoSgSbj sugar    have-Neg-3SgSbj Quot
    ‘He/She, said that he/she, has no sugar.’

b. á           sikéró   yá   sò-Ø  wà
    3LogoSgSbj sugar Exist have-3SgSbj Quot
    ‘(He/She,) said that he/she, has some sugar.’
c.  ámbù  ñé  kiyè-sè  wàndè,
Amadou 3SgSbj said,
[nù.¹  bù:]  tò:  tò-s-é  wà
[person¹  Def.AnPl] sowing(n) sow-Pfv2-3PlSbj Quot
‘Amadou said that the people have sown (the millet).’

Although both quotative wa and interrogative ma are lexically atonal, normally getting their tone by spreading from the left, when they co-occur in the order ma wa (i.e. quoting a question), the combination is realized as má→ wà regardless of the final tone of the preceding word, see §13.2.1.

Within a quoted clause, wa is optionally repeated after an overt subject, if any. This is analogous to the quotative-subject particles in languages like Ben Tey, though this construction is less systematic in Nanga. In addition, many quotations, especially but not only of imperatives, begin with an initial quoted vocative of the ‘(hey) you!’ type, converted to third person pronoun (unless the original addressee is also a participant in the present speech act). This quoted vocative is obligatorily followed by wa. The effect is to indicate to whom the original quotation was directed. It is also used to highlight a switch in speaker in narratives reporting back-and-forth conversations, taking advantage of the narrative convention that each speaking turn begins with a vocative.

In (615a), wa occurs at the end of both quoted clauses, and optionally following the overt subject NP ‘the people’ in the first clause. In (615b), since ‘you-Pl have’ is conjugated, the clause-initial 2Pl ú: is interpreted as a quoted vocative. The conversion to third person does not take place here, indicating that the original addressees are also the addressees in the current speech event. Therefore such a vocative makes it unnecessary to specify the original addressee in a dative complement to the ‘say’ verb (‘He said, hey you, …’ = ‘He said to you, …’). In (615c), the original addressee is not a participant in the current speech event, so the original ‘hey you!’ is expressed with a 3Sg pronoun. There are many examples like this in the sample text. The alternative is to quote the actual appellation of the original addressee as the quoted vocative (615d).

(615)  a.  ñé  kiyè-sè  wàndè,
3SgSbj  said,
[mù.¹  bù:]  (wà)  yè-m-è  wà
[person¹  Def.AnPl] (Quot) come-Ipfv-3PlSbj Quot
ñà  nà  kò-s-è:  wà
here  meal  eat-IpfvNeg-3PlSbj Quot
‘He/She said that the people will come, (but that) they won’t eat here.’

b.  ñé  kiyè-sè  wndè,
3SgSbj  said,
[u:]  (wà)  sìkɔrɔ  só-ndɔ-wò:.  wà
[2PlSbj (Quot)] sugar  have-Neg-2PlSbj Quot
‘He/She, said (to you-Pl) that you-Pl [topic] have no sugar.’

c.  tà-tà:  [jɔmɔ  báy]  ñé  kiyè-sè  wàndè,
hyena  [hare  Dat]  3SgSbj said,
[ñé  wà]  ñé  wà
[3Sg  Quot]  go.QuotImprt Quot
‘Hyena said to hare: hey you (lit. “he”), go!’
d. tà-tā: ŋné kiyè-sè ṟ-ndé, hyena 3SgSbj said, [jòmɔ̀ wâ] ŋní wà [hare Quot] go.QuotImprt Quot ‘Hyena said: hey hare, go!’

The particle wa is omitted (because redundant) when it would otherwise be adjacent to the ‘say’ verb, i.e., when the latter immediately follows the quotation (616a). Even an intervening subject pronominal is enough to allow both the particle and the ‘say’ verb to appear (616b). Of course wa may co-occur with the ‘say’ verb when one quotation is embedded in another (616c).

(616) a. á:mádù [[nù:1 bû: (wâ)] tò: tɔ:-s-é Amadou [[person1 Def.AnPl (Quot)] sowing(n) sow-Pfv2-3PlSbj (#wâ) kiyè-só-Ø] (/#Quot) say-Pfv2-3SgSbj ‘Amadou said that the people have sown (the millet).’

b. [nù:1 bû:] tò: tɔ:-s-é wà] [person1 Def.AnPl] sowing(n) sow-Pfv2-3PlSbj Quot ŋné kiyè-só-Ø 3SgSbj say-Pfv2-3SgSbj ‘He said that the people have sown (the millet).’

c. […] yë-y kiy-à wà […] come-QuotImprt say,Pfv-3PlSbj Quot ‘“They told (me) to … and come,” (she) said.’ (2003.02.03)

The quotative particle is also omitted when the ‘say’ verb is negated, even when the ‘say’ verb is (atypically) preposed, so that adjacency of ‘say’ verb and quotative particle is not possible (617a). The particle is also omitted when the ‘say’ clause is a polar interrogative (617b). In other words, when the fact that the quoted speech was uttered (or thought) is not asserted, the quotative particle is not added to the quotation. A possible factor in this is that hearsay evidentiality is irrelevant in this context.

(617) a. á:mádù ŋné kiyè-ří-Ø, Amadou 3SgSbj say-PfvNeg-3SgSbj, [nù:1 bû:] tò: tɔ:-s-é (#wâ) [person1 Def.AnPl] sowing(n) sow-Pfv2-3PlSbj (#Quot) ‘Amadou did not say that the people have sown (the millet).’

b. ŋné kiyè-só-Ø mà 3SgSbj say-Pfv2-3SgSbj Q [nù: tò: tɔ:-s-é (#wâ)] [person sowing(n) sow-Pfv2-3PlSbj (#Quot)] ‘Did he say that the people have sown (the millet)?’

When the quoted material takes the form of a factive complement (§17.2), with final definite morpheme gú, the quotative particle is not used.
(618) *ńné*  
  
3SgSbj said,  

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kîyê-sè  

w-ndé,  

[[nù:₁ L  
  
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bù:]]  

[person^L  

Def.AnPl]

tô:  

tô:-sè^L  

gû  

(#wá),  

kà-kàrû = wá

sowing(n)  

sow.Pfl.  

Def.InanSg  

(#Quot),  

Rdp-lie-it.is.3SgSbj  

‘If he says (= claims) that the people have sown (the millet), it’s false.’

Quotative *wa* is possible, but less systematic, when the quotation is attributed to the current addressee (619a). In ordinary contexts (with no special modal attributes), it is absent when the addressee is also the subject of the quoted clause (619b). The particle can be used in repetitions of what the addressee has just said if the speaker needs confirmation, but in this case there is usually no overt 2Sg pronominal.

(619) a.  

[ńné  

báy]  

kîyâ,  

á:mádù  

ńné-ërè-Ø  

(wá)

[3Sg  

Dat]  

say.Impl,  

Amadou  

go-Pfv1a-3SgSbj  

(Quot)

‘Tell her that Amadou has gone.’

b.  

[bàr"í  

ú  

kîyê-sè  

w-ndé]  

[1SgDat  

2SgSbj]  

said]

ú  

yègè-wù  

(=# wá)

2SgSbj  

fall.Pfl-2SgSbj  

(=# Quot)

‘You-Sg told me that it was you [focus] who fell down.’

c.  

é:ní  

wá

tomorrow  

Quot

‘(Did you say) “tomorrow”?’

The quotative particle is generally not used in citations of the speaker’s own previous speech.

(620)  

[fántà  

báy]  

kîyê-só-y,  

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[Fanta  

Dat]  

say-Pfv2-1SgSbj,

á:mádù  

ńné-ërè-Ø  

(=# wá)

Amadou  

go-Pfv1a-3SgSbj  

(=# Quot)

‘I told Fanta that Amadou has gone.’

In (621a), presence of *wa* is possible (though not obligatory). If the subject of the quoted proposition is switched to first person (621b), absence of *wa* is preferred.

(621) a.  

[ńné  

báy]  

kîyâ,  

á:mádù  

ńné-ërè-Ø  

wá

[3Sg  

Dat]  

say.Impl,  

Amadou  

go-Pfv1a-3SgSbj  

Quot

‘Tell her that Amadou has gone.’

b.  

[ńné  

báy]  

kîyâ,  

ńné-ërè-ŷ  

(=# wá)

[3Sg  

Dat]  

say.Impl,  

go-Pfv1a-1SgSbj  

(=# Quot)

‘Tell her that I have gone.’

The difference is undoubtedly due to the different epistemic status of the quoted proposition in the two cases, rather than an automatic effect of subject type. If the context in (621b) above is adjusted so that it involves telling a falsehood, e.g. to escape arrest as in (622), *wa* reappears.
(622) [gendarme bây] kíyá, ánè-èrè-ỳ wà
[policeman Dat] say.Imprt, go-Pfv1a-1SgSbj Quot
‘Tell the policeman that I have gone away.’

Similar nuances have been found with second person (=current addressee) as subject of the quoted proposition. (623a) was elicited in the following context: the addressee has been injured in an accident, and is being informed that help is on the way. Quotative wà was usually absent, though possible, in this context. Here the speaker and especially the addressee are quite well aware of the injury having occurred. When the context was changed, so that the injury report was in fact a lie, presence of wà was consistent (623b).

(623) a. á:mádü [dɔ̀gɔ́tɔ̀rɔ̀ bày] kíyé jè-Ø,
Amadou [doctor Dat] say RecPrf-3SgSbj
[ú (wà) bàr’imí-yⁿ-èrè-ù (?#wà)]
[2SgSbj (Quot) be.hurt-MP-Pfv1a-2SgSbj (?#Quot)]
‘Amadou has already told (= informed) the doctor that you-Sg are injured.’

b. á:mádü [dɔ̀gɔ́tɔ̀rɔ̀ bày] kíyé-só-Ø,
Amadou [doctor Dat] say-Pfv2-3SgSbj,
[ú bàr’imí-yⁿ-èrè-ù wà]
[2SgSbj be.hurt-MP-Pfv1a-2SgSbj Quot]
‘Amadou has told the doctor (falsely) that you-Sg are injured.’

17.1.4 Jussive complement (reported imperative or hortative)

17.1.4.1 Quoted imperative and prohibitive

When the quoted material represents an original positive imperative, the verb is not in the original imperative form (§10.6.1). Instead, the verb takes a special quoted imperative form, which are also found in wishes of the ‘may God [Verb] you!’ type. The quoted imperative is expressed by the I-stem, for non-i-final as well as i-final verbs (for the latter, the I-stem and bare stem are identical). There are also some tonal changes. For the forms, see (375-376) in §10.6.4.

When imperatives are reported, this quoted imperative form is used regardless of the original addressee number. The quotative particle wa is added clause-finally, without a prosodic break, and it constitutes part of the phonological environment for syncope of the stem-final i in forms like gùrí.

An overt pronominal within the jussive clause itself, referring to the original addressee, is not obligatory. It is absent in (624), where the addressee has already been identified in the ‘say’ clause.

(624) [ńíñé bây] kíyá,
[3Sg Dat] say.Imprt,
[tè, l] gú] náŋ wà
[tea Def.InanSg] put.up QuotImprt Quot
‘Tell him to put the tea (kettle) up (on the burner)!’ (náŋǐ-)

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Often, however, the original addressee is indexed in the form of a quotative-subject phrase. This is a somewhat pro forma quoted vocative (‘hey you!’), converted to the appropriate pronoun in the current speech event’s deictic structure (hence usually converted from second to third person, unless it refers to the current speaker or listener).

(625) a. [yì-tègê L bû: báy] kîyé-sô-y, [child-Pl Def.AnPl Dat] say-Pfv2-1SgSbj, [bû: wà] [gō-y wá] [3Pl Quot] [go.out-QuotImprt Quot]
   ‘I told the children to go out.’
   (lit.: ‘I told the children: [hey] them! May … go out’)

   ‘Tell him/her to come.’

c. ńnê kîyê-sê wê-ndê, [ńnê wá] yê-y wá [3SgSbj said,] [1Sg Quot] [come-QuotImprt Quot]
   ‘He/She told me to come.’

d. [bû: báy] kîyé-sô-ý [3Pl Dat] say-Pfv2-1SgSbj
   ‘I told them them to pound the millet!’. (<tórí/ from stem tóró-)

In a quoted prohibitive, the verb appears in singular-addressee prohibitive (i.e., negative imperative) form, regardless of original addressee number. An independent pronoun denoting the original addressee, ostensibly a quoted vocative but somewhat pro forma, is often present, as in quoted positive imperatives. (626a) has a singular embedded addressee, (626b) a plural one. (626c) is a textual example.

(626) a. [ńnê báy] kîyâ, [3Sg Dat] say.Imprt,
   (ńnê wá) [ńnê r“á wá] [1Sg Quot] [tea L Def.InanSg] put.up-Proh] Quot
   ‘Tell him not to put the tea (kettle) up (on the burner)!’

b. [ńnê báy] kîyâ, [3Pl Dat] say.Imprt,
   (ńnê wá) [ńnê r“á wá] [1Sg Quot] [tea L Def.InanSg] put.up-Proh] Quot
   ‘Tell them not to put the tea (kettle) up (on the burner)!’
17.1.4.2 Quoted hortative (positive -ŋ, and negative)

In quoted positive hortatives attributed to a third person speaker, the originally imperative verb appears with quoted hortative (QuotHort) suffix -ŋ, regardless of original first-person inclusive number. See §10.6.5 for the form.

Examples are in (627), along with the singular- and plural-addressee hortatives for comparison. The vocalism and tones of the stem are identical in the three cases. It is therefore reasonable to think of -ŋ as historically a reduction of one of the hortative suffixes, probably via *-m (the L-tone shifting onto the following quotative particle).

(627) gloss hortative quoted hortative

Sg addressee Pl addressee

‘run’ yèg̱s-má yèg̱s-màyⁿ yèg̱s-ŋ (wà)
‘go out’ gög̱-má gòg̱-màyⁿ gòg̱-ŋ (wà)
‘buy’ évé-má évé-màyⁿ évé-ŋ (wà)
‘go’ ǐnè-má ǐnè-màyⁿ ǐnè-ŋ (wà)
‘give’ ńdè-má ńdè-màyⁿ ńdè-ŋ (wà)
‘go in’ núyʷ5-má núyʷ5-màyⁿ núyʷ5-ŋ (wà)
‘scrub’ púgús-má púgús-màyⁿ púgús-ŋ (wà)

For the velar nasal, compare the m ~ ŋ alternation in the imperfective verb paradigm (with ŋ word-finally in the zero 3Sg form), or in the conjugated ‘it is’ clitics. However, a morphemic equation of quoted hortative -ŋ with the imperfective morpheme, or with same-subject anterior subordinator ŋ, would make no grammatical or semantic sense.

The quotative hortative suffix is followed by the quotative particle wa, which has L-tone in spite of the H-tone of ŋ itself. This detail suggests that quoted hortative -ŋ is a reduced form of L-toned plural-addressee hortative suffix -màyⁿ, rather than of the less common H-toned singular-addressee hortative -má.

There is usually no preverbal independent pronoun. Examples of the quoted hortative are in (628).

(628) a. ǐnè  kiyé-sè w-ndé,  [ǐnè-ŋ  wà]
    3SgSbj  said,  [go-QuotHort  Quot]
    ‘He/She said, let’s go!’

b. ǐnè  kiyé-sè w-ndé,  [pèrgé  évé-ŋ  wà]
    3SgSbj  said,  [sheep  buy-QuotHort  Quot]
    ‘He/She said, let’s buy a sheep!’

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If the quoted speaker is also the current addressee, the construction is the same, provided that the original first inclusive did not include the current speaker.

(629)  [á:máðù báy] ú kiya-sè w-ndé [nín-ðí wà]  
[Amadou Dat] 2Sg said,  
[go-QuotHort Quot]

‘You-Sg said to Amadou, let’s (= you and Amadou) go!’

In self quotations, the quoted speaker is coindexed with the current speaker and is also included in the original first inclusive. In this case, instead of quoted hortative -ñí, the original full hortative verb form occurs, with suffix -má for singular addressee and -mày for plural addressee. Quotative wa is absent, presumably since it would have no evidential value.

(630)  a.  [á:máðù báy] í”” kiya-sè w-ndé ñíné-má  
[Amadou Dat] 1Sg said  
[go-Hort.SgAddr]

‘I said to Amadou, let’s (= the two of us) go!’

b.  [yi-tége báy] í”” kiya-sè w-ndé ñíné-mày”’  
[child-Pl Dat] 1Sg said  
[go-Hort.PlAddr]

‘I said to the children, let’s (= all of us) go!’

When the quoted speaker is also the current addressee, if the original first inclusive included the current speaker, we again revert to the full hortative form used in direct speech. Therefore (631a) has the (unembedded) hortative form. By contrast, (631b) with third person quoted speaker has the quoted hortative -ñí suffix.

(631)  a.  bár”í ú kiya-sè w-ndé ñíné-má  
1Sg.Dat 2Sg said  
[go-Hort.SgAddr]

‘You-Sg said to me, let’s (= you and me) go!.’

b.  bár”í ñíné kiya-sè w-ndé ñíné-ñí wà  
1Sg.Dat 3Sg said  
[go-QuotHort Quot]

‘He said to me, let’s (= him and me) go!’

Hortative negative -ndá:-má and plural-addressee -ndá:-mày”, and any of their variants -rá-má ~ -rá-mày” and -ndá-má ~ -ndá-mày”, are merged as invariant -ndá: when quoted. I gloss -ndá: as quoted hortative negative (QuotHortNeg in interliners). It is followed by the quotative particle wà. This -ndá: form appears under the same syntactic conditions as the reported positive hortative in -ñí (632a-b). With e.g. first person attributed speaker (self-quotiation), the original full hortative form is used (632c).

(632)  a.  tá-tá: ñíné kiya-sè w-ndé  
hyena 3SgSbj said  
[jám5 wá] ñíné-ndá: wà  
[hare Quot] [go-QuotHortNeg Quot]

‘Hyena said: hey hare, let’s not go!’
b. bàrⁿí ńné kiyè-sè w-ndé ńné-ndà: wà
   1Sg.Dat 3SgSbj said go-QuotHortNeg Quot
   ‘He/She said to me, let’s (= the two of us) not go!’

c. ǐⁿ kiyè-sè w-ndé ńné-ndà:-mó
   1SgSbj said go-HortNeg-Hort.SgAddr
   ‘I said (to one other person), let’s not go!’

17.2 Factive (indicative) and related complements

A factive complement (as the term is used here) has a verb with regular AN (aspect-negation) inflection, but without pronominal-subject marking (except for 3Pl). If the subject is pronominal, it is expressed as a preverbal subject pronoun, as in nonsubject relative clauses. A factive clause as a whole functions as an NP argument inside a higher clause. Depending on the construction, a factive clause proper is followed by a pronominal possessor agreeing with the subject of the complement clause (with inanimate singular possessive classifier), or by inanimate singular definite gú. The type with a pronominal possessor is found with ‘know’ (§17.2.1 just below) and in one construction with ‘see’ (§17.2.2.1). Unpossessed factive clauses with definite gú can be used in one type of quoted clause, see (618) in §17.1.3.

17.2.1 ‘Know that …’ complement clause

An example with imperfective negative verb is (633). A literal gloss would be “I know [your [you not coming]].”

(633) [ú ńye-ŋ3:] [ú hh3] jůg3-mr-Ø
   [2SgSbj] come-IpfvNeg [2Sg hhPoss.InanSg] know-Ipfv-1SgSbj
   ‘I know that you-Sg are not coming.’

If we replace the 2Sg subject in (633) with other pronominal categories, we get the factive complements in (634) below. The forms shown are those that would occur subordinated to a ‘know’ matrix clause (not shown). The various first and second person categories, and 3Sg, have their usual postnominal possessor forms, in these examples based on inanimate singular possessive classifier hh3 ~ hh3. The 3Pl has an L-toned, short-voweled form bũ 1g3, distinct from the usual 3Pl possessor combination bũ: 1g3 seen in e.g. ndô [bũ: 1g3] ‘their house’. 3Pl subject also has subject agreement on the verb (-ŋ-ê), whereas all other categories have invariant -ŋ-ê.

(634) a. [ǐⁿ yè-ŋ3: kô:] ‘that I am not coming’
   [i: yè-ŋ3: [i: 1g3]] ‘that we are not coming’
   [ū: yè-ŋ3: [ū: 1g3]] ‘that you-Pl are not coming’

b. [ńné yè-ŋ3: nô] ‘that he/she is not coming’

c. [bũ: yè-ŋ3: [bũ 1g3]] ‘that they are not coming’
An example with the perfective negative (-rí) is (635).

(635)  
\[
\begin{array}{llll}
\text{ú } \text{yè:-rí} & \text{ú } \text{HL } \text{g3}] & \text{júg3-m-Ø} \\
\text{[2SgSbj} & \text{come-PfvNeg} & \text{[2Sg} & \text{HL}^{\text{Poss.InanSg}]} & \text{know-Lpvf-1SgSbj} \\
\end{array}
\]

‘I know that you-Sg did not come.’

Replacing 2Sg by other pronominal-subject categories, we have the data in (636). Again, the 3Pl is the only category requiring its specific pronominal-subject suffix on the verb.

(636)  
\[
\begin{array}{llll}
a. \ [i:\text{-yè:-rí kɔ:}] & \text{‘that I did not come’} \\
\ [i:\text{-yè:-rí [i:\text{L} \text{gɔ\^}]]} & \text{‘that we did not come’} \\
\ [i:\text{-yè:-rí [u:\text{L} \text{gɔ\^}]]} & \text{‘that you-Pl did not come’} \\
\end{array}
\]

b. \ [\text{ńné yè:-rí nɔ:}]  \text{‘that he/she did not come’}

c. \ [\text{bù: yè:-ndú [bù L}\text{gɔ\^}]] \text{‘that they did not come’}

An example with (positive) reduplicated imperfective verb is (637). The imperfective ending is -m (not -ŋ).

(637)  
\[
\begin{array}{llll}
\text{ú } \text{yè-yè:-m} & \text{ú } \text{HL } \text{g3}] & \text{júg3-m-Ø} \\
\text{[2SgSbj} & \text{come-Lpvf} & \text{[2Sg} & \text{HL}^{\text{Poss.InanSg}]} & \text{know-Lpvf-1SgSbj} \\
\end{array}
\]

‘I know that you-Sg will come.’

With the other pronominal categories, the outputs are in (638). The 3Pl form again has its inflection on the verb.

(638)  
\[
\begin{array}{llll}
a. \ [i:\text{-yè-yè:-m kɔ:}] & \text{‘that I will come’} \\
\ [i:\text{-yè-yè:-m [i:\text{L} \text{gɔ\^}]]} & \text{‘that we will come’} \\
\ [i:\text{-yè-yè:-m [u:\text{L} \text{gɔ\^}]]} & \text{‘that you-Pl will come’} \\
\end{array}
\]

b. \ [\text{ńné yè-yè:-m nɔ:}] \text{‘that he/she will come’}

c. \ [\text{bù: yè-yè:-m-ɛ [bù L}\text{gɔ\^}]] \text{‘that they will come’}

A (positive) perfective-2 example is (639). With pronominal categories other than 2Sg, the forms are shown in (640). Again, the 3Pl form stands out.

(639)  
\[
\begin{array}{llll}
\text{ú } \text{yè:-só} & \text{ú } \text{HL } \text{g3}] & \text{júg3-m-Ø} \\
\text{[2SgSbj} & \text{come-Pfv2} & \text{[2Sg} & \text{HL}^{\text{Poss.InanSg}]} & \text{know-Lpvf-1SgSbj} \\
\end{array}
\]

‘I know that you-Sg came.’

(640)  
\[
\begin{array}{llll}
a. \ [i:\text{-yè:-só kɔ:}] & \text{‘that I came’} \\
\ [i:\text{-yè:-só [i:\text{L} \text{gɔ\^}]}] & \text{‘that we came’} \\
\ [i:\text{-yè:-só [u:\text{L} \text{gɔ\^}]]} & \text{‘that you-Pl came’} \\
\end{array}
\]

b. \ [\text{ńné yè:-só nɔ:}] \text{‘that he/she came’}

c. \ [\text{bù: yè:-s-ɛ bù L}\text{gɔ\^}]] \text{‘that they came’}

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Other AN inflections beyond the four illustrated above can also be used in this construction. I have verified this for the perfective-1a (-érê), perfective-1b (-ti), and the progressive (-sò), in each case without pronominal-subject suffixation except in the 3Pl.

In English, there is a basic distinction between X know that P and X know whether P for some proposition P. In the first case, but not the second, the current speaker presupposes the truth of P (cf. also X realize that P). In Nanga, as generally in languages of the region, this distinction is not made. Therefore e.g. ‘X doesn’t know that [Y is sick]’ (when Y is in fact sick) is expressed by the same construction that translates ‘X doesn’t know whether [Y is sick]’. In this construction, the factive complement is followed by polar interrogative particle *ma*. The philosophical significance of this distinction between English and Nanga is evident; in Nanga, one simply reports the state of mind of X, while in English the speaker superimposes his/her own knowledge on X’s state of mind.

(641) \[ \text{niŋé} \quad [\text{ũ} \quad \text{sěllë-rí} \quad \text{má:.}] \]
\[ \text{3SgSbj} \quad [\text{2SgSbj} \quad \text{be.healthy-PfvNeg} \quad \text{Q}] \]
\[ \text{júgà-ŋ’s-ø.Ø} \]
\[ \text{know-PfvNeg-3SgSbj} \]
‘He/She doesn’t know whether (= that) you-Sg are sick.’
\[ (\text{má:.} \text{pronounced } [\text{mààà}] \text{with dying-quail effect, §3.8.3}) \]

17.2.2 Complement clauses for ‘see’ and ‘hear’

17.2.2.1 Factive complement clause

In (642), the speaker (who expected the addressee to take the motorcycle away), arrives and sees that the motorcycle is still in its previous location. Here we get a factive complement of the same type used with ‘know’ (§17.2.1, above).

(642) \[ \text{ũ} \quad \text{[mòtò:]} \quad \text{gú} \quad \text{gè:ʒ’i-r’í} \]
\[ \text{[2SgSbj} \quad \text{[motorcycle} \quad \text{Def.InanSg} \quad \text{take.away-PfvNeg} \]
\[ \text{[uL} \quad \text{gàj]} \text{]} \quad \text{yì-sò-ý} \]
\[ \text{[2Sg} \quad \text{HL} \quad \text{Poss.InanSg}] \quad \text{see-Pfv2-1SgSbj} \]
‘I saw (= see) that you-Sg didn’t take the motorcycle away.’

In (643), the speaker reports what he/she has heard from others. Again, the complement is factive in form.

(643) \[ \text{ũ} \quad \text{bàmàkàʒ = Ø} \quad \text{niŋé-iŋh} \quad [\text{ũ} \quad \text{HL} \quad \text{gàj}]} \]
\[ \text{[2SgSbj B=Loc} \quad \text{go-lpfv} \quad \text{[2Sg} \quad \text{HL} \quad \text{Poss.InanSg}] \]
\[ \text{mùy’-sò-ý} \]
\[ \text{hear-Pfv2-1SgSbj} \]
‘I heard (= hear) that you-Sg are going to Bamako.’

17.2.2.2 Resultative complement with passive -yé

When the agent sees that an event has already taken place, the passive construction with -yé after an H-toned verb stem, and with tone-dropped subject NP (§9.3.2), may be used. In
(644), what the agent sees is a distressed cow on the ground in a position other than the usual resting position.

(644) $[\text{nàŋà}^L \quad \text{yègè-ý}] \quad yì:-\text{só-ý}$

[cow$^L$ \quad fall-Pass] \quad see-Pfv2-1SgSbj

‘I saw the fallen cow.’

This can of course shade into a factive sense: ‘I saw that a cow had fallen’, since the resulting situation implies a constitutive event.

17.2.2.3 Imperfective complement with -mɔ̀

When the complement of ‘see’ denotes a durative activity (or an imminent event at the point where it is/was about to happen) that was actually viewed by the agent, a construction with durative subordinator -mɔ̀ ‘while’ (§15.2.1) occurs instead of a factive complement.

(645) a. $[\text{nàŋà} \quad \text{yègè-mɔ̀}] \quad yì:-\text{só-ý}$

[cow \quad fall-while] \quad see-Pfv2-1SgSbj

‘I saw (a/the) cow falling (or: about to fall).’

b. $[\text{yì-tègè} \quad \text{giyè} \quad \text{bù:} \quad \text{giyè-mɔ̀}] \quad yì:-\text{só-ý}$

[child-Pl \quad dance(n) \quad 3PISbj \quad dance(v)-while] \quad see-Pfv2-1SgSbj

‘I saw the children dance (= dancing).’

17.2.3 Indicative main clauses

In some constructions, the “complement” clause has the form of an indicative main clause, with no sign of subordination. One can argue that the apparent higher predicate is really a parenthetical juxtaposition, cf. English parenthetical you know or you see.

17.2.3.1 After tilày = Ø ‘it is certain’

$\text{tilày} = \text{Ø} \; \text{‘it is certain’}$ may precede an ordinary indicative clause (not factive in form), denoting a future event that is (all but) certain, or a situation or a past event that one infers from strong evidence or reasoning. $\text{tilày}$ is a regionally ubiquitous form.

(646) a. $\text{tilày} = \text{Ø} \quad \text{á:ndè} = \text{Ø} \quad \text{tínfì-m-Ø}$

certainty=it.is \quad Anda=Loc \quad go-lpfv-1SgSbj

‘It’s certain (definite) that I will go to Anda.’

b. $\text{tilày} = \text{Ø} \quad \text{séwà:ri} = \text{yè} \quad \text{gò-èrè-Ø}$

certainty=it.is \quad S \quad go.out-Pfv1a-3SgSbj

‘He/She has certainly left Sevare (by now).’
17.2.3.2 With *tɛ̀mbì-* ‘find (that …)’

*tɛ̀mbì-* ‘find, encounter’ occurs in contexts such as ‘I arrived in Mopti only to find that my house had burned’. That is, an eventuality (often an unexpected fact or situation) is discovered by the protagonist after a motion event. The complement is an ordinary indicative clause with no sign of subordination.

(647) a. ṅínɛ-èr-à tɛ̀mbì-ŷ
   go-Pfv1a-3PISbj find.Pfv-1SgSbj
   ‘I found that they had gone.’

   b. [[ǹdò-
   ] gú] gǒ: kúwó-tì-Ø
   [[house-
   ] Def.InanSg] fire burn-Pfv1b-3SgSbj
   yè: tɛ̀mbì-ŷ
   come find.Pfv-1SgSbj
   ‘I came and found that fire had burned the house (=the house had burned down).’

If the situation found is an event in progress or about to happen, a durative complement with -mɔ̀ ‘while’ is used (648), as with ‘see’ in (645a-b) above.

(648) [[bɛ̀rī bù: gáɽ-á-mɔ̀] yè: tɛ̀mbì-Ø]
   [[goat 3PISbj be.put.in.Stat-while] come find.Pfv-3SgSbj
   ‘He came and found that goats were inside.’ (2004.02.02)

17.3 Verbal noun (and other nominal) complements

17.3.1 Structure of verbal noun phrase

Subjects, objects, and other preverbal phrases are unchanged from main clauses to verbal-noun clauses. There is no compounding (or incorporation) of object nouns. Accusative marking is obligatory for 1Sg objects (649b). For other objects, whose accusative marking is subject to phonetic attrition, it is optional or in some cases just not clearly audible. A subject NP may also be present, in its usual form (649d).

(649) a. [yì: sùỵ-ndé] èsì = ǹdó-Ø
   [child hit-VblN] good=it.is.not-3SgSbj
   ‘Hitting a child is not good.’

   b. [hjì-ʃ sùỵ-ndé] èsì = ǹdó-Ø
   [1Sg-Acc hit-VblN] good=it.is.not-3SgSbj
   ‘Hitting me isn’t good.’

   c. [nàmá kúwó-ndé] jɔrɔ-ù-Ø
   [meat eat.meat-VblN] want-Ipfv-1SgSbj
   ‘I want to eat some meat.’
17.3.2 ‘Prevent’ (késé-, gǎ:ndí-)

The verb késé- ‘cut’ can be used in the sense ‘prevent (motion), block’, and more abstractly ‘prevent (an activity)’. The complement is expressed as a verbal-noun clause, with the agent appearing as a postnominal possessor. The possessed NP as a whole is optionally followed by definite inanimate singular Ꙙgu (L-toned form).

(650) a. [[wàgàrî =yè ǹné-ndé] kɔ́: L gà: L gù]
   [[W=Loc go-VblN] 1SgPoss.InanSg 1 Def.InanSg]
   rain(n) cut. Pf v-3SgSbj
   ‘The rain prevented me from going (= blocked my going) to Wakara (village).’

   b. [yù: -wórì kɔ́: L gà: L gù]
      [[millet-farming(n) 1SgPoss.InanSg 1 Def.InanSg]
      sun InanSg-Acc cut. Pf v-3SgSbj
   ‘My farming millet, the (hot) sun blocked it (= farming).’

Another ‘prevent’ verb is gǎ:ndí-, which also takes verbal-noun complements ending in a possessor (651).

(651) á:mádù [niy’è-ndé nɔ] bù: gǎ:nd-à
   A [sleep-VblN 3SgPoss] 3PlSbj prevent. Pf v-3PlSbj
   ‘They prevented Amadou from sleeping.’

17.3.3 ‘Dare’ (dá:rí-)

This verb takes verbal noun complements. The subjects of the two clauses are coindexed. There is no possessor following the verbal noun.

(652) a. sìgé-ndé dá:rá-ŋ-è:
   go.down-VblN dare-IpfvNeg-3PlSbj
   ‘They don’t dare go down.’
b. \([\text{pà:n}\,\text{gò}:\,\text{bày}]\) \(\text{béřé-ndiyé-ndé}\) \(\text{dà:rá-m\,\,w}\) \(\text{mà}\)
[elephant] [Dat] approach-Inch-VblN [dare] [Pfvv-2SgSbj] [Q]

‘Do you-Sg dare to get close to the elephant(s)?’

c. \([\text{bà}\,\,\text{răng}\,\,\text{tì}\,\,\text{nd}]\) \(\text{dà:rsō-∅}\)
[1SgDat] [speak-VblN] [dare] [Pfv-2SgSbj]

‘He/She dared to speak to me.’ (\(\text{bà\,răng}\))

17.3.4 ‘Consent’ (\(\text{àwá}\))

The verb \(\text{àwá}\) ‘accept, receive, take (sth given)’ is also used in the sense ‘consent, give one’s agreement’ with a clausal complement. In (653), the complement’s subject is coindexed with that of the higher clause, and there is no possessor of the verbal noun.

\[(653)\] \(\text{ámbéři}\) \(\text{yé-ndé}\) \(\text{àwá}\) \(\text{jé-∅}\)
[chief] [come-VblN] [accept] [RecPrf-3SgSbj]

‘The chief has agreed to come.’

In (654), the two subjects are not coindexed. In one construction, the lower-clause is a verbal noun with following possessor (654a). In another, which has the form of a headless relative (covert head roughly ‘the fact’), the complement takes imperfective participial -\(\text{mì}\) on the verb (654b).

\[(654)\] a. \([\text{i}:\text{l}\,\text{bà}:]\)
[1PlPoss] [1father]

\([\text{sikasō}\,\text{i}:\,\text{íné-ndé}\,\text{[i}:\text{l}\,\text{gò}]]\)
[Sikasso] [1PlSbj] [go-VblN] [1Pl Poss.InanSg]

\(\text{àwá}\) \(\text{jé-∅}\)
[accept] [RecPrf-3SgSbj]

‘Our father has consented to our going to Sikasso.’

b. \([\text{yà:jì}:\,\text{i}:\,\text{kå\,\,rì-ri}i]\)
[marriage] [1PlSbj] [do-Ppl.Ipff] [accept-PfvNeg-3SgSbj]

‘He did not agree that we do the marriage.’

17.3.5 ‘Cease’ (\(\text{dågò̂}\))

\(\text{dågò̂}\) ‘leave, abandon’ can also mean ‘cease, stop (an activity)’. In many contexts it implies an abrupt or definitive abandonment of the activity, as opposed to ‘finish, complete’. It takes a verbal-noun complement, without a possessor (655a). In the perfective positive, the preferred inflection is perfective-1a -\(\text{tì}\) rather than perfective-2 -\(\text{sō-}\). This construction gets some competition from a monoclausal transitive construction with the cognate nominal of a verb, like ‘song’ from ‘sing’ (655b).

\[(655)\] a. \([\text{nàmà}\,\text{kúwó-ndé}\]
[meat] [eat-VblN] [leave-Pfv1b-3SgSbj]

‘He/She has ceased to eat meat.’
17.3.6 ‘Want’ (jɔ̀rɔ́)

For the different ‘want’ and ‘like, love’ verbs and quasi-verbs, see §11.2.4.3 above. jɔ̀rɔ́- ‘want’ takes verbal-noun as well as NP complements. In (656), the lower-clause subject is coindexed with the higher-clause subject.

(656) a. ñ̀nɛ́-ndɛ́ jɔ̀rɔ́-m-∅
go-VblN want-lpfv-1SgSbj
‘I want to go.’

b. [ñ̀nɛ́-ŋ́ yí:] jɔ̀rɔ́-ŋ-ɔ̀-y.: [3Sg-Acc see-VblN want-lpfvNeg-1PlSbj]
‘We don’t even want to see him/her.’

In (657), the two clauses have different subjects, so the lower-clause subject is expressed as the possessor of a verbal noun.

(657) [ù ñ̃l. bâ:] [ŋ̀gá yé:-ndɛ́ [ú ñ̃l. gɔ́3]]
[2SgPoss ñ̃l.father] [here come-VblN [2Sg ñ̃l.Poss.InanSg]]
jɔ̀rɔ́-ŋ́-∅:
want-lpfvNeg-3SgSbj
‘Your-Sg father doesn’t want you-Sg to come here.’

17.3.7 ‘Forget’ (ìrɛ́)

A partial paradigm of this verb is (658). It is transitive as a simple verb, taking an accusative object. The perfective form in common use is the perfective-1a.

(658) ‘Forget’

<table>
<thead>
<tr>
<th>Form</th>
<th>ìrɛ́-ùrɛ́-</th>
</tr>
</thead>
<tbody>
<tr>
<td>perfective-1a</td>
<td>ìrɛ́-ùrɛ́-</td>
</tr>
<tr>
<td>perfective</td>
<td>ìrɛ́-ùrɛ́-</td>
</tr>
<tr>
<td>negative</td>
<td>ìrɛ́-ùrɛ́-</td>
</tr>
<tr>
<td>imperfective</td>
<td>ì-ùrɛ́-ή</td>
</tr>
<tr>
<td>(3Sg) imperfective negative</td>
<td>ì-ùrɛ́-ή</td>
</tr>
<tr>
<td>imperative</td>
<td>ìrɛ́</td>
</tr>
<tr>
<td>prohibitive</td>
<td>ìrɛ́-ndá</td>
</tr>
</tbody>
</table>

In the perfective positive, this verb is commonly chained with a following simple perfective bèšì- ‘buried’ (659a,c). The verb bèšì- elsewhere ranges from ‘bury’ to ‘set down (for storage)’, implying that the item in question will be not be removed from its storage place any time soon.
The ‘forget’ verb takes verbal noun complements when the lower-clause subject is coindexed to the higher-clause subject and the complement denotes an action that was intended to be carried out (659a,c). ‘Buried’ is omitted in the prohibitive example (659b).

(659) a. \[
[bìdɔ̀ⁿ̩ \ gù \ tèmbí-rí-ndé]
\[
[jug_{\text{Def.AnSg}}] \ \text{become.wet-Tr.VblN}
\]
\[
[iré \ bèsi-\check{y}]
\]
\[\text{forget} \ \text{bury}.\text{Pfv-1SgSbj}
\]
‘I forgot to moisten the jug.’

b. \[
[sá:gù \ [ú_{\text{HL}} \ gò̂3]} \ jé-ndé \ irí-ndá
\]
\[
[\text{[sack] [2Sg \text{ HL} \text{Poss.InanSg}]] \ \text{bring-VblN} \ \text{forget-Proh}]
\]
‘Don’t forget to bring your sack.’

c. \[\text{yé-ndé} \ \text{iré} \ \text{bèsi-Ø}
\]
\[\text{come-VblN} \ \text{forget} \ \text{bury}.\text{Pfv-3SgSbj}
\]
‘He/She forgot to come.’

When the complement denotes a fact that the agent has forgotten, as opposed to an intended action that has slipped his or her mind, ‘forget’ takes different types of complement. In one construction, the complement is a headless relative clause ending in inanimate singular definite gù, which forces tone-dropping on the verbal participle (660a). In another, the complement-clause verb has an AN suffix but no pronominal-subject conjugation, as in relatives, but ends in a postnominal possessor expressing the subject (660b-c). This pattern is possible even when the subject of the complement clause is coindexed with the possessor (660d). For similar factive complements see §17.2.2.1. A third construction (660e) is translatable ‘forget whether P’ rather than ‘forget that P’, and the complement contains polar interrogative ma (§13.2.1).

(660) a. \[
[înè \ sèllè-\check{r}I \ gù]
\]
\[
[3\text{SgSbj} \ \text{be.healthy-Ppl.PfvNeg} \ \text{Def.InanSg}]
\]
\[
[iré \ bèsi-\check{y}]
\]
\[\text{forget} \ \text{bury}.\text{Pfv-1SgSbj}
\]
‘I forgot that he/she was sick.’ (lit. “was not healthy”)

b. \[
[sèllè-\check{r}I \ nò̂3] \ iré \ bèsi-\check{y}
\]
\[
[\text{be.healthy-PfvNeg} \ 3\text{SgPoss}] \ \text{forget} \ \text{bury}.\text{Pfv-1SgSbj}
\]
\[= (a)]

c. \[
[bù: \ sèllà-ndá \ [bù: \ gò̂3]]
\]
\[
[\text{[3PlSbj} \ \text{be.healthy-PfvNeg.3PlSbj} \ [3\text{Pl} \ \text{I Poss.InanSg}]]
\]
\[
[iré \ bèsi-\check{y}]
\]
\[\text{forget} \ \text{bury}.\text{Pfv-1SgSbj}
\]
‘I forgot that they were sick.’

d. \[
[sèllè-\check{r}I \ kò̂3] \ iré \ bèsi-\check{y}
\]
\[
[\text{be.healthy-PfvNeg} \ 1\text{SgPoss.InanSg}] \ \text{forget} \ \text{bury}.\text{Pfv-1SgSbj}
\]
‘I forgot that I am sick.’
e. [ú  yë:-só-w  mà:]  ìré  bèsi-ỳ
   [2SgSbj  come-Pfv2-2SgSbj  Q]  forget  bury.Pfv-1SgSbj
   ‘I forget whether/that you-Sg came.’
   (mà:: pronounced [mááà] with dying-quail effect, §3.8.3)

‘Remember’ is illé-ří- (an irregular reversive of ‘forget’), or a phonologically unrelated verb nàngíří-. The more general verb màndí- ‘think’ can also be used in the sense ‘remember’ (cf. English think of). Yet another expression for ‘remember’ is ìré bělí-, where ìré- ‘forget’ is chained to what appears to be an irregular reversive of bèsi- ‘bury’.

17.3.8 Obligational (wájíbi ‘duty’)

The noun wájíbi ‘duty, obligation, ultimately from Arabic and familiar in languages of the zone, indicates that the agent in question has a duty to carry out the activity. The free translation is of the type ‘X must VP’. In Nanga, the complement is expressed by a verbal-noun clause, the agent appearing as a possessor. The NP headed by the verbal noun can be taken as the subject (or topic) of wájíbi = ŋ̀ it is a duty (661a). Alternatively, wájíbi can take the purposive postposition to form an adverbial phrase within a larger indicative clause. This construction is useful when the event in question has already transpired (661b).

(661) a. [séwá:rì=yè  ŋné-ndé  kɔ:]  wájíbi = ŋ̀
   [S=Loc  go-VblN  1SgPoss.InanSg]  duty=it.is
   ‘I must go to Sevare.’ (“My going to Sevare is a duty.”)

b. [ò:  L  gò]  [wájíbi  dèr”i]  ŋné-ya
   [field  Loc]  [duty  Purp]  go.Pfv-1SgSbj
   ‘I had to go to the field.’ (“I went to the field [because of a duty].”)

17.3.9 ‘Fear, be afraid to’ (ú:-yí-)

When the complement denotes a hypothetical act whose subject is coindexed with the subject of ‘fear’ (‘be afraid to …’), the complement is based on a verbal noun (662a-b), or on some other nominal denoting the action, such as the cognate nominal yégí in (662c), which also has an overt possessor. For the forms of the ‘fear’ verb see §11.2.4.4.

(662) a. [ŋgá  yé:-ndé]  ú:-y-èrè-Ø
   [here  come-VblN]  fear-MP-Pfv1a-3SgSbj
   ‘He/She was afraid to come here.’

b. [ká  ŋné-ndé]  ú:-posição
   [there  go-VblN]  RdP-fear.Stat-1SgSbj
   ‘I am afraid to go there.’

c. [yì:  lìyégí]  ú:-posición
   [child  fall(n)]  RdP-fear.Stat-1SgSbj
   ‘I am afraid of the child’s falling (=that the child will fall).’
When the complement denotes any other type of eventuality, it takes the form of an imperfective relative complement. A pronominal-subject (if any) is expressed as an independent pronoun.

(663) a. [ǹjì-ŋ́ bù: súyò-mi] ú-rùwà-ý
[1Sg-Acc 3PISbj hit-Ppl.Ipfv] Rdp-fear.Stat-1SgSbj
‘I’m afraid he/she will hit me.’

b. [ǹñe-ŋ́ ñ:] súyò-mi] ú-rùwà-Ø
[3Sg-Acc 1SgSbj hit-Ppl.Ipfv] Rdp-fear.Stat-3SgSbj
‘He,’s afraid I will hit him看望.’

c. [nù: ǹjí yí-mi] ú-rùwà-y
[person 1SgAcc see-Ppl.Ipfv] Rdp-fear.Stat-1SgSbj
‘I am afraid that the person will see me.’

d. [ǹñe yégé-mi] ú-rùwà-y
[3SgSbj fall-Ppl.Ipfv] Rdp-fear.Stat-1SgSbj
‘I am afraid that he/she will fall.’

17.3.10 ‘Begin’ (tɔrɔ-

The ‘begin’ verb is tɔrɔ-. In (664) it is paired with its antonym dimé- ‘finish’ (which is covered in the following section just below).

(664) wàgàtì¹ ṣè“ànà  tɔrɔ-m.“
.time¹ where?  begin-Pfv2-3SgSbj
wàgàtì¹ ṣè“ànà  dimé-m.“
.time¹ where?  finish-Pfv2-3SgSbj
‘What time do you-Sg begin, (and) what time do you end?’

An overt complement clause sometimes ends in a bare verb stem that is directly chained with the ‘begin’ verb (665).

(665) [nà: kɔ:] tɔrɔ-sò-Ø
[meal eat.meal] begin-Pfv2-3SgSbj
‘He/She began to eat (the meal).’

However, the bulk of my examples involve a verbal-noun or other nominal complement. If there is a cognate nominal associated with a verb, the cognate nominal by itself is sufficient as complement of ‘begin’ (666a). A compound including an incorporated object can also serve as the complement (666b); see §5.1.3 for the {L}-{HL} tone combination. The verbal noun in -ndé can be used with any verb (666c-e).

(666) a. kòyò  tɔrɔ-tì-Ø
weeping(n)  begin-Pfv1b-3SgSbj
‘He/She began to weep.’ (cognate nominal, cf. kòyò kòyò- ‘weep’)
b. ŋé né̃ lé̌ sém é tør-só-∅
    3SgSbj sheep lè̌ llaughter Nom begin-Pfv2-3SgSbj
    ‘He/She began to slaughter the sheep-Sg/Pl’, cf. (e) below

c. [nàː kó:-ndé] tør-ti-∅
    [meal eat-VblN] begin-Pfv1b-3SgSbj
    ‘He/She began to eat (the meal).’

d. [núŋá núŋá-ndé] tør-ti-∅
    [song sing-VblN] begin-Pfv1b-3SgSbj
    ‘He/She began to sing (a song).’

e. [ńńep é̃rg é̃me-ndé] tør-só-∅
    [3SgSbj sheep slaughter-VblN] begin-Pfv2-3SgSbj
    ‘He/She began to slaughter the sheep-Sg/Pl’, cf. (b) above

17.3.11 ‘Finish’ (dimé-)

The complements are parallel to those of ‘begin’ (just above). Verbal-noun complements are exemplified in (667).

(667) a. [nàː kó:-ndé] dimé-ŋò:-∅
    [meal eat-VblN] finish-IpfvNeg-3SgSbj
    ‘He/She doesn’t stop (= keeps on) eating.’

b. [būː wará-ndé] dimé-èr-à
    [3PlSbj do.farming-VblN] finish-Pfv1a-3PlSbj
    ‘They have finished farming (=weeding).’

c. [tɔŋɔ tɔŋ-ndé] dimé-ŋó-ŋý
    [writing(n) write-VblN] finish-PfvNeg-1SgSbj
    ‘I haven’t (yet) finished writing.’

It is also possible to express similar concepts using a possessed verbal noun or other nominal that functions as the subject of ‘finish’.

(668) [wɔrí [būː 1gɔ] dimé-èr-∅
    [farmig(n)] [3Pl 1Poss.InanSg] finish-Pfv1a-3SgSbj
    ‘Their farming work is finished.’ (‘They have finished farming.’)

Recent perfect jè- (§10.2.1.5) is sometimes used in senses approaching ‘finish VP-ing’, as in kó:jè-y-, which can mean ‘we have (already) eaten’ or ‘we have (recently) finished eating’.

gò-ndó ‘cause to go out, take out’ appears to be used in the sense ‘complete’ (building a house) as a directly chained verb at the end of (718) in the sample text.
17.4  Locative verbal noun or other nominal complement

17.4.1  ‘Help’ (bă:rí-)

This verb normally takes nominal complements with final locative postposition gá ‘in’ or variant (§8.2.3), added to a verbal noun (which allows complements), or to some other nominal. This use of the locative might be compared with the pseudo-locative in purposive clauses §17.6.3. Regular verbal-noun examples are in (669).

(669) a.  [éw-ye-ndé  gá]  nji-ŋ bă:rí-só-∅
   [sit-MP-VblN  Loc]  1Sg-Acc  help-Pfv2-3SgSbj
   ‘He/She helped me to sit down.’

   b.  á:madù [ú-ŋ jón-ndé  gá]  nji-ŋ bă:rí-só-∅
   Amadou  [2Sg-Acc  treat-VblN  Loc]  1Sg-Acc  help-Pfv2-3SgSbj
   ‘Amadou helped me to treat you-Sg (medically’)

   c.  [nàŋá  págí-ndé  gá]  nji-ŋ bă:rí-só-∅
   [cow  tie-VblN  Loc]  1Sg-Acc  help-Pfv2-3SgSbj
   ‘He/She helped me to tie up a/the cow.’

In (670), the complement is a locative PP containing a nominal compound with incorporated object. For the compound pattern, see §5.1.3.

(670) a.  [lè:tèrè L-HL tông  ŋɔ]  ú-ŋ bă:rá-m-∅
   [letter L-HL write.Nom  Loc]  2Sg-Acc  help-Impr-1SgSbj
   ‘I will help you-Sg to write a/the letter.’

   b.  [pèrgè L-HL sèmè  ŋà]  nji-ŋ bă:rá
   [sheep L-HL slaughter.Nom  Loc]  1Sg-Acc  help
   ‘Help-2Sg me to slaughter a/the sheep!’

   c.  [nàŋá L-HL págà  gá]  nji-ŋ bă:rí-só-∅
   [cow L-HL tie.Nom  Loc]  1Sg-Acc  help-Pfv2-3SgSbj
   ‘He/She helped me to tie up a/the cow.’

A noun wôrî, elsewhere used mainly as cognate nominal for wàrá- ‘do farming’, is the complement in (671).

(671)  á:madù [wór  gó]  ú-ŋ bă:x-só-∅
   Amadou  [farming(n)  Loc]  2Sg-Acc  help-Pfv2-3SgSbj
   ‘Amadou helped you-Sg do the farming.’
17.5 Capability and possibility

17.5.1 ‘Be able to, can’ (*bèrè-*)

The verb *bèrè-* ‘get, obtain’ readily combines with a preceding chained VP ending with a verb in bare-stem form (§15.1). The sense is ‘can, be able to’. The two verbs have the same subject, which (if overt) appears to the left of the nonfinal chained VP. This is a direct chain in the sense of §15.1.

(672) a. *[bìrá  bìré]*  bèrè-ŋà-∅
    [work(n)  work(v)]  can-lpfvNeg-3SgSbj
    ‘He/She cannot work.’

b. *ǹdé  bèrè-mʷ*  mà
   go.up  can-lpfv-2SgSbj  Q
   ‘Can you-Sg go up?’

c. *[é:jí  yè:j]*  bèrè-ŋà-yⁿ
   [tomorrow  come]  can-lpfvNeg-1SgSbj
   ‘I can’t come tomorrow.’

d. *[kùrⁿ  írí-yé-mí]*  bèrè-mʷ  mà
   [stone  rise-MP-Caus]  can-lpfv.2SgSbj  Q
   ‘Can you-Sg lift the stone?’

e. *[ǹjí-ŋrí  bá:r]*  bèrè-mʷ  mà
   [1Sg-Acc  help]  can-lpfv.2SgSbj  Q
   ‘Can you-Sg help me?’ (*bá:r*)

A relative-clause example is (673), confirming that a subject pronoun in a nonsubject relative has its usual position just before the final verb-participle, as expected in a direct chain.

(673) *ùsaⁿ  yè:  ñ  bérè-mì*
   day¹  come  2SgSbj  can-Ppl.lpfv
   ‘the day you-Sg can come’

17.5.2 ‘Be possible to VP’

17.5.2.1 -yé- ‘be possible’

This auxiliary verb is suffixed (or cliticized) to the main verb in (impersonal) 3Sg subject forms. It is usually imperfective, and is translated as ‘be possible’. The negation ‘be impossible’ is very common. Perfective forms are elicitable (with difficulty). The perfective negative is interesting in that it controls tone-dropping on the main verb as well as on -yé- (674d). This is possible evidence for suffixal rather than chained-verb status for -yé-. However, a similar tone-dropping pattern is also found in the experiential perfect negative (§10.2.3.2), although in some other respects the experiential perfect morpheme patterns as a separate auxiliary verb.
(674) a.  
\[ \text{dəg-}{-yɛ-ŋɔ-} \]
\[ \text{leave-}{-\text{be.possible-}lpfvNeg-3SgSbj} \]
‘It is impossible to leave (it).’

b.  
\[ [\text{tàgá } yàŋà] [\text{tùmá } ná] \]
\[ \text{ndé}{-yɛ-ŋɔ-} \]
\[ \text{[shoe Inst] [tree Loc] go.up-}{-\text{be.possible-}lpfvNeg-3SgSbj} \]
‘It’s impossible to go up a tree with (=wearing) shoes.’ (2004.02.01),

c.  
\[ \text{ndé-yɛ-} \]
\[ \text{go.up-}{-\text{be.possible-}lpfv.3Sg} \]
‘It’s possible to go up.’

d.  
\[ \text{ndé-yɛ-rí-} \]
\[ \text{go.up-be.possible-PfvNeg-3SgSbj} \]
‘It was/become impossible to go up.’

e.  
\[ \text{kúr}{bùyó}{-yɛ-ŋɔ-} \]
\[ \text{stone break.rock.be.possible-}{-\text{lpfvNeg-3SgSbj} \]
‘The rock is impossible (=too hard) to break.’

The historical relationship between inflectable -\text{yɛ-} ‘be possible’ and the adjective-like passive -\text{yɛ} (§9.3.2) is unclear. They are quite distinct grammatically.

17.5.2.2 -\text{só-} ‘be possible to VP’

Another minor ‘be possible’ construction is attested (675). The stem-final vowel shifts to long \( i \): before suffixed -\text{só-}\. No other inflected forms, and no negative counterparts, were accepted. Only a handful of verbs allow this formation, which is not widely used. The suffix resembles \text{só-} ‘have’ and ordinary AN suffixes -\text{só-} (perfective-2) and -\text{só-} (progressive). It is possible that all four elements are etymologically related. It is also possible that the long \( i \): reflects a contraction of the stem-final short vowel with -\text{yɛ-} (preceding section).

(675)  
a.  
\[ \text{ndí}{-só-} \]
\[ \text{go.up-be.possible-3SgSbj} \]
‘It is/was possible to go up (climb).’ (\text{ndé-})

b.  
\[ \text{sígtí}{-só-} \]
\[ \text{go.down-be.possible-3SgSbj} \]
‘It is/was possible to go down.’

c.  
\[ \text{í-ýí}{-só-} \]
\[ \text{stand-MP-be.possible-3SgSbj} \]
‘It is/was possible to stand.’
17.6 Purposive, causal, and locative clauses

17.6.1 Purposive clauses with postposition ɗɛ̀r’ì ‘for’

17.6.1.1 Positive purposive clause with imperfective -m̀ and ɗɛ̀r’ì

The basic purposive-clause construction has an unconjugated imperfective form, ending in invariant -m̀. This is consistent with an imperfective positive relative clause with participle -m̀ ~ -m (§14.1.7.2), functioning as complement of the postposition ɗɛ̀r’ì ‘for’. The subjects of the two clauses may be disjoint or coindexed. The clause is often headless, but it may alternatively be headed by L-toned ɗàyⁿ from noun ɗàyⁿ ‘limit, boundary’ or ‘manner’, as in (678b) below, cf. also (681a-b) farther below. A literal translation of the construction is ‘[(a) limit/goal that …]’, cf. English to the end that …

In the frequent case where the two clauses have the same subject, the subject is not overtly expressed in the purposive clause. Therefore the purposive clause [ńdô pó: -m̀ ɗɛ̀r’ì] in order to replaster the house [ɓàrkô: gò ńdô -m̀ ɗɛ̀r’ì] in (676) remains unchanged when the pronominal category of the subject (expressed on ‘go up’ at the end) is changed to 3Sg, 1Pl, or whatever.

(676) [ńdô pó:: -m̀] ɗɛ̀r’ì [ńdô pó:: -m̀] ɗɛ̀r’ì

[barńkô: gò] ńdê-m-è

They will go up (and stand) on the barrel in order to replaster the house (= ceiling).

Another example of this construction is (677).

(677) [ńmbrì bay] dàmá dàmá-m-ìn ɗɛ̀r’ì

[chief Dat] speaking(n) speak-Ppl.Ipfv Purp

yè-ỳ: come.Pfv-1PlSbj

‘We have come in order to speak with the chief.’

When the main clause and the purposive clause have distinct subjects, if the subject of the purposive clause is pronominal, it is expressed as a proclitic, as in nonsubject relatives (678a-b).

(678) a. [ńn: bū: kó:: -m̀] ɗɛ̀r’ì

[meal 3PlSbj eat-Ppl.Ipfv Purp]

[barńmà gú] dünj-ý’

[pot Def.InanSg] put.down.Pfv-1SgSbj

‘I put the pot down, so that they (could) eat.’

b. [ńändé = Ø ɗàyⁿ] i: ĕní-m-ìn ɗɛ̀r’ì

[Anda=Loc manner= 1PlSbj go-Ppl.Ipfv Purp]

[lègesò: [á HL g5]] ĕ-ŋ ńdí-só-Ø

[bicycle 3RefSg HL Poss.InanSg] 1Pl-Acc give-Pfv2-3SgSbj

‘He gave us his bicycle, so that we (could) go to Anda.’
17.6.1.2 Negative clause with \(dér\)\(^{\prime}\) and prohibitive \(-rā\)

Purposive \(dér\)\(^{\prime}\) may follow a prohibitive (i.e. negative imperative) clause to produce a negative purposive clause. The verb has \(-rā\) suffix or variant, which (in this construction) is used for plural as well as singular addressee. Prohibitive plural \(-rā-ndì\) does not occur in such clauses.

In (679a-b), the subjects of the two clauses are distinct. In (679b), note suffix \(-rā\) even with (animate) plural subject.

(679)  a. \(dè\wá \ kè\-ndè\-mi\-y\-\) ~
roof  fix-Lpfv-1PISbj
[[\(gì^\prime\)\- yè\-gù\-rā\)] \(dè\)\(^{\prime}\)\]
[bam  fall-Proh  Purp]
‘We’ll fix the roof, so the roof beam(s) won’t fall.’

b. \([\text{ibling-mouth}^L\  \ gù\] \(kè\-sè\  dà\-gdà\-y\-\)\~,
[house-mouth\  \ Def.InanSg]  cut  leave.Pfv-1PISbj,
[[\(pè\-rê\)\- \ bù\-] \(mà\-gò\)\-rò\- \ gù\]  [[\(sheep\]^L\  \ Def.AnPl]  [[\(mango\]^L\  \ Def.InanSg]
\(kì\-\-rā\)] \(dè\)\(^{\prime}\)\]
eat-Proh  Purp]
‘We (have) blocked the doorway, so that the sheep-Pl will not eat the mango(es).’

A same-subject example is (680).

(680)  \([\text{ning}\- \ à\-mì\-y\-\) ]  [[\(ò\-sù\  \ gò\) \ tát\-rā\] \(dè\)\(^{\prime}\)\]
[meal  take-Lpfv-1PISbj]  [[\(road\  \ Loc\)  die-Proh  Purp]
‘We’ll take food (along), so as not to die (= starve) on the way.’

17.6.1.3 Negative clause with imperfective negative \(-ŋɔ\) and \(dér\)\(^{\prime}\)

Another negative purposive clause type has unconjugated imperfective negative suffix \(-ŋɔ\) on the verb. The form is consistent with a relative clause, headed by L-toned \(dà\)\(^{\prime}\)\-L ‘manner’ or ‘limit’, cf. (678b) above. If the subject is pronominal, it is expressed as a preverbal pronoun. This construction is an alternative to the type with prohibitive \(-rā\), discussed just above. The subjects of the two clauses may be disjoint (681a) or coindexed (681b). Literal translations might be “in such a way (or: to such an extent) that you-Sg do not sleep,” etc.

(681)  a. [[\(gir\-\-nth\-m’\-m\-]\ \(dà\)\(^{\prime}\)\-L\- \ ù \(nì\)\-n’\-\-ŋ\-\)] \(dè\)\(^{\prime}\)\]
[[sleeping(n)  manner\ 2SgSbj  sleep-PPl.LpfvNeg  Purp]
jīn\-\-n\-\-noise  make.noise-Lpfv-1SgSbj
‘I will make noise, so that you-Sg do not sleep.’
b. [chaise [gà: [ná:-m]-∅, [chair Loc] spend.night-Ipfv-1SgSbj
[[girè-ný'ë dày-aL i:-n ̀ ný'ë-gà:] dèr-iP] [[sleeping(m) manner 1SgSbj sleep-Ppl.IpfvNeg Purp]
‘I will spend the night in a chair, so as not to sleep.’

17.6.2 Purposive-like imperfective participial clause (-mì) without dèr-iP

A clause with unconjugated imperfective -mì, without postposition dèr-iP, also occurs in contexts allowing a purposive construal. However, in cases like (682) it is difficult to tease apart the specifically purposive element (‘sit in order to eat’) from the mere temporal simultaneity of ‘be sitting’ (stative) and ‘eat’, in the absence of an explicit purposive morpheme.

‘They are sitting in order to eat.’

For imperfective relative complements of ‘fear’, see §17.3.9.

17.6.3 Purposive clause with motion verb and pseudo-locative gó

In the purposive clause-type favored with main-clause motion verbs (especially ‘go’ and ‘come’), assuming a positive purposive clause and coindexation of the subjects (‘X went in order to VP’), the verb of the purposive clause occurs in its bare stem, but is tone-dropped, and is followed by gó. This construction has no negative counterpart.

(683) a. [[á [HL bâ:] jè: gó] ìnè-∅ [3ReflSgPoss father bringL Purp] go.Pfv-3SgSbj
‘She went to in order to bring her father.’ (<jè:)

b. [gò: [glyèL gó] ìnè-yì [fire killL Purp] go.Pfv-1SgSbj
‘I went in order to put out the fire.’

c. [nì: [nà:-L gó] y-ò: [water drinkL Purp] come.Pfv-3PlSbj
‘They came in order to drink the water.’

d. á [kú [kò:-mìL gó] ìnè-sò-∅ wà 3LogoSgSbj [InanSg sew-CausL Purp] go-Prog-3SgSbj Quot
‘(She said:) I am going in order to have that sewn.’ (2004.02.03)

Here is a hypothesis, far from certain, about the origin of this construction. Consider a sequence meaning *‘in/at/on the drinking of water’ in the case of (683c). This would have been something like *nì: [nà:-X kú gò/gà, with nì: ‘water’ as possessor, some nominal based on nà: ‘drink’ in L-toned form due to the possessor-controlled {L} and also due to the
following determiner, then an inanimate singular definite marker and an allomorph of the locative suffix. Elsewhere, inanimate singular definite kú ~ gú ~ w combines with the otherwise highly variable locative postposition as invariant gá (§8.2.3.2), so this scenario would require a divergent contraction to invariant gó in this case. However, both gá and gó occur as simple (indefinite) locative allomorphs. Or perhaps an archaic purposive postposition, distinct from the locative, occurred in the present construction. Possible purposive postposition cognates include Ben Tey gin and Jamsay jè, which are offshoots of a ‘say’ verb. In any event, a definite-locative contraction analysis would explain why gó is invariant in this construction, unaffected by the phonological form of the nominalized verb, whereas the simple locative has a range of variants, reflecting the vocalism and nasality of the noun (§8.2.3.1).

The possessor-possessum portion of this reconstruction receives unexpected support from a mysterious linking morpheme mɔ̀, not otherwise attested, found between the object NP and the verb in one textual passage (684). It may be related to genitive linkers in some other Dogon languages, the most productive of which are Tommo So mɔ̀ and Jamsay mà.

(684) [fìné wá] [gà:ry] yèy] mò kò:-mù gó]
[yè:-rì:-Ø mà wá]
Come-Pfv.Neg-3SgSbj Q Quot
’(She asked:) Hey you-Sg, did you-Sg not come in order to have that houseware there sewn up?’ (2004.02.03)

This diachronic speculation has some obstacles to overcome, but it is not entirely fanciful.

This apparent use of the locative postposition might be compared with its occurrence in complements of ‘help’ (§17.4.1).

17.6.4 Causal (‘because’) clause (ságù)

ságù comes at the end of the ‘because’ clause, which has the form of a normal main clause.

(685) ósì èsì = hò:-Ø ságù,
road good=StatNeg-3SgSbj because,
[lìsè gó] fìné bérè:-ń-y:-ı:
[village Loc] go can-LpfvNeg-1PlSbj
’We can’t go to the village because the road isn’t good.’

Nanga ságù might reflect a cross between some combination of the following ingredients. First, ‘because of X’ adverbials and ‘because …’ clauses in Dogon and other Malian languages contain forms like sábù and sábà: bù, going back to Arabic sabab- ‘reason, cause’. Nanga has a noun sábá: bì ‘reason’, and clause-initial sábù ‘because’ is common in neighboring languages like Jamsay and Bankan as well as Fulfulde. Second, there is a form *sàgù (e.g. Ben Tey sàw, Jamsay and Toro So sàgù) that occur in formulaic expressions like ‘(I put X) in God’s trust and in your trust’. Third, Jamsay and Togo Kan sógò, whose relationship to the two earlier sets is unclear, means ‘because of’ or ‘for the sake of’ in some contexts. So one possibility is that Nanga ságù is a hybrid of some sort.
17.6.5 ‘Because of (NP)’ (*dér*i)

The purposive postposition *dér*i (§8.3) usually means ‘for X’, but in some contexts it can be glossed ‘because of X’, as in (686). The difference is prospective ‘for’ versus retrospective ‘because of’.

(686) [ńdó  gó] [bòndí  dér*i] nù-yⁿ.
    [house  Loc] [rain(n)  Purp]  go.in.Pfv-1PlSbj

‘We went into the house because of the rain.’
18 Anaphora

The most important anaphoric morphemes are singular á and plural â. They can be third-person reflexive (generally coindexed to a clauosome subject), or logophoric (coindexed to the author of a quoted utterance or thought). Their functions are covered in this chapter, along with reciprocals and certain emphatic pronoun.

18.1 Reflexive

18.1.1 Third person reflexive object (á-ŋ́, plural â-ŋ̀)

If the subject is first or second person, the regular object form of the pronominal is used for a coindexed direct object, with no explicit reflexive marking (687). As always, the accusative suffix -ŋ́ may or may not be audible, except in the distinctive 1Sg accusative form (contrast independent 1Sg pronoun ě

(687) a. ŋí-ŋ́ készé-só-ý
  1Sg-Acc cut-Pfv2-1SgSbj
  ‘I cut myself.’

  b. ť-ŋ́ készé-só-ý: ‘We cut ourselves.’
  c. ť-ŋ́ készé-só-w ‘You-Sg cut yourself.’
  d. ť-ŋ́ készé-só-w: ‘You-Pl cut yourselves.’

If the subject is third person (pronoun or NP), the coindexed direct object is the accusative form of 3Reflexive singular á or 3Reflexive plural â, depending on grammatical number (688a-c). In (688d), the 3Reflexive pronoun could alternatively be either reflexive or logophoric, or both simultaneously, since both coindexation relationships are present. In nonlogophoric contexts, I gloss á and â: as “3ReflSg” and “3ReflPl,” respectively, in interlinear.

(688) a. á-ŋ́ készé-só-Ø
  3ReflSg-Acc cut-Pfv2-3SgSbj
  ‘He cut himself.’ or ‘She cut herself.’

  b. á-ŋ́ készé-s-é
  3ReflPl-Acc cut-Pfv2-3PlSbj
  ‘They cut themselves.’

  c. á:mádü á-ŋ́ készé-só-Ø
  A 3ReflSg-Acc cut-Pfv2-3SgSbj
  ‘Amadou cut himself.’
18.1.2 Third person reflexive PP complement (á, â):

(689a-c) involve dative complements that are coindexed to the clausemate subject. With a first or second person pronominal, like 1Sg in (689a), the regular dative form is used. When a third person pronominal is coindexed to the subject, the regular 3Sg íné is replaced by 3Reflexive singular á (689b), and the regular 3Pl bû: is replaced by 3Reflexive plural â: (689c).

(689) a. kë:ré bâr’í tìy-só-ŷ
   money 1Sg.Dat send-Pfv2-1SgSbj
   ‘I sent the money to myself.’

b. á:mádù kë:ré [á bây] tìy-só-∅
   Amadou money [3ReflSg Dat] send-Pfv2-3SgSbj
   ‘Amadou sent the money to himself.’

c. kë:ré [á: bây] tìy-s-é
   money [3ReflPl Dat] send-Pfv2-3PlSbj
   ‘They sent the money to themselves.’

The same third person reflexive forms occur with other postpositions (adpositions), like ‘under’ in (690). However, in such compound postpositions the pronominal may better be taken as a possessor (see the following section).

(690) á:mádù [dösí [á ³Hl ɣá]] sùŋgéo bërë-∅
   Amadou [under [3ReflSg ³Hl Poss.Inan]] boubou get.Pfv-3SgSbj
   ‘Amadou found (a/the) boubou under himself.’

18.1.3 Third person reflexive possessor (á, â):

When the possessor of a direct object or other nonsubject NP is coindexed to the clausemate subject, if the possessor is pronominal we get the same patterns seen for accusatives. For first or second person, the regular possessor forms are used (691). As a reminder, some pronominal possessors precede the possessed noun if it is a kin term (§6.2.2) as in (691a), otherwise the pronominal possessor combines with a possessive classifier and follows the noun (§6.2.1) as in (691b).

(691) a. [ú ³Hl bâ:] yë:-só-ŵ
   [2SgPoss ³Hl father] see-Pfv2-2SgSbj
   ‘You-Sg saw your father.’
b. [nërî yê:] yî:-sô-û
   [dog 1SgPoss.AnSg] see-Pfv2-1SgSbj
   ‘I saw my dog.’

If a third person possessor is coindexed to the clausemate subject, 3Reflexive pronouns (á, â:) function as possessors. The positioning of the reflexive-possessor pronoun is the same as for those other pronominals (1Pl, 2Sg, 2Pl, and 3Pl) that precede kin terms but follow other nouns.

(692) a. [nërî [â: HL yê]] yî:-sô-∅
   [dog [3ReflSG HL Poss.AnSg]] see-Pfv2-3SgSbj
   ‘She saw her (own) dog.’

b. [nërî [á: L yê]] yî:-s-ē
   [dog [3ReflPl 1Poss.AnPl]] see-Pfv2-3PlSbj
   ‘They saw their (own) dog.’

c. [á HL bâ:] yî:-sô-∅
   [3ReflSg Poss HL father] see-Pfv2-3SgSbj
   ‘She saw her (own) father.’

d. [á: HL bâ:] yî:-s-ē
   [3ReflPl Poss 1father] see-Pfv2-3PlSbj
   ‘They saw their (own) father(s).’

e. [âdô [á HL gɔ̃]] yî:-sô-∅
   [house [3ReflSg HL Poss.InanSg]] see-Pfv2-3SgSbj
   ‘He saw his (own) house.’

f. [âdô [á: L yê]] yî:-s-ē
   [house [3ReflPl 1Poss.InanPl]] see-Pfv2-3PlSbj
   ‘They saw their (own) houses.’

18.1.4 Emphatic pronouns

18.1.4.1 With màrⁿá ‘self’

Emphatics with adverbial màrⁿá following an independent pronoun are in (693a-b). When the referent is spelled out by a name or other nonpronominal NP, it is topicalized. It is followed by a resumptive pronoun with màrⁿá (693c). The specific type of emphasis here is exclusionary. Where it might have been expected that X would perform the activity with the help of others, he/she does it without help. For this exclusionary sense, see also the construction with tûmá (following section). Or, where it might have been expected that X would have someone else perform the activity, he/she does it in person. Regular (not anaphoric) third-person pronouns, e.g. 3Sg ñné, occur in this construction.
(693) a. [yî:] [á yè] tîvè-rí-∅,
    [child 3RefSg Poss.AnSg] send-PfvNeg-3SgSbj,
    [ìnë màr”ày] yè:-∅
    [3SgSbj self] come.Pfv-3SgSbj
    ‘He didn’t send his son, (rather) he came himself.’

b. [î: màr”ày] wàrà-mi-‘y:‘
    [1Pl self] farm-Ipfv-1PlSbj
    ‘We will do the farming ourselves.’

c. hàmídû [ìnë màr”ày] ñnè-∅
    Hamidou [3Sg self] go.
    Pfv-3SgSbj
    ‘Hamidou went himself (in person).’

Most examples involve subjects, but this is not a syntactic requirement. In (694), the relevant
pronoun is an accusative functioning as direct object.

(694) [yî: yè:] jà:r”à-r’í-∅,
    [child 1SgPoss.Anim] call-PfvNeg-3SgSbj
    [ǹjí-ŋ màr”ày] jà:r’í-∅
    [1Sg-Acc self] call.Pfv-3SgSbj
    ‘She didn’t call my son, she called me myself (i.e. directly).’

18.1.4.2 With tûmâ or variant tûmày” ‘one/alone’

The stem tûmâ ‘one’, in context also ‘single, sole’ or ‘alone, solitary’, elsewhere patterns as a
modifying adjective (§4.7.1.1). It can also function adverbially in a construction meaning ‘X
alone’, ‘X by him/herself’ (i.e. without accompaniment or assistance). In one pattern, tûmâ
follows an independent pronoun. Here it is optionally followed, somewhat redundantly, by
sày ‘only’. In this adverbial construction, tûmâ has a variant tûmày” (695b) that is not used as
a simple numeral. See also tûmá(-yè) ‘nothing but, exclusively’ in §19.4.3.

(695) a. [ú tûmâ (sày)] kèrø bérè-ŋɔ̀-w*
    [2Sg alone (only)] cut.up can-lpfvNeg-2SgSbj
    ‘You can’t cut up the meat alone.’

b. [ì:t. tûmày”] jìnjà l gú
    [1Sg alone] [water.jar Def.InanSg]
    ìy irl-yè-m bérè-ŋɔ̀-y*
    take rise-MP-Caus can-lpfvNeg-1SgSbj
    ‘I can’t lift the water jar by myself.’

If the subject is nonpronominal, it is treated as a topicalized NP and resumed by a 3Reflexive
pronoun (696).
18.1.4.3 With *kû:* ‘head’

Possessed forms of ‘head’ are used as emphatic alternatives to ordinary pronominal possessors (including third person reflexive possessors) when coindexed to the clausemate subject. ‘Head’ is singular in this construction even with plural possessor. In (697a-b), the possessed noun is a cognate nominal associated with the verb.

(697) a. *[[kû: [fį: [gɔ]]= bìrà] bìrè-mi-y.:.*
   *[[head [1Pl [Poss.InanSg]] 1work(n)] work-Ipvv-1PlSbj*  
   ‘We work for ourselves.’ (lit.: “we do [the work [of our head]]”)

b. *[[kû: [ā: [gɔ]]= bìrà] bìrè-mè*  
   *[[head [3ReflPl [Poss.InanSg]] 1work(n)] work-Ipvv-3PlSbj*  
   ‘They work for themselves.’

c. *[[kû: [kɔ]= bìrà] bìrè-m-Ø*  
   *[[head [1SgPoss.InanSg] 1work(n)] work-Ipvv-1SgSbj*  
   ‘I work for myself.’

18.1.4.4 With *yó*

* IPS yó ‘I myself’ is attested only once, in a textual passage where the speaker wonders where he (as opposed to someone else) is being asked to speak on a topic. See (179c) in §7.1.1. This is tonally distinct from *IPS yó ‘I and …’ with the conjunctive particle (§7.1).

18.2 Logophoric and indexing pronouns

18.2.1 True third person logophoric function

In a quotation (of speech or thought) attributed to one or more third persons (i.e. not the current speaker or addressee), any occurrence of a pronoun coindexed to the attributed speaker(s) takes logophoric form. The forms are singular *ā* and plural *â:* which we have already seen in third-person reflexive function (§18.1). In quotations, *ā* represents an embedded ‘I’, and *â:* an embedded ‘we’.
In nonsubject functions, á and â: have the same forms and linear positions as other pronouns. For example, they have regular accusative and dative forms (accusative á-á and á:-á, dative á bán and â: bán, respectively). They pattern with pronouns rather than with nouns as possessors, notably by combining with possessive classifiers and following alienably possessed nouns (i.e. other than kin terms), whereas nonpronominal NPs precede the possessed noun (698).

(698) a. ñôdô [ú \(g3^H\)] 'your-Sg house'
    ñôdô [á: \(g3^L\)] 'your-Pl house'

b. ñôdô [á \(g3^H\)] 'his-Logo house'
    ñôdô [á: \(g3^L\)] 'their-Logo house'

c. á:mádû \(L\)ñôdô 'Amadou’s house'
    yá: \(L\)ñôdô '(a/the) house of women'

However, logophorics in subject function in main clauses pattern like nouns, preceding the verb and requiring the verb (in a simple main clause) to agree with them. á requires a 3Sg suffix (usually zero, but nonzero in the imperfective positive), while â: requires a 3Pl suffix on the verb (699b).

(699) a. ñë\(r\)í súy\(s\)-só-\(w\) 'you-Sg hit (a/the) dog.'
    ñë\(r\)í súy\(s\)-só-\(w\) 'you-Pl hit (a/the) dog.'

b. á ñë\(r\)í súy\(s\)-só-\(Ø\) 'He/She-Logo hit (a/the) dog.'
    â: ñë\(r\)í súy\(s\)-s-\(e\) 'They-Logo hit (a/the) dog.'

c. á:mádû ñë\(r\)í súy\(s\)-só-\(Ø\) 'Amadou hit (a/the) dog.'
    yá: ñë\(r\)í súy\(s\)-s-\(e\) '(The) women hit (a/the) dog.'

Incidentally, (699c) brings out the communicative importance of NP tonosyntax. If ñë\(r\)í 'dog' were tone-dropped to ñë\(r\)í, á and â: would be parsed as possessors rather than subjects, e.g. [á 'ñë\(r\)í] súy\(s\)-só-\(Ø\) 'he hit [his (own) dog'.

In subject function in nonsubject relative clauses, logophorics do not behave like nonpronominal NPs. The latter precede all verbs in a direct chain, frequently with a resumptive third person subject pronoun immediately preceding the final verb (i.e. the participle); see §14.1.8. Logophorics take the same position as do other subject pronouns in relatives, i.e. immediately preceding the final participle. (700a-c) are main clauses, for comparison. (701a-c) are versions of (700a-c) converted to adverbal (hence nonsubject) relatives. 3Sg ámë, either as simple pronominal subject (701a) or as resumptive (701b), and 3Logophoric pronouns (701c), immediately precede sígé- ‘go down’, following the chained verb tómbo ‘jump’. Therefore 3Logophoric á as subject has a different position relative to the nonfinal chained verb in main (700c) and relative (701c) clauses.

(700) main clauses

a. tómbo sígé-só-\(Ø\) jump go.down-Pfv2-3SgSbj
   ‘He/She jumped down.’
b. [àrⁿà] né] tómbó sígé-só-Ø  
[\text{man}^\text{L} \ \text{Def.AnSg}] \text{jump} \ \text{go.down-Pfv2-3SgSbj}  
‘The man jumped down.’

c. á tómbó sígé-só-Ø \ wà  
3\text{LogoSgSbj} \text{jump} \ \text{go.down-Pfv2-3SgSbj} \ \text{Quot}  
‘He, said that he, jumped down.’

(701) relative clauses

a. ësùL tómbó ñné sigè-sèL gù  
dayL \text{jump} \ 3\text{SgSbj} \ \text{go.down-Ppl.PfvL} \ \text{Def.InanSg}  
‘the day he/she jumped down’

b. ësùL [àrⁿà] L né]  
dayL [\text{man}^\text{L} \ \text{Def.AnSg}]  
tómbó (ñné) sigè-sèL gù  
\text{jump} (3\text{SgSbj}) \ \text{go.down-Ppl.PfvL} \ \text{Def.InanSg}  
‘the day the man jumped down’

c. [ùsùL tómbó á sigè-sèL gù] \ wà  
[dayL \text{jump} \ \text{3\text{LogoSgSbj}} \ \text{go.down-Ppl.PfvL} \ \text{Def.InanSg}] \ \text{Quot}  
‘He, said, the day he, jumped down, …’

So, overall, 3Logophoric pronouns are treated for syntactic purposes variously like pronouns or like nonpronominal NPs.

A logophoric is not normally used when the attributed speaker is the current speaker or addressee.

(702) a. yè: béré-ŋ3-yⁿ (wà)  
\text{come} \ \text{can-IpfvNeg-1SgSbj} \ \text{(Quot)}  
‘(I) said that I can’t come.’

b. yè: béré-ŋ3-wⁿ \ wà  
\text{come} \ \text{can-IpfvNeg-2SgSbj} \ \text{Quot}  
‘(You-Sg) said that you-Sg can’t come.’

If the pronominal is plural, and its reference includes the attributed speaker (along with at least other person who is not a speech-event participant), the logophoric plural category is valid. In other words, an embedded ‘we’ in a quotation attributed to a single speaker appears as logophoric plural.

(703) á:mádů ñné kiyè-sè w-ndé  
Amadou \text{3Sg} \text{said}  
[fà: móti=yè ñíní-m-è] \ wà  
[3\text{LogoPlSbj} \ \text{Mopti=Loc} \ \text{go-Ipfv-3PlSbj}] \ \text{Quot}  
‘Amadou, said that they\text{xy} (e.g. Amadou and Seydou) are going to Mopti.’
18.2.2 Relative clause subject coindexation

The subject of a relative clause can be expressed as a 3Reflexive pronoun to coindex it to the third-person subject of the main clause. In (704a), the subject of both clauses is 1Sg. As usual in nonsubject relative clauses, a pronominal subject takes proclitic form. When 1Sg is replaced by a singular third person subject, the relative clause has 3Reflexive singular ā as subject (704b). A plural third person subject requires 3Reflexive plural ā: (704c).

(704) a. [dàyːL f.ą gürüⁿ-mi] kārⁿ-r̥-∅
   [limitL 1SgSbj be.able-Ppl.Ipfv] do-Ipfv-1SgSbj
   ‘I will do as much as I can.’

b. á:mádù [dàyːL ā gürüⁿ-mi] kārⁿ-ŋ
   Amadou [limitL 3ReflSgSbj be.able-Ppl.Ipfv] do-Ipfv.3SgSbj
   ‘Amadou will do as much as he can.’

c. [nù L bûː] [dàyːL ā: gürüⁿ-mi] kārⁿ-m-ê
   [personL Def.AnPl] [limitL 3ReflPlSbj be.able-Ppl.Ipfv] do-Ipfv-3PlSbj
   ‘The people will do what they can.’

Examples showing that the targeted relative-clause subject must be coindexed to the subject, not to some other NP, in the main clause are in (705). The requirement is met in (705a), but not in (705b), which therefore has an ordinary 3Sg subject pronoun in the relative clause.

(705) a. [liːgiL ā jiyé-sê] ṇji-ŋ kēr⁻sô-∅
   [birdL 3LogoSgSbj kill-Ppl.Pfv] 1Sg-Acc show-Pfv2-3SgSbj
   ‘He, showed me a bird that he (had) killed.’

b. [nàmà L ṇné kārⁿô-sê L gû]
   [damageL 3SgSbj do-Ppl.PfvL Def.InanSg]
   ṇné-ŋ kēr⁻sô-ý
   3Sg-Acc show-Pfv2-1SgSbj
   ‘I showed him the damage that he (or: she,) had made.’

18.2.3 Topic-indexing function

In texts, after a discourse referent is introduced, this referent may subsequently be indexed by singular ā or plural ā: in subject or preclausal topic function. For example, in (737) in the sample text, Hare and Hyena are introduced, then referred to as ā: wốy ‘they two’ as topic/subject of the next clause.

18.3 Reciprocal

18.3.1 Simple reciprocals (tū) with H-toned pronouns

The reciprocal is used when a plural direct object or other nonsubject NP is coindexed in a distributive fashion with a plural clausemate subject. The reciprocal form is invariant tū: for
any pronominal category of subject. This form differs (slightly) in tone from the noun *tū*: ‘agemate’. It behaves like a noun, and may take a postposition or accusative -ŋ.

(706) a. *tū:* yǐ:-sō-y::
   Recip see-Pfv2-1PlSbj
   ‘We saw each other.’

b. [tū:* yàŋà] jòrìyé-s-ē
   [Recip Comit] fight-Pfv2-3PlSbj
   ‘They fought with each other.’

c. *tū:*-ŋ̀ sūy-sō-y::
   Recip-Acc hit-Pfv2-1PlSbj
   ‘We hit each other.’

The reciprocal pronoun is optionally preceded by a plural pronominal possessor. A preposed pronominal possessor is grammatically correct for possession of a kin term or similar relationship term (including *tū*: ‘agemate’); see §6.2.2.1. The normal forms of such possessor pronouns are 1Pl ī:, 2Pl ù:, and 3Reflexive plural ā:, with {HL} tone. However, in combination with the reciprocal the pronominal is H-toned. The reciprocal morpheme is L-toned *tū:, as it would have been as a possessed noun after an {HL}-toned possessor. In this combination it does not allow the accusative morpheme. Thus first person ī: *tū:, second person ā: *tū:, third person ā: *tū:. This tonal quirk permits audible distinctions between reciprocals like (707a) and simple combinations of a pronominal possessor with ‘agemate’, as in (707b). With a pronominal possessor other than 1Pl, 2Pl, or 3Reflexive plural, only the latter reading would be possible anyway, as in (707c).

(707) a. [ī:* *tū:*] yǐ:-sō-y::
   [1Pl 1Recip] see-Pfv2-1PlSbj
   ‘We saw each other.’

b. [ī:* *tū:*] yǐ:-sō-y::
   [1PlPoss *agemate] see-Pfv2-1PlSbj
   ‘We saw our agemate(s).’

c. [bū:* *tū:*] yǐ:-s-é
   [3PlPoss *agemate] see-Pfv2-3PlSbj
   ‘They saw their (another group’s) agemate(s).’

18.3.2 ‘Together’ (*bèndèy*)

This is expressed with a morpheme *bèndèy* preceded by a pronominal denoting a nonsingular set. It is used in intransitive and transitive clauses where the subjects acted in concert. Since the subject is coindexed with the ‘together’ pronominal, the 3Reflexive plural form of the pronominal is required for third persons. The forms are irregular and are given in (708). One expects #ī:* *bèndèy*, #ū: *bèndèy*, and #ā: *bèndèy*, with the usual long vowel and HL-tone of these pronouns. Instead, the vowel is H-toned (as in reciprocals, preceding section), and it is optionally shortened. The L-tone on *bèndèy* is consistent with an original *HL* tone on a
preceding possessor. In other contexts, the shortened versions 2Pl ú and 3Reflexive plural á would be confused with the corresponding singulars, but since bèndéy is used only in the context of collective action, no mis-parsing is possible. The fact that the first person form has ì(:) from 1Pl í: rather than from nasalized 1Sg í: confirms this analysis.

(708) category form

<table>
<thead>
<tr>
<th></th>
<th>1Pl</th>
<th>2Pl</th>
<th>Reflexive Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ì(:) bèndéy</td>
<td>ú(·) bèndéy</td>
<td>á(·) bèndéy</td>
</tr>
</tbody>
</table>

Examples are in (709).

(709) a. [í(:) bèndéy] yè-ý·:  
[1Pl together] come.Pfv-1PlSbj  
‘We came together.’

b. [nù: L bû:] [á(·) bèndéy]  
[person Def.AnPl] [3RefPl together]  
yû: wàr-à  
millet farm(v).Pfv-3PlSbj  
‘The people farmed (= raised) millet together.’

c. [yè: dà: L ŋ·] [bû:-j pò:-mí jí]  
[come arrive and.SS] [3Pl-Acc greet and.SS]  
[á(·) bèndéy] kìwàrì kàr’í jè jí  
[3RefPl together] greetings do RecPrf and.SS  
‘She came up (to where they were), she greeted them, she and they finished (their) mutual greetings, (and …).’ (2004.02.03)

The construction can also be used when the antecedent is the direct object, like ‘leaves and onions’ in (710).

(710) [[ùwà yò] [gà:n yò]]  
[[leaf and] [onion and]]  
[fà: bèndéy] lògò-ý·:  
[3RefPl together] pound.Pfv-1PlSbj  
‘We pounded leaves and onions together.’

18.4 Restrictions on reflexives

18.4.1 No antecedent-reflexive relation between coordinands

Parallel to ‘I and my father’ (711a), we have the third person pattern ‘Amadou, and his, father’ in (711b), where (in the primary reading intended) the possessor of the right coordinand is coindexed with the left coordinand. (711b) uses the ordinary 3Sg possessor form nɔ, which does not specifically coindex the possessor to a particular antecedent. Therefore (711b) also has a reading involving a possessor for ‘father’ other than Amadou.
(711)  a.  [i^\text{1Sg}} and] [bä:  yë:  yò]  
    ‘I and my father’

  b.  [ámádù  yò]  [bä:  nò  yò]  
    [Amadou  and] [father  3SgPoss  and]  
    ‘Amadou, and his father.’
    (or: ‘Amadou, and her, father’)

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19 Grammatical pragmatics

19.1 Topic

19.1.1 Topic (gây ~ gåy and variants, ŋgôy ~ ŋgôy)

gây ~ gåy is especially common with pronouns, but it may occur after other NPs and adverbials: [[ú HL dê:] gây] ‘as for your mother’, [[lâr̥'ăL né] gây]. The final y is often omitted in allegro speech, resulting in variants gây ~ gåy, but the full pronunciation is normal in careful styles. Other regional languages have counterparts with k, like kây, and I have heard k occasionally in Nanga (either as an archaism or as a borrowing). The tone of the particle is <HL> after a final high (including rising) tone on the preceding word, L-tone after a final low (including falling) tone.

The topicalized constituent may be presentential, in which case it is resumed by a pronoun in the clause proper. Or the topicalized constituent may be clause-internal. It is difficult to make the distinction with an NP that functions as subject of the clause, since in this situation there is no change in linear position, and since the “resumptive” pronoun is just the obligatory pronominal-subject suffix on the verb.

Combinations with independent pronouns are in (712).

(712) category independent (e.g. subject)

1Sg  Ň:a  gây
1Pl  Ň:  gây

2Sg  ų  gây
2Pl  ų:  gây

3Sg  Ňné  gây
3Pl  bũ:  gây

1nánSg  kũ  gây
1nánPl  kũ:  gây

3LogoSg  á  gây
3LogoPl  á:  gây

The topic particle can also follow accusative nouns and pronouns. This is easiest to hear with 1Sg object, which has a distinctive accusative form. It shows clearly that the NP containing the topic particle can function as a clause-internal argument.
Another particle, ṭɡôy, occurs once in a text and appears to have the same function. Forms include 1Sg ṭⁿɡôy and 1Pl ṭ: ṭɡôy.

19.1.2 ‘Now’ (náy")

The temporal adverb ‘now’ is nípɛ̀yⁿ. However, a shorter form náyⁿ (always H-toned) is used, in close conjunction with a preceding NP (often a pronoun), as an alternative to the topic particle ṭɡáy. Thus 1Sg ṭⁿáyⁿ ‘as for me now,’ 1Pl ṭ: náyⁿ ‘as for us now,’ and so forth. This form is common in narratives.

When the ‘now’ particle functions as a topical element by itself, it appears in the form náyⁿ ṭɡáy; with variants ná ṭɡáy, nêyⁿ ṭɡáy, and nêyⁿ gâ.

19.1.3 ‘Also, even’ (yanà)

This atonal particle can follow any NP or adverbial constituent. It is distinct from invariably L-toned instrumental yàŋà ~ ỳŋà (§8.1.2).

When added directly to a noun or pronoun, the ‘also, even’ particle gets its tones by spreading from the left, see Atonal-Morpheme Tone-Spreading (§3.7.3.4). This H- or L-tone extends across both syllables: ṭⁿyàŋà ‘me too’, ṭ: yàŋà ‘us too’, é:ŋí yàŋà ‘tomorrow too’. This justifies the analysis of yanà as lexically atonal. However, it is also unexpectedly L-toned after the accusative suffix -ŋ, even when the latter is H-toned due to spreading from its left (714). This suggests a possible underlying or etymological L-tone for the accusative morpheme (§3.7.3.4).

(714) [ńíñé-ŋ ńdì-tì-ɔ́ -n̂d̂e] [ńįjí-ŋ yàŋà] ńd̂i
[3Sg-Acc give-Pfv1b-2SgSbj if] [1Sg-Acc too] give.Imprt
‘If you give (some) to him/her, give (some) to me too!’

The particle may follow a PP, including one with the (partially) homophonous instrumental postposition yàŋà.

(715) [nàŋà yàŋà] wàrà-m-∅,
[cow Inst] farm(v)-Pfv-1SgSbj,
[ŋàŋà yàŋà] yàŋà] wàrà-m-∅
[camel Inst too] farm(v)-Pfv-1SgSbj,
‘I do farming with an ox, (and) I do farming with a camel also.’

For yanà ‘also’ after each NP (including the first) in an extended list, as an alternative to the usual ‘and’ conjunction, see §7.1.2.

My assistant did not allow yanà after verbs, e.g. with clausal scope. Since most verbs have a natural complement, often a referentially unspecific cognate nominal, it is normally
possible to find a nominal to serve as the immediate scope of *yaŋa*. In (716), note ‘meal’ and ‘place’ in the interliners (omitted from the free English translation).

(716) *pañ*: dání-ŋ, [5ː *yaŋa*] sëmbí-ŋ
meal cook-Ipfv.3SgSbj, [place also] sweep-Ipfv.3SgSbj
‘He/She cooks, and he/she sweeps (the place) too.’

*yaŋa* can also function in the emphatic sense ‘even X’, which is closely related logically to ‘also, too’.

(717) a. [yì-tègè êwrè][L] bː *yaŋa* wôrî wárà-m-è
[child-Pl small][L] Def.AnPl even farming(n) farm-Ipfv-3PlSbj
‘Even the little kids will do farming (=weeding).’

b. [pɔː *yaŋa*] pɔː-mè-*rён-∅
[greeting(n) even] greet-Caus-PfvNeg-3SgSbj
‘He/She didn’t even say hello.’

19.2 Presentential discourse markers

19.2.1 ‘As much as …’ (*háli ~ hálè*)

This particle, omnipresent in languages of the zone, may occur at the beginning of a constituent phrase (NP or adverbial). The clause itself may be negated, resulting in the sense ‘not as much as’ (hence ‘not even’).

(718) a. [háli ɲfi-ŋ pɔː ]  kiy-ɾî-∅
[as.much.as 1Sg-Acc greeting] say-PfvNeg-3SgSbj
‘He/She didn’t say so much as hello to me.’

b. [háli ɓuːɗù wɔy] ɲf́i-ŋ ʊɗɛ-ɾî-∅
[as.much.as riyal two] 1Sg-Acc give-PfvNeg-3SgSbj
‘He/She didn’t give me so much as a red cent.’

c. [háli nà tůmá *yaŋa*  yɛː-ɾî-∅
[as.much.as time one even] come-PfvNeg-3SgSbj
‘He/She didn’t come so much as (=even) once.’

d. [háli ɲuŋá] ɲuŋí-só-∅
[as.much.as song] sing-Pfv2-3SgSbj
‘He/She even sang (a song).’

19.2.2 ‘Well, …’ (*háyà*)

This is the common ‘well, …’ expression, giving the speaker time to formulate a clause. This is a regional form also common in e.g. Fulfulde and Jamsay.
19.2.3 ‘So, …’ (wálà)

French voilà appears in the form wálà, also in regional use.

(719) wálà: nã: béré jè-w
so meal get RecPrf-2SgSbj
‘So you have gotten a meal!’

19.2.4 Clause-initial emphatic particle (péy, pés)

péy can be used with positive and negative clauses. pés is used with negative clauses only (‘not at all”).

(720) a. péy sélè-só-y
    Emph be.healthy-Pfv2-1SgSbj
    ‘I’m perfectly healthy.’

b. péy nã: kà:rì-y
    Emph meal eat-PfvNeg-1SgSbj
    ‘I haven’t eaten at all.’

c. pés nã: kà:rì-y
   [= (b)]

19.2.5 ‘But …’ (mè):

The attested form is mè; It is French mais, also now used in many other Malian languages. Unlike the French original, mè: is pronounced at the end of the preceding clause.

(721) yè:-só-Ø mè: bè:-rî-Ø
    come-Pfv2-3SgSbj but remain-PfvNeg-3SgSbj
    ‘He/She came but did not stay.’

In prepausal position the particle is usually heard as L-toned mè:; as in (713) above.

19.2.6 ‘Lo, …’ (jàngà→)

This particle, which occurs in various forms in most local languages, is used in narrative at the beginning of a clause introducing a dramatic or surprising new event.
19.3 Pragmatic adverbials or equivalents

19.3.1 ‘(Not) again’, ‘on the other hand’

‘Again’, i.e. ‘one more time’ or ‘a second time’, is expressed by the adverb íyé (contrast íyé ‘today’, §8.4.6.1). It can also be expressed by the adverb bëndí (also the adjective ‘other’) or by the chained verb bindé- ‘go back, return’. bëndí is preferred in negative or irrealis contexts (722a-b), while bindé is usual in positive indicatives (722c).

(722) a. bëndí òmbòrí=yê ńní-ŋˇ-yˇ
other Hombori=Loc go-IPfvNeg-1SgSbj
‘I won’t go to Hombori again.’

b. bëndí ñgá yê:-w ndè, há:jè bërè-m w
other here come.Pfv-2SgSbj if, problem get-IPfv-2SgSbj
‘If you-Sg come here again, you’ll get trouble.’

c. [nà: [á báy] kò]-ŋ
[meal [3ReflSg Dat] eat-and.SS]
[bindé ñgá kò]-ŋ
[go.back here eat.Pfv-3SgSbj]
‘Having eaten at home, he ate here again.’

19.4 ‘Only’ particles

19.4.1 ‘Only’ (sày)

The usual ‘only’ particle is sày (as in Jamsay). It follows the constituent (X), either an NP or an adverb, that it has scope over. It is often heard as L-toned sày, especially prepausally.

(723) [të:mdérè sày] sò-y
[hundred only] have-1SgSbj
’I have only one hundred (riyals).’

sày can indirectly have scope over a VP by being added to a cognate nominal or other conventionalized object associated with the verb.

(724) bìrè-ŋò:-∅, [gìrè-ñfì-y é sày] nỳ‰-é-ŋ
work-IPfvNeg-3SgSbj, [eye-sleeping(n) only] sleep-IPfv.3SgSbj
‘He/She doesn’t work, he/she just sleeps.’

As is true in all languages of the zone, ‘only X’ or ‘none other than X’ can also be expressed by a negated clause combined with an ‘if not’ (i.e. ‘unless’) conditional (725a). A somewhat similar nuance can be expressed by a construction with dò:mó ~ dò:nó, attested once in a textual passage talking about an episode in the past when there were only occasional scraps to eat (725b).
(725) a.  bùrà [ɔːndó  ndò:-Ø  ndè]
B [honey  not.be-3SgSbj  if]
[kò bëndí  mùrà-Ø]
[thing other]  not.want-3SgSbj
‘Boura wants nothing other than honey.’
(lit. “Boura, if it isn’t honey, he doesn’t want anything else.”)

b.  [nà:  àndì  èkwà  àntùì  ndè,]
[meal small  get  taste.Pfv-2SgSbj  if,]
[kú = ŋ̀ dò:mó]
[DiscDef=it.is otherwise]
[ná: tuyⁿ→ kò: sîrⁿ-ndè]  ŋ̀gò-Ø
[meal fully.sated  eat  be.sated-VblN  not.be-3SgSbj]
‘(Except) if you-Sg got and tasted a little bit of food, other than that there was no eating enough food and being full (of food).’ (2004.01.07)

19.4.2 ‘Just (one)’, ‘a mere’ (léŋ ~ lék)

léŋ ~ lék is a colorful intensifier for tùmá ‘one’ (726a). Its stylistic flavor is along the lines of colloquial English ‘I have one lousy cow’, where ‘lousy’ deprecates ‘one’ (expressing the meager number of cows) rather than the unfortunate animal. It can occasionally extend to higher numbers (§8.4.3.2).

Less emphatic is déndè (726b). Like a second adjective, it controls tone-dropping on the noun and on the adjective-like numeral.

(726) a.  [nàŋ:  tùmá  léŋ]  sò-y
[cow single  mere  have-1SgSbj]
‘I have a single (=only one) cow.’

b.  [nù  tùmá]  déndè]  núyⁿi  nà
[[person one]L only]  go.in  then.DS
‘Only one person goes in (the granary), …’ (2004.02.03)

19.4.3 tùmá(-yé) ‘nothing but, exclusively’

tùmá (related to tùmá ‘one’, but homonymous with tùmá ‘tree’) can be used adverbially to mean ‘nothing but, exclusively’. It is optionally extended as tùmá-yé.

(727) [dàrⁿà  kú  pù→]
[outside Def.InanSg all]
pîr-ɔnì tùmá  bîyé-yè
Fulbe-Collective exclusively lie.down.Stat-3PlSbj
‘Throughout the open area there were none but Fulbe lying down.’ (2004.01.10)
19.5 Phrase-final emphatics

19.5.1 Phrase-final já:dì ‘exactly’

This emphatic, common in Fulfulde and (through borrowing) some other languages of the zone in the form jà:tí, is often a single-word confirmation of a proposition uttered by an interlocutor (‘Exactly!’). It may also be added to a phrase or clause with similar sense.

(728) a. kò-kò:ú = wá já:dì
   Rdp-viper=it.is.InanSg exactly
   ‘Yes, indeed it is a viper.’

   b. ú já:dì
   2Sg exactly
   ‘precisely you-Sg’ (confirming)

For ‘precisely, exactly’ without the confirmational context, see the particles described in §8.4.3.2.

19.5.2 Clause-final kòy

This clause-final emphatic particle is used to give strong assent to a proposition by an interlocutor, or to give a confident answer to a polar interrogative. Often it can be translated colloquially as adverbial sure in responses like it sure was!

(729) kè:rè nòm kòy
       money difficult Emph
   ‘Money sure is hard to come by.’ (nòmí)

This particle is regional (Jamsay, Fulfulde, Humburi Senni, etc.).

19.5.3 Clause-final dè

This clause-final emphatic particle is more adversative or admonitive than kòy, suggesting that the addressee needs to be made aware or reminded of something. (730a) could be said to someone who has just announced plans to mount an expensive project.

(730) a. kè:rè nòm dè
       money difficult Emph
   ‘(But) money is hard to come by!’

   b. [gùrì  báy] ú-ŋ há:ybà dè
   [thief Dat] 2SgSbj-Acc watch.over.Imprt Emph
   ‘Watch out for the thief (or: thieves) now!’
c. \([\text{nù} \quad \text{tùmà}^L \quad \text{dèndè}] \quad \text{nùy}^\prime \quad \text{nà}\)  
[[\text{person} \quad \text{one}^L \quad \text{only}]] \quad \text{go.in} \quad \text{then.DS}  
[[\text{person}^L \quad \text{bèndì} \quad \text{nùy}^\prime \cdot \text{ŋò} \cdot \text{dè}]]  
[[\text{other}]] \quad \text{go.in-LpvNeg} \quad \text{Emph}\)

‘Only one person goes in (the granary). No-one else goes in, mind you.’  
(2004.02.03)

### 19.6 Backchannel and uptake checks

Backchannel support from the listener to the speaker who has the floor, especially during a narrative or other extended speaking turn, can take the form of *uh-huh* type utterances (not easily transcribed phonologically). The more formal *nà:m* is used, for example, to punctuate an imam’s sermon.

Before narrating a tale, the narrator requests audience permission with the phrase *té:njè → hà(djì) →* (obscurely related to the noun *té:njè* ‘tale’), as in (736) below. The audience responds with *yáwò →* and the tale begins.

The speaker may initiate backchannel with a question like *pá:mí - só - ñà:* ‘did you understand?’ Often such questions are pro forma and no actual reply is required.

### 19.7 Greetings

#### 19.7.1 Time-of-day greetings

Time-of-day related greetings (‘good morning!’ etc.) and their responses (R) are in (731). The unmarked *pò:* is used in the middle of the day. The greetings presented early in the day and at night have a retrospective time perspective: the ‘good morning!’ expressions are based on *nà:* ‘spend (the) night’, while the ‘good night’ expressions are based on *dèrò:* ‘spend (the) mid-day’. By contrast, the late-afternoon greeting uses the term for ‘late afternoon’ (*dèndèsì*).

The imperative plural suffix *-ndì* on the plural-addressee versions of the greetings suggests that all the greetings are imperative in form. *àyâ:* is only used as a greeting response and therefore has no “literal” meaning.

(731)  
greeting situation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>nùy</em></td>
<td>morning 6-9 AM (singular addressee)</td>
</tr>
<tr>
<td><em>nà:-ndì</em></td>
<td>(plural addressee)</td>
</tr>
<tr>
<td>R: <em>àyâ:</em></td>
<td></td>
</tr>
<tr>
<td>R: <em>nà:-kò:</em></td>
<td>(archaic)</td>
</tr>
<tr>
<td><em>pò:</em></td>
<td>mid-day 9AM to 4PM (singular addressee)</td>
</tr>
<tr>
<td><em>pò:-ndì</em></td>
<td>(plural addressee)</td>
</tr>
<tr>
<td>R: <em>àyâ:</em></td>
<td></td>
</tr>
<tr>
<td>R: <em>pò: bèrè-mi</em></td>
<td>(archaic)</td>
</tr>
</tbody>
</table>
The ‘(have a) good night!’ expressions are in (732). They may be addressee-directed (imperative), or hortative and inclusive (‘let’s ...’). jáŋâ is another word meaning ‘health’. à:mi:" is the ‘amen!’ word and functions to acknowledge a blessing or wish.

(732) jáŋâ ná: final ‘good night!’ (singular addressee)
jáŋâ ná:-ndì (plural addressee)
R: à:mi:" jáŋâ ná:-má final ‘good night!’ hortative (singular addressee)
jáŋâ ná:-mày hortative (plural addressee)
R: à:mi:" Also using the verb ná:- ‘spend night’ are the questions in (733), which can be added to a ‘good morning!’ greeting.

(733) jáŋâ ná:-w" mà ‘Did you sleep well?’ (Sg addressee, familiar)
jáŋâ ná:-w" (Sg addressee, respectful)
(u:) jáŋâ ná:-w": (Pl addressee), for :: see §3.8.3
R: ná:-só-ŷ ‘I slept well’ (said by a friend)
R: ná:-só ‘I slept well’ (respectful)
R: ná:-s-é ‘we slept well’ (respectful)

19.7.2 Situation-specific greetings

Activity- and/or place-specific greetings and their responses are of two basic structures. One type is based on the locative form (postposition gó, gá, etc.) of a noun like ‘field(s)’, ‘market’, ‘well’, or ‘work’ (734). These greetings are primarily used when the addressee is at the relevant location or is performing the indicated activity, though [ò: gó] pò: can also be addressed to someone returning from the fields.

(734) [ò: gó] pò: (at, or returning from, fields)
R: àwá:
[évé gá] pò: (at the market)
R: àwá:
[è: gá] pò: (at the well)
R: àwá:
The greetings in (735) are of the form ‘you and {fields, work, market, water}’ and are generally addressed to someone returning from the place and activity in question.

(735)  [ú yò] [ó: yò]  (at, or returning from, fields)
R:  àwâ:

[ú yò] [bírá yò]  (coming back from work)
R:  àwâ:

[ú yò] [éwé yò]  (returning from the market)
R:  àwâ:

[ú yò] [nì: yò]  (coming back from well, with nì: ‘water’)
R:  àwâ:

A traveler arriving at a house is greeted with [[ńdó gó] dô:] ‘arrive at (or: approach) the house!’; an invitation to come in and deposit one’s baggage. One who is leaving on a long trip is sent off with the phrase [jáŋ dô:], literally ‘arrive (there) in health!’ . The reply is à:mí: ‘amen’.

One gives condolences to a survivor of a deceased person with the phrase [[pɔ̀ ńɔ́] ńɔ́] pô:, literally ‘greetings in high worth’. The visitor who has presented condolences and is about to leave is told: [dênjê [ú h³ gɔ́] gûr-Ndíyé- mì ‘may God lengthen your (life)’, and/or [dênjê [í bëndéy L kɔ́] wàgá-Ndíyé-mì] ‘may God put distance between us (i.e. us and the dead person)’. On returning home from giving condolences in another village, one is greeted with [yògí gó] pô:, literally ‘greetings in running’.

19.7.3  Islamic greetings

The usual Islamic greetings and similar formulaic phrases, from Arabic, are present, since the Nanga-speaking zone is now largely Muslim. àsâlâ: màlë:kûm (Arabic ‘peace to you-Pi’) is the formal greeting, especially on entering the presence of a group of men. The reply is wâ:lékûmàsâlâ:m. The Islamic formula for inviting someone to come in, to join in a meal, etc., is bìsîmëlâ (Arabic ‘in God’s name’). âłbârkà ‘thank you!’ (Arabic ‘blessing’) is used to thank someone for a meal or a gift, and in markets as a polite refusal to accept an offer to buy or sell.
Text

Text recorded in 2007 (reference Nanga 2007.01.01). Phrases spoken by hyena in Jamsay, see (744-45, 754-55, and 759), are in green and their free translations are italicized.

(736) té:njè → ñdì→,
[formulaic story opening phrase, cf. té:njè ‘tale’; audience should respond yáwò→]

(737) [jù:rì yò] [tà:ta: yò] [sàmàr”-bírá gá] ñn-ò,
[łamó] [ tàta:] [yò] [Rdp-hyena] [day.labor-work(n) Loc] go.Pfv-3PlSbj,
[fá: wòy] [sàmàr”-bírá gá] ñnè ñù, [3RefPl two] [day.labor-work Loc] go and SS,
[ sàmàr”-bírá gá] bù:-ù ây-ù, [day.labor-work Loc] 3Pl-Acc receive.Pfv-3PlSbj,
lìgòrù-mé kêmè-mù, apiary build-Ppl.Ipfv,
‘Hare and hyena went to (get) day-labor work. The two of them went to (get) paid work, and they (= people) took them in paid work, (for them) to build apiaries (man-made beehives).’
[X yò Y yò ‘X and Y’ §7.1.1; topic-indexing 3Reflexive plural à: §18.2.3; ñù ‘and SS’ in same-subject VP chains §15.2.7]

(738) donc [lìgòrù-mé kêmè’h-l kêmè] [nà: dëgè-ñ-è: wà],
so [apiary build’h-1 build] [hand lick-IpNeg-3PlSbj Quot],
wò:ti-yò: wà, [lìgòrù-mé kêmè’h-l kêmè] all.right Quot, [apiary build’h-1 build]
tà-tà: [nà: [á kù]] dëgè-Ø, [Rdp-hyena] [hand [Refl Poss.InanSg]] lick.Pfv-3SgSbj,
lìgòrù-mé yègè sigè-Ø, apiary fall go.down.Pfv-3SgSbj,
donc [ñnè wà] [bëndì dëgí-rá wà] so [3Sg Quot] [other lick-Proh Quot]
[wò:ti-yò: wà], [ká mày”]
[all.right Quot], [DiscDef like] kêmè’h-l kêmè’h-l kêmè’h-l kêmè build’h-1 build-1 build
[ñdò’l kù] kêmè go-nd-ò, [house’d Def.InanSg] build go.out-Caus.Pfv-3PlSbj
‘So (the bosses) said, when building the apiary, they (= hare and hyena) will (= must) not lick their hands. They said, all right. When building the apiary, hyena licked his hand. The apiary fell down (= collapsed). (The bosses) said, “hey you (= hyena), don’t lick (your hand) again!” In that way they kept building and building, and they finished building that house (= apiary).
As the two of them were coming (back), they took the road of (= to) the houses (= village). The two of them were coming. They kept coming and coming, (then) a rain storm arose. When the storm arose, hare mounted his cow. Hyena tugged on his goat until he (= hyena) was exhausted (= for a long time), (but) it wouldn’t go. Hare said: “hey you, have courage, come and (let’s) go!” He (= hyena) said, “all right.”’
(741) bàsá-ŋí ńné bú-má]
pull-lpfv 3SgSbj be-while]
[bèr-ŋé biyé dë: jé-Ø,
[goat Def.AnSg lie.down be.calm finish.Pfv-3SgSbj,
biyé ńné dë: jé ná,
lie.down 3SgSbj be.calm RecPrf then.DS,
[ìbèr ná biyé ńné dë: jé ndá]
[goat Def.AnSg lie.down 3SgSbj be.calm RecPrf then.DS]
jómó [ńné wá] [yè-ŋí-ŋí: ndé]
hare [3Sg Quot] [come ő go-lpfvNeg if]
á ńné-ŋí dàɡ świadom [kàýj] ńné-a Hà]
[3SgSbj 3Sg-Acc leave-Pfv1b Top] go-lpfv.3SgSbj Quot]
[àwó:ti-yó: wà,]
[all.right Quot]

‘As he (= hyena) was pulling, the goat lay down motionless (refusing to budge). When it lay down motionless—, when the goat lay down motionless, hare said: “hey you (= hyena), if you (= hyena) won’t come and go (with me), I (= hare) will leave you (here) and go.” He (= hyena) said: “all right.” ’

[imperfective -ŋí (-mí) plus bù ‘be’ §15.2.2.2; dë: jé- is a fixed collocation; logophoric pronoun indexing author of quotation §18.2.1; perfective-1b -tí indicates a temporal gap between ‘leave’ and ‘go’; L-toned ndé ‘if’ §16.1]

(742) [bàsá ńné kán ná]
pull 3SgSbj do then.DS]
[ìbèr ná] yè-ŋí: ńné kán ná
[goat Def.AnSg] come-lpfvNeg 3SgSbj do then.DS]
[ìbèr ná] [yè-ŋí tìmà] [gùwà tìmà]
[goat Def.AnSg] [leg one] [front.leg one]
yank.off eat.meat.Pfv-3SgSbj,
[yè kúwó-Ø, [ádá kúwó-ŋí] yè encore,
[come ő go-QuotHort Quot], hare [3Sg Quot] again still,
ńné-ŋí-Ø: wá, go-lpfvNeg-3SgSbj Quot,

‘When he (= hyena) had pulled and the goat wouldn’t come, he (= hyena) yanked off and ate one of the goat’s legs, one front leg. Having yanked it off and eaten it, (hare) said, “come and (let’s) go!” Hare said, “hey you, once again!” He (= hyena) said: “I am not going.” ’

[bare verb stem plus kár’i ná ~ kán ná ‘do’ for subject switch, see (572) in §15.2.6.1; ‘one of goat’s legs’ possessed core NP with tonosyntactic control over noun and adjective §6.2.1.2]

(743) [bàsá-ŋí bàsá-ŋí bàsá-ŋí ńné bú-má]
pull-lpfv pull-lpfv pull-lpfv 3SgSbj be-while]
[[bèr ná] yè-ndé ìwà-rí-Ø,]
[goat Def.AnSg] come-VblN accept-PfvNeg-3SgSbj,
yè-ndé ìwà-rí ńné kán ná
[come-VblN accept-PfvNeg-3SgSbj] 3SgSbj do then.DS]
Now, when he (= hyena) had finished eating his thing (= meal), (eating) the whole goat, the two of them (= hyena and hare) were coming, (and) when they had gone a little way, he (hyena) said: “hey hare, give me (= hyena) (back) my goat-ear!” He (= hyena) thought (= assumed) that hare had already eaten (it), (but) hare took (it) out and gave it to him (= hyena). (Hyena) said (in Jamsay): “I am just kidding now!” (Hare) said: “all right.”

[QuotImprt in jussive, i.e. in quoted command, §10.6.4 and §17.1.4.1]
(745) \[ â: wôy ] yè:-mô \[3 \text{ReflPI} \text{two} \] come-while come-while come-while come-while iyè tâ-tâ: \[ jàmô wà \] again Rdp-hyena [hare Quot] [sùñùr] \[ à â \[g3\] dí wà, [ear] \[3 \text{LogoSg} \text{Poss.InanSg} \] give.\text{QuotImp} \text{Quot}, jàmô iyè ñnè-ñ gò-ndô ndí-\text{C}, hare again 3Sg-Acc go.out-Caus give.Pfv-3SgSbj, dàm gà:jè kùn-á:a-tà-m wà, up.to.now kidding do-\text{Ipfv}-1SgSbj Quot, yè:-mô yè:-mô yè:-mô yè:-mô, come-while come-while come-while come-while ‘The two of them were coming and coming. Again hyena said: hey hare, “give (me) my (goat) meat (= ear)!” Hare again took (it) out and gave it to him. (Hyena) said (in Jamsys): “I am just kidding now!” (They were) coming and coming.’

(746) \[ [kù mà:] yè: ì ] [tìdô gò] d-\text{C}, \[3 \text{SgSbj} \text{like} \] come and.SS] [\text{house Loc} arrive Pfv-3PISbj], [nè-ñjà yè: dàs ì ì, [house Loc] come arrive and.SS—, [tìdô gò] yè: dàs ì, [house Loc] come arrive and.SS, \[ jàmô wà \] bër-nâmâ \[ à â \[g3\] dí wà, [hare Quot] [goat-meat \[3 \text{LogoSg} \text{Poss.InanSg} \] give.\text{QuotImp} \text{Quot}, jàmô ñnè-ñ gò-ndô ndí-\text{C}] hare 3Sg-Acc go.out-Caus give.Pfv-3SgSbj] \[ à \] ñnè-ñtà gà:jè kùr-i-sò wà, \[3 \text{LogoSg} \text{now Inst} \text{kidding do-} \text{Prog} \text{Quot}, In that way they came and arrived at the houses (= village). Having come and arrived at the houses—. Having come and arrived at the houses, (hyena) said: “hey hare, give (me) my goat meat (= ear)!” Hare took (it) out and gave it to him, saying “now I (= hare) am kidding (= joking).”’’

[\text{Hare speaks in Nanga}]

(747) \[ [kù mà:] [ùsù wôy] dàs ì ] \[3 \text{SgSbj} \text{like} \] [\text{day two} \text{arrive and.SS}] \[ jàmô \] \[ \text{[}[ à â \[ g3 \] ñà sè:mbè-\text{bì} \text{a} ] ì ] \text{母亲} \text{cotton.basket} \text{Loc} \] \[ ñnè ì ] kùn dàgè-\text{C}, \[ \text{go and.SS} \text{put in leave.Pfv-3SgSbj}, \] \[ â:mbè-\text{bì} \text{a} ì ] kùn dàgè ì, \[ \text{cotton.basket Loc} \text{put in leave and.SS} \] ñmô ñnè èrè nà, \[ \text{hare 3SgSbj Pfv1a then.DS} \] ñmô \[ \text{[}[ ñjà ñà ] yè: ì ] \text{younger.sibling 3SgPoss} \text{come and.SS} \] \[ sùñùr \text{L] kù] gò-ndô kùwè-\text{C}], \[ \text{ear} \text{Def.InanSg} \text{go.out-Caus eat.meat.Pfv-3SgSbj}, \] 407
‘When two days had arrived (= elapsed) in that way, hare went and put and left (the goat-ear) in his mother’s cotton-gear basket. When hare had put and left (it) in the cotton-gear basket, and had gone out (completely), hare’s younger brother came and took out the (goat) ear and ate (it).’

[(ty)èrè as linking equivalent of perfective-1a -èrè- in chains with nà, §15.2.6.1; ‘hare, [his, younger sibling]’ with topicalized possessor, cf. the simpler phrasing jómè Უò jô ‘hare’s younger sibling’]

(748) gò-ndó  á Coinbase kùwó  nà.
gout-Caus 3SGSbj eat.meat then.DS,
tà-tà:  [yé:  nà]
Rdp-hyena [come and.SS]
[bèr-sùnùr]i  [á  [[ùnè  gù]]]  ñdí  wà,
[goat-ear [3Refl Poss.InanSg]] give.QuoteImprt Quot,
[jómè  [yè:  nà]  ñirè  ñùnè  kàn  nà]
hare [come and.SS] look 3SGSbj do then.DS
kùrò = ndó-ɔ̀,  donc [ñùnè  wà]
be.put.in=StatNeg-3SGSbj, so [3SG Quot]
[bèr-sùnùr]i  [á  [[ùnè  gù]]]  tù:sì  wà,
[goat-ear [3LogoSg Poss.InanSg]] pay.QuoteImprt Quot,
jómè wà-tì-yò:  wà,
hare all.right Quot,
jómè [[nàpà  á  yè]]  bàsà  nà
hare [[cow [3ReflSg Poss.InanSg]] pull and.SS]
[[á:  wòy]  [[ùnè  nà]]—,
[[3ReflPI two] [fields Loc] go and.SS]—,
[[á:  wòy]  [[ùnè  nà]],
[[3ReflPI two] [fields Loc] go and.SS],
jómè [[tá-tà:  wà]  [[ùsì  tùmìbo  yè:-mi] gù]
hare [Rdp-hyena Quot] [sunL sun.rise come-Ppl.IpfvL Def.InanSg]
yè:-sò  mà→ wà,
see-Prog Q Quot,

‘After he took (it) out and ate (it), hyena came and said: “give (me) my goat-ear!” Hare came and looked, (but) it (= ear) wasn’t in (the basket). (Hyena) said: “so, hey you, pay for (= replace) my goat-ear!” Hare said, “all right.” Hare pulled his cow, the two of them (= hare and hyena) went to the field—. The two of them went to the field, and hare said: “hey hyena, do you see that sun which is rising (and coming)? Do you see it?”’

[kùrò-ndó-], negation of stative yá kùrò- ‘be (put) in’ §11.2.3; same-subject ɣ §15.2.7 in ’went to the field’ with partial coindexation of subjects, singular versus plural; imperfective relative clause ‘sun which is rising and coming’ §14.1.7.2]

(749) é  tá-tà:  [á  yè:-sò]  wà,
yes Rdp-hyena [3LogoSgSbj see-Ipfv] Quot,
doncé [ñùnè  wà]  [[ùsì  tùmìbo  yè:-mi] gù]
so [3SG Quot] [sunL sun.rise come-Ppl.IpfvL Def.InanSg]
[[ùsì] gù]  gò: = Ø  wà,
[sunL Def.InanSg] fire=it.is Quot]
[[ñùnè  wà]  [kù-ŋ  ñùnè  jè:] gày]
[3SG Quot] [DiscDef-Acc go scoop.coals then.SS]
Hare said, “the sun, not fire. In that way hyena came and said: exhausted (i.e. trying in vain to get fire from the sun), (but) he didn’t get any fire. It was the sun, not fire. In that way hyena came and said: “as for me, I haven’t gotten any fire.” Hare said, “all right, it’s nothing special (= it doesn’t matter).”’
(752) **donc** [[riné wá] [kìrà L bù-mù L gu] so [3Sg Quot] [horn L be-Ppl.Ipfv L Def.InanSg] kény→ yi:-sò mà] [é yì:-sò wá], sticking.out see.Prog Q [yes see-Prog Quot], [dôn [kù L nàmà L gu] kéréw] [so [[DiscDef HI meat LDef.InanSg] [all] kà yá kùr”nà bì wá] there.Def Exist be.put.in Quot] [riné wá] [gò-ndè wá] wò:tìyô;, [3Sg Quot] [go.out-Caus.QuotImprt Quot] all, right, (Hare) asked him: “so, do you see those horns that are (there) sticking out?” (Hyena) said: “yes, I see it.” (Hare) said: “so, all that meat is in there (= underground), you (= hyena) should take it out.” (Hyena) said, “all right.” [combination of preposed possessor, noun, and L-toned definite morpheme §6.5.4; existential particle yá §11.2.2.1; quoted imperative gò-ndè (375e)]

(753) [[kù máy” níné kán nà] [DiscDef like] 3SgSbj do then.DS [bôndi L dügi] yè:-Ø], [[bôndi L dügi] níné yè: nà] [rain L big] come.Pfv-3SgSbj], [rain L big] 3SgSbj come then.DS [jàmò [à gå] ténmbè gà] ndé-ŋ wá], [hare [3LogoSg Top] [above Loc] go.up-lpfv.3SgSbj Quot], [wò:tìyô: wá] tà-tà: [all.right Quot] Rd-p-hyena [á gå] [[dôsù gò] bè:-ŋ wá], [3LogoSg Top] [below Loc] stay-lpfv.3SgSbj Quot], ‘After it happened like that, a big (=heavy) rain came. Hare said: “as for me, I will go up above (= into the tree)”. (Hyena) said, “all right.” Hyena said: “as for me, I will stay below.”’

éy → [fərəL démbré] mînrə-rə-Ø wà,
hey! [rainL big] rain.fall-Lpfv-3SgSbj Quot,
3hə̃ŋ jəm3 á yə:-sə wà,
uhuh! hare 3LogoSbj see-Prog Quot,

‘Hare went up above, and when he would eat his meat, he threw the bones (down) on hyena’s head. (Hyena thought [in Jamsay]:) “wooo, woo, today a big (=heavy) rain sure is falling!” (Hyena) said: “elder brother hare, do you see?” “Uh-huh,” hare said, I see (it).” When hare would eat his meat, threw the bone(s) down with a thud on his (= hyena’s) head. (Hyena) said, “hey, a big rain is falling!” “Uh-huh,” hare said, “I see (it).”’

[Hyena mistakes the bones for hailstones; H-toned anterior ndé ‘then’ after L-toned verb in imperfective contexts §15.2.8.2]

(755) [[kú màyə] kúwó ñ]  
[[DiscDef like] eat.meat and.SS]  
[kirəL démbré] gu] [tündi gó],  
[bone big] Def.InanSg [down Loc],  
[tå-tå: [kú:] gu] tây ñné gisé nà,  
[Rdp-hyena head.] Loc thud! 3SgSbj throw then.DS,  
 tá-tå: 3n→ [dé ] jəm3]  
Rdp-hyena oh! [elder.sibling hare]  
[ú=ý mí kám-á:rə-wə] mà→ wà,  
[2Sg=Foc 1SgObj throw-Lpfv-2SgSbj Q] Quot,  
é→ wà, d’accord [yërè sigé wà]  
yes Quot, okay [come go.down.QuotImptr Quot]  
fíné wá yì-yì:-ñ wà,  
[3Sg Quot] Rdp-see-Lpfv Quot,  

‘In that way he ate, and at the end (of the meal) he threw the big bone down hard on hyena’s head. Hyena said: “oh, elder brother hare, is it you [focus] who is throwing (bones) on me?” (Hare) said: “yes.” (Hyena) said: “all right, come down (here)! You (= hare) will see!”’

[yërè sigé is a mix of Jamsay and Nanga; yì-yì:-ñ reduplicated imperfective §10.2.2.3]

(756) [[kú màyə] jəm3 sigé ñné yë: nà,  
[[DiscDef like] hare go.down 3SgSbj come then.DS,  
á ñné-ñ] kúwó-ñ,  
3LogoSbj 3Sg-Acc eat.meat-Lpfv.3SgSbj,  
fíné wá nmâyə á-ñ] kúwóL ndé,  
[3Sg Quot] like.this 3LogoSg-Acc eat.meatL and.then,  
á [dɔsùL ká] á yëgē-O ndé]  
[3LogoSg downL Def.Loc] 3LogoSbj fall.Pfv-3SgSbj if]  
fíné wá á-ñ] mənə-r’í wà quoi,  
[3Sg Quot] 3LogoSg-Acc get.even-PfvNeg Quot Emph,  
doncé [fíné wá].  
so [3Sg Quot],  
fíné wá [pàndìL sirîdí] gò]  
[3Sg Quot] [threadL thin] Loc]  
á-ñ] pâgí wà quoi,  
3LogoSg-Acc tie.quotImptr Quot Emph,
The text appears to be a transcription of a narrative in a language with complex grammatical features. It describes an encounter between a hare and a hyena, where the hare is tied up and roasted by the hyena. The narrative includes imperatives and conditional clauses, with the final sequence being imperative.

The text also includes notes on transcription, indicating corrections and the use of specific tones and tones in clauses.

The text is dense and contains elements of storytelling and dialogue, with the use of verbs and nouns typical of the language in question.
'He (= hyena) went there, he went inside a house, and found him (= hare) slipped in among the thin ceiling poles. While he (= hare) was in among the thin ceiling poles, (hyena) said: “elder brother hare, come down!” Hare said: “I won’t go down.”’

[stative form of verb ‘be slipped in’ §10.3]

(759) [ńíné wá] [nìjèy₃ á ụmày yègè sigè₃ ndé]
[3Sg Quot] [now 3LogoSgSbj like.this fall go.down if]

[ŋàmà [á gṣ]] [nàmà-èrè-Ø]

[meat [3LogoSg Hl Poss.InanSg]] be.ruined-Pfv1a-3SgSbj

[ńíné wá] dùyà ńíné bàrá jè₃ ndé,
[3Sg Quot] ashes go gather bring if,

[ò só] ńíné tíy₃ ndé,
[below Def.Loc] 3SgSbj dump if,

[á] [dùyà gà] yègè-ŋ]
[3LogoSgSbj [ashes Loc] fall-Lpfv]

[á-ŋ] bàr“umè-r‘i-Ø] [ńíné wá]
[3LogoSg-Acc wound-PfvNeg-3SgSbj] [3Sg Quot]

[ŋàmà [á gṣ]] wô: kúwò-ŋ wà,
[meat [3LogoSg Hl Poss.InanSg]] catch eat.meat-Lpfv Quot,

[wô:tíyô:] [kò ké] tý’ɔ=ŋ’ wà
all.right [Nonh Top] truth=it.is Quot

‘(Hare) said: “hey you, if I fall down like that now, my flesh will have been ruined. When you (= hyena) have gone and gathered some ashes and brought them, and when you have dumped them down below (on the ground), (then) I will fall (= land) on the ashes and it will not have injured me, (then) you will catch me and eat my meat.” (Hyena) said (in Jamsay): a’II right, that’s true.”

(760) donc tà-tà: [ńíné ñí] [dùyà [ńíné ñí]
so Rdp-hyena [go and.SS] [ashes [go and.SS]

jàrọ jè: ñí]
look.for [bring and.SS]

dùyà [ńdò-pìrè gà] mà: tìy ñí,
[ashes [house.inside Loc] pouring.lots dump and.SS],

[jàmọ gày] [sèwèrè gà] yà nàǹà-ò,
[hare Top [ceiling.poles Def.Loc] Exist be.up.on.Stat-3SgSbj,

ńíné wá] kúngà yè sigí wà,
[3Sg Quot all.clear come go.down QuotImprt Quot,

jàmọ dùyà gà] pùy ñíné kàn nà,
hare [ashes Def.Loc] thud! 3SgSbj do then.DS,

[[tà-tà: l gị̀rè gò] dùyà yègí→ kàr‘ì-Ø]
[[Rdp-hyena ’eye Loc] ashes powder.get.in do.Pfv-3SgSbj]

jàmọ ká yègò màr’e-Ø],
hare there.Def run be.lost.Pfv-3SgSbj

‘So, hyena went and looked for ashes, and brought (them), and dumped (them) all around inside the house. Hare for his part was (still) up among the ceiling poles. (Hyena) said: “hey hou, the coast is clear, (now) come (= drop) down!” When hare made a thud (falling) on the ashes, the dust (kicked up from the ashes) got into hyena’s eyes (half-blinding him). Hare ran (from) there and disappeared.’

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[kùŋgà, used in contexts like ‘the coast is clear’, is obscurely related to kú =ŋ ‘it’s that’]

(761) [tę́:një  méłèm]  [dùmá  méłèm]  quoi
[story submerged]  [finish(n) submerged]  Emph
[story-closing formula]
References

Heath, Jeffrey. 2015a. *A grammar of Ben Tey*. Language Description Heritage Library (MPI), online.
Heath, Jeffrey. 2015b. *Texts in Bey Tey*. Language Description Heritage Library (MPI), online.
## Abbreviations and symbols

### Abbreviations

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Symbols

*  reconstructed
#
ungrammatical, unacceptable, unattested
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ê, î, ë, ï, ð  tone changes on stem in compounds, chapter 5
<…>  a) contour tones on a single syllable, e.g. <HL> and <LH>
b) false starts in texts (omitted from translations), e.g. (665)
/…/  a) lexical tone melody, e.g. /LH/, /H/
b) underlying or lexical representation, e.g. / gàrá/
{…}  a) tone overlay, e.g. {HL}, {H}, {L}
b) enclosing any set, e.g. { u a í}
[…]  a) phonetic (IPA) representation, e.g. [bú:]

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[…]L  {L} tone overlay controlled by an element to the right, §6.1.4
[…]L→H  like preceding but with extra H-tone on final syllable/mora
HL[…], H[…]  {H} or {HL} tone overlay controlled by a possessor to the left, §6.2.1
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