# A Grammar of Najamba (Dogon, Mali) 

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## 1 Introduction

### 1.1 Dogon languages

Dogon is considered to be a division of the Niger-Congo phylum, though this opinion is not universal. The genetic position within N-C is unclear at this point. One suggestion is that Dogon and Ijoid separated very early from the remainder of N-C.

As research on the various Dogon languages progresses, it has become increasingly clear that there is a primary "eastern" versus "western" genetic division, first articulated by Kirill Prokhorov. This split, more accurately a diagonal SW to NE, correlates roughly with the east versus west cliffs of the main Dogon plateau. The "eastern" group also extends northeast of the main plateau into the zone of smaller inselbergs in the Douentza and Boni areas. (1) gives an rough breakdown, from NE to SW, showing the approximate geographical alignment of the two divisions. Jamsay, Najamba-Kindigué, Toro So, and Tengou-Togo are internally complex and each likely contains more than one language. Yanda Dom and Tebul Ure are actually on the eastern cliffs, geographically separated from the rest of "western" Dogon, with "easten" Tommo So intervening between them on the high plateau.

| western | eastern |
| :--- | :--- |
|  | Toro Tegu <br> Ben Tey, Bankan Tey |
| Najamba-Kindigué-Bondu group | Jamsay group, Nanga |
| Yanda Dom, Tebul Ure <br> Tiranige | Tommo So <br> Dogulu <br> Bunoge, Mombo, Ampari, Penange |
| Donno So, Toro So group <br> Tengou-Togo group <br> Tomo Kan |  |

Among the typical features of western Dogon languages are 2Sg pronoun $o$ (versus eastern $u$ ), and at least vestiges of inanimate nominal class suffixes derived from *ko/ko and/or *ke/ke.

The Najamba-Kindigué group is the most northerly of the western division. Across the east-west divide, Najamba is in contact with Jamsay and Tommo So, while Kindigué is mainly in contact with Tommo So.

### 1.2 Najamba-Kindigué (Bondu-So) language and its dialects

The choice of an official term for the language under study here is difficult. For background on terms used in earlier surveys, see Hochstetler (2004: 26).

The exonym used particularly by Tommo So speakers in the main plateau is Bondu-So (stem bòndú, plus só 'talk, language'). The endonymic version of this is "bondum-dom"
(cited by Hochstetler from older literature). This is not an endonym in current use by speakers of the language covered in this grammar, though it may turn out to be used on the high plateau (see below).

The endonym nàjàmbá-gé denotes the language spoken primarily in two parallel valleys cutting into the high plateau going west from near Douentza, and on the enclosing heights. For the term, see ( $280 \mathrm{a}-\mathrm{b}$ ) in §8.4.4.1; for the noun-class suffix see §4.1.3.6. A popular etymology of the ethnic term nàjàmbá is an amalgam of nàlé 'friend' and jàmbá 'betray(al)', alluding to an event in an origin narrative.

The dialectal situation in another set of villages, north of the core Najamba zone and on or near the main highway from Douentza to Mopti-Sevare, is more complicated. The growing tendency is for people in this zone to describe their dialects collectively as pǒ: yó.: with exaggerated "dying-quail" intonation (prolonged, with slowly falling pitch). This is based on a shared greeting (pǒ:) and its standard reply yó.: . However, this informal term can be extended to include Najamba and Bondu varieties.

The term Kindigué (kìndì-gé) was apparently once limited to the dialects of certain villages on the heights, such as Ambaka and Koli, but it is now often used more broadly to include the varieties spoken in the Koira village cluster, and sometimes to include all varieties of the highway area plus the Bondu varieties on the high plateau around Borko. People in the Koïra village cluster also refer to their variety by a specific term Kolobinye (kj̀lıbì-nદ́), an irregular derivative of the native name for Koïra itself (kólòbì).

The dialectal complexity of the highway area has become more complicated in recent decades because residents of some of the main villages on the heights have moved down and northward to the plains near the highway to found satellite villages. The original Mougi village on the heights is still occupied, but it has also spawned three new villages on the plains (Dimbatoro, Béguima, and Néma), which are still considered part of Mougi in the broad sense. Old (or Upper) Mougi still considers itself Najamba, but the newer villages are in closer contact with Koïra and other older villages.

The village of Sinda, which is on the highway and therefore in the pǒ: yó.: or Kindigué area geographically, is considered by Kindigué/Kolobinye speakers to be a Najamba outlier. Speakers of Najamba proper also recognize the affinity between their language and the variety spoken in Sinda, though they consider the latter to be distinctive and refer to it by its own name sìndà-gé. Sinda is socially set apart by its large contingent of members of the blacksmith caste. An immediate neighbor of Sinda is Siba, which is said to have been founded by Songhay.

The varieties spoken on villages on the high plateau to the west such as Dogani, Borko, and Tintam increasingly refer to their language as Bondu (bòndú), which is primarily an exonym used by Tommo people. Others include these varieties as part of pǒ: yó.: or Kindigué. These dialects have yet to be investigated. The term "Bondu So," which ends in the word for 'language' in Tommo So, has been applied to the entire Najamba-Kindigué-Bondu dialect group occurs in some earlier Dogon surveys.

The term Najamba will be used in this grammar, which does not describe Kindigué or Bondu varieties. The hyphenated term Najamba-Kindigué or Najamba-Kindigué-Bondu will be used to refer to the entire dialect complex.

Contact languages are as follows. French is taught in schools, though to date relatively few individuals living in the villages can speak French passably. Fulfulde is spoken in some
small villages in the area, and is the traditional lingua franca of the administrative and market town Douentza, though it is now slowly giving way to Bambara there. Jamsay is spoken in some nearby villages such as Fombori, and is a kind of Dogon-internal lingua franca in the Douentza area. Tommo So is spoken in the valleys immediately to the south of the two main Najamba valleys (see below), and on the high plateau beyond the cliffs. There is some contact between the most westerly villages on the high plateau and speakers of Tiranige, which is called kèlgá in Najamba

### 1.2.1 Songhay influence

The nearest extant Songhay language is Tondi Songway Kiini, spoken in a few villages including Kikara to the north-east of Douentza. There are no Songhay-speaking groups in the Najamba-Kindigué-Bondu zone. However, there is some ethnohistorical and lexical evidence suggestive of earlier Songhay contacts.

The village of Siba just off the highway claims to have been founded by Songhay in the time of Askia Mohamed (late Middle Ages). A similar Songhay origin is claimed in Tintam, which is said to be the oldest Bondu village in the Borko-Dogani area. The Songhay surname Maiga is common in Siba but not in Tintam. Badiari village in the core Najamba area has a blacksmith population which also has surname Maiga.

The official village name Koïra Béri, evidently now an exonym, is clearly from Songhay koyra be:ri 'big village/town'. However, the current Kindigué (Kolobinye) endonym for the village is unrelated to this.

Words of likely Songhay origin found in Najamba but not in Jamsay or other nearby Dogon languages include: bàndí 'back' and irregularly related bàndè-bándè 'going backward' (Songhay bande), mágà: 'thigh below hip' (Songhay maka), dǎy 'well (n)', párngá 'donkey’ (Songhay farka), gándè-gàndè kán '(do) chest-to-chest' (maneuver in wrestling; Songhay gande 'chest'), sá:bú kán 'give thanks to God' (Songhay yerkoy saabu 'God be praised!'), tàgá '(God’s) creation' (Songhay taka), bùgú '(Fulbe) hut' (Songhay bugu), kùrsà-kùrsá 'skin disease with rashes' (Songhay kursa), and last but not least tápkúndé 'elephant' (Songhay tarkunda ).

Of special historical importance is Najamba jǎ: 'since’ (§15.2.5, §17.5.1.2). Within Dogon its only known congeners are Toro Tegu and Bankan Tey (Walo village) zǎ: . Toro Tegu has historically been in contact with Humburi Senni (HS), and Bankan Tey is still in daily contact with Tondi Songway Kiini (TSK), so the Dogon distribution of jǎ: and zǎ: hugs the Dogon-Songhay front line.

Interestingly, eastern Songhay including HS and TSK has zǎ:, while western Songhay (Timbuktu, Djenné) has $j$ a: (atonal), reflecting the western merger of $*_{\mathrm{z}}$ and ${ }_{\mathrm{j}}$. The $j$ in Najamba jǎ: is a possible indication that the former Songhay group in contact with NajambaKindigué spoke a western Songhay variety.

### 1.3 Environment

The core Najamba speaking villages known to me are listed in (2), with approximate coordinates in degrees, minutes, and decimal fractions of minutes. They are situated in the
two narrow valleys going west from Douentza and the adjacent heights. People from these villages refer to their ethnicity and language as Najamba.
(2) Villages of core Najamba valleys and enclosing heights

| official name | native name | north | west |
| :--- | :--- | :--- | :--- |
| Adia | ǎ:jà | 1457.770 | 0306.682 |
| Assakarba | dô: | 1459.143 | 0300.232 |
| Badiari | bàjâl | 1457.743 | 0259.555 |
| Dindari | dìndǎl | 1457.973 | 0306.363 |
| Dioni | jǒn | 1456.500 | 0305.528 |
| Kubewel | kúnjà-gâ: | 1459.061 | 0302.049 |
| Lamorde | dìmbìrá | 1457.741 | 0306.027 |
| Madina | màdínà | 1458.414 | 0303.092 |
| Mougi (Upper) | mùgî:, mùgì-kî: | 1500.504 | 0309.934 |
| Neri | něl | 1457.068 | 0307.327 |
| Olkia | òl-kíyá | 1455.688 | 0303.881 |
| Orodou | òlò-dû: | 1458.311 | 0304.425 |

Madina and Orodou were originally on the nearby heights, but moved down to their current locations on the plain at some point following Malian independence (1960).

A characteristic of Malian maps is that the names of villages are frequently those used by Fulbe, i.e. in Fulfulde. This accounts for divergences, up to and including complete suppletion, between the vernacular (Dogon) names and those on the maps.

The main surnames in these villages are those in (3). Parenthesized comments with "ex" indicate the geographic origin of settlers with that surname. There are no large concentrations of blacksmiths, usually one family per village. Blacksmiths are considered to be people of caste and do not intermarry with Dogon.

| surname | in Najamba | villages |
| :--- | :--- | :--- |
| Balobal | bálóbàl | Adia |
| Dambawo-Damba <br> Diarra <br> dàmbáwó-dàmbà <br> járà | Dindari (dominant) <br> Upper Mougi (blacksmiths), Temba <br> (blacksmiths) |  |
| Doumbo | dúmbò | Olkia (ex Dourou near Bandiagara) |
| Gaba | gá:bà | Assakarba |
| Guindo | gíndò | Kubewel |
| Isabere | ìśbèrè | Assakarba |
| Kassambara | kàsàmbárà | Kubewel |
| Kénoba | kénòbà | Neri |
| Koliyaba | kólyàbà | Olkia (ex Dioni) |
| Kondoo-Kondo | kòndó:-kòndò | Lamordé (dominant) |


| Maiga | máygà | Badiari (blacksmiths), Kubewel (blacksmiths), Maiga (blacksmiths) |
| :---: | :---: | :---: |
| Ombotimbe | òmbòtímbè | Olkia (ex Kendié [Tommod) |
| Ongoiba | ònóybà | Kubewel (dominant), and Upper Mougi (dominant), Adia, Badiari |
| Ouologuem | wòlògêm | Kubewel |
| Pelkouliba | pélkùlí:bà | Madina (dominant), Orodou (ex Wadouba zone [Tommo]), Kubewel |
| Samasségou | sàmàségù | Mougi (blacksmiths), Néma (blacksmiths) |
| Tabalaba | tàbàlá:bà | Dioni (dominant), Orodou (ex Dioni) |
| Tembiné | tèmbìné | Kubewel |
| Tembo | témbò | Adia (dominant), Orodou (ex Adia), Kubewel |
| Toloba | tólòbà | Kubewel |
| Yalkouyé | yàlkúyè | Olkia (ex Dioni), Orodou (ex Dioni), Badiari |
| Yombolba | yòmbólbà | Neri (ex Toulé [Tommo]) |

The most unusual among these surnames are the iterative dàmbá-wó-dàmbà and kòndó:-kòndò. The first is said to derive from dàmbá 'push', referring to disputes. kòndó:-kòndò is said to derive from kóndí 'repair (v)', referring to resolution of disputes. Tabalaba, the surname at the ancient village of Dioni, is from tàbàlâ: 'flat stone area'.

Some of the other surnames are much more common in other Dogon and non-Dogon ethnic groups. Diarra and Samassékou are mostly Fulbe. Maiga is Songhay. Ongoiba is mostly Jamsay. Ouologuem is mostly Tommo. Guindo is mostly Toro So.

Villages on or near the main highly north of the last heights are in (4). People from these villages generally refer to the dialects spoken in this zone as pǒ: yó. $\therefore$, and may refer to some of them as Najamba, as Kindigué, or by village-specific terms.
(4) Villages on or near main highway
a. Sinda area

| Siba | Síbà | 1501.634 | 03 | 04.563 |
| :--- | :--- | :--- | :--- | :--- |
| Sinda | Sìndá | 1501.938 | 03 | 04.826 |

b. core Kindigué

Ambaka àmbàká: 1454.9780307 .180
Kol kól 1500.5240311 .889

| c. Koïra cluster Koïra Noumaldé | kóyrà |  |  |
| :---: | :---: | :---: | :---: |
|  | kòyrà-ébàn | 1502.374 | 0311.814 |
|  | koyra-lumorde (Fulfulde) |  |  |
|  | (note: ébàn and lumorde mean 'marketplace') |  |  |
| Koïra Madina | kòyrà-màdínà | 1502.848 | 0312.490 |
| Koïra Béri | kòyrà-dòlê: | 1502.950 | 0311.532 |
|  | koyra-karawal (Fu | ulde) |  |
|  | (note: dòlê: and k | wal mean | d, barren |
| d. new villages settled from Mougi |  |  |  |
| Beguima | bègímà | 1502.464 | 0308.573 |
| Dimbatoro | dùbàtólò | 1502.468 | 0309.220 |
| Nema | né:mà < Fulfulde | 1502.273 | 0307.529 |
|  | old name $g W \varepsilon$ :-táb |  |  |
| e. other |  |  |  |
| Ibissa | ìbíjà | (1503 | $0316)$ |
| Noumbori | nùmbǒl | 1503.054 | 0309.727 |
| Songoli | sònôl | 1502.043 | 0313.051 |
| Tabako | tàbâ: | 1502.266 | 0306.185 |

Surnames of the villages near the highway are in (5).
(5)

| surname | in Najamba | villages |
| :--- | :--- | :--- |
| Balobal | bálóbàl | Sinda |
| Dambélé | dámbèlè | Siba |
| Diarra | járà | Sinda (blacksmiths), Tabako (blacksmiths) |
| Dicko | díkò | Tabako (ex Tanga [Tiranige]) |
| Diombélé | jómbélè | Songoli (ex Dogani) |
| Kassambara | kàsàmbárà | Sinda (dominant) |
| Kindimilba | kìndìmbílbà | Noumbori (dominant) |
| Koungoulba | kùngúlbà | Songoli |
| Maiga | máygà | Siba |
| Ongoiba | j̀yóybà | Dimbatoro, Béguima, and Néma |
|  | póròlbà | (dominant), Tabako |
| Porolba | pùjúgù | Koli (dominant) |
| Poudiougou | Kära Béri, Koïra Madina |  |
| Samassékou | sángàlbà | Tabako (blacksmiths) |
| Sangalba | sàl | Köra (all 3 villages) |
| Soukanaba | súkàbà | Tabako |
| Yombolba | yòmbólbà | Ambaka (dominant) |

We have not done detailed mapping in the "Bondu" area on the high plateau. Some of the locations are in (6). Parenthesized coordinates are estimates from maps.

(6) | official name | native name | north | west |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| Aina | áynà | 1449.562 | 03 | 33.192 |  |
| Borko | bólò | 1457.243 | 03 | 21.248 |  |
| Dempare | dèmbâl | 1502.652 | 03 | 22.056 |  |
| Dogani | dògǎn | 1453.817 | 03 | 25.240 |  |
| Gobina | dògàn-gò:gìná | 1453.592 | 03.36 .205 | part of Dogani |  |
| Kidibili | kìndìbîl | $(1459.5$ | 03 | $17)$ | on old map only |
| Kongoro | kòngélè | 1457.504 | 03 | 21.216 |  |
| Koundé | dògàn-kúndè | $(1454$ | 03 | $26)$ | part of Dogani |
| Koutoumel | (?) | $(1452$ | 03 | $30)$ |  |
| Menti | méndù | 1454.580 | 03 | 23.649 |  |
| Namare | nàmàré | $(1502$ | 03 | $16)$ |  |
| Nombol | bòlò-nómbòl | 1458.059 | 03 | 21.588 |  |
| Oumé | úmè | 1455.099 | 03 | 22.743 |  |
| Pouti | púrù (old name) | $(1452.5$ | 03 | $31)$ |  |
| Tiangali | sànǎl | 1450.290 | 03 | 30.839 | two villages |
| Sirou | bǔl | 1451.959 | 03 | 28.372 |  |
| Tapou | tábù | 1449.406 | 03 | 34.139 |  |
| Tintam | tíndàm | 1456.390 | 03 | 20.788 |  |

Many of the villages along the highway, and some from around Borko, frequent the weekly market of Boré instead of or in addition to that of Douentza. There are also small weekly markets at Koira Beri, Borko, and Dogani.

The major economic activity is millet (Cenchrus spicatus) farming in the plains. Minor crops grown in the same fields are sorghum, sesame, peanuts, okra, cow-peas (Vigna unguiculata), roselle (Hibiscus sabdariffa), cotton, and a little maize and peanuts. The rainy season is roughly June to September, with a harvest in late October or early November. During the long dry season, some off-season (contre-saison) gardening of cash crops is carried out: onions, garlic, lettuce, tomatoes, chili peppers, sweet potatos, cassava. Smallscale livestock herding is practiced (sheep, goats, cattle). Transportation of goods to and from the villages is chiefly by donkey cart. Donkeys and camels also serve as mounts; horses seem to have disappeared from the immediate zone in recent times (though they are still found in some villages closer to Mopti-Sévaré.

Schools were built in the 1990's in Koira Beri, Kubewel, and Adia. A number of other villages have also recently built schools. There is currently a generation of students who are reaching high-school age and are heading to Douentza or other larger towns to continue their studies.

### 1.4 Previous and contemporary study of Najamba

I am unaware of any previously published or otherwise circulated professional linguistic work on Najamba.

Abbie Hantgan, a 2013 Linguistics Ph.D. at Indiana University and a member of the Dogon languages project, had been a Peace Corps volunteer in the village of Koira Beri in the

Kindigué zone in 1998-2000. At that time she acquired a practical speaking knowledge of the local Kindigué, as well as Fulfulde. She subsequently did some fieldwork on Kindigué as part of the Dogon project, with emphasis on phonology and verbal morphology. Her other assignments on Bangime (Mali) and Tiefo (Burkina) took up most of her time during our Dogon-based project, and her dissertation was on Bangime (Hantgan 2013). She has, however, published on the Bondu (i.e. Kindigué) vowel harmony system (Hantgan \& Davis 2012).

### 1.4.1 Fieldwork

My data are from the villages of Kubewel and Adia, which occur (along with a few smaller villages) in a horshoe valley that opens up (on the east) to Douentza.

The fieldwork began in a small way in 2004-5, while I was working mainly on Jamsay and based in Douentza. I began with a 4-day visit to Kubewel and a 2-day visit to Adia, during which I and my Dogon assistants elicited flora-fauna vocabulary and collected or observed specimens. Several tapes were also recorded during these visits. Data for an initial working lexicon were later elicited in Douentza with a Najamba speaker over a five-day period.

In June-December 2006, I again worked mainly on other languages, but at the end of that session I did two weeks of grammatical elicitation on Najamba and sketched some sections of the grammar (mainly morphology). We also did a one-day follow-up trip to Kubewel to check on some plant and animal terms. In 2007 and 2008 I was able to spend a total of two months on Najamba and wrote a draft of this grammar. The final editing of the grammar was completed in early 2017.

### 1.4.2 Acknowledgements

The initial 2005-5 work was done on the margins of a project focused on Jamsay, financed by the National Endowment for the Humanities. The core fieldwork on Najamba was done in 2006-2008 as part of a larger Dogon project funded by the National Science Foundation. Additional fieldwork was done opportunistically in later years through 2017. The NSF grants focused on Dogon languages were BCS-0537435 (2006-09), BCS-0853364 (2009-13), and BCS-1263150 (2013-17). The University of Michigan helped out with bridging funds between NSF grants and by paying a substantial portion of my salary during fall 2006 and winter 2008.

## 2 Sketch

The most striking feature of Najamba, as opposed to other Dogon languages, is its flourishing noun-class system. Objectively inanimate nouns are divided into three classes, one of which, the pseudo-animate, is identical morphologically to the single class of animate nouns (humans and higher animals). The two specifically inanimate classes share an inanimate plural category (distinct from the plurals of animates and pseudo-animates), but the two differ from each other in the singular. Najamba has a Swahili-like agreement system whereby the inanimate noun classes, in singular and plural forms, are reflected by agreement in modifiers (adjectives, demonstratives). Other western Dogon languages have reduced versions of this class system, ranging from semi-productive (Tebul Ure) to completely frozen (southwestern subgroup, e.g. Mombo).

Another striking feature of Najamba is the elaboration of participles, distinguishing subject from object agreement, in focalized and relative clauses. These participles also participate in noun-class agreement. As a result, there is more morphological detail here than in any other of our other Dogon grammars.

### 2.1 Prosody

Najamba is a tonal language. H is high tone, L is low tone. Syllables may be $\mathrm{H}, \mathrm{L}$, falling $<H L>$, rising <LH>, or bell-shaped <LHL>. All regular stems (nouns, verbs, adjectives, numerals) have a lexical tone melody with one (rarely two) H-tone element(s). Some stems have $/ \mathrm{H} /$ lexical tone melody, others have $/ \mathrm{LH} /$, /HL/, or /LHL/ melody, spread out over the relevant number of syllables, but none is lexically all-L toned.

These lexical melodies are modified or overridden by tone overlays imposed by inflectional suffixes (verbs) or by syntactic constructions (nouns, adjectives, numerals). Inflected verbs (stem plus suffix) and verbal participles have a variety of tone formulae that are either entirely controlled by the inflectional category (tone overlays), or a combination of lexical melody and partial overlay.

For basics of Dogon tonosyntax, see Heath \& McPherson (2013), McPherson \& Heath (2016), and related work.

### 2.2 Inflectable verbs

Verb stems may be simple, or may include one or more derivational suffixes following the basic verb stem. Derivational categories include reversive ('untie', 'unlock') and causative. An opposition between mediopassive (middle) and transitive verbs, both marked by suffixes, is highly productive in this language. Adjectives generally have associated inchoative verbs ('become ADJ'). The verbs are phonologically similar to the adjectives, but there is no rigorous derivational relationship between them. I therefore analyse the adjectives and the
related verbs are equal members of word-families. Factitives ('cause to become ADJ') can be derived from the inchoatives.

Inflectional categories are expressed by suffixes that follow any derivational suffixes that may be present. Indicative verbs typically have an aspect-negation (AN) suffix, followed by a pronominal-subject suffix: Vb-AN-Pron. The perfective (positive) and the 3 Sg subject category are unmarked (zero suffixes).

Indicative AN categories marked by nonzero suffixes are perfective negative, present, future, present negative, and future negative. Pronominal-subject categories are $1 \mathrm{Sg}, 1 \mathrm{Pl}, 2 \mathrm{Sg}$, 2Pl, 3Sg (unmarked), and 3Pl. The morphology (AN-suffix allomorphy, tone formulae) often points to a division between $1 \mathrm{st} / 2$ nd person categories on the one hand, and 3 Sg and 3 Pl on the other, but sometimes 3 Pl is quite distinctive.

Instead of English-style "tense" (past versus present), calculated by directly comparing the time (point or interval) of the denoted eventuality with the moment of speaking, Najamba (like other Dogon languages) has a higher-level distinction between nonpast (unmarked) and past (marked) temporal frameworks, with parallel aspectual categories. English $I$ sat is translated as a perfective-aspect form within the nonpast framework, while $I$ had sat is translated as a corresponding aspect form within the past framework.

Each verb has a lexical tone melody, usually either /H/ or /LH/. Two irregular monosyllabic verbs have /HL/ and there is one /LHL/ verb. In addition, each verb belongs lexically to either the $-\operatorname{ATR}\{\varepsilon \rho\}$ or the $+\operatorname{ATR}\{e o\}$ harmonic class. Each verb has three stem-forms, the choice being determined by the inflectional category. These are here called the E-stem, the A/O-stem, and the I-stem. In addition, each AN category comes with a full or partial tone overlay on the stem, though many AN categories preserve the initial tone (H or L) of the verb. For each AN suffix, therefore, the stem-vocalism (e.g. A/O-stem) and tone formula must be separately specified. Most nonzero AN suffixes require the A/O-stem, but each has its own tone formula, and in some cases (present negative versus future negative) the only difference is in the tones.

Stem tone formulas for the various AN categories are combinations of $H, L$, and the variable X (the latter represents the initial lexical low or high). For example, ((X)) $\mathrm{H}^{*}(\mathrm{~L})$ means that the H tone is obligatory, the final L tone is present if there is a syllable available, and the initial X (lexical H or L ) is expressed if there is yet another syllable or mora available after that. Any further syllables are filled by spreading the medial H tone.

The chaining form, which is often used in this grammar as a citation form, is the form of the verb in nonfinal position in verb chains. It shows the lexical tone melody. Factoring out the tones, the chaining form is unusual in that it is based on the E-stem of verbs of the -ATR $\{\varepsilon \rho\}$ harmonic class, but on the I-stem of verbs of the +ATR $\{e o\}$ harmonic class.

A few representative forms are given here for 'slaughter' (i.e. 'cut the throat of') and 'go'. Both are lexically /H/-toned, but 'slaughter' is of -ATR $\{\varepsilon \rho\}$ harmonic class and 'go' of + ATR $\{$ e $o\}$ class.

| category | 'slaughter' | 'go' | stem vocalism |
| :--- | :--- | :--- | :--- |
| chaining | sémé | ín (</ín-íl) | E-stem, I-stem |
| perfective | sèmè- | ìnè- | E-stem |
| future $(1 \mathrm{st} / 2 \mathrm{nd})$ | sèmà-mbô- | ìnò-mbô- | $\mathrm{A} / \mathrm{O}$-stem |
| future negative | sèmǎ-ndì- | ìnǒ-ndì- | $\mathrm{A} / \mathrm{O}-$ stem |
| verbal noun | sémí-lé | ín-lé | I-stem |

'Slaughter, cut the throat of' is a typical verb with an E-stem seme-, an A/O-stem sema-, and an I-stem semi (which undergoes Post-Sonorant High-Vowel Deletion to sem). I take the lexically basic form to be sémé, a version of the E-stem that is used as the chaining form. From the representation sémé we can see that the lexical melody is $/ \mathrm{H} /$ rather than $/ \mathrm{LH} /$ and that the ATR-harmonic class is $\{\varepsilon \rho\}$ rather than $\{e o\}$. From the E-stem, in addition to the chaining form $s \varepsilon ́ m \varepsilon ́$, we get perfective $s \varepsilon ̀ m \varepsilon ̀-~(r e c a l l ~ t h a t ~ t h e ~ p e r f e c t i v e ~ h a s ~ z e r o ~ A N ~ s u f f i x), ~$ which gives us pronominal-subject forms such as 1 Sg sèmè-ḿn 'I slaughtered'. Other AN categories are based on the A/O-stem: perfective negative sémá-l- 'did not slaughter', present sémà-njò- 'slaughters', future sèmà-mbó- 'will slaughter' (form for 1st/2nd person categories), future negative sèmǎ-ndì- 'will not slaughter', and present negative sémà-ndí- 'will not slaughter'. The progressive is expressed by the uninflectable form sémà-mbò (cf. English -ing) plus an inflected form of quasi-verb bò- 'be' as auxiliary. The I-stem is not used for this verb in any basic AN category, but it occurs in the verbal noun sém-lé ‘slaughtering’ (</sémí-lé/). For verbs of the +ATR \{e o\} harmonic class, the I/U stem rather than the E-stem is used in the chaining form, as well as in the verbal noun.

In addition to regular verbs, which are aspectually dynamic (distinguishing perfective from imperative), there are stative verbs which do not make aspectual distinctions. These can be derived statives, related to regular verbs (stative 'be seated' versus dynamic 'sit down'), or they can be defective stative-only quasi-verbs like 'want', 'know', 'be (somewhere)', 'have', and 'can'.

There is a perfect AN inflection with auxiliary verb jò- and variants, related to the 'have' quasi-verb. An experiential perfect ('have ever/never VP-ed') is expressed by auxiliary verb tár (cf. tár 'look at') plus the same jò-.

There is a periphrastic progressive translatable as the English be VERB-ing type, with a pronominally uninflected progressive in -mbò plus an inflected bò- 'be', as in sémà-mbò bò- 'is slaughtering'.

Suffixally expressed deontic modal categories are the imperative and the hortative. The imperative extends beyond second person subject, and the hortative extends beyond first inclusive ('let's) subject.

In relative clauses, regular AN-inflected verbs are replaced by verbal participles that agree with the head NP in nominal features. Under subject focalization, a distinct set of participles (not agreeing with the focalized constituent) is used.

### 2.3 Nouns

Most nouns have distinct singular and plural forms at word level.

Najamba has a rather unusual (for Dogon) nominal morphology in which many nouns, here labeled mutating, express the number distinction by a stem-final vowel mutation from back (or low) to front vowel, or vice versa (e.g. $ァ$ : versus $\varepsilon$ :). Most such nouns end in a long vowel. Another morphological type of nouns, suffixing, lack this type of mutation, but have either a singular suffix (inanimates) or a plural suffix (animates). In the suffixing inanimates, the singular suffix is usually optional. Adjectives are also of these two types, either mutating or suffixing, and in principle have full sets of animate and inanimate forms.

The mutating nouns are interesting because the back/low (hereafter "O") form and the front (hereafter "E") form are mapped in different ways onto the singular/plural distinction. For grammatically animate nouns (denoting humans, animals, and some inanimates such as weapons), the E form is singular while the O form is plural. For grammatically inanimate nouns, on the other hand, the E form is used in the plural. In the singular, grammatically inanimate nouns split into two subclasses, one of which is E and the other O. I therefore speak of $\mathbf{E} / \mathbf{E}$ and $\mathbf{O} / \mathbf{E}$ inanimate classes (the second symbol in each case represents the plural), as opposed to the animate (or $\mathbf{E} / \mathbf{O}$ ) class. Many nouns that denote inanimate entities are (pseudo-)animate $\mathrm{E} / \mathrm{O}$ as opposed to $\mathrm{E} / \mathrm{E}$ or $\mathrm{O} / \mathrm{E}$.

Examples of mutating nouns are tòjǒ: 'blister', plural tòjě: (inanimate $\mathrm{O} / \mathrm{E}$ ); and sàmbé 'spear', plural sàmbú: (animate).

Examples of suffixing nouns are: kî: 'head', plural kî:-mbò (animate); búmbé-ŋgó 'track (of snake)', plural búmbé (inanimate $\mathrm{O} / \mathrm{E}$ ); and dǎy-пgé 'well (water)', plural dǎy (inanimate E/E).

### 2.4 Unpossessed noun phrases (NP)

A simple noun phrase may contain a noun, a modifying adjective, and a final determiner such as a definite morpheme. Adjectives have substantially the same morphology as nouns (except that adjectives also have special predicative forms). Adjectives, like nouns, may be either mutating or suffixing. Mutating adjectives have just two forms ( E and O). Suffixing adjectives, if semantically compatible with the full range of animate and inanimate nouns, have richer paradigms than suffixing nouns since they allow inanimate singular -ngo and -nge and also allow animate plural -mbo.

The adjective and the determiner take their agreement class from the noun. For a mutating adjective, the E form is singular for animates (including pseudo-animates that are objectively inanimate), and plural for the main inanimate classes. The O form is plural for animates, and singular for the majority of inanimates.

Examples of singular and plural NPs are (8a) and (8b). 'Pond' is an E/E-class inanimate, and therefore takes the E form of the (mutating) adjective 'big' in both singular and plural.
a. tàgà: ${ }^{\mathrm{L}}$ gìndé: ké
pond ${ }^{L}$ big.InanSg.E Def.InanSg.E
'the big pond'
b. tàgè: ${ }^{\mathrm{L}}$ gìndé: yé
pond. $\mathrm{Pl}^{\mathrm{L}} \quad$ big.InanPl Def.InanPl
'the big ponds'

In (8), the nouns have dropped tones to $\{\mathrm{L}\}$ before the modifying adjective (and in some other syntactic contexts). This tone-dropping is indicated by superscript ${ }^{\mathrm{L}}$ "pointing" (in this case rightward) to the tonosyntactic controller.

A suffixing noun ('egg') and a suffixing adjective ('big') co-occur in (9). 'Egg' is inanimate ( $\mathrm{O} / \mathrm{E}$ class). Again, tone-dropping applies to a noun before a modifying adjective.
a. pòl-ngò ${ }^{\mathrm{L}}$
egg-InanSg. $\mathbf{O}^{\mathrm{L}}$
bǐn-gó
kó
big-InanSg. 0
'the big egg'

| g. pòlè ${ }^{\mathrm{L}}$ | bìní: | yé |
| :--- | :--- | :--- | :--- |
| egg. $\mathrm{Pl}^{\mathrm{L}}$ | big.InanPl | Def.InanPl |

'the big eggs'

Def.InanSg.O

An NP may also contain a numeral or other quantifier ('each', 'all'). Numerals behave differently from modifying adjectives in that they do not control tone-dropping on the preceding noun (or noun plus adjective). This suggests that the noun plus adjective unit should be considered the core NP, which is then subject to wider determination and quantification. The basic linear order is (10). An example showing this order is (11).
(10) $[\mathrm{N} \quad$ Adj] Num Det 'all'
(11) [nì:-mbò ${ }^{\mathrm{L}}$ bǐn-bó] tà:ndî: bè ${ }^{\mathrm{L}}$ dîn
[bird-P1 big-Pl] three Def.AnP1 ${ }^{\mathrm{L}}$ all
'all three (of the) big birds'

### 2.5 Possession

A nonpronominal possessor NP precedes the possessum (possessed noun or NP). A pronominal possessor may likewise precede the possessum, but as indicated just below there is another option. If the possessor (pronominal or not) precedes the possessum, the possessed core NP (noun plus any adjectives) is subject to tone-dropping due to the possessor. Thus ólé 'house' keeps its H-tones in definite ólé ké but is L-toned in mí ${ }^{\mathrm{L}}$ òlè ké 'my house' and in [ánè mó] Lòlè ké 'the man's house' (ké is a definite determiner, inanimate E-class). If the core NP contains an adjective, the adjective has already forced tone-dropping on the noun. When the noun-adjective core NP is preceded by a possessor, the possessor forces tonedropping on the entire core NP ( $\mathrm{N}-\mathrm{Adj}$ ), the incrementally audible effect being that the adjective drops its tones.

By contrast, NP elements (numerals, determiners, quantifiers) that follow the core NP (i.e. noun plus adjective) are not tone-dropped under the influence of a possessor. In (12a), the core NP is tonosyntactically bracketed and the $\{\mathrm{L}\}$ overlay applies to the adjective as well as to the noun. In (12b), only the noun is tone-dropped, while the numeral is tonosyntactically free.

| a. mí | ${ }^{\text {L }}$ [òlè | gìndè:] | ké |
| :--- | :--- | :--- | :--- |
|  | 1SgPoss | ${ }^{\text {L }}$ [house | big.InanSg.E] |$\quad$ Def.InanSg.E

b. mí Lòlè tà:ndî: yé

1 SgPoss ${ }^{\text {L house three Def.InanPl }}$ 'my three houses'

If the possessor is a pronominal, it may alternatively follow the core NP (plus a cardinal numeral, if present). In this case there is an appositional construction of the type 'house [my Poss]', where 'Poss' represents any of a set of pronoun-like classificatory elements used only in this context, and agrees with the possessum in nominal features ( $\mathrm{AnSg}, \mathrm{AnPl}$, $\mathrm{InanSg} . \mathrm{E}$, InanSg.O, InanPl). Thus (13a) 'my big house' is expressed as '[big house] [my Poss]'. The possessed core NP may be directly followed by a numeral, which therefore precedes the possessor and the classifier. However, if a determiner and/or a universal quantifier are present, they follow the possessor phrase (13b).

| a. | [òlè | gìndé: $]$ | $[m i ́ n$ | gè $]$ |
| :--- | :--- | :--- | :--- | :--- |
|  | [house ${ }^{\mathrm{L}}$ | big.InanSg.E] | $[1 \mathrm{SgPoss}$ | Poss-InanSg.E $]$ |
|  | 'my big house' |  |  |  |


'all my three big houses'

### 2.6 Postposition phrase (PP)

Adpositions are postpositional. Simple postpositions are mà (in some combinations, má), which is used in dative, instrumental, and locative functions, and purposive nèn 'for'. Accusative gì (direct objects and recipient of 'give') also behaves like a postposition, coming at the end of the NP and not co-occurring with any other postposition. There are many compositve postpositions that end in mà but also have an original possessed noun, as in [ $[X$ kùl] mà] 'inside X ', originally 'in [X's belly]' ( $<k \hat{u} l$ 'belly'). See chapter 8 for the postpositions and other adverbial elements.

### 2.7 Main clauses and constituent order

Constituent order is SOV when the subject and object are both unfocalized nonpronominal NPs.

| [nò: $^{\mathrm{L}}$ | kúlmá] | èndê: | gàlì-yè- $\varnothing$ | $m \varepsilon ́$, |
| :--- | :--- | :--- | :--- | :--- |
| [person | adult] | child | scold-MP-3SgSbj | if, |
| èndê: | kòn-kámà | gìné | já-ndì- $\varnothing$ |  |
| child | anything | say | can-FutNeg-3SgSbj |  |

'If an adult scolds a child, the child can't say anything.'

The verb (or serialized verb chain) is normally clause-final, except for subordinators (chapters 15-17) and clause-final emphatics (§19.5). Aspect, tense, negation, and deontic modal categories are expressed by verbal morphology and/or by auxiliaries juxtaposed tot he verb. Adverbs and adverbial phrases occur in various preverbal positions, including clause-initial before subjects.

### 2.8 Participles

In relative clauses and related subordinated clause types, and in the presence of a focalized subject, the main-clause verb (with pronominal subject marked by the final suffix) is replaced by a verbal participle that agrees in nominal features but not pronominal person with the head NP. In relatives, there is a distinction in some inflectional categories between subject and nonsubject participles. Najamba has the richest participial morphology of any Dogon languages that has been studied to date.

Verbal participles resemble nouns and adjectives morphologically. Like them, some participles are mutating (final long vowels switch between back/low and front depending on agreement category), while others are suffixing (animate plural suffix -mbo). See $\S 14.3$ for the elaborate morphology of relative-clause participles, and $\S 13.1 .1$ for participles in subjectfocus clauses.

### 2.9 Relative clauses

A relative clause is characterized by the features in (15).
(15) a. the central part of the head NP (maximally Poss-N-Adj-Num) is internal to the relative clause, but is subject to tone-dropping as though followed by a reference restricting modifier;
b. the verb takes participial form, agreing in nominal features (noun class, plurality) with the head NP, and in some AN categories distinguishing subject from nonsubject relativization;
c. if the head NP is not the subject, a pronominal subject is expressed by a special set of subject morphemes immediately preceding the participle;
d. a determiner and/or the 'all' quantifier that have scope over the relativized NP appear in postparticipial position.

For details see Chapter 14.

### 2.10 Focalization

Focus particle yà: follows a focalized non-verb constituent (NP, adverbial phrase), which is fronted to clause-initial position. The particle is sometimes omitted.

When the focalized constituent is the subject, which is already clause-initial, the verb takes the form of a subject-focus participle, agreeing with the subject in class and number features (but not person). When a nonsubject constituent (object, adverbial phrase, etc.) is focalized, the verb has its normal main-clause form.

See chapter 13 on focalization.

### 2.11 Interclausal syntax

Najamba can combine two or more verbs into a chain (§15.1). In direct chains, the final verb is inflected, while nonfinal verbs occur in the chaining form (morphologically bare except for taking E-stem or I-stem segmental form). Directly chained verbs can only be separated by an intervening pronominal-subject proclitic in nonsubject relatives.

Loose chains may involve two or more distinct VPs (with shared subject) or distinct clauses. In a loose chain, nonfinal verbs have an overt subordinator, usually indicating how the two eventualities compare in time (simultaneous versus sequenced) and to some extent whether their subjects are coindexed or disjoint (chapter 15).

Higher verbs like 'know (that ...)' take regular main clauses as complements (§17.3.2). Quoted clauses may be framed by an inflected 'say' verb or by uninflected quotative particle wa, which can occur both after the subject and clause-finally (§17.1.2).

Other subordinated clause (or VP) types include conditionals (chapter 16), verbal-noun complements (§17.4), and purposive clauses (§17.6).

## 3 Phonology

### 3.1 Internal phonological structure of stems and words

### 3.1.1 Syllables

Typical syllables of Najamba are $C v, C v$ :, and $C v L$ with final sonorant. $C v: L$ is also found but uncommon.
$N C v$ syllables are difficult to isolate. They are likely present in the few stems with medial $L N C$ triple clusters like rmb in gùrmbâ: 'pigeon' (§3.2.11.4). Medial NC clusters, with homorganic nasal and voiced stop, as in bàndí 'back (body)', arguably syllabify with the following vowel (bà.ndí ), but it is difficult to test this. The few words beginning with NCV, such as ǹdé 'give' and the examples in $\S 3.2 .11 .1$ below, are pronounced with L-toned syllabic nasal in isolation or post-pausally.

The initial $C$ position may be vacant in word-initial syllables.

### 3.1.2 Embryonic metrical structure

Najamba shows relatively little of the metrical patterning that pervades the phonology (especially the verb morphophonology) of the northern Dogon languages that I have studied, where the second syllable of $C v C v C v \ldots$ is subject to frequent vocalic reduction (to a high vowel or schwa, or to zero).

Nonmonosyllabic verb stems do shift their final vowel to /i/ before the reversive suffix, which has allomorphs $-l \varepsilon$ and $-1(\S 9.1)$, and the $/ \mathrm{i} /$ is then subject to Post-Sonorant HighVowel Deletion (§3.4.2.1) in the relevant phonological environment. However, "stem-final" is not a metrically defined position in the usual sense.

### 3.1.3 Weight (light and heavy stems)

The distinction between prosodically light and heavy stems is less important in Najamba than in some other Dogon languages. There is a progression in verbal tonology from Cv - to CvCv to $C v: C v$ - to $C v C v C v$-, and so forth. However, this is largely a function of the way complex autosegmental sequences are mapped onto verb stems with different syllable and mora counts. The most common pattern is that an overlay associated with an inflectional category, such as present tense, must be fully applied to the stem before the stem's own lexically defined onset tone ( H or L ) can be realized. This is not a matter of weight per se.

More interesting is the strong $C v(N) C v$ bias of derived statives based on stance and 'hold' verbs and some others, see the list in (423) in §11.2.3. That $\operatorname{Cv}(N) C v$ is a real target is shown by the dropping of the mediopassive suffix in trisyllabic inputs like íngí-yع́ 'stand up' and its retention in bisyllabic inputs like bǐ(-)y 'lie down' </bì(-)yí/, producing syllabically parallel íngà 'be standing' and bíyò 'be lying down'. This "Goldilocks" bias, not too long and not too short, for derived statives is widespread in Dogon languages.

### 3.2 Consonants

The consonantal phonemes are in (16). Somewhat marginal phonemes are enclosed in parentheses. Very marginal ones are in double parentheses. Largely absent from the inventory are nasalized sonorants $\left\{y^{n} W^{n} r^{n}\right\}$, which are common in eastern Dogon languages.
(16) Consonants

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| labial | $p$ | $b$ | $m$ | $(f)$ |  |  | $W$ | $\left(\left(W^{n}\right)\right)$ |  |  |
| alveolar | $t$ | $d$ | $n$ | $S$ | $((z))$ | $1, r$ |  |  |  |  |
| alveopalatal | $(c)$ | $j$ | $n$ | $((\breve{s}))$ | $((\check{z}))$ |  | $y$ | $\left(y^{n}\right)$ |  |  |
| velar | $k$ | $g$ | $\eta$ |  |  |  |  |  |  |  |
| laryngeal |  |  |  |  |  |  |  |  | (h) ((P)) |  |

$c$ is IPA [tS], $j$ is [d3], $\check{s}$ is [J], $y$ is [j].
key to columns: 1. aspirated voiceless stops ( $c$ is affricated); 2. voiced stops; 3. nasals; 4. voiceless fricatives (including sibilants); 5 . voiced fricatives; 6 . liquids; 7 . semivowels; 8. nasalized semivowels; 9. aspiration; 10. glottal stop.

Voiceless obstruents occur chiefly in stem-initial position.

### 3.2.1 Fulfulde preglottalized consonants ( $6 d f$ )

Fulfulde preglottalized consonants $\left\{{ }^{\prime} b^{\prime}\right.$ 'd 'y\} are (inaccurately) represented in Fulfulde orthography as implosives $\{6 d\}$ (and y with a similar hook). They are here represented as $\{6 d f\}$ since the implosive $y$ symbol is not available to me typographically. They occur in some unassimilated loanwords, usually varying with voiced stops in more fully nativized pronunciations. Examples: díllé 'sneeze', já6é '(container) catch (dripping liquid)', táfè-táfè kán 'break up (into subgroups)'.

### 3.2.2 Alveopalatals $(c, j, j)$

Voiced affricate $j$ and nasal $n$ are legitimate phonemes, occurring before back as well as front vowels. Examples: kájábí 'wait', tòjó: 'blister', kè:njú 'year', jàmí 'malfunction', némélé-„émélé ‘blinking', àlè númbé 'light rain'.

By contrast, c (i.e. [tf]) is marginal, occurring chiefly before front vowels $\{i$ e $\varepsilon\}$ and typically varying with $[\mathrm{k}]$ or palatalized $\left[\mathrm{k}^{\mathrm{y}}\right]$. Examples with consistent $c$ include Fulfulde loanwords m̀mb́ccè 'change (money back)', wáccé 'chew cud', and nécé ‘spur on (horse)'.

There are a few loanwords with clear $c$ before a non-front vowel: cárdì 'silver (metal)', cámbòl 'diabetes’, cá:gàl 'spine below nape’, cá:Igò 'carrion' (nativized variant sá:dì), cáldì 'forks (in sticks)', tèmè cóndì 'flour sieve', cókì 'game played with a knife', dáncùgù 'sleeveless boubou'.

Expressive vocabulary: cékèy-cékèy 'rattling sound', có $\rightarrow$ (exclamation), cím-cím 'sound of chirping'.

### 3.2.3 Representations of initial $C W \ldots$ and $w \ldots$

A small number of stems appear to begin in $C W v$, where $v$ is a front or low vowel. The $w$ is audible before $\{a \varepsilon e\}$. The consonant $C$ is a velar or a coronal. An additional initial homorganic nasal may occur before the $C$ ( $\grave{g}$ wě: 'dog'). All examples known to me are presented in this section. It is necessary to discuss the options for lexical representation of these stems before attempting to formulate phonological rules for the alternations they show.

The nouns, adjectives, and numerals in (17a-c) undergo no relevant phonological alternations, so for them there is no direct evidence for any representation other than the one shown.

|  | stem | gloss | plural |
| :---: | :---: | :---: | :---: |
| a. | gwǎ: | 'country, land' | $g W \varepsilon ̌:$ |
|  | swâ: | 'whip (branch)' | $s w \hat{\varepsilon}$ : |
|  | ŋ̀gWど: | 'dog' | ŋ̀gwè:-mbó |
|  | dwà:nâ: | 'private field' | dwà:nê: |
|  | kwàndé | 'curving' |  |
|  | dwă:n | '(a) swagger' |  |
|  | dèbè-Swǎ: | 'space under granary' |  |
|  | twây | 'nine' |  |
|  | úywá | 'this year' |  |
|  | $d w \varepsilon ̌ \grave{y}^{n}$ | 'fast' | $d w \varepsilon ̌ y^{n}-m b o ̀$ |
| c. | $s W \hat{\varepsilon} y$ | 'seven' |  |

There are several verbs that begin with $C w \varepsilon$ or Cwé in the chaining form. Those in $C W \varepsilon$ (18a-b) change to $C w a$ but keep the initial $C w$ in the many suffixal combinations that require the $\mathrm{A} / \mathrm{O}$ form. However, these verbs simplify to Cu - in the verbal noun with suffix -lé, and
the verb 'arrive' (18b) has a causative that begins in Cǒ:-. There is one verb with Cwé in the chaining form, and this not only has Cu - in the verbal noun but also Co - as the $\mathrm{A} / \mathrm{O}$ stem (18c).

|  | chaining | gloss | A/O stem |
| :--- | :--- | :--- | :--- | verbal noun

If we take the $C W V$ forms as underlying, we need a rule deleting $w$ in the sequence $C W V$ where $v$ is any rounded vowel $\left\{\begin{array}{lll}\text { u } & \rho\end{array}\right\}$. $/ \mathrm{Cwu} / \rightarrow C u$ is illustrated in all of the verbal nouns in (18), and /Cwo/ $\rightarrow$ Co is seen in A/O form go-for /gwo-/ in (18c). To exemplify /Cwo/ $\rightarrow C o$ we must consider pronominally inflected such as the perfective of $k w \varepsilon$ 'eat': $k w \varepsilon$ - $\varnothing$ 'he ate', $k w$-à: 'they ate', but $k$-ǒ: 'you-Sg ate' for /kw-ǒ:/.

This $w$-deletion rule would have to be formulated in such a way that the initial $C$ slot must be non-null, since the rule does not apply to forms of wé 'come' (A/O form wo-, verbal noun wú-lé ), and since there are stems beginning in $w$ plus rounded vowel: wúy '(water) fill up’, wǒr 'pull off’, wòlé ‘become accustomed’.

This detail demonstrates that the $w$-deletion rule would have to be prosodically sensitive, applying only to a $w$ that is noninitial in the syllabic onset. But this raises the possibility that the $C W V$ pronunciation itself is prosodically motivated.

In the nouns shown in (19) below, the unsuffixed forms (which are singular for some stems and plural for others) have $w$ (usually but not always preceded by another consonant) and a long e: or $\varepsilon$ : . Before a singular or plural suffix (of -CCV shape in either case), the $/ \mathrm{w} /$ appears to fuse with the long vowel. One way to formulate this is to have the $w$ spread into (the first mora of) the syllabic nucleus, merging its features [+round, +high] with the $/ \varepsilon: /$ or /e:/ to give, say, /oe/ and /oe/, respectively. The former surfaces as o (see 'cloths' in (19a)), which may also reflect the shortening of stem vowels that occurs in some nouns before one of the $-C C v$ number suffixes. The latter (i.e. /oe/) resyllabifies to oy (see 'seedstock' and 'mouse'), where $y$ is the phonetically closest nonsyllabic segment to /e/.
unsuffixed
a. twề: 'seedstock; sowing'
$S W \varepsilon ̌: \quad$ 'cloths’
b. wê: (/òê:/) 'mouse' plural ǒy-mbò

Another possibility is to suggest underlying forms of the type /tòe::/, /òê:/, and (harmonically correct) /sòž:/. We could then assume that the -CCv number suffix (here as elsewhere) induces shortening of the stem vowel, resulting in e.g. /tòé-وgò/ (after tonal rules). In unsuffixed /tòê:/, the /o/ desyllabifies before the long front vowel, producing twề: . In the suffixed form /tòé-ŋgò/, there is a more even-handed competition between / $\mathrm{o} /$ and (short) /e/ to occupy the syllabic nucleus position, and here the /o/ happens to win out and the /e/ desyllabifies, forming an acceptable intervocalic triple consonant cluster ypg with the suffixal consonants.

This analysis might make it unnecessary to posit a $w$-Deletion rule in such cases as $k$-ǒ: 'you-Sg ate'. Instead of deriving this from /kw-ǒ:/ by w-Deletion, we could derive it from e.g. /kò-ó/, with a phonetically unremarkable coalescence of the identical vowels. However, in a form like O-class nonsubject perfective participle $\eta$-ŏ: 'that (someone) heard' from $\eta \omega \varepsilon$ ' 'hear', I hear a bell-shaped tone rather than the expected falling tone. This points to a presurface representation / $\mathfrak{y w}-\hat{\jmath}: /$ or /yo$-\hat{\imath}: /$ where the nasal is followed by a nonsyllabic segment that (in a syllabic onset) does not bear a tone but that is articulated with lower pitch than a following H-toned vowel. When this nonsyllabic $/ \mathrm{w} /$ or $/ \mathrm{d} /$ is elided ( $w$-Deletion), the output is $<\mathrm{LHL}>$ toned, with the initial L reflecting the lower pitch of the elided element. So if we



There is no strong argument against applying the $w$-less analysis to the forms given earlier (17-18). Among other things, twê.: 'seedstock' in (19a) is clearly related to the verb
 syllables, i.e. CWV: (with long vowel) or $C W v C$. So representations like /gòǎ:/ for $g W a ̌:$ 'country' and (harmonically correct) /sòéỳ/ 'seven' would give the correct outputs. Similarly, in (18), we could represent 'eat' as /kóź/ and 'go out' as /góé/.

The phonetics also give support to an analysis with e.g. /kóz/ and /góé/ instead of /kwé/ and /gwé/. In $k w \varepsilon$ 'eat', what is written as " $w$ " is actually a nonsyllabic [ 0 ], so that [ko $\varepsilon$ ] is a suitable phonetic transcription. $g w e ́$ 'go out' is likewise best transcribed phonetically as [goé], though naturally [ O ] is harder to distinguish from [w] than is [ o ].

I am inclined to favor the analysis in terms of $/ \mathrm{\rho} /$ and $/ 0 /$ instead of $/ \mathrm{w} /$. However, in the interests of simplifying the orthography (by avoiding nonsyllabic diacritics) I will transcribe e.g. kwé and gwé.

### 3.2.4 Intervocalic $w$ is rare

Also notable is the fact that, except for monosyllabics like $k w \varepsilon$ ' eat' and wé 'come', and occasional Fulfulde loans like háwé 'persuade', no verb stem ends in a syllable of the form $w$ plus vowel. By contrast, other sonorants (including $y$ ) are very common in this position.

A handul of nouns also show singular/plural alternations that might suggest loss of original *w in some positions with resulting contraction. However, I can find no support from other Dogon languages for the internally reconstructed forms in (20). For example, 'cow' reconstructs as *nǎ: and 'woman' arguably as *yǎ: .

| gloss | singular | plural | possible internal reconstruction of Sg |
| :--- | :--- | :--- | :--- |
| 'cow' | ně: | nàwó: | *nàwé: |
| 'woman' | yě: | yàwó: | *yàwé: |
| 'opposite-sex sib' | ùbùlngé: | ùbùlngàwó: | *ùbùlygéwé |
| 'slave' | gùndé | gùndàwó: | $?$ |

### 3.2.5 Voiced velar stop $g$ and $g$-Spirantization $(g \rightarrow \gamma)$

Some spirantization of $g$ to [ $\gamma]$ was observed, as in e.g. Jamsay, intervocalically between a or $\rho$ vowels. I have no evidence of incipient phonemicization of the spirantized variant and will transcribe $g$.

### 3.2.6 Velar nasal ( g )

A phonetic [ $\mathfrak{\eta}]$ occurs in the homorganic velar cluster $\eta g$, as in - $\eta g$ ó (nominal suffix) and níngí: 'door shutter'. The corresponding voiceless cluster $\eta k$ is less common but occurs in loans and frozen compounds: bànàykú 'cassava' (<Bambara), jànjàykàbá 'multiple millet spikes on a single stem'.
$\eta$ also occurs prevocalically, where its status as an independent phoneme is clearer. Examples: núpá: 'boubou (garment)', ànjánálà 'forked stick', dípóndí 'calm down', káyŋè 'gold' (< Fulfulde), dóné 'cloth for carrying'.

### 3.2.7 Voiceless labials $(p, f)$

$p$ is common stem-initially as in other Dogon languages. $f$ occurs in a few regional terms probably borrowed from other languages: fùgâ: ${ }^{n}$ 'light metal', àlfâ: 'holy man' (< Arabic via Songhay), ká:fày ‘saber', mălfâ ‘rifle', yá:fé 'pardon, forgive' (< Arabic).

### 3.2.8 Laryngeals $(h, ?)$

Phoneme $h$ occurs in Fulfulde loanwords, e.g. hámpé 'chew (tobacco)', héllo 'reverse side'.
Glottal stop / $3 /$ occurs only in the usual unh-unh type of interjections and does not have phonemic status.

### 3.2.9 Sibilants $(s, \check{s}, z, \check{z})$

$s$ is the only real sibilant phoneme. There is no particular tendency to palatalize it phonetically before $i$ or other front vowels.

A marginal phonemic $s ̌$ occurs in a handful of loanwords, chiefly ínšâllâ:w 'if God wills' (<Arabic) and šínwâ: 'Chinese'.
$z$ was likewise find in a very small number of borrowings: zàndàrmâ: 'gendarme', ózpórêe: 'forestry official' (Fr Eaux et Forêts), làzìdâ:'n 'adjutant (military rank)', sàrzâ:" 'sergeant'.
ž is recorded in álžérì ‘Algeria’ (alongside álánzérì)

### 3.2.10 Nasalized sonorants

The nasalized sonorant phonemes $\left\{W^{n} y^{n} r^{n}\right\}$ are common in eastern Dogon languages. I have not observed $r^{n}$ in Najamba, and I know $w^{n}$ only in one recent loanword: àbìyôw ${ }^{n}$ 'airplane' (Fr avion). $y^{n}$ is uncommon but it does occur syllable-finally in several expressive terms including adjectival intensifiers (21a-c), in one or two probable loanwords (21d), and more interestingly in a handful of native terms (21e-f).

```
a. kǎyn}->\quad 'bared (teeth)'
    pǎy }\mp@subsup{}{}{n}\quad\mathrm{ 'wide open (eyes)'
    b. dǔyn-dǔy" 'very red' (intensifier)
    káy"-káy" 'very hard' (intensifier)
    jáyn-jáyn}\quad\mathrm{ 'very undercooked' (intensifier)
    táy }\mp@subsup{}{}{n}\mathrm{ -táy }\mp@subsup{}{}{n}\quad\mathrm{ 'adequately sugared'
    c. dàndàndǎy" 'enormous'
    d. làtěy }\mp@subsup{}{}{n}(\textrm{Pl})\quad\mathrm{ 'soldering metal'(singular làť̌-ŋgó )
    e. dw\varepsiloňyn-yè 'fast; hot'(suffixal forms dw\varepsiloňyn-\etagò or dw\varepsiloň-\etagò, etc.)
    f. gìyn'\varepsilon
```


### 3.2.11 Consonant clusters

### 3.2.11.1 Initial $C C$ clusters

A nasal may occur before a homorganic voiced stop. The nasal is phonetically L-toned when the word is pronounced in isolation, but this is not phonemic. A relatively small number of stems begin in such sequences. Many of them are loans (from Fulfulde), but some basic vocabulary is also involved. The lists in (22) begin with the clearly or probably native Dogon
vocabulary (e.g. 'give', 'listen to', 'thirst', 'honey', 'earth', 'dog') and conclude with clearly or probably borrowed forms.
(22) mb ìbúyl|m̀bùyè 'sip (tea)', gìrò-m̀bùlǎ: 'face' (variant gìrò-mùlǎ:), m̀báyrà:rì 'pre-dawn meal in Ramadan', èmbà m̀bóyrì 'sorghum variety', m̀búnìyà 'red-brown', m̀bú:dù 'currency unit', m̀béddà 'highway', m̀béccè 'change (money back)'
nd ǹdé 'give', ǹdíy 'listen to', ǹdúngùwàl yàl 'year of famine in early 20th Century', ǹdòré 'Guinea worm' (variant nòré )
nj ǹjǐ: 'honey', ǹjâ: 'earth (dirt)', ǹjéngó 'thirst', ǹjùlû: 'broom', ǹjé: 'simple, bare', àjăn ǹ̀jèngè̀y 'moonless night sky', [ǹjěm má] ín 'travel', ǹjá:lò èndè 'bastard child'
 'come to an agreement', ŋ̀gú:rè 'livelihood', ŋ̀gúmàlà 'hornless ram'

The fact that initial $N C$ does not have a tone-bearing nasal is clearly shown by third-person perfective $\grave{n} d \hat{\varepsilon}$ - 'gave' ( 3 Sg ǹd $\hat{\varepsilon}-\varnothing$ 'he/she gave', $3 \mathrm{Pl} \grave{n} d-\hat{a}:$ : , where the $\{\mathrm{HL}\}$ overlay is borne entirely by the full syllable. Phonemically these forms are $n d \hat{\varepsilon}-$, and L-tone on the nasal (in independent, i.e. postpausal position) is added by a low-level rule.

### 3.2.11.2 Medial geminated $C C$ clusters

Geminate clusters within a stem are not typical of native Dogon vocabulary in Najamba. There are many borrowings, especially from Fulfulde, with various consonants other than $h$ as medial geminate: m̀béccè 'change (money back)', púddì 'henna', ánnò:rà 'image', káŋクè 'gold', láyyá:rì 'sacrificial ram', and many others.

Examples that do not appear to be borrowings are in (23). Some were probably composite originally (23b) or belong to a hypocoristic register (23c), but those in (23a) have numerous Dogon cognates and may be old.

$$
\begin{equation*}
C C \quad \text { stem } \quad \text { gloss } \quad \text { comment } \tag{23}
\end{equation*}
$$

a. authentic-looking

11 kóllí 'cough (v)'
" pállà: 'woven cloth’
b. probably composite (originally)

| mm | sàmmá | 'fast, quickly' | cf. sǎy 'now', má 'in' |
| :--- | :--- | :--- | :--- |
| " | tùmmô: | 'pestle' | also tùmàndô: |
| $n n$ | ànné | 'how' | variant ànìné, cf. adverbial né |

c. hypocoristic kin term
yy ǎyyà 'mama'

### 3.2.11.3 Medial non-geminate $C C$ clusters

Clusters of nasal and homorganic voiced stop are common: bóngò: 'navel', yàmbí 'cover (foot)', yéndè 'west', gìnjâ: 'noise'. Clusters of nasal and homorganic voiceless stop are less common, and occur chiefly in Fulfulde and other loanwords: hámpé 'chew (tobacco)', sónté 'be unsold', dáncùgù 'sleeveless boubou (garment)', m̀bù:dù-tánkà 'a colonial coin'.

### 3.2.11.4 Medial triple $C C C$ clusters

Triple clusters involve a nonnasal sonorant plus a nasal and a homorganic voiced stop. These clusters may be stem-internal, but only rmb and røg are common: pùrmbǎ: 'buttock', ùjùrmbó 'sweat (n)', gùrmbâ: 'pigeon', gírngí-y 'precede', jó:rngàl 'donkey disease’, 'párngá 'donkey’, kárngá ‘vestibule’. Clusters wnd, ynj, and ynd are attested in Fulfulde loans: bà:-gò líwndù 'herder's staff’, kóynjòl 'anthrax', háyndíné ‘amaze'.

These clusters are also created at the boundary of a noun or adjective stem plus a number suffix, either singular -ngo or -nge or plural -mbo, as in àntól 'ganglions' with singular àntól-ŋgó, and là:ró 'slow-witted' with plural lǎ:r-mbó. We can add yŋg in this context, e.g. pǒy-ŋgò 'baby-carrying cloth'.

### 3.2.11.5 Final $C C$ clusters

None.

### 3.3 Vowels

### 3.3.1 Short and (oral) long vowels

The phoneme inventory is in (24).
(24) short: $u \quad u \quad u \quad a \quad \varepsilon \quad e \quad i$
long: $u: \quad o: \quad \jmath:$ a: $\varepsilon:$ e: $i$ :

### 3.3.2 Nasalized vowels

Nasalized vowels are not typical phonemes in Najamba. A search through the working lexicon yielded the following cases.


Onomatopoeias: kòmìlìyâ: ${ }^{n}$ 'humming sound', kí:n-kà:n-kí:n 'creaking sound', hă: ${ }^{n} \rightarrow$ (or hà: $\left.{ }^{n}-k i ́:=1\right)$ 'hee-haw' (donkey's braying), sí: ${ }^{n-s i ́: ~}{ }^{n}$ 'chirping sound'

Definite or likely loanwords (including Wanderwörter): wúsùlà:" '(modern) incense', másô:n 'builder' (Fr maçon), bògàlâ:n 'bogolan (vegetative yellow and brown dyes for clothing)', pìpàlâ:" 'square fan', pàntàl̂:" 'pants' (Fr pantalon), s文:'ntúrù 'belt' (Fr ceinture), kálásô: ${ }^{n}$ 'underpants' (Fr caleçon), tàgù-tàl̂̂:" 'high-heeled shoes' (Fr talon 'heel'), mìsò:rò lìl̂:. 'lacy head shawl' (Fr nylon), vàlâ:" 'straight row of plants in field', bìdô:n 'canisters' (Fr bidon), fügâ:. 'aluminum alloy', sàrsô: ${ }^{n}$ 'toy wheel', kélérô:n 'bugle' (Fr clairon), làzìdâ:" 'adjutant' (military rank), lìyètìnâ:.n 'lieutenant', sàrzâ:n 'sergeant', mòndìlàtô:n 'eucalyptus balm', bòròdíyàn 'bananas'.

Probable native Dogon term: sònnéndè 'sand'.

### 3.3.3 Initial vowels

An initial vowel in a stem is observed when the usual syllable-initial consonantal slot is unfilled. Most stems begin with a consonant but there is a respectable minority of vowelinitial stems. There is no obvious preference for a particular vowel-quality other than the usual harmonic considerations that would also apply if an initial consonant were present.

Nouns: áfâ:rù 'gun mechanism plate', úbú 'manure', ònô: 'mountain pass', ìnǒ: 'tooth', èndê: 'child', $\varepsilon$ ह́mè: 'milk'.

Adjectives: àndǎ: 'other', ઘ̀mó: 'moist', ílà 'ripe', ónànà 'smooth'.
Numerals: none.
Verbs: àbí 'receive', ímbí ‘implant', úl 'vomit', $\varepsilon$ ý́ '(bride) move to husband’s house', ér 'throw', óné ‘start to make money’, óbí-y ‘sit down’.

Initial long vowels are less common, as is also true of vowels in initial syllables beginning with a consonant. I can cite à:lé 'rain', á:ràbù 'Arab', $\check{\text { : ' 'tongs', ě:bè 'uncastrated }}$ goat', and ǎ:yè 'chins', the verbs á:lé 'pull in to oneself' and ǎ:n 'cook in a pot with a little oil', and the Fulfulde loans ó:lè 'yellow' and ó:ré '(herder) leave with herd in the morning'.

### 3.3.4 Stem-medial vowels

### 3.3.4.1 Stem-medial vowels in verbs

In underived trisyllabic verbs, the medial vowel is often a short high vowel, with the actual pronunciation as [i] or [u] affected by neighboring segments and by vowels in flanking syllables. Examples are némbíl (perfective nèmbìlè) 'beg', nùgúl 'frisk', dùndúl 'roll', námílé 'squash', kúgújí 'drag', póbílé 'wipe off (sweat)', yègílé 'wave vigorously’, dìngíĺ 'cut in half’, kóbíjé 'poke’, gèngíré '(hawk) sway’ (cognate nominal gèngírà), and many others. Derived trisyllabic and longer verbs with mediopassive $-y \varepsilon ́ \sim-y$, transitive $-r \varepsilon \in \sim-y$, or reversive $-l \varepsilon \sim-l$ require the I-stem of the preceding verb, so these derivatives too automatically have a high vowel in the immediately presuffixal syllable.

Non-high medial vowels do occur, however. In a case like kájábí 'think', one suspects a denominal origin (cf. kàjábù 'thought'). In e.g. dèndélí-ylldèndèlì-yè 'be globular', from déndèlè 'round, globular', only the final vowel has shifted to $i$ before the derivational suffix.

Causative suffixes ( $-m,-n d i ́,-g i ́$ ) follow the $\mathrm{A} / \mathrm{O}$-stem of the verb and so by definition have medial a or $o$. See $\S 9.2$ for examples.

In quadrisyllabic verb stems, the second vowel may match the first, as in yèndéli-yé (variant yànđálí-yé) 'glide'.

### 3.3.4.2 Stem-medial vowels in nouns and other stems

In nouns of three syllables, there is always the possibility of an original compound, in which case the vocalism may not be harmonically or otherwise "correct." Quadrisyllabic and longer nouns are probably structured prosodically as compounds even when etymologically unitary, so I disregard them here.

In trisyllabic nouns with no compound-like appearance, one observes a range of medial vowel patterns, especially when loanwords are included. Often the medial vowel is identical in quality to the vowel of the both flanking syllables: kàkàrâ: 'wing', sénfllé 'chain', jámbálá 'pick-hoes', yémbélé 'scarification', bámbàrà 'Bambara', jàmálà 'thief', déndèlè 'globular objects', kègélè 'runt', mèlégè 'genie', pèréndè 'hot chili peppers'. Or it is identical to the vowel of the preceding syllable only: kèkérî: 'clitoris', á:ràbù 'Arab', gòlònjé 'lazy person', nว̀nว̀mé 'camel', nàlàlé 'co-wife', gágàl̂̂: 'gallbladder', jòmbòmbá 'object sent by sorceror', tàndàmê: 'key', àmàlé 'in-law', kúndúlé 'intact wholes', sògòjé 'rags', màsàkû: 'sweet potato' (<Bambara compound), wè:gérù 'violin', làsá:sì 'modern rifle', mìsídè 'mosques' (<Arabic), àlmá:mù 'imam' (<Arabic). Or it is identical to the vowel of the following syllable only: dómbélé 'crest of rooster', ìgúmàlà ‘hornless ram', ámbìrì 'chief' (< Arabic), bájòndò 'sleeved hoe (type)', bòbírì 'reed flute', tòngèré 'shallow hole', kùmbèré 'baobab seeds', tókàrà 'namesake' (< Fulfulde). ATR-harmony is respected, so e and o may combine, or $\varepsilon$ and $\rho$, but the two sets are not mixed. A final vowel from the set $\left\{\begin{array}{c}\varepsilon \\ \varepsilon\end{array} \quad 0\right\}$ may really be an agreement marker, so the relationship between the medial and the final vowel may be complicated by morphophonology.

We see a medial high vowel in kòmilé 'dry outer bark', tè̀níl̀ 'Tengou (southern Dogon)', pètíné 'cloves', gémílé 'charcoal' (cf. gémè 'black'), sé:kù:jò ‘Itinerant holy man’ (< Fulfulde), àlsìâ:m 'Muslim' (< Arabic), gàrí:bù 'mendicant pupil' (< Arabic). Note that vowel harmony is again respected in spite of the intervening extraharmonic high vowel. In jèvgíyè: 'great-grandchild' and sèjíyè 'grandchild', both denoting kin of junior generations, a minor diminutive pattern is present (\$4.2.1). Additional nouns as kòríyò 'calabash' might be reconsidered in this light.

Other, minor medial-vowel patterns occur chiefly in borrowings: màdèmbá 'corn', bùyà:gí 'guava' (regional word), dùndàngé: 'shacks', sàkó:sì 'travel bags' (Fr sacoche), málè:kà 'angel' (< Arabic), dùwánè: 'customs officer' (Fr douanier), tùbàlá:jì 'baggy pants' (< Fulfulde).

Vocalism is unstable in the word for 'wind (airflow)'. One speaker gave the (unsuffixed) plural as énáné, another as $\varepsilon$ ह́é ~ ह́néné. The singular is énáná-ŋgoó ~ éná-ŋggó.

### 3.3.5 Stem-final vowels

### 3.3.5.1 Stem-final vowels of nouns, adjectives, numerals

Nouns and numerals have lexically variable final vowels (or final consonants. Taking the singular of nouns as lexically basic (except where derived suffixally from an unsuffixed plural or collective), the full set of vowel qualities is exemplified in (25). As the examples suggest, the length and tone of the final vowel is also lexically variable, independently of vowel quality.

```
noun gloss
nàmâ: 'meat'
dógè 'Dogon (person)'
ínè 'goat'
ìn⿱̌: 'tooth'
gólò 'fire'
gùjú 'skin'
tagit: 'shoes'
```

There are only a few basic numeral stems (see §4.7.1), so the full range is not citable, but there is no reason to think that any special restrictions on phonological shape (other than those that apply to nouns) are applicable.

Adjectives also have a range of final vowels, but the situation is complicated here by the fact that adjectives have several agreement forms, and in some cases do not occur in a barestem form. Those adjectives that occur with no apparent suffix end in front and low vowels: dùmbé 'blunt', píľ̀ 'white', ílà 'ripe', mènjí: 'thin'. Other adjectives have two agreement forms (back/low versus front) with final alternations $u: \leftrightarrow i:, o: \leftrightarrow e:, ~ o: \leftrightarrow \varepsilon$ :, and $a: \leftrightarrow \varepsilon$ : These adjectives can perhaps be represented as ending in a vowel specified for height but not for [ $\pm$ back], the latter feature being supplied by an agreement morpheme that fuses with the final vowel.

### 3.3.5.2 Verb-stem vocalic ablaut (E-stem, A/O-stem, I-stem, chaining form)

Verb stems end in vowels, and this final vowel varies depending on the morphological context. (26) presents representative forms showing each final vowel. The verbal noun (VblN) is based on the I-stem, which ends in $i$ or (for a few monosyllabics) $u$. The perfective, which has no AN suffix, is based on the E-stem, which ends in e or $\varepsilon$. Most nonzero inflectional suffixes, and some derivational suffixes, require the A/O-stem, which ends in a or $o$. The chaining form is segmentally identical to the E-stem for verbs of the $\{\varepsilon \Omega\}$ ATR-harmonic class, and to the I-stem for verbs of the \{e o\} ATR-harmonic class. It does, however, usefully display the lexical tone.

The split in (26) is between verbs of -ATR $\{\varepsilon \rho\}$ class, whose final vowels alternate between +high (usually $i$, in a few cases $u$ ), $\varepsilon$, and a, and verbs of the $\{e o\}+$ ATR class,
whose final vowels alternate between +high (as before), e, and $o$. Medial short high vowels are subject to syncope.

$$
\begin{equation*}
\text { gloss chaining } \mathrm{VblN} \quad \text { perfective } \mathrm{A} / \mathrm{O} \text { stem (tone variable) } \tag{26}
\end{equation*}
$$

a. $\mathrm{H} / \varepsilon / a$

| 'eat' | kwé | kú-lé | kwè- | kwa- |
| :--- | :--- | :--- | :--- | :--- |
| 'cut' | kéjé | kéjí-lé | kèjg̀- | keja- |
| 'pick fruit' | bèlé | bél-lé | bèlè- | bela- |
| 'leave' | dògé | dógí-lé | dògg̀- | doga- |

b. H/e/o (monosyllabic)

| 'come' | wé | wú-lé | wè- | wo- |
| :--- | :--- | :--- | :--- | :--- |
| 'bring' | jê: | jí:lé | jê:- | jô:- |
| 'sleep' | nóy | nóy-lé | nòyè- | noyo- |
| 'do well' | kóndí | kóndíllé | kòndè- | kondo- |
| 'go down' | súgí | súgí-lé | sùgè- | sugo- |
| 'catch' | ibí | íbí-lé | ibè- | ibo- |

The presuffixal $\mathrm{A} / \mathrm{O}$ stem, though it occurs with most of the inflected forms and is therefore highly conspicuous in usage, also requires the shift of nonfinal $\{\varepsilon \rho\}$ vowels in the stem to $\{e o\}$, as seen in the first syllable of keja- 'cut'. Many of the inflections that use the A/O stem also impose nonlexical tone overlays on the stem. This suggests that the A/O stem cannot be taken as lexically basic.

### 3.3.6 ATR harmony

Some kind of vowel harmony involving particularly the mid-height vowels + ATR $\{e o\}$ versus -ATR $\{\varepsilon \rho\}$ is common in Dogon languages. Najamba is no exception, but its system of vowel harmony works in somewhat unusual manner.

In general, $\{i \operatorname{la} u\}$ are extraharmonic, i.e., they may co-occur with vowels of either active harmonic class.

### 3.3.6.1 ATR harmony in verbal morphology

The pattern of vowel harmony at work in verbal morphology can be observed in (27). Disregard the tones for present purposes.

$$
\begin{equation*}
\text { gloss chaining } \quad \text { perfective } \quad \text { future }(1 \mathrm{st} / 2 \mathrm{nd} \text { person }) \tag{27}
\end{equation*}
$$

a. $\{\varepsilon \rho\}$ harmonic class

| 'drink' | né | nè- | nà-mbó- |
| :--- | :--- | :--- | :--- |
| 'hit' | dènjé | dènjè- | dènjà-mbó- |
| 'run' | yòbé | yòbè- | yòbà-mbó- |
| 'tie' | págí | pàgè- | pàgà-mbó- |

b. $\{$ e $o\}$ harmonic class

| 'come' | wé | wè | wò-mbó- |
| :--- | :--- | :--- | :--- |
| 'go' | ín | ìnè- | ìnò-mbó- |
| 'sleep' | nóy | nòyè- | nòyò-mbó- |

The lexical ATR-harmonic class can always be seen clearly in the perfective, which ends in $\varepsilon$ or $e$. The chaining form also respects (or at least does not violate) this lexical class, but the shift to final $i$ in some stems, and the deletion of this /i/ after sonorants, disguises the ATR-harmonic class in some verbs, namely, those whose nonfinal vowels are extraharmonic $\{a u i\}$.

The evidence as to the relative markedness of the $\{\varepsilon \rho\}$ and $\{e o\}$ is mixed. $\{\varepsilon \rho\}$ is strongly predominant in monosyllabic (i.e. single-vowel) stems. In addition, nonmonosyllabic stems with at least one harmonically sensitive nonfinal vowel are also mostly of $\{\varepsilon \rho\}$ type, so e.g. $C \varepsilon C \varepsilon$ and $C o C \varepsilon$ stems are more common than $C e C e$ and $C o C e$ in the perfective. However, when the nonfinal vowels are from the set of extraharmonic vowels, if anything final e predominates.

The lexical vocalism is dramatically changed in the many derived and inflected forms based on the A/O stem of the verb, such as the future in the rightmost column of (27), where two major changes occur. First, the stem final vowel becomes a for the $\{\varepsilon \rho\}$ class, and $o$ for the $\{\mathrm{e} o\}$ class. Secondly, any nonfinal vowels from the set $\{\varepsilon \rho\}$ are converted to the corresponding vowels from the set $\{\mathrm{e} o\}$. For example, the $\rho$ in yòbé 'run' changes to $o$ in future yòbà-mbó- (27a). As a consequence, in all of the relevant inflections and derivations, the only telltale clue that the underlying stem is of the $\{\varepsilon \rho\}$ class is the stem-final a (rather than $o$ ) before the suffix, even though a itself is extraharmonic.

As a result, it is necessary to think in terms of an $\{$ e $o\}$ overlay on the verb stem in the $\mathrm{A} / \mathrm{O}$ stem, i.e. in the future and several other suffixal categories. This is comparable to the various tone overlays that are separately applied to verb stems in many of the same morphological contexts.

Derivational suffixes for verbs may adopt the ATR-harmonic class of the input them, or they may disregard it and present their own independent vocalism. In the first group are reversive $-l \varepsilon ́$ or $-l(</-l i ́ /)$, mediopassive $-y \varepsilon ́$ or $-y(</-y i ́)$, and transitive $-r \varepsilon ́$ or $-r(</-r i ́ /)$. The variants with underlying final /i/ occur with + ATR stems. In the second group are three causative suffixes, $-m(</-m i ́ /)$, $-n d i ́-$, and $-g i ́-$. These causative suffixes require the A/O-stem and therefore have $+\operatorname{ATR}$ (eos harmony.

### 3.3.6.2 ATR harmony in nominal morphology

There is no harmonic interaction between stems and a final number suffix, inanimate singular - $\eta g$ o or- $\eta g e$, or animate plural -mbo. These suffixes acquire their tones, but not their vocalism, from the preceding stem. The stem may contain vowels of either the $\{\varepsilon 0\}$ or $\{e o\}$ harmonic class.

Harmony is generally respected in alternations of final vowels (class markers) in mutating (as opposed to suffixing) stems. These alternations distinguish singular and plural for nouns, and class as well as singular and plural for adjectives. For example, there are final-vowel alternations between $\varepsilon$ and $\varsigma(28 \mathrm{a})$ and between $e$ and $o(28 \mathrm{~b})$. In these examples, the nonfinal stem vowels are extraharmonic $\{u i\}$ which cannot themselves mutate.
gloss
singular
plural
a. 'death'
tìbǒ: tìbě:
'side'
tíngó:
tíngé:
$\begin{array}{lll}\text { b. 'shadow' } & \text { kìndô: } & \text { kìndê: } \\ \text { 'animal pen' } & \text { kìlǒ: } & \text { kìlě: } \\ \text { 'hunched back' } & \text { gùnjò-gùnjô: } & \text { gùnjò-gùnjê: }\end{array}$
c. 'old, worn-out (object)' kùnjě: kùnjǒ:
[distinct from kúnjé: ‘old (person, animal)', plural kúnjó:]

Array (29) below shows the same final-vowel alternations, but these examples do have, in addition, a harmonically sensitive nonfinal vowel. In (29a), this vowel remains unaffected by the harmonically conservative final-vowel change. In the irregular noun 'child' (29b), the nonfinal vowel adopts the quality of the final vowel, but there is no shift in harmonic class.

| gloss | singular | plural |
| :--- | :--- | :--- |
| a. 'midriff' | bèrè-bèrô: <br> bóngò: <br> dól̀̀: | bèrè̀-bèrê: <br> bóngè: <br> 'navel' |
| dosticles: | 'child' | èndê: |

However, there are some cases where the ATR-harmonic class of the entire stem does shift from singular to plural (30). The generalization about these cases is that $\{\mathrm{e} o\}$ harmonic class is associated with the O agreement form (singular for some nouns, plural for others (including humans and animates), while the $\{\varepsilon \rho\}$ harmonic class is associated with the E agreement form. In (30a), we have E/O agreement type, i.e. with O agreement in the plural. In (30b-c), on the other hand, O agreement is found with the singular and E agreement with the plural.

| gloss | singular | plural |
| :---: | :---: | :---: |
| a. 'woman' | $y \varepsilon ̌:$ | yàwó: |
| 'cow' | ně: | nàwó: |
| 'slave' | gùndé | gùndàwó: (or: gùndé-mbó ) |
| 'opp-six sibling' | ùbùlıgé: | ùbùlngàwó: |
| b. 'cloth' | Sò-ŋgó | SWĚ: |
| c. 'heart and liver' | kéndà: | kéndè: |

The a-vowel in yàwó: etc. in (30a) is structurally parallel to the stem-final a in verbs of lexical $\{\varepsilon \rho\}$ class that have undergone the $\{\mathrm{e} o\}$ harmonic melody overlay in the A/O stem (see preceding section).

### 3.3.6.3 ATR harmony in adjectival morphology

Many adjectives end in long vowels that shift between front and back/low (symbolized here as "E" and "O") to agree with the nominal category of the referent. In most cases the ATR-harmonic class of the adjective remains constant. For example, we have alternations of $\varepsilon$ and $\rho$ (31a) and of e and $o$ (31b). (31c) shows two related adjectives that differ in ATR class. In one adjective, the ATR-harmonic class shifts from singular to plural (31d).

| gloss | E | O |
| :--- | :--- | :--- |
| a. 'ruined' | bùgê: <br> gìndé: | bùgô: <br> gìndó: |
| b. 'tall' | gàbô: | gàbê: |
| c. 'old (thing)' | kùnjě: <br> kúnjé: | kùnjǒ: <br> kúnjó: |
| d. 'nasty, bad' (person)' | nè:ndé: | nè:ndá: |

### 3.3.7 Ideal lexical representations of verb stems

The ideal lexical representation of a verb stem is a blend of the chaining form (which brings out the lexical tone melody) and the E-stem (which brings out the ATR-harmonic class). For verbs of the -ATR class $\{\varepsilon \rho\}$, the chaining form by itself is sufficient to fully characterize the stem. This is because the chaining form has the segmental structure of the E-stem, as in bèlé 'pick fruit' (chaining form bèlé, E-stem bele with variable tone). Chaining forms like dògé 'leave' show that the chaining form for old $* \mathrm{C} \supset \mathrm{C} \rho$ verbs derives directly from the E-stem.

However, for verbs of the +ATR-harmonic class $\{e o\}$, the chaining form derives from the I-stem, which does not always directly indicate (though one can always infer) this harmonic class. The ideal representation for these verbs is therefore a blend of the tone melody of the chaining form with the segments (notably the final vowel) of the E-stem, even though this combination of tones and segments does not exist as an actual form: /págé/ 'tie' (blended from /págí/ and /page/), 今ibé/ 'catch', etc. In the lexicon it would suffice to present just the chaining form (págí, íbí), since the final $i$ tells us indirectly that the \{e o\} ATR-harmonic class is at hand. But this puts a burder on the end-user, and an idealized representation is more transparent.

In a more radical autosegmental decomposition, one would extract the ATR-harmonic class and/or the tone melody as ontologically distinct entitities. This would leave a strippeddown lexical carcass with the consonants and the vowels, except that $\{e \varepsilon\}$ would merge as (underspecified) $E$, and $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ would merge as $O$. We could then think of the lexical representations as having up to three components, even without further extraction of, say, a metrical structure.

$$
\begin{array}{lll}
b \varepsilon ̀ l \varepsilon ́ ~ & \text { equals } & \{b E I E,-\operatorname{ATR} \varepsilon / \Delta, \mathrm{LH}\}  \tag{32}\\
\text { págíg } & \text { equals } & \{p a g E,+\operatorname{ATR} e / o, \mathrm{H}\}
\end{array}
$$

I have mixed feelings about such a decomposition. It seems more reasonable to me to think of the ATR-harmonic class, and the tone melody, as being extractible (by native speakers) from the chaining form or a slight idealization thereof.

### 3.3.8 Vocalic sound symbolism

As in other Dogon languages, there are some pairs of verbs and expressive adverbials (EAs) that differ in vocalism in a fashion suggesting size or intensity symbolism. A verbal example is the pair gùnjíi ' (squirrel) dig up (seeds)' and g̀̀njé 'dig (small hole in sand)'. Another, with correspondences in some other Dogon languages, is púllí 'break (e.g. cigarette)' and péllí 'break off, prune (flowering stem of onion)'.

Among EAs I can cite pàràjày né 'having small spots or stripes' and pùrùjày né 'blotched, having large spots'.

Usually in Dogon languages the semantic distinctions involve size or other quantity, with front vowels like $\varepsilon$ and $e$ suggesting diminution. However, I do not have enough Najamba data on this point to attempt a close analysis.

### 3.4 Segmental phonological rules

### 3.4.1 Trans-syllabic consonantal processes

### 3.4.1.1 Nasalization-Spreading

There is no general Nasalization-Spreading rule of the type /nawa/ $\rightarrow n a w^{n} a$ as found in eastern Dogon.

However, $l$ is often heard as something very close to [n] after a nasal syllable, i.e. after $N_{V}$ with some nasal consonant $N$. This happens constantly with là 'also, too', since such combinations as mí là 'I too' and mó là 'he/she too' are very common. I initially transcribed mí nà, mó nà, etc. However, the $l$ does not quite merge with $n$ in such cases, and speakers are quick to correct the linguist's mispronunciation of such combinations with $n$ instead of 1 . Perhaps the nasalized allophone of $l$ is a tap of some sort. A close instrumental study would be useful.

### 3.4.1.2 $\quad g \sim \eta$ and $\eta g \sim \eta$ alternations

There is no productive alternation of this type. For example, the adjectival stem wàgí 'distant' has a related verb wàgá-ndí with no change in the $g$. Likewise, súgí 'go down' has a causative súgó-ndí. (Cognates of these stems in eastern Dogon do show $g / \eta$ alternations.)

Two word-families offer possible cases of (historical) alternations. One set consists of noun dógú 'prop' or 'pillar', noun ď̌y 'pillar of stacked stones or bricks', and verb dòý́ 'prop (something) up'. In the collocation dógú dòné 'put in a prop', dógú behaves like a cognate nominal.

Also suggestive is the set tégé '(e.g. roof) leak', tégí '(liquid) drip', and téní-yé '(rainwater) form puddles on roof'.


### 3.4.2 Syncope and apocope (vowel deletions)

### 3.4.2.1 Post-Sonorant High-Vowel Deletion (in verbs)

In verbal morphology, deletion applies to a stem-final short /i/ after an intervocalic medial sonorant $\{\eta$ n lry $w$ \} and usually $m$.

There are not many opportunities for deletion of stem-final vowels in verbs, since most derivational and inflectional suffixes require the A/O-stem of the verb (final a or o). However, deletion of the stem-final vowel does occur in the verbal noun (suffix -lé) and in the reversive derivation (§9.1), which require forms of the stem ending in /i/. For example, before reversive suffix -lé- or /-lí-/ (on the latter see below), the stem-final vowel shifts to $i$ in all cases where it is not deleted (33a). Assuming that the shift to /i/ occurs in all verb stems before this suffix, we conclude that $/ \mathrm{i} /$ is deleted after a sonorant in (33b-c).

|  | stem | perfective | gloss | reversive | gloss |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. tímbé | tìmbè | 'cover with lid' | tímbí-lé | 'take lid off' |  |
|  | dàgí | dàgè | 'lock' | dàgí-lé | 'unlock' |
|  | gìbí-r | gìbì-rè | 'put on wrap' | gìbí-l | 'take off wrap' |
|  | yàmbí | yàmbè | 'cover' | yàmbì-lé | 'uncover' |


| c. tá:n | tà:nè | 'step on' | tá:n-lé | 'remove foot from' |
| :--- | :--- | :--- | :--- | :--- |
| kíl | kilè̀ | 'fence in' | kíl-lí | 'remove fence from' |

In (33c), a good case can be made that the input verbs have also undergone deletion of final /i/ in the chaining forms tá: $n$ and kíl. Likewise for the suffix itself in reversive gìbí-l 'take off wrap' in (33a). In this analysis, these verbs have chaining forms /tá:ní/, /kílí/, and /gìbí-lí/, which satisfy the conditions for deletion of the final $/ \mathrm{i} /$. The supposition that final $/ \mathrm{i} /$ is present here is based on circumstantial rather than direct evidence. Final /i/does occur in the chaining form of other verbs, where an intervocalic sonorant does not precede the $/ \mathrm{i} /$; see dàgí and yàmbí in the leftmost column in (33a), and kíl-lí in the reversive column in (33c). /i/ is the only stem-final vowel that has this peculiar distribution. $\left\{\begin{array}{llll}o & \text { a } & \varepsilon & e\end{array}\right\}$ occur as final vowels in verb stems with no tendency to syncopate, and the remaining vowel, $u$, does not occur stemfinally in any nonmonosyllabic verb.

An exception is verb mèmí-lé 'untwist cord', a fairly uncommon reversive of mèmé 'twist cord'. A similar phonological environment involving verbal noun suffix -lé does require PostSonorant High-Vowel Deletion, as in mém-lé 'twisting (cord)'.

### 3.4.2.2 High-Vowel Syncope (in non-verbs, after sonorant, bor $g$ )

For nouns and adjectives, there is no exact equivalent to the Post-Sonorant High-Vowel Deletion described just above for verbs. For example, several nouns have a shift from stemfinal $u$ (singular) to $i$ (plural), and the $i$ is not deleted. There are numerous such examples involving $r$, e.g. jùrú 'waterbag', plural jùrí.

However, nouns and adjectives do have a similar process by which a stem-final high vowel $\{u i\}$ is deleted before a nominal suffix (singular or plural). As with the verbs, the deletion is associated with a preceding intervocalic unclustered sonorant, but with the nouns and adjectives the deletion may extend to cases involving a preceding peripheral voiced stop $\{b g\}$ if the suffix begins with a homorganic nasal.

Examples include agentives like nàmà-sèmé 'butcher', gòlè-gòlé 'farmer', and tè:-kèré 'wood-gatherer' (§5.1.4), which have plurals nàmà-sě-mbó (with $/ \mathrm{mmb} /$ simplified to mb ) gòlè-gǒl-mbó, and tè:-kěr-mbó. The deleted vowel is /u/ (raised from /e/), as seen in nonsyncopating agentive plurals like kèlè-mìjú-mbó 'cowry-tosser'.

Singular suffix -ngo is phonologically similar to plural -mbo (the two are associated with different sets of nouns). Many nouns shift a final /e/ to $i$ or $u$ (kìjé 'husked grain spikes', singular kìjú-ŋgó; dámbè 'tinder', singular dámbì-ngò). After an unclustered intervocalic sonorant, this high vowel deletes: à:lé 'rain(s)', singular ă:l-ŋgó.

The most interesting cases of syncope involve a peripheral voiced stop $\{b g\}$ instead of a sonorant. Here the peripheral voiced stop appears to be attracted to a homorganic nasal-stop cluster $\{m b \eta g\}$ in the number suffix, resulting in syncope of the intervening high vowel, followed by further fusion of the consonants, but no vocalic lengthening.

Consider dàbàrù-dàbé 'magician', an example of a productive compound type ending in an agentive (§5.1.4). The expected plural is \#dàbàrù-dàbú-mbó. The /u/ preceding plural -mbó should not syncopate, because it is preceded by an obstruent. However, in fact we get dàbàrù-[dǎ-mbó] 'magicians', where the /u/ has in fact disappeared, and the resulting $/ \mathrm{bmb} /$ has simplified to mb . Another example is tìmè:-ìbé 'tree-catcher' (i.e., forestry officer),
plural tìmè:-[ǐ-mbó]. I treat this as an extension of syncope, followed by consonantal assimilations. By contrast, intervocalic deletion of the $b$ would have produced long vowels, as it in fact does in plurals of some other nouns (see the following section).

There are parallel examples of nouns whose disappearing consonant is $g$ rather than $b$, preceding singular suffix -ngo. Examples (with plurals or collectives first): yógé 'millet', singular yó-ŋgó ; nègé ‘oil', singular ně-ŋgó ; kèndà-[tèg-î:] 'lunch’, singular kèndà-[tě-ngò]. Before - $\eta g o$, stem-final /e/ often shifts to a high vowel such as /i/, and stem-final long /i:/ typically shortens to $i$. Therefore the cases of $g$-Deletion probably involve Post-Sonorant High-Vowel Deletion (syncope), and resulting contraction of /gŋg/ to $\eta g$. Example: /nègí-ทgó/ 'oil' $\rightarrow$ /něg-ngó/ $\rightarrow$ ně-ngó. Again, the fact that the presuffixal vowel is short suggests a syncope plus consonant-assimilation derivation, rather than deletion of intervocalic $g$ plus vv-Contraction.

### 3.4.3 Intervocalic Labial-Deletion

There are some common suffixes on noun, adjective, and verb stems that begin with $m b$ (animate plural -mbo, future -mbô-). If the stem preceding such a suffix ends in $v m v$, where $v$ is a vowel from the set $\{\operatorname{a} \varepsilon \rho\}$, the $m$ is often deleted, although the full pronunciation is also possible. Thus gémè 'black', plural gémè-mbò or more often $g \hat{\varepsilon}$ :-mbò ; mòm 'fetish', plural mǒ:-mbò or mòmé-mbò ; verb dǎm 'speak', 1 Sg future dàmà-mbó-m̀ or dà:-mbó-m̀. This process is clearly an intervocalic deletion, leading to a contraction of the flanking vowels into a long vowel.

I observed no deletion of $m$ in e.g. kòmô:-mbò 'sickles' or kèrè-nàmâ:-mbò 'wild animals', where the potentially targeted $m$ is followed by a long vowel. However, a preceding long vowel does allow the deletion: sǎ:mà 'sick person', plural sâ̆:-mbò (</sǎ:mà-mbò/) with $<$ LHL $>$ tone on the first syllable.

Deletion of $/ \mathrm{b} /$ in the same position is less common but is attested, especially with the verb yòbé 'run', as in 'and (then)' chaining form yǒ:-mbò (</yòbé-mbò/), and progressive yô:-mbò (</yóbà-mbò/).

Intervocalic Labial-Deletion (optional)

$$
\{m, b\} \rightarrow \varnothing \quad \begin{gathered}
\text { [-long] } \\
{\left[\begin{array}{ll}
a \varepsilon \rho\} \\
{[\text { [-l }}
\end{array} \quad\{a \varepsilon \rho\} m b\right.}
\end{gathered}
$$

The other potential target for this deletion process would be $w$, but this semivowel is essentially absent from word-medial intervocalic position in Najamba, the exceptions being Fulfulde loans like háwé 'persuade'. My assistant did not delete the $w$ in háwè-mbò 'persuade and (then) ...'

I did not observe deletion of $g$ in a comparable environment. This is observed with (imperfective) - $\eta g a-$ participles of págí 'tie', which appeared as e.g. future participle pàgă-ŋggà rather than \#pă:-ŋgà. The example tested was nò: [pègè-mbó bé] pàgǎ-ŋgà mó 'the person who ties the animals'.

### 3.4.4 Intervocalic and preconsonantal $y$-Deletion

Intervocalic $/ y /$ in several nouns is likewise apparently deleted in some nouns before singular suffix - $\eta g o$ or $-g o$ (35). The unsuffixed plural (or collective) of these nouns ends in e, which often shifts to /i/ before this suffix. Therefore we could analyse these examples as instances of Post-Sonorant High-Vowel Deletion followed by contraction of /yŋg/ to $\eta g$. However, the examples diverge regarding the vowel length of the stem vowel in the suffixed singular. In (35a), the vowel is long a:, suggesting that the $/ \mathrm{y} /$ is deleted intervocalically, triggering subsequent contraction of two short vowels into a long vowel (/ae/ $\rightarrow$ a:). This would be parallel to Intervocalic Labial-Deletion. In (35b), however, the vowel is short, lending itself to a syncope plus $C C$-cluster reduction analysis whereby the $/ \mathrm{y} /$ is deleted before a consonant, e.g. /sáyè-gò/ $\rightarrow$ /sáy-gò/ $\rightarrow$ sá-gò.
singular plural
gloss
a.
bǎ:-ŋg
bàyé
bǎyè
sàyé
ǎyè
tǎ:-ŋgó tǎyè
b. sá-gò sáyè 'cotton'
mànà ǎ-ŋgó
mànà àyé
'small gourd'
'stick'
'torch'
'branch'
'rifle cock'
'plain millet cakes'

These processes affect only a few noun stems and are probably highly morphologized. I note in passing that Najamba does not reduce other triple clusters with sonorant plus homorganic nasal and voiced stop, and that the triple cluster yøg is unreduced in jǎy-ŋgò (cognate nominal of verb jǎy 'sow seeds in a pit with some manure') and in pǒy- $\eta$ gò 'baby-carrying cloth'.

### 3.4.5 Local consonant cluster rules

### 3.4.5.1 Summary of consonant cluster adjustments

Najamba is rather thin on $C C$-cluster processes, in comparison to eastern Dogon (especially Toro Tegu) where syncope often feeds such processes. The one notable process is shift of /rl/ to $l l$, and even this is not always carried out.

### 3.4.5.2 $/ \mathrm{rl} / \rightarrow 11$

This shift does not occur in verbal nouns with suffix -lé. We therefore always get e.g. tár-lé '(act of) looking'. However, there is one irregular reversive verb (usual suffix -lé or $-l$ ), and one transitive verb (usual suffix -ŕ́~ $-r$ or less often $-l \varepsilon ́ \sim-l$ ) paired with mediopassive $-y \varepsilon ́$ $\sim-y$, that show 11 . One other reversive ('take off hat') fluctuates between $r l$ and $l l$.

| input verb | gloss | derived verb | gloss |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| ìré | 'forget' | íl-lí-y $\varepsilon$ | 'remember' |
| gǒr | 'put on hat' | gǒr-lí~ gǒl-lí | 'take off hat' |
| éríl-yé | 'be tangled' | él-lé | 'tangle (sth)' |

### 3.4.6 Vowel-vowel and vowel-semivowel sequences

### 3.4.6.1 $v v$-Contraction

Numerous suffixes consist of, or begin with, vowels that replace the final vowel of the preceding morpheme.

| suffix | category |
| :---: | :---: |
| -û: | nominalization (§4.2.3.7) |
| -î: | instrument nominal (§4.2.3.6) |
| -o:~-๑: | 2Sg subject |
| -e: ~-ع: | 2 Pl subject |
| -ع: ~-a: | 3 Pl subject |
| -e: ~ - | participle |
| -o: ~-o: | participle |

A suffixal high vowel $\{i u\}$ replaces the final stem vowel. The latter leaves no trace, since these suffixes also determine the tone of the derived stem.

For the non-high suffixal vowels, we get variable output vowel quality and tone. Tone is covered in §3.6, below. The 3Pl subject forms are highly irregular and morphologized, varying with inflectional category in a way that makes a phonological analysis inadvisable. For the remaining suffixes with non-high vowels, the final vowel quality is determined by the ATR-harmonic class of the stem. Therefore one could think of e.g. $2 \mathrm{Sg}-\mathrm{o}: \sim-\mathrm{\sim}$ : as having a slightly underspecified representation as a back rounded mid-height vowel /-O:/ ( $O$ is archiphoneme for $o$ and $\rho$ ), acquiring its final "coloring" from ATR-harmonic processes.

Verb stems also have vocalic alternations of the type seme, sema-, and/semi-/ $\rightarrow$ sém for the verb 'slaughter'. These are referred to as the E-stem, A/O-stem, and I-stem, respectively. The E-stem is lexically basic, revealing the lexical ATR-harmonic class (and, in the chaining form, the lexical tone). The A/O- and I-stems impose a -ATR $\{e o\}$ melody on the stem, but also change the stem-final vowel in a manner that could be interpreted as addition of a suffixal vowel that replaces the stem-final vowel.

For nouns and adjectives, the main issue relevant here is the analysis of the agreement endings that mark singular and plural number (in different ways for different classes of stems). Most nouns show final alternations of the type singular $\left\{\begin{array}{l}\text { u } o \rho a\}\end{array} \rightarrow\right.$ plural $\{i \sim e ~ e ~ \varepsilon \varepsilon\}$, with a back or low vowel shifting to a front vowel. There are also a few nouns that have the opposite shift, from front (singular) to back (plural) vowel. The tone and length
of the final vowel are lexically variable. One way to analyse this is to tease apart a lexical representation including tone, length, and some vocalic features from abstract "E" and "O" agreement elements, specified as front and back, respectively, that fuse with the lexical vowel to produce the observable forms. Such an analysis is appropriate for adjectives (which acquire agreement status from a noun), and could also work for nouns. For nouns, we could alternatively take the singular form as lexically basic, and add the "E" (for most stems) or "O" (for the minority) to form the plural.

Consider the typical examples in (38), showing final $\leadsto \varepsilon$. The skeleton is derived by extracting the agreement element E or O , using $\alpha$ as the archiphoneme for $\rho$ and $\varepsilon$ (specified for lower mid height, but not for backness or rounding). The skeleton can be further decomposed if the ATR-harmonic class is extracted from the remainder.

| gloss | singular | plural | skeleton |
| :---: | :---: | :---: | :---: |
| 'fruit' | ว̀mô: | $\grave{\grave{m}} \hat{\varepsilon}$ : | ১̀m ${ }_{\text {: }}$ |
| 'horn' | kélò: | kélè: | kélò: |
| 'garden' | bòrǒ: | bòrě: | bòrǎ: |
| 'side' | tíngó: | tíngé: | tíngá: |
| 'long sack' | bò:ró | bò:ré | bò:rá |

If we analyse e.g. $\grave{\text { ons }}$ : as the combination of skeleton / $\mathrm{m} \mathrm{m} \hat{\mathrm{o}}$ // and the abstract O element (i.e. [+back, +round]), we need a simple $v v$-Contraction (or, more accurately, feature-fusion) rule to produce the outputs. If on the other hand we take singular $\grave{\jmath} \mathrm{m} \hat{\jmath}$ : to be lexically basic, its plural $\grave{\grave{m}} \hat{\varepsilon}$ : would have to be produced by combining /òmô:/ with agreement element E (i.e., [-back, -round]), whereby the features of $E$ replace the (opposite) features of the final lexical vowel.

### 3.4.6.2 Monophthongization (/iy/ to $i$ :, /uw/ to $u$ :)

Within a syllable, /iy/ is heard as $i$ : . The clearest cases of this are with verb stems (derived or not) ending in / ...vyí-/ in the A/O- and I-stems (" $v$ " is any vowel). The final /i/ is deleted after an unclustered intervocalic sonorant (§3.4.2.1). If $v$ is $/ \mathrm{i} /(39 b)$, orthographic "iy" is pronounced [i:]. This is very common, since $v$ is /i/ the regular vowel of medial (noninitial and nonfinal) syllables in verb stems.

| gloss | A/O-stem | underlying | phonetic |
| :--- | :--- | :--- | :--- |
| a. 'learn' | bǎy | /bàyíl | [bǎj] |
| b. 'become blind' gìrbǐ-y | /gìrbí-yí/ | [gìrbǐ:] |  |

Presumably /uw/ would also be heard as as $u$ :, but I can find no examples where the underlying form clearly has $/ \mathrm{w} /$. This is because (nonomonosyllabic) verb stems ending in $\ldots W V$ - (" $V$ " is any vowel) are absent.

### 3.4.7 $C v$ - to $C v$ :- lengthening (verbs before derivational suffixes)

Monomoraic $C v$ - verb stems are lengthened to $C v$ :- before derivational suffixes, with some exceptions.

Most $C V$ - and $C W V$ - verbs that are attested with the productive causative suffix $-m$ undergo this lengthening. Examples are $\eta w \bar{\varepsilon}$ 'go in' with cauastive $\eta w a ́:-m$ 'take in', and né 'drink' with causative nǎ:-m 'give drink to'. Irregularly, gwé 'go out' has a short vowel in (archaic) causative gǒ-m. See (299b-c) in §9.2.1 for further examples.

A similar process may be active in verbs with the transitive suffix $-r \varepsilon \sim-r$, but in these cases there are difficulties in modeling how the derivations work phonologically. See (308) in §9.3.3 for the relevant pairs.

### 3.5 Cliticization

### 3.5.1 Phonology of $=y \sim=i$ : 'it is' enclitic

The 'it is' enclitic has phonological alternations somewhat like those in Jamsay, but in Najamba the enclitic has no intrinsic tone. After a vowel, it is heard as $=y$, with a tone spread from that of the vowel. After a consonant, it is heard as $=i$, and here again it acquires its tone from the preceding syllable.

When the noun ends in a bimoraic $C v C$ with contour tone $<\mathrm{LH}>$ or $<\mathrm{HL}>$, the addition of $=i$ : forces resyllabification as $\ldots<C v><C i:>$, so the second tone component of the contour tone is realized on the $i$ :. In (40), the angled brackets in the 'it is' form indicate syllabification.

|  | form | with 'it is' |
| :--- | :--- | :--- |$\quad$ gloss.

### 3.6 Tones

Tones at the level of syllables are $\mathrm{H}[\mathrm{igh}]$, $\mathrm{L}[\mathrm{ow}]$, falling $<\mathrm{HL}>$, rising $<\mathrm{LH}>$, and bell-shaped $<\mathrm{LHL}>$. In this notation, angled brackets $<>$ represent syllable boundaries. A notation with curly brackets such as $\{\mathrm{LH}\}$ denotes a more abstract tone overlay that may be realized over a variable number of syllables. Likewise with lexical tone melodies like /LH/.

The most complex and least common syllable-level tone is $<$ LHL $>$. Lexical $<$ LHL $>$ is observed in a few monosyllabic nouns in their unsuffixed form(s). Unanalysable noun stems are in (41a). One variant of the reciprocal morpheme is in (41b).

$<$ LHL $>$ tones are also produced by grammatical tones applied to monosyllabic verb stems. For example, future $k w a ̌-m$ 'he/she will eat'—more properly /kòá-m̀/) with $<$ LHL $>$ tone—is distinct from imperative kwá-ì̀ 'eat!-2Pl’ (/kóá-m/).
$<$ LHL $>$ tones are also produced in nominalizations based either on monosyllabic verbs or on verbs of shape /Ciyv/ (" $v$ " is any vowel) that are reduced to Ciy- (phonetic [Ci:]) before nominalizing suffix -n.

| form | gloss | related form |
| :---: | :---: | :---: |
| a. bǐỳ-n [bî:n] <br> tèmbèn-mî:-n <br> ìnjè-dǐỳ-n [...dî̀:n] | 'bedding' 'brick factory' 'outhouse' | bǐyllbìyè 'lie down’ <br> mé: $\\| m$ è: 'make (bricks)' <br> ínjé ~ íngé 'water', dìyé 'bathe' |
| b. nì:-tê: twê: | 'slingshot' 'seedstock' | $n i ̌: ~ ‘ b i r d ’, ~ v e r b ~ t e ́: ~ \\| t e ̀: ~ ' s t i n g ' ~$ singular tǒy- $\eta g o ̀, ~ v e r b ~ t w \mathcal{\varepsilon}$ 'sow' |

### 3.6.1 Lexical tone melodies

### 3.6.1.1 At least one H-tone in each stem

In their lexically basic forms, stems (verbs, nouns, adjectives, numerals) may not be /L/-toned, i.e. it must have an H-tone. The lexical tone melody, spread over the relevant syllables, may be all-high $/ \mathrm{H} /$, rising /LH/, falling /HL/, or bell-shaped /LHL/, and in longer nouns (mostly of compound origin) occasionally /HLHL/ or the like. As a result, a stem- or word-level $\{\mathrm{L}\}$ overlay is always audibly distinct from the lexical melody.

### 3.6.1.2 Lexical tone melodies for verbs

Regular verbs divide into two primary lexical melodic classes. One is level high /H/, the other is rising /LH/. The exceptions are two monosyllabic $<\mathrm{HL}>$ verbs, and one bisyllabic $\mathrm{L}<\mathrm{HL}>$ verb.

For an inventory of monosyllabic verbs, see $\S 10.1 .1$. Nearly all monosyllabic stems are all-high, with shapes $C \hat{v}, C w v ́, C v ́$ : in the chaining form. However, $j \hat{e}$ : 'bring' and $d w \hat{\varepsilon}$ : 'arrive' have unique falling melodies. In addition, short-voweled $C \hat{v}$ and $C W v ́$ verbs split into three groups based on whether they lengthen their vowel before perfective negative -1 - and, if
they do lengthen, whether the tone of the stem is H or L (§10.1.4.2). A similar split occurs before causative $-m(\S 9.2 .1)$, but some of the verbs in question have distinct tonal forms before the perfective negative and causative suffixes. One is tempted to infer the lexical tone from these forms, but the inconsistency between perfective negative and causative suggests that these tonal patterns may be frozen vestiges of original lexical tones that are no longer clearly valid synchronically.

Bisyllabic and longer verbs are lexically either /H/ or /LH/, except for a single /LHL/ verb, dinê: 'find, encounter'. This is also the only nonmonosyllabic verb stem ending in a long vowel. For $\{\mathrm{LH}\}$ verbs, the tone break is between the first and second vocalic moras, hence $C \grave{v} C \hat{v}, C \bar{v}: C \hat{v}, C \grave{v} C \hat{v} C \dot{v}, C \bar{v}: C \hat{v} C \dot{v}$, etc. Note in particular that in $C \check{v}: C \hat{v} \ldots$, with long vowel in the first syllable, the break is within the duration of this vowel, which therefore has rising tone: dă:ná-m 'have (sb) roast (sth)', bǎ:ré 'teach', bǔ:jí-y 'be in poor shape'. In the case of $C \check{v}: C \hat{v}$ verbs with medial sonorant and $\left\{\begin{array}{c}\text { e } o\} \text { ATR-harmonic class, and therefore }\end{array}\right.$ subject to deletion of final /i/ in the chaining form, having the break in the long first syllable, instead of at the syllable boundary, makes it unnecessary to shift tones following PostSonorant High-Vowel Deletion: dǎ:n 'roast' (/dǎ:ní/).

For $C \grave{v} C C \dot{v}, C \grave{v} C C \dot{v} C \dot{v}$, etc., especially where the first of the clustered consonants is a sonorant (as it is in native Dogon forms of these shapes), one might expect a similar tone break within the initial $C v C$ syllable. Instead, these verbs have the break point at the syllable boundary: yàmbí 'cover', dùngí 'stuff, cram', bìndí 'turn over'.

However, a $C \dot{v} C \dot{v} C \hat{v}$ verb appears as $C \check{v} C C \bar{v}$ when syncope has removed the medial vowel (§3.6.4.4). This happens in reversive gǒr-lé 'pull back (arm)', syncopated from /gòrí-lé/, derived from gòré ‘hold out (arm)’.

The tone breaks described above are valid for the chaining form, which surfaces with its lexical melody. Tone overlays imposed on the stem by an inflectional suffix or derivational category have their own patterns of application to stems of various prosodic shapes.

In verbs (but not other word-classes), there is a fairly good correlation between choice of lexical tone melody and initial consonant. In particular, initial voiceless obstruents (stops and sibilants) strongly favor the $\{\mathbf{H}\}$ melody, while initial voiced stops strongly favor the $\{\mathbf{L H}\}$ melody. Nearly every nonmonosyllabic verb beginning in a stop follows this pattern, though there are several counterexamples involving Fulfulde borrowings with initial voiced stop, e.g. báté 'hold (meeting)', gá:jé 'chat', jámbé 'betray'. Initial sonorants, and the absence of an initial consonant, are compatible with either $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ melody, which in this case are lexically arbitrary.

### 3.6.1.3 Lexical tone patterns for unsegmentable noun stems

Uncompounded nouns have a range of melodies: /H/, /HL/, /LH/, /LHL/, and in a few cases /HLHL/. The melody is strictly lexical, and unlike the case with verbs it does not correlate with initial consonant type. /LH/ and /LHL/ are especially common. /HL/ is realized as $\mathrm{H}^{*} \mathrm{~L}$ on trisyllabic stems, with the tone break coming near the end (right edge). / $\mathrm{LH} /$ is similarly realized as L*H on trisyllabic stems.

| melody | example | gloss |
| :---: | :---: | :---: |
| /H/ | úbú | 'manure' |
|  | bándá | 'courtyard' |
|  | kóbá: | 'band of cloth; brick mold' |
|  | dómbélé | 'crest (of rooster)' |
| /HL/ | pâ: | 'bowl-shaped jar' |
|  | $k w \hat{\varepsilon}$ : | 'food' |
|  | dógè | 'Dogon person' |
|  | dágù: | 'medication' |
|  | jápèrè | 'donkey saddle' |
|  | gáfâkà | 'saddlebag' |
| /LH/ | $y \varepsilon ̌:$ | 'woman' |
|  | gWǎ: | 'country' |
|  | nàlé | 'friend' |
|  | èlǎ: | 'dew' |
|  | gè:jú | 'thin thread' |
|  | gòlònjé | 'lazy person' |
|  | àrbàkàndé | 'gum arabic' |
| /LHL/ | bǎyè | 'stick' |
|  | tă: | 'leopard' |
|  | ǹjâ: | 'earth' |
|  | èndê: | 'child' |
|  | dě:rù | 'tree-top' |
|  | sògòlû: | 'yellow dye' |
|  | ànjíkò: | 'roselle (variety)' |
| /HLHL/ | púlàndê: | 'Fulbe person' (original diminutive) |
|  | gágàlî: | 'gallbladders' (old reduplication) |
|  | jálòsárì | 'plow (n)' (borrowing) |

The lexical melody as seen in singulars is generally retained in plurals, whether suffixal or by vocalic mutation.

### 3.6.1.4 Lexical tone melodies for adjectives and numerals

In their modifying (i.e. postnominal) forms, adjectives have a range of lexical tone melodies. The nonsuffixing adjectives, which have participle-like final long vowels that switch between front and back/low qualities to agree with nouns, may be $/ \mathrm{H} /$, /LH/, or /LHL/, e.g. nálá: 'good', غ̀mó: 'fresh, moist', pàlâ: 'small', and dùlǒ: 'first'. The /LHL/ melody, realized syllabically as $\mathrm{L}<\mathrm{HL}>$, is especially common. /LH/ may have its tone break at the syllable
boundary as with èmó:, or in the middle of the final long vowel as with dùlǒ: . Using syllabic notation these are L.H and L. $<\mathrm{LH}>$, respectively.

The suffixing adjectives, whose most basic form ends in a vowel from the set \{e $\varepsilon$ a o i: $\varepsilon:$ :\} or in a suffix -yè, are /H/ (kómbé 'skinny'), /LH/ (dùmbé 'blunt', sògòjé 'wornout'), /HL/ (pílè 'white', yégèlè 'cool'), or /LHL/. The latter is realized as <LH>.L or L. $<\mathrm{HL}>$ depending on moraic structure (gǐrbà 'blind', bùrî: 'tender'). /LHL/ melody is normal in the subtype with suffix -yè (§4.5.1.2).

There are only a few numerals, but they appear to be similar in tonal possibilities to nouns. The only /H/ numeral is kúndú 'one', which behaves like an adjective. For the other basic numeral stems, the melodies are a) /HL/ realized as H.H.L, H.L or $<\mathrm{HL}>$ depending on syllable count (píyélì 'ten', kúlèy 'six', nô:y 'two'), b) /LHL/ (tà:ndî: 'three'), and c) for the noun-like larger numerals /LH/ realized as L.H or $\langle\mathrm{LH}\rangle$ (mùjú 'thousand', sǐn 'hundred').

### 3.6.2 Grammatical tone patterns

### 3.6.2.1 Grammatical tone overlays and formulae for verb stems

Verb stems and suffixed verbs are subjected to a wide range of tone formulae (typically a mix of overlay and lexical melody on the stem plus a suffixal tone). The formulas associated with the verb stem in various inflectional categories are summarized in (44). In each case the hyphen represents the break between stem and inflectional suffix, so ((X)) $\mathrm{H}^{*}(\mathrm{~L})-\mathrm{L}$ means $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ - stem and L-toned suffix. $\mathrm{H}^{*}$ means one or more H -toned moras, $\mathrm{L}^{*}$ means one or more L-toned moras. X represents the initial tone of the verb-stem lexical melody. Single parentheses mean that the tonal feature is audibly realized only when a mora not already tonally marked is available. Double parentheses mean that the tonal feature is audible only if there is a mora available after single parentheses have been opened. The extra H's or L's in $H^{*}$ and $L^{*}$ beyond the obligatory single $H$ or $L$ are activated when another syllable is available after all parenthesized elements have been realized. For example, $(\mathrm{X}) \mathrm{H}^{*}((\mathrm{~L}))$ - L is realized as H-L, XH-L, XHL-L, and XHH-L, depending on the number of syllables or moras. The italicized rows involve categories whose tone formula is derived from that of another category listed. In participles, $\alpha$ : represents a variable mid-height long vowel $\{\varepsilon$ :, e:, $\lrcorner:, o:\}$ expressing agreement with the head NP of a relative ( E or O category) but respecting the verb's lexical ATR value.

$$
\begin{equation*}
\text { category } \quad \text { suffix } \quad \text { tone formula } \tag{44}
\end{equation*}
$$

a. indicative positive perfective present future

1st/2nd
3 Sg
3 Pl

L*- (but see below)
((X))H*(L)-L

L*-<HL>
L*H-L
L*H-L
b. indicative negative perfective negative 1st/2nd, 3Sg $\quad-1(</-1 i ́-/) \quad \mathrm{X}\left(\mathrm{H}^{*}\right)$-H (stem with lexical melody)

3 Pl
present negative future negative
:-ndí $\quad L^{*}-\mathrm{H}$
-ndí (X)H*L-H
-ndì L*H-L
c. deontic modal positive
imperative (Sg addressee) (zero) $\mathrm{H}^{*}$
imperative ( Pl addressee) (based on Sg )
hortative ( Sg addressee) -ý $\quad \mathrm{L}^{*}-\mathrm{H}$
hortative ( Pl addressee) $\quad-\grave{y} \quad \mathrm{~L} * \mathrm{H}-\mathrm{L}$
d. deontic modal negative
prohibitive (-là)
prohibitive (-nô:)
hortative negative

| -là | $(\mathrm{X}) \mathrm{H}^{*}((\mathrm{~L}))-\mathrm{L}$ |
| :--- | :--- |
| -nô: | $\mathrm{L}^{*}-<\mathrm{HL}>$ |

(based on prohibitive -là)
e. uninflected and nominal forms
verbal noun
verbal noun
agentive
progressive
-lé
-ndá: $\quad \mathrm{H}^{*}-\mathrm{H}$
(zero) $L^{*}(\mathrm{H})$
-mbò ((X)) $\mathrm{H}^{*}(\mathrm{~L})-\mathrm{L}$
f. participles (positive)
perfective
subject nonsubject
present
subject nonsubject
future
subject nonsubject
final $\alpha$ :
(X) $\mathrm{H}^{*}(-) \mathrm{H}$
final $\grave{\alpha}: \quad(\mathrm{X}) \mathrm{H}^{*}(-) \mathrm{L}$
-ngà
-ŋgà
-ngà $\quad \mathrm{L} * \mathrm{H}-\mathrm{L}$
-ngà L*H-L
g. participles (negative)
perfective negative subject nonsubject
$-1-\alpha ́: \quad(X) H^{*}-\mathrm{H}$
$-1-\grave{\alpha}: \quad \quad L^{*}-\mathrm{L}$
present negative subject $\quad-n d-\alpha ́: \quad((\mathrm{X})) \mathrm{H}^{*} \mathrm{~L}-\mathrm{H}$ nonsubject $\quad-n d-\grave{\alpha}: \quad((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})-\mathrm{L}$
future negative
subject/nonsubject $\quad-n d-\grave{\alpha}: \quad \mathrm{L} * \mathrm{H}-\mathrm{L}$
nonsubject $\quad-n d-\grave{\alpha}: \quad \mathrm{L}$ :H-L

| h. subject-focalization participles (positive) |  |  |
| :---: | :---: | :---: |
| perfective | (equals inflected 3Sg perfective) |  |
| present | -nj-è: | L*-L |
| future | -mb-ê: | L*-< $\mathrm{HL}>$ |
| i. subject-focalization participles (negative) |  |  |
| perfective | -l-è: | L*-L |
| present | -nd-é: | (X)HL-H |
| future | -nd-è: | L*H-L |

Several of these formulae are rather simple. We have $\{\mathbf{L}\}$ tones in the stem in the 1 st $/ 2 \mathrm{nd}$ person perfective (and to some extent the third person perfective), the $1 \mathrm{st} / 2 \mathrm{nd}$ person future, the 3 Pl perfective negative, the singular-addressee hortative, and the prohibitive variant with -nô: . The stem is also $\{\mathrm{L}\}$-toned in many of the participial forms. Conversely, we have $\{\mathrm{H}\}$-toned stem in the imperative singular and in the verbal noun with -lé or -ndá: .

There are three other tonal patterns for stems. The first (disregarding the suffixal tone) is $\mathbf{L} * \mathbf{H}$-, with at least one L and at least one H mora, with intervening moras L-toned $(<\mathrm{LH}\rangle$, LH, LLH, etc.). This is the characteristic future stem-tone formula, appearing (always before an L-toned suffix) in the third person future, throughout the future negative, and in several future participles. However, future forms based on suffix $-m b \hat{o}-$, i.e. the $1 \mathrm{st} / 2 \mathrm{nd}$ person future positive inflections along with the future positive subject-focalization form in -mb-ê:, have $\{\mathrm{L}\}$-toned stem (before the initial H-tone of the suffix).

The second is basically $\mathrm{H}^{*} \mathrm{~L}-$, i.e. the mirror image of $\mathrm{L}^{*} \mathrm{H}-$, but all categories whose formulae include the $H^{*} \mathrm{~L}$ - overlay allow the stem-initial mora to express the lexical distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$, at least if there are enough moras to go around. Representing the lexical initial tone as X , these formulae are therefore of type $\mathbf{X H} * \mathbf{L}$ (i.e. either $\mathrm{LH}^{*} \mathrm{~L}$, or $\mathrm{HH}^{*} \mathrm{~L}$ equivalent to $\mathrm{H}^{*} \mathrm{~L}$ ) when maximally expressed. The full formulae, showing the pecking order of the tone components, are $(\mathrm{X}) \mathrm{H}^{*} \mathrm{~L}-$ in the present negative with suffix -ndí (the final $L$ must be expressed in the stem, since the suffix is H-toned), $(\mathrm{X}) \mathrm{H}^{*}((\mathrm{~L}))$ - in the prohibitive with -là suffix ( X has priority over L$)$, and $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ - in the present with -njò- suffix (L has priority over X).

From monomoraic yé 'see', present negative yâ-ndí- shows falling (i.e. <HL>) stem before the suffixal H-tone, while prohibitive yá-là and present yá-njò- have only an H -tone on the stem before the L-toned suffix. Bimoraic /LH/-toned yòbé 'run' brings out the variable pecking order between the X and the L in $\mathrm{XH}^{*} \mathrm{~L}-$, as we see in prohibitive yòbá-là (where the final L-tone of the stem is missing), and present yóbà-njò- (where the initial lexical L-tone is missing). The present negative is yóbà-ndí-.

The remaining formula is that of the perfective negative (excluding the 3 Pl ). For stems of two or more syllables, it is clearly $\mathrm{XH}^{*}$-, i.e., either $\mathrm{H}^{*}$ - (for lexical /H/ melody) or $\mathrm{LH}^{*}$ - (for lexical /LH/ melody). The most unusual feature of this inflection is that it brings out otherwise missing lexical tone distinctions among monomoraic verbs ( $\mathrm{Cv}-\mathrm{C}, \mathrm{CWv}$-), which are elsewhere treated as H-toned. Thus $\eta w \varepsilon ́$ 'go in' has perfective negative / $\mathfrak{y} w$ á:-lí-/, while the elsewhere usually homonymous $\eta w \mathcal{\varepsilon}$ 'hear' has perfective negative / $\mathfrak{w}$ à:-lí-/, with only the lexical X tone appearing on the stem. One hesitates to ascribe lexical tones solely on the basis of one negative inflection (there is also some evidence for such a lexical tonal distinction of
these verbs in their causatives, but the perfective negative and the causative disagree as to which verbs are treated as H -toned and which are treated as L-toned). If, however, we decide that the perfective negative does in fact reveal lexical tones for monomoraic verbs, we should represent the tone formula as $\mathbf{X}\left(\mathbf{H}^{*}\right)$-, with obligatory expression of the lexical variable X.

Since the dominant lexical tone melodies for verbs are $/ \mathrm{H} /$, notationally equivalent to $\mathrm{H}\left(\mathrm{H}^{*}\right)$, and /LH/ realized as $\mathrm{LH}^{*}$, the formula $\mathbf{X}\left(\mathbf{H}^{*}\right)$ is generally indistingushable from the lexical melody itself. It is therefore possible to argue that the perfective negative has no tone overlay.

### 3.6.2.2 Grammatical tones for noun stems

There is only one tone overlay for Najamba nouns: stem-wide tone-dropping to $\{\mathrm{L}\}$. This affects a) a noun followed by a modifying adjective (§6.3.1) or by a demonstrative (§6.5.2) but not by a definite morpheme (§6.5.3); b) a noun with a preceding possessor, whether NP or pronoun (§6.2); c) a noun not already tone-dropped that functions as head NP of a relative clause (§14.2.1); and d) a noun functioning as the initial in compounds (§5.1.1-2, §5.1.4).

### 3.6.2.3 Grammatical tones for adjectives and numerals

When a modifying adjective is added to a noun within an NP, the adjective forces tonedropping on the noun, as noted above. The noun-adjective sequence is now a core NP, and at this point it is the adjective that is exposed to tone-dropping from the wider morphosyntax. For example, if a second modifying adjective is added, the first adjective is tone-dropped (§6.3.3.1). Similarly, a following demonstrative tone-drops an adjective (§6.5.2). If a core NP ( N -Adj) is possessed, the possessor forces tone-dropping on the entire N -Adj combination (§6.2.1). And if N -Adj serves as internal head NP of a relative clause, the adjective drops tones (§14.2.1).

Numerals do not directly interact tonally with a preceding core NP (noun, or noun plus one or more adjectives). When a numeral follows a core NP, both the numeral and the core NP have the tones that they would have independently. However, when the numeral is followed by a demonstrative (§6.5.2), or when the entire expanded NP (core NP plus numeral) is the internal head of a relative (§14.2.1), both the core NP and the numeral are tone-dropped. Likewise, when such an expanded NP has a possessor ('my three dogs'), the possessor imposes tone-dropping on both the core NP ('dog') and the numeral (§6.2.1).

### 3.6.3 Tonal morphophonology

### 3.6.3.1 Atonal-Suffix Tone-Spreading

Certain suffixes have no intrinsic tone. Instead, they acquire their tone by spreading from the preceding morpheme.

The most conspicuous examples are the syllabic nominal animacy-number suffixes: inanimate singular $-\eta g o \sim-g o$ and $-\eta g e$ and animate plural $-m b o$. (Some nouns take the singular suffix, some take the plural suffix, and some take neither.)

The tonology is partially obscured by modifications to stem-final vowels before these suffixes. However, in (45) we can see the basic pattern by which the suffix acquires its tone from the preceding stem.

| gloss | singular | plural (or collective) |
| :---: | :---: | :---: |
| a. 'father's sister' | sèjí: | sèjí-mbó |
| 'elder' | kúlmá | kúlmá-mbó |
| 'chicken' | kórò | kôr-mbò |
| 'Arab' | á:ràbù | á:ràbù-mbò |
| b. 'corn' | màdèmbá-пgó | màdèmbá |
| 'squash' | góné-пgó | góné |
| 'sweet potato' | màsàkû:-ŋgò | màsàkû: |
| 'froth' | bùjè-bújè-ŋgò | bùjè-bújè |

### 3.6.3.2 Word-Final <LH>-to-H Raising

Many nouns, adjectives, and verbs end in a long <LH>-toned vowel. Before particles or other words beginning with an H -tone (except over a pause or similar prosodic break), this rising tone is raised (or leveled) to a flat H-tone. Monosyllabic words ( $C \check{v}$ : $C \check{v} C, C \check{v}: C$ ) are unaffected, and retain their contour tones.

The combinations in question are very common. Among the H -toned particles that induce this effect on a preceding word are those in (46).
particle type of preceding word
a. mé ‘if/when ...’ perfective (positive) verb (1st/2nd person)
b. dîn 'all' noun, adjective
definite determiners noun, adjective
c. má (locative) noun, adjective

Examples with $m \varepsilon ́ \varepsilon$ ' $\mathbf{i f} / \mathbf{w h e n} . .$. ' are in (47). The form of the relevant word when it appears without the particle is shown in parentheses after the free translation. In (47a), the raising of the vowel increases the acoustic difference between 'you-Sg sat down' and obbì-y-ò: 'they sat down'. In (47c), the verb is monosyllabic and does not raise and level its tones before mé. In $(47 d)$, the initial nasal is treated as a syllable for this purpose, so the final vowel raises.

'if/when you-Sg have sat down' (<òbì-y-ǒ:)
b. dìmbì-yé-y mé
follow-MP-1P1Sbj if
'if/when we have followed' (< dìmbì-yè-y)
c. $y$-ǒ: mé
see.Pfv-2SgSbj if
'if/when you have seen'
d. ìd-ó: mé
give.Pfv-2SgSbj if
'if/when you-Sg have given' (< nd-ǒ:) (2005-1a)

There are passages in my texts where the mé was actually omitted, leaving the raising of the tone of the final syllable of the verb as an index of its virtual presence.

Examples with quantifier dîn 'all, every, each' are in (48).

| gloss | regular form | with dîn ('all, every, each') |
| :---: | :---: | :---: |
| a. 'village' | sònjǒ: | sònjó: dîn |
| 'road' | ùsfõ: | ùsfó: dîn |
| 'hands' | nùmě: | nùmé: dîn |
| 'other' | àndě: | àndé: dîn |

b. 'person' nǒ
nǒ: dîn
'foot' nǎ: nǎ: dîn

Examples with definite determiners are in (49). Demonstratives are not relevant here since they force tones on the preceding noun or adjective to drop.

|  | gloss | regular | with defini |
| :---: | :---: | :---: | :---: |
| a. | 'village' | sònjǒ: | sònjó: ké |
|  | 'road' | ùsfǒ: | ùsfó: kó |
|  | 'hands' | nùmě: | nùmé: yé |
|  | 'other' | àndě: | àndé: yé |
| b. | 'person' | nǒ: | nǒ: mó |
|  | 'foot' | nǎ: | nǎ: kó |

The situation with locative postposition má is tricky, since this postposition also has an L-toned variant mà. The L-toned variant has a more general distribution (for example, it is
used after definite determiners of any tonal type), and is a strong candidate to represent the lexical (underlying) tone. In the interpretation suggested here, mà first rises to má after some (but not all) words ending in an H -tone element (i.e. in a syllable with high or rising tone). Then this newly H-toned variant má induces Word-Final $<\mathrm{LH}>$-to-H Raising when the (nonmonosyllabic) stem ends in a long vowel with rising tone.

|  | gloss | regular form | with má ('in', 'on', 'at') |
| :---: | :---: | :---: | :---: |
| a. | 'road' | ùsfǒ: | ùsfó: má |
|  | 'village' | sı̀njǒ: | sònjó: má |
|  | 'other (place)' | àndž: | àndé: má |
|  | 'hand' | nùmǎ: | nùmá: má |
| b. | 'foot' | nă: | nǎ: má |

The tonal change also applies when the following H-toned element is a pronoun (51a), a numeral (51b), or a verb (51c), among other elements.
(51) a. ànè àndé: mí yè 'another man saw me'
b. sònjé: nôy 'two villages' (sònjě:)
c. ànè àndé: ínè 'another man went'

### 3.6.4 Low-level tone rules

### 3.6.4.1 Contour-Tone Mora-Addition (absent)

Contour tones require a minimum number of moras (timing units) to play out. However, I know of no case where a floating tone is added to a syllable and where the nucleus of that syllable is audibly lengthened to accomodate the extra tone component.

### 3.6.4.2 Contour-Tone Stretching

When a syllable with a contour (falling or rising) tone is extended by the addition of a syllable-final consonant (in the form of a suffix or enclitic), the contour tone is phonetically realized by stretching the first tone component, so that the final tone component is realized on the last possible mora.

For example, nùmǎ: 'hand' with final rising-toned syllable can be followed by the 'it is' enclitic $=y$, which has no intrinsic tone of its own. The final tone element of the stem (in this case, H) spreads into the semivowel of the enclitic. The first tone element (here, L) then pushes right, confining the H -tone to this semivowel (phonetic [nùmà:j]). A similar example with falling tone is nàmâ: 'meat', which combines with the same 'it is' enclitic as phonetic [nàmá:j].

In spite of the phonetics, I prefer to transcribe e.g. nùmǎ: = ý 'it is a hand' and nàmâ: = ỳ 'it is meat', since this clarifies the actual source of the contour tone.

### 3.6.4.3 Final-Tone Resyllabification

A stem-final syllable with contour tone, $<\mathrm{LH}>$ or $<\mathrm{HL}>$, may precede an atonal but syllabic enclitic, namely the $=i$ : variant of the 'it is' enclitic (§3.5.1). In this combination, the final tone element of the stem shifts onto the enclitic. Thus / gěn = i:/ 'it's blood' surfaces as gèn = í:, and /kên=i:/ 'it's there' surfaces as kén=ì: .

A similar process occurs in some suffixed nouns, though it is not regular. Inanimate examples like gìyé 'farts (n)', singular gìyè-ngó are in (95d). Examples generally involving vowel-shortening like nǒ: 'person', plural nò-mbó 'people', are in (113a).

### 3.6.4.4 Stranded-Tone Re-Linking

When a tone is stranded due to the deletion of a vowel and resulting resyllabification, it is realized on the preceding syllable within the word. This is the case in the verb gǒr-lé 'pull back (arm)', syncopated from /gòrí-lє́/, mentioned in §3.6.1.2 above.

The process is fairly common in suffixed nouns, which often trigger syncope of a stemfinal vowel. Since the suffixes are syllabic but atonal, a simple tone of the deleted vowel also appears on the suffix. An example is àlmá:mù 'imam', plural àlmâ:m-bò (§4.1.3.8). Another is wòlé 'vein; root', plus wǒl-ŋgò (§4.1.3.2). If the deleted vowel is contour-toned (my examples are with $<\mathrm{HL}>$ vowels), its leftmost tone element moves further left onto the final surviving syllable of the stem, while its rightmost tone element appears on the suffix only. An example is gágàlî: 'gallbladders', singular gágǎl-ŋgò (§4.1.3.2), where the $<\mathrm{HL}>$-tone of the deleted vowel is split between stem-final and suffixal syllables.

### 3.6.4.5 $<\mathrm{HLH}>$-to- $<\mathrm{HL}>$ Reduction

There are few opportunities to test the behavior of underlying $<\mathrm{HLH}>$ toned syllables. This is not an acceptable surface sequence within a syllable, unlike the fully acceptable bell-shaped <LHL>.

However, there are two morphological contexts where this sequence arises, and where it is resolved by dropping the final H-tone element. In both situations, one or another of the three verbs that end in a lexical falling tone occur with a single-consonant suffix that would normally be H-toned, so we ought to get a final $<\mathrm{HLH}>$ syllable. The verbs are $d w \hat{\varepsilon}$ : 'arrive', $j \hat{e ̂}$ : 'bring', and dinne. 'find'. One suffixal combination is the 3 Sg perfective negative, whose underling form is /-lí-/ with an H-toned vowel, seen more clearly in e.g. $1 \mathrm{Sg}-1 u ́-m$ and $1 \mathrm{Pl}-1 i ́-y$. Word-finally, i.e. in the zero 3 Sg form, the 1 of /-lí-/ is deleted. In other verbs, when the stem-final ends in an L-tone, the H-tone of /-lí-/ is preserved, and fuses with the L-tone to form a rising $<\mathrm{LH}>$, as in nǎ- $1-\varnothing$ 'he/she did not drink'. For 'arrive', 'bring', and 'find' we should therefore have $3 \mathrm{Sg} \# d \tilde{o}:-1-\varnothing$, \#jõ:- $-\varnothing$, and \#dìnõ:- $1-\varnothing$, respectively, with $<\mathrm{HLH}>$ tones on the final syllable, after the final /i/ has been deleted. The actual surface forms are, however, dô:-l, jô:-l, and dìnô:-l, with falling (i.e. $<\mathrm{HL}>$ ) rather than $<\mathrm{HLH}>$ tone on the final syllable.

These three verbs have perfective positive stems with the same lexical $<\mathrm{HL}>$ final syllable. Such pronominal-subject suffixes as $1 \mathrm{Sg}-\mathrm{m}^{\prime \prime}$ are elsewhere H -toned after the
perfective stem, which for most verbs is entirely L-toned, as in dènè-m' 'I fell'. With the three verbs mentioned above, the H-tone is absent: jê:-m 'I brought', $d w \hat{\varepsilon}:-m$ 'I arrived', dìn $\hat{\varepsilon}:-m$ 'I found.

To summarize, if the H -tone of the deleted suffixal vowel initially combines with the tone of the stem-final syllable, the resulting $<\mathrm{HLH}>$ must be reduced to $<\mathrm{HL}>$.

```
<HLH> syllable reduces to <HL>
```

Alternatively, a constraint against $<\mathrm{HLH}>$ syllables could be formulated, blocking the development of $<\mathrm{HLH}>$ at any level.

### 3.7 Intonation contours

### 3.7.1 Phrase and clause-final nonterminal contours $\left(\nearrow, \downarrow, \rightarrow, \rightarrow^{\dagger}, \rightarrow^{+}\right)$

In texts, the following conventions are used to indicate intonational features: $\nearrow$ terminal high pitch at the end of a nonfinal clause or other constituent, usually marking incompetion in the middle of a parallel series, $\searrow$ for a notable pitch drop at the end of the final clause or other constituent in such a parallel series, $\rightarrow$ prolongation (with no special pitch shift) either as part of the lexical item (see the following section) or to set up the following clause, $\rightarrow^{\dagger}$ combination of $\rightarrow$ and $\nearrow$, and $\rightarrow^{\star}$ for prolongation plus progressive pitch lowering.

A typical textual example of $\nearrow$ followed by a parallel but series-ending $\downarrow$ is (508b) in §14.2.5.

### 3.7.2 Adverbs and particles with lexically specified prolongation $(\rightarrow)$

A number of expressive adverbials have final $\rightarrow$ built into their lexical form (§8.4.8.1). In Najamba, the prolongation is less conspicuous than in eastern Dogon languages like Jamsay, since in Najamba the adverbials are followed by a particle $n \grave{\varepsilon}$.

### 3.7.3 Dying-quail word-final intonation (absent)

The dying-quail final intonation or intonation-like grammaticalized terminal prosody, common in Jamsay and to some extent other eastern Dogon languages, is largely absent from Najamba. The only prosodic pattern that approaches it is one pronunciation of ma $\rightarrow$ 'or' (§7.2.2).

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

### 4.1.1 Nominal categories

### 4.1.1.1 Nominal morphological categories

The categories relevant to nouns (and NPs) are those in (53).
a. singular vs. plural
b. animate (including pseudo-animate) vs. inanimate
c. agreement classes (based on agreement with modifiers)

In terms of their own morphology, nouns are of the types in (54), based on the relationship between the form of the singular noun and the corresponding plural.
(54) a. singular equals plural, no suffixes or mutations
b. singular distinguished from plural by stem-final vowel mutation
c. singular unmarked, plural has suffix -mbo (animates \& pseudo-animates)
d. plural unmarked, singular has optional suffix - $\eta g O \sim$-go or - $g g e ~(i n a n i m a t e s) ~$

Type (54a) consists of a fairly small number of nouns that simply do not distinguish singular from plural. This includes mass nouns not easily divided into units (e.g. 'honey'), nouns with a unique denotatum ('God', 'sun'), and unassimilated loanwords ('shroud'). Many "mass" nouns are actually countable nouns in Najamba and often appear in plural form; this includes most crops.

However, (54a) also includes some inanimates that behave like English sheep, in that the same invariant nominal form may function morphosyntactically as either singular or plural, as verified by agreement in suffixing adjectives and in determiners. The known examples of this are in (55).

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural } \tag{55}
\end{array}
$$

Sg has same form as Pl , E/E-class inanimates

| 'house' | ólé | ólé |
| :--- | :--- | :--- |
| 'courtyard' | bándá | bándá |
| 'field' | yàlî: | yàlî: |
| 'well (water)' | dǎy | dǎy |
| 'day' | dénán | dénán |
| 'night' | nám | nám |
| 'pocket' | jíbà | jíbà |

Many nouns have either a suffixal plural (56a) or a suffixal singular (56b), while others ("mutating" stems) make the distinction by vocalic changes (56c).

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural } \tag{56}
\end{array}
$$

a. suffixal plural (animates)
'agama lizard' tì̀gá tìngà-mbó
b. suffixal singular (inanimates)
'shed' gúlì:-ŋggè gúlì:
'stem' sìmbá-ŋgoó sìmbá
c. vocalic mutation (animates and inanimates); see $\S 4.1 .2$ below
'goat' ínè ínà:

Singular suffixation and plural suffixation are not completely symmetrical, however. Animate plural suffix -mbo is effectively obligatory when its semantic conditions are fulfilled, while the inanimate singular suffixes (O-class -ŋgo ~ -go, E-class -ŋge) are usually optional. That is, the unsuffixed stem may be used in singular as well as plural functions, which can still be distinguished by agreement with adjectives and determiners.

Two nouns have suppletive plurals. These are the ontologically basic terms that together can denote all living and inanimate entities (57a-b). See §4.1.3.1 below for closer analysis.
a. animal
'living thing, critter' $y \hat{\varepsilon}: \quad$ bómbò
b. inanimate
'thing’ kóngò yèpà:bé

### 4.1.1.2 Nominal agreement categories

The maximum set of agreement categories for nouns is that in (58).

Agreement categories

| animate singular | animate plural |
| :--- | :--- |
| inanimate singular E-class | inanimate plural |
| inanimate singular O-class |  |

The categories "animate" and "inanimate" are grammatical rather than biologically correct. Essentially all animals (including insects and shellfish), along with humans, are grammatically animate. However, there are many nouns denoting inanimate (at least for us) entities that are grammatically animate; I refer to them as pseudo-animates.

All five agreement categories are distinguished by determiners. For example, there are five definite markers (59).

Definite determiners

|  | singular | plural |
| :---: | :---: | :---: |
| animate | mó | bé |
| inanimate | ké | yé |
|  | kó |  |

For suffixing adjectives, animate singular and inanimate plural are both unmarked and therefore homophonous. The three marked categories have distinct suffixes (60).
(60) Categories distinguished by suffixing adjectives

|  | singular | plural |
| :---: | :---: | :---: |
| animate | zero | $-m b o$ |
| inanimate | $-\eta g e$ | zero |
|  | $-\eta g o(-g o)$ |  |

Mutating adjectives, which use final-vowel changes instead of suffixes to distinguish class and number, make only a binary distinction between what I label as E and O morphological forms. These two categories are mapped onto the categories of (58) above as shown in (61).
(61) Categories distinguished by mutating adjectives

|  | singular | plural |
| :---: | :---: | :---: |
| animate | E | O |
| inanimate | E | E |
|  | O |  |

That is, animates have $\mathrm{E} / \mathrm{O}$ agreement (singular/plural), and inanimates (depending on class) have either $\mathrm{E} / \mathrm{E}$ or $\mathrm{O} / \mathrm{E}$ agreement. In the $\mathrm{E} / \mathrm{E}$ type, the adjective is the same for singular and plural nouns.

Since some nouns and some adjectives are suffixing, while other nouns and adjectives are mutating, all four combinations (e.g. mutating noun and suffixing adjective) occur. In a N Adj combination, whether the noun is suffixing or mutating has no bearing on the form of the adjective.

### 4.1.1.3 Semantics of animate and pseudo-animate nouns

Nouns denoting humans and animals (including insects) are grammatically animate. They have no singular suffix, but many take the animate plural suffix -mbo (for the phonology, see §4.1.3.7-8 below). There are also some mutating nouns that distinguish singular from plural by stem-final vowel shifts rather than by suffixation.

The grammatical animacy of a noun is tested by the form taken by a modifier (determiner or adjective). For suffixing adjectives, the unmarked form is used when modifying singular animate nouns, and the form with animate plural suffix -mbo is used when modifying plural animate nouns (again, regardless of the way plurality is expressed morphologically on the noun itself). For mutating adjectives, the E variant is used for animate singular, and the O variant is used for animate plural.

The definite determiners used with animate nouns are animate singular mó and animate plural bé.

Examples of nouns denoting humans and animals are in (62).

|  | singular | plural | gloss |
| :--- | :--- | :--- | :--- |
| a. | nàlé | năl-mbó | 'friend' |
|  | yáyè | yây-mbò | 'woman who has given birth' |
|  | gòlònjé | gòlònjú-mbó | 'lazy person' |
|  | dùbé | dùbú: | 'blacksmith' |
|  | dógè | dógò: | 'Dogon (person)' |
|  | yě: | yàwó: | 'woman' |
|  | èndê: | òndô: | 'child' |
|  |  |  |  |
| b. | gàn-kírí | gàn-kír-mbó | 'aquatic tortoise' |
|  | tă: | tă:-mbò | 'leopard' |
|  | gàndá | gàndà-mbó | 'mollusc' |
|  | ínè | inà: | 'goat' |
|  | ně: | nàwó: | 'cow' |

A considerable number of nouns (pseudo-animates) denoting inanimate objects are grammatically animate in their morphology and in their agreement patterns. Most of these nouns are from the semantic categories in (63).
(63) Pseudo-animate nouns (treated as animate grammatically)
a. implements with blades
b. implements with points or hooks
c. firearms
d. certain garments (pants and footwear)
e. vehicles
f. ritually powerful objects
g. musical instruments
h. stones
i. woven covers
j. apiaries (for honey)

Examples of (63a), blade implements, are lâ:m 'razor blade' (Fr lame), pòlé 'knife', sìlbé 'folding knife', gùlâ: 'chopping ax' (among other ax/hatchet terms), jálòsárì 'plow', dàbá 'daba' (among other hoe terms), ká:fâ: 'sword', and kòmô: 'sickle'. Perhaps pìndî: 'trap' also belongs here.

Examples of (63b), pointed or hooked implements, are kèmé 'point' (and its compounds), sílbàl 'simple awl', mènjénè 'needle', tòndòmbèlé 'metal hook', dùrî: 'pole with hook (for pulling off fruits)', sàmbé 'spear', and dǐ: 'thorn'. Perhaps tàndàmê: 'key' also belongs here.

Examples of (63c), firearms, are mǎlfâ 'rifle, musket', làsá:sì 'modern rifle', and gă:lè 'rifle mechanism'.

Examples of (63d), garments (pants and footwear) are yábà 'pants', tùbàlá:jì 'baggy pants', bènté 'loincloth', tènî: 'uniform' (Fr tenue), and tàgî: 'shoe' along with several compounds beginning with tàgù- 'shoe' such as tàgù-bà:bî: 'modern sandal'. Since the garments in question cover the midsection or the feet, this category might be compared with that of woven covers (below.

Examples of (63e), vehicles, are mòtô: 'motorcycle', wògòtórò 'donkey or ox cart', dàmbà-dámbà 'push-cart', nègèsó: 'bicycle', bàtô: 'steamboat', and àbìyôW ${ }^{n}$ 'airplane' (Fr avion).

Examples of (63f), ritually powerful objects, are sábè 'amulet' (also 'paper'), nòmbé 'rainbow' (i.e. "Nommo" the river god), jòmbùmbá 'object sent by sorceror', dě:rè 'statuette (of animist god)', mèlégè ‘djinn (genie)', and mòmé ‘fetish (animist idol)'.

Examples of $(63 \mathrm{~g})$, musical instruments, are bònî: 'tomton', bàrá 'calabash tomtom', gónè 'hourglass-shaped tomtom', bòbírì 'reed flute', and wè:gérù 'violin'.

Examples of (63h), stones, are tènĝ̂: 'oil grindstone', kìn-dàngú 'mountain boulder', and è $\eta i ̂ n ~ ' h e a r t h ~(t h r e e ~ s t o n e s ~ o n ~ w h i c h ~ p o t s ~ a r e ~ s e t, ~ o v e r ~ a ~ f i r e) ' . ~ F o r ~ k i ̀ n u ̂: ~ ' s t o n e ' ~ i t s e l f, ~ s e e ~$ below.

Examples of (63i), woven covers (also used as e.g. pot or calabash covers), are pìpàlâ: ${ }^{n}$ 'square fan' and $p \grave{̀ n d u ́ ~ ' w o v e n ~ c o n c a v e ~ w i n n o w i n g ~ v a n ' . ~}$

Examples of (63j), apiaries, are kòbî: 'apiary in tree' and nìmá 'apiary in cave'.
Those not fitting into any category include sà:gé 'month', bùndè-ə̀mê: 'rolling pin (for ginning cotton)', dòךé 'rag used as cushion for load on head' and témè ‘sieve' (Fr tamis).

The majority of animates (human, animal, or pseudo-animate) have an unsuffixed bare stem in the singular and animate plural suffix -mbo. However, there are a significant minority that use stem-final vowel mutations instead of suffixation. These nouns have a stem-final front vowel in the singular, which becomes a back or low vowel in the plural. An example is nà:jî: 'goat kid', plural nà:jû: . For more discussion and lists of examples, see $\S 4.1 .2 .5$, below. Whether an animate noun expresses plurality by suffixation or by stem-final vowel mutation is irrelevant to agreement.

Out of some 250 flora terms elicited, only one is pseudo-animate. This is nàygá (plural nàngá-mbó ), which denotes the dangerous prostrate herb Tribulus terrestris. The fruits of this plant have thorn-like spines that are painful to step on, so the noun can be thought of as belonging to the 'pointed or hooked implement' category.
kinû: 'stone' is an inanimate O-class singular, but it becomes pseudo-animate in the plural kinn-bò (</kǐn-mbò/).. This animacy shift applies to modifier agreement as well as to the form of the noun itself.
dúmé-lgó '(livestock) animal' is also an inanimate O-class singular. Its plural varies between dúmé: and dúmó:, and agreement likewise varies between inanimate plural or animate plural. Inanimate plural agreement occurs in (449a) in §12.1.2, versus possible animate plural agreement in (666f) in $\S 17.6 .1$. The original sense was probably 'possession' (cf. English chattel), related to the common verb dùmé 'get, obtain. This semantic history may help explain the unusual morphology and inconsistent agreement pattern.

### 4.1.1.4 Semantic categories of $\mathrm{O} / \mathrm{E}$ and $\mathrm{E} / \mathrm{E}$ class inanimates

All nouns denoting inanimate objects or abstractions, other than those in the pseudo-animate categories described just above, take E-agreement with mutating adjectives (and may be followed by inanimate plural definite yé ) in the plural, which involves no suffixation of the noun. In the singular, there are two classes. One of them has O -agreement with mutating adjectives, and may be followed by inanimate singular O-class definite morpheme kó. This is the $\mathbf{O} / \mathbf{E}$ class (E being the plural agreement category). The other class, in the singular, has E-agreement with mutating adjectives, and may be followed by inanimate singular E-class definite morpheme ké. This is the $\mathbf{E} / \mathbf{E}$ class.

Both classes include suffixing nouns (which take, often optionally, inanimate singular E-class suffix - $\eta g e$ or O-class suffix - $\eta g o$ or -go), mutating nouns (which express the difference between singular and plural by a change in stem-final vowel quality), and invariable nouns (no difference in the form of singular and plural nouns, though agreement brings out the distinction. The morphology of suffixing and mutating nouns is described in detail in the sections below. Examples of invariable nouns are dénán 'day/days' (E/E class) and tè:ré 'miracle' (O/E).

The $\mathrm{E} / \mathrm{E}$ class is smaller, and it is simplest to describe its semantic range and then recognize $\mathrm{O} / \mathrm{E}$ as the default for all inanimates not otherwise accounted for. The semantic groups in (64) have been observed.

## E/E class nouns

a. some topographic features
b. holes
c. dwellings and other built structures
d. some body parts
e. liquids
f. time

Examples below are cited in the (generally optional and in some cases rather uncommon) suffixed form of the singular if attested.

Examples of (64a), topographic features, are kéngé 'place', gwă: 'country', yàîì-ggè '(cultivated) field', dwà:nâ: 'private field', dàgâ: 'open bare land', bòrǒ: 'plains', sé:nò: 'sandy plains’, kùbǐ:-ŋgé 'dense forest', pèmbě:-ŋggé 'street outside house', sè:-dûn-gè
'pounding area (where women pound millet ears in large mortars)', yél-ŋgé 'high spot near a depression', yáyrè- $\eta g e ̀ ~ ' d e p r e s s i o n ~(i n ~ p l a i n s) ', ~ s a ̀ m b a ̂: ~ ' m e a d o w ', ~ p \grave{n d o ̂: ~ ' r i v e r b e d ~(o u e d) ', ~}$ jìmdú 'moist edge of pond', and kèlbè-dúlè- $\eta g e ̀ ~ ' t e r m i t e ~ m o u n d ' . ~ M o s t ~ o f ~ t h e s e ~ d e n o t e ~ z o n e s ~$ that may extend horizontally. By contrast, terms for the hills and mountains that (often abruptly) punctuate these flat expanses (kóngó: 'mountain', pègèlô: 'hill', ̀̀nô: 'mountain pass') are $\mathrm{O} / \mathrm{E}$, as are terms for earthly substances like ǹjâ: 'earth (dirt)'.

Examples of (64b), holes, which grade into topographic features, are dǒl-ŋgé 'hole (perforation)', dǎy-ŋgé 'well (water)', dúlé- $\eta g e ́ ~ ' p i t ~(h o l e ~ i n ~ e a r t h) ', ~ t e ̌:-\eta g e ́ ~ ' n a t u r a l ~ d e e p ~ h o l e ~$ in rock', and tòngèré-ŋgé 'shallow hole'. However, góló: ‘ditch, channel' is $\mathrm{O} / \mathrm{E}$.

Examples of ( 64 c ), dwellings and other structures, are ólé 'house', mìsídè- $\eta g e ̀ ~$ 'mosque', dùndàngé:-ŋgè 'shack', gúlì:-ŋgè 'shed', pàndǎ: 'first room in house', tárbà 'hunting shelter', tògòjêe: 'niche in wall', tánà 'granary', and kárngá 'covered vestibule'. Others like bándá 'courtyard', ébán 'market', and dá:kà 'Fulbe camp' could be included here or under topographic features.

Examples of (64d), body parts, are kî:-ŋgè 'head' and ìbí-ngé 'mouth'. As body parts are divided between $\mathrm{E} / \mathrm{E}$ and $\mathrm{O} / \mathrm{E}$ classes, there is further discussion of their semantics below.

Examples of (64e), liquids, are íngé 'water', gěn-gé 'blood', kònjé-ŋgé 'millet beer', jàbìré 'sauce', níngé 'green sauce', ǹjǐ: 'honey', bà:nâ: 'porridge', sòlé 'cream of millet', à:lé 'rain', and $\varepsilon$ émè: 'milk'. Some other E/E nouns like sé:jè:-ŋgè̀ 'spring (water)' and tàgǎ: 'pond, pool' could be placed here or under topographic features. ně-ŋgó 'oil' is $\mathrm{O} / \mathrm{E}$.

Examples of (64f), time, including prayers (which occur at fixed hours and may be used as time-of-day indicators), are dénán 'day', wákàtì (or wágàtì) 'time (moment)', nám 'night', ùjú 'daytime', $\varepsilon$ ह́ggú 'tomorrow', ègǎ: 'early morning', dèndà:jú 'early PM', púllò 'twilight', jùgîn 'week', ásè 'Saturday', lá:sàrà 'late afternoon prayer' (and terms for other time-specific prayers), and sân 'prayer'. However, $\mathrm{O} / \mathrm{E}$ agreement was observed for jènǎ: 'rainy season'. Either $\mathrm{O} / \mathrm{E}$ or $\mathrm{E} / \mathrm{E}$ agreement is possible for ̀̀gín 'hot season' and kènjû: 'year' (homonym of kènjû: 'pick'hoe').

Human and animal body parts are a domain where some nouns are $E / E$ and others are $\mathrm{O} / \mathrm{E}$. There is some correlation with semantic subdomains (65).

$$
\begin{equation*}
\text { gloss } \quad \text { singular } \tag{65}
\end{equation*}
$$

a. E/E class
abstractions
'soul'
kíndè:
'soul' kínjàn
'name' ínèn
body/torso
'body' gòjí-ŋgé
'chest (body)' gènjè̀-gènjê:-ngè
'chest (body)' pélè-ŋgè
'back (body)' bàndí-ngé

| joints |  |
| :---: | :---: |
| 'joint' | dígìn-gè |
| 'knee' | nà:-kínjì-ngè |
| 'elbow' | nùmà-kínjì: |
| head to shoulders |  |
| 'head' | kî:-ŋgè |
| 'middle of head' | dánà: |
| 'side of face' | $t E ́ g \varepsilon ̀ l e ̀:-ŋ g e ̀ ~$ |
| 'mouth' | ìbí-пgé |
| 'nose' | kìnjâ: |
| 'chin' | ǎ:-ngè |
| 'upper shoulder; wing' | kàkàrâ: |
| b. O/E class |  |
| abstractions |  |
| 'voice' | yô: |
| 'side' | tíngó: |
| head to shoulders |  |
| 'fontanel' | bónè-ngò |
| 'face' | gìrò-m̀bùlǎ: |
| 'eye' | gìró |
| 'tongue' | něndò: |
| 'tooth' | ìnǒ: |
| 'gap between teeth' | nálbè-ŋgoò |
| 'ear' | súnù: |
| 'cheek' | tùrû: |
| 'scarification' | yémbélé-ทgó |
| 'neck' | mŏ: |
| 'throat' | pòrò-pòrô: |
| belly to midsection |  |
| 'belly' | kûl |
| 'navel' | bóngò: |
| 'navel (protruding)' | bòngò-bòngô: |
| 'midriff' | bèrè-bèrô: |
| 'thigh below hip' | mágà: |
| 'buttock' | pùrmbǎ: |
| 'testicles' | dólò: |
| 'penis' | jógú |
| 'vagina' | dúmbú |
| 'foreskin' | múrù |
| 'clitoris' | kèkér-ŋgò |
| 'womb; female genitalia' | púrú |


| limbs/extremities |  |
| :---: | :---: |
| 'hand' | nùmǎ: |
| 'foot' | nà:-gó |
| 'palm (hand)' | nùmà-tábíjà: |
| 'fist' | nùmà-kúmbù: |
| 'heel' | nà:-dórò: |
| 'finger' | nùmà-séndo: |
| 'fingernail' | kóbùlù: |
| internal organs |  |
| 'liver' | kéndà: |
| 'heart' | kèndà: sósòrò: |
| 'spleen' | kèndà: nánàgà: |
| 'windpipe' | yògòlo-y |
| 'placenta' | ógò: |
| 'lung' | búbùjû: |
| 'kidney' | bó:jè-пgò |
| 'gallbladder' | gágǎl-ŋgò |
| 'gizzard' | kèkê:-ngò |
| 'intestines' | bìndú |
| 'colon' | bórbórdè-ทgò |
| 'vein; root' | wǒl-ŋgó |
| hair etc. |  |
| 'tuft of hair' | bàkélò: |
| 'beard' | $b \hat{\varepsilon}:-\eta g o ̀$ |
| 'hair; feather' | kùlé-пgó |
| 'sideburns' | kàlàkàmbé-ทgó |
| bone and cartilage |  |
| 'cartilage' | dúmbà: |
| 'lower jaw' | jàjàgâ: |
| 'shoulderblade' | pápàrà: |
| 'hip' | tínì:-ŋgò |
| 'bone' | kìná-ŋgó |
| 'back of skull above nape' | dòrô: |
| 'mane' | yéndè-ŋgò |
| 'horn' | kélò: |
| skin and fat |  |
| 'skin' | gùjú |
| 'animal fat' | sî:-ngò |
| 'ganglion' | àntól-пgó |
| protrusion |  |
| 'hump' (variant) | júngà: |
| 'crest (rooster)' | dómbélé-ŋgó |
| 'breast' | ónjù: |
| 'tail' | dúl̀: |
| 'antenna' | jómbò: |

Having described in some detail the lexical inventory of pseudo-animates (inanimates treated grammatically as animate) and that of the $\mathrm{E} / \mathrm{E}$ inanimate class, it suffices to say that all other inanimates are of the $\mathbf{O} / \mathbf{E}$ class.

This includes abstractions (including those denoting actions), inanimate bodies and forces in nature, and many artifacts (except weapons and implements with blades, hooks, or points). A few examples (shown with singular suffix in cases where this suffix is attested) to show the semantic range are kòmbé-ŋgó 'war', sá-gò 'cotton', ह́nè-ŋgò 'potash', énáná-ŋgoó 'wind (air current)', sónà- $g g o ̀ ~ ' s o i l ’, ~ g a ̀: g o ́ ~ ' h u n g e r ’ ~(o r i g i n a l l y ~ * g a ̀:-g o ́), ~ y a ́ m b u ́: ~ ' b l a n k e t ’, ~ d u ́ m u ̀: ~$ 'disease', dágù: 'medication', úbú 'manure', jèmbó 'pain', pó:lò: ‘waterskin', gólò ‘fire’, ùfõ: 'road', tìmô: 'tree', sònjǒ: ‘village', kòríỳ̀ ‘calabash', tìbǒ: ‘death', jòmbó: ‘shoulderbag', kàlǎ: 'price', and ká:bú 'mat'.

Substantially all flora terms (except for the spiny-fruited Tribulus, mentioned earlier as a pseudo-animate) are $\mathrm{O} / \mathrm{E}$ class inanimates. The semantic class enforces $\mathrm{O} / \mathrm{E}$ agreement even with flora terms that are based on a noun of another agreement class. For example, Diheteropogon grass (whose inflorescences have long, stiff awns) is called kìr-gá: sàmbè, literally 'herder's spear'. By itself, sàmbé 'spear' is pseudo-animate, and 'the red spear' is therefore sàmbè bánè mó, with animate singular agreement on the adjective and on the final definite morpheme. However, 'the red Diheteropogon grass' is kìr-gá: sàmbè bán-gò kó, where the adjective and the definite determiner have $\mathrm{O} / \mathrm{E}$ (here, singular O ) agreement.

Examples where the "same" noun stem occurs with different agreement-class forms in different senses include a) bèmbé, plural bèmbé-mbó 'firefly’ (animate), versus bèmbé-ทgó, plural bèmbé 'Abrus bush' (O/E inanimate); and b) pòlé, plural pǒl-mbó 'knife' (pseudoanimate), versus pǒl-ŋgó, plural pòlé 'egg' (O/E inanimate). 'Knife' and 'egg' are accidental homophones, cf. Dogul Dom pòló 'egg' and pòlgó 'knife'. 'Firefly' and 'Abrus bush' (whose bright red-and-black seeds are made into necklaces by children), though separated by animacy, might go back to a single lexical item.

### 4.1.2 Mutating noun stems

Mutating nouns have counterparts among adjectives (§4.5.1.1) and verbal participles (§14.3).

### 4.1.2.1 Back/low vowel (singular) versus front vowel (plural)

A large number of nouns, mostly inanimates with $O / E$ type agreement, have a singular ending in a back or low vowel $\left\{\begin{array}{l}\text { 人 } O \rho a\} \text {, opposed to a plural ending in a front vowel }\{i e \varepsilon\} \text {. The }\end{array}\right.$ length and tone of the vowel are lexically determined, and are held constant across the two forms in nearly every case. The vowel-quality mutations are those in (66), to be read left to right.

```
                singular plural
```

| $u$ | $i$ |
| :---: | :---: |
| $n$ | $e$ |
| $o$ |  |
| $a$ | $\varepsilon$ |

From a glance at (66), we see that a) the singular vowel cannot be predicted from the plural vowel except in the case of $i$; and b) one can usually predict the plural from the singular, but singular $u$ corresponds to two plural qualities $i$ and $e$.

Using $\leftrightarrow$ as the symbol for mutations (e.g. $o \leftrightarrow e$, with the singular on the left), let us examine the number of stems in question. From the nouns in my working lexicon, my count of uncompounded nouns (including a relatively small number of well-assimilated loanwords) is as indicated in (67). Note that $u \leftrightarrow i$ is four times as common as $u \leftrightarrow e$. The numbers would rise somewhat if noun-like compound finals were included.
mutation \# of nouns

| $u \leftrightarrow i$ | 68 |
| :--- | :--- |
| $u \leftrightarrow e$ | 15 |
| $o \leftrightarrow e$ | 38 |
| $\jmath \leftrightarrow \varepsilon$ | 57 |
| $a \leftrightarrow \varepsilon$ | 79 |
| total | 255 |

For the $u \leftrightarrow i$ and $u \leftrightarrow e$ mutations, the numbers can be broken down by vowel-length and (for long final vowels) by tone (68).

$$
\begin{equation*}
u \leftrightarrow i \quad u \leftrightarrow e \tag{68}
\end{equation*}
$$

| final short $u$ | 42 | 10 |
| :--- | :--- | :--- |
| final $\hat{u}:$ | 14 | 2 |
| final $\grave{u}:$ | 10 | 4 |
| final $u:$ | 2 | 0 |

The number of $u \leftrightarrow i$ nouns with final $\hat{u}$ : would be much larger if compounds were included, since many of these are nominals with a suffix - $\hat{u}$ :, see (399a) in §11.1.3.2. Even leaving these aside, there is a clear preponderance of $u \leftrightarrow i$ over $u \leftrightarrow e$.

The $u \leftrightarrow i$ and $u \leftrightarrow e$ nouns, excluding the $u \leftrightarrow i$ nouns ending in $-\hat{u}$ : derivational suffix, can also be broken down by the vowel of the penultimate syllable (69).
penultimate vowel $\quad u \leftrightarrow i \quad u \leftrightarrow e$

| $u$ | 17 | 6 |
| :--- | :--- | :--- |
| $i$ | 5 | 1 |
| $o$ | 9 | 1 |
| $e$ | 3 | 3 |
| 0 | 2 | - |
| $\varepsilon$ | 3 | - |
| $a$ | 15 | 3 |

The quantitative data do not give much reason to think that the choice between $i$ and $e$ as the plural of $u$ can be explained phonologically.

The full set of $u \leftrightarrow e$ stems known to me, including noun-like compound-finals, are in (70).

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural } \tag{70}
\end{array}
$$

a. another e-vowel in stem

| 'tree-top' | dě:rù | dě:rè |
| :--- | :--- | :--- |
| 'cowry' | kèlû: | kělè ~ kèlê (collective), cf. kèlî:: plural |
| 'thin thread' | gè:jú | gè:jé |

b. singular with final long vowel, plural with final short vowel
'mash (from oil)' dúnjù: dúnjè
'bobbin' dǎ:lù: dǎ:lè
'medication' dágù: dágè
'yellow dye' sògòlû: sògólè
'heart of palm' sìm-póndù: sìm-póndè
c. other

| 'corner' | yó:bùndù | yó:bùndè |
| :--- | :--- | :--- |
| 'skin' | gùjú | gùjé |
| 'intestines' | bìndú | bìndé |
| 'manure' | úbú | úbé |
| 'large beer jar' | dùdùmbú | dùdùmbé |
| 'watermelon' | kàndú | kàndé |

In (70a), possibly the presence of an e-vowel in the penult has favored e over $i$ as plural vowel. However, there is no clear synchronic phonological rule of this type, and three cases of plural $i$ can be cited: ké:sù $\leftrightarrow k e ́: s i ̀ ~ ' m e t a l ~ j e w e l r y ~ b o x ' ~(r e g i o n a l, ~<~ F r ~ c a i s s e), ~$ àljébù $\leftrightarrow a ̀ l j e ́ b i ̀ ~ ' b i t ~(m o u t h p i e c e) ' ~(r e g i o n a l, ~<~ A r a b i c), ~ a n d ~ t h e ~ c o m p o u n d ~ k i ̀:-e ̀ r u ́ ~ ' h a i r s t y l e ' ~$ (cf. verb $\varepsilon$ ع́ $\varepsilon$ 'braid, do the hair of').

The set (70b) is highly distinctive in that the long /u:/ of the singular is shortened as well as fronted in plural /e/. There are no such vowel-length discrepancies in the many $u \leftrightarrow i$ nouns.

A few representative examples of the other mutation types are presented below.
$u \leftrightarrow i: k a ́: b u ́ \leftrightarrow k a ́: b i ́ ~ ' m a t ’, ~ p a ́ t u ̀ \leftrightarrow p a ́ t i ̀ ~ ' g o a t s k i n ~ w a t e r b a g ~ a t ~ w e l l ', ~ g i ́ b u ́ \leftrightarrow g i ́ b i ́ ~ ' w o m a n ' s ~$ wrap (garment)', górú $\rightarrow$ górí 'hat', tùrû: $\leftrightarrow t u ̀ r i ̂: ~ ' c h e e k ', ~ d u ́ m u ̀: ~ \leftrightarrow d u ́ m i ̀: ~ ' d i s e a s e ', ~$ súnù:↔súnì: ‘ear’.
$o \leftrightarrow e: ~ s i ̀ j o ̌: \leftrightarrow s i ̀ j e ̌ ~ ' l i n e ', ~ k o ́ n g o ́: \leftrightarrow k o ́ n g e ́: ~ ' m o u n t a i n ', ~ t u ̀ m b o ́ ~ ↔ t u ̀ m b e ́ ~ ' m o u n d ', ~$ gìró $\leftrightarrow$ gìré 'eye', bó:lò: $\leftrightarrow$ bó:lè: 'thread', gólò $\leftrightarrow$ gólè 'fire'.
$\supset \leftrightarrow \varepsilon$ : ذ̀nô:↔ゝ̀nर̂: 'mountain pass', símò: ↔símè: ‘cement' (Fr ciment). jว̀mbó:↔jòmbé: 'shoulderbag', něndj̀↔něndè 'tongue', dúlò:↔dúlè: 'tail'.
$a \leftrightarrow \varepsilon$ : làmpá $\leftrightarrow l a ̀ m p \varepsilon ́ ~ ' l a m p ' ~(i n t e r n a t i o n a l ~ w o r d), ~ g i ̀ y a ̂: ~ ↔ g i ̀ y \hat{\varepsilon}: ~ ' d a n c e ’, ~ g w a ̌: \leftrightarrow g w \varepsilon ̌: ~$ 'country', nùmǎ: 'hand', tárbà $\leftrightarrow t a ́ r b e ̀ ~ ' h u n t i n g ~ s h e l t e r ' . ~$

### 4.1.2.2 Frequency of stem-final long vowels in mutating noun stems

Even from these lists, readers familiar with Dogon languages will be struck by the large percentage of nouns that end in a long vowel. Based on noncompounded nouns with finalvowel mutations in my lexicon (excluding flora-fauna), the statistics look like these (71).

| mutation type | monosyllabic |  | bisyllabic or longer |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $C V$ | $C V:$ | $\ldots C V$ | $\ldots C V:(\%)$ |
|  |  |  |  |  |
| $u \leftrightarrow i$ | 0 | 0 | 42 | $26(38 \%)$ |
| $u \leftrightarrow e$ | 0 | 0 | 8 | $5(38 \%)$ |
| $o \leftrightarrow e$ | 0 | 0 | 14 | $30(68 \%)$ |
| $0 \leftrightarrow \varepsilon$ | 0 | 2 | 6 | $49(86 \%)$ |
| $a \leftrightarrow \varepsilon$ | 0 | 3 | 12 | $64(81 \%)$ |

For the mid-height and low vowels, the percentage of stems ending a long vowel is quite remarkable, and even for singular $u$ the percentage is substantial. Given that alternations of final $o$ : and $e$ :, $s$ : and $\varepsilon$ :, and $a$ : and $\varepsilon$ : are also found with many adjectives and participles, this suggests that (historically) most nouns formerly ended in either a singular or plural suffix that phonologically fused with the original stem-final vowel.

The predominance of final long vowels is even more striking when we note that many of the nouns with final short vowels are obvious or probable loanwords. In the case of $o \leftrightarrow e$, the inventory of final-short-vowel stems is further swollen by several cases where original plural *-mbo or singular *-ŋgo $\sim^{*}$-go has become fused to the stem. For the mid-height and low vowels, the inventory of final-short-vowel stems is as follows, with forms given in the singular.
(72) $o \leftrightarrow e$
a. likely loans: pàgùmbó 'tea bag', màngórò 'mango'
b. end in ...mbó (possible frozen plural *-mbo): jàngùmbó 'fruit cluster', kùjùmbó 'handful of food', yòmbó 'prepared food', gìmbó 'odor' (verb gǐn 'emit odor'), tèndùmbó 'row (e.g. of plants)' (adjective tèndô: 'straight')
c．end in ．．．クgó or ．．．gó（frozen singular＊－ŋgo or＊－go）：nà クgó＇weeping＇（verb nદ́ ‘weep＇），kángó ‘challenge’（verb káp），jò：gó ‘shame’（verb jə̀yє́），gà：gó ‘hunger’ （Jamsay jě：），gògó ‘cold weather＇（Nanga etc．gòyó ）
d．native Dogon：gìró＇eye＇，gólò＇fire＇，tùmbó＇mound＇

## （73）$\rho \leftrightarrow \varepsilon$

a．likely loans：ánò：rò＇image＇（＜Arabic），sékkò＇straw hanging mat＇（＜Fulfulde）， mìsó：rò＇shawl＇（＜Fr mouchoir）
b．native Dogon（or likely so）：j̀mbう̀ló＇misfortune＇，bò：ró＇long thin sack＇，něndò ＇tongue＇，
（74）$a \leftrightarrow \varepsilon$
a．likely loans：làmpá＇lamp＇，m̀béddà＇highway＇（＜Arabic），kárŋgá＇covered entryway＇，bàrà：dá＇tea kettle＇（＜Arabic），bármá＇modern pot＇（regional），dísà ＇elegant fabric＇，gíbà＇pocket＇（＜Arabic）
b．native Dogon（or likely so）：bándá＇courtyard＇，kùngá＇black mat border＇，gànjàlá ＇opening in kitchen wall＇，tárbà＇hunting shelter＇，gàjá＇scarification＇

## 4．1．2．3 Final－vowel mutations as single－feature suffixes

Even synchronically，one could perhaps think of the noun stems that undergo final－vowel mutations as being based on a lexical stem ending in a vowel that is underspecified for the ［ $\pm$ back］feature．If so，this would be amalgamated with number suffixes consisting only of the feature［＋back］（singular）or［－back］（plural）．

A slightly less aggressive version of this would be to take the singular as lexically basic， in all of its vocalic splendor，consider the plural suffix to be the feature［－back］，and have this feature oust the backness feature of the noun stem．

In implementing any such phonological analysis，in order to account for the existence of both $\rho \leftrightarrow \varepsilon$ and $a \leftrightarrow \varepsilon$ ，it might be necessary to recognize a distinction（not audible on the surface）between true $\varepsilon$（in $\supset \leftrightarrow \varepsilon$ ）and an underlying／æ／that is eventually raised to $\varepsilon$（in $a \leftrightarrow \varepsilon$ ）．

## 4．1．2．4 Segmental phonological alternations in mutating nouns

For the most part，there is no difference between the singular and the plural other than the shift between back／low and front stem－final vowel．However，there are some nouns that have a slightly more complex phonology．

Most of the alternations involve a trisyllabic stem with a medial high vowel that fluctuates between $i$ and $u$ ．It is an interesting question whether this is a low－level phonetic adjustment to the different final vowel，or whether it represents a spread of the ablaut－like mutation process itself to encompass a noninitial penult．The forms known to me are in（75）．

| gloss | singular | plural |
| :--- | :--- | :--- |
| 'wooden lock', | tàyà-kógúrú | tàyà-kógírí |
| 'dream' | mànjùrr-û: | mànjìr-î: |
| 'shard for serving food' | kòbùlû: | kòbìlî: |
| 'fingernail' | kóbùlù: | kóbìlì: |
| 'half of split peanut' | kábùlò: | kábìlè: |
| 'tea bag' | pàgùmbó | pàgìmbé |
| 'fruit cluster' | jàngùmbó | jàngìmbé |

Such alternations do not usually apply to mid-height or low vowels in the same penultimate position. However, I have recorded occasional examples of such alternations, sometimes as variant pronunciations. All examples known to me are in (76).

| gloss | singular | plural |
| :--- | :--- | :--- |
|  |  |  |
| 'mango' | màngórò | màngérè |
| 'spoon' | gònjòrô: | gònjèrê: |
| 'wooden milk bucket' | kárànjò̀rê.: | kárèwè |
| 'open space with soil in hills' | tòndòló | tòndèlé |

For the noun mìsó:rò (variant mùsó:rò) 'head shawl' ( $<$ Fr mouchoir with a semantic shift), one assistant gave the regular plural mùsó:rè, while another fluctuated between missérè and mìswé:rè (the latter arguably representable as /mìsóérè/).

Another type of vocalic alternation, cutting across the ATR opposition, occurs with bisyllabic nouns in the $a \leftrightarrow \varepsilon$ mutation type. Here there is a regular alternation between $e$ (in the singular with final a) and $\varepsilon$ (agreeing with the final $\varepsilon$ of the plural), and likewise between $o$ (singular) and $\rho$ (plural). The only counterexamples to this alternation are táyà 'granary' (Pl táyè) and the loanword m̀béddà 'highway' ( Pl m̀béddè). With these two exceptions, all bisyllabic $a \leftrightarrow \varepsilon$ nouns with a mid-height vowel in the intial (i.e. penultimate) syllabic show $e / \varepsilon$ or $o / o$ alternations. I have six examples of this alternation, although for 'dew' the plural is marginal.

| gloss | singular | plural |
| :---: | :---: | :---: |
| a. 'liver (and heart)' 'boundary stones' 'edible leaves' 'dew' | kéndà: <br> pégá: <br> bèlâ: <br> èlǎ: | kéndè: <br> pégé: <br> bèlê: <br> غ̀lě: (marginal) |
| b. 'flexible liana branch' 'band of cloth; brick mold' 'difficulty, problem' | òbâ: <br> kóbá: <br> tórrà | $\grave{\jmath b} \hat{\varepsilon}$ : <br> kóbé: <br> tórrè |

Given that singular a requires plural $\varepsilon$, it is not surprising that ATR-harmonic considerations require a harmonically correct vowel in the first syllable of the plurals. What is more notable is the fact that (except for the loanword m̀béddà) there are no bisyllabic singulars with an $\{\varepsilon \rho\}$ vowel in the first syllable preceding $a$ in the final syllable. This suggests that $/ \mathrm{a} / \mathrm{is}$ compatible with $\{\mathrm{e} o\}$ but not with $\{\varepsilon \rho\}$ ATR-harmonic classes.

This is supported by study of the nouns with $\lrcorner \leftrightarrow \varepsilon$ mutations. Out of the 57 nouns of this type in my lexicon, there are none with a-vowel in the penult. There are two with a-vowel in the antepenult: ánò:rà 'image’ (< Arabic), bàḱ́lè: 'tuft of hair'. By contrast, a-vowels are common in the penult of nouns with $\supset \leftrightarrow \varepsilon$ mutations (kàló: 'boundary', kànjô: 'crack', etc.).

In one stem, the phonological oddity is the presence of $w$ before the $e$-vowel of the plural (78).
'roselle (variety)' ànjíkò: ànjíkwè:

This term denotes varieties of roselle that are grown for their calices (used in cooking). The more general term for 'roselle' (Hibiscus sabdariffa), which has many easily distinguishable cultivars, is ánjè. The morphology of ànjíkò: is non-transparent, but native speakers presumably divide it approximately as ànjí-kò: . The final might be represented as singular /kwò:/, plural /kwè:/. Deletion of $w$ between a consonant and a back rounded vowel is regular, cf. $k$-ǒ: 'you-Sg ate' from $k w \varepsilon$ 'eat, cf. (18-19) in (§3.2.3).

The term for 'cowry (shell)' (now also 'money') is also somewhat problematic (79).

```
kèlû: 'cowry shell’ (singular)
kèlî: 'cowry shells' (plural)
kělè ~ kèlê 'cowries (collective); money'
```

This is one of the nouns with long $u$ : in the singular and short $e$ in the plural (or rather, for this noun, the collective); see (70b) in §4.1.2.1, above. Plural kèlî: is phonologically unproblematic, since it retains the tones and prosodic structure of the singular. The collective form, which is actually in most common use ('money'), is problematic since it is prosodically bimoraic but has the same LHL tone sequence as in the trimoraic singular and plural forms. The fact that the medial /l/ is a sonorant is probably helpful in allowing speakers to fit this tripartite tone contour onto two moras. I usually heard the form as kělè with just a hint of L-tone in the transition from the $k$ to the first $e$.

The monosyllabic stems that have final mutations are also interesting phonologically. Those known to me are in (80).

| gloss | singular | plural |
| :--- | :--- | :--- |
| a. 'country' | gwǎ: <br> 'earth' | ghâ: |
| b. 'neck', | ǹjê: |  |

$$
\begin{array}{lll}
\text { c. 'voice' } & \text { yô: } & \text { yòŵ̂: } \\
\text { 'bowl-shaped jar' } & \text { pâ:: } & \text { páyغ̀ (variant pâa:) }
\end{array}
$$

The forms in (80a) present no major problems. One can argue whether 'earth' is mono- or bisyllabic. 'Country', parallel to other stems with orthographic $C W \ldots$ onsets, may be best analysed phonologically as singular /gòàá/ and plural /gòz̀ $\varepsilon /$. The plural is pronounced [gač̌:].

The forms in ( $80 \mathrm{~b}-\mathrm{c}$ ) illustrate the difficulty of deriving the plurals directly from the singulars by changing the backness feature of the final vowel. 'Neck' in (80b) is another bimoraic stem with a tripartite $<\mathrm{LHL}>$ tone melody. Leaving aside the issue how to apportion the three tone components, the singular/plural relationship suggests a representation like singular $/ \mathrm{m} \rho ง$, with only the second moraic element subject to fronting in the plural.

On the other hand, the two cases in (80c) suggest that the lexical representation contains the medial semivowel audible in the plural, and that this is deleted in the singular. The singulars could therefore be represented as /yòwô:/ and /páyà/. Deletion of the medial semivowel in /yòwô:/ is more reasonable (phonetically and in terms of supporting Najamba examples) than that in /páyà/, which is rather unusual typologically and is never observed in such Najamba forms as wàyá-ŋgó 'thick-Sg' (from wàyé:) or áyá-m 'cause to be tired' (causative of áy 'be tired'). Therefore an alternative analysis is to take 'bowl-shaped jar' as singular /páà/, plural /páè/, and think of the y in páyè as epenthetic.

Phonologically similar alternations also occur with singulars and plurals of suffixing (i.e. not mutating) nouns of the sort covered below.

### 4.1.2.5 Front vowel (singular) versus back/low vowel (plural)

A fairly small number of stems have a mutation between a front vowel in the singular and back/low vowel int the plural. This is the opposite of the more common pattern described in the sections above. The attested alternations are those in (81), leaving vowel-length changes aside.
singular plural


This is close to the mirror image of what we saw for the majority (back to front) mutation type, except for the singular/plural relationships $e \leftrightarrow a$ (for just two nouns) and (disharmonic) $\varepsilon \leftrightarrow O$ (also for just two nouns).

I will start in medias res with singular e, since the 'child' term will figure in the discussion of other nouns below.

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural }
\end{array}
$$

a. $e \leftrightarrow a$ :
'man'
'goat'

$$
\begin{array}{ll}
\text { ánè, ánì } & \text { ánà: } \\
\text { ínè } & \text { ínà: }
\end{array}
$$

b. $e: \leftrightarrow 0$ :, core example
'child'
èndê: òndô:
c. e: $\leftrightarrow o$ :, deriving from (b)
'rival' bà:ndê: bà:ndô:
d. $e \leftrightarrow u$ :

| 'uncastrated (goat)' | ě:bè | ě:bù: |
| :--- | :--- | :--- |
| 'amulet; paper' | sábè | sábù: |
| 'spear' | sàmbé | sàmbú: |
| 'person without fingers' | dùmbé | dùmbú: |
| 'Nanga (ethnicity)' | náyè | náyù: |
| 'blacksmith (caste)' | dùbé | dùbú: |
| 'leatherworker (caste), | jàmbé | jàmbú: |

e. e: $\leftrightarrow u: / o:$, originally derived from (b)
'Fulbe (person)' púlàndê.
púlàndû:, púlàndô:
The unusual final $e \leftrightarrow a$ : alternation in (82a) involves vowel length as well as quality. For 'man' the phonology is made even more difficult by the existence of variant final vowels in the singular. The important noun 'child' ( 82 b ) shows an $e \leftrightarrow O$ mutation that spreads into the initial syllable. This noun may be a restructuring of an old compound 'person-child', cf. Tiranige ndà: and Tommo So ndé 'person', and Tommo So í: and Dogul Dom ěg 'child', among other relevant Dogon forms. The term for 'rival' is a somewhat frozen compound of bǎ: 'father' and the Najamba 'child' term (males of similar age within an extended family are the prototypical rivals).

The alternation of final $u: \leftrightarrow e(82 \mathrm{~d})$ is the mirror image of the $e \leftrightarrow u$ : alternation seen for a few nouns in (70b) in §4.1.2.1, above (e.g. dágù: 'medication, plural dàgè). The noun 'Fulbe (person)' (82e) probably originated as a compound ending in 'child' ( 82 b ), but has been partially assimilated into this $u: \leftrightarrow e$ type ( 82 d ).

The data involving singular $\varepsilon(:)$ are rather messy. For $\varepsilon: \leftrightarrow a$ : I can cite the set of derived nouns ending in characteristic - $g \varepsilon$ : ( $\S 4.2 .2 .1$ ), here exemplified by 'herder' (83a), plus two ethnic terms (83a). The nouns with $\varepsilon \leftrightarrow 0$ : also include ethnic terms and other nouns that characterize human types, along with one kin term denoting an important relationship (83b).
gloss singular plural
a. $\varepsilon: \leftrightarrow a:$

| 'herder' | kìr-gé: | kìr-gá: |
| :--- | :--- | :--- |
| 'Tuareg clan' | dà:gě: | dà:gă: |
| 'northern Dogon', | bà:lě: | bà:lă: |

b. $\varepsilon \leftrightarrow 0$ :

| 'Sorko, Bozo' | sólgè | sólgò: |
| :--- | :--- | :--- |
| 'Dogon' | dógè | dógò: |
| 'Tommo' | tómbè | tómbò: |
| 'enemy' | àndàmê: | àndàmô: |
| 'impoverished person' | gìríyé: | gìríyó: |
| 'close second cousin' | nìỳ̀mê: | nìyòmô: |

The most unusual mutations are those where $\varepsilon$ : (in one case, short $\varepsilon$ ) in the singular corresponds to awo: (with a shift in ATR-harmonic class) in the plural (84a), see (30a) in §3.3.6.2. There is one similar example with $a$ : in the singular (84b).

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural } \tag{84}
\end{array}
$$

a. $\varepsilon: \leftrightarrow a w o$ : with shift in ATR-harmonic class
'woman' yě: yàwó:
'cow' ně. nàwó:
'opposite-sex sibling'
ùbùlŋgé: ùbùlngàwó:
( Pl also ùbùlygà-mbó )
‘slave’ (variant Pl)
gùndé
èndwǎ:
òndàwó:

Two of the three nouns with $i: \leftrightarrow u$ : in (85a) below denote juvenile livestock animals. The other livestock animal (pغ̀gé 'sheep') has a juvenile term pègè èndê:, plural pègè-mbò òndô:, clearly ending in èndê. 'child' or its plural òndô: 'children'. It is probably ill-advised to try to derive the forms for 'goat kid' and 'calf' directly from a similar compound containing èndê., but if we compare these two nouns with ínà: 'goats' and ně: 'cow' (plural nàwó:), we can isolate endings $-j \hat{i}$ : and $-m b \hat{i}$ : that arguably contain a diminutive $-\hat{i}:$. There is no specifically diminutive sense in tàgî: 'shoe' (85b), but one cannot rule out a diminutive origin.

```
gloss
singular
```

plural
a. $i: \leftrightarrow u$ :, juvenile animals

| 'goat kid' | nà:jî:. | nà:jû: |
| :--- | :--- | :--- |
| 'calf' | nà:mbî: | nà:mbû: |

b. i: $\leftrightarrow u$ :, other tàgî: tàgû:
'shoe'

### 4.1.3 Suffixing noun stems with final -ngo $\sim-g o,-\eta g e$, or $-m b o$

Most nouns that do not distinguish singular from plural by mutations of the final vowel have either a singular suffix (and an unmarked plural/collective), or a plural suffix (and an unmarked singular). For nouns that make no morphological singular/plural distinction, see (55) in §4.1.1.1 above.

The suffixes -ngo $\sim-g o$, - $\eta g e$, and $-m b o$ induce modifications of stem-final vowels in many stems. These reductions take the form of shortening of long vowels, raising /e/ to $i$, rounding and backing /i/ to $u$, and lowering / $\varepsilon /$ to $a$.

### 4.1.3.1 Nouns kóngò ‘thing’, bómbò 'critters’, kéngé 'place’, íngé ‘water’

The historical relationship between $\mathrm{O} / \mathrm{E}$-class inanimate singular - $g g o$ ( $-g o$ ) and the noun kóngò 'thing' (usual plural yèpà:bé ) cannot be determined by internal reconstruction alone. Two mutually exclusive choices present themselves. One possibility is that kóngò contains (now frozen) singular *-ngo. The other is that singular -ŋgo is a phonologically reduced form of an older classifier based on kóngò 'thing'. It's worth mentioning that singular kó and plural yé occur as inanimate demonstratives and as definite morphemes.

Although the usual plural of kóngò 'thing' is suppletive yèpà:bé 'things', when kóngò denotes an unspecified living thing (synonym in this case: yê:) it has a distinct plural bómbò 'critters', used to denote unidentified living things of any size. For example, the general term for snake is singular kòngò jàlá-ŋgò (literally "long thing," perhaps originally a taboo euphemism), and plural bòmbo jàlá-mbó. The relationship of bómbò to animate plural -mbo is like that of kóngò 'thing' to singular -ngo, but raises the same chicken-and-egg historical linguistic issue.

Similar points can be made about the historical relationship between E/E-class inanimate singular -ŋge and the noun kéngé 'place' (plural identical to singular). The E/E class includes many terms for topographic and other places. Adverb kên 'there' is also likely related. However, the E/E-class also includes nouns denoting liquids, whose prototype is íngé 'water', which also ends in ggé. One possibility is that -ŋge may have derived independently from both 'place' and 'water'.

### 4.1.3.2 Segmental phonology of nouns with singular -ngo

The phonology associated with nominal suffixes $-m b o$, $-\eta g o \sim-g o$, and $-\eta g e$ is complex. I begin the analysis with - $g$ go, covering segmental and tonal phonology in successive subsections. The process will then be repeated for -nge (§4.1.3.6) and for -mbo (§4.1.3.7-8), which in many respects are phonologically parallel to - $\eta g o$.

For the semantics associated with the $\mathrm{O} / \mathrm{E}$ inanimate class, see $\S 4.1 .1 .4$. As with other classes, $\mathrm{O} / \mathrm{E}$ nouns can be suffixing or mutating. Among the many suffixing $\mathrm{O} / \mathrm{E}$ nouns,
physical objects or forces, and body parts (of humans, plants, etc.) are especially wellrepresented. Some glosses are 'ball', 'mortar (for pounding)', 'waterjar', 'star', 'mud brick', 'bottle', 'food', 'animal', 'oil', 'millet', 'salt', 'baggage/gear', 'ladder', 'egg', 'seedstock', 'fritters', 'cow-peas', 'cloth', 'gum arabic', 'egg', 'beard', 'hip', stem', 'leaf', 'grain', 'sorghum', 'charcoal', 'froth', 'ashes', 'iron/metal', and 'wind'. Some nouns, however, are more abstract, e.g. 'war', 'applause', 'fart', 'marriage'.

In somewhat over $50 \%$ of these stems, there is no phonological change to the stem when singular -ngò is added. Examples are in (86). Many of the stems shown have phonological shapes that would have allowed stem-final vowel modifications. Note especially the final long vowels that are unshortened in (86a), and the final $\{e o\}$ vowels that are not raised or syncopated in (86b).

| gloss | plural/collective | singular |
| :---: | :---: | :---: |
| a. 'gizzard' | kèk $\hat{\varepsilon}$ : |  |
| 'hip' | tínì: | tínì:-ŋgò |
| 'pack (of cigarettes)' | pákè: | pákè:-ŋgoò |
| 'gum (resin)' | nâ: | nâ:-ŋgò |
| 'firewood' | té: | té:-пgó |
| 'grain' | sê: | sê:-ŋgò |
| b. 'crest (of rooster)' | dómbélé | dómbélé-ŋgó |
| 'ball' | dóndòlò | dóndòlò-ŋgò |
| 'squash' | góné | góné-пgó |
| c. 'bone' | kìná | kìná-ŋgó |
| 'hair, feather' | kùlé | kùlé-пgó |
| 'fontanel' | bónغ̀ | bónè-ŋgò |
| 'chaff' | j̀y | ò ¢́-ŋgó |
| 'peanut' | ćlé | ع́lé-ŋgó |
| 'chain' | SÉnćlé | Sénélé-ทgó |
| 'potash' | દ́nè | Énè-ŋgò |

However, the other half of suffixing $\mathrm{O} / \mathrm{E}$ stems do show at least one segmental change before the suffix. The general pattern is that a stem-final vowel is weakened (shortened, deleted, or raised to a high vowel).

In (87) the final vowel is shortened with no further change. All examples in my lexicon of final-vowel shortening with no other modification are shown.

| gloss | plural/collective | singular |
| :---: | :---: | :---: |
| a. 'bark fiber' | bá:jí: | bá:jí-ngó |
| b. 'swelling' | àmìyê: | àmìyé-ŋgò |
| 'animal' | dúmé:, dúmó: | dúmé-ŋgó |
| 'food' | $k w \hat{\varepsilon}$ : | kwé-ทgò |
| 'supper' | nènê: | лદ̀nદ́-пgò |

Another presuffixal change is that the stem-final vowel may be raised from /e/ to $i$ or $u$ (88a-b), or lowered from $/ \varepsilon /$ to $a(88$ c). All known uncompounded examples are shown, along with a few compounds.
gloss
plural/collective singular
a. $/ \mathrm{e} / \rightarrow i$

| 'applause' | pómbè | pómbì-ngò |
| :--- | :--- | :--- |
| 'papaya' | mánjé | mánjí-ngó |
| 'stray crop plant' | tèbé | tèbí-ngó |
| 'tinder' | dámbè | dámbì-ngò |
| 'thing tilted to one side' | bàmbé | bàmbí-ngó |

b. $/ \mathrm{e} / \rightarrow u$

| 'fritters' | tónjè | tónjù-ngò |
| :--- | :--- | :--- |
| 'roselle' | ánjè | ánjù-ŋgò |
| 'cow-peas', | númbé | númbú-ngó |
| 'husked grain spike' | kìjé | kìjú-ŋgò |
| 'mashed Sclerocarya seeds' | énjé | énjú-ŋgó |
| 'rags' | sògòjjé | sògòjú-ngó |
| 'gum arabic' | àrbàkàndé | àrbàkàndú-ŋgó |
| 'blinders' | gìrè-yàmbé | gìrè-[yàmbú-ngó] |

c. $/ \varepsilon / \rightarrow a$

| 'bier' | pándé | pándá-ทgó |
| :---: | :---: | :---: |
| 'clove' | pètíné | pètíná-ทgó |
| 'bracelet' | nùmà-sàgé | nùmà-[sàgá-ทgó] |
| 'sorghum bundle' | èmbà-tágè | èmbà-[tágà-ŋgò̀] |

Shortening and raising (/e:/ $\rightarrow i$ ) are combined in one noun (89).
gloss
plural/collective
singular
'mosquito net' sángé: sángí-ŋgó

In a large number of examples, the stem-final vowel is deleted (syncopated). Elsewhere in Najamba morphophonology, for example in the chaining form of verbs (§10.1.2), a stem-final short high vowel is deleted after an unclustered sonorant. There is good reason to extend this analysis to these nominal alternations. However, few suffixing E/O nouns end in a short high vowel. In fact, most nouns with final $u$ are of the mutating rather than suffixing type. An exception is the loanword 'citrus', which does have final $/ \mathrm{u} /$ that syncopates before the singular suffix (90a).

Much more common are nouns whose stem-final /e/ is deleted (90b). I assume that it is first raised to a high vowel, and then undergoes High-Vowel Syncope (§3.4.2.2). Deletion of the final vowel is not usual in the case of $/ \varepsilon /$, which is either retained without change as in (86c) and (87b) above, or in a few cases lowered to $a$ as in (88c) above. However, in two nouns a final $/ \varepsilon /$ does delete $(90 \mathrm{c})$.

|  | gloss | plural/collective | singular |
| :---: | :---: | :---: | :---: |
| a. | 'citrus' | lèmbúrù | lèmbûr-ŋgò |
|  | 'wood chips' | tè:-kòmilé | tè:-kòmǐl-ŋgó |
|  | 'roselle plant' | dòné | dǒn-gó |
|  | 'baggage' | gòné | gǒn-gó |
|  | 'waterjar' | gòné | gǒn-gó |
|  | 'wood chips' | tè:-kòmìlé | tè:-kòmǐl-ngó |
|  | 'round object' | déndèlè | déndèl-ngò |
|  | 'small woven prayer mat' | kùnà-déngélé | kùnà-[déngél-ŋgó] |
|  | 'vein; root' | wòlé | wǒl-ทgó |
|  | 'hard seed' | kélé | kél-пgó |
|  | 'sesame' | pǎ:lè | pǎ:1-ŋgò |
|  | 'tamarind seed' | à:lé | ă:1-пgó |
|  | 'intact whole' | kúndúlé | kúndúl-ŋgó |
|  | 'dry outer bark' | kòmilé | kòmǐl-ŋgó |
|  | 'shell (of pod)' | kògòlé | kògǔl-ŋgó |
|  | 'egg' | pòlé | pǒl-пgó |
|  | (contrast pòlé, Pl pǒl-mbó 'knife') |  |  |
| c. | 'salt' | nèm ${ }^{\text {c }}$ | něm-gó |
|  | 'object w. flattened sides' | pòmbìré | pòmbǔr-пgó |

In (91), the final long high vowel has first been shortened, then deleted by High-Vowel Syncope (§3.4.2.2). In (91a), its final-syllable $<H L>$ tone has been redistributed, with the $H$ moving leftward while the L is expressed on the suffix. See Stranded-Tone Re-Linking (§3.6.4.4).

| gloss | plural/collective | singular |
| :---: | :---: | :---: |
| a. 'purchase' | dòn-î: | dǒn-gò |
| 'gallbladder' | gágàlî: | gágǎl-ŋgò |
| 'clitoris' | kèkérî: | kèkér-ŋgò |
| b. 'mortar' | túní: | tún-gó |
| 'ladder' | bíní: | bín-gó |
| 'sale' | tùlî: | tǔl-ngò |

Three nouns show a shift in ATR-harmonic class from -ATR $\{\varepsilon \rho\}$ in the plural/collective to +ATR $\{e o\}$ in the singular (92). One could argue that the unsuffixed plural/collective shows the lexical ATR-harmonic class, and that the $o$-vowel of the singular suffix has (idiosyncratically) affected stem-vocalism in these nouns. However, the alternation is not productive, and many other nouns illustrated above show $\{\varepsilon o\}$ stem vowels before singular -ngo.
gloss
plural/collective singular
a. 'cloth'
'marriage'
SWĚ:
sò-ngó
غ̀y $\check{:}$ :
èyà-ŋggó
[cf. verb $\varepsilon$ ச́ $\varepsilon^{~ '(b r i d e) ~ m o v e ~ t o ~ h u s b a n d ' s ~ h o u s e '] ~}$
b. 'iron' íné: ínó-ŋgó

In (93a), the phonological issue is the disappearance of the medial $g$ of the stem before - $\eta g$. One would expect \#nègv́-ŋgó and \#yógv́-ŋgó, with some vowel $v$ (either the unaltered lexical $e$, or a high vowel). There is no general intervocalic $g$-Deletion rule, as seen in (93b).
gloss plural/collective singular
a. 'oil'
nègé
ně-пgó
'millet'
yógé
yó-ŋgó
$\begin{array}{lll}\text { b. 'bracelet' } & \text { nùmà-sàgé } & \text { nùmà-[sàgá- } \eta g o ́] \\ \text { 'sorghum bundle' } & \text { èmbà-tágè } & \text { èmbà-[tágà- } \quad \text { gò] }\end{array}$
èmbà-tágè èmbà-[tágà-ŋgoò]

I argue in §3.4.2.2 that examples like (93a) are best analysed in terms of first raising stemfinal /e/ to a high vowel like /i/, followed by an expanded form of High-Vowel Syncope. Syncope usually applies after sonorants rather than after obstruents like $g$, so an extension is needed. Syncope in this case is favored by the homorganic relationship between the intervocalic $g$ of the stem and the $\eta g$ of the suffix. Therefore the suggested derivation is of the type /nègé-ŋgó/ $\rightarrow$ /nègí-ŋgó/ $\rightarrow$ /něg-ŋgó/ (syncope) $\rightarrow$ ně-ŋgó (simplification of unpronounceable /gyg/ via via / $\mathrm{y} \eta \mathrm{g} /$ to $\eta g$ ).

The remaining set of segmental alternations leads us into the tricky area of vowel/semivowel relationships; see §3.4.6. The relevant forms that involve singular suffix -ngo are in (94).

|  | gloss | plural/collective |
| :--- | :--- | :--- | singular

In (94a-b), $y$ is present in the unsuffixed plural/collective but disappears before singular - $\eta g o$. In (94a) the vowel preceding -ngo is short, suggesting a derivation with syncope followed by preconsonantal $y$-Deletion, /àyé-ŋgó/ $\rightarrow$ /ăyŋgó/ $\rightarrow$ ăทgó. In (94b), on the other hand, the vowel preceding - $\eta g o$ is long, pointing to intervocalic $y$-Deletion followed by $V V$-Contraction. See §3.4.4 for discussion of these minor, probably morphologized processes involving /y/.

In (94b), the relationship between twề: and tǒy-ngò revolves around competition between the back rounded element and the front unrounded element for status as syllabic nucleus. Taking the lexical form as /tòè/, in the unsuffixed form the e-vowels are well-positioned for this purpose, and the /o/ ends up as a densyllabified semivowel $W$. In the singular, if the final /e/ is chopped off by some process or other, the resulting /tòé-ŋgò/ could allow the first /o/ to become syllabic nucleus, reducing the /e/ to nonsyllabic status.

In (94c), the relationship of pǒyyè to pǒy-ngò is probably best handled by raising and syncopating the final /e/. The reduction of /yyng/ to yng would be routine.

### 4.1.3.3 Tonology of nouns with singular -ngo

We now turn to the tonology of the singular/plural alternations involving singular suffix - $\eta g o$. First up are those cases where a stem-final vowel is not syncopated to zero before the suffix (95). If the stem is $/ \mathrm{H} /$-toned, the H -tone spreads to the suffix (95a). If the stem is tonally contoured, but has a final vowel with a flat H- or L-tone, this too may spread to the suffix ( $95 \mathrm{~b}-\mathrm{c}$ ). However, there are a few nouns, some showing a shortened final vowel, that divide an LH tone into L on the stem and H - on the suffix (95d).

| gloss | plural/collective | singular |
| :--- | :--- | :--- |
| a. 'bark fiber' | bá:jí:: | bá:jí- $\quad$ gó |
| 'mortar' | tún-gó | túní: |

b. 'applause'
'tinder'
pómbè
pómbì-ทgò
dámbè
dámbì-ŋgò
c. 'stray crop plant'
tèbé tèbí-ŋgó
'husked grain spike'
kìj
kìjú-ŋgò
'corn'
'fonio'
'sorghum'
màdèmbá
màdèmbá-ŋgó
'stem'
'leaf'
'baobab seed'
'chaff'
рə̀クモ́
рذ̀ŋદ́-ŋgó
èmbá èmbá-ŋgó
sìmbá sìmbá-ŋgó
kòmbá kòmbá-ŋgó
kùmbèré kùmbèré-ŋgó
๖̀ยє
̀̀ý́-ๆgó
d. 'fart'
'cloth'
'marriage'
gìyé
gìyè-ŋgó
swě: sò-ŋgó
غ̀yદ̌: ~ $\check{:}$ èyà-ŋgó

If the unsuffixed stem ends in a syllable with a contour tone, the final tone element spreads to the suffix. If the stem-final syllable is not reduced, it retains its contour tone before the suffix (96a-d).
gloss
a. 'beard'
'animal fat'
'gum (resin)'
'sapling'
'grain'
'gizzard'
'canister'
'sweet potato'
b. 'papaya'
'mud brick'
'bottle'
c. 'rope'
'ashes'
d. '(male) elegance'
'(female) elegance'
'flower"
plural/collective singular

| bê: | bê:-ngò |
| :--- | :--- |
| sî: | sî:-ngò |
| nâ: | nâ:-ngò |
| ùrî: | ùrî:-ngò |
| sê: | sê:-ngò |
| kèk $\hat{\varepsilon}:$ | kèk $\hat{\varepsilon}:-\eta g o ̀ ~$ |
| bìdô: | bìdô:-ngò |
| màsàkû: | màsàkû:-ngò |

pàpây-ทgó
tèmbên-gò
bùtêl-ngò
š̌:-ŋgó
dj̀dě:- $\eta g o ́ ~$
dwă:n-gó
gùlǎn-gó
pùněn-go

In some nouns, a stem-final long vowel with $<\mathrm{HL}>$ tone is reduced to a short vowel before singular -ngo. In this case, the tone components are separated. The $H$ is realized on the
shortened stem-final vowel, while the L is realized on the suffix (97a). Similarly, an $<$ LHL $>$ tone is divided into $<\mathrm{LH}>$ (rising) on the stem-final and L on the suffix (97b).

| gloss | plural/collective | singular |
| :---: | :---: | :---: |
| a. 'swelling' | àmìy $\hat{\text { e }}$ | àmìyé-ŋgò |
| 'food' | kwê: | kwé-ngò |
| 'supper' | nènê: | nènદ́-пgò |
| b. 'slingshot' | $n i ̀:-t \check{\varepsilon}$ | $n i ̀:-t \check{: c}:-\eta g o ̀$ |

If a stem-final vowel is deleted by High-Vowel Syncope before - $\eta g o$, its tone is expressed on the syllable to the left (in addition to the final tone component spreading to the suffix). Syncope generally occurs after an unclustered sonorant, the few other cases (if they involve syncope at all) being after $\mathrm{a} / \mathrm{b} /$ or $/ \mathrm{g} /$ that is (then) itself deleted before $-\eta g o$ (§3.4.2.2). The effect is that the post-syncope stem-final syllable always ends in a sonorant consonant, and is therefore easily capable of bearing a contour tone. As usual, if the stem is $/ \mathrm{H} /$-toned, the H spreads to the suffix (98a). If the deleted vowel is L-toned and the preceding syllabls is H-toned, my only example being 'citrus' (Bambara loanword), the output is a falling tone on the stem-final in addition to an L-tone on the suffix (98b). Parallel to this, and in a much larger number of examples, if the deleted stem-final vowel is H -toned and follows an L-tone on the preceding syllable, we end up with $<\mathrm{LH}>$ tone on the stem-final before H -tone on the suffix (98c). However, in (98d) pǎ:lè 'sesame' passes up the opportunity to keep all three tone components on the stem, and the result is singular pǎ:l-ngò with $<\mathrm{LH}>$ first syllable, instead of \#pă:1-ŋgò with $<\mathrm{LHL}>$ tone.

| gloss | plural/collective | singular |
| :---: | :---: | :---: |
| a. 'mortar' | túní: | tún-gó |
| 'millet' | yó-пgó | yógé |
| 'intact whole' | kúndúlé | kúndúl-ทgó |
| 'mosquito net' | sángé: | sángí-пgó |
| 'cow-peas' | númbé | númbú-ทgó |
| b. 'citrus' | lèmbúrù | lèmbûr-ngò |
| c. 'baggage' | gòné | gǒn-gó |
| 'egg' | pòlé | pǒl-пgó |
| 'shell (of pod)' | kògòlé | kògǔl-ŋgó |
| 'vein; root' | wòlé | wǒl-ทgó |
| 'waterjar' | gòné | gǒn-gó |
| 'salt' | nèmé | něm-gó |
| 'oil' | nègé | ně-пgó |
| 'object with flattened sides' | pòmbìré | pòmbǔr-ŋgó |
| 'shell (of pod)' | kògòlé | kògǔl-ŋgó |


| 'dry outer bark' | kòmìlé <br> à:lé | kòmı̌l-ŋgó <br> ǎ:l-ŋgó |
| :--- | :---: | :--- |
| 'tamarind seed' | (contrast à:lé 'rain') | pòlé |

d. 'sesame'
pǎ:lè pǎ:1-ngò

In some cases, including a large set of instrumental nominals illustrated here by 'bra', the deleted stem-final segment is a long vowel with a falling ( $<\mathrm{HL}>$ ) tone, preceded by an L-toned syllable. The end result is a new stem-final ending in a sonorant, with rising tone, followed by an L-toned suffix (99a-b). If the falling-toned stem-final long vowel is preceded instead by an H-toned syllable, my only example being 'clitoris' (99c), the high component of $<\mathrm{HL}>$ simply merges inaudibly with the lexical H-tone.

| gloss | plural/collective | singular |
| :--- | :--- | :--- |
| a. 'lunch' | kèndà-[tèg-î:] | kèndà-[tě-ngò] |
| 'sale' | tǔl-ngò <br> ònjù-[dǒn-gò] | tùlì: <br> onjù-[dòn-î:] |
| b. 'gallbladder' | gágǎl-ngò | gágàlî: |
| c. 'clitoris' | kèkér-ngò | kèkérî: |

### 4.1.3.4 Singular -go

Trivially, -go occurs instead of - $\eta g o$ after many stems that end (perhaps after syncope of a final vowel) in a nasal consonant.
gloss

| a. 'male elegance' | $d w a ̌: n$ <br> dòn-î: | dwǎ:n-gó <br> dǒn-gò |
| :--- | :--- | :--- |
| b. 'salt' | nèmé | něm-gó |
| c. 'okra' | gón | gón-gó |

c. 'okra'
gón gón-gó

In cases like these, I favor taking the suffix to be /-ngo/, which may lose its initial nasal when clustered with a preceding nasal. This is because - $\eta g o$ is much more common than -go in environments where the two can be distinguished.

However, there are a number of cases of -go instead of - $\eta g o$ after a vowel, where there is no evidence that a nasal has been deleted. The full set of examples is given in (101). The preceding vowel is always $a$, sometimes from /ae/, but (in one case) $\varepsilon$ ('tongs').

| gloss | plural/collective | singular |
| :--- | :--- | :--- |
| a. 'foot', |  |  |
| 'tongs' | nǎ: | nà:-gó <br> ž:-gò |
| b. 'cotton' | sáyè | sá-gò |
|  | 'branch' | ǎyè |
|  | 'stick' | bǎyè |
|  | 'torch' | sàyé |

The two nouns in (101) diverge in the tonal treatment of the singular, which has an L-toned stem in 'foot' but a rising-toned stem in 'tongs'.

The nouns in (101b) have $y$ between $a$ and $e$ in the plural collective, versus a simple $a$-vowel (short in 'cotton', long in the other cases). The phonology of these nouns should be compared to counterparts with suffix - $\eta g o$, see (94a-b) in §4.1.3.2, above. Again, the options are to include $y$ in the lexical representation and get rid of it in the singular by some form of $y$-Deletion, or to take the $y$ in the plural/collective as an epenthetic element separating a from e.

### 4.1.3.5 Cases of frozen *-ŋgo and *-go

By "frozen" singular suffix, I mean that either no plural can be elicited ('sun' with unique referent), or that the plural is based on the entire singular stem (with a final-vowel mutation). In either case, there is no evidence from paradigmatic alternations that is available to the language learner to indicate segmentability. For those nouns with a suffixal plural, there is concrete paradigmatic evidence of unsegmentability. All known examples are in (102), including related forms (right column).

| gloss | form | comment or related form |
| :--- | :--- | :--- |
|  |  |  |
| 'hunger' | gà:gó | Pl gà:gé; Jamsay jě., Nanga gìyé |
| 'cold (weather)' | gógó | Pl gògé; Nanga etc. gj̀yó |
| 'sun' | ùjúngó | unique referent; Ben Tey etc. ùsú |
| 'weeping' | nàngó | Pl nàngé; with verb: nàngó né 'weep' |

In addition, H-toned - $\eta g o ́ \sim$-gó is used (in a more transparently segmentable fashion) as derivational suffixes producing abstractive nominals from nominal or (more often) adjectival stems (§4.2.2.3). There are several cognate nominals derived from verbs that show frozen *-ngo and *-go, along with two that appear to show frozen animate plural *-mbo, see (400b-d) in §11.1.3.2.

### 4.1.3.6 Segmental and tonal phonology of nouns with singular -nge

- ŋge is less common than -ŋgo. Nouns ending in -nge have E/E type agreement with adjectives (e.g. nálé: 'good' for both singular and plural noun), and it is clear that -ŋge and -ngo are identical except for agreement class. This leads us to expect that the phonology of - $\eta g e$ will match that of $-\eta g o$. This expectation is verified for the most part. Therefore the data will be presented here with only brief commentary; see §4.1.3.2-3 for more details on similar phonological patterns for -ngo.

The tone of the suffix is spread from the final tone of the preceding stem. The noun undergoes no segmental change between unsuffixed plural/collective and suffixed singular in most cases; a few typical examples are in (103a). (103b) is a complete list of relevant nouns that end in $e$ after an unclustered sonorant, i.e. in an environment where raising to a high vowel and then deleting the stem-final vowel would not have been difficult, but where the $e$ survives unscathed before -nge.
gloss plural/collective singular
a.

| 'back (body)' | bàndí | bàndí-ngé |
| :---: | :---: | :---: |
| 'side of face' | tégèlè: | tÉgèlè:-ŋgè |
| 'blood' | gěn | gěn-gé |
| 'chest (body)' | pélè | pélè-ทgè |
| 'street outside' | pèmbě: | pèmbě:-ŋgé |
| 'pit (hole)' | dúlé | dúlé-ŋgé |
| 'shallow hole' | tòngèré | tòngèré-ngé |
| 'termite mound' | kèlbè-dúlè | kèlbè-dúlè-ŋgè |

Shortening of a stem-final long vowel with no other change is observed in (104a). Raising of /e/ to $i$ occurs in one instance (104b). Deletion of a high vowel, or of /e/ (presumably after it is raised to a high vowel) occurs in (104c). Deletion of a long /e:/ (presumably after shortening and raising) occurs in (104d). All known examples of these patterns are presented here. The deletions are attributable to High-Vowel Syncope (§3.4.2.2).

| gloss | plural/collective | singular |
| :--- | :--- | :--- |
| a. 'thickening into syrup' | dá:nì: |  |
| géndè: |  |  |
| 'forehead' | nà:-kínjì: | dá:nì-ngè <br> géndè-ngè <br> nà:-kínjì-ngè |
| b. 'green sauce' | níngé | níngí-ngé |

The tonology is generally straightforward, following the same lines as for -ngo. I know of no cases where a noun with $/ \mathrm{LH} /$ melody shifts the H entirely onto the suffix - $\quad$ ge, parallel to sò- $\eta g o ́ ~ ' c l o t h ', ~ e ̀ y a ̀-\eta g o ́ ~ ' m a r r i a g e ', ~ a n d ~ n a ̀:-g o ́ ~ ' f o o t ' . ~ H o w e v e r, ~ t h e r e ~ i s ~ o n e ~ f r o z e n ~ c a s e ~ o f ~$ this type, gèndèngé 'side, end (e.g. of blanket)', for which no plural was elicitable; cf. postposition $g \grave{n}$ dè ‘around’ (§8.2.9).

The other frozen example known to me is úméngé (note the shift in ATR-harmonic pattern from $\varepsilon$ to e), which is attested only in the temporal adverbial PP úméngé má 'early'.

One may ask whether there are any examples of singular -gé without the nasal, parallel to nouns with singular -go instead of - $g g o$. There is a suffix -gé, but it functions as an abstractive derivational suffix (building derived nouns from nominal and adjectival stems), rather than as a simple singular suffix; see $\S 4.2 .2$.2

### 4.1.3.7 Segmental phonology of nouns with plural -mbo

Nouns that take -mbo are (grammatically) animate, and have an unsuffixed singular. The set of nouns that takes-mbo is (therefore) disjoint from the sets of inanimate nouns that take singular suffix -ngo, $-g o$, or $-\eta g e$.

In (105), the stem undergoes no segmental or tonal change when -mbo is added. This is the case with about $75 \%$ of attested stems that take this suffix.


As with the singular suffixes, various reductions and shifts of stem-final vowels are observed. The following data, which include all examples from an early working lexicon, are presented in an order that facilitates comparison with the phonological analyses of the singular suffixes (see especially §4.1.3.2).

Shortening of a stem-final long vowel, with no other segmental change, is illustrated in (106).

| gloss | singular | plural |
| :--- | :--- | :--- |
| 'father's sister' | sèjí: | sèjí-mbó |
| 'great-grandchild' | jèngíyè: | jèngíyè-mbò |
| 'elder same-sex sibling' | dèlǎ: | dèlà-mbó |


| 'person' | nǒ: | nò-mbó |
| :--- | :--- | :--- |
| 'visitor' | bèmbǎ: | bèmbà-mbó |
| 'owner, master', | dòmbǎ: | dòmbà-mbó |
| 'younger same-sex sibling' | òǰ: | òjò-mbó |
| 'husband' | nògǒ: | nògò-mbó |

A final mid-height vowel is raised from /e/ to $u$ systematically in human agentives, many of which also include a compound initial (§4.2.3.5, §5.1.4). Example: dùmò:-hàybé 'livestock custodian', plural dùmò:-[hàybú-mbó]. In addition to this morphologically specialized type, a few other nouns show raising from $/ \mathrm{e} /$ to $i(107 \mathrm{a})$ or to $u(107 \mathrm{~b})$. There are no nouns that lower final $/ \varepsilon /$ to a before $-m b o$.
(107)

|  | gloss |
| ---: | :--- |
| a. | 'folding knife' |
|  | 'woman after childbirth' |
| b. | 'widow' |
|  | 'rag as head cushion' |
|  | 'lover, concubine' |
|  | 'lazy person' |
|  | 'month, moon' |
|  | 'long straight knife' |
|  | 'grindstone' |
|  | 'mother's brother' |
|  | 'stepmother' |

singular
sìlbé
yàygé
yà-pàndé
dòné
gòjé
gòlònjé
sà:gé
pòlè-gàngé
nùngé
nèjǐ:
mòjǐ:
plural
sìlbí-mbó
yàygí-mbó
yà-pàndú-mbó dò̀ú-mbó
gòjú-mbó
gòlònjú-mbó
sà:gú-mbó
pòlè-gàngú́-mbó
nùngú-mbó
nèjù-mbó
mòjù-mbó

In a fairly large number of nouns, a final short vowel is deleted by High-Vowel Syncope (§3.4.2.2). This is possible when this vowel is preceded by an unclustered intervocalic sonorant (nasal, liquid, semivowel). The vowel is usually high $\{u i\}$ or upper mid-height $\{e o\}$, but sometimes $\{\varepsilon \rho\}$ and in one case even $a$. We can still argue for a two-step process of raising to high vowel, then syncope of this high vowel by High-Vowel Syncope (§3.4.2.2), but the evidence is less persuasive in the case of plural -mbo than it is for inanimate singular -ŋgo and -nge.

The data in (108) are organized by vowel quality (in the singular).

$$
\begin{array}{lll}
\text { gloss } & \text { singular } & \text { plural } \tag{108}
\end{array}
$$

a. $\left\{\begin{array}{ll}u & i\end{array}\right\}$

> 'imam'
> 'imam's respondent'
> 'reed flute'
> 'plow'

| àlmá:mù | àlmâ:m-bò |
| :--- | :--- |
| àlmú:jìnì | àlmú:jìn-bò |
| bòbírì | bòbîr-mbò |
| jálòsárì | jálòsâr-mbò |

b. $\{e o\}$

| 'horse' (variant) | bàné | bà-mbó |
| :--- | :--- | :--- |
| 'genie' | gínè | gîn-bò |
| 'rifle mechanism' | gǎ:lè | gă:l-mbò |
| 'metal hook' | tòndòmbèlé | tòndòmběl-mbó |
| 'orphan' | àjàbàlé | àjăbǎl-mbó |
| 'friend (same-sex)' | nàlé | nàl-mbó |
| 'statuette' | dě:rè | dě:r-mbò |
| 'woman who has given birth' | yáyè | yây-mbò |
| 'senior twin' | pàyé | pǎy-mbó |
| 'chicken' | kórò | kôr-mbò |

c. $\{\varepsilon \rho\}$
'older of two young children'
'Tengou (ethnicity)'
'circumcision loincloth’
èndè: nèbèndé
òndò: nèbèndé-mbó
tènílદ̀
tèyûl-mbò
yàbà-dóndóló
yàbà-dóndól-mbó
d. $\{a\}$
'sick person'
sǎ:mà
sǎ:m-bò

In (109), a long high vowel is deleted. Presumably it is first shortened as in (106) above, then the short vowel is deleted by High-Vowel Syncope (§3.4.2.2), as in (107) above.
gloss singular plural
a. 'unmarried person'
kùmî:
kǔm-bò
'tomtom'
bònî:
bǒ-mbò ~ bǒn-bò
b. 'stone'
kìnû:
kǐn-bò

When -mbo follows a noun ending in $\ldots b v$ or $\ldots m v$ (" $v$ " is any short vowel), the labial is optionally deleted (intervocalically), with subsequent contraction of the two adjacent vowels into a long. This labial deletion is arguably haplologic, favored by the homorganic labial mb of the suffix.

| gloss |  | singular |
| :--- | :--- | :--- | plural

A modification of the quality of the vowel in a medial syllable is attested (111) but uncommon. For the plural of 'traditional chief', a suitable derivation is /òbèlé-mbó/ $\rightarrow$ /òbèlú-mbó/ (raising) $\rightarrow$ òbǔl-mbó (syncope with simultaneous tone relocation and idiosyncratic shift of the features of the deleted $/ \mathrm{u} /$ to the preceding syllable).

| gloss | singular | plural |
| :--- | :--- | :--- |
| 'traditional chief' | òbèlé | òbǔl-mbó |

### 4.1.3.8 Tonology of nouns with plural -mbo

Like singular - $\eta g o$ and $-\eta g e$, plural -mbo gets its tone by spreading from the left. This can be seen in examples in the preceding section. In most cases, there is no change in the tones of the stem when the suffix -mbo is added.

However, when the stem-final vowel is deleted, if its tone diverges from that of the preceding syllable, there is an issue as to how the tone is relocated.

A stem-final L-toned vowel that is deleted following an H -toned syllable results in a falling tone (112a). Conversely, a stem-final H-toned vowel that is deleted following an L-toned syllable may result in a rising tone (112b). See Stranded-Tone Re-Linking (§3.6.4.4).

| gloss | singular | plural |
| :--- | :--- | :--- |
| a. 'imam' | àlmá:mù | àlmâ:m-bò |
| 'imam's respondent' | àlmú:jìnì | àlmú:jìn-bò |
| 'reed flute' | bòbírì | bòbîr-mbò |
| 'plow' | jálòsárì | jálòsâr-mbò |
| 'woman who has given birth' | yáyè | yây-mbò |
| 'chicken' | kórò | kôr-mbò |
| b. 'senior twin' | pàyé | pǎy-mbó |
| 'metal hook' | tòndòmbèlé | tòndòmběl-mbó <br> 'orphan' |
|  | àjàbàlé | àjǎbǎl-mbó |

Before plural -mbo, when a stem-final long vowel with $<\mathrm{LH}>$ tone is shortened, the H -tone element is expressed on the suffix only (113a). There are also some cases where the same pattern (H-tone on suffix only) occurs without shortening (or deletion) of the stem-final vowel (113b). In (113c), a deleted stem-final high vowel following an L-toned syllable likewise expresses its H-tone only on the suffix; this contrasts with what we just saw in (112b), above. If a deleted L-toned stem-final vowel follows a rising-toned syllable, instead of an <LHL> syllable, the rising-toned syllable remains constant in the plural, so the stemfinal L-tone is realized only on the suffix (113d).

|  | gloss | singular | plural |
| :---: | :---: | :---: | :---: |
|  | 'person' | nǒ: | nò-mbó |
|  | 'elder same-sex sibling' | dèlă: | dèlà-mbó |
|  | 'visitor' | bèmbǎ: | bèmbà-mbó |
|  | 'grandfather' | pòbǎ: | pòbà-mbó |
|  | 'owner, master' | dòmbǎ: | dòmbà-mbó |
|  | 'younger same-sex sibling' | ̀j̀̆: | j̀j̀-mbó |
|  | 'husband' | nògǒ: | nògう̀-mbó |
|  | 'mother's brother' | nèjǐ: | nèjù-mbó |
|  | 'stepmother' | mòjǐ: | mòjù-mbó |
| b. | 'cross-cousin' | tǐ: | tì:-mbó |
|  | 'bird' | nǐ: | nì:-mbó |
|  | 'entire tree' (< 'mother') | nǐ: | nì:-mbó |
|  | 'dog' | пgWĚ: | пgwè:-mbó |
|  | 'sores on inside of eyelid' | gàndá | gàndà-mbó |
| c. | 'co-wife' | jàlàlé | jàlàl-mbó |
|  | 'horse' (variant) | bàné | bà-mbó |
|  |  |  | (P1 also bǎn-bó ) |
| d. | 'rifle mechanism' | gǎ:lè | gǎ:1-mbò |
|  | 'statuette' | dě:rè | dě:r-mbò |
|  | 'mouse' | ǒyè | ǒy-mbò |

### 4.1.4 Frozen $C v$ - reduplication in nouns and adjectives

Najamba does not have a large number of nouns that look like they begin in a $C v$ - reduplication, comparable to those with $C i-, C u-$, or $C v$ - (with a copy of the first stem vowel) in eastern Dogon languages. The few examples of this type in Najamba are in (114). They show repetition of the first vowel.

| noun/adjective | gloss |
| :--- | :--- |
| dùdùmbú | 'large jar for millet beer' |
| bèbê: $\sim$ bèbô: | 'feeble, having lost strength' |
| bébé | 'deaf-mute' |
| gègélè | 'stuttering' |
| gègérè | 'very fast speech' |
| tátágá | 'arrogance' |
| g̀̀n-gò púpújú | 'worn-out waterjar' |
| gìrè-gègèlé | 'furtive look'(gìré 'eyes') |

### 4.1.5 Frozen full-stem iterations in nouns

$C v C v-C v C v$ iterations used as nouns (or adverbs) are fairly common. In a few cases the iteration is related to an attested shorter stem, but in many the iteration is the only form in its word family. Most examples involve an iterated bisyllabic element. The data in (115) are grouped by tone patterns.
a. LL-HL

| Wèlè-wélè | 'immature peanut pod' |
| :--- | :--- |
| bùjè-bújè | 'froth, suds, soap lather' (verb bùjjé 'foam') |
| bùrè--búrè | 'sediments' |
| kèjè-kéjè: | 'twigs' (Sg kèjè-kéjò: ; verb kéjé 'cut') |
| yàgà-yágà | 'lightweight nickel alloy (for bracelets)' |
| nèmè-némè | 'trivial chatter' |
| nàmà-námà | 'bric-à-brac, junk' |
| kùbù-kúbù | 'machete blade' (local Fr coupe-coupe) |
| jà:rà-já:rà | 'incitement' (cognate nominal for verb já:ré ) |
| dòlà-dólà | 'race, competition' (dòlé 'be in front') |
| yòbà-yóbà | 'race' (yòbé 'run') |
| bìlà-bílà | 'exchange' (verb bìlé ) |
| bùlà-búlà | 'blue' |
| dàmbà-dámbà | 'push-cart' (dàmbí 'push', cf. local Fr pousse-pousse) |
| mò:-[wùndà-wúndà] | 'meningitis' (swollen neck) |

b. HL-HL
yúgù-yúgù 'pile of used European clothing'
c. LL-LH
pòtò-pòt
kùrsà-kùrsá
'mud'
u
'skin disease with rashes'
dèmè-dèmé 'odd jobs’
d. LH-LHL
yòlà-yòlâ: 'aggressive provocation'
غ̀njè-ènjê: 'corner; cavity in rocks' (verb énjé 'slip X into'
kàlè-kàlê: 'external stairway' (< Fr escalier ?)
gènjè-gènjê: 'chest (body)' (variant jèn-jènjê:)
kìndò-kìndô: '(someone's) shadow' (< kìndô: 'shade')
e. LL-LH
pòndò-pòndǒ: 'board, plank'
mènè-mèně: 'lightning flashes'
kùndà-kùndǎ: 'cloud'
f. HH-LL
níní-nìnè: 'sauce pots’ (cf. níngé ‘sauce')
g. LH-LL bènán-bènàn 'dilemma, quandary' (...bènàn mà 'between')

A variant on the productive LL-HL tone pattern of (115a) is the LLL-HLL pattern in tègèlè-tégèlè 'residue of liquid collecting in bottom of recipient after pouring'.

There are numerous reduplicated (semi-)onomatopoeic terms denoting sounds (cf. English chomp, bang, crunch, rustle). Examples are kùgúrùm-kùgúrùm (or kàgáràm-kàgáràm) 'chomp-chomp (loud chewing)' and sáynàm-sáy"àm 'crunch-crunch (e.g. walking through a field)'.

With a change in vowel quality we have the regional word tèngè-tángá 'dancer on stilts (from central Dogon country)', pí:lì-pá:là 'deceptive talk', and kóróy-kàrày 'hurried, hasty (action)' The shift to a-vowels in the second occurrence is noteworthy and has parallels in other Dogon languages. In onomatopoeic and similar terms for noises, a three-part ABA pattern with a-vowels and L-tone in the medial B occurrence is attested in kǒ:-kà:-kǒ: (sound of toad croaking) and in hó:-hà:-hó: 'loud chattering'. For some reason a similar pattern occurs in tò:-tà:-tô: 'sixth day after tomorrow' (one week from today).

### 4.1.6 Frozen initial à- in nouns

This is not a synchronically noticeable pattern in Najamba. The forms in (116) may be of historical interest.

```
àjánàlà ‘forked end (of stick)’ cf. Jamsay à-jǎy
àsàyálà 'hail(-stones)' cf. Nanga bòndì-sàyárnâ 'hail' (bòndí 'rain')
àjǎn 'sky'
```


### 4.2 Derived nominals

### 4.2.1 Diminutives

There are no productive morphological diminutive formations. See §5.1.6 for a few (mostly frozen) compounds ending in 'child'.

In kinship terminology, the pair $j \varepsilon ̀ n j \hat{\varepsilon}$ : 'great-grandparent' and its reciprocal jèngíyè: is suggestive. A somewhat similar pair is nèjí: 'mother's brother' and its reciprocal nèjìyê: 'sister's child'. The 'grandchild' term sèjíyè has some resemblance to the junior-kin members of the preceding pairs. The apparent final e/ $\varepsilon$ endings in the junior terms may be related to the first syllable of èndê: 'child' (plural òndô:). This first syllable may represent the original stem *ě, since singular èndê: may have been back-formed from its plural. Compare Dogul Dom ěg 'child' with a different original suffix and eastern Dogon forms like Tommo So í11 'child'.

### 4.2.2 Denominal (and deadjectival) nouns

### 4.2.2.1 Characteristic derivative (-gé:, -gá:)

A noun (or adjective) describing a person or other animate by reference to a salient characteristic (body part, attribute, or possession) can be formed by adding derivational suffix -gé: (plural -gá:) to an $\{\mathrm{L}\}$-toned form of the noun denoting the characteristic.

| noun | gloss | characteristic | gloss |
| :---: | :---: | :---: | :---: |
| kínjàn | 'life' | kìnjàn-gé: | 'living, alive' |
| gùnjù-gùnjô: | 'hunched back' | gùnjù-gùnjò:-gé: | 'hunchback' |
| kùlé | 'hairs' (plural) | kùlè-gé: | 'hairy (person)' |
| tójú | 'big testicles' | tòjù-gé: | 'one with big testicles' |
| nàndă: | 'left (side)' | nàndà-gé: | 'left-handed person' |
| sî: | 'animal fat(s)' | sì-gé: | 'fatty (animal, meat)' |
| sémbé | 'strength, force' | sèmbè-gé: | 'strong (person)' |
| ánì, Pl ánà: | 'man' | ànà-gé: | 'fearless' |

Inanimate examples have the expected distribution of -gé: and -gá: depending on the class of the noun denoting the described entity. For example, from sǐ: 'animal fat' we get sì:-gé: 'fatty' (singular E-class, and all inanimate plurals), and sì:-gá: (singular O-class). An example involving a pseudo-animate noun is sàmbè kèlè-gé: 'wooden spear with metal tips', containing sàmbé 'spear' and kélò:\|kélè: 'horn'.

### 4.2.2.2 Denominal or deadjectival abstractive (-gé )

The abstractive suffix -gé is attested with a few nouns and adjectives that denote life stages or other classificatory characteristics, generally of humans. In (118), the original noun drops tones to $\{\mathrm{L}\}$ before -gé, but no other consistent vocalic change is seen.

| noun | gloss |
| :--- | :--- |
| èndwǎ: | 'man (not old)' |
| gìnè-mórù | 'magician' |
| ánì (Pl ánà:) | 'man' |
| gìndó:, gìndé: | 'big; honored' |


| abstractive | gloss |
| :--- | :--- |
| èndwà:-gé | 'youth' |
| gìnè-mòr-gé | 'sleight-of-hand' |
| ànà-gé | 'fighting mode' |
| gìndè-gé | 'honor, esteem' |

In (119), the original noun raises its final vowel to /i/, which then syncopates after an unclustered intervocalic sonorant.

| (119) | noun | gloss | abstractive | gloss |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| ògə̀ndê: | 'rich person' | ògòndì-gé | 'richness, wealth' |  |
| là:ró | 'shiftless' | là:r-gé | 'shiftlessness' |  |
| gòlònjé | 'lazy person' | gòlònjì-gé | 'laziness' |  |

An apparent yvextension on the initial is seen in sàfìyà-gé 'idiocy' from noun sáfí 'idiot', and in dòfìyò-gé (variant of dòfè-gé ) 'cowardice' from noun dófé 'coward’.

The morphosyntactic flexibility of the suffix is suggested by [nò:=là]-gé 'nonhumanness' (not being considered to be a normal person), based on nǒ: =là 'is not a person'. A similar example is [jògò-ndì]-gé '(state of) not having', from jògò-ndí- 'not have'.

The suffix -gé is also used in names of languages: pùlàndì-gé 'Fulfulde language', bè:n-gé 'language of Beni', etc. Speech is also relevant in [kì:-jògò-ndì]-gé 'nonsense, blathering' (cf. kî: jògò-ndí 'not have a head'). -

### 4.2.2.3 Denominal or deadjectival abstractive (-ŋgó )

In the deajectival cases, the abstractive noun is segmentally identical to the form of the adjective with O-class singular suffix -ngo. However, the noun has an L-H formula, with the H-tone on the suffix. The forms shown are all that are known to me. The adjectives for Cartesian dimensions are well-represented (120a), as are a scattering of other adjectives (120b).

| abstractive | gloss | adjective (O-class singular) |
| :---: | :---: | :---: |
| a. mìn-gó | 'depth' | mǐn-gò 'deep' |
| wàyà-пgó | 'width' | wàyá-ŋgó 'wide' |
| jàlà-ŋgó | 'length' | jàlá-ŋgó 'long' |
| b. nàm-gó | 'expensiveness' | năm-gò 'expensive, difficult' |
| kèndà-[Ěl-ŋgó] | 'happiness' | と̌l-ŋgò ('sweet, good') |
| dwèy-пgó | 'hot weather' | dwěy ${ }^{\text {n-ngò 'hot' }}$ |

A similar nominalization, but this time denominal, consists of - $\eta g o ́$ or -gó (again H-toned, after $\{\mathrm{L}\}$-toned stem) added to a noun denoting an amical or amorous relationship.

| abstractive | gloss | noun (singular) |
| :--- | :--- | :--- |
| nàl-ngó | 'friendship' | nàlé 'friend', Pl nàl-mbó |
| gòjù-gó | 'illicit sex' | gòjé 'concubine', Pl gòjú-mbó |

These abstractive nominals may be compared to cases of frozen inanimate singular O-class suffix *-gó or *-ŋgó, no longer clearly segmentable, covered in §4.1.3.5.

### 4.2.3 Deverbal nominalizations

In addition to the forms described in the following sections, readers are referred to the full list of cognate nominals in §11.1.3.2. Although the verb is often parasitic in form on the nominal, and the nominal may be a borrowing (often from Fulfulde), in some cases the nominal may have been derived from the verb.

### 4.2.3.1 Regular verbal noun -lé

The fully productive verbal noun is expressesd by adding the suffix -lé to the I-stem of the verb. For several monosyllabic verb stems, the I-stem has a $u$-vowel. For all other verbs, this stem ends in $\mathrm{i} /$, which is subject to Post-Sonorant High-Vowel Deletion (when preceded by an unclustered sonorant. The I-stem requires $\{e o\}$ rather than $\{\varepsilon \rho\}$ in any nonfinal midheight vowels. The entire verbal noun is $\mathbf{\{} \mathbf{H}\}$-toned. Monosyllabic verbs that have regular verbal nouns are in (122a-b). The verbal noun of 'arrive' is variable (122c). Among the nonmonosyllabic stems, those in (122d) show Post-Sonorant High-Vowel Deletion while those in (122e) do not.

|  | gloss | chaining | verbal noun |
| :---: | :---: | :---: | :---: |
| a. | 'come' | wé | wú-lé (variant wílé) |
|  | 'insult' | ${ }^{\text {dwé }}$ | dú-lé |
|  | 'go out' | gwé | gú-lé |
|  | 'see' | yé | yíllé |
|  | 'remain' | bé | bí-lé |
|  | 'weep' | né | mílé |
|  | 'bring' | jê: | jí:-lé |
|  | 'make bricks' | mé: | mí:-lé |
| c. | 'arrive' | $d w \hat{\varepsilon}$ : | dúy-lé, dú:-lé |
| d. | 'slaughter' | sémé | sém-lé |
|  | 'cut in half' | dì̀gílé | díggîl-lé |
|  | 'finish' | pór | pór-lé |
| e. | 'leave' | dògé | dógílé |
|  | 'cut off (branch)' | támbí | támbílé |
|  | 'scrub' | túgújé | túgújí-lé |
|  | 'get' | dìnê: | diníi:-lé |

The verbal noun is readily formed from suffixally derived verbs, including passives.

| (123) | gloss | category | chaining | verbal noun |
| :--- | :--- | :--- | :--- | :--- |
|  | 'go around' | mediopassive | gònílí-yé | gónílí-y-lé |
|  | 'become long' | inchoative | jàlá-ndí | jálá-ndí-lé |
| 'unlock' | reversive | dàgí-lé | dágí-l-lé |  |
|  | 'make big' | factitive | gìndá-m | gíndá-m-lé |
|  | 'inflate' | causative | píbíyó-m | píbíyó-m-lé |

### 4.2.3.2 Verbal noun with -ndá:

This less common verbal-noun formation is attested in several textual examples. In the forms preferred by both of my assistants, the vocalism is that of the chaining form of the stem (E-stem for verbs of the $\{\varepsilon \rho\}$ ATR-harmonic class, I-stem for those of the $\{e o\}$ class). The tone overlay is $\{\mathrm{H}\}(124)$. For variants based on the A/O-stem, see below.

|  | gloss | chaining | verbal noun |
| :---: | :---: | :---: | :---: |
| a. | 'come' | wé | wé-ndá: |
|  | 'insult' | dwé | dwé-ndá: |
|  | 'go out' | gwé | gwé-ndá: |
| b. | 'see' | yह́ | yé-ndá: |
|  | 'weep' | nє | né-ndá: |
|  | 'bring' | $j$ jê: | jé:-ndá: |
|  | 'make bricks' | $m \varepsilon ́$ | $m \varepsilon ́:-n d a ́: ~$ |
| c. | 'arrive' | $d w \hat{\varepsilon}$ : | $d w \varepsilon$ :-ndá: |
| d. | 'slaughter' | sémé | sémé-ndá: |
|  | 'cut in half' | dìngílé | díngílé-ndá: |
|  | 'cut off (end)' | pór | pór-ndá:1 |
|  | 'come to an end' | ìgí | ígí-ndá: |
| e. | 'leave' | dògé | dógé-ndá: |
|  | 'cut off (branch)' | támbí | támbá-ndá: |
|  | 'scrub' | túgújé | túgújé-ndá: |
|  | 'go back' | màmílí-yé | mámílí-yé-ndá: |

In the absence of an NP-final determiner, a final semivowel /y/ that I take to be the 'it is' enclitic is usually added, resulting in -ndá: $=\hat{y}$. This use of 'it is' enclitic $=y$ is reminiscent of its use in the passive (for indefinite subject), see $\S 10.5$. Before a determiner (definite kó ), the enclitic $=y$ is omitted.

As with the more general verbal noun in -lé, a nominal compound initial (usually an incorporated object) with $\{\mathrm{L}\}$ overlay may be added. Thus ìngè-érá-ndá: =ý 'water-drawing'
(íngé 'water', A/O-stem of éré 'draw water'), or with a definite determiner ìngè-érá-ndá: kó 'the water-drawing'.

In texts, I also found examples of verbs taking the A/O-stem instead of the chaining form (which is a mix of the E-stem and the I-stem). See ìngè-érá-ndá:=ý 'water-drawing', mentioned just below, and [tè:-ŋgoò]-[kérá-ndá: = ý] 'going and getting wood' in (125), below. My textual examples of this vocalism involve nominal compound initials and the final $=y$ enclitic, details that may or may not be significant. My assistants preferred chaining-form vocalism even for these cases: ìngè-éré-ndá: =ý, [tè:-ŋgò]-[kérá-ndá: = ý].

```
íyó [tè:-ŋgò ] \({ }^{\text {L }}\)-[kérá-ndá: = ý]
today \(\quad\left[\right.\) firewood-Sg] \({ }^{\mathrm{L}}\)-[go.get-VblN=it.is]
[bà:-ólé má] òndú- \(\varnothing\)
[father-house in] not.be-3SgSbj
```

'Today, there is no going and getting wood in (i.e. among) families.' (2005-1 a)

### 4.2.3.3 Abstractive and other nominalizations with suffix -n

The abstractive is fairly common. In the predominant pattern, the stem is L-toned, except for a final H-tone on the -n. I transcribe e.g. dùmě-n, though dùmè-ń would also be reasonable.

The sense is abstractive, denoting a state or condition, cf. English -ness and similar nominalizations. The stem that serves as the basis for the derivative may be a verb or an adjective, or even a noun with adjective-like sense. In some cases the abstractive is part of a word-family with both verbs and adjectives and it is not always possible to determine a unique basis word. Shown in (126a-e), subdivided by semantic classes, are all uncompounded abstractives of this type in my working lexicon. It should therefore be representative, but many other forms can be elicited.

## abstractive gloss

a. conditions/states

| àyǐ-n | 'suffering, fatigue' |
| :--- | :--- |
| gìrìy $-n$ | 'poverty' |
| gìrbǎ-n | 'blindness' |
| tùgùmǎ-n | 'deafness' |
| sà:mǎ-n | 'sickness' |
| dàgì-lì-yž-n | 'being unlocked' |

b. qualities

$$
s \grave{m} m \check{\varepsilon}-n
$$

mà:mǐ-n
غ̀j $\dot{\varepsilon}-n$
gàbǐ-n
kèlǎ-n 'hatred'
related form(s)

## áy 'be tired'

gìríyé: 'pauper', gìríyé 'become poor'
gǐrbà 'blind person'
tùgúmà 'deaf person'
sǎ:mà 'sick person'
dàgí-lé ‘unlock', MP dàgí-lí-yé
sémè 'sly'
mă:m 'be capable'
$\varepsilon j \varepsilon ́ \varepsilon$ 'be clean', $\grave{j} j \hat{\varepsilon}$ : 'clean'
gàbê: 'tall', gàbí 'become tall'
kélà- 'not like, dislike' (§17.2.1.1)
c. actions

| bòǧ̌-n | 'barking (of dog)' | bògí 'bark' |
| :--- | :--- | :--- |
| màgǐ-n | 'magic' | màgí 'do magic (tell fortunes)' |
| sòygǎ-n | '(a) curse' | sóngé 'curse (someone)' |

d. results of actions

| dùmě-n | 'earnings; property' | dùmé 'obtain' |
| :--- | :--- | :--- |
| dèně-n | 'loss' | dèyé 'lose' |
| nàmǐ-n | 'damage, harm', | jǎm 'damage, waste (v)' |

e. other semantic categories

| dàmǎ-n | 'totemic place' | dàmá 'totem' |
| :--- | :--- | :--- |
| jìmbě-n | 'darkness' | jìmbí 'become dark' |

A possible frozen case is gùlǎn 'finery'.
The forms in (127) below also have an $-n$ suffix, but they differ tonally from all examples given above. Those in (127a) constitute a natural semantic set (based on stance verbs), and all end with an L-tone, though other tonal details vary from form to form. (127b) have $\{\mathrm{H}\}$-tones, along with an overlaid -ATR $\{$ e $o\}$ melody that is absent in (126). Most examples in (127a-b) denote locations or Cartesian-geometric positions. (127c) with LHL tones includes cognate nominals of body-function verbs; see (399b) in §11.1.3.2.
abstractive gloss
a. íngí-n
óbì-n
bǐỳ-n
b. négí-n
yóbí-n
c. àyî-n
bègî-n
tègî-n
pèbî-n
ìbî-n
'height'
'place to sit'
'bedding'
'saltlick'
'race, running'
'yawn'
'hiccup'
'gunpowder chamber' 'whistling'
'place to catch'
related form(s)
íngí-yé 'stand' óbí-y břy 'lie down'
négé 'lick'
yòbé ‘run’
ǎy 'yawn'
bègí 'have the hiccups'
tégé 'put in a pinch of gunpowder' pébí 'whistle' ìbí 'catch'

Possible frozen cases: jùgîn 'week', búndán 'dancing ground'.
ébán 'market' does not correspond to a verb in Najamba, whose verb for 'buy' is dòné. However, note the compound initial in èbà-kálú 'commerce' and èbà-gòné 'merchandise'. $\varepsilon b \varepsilon ́$ 'buy' occurs in several other Dogon languages.

Nominal forms ending in $-n$ are also fairly common as compound finals. Often the compounds denote locations; see §5.1.5.

### 4.2.3.4 Nominalizations with suffix -ngán (-ngân, -gùl, -ngà̀)

The known examples of deverbal nominalization with -ŋgán are in (128). The vocalism is that of the I-stem, the examples showing a final /i/ that syncopates after an intervocalic unclustered sonorant. The suffix has H-tone. The stem itself has $\{\mathrm{H}\}$ or $\{\mathrm{L}\}$ overlay. The choice of stem tone appears to be based on prosodic weight, but there are too few examples for clear generalizations.

$$
\begin{array}{lll}
\text { nominal } & \text { gloss } & \text { related verb or phrase } \tag{128}
\end{array}
$$

a. stem $\{\mathrm{H}\}$-toned

| bí-ngán | 'being; nature' | bò 'be', bé 'remain' |
| :---: | :---: | :---: |
| gír-ygán | 'pasture, herding' | gìré gír-ngán gìré 'take (animals) to |

b. stem $\{\mathrm{L}\}$-toned
nìgì-ngán
sìngìl-ngán
gàj̀i-ngân
dùbì-ngán
‘calculation’ nigì-ngán nígíl 'do a calculation’
'rest, relaxation' síggílí-y 'rest, relax'
'snatching' gàjí 'snatch'
'forging' dùbé 'forge (v)'

Other nouns ending in ...ngán, but not transparently decomposible, include pálángán 'neighborhood, quarter (of a village or town)' and sò:-jíggán 'neighbor'.

There is one example of - $\eta$ gàn with suffixal falling tone, after a two-verb chain (129). See also gùndà-r̀găn ‘slavehood’ from noun gùndé 'slave’ (§4.2.3.9).

$$
\begin{equation*}
\text { ỳ̀bè-d̀̀lè-ggân } \quad \text { 'race (competition)' yòbé 'run', d̀̀lé 'be in front' } \tag{129}
\end{equation*}
$$

A suffix -gùl is attested only in námá-gùl 'damage, waste(n)', cf. transitive verb nàmá-gí 'damage (sth)', intransitive verb jǎm 'be damaged, malfunction', and regular nominalization nàmǐ-n ‘damage, waste(n)'.
súmà-ngàl 'brand (on cow)' appears to have a deverbal nominalizing suffix -ŋgàl, cf. verb súmé 'brand (a cow)'. Both verb and nominalization are borrowed from Fulfulde.

### 4.2.3.5 Uncompounded agentives

The productive agentive derivation is almost always expressed as a compound of the basketmaker type. In cases like 'runner' where no external object is manufactured or impinged on, a cognate nominal is the compound initial. The initial is $\{\mathrm{L}\}$-toned. The final is the agentive form of the verb, which is characterized by $+\operatorname{ATR}\{e o\}$ vocalism and a final $e$ vowel, with $\{\mathrm{LH}\}$ overlay expressed as H (monosyllabics), LH (bisyllabics), and LLH (trisyllabics). For examples and further discussion, see §5.1.4.

I have one attestation of an uncompounded agentive, namely jòné 'healer', see (788) in the sample text.

In addition, there is one noun that functions semantically as an agentive and is related to a verb, but it has $/ \mathrm{H} /$ melody. In the absence of any parallel forms, I take this noun to be a distinct lexical item of the same word-family as the verb, rather than as a derivative similar to the compound agentives.

```
tálé ‘hunter’, plural tál-mbó
related forms: verb táll ltàlè 'hunt', noun tǎl 'hunt'
```


### 4.2.3.6 Instrument nominals (- $-\hat{i}:)$

This derivation is based on the relevant action verb.
In one pattern, instrument nominal suffix $-\hat{i}$ : is added to the tone-dropped form of the stem, and replaces the stem-final vowel. The - $\hat{1}$ : suffix is heard without change in the plural, which carries no further suffixes. Nonfinal vowels in the verb stem may be of -ATR \{eo\} but not of +ATR $\{\varepsilon \rho\}$ ATR class, suggesting that the verb is in the A/O-stem.

The singular suffix -ngo may be added to the nominal. The suffix combination /- $\hat{i}-\eta g o /$ is then usually expressed as -íngò with shortened $i$-vowel. This $i ́$ is audible after a consonant cluster or an obstruent, but it syncopates after an unclustered sonorant. If syncope applies, it leaves no segmental trace of the original /-î:-/, although its tones are expressed on the flanking morphemes; see Stranded-Tone Re-Linking (§3.6.4.4). Occasionally (when the instrument nominal has no additional compound initial) the suffix complex is expressed as $-\hat{i}:-\eta g o ̀ ~ w i t h ~$ long falling-toned $\hat{i}$., see 'scrubber' (131c).
singular plural verb


```
sift \({ }^{\text {L }}\)-Inst-Sg
'couscous steaming pot'
```


$\begin{array}{lll}\text { c. } & b i b^{\mathrm{L}}-\hat{i}--\eta g o ̀ ~ & b i b^{\mathrm{L}}-\hat{1}: \\ \operatorname{rub}^{\mathrm{L}}-\mathrm{Inst-Sg} & \text { bibé 'rub' } \\ & \text { 'scrubber (for bathing) } & \end{array}$

$\begin{array}{lll}\text { e. tǔıl }{ }^{\mathrm{L}}-\varnothing \text { - } \eta g \text { ò } \\ \text { sell }{ }^{\mathrm{L}} \text {-Inst-Sg } & \text { tùl }{ }^{\mathrm{L}}-\hat{i} \text { : túlé 'sell' }\end{array}$
sell ${ }^{\mathrm{L}}$-Inst-Sg
'(a) sale'
f. dǒn ${ }^{\mathrm{L}}-\varnothing-\eta g o ̀ \quad ~ d o ̀ n{ }^{\mathrm{L}}-\hat{1}: \quad$ dòné 'buy'
buy-Inst-Sg
'purchase'
g. bǐl ${ }^{\mathrm{L}}-\varnothing$ - -gò̀ $\quad$ bìl ${ }^{\mathrm{L}}-\hat{1}: \quad$ bìlé 'exchange'
exchange-Inst-Sg 'exchange, barter'
 hobble-Inst-Sg
'hobbles (rope tied around animal's forelegs to reduce motion)'

In another set of cases, -î: is singular, and is pluralized by adding -mbò.
singular plural verb
a. dùr ${ }^{\mathrm{L}}-\hat{1}: \quad$ dùr ${ }^{\mathrm{L}}$ - $\hat{1}$ :-mbò dùré 'shoot (arrow), heave (spear)'
shoot ${ }^{\text {L }}$-Inst
'pole with hooked metal tip for pulling off fruits'
b. bìmb ${ }^{\mathrm{L}}-\hat{1}: \quad$ bìmb ${ }^{\mathrm{L}}-\hat{1}:-m b o ̀ \quad$ bìmbé 'file (something),
file ( $v)^{L}$-Inst
'file (tool)'
c. $\operatorname{sò}^{\mathrm{L}}-\hat{1}: \quad \operatorname{sò}^{\mathrm{L}}-\hat{1}:-\mathrm{mbò} \quad$ sóbé 'make hole in wooden handle' make.hole ${ }^{\mathrm{L}}$-Inst
'awl for puncturing wooden handles'
$\mathrm{d} . \quad$ èmb ${ }^{\mathrm{L}}-\hat{1}: \quad$ èmb ${ }^{\mathrm{L}}$ - $1:-m b o ̀ ~ \quad ́ m b \varepsilon ́ ~ ' h o l d ~ b y ~ p i n c h i n g ' ~ ' ~$
pinch ${ }^{\text {L }}$-Inst
'tweezers'
e. $\operatorname{sèm}{ }^{\mathrm{L}}-\hat{1}$ : $\quad \operatorname{sèm}^{\mathrm{L}}-\hat{1}:-m b o ̀ ~ \quad s \varepsilon ́ m \varepsilon ́ ~ ' s a w ~(c u t) ' ~$
saw (v) ${ }^{\text {L }}$-Inst
'saw (for cutting calabashes)' ( Pl also pronounced sěm- $\varnothing$-mbò)
f. $k o ̀ j{ }^{\mathrm{L}}-\hat{1}: \quad k o ̀ j{ }^{\mathrm{L}}-\hat{1}:-m b o ̀ \quad k o ́ j \varepsilon ́$ 'scrape'
scrape ${ }^{\text {L }}$-Inst
'scraper (for pots)'
g. wò: $1^{\mathrm{L}}-\hat{1}: \quad$ wò: $1^{\mathrm{L}}-\hat{1}:-m b o ̀ \quad$ wó:lí-y ${ }^{\text {' }}$ scrape out (calabash)'
scrape. out ${ }^{\mathrm{L}}$-Inst
'calabash scraper' (used in making calabashes)

```
h. kèj \({ }^{\mathrm{L}}-\hat{i}: \quad k e ̀ j{ }^{\mathrm{L}}-\hat{i}:-m b o ̀ \quad k \varepsilon ́ j \varepsilon ́ ~ ' c u t ' ~\)
    cut \({ }^{\text {L }}\)-Inst
    'heavy wedge (chisel) for piercing metal'
```

The majority of instrument nominals with suffix -î: are compounds including a nominal initial that denotes the typical direct object ('egg-beater'). For examples and discussion, see §5.1.11. This semantic pattern should be distinguished from the basically noun-adjective sequence exemplified by /sàmbè sòb-î:/ 'spear (sàmbé ) with sharp tips', ending in the same sòb-î: seen above in (132c).

### 4.2.3.7 Deverbal nominals with suffix -û:

There are also a number of nouns ending in -û: (plural -î: by a regular vowel shift) that are clearly related to verbs. Some are instrumental in sense (133a), but other semantic relationships are also observed (133b). Possible frozen instrumental nominals, not involving a transparently related verb, are in (133c). In (133d), -û: occurs both on a simple verb and on its causative (suffix -m-). Further examples are in the list of cognate nominals with $-\hat{u}$ : in (399a) in §11.1.3.2.


### 4.2.3.8 Deverbal nominal with suffix -rú

This nominalization is clearly present only in the cases in (134), since for them a corresponding verb is present. The plurals are énjír-rí and tímbí-rí, as the shift from final $u$ to (plural) $i$ also affects the medial vowel quality.

| a. énjú-rú | 'prop to rebalance' | Énjé 'slide/slip (object) in' |
| :--- | :--- | :--- |
| b. tímbú-rú | 'lid' | tímbé 'cover, put a lid on |
| (also tímbú:) |  |  |
| c. págú-rú | '(sth used as) belt' | págí 'tie' |

Possible frozen case: tàyà-kógúrú 'wooden bolt'. Given the alternation of tímbú-rú with tímbú:, other cases of nouns with final ú: might be considered here (yámbú: 'blanket', níygú: 'door shutter').

### 4.2.3.9 Minor denominal nominals

Isolated formations not attributable to a productive pattern are given in (135). For (135a), compare suffix -ŋgǎn with deverbal nominalizing suffix -ŋgán (§4.2.3.4).

```
    noun gloss related form(s)
    a. gùndà-ỳgǎn 'slavehood' gùnd\varepsiloń'slave'
    b. kínjàn 'life; livelihood' kíndè: 'soul', kìndò-kìndô: '(someone's)
                                    shadow’, kìndô.: 'shade’
```


### 4.3 Pronouns

Except for some morphophonological complexity in subject suffixes on verbs, pronouns are quite regular and transparent. For each category, there is a single "basic" form used independently, as preverbal subject proclitic (in relative clauses), as prenominal possessor, and before postpositions or discourse-functional particles, including accusative gì in object function. Before all-purpose postposition mà (§8.1.2), 1Sg mí contracts to 1 ń resulting in ń mà, while the rest of the paradigm is regular. Except in relative clauses, pronominal subjects are normally expressed as suffixes on the verb. In the case of first and second persons, the suffixes are closely related to the basic forms.

| basic |  | object | possessor (preposed) |
| :---: | :---: | :---: | :---: |
|  | b |  |  |


| a. | 1 Sg | mí | mí | $-m$ | mí $g i ̀ ~$ | mí .. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 Pl | $i ́$ | $i ́$ | $-y$ | ígì | í ... |
| b. | 2 Sg | ó | ó | $-\Omega \sim-o$ | ó gì | ó ... |
|  | 2 Pl | é | é | $-\varepsilon \sim-e$ | é gì | é ... |


| c. | 3 AnSg mó <br> 3 AnPl bé | mó <br> bé | $-\varnothing$ <br> $-\varepsilon \sim-a$ | mó gì <br> bé gì | mó ... <br> bé ... |
| :--- | :--- | :--- | :--- | :--- | :--- |
| d. | InanSg O kó | kó | $-\varnothing$ | kó gì | kó ... |
| InanSg E | ké | ké | $-\varnothing$ | ké gì | ké ... |
| InanPl | ké | ké | $-\varnothing$ | ké gì | ké ... |

kó is often a discourse-definite 'that'. In this function, kó could be considered to be the corresponding near-distant demonstrative (in discourse-definite function) with zero noun. For possessor-like prenominal kó in strong discourse-definite function see §6.5.1.
(137a) exemplifies a 1 Sg possessor combined with a 1 Sg subject suffix on the inflected verb. Accusative [mí gì] occurs in (137b). The preverbal (actually, preparticipial) form $/ \mathrm{mí}$, which is typical of nonsubject relative clauses, is illustrated in (137c).


### 4.4 Determiners

### 4.4.1 Deictic demonstrative pronouns ('this'/'that')

There is a three-way spatial distinction among deictics: proximate 'this', near-distant 'that (near you or just over there), and far-distant 'that (in the distance)'. There is one paradigm for animates (humans and animals), including pseudo-animates. There is another paradigm for inanimates (including plants). There are distinct singular and plural forms for each category.

In addition to its canonical deictic sense, the animate singular proximate demonstrative $\check{o r m}$ is also used, in parallel clauses, to refer alternately to the two members of a pair who have been previously introduced as discourse referents ('There were two brothers; one (ǒm) was ..., the other (ǒm) was ...').

A far-distant form may be used opportunistically in texts to denote a counterparty to the most topical referent, in a fashion recalling the Algonquian obviative. For example, in a passage about two companions, animate singular far-distant òmá: may be used several times to denote the less topical of the two.

The animate demonstrative forms are given in (138).

|  | Sg | Pl |
| :--- | :--- | :--- |
| proximate | ǒm | èbíyè |
| near-distant | mó | bé |
| far-distant | òmá: | èbá: |

When a deictic demonstrative pronoun modifies a preceding noun, the noun keeps its normal singular or plural segmental form, but drops its tones. In other words, demonstratives pattern tonosyntactically like modifying adjectives. (139) illustrates this with pègé 'sheep' and plural $p \grave{\varepsilon} g \grave{\varepsilon}$-mbó. The near-distant demonstratives are identical in form to definite morphemes (§4.4.2.2). However, demonstratives including near-distant ones, unlike definite morphemes, control tone-dropping on the preceding noun.
a. $p \grave{\varepsilon} g \grave{\varepsilon}^{\mathrm{L}}$
ǒm
sheep ${ }^{\text {L }}$
Prox.AnSg
'this sheep'
b. pègè-mbò ${ }^{\mathrm{L}} \quad \grave{\varepsilon} b i ́ y \grave{\varepsilon}$
sheep- $\mathrm{Pl}^{\mathrm{L}} \quad$ Prox.AnPl
'these sheep'
c. $p \grave{\varepsilon} g \varepsilon^{\mathrm{L}} \quad$ mó
sheep ${ }^{L} \quad$ NearDist.AnSg
'that sheep (near you or just over there)'
d. $p \grave{\varepsilon} g \grave{\varepsilon}-m b \grave{o}^{\mathrm{L}} \quad b e ́$
sheep. $\mathrm{Pl}^{\mathrm{L}} \quad$ NearDist.AnPl
'those sheep (near you or just over there)'
e. $p \grave{\varepsilon} g \grave{\varepsilon}^{\mathrm{L}}$ òmá:
sheep $^{\mathrm{L}} \quad$ FarDist.AnSg
'that sheep (in the distance there)'
f. pègè-mbò ${ }^{\mathrm{L}}$ èbá:
sheep. $\mathrm{Pl}^{\mathrm{L}} \quad$ FarDist.AnPI
'those sheep (in the distance there)'
Another series, based on ínè 'goat' and its plural ínà:, is this: ìnè ${ }^{\mathrm{L}}$ ǒm 'this goat', ìn-à: ${ }^{\mathrm{L}}$ Ébíyè 'these goats', ìn ${ }^{\mathrm{L}}$ mó 'that-Near goat', ìnà: ${ }^{\mathrm{L}}$ bé 'those-Near goats', $n \dot{\varepsilon}^{\mathrm{L}}$ òmá: 'that-Far goat', ìnà: ${ }^{\text {L }}$ èbá: 'those-Far goats', . Another with the human yě: 'woman' and its plural yàwó: is: yè: ${ }^{\mathrm{L}}$ ǒm, yàwò: ${ }^{\mathrm{L}}$ èbíyè, yè: ${ }^{\mathrm{L}}$ mó, yàwò: ${ }^{\mathrm{L}}$ bé, yè: ${ }^{\mathrm{L}}$ òmá:, and yàwò: ${ }^{\mathrm{L}}$ èbá: . Note that the lexically specific forms of the singular and plural are respected.

For inanimates, there are two agreement classes of nouns with distinct singulars (E-class and O-class), but the two classes merge into a single inanimate plural category (140).
(140) Inanimate demonstrative pronouns

|  | InanSg (O) | InanSg (E) | InanPl |
| :--- | :--- | :--- | :--- |
| proximate | ŋ̀gú | ŋ̀gí | ěy |
| near-distant | kó | ké | yé |
| far-distant | ŋ̀gwá: | ŋ̀gá: | èyá: |

A series with bǎ:-gò 'stick', plural bǎyè, is (141). This nous is of O/E inanimate class. Again, the singular/plural distinction on the noun is maintained, and the noun drops its tones.
(141)
a. bà:-gò ${ }^{\mathrm{L}}$ ŋ̀gú
stick-InanSg. $\mathrm{O}^{\mathrm{L}} \quad$ Prox.InanSg.O
'this stick'
b. bàyè ${ }^{\text {L }}$ ěy
stick.P1 ${ }^{\mathrm{L}} \quad$ Prox.InanPI
'these sticks'
c. bà:-gò ${ }^{\text {L }}$ kó
stick-InanSg. $\mathrm{O}^{\mathrm{L}} \quad$ NearDist.InanSg. $O$
'that stick (near you or just over there),
d. bàyè̀ ${ }^{\mathrm{L}}$
yé
stick. $\mathrm{Pl}^{\mathrm{L}}$
NearDist.InanPl
'those sticks (near you or just over there)'
e. bà:-gò ${ }^{\mathrm{L}}$ ŋ̀gwá:
stick-InanSg. $\mathrm{O}^{\mathrm{L}} \quad$ FarDist.InanSg.O
'that stick (in the distance there)'
f. $p \grave{\varepsilon} g \grave{\varepsilon}-m b o{ }^{\mathrm{L}}$ èyá:
stick.P1 ${ }^{\mathrm{L}} \quad$ FarDist.InanPl
'those sticks (in the distance there)'
Inanimate class $\mathrm{E} / \mathrm{E}$ is exemplified by táyà 'granary': singulars tàyà ${ }^{\mathrm{L}}$ g̀gí, tàyà ${ }^{\mathrm{L}}$ ké, tàyà ${ }^{\mathrm{L}}$ ŋ̀gá:, plurals tàyà ${ }^{\mathrm{L}}$ ěy, tàyà ${ }^{\mathrm{L}}$ yé, tàyà ${ }^{\mathrm{L}}$ èyá: .

Examining the paradigms above, we observe that the far-distant forms are (irregularly) related to the proximate forms, but involve an ending á: .

### 4.4.2 Definite morphemes

### 4.4.2.1 Discourse-definite 1 í

A morpheme í, homophonous to the basic 1Pl pronominal, occurs once in a text as a resumptive discourse-definite form. After describing the idyllic good old days (lots of food and peace), see (712) in the sample text, the speaker resumes that description with $i^{\prime}(142)$.

$$
\begin{array}{lccc}
\ldots \text { kày } \begin{array}{lll}
\text { [íyó } & \text { nù:], í } & \text { òndú- } \varnothing \\
\ldots \text { Topic } & \text { [today } & \text { now], }
\end{array} \text { DiscDef } & \text { not.be-3Sg }  \tag{142}\\
\text { '... as for (that). Nowadays, this (situation) does not exist.' }
\end{array}
$$

Given the hapax legomenon status of this form, I cannot vouch for its productivity.

### 4.4.2.2 Regular definite determiners

Regular definite morphemes are identical in form to the corresponding near-distant deictic demonstratives, including marking for number and agreement class. See the near-distant forms in the animate and inanimate demonstrative paradigms in §4.4.1 above. In spite of this homophony, definite determiners can always be identified by their failure to control tonedropping on a preceding modified noun.


If mó, bé, and kó in these examples had been near-distant determiners, the preceding nouns would have been tone-dropped: pègè ${ }^{\mathrm{L}}$ mó, pègè-mbò ${ }^{\mathrm{L}}$ bé, kìnù: ${ }^{\mathrm{L}}$ kó, and kìn-bò ${ }^{\mathrm{L}}$ bé.

### 4.4.3 Determiner sandwich (e.g. mó $X$ mó )

An element with the form of a definite determiner may occur on both sides of the noun, which drops its tones to $\{\mathrm{L}\}$. The controller of the tone-dropping is technically ambiguous, since a) a definite determiner is identical to a third person pronoun, so the occurrence on the left could be taken syntactically as a possessor, which would force tone-dropping on the following possessum; and b) a definite determiner has the same form as a near-distant demonstrative pronoun, which forces tone-dropping on the preceding modified noun. In textual occurrences, the NP in question is discourse-definite rather than deictic, so I opt for the former (possessor) analysis for morphosyntactic purposes, even though the "possessor" is coindexed with the possessum. Evidence for this analysis is provided by similar frames consisting of a preceding determiner and a following 'each/all' quantifier, see discussion of (146) below.

In (144), the speaker reintroduces a discourse referent ('the woman') who was part of earlier discourse, after a short digression. The excerpt is from a general discussion about marriage, so the woman in question is generic, though at this point discourse-definite.

| $\begin{align*} & \text { [mó }  \tag{144}\\ & \text { [AnSgPoss } \end{align*}$ | ${ }^{\mathrm{L}} \mathrm{y} \grave{\varepsilon}$ : <br> ${ }^{\text {L }}$ woman | $\begin{aligned} & \text { mó] } \\ & \text { Def.AnSg] } \end{aligned}$ | bángàl marriage | $\begin{aligned} & \text { kàn-ó: } \\ & \text { do.Pfv-2SgSbj } \end{aligned}$ | $\begin{aligned} & m \varepsilon ́, \\ & \text { if, } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [yč: | mó] |  |  |  |  |
| [woman | Def.AnSg] |  |  |  |  |

'That woman (whom I was talking about earlier), when you marry her, the woman, ...' (2005-1a)

Especially with inanimate singular kó, which (in addition to denoting objects) may also be used more abstractly to denote a situation ('in that case', etc.), there is some question whether the leftmost occurrence should be understood as referring to an external possessor, or as part of a determiner sandwich (kó ... kó ), in examples like (145).

| jěnjà | [kó | ${ }^{\text {L }}$ Sèmbè | kó] |
| :---: | :---: | :---: | :---: |
| God | [InanSg.O.Poss | ${ }^{\text {L }}$ strength | Def.InanSg.0] |
| jěnjà | $\left[\begin{array}{ll}\text { íl } & \text { gi] }\end{array}\right.$ | ǹ̀tí-ná |  |
| God | [1P1 Acc] | give-Hort.3Sg |  |

'May God give us that strength' (or: '... the strength of/for that') (2005-1a)
b. jǎ: [nǎ: mà] mó j-ò:,

| since | [yesterday | in] | AnSg | take.Pfv-PplNonSbj.InanSg.O, |
| :---: | :---: | :---: | :---: | :---: |
| íyó |  |  |  | yà:] | íyó [[kó ${ }^{\mathrm{L}}$ sàrù: kó] mà yà:] bò-y today [InanSg.O.Poss ${ }^{\mathrm{L}}$ question Def.InanSg.O] in Foc] be-1P1Sbj 'it (questioning) having begun (=having fone on) since yesterday, today that questioning [focus] is what we are (still) in.' (2005-1a)

Another example is ké ${ }^{\mathrm{L}}$ yàl ké 'that (just mentioned) year' in (620b) in $\S 16.2 .1$. See also the discussion of nonproximate animate presentatives òmá:mò: and $\mathfrak{\varepsilon} b a ́: b \grave{\varepsilon}:$ in §4.4.4.

Structurally and semantically similar to a determiner sandwich is a construction with initial determiner, followed by a noun and a quantifier dîn 'all, each'. Again, the NP resumes
an already stated discourse referent, but this time the discourse referent is generic and the NP denotes any member of the set. The free translation is 'any/no such X '. Observe in (146) below that kéngè 'place' undergoes tone-dropping to ${ }^{\mathrm{L}}$ kèngè in the relevant occurrence (third line). Since dîn 'all, each' does not induce tone-dropping on nouns, the tone-dropping must be due to the preceding determiner, here ké. This supports the view that the determiner functions as a possessor in this construction.

| [ $\left[k e ̀ n g e ̀ e^{\text {L }}\right.$ <br> [place ${ }^{\text {L }}$ | j̀gîn] <br> here] | bèlí-yé <br> get.up | $n \grave{\varepsilon}]$ <br> then.SS] |
| :---: | :---: | :---: | :---: |
| [hâl | [dúwánsá | mà] | $d-$ ò:], |
| [until | [D | in] | arrive.Pfv-2SgSbj] |
| [ké | ${ }^{\text {L }}$ kèngè | dîn] | òndú- $\varnothing$ |
| [Inan.Sg. | .E ${ }^{\text {Lp }}$ Lace | all] | not.be-3SgSbj |

'(To find a spot where one can discreetly urinate), you will get up from here (the village) (and go) all the way to Douentza, there is no such spot.' (2005-1 a)

### 4.4.4 Demonstrative adverbs

### 4.4.4.1 Spatial adverbs

A three-way distance distinction is again present in demonstrative adverbs ('here', 'there'). The near-distant adverb kên 'there (near you or just over there)' is also used as the discoursedefinite (anaphoric) adverb 'there (=in the aforementioned place)'. This is similar to the pattern in determiners, where near-distant demonstrative pronouns have the same form as definite determiners (though a preceding modified noun has different tones in the two cases).
a. ŋ̀gîn 'here' (proximate)
j̀gí mà
ên
b. kên
'there' (deictic, near-distant)
ké mà
c. ŋ̀gâ:n
'there' (deictic, far-distant)
d. kên 'there' (discourse-definite)
ké mà
kên may be related historically to the (E-class) noun kéngé 'place', which might have once been morphologically decomposable, see §4.1.3.1 above. ìgí mà and ké mà are demonstratives plus the postposition mà, which here has locative function.

### 4.4.4.2 Deictic adverb plus approximative -dè

The 'here/there' adverbs (preceding section) may add suffix -d , which forces -ATR $\{\varepsilon \rho\}$ vowel harmony on the stem (the effect being that $e$ shifts to $\varepsilon$ ). The sense is 'around here/there', i.e., a more approximate location than the simple adverb would have.
a. ŋ̀gín-dè 'around here' ह́n-dè
b. kén-dè 'around there' (deictic, near-distant)
c. ŋ̀gá:n-dè 'around there' (deictic, far-distant)
d. kén-dè 'around there' (discourse-definite)

In (149), ŋ̀gí mà and ŋ̀gín-dè are used to denote two distinct but equidistant locations ('east' and 'west'). In other words, !̀gín-dè here functions as a kind of obviative.
(149) ùjúngó [ìgí mà] túmbò-njò- $\varnothing$,
sun [here] rise-Pres- 3 SgSbj ,
ùjúngó j̀gín-dè dénà-ŋjò- $\varnothing$
sunSg here-Approx fall-Pres- 3 SgSbj
'The sun rises here (pointing to east), and the sun sets here (pointing to west).' [2005-2a]

See also interrogative ǎn-dè 'whereabouts?' (§13.2.2.3).

### 4.4.4.3 Demonstrative manner adverbials 'like that' (kèné ), 'like this' (nènદ́ )

 $\S 10.5 .2$, (616) in $\S 16.1 .3$, and (742) in the sample text. In most of my examples, kèné denotes a manner that has already been either shown or described, or that is otherwise jointly known. However, since the related locative adverb kên can be either near-distant (deictic) or discourse-definite, it may be that kèné can also shift between these semantic frames.

A similar adverb is nèné 'like this'. It denotes a manner that is currently being demonstrated or that has just been described. See (737) in the sample text.

The second syllable of these adverbs may be related to the adverbial particle nè (§8.4.8.1).

### 4.4.5 Presentatives (úngò:, éyè:, ómò:-m, òmá:mò:, etc.)

The presentative form follows the relevant NP. Inanimate and animate presentatives are distinguished. The inanimate forms are in (150). They resemble inanimate proximate demonstratives (singulars ìgú and ìgí, plural ěy ).

| InanSg.O | InanSg.E | InanPl |
| :--- | :--- | :--- |
| úngò: | íngè: | éyè: |

Inanimate examples are in (151).
a. [tìmô: kó]
úngò:
[tree Def.InanSg.O] Presntv.InanSg.O
'Here's the tree.'
b. [táyà ké] íngè:
[granary Def.InanSg.E] Presntv.InanSg.E
'Here is the granary.'
c. [tìmê: yé] éyè:
[tree.Pl Def.InanPl] Presntv.InanPl
'Here are the trees.'

Animate presentatives are based on inflected forms of a special quasi-verb related to the animate demonstratives. The quasi-verb is ómò: in the singular, $\varepsilon$ ह́bè: in the plural, compare animate proximate demonstratives ǒm (singular) and $\grave{\varepsilon} b i ́ y e ̀ ~(p l u r a l) . ~ I f ~ t h e ~ s u b j e c t ~ i s ~$ pronominal, it is represented by an independent pronoun preceding the quasi-verb.
$1 \mathrm{Sg}-\mathrm{m}$ and 1Pl -y may be added (152a below). No distinctive second person forms were elicitable. This may be because the stems already end in the vowels typical of 2 Sg and 2 Pl suffixes, so such suffixes would be absorbed by the quasi-verb's final vowel. The (apparent) third person forms may also be used with a second person pronoun. There is a special set of partially reduplicative forms used in third (and therefore also second) person reference when the referent is visible but some distance away (152c).
(152) Presentative (animate)
a. first person

1 Sg ómò:-m
1 Pl ह́bè:-y
b. Proximate, third person (also extended to second person)

AnSg ómò:
AnPl $\varepsilon$ ह́bè:
c. Nonproximate, third person (also extended to second person)

AnSg òmá:mò:
AnPl èbá:bè:

Comparing nonproximate presentatives òmá:mò: and $\grave{\varepsilon} b a ́: b \grave{\text { : }}$ : to the far-distant demonstratives òmá: and èbá: (§4.4.1 above), we can imagine a kind of determiner sandwich (§4.4.3) flanking a distant or nonproximate morpheme -á:-.

Animate presentative examples are in (153).
(153)
a. yě: ómò:
woman be.Sg
'Here is a/the woman.'
b. yàwó: $\varepsilon$ ह́bè.
woman.Pl be.Pl
'Here are (the) women.'
c. mí ómò:-m
$1 \mathrm{Sg} \quad$ be. $\mathrm{Pl}-1 \mathrm{SgSbj}$
'Here I am.'
d. í $\varepsilon$ ह́bè:-y

1 Pl be.Pl-1P1Sbj
'Here we are.'
e. é $\varepsilon$ ह́ $\grave{\text { e }}$

2 Pl be. Pl
'There you- Pl are.'

### 4.5 Adjectives

### 4.5.1 Underived adjectives

Adjectives behave morphologically much like nouns in Dogon languages. Nouns and adjectives are also closely related to verbal participles, which occur in relative clauses and in subject-focalized clauses.

N -Adj combinations are similar in some ways to noun-noun compounds. When an adjective modifies a noun, the noun itself is tone-dropped ( $\mathrm{N}^{\mathrm{L}}$ Adj), just as the initial in many noun-noun compounds is tone-dropped $\left(\mathrm{N}^{\mathrm{L}}-\mathrm{N}\right)$. However, while compound initials are not usually separately pluralizable, in N -Adj combinations both words have their normal suffixal morphology, marking noun class and number.

Adjectives, like nouns, divide into two morphological types, suffixing and mutating, which behave exactly like their noun counterparts. Suffixing adjectives that are semantically compatible with the full range of nouns have four distinct forms. The first agrees with animate singular and inanimate plural nouns. This form is either unmarked as with nouns (zero suffix), or it has a suffix -ye not used with nouns (compare inanimate plural near-distant demonstrative or definite yé ). Other forms show the usual nominal suffixes: animate plural -mbo, inanimate singular -ngo or -nge. The two nouns 'stone' and 'animal' (154d)
often switch animacy values from singular to plural, and modifying adjectives may respect the switch, showing inanimate - ngo in the singular but animate -mbo in the plural.

Mutating adjectives have just two forms, E and O , marked by vowel-quality shifts in (at least) the final syllable. The E form is animate singular, inanimate plural, and (for $\mathrm{E} / \mathrm{E}$ noun class) inanimate singular. The O form is animate plural and (for $\mathrm{O} / \mathrm{E}$ noun class) inanimate singular.

The relationship between adjectival forms and the categories of modified nouns is summarized schematically in (154).

$$
\begin{equation*}
\text { gloss } \quad \mathrm{Sg}, \mathrm{Pl} \tag{154}
\end{equation*}
$$

form of adjective
mutating suffixing
$\begin{array}{llll}\mathrm{Sg} & \mathrm{Pl} & \mathrm{Sg} & \mathrm{Pl}\end{array}$
$\begin{array}{llll}\mathrm{E} & \mathrm{O} & -y e \sim \varnothing & -m b o\end{array}$
a. animate
'person' nǒ:, nò-mbó
'donkey’ párngá, párŋgá-mbó
'spear' sàmbé, sàmbú:
b. inanimate $\mathrm{O} / \mathrm{E} / \mathrm{ye} \quad \mathrm{O} \quad \mathrm{E} \quad-\eta g o \quad$-ye $\sim \varnothing$
'hand' nùmǎ:, nùmě:
'stick' bà:-gó, bǎyè
'rope' sǐ:-ŋgó, sǐ:
c. inanimate E/E E E -nge -ye~ $\quad$ -
'place' kéngé
'well' dǎy (~ dǎy-ŋgé ), dǎy
d. inanimate $\mathrm{O} / \mathrm{E} / \mathrm{mbo}$ (rare) $\quad \mathrm{O} \quad \mathrm{E} \quad-\eta g o \quad-m b o$
'stone’ kìnû:, kǐ-mbò
'animal' dúmé-ŋgó, dúmó:

### 4.5.1.1 Mutating adjectives

The two forms of these adjectives are distinguished by a shift between back/low and front final long vowels, represented as O and E , respectively. The $\mathrm{O} \leftrightarrow \mathrm{E}$ alternations attested for adjectives are $a: \leftrightarrow \varepsilon:, ~ จ: \leftrightarrow \varepsilon:, o: \leftrightarrow e:$, and $u: \leftrightarrow i:$. The forms are closely related to those of mutating nouns (§4.1.2.1) and participles (§14.3). For adjectives, the final vowels are always long (this is true for most, but not all, mutating nouns).

The way the two forms map onto noun-class and number categories is shown in (155).
ending
front vowel (E) animate singular inanimate plural inanimate singular (E/E class)

```
back/low vowel (O) animate plural
inanimate singular (O/E class)
```

Consider the adjective 'good', with two forms nálé: and nálá: . For the human and animate nouns in (156a), nálé: is singular and nálá: is plural. For the inanimates in (156b), the reverse is true. A smaller class of nouns have nálé: in both singular and plural (156c). 'Stone' (156d) is variable in the singular.

| gloss | singular | plural |
| :--- | :--- | :--- |
| a. 'person' | nò: nàlé: <br> 'child' <br> 'donkey' <br> pàrngà nálé: | nò-mbò nálá: <br> òndò: nálá: <br> pàrngà-mbò nálá: |
| b. 'hand', | nùmà: nálá: <br> bà:-gò nálá: <br> sì:-ngò nálá: | nùmè: nálé: <br> 'rope' |
| c. 'head'yè nálé: |  |  |
| 'place': nálé: |  |  |

The distribution of final vowels $\varepsilon$ ': and á: is as indicated in (157), disregarding 'stone'.

| example | agreement class | Sg | Pl |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 'person' | animate (always E/O) | é: | á: |
| 'hand' | inanimate O/E-class (both subclasses) | á: | é: |
| 'head' | inanimate E/E-class | ह́: | é: |

In other words, the majority inanimate agreement class and the animate class have the opposite stem-final vowel alternations. The minority E/E inanimate class ('granary') has a single adjectival form with the front vowel. (It is possible to distinguish singular from plural in such cases as 'good granary' versus 'good granaries' either in the noun itself or, more reliably, in a definite or other determiner following the adjective).

The vocalic opposition á: versus $\varepsilon$ : for 'good' is one of several vocalic oppositions used by different adjectives (158). These are all of the basic type back/low \{ $\begin{aligned} & \text { o o } o \text { a }\} \text { versus front }\end{aligned}$ $\{i$ e $\varepsilon\}$. The two members of each alternation are distributed over class/number categories in the same way as $a$ : and $\varepsilon$ : in (156) above.

| alternation | example (O, E) | gloss |
| :---: | :---: | :---: |
| $a: \leftrightarrow \varepsilon$ : | nálá:, nálé: | 'good' |
| $\bigcirc: \leftrightarrow \varepsilon$ : | bòbô:, bj̀bê: | 'weak' |
| $o: \leftrightarrow \mathrm{e}:$ | gàbô:, gàbê: | 'tall' |
| $u: \leftrightarrow i$ : | bàndìgí:, bàndùgú: | 'last' |

There are two back/low vowels $\{a: 0:\}$ that correspond to $\varepsilon$ : . This distinction is phonologically conditioned rather than lexically arbitrary. Adjectives whose nonfinal syllable contains a vowel from the set $\left\{\begin{array}{l}\text { a }\end{array}\right\}$ have final $a$; , while those whose nonfinal syllable contains a vowel from the set $\{0 \varepsilon u i\}$ have final ó: .

Examples of these types are in (159).
gloss back/low-form front-form
a. $a: \sim \varepsilon$ :

| 'good' | nálá: | nálé: |  |
| :--- | :--- | :--- | :--- |
| 'small, young' | pàlâ: | pàl̂́: |  |
| 'bad, ugly' | nè:ndá: | nè:ndé: | (with ATR switch) |
| 'new' | kàndǎ: | kàndě: |  |
| 'other' | àndă: | àndě: |  |
| 'kindly' | pà:gá: | pà:gé: |  |
| ordinals (3rd+) | $\ldots$-nă: | $\ldots-n \varepsilon ̌: ~$ |  |

b. $๑: \sim \varepsilon$ :

| 'fresh; moist' | غ̀mó: | غ̀mé: |  |
| :---: | :---: | :---: | :---: |
| 'weak' | bòbô: | bobê: | (variants bèbô:, bèbê:) |
| 'rotten' | gòmô: | gว̀mê: |  |
| 'loose, slack' | yòrô: | yòrê: |  |
| 'big, adult' | gìndó: | gìndé: |  |
| 'first' | dùlǒ: | dùlě: |  |
| 'old' | kúnjó: | kúnjé: |  |
| 'ugly' | tànô: | tànê: |  |
| 'crooked' | kòndô: | kòndê: |  |
| 'fragile' | bùgô: | bùgê: |  |

c. $O: \sim e$ :
'wet' tèmbô: tèmbê:
'tall'
gàbô:
'straight' tèndô:
gàbê:
tèndê:
'unripe, raw' kòlô: kòlê:
'crowded' àngô: ángê:
'dry' màyô: màyê:
'second’ nòjǒ: nòjě:
'firm' màlô: màlê:

| 'curved' | tòndô: | tòndê: |
| :--- | :--- | :--- |
| 'crooked' | pòndô: | pòndê: |
| 'dense' | kùrô: | kùrê: |
| 'flat' | dàgô: | dàgê: |
| 'pointed' | sèmbô: | sèmbê: |
| 'pointed' | sèrô: | sèrê: |

d. $i: \sim u:$
'last' bàndùgú: bàndìgí:

### 4.5.1.2 Suffixing adjectives (-ye $\sim \varnothing$, -ŋgo, -ŋge, -mbo)

Suffixing adjectives have the same class-number suffixes as suffixing nouns (§4.1.3), including inanimate singulars $-\eta g o$ and $-\eta g e$, and animate plural $-m b o$. The remaining form (animate singular, inanimate plural) either ends in a lexical vowel (long or short depending on the adjective) or has a suffix -ye that does not occur with nouns.

Consider the paradigm of 'white' (160). This stem does not use the suffix -ye.

| (160) | class | Sg | Pl |
| :---: | :---: | :---: | :---: |
|  | Animate | pílè | pílè-mbò |
|  | Inanimate |  |  |
|  | O/E/ye | pílè- $\mathrm{\eta} g$ ò | pílè |
|  | $\mathrm{O} / \mathrm{E} / \mathrm{mbo}$ | pílè-ทgò | pílè-mbò |
|  | $\mathrm{E} / \mathrm{E}$ | pílè-ygè | pílė |

Aside from the usual reductions in stem-final vowels before the $-\eta g o$, $-\eta g e$, and $-m b o$ suffixes (also found in nominal morphology), there are no vocalic alternations in the stem for suffixing adjectives (certainly none based on agreement). A more or less exhaustive array showing adjectival forms is in (161). The stems in (161a-d) do not allow the suffix -ye, while those in (161e) require it for animate singular and inanimate plural. For semantic reasons (e.g. restriction to +animate or to -animate modified nouns), some adjectives show only partial paradigms.

$$
\begin{equation*}
\text { gloss } \quad \operatorname{InanSg}(\mathrm{O} \text { and } \mathrm{E}) \quad \text { InanPl/AnSg } \quad \mathrm{AnPl} \tag{161}
\end{equation*}
$$

a. final short $\{e \varepsilon a\}$
bisyllabic

| 'bent' | gòndú-пgó~ - Пgé | gòndé | gòndú-mbó |
| :---: | :---: | :---: | :---: |
| 'blunt' | dùmbú-ŋgó ~ - ŋgé | dùmbé | dùmbú-mbó |
|  | [with humans: 'having legs broken or paralyzed'] |  |  |
| 'skinny' | - | kómbé | kómbú-mbó |
| 'white' | pílè-ทgò ~ -ŋgè | pílè | pílè-mbò |
| 'red' | bán-gò ~ -gè | bánè | bán-bò |


| 'black' |  | $j \varepsilon ́ m e ̀$ | jémè-mbò |
| :---: | :---: | :---: | :---: |
| 'skinny (tree)' | kémbé-ŋgó~ - Пgé | kémbé | - |
| 'ripe, cooked' | ílà-ŋgò ~ -pgé | ílà | - |
| 'blind' | - | ǧ̌rbà | ǧ̌rbà-mbò |
| 'curving' | kwàndú-pgó ~ -ngé | kwàndé | - |
| 'curvy' | pàmbú-ŋgó~ - -ngé | pàmbé | - |
| 'tilted' | bàmbí-ngó~ ~ - g (é | bàmbé | - |
| trisyllabic $\{H L\}$ |  |  |  |
| 'cool' | yégèlè-ngò ~ - g è | yégèlè | yégèlè̀-mbò |
| 'coarse' | yágàjà-tgò ~ -ygè | yágàjà | yágàjà-mbò |
| 'coarse (skin)' | kágàjà-pgò ~ -ygè | kágàjà | kágàjà-mbò |
| trisyllabic \{LH\} |  |  |  |
| 'worn-out' |  | sògòjé | - |
| 'damaged' | kògǒl-ŋgó~ ~ - gé | kògòlé | - |

b. final long $i$ :
bisyllabic
'thin' mènjú-ŋgó~-ŋgé mènjí: mènjú-mbó
[InanSg equals AnPl also mènjú:]
'fat, thick' bǐn-gó~ - gé bìní: bǐn-bó
[InanSg equals AnPl also bìnú:]
'short' dèndú-ŋgó
[InanSg equals AnPl also dèndú:]
'tender', soft' bǔr-ŋgò̀~-ngè bùrî: bǔr-mbò
'rancid' pìbú-ngò
pìbî:
c. final long $\varepsilon$ :
bisyllabic

| 'flat, wide' | wàyá-ŋgó~ $\sim$ gé | wàyź: | wàyá-mbó |
| :---: | :---: | :---: | :---: |
| 'empty' | ìnjé-ŋgó ~ ทgé | ìnje: | ìnjé-mbó |
| 'long' | jàlá-ngó~ - - gé | jàlé: | jàlá-mbó |
| trisyllabic |  |  |  |
| 'slow' | támàlà-ngò ~ -ngè | támàlè: | támàlà-mbò |
| [InanPl equals AnSg also támàlà] |  |  |  |
| 'smooth' | ónànà-fgò ~-ŋgè | ónànè: | ónànà-mbò |
| [InanPl equals AnSg also ónànà] |  |  |  |
| 'foul' | kújàjà-ŋgò ~ - l gè | kújàj̀̇: | kújàjà-mbò |
| 'crispy' | sínànà-pgò ~ - y è | sínànè: |  |
| 'lightly salted' |  | દ́jèjè: | દ́jèjè-mbò |
| 'bitter' | ámàlà-ŋgò ~ - ng (è | ámàl̀z: |  |

d. final short $o$
bisyllabic
'worthless' lă:r-ŋggó là:ró lă:r-mbó

| Cvy |  |  |  |
| :---: | :---: | :---: | :---: |
| 'hard, solid' | mǎy-ŋgò ~ - ŋgè | mǎy-yè | mǎy-mbò |
| 'good' | něy-пgò ~ -ngè | něy-yè | něy-mbò |
| 'hot; fast' |  | dǒy ${ }^{n}$-yè | dǒy ${ }^{n}$-mbò |
| bisyllabic |  |  |  |
| 'slow' | pèjú-ŋgò ~ -ŋgè | pèjí-yè | pèjí-mbò |
| 'narrow' | pèmbí-ŋgò ~ -ŋgè | pèmbí-yè | - |
| 'sour, salty' | ăm-gò~ -gè | àmí-yè | ǎm-bò |
| [human sense: 'loud-talking'] |  |  |  |
| 'sweet' | と̌l-ŋgò ~ -ŋgè | c̀lí-yè | čl-mbò |
| 'sharp' |  | c̀lí-yè | c̀lú-mbò |
| 'pungent' | kèrú-ŋgò | kèrí-yè | - |
| 'difficult' | nǎm-gò~ -gè | nàmí-yè | nǎm-bò |
| 'heavy' | nǐm-gò ~ -gè | nìmí-yè | nǐm-bò |
| 'bitter' | gàlú-ŋgò ~ -ŋgè | gàlí-yè | gàlú-mbò |
| 'nearby' | dǔm-gò~ -gè | dùmí-yè | dǔm-bò |
| 'deep' | mǐn-gò ~ gè | mìní-yè | - |
| 'distant' | wǎy-gò ~ gè | wàgí-yè | - |
| 'thin (wall)' | غ̀nú-ŋgò ~ -ŋgè | èní-yè | - |
| 'lightweight' | yěr-ŋgò~ ~ŋgè | yèrí-yè | yěr-mbò |

غ̀lí-yè 'sweet' and 'sharp' (and more generally 'good') is related to another adjective $\varepsilon$ élèlè: ( $\varepsilon$ lèlè-ngò) that means more specifically 'sweet, sugary'.

The adjective meaning 'much, many' is invariant in form: ségín.

### 4.5.2 Adjectives containing frozen negative suffix (nè:ndá:, èndá )

nè:ndá: (O) ~ nè:ndé: (E) 'bad, ugly' likely contains (historically) the stem seen in něy-yè 'good'. The remainder of the 'bad' stem is most likely based on reinterpretation of an original negative predicate, the synchronic version of which is nèy=lá 'it isn't good' (from něỳ 'it is good'). A negative participle might also have been involved in some way. That nè:ndá: is no longer segmentable into 'good' plus a negative morpheme is shown by the fact that it has its own chain of derivatives, such as inchoative néndá-ndí ~ néndá-ndí-yé 'become bad', and by the fact that it (as predicate nè:ndá 'it is bad') can itself be negated: nè:ndà = lá 'it isn't bad'.

The adjective $\grave{\varepsilon} l i ́-y e ̀ ~ ' s w e e t ' ~(a n d ~ m o r e ~ g e n e r a l l y ~ ' p l e a s i n g ') ~ h a s ~ p r e d i c a t i v e ~ f o r m ~ \grave{\varepsilon l u ́-\grave{m}}$ 'it is sweet'. It too has an antonym whose modifying adjective form is èndá: (O) ~ $\varepsilon$ ndé: (e) 'not sweet' (hence 'displeasing, unpleasant'), undoubtedly another original negative participial that is now frozen into a unit. Its inchoative is éndá-ndí 'become not sweet', compare $\varepsilon$ éá-lí-yé 'become sweet'. Although the 'not sweet' adjective is the common way to deny sweetness, the 'sweet' adjective can be directly negated in predicative function:
 negated: èndà = lá 'it is not displeasing'.

Adjective nàndǎ: ~ nànď̌: 'left (hand/foot)' might also be looked at in this connection, see end of §8.4.7.3.

### 4.5.3 Adjectival suffix -ndé

I know of two adjectival stems with suffix -ndé, plural -ndú-mbó, added to $\{\mathrm{L}\}$-toned stem without changing the positive-negative polarity. They may modify a human noun like nǒ: 'person' or they may be used absolutely as nouns ('proud one', etc.).

| form | gloss | related form |
| :--- | :--- | :--- |
| gàndàl-ndé | 'proud, vain' | gándàl 'vanity' |
| tàtàgà-ndé | 'arrogant' | tátágá 'arrogance' |

### 4.5.4 Suffix -lù: (O) ~ -lì: (E) ‘-ish’

The suffix -lù: $(\mathrm{O}) \sim-l i ̀: ~(e)$, with a meaning similar to '-ish', may be added to an adjective stem. It is most common with color adjectives (163a-b) but it is elicitable with others (163c). The formation is basically adverbial, and may be followed by adverbial particle né (§8.4.2.1, $\S 8.4 .8 .1$ ) and made predicative with auxiliary bò- 'be'. If the adjective is longer than bisyllabic, it is truncated to a bisyllabic (163b).
(163)

|  | adjective | with -lù: | 'gloss' |
| :---: | :---: | :---: | :---: |
| a. | bánè | bànù-lù: | 'reddish' |
|  | gémè | gèmè-lù: | 'blackish' |
|  | pílè | pìlè-lù: | 'whitish' |
|  | Wérè | wèrè-lù: | 'greenish' |
| b. | búlà-búlà | bùlà-lù: | 'bluish' |
|  | nòl-púnè-ŋgò | nòlò-lù: | 'greenish' |
| c. jàlé: |  | jàlà-lù: | 'longish' |

An example is (164).
(164) [jàlà-lù: né] bò- $\varnothing$
[long-ish Adv] be-3SgSbj
'It is rather long.'

Also of interest is gèmìlmbó: ~ gèmìlmbé: 'shiny black' (from gémè 'black'), applied for example to glossy starlings.

### 4.6 Participles

Participles are noun-like forms of verbs, used in relative clauses and related subordinated clause types (§14.3) and in subject-focalized clauses (§13.1.1). Depending on the aspectnegation (AN) category, the participle ends in either a long-voweled agreement suffix ( $-\varepsilon$ : $\sim$-e:, -o: $\sim-o:$ ) similar to the endings of mutating adjectives and nouns, or in a (positive imperfective) morpheme - $\eta g a$ that may be followed by animate plural -mbò. The tones of the suffixes depend on the particular AN category.

### 4.7 Numerals

Numerals follow modified nouns. They may precede or follow modifying adjectives, see Adjective-Numeral Inversion (§6.4.2).

### 4.7.1 Cardinal numerals

### 4.7.1.1 'One', 'same (one)', and 'other'

The numeral ' 1 ' modifying a noun behaves like an ordinary adjective ('big', 'red', etc.), in that it forces tone-dropping on the noun. The neutral numeral ' 1 ' is kúndú ( O ) ~ kúndé ( E ).
gloss noun 'one ...'
a. O-class inanimate

| 'tree' | tìmô: | tìmò: ${ }^{\text {L }}$ kúndú |
| :--- | :--- | :--- |
| 'stick' | bă:-gò | bà:-gò ${ }^{\text {L }}$ kúndú |
| 'eye' | jìró | jìrò ${ }^{\mathrm{L}}$ kúndú |
| 'hand' | nùmǎ: | nùmà $:{ }^{\mathrm{L}}$ kúndú |
| 'tree' | tímô: | tìmò: ${ }^{\mathrm{L}}$ kúndú |
| 'skin, hide' | gùjú | gùjìu ${ }^{\mathrm{L}}$ kúndú |
| 'stone' | cínû: | cìnù: ${ }^{\mathrm{L}}$ kúndú |

b. E-class inanimate

| 'well' | dǎy | dày ${ }^{\mathrm{L}}$ kúndé |
| :--- | :--- | :--- |
| 'shed' | gúlì:-ŋgè | gùlì: : kúndé |
| 'granary' | tánâ | tànà ${ }^{\mathrm{L}}$ kúndé |
| 'house' | ólé | òlè̀ ${ }^{\mathrm{L}}$ kúndé |
| 'courtyard' | bándà | bàndà kúndé |
| 'tomtom' | bónî: | bònì: ${ }^{\mathrm{L}}$ kúndé |

c. animate

| 'dog' | $\grave{j} g W \varepsilon ̌:$ | $\grave{g} g W \grave{\varepsilon}:{ }^{\mathrm{L}}$ kúndé |
| :--- | :--- | :--- |
| 'sheep' | $p \grave{g} g \varepsilon ́$ | $p \varepsilon \grave{\varepsilon}{ }^{\mathrm{L}}$ kúndé |

```
`donkey` pár\etagà pàrngà }\mp@subsup{}{}{L}\mathrm{ kúndé
'person' nǒ: nò. }\mp@subsup{}{}{L}\mathrm{ kúndé
```

kúndú can also mean '(one and) the same, identical', predicated of two entities. See textual example (670) in §17.6.3.

In counting (reciting the list of numerals: ' $1,2,3, \ldots$ '), the form for ' 1 ' is tô:y (which conveniently rhymes with the following nô:y ' 2 '). tô:y is also an adverb 'first(ly)' (§8.4.7.2). In combinations with decimal terms like ' $20+1$ ' (i.e. '21'), the form is tómày (§4.7.1.3).

A more emphatic adjective translatable as '(a/the) single ...' is tòm $\hat{\varepsilon}$ : ( E ) ~ tòmô: ( O ) as in nǒ: tòmê: 'one single person'. The noun does not drop tones, suggesting that the numeral here is really an adverbial, is appositional, or is treated like nonsingular numerals. The phrase dépán tòmô: (variant dépán tòmê:) 'one day' is used in narrative, as in English, to mean 'one ( $=$ a certain) day', generally when the narrative is re-set to a later time. Close siblinghood is expressed by the adverbial phrases nǐ: tòmê: '(having) one (=the same) mother' and bǎ: tòmê: '(having) one father', which are juxtaposed when both mother and father are shared. Although the numeral 'one' is obligatory, it may agree morphologically with a plural subject, as in predicative nǐ: tòmô: = y 'we (=you and I) are of the same mother'.

Irregularly related to the preceding are tòmá in e.g. mì tòmá 'I alone, I by myself', and adverb tómá ‘only' (§19.4.1).

### 4.7.1.2 ' 2 ' to ' 10 '

The single-digit numerals ' 2 ' to ' 20 ' are in (166). There is no difference between the forms used in counting ( ${ }^{\prime} 1,2,3, \ldots$ ) and those that modify a preceding noun.

| gloss | form | comment |
| :--- | :--- | :--- |
| '2' | nô:y |  |
| '3' | tà:ndî: |  |
| '4' | ké:jèy |  |
| '5' | nùmî: |  |
| '6' | kúlèy |  |
| '7' | swêy | phonetic [sộ̂j] |
| '8' | sá:gì: |  |
| '9' | twây | phonetic [tọâj] |
| '10' | píyélì |  |

Numerals greater than ' 1 ' follow the modified noun but do not induce tone-dropping. The noun takes its regular plural form. Thus pègè kúndé 'one sheep', but pègè-mbó nô:y 'two sheep', pègè-mbó píy $\ell$ lì 'ten sheep', etc.
4.7.1.3 Decimal units (' 10 ', ' 20 ', ...) and combinations ( ${ }^{\prime} 11$ ', ' 59 ', ...)

The decimal units (integral multiples of ' 10 ' up to ' 90 ') are in (167).
gloss form

| '10' | píyélì |
| :---: | :---: |
| '20' | pǒ:-nう̀ |
| '30' | pó-tà:ndî: |
| '40' | pòló-kéjèy, pòlć-kéjèy |
| '50' | pòló-nùmî: |
| '60' | pòló-kúlèy |
| '70' | pòló-swêy |
| '80' | pòló-sá:gì: |
| '90' | pòló-twây |

The mini-sequence ' $\mathbf{2 0}$ '-' $\mathbf{3 0}$ ' is based on pǒ:- or pó- plus the relevant digit, with nô:y ' 2 ' slightly reduced to -nう̀y (the vowel is shortened, and ATR-harmonized to the preceding vowel). The remaining terms are based on pòló- (dialectally pòlé-) plus the digit term, with '4'
 ' 30 ' and ' 80 ' is not shortened.

For ' 80 ', an alternative (and now archaic) form is $k \bar{\varepsilon}: s u ̌ m$. For speakers who use this, ' 90 ' is the somewhat opaque [kè:Sǔm má] ké píyélì, i.e. ' 80 ' plus ' 10 '.

The decimal terms, like the single-digit terms from ' 2 ' up, follow a modified noun (in plural form, without tone-dropping): pègè-mbó pòló-nùmî: 'fifty sheep'.

A decimal (or larger) term D combined with a single-digit term S takes the form [D sìgá S ]. In interlinears I will gloss sìgá as 'plus', but it occurs only in such numerals. When S is ' 1 ', it takes the form tómày. In ' 11 ' to ' 19 '. The forms taken by the D term before sìgá also differ somewhat from their independent forms, in that final semivowels are removed, and final long vowels are shortened or in one case ('50') deleted. In all cases, the final tone is $H$. The independent forms and those used before sìgá are shown together in (168). Examples are in (169).
gloss independent
with following sìgá (and digit)

| '10' | píyélì | pé: sìgá ... |
| :--- | :--- | :--- |
| '20' | pŏ:-nòy | pǒ:-nó sìgá... |
| '30' | pó-tà:ndì: | pó-tà:ndí sĭgá... |
| '40' | pòló-kéjèy | pòló-kéjé sìgá ... |
| '50' | pòló-nùmî: | pòló-nǔm sìgá ... |
| '60' | póló-kúlêy | pòló-kúlé sìgá ... |
| '70' | pòló-swêy | pòló-swé sìgá ... |
| ' 80 ' | pòló-sá:gì: | pòló-sá:gí sìgá ... |
| '90' | pōló-twây | pòló-twá sìgá ... |

a. pé: sìgá tómày
ten plus one 'eleven'

| b. | pòló-kéjé <br> ten-four <br>  <br> 'forty-five' | nùmî: |
| :--- | :--- | :--- | :--- |
|  |  | five |

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

The larger units are given in (170). For sǐp 'hundred', the final nasal tends to assimilate in position to a following consonant.
a. 'hundred'
sǐn (for currency often: té:mèndérè)
b. 'thousand' mùjú
c. 'million' mílyô: ${ }^{n}(<\mathrm{Fr})$
sǐn is felt to be the authentic Najamba term, but as in all Dogon languages in the DouentzaBoni areas the Fulfulde loanword té:mèndérè is also common with reference to currency. Fulfulde is still an important lingua franca in the large towns and in weekly markets.

These numerals behave like common nouns in that they may be followed by single-digit numerals in their regular forms: sǐn nô:y 'two hundred', mùjú tà:ndî: 'three thousand', mílyô: nùmî: 'five million'. When the sense is understood to be 'one hundred' or 'one thousand', the ' 1 ' numeral is typically omitted. For 'one million' the ' 1 ' numeral may be present or absent.

When an unmodified '(one) hundred' or '(one) thousand' is followed by a smaller numeral other than a single digit (as in ' 220 ' or ' 1200 '), the regular conjunctive particle má 'and' is added to the larger term (171a-b). This morpheme is not used when the larger-unit term is itself modified, as in 'two hundred' or 'five million' ( $171 \mathrm{c}-\mathrm{d}$ ).
a. [pègè-mbó sǐm má py̌:-nว̀y] jógò-m [sheep- Pl hundred and ten-two] have- 1 SgSbj 'I have one hundred twenty sheep.' (sǐy)
b. pègè-mbó mùjú má [š̌n nô:y]
sheep- Pl thousand and [hundred two]
'one thousand two hundred sheep'
c. pègè-mbó [sǐn nô:y] pó-tà:ndî:
sheep-Pl [hundred two] ten-three 'two hundred and thirty sheep'
d. pègè-mbó [mùjú nô:y] [š̌n tà:ndî:] sheep-Pl [thousand two] [hundred three] 'two thousand three hundred sheep'

The 'million' term mílyô:n, a loanword, does not easily enter into compactly expressed combinations of these types. Typically the 'million' term (with or without its own modifiers) and a numeral phrase denoting a lesser quantity are conjoined by má 'and'. If a modified noun is present, it is repeated.
[[pègè-mbó mìlyò: ${ }^{{ }^{\mathrm{L}}}$ kúndú] má] [pègè-mbó mùjú píyélì]
[[sheep-Pl million ${ }^{\mathrm{L}}$ one] and] [sheep-Pl thousand ten]
'one million, ten thousand sheep'

A single-digit add-on uses sìgá. When the higher numeral is also modified by a single digit ' 3 ' to ' 9 ' (as in ' 301 '), this single-digit term undergoes the same segmental modifications seen above in combinations of single-digits with decimal terms (e.g. '12', '57'). However, nô:y 'two' modifying 'hundred' or 'thousand' (as in '203' or '2006') does not undergo a segmental reduction. All single-digit terms preceding sìgá (including ' 2 ') end in an H-tone. For '(one) hundred/thousand’, má ‘and’ is used before sìgá. The paradigm of sǐn 'hundred' is presented in (173); that of mùjú 'thousand' is entirely parallel.

| (173) | gloss | independent | with following sìgá (and digit) |
| :---: | :---: | :---: | :---: |
|  | '100' | Sǐn | sǐm má sigá ... |
|  | '200' | sǐn nô:y | sǐn nó:y sìgá... |
|  | '300' | sǐn tà:ndî: | sǐn tà:ndí sìgá... |
|  | '400' | sǐn ké:jèy | sǐn ké:jé sìgá ... |
|  | '500' | sǐn nùmî: | sǐn nǔm sìgá ... |
|  | '600' | sǐn kúlèy | sǐn kúlé sìgá ... |
|  | '700' | sǐn SWêy | sǐn Swé sìgá ... |
|  | '800' | sǐn sá:gì: | sǐn sá:gí sìgá ... |
|  | '900' | sǐn twây | sǐn twá sìgá ... |

### 4.7.1.5 Currency

The local currency for several decades has been the West African CFA franc. In all native languages, amounts under a million francs are expressed in multiples of the 5 CFA unit (in some languages still called by a term such as "riyal" originally denoting a French-colonial coin not in use since Independence). In Najamba this currency unit is called kèlû: or, loaned from Fulfulde, m̀bú:dù. Both terms can also mean 'money'. kèlû: (Pl kělè) also means 'cowry shell(s)', which were formerly used as a kind of currency (and still used as decorations, and by fortune-tellers). Since 5 CFA is worth about one American penny, numeral phrases denoting currency sums are often quite large. One effect is that it is usually unnecessary to specify that one is talking about currency. Thus 100,000 CFA francs is expressed literally as "twenty thousand riyals" (cèlû: mùjú pǒ:-nòy), or more often as just "twenty thousand" (mùjú pǒ:-nòy), there being few other countable entities of this magnitude.

For sums beginning with $1,000,000$ CFA francs, expressions based on the French loan mílyô: ${ }^{n}$ are used. Here this noun denotes one million CFA francs, not one million riyals.

### 4.7.1.6 Distributive numerals

Distributives are adverbial in nature, specifying a spacing (in position or time) between more or less identical entities, which may express any grammatical relation in the clause. Distributives are expressed as iterations of numerals (174).
a. kúndú-kíndú jénjá
one-one take
'Take (them) one at a time (one by one).'
b. [yàwó: bé] tán-tán $W$-ô:
[woman.Pl Def.AnPl] three-three come.Pfv-3PISbj
'The women came three at a time (by threes).'

Some reductions occur in the forms of the numerals. For single-digit terms, the forms are those in (175). Note the uniform H-tones, and minor segmental reductions seen in other combining forms of these numerals. For ' 1 ', the distributive has distinct O and E forms depending on the noun class.

| gloss | form | distributive |
| :--- | :--- | :--- |
| ' | kúndé, kúndú | kúndé-kúndé, kúndú-kúndú |
| ' 2 ' | nô:y | nóy-nóy |
| '3' | tà:ndî: | tán-tán |
| '4' | ké:jêy | kéjé-kéjé |
| ' 5 ' | nùmî: | núm-núm |
| '6' | kúlêy | kúlé-kúlé |
| '7' | swêy | Swé-swé |
| ' 8 ' | sá:gì: | ságí-ságí |
| '9' | twây | twá-twá |
| '10' | píyélì | píyél-píyél |

Examples involving larger numerals are in (176) below. The main issue is how much of a complex numeral to repeat in the distributive. The distributive of ' 20 ' is either a full iteration based on the combining form pó:-nó (as used before sìgá in ' 21 ' through ' 29 '), or an interesting partial reduplication of the single-digit component only, where the reduplicant takes the combining form (-nó-) and the base takes the fuller form -nóy. The second alternative is most often used in connection with currency (i.e. items that are sold for ' 20 riyals', equivalent to 100 francs CFA each). Distributives for ' 30 ' through ' 90 ' are constructed by adding the respective single-digit distributive, from (174) above, to př:- or pı̀ló-. Distributives based on unmodified 'hundred' or 'thousand' involve stem-iteration with lexical tone melodies preserved. Distributives based on complex numerals containing the single-digit connective sìgá iterate only the following single-digit term, as in ' 35 ' in (176).

| gloss | form | distributive |
| :--- | :--- | :--- |
| '20' | pǒ:-nòy | pǒ:-nó-pǒ:-nó |
| pŏ:-nó-nôy (especially for currency) |  |  |
| '30' | pó-tà:ndî: | pó-tán-tán |
| '50' | pòló-nùmî: | pōló-núm-núm |
| '100' | sĭŋ | sǐn-sǐn |
| '200' | sǐg nô:y | sǐn nóy-nóy |
| '1000' | mùjú | mùjú-mùjú |
| '35' | pó-tà:ndí sìgá nùmî: | pó-tà:ndí sìgá núm-núm |

### 4.7.2 Ordinal adjectives

### 4.7.2.1 'First' and 'last'

'First' as ordinal adjective is dùlě: (E) ~ dùlǒ: (O). Like (other) modifying adjectives, but unlike numerals from ' 2 ' up, it forces tone-dropping on the noun. There is no difference between inanimate and animate.
a. pòlè ${ }^{\mathrm{L}}$ dùlě:
knife $^{\mathrm{L}} \quad$ first.InanE
'the first knife'.
b. pòl-mbò ${ }^{\mathrm{L}}$ dùlǒ:
knife-P1 ${ }^{\mathrm{L}} \quad$ first.AnPl
'the first knives'
c. $y$ è: ${ }^{\mathrm{L}}$ dùlě:
woman ${ }^{\text {L }} \quad$ first.InanSg.E
'the first woman'
d. yàwò: ${ }^{\mathrm{L}}$ dùlǒ:
woman. $\mathrm{Pl}^{\mathrm{L}} \quad$ first.AnPl
'the first women'
In complex numerals ending in ' 1 ', such as ' 21 ', the numeral tómây has an ordinal tòmà-ně: or tòmà-nǎ: (see the following section).

Adverbial 'first' as in 'we will finish the work first, then we will eat' is gǐrmà. A related form gìrngí: (pl gìrngú:) means 'first, in the lead (in a race or other competition)', cf. French en tête.
'Last' as ordinal (opposite to 'first' in a finite temporal sequence, or as in bringing up the rear in a competition) is bàndìgí:, plural bàndùgú:, regardless of animacy.
a. pòlè ${ }^{\mathrm{L}}$ bàndìgí:
knife $^{\mathrm{L}}$ last
'the last knife'
b. pòl-mbò ${ }^{\mathrm{L}}$ bàndùgú:
knife-Pl ${ }^{\text {L }} \quad$ last.Pl
'the last knives'
c. $y \grave{\varepsilon^{\prime}}{ }^{\mathrm{L}}$ bàndìgí:
woman ${ }^{\mathrm{L}}$ last
'the last woman'
d. yàwò: ${ }^{\mathrm{L}}$ bàndùgú:
woman. $\mathrm{Pl}^{\mathrm{L}} \quad$ last.Pl
'the last women'

### 4.7.2.2 Other ordinals with suffix -ně: (E)~ -nǎ: (O)

There are no animacy distinctions in ordinals. 'Second' (nòjě., nòjǒ:) is irregular, though the onset nò resembles the onset of other forms of ' 2 '.

Ordinals from 'third' up are based on a suffix -ně: (E) or -nǎ: (O). For animates, -nǎ: is plural. When the ordinal suffix is added to a single-digit stem, various minor segmental changes are observed. In a complex numeral phrase, the suffix is added to the final numeral stem.

The relevant stem drops its tones before the suffix. Tone-dropping applies to the entirety of tightly-knit decimal combinations, as in 'thirtieth', and it extends to the sìgá 'plus' linker in complex numerals ending in a single-digit term (' 11 ', ' 28 '). However, tone-dropping does not extend to decimal or larger terms at the beginning of complex numerals. Thus in 'eleventh', based on a cardinal numeral of the form 'ten plus one', the ordinal drops the tones of 'plus one' but not of "ten."
E agreement O agreement gloss
a. single-digit numeral

| nòjě: | nòjǒ: | 'second' |
| :--- | :--- | :--- |
| tàn-ně: | tàn-nǎ: | 'third' |
| kèjè-ně: | kèjè-nǎ: | 'fourth' |
| nùm-ně: | nùm-nǎ: | 'fifth' |
| kùlè-ně: | kùlè-nă: | 'sixth' |
| SWè-ně: | Swè-nǎ: | 'seventh' |
| sàgì-nč: | sàgì-nă: | 'eighth' |
| twà-ně: | twà-nǎ: | 'ninth' |
| pìyèl-ně: | pìyèl-nǎ: | 'tenth' |

b. decimal

| pò:-nòy-ně: | pò:-nòy-nă: | 'twentieth' |
| :---: | :---: | :---: |
| pò-tàn-ně: | pò-tàn-nǎ: | 'thirtieth' |
| pòlò-kèjè-ně: | pòlò-kèjè-nă: | 'fortieth' |

c. decimal plus single-digit numeral pé: sìgà tòmà-ně: pé: sìgà tòmà-nǎ: 'eleventh'
d. larger units (unmodified)

| tè:mèndèrè-ně: | tè:mèndèrè-nǎ: | 'hundredth' |
| :--- | :--- | :--- |
| sìn-ně: | sìn-nǎ: | 'hundredth' |
| mùjù-ně: | mùjù-nă: | 'thousandth' |

e. hundred plus decimal numeral (two levels) sǐn pò:-nòy-ně:
sǐn pò:-nòy-nǎ:
'hundred and twentieth'

## 5 Nominal and adjectival compounds

### 5.1 Nominal compounds

The formulae used in this chapter to quickly capture the structure of a compound type make use of the abbreviations n[oun], v[erb], a[djective]. "x" is a variable word-class (usually a noun or PP. Using x as a prop to exemplify diacritics, $\overline{\mathrm{x}}$ means lexical tones (i.e. no tone
 overlay. For example, the formula ( $\overline{\mathrm{x}} \overline{\mathrm{n}}$ ) means that the compound begins with a stem of variable word class with all tones dropped, and ends in a noun with its regular tones.

### 5.1.1 Compounds of type ( ( $\overline{\mathrm{x}} \overline{\mathrm{n}}$ )

The productive type of noun-noun compound is of this type, with $\{\mathrm{L}\}$-toned noun or less often a simple PP as initial, and with a final noun that shows its regular tone melody (181). The ${ }^{\mathrm{L}}$ superscript would be appropriate at the right edge of the initial, but I omit it here.
compound
gloss
components

| sùn-[kìná- $n g o ́] ~$ | 'bone behind ear' | súnù: 'ear' | kìná- $n g o ́ ~ ' b o n e ' ~$ |
| :--- | :--- | :--- | :--- |
| gìrò-gùjú | 'eyelid' | gìró 'eye' | gùjú 'skin' |
| kìnjà-gìró | 'nostril' | kìnjâ: 'nose' | gìro 'eye' |
| dàwà̀-tòndô: | 'ink gourd' | dáwà 'ink' | tòndôo: 'can (n) |

Either the initial or (less often) the final may itself be a compound.

$$
\begin{array}{lll}
\text { compound } & \text { gloss } & \text { components }  \tag{181}\\
\text { [nà:-pz̀gèlo::]-gìró } & \text { 'anklebone' } & \text { nă: 'foot', pg̀gèľ̌: 'hill', gìró 'eye' }
\end{array}
$$

The final syllable of the initial may be reduced, especially by shortening a long vowel. There are some examples of High-Vowel Syncope (§3.4.2.2). Neither process is obligatory in compounds. Presumably the established, high-frequency compounds are most likely to be reduced.

Similar compounds with tone-dropped initials are those with final verbal noun (§5.1.2), agentives with an added compound initial (§5.1.4), compounds with a final ending in suffix -n (§5.1.5), 'child' compounds (§5.1.6), and 'egg-beater’ type instrument nominals (§5.1.11). In some such cases the initial can be a short PP instead of a noun.

Since nouns also drop their tones before modifying adjectives, it is not always possible to distinguish a noun-adjective sequence from a noun-noun compound. There are several cases where a stem that allows nominal suffixation occurs in only one or two combinations with a
preceding $\{\mathrm{L}\}$-toned noun stem. This may make it impossible to determine whether the second element is a compound final or a postnominal adjective with narrow semantic range.

### 5.1.2 Compounds with final verbal noun, type ( $\mathrm{x} \overline{\mathrm{n}}$-lé )

A verbal noun with suffix -lé may take an $\{\mathrm{L}\}$-toned compound initial. This is a subtype of the (in $\overline{\mathrm{n}}$ ) compound type (preceding section). Usually the initial is a noun, denoting the object (182a) or occasionally the subject (182b). It may also be a simple PP (182c).
a. bàn ${ }^{\mathrm{L}}-[n a ́:-m-l e ́] ~$
horse ${ }^{\mathrm{L}}$-[drink-Caus-VblN]
'(time for) letting horses drink'
b. ùjùngò ${ }^{\mathrm{L}}$-[dén-lé]
$\operatorname{sun}^{\mathrm{L}}$-[fall-VblN]
'sunset'
c. [sùnù-mà $]^{\mathrm{L}}-[\eta u ́-l e ́]$
[ear-in] ${ }^{\mathrm{L}}$-[hear-VblN]
'what someone has heard'

Further examples can be found in the subsections of §17.4.

### 5.1.3 Possessive-type compounds of type ( $\bar{n}$ ǹ)

Compounds where the initial noun has its lexical tones ( $\overline{\mathrm{n}}$ ) and the final drops to $\{\mathrm{L}\}$ are identical in form to the sequence of possessor plus possessum. Compare English compounds like 'rabbit's foot' and 'pot of gold'.

$$
\begin{align*}
& \text { compound gloss components }  \tag{183}\\
& \text { gǒn }{ }^{\text {L }} \text { nìngè } \quad \text { 'okra sauce' gǒn 'okra' níngé 'green sauce' } \\
& \text { yógé }{ }^{\text {L }} \text { bà:nà: 'millet porridge' yógé 'millet' bà:nâ: 'porridge' } \\
& \text { [gìró dù:] }{ }^{\mathrm{L}} \text { kìnà- } \eta g o ̀ ~ ' c h e e k b o n e ’ ~ g i ̀ r o ́ ~ ' ~ d u ̀: ~ ‘ e y e-b a s e ' ~ k i ̀ n a ́-\eta g o ́ ~ ' b o n e ’ ~ ' ~ \\
& \text { pègèlô: ' } n o ̀: \quad \text { 'mountaineeer' pègèlô: 'hill' nǒ: 'person' }
\end{align*}
$$

In lexical elicitation, assistants sometimes gave this possessive-type compound first, then (in follow-up) rephrased the same combination as an ( $\overline{\mathrm{x}} \overline{\mathrm{n}}$ ) compound. For example, yógó ${ }^{\text {L }}$ bà:nà: could be glossed literally as 'porridge of millet' (cf. cream of wheat). It can easily evolve into yògè ${ }^{\mathrm{L}}$-bà:nǎ: .

### 5.1.4 Agentive compounds of type ( x г̌)

In an agentive compound (cf. basket-maker, rabbit hunter), the initial represents the NP theme, which would otherwise appear as a direct object in most cases. This noun appears in bare form and in L-tone, as in other noun-noun compounds. The final is a verb stem in agentive form (§4.2.3.5), with + ATR vocalism and $\{\mathrm{LH}\}$ overlay (the H appearing on the final syllable or mora).

The examples below involve bisyllabic verb stems. In (184a) the initial and final are unrelated in form. In (184b) the initial is a cognate nominal.

| agentive | gloss | noun | verb (chaining) |
| :---: | :---: | :---: | :---: |
| a. nàmà ${ }^{\mathrm{L}}$-sèmé | 'butcher' | nàmá 'meat' | sع́mé 'slaughter' |
| dòngò̀j ${ }^{\mathrm{L}}$-tìyé | 'basket-maker' | dòngòlô: 'basket' | tíyé 'weave' |
| òlè ${ }^{\text {L }}$-ònjé | 'house builder' | ólé 'house' | ónjé 'build' |
| kòrìyò ${ }^{\text {L }}$-sèmé | 'calabash-cutter' | kòríyò 'calabash' | sémé 'saw' |
| gàlà ${ }^{\text {L }}$-gàné | 'dye-er' | gàlá 'indigo' | gǎn 'put' |
| gùjù ${ }^{\text {L }}$-kòndé | 'tanner' | gùjú 'skin' | kóndé 'make well' |
| tè ${ }^{\text {L }}$-kèré | 'wood-gatherer' | té: 'firewood' | kéré 'search for (firewood)' |
| kèlè ${ }^{\text {L }}$-mìjé | 'cowry-tosser' | kělè 'cowries' | mìjí 'toss' |
| gè:jù ${ }^{\text {L }}$-tìyé | 'weaver' | gè:jú 'thread' | tíyé 'weave' |
| b. dàbàrù ${ }^{\text {L }}$-dàbé | 'magician' | dàbárù 'magic' | dàbí 'do (magic)' |
| dùgà ${ }^{\text {L }}$-dùgé | 'sorceror' | dúgô: 'sorcery' | dùgí 'do (sorcery)' |
| $\eta$ ¢ànà ${ }^{\text {L }}$-ŋwàné | 'singer' | jwànă: 'song' | nwăn 'sing' |
| mànà ${ }^{\text {L }}$-màné | 'cook' | mànâ: 'meal' | mǎn 'cook' |
| gòlè ${ }^{\mathrm{L}}$-gòlé | 'farmer' | gólè: 'farming' | gòlé 'do farming' |
| sàn ${ }^{\text {L }}$-sàné | 'Muslim' | sân 'prayer' | sán 'perform (prayer)' |
| jı̀no ${ }^{\mathrm{L}}$-jòŋé | 'healer' | jònǒ: 'healing' | jònć 'treat (the sick)' |

Such agentives have human or at least animate reference. The plural is therefore formed by suffixing -mbo. This suffix induces the shift of the preceding stem-final /e/ to $u$, as in gùjè-kòndú-mbó 'tanners' and kèlè-mìjú-mbó 'cowry-tossers'. The /u/ syncopates if it is preceded by an unclustered stem-medial sonorant, as in mànà-mǎn-bó 'cooks'. It is also syncopated when preceded by unclustered stem-medial $b$ (which fuses with the suffixal $m$ ), as in dàbàrù-dǎ-mbó 'magicians' from singular dàbàrù-dàbé. For the cases involving $b$, see the end of §3.4.2.2.

Examples based on monosyllabic verbs are in (185). In the plural, the verb appears as $C i ́-~ f r o m ~ C v ́ ~ s t e m s, ~ a n d ~ a s ~ C u ́-~ f r o m ~ C w v ́ ~ s t e m s . ~ T h e ~ v e r b s ~ h e r e ~ a r e ~ n \varepsilon ́ ~ ' d r i n k ' ~ a n d ~ t w e ́ ~ ' s l a s h ~$ earth to sow (seeds)'. The monomoraic shapes like ní- and tú- are too short to overtly bear a rising tone, so the tone simplifies to H .

| singular | plural | gloss |
| :--- | :--- | :--- |
| kj̀njè-né | kj̀njè̀-[ní-mbó] <br> twè-twě | 'drinker of millet beer' $[t u ́-m b o ́] ~$ | | 'sower of seeds' |
| :--- |

The verb stem may be trisyllabic, in which case the $\{\mathrm{LH}\}$ overlay is realized as L.L.H. Examples are sè:-ènìyé 'grain winnower' (plural sè:-èň̌y-mbó) and [nèmbìl-ngò]-nèmbìlé 'beggars (from another village)'. The verb may contain a causative or other derivational suffix: [sìyà-màlè]-[sìyà-mé] 'carpenter (who carves wood with a hatchet)', plural [sìyà-màlè]-[sìyă-m-bó], based on causative síyá-m\|sìyà-mè 'carve (wood)'.

In one example, the initial is a locative $\mathbf{P P}$, tone-dropped to $\{L\}$.
[kì:-mà ${ }^{\mathrm{L}}$-yé plural: [kì:-mà ${ }^{\mathrm{L}}$ - $[y i ́$ ímbó]
[head-in] ${ }^{\mathrm{L}}$-see.Agent
'diviner (including palm-reader)' (cf. kî: mà 'in/on the head', yé 'see')

Mediopassive suffix $-y \varepsilon \in-y$ is optionally omitted in the agentivized verb stem. For example, the cognate collocation yál yàli-yé 'take a stroll' can form a full-sized agentive yàl-yàlì-yé (plural yàl-yàlǐ-y-mbó ), or a simplified one yàl-yàlé (plural yàl-yàl-mbó). The other derivational suffixes (reversive, causative) are central to the sense of the verb and are not deleted: [òlè-gìrì]-[dàgì-lé] 'unlocker of doors’ from òlè gírì 'door' and reversive dàgì-lé 'unlock', òndò:-kwà:-mé 'feeder of children' from òndô: 'child' and causative kwá:-m 'cause to eat, feed'.

### 5.1.5 Compounds with final suffix $-n$, (ǹ $\hat{v}-n$ ) or (ì $\check{v}-n$ )

In (187), the compound denotes the location where the action occurs. The compound initial is $\{\mathrm{L}\}$-toned, and the nominalization with $-n$ has $\{\mathrm{LHL}\}$ overlay realized as $\mathrm{L}<\mathrm{HL}>$. The formula is therefore ( $\hat{n} \hat{v}-n$ ). The -n nominal has no plural.

$$
\begin{array}{lll} 
& \text { compound } & \text { gloss } \\
\text { a. } & \text { nàllò-[kànî-n] } & \text { 'conversation place' } \\
& \text { kèlèn-[kànî-n] } & \text { 'defecating place' }
\end{array}
$$

b. mànà-[mànî-n] 'kitchen' mànâ: 'meal', mǎn 'cook meal'
c. kòmbì-[dèbî-n] 'sanctuary in rocks' kòmbî: 'cave(s)', dèbé 'cover'
d. pùmèrè-[sànî-n] 'holy-day prayer place'
púmèrè 'community prayer on Muslim holidays', sán 'pray'
e. mòmè-[nà:-mí-ǹ] 'place for sacrifices’ mòmé ‘fetish', nǎ:-m 'cause to drink’

There are also uncompounded -n nominals like óbì-n 'place to sit', see (127a-b) in §4.2.3.3, but the tones are somewhat different.

In (188), the compound denotes a state. The initial is again $\{\mathrm{L}\}$-toned, but this time the nominalized verb has $\{\mathrm{LH}\}$ overlay with the final rise realized phonetically on the $-n$ suffix. For uncompounded abstractive nominals of this type, see (126) in §4.2.3.3.
a. kèndà-nàmǐ-n
'anxiety (waiting)' kéndà: 'heart', nǎm 'be ruined'
b. pèrè-dùmě-n 'being pampered' péré dùmé 'be pampered'

Possibly belonging here is à:lè-mǎ:n 'drought, dry spell'. The initial is clearly à:lé 'rain', and the final is obscurely related to mǎy 'hard'.

In òlè-súgí-n 'host (who lodges a visitor)', -súgí-n corresponds obscurely to súgó-ndí 'cause to go down' (with uncommon causative suffix -ndí), hence 'lodge, provide lodging for' (one "goes down" to one's home after the day's work).

### 5.1.6 Compounds of type 'X-child'

The uncompounded noun for 'child' has singular èndê: and plural òndô: . It is a common compound final with names of animal species, as in $p \grave{\varepsilon} g \varepsilon$-èndê.: 'sheep-child' (i.e. 'lamb') and kòr-èndê: 'chicken-child' (i.e. 'chick').

However, unlike the case in eastern Dogon languages, this term does not occur in Najamba compounds of the type 'baobab-child' to denote the fruit or other productive part of a tree or plant species. Instead, 'fruit of X ' is expressed using a distinct noun, òmô: 'fruit'. Likewise, 'child' compounds are not widely used to denote small objects paired with larger objects.

However, there are some (semi-)frozen nouns ending in ...ndê: (plural ...ndô:) or in ...ndô: (plural ...ndê:) that appear to have originated as 'X-child' compounds.

| singular | gloss | components or comments |
| :--- | :--- | :--- |
|  |  |  |
| nùmàndê: | 'small grindstone' | held in hand, used on large grindstone (nùngé ) |
| tùmàndô: | 'pestle' | synonym tùmmô:, used with mortars (túní:) |
| ogg̀̀ndê: | 'rich person' | òǵ 'chief' |
| bà:ndê: | 'rival' | bǎ: 'father' |
| púlàndê: | 'Fulbe person' | plural púlàndû: ~ púlàndô: |

Its original composite origin suggests why 'Fulbe person' is a rare /HLHL/-melody noun.

### 5.1.7 Compounds with 'man' (ánè) or 'woman' (yě:)

The uncompounded noun for 'man' is ánè ~ ánì (dialectal variants), plural án-à: . That for 'woman' is yě:, plural yàwó: . These forms are also used as adjectives following e.g. names of animals. For example, ně: denotes 'bovine, cattle', and may be specified for sex as $n \varepsilon ̀: ~ a ́ n e ̀ ~$
'bull' or $n \grave{\varepsilon}$ : ${ }^{\text {L }} y$ ž: ' 'cow'. Adult male livestock animals are usually described more specifically as 'castrated male' or 'uncastrated male'.

The nouns meaning 'man' and 'woman' may be modified by adjectives. Examples with 'woman' are yè: ${ }^{\text {L }}$ ká:bà 'full-grown woman with children (up to age 40)' and yè: ${ }^{\mathrm{L}}$ kùmî: 'unmarried woman' (plurals yàwò: ${ }^{\mathrm{L}}$ ká:bà-mbò, yàwò: ${ }^{\mathrm{L}}$ kǔm-bò). Compare àn ${ }^{\mathrm{L}}$ kùmî: 'unmarried man' (plural ànà: ${ }^{\text {L }}$ kǔm-bó). However, there are some combinations where 'woman' takes a special form yà- (in one case, yà:-) instead of yž: . Since yà- does not change in the plural, while yě: is replaced by yàwó: in the plural (even with a following adjective), yà- must be considered to be a dedicated compound initial, as opposed to an ordinary modified noun. At least two of the combinations have male equivalents, with invariant ànà- as the initial.


The compound finals -sílè, -yè, and -bû: in (190) above are not attested in other combinations. 'Old man' is ànè kúnjé:. For the 'widow(er)' terms, compare the verb pándí-lé '(man) marry (widow)'. For 'menstruating woman', compare pùnă: 'menstrual blood' and pùnàn-ólé 'house for menstruating women'.

### 5.1.8 'Owner of’ (dòmbǎ:)

The uncompounded noun 'owner' is dòmbǎ: (plural dòmbà-mbó). It occurs in (possessive) compounds of the type ' X 's owner', where X can be any NP (including a pronoun), as in mó ${ }^{\mathrm{L}}$ dòmbà 'his/her/its master' The singular is usually heard as ${ }^{\mathrm{L}}$ dòmbà with final short vowel. It is common in possessive-type compounds, as in ólé ${ }^{\mathrm{L}}$ dòmbà 'house owner' (plural ólé ${ }^{\mathrm{L}}$ dòmbà-mbò). Since the possessor noun (here 'house') has full NP form, its grammatical number varies independently of that of the 'owner' noun. Therefore 'house owner', 'house owners', 'houses owner', 'houses owners' are all possible, depending on how many structures and how many proprieters are involved. This is a possibility for possessive-type compounds but not for the ( $\overline{\mathrm{x}} \overline{\mathrm{n}}$ ) compound type where the initial is normally just a bare noun stem.

Further examples illustrating the range of usage follow. Those in (191a) are simple compounds with a preceding noun. In (191b) we have a similar compound that functions as an adjectival phrase, modifying a preceding $\{\mathrm{L}\}$-toned noun.
a. dàlídì ${ }^{\mathrm{L}}$ dòmbà 'one who commands respect' sònjǒ: ${ }^{\text {L }}$ dòmbà 'old-stock person' (from an old family in a village) dè-dégè ${ }^{\mathrm{L}}$ dòmbà
'fortune-teller who holds seances'
tó:rù ${ }^{\mathrm{L}}$ dòmbà
né:dì ${ }^{\mathrm{L}}$ dòmbà
'fetish-worshiper'
'mild-mannered person'
b. sàmbè ${ }^{\mathrm{L}}$ [dúgà: ${ }^{\mathrm{L}}$ dòmbà] 'spear with clanging attachments'

The nouns in (191) are dàlídì 'respectability, prestige', sònjǒ: 'village', dè-dégè 'idol, statuette', tó:rù 'fetish', né:dì ‘mild temperament, sàmbé 'spear', and dúgà: 'amulet'.

In (192), excerpted from (736) in the sample text, the compound initial is actually a verb form. For the generalized use of pseudo-1 Sg subject in anaphoric contexts, see §18.2.2.

$$
\begin{array}{lr}
\text {... [àybà-mbó-m̀ } & \mathrm{L} \text { dòmbà:] }=\grave{y}  \tag{192}\\
\ldots \text { [humiliate-Fut-LogoSbj } & \text { Lowner] }_{\text {Lot.is }} \\
\text { '(It's you who) are involved in humiliating } \ldots . .
\end{array}
$$

For dòmbâ-n 'the fellow', see §18.2.3 below.

### 5.1.9 Product-of-action compounds ('boiled eggs') (-bà:)

The initial in these expressions is a noun denoting a category of entities, in $\{\mathrm{L}\}$-toned form (as in noun-noun compounds and in noun-adjective sequences). The second element is a kind of adjective alluding to the process of making a particular kind of this category (compare English boiled eggs, fried eggs, poached eggs, etc.).

The most common construction is one where the verb takes its chaining form, i.e. the E-stem for verbs with -ATR $\{\varepsilon 0\}$ vocalism and the I-stem for those with +ATR $\{e o\}$. This is followed by -bà:, which functions as a unit morpheme. Historically at least, it is a participle of the past passive $=b-\grave{a}:=\grave{y}(\S 10.5 .1)$.

| tèngà:rè ${ }^{\text {L }}$ kóbé-bà: | 'large co | kóbé 'apply hide to' |
| :---: | :---: | :---: |
| sàbè ${ }^{\text {L }}$ kóbé-bà: | 'amulet' | kóbé 'apply hide to' |
| pùnè ${ }^{\text {L }}$ nè̀ź-bà: | 'sifted flour' | nè̀ż 'sift' |
| gòrù ${ }^{\text {L }}$ túpíné-bà: | 'embroidered skullcap' | túpíné 'embroider' |
| sàpùn ${ }^{\text {L }}$ màygí-bà: | 'soap ball' | màngí 'shape into balls' |
| sòlè ${ }^{\text {L }}$ jà̀ggí-bà: | 'cream of millet (type)' | jàngí 'pound with water' |
| solele ${ }^{\text {L a }}$ :n-bà: | 'cream of millet (type)' | ă:n 'cook in pot with oil' |
| yàlì ${ }^{\text {L }}$ bǐ:-r-bà: | 'field lying fallow' | $b$ bri:r- 'cause to lie down' |

If the entity denoted is countable, the plural is expressed by the noun, holding the -bà: form constant: sàbù: ${ }^{\text {L }}$ kóbé-bà: ‘amulets’.

In [sè: ${ }^{\text {L }}$ năm-bà:] ${ }^{\text {L }}$ pùnè 'ground millet cooked between two hot stones', the product-ofaction expression (sê: 'grains', năm 'grind') is morphosyntactically the possessor of púnè 'flour'.

### 5.1.10 Function-of-noun compounds ('water for drinking') (-mb-à:)

These expressions are of the type 'drinking water', i.e. 'water for drinking'. The verb denotes the action that the entity is intended for. The noun is $\{\mathrm{L}\}$-toned, and may be considered the head NP of a relative clause. The verb ends in -mb-à:, a participle-like ending that is closely related to present passive $-m b-a ̀:=y$ (§10.5.3). Consistent with this morphological association, the verb is in the $\mathbf{A} / \mathbf{O}$-stem. It has tonal formula $((\mathbf{X})) \mathbf{H}^{*}(\mathbf{L})$, i.e., there there is an obligatory H-tone, then a stem-final L-tone if another (final) syllable is available, and finally the lexical initial tone X is also expressed if there is another available mora at the beginning. Any remaining moras between the initial lexical tone and the stem-penultimate H-tone are also H. So the stem appears as H, HL, XHL, XHHL, etc., depending on prosodic structure.
a. sìrà ${ }^{\mathrm{L}}$ hámpà-mb-à: 'chewing tobacco'
b. sìrà ${ }^{\mathrm{L}}$ síngí-yò-mb-à: 'snuff (sniffing tobacco)'
c. ìngè ${ }^{L}$ ná-mb-à: 'drinking water'
d. ìngè ${ }^{\mathrm{L}}$ díyà-mb-à: 'bathing water'
e. sò- $g$ gò ${ }^{\mathrm{L}}$ gòrí-yò-mb-à: 'cloth head covering' (gòrí-y 'put on one's hat')
f . tàbà ${ }^{\mathrm{L}}$ námà-mb-à: 'tobacco for crushing'
(often pronounced tàbà ${ }^{\mathrm{L}}$ nâ:-mb-à:)
In the plural, only the initial noun changes: swè: ${ }^{\mathrm{L}}$ gòrí-yò-mb-à: 'cloth head coverings', plural of (194e).
tàbà ${ }^{\mathrm{L}}$ námà-mb-à: (variant tàbà ${ }^{\mathrm{L}}$ nâ:-mb-à:) 'tobacco for crushing' (194f) is distinct from the superficially similar tàbà ${ }^{\text {L }}$ nǎm-bà: 'crushed tobacco (for snuff or for chewing)', both from verb năm 'crush, grind'. The latter is a product-of-action compound of the type described in the preceding section.

### 5.1.11 Instrument-nominal compounds in -î: ('egg-beater')

For the main type of uncompounded instrument nominal ('steamer', 'covering', 'scrubber') with singular -í-ngò and plural -î., see (131) in §4.2.3.6. Compounds based on such nominals add an initial that denotes a common direct object of the relevant action (cf. egg-beater). The entire compound may function absolutely as a noun, or it may be an adjective modifying a noun that denotes the general class of objects, as in 'calabash for drawing milk'.

In elicitation, my primary assistant typically adjusted the grammatical number of the nominal initial to that of the compound, e.g. singular 'egg-beater' versus plural 'eggsbeaters'. He had some experience teaching French (and Dogon) grammar, and at times selfconsciously applied this "rule of grammar" in our vocabulary elicitation sessions. In less selfconscious speech, the nominal initial tends to be stable, taking singular or collective form for mass nouns, and plural or collective form for countable nouns.
a. ònjù ${ }^{\mathrm{L}}-\left[\right.$ dò $\left.\eta^{\mathrm{L}}-\hat{1}:\right]$
breast $^{\mathrm{L}}-\left[\right.$ put.under $\left.{ }^{\mathrm{L}}-\mathrm{Inst}\right]$
'bras' $^{(\mathrm{Sg} \text { ònjù }}{ }^{\mathrm{L}}-\left[\right.$ dǒy ${ }^{\mathrm{L}}-\varnothing$-gò] 'bra' $)$
b. [sà-gò $]^{\mathrm{L}}-\left[h a ̀: S^{\mathrm{L}}-\hat{1}:\right]$
[cotton-Sg $\left.{ }^{\mathrm{L}}\right]-\left[\operatorname{card}(\mathrm{v})^{\mathrm{L}}\right.$-Inst]
'cotton card(er)s (for carding ginned cotton)' (Sg [sà-gò] ${ }^{\mathrm{L}}$-[hà:s ${ }^{\mathrm{L}}$-í- $\eta g$ gó])
c. ìnè: ${ }^{\mathrm{L}}-\left[g i{ }^{\mathrm{L}}-\hat{1}:\right]$
ìnǒ: |lìně: 'tooth', gìjé 'brush'
tooth. $\mathrm{Pl}^{\mathrm{L}}$-[brush(v) ${ }^{\mathrm{L}}$-Inst]
'chewsticks' (stick used like toothbrush) (Sg ìnò: ${ }^{\mathrm{L}}-\left[g i \grave{j}{ }^{\mathrm{L}}-1\right.$ íngò̀ $\left.]\right)$

calabash- $\mathrm{Pl}^{\mathrm{L}} \quad \operatorname{milk}(\mathrm{n})^{\mathrm{L}}-\left[\operatorname{milk}(\mathrm{v})^{\mathrm{L}}-\operatorname{Inst}\right]$
'calabashes for milking' $\left(\operatorname{Sg} \ldots\right.$ èmè-[と̌m ${ }^{\mathrm{L}}-\varnothing$-gò] $)$
e. $\grave{\varepsilon} l \grave{\varepsilon}^{\mathrm{L}}-\left[\mathfrak{a}: n^{\mathrm{L}}-\hat{1}:\right] \quad$ ह́lé 'peanut', ǎ:n 'roast w. oil'
peanut. $\mathrm{Pl}^{\mathrm{L}}$-[dry.roast ${ }^{\mathrm{L}}$-Inst]
'pot for dry-roasting millet or peanuts (in a little oil)' (Sg $\left.\grave{\varepsilon} l \grave{\varepsilon}-\left[a ̆: n^{\mathrm{L}}-\varnothing-g o ̀\right]\right)$
Other examples from the lexicon, now shown in the singular: gòn-gò ${ }^{\mathrm{L}}$ ìnjè-[ $n^{\mathrm{L}}-1$ í- $\left.\eta g o ̀\right]$ 'waterjar for drinking water'), nà: ${ }^{\mathrm{L}}$-[tàmb ${ }^{\mathrm{L}}$-í-ngò̀] 'foot-pedal (for loom)', kòrìyò ${ }^{\mathrm{L}}$

 'stopper for closing gunpowder chamber', kà:bù ${ }^{\mathrm{L}} \operatorname{sàn}^{\mathrm{L}}-\left[s a n^{\mathrm{L}}-\varnothing\right.$ - $\left.g o ̀\right]$ 'mat for praying', kì: ${ }^{\mathrm{L}}-[t u \check{\eta}]^{\mathrm{L}}-\varnothing$ - $\left.g o ̀\right]$ 'pillow' ("head-rester-er", verb túng $\varepsilon^{\text {'rest }}$ [head]').

In [yèmbì-lè] ${ }^{\mathrm{L}}$-[yèmb ${ }^{\mathrm{L}}$-ú-ngò] 'square fan', yémbí-lé is the verbal noun of yèmbé '(to) fan', the verb that is the basis for [yèmb-ú-пgò].

In (196), the instrument compound (which by itself means 'straining basket for liquids') is the possessor of the class noun.

$$
\begin{array}{ll}
\text { ìngè̀ }{ }^{\mathrm{L}}-\left[\operatorname{sè} j^{\mathrm{L}}-\hat{i}:\right] & { }^{\mathrm{L}} \text { tèmè }  \tag{196}\\
\text { water }{ }^{\mathrm{L}}-\left[\text { filter }(\mathrm{v})^{\mathrm{L}}-\text { Inst }\right] & { }^{\mathrm{L}} \text { sieve }
\end{array}
$$

'water-filtering sieve' (íngé 'water', séjé ‘filter', témè ‘sieve')
In the case of gì:-pòlè ${ }^{\mathrm{L}}$ dàmb $^{\mathrm{L}}$ - $\hat{-1}$ : 'small harvesting knife (pushed into base of millet grain spike)', the semantic relationship is different. dàmb ${ }^{\text {L }}$ - 1 : 'pusher' can also be used by itself in the same sense. However, gì: ${ }^{\text {L }}$-pòlé 'harvest knife' does not denote the logical object (since the knife itself does the pushing). Instead, 'harvest knife' is the larger class of implements of which this is a type. In other words, it is a 'pushing harvest-knife', not a 'pusher of harvestknives'.

In the other type of uncompounded instrument nominal, - $\hat{i}$ : is the singular and plural suffix -mbò is added to it, see (132) in $\S 4.2 .3 .6$. above. This is uncommon as compound final,
but one example is attested (197). It has an interesting semantic shift, and may have originated as a euphemism.
(197) singular instrumental (component noun and verb)
tènd $\grave{\varepsilon}^{\mathrm{L}}-\left[k o ̀ m i l l^{\mathrm{L}}-\hat{1}:\right] \quad$ tèndé ‘shell', kómíl 'crack open'
shell $^{\mathrm{L}}$-[crack.open ${ }^{\mathrm{L}}$-Inst]
'scraper (for removing baby's excrement)'

### 5.1.12 Other nominal compounds

The compounds in (198) are somewhat opaque and do not fit any productive pattern.
a. mìsò:rò ${ }^{\mathrm{L}}$ tŏ:-mb-ò:
'simple head shawl (modern fabric)'
b. mìsò:rò-gì ${ }^{\mathrm{L}}$ tô:-mb-è:
$[=(\mathrm{a})]$
c. bà:-gò ${ }^{\text {L }}$ túb-á:
'staff (stick) with forked end'
Compounds (198a-b) have mìsó:rò 'head shawl' (< Fr mouchoir) as initial. The final looks like a frozen participle. No verb of this shape is in use, but my assistant suggested a connection with adverbial tô:-tô: ‘simple, plain'.
(198c) begins with bǎ:-gò 'stick, staff'. The final is a participle or adjective, related obscurely to the verb túbí-yé- 'lean on'.

### 5.2 Bahuvrihi compounds

Bahuvrihi compounds have meanings like 'four-footed' or 'fleet-footed'. They describe an individual or subset from a class ('person', 'animal', etc.) by characterizing or quantifying a body part or similar attribute. The bahuvrihi compound is by nature adjectival, but it may also be used absolutely, with the relevant class noun understood.

### 5.2.1 Noun-adjective bahuvrihi ("Blackbeard") compounds ( $\bar{n} \bar{a}$ )

In the bahuvrihi construction attested with adjectives, the attribute noun is followed by the adjective, both keeping their regular tones (instead of the noun dropping tones before the adjective). Agreement on the adjective is with the class noun (overt or covert), hence with 'person' in 'black-hearted (person)', not with the attribute noun ('heart'). Thus compare (199a) with kèndà: ${ }^{\text {L }}$ gém̀̀-ngò '(a) black heart' (plural kèndè: ${ }^{\mathrm{L}}$ gém̀̀ 'black hearts'), noting the tones and (in the singular) the agreement.
a. nò: ${ }^{\text {L }}$ kéndà:-gémè
person ${ }^{\mathrm{L}}$ heart-black
'cruel ("black-hearted") person'
b. tìngà ${ }^{\mathrm{L}}$ kî:-bánè
agama ${ }^{\mathrm{L}}$ head-red
'red-headed agama lizard'
c. èndè: ${ }^{\mathrm{L}}$ kî:-bìní:
child $^{\mathrm{L}}$ head-big
'big-headed child'
The plurals, respectively, are nò-mbò ${ }^{\mathrm{L}}$ kéndà:-[gê:-mbò] 'cruel persons', tìngà-mbò ${ }^{\mathrm{L}}$ kî:-[bân-bò] 'red-headed agamas', and òndò: ${ }^{\text {L }}$ kî:-[bǐn-bó] 'big-headed children'. The class noun ('person', etc.) and the final adjective agree, while the form of the attribute noun is unchanged from its form in the singular bahuvrihi.

Further examples: gùjú-gémè 'black-skinned one (African)', gùjú-bánè 'red-skinned one (white person)', sémbé-pàl̂e: 'having little strength (weak)', gòjí-màlê: 'having a firm body (energetic)', kìnjâ:-sèrê:' 'having a pointed snout', pò:lò ${ }^{\mathrm{L}}$ ibbí-wàyá: 'waterskin with wide mouth', [bí-pgán][nàmí-yè] 'of difficult nature' (one who is difficult to get along with); kî:-[măy-yè] ‘hard-headed’ (i.e., stubborn), dánà-bìní: ‘big-headed person', nă:-gòndé 'having bent leg(s, bowlegged'), nó:nò-nè:ndé: ‘unlucky, ill-fated', nó:nò-[něy-yè] 'fortunate, blessed with good fortune'.

### 5.2.2 Noun-numeral bahuvrihi ('four-footed') compounds (-mbé)

In another construction, attested in my data only with numerals, a suffix with agreement forms -mbé $(\mathrm{E})$ or -mb ó $(\mathrm{O})$ is added to the $\{\mathrm{L}\}$-toned sequence of the attribute noun and the adjective or numeral. I will gloss the suffix as 'having' in interlinears.
a. nà: ${ }^{\mathrm{L}}-k \hat{\mathrm{~L}} \dot{\mathrm{j}}{ }^{\mathrm{L}}$-mbé
foot ${ }^{\mathrm{L}}$-four ${ }^{\mathrm{L}}$-having
'quadruped, four-footed' (nă:, ké:jz̀y)
b. nè: ${ }^{\mathrm{L}}$ kì: ${ }^{\mathrm{L}}{ }^{\mathrm{L}}{ }^{\mathrm{n}}{ }^{\mathrm{L}}{ }^{\mathrm{L}}{ }^{-}$-mbé
cow $^{\mathrm{L}} \quad$ head ${ }^{\mathrm{L}}$-two ${ }^{\mathrm{L}}$-having
'two-headed cow' (kî:, nô:y; plural nàwò: ${ }^{\mathrm{L}}$ kì: ${ }^{\mathrm{L}}$-nòy ${ }^{\mathrm{L}}$-mbó)
As (200a) suggests, some numerals have a reduced form before the suffix in this construction. A final semivowel is dropped (' 7 ', ' 9 ', but not ' 2 '). A final short high vowel is dropped after an unclustered sonorant (' 10 '). A final long vowel is shortened (' 3 ', ' 8 '), or dropped after an unclustered sonorant ('5').

| gloss | numeral | 'having X head(s) |
| :---: | :---: | :---: |
| '1' | kúndé | kì: ${ }^{\text {L }}$-kùndè ${ }^{\text {L }}$-mbé |
| '2' | nô:y | kì: ${ }^{\mathrm{L}}$-nò ${ }^{\mathrm{L}}$-mbé |
| '3' | tà:ndí: | ki: ${ }^{\text {L }}$-tà:ndi ${ }^{\text {L }}$-mbé |
| '4, | ké:jèy | kì: ${ }^{\mathrm{L}}-k \varepsilon \grave{j}^{\text {c }}{ }^{\mathrm{L}}$-mbé |
| '5' | nùmî: | kì: ${ }^{\text {L }}$-nùm ${ }^{\text {L }}$-bé |
| '6' | kúlêy | kì: ${ }^{\text {L }}$-kùlè ${ }^{\text {L }}$-mbé |
| '7' | SWêy | kì: ${ }^{\text {L }}$-swè ${ }^{\mathrm{L}}$-mbé |
| '8' | sá:gì: | kì ${ }^{\mathrm{L}}$-sà: $\mathrm{gic}^{\mathrm{L}}$-mbé |
| '9' | twây | kì: ${ }^{\mathrm{L}}$-twà ${ }^{\mathrm{L}}$-mbé |
| '10' | píyélì | $k i$ : ${ }^{\mathrm{L}}$-pìyèl ${ }^{\mathrm{L}}$-mbé |
| '1000' | mùjú | kì: ${ }^{\text {L }}$-mùjù ${ }^{\mathrm{L}}$-mbé |

### 5.2.3 Noun-adverbial bahuvrihi compounds

A bahuvrihi may end in an adverbial phrase, including the adverbial particle $n \grave{\varepsilon}$ (§8.4.8.1). Such adverbials often have expressive adjective-like senses and may be used predicatively (with bò- 'be'). These bahuvrihis are often used in insulting and mocking expressions.
a. pùrmbě: [sòjí $\rightarrow$ nè] buttock [skinny Adv]
'one with skinny buttocks'
b. pùrmbě: [gèngìrí $\rightarrow$ nè]
buttock [tilted Adv]
'one with tilted buttocks'

## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

### 6.1.1 Linear order

The order of words within an NP is (203). Only one of the possessor slots (203a,e) may be filled. In (203f), usually only one determiner may occur, but the combination of definite plus quantifier may follow a demonstrative.
(203) a. possessor (NP or pronoun)
b. noun
c. modifying adjective(s)
d. cardinal numeral
e. pronominal possessor with possessive classifier
f. 1. demonstrative determiner
2. definite determiner
g. universal quantifier ('all' or 'each')

Examples are in (204). "Psm" (possessum) in interlinears indicates possessive classifiers.
a. [ḿn ${ }^{\mathrm{L}}$ bà $]$ òlè ${ }^{\mathrm{L}}$ gìndé: nô:y [1SgPoss ${ }^{\mathrm{L}}$ father] house ${ }^{\mathrm{L}}$ big two 'my father's two big houses' poss-n-adj-num
b. [òlè nò:y] ěy
[house two] those.Inan
'those two houses' n-num-dem
c. òlè ${ }^{\mathrm{L}}$ gìndé: dîn
house $^{\mathrm{L}}$ big each
'each big house' n-adj-quant
d. òlè ${ }^{\mathrm{L}}$ ěy $\quad$ yè ${ }^{\mathrm{L}}$ dîn
house $^{\mathrm{L}}$ these.Inan Def.InanP1 ${ }^{\mathrm{L}}$ all
'all these houses' n-dem-def-quant
chunked tonosyntactically as [òlè ${ }^{\mathrm{L}}$ ěy] plus [yè ${ }^{\mathrm{L}}$ dîn]
e. ánà: bé
man.Pl Def.AnPl
'the men' $n$-def
f. ànà: ${ }^{\mathrm{L}}$ măy-mbò bé
man. $\mathrm{Pl}^{\mathrm{L}}$ solid-Pl Def.AnPl
'the solid (=able-bodied) men' $n$-adj-def
g. òlè ${ }^{\mathrm{L}}$ gìndé: ké:jèy yé house $^{\mathrm{L}}$ big four Def.InanPl 'the four big houses' $n$-adj-num-def
h. òlè ${ }^{\mathrm{L}}$ gìndé: tà:ndî:
house.P1 big.InanPl three
$\left[\begin{array}{llll}m i ́ & y \grave{e}] & y e^{\mathrm{L}} & d i ̂ n \\ \end{array}\right.$
[1SgPoss Psm.InanP1] Def.InanP1 ${ }^{\text {L }}$ all 'all my three big houses'

There are two alternative positions for possessors. A nonpronominal possessor such as 'my father' in (204a) always precedes the possessum ('houses'). A pronominal possessor may either precede in bare form, as in [m ${ }^{\text {L }} b a ̀$ ] 'my father' itself in (204a), or follow with an attached animacy-number classifier that agrees with the possessum, as in (204h). To the extent that the classifier is still recognizably a noun-like word ('thing', 'critter'), in apposition to the main noun, the pronominal possessor can be said to still be prenominal.

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

An NP may be constructed with the central noun slot empty. This can happen when the lexical category (e.g. 'tree') is understood from previous discourse context or other shared knowledge, or when the lexical category is indefinite ('what is this?'). The NP may take the form of an adjective (205a), a determiner (205b), or a numeral (205c). However, adjectives and numerals often take a semantically light ontological noun ('person', 'thing','place', etc.) in similar contexts.

| a. | [gìndó: | kó] | dèm̀̀- $\varnothing$, |
| :--- | :--- | :--- | :--- |
| [big.InanSg.O | Def.InanSg.O] | fall.Pfv- 3 SgSbj |  |
| [mènjú: | kó] | íngà- $\varnothing$ |  |
|  | [small.InanSg.O | Def.InanSg.O] | stand.Stat- 3 SgSbj |

'The big one fell down, the small one is (still) standing.'
(after being asked how the two trees in the courtyard are doing after a windstorm)
b. ǒm nálé:, òmá: nálé: $=$ là- $\varnothing$

Prox.AnSg good.AnSg, FarDist.AnSg good.AnSg=it.is.not-3SgSbj
'This one is good, that one (over there) is no good.'
(two motorcycles)


### 6.1.3 Apparent bifurcation in relatives

In relative clauses, the main part of the head NP remains inside its clause but undergoes tonedropping. This internal head includes any possessors, modifying adjectives, and/or cardinal numerals. By contrast, any determiners and/or 'all' quantifiers that have scope over this NP are seemingly shifted to the position immediately following the (verbal) participle at the end of the relative clause.

This is best modeled by taking the relative clause to be part of the head NP prior to movement, inverting their apparent relationship (chapter 14).

### 6.1.4 Internal bracketing and tone-dropping

Tone-dropping to stem-wide $\{\mathrm{L}\}$ applies to a noun when followed by a modifying adjective or demonstrative.
a. $p \grave{\varepsilon} g \grave{\varepsilon}^{\mathrm{L}} \quad$ ǒm
sheep $^{\mathrm{L}} \quad$ this.AnSg
'this sheep' (< pègé )
b. $p e ̀ g \grave{\varepsilon}^{\mathrm{L}}$ nálé:
sheep $^{\mathrm{L}} \quad$ good.AnSg
'a good sheep'
c. $[p غ ̀ g \varepsilon ̀ ~ n a ̀ l \grave{\varepsilon}:]^{\mathrm{L}} \quad$ ǒm
[sheep good.AnSg] this.AnSg
'this good sheep' (<pègè ${ }^{\mathrm{L}}$ nálé: $)$
d. [òlè gìndè: $]^{\mathrm{L}}$ bán-gè
[house big.InanSg.E] ${ }^{\text {L }}$ red-InanSg.E 'a big red house' (< ólé, gìndé: )

In examples like 'this good sheep' (206c) and 'a big red house' (206d), there is no way to tell whether the rightmost word has induced simultaneous tone-dropping on both preceding words, or whether tone-dropping is cyclical (bottom-up), with each modifier inducing tonedropping on the adjacent element.

Tone-dropping does not apply to a noun before a cardinal numeral or before dîn as distributive quantifier ('each').
a. pègè-mbó nùmî: sheep-Pl five 'five sheep'
b. p $\grave{g} g \varepsilon \quad d i ̂ n$
sheep each
'each sheep'
When dîn as universal quantifier 'all' follows a noun with a definite marker, the marker but not the noun (or any intervening modifiers) drops tones. In (208a-b) this tonosyntactic grouping (chunking) is expressed by bracketing, but elsewhere I often omit the brackets. The 'all' quantifier also also controls tone-dropping on independent pronouns (§6.6.1).
(208)
a. pègè-mbó [bè ${ }^{\mathrm{L}}$ dîn]
sheep.Pl [Def.AnPl ${ }^{\text {L }}$
all]
'all (of) the sheep'
$\begin{array}{lll}\text { b. ólé } & \text { [yè }{ }^{\mathrm{L}} & \text { dîn] } \\ \text { house } & \text { [Def.InanPl } & \text { all] }\end{array}$
'all (of) the houses'

### 6.2 Possessives

There are two ways to construct a possessum with the meaning ' X 's Y ', when X is a pronoun ('my house', 'his goat'). In one, the possessor X (in its regular form) precedes the possessum Y , which drops its tones. The formula here is therefore $\left[\mathbf{X}^{\mathrm{L}} \mathbf{Y}\right.$ ], where ${ }^{\mathrm{L}}$ indexes tonedropping. In the second, the possessum Y comes first, in its regular form, followed by a possessed nominal classifier that agrees with Y in number and animacy. The formula is $\left[\mathbf{Y}_{\mathbf{i}}\left[\mathbf{X C l a s s}_{\mathrm{i}}\right]\right.$, where subscript " i " indicates number and animacy categories. The two constructions are exemplified in (209a-b), using $\eta g w e ̌$ : ‘dog'.
(209)
$\begin{array}{lll}\text { a. } & \text { mí } & { }^{\mathrm{L}} \text { !ggwè: } \\ & 1 \text { SgPoss } & { }^{\mathrm{L}} \mathrm{dog} \\ & \text { 'my dog' } & \end{array}$
$\begin{array}{lll}\text { b. } \begin{array}{ll}\text { ngwと̌: } \\ \text { dog } \\ \text { 'my dog },\end{array} & {\left[\begin{array}{lll}{[\text { mí }} & y \grave{\varepsilon}] \\ & & \end{array}\right]}\end{array}$

Only the type $\left[\mathrm{X}^{\mathrm{L}} \mathrm{Y}\right]$ is available when X is a nonpronominal NP. When Adjective-Numeral Inversion applies in an NP, even a pronominal possessor must be preposed, see §6.4.2.

### 6.2.1 Possessor precedes possessed [ $\left.\mathrm{X}^{\mathrm{L}} \mathrm{Y}\right]$

The possessor NP has its regular form, and appears to the left of the possessed core NP. The latter drops its tones (210a). If the core NP contains one or more modifying adjectives, all stems other than the final adjective are already tone-dropped, so the only audible tonedropping due to the possessor is that of the final adjective (210c). A cardinal numeral following the core NP is also tone-dropped under the influence of a possessor (210d). If a N -Adj or N -Num inner sequence is sandwiched between two controllers, such as a preceding possessor and a following demonstrative, the inner sequence is doubly condemned to tonedropping (210f). Any determiners and non-numeral quantifiers that follow at the end of an NP are not affected tonally by the presence of a possessor, though determiners are tone-dropped before dîn 'all' by a separate, local process. Possessums may end in a definite determiner agreeing with the head ( $210 \mathrm{~b}-\mathrm{d}$ ) but it is optional.
a. á:màdù ${ }^{\mathrm{L}}$ òlè
Amadou ${ }^{\text {L }}$ house
'Amadou's house' (< ólé )
$\begin{array}{lcl}\text { b. á:màdù } & { }^{\text {L }} p \grave{g} g \grave{\varepsilon} & \text { mó } \\ & \text { Amadou } & { }^{\text {L }} \text { sheep }\end{array} \quad$ Def.AnSg
$\begin{array}{llll}\text { c. á:màdù } & { }^{\mathrm{L}} \text { [òlè } & \text { gìndè:] } & \text { ké } \\ & \text { Amadou } & { }^{\mathrm{L}} \text { [house } & \text { big.InanSg.E] }\end{array}$ Def.InanSg.E
'Amadou's big house' (< òlè ${ }^{\mathrm{L}}$ gìndé:)
d. á:màdù ${ }^{\text {L }}$ [òlè nùmì:] yé
Amadou ${ }^{\text {L }}$ [house five] Def.InanPl
'Amadou's five houses' (< ólé nùmî:)
e. á:màdù ${ }^{\mathrm{L}}$ òlè [yè ${ }^{\mathrm{L}}$ dîn]
Amadou ${ }^{\text {L }}$ house.Pl [Def.InanP1 ${ }^{\mathrm{L}}$ all]
'all of Amadou's houses' (< á:màdù ${ }^{\text {L òlè yé }) ~}$
f. á:màdù ${ }^{\mathrm{L}}$ [òlè kùlèy] ${ }^{\mathrm{L}}$ ěy
Amadou ${ }^{\mathrm{L}}$ [house $\quad$ six] ${ }^{\mathrm{L}} \quad$ Prox.InanSg.E
'these six houses of Amadou's'

Kin terms are treated generally like other possessums (211a-c), but see $\S 6.2 .4$ below.
a. á:màdù $\quad{ }^{\mathrm{L}}$ nì:
Amadou ${ }^{\mathrm{L}}$ mother
'Amadou's mother'
$\begin{array}{llll}\text { b. á:màdù } & { }^{\mathrm{L}} \text { nèjì } & {\left[\text { mò }^{\mathrm{L}}\right.} & \text { dîn }] \\ & \text { Amadou } & { }^{\mathrm{L}} \text { uncle } & {\left[\text { Def.AnPl }{ }^{\mathrm{L}}\right.}\end{array}$ all]
'all of Amadou's uncles' (< á:màdù ${ }^{\mathrm{L}}$ nèjì mó )
$\begin{array}{llll}\text { c. á:màdù } & { }^{\text {L }} \text { [nèjì-mbò } & \text { nùmì:] } & \text { bé } \\ & \text { Amadou } & { }^{\text {L }} \text { [uncle-AnPl } & \text { five] }\end{array}$
'Amadou's five uncles (< nèjì-mbó nùmî:)

### 6.2.2 With possessive classifier [ $\left.\mathrm{Y}_{\mathrm{i}}\left[\mathrm{X} \mathrm{Class}_{\mathrm{i}}\right]\right]$

The possessive classifiers are listed in (212). They make the usual distinctions in nominal morphology: between singular and plural, between animate and inanimate, and (within inanimate singular) between O and E classes. Animate singular and inanimate plural are homophonous, as with adjectives and nouns.

Possessive classifiers

| animacy | singular | plural |
| :--- | :--- | :--- |
| animate | $y \grave{\varepsilon}$ | $b \grave{~}$ |
|  |  |  |
| inanimate. O | $g \grave{y}$ | $y \grave{\varepsilon}$ |
| inanimate.E | $g \grave{\varepsilon}$ | $y \varepsilon ̀$ |

At least $y \grave{\varepsilon}$ (in both functions) and g̀̀ are likely derived from simple nouns, reconstructed approximately as *kò 'thing (singular)' and *yè with two disjoint senses 'critter (singular)' and 'things (plural)'. There is comparative evidence for this in other Dogon languages. Najamba itself has the following (likely composite etymologically): kóngò 'thing', yèpà:bé 'things', yê: 'critter' (any animate being), and bómbò 'critters', cf. §4.1.3.1.

This construction is available as an option when the possessor is pronominal (see below for nominal possessors). Examples of each of the classifiers are in (213). I can find no sharp lexical restrictions on this construction. Inalienables (kin terms and body parts) may occur either in this construction $(213 \mathrm{~g})$ or with a preposed pronominal possessor, though the latter is preferred especially for core kin terms.

| a. | $p \varepsilon ̀ g \varepsilon ́$ | [ó |  |
| :---: | :---: | :---: | :---: |
|  | sheep. Sg | [2SgPoss | Psm.AnSg] |
|  | 'your-Sg sheep-Sg' |  |  |
| b. | pègè-mbó | [ó | boj] |
|  | sheep-Pl | [2SgPoss | Psm.AnPl] |
|  | 'your-Sg sheep-Pl' |  |  |



The shift of /dèlǎ:/ to dèlá: before H-toned mí in (213g) is by Word-Final <LH>-to-H Raising (§3.6.3.2).

The possessor pronominal is closely fused with the classifier phonologically, and the two could be transcribed as one word. In particular, the 5 or $\varepsilon$ of the classifiers obligatorily induces harmony on a mid-height vowel of the pronominal. This affects second and third person forms (214).
(214) category usual form before classifier

| 2 Sg | ó | ó |
| :--- | :--- | :--- |
| 2 Pl | é | $\varepsilon ́$ |
| 3 Sg | mó | mó |
| 3 Pl | bé | $b \varepsilon ́$ |

Other contractions also occur, but they are optional. The $/ \mathrm{y} /$ or $/ \mathrm{g} /$ of the classifier may lenite or disappear, resulting in optional contractions of the type /mó gò/ $\rightarrow$ phonetic [mô:] and /́́ $y \grave{\varepsilon} / \rightarrow$ phonetic [ $\hat{\varepsilon}:]$. 1Sg mí may drop its vowel and have its nasal assimilate, as in /mí gò/ $\rightarrow$ phonetic [ 1 gò].

Modifiers such as numerals and adjectives may follow the possessed noun, preceding the pronominal possessor (215).

| a. | pègè-mbó | nùmî: | $[0 ́$ |
| :--- | :--- | :--- | :--- |
|  | sheep-Pl | five | bò $]$ |
|  | 'your-Sg five sheep' |  |  |

```
b. pègè }\mp@subsup{}{}{\textrm{L}}\mathrm{ jध́mè [ó yè]
    sheep }\mp@subsup{}{}{\textrm{L}}\mathrm{ black [2SgPoss Psm.AnSg]
    'your-Sg black sheep-Sg'
```

Determiners, relative-clause participles, and/or universal quantifiers may follow the possessor (including the classifier). A demonstrative, like ǒm in (216a), or a relative clause as in (216b), has no audible tone-lowering effect on preceding words. This is presumably because any tone-lowering would be limited to the immediately preceding possessive classifier, which is always already L-toned. The demonstrative or relative clause cannot control tone-lowering on the pronominal possessor morpheme, or on the noun and any modifiers. Determiners are themselves tone-dropped before the universal quantifier by a local process (216b).
a. pègé [ó ỳ̀] ǒm
sheep [2SgPoss Psm.AnSg] this.AnSg
'this sheep-Sg of yours-Sg'
b. ólé tà:ndî: [mí yè] dèn-é: yé
house three [1SgPoss Psm.InanPl] fall.Pfv-Ppl.InanPl Def.InanPl
'my three houses that fell'
$\begin{array}{lllll}\text { c. pègè-mbó } & {[\text { [́n }} & \text { bò }] & {\left[b \text { en }^{\mathrm{L}}\right.} & \text { dîn }] \\ \text { sheep-Pl } & {[1 \mathrm{SgPoss}} & \text { Psm.AnPl }] & {\left[\text { [Def.AnP1 }{ }^{\mathrm{L}}\right.} & \text { all }] \\ & \text { 'all (of) my sheep' } & & & \end{array}$

A possessive consisting of NP or pronoun plus classifier may occur without an overt possessed noun. If the possessor is a nonpronominal NP, inanimate gò and $g \grave{\varepsilon}$ are realized with $k$ replacing $g$. An example is jěnjà kj̀ 'God's' in (763) in the sample text. This is further evidence that classifier gò is a reflex of *k̀̀ 'thing'. A pronominal example is $\sigma^{\text {g gò kó 'yours }}$ (definite)' in (463c) in §13.1.1.1 below, which includes definite kó.

For the use of these classifiers in predicates of the type 'Y is X 's (=Y belongs to X )', see §11.5.2.

### 6.2.3 Choice among possessive constructions

Only the $\left[x^{L} y\right]$ construction is available when the possessor is a nonpronominal NP. For pronominal possessor, the choice is as follows.

The classifier construction is avoided with a few basic kin terms, in which case only the [ $x^{L} y$ ] construction is in normal use (217a). Both constructions were readily elicited for body parts like 'foot' ( $217 \mathrm{~b}-\mathrm{c}$ ), with no discernible change in meaning, as well as for clearly alienable possessions like 'rope' (217d-e).
a. mí ${ }^{\text {L }}$ bà
1SgPoss ${ }^{\mathrm{L}}$ father 'my father'

| b. mí 1 SgPoss 'my foot' | $\begin{aligned} & \text { L } n a ̀:-g o ̀ ~ \\ & { }^{\text {L }} \text { foot-Sg } \end{aligned}$ |  |
| :---: | :---: | :---: |
| c. nà:-gó foot-Sg 'my foot' | $\begin{aligned} & {[m i ́} \\ & {[1 \mathrm{SgPoss}} \end{aligned}$ | $\begin{aligned} & \text { gə̀] } \\ & \text { Psm.InanSg.O] } \end{aligned}$ |
| d. mí 1 SgPoss 'my rope' | $\begin{aligned} & \text { L sì:-ngò } \\ & { }^{\text {L }} \text { rope-Sg } \end{aligned}$ |  |
| e. sǐ:-ŋgó rope-Sg 'my rope' | [mí [1SgPoss | $\begin{aligned} & \text { gə̀] } \\ & \text { Psm.InanSg.O] } \end{aligned}$ |

### 6.2.4 Possessed forms of kin terms

Most kin terms behave like other nouns in the relationship between absolute (unpossessed) and tone-dropped possessed forms. For example, bójò 'father's younger brother' occurs as possessum in mí ${ }^{\text {L }}$ bòjò 'my ...'.

Several kin terms end in a long $i$ : or a: in the absolute form that corresponds to a short vowel in the form with preceding possessor (218a). This is systematic, unlike the inconsistent phonetic shortening of final long vowels in other nouns in $\{\mathrm{L}\}$-toned possessed form. The 'great-grandparent' term (218b) keeps its long $\varepsilon$ : . There is no shortening in the monosyllabic noun 'cross-cousin' (218c).

|  | absolute | after possessor | gloss |
| :--- | :--- | :--- | :--- |
| a. nèjǐ: | L $n e ̀ j i ̀ ~$ | 'mother's brother' |  |
|  | sèjí: <br> pòbǎ: | ${ }^{\text {L }}$ Lè̀jì | pòbà |

For 'father' and 'mother', special possessed forms are in use. For all pronominal possessors, 'father' is reduced from bǎ: to ${ }^{\mathrm{L}}$ bà, and 'mother' is reduced from nǐ: to just ${ }^{\mathrm{L}}$ ǹ, which syllabifies with the pronominal. $1 \mathrm{Sg} m i{ }^{\mathrm{L}}$ bà 'my father' often reduces further to $m^{\mathrm{m}}{ }^{\mathrm{L}}$ bà. For 3 Sg possessor, in addition to forms with mó as possessor, parallel to those for the other pronominal persons, there are special alternative forms with suffix -ǹ after a long vowel, forming an $<$ LHL $>$ syllable, with no preceding pronominal possessor. After any nonpronominal NP, bǎ: 'father' and nǐ: 'mother' have their regular tone-dropped forms ${ }^{\text {L }}$ bà: and ${ }^{\mathrm{L}}$ nì: .

| (219) | gloss | absolute | 'my' | 'your' | 'his/her' | after NP (X) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 'father' | bǎ: | ḿ ${ }^{\mathrm{L}} b a ̀ \quad o ́ ~$ |  |  |  |

Examples of a possessed kin ('maternal uncle') without and with postnominal modifiers are in $(220 a-c)$. In (220c), either the possessor or the demonstrative would suffice to control tonedropping on 'uncle'.
a. á:màdù / mí ${ }^{\mathrm{L}}$ nèjì nè:ndé: (mó)
$\mathrm{A} / 1 \mathrm{Sg}$ uncle nasty (Def.AnSg)
'Amadou's/my evil uncle’ (< nèjǐ:, nè:ndé: )
$\begin{array}{llll}\text { b. á:màdù / mí } & { }^{\mathrm{L}} \text { nèjù-mbò } & \text { kúlèy } & \text { bé } \\ \mathrm{A} / 1 \mathrm{Sg} & { }^{\mathrm{L}} \text { uncle-AnPl } & \text { six } & \text { Def.AnPl }\end{array}$
'Amadou's/my six uncles' (< nèjù-mbó, kúlèy )
$\begin{array}{lll}\text { c. á:màdù / mí } & { }^{\mathrm{L}}{ }^{\text {nèjjì }}{ }^{\mathrm{L}} & \text { ǒm } \\ \mathrm{A} / 1 \mathrm{Sg} & { }^{\mathrm{L}} \text { uncle }^{\mathrm{L}} & \text { Prox.AnSg }\end{array}$
'this uncle of Amadou's/mine'

There are also a range of related forms. Related to 'father' are the vocative bâ: 'dad!', along with bàbâ:, a respectful vocative that may be addressed to any man. The father's brothers are called bà ${ }^{\mathrm{L}}$ gìndé 'big father' (elder than father) and bójò (younger than father), the latter term possibly containing a form of 'father' etymologically.

For 'mother' there is an alternative stem íyà, mainly vocative ('mom!'), but also occasionally used in reference: mí ${ }^{\mathrm{L}}$ ìà 'my mom'. The mother's sisters are referred to as númbò (elder) and j$\check{n}$ njò (younger).

### 6.2.5 Recursive and embedded possession

Recursion (stacking) of possessors is of course possible. All possessed nouns are tonedropped, leaving only the initial possessor tonally independent. A determiner (usually definite) may occur after any nonpronominal noun. Determiners are not subject to tonedropping except when followed by an 'all' quantifier.
a. [mó
${ }^{\text {L }}$ kòngò̀l]
${ }^{\mathrm{L}}$ bìrò:
[AnSgPoss ${ }^{\text {L}}$ honor] ${ }^{\text {L work }}$
'the work of his honor' (i.e. what he was obligated to do) (2005-1a)

| b. | [sěydù | ${ }^{\mathrm{L}}$ bà: | mó $]$ |
| :--- | :--- | :--- | :--- |
|  | $[\mathrm{S}$ | ${ }^{\mathrm{L}}$ father | Def.AnSg $]$ |${ }^{\mathrm{L}}$ òlè ${ }^{\mathrm{L}}$ house

One can argue about whether all of the stacked possessums are simultaneously tone-dropped by the highest possessor, or whether tone-dropping applies cyclically from the bottom up, e.g. to 'work' and then 'honor' in (221a). I prefer the one-step model, but there is no way to prove that cyclical tone-dropping is not possible.

### 6.3 Noun plus adjective

### 6.3.1 Noun plus regular adjective

The adjective follows the noun and forces the noun to drop tones. The noun is numbermarked as it would be by itself (recall, though, that inanimate singular suffixes -ngo, -go, -nge are optional in most contexts, and they are sometimes omitted on the noun when they are present on the adjective). The adjective agrees with the nominal categories of the noun, with the details depending on the morphological class of adjective (222b)

| singular | plural | adjective gloss |
| :---: | :---: | :---: |
| a. Sǐ:-ŋgó rope-Sg | sǐ: ropes |  |
|  | $\begin{aligned} & \text { sì: }^{\mathrm{L}} \text { nálé: } \\ & \text { š̌: }{ }^{\mathrm{L}} \text { gémè } \\ & \text { sǐ: } \end{aligned}$ | 'good' <br> 'black' <br> 'long' |

The combination of noun plus adjective(s) constitutes the core NP, which may be followed by a numeral and/or a determiner, and/or preceded by a possessor.

### 6.3.2 Adjective gàndí 'certain (ones)'

The adjective gàndí is used with countable entities in the sense 'certain (ones), some (as opposed to others)'. It typically occurs twice in parallelistic passages, translatable as 'some ..., (while) others ...'. For human reference the full noun-adjective sequence is of the type nò-mbò ${ }^{\mathrm{L}}$ gàndí 'certain people', with plural noun (nò-mbó 'people') in $\{\mathrm{L}\}$-toned form before an adjective. This is often simplified to just gàndí when the class of entities is already clear from preceding discourse (223).

| gàndí | ínà: | sèmǎ-mb-à, |
| :--- | :--- | :--- |
| certain.ones | goat.Pl | slaughter-Fut-3P1Sbj, |
| gàndí | pègè-mbó | sèmǎ-mb-à |
| certain.ones | sheep- Pl | slaughter-Fut-3P1Sbj |

'Some (people) will slaughter goats, while others will slaughter sheep-Pl.'
gàndí is not used to my knowledge in the singular sense 'a certain (individual)'. However, it may occur with what translates into English as a mass noun, to denote partitioned segments, in parallelistic constructions of the same type. I note that such "mass" nouns as 'millet' are readily pluralized in Najamba. See, for example, (448a-b) in §12.1.2.

```
[yògè \({ }^{\mathrm{L}}\) gàndí] sàngí kwǎ-mb-à: = ỳ,
[millet \({ }^{\mathrm{L}}\) some] now eat-Fut-Pass \(=\) it.is
gàndí bèjǒ-mb-à: = ỳ
some store-Fut-Pass \(=\) it.is
```

'Some of the millet will be eaten now, some (the rest) will be stored.'

Alternatively, gàndí may fail to control tone-dropping on the noun. In this case, we must take it as either an adverb, an appositional noun, or a numeral, since these elements do not control tone-dropping. In (225) below, lines 1 and 3, gàndí mà 'in certain (ones)' has no tonal effect on the preceding kéngè 'place'. The general point of the passage is that there used to be much vegetation by the roadside, so a solitary traveler had little protection. One might also translate gàndí mà as an adverb ('sometimes').

```
kéngèL [gàndí mà] [hâl nǒ: wé n\grave{c}]
place }\mp@subsup{}{}{\textrm{L}}\mathrm{ [certain in] [until person come then.SS]
[[ó \il] [dèmbù n\varepsiloń] [ìbŏ-\etagà=ỳ káná-l-\varnothing mé]
[[2Sg Acc] [surprise Adv] [catch-Fut.PplSbj=it.is do-PfvNeg-3SgSbj if]
kéngè [gàndí mà] yá-m=bà-l-ó:,
place [certain in] see-Pres=Past-PfvNeg-2SgSbj,
[pŭllò yà:] kùrè-\varnothing mé díndì
[twilight Foc] be.dense.Pfv-3SgSbj if all
```

'In certain places if a person came, if he didn't surprise you and catch hold of you (you wouldn't know he was there); in certain (other) places you didn't (couldn't) see (the person), if the twilight [focus] was dense (dark).' (2005-1a)

A similar textual example is (226). The /H/-toned dúmé: ‘animals' (variant dúmó: also possible here) is not tone-dropped.
(226) [dúmé: [gàndí bè ${ }^{\mathrm{L}}$ dîn] dòクg-â:] ìn-ó: mé [animal.Pl [certain Def.AnP1 ${ }^{\mathrm{L}}$ all] touch-Purp] go.Pfv-2SgSbj if 'if you went in order to touch any other (livestock) animals' (2005-1a)

### 6.3.3 Expansions of adjective

### 6.3.3.1 Adjective sequences

More than one modifying adjective may follow the noun within a core NP. The order of adjectives is partially predictable, with color and other material-related adjectives first, followed by size, then by abstract (e.g. evaluative) adjectives.
a. [gòn-gò
bàn-gò $]^{\text {L }}$
gìndó:
[waterjar-InanSg.O red-InanSg.O] ${ }^{\text {L }}$
big-Inan.Sg.O
'a big red (i.e. brown) waterjar'
b. [gòn-gò
[waterjar-InanSg.O
gìndò: $]^{\mathrm{L}} \quad$ nálá:
'a good big waterjar'
big-InanSg.O] ${ }^{\text {L }}$
good-Inan.Sg.O

In such sequences, only the final adjective has lexical tones (including at least one H -tone), while the preceding words are tone-dropped. There is no way to determine whether the final adjective forces tone-dropping simultaneously on all preceding words within the core NP (which I think is the best analysis), or whether tone-dropping applies cyclically, with each adjective forcing tone-dropping in turn on the preceding word.

Even the final word in the core NP may undergo tone-dropping due to wider morphosyntactic considerations, for example as head NP of a relative clause.

### 6.3.3.2 Adjectival intensifiers

Some expressive adverbials (§8.4.8) function semantically as adjectival intensifiers. Examples are in (228). Many are iterations (228a), unrelated to any lexical item.


| b. pépép | 'very full (to the brim)' | jòyó: 'full' |
| :--- | :--- | :--- |
| c. sébú-sébú | 'very lanky' | - |
| d. sém-sém | 'very sharply pointed' | sèmbô: 'pointed' |
| e. yómbù | 'very wet' | tèmbô: 'wet' |
| f. pèjéjé | 'very cold' | yégèlè 'cold' |
| g. lók | '(just) one' | see §4.7.1.1 |

These intensifiers are mainly used as adjuncts to predicative forms of the adjectives. They are more "colorful" semantically than the glosses suggest. For example lók in ( 230 g ) might be translated in context as 'one (lousy) _', as in 'he gave me one lousy dime'. pèjéjé in (230g) might be glossed 'bitterly (or freezing) cold', and so forth.

Like other expressive adverbials, these intensifiers do not normally combine with other words into phrases. They are basically adverbial, added to already complete sentences.

### 6.3.3.3 'Near X', 'far from X'

A predicate adjective (§11.4) 'near' or 'far, distant' may take a locative complement denoting the reference point.

| a. | [sònjó: | ké] | [pègèlô: | mà] | dŭm̀ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [village | Def.InanSg.E] | [hill | in] | near. 3 SgSbj |
|  | 'The village is near a/the (rocky) hill.' |  |  |  |  |



Such a locative complement is not commonly used with adjectives functioning as NP-internal modifiers.

### 6.3.3.4 'Good to eat'

In this construction, the adjective (e.g. 'good') is the predicate (§11.4). The action verb is expressed as a verbal noun with H-toned postposition má 'in'.
a. [bì:-ทgó
${ }^{\mathrm{L}}$ ̀̀mò:] [ónjí-lé má]
غ̀lú-m̀
[Sclerocarya-Sg ${ }^{\mathrm{L}}$ fruit] [suck-VbIN in] be.good-3SgSbj
'The fruit of Sclerocarya tree is good to suck.'
b. [sògólù: ${ }^{\mathrm{L}}$ bà:-gò] [támbí-lé má] măy
[Anogeissus ${ }^{\mathrm{L}}$ stick-Sg] [cut-VbIN in] hard.3SgSbj
'The wood of Anogeissus tree is hard to cut.'

This construction is not attested within an NP (?'a good-to-suck fruit').

### 6.4 Noun plus cardinal numeral

### 6.4.1 Noun (and adjective) plus cardinal numeral

The numeral 'one' is morphosyntactically an adjective. It therefore agrees in nominal features with the noun, and the noun drops its tones (231a). Other numerals do not agree with nouns, and do not interact with them tonosyntactically (231b).
a. gòn-gò
kúndú
waterjar-InanSg.O one.InanSg.O
'one waterjar'
b. gòné nùmî:
waterjar.Pl five
'five waterjars'
c. [gònè ${ }^{\mathrm{L}}$ bánè] nùmî:
[waterjar ${ }^{\mathrm{L}}$ red.InanPl] five
'five red (=brown) waterjars’

Numerals remain with the core NP in relative clauses ('the five waterjars that I left here'), rather than following the verbal participle (chapter 14).

### 6.4.2 Adjective-Numeral Inversion

In an indefinite NP consisting of noun-adjective-numeral, as in '(I have) three big houses', the order of elements is fixed (232):

| òlè ${ }^{\mathrm{L}}$ | gìndé: | tà:ndî: |
| :--- | :--- | :--- |
| house $^{\mathrm{L}}$ | big.InanP1 | three |

'three big houses'

When a demonstrative (233) or a preposed possessor (234) is added, the numeral and adjective optionally switch positions. An assistant rejected a version with a postposed pronominal possessor. Inversion also optionally occurs when the NP is head of a relative clause (235). We can think of demonstratives, possessors, and relative clauses as licensors of this inversion. These are also, along with modifying adjectives, the reference-restricting elements that regularly control tone-dropping on the noun and any intervening words in the

NP. In (233-235) the numeral is bolded in the interlinear to make the reordering easy to follow.
(233) with demonstrative
a. Lòlè
gìndè:
tà:ndì:] ${ }^{\text {L }}$
ěy
[house big.InanPl
three] ${ }^{\text {L }}$
Prox.InanPl
'these three houses'
b. [òlè
tà:ndì:
gìndè: $]^{\mathrm{L}}$
ěy
[house
three
big.InanPl] ${ }^{\mathrm{L}} \quad$ Prox.InanPl
[=(a)]
(234)
with preposed possessor

| a. | mí | ${ }^{\text {L }}$ [òlè | gìndè: | tà:ndì:] | (yé) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SgPoss | ${ }^{\text {L }}$ [house | big.InanPl | three] | (Def.InanPl) |
|  | 'my three houses' |  |  |  |  |

$\left.\begin{array}{lllll}\text { b. } & \text { mí } & \text { L} \text { [òlè } & \text { tà:ndì:] } & \text { gìndé: }\end{array}\right]$ yé $\begin{aligned} & \text { 1SgPoss } \\ & \\ & {[=(\mathrm{a})]}\end{aligned}$
(235) with relative clause
a. [òlè gìndè: tà:ndì:] dèn-ê: yé
[house big.InanPl three] ${ }^{\mathrm{L}}$ fall.Pfv-PplNonSbj.InanPl Def.InanPl
'(I see) the three houses that fell'
$\left.\begin{array}{lllll}\text { b. } & {[\text { òlè }} & \text { tà:ndì: } & \text { gìndè: }]^{\mathrm{L}} & \text { dèn- } \hat{\varepsilon} \text { : }\end{array}\right]$ yé $\begin{aligned} & \text { [house } \\ & \text { three } \\ & \text { big.InanPl }]^{\mathrm{L}}\end{aligned} \begin{aligned} & \text { fall.Pfv-PplNonSbj.InanP1 }\end{aligned}$
An assistant rejects (symbol \#) inversion when the only candidate for an inversion licensor is a definite marker, as in (236a-b) below. A minor, supporting role for definite marking in inversion is suggested by an assistant's comment that definite yé was required in inverted (234b) above, in addition to the possessor, but optional in uninverted (234a).
(236)
a. òlè ${ }^{\mathrm{L}}$ gìndè: tà:ndî: yé
house ${ }^{\mathrm{L}}$ big.InanPl three Def.InanPl
'the three big houses'
$\begin{array}{llll}\text { b. \# lòlè } & \text { tà:ndì: }]^{\mathrm{L}} & \text { gìndè: } & \text { yé } \\ \begin{array}{ll}\text { \# [house } \quad \text { three }] & \text { big.InanPl }\end{array} & \text { Def.InanPl } \\ & {[\text { intended sense }=(\mathrm{a})]} & & \end{array}$

### 6.5 Noun plus determiner

### 6.5.1 Prenominal kó

A prenominal kó could be interpreted morphologically as inanimate singular pronoun kó in possessor function, or else as inanimate singular near-distant demonstrative kó. In some examples, the kó itself appears to be nonreferential, or at least not clearly referential. As with a true possessor-possessed sequence, the head noun drops its tones.
(237) jěnjà [kó ${ }^{\mathrm{L}}$ jàm] [í $\quad$ gì] ǹdí-ná

God [InanSgPoss Lpeace] [1Pl Acc] give-Hort.3Sg
'May God give us the peace of that (i.e. that peace)' (2005-2a)

Since there is another kó that functions as inanimate postnominal demonstrative or definite marker, a determiner sandwich kó ${ }^{\mathrm{L}} \mathrm{N}$ kó is common (§4.4.3). See kó ${ }^{\mathrm{L}}$ yàrù kó 'that debt’ in (738) in the sample text, and kó ${ }^{\mathrm{L}}$ Sèmbè kó 'that strength' in (145a) in §4.4.3.

### 6.5.2 Postnominal demonstratives

For the paradigms of demonstratives, see $\S 4.4 .1$. A demonstrative may be used absolutely, i.e. by itself ( $\grave{g} g$ 'this one'), or it may follow a noun, core NP, or sequence of core NP plus numeral. In (238), we see that the demonstrative forces tone-dropping on the noun or adjective that precedes it. The noun or adjective is otherwise unchanged, and in particular it keeps its regular number marking, even though the demonstrative also includes number and agreement-class information.
a. gòn-gò ${ }^{\mathrm{L}}$ ŋ̀gú
waterjar-InanSg. $\mathrm{O}^{\mathrm{L}} \quad$ Dem.InanSg.O
'this waterjar'
b. gònè ${ }^{\mathrm{L}}$
ěy
waterjar. $\mathrm{Pl}^{\mathrm{L}}$
Dem.InanPl
'these waterjars'
c. [gòn-gò
[waterjar-InanSg.O
'this red waterjar'
$\begin{array}{ll}\begin{array}{ll}\text { bàn-gò }]^{\mathrm{L}} & \text { Ø̀gú } \\ \text { red-InanSg.O] }\end{array} & \text { Dem.InanSg.O }\end{array}$

In (239a), the demonstrative follows a noun plus numeral combination. The demonstrative controls tone-dropping simultaneously on the noun and the demonstrative. Without the demonstrative, both the noun and the numeral have regular tones, including at least one H-tone (239b).
a. [gònè nùmì:] ěy
[waterjar.Pl five] ${ }^{\mathrm{L}} \quad$ Prox.InanPl
'these five waterjars'
b. gòné nùmî:
waterjar.Pl five
'five waterjars'

When any NP containing a demonstrative functions as head NP of a relative, the demonstrative (like a definite marker) follows the verbal participle, and is therefore separated from the internal head NP, see $\S 14.2 .8$.

### 6.5.3 Definite morphemes

Definite markers are identical in form to near-distant demonstratives (§4.4.1). However, as definite markers, these morphemes do not control tone-dropping. Contrast the near-distant demonstrative in (240a) with the homophonous definite marker in (240b). The only difference is in the tones of the preceding noun.
a. bà:-gò ${ }^{\mathrm{L}}$ kó
stick-InanSg.O ${ }^{\text {L }} \quad$ NearDist.InanSg.O
'that stick (near you)'
b. bǎ:-gò kó
stick-InanSg.O Def.InanSg.O
'the stick'

A definite morpheme almost never co-occurs with a true postnominal demonstrative. The combination is attested only when the two are followed by an 'all' quantifier, see (204d) in §6.1.1 above. Examples like that probably involve chunking of a long NP into smaller portions, with the definite marker grouped and the quantifier constituting one chunk.

Definite markers are best thought of as weak demonstratives, "pointing" to preceding discourse or to shared knowledge.

### 6.6 Universal and distributive quantifiers

### 6.6.1 'Each X ' and 'all X' (dîn, kámà)

The invariant particle dîn may function as a distributive quantifier 'each' or as a universal quantifier 'all'. Plural personal pronouns, and postnominal determiners (definite and demonstrative), are elsewhere H-toned but drop to L-tone before dîn (241).
(241) category usual form with dîn
a. plural pronouns

| 1 Pl | í | $i^{\mathrm{L}}$ dîn |
| :--- | :--- | :--- |
| 2 Pl | é | $\grave{e}^{\mathrm{L}}$ dîn |
| 3 Pl | bé | bè ${ }^{\mathrm{L}}$ dîn |

b. plural near-distant determiners

| Def.AnPl | bé | bè ${ }^{\mathrm{L}}$ dîn |
| :--- | :--- | :--- |
| Def.InanPl | yé | yè ${ }^{\mathrm{L}}$ dîn |

Typical distributive examples are in (242). dîn is here added to the singular form of a countable noun, with no determiners.
(242)
a. nǒ: dîn
person each
'each person'
b. tìmô: dîn
tree each
'each tree'

Distributive dîn may be added to a possessed singular noun (243).

| $[[[e ̀ n d e ̂: ~$ | $[m i ́ n$ | $y \grave{~}]]$ | dîn $]$ | gì $]$ | bú:dì | ǹdè-ḿn |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $[[[$ child | $[1 S g P o s s$ | Psm.AnSg $]$ | each $]$ | Acc $]$ | money | give.Pfv-1SgSbj |

'I gave money to each of my children.'

In the universal sense 'all', dîn is typically added to a plural definite NP (or to a plural personal pronoun with specific reference). Recall that the Najamba counterparts of English mass nouns like 'sugar' are readily pluralizable.
a. nò-mbó
person-Pl [Def.AnPl ${ }^{\text {L }}$ dîn]
'everybody, all the people'
b. tìmê: [yè ${ }^{\mathrm{L}} \quad$ dîn]
tree.Pl [Def.InanPI ${ }^{\text {L }}$ all]
'all the trees'
c. súkàrà [yè ${ }^{\mathrm{L}}$ dîn]
sugar.Pl [Def.InanPl ${ }^{\mathrm{L}}$ all]
'all the sugar' (lit.: 'all the sugars')

See also (210e) 'all of Amadou's houses' and (211b) 'all of Amadou's uncles' in §6.2.1 above.

A distinction between universal ('all') and distributive ('each') readings is verified by pronominal-subject agreement. (245a) shows 3 Sg agreement and is therefore distributive, while ( 245 b ) shows 3 Pl agreement and is therefore universal.

b. [nò-mbó [bè ${ }^{\mathrm{L}}$ dîn]] [kó gì] dìmbì-y-à: [person-Pl [Def.AnP1 ${ }^{\text {L }}$ all]] [InanSg.O Acc] follow-MP.Pfv-3PISbj 'All of the people have followed (done) that.'

A purely distributive morpheme kámà 'any' is part of a very small number of fixed phrases with semantically light ontological nouns, which are always singular in form in this combination. The high-frequency forms are nò: ${ }^{\text {L }}$ kámà 'anyone' (nǒ: 'person') and the irregular kòn-kámà 'anything' (cf. kóngò 'thing'). The noun undergoes tone-dropping. An assistant rejected the combination of kámà with kéngè 'place'.

### 6.6.2 'No X'

Expressions like 'no children have died' where (in English) the negation combines with 'some/any' to produce a negative quantifier within the NP, are expressed in Najamba with a negative predicate following an NP with ordinary quantifier (e.g. 'one'). hâl 'even' (§19.1.4) may be added for emphasis ('not even').

| $[$ hâl | [èndè: ${ }^{\text {L }}$ | kúndé $]$ | tíbá-l- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| $[$ until | $\left[\right.$ child ${ }^{\mathrm{L}}$ | one.AnSg] | die-PfvNeg-3SgSbj |
| 'Not even one child (has) died.' $(=$ 'No child died' $)$ |  |  |  |

### 6.6.3 Universal quantifier combined with a numeral

A numeral may be followed by a definite determiner and then dîn. It is easiest to elicit such examples when no noun preceding the numeral is present.

| $[$ kúlèy | $\left[b \grave{c}^{\mathrm{L}}\right.$ | dîn $]]$ | tìb-à: |
| :--- | :--- | :--- | :--- |
| $[\operatorname{six}$ | $\left[\right.$ Def.AnP1 ${ }^{\mathrm{L}}$ | all $]]$ | die.Pfv-3P1Sbj |

'All six (people) died (were killed).'

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction ' X and Y ' $(\mathrm{ma} \rightarrow)$

In ordinary NP conjunction, both the left and the right conjunct are followed by the coordinator ma $\rightarrow$ 'and'. This particle adopts the phonological tone of the ending of the preceding word, but is subject to intonational modification of its pitch and duration. In allegro speech the intonational prolongation is not always heard.
(248) [ánà: mà $\rightarrow$ ] [yàwó: má $\rightarrow$ ]
[man.Pl and] [woman-Pl and]
'men and women'
For má (not prolonged) in composite numerals, see §4.7.1.4.
In several other Dogon languages, including Jamsay, ma $\rightarrow$ is the disjunction 'or' and can also function as clause-final polar (yes-no) interrogative. A more or less homophonous ma $\rightarrow$ (but likely with some intonational difference) still functions as a disjunction in Najamba ( $\$ 7.2 .2$ below). The clue as to whether conjunction or disjunction is at hand is that ma $\rightarrow$ 'and' follows NPs and similar constituents, while ma $\rightarrow$ 'whether?' (interrogative) is clausefinal and so follows predicates.

### 7.1.2 "Conjunction" of verbs or VP's

Verbs and VPs are "conjoined" by the various subordinating (loose chaining) mechanisms described in Chapter 15. See especially -mbò 'and (then)' (§15.1.3), sequential nè 'then’ (§15.1.5), and different-subject -n (§15.1.6).

### 7.2 Disjunction

### 7.2.1 'Or' (wàlá $\rightarrow$ )

The disjunctive particle wàlá $\rightarrow$ (a regional form ultimately from Arabic) intervenes between the two coordinands.
(249) a. ánà: wàlá $\rightarrow$ yàwó:
man.Pl or woman.Pl
'men or women'
b. kúndú wàlá $\rightarrow$ nô:y
one or two
'one or two'
c. [dènjà:jú má] nàmâ: wàlá $\rightarrow$ númbé kwá-njò-y
[evening in] meat or cow.peas eat-Pres-1P1Sbj
'In the evening we eat meat or cow-peas.'

### 7.2.2 $\mathrm{NP}($ and adverbial) disjunction $(\ldots m a \rightarrow$, wàlá $\rightarrow)$

Two constructions are available. In one, which is closely related to the form of polar interrogatives (§13.2.1.2), the particle $m a \rightarrow$ 'whether?' with intonational prolongation is added to the end of the first option. The particle has no intrinsic tone in this function, but typically adopts the preceding tone, which may then be modified or overridden phonetically by intonational pitch raising or lowering (transcription: mà $\rightarrow^{\dagger}$ or mà $\rightarrow^{\dagger}$ after an L-tone, má $\rightarrow^{\dagger}$ or má $\rightarrow^{+}$after an H-tone. In some examples it has a falling pitch not unlike the dyingquail intonation of Jamsay and Togo Kan (transcription: mâ $\rightarrow$, roughly equivalent to ma. $\therefore$ in those languages). I have noticed this pitch pattern when the 'whether?' disjunction functions like a subordinated clause; see (650) in $\S 17.4 .5$ ('I forgot that ...'), (653) in §17.4.7 ('I'm afraid that ...'), and (500a-b) in §13.2.5.

Idiosyncratic intonational patterns would help distinguish this disjunctive function of $m a \rightarrow$ 'whether?' from the more or less homophonous 'and' conjunction (§7.1.1). However, the risk of confusion is low, since the 'and' conjunction follows nonpredicative constituents, usually NPs, while disjunctive $m a \rightarrow$ occurs clause-finally after predicates.

In (250a), ma $\rightarrow$ is repeated after the second option (such repetition is optional). In this case, the pitch may be lower on the final $\mathrm{ma} \rightarrow$ regardless of phonological tone, since a sharp final pitch drop serves to indicate finality. In (250b), ma $\rightarrow$ occurs at the end of the first option, and is followed by (always low-pitched) mà $\rightarrow$ 'or' at the beginning of the second option.

'(Do you want) cooked rice, or millet cakes (with sauce)?'
b. [móttì mà nà:-mbó-ỳ mà $\rightarrow^{\dagger}$,
[Mopti in] spend.night-Fut-1PlSbj whether?,
$m a ̀ \rightarrow \quad$ [ségù mà $]=y ̀$
or [Segou in]=it.is
'We will stop for the night in Mopti or in Segou.'

For more complex constructions where $m a \rightarrow$ is embedded under a higher clause, cf. English whether, see $\S 16.3$ (willy-nilly conditionals) and $\S 17.4 .7$ ('be afraid that ...').

The disjunction wàlá $\rightarrow$ 'or' may also be inserted between the two disjunctive options (251). This is a local variant of a regionally widespread form of Arabic origin.
(251) [[bà:ná: ${ }^{\mathrm{L}}$ dòmbà] wàlá $\rightarrow$ túmbílé] y-ǒ: mé, yóbá [[outback ${ }^{\mathrm{L}}$ owner] or hyena] see.Pfv- 2 SgSbj if, run.Imprt 'If you-Sg see a lion or a hyena, flee!'

### 7.2.3 Clause-level disjunction

In an interrogative asking whether X or Y (two usually incompatible propositions) is true, $m a \rightarrow$ may appear as a disjunctive particle at the end of the first clause. The regular interrogative particle ló may appear at the end of the entire sequence.
(252) [ŋ̀gí nù:] [ín mà] kóndò- $\varnothing \quad$ mà $\rightarrow^{\dagger}$
[Prox.InanSg.E now] [1Sg Dat] be.done.well.Stat-3SgSbj or
kóndò-ndí- $\varnothing$ ló
be.done.well-StatNeg-3SgSbj $\quad \mathbf{Q}$
'Is this done well for me now, or is it not done well?' (2005-1a)

## 8 Postpositions and adverbials

### 8.1 Accusative gì and all-purpose postposition mà~ má

### 8.1.1 Accusative gì

Direct object NPs (animate or inanimate) and pronouns may be followed by accusative casemarker gì. It is optional but rather common. Although grammatically a (structural) case marker, it patterns morphosyntactically as a postposition, appearing just once, after an NP (pronominal or otherwise).

| a. [[dôm | kó] | gì] | dàmá-m̀ |
| :---: | :---: | :---: | :---: |
| [[speech | Def.InanSg.O] | Acc] | speak-Fut.3SgSbj |
| e w | k the word | 05 |  |

b. [[nǎ: ó gə̀rè=b-غ̀: ké] gì]
[[foot 2 SgSbj stretch.Pfv=Past-PplNonSbj.InanSg.E Def.InanSg.E] Acc] bìndí nè turn then.SS
'having turned (shifted) the part (edge of the blanket) where you had stretched out your legs, ...' (2005-1a)
c. $[o ́ \quad$ gì $]$ nògè- $\varnothing$ díndì
$[2 \mathrm{Sg}$ Acc] discourage.Pfv-3SgSbj all 'if it discouraged you' (2005-1a)

In combination with pronouns, /gì/ may be reduced to ì (or less), and the difference between its (reduced) presence and absence is phonetically subtle. This is especially true of 1 Sg [mí gì] and 1Pl [í gì], where elision of the /g/results in a falling-toned form, phonetic [mî:] or [î:], which in allegro speech simply shade into the unmarked pronominal forms míand í.

Accusative gì rather than dative mà is regularly used to mark the recipient of 'give'.
a. jěnjà jâm [í gì] ǹdí-ná
God peace [1Pl Acc] give-Hort. 3 Sg
'May God give us peace!' (2005-1a)
b. jěnjà ùsfǒ: [dòmbâ-n gì] ìdá:-1-Ø mé tán ノ

God path [fellow Acc] give-PfvNeg-3SgSbj if only 'If God hasn't given the path to the fellow' (2005-1 a)
c. [[[ó ${ }^{\text {L }}$ kèndà:] mà ònd-ó:] sàgù $]$
[[[2SgPoss ${ }^{\text {L heart] in] not.be-PplSbj.InanSg.O] responsibility] }}$
[nŏ: gì] ǹd-ó: mé $\quad$ mes
[person Acc] give.Pfv- 2 SgSbj if
'if you have given the responsibility (right to speak) of what is not in your heart to a person' (2005-1a)
gì also occurs with gìné 'say' and dă:ndí 'tell'.
a. [[nò: ${ }^{\mathrm{L}}$ kúlmá] gì] dôm dámá gìn-à: mé [[person ${ }^{\text {L }}$ elder] Acc] speech speak.Imprt say.Pfv-3PlSbj if 'if they tell (ask) an elder to speak' (2005-1 a)
b. [í gì] dá:ndí-lé kóл, gày-nô:-wò:
[1Pl Acc] tell-VblN Def.InanSg.O, delay-Proh-Hort.3Pl
'May they not neglect (delay) to tell us (the information)!' (2005-1a)
However, the pragmatic equivalent of an indirect object of 'say' is usually expressed as a vocative at the beginning of the quotation itself. Instead of 'I said to him: jump!', the usual Najamba pattern is 'I said: (hey) So-and-So, jump!'.

### 8.1.2 Locative-instrumental postposition mà and variant má

The most common and structurally basic variant is mà (§8.1.2.1) An H-toned variant má occurs under some conditions (§8.1.2.2).

### 8.1.2.1 L-toned mà

The L-toned variant is used after all words or particles ending in an L-tone, and after many that end in an H-tone: all determiners (definite morphemes, demonstrative pronouns), basic spatial terms (e.g. bàndí 'rear', gǐr 'front'), human and animal terms (e.g. nǒ: 'person', yě: 'woman'), and some others.
ólé 'house' is H-toned, but the final syllable is low in ólè mà 'at home'. This is reminiscent of the more pervasive "tonal locative" of Jamsay, except that in Jamsay the tonal change by itself is sufficient to mark the form as a locative adverb phrase. In Najamba, this tone shift does not apply to bà:-ólé 'native village' (lit. "father-house"), the locative of which is bà:-ólé má with H-toned má.

In the spatial domain, this very common postposition can be used in static locative, allative, and ablative functions. It is also used in dative-benefactive ('for, to') and instrumental function ('by means of'). In other words, it is an all-purpose postposition. It is not unusual to have two or more PPs with this postposition in the same clause, in different functions (256).
[ké mà] [mó mà] kòndó-m̀
[InanSg.E in] [AnSg Dat] be.good-Fut.3SgSbj
'It will be good for him in that place.' (2005-1a)
'For him' in (256) illustrates the dative-benefactive function. This applies to optional benefactives that can be added to a wide range of verbs. The recipient of 'give' and the addressed recipient of 'say', by contrast, are accusative (§8.1.1).
mà has static locative function 'in, at' in (257a-d).
(257)
a. [dǎy
mà $] \quad b-\varepsilon$ :
[well(n) in] be-3P1Sbj
'They are at the well.'
b. [ìgállù mà] bíró: dùmè-ḿ
[city in] work(n) get.Pfv-1SgSbj
'I found work in the city.'
c. [[mí ${ }^{\mathrm{L}}$ gò̀jì $]$ mà $]$ péndé bô:- $\varnothing$
[[my ${ }^{\text {L }}$ body] in] sore.Pl be-3SgSbj
'There are sores on my body.' (gòjí)
d. tìngá [[òlè ${ }^{\mathrm{L}}$-gègèlé ké] mà] ínò-njò- $\varnothing$
agama [[house ${ }^{\mathrm{L}}$-wall Def.InanSg.E] in] go.Pres-3SgSbj
'The agama lizard is climbing on the wall.'

See also the more explicit 'inside (X)' compositve postposition [ $[X$ kùl] mà] in §8.2.1 below. Speakers often preferred this fuller construction to translate 'in (a house, a recipient, etc.)'.

With a human complement, in spatial contexts mà means 'in the presence of' or 'at the house of', cf. French chez.

| $[[m i ́$ | ${ }^{\mathrm{L}}$ ̀̀ $]$ | mà $]$ | sùgò-mbó-m̀ |
| :--- | :--- | :--- | :--- |
| $[[1 \mathrm{SgPoss}$ | ${ }^{\mathrm{L}}$ mother $]$ | in $]$ | go.down-Fut-1SgSbj |

'I will go down (spend the night) at my mother's.'

Allative function, in conjunction with a verb of motion like 'go' or 'run', is expressed by the same postposition mà. The vectorial element is contributed by the verb, not by the postposition, which I continue to gloss simply as 'in'.
a. [dúmánsá mà] ínò-njò- $\varnothing$
[Douentza in] go-Pres-3SgSbj
'He/She is going to Douentza.' (<dúmánsâ)
b. [[mí ${ }^{\mathrm{L}}$ sònjò:] mà] ìnè-ı́n
[[1SgPoss $\quad{ }^{\text {L village }}$ in] go.Pfv-1SgSbj
'I went to my village.'

The same postposition can be used in what translates as ablative function ('from X '). This requires a verb like 'go out'. Again, it is the verb (not the postposition) that contributes the vectorial element.
a. [[mó ${ }^{\mathrm{L}}$ sònjò: $]$ mà $]$ gwè- $\varnothing$
[[3SgPoss ${ }^{\text {L village }] ~ i n] ~ g o . o u t . P f v-3 S g S b j ~}$
'She exited from (=left) her village.'


Several composite spatial postpositions described in the sections bellow include mà in one of these spatial contexts, along with what was originally a noun, cf. English in front of, in back $o f$, etc.

Instrumental (and related) senses occur in sémbé mà 'by force' and in (261).

| té:- ngó | [[gùlâ: | mó] | mà $]$ | $k \varepsilon ̀ j \varepsilon ̀-\varnothing ~$ |
| :--- | :--- | :--- | :--- | :--- |
| wood-Sg | $[[\mathrm{ax}$ | Def.AnSg $]$ | with $]$ | cut.Pfv-3SgSbj |

'He/She cut the (piece of) wood with the ax.'

Temporal readings ('during') occur mainly with subordinated clauses, as in the 'since ...' construction (§15.2.5).

### 8.1.2.2 H-toned má

In most combinations involving just an inanimate noun and the postposition (without an intervening modifier or determiner), if the noun ends in an H-tone, the postposition takes H-toned form má. Evidently the final H-tone (idiosyncratically) spreads from the noun into the postposition. Some of the examples are common phrases similar to English in town, (diplomatic register) in country, (British) in hospital, etc. In the subset of these cases where a nonmonosyllabic noun ends in an $<\mathrm{LH}>$-toned long vowel, the tone is flattened as H -tone by Word-Final $<\mathrm{LH}>$-to-H Raising (262b).
gloss noun with má gloss with má
a. noun with final H -toned syllable

| 'market' | ébán | ébán má | 'at/to (the) market' |
| :--- | :--- | :--- | :--- |
| 'outback' | kéré | kéré má | 'in/to the outback' |
| 'evening' | dènjà:jú | dènjà:jú má | 'in the evening' |
| 'night' | nám | nám má | 'at night' |
| 'daytime' | dénán | dénán má | 'in the daytime' |
| 'courtyard' | bándá | bándá má | 'in/to the courtyard' |
| 'force' | sémbé | sémbé má | 'by force' |
| 'knife' | pòlé | pòlé má | 'by means of a knife' |


| 'fan' | pèndú | pèndú má | 'by means of a fan' |
| :--- | :--- | :--- | :--- |
| 'skin' | gùjú | gùjú má | 'by means of a skin (hide)' |
| 'eye' | gìró | gìró má | 'by means of the eye(s)' |

b. noun with final $<\mathrm{LH}>$-toned syllable

| 'village' | sònjǒ: | sònjó: má | 'in/to the village' |
| :--- | :--- | :--- | :--- |
| 'garden' | bòrǒ: | bòró: má | 'in/to the garden' |
| 'bowl' | gùmbǎ: | gùmbá: má | 'in/to the bowl' |
| 'road' | ùsfǒ: | ùsfó: má | 'in/to the road' |
| 'street' | pèmbě: | pèmbé: má | 'in/to the street' |

It is difficult to find examples with a final $C \check{v} C$ or $C v: C$ syllable, to test whether the presence of the final consonant blocks Word-Final $<\mathrm{LH}>$-to-H Raising. In the few examples tested, the rising tone did not level out to H . In the complex number [kè:Sǔm má] ké píyélì ' 90 ', from kè:sǔm ' 80 ' (§4.7.1.3), I hear $<\mathrm{LH}>$ rather than H tone on the sǔm syllable.

H-toned má is also used after adjectives that end lexically in an H-tone or in an $<\mathrm{LH}>$-toned syllable that flattens to H .

| [ $\left[\right.$ no ${ }^{\text {. }}$. [ $\left[\right.$ person ${ }^{\text {L }}$ | àndé:] <br> other. | g] |  |  |
| :---: | :---: | :---: | :---: | :---: |
| [ [ó | ${ }^{\text {L }}$ hàkkillè] | mà] | ó | jò-ŋgà] |
| [[2Sg | ${ }^{\text {L }}$ mind] | in] | 2 SgSbj | have-PplNonSbj] |
| kànà-m |  |  |  |  |
| do-Fut. 3 SgSbj |  |  |  |  |

Adding a possessor to the noun causes tone-dropping on the noun (or adjective), so there is no H-tone to spread into the postposition: [ $\left[m i ́ ~{ }^{\mathrm{L}}\right.$ sònjò:] mà] 'to my village'. Likewise, adding a determiner (even if H -final) after the noun forces reversion to L-toned mà, as in sònjò: ${ }^{\mathrm{L}}$ クgí mà 'to this village'.

### 8.2 Other spatial postpositions

### 8.2.1 'In, inside of' ( ${ }^{\text {L }}$ kùl mà $)$

'In X' or 'inside of X ' can be expressed by a compositve postposition that literally means "in the belly of X." The noun kûl 'belly' functions as possessum, and the phrase takes the form [ [ $X^{\mathrm{L}}$ kùll] mà $]$.
a. [[ólé
${ }^{\text {L }}$ kùl]
mà] nóyò-njò- $\varnothing$
[[house ${ }^{\text {L belly }}$ in] sleep-Pres- 3 SgSbj
'He is sleeping in(side) the house.'
$\begin{array}{llll}\text { b. } & {[[\text { mí }} & \left.{ }^{\mathrm{L}} \text { jìbà }\right] & \left.{ }^{\mathrm{L}} \text { kùl }\right]\end{array} \quad$ mà

[house ${ }^{\mathrm{L}}$ many] [[[village Def.InanSg.E] ${ }^{\mathrm{L}}$ belly] in] exist-3SgSbj
'There are many houses in the village.'

This postposition is used with temporal sense 'while ...' with headless nonsubject relatives (§15.2.4).

### 8.2.2 'About' ( ${ }^{\mathrm{L}}$ dòm)

The sense '(speak) about $X$ ', i.e. '(speak) on the subject of $X$ ' is expressed as "(speak) the talk of X." The noun for 'talk, language, words' is dôm, which here appears in $\{\mathrm{L}\}$-toned possessed form.

| [[nì:-mbó | bé] | ${ }^{\mathrm{L}}$ dòm] | dà: ${ }^{n}-m b o ́-y$ |
| :--- | :--- | :--- | :--- |
| [[bird-Pl | Def.AnPl] | ${ }^{\mathrm{L}}$ speech] | speak-Fut-1P1Sbj |

'We will talk about the birds.' (</dàm-mbó-ỳ/)

### 8.2.3 'On' ( ${ }^{\text {L }}$ kì: mà $)$

The nouns meaning 'head' are dánà and kî:. Of these, dánà has a literal sense denoting the physical body part, while kî: has a wider range of senses including 'intelligence'. kî: is also part of a compound postposition that literally means 'in/on the head of X ', where X is expressed as the possessor. We therefore get [[ $\left.X^{\mathrm{L}} k i ̀:\right]$ mà $]$. This compositve postposition may be translated freely as 'on $X$ ', denoting location on a surface or resting on the top of a larger object. It can also be translated 'onto X' or 'off of X' (='from on top of X') in combination with a verb of motion.
(266)
a. [màngórò kó]
[mango Def.InanSg.O]
[[[[tà:bǎl kó] $\left.\left.{ }^{\text {L }} k i ̀:\right] ~ m a ̀\right] ~ b o ̀-~ \varnothing ~$
[[[table Def.InanSg.O] ${ }^{\text {Lhead }}$ in] be-3SgSbj
'The mango is on (top of) the table.'
b. [sìbá-ŋgó kó]
[bundle-Sg Def.InanSg.O]
[[[ká:bù kó] ${ }^{\text {L } k i ̀:] ~ m a ̀] ~ b e ́ j o ́ ~}$
[[[mat Def.InanSg.O] ${ }^{\text {Lhead }}$ in] put.Imprt
'Put-Sg the bundle (of millet grain spikes) on the mat!'
$\begin{array}{lllll}\text { c. màngórò } & {[[m i ́ n} & \left.{ }^{\text {L }} k \grave{i}:\right] & \text { mà }] & \text { dèỳ̀̀- } \varnothing \\ \text { mango } & {[[1 \mathrm{Sg}} & \left.{ }^{\mathrm{L}} \text { head }\right] & \text { in }] & \text { fall.Pfv- } 3 \mathrm{SgSbj}\end{array}$
'A mango fell on me.'
d. á:màdù [[[ká:bù kó] ${ }^{\text {L } k i ̀:] ~ m a ̀] ~ b e ̀ l i ̀-y غ ̀-~} \varnothing$

Amadou [[[mat Def.InanSg.O] ${ }^{\text {L head] }}$ in] get.up-MP.Pfv-3SgSbj
'Amadou has gotten up off the mat.'

### 8.2.4 'Next to, beside' (sòn)

The postposition sòn indicates position near the side of the reference object.
a. [[ólé ké] sòn]
[[house Def.InanSg.E] beside]
'beside the house'
b. [[mí sòn] bò- $\varnothing$
[[1Sg beside] be-3SgSbj
'He/She is next to me.'

It is also possible to add locative mà, resulting in (slightly assimilated) [ $X$ sòm] mà, apparently with identical meaning. An example is (456) in §12.1.5.

I know of no related noun or adjective, so I do not mark sòn with ${ }^{\mathrm{L}}$ possessum superscript, but it is reasonable to think that its origin is denominal as with other composite postpositions. It is conceivable that the noun sònjǒ: 'village', which has no known cognates elsewhere in Dogon, is somehow related.

### 8.2.5 'In front of' ( $\left.{ }^{\text {L girr mà }}\right)$

The compositve postposition [ $[X$ girr] mà] means 'in front of'.
a. [[mí ${ }^{\mathrm{L}}$ gìr] mà $]$
[[1Sg ${ }^{\text {L }}$ front] $\quad$ in]
'in front of me'
b. [[[ólé ké] mà]
[[[house Def.InanSg.E] ${ }^{\text {L }}$ front] in]
'in front of the house'

The noun gir on which this is based occurs in the adverbial PP gir mà 'in front, ahead'. A more distant etymological relationship with gìro 'eye' is a possibility.

### 8.2.6 'Behind', 'after’ ('bàndì mà)

'Behind X ' is expressed with the compositve postposition ${ }^{\text {L }}$ bàndì mà. Like other spatial postpositions it can be glossed as a static locative, as an allative, or as an ablative depending on the verbal context.
a. [[[sònjó: ké]
${ }^{\text {L }}$ bàndī mà ì ìnè- $\varnothing$
[[[village $\quad$ Def.InanSg.E] ${ }^{\text {L }}$ behind] in] go.Pfv-3SgSbj
'He has gone behind the village'
$\begin{array}{lllll}\text { b. } & {[[\text { mí }} & \left.{ }^{\mathrm{L}} \text { bàndì }\right] & \text { mà }] & b-\hat{\varepsilon}: \\ & {[[1 \mathrm{SgSbj}} & \left.{ }^{\mathrm{L}} \text { behind }\right] & \text { in] } & \text { be-3PlSbj } \\ & \text { 'They are behind me.' } & & \end{array}$
The noun on which this is based is bàndí 'back (of body)', which is also the source of adverbial PP bàndí mà 'behind, in the rear'. bàndí itself may be a borrowing from Songhay bande (§1.2).
${ }^{\text {L }}$ bàndì mà also occurs in temporal contexts in the sense 'after X' (270). Here, however, it competes with temporal clauses that have senses like 'when X has ended, ...'

| [[láyyà | ${ }^{\text {L }}$ bàndì] | mà] | wó-m̀̀ |
| :--- | :--- | :--- | :--- |
| [[Feast.of.Ram | ${ }^{\text {L }}$ behind] | in] | $\left.\begin{array}{l}\text { come-Fut.3SgSbj }\end{array}\right]$ |

'He/She will come after the Feast of the Ram.'

Iterative adverbial bàndè-bándè 'going backward' is also related.

### 8.2.7 'Under' ( ${ }^{\text {L }}$ dù: mà)

'Under X ' is [ $X^{\mathrm{L}}$ dù:] mà.
a. [tàgú: bè]
[[shoe.Pl Def.InanPI]
[[[tà:băl kó] ${ }^{\mathrm{L}}$ dù:] mà] gán-è:
[table Def.InanSg.O] ${ }^{\text {L }}$ under]
'The shoes are under the table.' (tàgû:)
in] be.in.Stat-3PISbj
b. [[[tímó: kò] ${ }^{\mathrm{L}}$ dù:] mà] nóyò-njò- $\varnothing$
[[[tree Def.InanSg.O] ${ }^{\text {L }}$ under] in] sleep-Pres-3SgSbj
'He/She is sleeping under the tree.' (tímô:)
$\begin{array}{lllllll}\text { c. } & \text { òê: } & {[[k i ́ n u ́: ~} & \text { kò } & \left.{ }^{\mathrm{L}} \text { dù: }\right] & \text { mà }] & \eta w غ ̀-\varnothing \\ \text { mouse } & {[[\text { stone }} & \text { Def.InanSg.O] } & { }^{\mathrm{L}}{ }^{\mathrm{L}} \text { under] } & \text { in] } & \text { go.in.Pfv-3SgSbj }\end{array}$
'The mouse went in under the rock.' (kínû:)

The noun on which this is based is dû: 'bottom, lowest part'. The relevant adverbial PP is dú: mà 'below'.

### 8.2.8 'Between' ( ${ }^{\text {Lbènàn mà) }}$

This is expressed by the compositve postposition ${ }^{\mathrm{L}}$ bènàn mà. The complement may be a simple NP or pronoun denoting a set of two or more entities, or a conjoined NP.
a. [í ${ }^{\text {L }}$ bènàn] mà
[1Pl ${ }^{\text {L }}$ between] in
'between us'
$\begin{array}{llllll}\text { b. } & {[[a ̌: j a ̀ ~} & \text { mà } \rightarrow] & \text { [kúnjà-gâ: } & \text { mà } \rightarrow] & { }^{\mathrm{L}} \text { bènàn] }\end{array}$ mà 'between Adia and Kubewel (villages)'

The noun on which this is based is bènán 'middle'.

### 8.2.9 'Around' (gèndè)

Postposition gèndè means 'around, in the area of'. There is a related noun gèndèngé 'side, end (e.g. of blanket)' with somewhat frozen singular *-gge (§4.1.3.6). Since it is not obvious to speakers that the postposition is a special use of a noun, I omit the ${ }^{\mathrm{L}}$ possessum superscript.

| a. [yàl̂i: | gèndè] | dògè-m̀ |
| :---: | :---: | :---: |
| [field | around] | leave.Pfv-1 SgSbj |
| ft | the area | the fields. |

b. [sònjǒ: gèndè] [ínè mó] tár tìyè-m
[village around] [goat Def.AnSg] look.at send.Pfv-1SgSbj 'I saw the goat (from a distance) in the vicinity of the village.'

For the abstract sense 'approximately' with a locational, see §8.4.3.1.

### 8.3 Purposive-causal (nغ̀n)

The purposive-causal postposition is nèn. It can be used in purposive sense, denoting a hopedfor outcome of an activity (274a-b). It is also used in causal sense, denoting a preexisting eventuality that led to a response (274c).
a. [[yógé yé] nèn] wè jògà
[[grain.spike.Pl Def.InanPl] for] come Perfect.3PlSbj
'They have come for the millet grain spikes.'
b. [jénjà nèn] núná: $\left[\begin{array}{lll}\text { mí } & \text { gì } \\ \text { ìdè- } \varnothing\end{array}\right.$
[God for] boubou [1Sg Acc] give.Pfv- 3 SgSbj
'He/She gave me a boubou for God (=for free).'
c. [[màyín kó] nèn] [[bé ${ }^{\text {L }}$ gwà:] mà] g-ò:
[[drought Def.InanSg.O] for] [[3PlPoss ${ }^{\text {L }}$ land] in] go.out.Pfv-3PlSbj 'Because of the drought, they have left their country.' (< gwă:)
nèn is also the 'than' postposition in asymmetrical comparatives (§12.1.2, §12.1.4). In this function it may follow PPs and accusative NPs as well as bare NPs.

### 8.4 Other adverbials (or equivalents)

Some of the adverbs described below require, or are at least commonly followed by, adverbial particle $n$ è.

### 8.4.1 Similarity (dân 'like’, mùlí-y 'resemble’)

'Like X ' is expressed as [ $X$ dân]. It is similar to a PP, but dân is not L-toned like other postpositions. The 'like' particle has no tonal effect on the X constituent. The X constituent is an NP or adverb (e.g. PP).
$\begin{array}{lll}\text { a. } & \text { [éná-ngó } & \text { dân] } \\ & \text { [wind-InanSg.O] } & \text { ìnó-m̀ } \\ \text { like] } & \text { go-Fut.3SgSbj }\end{array}$
'He (= traveling merchant) will go (= from market to market) like the wind.' (2005-1a)
b. kà: [íyó dân] máyá-ndá-1- $\varnothing$
but [today like] hard-Inch-PfvNeg-3SgSbj
'But it (= life) wasn't as hard as nowadays.' (2005-1a)

Since a "relative clause" is syntactically an expanded NP (§14.1), it may be followed by dân. For dân indicating approximate quantity, see §8.4.3.1. For 'like this/that' with a demonstrative, see §8.4.6. For dân in symmetrical comparatives, see §12.2.1-2. For dân in manner adverbials ('like the way ...'), see §15.2.3.

There is also a (perfective subject) participle dàmb-é: (E) or dàmb-ó: (O), which means 'being like (something)'. It generally occurs in negative sentences ('there is nothing like ...'). No main-clause verb related to this could be elicited. It may be a compressed form of dân 'like' plus the participial variant $b$-é: ~ b-ó: (§14.3.10) from bô: 'be (somewhere)' (§11.2.2.1). (276) is excerpted from (533) in §14.3.5.

| [mó | dàmb-é: | là] | òndú- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [AnSgObj | be.like-Pp1Sbj.AnSg | also] | not.be-3SgSbj |

'There is (likewise) no one like him/her.' (2005-1a)

The transitive verb ' X resemble Y ' is mùlí-y.

### 8.4.2 Extent

### 8.4.2.1 'A lot', 'a little' (ségín, nǎ:n nè, tégì nè)

'Much/many’ is expressed by the adjective ségín (invariant), see (264c) in §8.2.1 above and (403a) in §11.1.3.3. ségín can also used absolutely (without a noun) in the sense 'a lot', see (432a) in §11.3.1. The related verb is ségé 'be abundant or numerous'. There is also a derived noun $s \varepsilon ̀ g \varepsilon ̌-n$ 'number, amount'.

Adverbial 'a lot, very much, to a great extent' is nă:n nè. It also means '(done) well'. Juxtaposed to another adverb or similar expression it means 'very', see (721) in the sample text.

Adverbial 'a little, somewhat' is tégì nè.

### 8.4.2.2 'Totally’ (láy)

This is an emphatic element when clause-final. However, it is adverbial morphologically, and may occur in the typical adverbial phrase (láy nè). An example is (509) in §14.2.5.

The phrase [[láy nè] ìgí] with ìgí 'be finished' is idiomatic for '(man) die without leaving heirs'.

### 8.4.3 Specificity

### 8.4.3.1 'Approximately’

dân 'like' (§8.4.1) can indicate an approximate quantity (277a). For time expressions, a possessed form ' wàgàtì mà 'at the time of' may be used (277b). For spatial locations, postposition $g \grave{z} n d \grave{\varepsilon}$ 'around' is available (277c).
a. [pègè-mbó pǒ:-nう̀y dân] jógò-m
[sheep-Pl ten-two like] have- 1 SgSbj
'I have something like twenty sheep.'
b. [[[sà:gé tìbò-nd-ô:] ${ }^{\mathrm{L}}$ wàgàtì $]$ mà $]$ ìnò-mbó-ỳ
[[[month die-Fut-PplSbj.InanSg.O] ${ }^{\text {L time }] ~ i n] ~ g o-F u t-1 P l S b j ~}$
'We will go (there) around the end of the month.'
c. [kúnjà-gâ: gèndè] à:lé tègè- $\varnothing$
[K around] rain(n) rain.fall.Pfv-3SgSbj
'It rained around (in the vicinity of) Kubewel (village).'

### 8.4.3.2 'Exactly' (témbé)

témbé insists that the quantity, time, or location is precise. In (278a-b), it is adverbial in function, as shown by the fact that it follows the locative postposition mà in (278b). With time expressions it is adjectival, modifying mìdî: 'noon', and preceding the locative postposition (278c).
a. pègè-mbó pǒ:-nう̀y témbé jógò-m sheep- Pl ten-two exactly have -1 SgSbj 'I have exactly twenty sheep.'
b. [[kúnjágâ: mà] témbé] à:lé tèg̀̀- $\varnothing$
[K at] exactly] rain(n) rain.fall.Pfv-3SgSbj 'It rained right at Kubewel (village).'
c. [[mìdî: témbé] má] kwà-mbó-ỳ [[noon exactly] in] eat-Fut-1PlSbj 'We will eat at noon sharp.'

### 8.4.3.3 'Specifically, personally' ( ${ }^{\text {L }}$ kì: mà)

In (279), a reflexive construction of the form "in my head" (= 'myself'), see §18.1, occurs along with témbé 'exactly' to emphasize the specificity of the subject.
(279) [[mí ${ }^{\text {L } k i ̀:] ~ m a ̀] ~ t e ́ m b e ́ ~ n a ̀ m a ̂: ~ k u ̀ b o ́-n u ̀-m ́ ~}$
[[1SgPoss ${ }^{\mathrm{L}}$ head] in] exactly meat eat.meat-PresNeg- 1 SgSbj
'I personally do not eat meat.'

### 8.4.4 Evaluation

### 8.4.4.1 'Well' and 'badly'

Where possible, an adjective 'good' (síyè-, nàlá:) or 'bad' (nè:ndá:) is added to a direct object or other relevant constituent, so there is no true adverb.
a. [nàjàmbà-gè
Síyè-ngè $]$ dámà-nj-ò:
[Najamba-InanSg.E ${ }^{\text {L }}$ good-InanSg.E] speak-Pres-2SgSbj
'You-Sg speak Najamba well.' (lit. "You speak good Najamba")
$\begin{array}{lll}\text { b. } & \text { [nàjàmbà-gè }{ }^{\mathrm{L}} & \text { nè:ndé:] } \\ \left.\begin{array}{lll}\text { [Najamba-InanSg.E } \mathrm{E}^{\mathrm{L}} & \text { bad.InanSg.E] } & \text { dámà-nj-ò: } \\ & \text { 'You-Sg speak Najamba badly.' (lit. "You speak bad Najamba") }\end{array}\right) .\end{array}$

The verb kóndí 'do well' and its mediopassive kóndí-y 'be done well' are used in a wide range of contexts including '(artisan) make (product)', 'repair (something damaged)'. Here the evaluative 'well' is built-in.

### 8.4.4.2 'Proper, right' (yàgí)

The verb yàgí 'means 'be proper, right, normal, appropriate, acceptable', with reference to behavior. It is regularly followed by jòg-â.; participle of 'have', here a perfect auxiliary. In (281), the sense of the bracketed phrase in (281) is like that of French comme il faut.
(281) [yàgí jòg-â: dân] gòl-ǒ:
[be.right have-PplSbj like] do.farming.Pfv-2SgSbj
'You-Sg have done the farming in the right way.'
yàgí may take a "complement," really a clause-like subject, in verbal noun form (§17.4.9).
yàgí jòg-â: is negated as perfective negative yàgá-l-ó: 'it isn't right'. This confirms that yàgí in (281) is a verb.

### 8.4.5 Epistemic modals ('maybe', 'definitely')

For 'maybe', see nè bǎ-m̀̀ in §15.1.1.5.2. For 'definitely, certainly', see táffòrò or tìlây in $\S 17.3 .5$. These are higher predicates rather than clause-internal adverbs.

### 8.4.6 Manner

A manner adverbial based on an adjectival concept may be expressed by chaining the corresponding inchoative verb ('be/become ADJ') to a following inflected verb.
a. dòyá-ndí-mbò yóbà-njò- $\varnothing$
rapid-Inch-and run-Pres-3SgSbj
'He/She runs rapidly.'
b. péjá-ndí-mbò yóbà-njò- $\varnothing$
slow-Inch-and run-Pres-3SgSbj
'He/She runs slowly.'
'Thus' is expressed as 'like this/that', e.g. kó dân 'like that (discourse-definite)', ŋ̀gú dân 'like this (deictic)'. For dân 'like' see §8.4.1 above.

The nouns bí-ŋgán 'being; nature, essence' and ùsfỹ: 'path, way’ can be used in manner expressions. An example of ùsfy̌: is (326) in §10.1.3.3. An example of bí-ŋgán is (660b) in §17.5.1.2.

For manner adverbial clauses ('how ...'), see §15.2.3.

### 8.4.7 Spatiotemporal adverbials

### 8.4.7.1 Temporal adverbs

Some basic adverbs (generally nouns that may be used adverbially) are in (283). (283b) is a series of terms extending from 'tomorrow' through to one week from today, along with term for 'two weeks from today'.

|  | Íyó | 'today; nowadays' |
| :---: | :---: | :---: |
|  | nă: | 'yesterday; formerly, in the old days' |
|  | íyó tà:ndì | 'day before yesterday' |
|  | sǎy | 'now' |
| b. | Éngú | 'tomorrow; in the future' |
|  | Éndèn | 'day after tomorrow' |
|  | èndèn tô: | 'second day after tomorrow' |
|  | tòndì kándà | 'third day after tomorrow' |
|  | tòndì mínà | 'fourth day after tomorrow' |
|  | bùrùdù tô: | 'fifth day after tomorrow' |
|  | tò:-tà:-tô: | 'sixth day after tomorrow' (one week from today), cf. §4.1.5 |
|  | pěl-ŋgò | 'two weeks from today' |
|  | gǒl | 'last year' |
|  | nàngǔl | 'next year' |
|  | únwá | 'this year' |

éngú 'tomorrow; in the future'
ह́ndèn 'day after tomorrow’
غ̀ndèn tô: 'second day after tomorrow'
tòndì kándà 'third day after tomorrow'
tòndì mínà 'fourth day after tomorrow'
bùrùdù tô: 'fifth day after tomorrow'
tò:-tà:-tô: 'sixth day after tomorrow' (one week from today), cf. §4.1.5
pěl-ngò 'two weeks from today'
gǒl 'last year'
úywá 'this year'

The terms for 'yesterday', 'today', and 'tomorrow' also mean, respectively, 'in the past (= in the old days)', 'nowadays', and 'in the future'. Some of the texts compare the good times of the past (pre-1970) with the hard times of the present, or changes in social mores, and the temporal setting at any given point is regularly expressed as jǎ: 'yesterday' or íyó 'today’. See, for example, (712) in the sample text.

The texts do not often talk about the future, but 'tomorrow' = 'in the future' can be illustrated by the textual passage in (284). The context is that of a farmer writing down an annual agricultural calendar or schedule this year with dates and locations (e.g. for planting) that can be followed in subsequent years. See also (764) in the sample text.


For adverbial clauses with jǎ: 'since ...' and hâl 'until ...', see $\S 15.2 .5$ and $\S 17.5 .1 .2$.

### 8.4.7.2 'First' (tô:y, ǧ̌rngí-y)

tô:y is also the form of the numeral ' 1 ' in counting sequences ('one, two, three, ...') (§4.7.1.1). As an adverb it may mean 'firstly (before something else)' (285a) or 'at first, initially'. The sense 'firstly' may also be expressed by a form of the word-family centered on gǐr 'in front', such as the verb gǐrngí-y 'precede, go ahead (of others)' (285b).
a. tô:y [bíró: kó] bìré-y mé, ...
firstly [work(n) Def.InanSg.O] work.Pfv-1PlSbj if, ...
'We will do the work first, (then ...)'

| b. | bíró: kó $]$ gìrngì-yé-y | mé, |
| :--- | :--- | :--- | :--- |
| work(n) Def.InanSg.O] precede-MP.Pfv-1P1Sbj | if, |  |
| yòmbó | kwà-mbó-y |  |

### 8.4.7.3 Nondemonstrative spatial adverbs

Spatial adverbs, generally nouns with adverbial functions, are in (286). For demonstrative adverbs ('here', 'there', etc.) see §4.4.4.1.
a. kî:
'above, top, summit'
lit. "head"
dî: 'below, bottom, down'
b. dûn 'east'
yéndè 'west'
kórál 'north'
tómbál 'south'
c. bàndè-bándè 'going backward, in reverse'
gǐr má 'forward' gìró 'eye'
kórál 'north' and tómbál 'south' might have originated as suffixal derivatives, but I cannot work out etymologies. They may be inter-Dogon borrowings, cf. Tommo So kólólúlú 'north' and túmbálú 'south' (McPherson 2013: 271).
'Left' and 'right' are not attested as directional terms. Cardinal direction terms and 'backward' or 'forward' are used instead. Adjective 'right (hand, foot)' is nغ̀- $\eta g o ́ ~(p l u r a l ~ n \varepsilon ̌:), ~$ which also means 'plain, simple'. Adjective 'left (hand, foot)' is nàndǎ: (O) ~ nàndě: (E). Cognates occur in several Dogon languages. Cognates of ně: are suggestively similar in form to the verb 'eat'. McPherson derives Tommo So nààndá 'left' from a homophonous noun meaning 'area at the edge of the village for defecating'. An alternative or complementary line of inquiry might lead to comparison with adjectives including a fused negative suffix like nè:ndá: 'bad' (§4.5.2), in which case the relevant verb might be 'drink' (Najamba né, with many cognates).

### 8.4.8 Expressive adverbials

Expressive adverbials (EAs) can function as adverbs (with no precise thematic role in the clause). They can be made into stative predicates (denoting a continuing process or state) by preposing them to a conjugated form of bò- 'be (somewhere), be present' or its negation òndí~ òndú- 'not be (somewhere), be absent'. Examples are [dém $\rightarrow$ nè] bò- $\varnothing$ 'it is straight' and its negation [dém $\rightarrow$ nè] òndí- $\varnothing$ 'it is not straight'. There does not seem to be a dedicated inchoative ('become ...') auxiliary, but change of state can be indicated by kán 'do' as clausefinal verb.

### 8.4.8.1 Expressive adverbials with and without adverbial ǹ̀ $\sim$ nè or $g a ̀$

Expressive adverbials, which include (or blur into) adjectival intensifiers, commonly occur with following adverbial particle nè in sentential context (for gà see below). When the adverbial has $\{$ e $o\}$ vowel harmony, this spreads into $n \grave{\varepsilon}$, which becomes nè. A minority of these adverbials are lexically /L/-toned, in which case the particle is H-toned (287h), a kind of tone polarization. Some iterated adverbials are used with no adverbial particle (287c). Adverbial né is also perhaps a (somewhat frozen) part of ànn $\varepsilon$ ~ ànìné 'how?' (§13.2.5) and of kèné 'like that' and nèné 'like this' (§4.4.4.3).

While $n \grave{\varepsilon}$ is the usual adverbial particle, a morpheme gà with partially overlapping function also turned up with a few EAs, including EAs derived from certain adjectives (such as color) with suffix $-y$, before kán 'do'.

| a. | [sìjé:-sìjé-y | gà] | kánè- $\varnothing$ |
| :---: | :---: | :---: | :---: |
|  | [striped-EA | Adv] | be.done.Pfv-3SgSbj |
|  | 'It has becom | striped |  |

b. [gìndé-y / bánè-y / pílè-y / gémè-y gà] kánè- $\varnothing$
[big-EA / red-EA / white-EA / black-EA
Adv] be.done.Pfv-3SgSbj 'It has become big/red/white/black.'

As in most other Dogon languages, EAs are abundant. Some examples are in (288), grouped by phonological features. The iterative stems in (288a) belong to a type especially common with adjectival intensifiers ( $\S 6.3 .3 .2$ ). The examples in $(288 \mathrm{e}, \mathrm{g})$ show lexicalized "intonational" prolongation $(\rightarrow)$. Probably because of the following nè, this prolongation is less conspicuous in Najamba than in eastern Dogon languages, which have no similar adverbial particle.

## form

gloss
related form/comment
a. full iteration of mono-/bisyllabic, tones repeated (usually all-high)
dúngáy-dúngáy nè 'lumbering along'
ло́クо́y-пóךо́y nè '(walking) stiffly'
gáráy-gáráy nè 'fit, in good shape'
dángó-đángó nè 'conpicuously visible’ also dóngó-dóngó nè

| góló:-góló: nè sìjé:-sìjé: nè | 'lined (e.g. paper)' 'striped' |
| :---: | :---: |
| tònč:-tònč: nè | 'blotched, with large spots' |
| légí-légí nè | 'soaring, at the summit' |
| dóm-dóm nè | 'conpicuously visible' |
| yór-yór nغ̀ | 'poorly, weakly (work)' adjective yòrê: |
| dím-dím nè | 'towering high' also just dím nè |
| gén-gén nè | 'fit, in good shape' |
| táy ${ }^{n}$-táy ${ }^{n}$ nè | 'adequately sugared' |
| jém-jém nè | 'somewhat elongated (half-full sack)' |
| лย์m-ném nè | 'flimsy, insubstantial' |
| dûm-dûm nè | 'scattered' |
| dôy-dôy nè | 'almost alongside (e.g. in a race)' |
| dây-dây nè | 'freely, for nothing' also just dây nغ̀ |
| měy-měy nè | 'flickering' |
| gěn-gě! nè | 'staggering' |

b. like (a), based on $-n$ nominal ( $\S 4.2 .3 .3$ )
[déní-n]-[déní-n] nè '(walk) clumsily, falling' dèné'fall'
c. full iteration of trisyllabic, LHL-LLL tones (not used with nغ̀)
dìníyà-dìnìyà '(going along) bumpily'
gèngíryà-gèngìryà '(walk) tilting to one side then the other'
jùmbíyà-jùmbìyà '(walk) with head bent forward'
wùndíyà-wùndìyà 'meandering'
d. three-part full iteration with L-toned $a$ in medial
gěy-gàn-gěク nè 'struggling under heavy load'
e. reduplicated $C \grave{v}-C \grave{v} C \bar{v} \rightarrow$ with "intonational" prolongation
$b \grave{\varepsilon}-b \grave{\varepsilon} l i ́ \rightarrow n \grave{\varepsilon} \quad$ 'out of shape physically'
gò-gòló $\rightarrow$ nè '(door) ajar, slightly open'
f. onomatopoeic
$\begin{array}{ll}\text { sórrrr nè } & \text { 'dripping rapidly' } \\ \text { kă:-kǎ: nè } & \text { '(laugh) loudly (ha! ha!)' used with màndí 'laugh' }\end{array}$
g. unreduplicated with "intonational" prolongation $\rightarrow$
gòngìrí $\rightarrow n$ è $\quad$ 'rickety, shaky'
gèngìrí $\rightarrow$ nè 'precariously positioned'
jèmbèlé $\rightarrow$ nè 'improperly placed'
dòndòló $\rightarrow$ nè 'in a circle, round' also dèndèlé $\rightarrow$ nè
jùgùjí $\rightarrow n$ è 'woolly, furry' jùgújí-y'be woolly' yùgùjí $\rightarrow n \varepsilon ̀ \quad$ 'woolly, furry' yùgújí-y 'be woolly'
$p \varepsilon ́ n d \grave{\varepsilon} \rightarrow n \varepsilon ̀ \quad$ 'brick-shaped (elongated)'

| $b \varepsilon ́ n d \grave{c} \rightarrow n \varepsilon$ ¢ | 'brimming, full (with liquid) to the rim' |
| :---: | :---: |
| térè $\rightarrow n \underline{~}$ | 'brimming, full (with liquid) to the rim' |
| sórò $\rightarrow$ nè | 'short and cylindrical' also sórò $\rightarrow$ nè |
| $p u ́ j e ̀ \rightarrow n \grave{~}$ | 'foaming, frothily' cf. verb bùjé 'foam' |
| dùríl $n$ è | 'sticking out, extruding' |
| $p o ́ \rightarrow n \varepsilon ̀$ | 'right now, immediately' |
| nǎy ${ }^{n} \rightarrow$ nè | 'wide open (eyes)' |
| $p a y^{n} \rightarrow n \grave{\varepsilon}$ | 'wide open (eyes)' |
| kǎy ${ }^{n} \rightarrow n$ ¢̀ | 'blazing (sun)' |
| $d o ̌ y \rightarrow n \grave{\varepsilon}$ | '(e.g. child) walking clumsily' |
| SéW $\rightarrow$ nè | 'silently' |
| $j e ́ y \rightarrow n e ̀$ | '(looking) hard (at something)' |
| gén $\rightarrow$ nè | 'squeezing tightly' |
| $k a ́ p \rightarrow n \grave{~}$ | 'squeezing tightly' |
| búm $\rightarrow$ nè | 'solidly built (body)' |
| $p u ́ y \rightarrow n \grave{e}$ | 'solidly built (body)' |
| $w a ́ \rightarrow n \varepsilon ̀$ | 'gaping, wide open' |

h. other, with L-tones then H-toned né
pàràjày né
pùrùjày né yùgùjày né téndèlè: né gàngàlà né dìyàw né jùngày né nànày né yùjày né sùyày né bòjù né, bòjù né
'having small spots or stripes'
'blotched, having large spots'
'woolly, furry'
'having too much momentum to stop'
'wide, extending laterally' (person, horned animal)
'(umbrella, tree) be spread out overhead'
'(e.g. fruits) in clusters'
'(e.g. fruits) in clusters'
'(tree) with roots spreading'
'(bush) with thick foliage'
'soaking wet'
i. other, with L-toned nغ̀

| tégì-tégì nè | 'slightly, a little' |
| :--- | :--- |
| gómbón nè | 'protruding horizontally' |
| Símbéy nè | 'hanging out over' |
| búndúm nè | 'filled out (bag)' |
| kóróy nè | '(ears etc.) turned out' |
| júrúm nè | 'withdrawn and downcast' |
| kájàl nè | '(running) hard' |
| yágáw nغ̀ | 'inconsequential, insignificant' |
| sém nè | 'pointed' $\quad$ cf. adjective sèmê: |

Like other adverbials, these can be made predicative by adding a conjugated form of bò-- 'be', hence [gòngìrí $\rightarrow$ nè] bò- 'be rickety, shaky'.

### 8.4.8.2 'Straight' $($ dé $\rightarrow$ nè, dém $\rightarrow$ nè $)$

The adverb 'straight (direct trajectory to a location)' is dé $\rightarrow$ nè $\sim$ dém $\rightarrow$ nè. The $m$ in dém $\rightarrow$ is intonationally prolonged, as in Jamsay and some other Dogon languages.
a. [dé $\rightarrow$ nè] [dúmásá mà ìn-ò:
[straight Adv] [D in] go.Pfv-3PlSbj
'They went straight to Douentza (with no detours or stops).'
b. [ìgîn gwé-mbò] [[dém $\rightarrow$ nè] [kúnjà-gâ: mà] ìnè-ḿn]
[here go.out-and.SS] [[straight Adv] [ K in] go.Pfv-1SgSbj] 'I went straight from here to Koubewel.'

Iterated dém-dém is used as an intensifier for 'straight'.
The gloss 'straight' in the sense 'not crooked', referring to e.g. a stick, is expressed by an unrelated adjective tèndô: ~ tèndê: .

### 8.4.8.3 'Apart, separate’ (nágá )

nágá 'apart, separate, distinct' is a predicate indicating the physical separation or distinct identity of two or more entities. It may be iterated for distributive sense (290a), or it may occur twice in parallel clauses (290b). It may be conjugated by adding bò- 'be'.
a. nágá-nágá $\quad b-\varepsilon ̀:$
separate-separate be-3PlSbj
'They are distinct (not the same).'
b. [èmbá yé] nágá,
[sorghum Def.InanSg.E] separate,
[yógó yé] nágá
[millet Def.InanSg.E] separate
'Sorghum and millet are distinct.'
' X and Y are (not) the same' is often expressed as ' X and Y are (not) one'.
(291) [yàwó: má $\rightarrow$ ] [ánà: má $\rightarrow$ ] kúndú=lá
[woman. Pl and] [man.Pl and] one=it.is.not
'Women and men are not the same.'
8.4.8.4 'Always’ (àsú:), 'never’
'Always, constantly' is àsú: .
(292) bíré: tà:ndî: yét,
work(n).Pl three Def.InanPl,
[yé gà] àsú: [gǐr mà] ínò-njò- $\varnothing$
[Near.InanP1 Top] always [front in] go-Pres-3SgSbj
'The three types of work, they always go in front.' (2005-1a)

The phrase wágátì dîn 'every time' may also be used.
'Never' is àbádá (from Arabic). It common in conversation as an emphatic negative ('not at all, not on your life').

For the experiential negative construction for verbs ('have ever done', 'have never done'), see §10.1.3.2.

### 8.4.8.5 'Carelessly'

yògòrò-yógòrò (variant yògòlè-yógòlè) is a noun or adjective meaning 'careless(ness)', denoting sloppy or nonchalantly performed work.

### 8.4.8.6 'Together' (sǒ:)

Adverbial '(being) together' is sǒ: .
(293) sǒ: kwà-mbó-ỳ
together eat-Fut-1PlSbj
'We will eat together.'
'Neighbor' is sò: ${ }^{\text {L }}$-jíngán, which may begin with this morpheme.

### 8.4.9 Distributive adverbial iteration

For distributive numerals ('two by two', etc.), see §4.7.1.6. Similar examples involving iterations of other stems are in (294).
a. dûm-dûm nغ̀ 'scattered, here and there' (adverb)
b. tég-tég 'dripping, one drop at a time', cf. tégí '(a) drop'
c. lú:bà-lú:bà 'by turns'
górrè-górrè 'by turns’
d. sórtòl-sórtòl 'arranged in rows'

A more productive construction has explicit 'and' conjunctions (§7.1.1). For example, 'house by house' is expressed as 'house and house'.
(295) jàmálà-mbò [ólé má $\rightarrow$ ] [ólé má $\rightarrow$ ] $\eta w$-à: thief-Pl [house and] [house and] go.in.Pfv-3PlSbj
'The thieves went in house by house.'

## 9 Verbal derivation

This chapter covers derivational suffixes attached directly to the stem, or to other derivational suffixes, preceding AN and pronominal-subject inflectional suffixes. A passive construction with several variants is discussed in connection with verbal inflection (§10.5) since it interacts with aspect-negation (AN) marking.

### 9.1 Reversive verbs ( $-1 \varepsilon \sim-1$ )

Dogon languages typically have a range of reversive verbs, formed by derivational suffixation, and Najamba is no exception. The reversive suffix is $-l \varepsilon$ (-ATR) or $-l</-\mathrm{li} /$ $(+$ ATR) in the chaining form. The final vowel of the stem shifts to $i$ before the suffix. Stems with nonfinal $a$-vowels are + ATR in their underived stems (hence stem-final $e$ in the E-stem, $o$ in the A/O-stem), but their reversive suffix shifts to -ATR (296c). The lexical tone melody of the input verb is respected and reapplied to the derived stem.

Both the simple stem and the reversive suffix, but not both in the same word, are subject to Post-Sonorant High-Vowel Deletion (§3.4.2.1). In the underived chaining form, deletion occurs if the final /i/ is preceded by an intervocalic sonorant, as in kíl 'fence in' from /kíli/. In reversives, since the final vowel of the input stem shifts to /i/ for all verbs, deletion of this presuffixal /i/ occurs in examples like /úlí-lél $\rightarrow$ úl-lé 'disinter’ (296a). Reversives that preserve +ATR vocalism from the input stem have suffixal /-lí/ in the chaining form, and the /i/ is deleted in e.g. /mùndí-lí/ $\rightarrow$ mùndí-l 'uncrumple' (296d). However, deletion cannot apply both to stem-final and suffixal /i/ in the same word. When the stem-final $/ \mathrm{i} /$ is in position to delete, it does delete, and this creates a consonant cluster that prevents the wordfinal suffixal /i/ from deleting, as we see in /kílí-lí/ $\rightarrow$ kíl-lí 'remove fence from' (296d).
input gloss
reversive gloss
(chaining)
a. /H/melody, -ATR $\{\varepsilon \Omega\}$

| téné | 'hobble' | tén-lé | 'unhobble' |
| :--- | :--- | :--- | :--- |
| tímbé | 'cover with lid' | tímbí-lé | 'take lid off' |
| níngé | 'shut' | níngíl-lé | 'open' |
| úlé | 'bury' | úl-lé | 'disinter' |
| sóngé | 'curse (v)' | sóngí-lé | 'retract a curse' |

b. /LH/ melody, -ATR $\{\varepsilon \rho\}$
gùbé 'hook, hang up' gùbí-lé 'unhook, take down' mèmé 'twist (cord)' mèmí-lé 'untwist (cord)'
(unusual undeleted /i/ in mèmí-lé, checked with two speakers)
gə̀ré 'hold out (arm)' ǧ̌r-lદ́ 'pull back (arm')
c. stem $a$-vowels, shift from + ATR $\{e o\}$ to $-\operatorname{ATR}\{\varepsilon \rho\}$

| págîlpàgè | 'tie' | págí-lé | 'untie' |
| :---: | :---: | :---: | :---: |
| tá:n\ltà:nè | 'step on' | tá:n-1ع | 'remove foot from' |
| dàgîldàgè | 'lock' | dàgí-lé | 'unlock' |
| yàmbíllyàmbè | 'cover' | yàmbí-lé | 'uncover' |
| ságí\|lsàgè | 'put up' | ságíl-lé | 'take (back) down' |

d. simple stem and reversive have $+\operatorname{ATR}\{$ e $o\}$ vocalism
kíl|lkìlè 'fence in' kíl-lí 'remove fence from'
mùndí 'crumple' mùndí-1 'uncrumple'
gǒr 'put on (hat)' gǒr-lí 'take off (hat)'
(also pronounced gǒl-lí)
e. tone shift
dìyé 'carry on head' díl-lé 'take (load) off head'
(cf. dǐ:-ré 'put (load) on someone else’s head', §9.3.3)

The examples in (297) are more complex. In (297a-b), mediopassive suffix -y $\sim-y$ in the input verb (in one case absent) follows the reversive suffix -lí-. Minor patterns are represented in (297c-d). In (297e), the input has a more or less frozen transitive suffix $-r \varepsilon \sim-r(\S 9.3 .2)$ that is absent in the reversive.

|  | $\begin{align*} & \text { ságí-yé }  \tag{297}\\ & \text { dàngí-yé } \end{align*}$ | 'be caught (in tree)' <br> 'be stuck (to sth)' | ságí-lí-yé dàngì-lí-yé | 'get free (from tree)' <br> 'become unstuck' |
| :---: | :---: | :---: | :---: | :---: |
|  | nigíjíly | 'be tangled' | nìgíjílíl-y | 'be untangled' |
|  | tóndí-y | 'be bent' | tóndílíly | 'be straightened' |
|  | tíbí-y | 'get stuck' | tíbí-lí-y | 'get unstuck' |
| no mediopassive suffix in input |  |  |  |  |
|  | dèmbé | 'get bogged' | dèmbí-lí-yé | 'get unbogged' |
| c. | jìbí-y | 'attach (wrap)' | jìbǐ-1 | 'untie, take off (wrap)' |
| d. | ìré | 'forget' | îl-lí-yé | 'remember' |
| e. | pégé-ré | 'drive in (nail)' | pégí-lé | 'remove (nail)' |
|  | jǔ:-r | 'flip over' | jǔ:-1 | 'unflip, put back right-side- |

### 9.2 Deverbal causative verbs

### 9.2.1 Productive causative suffix $-m$

Causative derivatives have a wide range of senses including 'cause $X$ to VP', 'let/allow $X$ to VP', and 'have X VP'.

The productive causative suffix is $-m$ in its chaining form (298), apocopated from /-mi/ by Post-Soronant High-Vowel Deletion (§3.4.2.1). The preceding verb stem takes the A/O-stem. Causative $-m$ can readily follow mediopassive $-y \varepsilon ́ \sim-y$ (298d).

|  | input | gloss | causative |
| :--- | :--- | :--- | :--- | gloss

When the base stem is a monomoraic, i.e. $C \hat{v}$ or $C W \dot{v}$, three treatments are observed. The vowel remains short in one case (299a). In all the others, the vowel is lengthened. In this case, there is a split between two sets of verbs. Some have an H-toned causative (299b), while others have an LH-toned causative (299c).

| input | gloss | causative | gloss |
| :---: | :---: | :---: | :---: |
| a. gwé | 'go out' | gǒ-m | 'take out, remove' |
| b. $k w \varepsilon ์$ | 'eat (meal)' | kwá:-m | 'feed' |
| $\eta W \varepsilon ์$ | 'go in' | nwá:-m | 'take in' |
| SWย | 'pour' | swá:-m | 'cause to pour' |
| c. jà̀ygó né | 'weep' | jà̀ngó fă:-m | 'cause to weep' |
| пЕ́ | 'drink' | nǎ:-m | 'give drink to' |
| yé | 'see' | yă:-m | 'cause to see' |
| $b \varepsilon ์$ | 'remain' | bǎ:-m | 'cause to remain' |
| jє | 'take' | jǎ:-m | 'cause to take' |
| ПWÉ | 'hear' | nwǎ:-m | 'cause to hear' |
| dwé | 'pound' | dwă:-m | 'cause to pound' |

The split between (299b) and (299c) strongly suggests that there was originally a melodic distinction of $/ \mathrm{H} /$ versus $/ \mathrm{LH} /$. This split is neutralized in most inflected and derived forms. However, there is one inflectional category that shows a similar split: perfective negative (§10.1.4.2), although the inventory of /H/versus /LH/ verbs does not exactly match that in the causative.

A representative set of forms (chaining form and inflectional) for two of the causatives is in (300). 'Have (someone) spend day' brings out the +ATR quality of the A/O stem.

| category | $\begin{align*} & \text { 'have (sb) spend day' }  \tag{300}\\ & \text { < dèné } \end{align*}$ | 'let escape' <br> < pór /póríl |
| :---: | :---: | :---: |
| bare stem | dèná-m | póró-m |
| VblN | déná-m-lé | póró-m-lé |
| 3Sg Pfv | déná-mè | póró-mè |
| 3Sg Pres | déná-mà-njò | póró-mò-njò |
| 3Sg Fut | dènà-má-m̀ | pòrò-mó-m |
| 3Sg PfvNeg | dèná-má-1 | ро́ró-mó-1 |
| 3Sg ProgNeg | dèná-mà-njò-ndí | póró-mò-njò-ndí |
| 3Sg FutNeg | dènà-mǎ-ndì | pòrò-mǒ-ndì |

### 9.2.2 Minor causative suffixes -ndí, -gí

All examples known to me of causative -ndí with no other derivational suffixation are in (301a). The suffix is added to the A/O-stem of the verb (see especially 'cause to get up'). The -ndí causative generally preserves the lexical tone melody of the stem, /H/ or /LH/, the latter being reapplied to the whole derived stem. The examples in (301b) have -ndí added to transitive -rغ́- (see §9.2.2), forming a doubly transitivized derivative corresponding to mediopassive -yع́. In (301c), the irregular /HL/ melody of the underived stem is replaced in
the causative by the /LH/ melody that is typical of verbs beginning in a voiced stop. In (301d), a cluster $\eta g$ in the input is simplified to $\eta$ in the causative.

| anput | gloss | causative | gloss |
| :--- | :--- | :--- | :--- |
| a. ilé |  |  |  |$\quad$ 'go up' $\quad$| ìlá-ndí |
| :--- |
| (cf. also índí 'lift') |

Possible frozen cases, no longer clearly segmentable, include sélóndí 'tease' and dìjóndí 'console’.

The known examples of minor causative suffix -gí are in (302).

| input | gloss | causative | gloss |
| :---: | :---: | :---: | :---: |
| năm | 'malfunction' | jàmá-gí | 'damage, waste' |
| sél | 'be diluted' | séló-gí | 'dilute, water dow |
| pár | 'snap' [intr] | párá-gí | 'pull off' |
| sán | 'disperse' [intr] | sáná-gí | 'scatter; expose ( |
|  | (cf. regular causative sáná-m 'cause to disperse' |  |  |
| dìbí | 'be lost' | dìbó-gí | 'cause to be lost' |
| pújí | 'crumble' [intr] | pújó-gí | 'crumble' [tr] |
| dǒl | 'be punctured' | dòló-gí | 'puncture' |
| tójé | 'be blistered' | tójá-gí | 'cause blisters' |

Possible frozen cases, no longer clearly segmentable, include kímógí- 'extinguish (fire)', dàmágí 'denigrate’ (cf. dǎm 'speak'), and gìnágí ‘break in half’.

Obscurely related to dàmágí- 'denigrate’ and dǎm 'speak' is another verb, dǎmgí-y '(two or more persons) have a debate (argument)'. The tone suggests syncope of a medial high vowel, pointing to a prototype *dàmígí-yí. Perhaps this too contains suffix -gí, but the stemvocalism (*dàmí-) is not consistent with the $\mathrm{A} / \mathrm{O}$-stems seen in (302).

At least one causative with -ndí can itself function as input to the productive causative with suffix -m. This is ìgó-ndí 'finish (something)' (causative of ìgí 'be finished'), which has a regular -m causative, viz., ìó-ndó-m 'cause (someone) to finish'.

Omitted here are occasional examples where both an underived and a causative verb (suffix -in-) have been borrowed from Fulfulde, e.g. jángí 'study' and causative jángíné 'teach'.

### 9.3 Transitive and and mediopassive suffixes

### 9.3.1 Mediopassive -y $\underset{\sim}{\sim}-y$ derived from unsuffixed verb

The mediopassive ("MP") suffix $-y \varepsilon \in \sim-y$ is quite productive. It's semantic core is indeed mediopassive (i.e. middle voice), and its distribution is reminiscent of the Romance (e.g. Spanish) reflexive. The mediopassive nature is especially clear in cases where $-y \varepsilon \in \sim-y$ is opposed to a transitive derivative with suffix $-r \varepsilon \in-r$ (less often $-l \varepsilon \sim-1$ ), on which see the following section.

English passives with unspecified external agents ('be eaten', 'be seen', 'be given') are usually translatable as simple transitives with generic third plural subject. For example, 'it isn't eaten (= is inedible)' is phrased as kó kwǎ-ndì-yà 'they won't (= don't) eat it', and 'the (cooked) food has been completely eaten up' is phrased as [yòmbó kò dîn] kwé kìr-ò: 'they completed eating all the food'. ' X be born' is usually expressed as 'they gave birth to X ' ( $[X$ gì] nàl-à:]), which sounds illogically plural but which is consistent with the flexible semantics of 'give birth', which is not strictly limited to the genetrix as subject (compare English active have in Mary and Bob are expecting to have a child soon); see (461) in §12.3. A mediopassive version similar to the English construction is also possible: [X nàlì-yغ̀].

In most examples the morphophonology of the mediopassive derivation is straightforward. In all examples known to me, the suffix is added to a form of the stem ending in $i$, which is not subject to syncope. For nearly all verbs, this form of the verb is identical to the I-stem as used before verbal noun suffix -lé. However, monosyllabic stems of the shape
 this: transitive $s w \varepsilon ́$ 'pour, spill', verbal noun sú-lé, and mediopassive sí-yé 'be spilled, be poured'. I was also able to elicit yí:-yé ~ yí-yé 'be seen' (transitive yé 'see', verbal noun yí-lé ). Perhaps the suffixal semivowel $y$ has forced the use of homorganic $i$ rather than $u$. Except sometimes in yí(:)-ý́ 'be seen', where the flanking homorganic /y/ semivowels mask the length of the $i$ (facilitating ambiguity and historical shifts), a $C_{V}$ - stem does not lengthen its vowel before the mediopassive suffix.

The examples in (303) involve a mediopassive in $-y \varepsilon ́ \sim-y$ in opposition to a morphologically unmarked transitive. Many other such pairs can be found in the lexicon, or readily elicited.

|  | wùjí <br> wùjí-y | 'swing (something)' <br> '(something) dangle' |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { pé: } \\ & \text { pí:-ý́ } \end{aligned}$ | 'let (mud-manure mix) ferment' '(mud-manure mix) ferment' |
|  | mòmbé mòmbí-yé | 'assemble (a group)' <br> '(group) be assembled' |
|  | kábílé <br> kábílí-yé | 'separate (X from Y)' <br> '(individual) separate oneself' |
| e. | yàmbí yàmbí-yé (reversive | 'cover (someone)' 'cover oneself' 'uncover') |
|  | nigíjí <br> nigijí-y | 'mix ( X and Y )' <br> '( X and Y ) be mixed' |
| g. | tóndí tóndí-y | 'bend, curve (something)' <br> 'be curved' |
|  | bìné <br> bìní-yé | 'lean (something, against something)' <br> 'lean one's shoulder (against something) |
| i. | dùmé <br> dùmí-yé | 'get, obtain' <br> 'be obtainable (available)' |
|  | bàrí bàrí-yé | 'add, increase (something)' '(e.g. herd) increase, expand' |

The mediopassive suffix may follow the reversive suffix, as in níngílí-yદ '(e.g. door) be opened' from níngíl- 'open (door)', reversive of níggé 'shut (door)'. Other Vb-Rev-MP examples are dángí-lí-yé '(something stuck on) become unstuck, be taken off’ and nóggí-lí-yé '(something caught in a tree) become un-caught, get free'.

The mediopassive suffix cannot follow causative $-m$. However, the opposite sequence mediopassive-causative is common. It appears as -yá-m or -yo-m depending on ATR-harmonic class. An example is the derivational chain of bilk 'change (something)', mediopassive bilí-yé '(something) evolve, change', and causative of mediopassive bilí-yá-m 'transform (something)'. Other Vb-MP-Caus examples (among many) are píbí-yó-m 'inflate' (cause to be inflated) and yùgúlí-yó-m 'drive (someone) crazy' (cause to become crazy).

The mediopassive suffix may follow the minor, more lexicalized causative allomorphs. bàndí-gí 'cause to remain behind' (noun bàndí 'back') has mediopassive derivative bàndí-gí-y 'remain behind'.

There are many verbs that end in ...yย́ or ...y that fit the mediopassive semantics for the suffix, but for which segmentation is not transparent due to the lack (at least in my current knowledge of Najamba lexicon) of attested counterparts without the suffix or with a different suffix. My practice is to hyphenate where the sense is consistent with mediopassive semantics. A few among many examples are in (304).

```
gèlí-y\varepsiloń 'keep'
y\varepsiloǹnd\varepsiloń-lí-y\varepsiloń 'flap in wind' (cf. yèndí 'hang or drape (over sth)')
túbí-y\varepsiloń 'lean on (a cane)'
pírí-y 'fly (away)' (poor semantic match with pír 'catch, trap')
pírgí-y '(dying animal) flop around'
bá:lí-yé 'wilt, shrivel'
gèrí-y 'bend over backward'
gìmbí-y 'lean forward, bow'
á\etaí-y\varepsiloń 'cross one's arms'
```


### 9.3.2 Paired mediopassive $-y \varepsilon ́ \sim-y$ and transitive $-r \varepsilon ́ \sim-r$ or $-l \bar{\varepsilon} \sim-1$

Mediopassive $-y \varepsilon \in \sim-y$, introduced in the preceding section, is sometimes paired with a corresponding transitive with suffix $-r \varepsilon ́ \sim-r$ or less often $-l \dot{\varepsilon} \sim-l$. The transitive adds an agent to an otherwise intransitive or simple transitive verb. There is only a limited danger of confusion between the $-l \varepsilon \sim-l$ variant of the transitive suffix and the reversive suffix $-l \varepsilon \sim-l$, on which see $\S 9.1$, above.

Mediopassive-transitive doublets occur, for example, in verbs of change of stance (305a) and in verbs of donning garments (305b). In (305a), one is tempted to say that $-r$ is semantically a causative ('cause to sit'). However, the comparison with (305b) suggests that the apparent intransitive ('sit down') might really be a mediopassive ('seat oneself'), i.e. with both an agent and a coindexed object. Compare Spanish sentarse 'sit' and ponerse el sombrero 'put on one's hat'.

```
a. óbí-y 'sit down'
óbí-r 'cause to sit, seat (someone)'
b. gìíly 'put a hat on (oneself)'
    gibí-r 'put a hat on (someone else)'
    gìí 'replaster (wall)'
    (cf. reversive gìbí-l 'take hat off [oneself or someone else]')
```

Further mediopassive-transitive pairings are in (306).
a. jèngí-yé '(something) tilt' jèngí-lé 'cause (something) to tilt'
b. kúmbí-y 'hold (something)'
kúmbí-r 'entrust (something, to someone else)'
c. érí-yé 'become tangled' (also 'be tripped')

ह́l-lє́ 'tangle (something)'

d. síbí-y 'hide oneself'
síbí-r 'hide (something)'
(dubiously related to síbí 'lay the second layer in basket or bag')
e. tóndí-y 'be curved'
tóndí-r 'bend, curve (something)'
tóndí
"
f. dògí-y 'be facing up'
dògí-r 'hold (something) facing up'
(probably unrelated to dògí '(woodpecker) peck deeply into tree')
g. dàbí-yé 'lie in wait for'
dàbílé 'stalk (prey)'
h. digí-yé '(objects) be joined (at ends)'
dìgí-ré 'join (two objects)'
i. gògí-y '(bowl) be hung (e.g. on rock)'
gògí-r 'hang (bowl, e.g. on rock)'
gògí
j. sóbí-yé '(knife) sink in'
sóbí-ré 'skewer (e.g. meat, for brochette)'
sóbé 'jab, puncture’
k. dìmbí-yé 'follow (someone)'
dìmbí-ré 'chase away, drive out; align (in rows)'

In (307), the transitive form has an irregular suffix complex including the minor causative suffix -ndí(§9.2.2).
a. ípgí-yé
'stop, stand'
íngí-rá-ndí 'cause to stop or stand'
b. íbí-yé 'fear, be afraid'
íbí-rá-ndí 'scare (someone)'

### 9.3.3 Paired -ý́~ -y and -ré~-r after Cv-stem

Array (308) presents apparent examples of the opposition of mediopassive $-y \varepsilon \in-y$ and transitive $-r \varepsilon \in \sim-r$, but this time after monomoraic $C v$ - stems. The semantic relationships (stance, holding, etc.) are consistent with the other examples of this pairing given above. If this analysis is accepted, it would follow that $C v$ - is lengthened to $C v$ :- before the transitive suffix (§3.4.7), but not before the mediopassive.

```
a. bǎy (or: bǎ-y)
    bǎ:-rع́
'instruct (someone),
b. nóy (or: nó-y)
'sleep'
    nó:-r
c. íngé dìyé (or: dì-yé)
    íngé dǐ:-ré 'cause to sit, seat (someone)'
d. dìyé (or: dì-yé) 'carry on one's head'
    dǐ:-rย́
e. póy (or: pó-y)
    pó:-r
f. bǐy (or: bǐ-y) 'lie down, go to bed'
    bǐ:-r
'put (someone) to sleep'
'bathe’ (íngé ‘water')
'put on (someone else's) head'
'carry on back'
'put (something) on the back of (someone else)'
'lie down, go to bed'
'cause to lie down, put to bed'
```

In spite of the the similarity between $C v(-) y v$ - and heavier $C v C v-y v$ mediopassives, there are reasons to suspect that native speakers do not clearly segment the $C V y v$ - intransitive shape. The first is the failure of the vowel to lengthen, as just noted. The second is that there are stative inflected forms, and cognate nominals, that include the $y v$ syllable for $C v y v$ verbs, but that omit suffixal $-y \varepsilon ́ \sim-y$ after longer stems. For example, stative bíyò- 'be lying down' preserves the $y v$ input syllable, whereas statives of nonmonosyllabic stems drop mediopassive $-y \varepsilon ́ \sim-y(\S 11.2 .3)$. The cognate nominal for nóy '(go to) sleep' is likewise nóyè 'sleep'. I therefore hesitate to hyphenate the intransitives as bǎ-y, nó-y, etc., though readers may consider this possibility.

The alternative is to treat doublets like those in (308) as adding the transitive suffix to an unsegmentable input stem of the shape Cvyv-. This would require a slightly irregular $y$-Deletion rule, compare $\S 3.4 .4$, after which the two newly adjacent vowels would contract into a long vowel. For example, bǎ:-ré in (308a) above would be derived from /bàyá-ré/ via /bàá-ré/.

A similar ambiguity arises in the formation of derived statives from some of these same verbs; see discussion of (423b) and (426b) in $\S 11.2 .3$.

### 9.4 Deadjectival inchoative and factitive verbs

A number of adjectives have an associated intransitive inchoative verb ('be/become X '), with no obvious derivational suffixation in either direction, and not always with the same lexical tone melody. The adjective and the inchoative verb are clearly members of the same wordfamily, but their forms are independently lexicalized. In (309), an inanimate singular form of the adjective (A) is shown, along with the inchoative ('become A') and the factitive ('cause to become $A^{\prime}$ ). The factitive is morphologically the causative of the inchoative, and ends in causative -m.

| gloss | adjective | inchoative | factitive |
| :---: | :---: | :---: | :---: |
| a. -ATR $\{\varepsilon \rho\}$ class in adjective and inchoative |  |  |  |
| /LH/ melody in inchoative |  |  |  |
| 'rotten' | gòmô: | gòmé | gòmá-m |
| 'big, adult' | gìndó: | gìndé | gìndá-m |
| 'black' | jémè | jèmé | jèmá-m |
| 'feeble' (variant) | bèbô: | bèbé | bòbá-m |
| /H/ melody in inchoative |  |  |  |
| 'old (person)' | kúnjé: | kúnjé | kúnjá-m |
| 'ripe' | ílà | ílé | ílá-m |
| b. +ATR \{e o\} class in adjective and inchoative |  |  |  |
| /LH/ melody in inchoative |  |  |  |
| 'blunt' | dùmbé | dùmbí | dùmbó-m |
| 'tall' | gàbô: | gàbí | gàbá-m |
| 'hard' | mǎy-yè | mǎy | màyá-m |
| /H/ melody in inchoative |  |  |  |
| 'skinny' | kómbé | kómbí | kómbó-m |
| 'straight' | tèndô: | téndí | téndó-m |
| 'cramped' | àngô: | ángí | ángá-m |
| 'sour, salty' | àmí-yè | ám | ámá-m |

In a minority pattern (310), the inchoative is formed in the same way, but the factitive has a minor causative suffix -ndí. This is to be distinguished from inchoative (i.e. intransitive) suffix -ndí discussed juste below.

| gloss | adjective | inchoative | factitive |
| :--- | :--- | :--- | :--- |
| 'slack, loose' | yòrô: | yòré | yòrá-ndí |
| 'full' | jòyó: | jǒy | jòyó-ndí |

The inchoatives and the adjective stems themselves do show consistency in ATR-harmonic class (the causative requires $\{e o\}$ vocalism). There is no consistency between adjective and inchoative in tone melody, however. The inchoatives follow the usual pattern by which /H/
melody is required by initial voiceless obstruents (such as stops), while /LH/ melody is strongly associated with voiced stops.

Many other adjectives are verbalized by means of an overt inchoative suffix -ndí, from which is formed a factitive by adding causative $-m$. The inchoative suffix (like the causative suffix) requires the $\mathbf{A} / \mathbf{O}$-stem, which requires + ATR stem vocalism. Again, the tone melody of the inchoative (and therefore of the factitive) correlates with the voicing of the initial consonant if it is an obstruent, but is subject to a lexical choice for stems beginning with a sonorant or with no consonant.

$$
\begin{equation*}
\text { gloss } \quad \text { adjective } \quad \text { inchoative factitive } \tag{311}
\end{equation*}
$$

a. verbs have /LH/ melody

| 'fat, thick' | bìnú: | bìnó-ndí | bìnó-ndó-m |
| :--- | :--- | :--- | :--- |
| 'hot; fast' | dwéy'-yè | dòyá-ndí | dòyá-ndá-m |
| 'flat; spacious' | wàyé: | wàyá-ndí | wàyá-ndá-m |
| 'distant' | wàgí-yè | wàgá-ndí | wàgá-ndá-m |
| 'nearby' | dùmí-yè | dùmó-ndí | dùmó-ndó-m |
| 'bitter' | gàlí-yè | gàlá-ndí | gàlá-ndá-m |
| 'thin' | mènjí: | mènjó-ndí | mènjó-ndó-m |
| 'long' | jàlé: | jàlá-ndí | jàlá-ndá-m |
| 'deep' | miní-yè | mìnó-ndí | mìnó-ndó-m |
| 'short' | dèndú-ngó | dèndó-ndí | dèndó-ndó-m |
| 'thin' | mènjú-ngò | mènjó-ndí | mènjó-ndó-m |

b. verbs have $/ \mathrm{H} /$ melody

| 'heavy' | nìmí-yè | nímó-ndí | nímó-ndó-m |
| :--- | :--- | :--- | :--- |
| 'good' | něy-ngò | néyá-ndí | néyá-ndá-m |
| 'narrow' | pèmbî: | pémbá-ndí | pémbá-ndá-m |
| 'slow' | pèjí-yè | péjá-ndí | péjá-ndá-m |
| 'sweet' | èlí-yè | élá-ndí | élá-ndá-m |
| 'difficult' | nàmí-yè | námá-ndí | námá-ndá-m |
| 'small, young' | pàlâ: | pálá-ndí | pálá-ndá-m |
| 'hard' | mǎy-ngò | máyá-nd-í: | máyá-ndá-m |

Many verbs are attested with a different inchoative suffix $-y \varepsilon \in \sim-y$, which is suspiciously similar in form to the mediopassive suffix. It is added either directly to the stem (312a), or to the already inchoative suffix -ndí- (just illustrated above) to form a fused suffix complex (312b). The corresponding factitive is formed by adding causative suffix $-m$.

| gloss | adjective | inchoative | factitive |
| :--- | :--- | :--- | :--- |
| a. 'coarse' | yágàjà | yàgájí-yé | yàgájí-yá-m |
| 'ripe, cooked' | ílà | ílí-yé | ílí-yá-m |
| 'cool' | yégèlè | yègílí-y | yègílí-yó-m |
| 'slow' | támàlà | támálí-yé | támálí-yá-m |



Two verbs have a factitive suffix $-r \varepsilon \in \sim-r$ added directly to the stem, paired with an inchoative with $-y \dot{\varepsilon} \sim-y(313)$. The pairing of transitive $-r \dot{\varepsilon} \sim-r$ with mediopassive $-y \dot{\varepsilon} \sim-y$ is much more productive in other semantic domains (§9.3.2).

| gloss | adjective | inchoative | factitive |
| :--- | :--- | :--- | :--- |
| a. 'wet' | témbô: | témbí-y | témbí-r |
| b. 'curved' tòndô: | tóndí-y | tóndí-r <br> (also tóndí) |  |

The colors 'white' and 'red' have complex inchoatives with mediopassive -yé added to -lí-. The usual factitive, on the other hand, adds causative $-m$ to an inchoative without derivational suffix. This unsuffixed inchoative is unattested for 'white' and 'red', but is attested for the third member of the core color-term triangle, 'black', see (309a) above.

| gloss | adjective | inchoative | dactitive |
| :--- | :--- | :--- | :--- |
| 'white' | pílè | pílá-lí-yé | pílá-m |
| 'red' | bánè | báná-lí-yé | bàná-m |

### 9.5 Denominal verbs

There are no productive denominal verbalizations. Examples of word-families including a noun and a verb where a case can be made for such a verbalization are in (315).
a. bàndí
'back (body)'
bàndí-gí 'cause to remain behind'
b. sérè 'witness(n)' sérí-y 'testify'
bàndí 'back' (315a), a borrowing from Songhay, is part of a larger word family including postposition [ $\left[X^{\mathrm{L}}\right.$ bàndì] mà] 'behind $\mathrm{X}^{\prime}$ and adverb bàndè-bándè 'going backward' (§8.2.6). sérè 'witness' (315b) is the local instance of a regionally widespread word family including Fulfulde seede, cf. Arabic root $\sqrt{ }$ s̊hd.

### 9.6 Obscure verb-verb relationships

Occasionally a pair of verbs is at least seemingly related, but they do not follow any welltrodden derivational channel.
$\begin{array}{lllll}\text { (316) a. ùgí } & \text { 'roast, bake' ùgí-r } & \text { 'burn (incense)' } \\ \text { b. gǔl } & \text { 'dig' } & \end{array}$

## 9.7 "Underived" trisyllabic verbs

Many trisyllabic verbs that cannot be transparently segmented into a bisyllabic stem plus a derivational suffix may have originated as such derivatives. Most of them (excluding Fulfulde borrowings) end in $\ldots g \varepsilon ́ \sim g i ́, \ldots j \varepsilon ́ \sim j i ́, \ldots r \varepsilon ́ \sim r, \ldots l \varepsilon \sim l, \ldots y \varepsilon \sim y, \ldots m \varepsilon \sim m$, which resemble attested derivational suffixes.

Examples: námílé 'apply mud', gèngíré '(hawk) sway from side to side in flight', kúmbíjí 'cause (e.g. leaf) to curl'.

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

For an initial impression of the morphology of inflected verbs and their participles (which are used in relative clauses), the paradigm of ý 'see' in (317) may be useful. In the "inflected" column, the 3 Sg subject form is given for indicative categories (317b-c), 2 Sg for the imperative (317d), and 1 Pl dual inclusive for the hortative (317e). Participles agree with the head nouns (not subjects) of their relative claues, explaining the variable vocalic endings. Participles ending in -ngà have an (animate) plural form -ngà-mbò. There are tonal differences between subject relatives and nonsubject participles in some AN categories.
category simple conjugated
participle
subject nonsubject
a. chaining form $y \varepsilon ́$
verbal noun yí-lé
progressive yá-mbò
b. perfective

| $y \grave{\varepsilon}-\varnothing$ | y-є́:/-ó: | $y-\hat{\varepsilon} \cdot /-\frac{0}{\text { : }}$ |
| :---: | :---: | :---: |
| yá-njò- $\varnothing$ | yá-ŋgà | yá-ngà |
| yá-m̀ | yǎ-ngà | yǎ-ngà |
| or: | yà-ngà | yà-ŋgà |

present
future
c. perfective negative
future negative
present negative
yǎ:-1-Ø yà:-1-é:/-ó: yà:-l-è:/-ò:
yǎ-ndì- $\varnothing$ yǎ-nd-è/-ò: yà-nd-è/-ò:
yâ-ndí- $\varnothing$ yâ-nd-é/-ó: yá-nd-è/-ò:
d. imperative
prohibitive I
yá
prohibitive II
yá-là
or:
yà-ทgà
yà-ŋgà
e. hortative
hortative negative
yà-ý
yá-là-ỳ

The details about each category, including full pronominal paradigms where relevant, and with examples of a variety of prosodic stem shapes, will be given in the various sections below and (for participles) in chapter 14 on relative clauses. However, certain points can be mentioned here before we get into the nitty-gritty.

One stem, which I call the E-stem although I take it to be lexically basic in Najamba, always ends in $e / \varepsilon$ (for 'see', $\varepsilon$ ). This stem is the basis for the chaining form, the perfective (positive), and the prohibitive-II with suffix -nô: . What I call the I-stem usually ends in $i$ as it
does for 'see', though some other monosyllabics have Cu -. This stem occurs before verbal noun suffix -lé, and before the reversive derivational suffix. All remaining forms in (317) are based on the A/O stem (for 'see', ya-). As will be shown below, the A/O stem also involves a neutralization of nonfinal stem vowels of the -ATR $\{\varepsilon \rho\}$ and +ATR $\{\mathrm{e} o\}$ classes, so this stem cannot be taken as lexically basic. Synchronically in Najamba (unlike the case in some other Dogon languages), I take $i / u$ and $a / o$ to be morphologically conditioned mutations of the lexical stem final $e / \varepsilon$, and do not hyphenate any of them.

The tone formula of a complete verb form (including suffixes) is in some cases entirely determined by the inflectional category. It combines fixed suffixal tones with a tone overlay on the stem. For example, the verbal noun with suffix -lé is always entirely $\{\mathrm{H}\}$-toned. In some forms (chaining, perfective negative), the onset of the verb form respects the distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ lexical melodies, though the tones of the remainder of the word are determined by the grammatical category. Since only one verb is presented in (317) above, and a monosyllabic at that, the relevance of lexical melodies will only emerge in the relevant sections below.

In participles, tone formulae play two distinct roles in differentiating categories. For the
 represents a stem syllable, distinguishes tenses (present versus future). However, the tone formulae for this suffixal participle are not sensitive to the distinction between subject and nonsubject participles. On the other hand, mutating participles, which end in a long-vowel (perfective, plus both negative indicative categories) use tones to distinguish subject from nonsubject participles. There is an H-tone element somewhere in the subject participle that corresponds to an L-tone in the nonsubject participle. Participles are described in chapter 14 rather than in the present chapter.

### 10.1.1 Stem shapes

### 10.1.1.1 Regular verbs

All monosyllabic verb stems with full paradigms that are known to me are in (318). I include ǹdé 'give', which differs only in having an extra homorganic nasal in the onset, whose L-tone is automatic, and in having an irregular bisyllabic variant. It is the last item in (318a). The verbs in (318) are grouped by phonological similarity. Most (318a-d) have short vowels in the forms shown (though $C v$ - lengthens to $C v$ :- before derivational suffixes, see $\S 3.4 .7$ ). Long vowels do occur in some verbs ( $318 \mathrm{e}-\mathrm{g}$ ). Lexically, as seen in the chaining and perfective forms, most of the verbs ( $318 \mathrm{a}, \mathrm{c}, \mathrm{e}-\mathrm{f}$ ) have $\varepsilon$-vowel, while a few ( $318 \mathrm{~b}, \mathrm{~d}, \mathrm{~g}$ ) have e-vowel. Also, as seen in the chaining forms, there is only one tonal possibility for (monomoraic) $C v$-stems (318a-b), and $C W v$-stems behave like $C v$-stems (318c-d).
chaining perfective $\mathrm{A} / \mathrm{O}$ gloss
a. $j \varepsilon$ jìे- ja- 'take'
$y \varepsilon ́ \quad y \dot{-} \quad y a-\quad$ 'see'
bé bè- ba- 'remain'
né nغ̀- na- 'weep'

| né <br> $\grave{n}$ né | $n \grave{\varepsilon}-$ <br> ǹdè- | na- <br> ǹda- | 'drink' <br> 'give' (bisyllabic variant ǹdíré etc.) |
| :---: | :---: | :---: | :---: |
| b. wé | wè- | wo- | 'come' |
| c. $k W \varepsilon \in$ | kwè- | kwa- | 'eat' |
| ךWÉ | ПWè- | !wa- | 'go in' |
| ךWÉ | ПWĖ- | ทwá- | 'hear' |
| $d w \varepsilon ์$ | $d w \varepsilon$ - | dwa- | 'pound in mortar' |
| $d w \varepsilon ์$ | $d w \varepsilon$ - | dwa- | 'insult' |
| $t w \varepsilon ์$ | $t w \dot{\text { - }}$ | twa- | 'slash earth (to sow)' |
| SWย | SWÈ- | swa- | 'pour; spit' |
| d. gwé | gwè- | go- | 'go out' |
| e. $d w \hat{\varepsilon}$ : | $d W \varepsilon ̀:-$ | do:- | 'arrive at, reach' |
| f. né: | $n \mathrm{E}$ : | na:- | 'stay up at night' |
| té: | $t \varepsilon$ : | ta:- | 'sting' |
| té: | $t \overline{\text { : }}$ | ta:- | 'avoid (taboo)' (noun tǎ:) |
| té: | $t \stackrel{\text { : }}{ }$ | ta:- | 'sprout; grow (hair)' |
| mé: | $m \dot{\text { : }}$ | ma:- | 'make bricks' |
| ké: | $k \stackrel{\text { e }}{ }$ | ka:- | 'shave' |
| ké: | $k \dot{\text { : }}$ | ka:- | 'tell (a riddle)' (noun ámbà-kà:) |
| pé: | $p \stackrel{\text { : }}{ }$ | pa:- | 'let ferment (e.g. earth)' |
| wé: | wè: | wa:- | 'remain to the end of the farming season' |
| g. jê: | $j{ }^{\text {ê: }}$ | jô:- | 'bring' |

For the possibility of analysing the verbs in (318c-e) as having desyllabified $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ rather than true $w$, see discussion following (18) in §3.2.3.

In several other Dogon languages, monosyllabic verbs split into two tonal classes, like longer stems. LH-toned $C \check{v}(:)$ - is associated in those languages with initial voiced obstruents, and occurs with a subset of stems with initial sonorants or with no initial consonant. For example, 'go in' and 'hear' are distinguished tonally in these languages in at least some forms, in some languages including the bare stem. For Najamba, I hear only a small phonetic
 phonemic rising tone. I likewise hear no difference between the bare stems of 'go in' and 'hear', or between 'insult' and 'arrive'. However, the original tone-class differences do survive in Najamba in the perfective negative and in the causative derivation.

Mention may also be made of several defective stative verbs, quasi-verbs, and inflectable clitics with monosyllabic (or in one case nonsyllabic) forms (chapter 11): bé- 'be, remain', $b o ̀-$ 'be (somewhere)', bô:- 'be present', past enclitic $=b \grave{\varepsilon}-$, = lá- 'is not', and $=y$ 'it is'.

There are many bisyllabic verbs. They can be grouped into four open classes by the intersection of lexical tone melody $/ \mathrm{H} /$ versus $/ \mathrm{LH} /$, always (except for $C v$-stems) observable
in the chaining form, with lexical ATR class: -ATR $\{\varepsilon \rho\}$ versus + ATR $\{\mathrm{e} o\}$, (nearly) always observable in the perfective ending $\varepsilon$ or $e$.

| chaining | perfective | A/O-stem | gloss |
| :---: | :---: | :---: | :---: |
| a. /H/ melody, -ATR $\{\varepsilon \rho\}$ |  |  |  |
| Síyé | Sìyè | siya | 'be spilled' |
| tégé | tègè | tega | '(rain) fall' |
| pómbé | pòmbè | pomba | 'compete' |
| b. /H/ melody, +ATR $\{$ e o $\}$ |  |  |  |
| tún | tùnè | tuno | 'put (in)' |
| píjí | pìjè | pijo | 'spray' |
| júmbí | nùmbè | numbo | 'drizzle' |
| c. /LH/ tone, -ATR $\{\varepsilon \rho\}$ |  |  |  |
| dògé | dògè | doga | 'leave' |
| yòbé | yòbè | yoba | 'run' |
| dòné | dònè | dona | 'but' |
| d. /LH/ tone, $\{$ e o $\}$ |  |  |  |
| $g o ̌-m$ | gò-mè | go-mo | 'take out' |
| dànjí | dànjè | danjo | '(rain) strike hard' |
| bǎl | bàlè | balo | 'gather' |

### 10.1.1.2 Irregular verbs

There is one $C \grave{v} C \hat{v}$ : verb with final high vowel and /LHL/ melody. This is dinet. 'find (by chance), encounter'. Tonologically, it has similar properties to the two monosyllabic verbs jê: 'bring' and $d w \hat{\varepsilon}$ : 'arrive', the only verbs that have $/ \mathrm{HL} /$ melody. These three stems keep their tone melodies in a range of inflectional contexts. Regular verbs (all but these three) have either $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ melody, the choice being partially predictable from initial consonant. For regular verbs, the lexical is overridden by inflection-specific grammatical tone overlays in several inflectional categories.
'Give' varies between $N C v$ shape (third-person perfective $\grave{n} d \hat{\varepsilon}$-, irregular imperative ndí) and an extended shape NCirv (third-person perfective ìdírè-, imperative ǹdírà-). The extended form can be compared to the transitive derivation with $-r \varepsilon \in-r$ or $-l \varepsilon ́ \sim-l(\S 9.3 .2-3)$, but it does not increase the already disyllabic valency of the simple 'give' verb.

### 10.1.2 The chaining form

In nonfinal position in chains, verbs have their chaining form. For verbs of the -ATR $\{\varepsilon \rho\}$ class, the chaining form is based on the E-stem, and therefore ends in $\varepsilon$. For verbs of the + ATR $\{$ e $o\}$ class, the chaining form is based on the I-stem, which in most cases ends in $/ \mathrm{i} /$.

The $/ \mathrm{i} /$ is subject to deletion after an unclustered intervocalic sonorant. Examples involving (underlying) bisyllabic stems are nóy ‘sleep', ín 'go', nǎl 'give birth', and tár 'look' (compare perfectives nòyè-, ìnè-, nàlè-, tàrè̀-). Trisyllabics: óbí-y 'sit', tógíl 'chew (kola nuts)', wùjí-y 'turn around' (perfectives òbì-yè, tògìlè, wùjì-yè).

The chaining form exhibits the lexical tone melody, which is either $/ \mathrm{H} /$ or $/ \mathrm{LH} /$, except for two monosyllabic verbs with /HL/ (dwê: 'arrive', jê: 'bring') and one bisyllabic with /LHL/ (dìnê. 'find'). The /LH/ melody is expressed as LH*, with a single initial L-tone followed by one or more H-tones to fill out the rest of the stem. Monosyllabic stems are /H/-toned. Examples of the /LH/ melody are màmílí-yé 'go back', gìnágí 'break', yòbé 'run', and nǎl (</nàlí/) 'give birth'. Examples of the /H/ melody are íngí-yé 'stand, stop', nóy (</nóyíl) 'sleep', and monosyllabics kwé 'eat', gwé 'go out', and wé 'come'.

The chaining form is the best citation form. It directly expresses the lexical tone melody. It either expresses directly, or allows one to infer, the ATR-harmonic class, since all $\{\varepsilon \rho\}$ stems have an overt final $/ \varepsilon /$ in this form, and all $\{\mathrm{e} o\}$ stems either have an overt e or $o$ somewhere in the stem or have extraharmonic vowels from the set $\{u i a\}$ and end in a sonorant. Thus from chaining form tár 'look' we can infer perfective tàrè-.

In the inflected forms to which we now turn, both the lexical harmonic class and the lexical tone melody are frequently overridden by harmonies and tone overlays or formulae imposed by specific AN (aspect-negation) suffixes.

### 10.1.3 Perfective and imperfective systems

The indicative aspect-negation (AN) categories are those in (320). The perfective has zero suffix, while all others have suffixes or are periphrastic. The categories in (320) do not include past-shifted categories, on which see below.
a. perfective positive system
perfective
experiential perfect
b. imperfective positive system
present
progressive
future
c. perfective negative system
perfective negative
experiential perfect negative
d. imperfective negative system
present negative
future negative
progressive negative

A recurrent feature in the imperfective systems is a partially segmentable nasal, either $m$ or assimilated $n$ or $\eta$, at the beginning of aspectual suffixes. It occurs in $-m=b \grave{\varepsilon}$ - (past imperfective, future-in-past), present -njò-, future -mbô-, progressive -mbò, present negative -ndí-, future negative -ndí-, present relative participial -ngà, and future relative participial -ŋ́gà. The 3 Sg future portmanteau is just -m, and this may well reflect an original labial point of articulation. In addition to imperfectives, the nasal extends in part to statives, as in past stative $-m=b \varepsilon \varepsilon_{-}$and stative participle - $\eta g a ̀ . ~ T h e ~ n a s a l ~ c a n ~ t h e r e f o r e ~ b e ~ d e s c r i b e d ~$ negatively as a general non-perfective. If the nasal is segmented, this will require relabeling of the remaining morpheme. For example, future -mbô- and progressive -mbò could be connected to bò- 'be (somewhere)'. For a possible survival of *gà without the nasal, see $\S 14.3 .11$. However, I do not hyphenate except in $-m=b \grave{\varepsilon}$-, whose morphological structure is transparent.

The aspect-negation suffixes are followed (in simple main clauses) by pronominal-subject suffixes (§10.2). The basic AN suffixes and the pronominal-subject suffixes are not completely independent morphophonologically, and it is necessary to give sample pronominal-subject paradigms for each AN suffixal category covered below.

All of the categories in (320) are normally compared to the moment of speaking as the temporal reference point. For example, a simple perfective denotes an event that is already completed at this reference point. The reference point can be shifted to a past-time point by adding the inflectable past enclitic $=b \grave{\varepsilon}-$, which follows some AN suffixes and therefore constitutes a parallel inflectional system to (320), see §10.3.

Imperatives and hortatives (deontic modals) have their own distinctive morphology, see §10.4.

### 10.1.3.1 Perfective

The all-purpose perfective (positive) stem denotes completed individual events and is common in narratives. Various past imperfectives are expressed differently, with past enclitic $=b \grave{\varepsilon}$ - added to the relevant imperfective stem (§10.3).

The perfective (except for the 3 Pl subject form) is based on the E-stem, and therefore ends in either $\varepsilon$ or $e$ depending on the ATR-harmonic class of the stem. The 3Pl form is based on the $\mathbf{A} / \mathbf{O}$ stem. The E-stem is transparently the basis for 1 Sg and 1 Pl forms. The $2 \mathrm{Sg}, 2 \mathrm{Pl}$, and 3 Pl subject forms undergo $v v$-Contraction, but the contracted vowel takes the ATR value of the stem-final vowel. In addition, non-stem-final vowels are -ATR or +ATR based on their lexical ATR class.

For all but three irregular verbs, 1 st/2nd person forms have an $\{\mathrm{LH}\}$ tone overlay, i.e. $\{\mathrm{L}\}$-toned stem followed by H-toned suffix. 3 Sg and 3 Pl forms are $\{\mathrm{HL}\}$ when pronounced in isolation, but frequently drop to $\{\mathrm{L}\}$-toned in actual clauses when preceded by at least one constituent, and always drop to $\{\mathrm{L}\}$ before 'if' particles $m \varepsilon ́$ and dé in conditional antecedents and before interrogatives ló and $\mathrm{ma} \rightarrow$.

The three irregular verbs are /LHL/-toned dìnê:- 'find (by chance)' ( 3 Sg dìn $\hat{\varepsilon}:-\varnothing$, 3 Pl dìnô:- $\varnothing$ ) and /HL/-toned $d w \hat{\varepsilon}:-\quad$ 'arrive' ( $3 \mathrm{Sg} d w \hat{\varepsilon}:-\varnothing, 3 \mathrm{Pl}$ dô:- $\varnothing$ ) and jê:-- 'bring' $3 \mathrm{Sg} j \hat{e}:-\varnothing$, 3Pl jô:- $\varnothing$ ). These irregular verbs keep their lexical melody throughout the perfective paradigm, even in 1st/2nd person forms and in third-person forms in all contexts, including before 'if' and interrogative particles.

1 Sg and 3 Sg forms are given for a few representative verbs in (321).
gloss
perfective
c. tonally irregular
/HL/melody

| 'bring' | jê:-m | $j \hat{\text { je:- }}$ - | $j e ̂:-\varnothing$ mé |
| :---: | :---: | :---: | :---: |
| 'arrive' | $d w \hat{\varepsilon}:-m$ | $d w \hat{\varepsilon}:-\varnothing$ | $d w \hat{\varepsilon}:-\varnothing$ mé |
| LHL/ melody |  |  |  |
| 'find' | dinĉ:-m | dìnĉ:- $\varnothing$ | dìnê:- $\varnothing$ mé |

'find'
$1 \mathrm{Sg} \quad 3 \mathrm{Sg}$ in isolation 3 Sg before $m \varepsilon{ }^{\text {'if' }}$
a. -ATR
'hit'
'hit'
'eat'
dènjè-ḿ
'cut' kèjè-ḿ
'see' $\quad y \grave{\varepsilon}-\underline{m}$
'drink' $n \grave{\varepsilon}-\bar{m}$
'bathe' íngé dìyè-m
'run'
'go back'
b. +ATR
'come'
'go'
'sleep'
'break'

Wè-ḿn
ìnè-ń
nòyè-ḿ
gìnàgè-ı́m
$w \hat{e}-\varnothing$
ínè- $\varnothing \quad$ ìnè- $\varnothing$ mé
nóyè- $\varnothing \quad$ nòyè̀ $\varnothing$ mé
gínàgè- $\varnothing$

| dénjè- $\varnothing$ | dènjè- $\varnothing$ mé |
| :---: | :---: |
| $k w \hat{\varepsilon}-\varnothing$ | $k w \varepsilon ̇-\varnothing$ mé |
| kéjè-Ø | $k \varepsilon ̀ j e ̀-\varnothing$ mé |
| $y \hat{\varepsilon}-\varnothing$ | $y \grave{\Sigma}-\varnothing$ mé |
| $n \hat{\varepsilon}-\varnothing$ | $n \grave{-}$ - $\varnothing$ mé |
| íngé díyè- $\varnothing$ | íngé dìyè- $\varnothing$ mé |
| yóbè- $\varnothing$ | yòbè- $\varnothing$ mé |
| mámìlìyè- $\varnothing$ | màmìlìyè- $\varnothing$ mé |

màmìlìyè-ń
mámìlìyè- $\varnothing$ màmìlìyદ̀- $\varnothing$ mé
$1 \mathrm{Sg} \quad 3 \mathrm{Sg}$ in isolation 3 Sg before $m \varepsilon ́$ 'if'

ỳ̀bé

$$
5
$$

The verbs in (321a) belong to the -ATR $\{\varepsilon \rho\}$ class. The stem therefore ends in $\varepsilon$, and any preceding stem vowels of mid height must be $\varepsilon$ or $\Omega$. The verbs in (321b) belong to the +ATR $\{\mathrm{e} o\}$ class, so they end in e and may have preceding $\{\mathrm{e} o\}$ but not $\{\varepsilon \rho\}$ vowels. (321c) illustrates the three verbs whose lexical melodies end in a falling tone.

The full pronominal-subject paradigm shows that the $1 \mathrm{Pl}, 2 \mathrm{Sg}$, and 2 Pl are tonally parallel to the 1 Sg . However, the 2 Sg and 2 Pl suffixes are vocalic and therefore contract with the stem-final /e/ or $/ \varepsilon /$. The 3 Pl is tonally parallel to the 3 Sg (gínàg-à: 'they broke').

The $\mathbf{3 P l}$ requires $\{e o\}$ vocalism in nonfinal stem vowels, even in verbs that have $\{\varepsilon \rho\}$ vocalism in all other perfective forms. For such stems, the contracted 3 Pl suffixal vowel is heard as -à:; which corresponds in vowel quality to the final a that these stems have in the A/O stem (322). This (along with other details) suggests that the 3 Pl , alone of the perfective forms, is based on the A/O-stem.

| (322) | gloss | 1Sg | 3 Sg | 3 Pl |
| :---: | :---: | :---: | :---: | :---: |
|  | 'hit' | dènjè-ḿ | dénjè- $\varnothing$ | dénj-à: |
|  | 'eat' | kwè-ḿm | $k w \hat{\varepsilon}-\varnothing$ | kw-â: |
|  | 'run' | yòbè-ḿn | yóbè- $\varnothing$ | yób-à: |

Sample full paradigms are in (323).

| (323) | category | 'ate' | 'hit' | 'go' | 'sleep' | 'break' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 Sg | $k W \varepsilon$-ḿ | dènjè-mín | ìnè-ı́n | nòyè-ḿ | gìnàgè-ḿ |
|  | 1 Pl | kwè-ý | dènjè-ý | ìnè-ý | nòyè-ý | gìnàgè-ḿn |
|  | 2 Sg | $k$-ǒ: | dènj-ǒ: | ìn-ǒ: | nòy-ǒ: | gìnàg-ǒ: |
|  | 2 Pl | $k W-\varepsilon ̌:$ | dènj-દ̌: | ìn-ě: | nòy-ě: | gìnàg-ě: |
|  | 3 Sg | $k w \hat{\varepsilon}-\varnothing$ | dénjè- $\varnothing$ | ínè- $\varnothing$ | nóyè- $\varnothing$ | gínàgè- $\varnothing$ |
|  | 3 Pl | $k w$-â: | dénj-à: | ín-ò: | nóy-ò: | gínàg-à: |

For 'give', the only $N C V$ verb stem known to me, the perfective is either ìdè- $(3 \mathrm{Sg}$ ìd $\hat{\varepsilon}-\varnothing$ 'he/she gave', 3Pl ǹd-â:) or irregular bisyllabic ǹdirè- (3Sg ǹdírè- $\varnothing$, 3Pl ǹdír-à:). See §3.2.11.1 for the phonology of initial $N C$ clusters. The additional syllable in the bisyllabic variant resembles the transitive derivational $-r \varepsilon \in \sim-r$, which elsewhere adds a higher agent to another verb (usually intransitive). The conceptual structure of 'give' intrinsically includes a beneficiary (the recipient), and this isolated stem alternation in Najamba is reminiscent of the use of the cognate transitive derivational suffix in benefactive function in Tiranige.

### 10.1.3.2 Experiential perfect 'have ever' (tár jò-)

The experiential perfect is expressed periphrastically. The semantically substantive verb occurs in its chaining form. It is followed in the positive by what appears to be the verb tár 'look (at)', also in chaining form, then an inflected form of perfect auxiliary jò-. The negative counterpart is constructed with perfective negative tárá-l- 'did not look'; for the perfective negative paradigm see (339) in §10.1.4.2 below. For other functions of perfect jò- see $\S 10.1 .3 .3$ just below. Examples of the experiential perfect are in (324).
a. [bàmàkó mà] ín tár jò-m
[Bamako in] go have.ever Perfect- 1 SgSbj
'I have (once) gone to Bamako.'
b. èndê: dènjé tárá-lú-m
child hit have.ever-PfvNeg-1SgSbj
'I have never hit a child.'

The use of tár 'look' arguably reflects a basic split in Dogon thought between knowledge, facts, customs, etc. that were transmitted to the current generations by their elders, and those that were witnessed or produced by the younger generations themselves. In texts, the speaker will often specify whether a historical event (such as the introduction of the plow) was 'encountered, found' (verb dìnê:), i.e. took place before the speaker's childhood, or was initially observed (tár) by the speaker.

Most other Dogon languages have a similar experiential perfect including a verb-like element tárá, tá, or the like following the main verb in a chain-like construction, but so far as is presently known none of these other languages has a cognate of the independent Najamba verb tár 'look'. Therefore it is far from certain that 'look' and the experiential perfect morpheme are etymologically identical.

### 10.1.3.3 Perfect (jò-, jòg-â:-)

Najamba distinguishes a chain construction with regular verb $j \varepsilon$ 'finish (doing)' (§17.5.1) from a more highly grammaticalized perfect with auxiliary verb jò-. This auxiliary follows a verb in its chaining form. There is also a fuller form jòg-â:-, which similarly follows a verb in chaining form.

The paradigms of jò- and jòg-â:-, along with the positive perfective paradigm of 'finish' for comparison, are in (325). The paradigm of $j o \grave{o}$ - is a conventional verbal pronominal-subject paradigm. The exception is an unusual 3 Pl form which may reflect avoidance of any form that could be confused with the 3 Pl of 'finish'. The paradigm of jòg-â:- is quite different. In form it is the conjugation of the 'it is' enclitic (§11.2.1.2) added to a noun-like participle that has an unmarked singular and a plural suffix -mbo-. In the 3 Sg form, the enclitic $=y$ is optionally omitted (as in the passive).

| category | jò- | jòg-â:- | 'finish' (Pfv) |
| :---: | :---: | :---: | :---: |
| 1 Sg | jò-ḿn | $j o ̀ g-a ̂:=\grave{m}$ | $j \grave{\varepsilon}-m$ |
| 1 Pl | jò-ý | jòg-â:-mbò = y | $j \grave{\text { che }}$ |
| 2 Sg | $j$-ǒ: | jòg-â: $=$ W | $j$-ò: |
| 2 Pl | $j$-ě: | $j o ̀ g-a ̂:-m b=e ̀: ~$ | $j-\varepsilon$ : |
| 3 Sg | $j o ̀-\varnothing$ | jòg-â:( $=\grave{y}$ ) | $j \grave{\varepsilon}-\varnothing$ |
| 3 Pl | jògà |  | $j$-à: |

The participle plus 'it is' enclitic structure recurs in the passive construction (§10.5, (§14.4.2.2).

Both jò- and jòg-â:- are probably related historically to the stative quasi-verb jógò- 'have' (§11.5.1). The sense is often that of a recent perfect ('have already VP-ed').
jòg-â: = y may also be followed by an inflected form of kán 'do; be done'. This is common when there is a possibility of a subject switch, as in conditional antecedents. (326) contains one positive and one negative form of kán in this construction.

| (326) | [ó | ${ }^{\text {L }}$ jù:] | [ké mà ] |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [2SgPoss | ${ }^{\text {L }}$ comrade] | [InanSg.E in] |  |  |
|  | ó | dìmbí-yé | $j o ̀ g-\hat{a}:=\hat{y}$ | kànè- $\varnothing$ | $m \varepsilon$ |
|  | 2 SgObj | follow-MP | Perfect-PplNonSbj=it.is | be.done.Pfv-3SgSbj | if, |
|  | [é | ${ }^{\text {L }}$ bìrò:] | kúndú=ýn | kànè- $\varnothing$, |  |
|  | [2PlPoss | ${ }^{\text {L }}$ work] | one.InanSg. $\mathrm{O}=\mathrm{it}$.is be | be.done.Pfv-3SgSbj |  |
|  | [ ${ }^{\text {ó }}$ | ${ }^{\text {L }}$ jù:] | [ké mà ] |  |  |
|  | [ 22 SgPoss | $s{ }^{\text {L }}$ comra | de] [InanSg.E in] |  |  |
|  | ó | dìmbí-yé | jog̀-â:-y | káná-1-Ø | dé] |
|  | 2 SgObj | follow-MP | Perfect-PplNonSbj=itis | be.done-PfvNeg-3SgSbj | if] |
|  | [[mó là | là] [mó |  |  |  |
|  | $[[\mathrm{AnSg}$ a | also] [AnSgP | Poss ${ }^{\text {L }}$ road] take.Pfi | fv-3SgSbj] |  |

'If it happens that your-Sg comrade has followed (= supported) you in that, (then) your- Pl work is one ( $=$ the same). If your-Sg comrade has not followed you in that, (then) he too will have taken his (own) path.' (2005-1a)

The perfect with jò- often functions to describe a current state that has resulted from a previous change of state. The emphasis may be on the current state rather than the transition. For example, this perfect is used with deadjectival inchoative verbs ('become ADJ') in what amounts to a predication of a present-time state (§11.4.3). See also jò- in symmetrical comparatives, $(459 \mathrm{~b}-\mathrm{c})$ in §12.2.3.

### 10.1.3.4 Future (-m̀-, -mbô-)

There is a marked future with a suffix that takes the short form -m- in the 3 Sg , and a fuller form -mbô- in other pronominal-subject categories. For uninflectable -mbò followed by auxiliary verb bò- 'be' in progressive sense, see §10.1.3.5.

The future paradigm is based on the A/O-stem of the verb. Therefore all mid-height stems vowels are of the + ATR $\{e o\}$ class. The 1 st/2nd person forms have $\{\mathrm{L}\}$-toned stem, with a falling tone on the suffix complex, formula $\mathbf{L}^{*}$ - $\mathbf{H L}$. In the 3 Sg and 3 Pl , the stem has $\{\mathrm{LH}\}$ tone overlay, and both the L and H must be expressed, formula $\mathbf{L} * \mathbf{H}-\mathbf{L}$. In the 3 Sg , the suffx -min is L-toned, so the final H -tone on the stem combines with it to produce a falling $<\mathrm{HL}>$ tone on the final syllable. If the verb is monosyllabic, the combination of the $\{\mathrm{LH}\}$ stem overlay with the L-toned -m̀ results in an <LHL> syllable, as with 'see' in (327). Forms of two other verbs with lexical-ATR $\{\varepsilon \rho\}$ vocalism are presented for comparison.

| category | future | $y \varepsilon{ }^{\prime}$ 'see’ | $k \varepsilon ́ j \varepsilon ́ ~ ' c u t ' ~$ | dògé 'leave’ |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | -mbó-m̀ | yà-mbó-m̀ | kèjà-mbó-m̀ | dògà-mbó-m̀ |
| 2Sg | -mb-ô: | yà-mb-ô: | kèjà-mb-ô: | dògà-mb-ô: |
| 1 Pl | -mbó-ỳ | yà-mbó-ỳ | kèjà-mbó-ỳ | dògà-mbó-ỳ |
| 2 Pl | -mb-ê: | yà-mb-ê: | kèjà-mb-ê: | dògà-mb-ê: |


| 3 Sg | $-\grave{m}$ | yǎ-ìm | kèjá-ì | dògá-m̀ |
| :--- | :--- | :--- | :--- | :--- |
| 3 Pl | $-m b-a ̀$ | yǎ-mb-à | kèjǎ-mb-à | dògǎ-mbà |

[could also be segmented -m-bà based on 3Sg]

Some additional 1 Sg and 3 Sg forms are in (328), which also presents the 1 Sg perfective (on the left) for comparison. The stems in (328a) are lexically of the $\{\varepsilon \rho\}$ type, while those in (328b) are of the $\{e o\}$ type.

|  | gloss | 1Sg perfective | 1Sg future |
| :--- | :--- | :--- | :--- | 3Sg future

For tips on how to distinguish 3 Sg future $-\grave{m}$ from 1 Sg subject suffix $-m$ and from pluraladdressee imperative $-m$, see $\S 10.4 .1 .2$ below.

### 10.1.3.5 Progressive -mbò bò-

The combination of a verb ending in suffix -mbò with a pronominally inflected 'be' quasiverb bò- results in a progressive construction. For the conjugation of bò- itself, see §11.2.2.1. The -mbò suffix is perhaps related in some way to the future suffix, which has allomorphs -m $(3 \mathrm{Sg})$ and $-m b o ́-(1 s t / 2 n d$ persons). It should be sharply distinguished from another $-m b o ̀$ suffix in 'and (then)' constructions, which follows the chaining form of the verb (lexical tones, final $/ \varepsilon /$ or $/ \mathrm{i} /$ ); on the 'and then' construction see $\S 15.1 .3$.

Examples showing the form of verb stems before progressive -mbò are in (329). The vocalism shows that the progressive (like the future and other nonzero AN inflections) is based on the A/O-stem of the verb. The tones on the stem are $\{\mathrm{H}\}$ for short-voweled monosyllabics ('eat', 'see'), and $\{\mathrm{HL}\}$ for bimoraic verbs (long-voweled monosyllabics, and short-voweled bisyllabics ('leave', 'slaughter', 'bring', 'arrive'). In verbs with three moras, the first mora has the particular verb's lexical tone onset. Any remaining moras between this initial mora and the H of $\{\mathrm{HL}\}$ are high. Compare /H/-melody 'scrub' with /LH/-melody 'go back', 'break', and 'instruct'. The tonal formula for the stem is therefore $((\mathbf{X})) \mathbf{H} *(\mathbf{L})$.
(329)

| gloss | chaining | progressive |
| :--- | :--- | :--- |
|  |  |  |
| 'go back', | màmílí-yé | màmílí-yà-mbò |
| 'break' | gìnágíi | gìnágà-mbò |
| 'scrub' | túgújé | túgújà-mbò |
| 'instruct' | bă:ré | bă:rà-mbò |
| 'leave' | dógé | dógà-mbò |
| 'slaughter' | sémé | sémà-mbò |
| 'eat' | kwé | kwá-mbò |
| 'see' | ý́ | yá-mbò |
| 'bring', | jê: | jô:-mbò |
| 'arrive' | $d w \hat{\varepsilon}:$ | dô:-mbò |

Examples including inflected forms of auxiliary bò- are in (330).
a. gìnágà-mbò $b-\varepsilon$ :
b. gìnágà-mbò bò- $\varnothing$
'they are breaking'
c. gìnágà-mbò bò-m 'I am breaking'

A textual example is (331).

| gà:gó | ó | gíyà-mbò | bò- $\varnothing$, |
| :---: | :---: | :---: | :---: |
| hunger | 2 SgObj | kill-Prog | be-3SgSbj |
| [ ${ }^{\text {ó }}$ | ${ }^{\text {L nògò }}$ | mó] | gì] hàybá-nd-ò: |
| [ [2SgPoss | ${ }^{\text {L }}$ husband | Def.AnSg] | Acc] watch.over-FutNeg-2SgSbj |
| 'Hunger | ing you, | d) you don | ch over your husband.' (2005-2a) |

For the past progressive in -mbò bè- see §10.3.1.6.

### 10.1.3.6 Present (-njò-)

As in the other suffixal AN forms, the A/O-stem of the verb is used. The tone formula for the stem is identical to that of the progressive (§10.1.3.5), i.e. $((X)) H^{*}(L)$, realized as $\{H\}$ for monomoraic stems, $\{\mathrm{HL}\}$ for bimoraic stems, initial lexical tone for verbs of three or more moras, and any additional moras H -toned. For the 3 Pl , whose suffix begins with an H -tone element, the final $L$ of the stem is obligatory even for monosyllabics.

| gloss | chaining | present |
| :--- | :--- | :--- |
|  |  |  |
| 'go back' | màmílí-yé | màmílí-yà-njò- |
| 'break' | gìnágí | gìnágà-njò- |
| 'scrub | túgújj́ | túgújà-njò- |
| 'instruct' | bă:ré | bă:rà-njò- |
| 'leave' | dogǵ | dógà-njò- |
| 'slaughter' | sémé | sémà-njò- |


| 'eat' | $k w \varepsilon ́$ | kwá-njò- |
| :--- | :--- | :--- |
| 'see' | $y \varepsilon ́$ | yá-njò- |
| 'bring' | $j e ̂:$ | $j o ̂:-n j o ̀-~$ |
| 'arrive' | $d w \hat{\varepsilon}:$ | $d o ̂:-n j o ̀-~$ |

The pronominal-subject paradigm is (333).

| category | conjugation | with yé‘see' |
| :--- | :--- | :--- |
| 1 Sg | $-n j o ̀-m$ | yá-njò-m |
| 2 Sg | $-n j-o ̀:$ | yá-nj-ò: |
| 3 Sg | $-n j o ̀-\varnothing$ | yá-njò- $\varnothing$ |
|  |  |  |
| 1 Pl | $-n j o ̀-y$ | yá-njò-y |
| 2 Pl | $-n j-e ̀:$ | yá-nj-è: |
| 3 Pl | $-n j-\hat{\varepsilon}:$ | yâ-nj-ध.: |

The present with suffix -njò- may be used in weakly progressive ('be VP-ing') or habitual senses. Examples are in (334).
a. íngé díyà-njò-m water bathe-Pres-1Sg
'I am bathing.'
$\begin{array}{llll}\text { b. } & \left.\begin{array}{ll}\text { dénán } & \text { dîn }\end{array}\right] & \text { íngé } & \text { díyà-njò-m } \\ \text { [day } & \text { each } \\ \text { 'I bathe every day.' }\end{array}$
10.1.4 Negation of indicative verbs
10.1.4.1 Categories expressed by negative verbs

### 10.1.4.2 Perfective negative (-l-)

The perfective negative is characterized by a suffix beginning with $-l$-, except for a special 3Pl form -ndí. The forms with -l- suggest a basic form /-lv́-/ with an H-toned high vowel. The best choice is /-lí-/ rather than /-lú-/, since there is a construction with unconjugated final -lì (§15.1.4.4). The high vowel is deleted word-finally in the zero 3 Sg form, contracts with a suffixal vowel in the 2 Sg and 2 Pl , and appears with (arguably) assimilated vowel quality in $1 \mathrm{Sg}-l u ́-m$ and 1 Pl -lí-ỳ (or -lì-y).

The verb is in the A/O-stem. For nonmonosyllabic stems, the tones are lexical, hence either $/ \mathrm{H} /$ or $/ \mathrm{LH} /$. Examples of the 1 Sg and 3 Sg are in (335).

| gloss |  | chaining | perfective negative |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1Sg | 3 Sg |
| a. | 'hit' |  | dènjé | dènjá-lú-m | dènjá-l |
|  | 'cut' | kéjé | kéjá-lú-m | kéjá-1 |
|  | 'run' | yòbé | yòbá-lú-m | yòbá-1 |
|  | 'scrub' | túgújé | túgújá-lú-m | túgújá-1 |
|  | 'go' | íné | ínó-lú-m | ínó-1 |
|  | 'sleep' | nóy | nóyó-lú-m | nóyó-1 |
|  | 'sit' | óbí-y | óbí-yó-lú-m | óbí-yó-l |
| c. | 'break' | gìnágí | gìnágá-lú-m | gìnágá-1 |

Monosyllabic verbs with short vowel ( $C \hat{v}, C W \hat{v}$ ) are illustrated in (336). The perfective negative is instructive in that some of these verbs lengthen the stem vowel (336a,c) while others do not (336b), and in that some of the verbs have H-toned stem (336a) while others have L-toned stem (336b-c).

For the stems with low tone before the perfective negative suffix /-lí-/, when the suffixal vowel is deleted (in the zero 3 Sg form), the suffixal H -tone survives, amalgamating with the stem's low tone to result in a rising tone (336b-c)

$$
\begin{equation*}
\text { gloss } \quad \text { chaining } \quad 1 \mathrm{Sg} \text { PfvNeg } \tag{336}
\end{equation*}
$$

3Sg PfvNeg
a. lengthened vowel, /H/ melody

| 'eat' | kWÉ | kwá:-lú-m | kwá:-1-Ø |
| :---: | :---: | :---: | :---: |
| 'go in' | $\eta W \varepsilon ์$ | ทwá:-lú-m | nwá:-1-Ø |
| 'sow' | $t w \varepsilon ์$ | twá:-lú-m | twá:-1-Ø |
| 'pour' | SWé | swá:-lú-m | swá:-1-Ø |


| b. 'come' | wé | wò-lú-m | wǒ-1- $\varnothing$ |
| :---: | :---: | :---: | :---: |
| 'drink' | $n \varepsilon ์$ | nà-lú-m | nǎ-1-Ø |
| 'weep' | né | nà-lú-m | nǎ-1-Ø |
| 'be, stay' | $b \varepsilon$ | bà-lú-m | bǎ-1-Ø |
| 'go out' | gWé | gò-lú-m | gǒ-1-Ø |
| 'insult' | $d W \varepsilon ์$ | dwà-lú-m | $d w a ̆-1-\varnothing$ |
| 'pound' | $d w \varepsilon ์$ | dwà-lú-m | $d w a ̆-1-\varnothing$ |
| c. 'see' | yé | yà:-lú-m | yă:-1-Ø |
| 'hear' | ПWغ́ | nwà:-lú-m | ทwă:-1-Ø |

The tonal and vowel-length splits among $C$ ( and $C W \hat{V}$ ) monosyllabics in the perfective negative inflection, and in the causative derivation, are undoubtedly archaic phonological characteristics that have elsewhere been lost, very likely as the result of shortening of these verbs from two to one mora ( $C \bar{v}$ : to $C \hat{v}$ ). Note in particular that $\eta W \varepsilon$ 'go in' (336a) and $\eta W \varepsilon ́$
'hear' (336c) have distinct perfective negative forms, though most of their other inflections are homophonous. These two stems also have different tones in causative $\eta$ wá:-m 'take in' and $\eta$ wǎ:- $m$ 'cause to hear', and there is comparative evidence that the two stems originally differed in tone. However, while both the perfective negative and the causative split these monomoraic stems into three groups, the inventories are not exactly the same, since in the causative only 'go out' has a short-voweled stem (gǒ-m). See §9.2.1 for details.

Monosyllabic stems with long vowels are illustrated in (337).

| gloss | chaining | 1Sg PfvNeg | 3Sg PfvNeg |
| :---: | :---: | :---: | :---: |
| a. 'eat' | ké: | ká:-lú-m | ká:-1-Ø |
| 'sprout' | té: | - | tá:-1- $\varnothing$ |
| 'stay up' | $n \varepsilon$ : | ná:-1-úm | ná:-1- $\varnothing$ |
| 'sting' | té: | tá:-1-úm | tá:-1-Ø |
| b. 'bring' | $j \mathrm{je}$ : | jô:-1-úm | jô:-1- $\varnothing$ |
| 'arrive' | $d w \hat{\varepsilon}$ : | dô:-1-úm | dô:-1-Ø |

For the tonal phonology of $3 \mathrm{Sg} j \hat{o}:-1-\varnothing$ and $d \hat{o}:-1-\varnothing$ (329b), see $<\mathrm{HLH}>$-to- $<\mathrm{HL}>$ Reduction (§3.6.4.5).

The $\mathbf{3 P l}$ form is distinctive within the perfective negative paradigm. The stem has $\{\mathbf{L}\}$ overlay, and the final vowel is lengthened. The suffix is -ndí, which is probably opaque to further (synchronic) segmentation. Examples of the $1 \mathrm{Sg}, 3 \mathrm{Sg}$, and 3 Pl are in (338). The 3 Pl forms for 'enter' and 'hear' in (338a) are homophonous, though the corresponding 1 Sg and 3 Sg forms are audibly distinct.

| gloss | 1Sg PfvNeg | 3Sg PfvNeg | 3Pl PfvNeg |
| :---: | :---: | :---: | :---: |
| a. 'see' | yà:-lú-m | yă:-1- $\varnothing$ | yà:-ndí |
| 'drink' | nà-lú-m | nǎ-1-Ø | nà:-ndí |
| 'go out' | gò-lú-m | gǒ-1-Ø | gò:-ndí |
| 'come' | wò-lú-m | wǒ-1-Ø | wò:-ndí |
| 'eat' | kwá:-lú-m | kwá:-1-Ø | kwà:-ndí |
| homophonous in 3Plonly |  |  |  |
| 'enter' | ๆwá:-lú-m | 1.wá:-1-Ø | nwà:-ndí |
| 'hear' | jwà:-lú-m | 1]wǎ:-1-Ø | nwà:-ndí |
| b. 'cut' | kéjá-lú-m | kéjá-1-Ø | kèjà:-ndí |
| 'hit' | dènjá-lú-m | dènjá-l- $\varnothing$ | dènjà:-ndí |
| 'run' | yòbá-lú-m | yòbá-1-Ø | yòbà:-ndí |
| 'go' | ínó-lú-m | ínó-1- $\varnothing$ | ìnò:-ndí |
| 'jump | tómbó-lú-m | tómbó-1-Ø | tòmbò:-ndí |

The $\mathbf{1 P l}$ perfective negative suffix complex is always segmentally $-l i-y$. The 1 Pl suffix $-\bar{y}$ is L-toned. The -li- morpheme has a tone opposite to the final tone of the preceding stem. Since
the only perfective negative forms with stem-final low tone are a subset of the monosyllabic stems, there are only a handful of verbs that show up with 1 Pl perfective negative $-1 \hat{1}-\dot{y}$. Examples are yà:-lí-ỳ 'we did not see', wò-lí-ỳ 'we did not come'. All bisyllabic or longer stems end in an H-tone before the perfective negative suffix, as do the remaining monosyllabics, and all these verbs have 1 Pl perfective negative $-l i ̀-y$ (equivalent to /-lì-ỳ/ with low tone. Thus kwá:-lì-y 'we didn't eat', sémá-lì-y 'we did not slaughter', dògá-lì-y 'we did not leave', túgújá-lì-y 'we did not scrub'. Within the perfective negative paradigm, this low tone is unique to the 1 Pl .

Sample full paradigms are in (339).

| category | conjugation | with 'see' | with 'run' |
| :--- | :--- | :--- | :--- |
|  |  | yà:-lú-m | yòbá-lú-m |
| 1 Sg | $-l u ́-m$ | yà:-l-ó: | yòbá-l-ó: |
| 2 Sg | $-1-o ́:$ | yă:-l- $\varnothing$ | yòbá-l- $\varnothing$ |
| 3 Sg | $-1-\varnothing$ | yà:-lí-ỳ | yòbá-lì-ỳ |
|  |  | yà:-l-é: | yòbá-l-é: |
| 1 Pl | $-l i ́-y$ | yà:-ndí | yòbà:-ndí |
| 2 Pl | $-l-e ́:$ | -ndí |  |

For experiential perfect negative tárá-l, see §10.1.3.2.

### 10.1.4.3 Future negative (-ńdì-)

The future negative (FutNeg) indicates that an eventuality of the relevant type will not occur (in a relevant future time frame).

The suffix is -ńdì-. The low tone on the vowel distinguishes this suffix from the H-toned present negative -ndí- and also from 3Pl perfective negative :-ndí (which also lengthens the preceding vowel).

In the future negative, the stem ends in a single $\mathbf{H}$-toned mora. The H -tone is realized on the $n$ of the suffix. All preceding syllables are L-toned. The vocalism is that of the A/O-stem.

| (340) | gloss | chaining | future negative |
| :---: | :---: | :---: | :---: |
|  | 'go back' | màmílí-yé | màmìli-yǎ-ndì- |
|  | 'break' | gìnágí | gìnàgǎ-ndì- |
|  | 'scrub | túgújé | tùgùjǎ-ndì- |
|  | 'instruct' | bă:ré | bà:rǎ-ndì- |
|  | 'leave' | dògé | dògǎ-ndì- |
|  | 'slaughter' | sémé | sèmǎ-ndì- |
|  | 'eat' | kwé | kwă-ndì- |
|  | 'see' | yé | yǎ-ndì- |
|  | 'bring' | $j{ }^{\text {ê: }}$ | jǒ:-ndì |
|  | 'arrive' | $d w \hat{\varepsilon}$ : | dǒ:-ndì- |

The future negative is segmentally identical to the present negative (§10.1.4.4), but they differ tonally.

The pronominal-subject future negative paradigm, and a sample paradigm for 'jump', are in (341). The 1 Sg has -nù- $m$ where one would expect something like \#-ndù-m.

| category | conjugation | 'will not jump' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | $-n u ̀-m$ | tòmbó-nù-m |
| 2 Sg | $-n d-o ̀:$ | tòmbǒ-nd-ò: |
| 3 Sg | $-n d \grave{l}-\varnothing$ | tòmbǒ-ndì- $\varnothing$ |
|  |  |  |
| 1 Pl | $-n d i ̀-y$ | tòmbǒ-ndì-y |
| 2 Pl | $-n d-$ è: | tòmbǒ-nd-è: |
| 3 Pl | $-n d i ̀-y a ̀ ~$ | tòmbǒ-ndì-yà |

### 10.1.4.4 Present negative (-ndí-)

The present negative denies that the eventuality in question is occurring at the time of speaking, or that it occurs in some wider time frame including the present.

The present negative is segmentally identical to the future negative. However, the present negative has H-tone on the suffix -ndí-, as well as different stem tones. The -ndí- suffix should be distinguished from the special 3 Pl perfective negative portmanteau :-ndí, which is preceded by all-low toned stem and which lengthens the stem-final vowel.

Present negative -ndí- imposes an L-tone on the final syllable of the stem, and this L-tone must be preceded by an H-tone. As a result, lexical $C \hat{v} C \hat{v}$ and $C \hat{v} C \hat{v}$ stems merge as
 dógà-ndí- 'doesn't leave’ (<dògé). Similarly, all monosyllabics have falling tone on the stem: kwâ-ndí 'does not eat' ( $<k w \varepsilon$ ), dô:-ndí- 'does not arrive' ( $<d w \hat{\varepsilon}:$ ), jô:-ndí- 'does not bring’ (<jê:), kâ:-ndí- 'does not shave’ (<ké:). So neither short (bimoraic) bisyllabics nor monosyllabics reveal their lexical melodies in this inflection.

However, longer stems do distinguish lexical /H/ from /LH/ melodies by the tone of the first syllable or (for $C v: C v$ bisyllabics) the tone of the first mora: túgújà-ndí- 'doesn't scrub' (túgújé ) with initial H-tone, but màmílí-yà-ndí 'doesn’t go back' with initial L-tone (màmílí-yé ), and bǎ:nà-ndí- 'does not cook (porridge)' with $<\mathrm{LH}>$ tone on the first syllable (bà:n).

Therefore the overall stem-tone formula for this inflection is: $\mathbf{( X ) H} \mathbf{H} \mathbf{L}$, with obligatory H and L elements, with the lexically sensitive onset X tone audible if the H and L do not exhaust the available moras of the stem, and with any remaining intervening syllables H-toned.

| (342) | gloss | chaining | present negative |
| :--- | :--- | :--- | :--- |
|  | 'go back' | màmílí-yé | màmílí-yà-ndí- |
|  | 'break' | gìnágíi | gìnágà-ndí- |
|  | 'scrub' | túgújé | túgújà-ndí- |


| 'instruct' | bǎ:ré | bǎ:rà-ndí- |
| :--- | :--- | :--- |
| 'leave' | dògé | dógà-ndí- |
| 'slaughter' | sémé | sémà-ndí- |
| 'eat' | $k w \varepsilon ́$ | kwâ-ndí- |
| 'see' | $y \varepsilon ́$ | yâ-ndí- |
| 'bring' | $j e ̂:$ | $j o ̂:-n d i ́-~$ |
| 'arrive' | $d w \hat{\varepsilon}:$ | $d o ̂:-n d i ́-~$ |

The pronominal-subject paradigm is exemplified by 'jump' in (343). The pronominal suffixes and in fact the entire word forms are identical segmentally to those of the future negative.
(343) category conjugation 'does not jump'

| 1 Sg | $-n u ́-m$ | tómbò-nú-m |
| :--- | :--- | :--- |
| 2 Sg | $-n d-o ́:$ | tómbò-nd-ó: |
| 3 Sg | $-n d i ́-\varnothing$ | tómbò-ndí- $\varnothing$ |

### 10.1.4.5 Progressive negative (-njò-ndí-, -mbò òndú )

The most common progressive negative is not closely related morphologically to the periphrastic progressive (positive) with uninflectable -mbò followed by an inflected form of bò- 'be'. Instead, the form that functions as progressive negative is formed by adding suffix -ndí- (which also appears in the present negative and the stative negative) to what is morphologically the present (positive) form in -njò-.

| gloss | chaining | progressive negative |
| :---: | :---: | :---: |
| 'go back' | màmílí-yé | màmílí-yà-njò-ndí- |
| 'break' | gìnágí | gìnágà-njò-ndí- |
| 'scrub | túgújé | túgújà-njò-ndí- |
| 'instruct' | bă:ré | bă:rà-njò-ndí- |
| 'leave' | dògé | dógà-njò-ndí- |
| 'slaughter' | sémé | sémà-njò-ndí- |
| 'eat' | kwé | kwá-njò-ndí- |
| 'see' | yé | yá-njò-ndí- |
| 'bring' | $j$ jê: | jô:-njò-ndí- |
| 'arrive' | $d w \hat{\varepsilon}$ : | dô:-njò-ndí- |

The pronominal paradigm, and examples with 'jump', are in (345).

| category | conjugation | 'is not jumping' |
| :--- | :--- | :--- |
| 1 Sg | -njò-nú-m | tómbò-njò-nú-m |
| 2 Sg | -njò-nd-ó: | tómbò-njò-nd-ó: |
| 3 Sg | $-n j o ̀-n d i ́-\varnothing$ | tómbò-njò-ndí- $\varnothing$ |
|  |  |  |
| 1 Pl | -njò-ndí-ỳ | tómbò-njò-ndí-y |
| 2 Pl | -njò-ndé: | tómbò-njò-ndé: |
| 3 Pl | -njò-ndí-yà | tómbò-njò-ndí-yà |

It is also possible to negate the periphrastic progressive (positive) complex directly. In this case, instead of [VERB-mbò bò-], the construction is [VERB-mbò òndí-], keeping the progressive suffix -mbò on the verb, and replacing bò- 'be' with its own suppletive negative counterpart òndí- ~ òndú-. (346) is interchangeable with 1 Sg tómbò-njò-nú-m in (345).

```
tómbò-mbò òndí-yó-m
jump-Prog not.be-MP-1SgSbj
'I am not jumping.'
```


### 10.2 Summary of pronominal paradigms for indicative verbs

The subject-pronominal suffixes are slightly variable depending on the presence of a preceding AN suffix, and (when added to the perfective stem with zero AN suffix) on the ATR-harmonic class of the stem. The forms are summarized in (347), with examples from the perfective and present (positive) forms of 'eat'. The alternations e:/ع: and $o: / 0$ : in the contracted second person forms are based on the ATR-harmonic quality of the final vowel of the preceding morpheme.

| category | conjugation | 'ate' (perfective) | 'eat(s)' (present) |
| :---: | :---: | :---: | :---: |
| 1 Sg | -m | $k w \grave{\varepsilon}-\underline{m}$ | kwá-njò-m |
| 1 Pl | -y | kwè-ý | kwá-njò-y |
| 2 Sg | --:/o: | $k-o ̌:$ | kwá-nj-ò: |
| 2 Pl | - $\varepsilon$ :/e: | $k W-\varepsilon$ : | kwá-nj-è: |
| 3 Sg | - $\varnothing$ | $k w \grave{\varepsilon}-\varnothing$ | kwá-njò- $\varnothing$ |
| 3 Pl | $-a: / \varepsilon$ : (etc.) | kw-à: | kwâ-nj-¢̂: |

The " 3 Pl " form is generally used for (grammatically) animate nouns. Thus 3 Sg dènè- $\varnothing$ 'he/she/it fell' may also be used for plural inanimate subject (e.g. 'trees'), while dèm-à: 'they fell' is used when the subject is human, animal, or other grammatically animate noun like 'motorcycles'.

The 3Pl is the most irregular category morphologically, and not all of its allomorphs with the different AN suffixes are shown here.

For the three slightly irregular verbs with monosyllabic /HL/ or bisyllabic /LHL/ melodies, the perfective paradigms are in (348).

| category | suffix | 'found' | 'brought' | 'arrived' |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | -m | dìné:-m | jê:-m | $d w \varepsilon ́:-\grave{m}$ |
| 1 Pl | -y | dìné:-ỳ | jêe:-y | $d w e ́:-\grave{y}$ |
| 2 Sg | -0:/o: | dìn- ${ }^{\text {of: }}$ | $j$-ô: | $d-\hat{o}:$ |
| 2 Pl | - $\varepsilon$ :/e: | dìn- $\hat{\varepsilon}$ : | $j$-ê: | $d w-\hat{\varepsilon}$ : |
| 3 Sg | - $\varnothing$ | diǹ $\hat{\varepsilon}$ :- $\varnothing$ | $j e ̂:-\varnothing$ | $d w \hat{\varepsilon}:-\varnothing$ |
| 3 Pl | -a:/ع: (etc.) | dìn-ô: | $j$-ô: | $d-\hat{o}$ : |

### 10.3 Supplemental temporal morphemes

### 10.3.1 Past ( = b $\grave{\varepsilon}-$ )

The past morpheme with its pronominal-subject inflection may be added as an enclitic (or, arguably, as a separate auxiliary verb), to certain verb forms described in the following sections. It specifies past time for a stative or imperfective verb that might otherwise be taken as including the present, and it shifts a perfect ('has VP-ed') to past perfect ('had VP-ed', i.e. with reference to a moment in the past).

The pronominal-subject paradigms (positive and negative) of $=b \grave{\varepsilon}$ - are in (349).
category positive negative

| 1Sg | $=b \stackrel{\text { chem }}{ }$ ¢ | $=b a ̀-l u ́-m$ |
| :---: | :---: | :---: |
| 2 Sg | $=b-{ }_{\text {- }}$ : | = bà-1-ó: |
| 3 Sg | $=b \dot{\varepsilon}-\varnothing$ | $=b a ̆-1-\varnothing$ |


| 1 Pl | $=b \grave{\varepsilon}-y$ |  | $=b a ̀-1-\hat{1}:$ |
| :--- | :--- | :--- | :--- |
| 2 Pl |  | $=b-\varepsilon ̌:$ |  |
| 3 Pl |  | $=b$ bà- $-\mathrm{e}:$ |  |
| 3 |  | $=b a ̀:-n d i ́$ |  |

The forms of the past morpheme might be analysed as perfective forms of the verb $b \varepsilon$ - 'remain', i.e. perfective (positive) bè- and perfective negative bà-l(í)-. In forms other that perfective, bé- means 'remain, stay', as in 'I will remain here (while someone else is going away)'. In the perfective, b̀े- may function as the past-time equivalent of bò- 'be (somewhere)', see the following section. Taking $b \grave{\varepsilon}$ - and enclitic $=b \grave{\varepsilon}$ - as the E-stem perfective of bò- would make sense semantically, but the shift from +ATR bò- to -ATR $b \varepsilon$ - would be irregular.

### 10.3.1.1 Past of 'be (somewhere)'

The past-time equivalent of 'be (somewhere)' is formed by replacing bò- by bè- 'was/were (somewhere)'. In this function, $b \grave{\varepsilon}$ - is not encliticized to another predicative form. Negative 'was/were not (somewhere)' is similarly the negative of $b \grave{\varepsilon}$-. The forms are the same as those given just above for the enclitics, except that there is usually no audible final pitch rise in the positive 1 st/2nd person forms. There is no clear distinction between 'was/were' as past counterpart of bò- on the one hand, and the perfective of bé 'remain' (§11.2.6.1) on the other hand.
a. [sònjó: má] bè- $\varnothing$
[village in] be.Past- 3 SgSbj
'He/She was (or: used to be) in the village.'
b. [sònjó: má] bǎ-l- $\varnothing$
[village in] be.Past-PfvNeg-3SgSbj
'He/She was not in the village.'

### 10.3.1.2 Past of 'have', 'know', and 'want'

The past form of 'have' is jógò-m plus the conjugated form of $=b \grave{\varepsilon}-$. The sequence $-m=b \grave{\varepsilon}$ - is also used with other defective statives 'know' and 'want'. The sequence $-m=b \grave{\varepsilon}$ - is found in the past imperfective of regular verbs, but also in the past form of derived stative verbs. Since stative verbs do not distinguish aspect, it is difficult to gloss the $-m$ morpheme; I will gloss it as stative with 'have', 'know', 'want', and derived statives, and imperfective in the past imperfective of regular verbs. Examples with 'have', 'know', and 'want' are in (351). Note that all have $\{H L\}$ tones on the (bisyllabic) stem, which is consistent with tones on other verbs before $-m$ in the past imperfective and past stative.

```
a. \(\grave{\eta} g W \varepsilon ̌: \quad j o ́ g o ̀-m=b \varepsilon ̀-m\)
    dog have-Stat=Past-1SgSbj
    'I had (=used to have) a dog.'
b. tígà- \(m=b \varepsilon ̀-m\)
    know-Stat=Past-1SgSbj
    'I knew (=used to know).'
c. pègé kíyò-m=bè-m
    sheep want-Stat=Past-1SgSbj
    'I wanted a sheep.'
```

Negative counterparts are in (352). The negation of 'have' is expressed only in the enclitic, which has a perfective negative suffix (352a). The negation of 'know' is expressed by using the suppletive negative stem meaning 'not know', with no marking of negation in the enclitic (352b). The negation of 'want' (§17.2.1.1) is expressed using either of these morphological
constructions (352c-d). The fact that (352c) was volunteered by the assistant, while (352d) was then suggested by the linguist and accepted by the assistant, suggests that kélà- 'not want' may tend to pattern as a distinct verb ('dislike') rather than as a simple negation of 'want'.
a. ŋ̀gWĚ: jógò-m = bà-lú-m
dog have-Stat=Past-PfvNeg-1SgSbj
'I didn't have a dog.'
b. éndà- $m=b \grave{\varepsilon}-m$
not.know-Stat=Past-1SgSbj
'I didn't know.'
c. pègé kíyò-m= bà-lú-m
sheep want-Stat=Past-PfvNeg-1SgSbj
'I did not want a sheep.'
d. $p$ غ̀gé kélà- $m=b \varepsilon$ - $-m$
sheep not.want-Stat=Past-1SgSbj
'I did not want a sheep.'
10.3.1.3 Past stative $(-m=b \grave{\varepsilon}-)$

Examples (353a-b) illustrate the use of $-m=b \dot{\varepsilon}$ - with the stative form of a stance verb (§11.2.3). Since such statives (which end in or a) do not distinguish perfective from imperfective, the past enclitic is especially useful with them. (353a) is positive, (353b) negative.
a. já: ŋ̀gîn óbò- $m=b e ̀-\varnothing$
yesterday here sit-Stat=Past-3SgSbj
'Yesterday he/she was sitting here.'
b. já: j̀gîn óbò- $m=b$ ǎ- $1-\varnothing$ sit-Stat=Past-Neg-3SgSbj
'Yesterday he/she was not sitting here.'

Compare e.g. stative óbò- $\varnothing$ 'he/she is sitting', negative òbò-ndí- $\varnothing$ 'he/she is not sitting'. Other examples involving statives are jógò- $m=b \grave{\varepsilon}$ - 'had, used to have' and tígà- $m=b$ è- 'knew, used to know'.

### 10.3.1.4 Past of 'it is' enclitic ( $=y=b \dot{\varepsilon}$-)

$=b \grave{\varepsilon}$ - may also follow the 'it is' enclitic $=y$ (§11.2.1), which itself follows an NP (singular or plural). In this combination, the $=y$ is invariant (not conjugated), while $=b \grave{\varepsilon}$ - has its regular pronominal-subject inflection.
a. sònjó: $=\hat{y}=b \grave{\varepsilon}-\varnothing$
village $=$ it. is $=$ Past -3 SgSbj
'It was (= used to be) a village.' (< sònjǒ:)
b. $g o \check{: r e ̀}=\grave{y}=b \grave{c}-\varnothing$
'kola.nut.Pl=it.is=Past-3SgSbj
'It was (= used to be) kola nuts' (2005-1a)
c. $g \grave{l} \grave{\varepsilon}^{\mathrm{L}}-\mathrm{g}$ òlé $=\hat{y}=b \grave{\varepsilon}-\mathrm{m} \grave{m}$
farming ${ }^{\mathrm{L}}$-do.farming.Agent $=$ it.is $=$ Past -1 SgSbj
'I used to be a farmer.'
d. $g \grave{l c} \grave{\varepsilon}^{\mathrm{L}}-g o ̀ l u ́-m b o ́=\dot{y}=b \grave{\varepsilon}-\bar{y}$
farming ${ }^{\mathrm{L}}$-do.farming.Agent-Pl=it.is=Past-1PISbj
'We used to be farmers.'
In the negative, the inner sequence with $=y$ is unchanged from the positive type just illustrated. The past morpheme takes its regular conjugated negative form (355).

$$
\begin{align*}
& \text { g̀̀l } \grave{\varepsilon}^{\mathrm{L}} \text {-gòlé }=\hat{y}=b a ̀ \text {-lú-m }  \tag{355}\\
& \text { farming }{ }^{\mathrm{L}} \text {-do.farming.Agent=it.is=Past-PfvNeg-1 } \mathrm{SgSbj} \\
& \text { 'I did not use to be a farmer.' }
\end{align*}
$$

### 10.3.1.5 Past imperfective $(-m=b \grave{\varepsilon}-)$

The past imperfective consists of the main verb with suffix $-m$ plus an inflected form of the past enclitic. It may be used with any verb in past imperfective function, especially in habitual contexts ('used to VP'). In progressive contexts ('was VP-ing;) it also competes with the past progressive.

Examples showing the tones of the stems are in (356) below. The tone formula for the stem is $((\mathbf{X})) \mathbf{H}^{*}(\mathbf{L})$-. That is, an H-tone is obligatory ('eat', 'see', 'come'). If there is a second mora, we get $\{H L\}$ ('slaughter', 'leave', 'bring', 'arrive'). If there are additional moras, the initial mora respects the lexical $/ \mathrm{H} /$ versus $/ \mathrm{LH} /$ melody ('break', 'scrub', 'instruct'), and any further moras are filled out with H-tones ('go back'). This tone formula is identical to that which precedes the present (suffix -njò-) and that which precedes the morpheme $-m$ in the progressive construction.

The $-m$ functions here as an allomorph of present -njò-, and I will gloss it accordingly. It can be connected with the initial nasals in future -mbô- (special 3 Sg form -ì) and
present $-n j o ̀-$, and more directly with $-m$ in the progressive construction. Before the past enclitic, -m̀ is also found after statives ( $\S 10.3 .1 .3$ above).

| (356) | gloss | chaining |
| :--- | :--- | :--- |$\quad$ past imperfective

The negative replaces the inflected form of (positive) $=b \grave{\varepsilon}$ - by the corresponding form of its negative counterpart $=b a ̆-1-(1 \mathrm{Sg}=b a ̀-l u ́-\mathrm{m}$, etc.). Thus positive màmílí-yà-m=bè-m 'I used to go back', negative màmílí-yà-m= bà-lú-m̀ 'I did not use to go back'.

The past imperfective is used in the consequent clauses of counterfactual conditionals (§16.4).

### 10.3.1.6 Past progressive (-mbò bè-)

The normal progressive is expressed by a form with -mbò after the A/O-stem, plus an inflected form of bò- 'be', see $\S 10.1 .3 .5$. The morphosyntactically regular past counterpart replaces bò- by bè-. In elicitation, the past imperfective tends to be preferred even in semantically progressive contexts. However, the past progressive is attested in texts.

Examples from the sample text are yùgúlì-yò-mbò b-à: 'they used to be going crazy' in (762) and [í là] kánà-mbò bè-ỳ 'we too used to do it' in (725).

### 10.3.1.7 Future-in-past $(-m=b \grave{\varepsilon}-)$

A future-in-past construction, comparable semantically to the "conditional" of e.g. Romance languages, is segmentally identical to the past imperfective, but differs tonally. The future-inpast has a stem overlay $L^{*} H$ similar to tbe stem-plus-suffix formula $L^{*}-\mathrm{HL}$ of the simple future inflection (suffix -mbô-), with a final L-tone preceded by one H-tone. The sense is 'was going to VP' or 'was about to VP'.

| (357) | gloss | chaining |
| :--- | :--- | :--- | future-in-past

The negative replaces the inflected form of (positive) $=b \grave{\varepsilon}$ - by the corresponding form of its negative counterpart $=b a ̆-l-(1 \mathrm{Sg}=b a ̀-l u ́-m$, etc. $)$. Thus màmilì-yá- $m=b \grave{\varepsilon}-m$ ' $I$ was going to go back', màmìlì-yá-m = bà-lú-m̀̀ 'I was not going to go back'.
10.3.1.8 Past perfect (chaining form plus $=b \grave{\varepsilon}$-)
$=b \grave{\varepsilon}$ - is added to the chaining form, without the $-m$ - seen in the preceding (imperfective and stative) examples, for past perfect sense ('had VP-ed'). Positive examples are in (358). Note particularly the stem-final /i/ in (358c), versus the final $\{\varepsilon e\}$ in (358a-b). This distribution of the E-stem and I-stem is diagnostic of the chaining form. Stem-final $/ \mathrm{i} /$ is subject to PostSonorant High-Vowel Deletion, as in 'I had slept' (§3.4.2.1).
a. $k w \dot{\varepsilon}=b \grave{\varepsilon}-m \quad$ 'I had eaten'
dòg $\varepsilon=b \grave{\varepsilon}-m \quad$ 'I had left'
sém $\varepsilon=b \grave{\varepsilon}-m \quad$ 'I had slaughtered'
b. wé $=b \grave{\varepsilon}-m \quad$ 'I had come'
$j e ̂:=b \grave{\varepsilon}-m \quad$ 'I had brought'
$\begin{array}{ll}\text { c. } \quad \begin{array}{ll}\text { págí }=b \grave{\varepsilon}-m \\ \text { súgí }=b \grave{\varepsilon}-m\end{array} & \text { 'I had tied' } \\ \text { 'I had gone down' }\end{array}$
nó $y=b \grave{\varepsilon}-m \quad$ 'I had slept'

The negative counterparts consist of the (positive) inflected $=b \grave{\varepsilon}$ - preceded by a conjugated perfective negative verb. The subject pronominal category is therefore expressed twice. In (359), $1 \mathrm{Sg}=b \grave{\varepsilon}-m$ is added to an already fully inflected 1 Sg perfective negative ending in -lú-m.
(359)
a. kwá:-lú-m=bè-m 'I had not eaten'
dògá-lú-m = bè-m 'I had not left'
séma-lú- $m=b \grave{\varepsilon}-m \quad$ 'I had not slaughtered'
b. wò- $l u ́-m=b e ̀-m \quad$ 'I had not come' $j o ̂:-l u ́-m=b e ̀-m \quad$ 'I had not brought'
c. págá- $l u ́-m=b e ̀-m \quad$ 'I had not tied' súgó-lú- $m=b \grave{\text { - }}-\mathrm{m} \quad$ 'I had not gone down' nóyó-lú-m=bè-m 'I had not slept'

These past perfect forms (positive and negative) are also used in the antecedent clauses of counterfactual conditionals (§16.4).

### 10.3.2 'Still', 'up to now', (not) yet'

For 'not yet', the perfective negative verb is combined with invariant adverb táfön.
a. táfòn wò- $1-\varnothing$
not.yet come-PfvNeg-3SgSbj
'He/She hasn't come yet.'
b. táfòn twě twá-lì-y
not.yet sowing sow-PfvNeg-1PlSbj
'We haven't planted (the seeds) yet.'

For positive 'until now', 'so far', or 'still (= even now)', sàngí 'now' is combined with universal quantifier dîn 'all' as sàngí dîn.
a. [jènǎ:
kó] nčỳ
[sàngí
dîn]
[rainy.season Def.InanSg.O] is.good [now all]
'The rainy season is good for the time being.'
b. [sàngí dîn] tégà-njò- $\varnothing$ ló
[now all] rain.fall-Pres-3SgSbj Q
'Is it still raining?'
c. [sàngí dîn] yógé yé yà:-lú-m
[now all] millet.Pl Def.InanPl see-PfvNeg-1 SgSbj
'So far (=up to now) we haven't seen (=received) any millet.'

### 10.4 Imperatives and hortatives

### 10.4.1 Imperatives and prohibitives

### 10.4.1.1 Positive imperatives (including plural-addressee - $-\grave{m}$ )

Positive imperatives have an unsuffixed singular-addressee form that is based on the $\mathbf{A} / \mathbf{O}$ stem with no segmental affix. This means that the stem ends in a (corresponding to $\varepsilon$ in the chaining form and perfective) or $o$ (corresponding to $i$ in the chaining form and $e$ in the perfective), and that vowels of any nonfinal syllables are subject to $\{e o\}$ vowel harmony (clearly observable when the stem has a lexical $\{\varepsilon \rho\}$ ). In the imperative (singular), the word has $\{\mathbf{H}\}$ overlay for all stem shapes.

For plural addressee, an L-toned suffix -ì ("-PlAddr") is added to the (singular) imperative. The same similar is added to other deontic modals (prohibitive, hortative) for plural addressee. There is no resemblance between this suffix and regular 2 Pl morphemes (e.g. independent pronoun é ).

> gloss chaining
imperative singular addressee plural addressee


Textual examples are in (363).
a. [dôm
[ó
gò 7$]$
dímbí-yá
[talk(n) [2SgPoss
Psm.InanSg.O]]
follow-MP.Imprt
'Continue-2Sg your talk!' (2005-2a)

```
b. [bèlí-y\varepsiloń nè] kúnjá
[get.up-MP then.SS] get.old.Imprt
`Arise and get-2Sg old!'(2005-2a)
```

Imperative clauses may function as abstractives, under the scope of a phrase like 'there is ...' or 'there is no ...'.

| $[[$ ń | mà $]$ | dámá $]$ | kà $]$ | òndú- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| $[[1 \mathrm{Sg}$ | Dat $]$ | speak.Imprt $]$ | Top $]$ | not.be- 3 SgSbj |

'There is no (saying) "tell me!", (2005-1a)
10.4.1.2 Tips for distinguishing three verbal $-m$ suffixes

One may distinguish plural-addressee imperative $-\grave{m}, 1 \mathrm{Sg}-\mathrm{m}$, and 3 Sg future $-\grave{m}$ by the key in (365) when they directly follow the stem (underived or derived). For the 1 Sg , this is the case only in the perfective (positive). The 1 Sg suffix may also follow other AN suffixes, in which case there is no possibility of confusion.
category tone formula preceding vowel(s)
a. plural imperative $\{\mathrm{H}\} \quad\left\{\begin{array}{l}\text { a }\end{array}\right\}$, i.e. $\mathrm{A} / \mathrm{O}$-stem
b. 3 Sg future $\quad \mathrm{L}^{*}<\mathrm{HL}>\quad\{$ a $o\}$, i.e. $\mathrm{A} / \mathrm{O}$-stem
c. 1 Sg perfective $\quad L^{*}<\mathrm{LH}>\quad\{\varepsilon e\}$, i.e. E-stem

The 1 Sg perfective always has telltale stem-final $\varepsilon$ or $e$ of the E-stem, as in $k w \grave{\varepsilon}-m$ ' 'I ate' and ìnè-m 'I went'. For the two $-m$ combinations involving the $A / O$ form of the stem, the distinction is made by noting the stem tones, which are $\{\mathrm{H}\}$ in the plural-addressee imperative but which begin with an L-tone in the 3 Sg future. Thus sémá-m̀ 'slaughter-2Pl!' versus sèmá-m̀̀ 'he/she will slaughter'. For monosyllabic stems, the distinction between plural-addressee imperative and 3Sg future is phonetically subtle but real, even with bimoraic word shapes that make the bell-shaped $<$ LHL $>$ tone initially difficult for the foreign linguist to hear: $k w a ̂-m$ 'eat!-2Pl' versus $k w a ̌-\grave{m}$ 'he/she will eat', yâ-m 'see!-2Pl' versus yă-m̀ 'he/she will see'.

### 10.4.1.3 Prohibitive (negative imperative) with -là or -nô:

The negative counterpart of the imperative, the prohibitive, is expressed by adding either -là or -nर̂: to the stem for singular addressee. As in the (positive) imperative, for plural addressee a further suffix $-m$ is added (-là- $m,-n \hat{o}-m$ ).
-là and -nô: require distinct stem shapes.
Before -là, the $\mathbf{A} / \mathbf{O}$-stem is used. The onset of the stem respects the lexical distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ melodies. All short-voweled monosyllabics are $/ \mathrm{H} /$, so for these verbs no distinctive lexical tones are found here (366a-b). However, bimoraic stems with /LH/ melody keep it before the suffix (366c), while bimoraic stems with $/ \mathrm{H} /$ or (for $\mathrm{C} \hat{\mathrm{v}}:-$ ) /HL/
melody appear with $\{H L\}$ (366d-e). In even heavier stems, the initial mora is based on the lexical melody, the final two moras are HL, and any intervening moras are H -toned ( $366 \mathrm{f}-\mathrm{g}$ ). Therefore the formula for the stem is $\mathbf{X}\left(\left(\mathbf{H}^{*}\right)\right) \mathbf{H}(\mathbf{L})$, with obligatory $H$ and lexical onset $X$, though if X is H it fuses with the overlaid H . The tones are identical to the lexical melody, except that if the stem would otherwise end in two H -toned syllables, the stem-final syllable drops to L-tone.

The verb ínllìnè 'go' has a slightly irregular syncopated prohibitive ín-là 'don't go!' for expected \#ínò-là (366h), compare e.g. túnò-là ‘don’t put!'.

| gloss | chaining | prohibitive when addressee is <br>  <br>  <br>  <br>  <br>  <br>  <br> '... singular | $\ldots$ plural |
| :--- | :--- | :--- | :--- |

b. 'c

| 'come' | Wè-ḿn | wó-là | wó-là-m |
| :--- | :--- | :--- | :--- |
| 'go out' | gwé | gó-là | gó-là-m |


| 'hit' | dènjé |
| :---: | :---: |
| 'run' | yòbé |
| 'bathe' | íngé dìyé |
| 'instruct' | bă:ré |

dènjá-là dènjá-là-m
yòbá-là yòbá-là-m
íngé dìyé-là íngé dìyé-là-m
bă:rà-là bǎ:rà-là-m
d. 'bring' $j \hat{e}$
'shave’ $k \varepsilon$ :
jô:-la
jô:-là-m
kâ:-là kâ:-là-m
e. 'cut'
'spray' pí
‘sleep' nó
'look' tár
'put’ tún
kéjà-là kéjà-là-m
píjò-là píjò-là-m
nóyò-là nóyò-là-m
tárà-là tárà-là-m
túnò-là túnò-là-m
f.

| 'sit' | óbí-y |
| :--- | :--- |
| 'stop' | íngí-yé |
| 'make stop' | íngí-rá-ndí |

óbí-yò-là óbí-yò-là-m
'make stop' íngí-rá-ndí
ígí-yà-là íngí-yà-là-m
ípgí-rá-ndà-là íngí-rá-ndà-là-m

| g.'go back' màmílí-yé màmílí-yà-là <br> 'break' gìnágí màmálí-yà-là-mà-là | gìnágà-là-m |
| :--- | :--- | :--- | :--- |

h. 'go' ín în-là ín-là-m

Textual examples with -là are in (367).
(367)

b. [ìnjì-yá-m̀
mà:] kájábà-là
[stand-MP-Fut.3Sg Q] think-Proh
'Don't think that it (= what you say) will stand (= hold).' (2005-1a)
The alternative form with suffix $-n \hat{o}$ : is added to a stem with $\{\mathbf{L}\}$ overlay (tone-dropping). As in the chaining form, the vocalism is that of the E-stem for verbs with lexical $\{\varepsilon \rho\}$, and that of the I-stem for verbs with lexical $\left\{\begin{array}{c}\text { e } o\} \text {. }\end{array}\right.$


Comparison with other Dogon languages suggests that the -n̂: prohibitive may have originated as a direct chain ending with 'forget', which is nǎ: in Donno So and Tommo So, with further cognates. This diachronic connection is opaque in Najamba which has ìré 'forget'.

### 10.4.2 First-person inclusive hortatives

### 10.4.2.1 Positive hortatives 'let's ...!' (-ý, plural $-\dot{y})$

When the speaker urges one person to join with him or her in a collective act ('let's-Du go!'), the singular-addressee hortative is used. This consists of an $\{\mathbf{L}\}$-toned form of the $\mathbf{A} / \mathbf{O}$-stem
plus H-toned suffix $-\dot{y}$. When more than one interlocutor is addressed, the plural-addressee hortative is used. It is segmentally identical to the singular-addressee hortative, but has different tones, namely $\{\mathbf{L H}\}$ stem overlay with the H on the final mora, plus L-toned suffix $-\grave{y}$.


Examples are in (370).
(370)
a. wó mànâ: kwà-ý wá
come.Imprt meal eat-Hort.SgAddr Quot
'(He said:) "Come! Let's eat a meal!" ' (2005-2a)
b. [lí gò ] =là:] jǎ-ỳ
[[1PlPoss Psm.InanSg.O] =it.is.not.PplSbj] take-Hort.PlAddr
'Let's take what is not ours!' (2005-2a)
c. [áníyá dîn] kèné b-غ̀: kó,
[world all] like.that be-3P1Sbj Def.InanSg.O,
mòmbí-yé nàmá-ỳ
gather-Mp ruin-Hort.PIAddr
'Let's get together and ruin (= change) the situation where everyone is like that.' (2005-2a)

A hortative may appear in interrogative clauses (the Najamba syntax is roughly captured by e.g. 'let's do what?' as opposed to 'what shall we do?').

| (371) | dàbâr | [ànné | kàná-y |
| :--- | :--- | :--- | :--- |$\quad$ ló]

10.4.2.2 Hortative negatives 'let's not ...!' (-là-ý, -láày, -nô:-y)

The hortative negative ('let's not ...!') is expressed by adding 1Pl -y to a prohibitive. Since there are two distinct prohibitive formations, there are likewise two hortative negative formations. The common forms are those in (372a), where dual and plural addressee are distinguished tonally. The less common type in (372b) has a single form.
a. -là-ý singular addressee (first dual inclusive)
-lá-ỳ plural addressee (first plural inclusive)
b. -n̂̀:-y singular or plural addressee (first dual or plural inclusive)

Before the suffixes in (372a), the form of the stem is the same as that used before -là in the prohibitive (§10.4.1.3). That is, the A/O-stem accounts for the vocalism, and the lexical tones are used, except that if there is an H -toned stem-penultimate syllable, the stem-final syllable is L-toned. Examples of -là-ý~-lá-ỳ for several verbs are in (373).
(373)

| gloss | 'let's not ...!' (dual) | 'let's not ...!' (three or more) |
| :--- | :--- | :--- |
|  |  |  |
| 'go | ínò-là-ý | ínò-lá-ỳ |
| 'eat' | kwá-là-ý | kwá-láà |
| 'run' | yòbá-là-y | yòbá-lá-y |
| 'scrub' | túgújà-là-y | túgújà-lá-y |
| 'go back' | màmílí-yà-là-ý | màmílí-yà-lá-ỳ |

Textual examples are in (374).
a. já:ní-yò-lá-ỳ
squabble-MP-Proh-1PISbj
'Let us (3+) not squabble!' (2005-1a)
b. dògá-lá-ỳ
leave-Proh- 1 PISbj
'Let's not leave (abandon)!' (2005-1a)
The alternative form in $-n \hat{\imath}:-y$ has the same stem shape as we saw with prohibitive -n̂:, namely an L-toned equivalent of the chaining form, i.e. of the E-stem for verbs of -ATR $\{\varepsilon \Omega\}$ class and the I-stem for those of the +ATR $\{e o\}$ class.
a. [mó gì] yè-nô:-y
[3AnSg Acc] see-Proh-1PISbj
'Let's not see him/her!'
b. [sònjó: má] ìn-nô:-y
[village in] go-Proh-1PlSbj
'Let's not go to the village!'
10.4.3 Imperative with implied first person singular subject

Especially when seeking clarification of another's wishes, or of an apparent (but not clearly heard) imperative, a yes/no interrogative containing an imperative with understood first person subject may be used.
(376) sátàlà jô: ló
kettle bring.Imprt $\mathbf{Q}$
'(Did you ask me) to bring the kettle?'
In local French this is D'amener le bouilloire?
A first singular (or other) subject may be made explicit. In (377), the 1 Sg pronoun is focalized. This might be used when the speaker has heard the interlocutor's request ('bring the kettle!'), but isn't sure who it was addressed to.
(377) [mí yà:] sátàlà jô: ló
[1Sg Foc] kettle bring.Imprt Q
'(Did you ask) me [focus] to bring the kettle?'
10.4.4 Imprecations and wishes (third-person hortative)

The subsections below cover imprecations and wishes (with third-person subjects). For quoted imperatives and hortatives, see §17.1.4.1-2.

### 10.4.4.1 Positive 'may he/she ...!' (3Sg -ná, 3Pl -wô:)

Imprecations (wishes, blessings, curses) involving a third person singular agent are expressed by the suffix -ná. This suffix is common in imprecations with jěnjà 'God' as subject, but other subjects are also possible. For third person plural, the suffix is $-w \hat{o}$ : ( 378 d ).
(378) 'may he/she ...' 'may they ...'

| yòbí-ná | yòbú-wô: | run!' |
| :---: | :---: | :---: |
| màmílí-y-ná | màmílí-y-wô: | . go back |

```
dìmbí-y-ná dìmbí-y-wô: '... follow!'
té:-\etagó kér-ná té:-\etagó kér-wô: '... go look for firewood!'
```

The examples in (379) are from texts, except that (379d) was elicited as a plural-subject counterpart of (379c).
$\left.\begin{array}{lllll}\text { a. } & \text { jěnjà } & {[i ́} & \text { gì }] & \text { sútùrà }\end{array}\right]$ kán-ná
b. kà: jěnjà ké [í gì] yámbí-r-ná
but God InanSg.E [1P1 Acc] cover-Tr-Hort.3Sg
'But may God cover (= remove) that for us.' (2005-2a) (yàmbí)
c. [ $[$ ó
[[2SgPoss
${ }^{\mathrm{L}} y \dot{\text { è: }}$ ]
gì] kùmbì-y-ǒ.,
[ ['́
Lwoman] Acc] hold-MP.Pfv-2SgSbj
${ }^{\mathrm{L}} y$ è: là] ó kúmbí-y-ná [[2SgPoss ${ }^{\text {L woman also }] ~ 2 S g O b j ~ h o l d-M P-H o r t .3 S g ~}$
'(If) you have held (= watched over) your wife, may your wife too hold you.' (2005-2a)
d. $[$
[[2SgPoss
[[ó Lyàwò: là] ó kúmbí-y-wô: [[2SgPoss LwomanPl also] 2SgObj hold-MP-Hort.3Pl
'(If) you have held (= watched over) your wives, may your wives too hold you.' [plural version of (c)]
10.4.4.2 Negative 'may he/she not ...!' (3Sg -nô:-nà, 3Pl -nô:-wò:)

A negative morpheme -n̂:- also seen as an option in the prohibitive is placed between the verb stem and the (positive) third-person hortative suffixes, which are here heard with L-tones: 3Sg -nà, 3Pl -wò: . As in the prohibitive, -nô:- requires an L-toned stem, with vocalism as in the chaining form.
a. jěnjà kó [í gì] kànà-m-nô:-nà
God InanSg.O [1Pl Acc] do-Caus-Proh-Hort.3Sg
'May God not make us do that!' (2005-1a)
b. jěnjà $\begin{array}{ll}1 i ́ & g i ̀]\end{array}$ nè:ndá: ǹdè-nô:-nà

God [1Pl Acc] bad.InanSg.O give-Proh-Hort.3Sg
'May God not give us anything bad (= trouble)!'
c. [nè:ndá:
[bad.InanSg. 0
[bé gì]
[3Pl Acc] arrive-Proh-Hort.3Sg
'May our trouble not reach them!'
d. [í gì] dá:ndílé kóノ, gày-nô:-wò:
[1Pl Acc] tell-VblN Def.InanSg.O, delay-Proh-Hort.3PI 'may they not neglect (= delay) to tell us (the information)!' (2005-1a)

### 10.4.5 Obligational -நூgà-, -mb-è:-, and variants

An obligational construction ('X must VP') combines a future participle with an 'it is' enclitic. It is negated by the 'it is not' enclitic = lá-. A pronominal subject is expressed with a clause-initial pronoun.

For one assistant, one construction elicited is a regular future nonsubject relative with future participle - Ígà. (381a) is literally 'it is what I will leave (abandon)', with ' I ' as proclitic subject in a nonsubject relative. It is negated as (381b).

$$
\begin{array}{lll}
\text { a. } & \text { mí } & \text { dògă-lgà =ỳ }  \tag{381}\\
& \text { 1Sg } & \text { leave-Fut.PplNonSbj=it.is } \\
& \text { 'I must (or: ought to) leave (it).' } \\
& & \\
\text { b. } & \text { mí } & \text { dògă-pgà = lá } \\
& \text { 1Sg } \quad \text { leave-Fut.PplNonSbj=it.is.not } \\
& \text { 'I must not (or: ought not to) leave (it).' }
\end{array}
$$

This assistant later produced a version, (382), in which the 'it is' enclitic is conjugated for subject (11.2.1.2). This is literally ' $\mathrm{I} \mathrm{am} / \mathrm{He}$-or-she is what (=one who) will leave beer'.

$$
\begin{align*}
& \text { kj̀njé dògǎ-ngà }=m \text { / dògă-pgà }=y  \tag{382}\\
& \text { beer leave-Fut.PplNonSbj=it.is.1Sg / }=\text { it.is(.3Sg) } \\
& \text { 'I / He-or-she ought to leave (=quit drinking) beer.' }
\end{align*}
$$

The other assistant produced a dedicated obligational participial form -mb-è:- consisting of participial -è:- added to the future verb stem. He pronounced -mb-ò:- before $=\dot{y}$ enclitic (1Pl, $3 \mathrm{Pl})$. This form has the regular future stem-tone formula. This speaker conjugated the 'it is' enclitic directly, instead of or in addition to clause-initial subject pronouns. The positive paradigm is (383). The data should be used with caution since this assistant had evident difficulty producing the forms, and since the other assistant did not recognize them. The 2Pl and 3 Sg forms are structurally distinct but homophonous.
(383)
category
$1 \mathrm{Sg} \quad-m b-e ̀:=\grave{m}$
$1 \mathrm{Pl} \quad-m b-o ̀:=\grave{y}$
$2 \mathrm{Sg} \quad-m b-e ̀:=\grave{W}$
$2 \mathrm{Pl} \quad-m b-e ̀:=\varnothing$

3Sg -mb-è:
$3 \mathrm{Pl} \quad-m b-o ̀:=\grave{y}$

Positive examples are (384a-c). Negative examples are (384d-e).
(384)
a. [kéré mà] ìnǒ-mb-è: = m̀
[the.bush in] go-Fut-Oblig=it.is. 1 SgSbj
'I must go out to the bush (=to the fields).'
b. mó mí dògǎ-mb-è:
$\mathrm{AnSg} \quad 1 \mathrm{SgObj}$ leave-Fut-Oblig
'He/She must leave me.'
c. mí dògǎ-mb-ò: = ỳ

1 SgObj leave-Fut-Oblig. $3 \mathrm{Pl}=$ it.is
'They must leave me.'
d. [kéré mà] ìnǒ-mb-è: = lá-m
[the.bush in] go-Fut-Oblig=it.is.not-1 SgSbj
'I must not go to the fields.'
e. mí dògǎ-mb-ò: $=y=$ lá

1 SgObj leave-Fut-Oblig. $3 \mathrm{Pl}=$ it.is=it.is.not
'They must not leave me.'

When presented with (384a) above, the other assistant suggested that the only thing it sounded like to him was (385) below, which is phonologically similar but structurally distinct. It has (nonparticipial) future-in-past morphology, but does allow weak obligational force (§10.3.1.7).
(385)

| $[k \varepsilon ́ r \varepsilon ́ ~$ | mà $]$ | ìnǒ-m $=$ bè- $-\grave{m}$ |
| :--- | :--- | :--- |
| [the.bush $\quad$ in $]$ | go-Fut=Past- 1 SgSbj |  |

'I was going to go (=I was/am supposed to go) out to the fields.'

Overall the obligationals illustrated in this section are on the borderline between modality (obligation) and tense (futurity). For constructions with an explicitly obligational main clause, see §17.4.8-9.

### 10.5 Passive (nonspecific-subject)

What is here labeled the passive, in several variants (past passive, future passive, and present passive), is characterized by a a suffix -à:-, which follows either the chaining form of the verb plus past enclitic $=b \grave{\text { - }}$ - or a stem with suffix $-m b$ - (cf. future $-m b \hat{o}-$-). Because -à:- is always preceded by a $b$, morphemic segmentation is less than transparent.

In most cases passive -à:- is itself followed by the 'it is' enclitic $=y($ (§11.2.1.1-2) or its negation $=$ lá ( $\$ 11.2 .1 .3$ ), which is often heard as L-toned. This use of the 'it is' enclitic is reminiscent of its occurrence after perfect jòg-â:- (§10.1.3.3). Both jòg-â:- and verbs with passive -à:- resemble but are not identical to participles in relative clauses. Participles in perfective (positive) relatives likewise end in a long vowel, but a mid-height vowel rather than a: (§14.3.1).

In addition to the passive constructions described in the sections immediately below, which can function as main clauses, certain relative-clause constructions present what is arguably the same -à:- suffix, in participial function. For example, gínà-mb-à: 'what is called (" X ")' is similar to the present passive described in $\S 10.5 .3$, but it is syntactically more clearly participial and therefore has a suffixed animate plural counterpart gínà-mb-à:-mbò (§14.4.2.2). There are also two derivations that produce adnominal modifiers that must have originated as passive participles, regardless of their synchronic status. A product-of-action derivative (-bà:; §5.1.9) looks like a participle of the past passive ( $\$ 10.5 .1$ below). A function-of-noun derivative (-mbà:, $\S 5.1 .10$ ) looks like a participle of the present passive ( $\S 10.5 .3$ below).

The passive is not (further) inflected for pronominal subject. For this reason, and since final a: (and short a) are elsewhere associated with the 3Pl pronominal-subject inflection, as in $b$-à: 'they were' (§10.3.1.1) and 3Pl past enclitic $=b$-à: ( $(10.3 .1)$, I take the passive to be really a nonspecific-subject category. The forms are generally not identical to the true 3 Pl subject forms, and true 3 Pl (like other regular pronominal-subject suffixes) does not co-occur with the 'it is' enclitic except in special syntactic contexts.

The direct object is not promoted to subject position, and it may occur overtly with accusative case-marker $g i$. In fact, this "passive" construction can extend to intransitives, as in (389) in $\S 10.5 .2$ below with verb 'come'.

As one would expect given the nonspecific-subject feature, the passive typically occurs in general statements about recurrent eventualities.

### 10.5.1 Past passive ( $=b-\mathrm{a}:=\grave{y},=b-\mathrm{a}:=l a ́)$ in present perfect function

In this construction, the main verb occurs in its chaining form (E-stem or I-stem depending on ATR-harmonic class of verb). This is followed by enclitic complex $=b-a ̀:=y$ in positive clauses. The $=b$ - is recognizable as past enclitic $=b \grave{\varepsilon}$, which indeed does follow the chaining form of a verb in the past perfect ('had VP-ed', §10.3.1.8). The past passive $=b-\mathrm{a}:=\grave{y}$ functions more like a present perfect ('has VP-ed'), and has a resultative element, indicating that the original event has defined the current situation.

Textual examples of positive $=b-a ̀:=y$ are in (386).

| a. [dálí:dì | jógò- $\varnothing$ |  | wà], |  |
| :---: | :---: | :---: | :---: | :---: |
| [judgement | have-3Sg |  | Quot] |  |
| [dálí:dì | kó] | [mó | gì] | ǹd $\bar{\varepsilon}=b-a ̀:=\grave{y}$ |
| [judgement | Def.InanSg.O] | [ AnSg | Acc] | give=Past-Pass=it.is | 'He has (achieved) a sound judgement. He has been given sound judgement.' (2005-1a)

b. [swě: gì] [ké:sù mà] jòyó-ndí $=b-a ̀:=y$ ỳ, [garment.Pl Acc] [trunk in] be.full-Caus=Past-Pass=it.is, [[swě: yé] gì] dǎy $=b-a ̀:=\grave{y}$, [[garment Def.InanPl] Acc] lay.out=Past-Pass=it.is, [[swě: yé] gì] [òlè ${ }^{\mathrm{L}}$-gègèlé mà]
[[garment Def.InanPl] Acc] [house ${ }^{\mathrm{L}}$-wall in] $j a ̌ b=b-a ̀:=y$ put.on.wall=Past-Pass=it.is
'The clothes have been filled (= stuffed) into a trunk, the (other) clothes have been laid out (on the ground), the (other) clothes have been hung on the wall of the house.' (2005-2a)

The corresponding negative is with $=b$-à: = lá. Textual examples are in (387).
(387)
a. kó
[bà:-ólé
má]
Def.InanSg.O [father-house
in]
dìnê: $=b$-à: = lá
kǒy
encounter=Past-Pass=it.is.not Emph
'It definitely used to not be found in the family.' (2005-1a)
b. kóngòl bìré=b-à:=lá kǒy
honor work(v)=Past-Pass=it.is.not Emph
'(The work of) honor has definitely not been done.' (2005-1a)
10.5.2 Future passive ( $-m b-a ̀:=y$ ỳ $-m b-a ̀:=$ lá $)$ and future-in-past passive

A future passive is formed by adding -à: = ỳ to the future with suffix $-m b-$, $\mathrm{cf} .-m b \hat{o}-$ in the regular inflected future ( $\S 10.1 .3 .4$ ). The stem has the same tones that it has before future participial -ŋ́gà- (§14.3.4), namely stem-final H-tone element (realized on the $m$ ), preceded by L-tones, formula $\mathbf{L *} \mathbf{H}$ -
a. [mó gì] pònǎ-mb-à: =ỳ mà $\rightarrow$
$[[\mathrm{AnSg} \quad$ Acc $]$ wring-Fut-Pass=it.is Q
'Will he (= short person) be wrung (= stretched)?' (2005-1a)
[rhetorical question, general context]
b. [àbí nغ̀] gìbì-y-ó: mé,
[catch then.SS] wrap.on-MP-2SgSbj if,
ó dàmàgǎ-mb-à: = ỳ
2 SgObj denigrate-Fut-Pass=it.is
'If you take (a wrap [woman's garment] that is also used by others) and put it on, you will be denigrated' (2005-2a)

Although this form is morphologically based on the future inflection, it can be used in a generalized imperfective sense. For example, 'you will be denigrated' in (388b) is meant as a general statement about what happens nowadays.

Consistent with this semantic interpretation is the fact that $-m b-a ̀:=y$ may combine with the unmarked (hence elsewhere 3 Sg ) form of a following past enclitic $=b \grave{\varepsilon}$ to produce a morphological future-in-past passive, as in (389). A semi-literal translation respecting the future morphology is 'it would (often) happen', but as in English this may merge functionally with the past imperfective passive, denoting a regularly occurring eventuality, as in 'it used to happen' (following section).
(389) [kèné $\quad W o \check{-}-m b-a ̀:=y$ ỳ $=b \grave{c}-\varnothing]$
[thus come-Fut-Pass=it.is=Past-3Sg]
'It used to come (= happen) like that.' (2005-1a)

Example (389) also exemplifies the "passive" of an intransitive verb.
The negative counterpart of $-m b-a ̀:=\grave{y}$ is $-m b-a ̀:=l a ́$, with the usual replacement of positive 'it is' enclitic $=y$ by negative $=l a ́ ~ ' i t ~ i s ~ n o t ' . ~ P r e p a u s a l l y ~=~ l a ́ ~ a t ~ t h e ~ e n d ~ o f ~ a ~ l o n g ~$ word is often heard as =là.

| a. | [[dôm | kó] | gì] | dàmá-m̀, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [ [speech | Def.InanSg.O] | Acc] | speak-Fut. 3 SgSb |  |
|  | [dôm | [mó | gj] | kó |  |
|  | [[speech | [AnSgPoss | Psm.InanSg.O] |  | Def.InanSg.O] |
|  | àbă-mb-à |  |  |  |  |

'He will speak the talk (= words), (but) his talk won't be accepted.' (2005-1a)
b. [nǒ: dîn] [[mó ${ }^{\mathrm{L}}$ kì:] ${ }^{\mathrm{L}}$ sàgù $]$
[person each] [[AnSgPoss ${ }^{\text {L head] }}{ }^{\text {L }}$ responsibility]
ǹdǎ-mb-à: = là
give-Fut-Pass=it.is.not
'Each one will not be given his own (separate) right to speak (= authority).' (2005-1a)
10.5.3 Present passive $(-m b-a ̀:=\grave{y})$ and past imperfective passive $(-m b-a ̀:=\grave{y}=b \grave{\varepsilon})$

A present passive describing a recurrent activity that takes place in a time frame including the present may be formed with $-m b-a ̀:=\grave{y}$. It differs only tonally from the future passive
described just above. In the present passive, the stem has the same tone formula as the inflected present with suffix -njò- (§10.1.3.6), i.e. $((\mathbf{X})) \mathbf{H}^{*}(\mathbf{L})$. That the H-tone is the only obligatory tonal element is shown by monomoraic stems, as in $k w a ́-m b-a ̀:=y ̀ y ~ ' i s ~ e a t e n ' . ~ A ~$
 passive, versus LH in the future passive.

To form the negative, the 'it is' enclitic $=y$ is replaced by its negative counterpart $=$ lá 'it is not', sometimes heard prepausally as =là. Occasionally the negative enclitic is s tacked onto the positive 'it is' enclitic ( $=y=$ lá ).

$$
\begin{array}{lll}
\text { a. } & {[\text { bíró: }} & \text { gì }] \tag{391}
\end{array} \quad \text { bírà-mb-à: }=\text { ỳ }=\text { work(v)-Pres-Pass=it.is }
$$

'The work is done (these days).'


In general statements like these, the present passive gets some competition from the future passive, as noted in the preceding section.

The present passive is closely related to a participial function-of-noun derivative, used in contexts like 'water for drinking' versus 'water for bathing' (§5.1.10). A similar participial form occurs in the 'what is called " X "' construction (§14.4.2.2).

Adding past enclitic $=b \grave{\varepsilon}$ produces a past imperfective passive $-m b-a ̀:=\grave{y}=b \grave{\varepsilon}$ or $-m b-\hat{a}:=\grave{y}=b \grave{\varepsilon}$ ('used to be VP-ed'). This is rather common in texts (392a-c). In such past habitual contexts, this construction gets competition from the future-in-past passive (preceding section).
$\begin{array}{lll}\text { a. bà:-ólé } & \text { tô:n } & \text { tárà-mbò, } \\ \text { father-house } & \text { Recip.Dual } & \text { look.at-and, }\end{array}$
[bíró: gì] bírà-mb-à: $=\grave{y}=b \grave{\varepsilon} \quad$ gìn-à:
[work(n) Acc] work(v)-Pres-Pass=it.is=Past say.Pfv-3PlSbj
'The families looked at each other (= had a discussion), (and) they said (= it was said) that they used to do the work.' (2005-1a)
b. jă: [[kúlmá ${ }^{\text {L }}$ dòm] gì]
yesterday [[elder ${ }^{\mathrm{L}}$ speech] Acc]
dìmbí-yà-mb-â: $=y=b \grave{\varepsilon} \rightarrow$
follow-MP-Pres-Pass=it.is=Past
'In the past, the talk of an elder was followed (= obeyed).' (2005-1a)
c. jǎ: [jènà: ${ }^{\mathrm{L}}$-gólé: má] ${ }^{\mathrm{L}}$ bìrè:
yesterday [rainy.season ${ }^{\text {L }}$-farm.work in] ${ }^{\mathrm{L}}$ work(n).Pl
bírà-mb-à: = b-غ̀:, bírà- $m=b \grave{\varepsilon}-\mathrm{y}$
work(v)-Pres-Pass=Past-PplNonSbj.InanPl, work(v)-Pres=Past-1PlSbj
'In the past, in the rainy-season farming, the activities that used to be done, we did (them).' (2005-1a)

### 10.5.4 'Where to go'

In a context like 'know [where to go]', when the subject of 'to go' is indefinite or obvious, the present passive in -à: (without 'it is' enclitic) occurs in the complement.
a. ínò-mb-à: éndà- $\varnothing$,
go-Pres-Pass not.know-3SgSbj,
[[wó-mb-à: ké] gì] éndà- $\varnothing$
[[come-Pres-Pass Def.InanSg.E] Acc] not.know-3SgSbj
'He doesn't know where to go, (and) he doesn't know where to come.' (2005-1a)
b. ínò-mb-à: éndà:-m
go-Pres-Pass not.know-1 SgSbj
'I don't know where to go.'

However, the '(know) what to Vb ' construction is rather different, being based on a future participle in -ŋgà. See (529) in §14.3.4.

## 11 VP and predicate structure

### 11.1 Regular verbs and VP structure

### 11.1.1 Verb phrase

Subjects are well-defined morphosyntactically. For starters, they have their own clause-initial position, subject focalization requires a special verbal participle, and for some inflectional categories subject relatives have tonally distinct verbal participles from nonsubject relatives. Same and different subject subordinators are distinguished. Subjects can bind reflexive objects, though the latter ('your head', etc.) are not highly grammaticalized in Najamba. Imperatives and hortatives mark addressee number, and it is arguable that imperatives have no true subjects, but this is orthogonal to the question of a subject-VP division in indicative clauses.

Given that subjects are a well-defined category, VP can be defined as everything else (except aspect-negation), including predicates, objects, and adjuncts (PPs and adverbs). VP generally corresponds well to verbal-noun complements, though it is possible to smuggle a subject in as a compound initial if that slot is not taken by an object.

### 11.1.2 Fixed subject-verb collocations

Nouns that denote celestial bodies and meteorological phenomena occur in fixed collocations with some verbs.
ùjúngó 'sun' is the subject of ùjúngó dè̀ह́ ‘sun set' and ùjúngó túmbí 'sun rise'. The core meaning of dè̀ย́ is 'fall'. túmbí elsewhere has meanings like '(tree) grow leaves', '(e.g. onion) grow from a graft or bulb', and 'make a mound of earth', suggesting that sunrise is seen as an organic bulging.
à:lé 'rain' as subject is collocated with tég', as in à:lé tègغ̀- $\varnothing$ 'it rained'. tégé elsewhere means 'put a pinch (of gunpowder)' or 'cook (lunch)', neither of which is a good semantic match for 'it rained'.

The noun bà: occurs only in bà: $g w e ̀-~ \varnothing$, literally something like 'cloudy weather (rainy season) has gone out', denoting the autumn following the end of the rains.
$n \varepsilon ̌: n \grave{\varepsilon}:-\varnothing$ means 'day has broken' (at first light, around 5 AM ).
Many expressions for emotional state have kéndà: 'liver/heart' as subject, usually possessed (e.g. 'my ...'). Examples are 'X's heart go (=calm) down' in (394) below and 'X's heart be ruined (=unhappy)' in (749) in the sample text. 'Liver' and 'heart' are conceptually closely associated since, in butchery, the two organs are removed and usually cooked together. There is a distinction in the final vowel of the verb between kéndà: súgq 'get angry', with the same verb as in sùgé súgé 'defecate', and kéndà: súgí 'calm down (after being angry)', with súgí 'go down'. The distinction is sutble in the E-stems (sùgè-, sùgè-). A different collocation for 'get angry' is presented in the following section.

| já:\ín = í: | [kéndà: | [í | gò $]$ ] |
| :---: | :---: | :---: | :---: |
| squabble( n$)=\mathrm{it}$.is | [liver | [1P1Poss | Psm.InanSg.O]] |
| súgé | $j o ̀ g-a ̀:=\grave{y}$ |  |  |
| get.angry | Perfect-PplNonSbj=it.is |  |  |
| 'It is (=was) a s | e. Our hea | got ang | 05-1a) |

kéndà: can also be treated as an inalienable in this construction, as shown by the preposed pronominal possessor and the tone-dropped possessum in (395a-b).
a. [mí
[1SgPoss
${ }^{\text {L }}$ kèndà:]
súgè- $\varnothing$
'I got angry.'
b. [mí

Lkèndà:] nàmè- $\varnothing$
[1SgPoss ${ }^{\mathrm{L}}$ liver] be.ruined.Pfv-3SgSbj
'I was saddened (by some event).'

### 11.1.3 Idiomatic and cognate objects

### 11.1.3.1 Noncognate object-verb collocations

Some examples where the noun and verb are collocated to express a lexical sense, grouped by verb stem, are in (396).

$$
\begin{equation*}
\text { noun } \quad \text { gloss } \quad \text { nominal+verb } \quad \text { gloss } \tag{396}
\end{equation*}
$$

a. $S W$ ' 'pour, spill'

| sǔndè | 'spittle' | sǔndè swé | 'spit' ("pour spittle") |
| :--- | :--- | :--- | :--- |
| sùndè-járì | 'slobber' | sùndè-járì SWé | 'drool, emit slobber' |

b. ímbí 'plant (e.g. stick in ground)'
kìnjâ: 'nose' kìnjâ: ímbí 'blow one's nose'
c. kán 'make; be made' (many examples)

| hátìyò | 'sneeze (n)' | hátìyò kán | 'sneeze (v)' |
| :---: | :---: | :---: | :---: |
| sùjú:dù | 'prosternation' | sùjú:dù kán | 'prostrate (oneself) in Muslim prayer' |
| súrà | 'board game' | súrà kán | 'play the board game' |
| tónkè-tónkè | 'spotted' | tónkè-tónkè kán | 'become spotted' |
| tó:rù | 'fetish' | tó:rù kán | 'make animist sacrifices' |
| lútà | 'rejection' | lútà kán | 'reject (e.g. religion)' |
| sútùrà | 'protection' | sútùrà kán | '(e.g. God) protect (sb)' |
| - | - | jíngà kán | 'take sides (in a dispute)' |
| - | - | jên kán | 'fail' |


| - | - | hóynà kán <br> kóróy-kàrày kán | '(God) make (sb) well' 'do hurriedly' |
| :---: | :---: | :---: | :---: |
| d. ìbí 'catch' |  |  |  |
| rúkù | 'bowing (n)' | rúkù ìí | 'bow and place hands on knees (in Muslim prayer)' |
| sálìgì | 'ablution' | sálìgì ìbí | 'perform ablutions (before Muslim prayer)' |
| bìrí | 'wrestling' | bìrí ìbí | 'wrestle (someone)' |
| ámà:nà | 'promise' | ámà:nà ibí | 'make a promise' |
| íbí | 'mouth' | [ $X$ ìbì] ìbí | 'shut up' |
| e. $j \varepsilon$ 'take' |  |  |  |
| ámà:nà | 'promise (n)' | ámà:nà jé | 'make a promise' |
| á:dì | 'promise (n)' | á:dì jı́ | 'make a promise' |
| gíbí | ' $\operatorname{wrap}(\mathrm{n})$ ' | gíbí jé | a) 'take a woman's wrap' <br> b) '(girl) be excised' |
| jàmàlà-ŋgó | 'theft' | jàmàlà-ŋgó jé | 'commit a theft' |
| kéndà: | 'liver/heart' | kéndà: $j \in \mathfrak{L}$ | 'get angry' |
| ánnìyà | 'intention' | ánnìyà jé | 'have an intention' |

f. dàgí 'shoot (bullet); beat with stick; lock'
pómbè 'applause’ pómbè dàgí
súrà 'bucking (n)' súrà dàgí '(quadruped) buck; kick out’
tǎl 'history' tǎl dàgí 'recount the history (of a village)'
g. né ‘drink'
bà:nâ: 'porridge' bà:nâ:né
a) 'drink porridge’
b) 'undergo circumcision'
bǐn 'sacred place’ bǐn né
níngé 'sauce' níngé né 'take an oath (and drink) at the sacred place'
a) 'drink sauce;
b) skim sauce off of top of grain meal'
h. págí 'tie'

| èyà-ŋgó | 'marriage' | èyà- ŋgó págí | 'contract a marriage' |
| :--- | :--- | :--- | :--- |
| ìbí | 'mouth' | ìbí págí | '(millet) begin to form a grain |
|  |  | spike' |  |

i. tún 'put'
kèrè-néndé 'tickling' kèrと̀-néndé tún 'tickle (someone)'
j. té: 'sting; shoot; sprout; avoid (taboo)'

| kòmbé | 'war' | kj̀mbé té: | 'wage war' |
| :--- | :--- | :--- | :--- |
| kùlé | 'hair' | kùlદ́ té: | 'grow hair' |
| jây | - | jây té: | 'dive into water' |

k. pújî ‘shatter, explode; gush out'
wòlé 'roots (Pl)' wòlé pújí 'put down roots'
kìnjà-díné 'nosebleed’ kìnjà-díné pújí 'nose bleed'
For 'get angry', the construction alluded to in (396e) has pronominal-subject agreement for the individual affected, while unpossessed kéndà: precedes the verb like a direct object (397a); see also (674b) in §17.6.5. For a different 'get angry' construction, see (395a) above. 'Nose bleed' (396k) has a similar syntax, as in (397b).
a. kéndà: $j \grave{\text { c̀m }}$
liver take.Pfv- $\mathbf{1 S g S b j}$
'I got angry.'
b. kìnjà-díné pùjè-ḿ
nosebleed shatter.Pfv- $\mathbf{1 S g S b j}$
'I have a nosebleed.'

### 11.1.3.2 Formal relationships between cognate nominal and verb

Data in (398) show that there is no consistent pattern in the relationship between the forms of the nominal and of the verb. Like the verb, the nominal usually ends in a vowel. Nouns with final short vowel, including some cases where a final high vowel has arguably been deleted, are in (398a). In (398b), the noun and verb disagree in ATR-harmonic class. When the noun is nonmonosyllabic and ends in a long vowel (398c), the odds of an original suffixed origin increase, but there is no synchronically recognizable suffix on the noun. Some combinations involve nouns and verbs borrowed separately from the same word family in Fulfulde (398e). In some such cases, it may be that the Fulfulde noun was borrowed and the verb was (re-)created based on existing cognate-nominal/verb patterns.

Because verb stems are subject to much tighter phonological constraints (vocalism, tone melody) than are nouns, it is not surprising that the cognate nominals show a wide range of phonological details that are not predictable from those of the verbs. However, ATR-harmonic patterns are consistent between the noun and the verb, with the exceptions in (398b).
nominal gloss nominal+verb gloss
a. final short vowel or zero

| mǒnjè | 'urine' | mǒnjè mónjí | 'urinate' |
| :---: | :---: | :---: | :---: |
| úlè | 'vomit (n)' | úlè úl | 'vomit (v)' |
| gìyé | 'farts (Pl)' | gìyé gìy ${ }^{n}$ ह́ | 'fart, emit farts' |
| sùnjú | 'breath' | sùnjú súnjí | 'breathe' |
| níngé | 'green sauce' | níngé níngí | 'cook green sauce' |
| díbì | 'grill (n)' | díbì dìbí | 'roast (meat) over a fire' |
| gî: | 'harvest (n)' | gî: gǐy | 'harvest (with a knife)' |
| háwsá | 'mud (as mortar)' | háwsá háwsé | 'lay mud (between bricks)' |
| tě:n | 'harvest pile' | tě:n téné | 'make large harvest pile' |
| sân | 'prayer' | sân sán | 'pray, perform a prayer' |
| yál | 'walk (n)' | yál yàlí-yé | 'take a walk' |
| jî̀m | 'tale or riddle' | jîm jǐm | 'tell a tale or a riddle' |
| sífà | 'description' | sífâ sífé | 'make a description; give traveling directions' |
| tùmbó | 'mound' | tùmbó túmbí | 'make a mound' |
| bándè | 'swimming' | bándè bàndí | 'go swimming' |
| nállò | 'conversation' | jállé | 'converse (in daytime)' |
| wírrì | 'saying beads' | Wírrì wírré | 'say one's beads (with rosary)' |
| wá:jù | 'sermon' | wá:jù wá:jé | 'preach a sermon' |
| wá:tè | 'oath' | wá:tè wá:té | 'swear (truth)' |
| kàjábù | 'thought' (variant) | kàjábù kájábí | 'think a thought' |
| dwâ: | 'insult (n)' | dwâ: dwé | 'make an insult' |
| tǎ: | 'taboo' | tǎ: té: | 'avoid (a taboo)' |
| yándú | '(a) call' | yándú yàndí | 'make a call (summons)' |
| jáyrè | 'criticism' | jáyrè jáyré | 'make a criticism, denigrate' |
| jángà | 'studying (n)' | jáygà jáygí | 'study, go to school' |
| játè | 'count, calculation' | játè játé | 'count (v), calculate' |
| dógú | 'prop (n)' | dógú dòné | 'prop up' ( $g \sim \eta \S 3.4 .1 .2$ ) |
| nóyè | 'sleep (n)' | nóyè nóy | 'sleep (v)' |

b. change in vowel or in ATR-harmonic class

| dèbí | 'roof' <br> (cf. noun dèbǒ: | dèbí dèbé <br> f-building') | 'cover; put a roof on' |
| :---: | :---: | :---: | :---: |
| twě | 'sowing (n)' (cf. noun twê: | twě twé <br> stock') | 'sow (v), plant (seeds)' |
| dôm | 'talk (n), words' | dôm dǎm | 'speak' |
| dèndǎ: | 'evening chat' | dèndǎ: dèndé | 'chat in the evening' |
| mómbò | 'dues, ante (n)' | mómbò mómbé | 'pay dues, ante up' |
| kábìlò: | 'part, division' | kábìlò: kábílé | 'divide into parts' |


| c. final long vowel (except -û:) |  |  |  |
| :--- | :--- | :--- | :--- |
| yámbú: | 'blanket, covering' | yámbú: yàmbí | 'cover, put a blanket on' |
| àmbǒ: | 'fuzz' | aàbǒ: ámbí | '(millet spikes) grow a |
|  |  | reddish fuzz (flowers)' |  |

d. multisyllabic noun (usually < Fulfulde) and bisyllabic verb

| gá:jà:tì | 'conversation' | gá:jé | 'converse, chat' |
| :--- | :--- | :--- | :--- |
| dàbárù | 'magic' | dàrù dàbí | 'practice magic' |
| jámmò:rè | 'griot's calls' | jámmò:rè jámmé <br> híjjó:rè | 'pilgrimage' (griot) call out a genealogy' |
| níjjó:rè híjjé |  |  |  |$\quad$| 'make the pilgrimage (to |
| :--- |
| Mecca)' |

In pǒ: pó:-m 'make a greeting', the verb is causative in form. In màndà-m-û: màndá-m 'tell a joke', the verb is causative ('cause to laugh') and the nominal includes the causative suffix -m-.

Because the verbs have various tone formulae in the different AN inflections, in these lists I have normalized the tonal transcription of the cognate nominal, using its lexical melody. In particular, a final rising tone is shown even where it would be leveled to an H -tone before an initial H-tone of the chaining form. For example, in (398c) I write pàbă: pábí, which is correct as an underlying representation, but this actual combination would appear as pàbá: pábí after Word-Final <LH>-to-H Raising (§3.6.3.2). The rising tone would, however, appear in e.g. perfective pàbă: pàbè-, where the verb begins with an L-tone.

Recognizable nominal derivational suffixes occur in some cognate nominals. The $-\hat{u}$ : (plural -î:) in (399a) is also found in some (chiefly instrumental) deverbal nominals, see §4.2.3.7. -n suffixes with different stem tones are in (399b-e); for the type with $\{\mathrm{LH}\}$ stem tones, see (126) in §4.2.3.3.

| a. | kà: r -û: | - | kà:r-û: ká:ré | 'clear one's throat' |
| :---: | :---: | :---: | :---: | :---: |
|  | kòll-û: | 'cough (n)' | kòll-û: kóllí | 'cough (v)' |
|  | mànd-û: | 'laugh(ter)' | mànd-û: màndí | 'laugh (v)' |
|  | mànjùr-û: | 'dream (n)' | mànjùr-û: màngírí-yé | 'dream (v)' |
|  | yèr-û: | 'cry of joy' | yèr-û: yěy | '(women) emit cries of joy' |
|  | nèb-û: | 'betrothal' | nèb-û: nébé | 'become engaged' |
|  | kàjàb-û: | 'thinking' | kàjàb-û: kájábí | 'reflect, think' |
|  | bèbil-û: | 'bellowing' | bèbil-û: bèbíl | '(bull, billygoat) bellow' |
| b. | àyî-n | 'yawn (n)' | àyî-n ăy | 'yawn (v)' |
|  | (contra | st ày y -n 'fatigue' |  |  |
|  | bègî-n | 'hiccup' | bè̀î-n bègí | 'have the hiccups' |
|  | pèbî-n | 'whistling' | pèbî-n pébí | 'give out a whistle' |
|  | màgǐ-n | 'magic' | màgǐ-n màgí | 'tell fortunes' |
|  | bòǧ̌-n | 'barking' | bògǐ-n bògí | '(dog) bark' |
|  | gìmbě-n | - | gìmbě-n gìmbí | 'darkness fall' |
|  | sòngă-n | 'curse (n)' | sòngă-n sóngé | 'curse (v)' |
|  | já:ทí-n | 'squabble (n)' | já:pí-n já:pí-y | 'squabble (v)' |
|  | kíryè-n | 'praise (n)' | kíryè-n kíríyé | 'publicly praise' |

In (400) below, the noun contains an original inanimate singular suffix *-ggo or *-go. In (400a), the suffix is absent in the plural of the nominal, so the -ngo suffix is still clearly segmentable, even without reference to the verb. In (400b), the old *-ggo or *-go is now unsegmentable ...(7)go in the noun, which has an innovated mutating plural. However, in the
 ATR harmony, supports continued recognition of a morpheme boundary. For the cases in (400c), no plural could be elicited, so it is indeterminate whether these nouns belong in (400a) or (400b). In (400d), an original animate plural suffix *-mbo likewise became a fused part of the cognate nominal (but not the verb), was reinterpreted as singular, and has developed a new mutating plural.
(400) a. -ŋgo in singular only, plurals are $\varepsilon$ èy $̌$ :, nèmbìl-î., gòjù-mbó, dímbé-mbó

| èyà-ŋgó | 'marriage' | èyà-ŋgó Éyé | '(bride) move to husband's |
| :---: | :---: | :---: | :---: |
|  |  |  | house' |
| nèmbìl-ทgó | 'plea' | nèmbìl-ทgó némbíl | 'make a plea, beg' |
| gòjù-ngó | 'illicit sex' | gòjù-ngó gòjí-y | 'have an out-of-wedlock sexual relationship (concubinage)' |
| 'ímbé-ทgó | 'following | mbé-ngó dìmbí | (euphemism for the preceding) |

b. *-ŋgo now unsegmentable ... ngo, new mutating plurals kángé, nàngé, jə̀yègé kángó 'challenge’ kángó kán 'make a challenge’ jàngó 'weeping' jàngó né 'weep' jò:gó 'shame' jò:-gó jว̀yé 'be ashamed, show deference'
c. no plural elicitable
jǎy-ŋgò 'sowing ...' jǎy-ngò jǎy 'sow seeds in a pit with manure' ìbìnà-ŋgó 'fear' ìbìnà-ŋgó íbí-yé 'have a scare, be afraid' (noun also ìbì-ŋgó )
d. plural suffix *-mbo now unsegmentable, new mutating plurals gìlàmbé, gìmbé
gìlàmbó 'sound ...' gìlàmbó gìlé '(something unseen) make a sound'
gìmbó 'odor' gìmbó gǐn 'smell an odor'

The cognate nominal is sometimes iterative, versus uniterated verb (401).

| bùjè-bújè- $\eta g o ̀ ~ b u ̀ j e ́ ~$ | 'form a froth' |
| :--- | :--- |
| jà:rà-já:rà já:ré | 'incite, provoke' |
| yòlà-yòlâ: yòlé | 'provoke (with an insult or accusation)' |

The cognate nominal may be a compound, or a fixed noun-adjective combination (402). The verb, which may be historically secondary (imitative of the nominal), is related to the final stem in the composite nominal, even if this is a simple adjective ('cook dumplings', 'do the second round ...'). In this way the combination of cognate nominal plus verb has an iterativelike effect as in the simpler cases in (401a) above.

| ègà ${ }^{\mathrm{L}}$-tábù: tábí | 'have breakfast' |
| :---: | :---: |
| ámbà-kà: $k$ ع́: | 'tell a riddle' |
| ègà ${ }^{\text {L }}$-dà: bú dàbí | 'get up early in the morning' |
| àn ${ }^{\text {L }}$-tà ${ }^{\text {Lǎ: tán }}$ | 'spread (limbs)' |
| sùndè ${ }^{\text {L }}$-járì jǎr | 'emit slobber, drool' |
| $b e ̀ r \grave{~}^{\mathrm{L}}-\mathrm{k}$ ¢́jè kéjé | 'tell an outright lie' |
| kèndà ${ }^{\text {L }}$-[tèg-î:] tégé | 'have lunches' |
| [mànà ${ }^{\text {L }}$ pílè-ทgò] pílé | 'cook dumplings' (pílè 'white') |
| [gòlè ${ }^{\mathrm{L}}$ nòjǒ:] nójí | 'do the second round of farm work' (nòjǒ: 'second') |
| dòngòlo ${ }^{\mathrm{L}}$-sìbǎ: síbí | 'lay the second layer of millet grain spikes in container' |

### 11.1.3.3 Grammatical status of cognate nominal

If the cognate nominal is referential, it generally denotes a logical object of the action. The cognate nominal may be modified, quantified over, or possessed.
a. [dwà: ${ }^{\text {L }}$ ségín] dwá-njò- $\varnothing$
[insult(n) ${ }^{\mathrm{L}}$ many] insult(v)-Pres- 3 SgSbj
'He/She makes many insults.'
b. $\left[d w \grave{\varepsilon}:{ }^{\mathrm{L}}\right.$ nè:ndé:] dwá-njò- $\varnothing$
[insult(n).P1 ${ }^{\mathrm{L}}$ bad.InanPl] insult)v)-Pres-3SgSbj
'He/She makes bad (= nasty) insults.'

'if (on the other hand) you-Sg have not made the squabble of (= about) that with him, ...' (2005-1a.01)

However, in a few cases the cognate nominal is the subject: jíl $\grave{\varepsilon}$ jì $\bar{\varepsilon}$ ' late millet ripen(s)'.

### 11.1.4 Objects of causatives and ditransitives

Ditransitives include lexical verbs 'give' and 'show', plus derived causatives and causativelike transitive derivations.

Ditransitive $\grave{n} d \varepsilon$ ' 'give' has two objects. The recipient is usually human and is regularly followed by the accusative marker gì. The theme (entity transferred) is usually a thing, but may be animate. In freely produced examples, the theme does not have accusative marking even when human (404c), but follow-up questioning indicated that such marking is at least grammatical.

| a. | [ŋ̀gwě: | [mí | yè] | mó $]$ | [á:màdù | gi] | ǹ̀dè-ḿ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [dog | [1SgPoss | Psm.AnSg] | Def.AnSg] | [A | Acc] | give.Pfv-1 1 gSbj |
|  | 'I gave my dog to Amadou.' |  |  |  |  |  |  |
| b. | [ก̀gwě: | [mí | y ] | mó $]$ | [á:màdù | gì] |  |
|  | [dog | [1SgPoss | Psm.AnSg] | Def.AnSg] | [A | Acc] | show.Pfv-1SgSbj |
|  | I showed my dog to Amadou.' |  |  |  |  |  |  |



Causatives are exemplied in (405). The logical subject of the subordinated clause ('X jump', ' X drink water') is treated as direct object of the collapsed clause and takes accusative marking (405a-b). If both the subordinated subject and subordinated object appear, accusative gì is regular for the subject but usually omitted on the object (405c). If just one or the other appears, accusative marking is normal (405d)
a. [á:màdù gì] tòmbò-mè-ńn
$\left[\begin{array}{ll}\mathrm{A} & \text { Acc }] \quad \text { jump-Caus.Pfv-1SgSbj }\end{array}\right.$
'I made Amadou jump.'
$\begin{array}{llll}\text { b. } \begin{array}{lll}\text { [á:màdù } & \text { gì] } & \text { íngé } \\ {[\mathrm{A}} & \text { Acc] } & \text { water }\end{array} & \text { nà:-mè-ḿ } \\ \text { drink-Caus.Pfv- } 1 \operatorname{SgSbj}\end{array}$
'I had Amadou drink water.' (= 'I gave water to Amadou to drink')
c. [á:màdù gì] [̀̀gwě: mó] dènjà-mè-́n
[A Acc] [dog Def.AnSg] hit-Caus.Pfv-1SgSbj
'I had/made Amadou beat the dog.'

Verbs of carrying like 'carry on head' and 'carry on back' are mediopassive morphologically but syntactically transitive, with e.g. 'basket' or 'baby' as object. Accusative marking is regular on definite objects (inanimate or animate), and on indefinite animates, but not on indefinite inanimates (406b).

b. [yě: mó] dòng̀̀lô: dìỳ̀- $\varnothing$
[woman Def.AnSg] basket carry.on.head.Pfv-3SgSbj
'The woman carried a basket on the (=her) head.'
c. [yě: mó] [èndê: mó gì] pòyè̀- $\varnothing$
[woman Def.AnSg] [child Def.AnSg Acc] carry.on.back.Pfv-3SgSbj
'The woman carried the child on the (=her) head.'


The morphologically transitive forms of the same 'carry' verbs add an external agent, as when someone else helps to put the basket or the child in carrying position. In this case there are two objects. The subordinated subject is accusative-marked. The subordinated object is can also be accusative-marked, though less reliably.
 'I had him/her carry the basket on the head.'


## 11.2 ' Be ', 'become', and other statives

### 11.2.1 Identificational enclitic 'it is $\ldots$ ' $(=y,=i$ :

### 11.2.1.1 Unconjugated forms

The common use of this enclitic is in simple, verbless clauses like (408), where a discourse referent that is already established, or that is introduced by deixis, is identified by an NP or adverbial.
a. $n \check{\varepsilon}:=\dot{y}$
cow=it.is
'It (=previously introduced referent) is a cow.' (ně:)
b. ǒm
ně: = ${ }^{\prime}$
this.AnSg
cow=it.is
'This is a cow.' (ně:)
The enclitic may occur without plural or animacy agreement (409a). The identificational element may be a first or second person pronoun (409b).
a. nàwó: = ý
cow.Pl=it.is
'They are cows.'
b. $m i ́=y$
$1 \mathrm{Sg}=\mathrm{it}$.is
'It's me.'

The unconjugated 'it is' enclitic $=y$ is also part of some passive constructions, following $=b$-à: or -mb-à: (§10.5).

The enclitic takes the form $=y$ after a vowel, and $=i$ : after a consonant (including $y$ ). The tone is spread from the end of the word to which it is attached. The enclitic therefore has H-tone in (410a), and L-tone in (410b). The few words that end in consonants likewise spread a level (non-contour) tone into the enclitic syllable ( 410 c ). A final contour-toned long vowel stretches its tones (§3.6.4.2) to incorporate the enclitic $=y$, which forms the coda of the final syllable (410c). A consonant-final word with final contour-toned syllable divides the tone into its components as part of resyllabification (§3.6.4.3). The leftmost tone element surfaces on the stem-final syllable (which is now an open syllable $C v$ or $C v$ :), and the rightmost tone element surfaces on the word-final syllable which includes the enclitic in its $=i$ : variant. This is illustrated for stem-final $C \check{v} C$ in (410e) and for stem-final $C \hat{v} C$ in (410-f).

|  | gloss | form | 'it is X ..., |  |
| :---: | :---: | :---: | :---: | :---: |
| a. | 'this.InanSg' | j̀gú | j̀gú $=$ ý |  |
|  | ' 1 Sg ' | mí | mí $=$ ý |  |
|  | '2Sg' | б́ |  |  |
|  | 'house' | ólé | ólé $=\hat{y}$ |  |
|  | 'goat' | ínè | ín $\grave{\varepsilon}=\grave{y}$ |  |
|  | 'city' | j̀gállù | ìgállù $=$ y |  |
| c. | 'many' | ségín | ségín = í: |  |
| d. | 'pick-hoe' | cènjû: | cènjú: $=$ ỳ |  |
| e. | 'this.AnSg | ŏm | $\grave{o} \mathrm{~m}=1$ í: | syllabified as [ò.mí́] |
|  | 'hundred' | Sǐy | sìy $=1:$ | syllabified as [sì.gíí] |
| f. | 'here' | ǹjî̂n | ǹjín $=$ ì: | syllabified as [ǹ.d3í.nì] |
|  | 'there (distant)' | ற̀̀gâ:n | g̀gá: $n=$ ì: | syllabified as [ì.gáá.nì̀] |

### 11.2.1.2 Conjugated forms

In the unconjugated 'it is' construction illustrated above, the subject (i.e., the discourse referent to be identified) is covert. When the subject is a first or second person pronominal, a conjugated form of the 'it is' enclitic is used. Thus compare third person subject (411a) with 1 Sg subject (411b).
a. ánè = ỳ
$\operatorname{man}=i t$.is
'It (=he/she) is a man.'
b. ánè = $̀$ m
man=it.is. 1 Sg
'I am a man.'

The paradigm is (412). In the 1 Pl and 2 Pl forms, plural suffix -mbo optionally appears even where it is not otherwise present on a plural noun, as with nàwó: 'cows'. Its tone spreads from the preceding stem.

| category | after V | after C |
| :--- | :--- | :--- |
|  | $=\grave{m}$ | $=i:-\grave{m}$ |
| 1 Sg | $=\grave{W}$ | $=i:-\grave{W}$ |
| 2 Sg |  |  |
|  | $(-m b o)=\grave{y}$ | $(-m b o)=\grave{y}$ |
| 1 Pl | $(-m b)=\grave{e}:$ | $(-m b)=\grave{e}$. |

Nearly all actually occurring forms are postvocalic, since most nouns, adjectives, and personal pronouns ends in a vowel. For singular subjects ( 1 Sg and 2 Sg ), it is possible to elicit conjugated 'it is' predicates based on demonstrative ǒm 'this (animate singular)'. For plural subjects ( 1 Pl and 2 Pl ), with some difficulty it was possible to elicit 'it is' predicates based on the numeral sǐn 'hundred'. Examples are in (413). In the (syllabic) clitics, i.e. 1 Pl and 2 Pl and the postconsonantal allomorphs for 1 Sg and 2 Sg , a final H -tone from the stem spreads into the nucleus of the enclitic syllable as described in the preceding section.
a.

1 Sg
‘_am/are a cow' (<nと̌:) '_ am/are this (one)' (< ǒm)

$$
n \check{\varepsilon}:=\grave{m}
$$

$$
\begin{equation*}
\grave{o ̀ m}=1:-m \tag{413}
\end{equation*}
$$

2 Sg
$n \varepsilon ̌:=\grave{W}$
$\grave{o} m=i ́:-\grave{W}$
b.

In addition to its function in simple examples like those presented above, the conjugated 'it is' enclitic also occurs in perfect jòg-â: $(=\hat{y})$ and related forms, see $\S 10.1 .3 .3$. This likely originated as a predicative form of a participle.

### 11.2.1.3 'It is not ...' ( = lá)

The positive 'it is' enclitic is replaced by =lá, which also occurs on negative adjectival predicates (§11.4.4). The $l$ is optionally hardened to $d$ after a nasal consonant. This is an

$$
\begin{aligned}
& \text { '_ are cows' (< nàwó:) '_ are one hundred' }(<\text { sǐn }) \\
& \text { nàwó: }(-m b o ́)=\text { ỳ } \quad \text { sìn }=1:=\text { ỳ } \sim \text { sìm-bó }=\grave{y} \\
& \text { nàwó: }(-m b)=\hat{e}: \quad \operatorname{sìm}=\hat{e}: \sim \operatorname{sìm}-b=\hat{e}:
\end{aligned}
$$

infrequent combination, but = dá can follow animate singular demonstrative ǒm, resulting in ǒm = lá or ǒm = dá.
(414)
a. $n \varepsilon ̌:=l a ́$
cow=it.is.not
'It is not a cow.'
b. nàwó: = lá
cow. $\mathrm{Pl}=$ it.is.not
'They are not cows.'

A final H-tone in a personal or demonstrative pronoun, or in a predicative adjective (§11.4.4), drops to L-tone before = lá, but H-toned nouns have their usual tone (415).

|  | gloss | form | 'it is not $\mathrm{X} \ldots$. ${ }^{\text {' }}$ |
| :---: | :---: | :---: | :---: |
| a. | 'this (InanSg)' | j̀gú | j̀gù $=$ lá |
|  | '1Sg' | mí | $m i=~ l a ́ ~$ |
|  | '2Sg' | ó | ò = lá |
|  | 'house' | ólé | ólé= lá |
|  | 'goat' | ínè | ínè = lá |
|  | 'city' | j̀gállù | ̀̀gállù = lá |
| c. | 'pick-hoe' | cènjû: | cènjú: = lá |
| d. | 'many' | ségín | ségín = lá |
| e. | 'this (AnSg)' | ǒm | ǒm $=$ lá $\sim o \check{m}=d a ́$ |
|  | 'hundred' | SǏ7 | sǐy $=$ lá $\sim$ sǐy $=d$ d́ |
| f. | 'here' | ǹjîn | ǹjîn = lá $\sim$ ǹjî̂n $=$ dá |
|  | 'there (distant)' | ŋ̀gâ:n | !̀gâ: $n=1 a ́ \sim$ 门̀gâ: $n=$ dá |

The conjugated forms for 1 st and 2 nd person are in (416).
category after $v$ or $C$

| 1 Sg | $=$ lá $-\grave{m}$ |
| :--- | :--- |
| 2 Sg | $=l a ́-\grave{W}$ |
| 1 Pl | $=l a ́=y ̀,(-m b o)=l a ́=\grave{y}$ |
| 2 Pl | $(-m b o)=1-\hat{\varepsilon}$. |

Again, plural suffix -mbo is often added before the 1 Pl and 2 Pl clitics even after nouns that do not elsewhere take this suffix.

### 11.2.2 Existential-locational quasi-verbs and particles

In the usual case where present time reference is relevant, a special set of positive and negative existential-locational 'be present/absent, be/not be (in a place') are in use. If the relevant time interval is specifically past or future, relevant forms of a regular verb bé 'remain, stay' are used.

In most Dogon languages, such existential-locational quasi-verbs are obligatorily preceded by an "existential" proclitic in positive, unfocalized main clauses. Najamba has no such particle preceding the quasi-verb, but there may be vestigial traces thereof, see §11.2.2.3.

### 11.2.2.1 Positive existential-locational quasi-verb (bô:, bò)

In existential-locational expressions, the predicative element takes the form bô: when the location is not specified ('be present', more loosely 'exist'), and bò when it follows a locational (417). Synchronically, post-locational bò might be analysed as a phonologically reduced enclitic from the fuller form bô:, though this is incorrect historically. It is questionable whether these quasi-verbs are etymologically related to the regular verb $b \varepsilon$ - 'remain'.
a. á:màdù bô:- $\varnothing$

Amadou be-3SgSbj
'Amadou is present (here/there).'
$\begin{array}{llll}\text { b. á:màdù } & {[\text { [móttì }} & \text { mà }] & \text { bò- } \varnothing \\ & \text { Amadou } & {[\text { Mopti }} & \text { in }]\end{array}$
'Amadou is in Mopti.'
There is no "existential" proclitic of the sort found in most Dogon languages.
The pronominal paradigms are in (418).

| category | 'be present' | 'be in (a place) |
| :---: | :---: | :---: |
| 1 Sg | bô:-m | bò-m |
| 2 Sg | bô:-W | bò-W |
| 3 Sg | bô:- $\varnothing$ | $b o ̀-\varnothing$ |
| 1 Pl | bô:-y | $b o ̀-y$ |
| 2 Pl | $b$-ê: | $b$-è: |
| 3 Pl | $b-\hat{\varepsilon}$ : | $b-\varepsilon$ : |

The shift from +ATR to $\varepsilon$ in the 3 Pl is notable. It avoids $2 \mathrm{Pl}-3 \mathrm{Pl}$ homophony in this paradigm. However, it risks producing homophonies with other forms, namely with $b-\varepsilon$ : 'you-Pl were' (clause-finally often tone-dropped to $b-\grave{\varepsilon}$ :), see $\S 10.3 .1 .1$, and with $b-\hat{\varepsilon}$ : nonsubject participle of bé- 'remain'.

For past time reference, b̀̀- 'was/were' replaces bô:- ~ bò-. See §10.3.1 and §10.3.1.1 above for the paradigm of $b \grave{\varepsilon}$-. The past-time forms always occur with an overt locational in my data.

### 11.2.2.2 Negative existential-locational quasi-verbs (òndí ~òndú )

The negative counterpart of bô: ~ bò is òndí, dialectally òndú.
a. á:màdù òndí- $\varnothing$
Amadou be.Neg-3SgSbj
'Amadou is absent (=not here/there).'
$\begin{array}{cccc}\text { b. á:màdù } & {\left[\begin{array}{lll}\text { móttì } & \text { mà }\end{array}\right]} & \text { òndí- } \varnothing \\ & \text { Amadou } & {\left[\begin{array}{ll}\text { Mopti } & \text { in }]\end{array}\right.} & \text { be.Neg- } 3 \mathrm{SgSbj} \\ & \text { 'Amadou is not in Mopti.' } & \end{array}$

The conjugation of òndí is (420). Its -yo- augment for $1 \mathrm{st} / 2 \mathrm{nd}$ persons is discussed in the following section.
category 'be absent'

| 1 Sg | òndí-yò-m |
| :--- | :--- |
| 2 Sg | òndí-yò-W |
| 3 Sg | òndí- $\varnothing \quad$ (dialectally òndú- $\varnothing$ ) |
|  |  |
| 1 Pl | òndí-yò-y |
| 2 Pl | òndí-y-è: |
| 3 Pl | òndí-yà |

### 11.2.2.3 Evidence for an original existential particle

A number of Dogon languages have a proclitic "existential" particle that obligatorily precedes the 'be (somewhere)' quasi-verb in the absence of an overt locational, obligatorily precedes the 'have' quasi-verb, and less systematically may precede some other statives and in some languages even progressive verbs. An example is Jamsay, where 'he/she is present' is yó wò and 'it is present' is yó kj, with existential /y $\varepsilon$ / assimilating to yó. In these languages, the existential particle is disallowed under negation, in the presence of a focalized consituent, and in relative clauses. The particle is therefore limited to positive, unfocalized main clauses with stative predicates. Etymologically, the particle probably originated as an unstressed 'there' adverb.

Najamba has no such proclitic preceding 'be (somewhere)', 'have', or other statives. However, the morphology of 'be (somewhere)' and its negation may bear witness to the former existence of such an element, in a different linear position.
§11.2.2.1 above distinguished long and short forms of the 'be (somewhere)' quasi-verb, with e.g. 3 Sg bô:- $\varnothing$ 'he/she/it is present' in the absence of another locational phrase, versus bò $-\varnothing$ when it follows such a phrase. In the negative counterpart 'not be (somewhere)' or 'be absent' in (420) just above, an augment -yò- occurs clearly in $1 \mathrm{st} / 2$ nd person subject forms, and possibly as part of 3 Pl òndí-yà.

Working back from the extant forms, internal reconstruction suggests an earlier *bó yò 'be there' and *ò-ndí yò 'not be there'. Pushing internal reconstruction farther, *ò-ndí yò might in turn be a slightly trimmed form of *bò-ndí yò (since -ndí is a known stative negative suffix in Najamba and elsewhere). If so, *bó yò survives as bô:- when no other locational is present, and *(b)ò-ndí yò has merged with *(b)ò-ndí to form the single 'not be' paradigm, which is impervious to the presence or absence of another locational. The o-vowel in *yò might have originally been a front vowel that assimilated to the vowel of *bó.

This suggestion will, however, have to be vetted against existential-locational predicates in other western Dogon languages, and the history may be more complex than this scenario suggests.

### 11.2.3 Stative stance and 'hold' verbs with final a/o ('be sitting')

A form based on the bare $\mathbf{A} / \mathbf{O}$-stem of the verb, with $\{\mathrm{HL}\}$ tone overlay but without an inflectional suffix, functions as a stative with verbs of stance ('be sitting', 'be standing') and of holding. It takes the usual pronominal-suffix conjugation (see below). All attested derived statives are bisyllabic, as is the case in some other Dogon languages. Instead of a flexible tone formula that can apply to stems of all syllable counts, a simple $\{\mathrm{HL}\}$ will have to suffix here.

The corresponding change of state ('sit down', 'stand up', 'take hold') is regularly expressed by a mediopassive form of the verb with suffix $-y \varepsilon$ ~ $\sim-y$. For example, 'sit down' is mediopassive óbí-y 'sit', for example 3 Sg perfective òbì-yè- $\varnothing$ 'he/she sat down'. Like other mediopassives, óbí-y can take the full set of regular tense-aspect inflections (perfective, present, future, etc.). Derived (and underived) statives do not make these tense-aspect distinctions, though they do allow the conjugated past enclitic ( $\$ 10.3 .1 .3$ ).

The stative derived from óbí- y is óbò 'be sitting' = 'be seated', which expresses a static position rather than a transition. It consists of the $\mathrm{A} / \mathrm{O}$ stem and the $\{\mathrm{HL}\}$ overlay mentioned above. The mediopassive suffix is absent, either for semantic reasons or because keeping it would result in a prohibited trisyllabic stative. The negative counterpart of óbò is òbò-ndí- 'not be sitting', with stative negative suffix -ndí- and $\{\mathrm{L}\}$ tone overlay on the same $\mathrm{A} / \mathrm{O}$-stem. The 1 Sg form is $-n u ́-m$ for expected \#-ndú-m. Conjugated examples are in (421a-b).
a. óbò-m
be.sitting-1SgSbj
'I am sitting.'
b. òbòn nú-m
be.sitting-StatNeg-1SgSbj
'I am not sitting.'

Sample paradigms are in (422). For the lexically -ATR stems like 'stand' that end in a in the A/O-stem, 2 Pl and 3 Pl are homophonous in the positive paradigm. For lexically + ATR stems like 'sit' that end in $o$ in the $\mathrm{A} / \mathrm{O}$-stem, the 2 Pl ends in -è: while the 3 pl ends in $-\grave{\varepsilon}$ : .
(422) category 'be sitting' 'not be sitting' 'be standing' 'not be standing'

| 1 Sg | óbò-m | òbò-nú-m <br> óbò-nd-ó: | íngà-m <br> íngà-W <br> óngà- $\varnothing$ | ìngà-nú-m <br> ìngà-nd-ó: <br> inggà-ndí- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| 3 Sg | óbò- $\varnothing$ | òbò-ndí- $\varnothing$ | ing |  |

Other examples involving stance verbs are in (423). The two in (423b) require comment. If we analyse the change-of-state verbs as containing the mediopassive suffix (bǐ-y, tí-y), we must conclude that the suffix is retained in the statives (bíyò, tíyò), whereas for all other verbs the suffix is omitted in the stative. There are two ways to interpret this. One is that the morpheme boundary in bǐ-y and $t i ́-y$ is opaque. The other is that the morpheme boundary may be transparent to native speakers, but the bisyllabic constraint on statives forces inclusion of the suffix. The same issue arises in (426b) below, and in several mediopassive-transitive pairings (§9.3.3).

| change of state | gloss | stative | gloss |
| :---: | :---: | :---: | :---: |
| a. íngí-yé | 'stand up' | íngà | 'be standing' |
| yèndí-y | 'be hung' | yéndò | 'be hanging (on rope)' |
| sómbí-y | 'squat down' | sómbò | 'be squatting' |
| nàmí-yé | 'kneel' | nánà | 'be kneeling' |
| gòbí-y | 'stand on tiptoes' | góbò | 'be on tiptoes' |
| bìní-yé | 'lean on (sth)' | bínà | 'be leaning' |
| tíjí-y | 'hold self up' | tíjò | 'be holding self up' |
| jè̀gıí-yé | 'become tilted' | jéngà | 'be tilted, be atilt' |
| gèrí-y | 'lie on back' | gérò | 'be lying on back' |
| jàbí-yé | 'lie on belly' | jábà | 'be lying on belly' |
| b. bǐy (or: bǐ-y) | 'lie down' | bíyò | 'be lying down' |
| tíy (or: tí-y) | '(bird) alight' | tíyò | 'be perched' |

Transitive verbs of putting objects (in some position) have (intransitiive) statives that denote being in the relevant position (424). I have no attestations of mediopassives.

| gǎn | 'put X in Y , | $?$ | gánà | ' X be in Y (container)' |
| :--- | :--- | :--- | :--- | :--- |
| tún | 'put $\mathrm{X}($ somewhere $)$ | $?$ | túnò | ' X be in (place)' |
| ságí | 'put X up (on Y)' | $?$ | ságà | ' X be up (on Y$)$ ' |

Verbs of attaching are similar. Their mediopassives ('become tied', 'become connected') are elicitable.

| transitive | gloss | mediopassive | stative | gloss of stative |
| :--- | :--- | :--- | :--- | :--- |
| págí | 'tie X' | págí-y | págà | 'X be tied' |
| dígí-ré | 'join, connect X (to Y)' | dìgí-y | dígà | 'X be connected' |
|  |  |  |  | (cf. $\S 11.2 .5$ below) |

Verbs of holding and carrying are exemplified in (426). In dynamic contexts they are transitive, like 'put' and 'tie' above. However, they are mediopassive in form. In the stative derivatives, the subject is still the holder/carrier, not the person or object that is held or carried. This is because holding and carrying, unlike putting and tying, leaves the agent in a continuing state. I would add that holding and carrying can last considerable times under African conditions, as when women carry a baby on their backs while making their rounds, or when men and women carry baskets on their head from fields to the village (with harvested crops). The same issue regarding morphemic segmentation discussed for the verbs in (423b) above is relevant to those in (426b).

|  | taking hold | gloss | stative |
| :--- | :--- | :--- | :--- | gloss of stative

### 11.2.4 'Know' (tígà:-, negative éndà:-)

For 'know' (the object can be a fact or a person, cf. French savoir and connaître), the positive stem used with present time reference is tígà:- (shortened 3 Sg tígà- $\varnothing$ ), suppleted by negative éndà:- (3Sg éndà- $\varnothing$ ). Because of the stem-final $\mathrm{a}, 2 \mathrm{Pl}$ and 3 Pl are homophonous.

| (427) | category | 'know' | 'not know' |
| :---: | :---: | :---: | :---: |
|  | 1 Sg | tígà:-m | éndà:-m |
|  | 2 Sg | tígà:-W | éndà:-W |
|  | 3 Sg | tígà- $\varnothing$ | éndà- $\varnothing$ |
|  | 1 Pl | tígà:-y | éndà:-y |
|  | 2 Pl | tíg-è: | énd-غ̀: |
|  | 3 Pl | tíg-è: | ع́nd-غ̀: |

The verb jùg $\varepsilon$ 'recognize' is morphologically regular (aspect-marking).

### 11.2.5 'Is not connected' (dígà-ndí)

The negative expression dígà-ndí (cf. Jamsay dìgè-lá ), with stative negative -ndí, means literally 'is not connected'. In addition to its literal use, it may be used in the (meta)pragmatic sense 'it (e.g. what you're saying) is not connected (= not relevant, appropriate)'.

### 11.2.6 Morphologically regular verbs

### 11.2.6.1 'Remain' (bé-)

The (positive and negative) existential-locational quasi-verbs described above are defective statives that cannot mark aspect or futurity. When the time reference in question excludes the present, the quasi-verbs are replaced by inflected forms of the regular verb bé- 'remain'.

In the positive, for future time reference, bé- takes the regular future paradigm: 3 Sg bá-m, 1 Sg bà-mbó-m̀, etc. H-tones may be dropped at the end of long clauses.
a. Éngú j̀gîn [wé nè] bà-m
tomorrow here [come then.SS] remain-Fut. 3 SgSbj
'He/She will come and be (=stay) here tomorrow.'
b. jǎ: ந̀ ŋ̀gîn b-à:
yesterday here remain.Pfv-3P1Sbj
'They were here yesterday.'

The perfective of 'remain' is probably the source of bè- 'was/were', which replaces bò- 'be (somewhere)' when the reference time shifts to the past (§10.3.1.1), and therefore of the entire set of past-shifted verb forms with encliticized conjugated $=b \dot{\varepsilon}-(\S 10.3 .1)$. There is no clear formal distinction between the two paradigms, especially since the final H -tone on $1 \mathrm{st} / 2$ nd person subject forms is usually dropped except in careful pronunciation or in isolation.
(429)

| 1 Sg | $b \grave{\text { èm }}$ |
| :--- | :--- |
| 2 Sg | $b-\grave{o}:$ |
| 3 Sg | $b \dot{\varepsilon}-\varnothing$ |
|  |  |
| 1 Pl | $b \grave{\varepsilon}-y ́$ |
| 2 Pl | $b-\check{\varepsilon}:$ |
| 3 Pl | $b-a ̀:$ |

In the negative, for past time reference, the perfective negative is used: $3 \mathrm{Sg} b a \check{ }-1-\varnothing$ (430a), 3 Pl bà:-ndí, 1 Sg bà-lú-m, etc. Other negative stems are future negative bă-ndì- (430b) and present negative bâ-ndí-.
a. !̀gîn
bǎ-1- $\varnothing$
here remain-PfvNeg-3SgSbj
'He/She wasn't (=didn't stay) here.'
b. Éngú ŋ̀gîn bă-ndì- $\varnothing$
tomorrow here be-FutNeg-3SgSbj
'He/She will not be (=stay) here tomorrow.'

### 11.2.6.2 'Become X’ (kán, bìlí-yé ), 'X happen’

The 'become' verb follows an 'it is' construction with enclitic $=y$. The lexical options are the rather neutral kán 'be made, be done' (intransitive use of kán 'make') and bìlí-yé 'become, be transformed into'. The 'it is' construction does not change when the 'become' verb is negated (431d).
a. dógè =ỳ kànè-ḿ
Dogon=it.is be.made.Pfv- 1 SgSbj
'I became (=was made) a Dogon.'
b. dógò: = ̀̀ kàn-à:

Dogon. $\mathrm{Pl}=\mathrm{it}$.is be.made.Pfv-3P1Sbj
'They became Dogon.'
c. kòjá=ý bìlì-yè- $\varnothing$
frog=it.is become-MP-3SgSbj
'He/she was transformed into a frog.'
d. dógè $=$ ỳ káná- $1-\varnothing$

Dogon=it.is become-PfvNeg-3SgSbj
'He/She did not become a Dogon.'
kán 'be made' is also used in the sense '(event, action) happen'. The phrase kànè- $\varnothing$ mé 'if it happens' is often added to the end of a sentence in the sense 'if it has happened that ...' or 'in case ...'. This frequently occurs at subject switch points in narrative, or where a negative clause is followed by a positive one. See (326) in $\S 10.1 .3 .3$.

Transitive kán is the all-purpose 'do, make' verb, combining with many types of objects including fixed collocations with loanwords. See (396c) in §11.1.3.1 for examples.

### 11.3 Quotative verb and quasi-verb

### 11.3.1 'Say' (gìné )

This regular verb (full tense-aspect paradigms) can have an NP complement (432a), or a quotative complement (432b). Quotative complements are described in detail in §17.1.

a. | ségín | gìnè- $\varnothing$ |
| :--- | :--- |
|  | much |
|  | say.Pfv- $3 S g S b j$ |

'He/She said a lot.'
b. wó-njò-m gìnè
come-Pres-LogoSbj say.Pfv-3SgSbj
'He ${ }_{x}$ said that he $\mathrm{e}_{\mathrm{x}}$ was/is coming.'

### 11.4 Adjectival predicates

### 11.4.1 Conjugated adjectival predicate

Array (433) gives the paradigms of 'be small', 'be straight', and 'be short' as positive adjectival predicates.

|  | 'be small' | 'be short' | 'be heavy' |
| :---: | :---: | :---: | :---: |
| 3 Sg | pàlá | dèndú-m̀ | nǐm |
| 3 Pl | pàl- $\hat{\varepsilon}$ : | dèndí-y-è: | nìmí-y-غ̀: |
| 2 Pl | pàl-रह: | dèndí-y-è: | nìmí-y-è: |
| 2 Sg | pàlá-ẁ | dèndí-y-ò: | nìmí-y-ò: |
| 1 Sg | pàlá-m̀ | dèndí-yò-m | nìmí-yò-m |
| 1 Pl | pàlá-ỳ | dèndí-yò-y | nìmí-yò-y |

'Be small', corresponding to modifying adjective pàlê: ~ pàlâ:, has no suffix other than the pronominal-subject suffix. 'Be short' (cf. modifying adjective dèndú:, dèndí:, dèndú-ŋgó, etc.) and 'be heavy' (nìmí-yè, nǐm-gò, nìm-bò) have a suffix -yò-, which might be connected historically either with mediopassive $-y \varepsilon ́ \sim-y(\S 9.3)$ or with the -yò- augment in forms of 'not
be (somewhere)' (§11.2.2.2). I will gloss it noncommittally as 'be' in interlinears. The types 'be short' and 'be heavy' differ in the 3 Sg , but the difference is phonologically conditioned, as the 'be heavy' type with zero 3 Sg suffix consists of stems ending in $\{m y\}$ after the final vowel (if any) is deleted.

Lists of adjectives with these predicative forms are in (434), using the 3 Sg form (with the 1 Sg in parentheses where relevant). The corresponding modifying forms can be found in $\S 4.5 .1-3$. Some adjectives were unelicitable in a dedicated predicative form (as opposed to the 'it is' enclitic form, or a verbalization).
a. no suffix, like 'be small' in (433) above pàlá 'it is small' ( 1 Sg pàlá-m̀), nè:ndá 'it is bad' ( 1 Sg nè:ndá-m̀); tàmàlá 'it is slow', èndá 'it is displeasing (not sweet)'
b. 3Sg -ı̀m, others based on -yò-, stem bisyllabic, like 'be short' in (433) above
dèndú-m̀ 'it is short' ( 1 Sg dèndí-yò-m); غ̀lú-m̀ 'it is sweet' ( 1 Sg ह̀lí-yò-m); bìnú-m̀ 'it is big, stout' ( 1 Sg bìní-yò-m); mènjú-m̀ 'it is slender' ( 1 Sg mènjí-yò-m); gàlú-m̀ 'it is bitter' ( 1 Sg gàlí-yò-m); pèmbú-m̀ 'it (passage) is narrow' ( 1 Sg pèmbí-yò-m); wàgú-m̀ 'it is distant' ( 1 Sg wàgí-yò-m); pèjú-m̀ 'it is slow' ( 1 Sg pèjí-yò-m); mìnú-m̀ 'it is deep' ( 1 Sg mìní-yò-m̀); bùrú-m̀ 'it (= meat) is tender' ( 1 Sg bùrí-yò-m); pìbú-m̀ 'it is rancid' ( 1 Sg pìbí-yò-m)
c. ends in $m$ or $y, 3 \mathrm{Sg}$ zero, others based on -yò-, like 'be heavy' in (433) above nĭm 'it is heavy' ( 1 Sg nìmí-yò-m); mǎy ${ }^{n}$ 'it is hard ( 1 Sg mǎy-yò-m); năm̀ 'it is difficult' ( 1 Sg nàmí-yò-m); dw ny $^{n}$ 'it is hot; it is fast' $\left(1 \mathrm{Sg} d w \varepsilon ̌ y^{n}-y o ̀-m\right)$; ǎm 'it is sour' ( 1 Sg àmí-yò-m); dǔm̀ 'it is near' ( 1 Sg dùmí-yò-m)

Predicative 'be good' is usually not expressed with a form phonologically related to the modifying nálá:, nálé: 'good'. There is a suppletive predicative form něỳ 'it is good' $(1 \mathrm{Sg}$ $n \varepsilon ̌ y-y o ̀-m)$. Alternatively, $\grave{\varepsilon} l u ́-m ̀ ~ ' i t ~ i s ~ s w e e t ' ~ c a n ~ b e ~ s t r e t c h e d ~ t o ~ m e a n ~ ' i t ~ i s ~ g o o d ' . ~$

A number of adjectives are attested in a 3 Sg predicative form ending in $-\grave{m}$, but 1 st/2nd person forms were not elicitable (435).
a. stem has both predicative (final a/o) and modifying forms
bisyllabic
jàlá-m̀ 'it is long'; wàyá-m̀ 'it is wide'
trisyllabic
ònàná-m̀ 'it is smooth', yàgàjá-m̀ and near-synonym kàgàjá-m̀ 'it is coarse', àmàlá-m̀ 'it (e.g. mango) is slightly bitter', yègèló-m̀ 'it (= water) is cool'
b. stem is attested in this 3 Sg predicative form only
bisyllabic
ènú-m̀ 'it is thin', kèrú-m̀ 'it is pungent'
trisyllabic
kùjàjá-m̀ 'it has unpleasant smell (e.g. urine, burning hairs or feathers)'; sìnàná-m̀ 'it has a crispy taste', èjèjó-m̀ 'it is lightly salted or sugared'

Some adjectival senses are expressed by terms that are morphosyntactically adverbials (§8.4.8). These may be made predicative by adding the usual adverbial n $\grave{\varepsilon}$, plus a conjugated form of bò- 'be'. For example, 'lightweight' is yéréw nè as an adverbial, and can easily be made predicative as [yéréw nè] bò- 'be lightweight'.

### 11.4.2 Adjectival predicates with 'it is' enclitic

Some adjectives occur in a predicative construction with the 'it is' enclitic. See $\S 11.2 .1$ for this enclitic and its conjugation. An example is 'new', which does not seem to have a simple inchoative verb. Perhaps we should understand the adjective as being nominal in function, e.g. 'I am a newbie' and the like.

The adjective takes the appropriate form (for animacy and number), and is followed by $=y$ (with tone spread from the left) for any third person subject, or by a pronominally inflected form of the enclitic for 1 st or 2 nd person subject.
a. kàndé: = $\grave{m}$
new. $\mathrm{AnSg}=$ it.is. 1 SgSbj
'I am new.'
b. kàndá: = ý
new. $\mathrm{AnPl}=\mathrm{it}$.is
'They are new.'
c. kàndé: = lá-m̀
new. $\mathrm{AnSg}=$ it.is.not -1 SgSbj
'I am not new.'
d. kàndá:=lá
new. $\mathrm{AnPl}=$ it.is.not
'They are not new.'

For color adjectives ('white', 'black', 'red'), both assistants checked used the 'it is' enclitic on an adjective with appropriate nominal agreement.
a. [ólé ké] pílè-ŋggè =ỳ
[house Inan.Sg.E] white-InanSg.E=it.is
'The house is white.'
b. [tìmô: kó] pílè-ŋgò = y
[tree Inan.Sg.O] white-InanSg. $\mathrm{O}=\mathrm{it}$.is
'The tree is white.'
c. [tìmê: yé] píl̀̀ $=\grave{y}$
[tree. Pl Inan. Pl$] \quad$ white. $\operatorname{Inan} \mathrm{Pl}=$ it.is
'The trees are white.'

### 11.4.3 Inchoative adjectival verbs with perfect $j o \grave{-}$

A number of adjectives have no predicate form as such. Instead, the corresponding inchoative verb is used. See $\S 9.4$ for lists of such verbs. For stative predicate ' X is (adjective)', the verb is followed by the perfect auxiliary $j o$ o- ( $\S 10.1 .3 .3$ ).
(438) Deadjectival inchoative verbs with perfect $j o ̀-$
gàbí jò- $\varnothing$ 'it is tall'; témbí jò- $\varnothing$ 'it is wet'; téndí jò- $\varnothing$ 'it is straight'; gòmé jò- $\varnothing$ 'it is rotten'; gìndé jò- $\varnothing$ 'he/she is big (adult)'; kúnjé jò- $\varnothing$ 'he/she is old'; mǎl jò- $\varnothing$ 'it (rope) is tight'; yòré jò- $\varnothing$ 'it is loose, slack'; mǎy jò- $\varnothing$ ' it is hard'.

If an adjective has both an inchoative derivative and a predicate-adjective form, either can be used in descriptive predicates (439).

| nìmí-yò-m | $(=$ | nìmó-ndì | jò- $m)$ |
| :--- | :--- | :--- | :--- |
| be.heavy-be-1SgSbj | $(=$ | heavy-Inch | Perfect-1SgSbj $)$ |

'I am heavy.'
11.4.4 Negative adjectival predicates (= lá-)

Adjectives with predicate forms may negate them by adding 'it is not' enclitic $=$ lá- ( $\S 11.2 .1 .3$ ) which can be conjugated. The $l$ optionally hardens to $d$ after a nasal (440). An /LH/-melody adjective like nimm 'heavy' flatten to L-toned before the H -toned enclitic.
nìm $=$ dá- $-\grave{m}$
heavy=it.is.not- 1 SgSbj
'I am not heavy.'

If the predicate is expressed by an inchoative verb, it is negated by the regular perfective negative (441a-b). These are literally of the type 'have not become ADJ'.
a. gàbá-lú-m
be.tall-PfvNeg-1SgSbj
'I am not tall.'
b. nìmó-ndó-lù-m
heavy-Inch-PfvNeg-1 SgSbj
'I am not heavy.'

### 11.5 Possessive predicates

### 11.5.1 'Have' (jógò-)

This construction corresponds to English ' X have Y '. X is normally a topical or otherwise easily accessible referent such as a 1 st/2nd person pronoun. The object $Y$ is generally the newsworthy element. The positive forms are based on a defective stative quasi-verb jógòThe negative forms are based on jògò-ndí- with stative negative ending. The paradigms are in (442).
(442)

| subject | positive | negative |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | jógò-m | jògò-nú-m |
| 2 Sg | jóg-ò: | jògò-nd-ó: |
| 1 Sg | jógò- $\varnothing$ | jògò-ndí- $\varnothing$ |
|  |  |  |
| 1 Pl | jógò-y | jògò-ndí-ỳ |
| 2 Pl | jóg-è: | jògò-nd-é: |
| 3 Sg | jóg- $:$ | jògò-ndí-yà |

The 'have' quasi-verb follows the NP denoting the possessed entity (443).
a. ně: jógò-m
cow have-1 SgSbj
'I have a cow.'
b. ně: jògò-ndí- $\varnothing$
cow have-PfvNeg-3SgSbj
'He/She doesn't have a cow.'

The 'have' quasi-verb is related in a somewhat obscure way to perfect auxiliaries $j o \grave{-}$ and jòg-â:- (§10.1.3.3, §11.4.3).

### 11.5.2 'Belong to' predicates with possessive classifiers

The construction ' $Y$ belongs to $X$ ', i.e. ' $Y$ is $X$ 's', takes the possessum $Y$ as conceptual starting point, and predicates X as the possessor. This is expressed in Najamba as $\mathrm{X}[\mathrm{Y}$ ('s) possession] $=i$ it.is, with enclitic $=y$.

The form glossed 'possession' in this literal translation is really a possessive classifier that has distinct forms for animacy, class, and number. The same classifiers are used in nonpredicative possessives when the possessor is a pronominal ( $\S 6.2 .2$ ), but in predicates the possessor may be any pronoun or NP. They are also closely related to some demonstratives. In (444), the predicative forms are shown along with the final $=y$ 'it is'.

$$
\text { singular } \quad \text { plural }
$$

| inanimate E-class | $g \grave{\varepsilon}=y$ | $y \grave{\varepsilon}=y$ |
| :--- | :--- | :--- |
| inanimate O-class | $g \grave{\jmath}=y$ | $y \grave{\varepsilon}=y$ |
| animate | $y \grave{\varepsilon}=y$ | $b \grave{o}=y$ |

The regular negation of $=y$ 'it is' is =lá 'it is not', and this is used in the corresponding negations: $g \grave{\varepsilon}=$ lá, etc.

If the possessor is a pronoun, the classifier cliticizes to it. Vowel $o$ in a pronoun ( 3 Sg mó, 2 Sg ó ) shifts to $\lrcorner$, harmonizing with the -ATR $\varepsilon$ or $\varsigma$ of the 'possession' noun.
a. [tímô: kó]
$m i ́=g \grave{j}=y$
[tree Def.InanSg.O] $1 \mathrm{Sg}=$ Psm.InanSg. $\mathrm{O}=\mathrm{it}$.is
'The tree is mine.'
b. [nè: $\left.{ }^{\mathrm{L}} \quad \check{ } \mathrm{o} m\right] \quad m o ́=y \grave{\varepsilon}=y$
[cow ${ }^{\mathrm{L}}$ this. AnSg$] \quad 3 \mathrm{Sg}=\mathrm{Psm} . \mathrm{AnSg}=$ it.is
'This cow is his/hers.'
c. [tánà ké] ó=gè=lá
[granary Def.InanSg.E] 2Sg=Psm.Inan.Sg.E=it.is.not
'The granary is not yours-Sg.'

Before a stop, the 1 Sg pronoun may have its regular full form mí, as in $m i ́=g \grave{\imath}=y$ (445a) above. Alternatively, it may syncopate. If it does syncope, the surviving nasal undergoes point-of-articulation assimilation to the stop. Hence $m i ́=g \grave{\jmath}=y$ syncopating to $\bar{\eta}=g \grave{\grave{l}}=y$ ' it (InanSg.O) is mine', $m i ́=g \grave{\varepsilon}=y$ syncopating to $\dot{\eta}=g \grave{\varepsilon}=y$ 'it (InanSg.E) is mine', and $m i ́=b \grave{j}=y$ syncopating to $m=b \grave{m}=y$ 'they (An) are mine.' No contraction takes place before $y$.

A textual example is (446).

| yě: | bíró: | bìrè- $\varnothing$ | mé $\nearrow$, |
| :--- | :--- | :--- | :--- |
| woman | work(n) | $\quad$ work.Pfv-3SgSbj | if, |
| [[ánè | mó] | kò $=y$ |  |
| [[man | Def.AnSg] | Psm.InanSg.O]=it.is |  |

'If a woman did the work, it belonged to the man.' (2005-1a)

## 12 Comparatives

### 12.1 Asymmetrical comparatives

### 12.1.1 'Head' and 'mother' as superlatives

In addition to the productive morphosyntactic constructions covered below, it is worth noting that nǐ: 'mother' and kî: 'head' can be used in superlatives with senses like 'most important'. Quite independently of Saddam Hussein and 'the mother of all battles', Najamba speakers use 'mother' (along with 'head') in passages like (447). In this text, the speaker has commented at length on the pros and cons of farming, herding, and commerce as the three common professions.

'But it's he (= farmer) [focus] who is the mother (= most essential). If they say (= speak of) the head (= chief) of (types of) work of ( $=$ in) the entire world, farming [focus] is the head (= chief) of (types of) work.' (2005-1 a)

### 12.1.2 Comparatives with tóló 'more'

When the comparanda are nonsubjects, the 'more/most' expression is always tóló. It immediately follows the comparandum and the two should be bracketed together in transcriptions. tóló can also occur in subject comparatives where, however, forms based on verb ìró- are more common, see below. The comparandum phrase $X$ nèn ('than $X^{\prime}$ ) may precede or follow the rest of the clause. nèn occurs elsewhere as a purposive postposition (§8.3). In (448), the comparanda are objects or adverbials, with the subject held constant. In (448c), we see that a direct object NP containing gì may be followed by nèn 'than'.
a. [èmbá nèn] [yógè tóló] tígà:-m
[sorghum.Pl than] [millet.Pl more] know-1 1 SgSbj
'I know millet more than (I know) sorghum.'
b. [númbè tóló] kíyò-m [ह́lé nèn]
[cow-pea.Pl more] want-1SgSbj [peanut.Pl than]
'I like cow-peas more than (I like) peanuts.'
c. [[mí gì] tóló] ìdè $\begin{array}{lll}{\left[\begin{array}{lll}o ́ & g i ̀ l & n \varepsilon ̀ n]\end{array}\right]}\end{array}$ $[[1 \mathrm{Sg} \quad \mathrm{Acc}]$ more] give.Pfv-3SgSbj [[2Sg Acc] than]
'He gave me more than (he gave) you-Sg.'
d. [íyó tóló] bìrè-m [nǎ: nèn] [today more] work(v)-1 SgSbj [yesterday than] 'I worked more today than (I worked) yesterday.'
e. [íyó tóló] bìr-à: [nă: nèn]
[today more] work(v).Pfv-3P1Sbj [yesterday than] 'They worked more today than (they worked) yesterday.'

The 'it is' enclitic $=y$ is often added to tóló in textual examples like those in (449).
a. [mó
tóló $=\hat{y} \quad$ [[[dúmé:
yé] kùl]
mà]
[AnSg more]=it.is [[[animal.Pl Def.InanPl] inside] in]
[ó gì] náfé $\begin{array}{ll}0 & j o ̀ g-a ̂: ~\end{array}$
$[2 \mathrm{Sg} \quad \mathrm{Acc}] \quad$ benefit(v) Perfect-PplSbj
'Among the (livestock) animals, it (= favorite animal) has benefited you the most.' (2005-1a)

'It (= favorite animal) has seen your benefit (= good treatment) more (than others have).' (2005-1a)

See also (466e) in §13.1.1.3 ('will go in front the most').

### 12.1.3 'Be better, more’ (ìró-)

In the sense ' X be better than Y ' or ' X be more than Y ', a verb ìró- 'be better than' or 'be more than' is used. The comparandum is a direct object, without postposition nèn.
a. [mí
gì $\quad$ ìró- $\varnothing$
[1Sg Acc] be.better-3SgSbj
' $\mathrm{He} /$ She is better than $\mathrm{I}(\mathrm{am})$.'
b. [ó gì] ìró-m̀
[2Sg Acc] be.better-1SgSbj
'I am better than you-Sg (are).'
c. ně: $[p \dot{g} g \varepsilon ́ \quad g i ̀] ~ i ̀ r o ́-\varnothing ~$
cow [sheep Acc] be.better- 3 SgSbj
'A cow is better than a sheep.'
d. píyélì [nùmî: gì] ìró- $\varnothing$
ten [five Acc] be.more-3SgSbj
'Ten is more than five.'

### 12.1.4 Comparatives with ìr-ê: 'more’ (subject comparanda)

The invariant participle irr-ê: (note the falling tone) occurs when the subjects of the two respective underlying clauses are compared asymmetrically with respect to a scalar domain. In this construction ìr-ê: is morphologically E-class, presumably inanimate singular in abstract sense. The O-class form ìr-ô: does not occur, regardless of the classes of the two comparanda. The lesser comparandum is directly followed by 'than' postposition nèn, which was introduced in §12.1.2 above. The normal sequence is therefore [ $X$ nèn] ir-ê: followed by the VP.

If the domain is not specified, the unmarked interpretation (for human comparanda) is 'older than'.

| $\left[\begin{array}{ll}m i ́ l & \text { nèn }]\end{array}\right.$ | ìr-ê: |  |
| :--- | :--- | :--- |
| $[1 S g$ | than $]$ | be.more-PplSbj.InanSg.E |
| ' $\mathrm{He} / \mathrm{She}$ is older than $\mathrm{I}(\mathrm{am})$. |  |  |

The domain of comparison may be specified in a predicate, following the entire sequence ending in ìr-ê:. In (452a-b), the predicate is an inchoative verb that specifies the domain of comparison. In ( $452 \mathrm{c}-\mathrm{e}$ ), an adjectival predicate specifies the domain.

e. [mó nèn] ìr-ê: gàbí jò-m [AnSg than] be.more-PplSbj.InanSg.E be.tall Perfect-1SgSbj 'I am taller than he/she (is).'
f. [í nèn] ìr-ê: kúnjé jògà
[1Pl than] be.more-PplSbj.InanSg.E be.old Perfect.3P1Sbj 'They are older than we (are).'
g. [mí ${ }^{\mathrm{L}}$ òlè ké] [[ó nèn]
[1SgPoss ${ }^{\text {L }}$ house Def.InanSg.E] [[2SgPoss ${ }^{\text {L }}$ house Def.InanSg.E] than] ìr-ê: gìndé jò- $\varnothing$
be.more-PplSbj.InanSg.E be.big Perfect-3SgSbj
'My house is bigger than your house (is).'


In (453a-b), the focal comparanda are again subjects, but this time with transitive verbs.
a. á:màdù [ó nèn] ìr-ê:
tígà- $\varnothing$
Amadou [2Sg than] be.more-PplSbj.InanSg.E know.Stat-3SgSbj
'Amadou knows more than you-Sg (know).'



In (454), there is no single focal comparandum constituent, since the subjects and objects of the two clauses are both disjoint referentially. The entire comparandum clause is nominalized. A fairly literal gloss would be "I know millet(s) more [than [your knowing sorghum(s)]]."

| (454) | [[èmbá | ó |  |  |  | $\begin{aligned} & \text { nèn] } \\ & \text { than] } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [[sorghum. Pl | 2 SgSbj |  | PplNonSbj |  |  |
|  | ìr-ê: |  | yógé | tígà:-m |  |  |
|  | be.more-PplSbj.AnSg |  | millet.Pl | know.Stat-1SgSbj |  |  |
|  | 'I know millet more than (the extent to which) you-Sg know sorghu |  |  |  |  |  |

For humans and other animates, the form ìr-ô: is used when the subject is plural (455). For inanimates, following the usual agreement rules, ìr-ê: is used for plural subjects and for E/E-class singulars, while ìr-ô: is used for O/E-class singulars.

| $\begin{equation*} \left[n o ̀-m b o o^{L}\right. \tag{455} \end{equation*}$ |  | tò-mbó | ìr-ô: | be] |
| :---: | :---: | :---: | :---: | :---: |
| [person-P1 ${ }^{\text {L }}$ |  | Recip-P1 | be.better-PplSbj.AnPl | Def.AnPl] |
| [jěnjà | [bé | gì] | sàgì-rè- $\varnothing]$ |  |
| [God | [AnPl | Acc] | superimpose.Pf |  |

'(As for) persons who are better than each other (= unequal in wealth), God has put them one above the other.' (2005-1a)

### 12.1.5 Comparatives from other verbs

Although direct elicitation always resulted in the comparative constructions described in the preceding sections, a pattern with the same kind of participle seen in ir-ê: (with final falling tone) is attested in the texts with verb áyllàyè 'be weary', in the participial form ày-ê: . This occurs both with and without tóló in the passage (456).
(456) kà: [ó tóló] =ý ày-ê:,
but $\quad[2 \mathrm{SgSbj}$ more $]=i t . i s \quad$ be.weary-PplSbj.AnSg,
[[gòlè-gòlé sòm] mà] ín nè,
[[farmer beside] in] go then.SS,
èbà-kálé mí ày-ê:
merchant 1 SgSbj be.weary-PplSbj.AnSg
'But (you say) you are the most tired (= work the hardest). (You) go up to the farmer (and say) "I the merchant am (the most) tired".' (2005-1a)

### 12.2 Symmetrical comparatives

### 12.2.1 With dân 'like'

In (457a-b), the two equal comparanda are expressed respectively with dân 'like' (§8.4.1) and là 'too'. Literal translations are therefore of the type "[I too] am tall [like you]."
(457)
a. [mó dân] [mí là] gàbí jò-m $[3 \mathrm{Sg}$ like] [1Sg too] be.tall Perfect- 1 SgSbj 'I am as tall as he/she (is).'
b. [mí dân] [ó là] bìré kóndò-mb-ò:
[1Sg like] [2Sg too] work[n] do.well-Fut- 2 SgSbj 'You-Sg work as well as I (work).'

### 12.2.2 '(Not) so much'

The comparandum phrase $X$ dân 'like $X$ ' can also occur with a negative predicate (458).

| $[m i ́$ | dân] | bírà-ndí- $\varnothing$ |
| :--- | :--- | :--- |
| $[1 \mathrm{Sg}$ | like $]$ | work(v)-PresNeg-3SgSbj |

'He/She doesn't work like (=as hard as) I (work).'

### 12.2.3 'Attain, equal' ( $g w e ́, d w \hat{\varepsilon}:$ )

The verbs $g w e ́$ 'go out' (contextually also 'be enough, suffice') or the verb $d w \hat{\varepsilon}$ : 'arrive; attain, reach' may have the sense 'attain the level of, equal ( sb , in some respect)'. In eastern Dogon languages, 'arrive' is commonly used in this sense, but 'go out' is not.

In comparatives, the 'go out' or 'arrive' verb is often negated, hence ' X does not equal $Y$ ', as in (459a). This is the only way to express ' X is less than Y '. The verb may also be used in positive clauses, expressing a symmetrical comparative (459b) or a mathematical equivalence (459c). The examples here are with 'go out'. The versions with 'arrive' would have dô:-l- $\varnothing(459 \mathrm{a})$ and $d w \hat{\varepsilon}:-j o ̀-\varnothing(459 \mathrm{~b}-\mathrm{c})$.
a. [bìré kóndó-m̀ ]
[work(n) do.well-Fut.3SgSbj]
ká: [dèlân gí] gǒ-l-Ø
but [elder.brother Acc] go.out-PfvNeg-3SgSbj
'He works well, but he hasn't equaled his elder brother (in work).'
b. [dèlân gì] gwé jò- $\varnothing$
[elder.brother Acc] go.out Perfect-3SgSbj
'He is equal to (=as good as) his elder brother.'
c. [nùmî: mà:] [nùmî: mà:] píý́lì gwé jò- $\varnothing$
[five and] [five and] ten go.out Perfect-3SgSbj
'Five plus five equals ten.'

## 12.3 'A fortiori' (sákò)

The 'a fortiori' word sákò ~ sákkò is a variant of a widespread regional form. It occurs in contexts like 'I don't have one dollar to my name, much less (= never mind) a thousand dollars'. That is, the first clause expresses a proposition of the 'not (even)' type, and the a fortiori clause that follows negates a proposition with a wider quantificational scope or denoting a rarer or more difficult eventuality, for rhetorical effect. Local French expresses this with $\grave{a}$ plus forte raison.
(460) pó:-nôy jògò-nú-m sákò [sǐn nô:y] ten-two have-PresNeg-1 SgSbj a.fortiori [hundred two] 'I don't have 20 riyals ( $=100$ francs), never mind 100 riyals.'

A textual example is (461).
(461) íyó, èndê: nàl-ó: mé, today, child bear.Pfv- 2 Sg Sbj if, [[èndê: mó] gì] ó dènjá-mà-ndí-yà, [[child Def.AnSg] Acc] 2SgSbj hit-Caus-PresNeg-3P1Sbj, sákò [yě: mó gày là]
a.fortiori [woman Def.AnSg Top also] 'Nowadays, if you (=a man) have borne a child, they don't let you beat the child, never mind (beat) the woman.' (2005-2a)

## 13 Focalization and interrogation

### 13.1 Focalization

The focalized constituent is fronted. It is optionally, but often, immediately followed by focus particle yà: .

When the subject is focalized, subject-focus participles (similar to some types of relativeclause participles) replace the usual inflected verb, except that perfective positive verbs use a simple E-stem identical to a main-clause perfective verb, but without pronominal-subject suffixation. Nonsubject focalization requires the use of the same inflected verb that would appear in an unfocalized sentence.

Focalized negative clauses are less common for pragmatic reasons, but they are grammatical. The invariant participle ending -è: is used after the perfective negative future negative, and present negative, after their regular AN suffixes.

### 13.1.1 Subject focalization

### 13.1.1.1 Subject-focalized perfective positive (zero suffix) and negative (-1-è:)

In the perfective (positive), under subject focalization, the verb has the regular perfective stem (not a participle), with $\{\mathbf{L}\}$ tone overlay, but omits any pronominal-subject suffix. This form is homophonous with the morphologically unmarked 3 Sg subject form of a main-clause perfective, except that the 3 Sg form has $\{\mathrm{HL}\}$ tones when pronounced in isolation. For example, dènjè 'hit-Pfv' occurs with both 1 Sg and 3 Pl subjects under subject focalization (462a-b).
(462)

|  | $\begin{aligned} & {[\mathrm{mí}} \\ & {[1 \mathrm{Sg}} \end{aligned}$ | yà:] <br> Foc] | [!̀gWど: [dog | $\begin{aligned} & \text { mó } \\ & \text { Def.AnSg } \end{aligned}$ | gì] <br> Acc] | dènjè <br> hit.Pfv |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'It was $\underline{I}$ [focus] who hit the dog.' |  |  |  |  |  |  |
|  | [bé | yà:] | [ŋ̀gWě: | mó | gì] | dènjè |
|  | [1Sg | Foc] | [dog | Def.AnSg | Acc] | hit.Pfv |
| 'It was they [focus] who hit the dog.' |  |  |  |  |  |  |
|  | [mí | yà:] | wè |  |  |  |
|  | [1Sg | Foc] | come.Pfv |  |  |  |
|  | 'It wa | [focus] | ho came |  |  |  |

A textual example is (719) in the sample text ('the child [focus] has done that').

In the negative, the verb stem and perfective negative suffix combine in the same way (including irregularities in vocalism) as in main clauses, except that the stem (and word) is $\{\mathbf{L}\}$-toned. Subject-focus participial -è: follows perfective negative -1-.
a. [mí yà:] dèyà-l-è:
[1Sg Foc] fall-PfvNeg-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who did not fall.'
b. [mí yà:] ndà:-l-è:
[1Sg Foc] give-PfvNeg-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who did not give.'
$\begin{array}{lllll}\text { c. [̧́ } & \text { gò } & \text { kó } & \text { yà:] } & \text { dùmà-l-è: } \\ {[2 S g P o s s} & \text { Psm.InanSg.O } & \text { Def.InanSg.O } & \text { Foc }] & \text { get-PfvNeg-Ppl.SbjFoc }\end{array}$ 'It's yours (=your benefit) [focus] that hasn't been gotten.' (2005-1a)

### 13.1.1.2 Subject-focalized present positive (-nj-è:) and negative (-nd-è:)

In the present (positive), subject-focus participial suffix -è: is added to the regular AN suffix -njò-, producing -nj-è: . There is no opposition of E and O noun classes as there is with relative-clause participles. The verb is $\{\mathrm{L}\}$-toned.
a. [mí yà:] ènî: bìrà-nj-è:
$[1 \mathrm{Sg}$ Foc] here work(v)-Pres-Ppl.SbjFoc
'It is I [focus] who work here.'
b. [nùmǎ: [mí gò] yà:] jènò-nj-è:
[hand [1SgPoss Poss] Foc] hurt-Pres-Ppl.SbjFoc
'It's my hand [focus] that hurts.'
c. [nùmě: [mí yè] yà:] jènò-nj-è:
[hand.Pl [1SgPoss Poss] Foc] hurt-Pres-Ppl.SbjFoc
'It's my hands [focus] that hurt.'
d. [kwé-ŋgò yà:] mó jènò-nj-è:
[food-InanSg.O Foc] AnSgObj convey-Pres-Ppl.SbjFoc
'Food [focus] is what takes (= attracts) him (there).' (2005-1a)

Verbs 'hurt, be painful' (464b-c) and 'convey, take (there)' (464d) are homophones (or the same polysemous verb).

Negative counterparts have -nd-è:, based on the regular present negative suffix -ndí-, with $\{\mathrm{L}\}$ or sometimes $\{\mathrm{HL}\}$ tones. This form differs only tonally from the corresponding future negative focalized form (see the following section).
a. [mí yà:] sèmà-nd-è:
[1Sg Foc] slaughter-PresNeg-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who don't slaughter.'
b. [mí yà:] yà-nd-è:
[1Sg Foc] see-PresNeg-Ppl.SbjFoc 'it's $\underline{I}$ [focus] who don't see.'
c. [mí yà:] yòbà-nd-è:
$[1 \mathrm{Sg} \quad$ Foc] run-PresNeg-Ppl.SbjFoc 'it's $\underline{I}$ [focus] who don't run.'
d. [mí yà:] màmìlì-yà-nd-è:
[1Sg Foc] go.back-PresNeg-Ppl.SbjFoc 'it's I [focus] who don't go back.'

See also tégà-nd-è: in (715) in the sample text.

### 13.1.1.3 Subject-focalized future positive (-mb-ê:) and negative (-nd-è:)

In the future (positive), the participle ends in -mb-ê: after an $\{\mathrm{L}\}$-toned stem under subject focalization, though in recordings the suffix is sometimes heard as L-toned -mb-è:, as in (466f) below. The morphology is the participial equivalent of the $1 \mathrm{st} / 2 \mathrm{nd}$ person portion of the regular future paradigm, which has -mbô- after $\{\mathrm{L}\}$-toned stem.
a. [mí yà:] ìnò-mb-ê:
[1Sg Foc] go-Fut-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who will go.'
b. [fántà yà:] ìnò-mb-ê:
[Fanta Foc] go-Fut-Ppl.SbjFoc
'It is Fanta [focus] who will go.'
c. [òndò ${ }^{\mathrm{L}}$ ánà: bé yà:] ìnò-mb-ê:
[child. $\mathrm{Pl}^{\mathrm{L}}$ male.AnPl Def.AnPl Foc] go-Fut-Ppl.SbjFoc
'It is Fanta [focus] who will go.'
d. má òmá: tòndì-yò-mb-ê: mà $\rightarrow$
or FarDist.AnSg bend-MP-Fut-Ppl.SbjFoc $\quad$ Q
'or is it the counterpart (= that one) who will bend?' (2005-1a)
e. kó tóló =ý [gǐr mà] ìnò-mb-ê: Л

InanSg.O more=it.is [front in] go-Fut-Ppl.SbjFoc
'That [focus] is what will go in front the most' (2005-1a)
f. ̀̀gú àngú kòndò-mb-è: ló ,

Prox.InanSg.O which? do.well-Fut-Ppl.SbjFoc Q, ற̀gú kóndò-mb-è:
Prox.InanSg.O do.well-Fut-Ppl.SbjFoc
'What will make this well? This [focus] will make (it) well.' (2005-1a)
The participle in the negative version is segmentally identical to that in the present negative, see (465) in the preceding section. In the future negative participle, suffix complex -nd-è: is L-toned, while the preceding verb stem has a final H -tone and is otherwise L -toned, formula L*H-L. Compare the regular inflected future negative with suffix -ńdi- and with the same L*H stem.
a. [mí yà:] ìnó-nd-è:
[1Sg Foc] go-FutNeg-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who will not go.'
b. [mí yà:] sèmá-nd-è:
[1Sg Foc] slaughter-FutNeg-Ppl.SbjFoc
'It is I [focus] who will not slaughter.'
c. [mí yà:] wó-nd-è:
[1Sg Foc] come-FutNeg-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who will not come.'

### 13.1.1.4 Subject-focalized progressive (-mbò b-è̀), negative (-njò-nd-è̀)

In the progressive (positive) construction, the verb with progressive -mbò is followed, under focalization, by invariant participial b-è: or jòg-è: (468).
a. [mí yà:] bíř́: bírà-mbò b-è:
jóg-è:
[1Sg Foc] work(n) work(v)-Prog be/have-Ppl.SbjFoc
'It is $\underline{I}$ [focus] who am/will be working.'
b. [yàwó: bé] íngé érà-mbò b-è:
[woman.Pl Def.AnPl] water get.water-Prog be-Ppl.SbjFoc 'It's the women [focus] who are getting water (at the well).'

In its unfocalized inflected form, the progressive negative is based on a suffix complex -njò-ndí.. Under focalization, this becomes participial -ǹjò-nd-è:, and the whole word is $\{\mathbf{L}\}$-toned.

```
a. [mí yà:] kwà-ǹjò-nd-è:
[1Sg Foc] eat-Prog-Neg-Ppl.SbjFoc
'It's I [focus] who am not eating.'
```

b. [mí yà:] yòbà-njò-nd-è:
'It's I [focus] who am not running'
c. [mí yà:] màmìlì-yà-njò-nd-è:
'It's I [focus] who am not going back'

### 13.1.1.5 Subject-focalized perfect positive (j-è:) and negative counterpart

Under subject focalization, perfect auxiliary verb jò- becomes participial $j$-è. . The main verb remains in its chaining form, but it drops tones, so the entire verb complex is $\{\mathbf{L}\}$-toned. This is easiest to hear when interrogative particle ló is added at the end.
a. ǎm wè ${ }^{\mathrm{L}}$
j-è: ló
who? come ${ }^{\text {L }}$ Perfect-Ppl.SbjFoc $\quad$ Q
'Who has come?'
b. mí $w e^{\mathrm{L}} \quad j$-è:
$1 \mathrm{Sg} \quad$ come $^{\mathrm{L}} \quad$ Perfect-Ppl.SbjFoc
'It is I [focus] who have come.'
c. [mí yà:] yòbè ${ }^{\mathrm{L}} \quad j$-è:
$[1 \mathrm{Sg} \quad$ Foc $] \quad \operatorname{run}^{\mathrm{L}} \quad$ Perfect-Ppl.SbjFoc
'It is I [focus] who have run.'
$\begin{array}{lllll}\text { d. } & \text { [dùmě-n } & \text { kó } & \text { yà:] } & \text { pàlà-ndì }{ }^{\text {L }}\end{array} \quad$ j-è:
'The gain (= production) [focus] has become small.' (2005-1a)

See also (654a) in §17.4.8.
The perfective negative participle -l-è: (§13.1.1.1 above) occurs in negative counterparts (471). I was unable to elicit a specifically perfect negative subject-focus form.
a. [ǎm yà:] wò-l-è:
[who? Foc] come-PfvNeg-Ppl.SbjFoc Q
'Who has not (= did not) come?'
$\begin{array}{llll}\text { b. } & {\left[\begin{array}{ll}\text { ǎm } & \text { yà: }\end{array}\right]} & \text { sèmà-l-è: } & \text { ló } \\ & {[\text { who? }} & \text { Foc }] & \text { slaughter-PfvNeg-Ppl.SbjFoc }\end{array} \quad$ Q
13.1.1.6 Subject-focalized past-time positive ( $=b-\grave{\varepsilon}$ :) and negative counterparts

Under subject focalization, past morpheme $=b \grave{\varepsilon}$ - takes participial form $=b-\varepsilon$ : .

In the most common past-time constructions, namely the past imperfective (the past-time equivalent of the present) and the past stative, both with suffix -m-, the whole word is $\{\mathbf{L}\}$-toned.
a. ǎm
tìgà- $m=b-\varepsilon ̀$ :
who? know-Stat=Past-Ppl.SbjFoc
'Who knew?' (= 'Who used to know?')
b. [í yà:] tìgà- $m=b-\varepsilon$ :
[1Pl Foc] know-Stat=Past-Ppl.SbjFoc
'It's we [focus] who knew.'
c. sěydù bìrà- $m=b-\varepsilon$ :

S work(v)-Pres=Past-Ppl.SbjFoc
'It was Seydou [focus] who was working.'

The future-in-past form again has $=b-\varepsilon$ : following a verb ending in imperfective $-m-$, but with future tone formula $L^{*} \mathrm{H}-\mathrm{L}$, i.e., with a single H -tone on the stem-final syllable (473).

| $\left[\begin{array}{ll}m i ́ & \text { yà: }]\end{array} \quad\right.$ màmìlì-yà- $-\dot{\prime}=b-\varepsilon$ : $:$ |  |
| :--- | :--- |
| $[1 \mathrm{Sg}$ | Foc $]$ | go.back-MP-Fut=Past-Ppl.SbjFoc

In the past perfect, $=b-\varepsilon$ : directly follows the $\{\mathrm{L}\}$-toned E-stem (perfective stem) of the verb, without intervening $-m$-.

$$
\begin{array}{lll}
{\left[\begin{array}{ll}
\text { mí } & \text { yà: }
\end{array} \quad \text { màmìlì-yè }=b-\grave{\varepsilon}:\right.}  \tag{474}\\
{[1 \mathrm{Sg}} & \text { Foc] } & \text { go.back-MP.Pfv=Past-Ppl.SbjFoc } \\
\text { 'It's I [focus] who had gone back.' }
\end{array}
$$

The corresponding subject-focalized negatives are illustrated as follows: past imperfective negative in two variants (475a-b), future-in-past negative in two variants (476a-b), and past perfect negative (477). The variants in (475a-b) reflect different preferences of my two primary assistants. The (a) examples have two occurrences of the past enclitic.
past imperfective negative
a. sěydù bìrà- $m=$ bà- $1-\grave{\varepsilon}:=b \grave{\varepsilon}$
$\mathrm{S} \quad$ work(v)-Pres=Past-PfvNeg-Ppl.SbjFoc=Past
'It was Seydou [focus] who was not working.'
b. sěydù bìrà-m = bà-l-દ̀:
S work(v)-Pres=Past-PfvNeg-Ppl.SbjFoc
[=(a)]
(476) future-in-past negative
a. [mí yà:] màmìlì-yà-ḿn=bà- $1=b-\varepsilon$ :
$[1 \mathrm{Sg} \quad$ Foc $]$ go.back-MP-Fut=Past-PfvNeg=Past-Ppl.SbjFoc 'It was I [focus] who was not going to go back.'
b. [mí yà:] màmìlì-yà-ḿ = bà-l-é:
[1Sg Foc] go.back-MP-Fut=Past-PfvNeg-Ppl.SbjFoc [ $=(\mathrm{a})$ ]
(477)
past perfect negative
[mí yà:] màmílí-yá- $1=b-\varepsilon ̀:$
[1Sg Foc] go.back-MP-PfvNeg=Past-Ppl.SbjFoc
'It was I [focus] who had not gone back.'

### 13.1.1.7 Subject-focalized stative quasi-verbs

Existential-locational 'be (somewhere)', corresponding to both bô:- 'be present (here/there)' and L-toned bò- 'be (in a specified place)', becomes participial b-è: under subject focalization. Examples without an overt locational, corresponding to bô:- in unfocalized main clauses, are in (478).
a. ǎm $\quad b$-è:
who? be-Ppl.SbjFoc
'Who is (present) here/there?'


Examples corresponding to L-toned bò- 'be' following an overt locational are in (479).
(479)
a. [ǎm yà:] [sònjó: má] b-è:
[who? Foc] [village in] be-Ppl.SbjFoc
'Who is in the village?'
b. [sěydù yà:] [sònjó: má] b-è:
$\left[\begin{array}{ll}\mathrm{S} & \text { Foc] [village in] be-Ppl.SbjFoc }\end{array}\right.$
'It's $\underline{\text { Seydou }}$ [focus] who is in the village.'
$\begin{array}{lllllll}\text { c. } & \text { é } & \text { àngú } & \text { [[é } & \left.{ }^{\text {L }} \text { kèndà: }\right] & \text { mà }] & b \text {-è: } \\ & 2 \mathrm{Pl} & \text { which? } & \text { [[2PlPoss } & \left.{ }^{\mathrm{L}} \text { heart }\right] & \text { in }] & \text { be-Ppl.SbjFoc }\end{array}$ Q $^{\text {Q }}$
'(As for) you-Pl, which (= what) is in your heart?' (2005-1a)

The negative counterpart of $b$-è: is ònd-è: .
(480) [sěydù yà:] [sònjó: má] ònd-è:
$[\mathrm{S}$ Foc] [village in] not.be-Ppl.SbjFoc
'It's Seydou [focus] who is not in the village.'
'Have' (jògà-) has a participial form jòg-è: under subject focalization.
a. ăm kènjû: jòg-è:
who? pick-hoe have-Ppl.SbjFoc
'Who has a pick-hoe?'
b. [mí yà:] kènjû: jòg-è:
[1Sg Foc] pick-hoe have-Ppl.SbjFoc 'It's I [focus] who have a pick-hoe.'
13.1.1.8 Subject-focalized forms of other stative verbs

For 'know', the subject-focalization form is tìg-è: (482).
(482)
a. ǎm tìg-દ̀:
who? know-Ppl.SbjFoc
'Who knows?'
b. mí tìg-è:

1SgSbj know-Ppl.SbjFoc
''It's I [focus] who knows.'

A list of subject-focalized stative participles, positive and negative, is (483).
(483)

| gloss | subject-focus participle |  |
| :---: | :---: | :---: |
| 'know' | tìg- ${ }_{\text {e }}$ |  |
| 'not know' | ènd-غ̀: |  |
| 'want' | kìy-è: |  |
| 'not want' | $k \varepsilon \grave{l}-\bar{\varepsilon}$ : |  |
| 'can, be able to' 'cannot' | jà-mb-è: <br> jà-nd-è: | based on future |

There is no special subject-focus form of the 'it is' enclitic, which has few morphological properties of inflectable verbs. Focus particle yà: is the only sign of focalization.
[mí yà:] [kî: mó]=ỳ
$[1 \mathrm{Sg} \quad$ Foc] [head Def.AnSg]=it.is
'I [focus] am the chief.'

### 13.1.2 Object focalization

The focus particle may follow an object NP, or an object pronominal, with or without optional accusative gì. The verb has its regular main-clause form and is therefore inflected for pronominal-subject as well as for AN category. There are no nonsubject focalization participles.
a. [हैl $\varepsilon$
yà:]
kíyò-m
[peanuts.Pl Foc] want.Stat-1 Sg Sbj
'Peanuts [focus] are what I like.'
b. [mălfà yà:] dògè- $\varnothing$
[rifle Foc] leave.Pfv-3SgSbj
'It was a rifle [focus] that he/she left.'
c. [[ó gì] yà:] kíyò- $\varnothing$
$[[2 \mathrm{Sg} \quad$ Acc] Foc] want.Stat-3SgSbj
'It's you-Sg that he/she likes.'
d. [ह́lé yà:] kùbò-mbó-m̀
[peanuts.Pl Foc] eat-Fut-1SgSbj
'Peanuts [focus] are what I will eat.'

'Tea [focus] is what he/she doesn't drink.'
A textual example is (695) in §19.1.1.
In the perfective, the $H$-tone on the final mora of a 1 st $/ 2$ nd person subject suffix, occurring inconsistently in main clauses, is absent in verbs with object-focus (486).
a. [[ग̀gwě: mó] gì yà:] dènjè-m̀̀
$\left[\begin{array}{llll}{[\operatorname{dog} \quad \text { Def.AnSg] Acc Foc] hit.Pfv-1SgSbj }}\end{array}\right.$
'It was the dog [focus] that I hit.'
b. [ìgú
yà:]
kàn-ò:
[Prox.InanSg.O Foc] do.Pfv-2SgSbj
'This [focus] is what you-Sg did.'

### 13.1.3 Focalization of PP or other adverbial

Adverbials including PPs may be focalized. Focus particle yà: is optionally present (487a). When the particle is omitted, focalized status can be hinted at by fronting, without a pause suggestive of topicalization or scene-setting. However, unless a subject is also present this is unreliable ( $487 \mathrm{~b}-\mathrm{c}$ ). The verb has its regular main-clause inflected form.

b. ŋ̀gîn
tib̀è- $\varnothing$
here die.Pfv-3SgSbj
'It is here [focus] that he/she died.'
c. ìgîin kwá-njò-y
here eat-Pres-1PISbj
'It is here [focus] that we eat.'

### 13.1.4 Focalization of postpositional complement (absent)

I have no examples where just the complement NP inside the PP is focalized. For focalization of the entire PP see the preceding section.

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives

There is no tag question (n'est-ce pas?) construction. Polar (yes/no) questions are often presented in two-part form, with at least an inflected verb in the second clause, whose polarity value is the opposite of that of the first clause ('Will you go to Bamako, or won't you go?').

### 13.2.1.1 Clause-final ló

Examples of clause-final ló forming polar questions are in (488). Its tonal behavior is like that of 'if' particles dé and mé (chapter 16). Third person perfectives are $\{\mathrm{L}\}$-toned even if not preceded by another constituent (488a). If the preceding word (normally a verb or other predicate) has two or more syllables and would otherwise end in a rising tone, as in 1st/2nd person perfectives, this tone is raised to high by Word-Final $<$ LH $>$-to-H Raising (§3.6.3.2), as in (488c).

```
a. ìn-ò:ló
    go.Pfv-3PlSbj Q
    'Did they go?'
```

b. ìnǒ-mb-à ló
go-Fut-3PlSbj Q
'Will they go?'
c. [mó gì] dènj-ó: ló
$\left[\begin{array}{ll}3 \mathrm{Sg} & \text { Acc] hit.Pfv-2SgSbj } \quad \mathbf{Q}\end{array}\right.$
'Did you-Sg hit him/her?' (<dènj-ǒ: )

### 13.2.1.2 Clause-final ma $\rightarrow$

When an interrogative is presented as a choice between two propositions (such as ' P ' and 'not $P^{\prime}$ ), a particle $m a \rightarrow$ with intonational prolongation and often with raised pitch is placed after the first option (489), and is optionally repeated at the beginning or end of the second option, see §7.2.2.
(489) ìn-ò: $\quad$ mà $\rightarrow^{\dagger}$ ìnò:-ndí $\downarrow$
go.Pfv-3PISbj whether? go-PfvNeg.3PiSbj
'Did they go or didn't they go?'
In several other Dogon languages (e.g. Jamsay) there is a particle ma that is both the productive polar interrogative and the productive disjunctive 'or' particle. In Najamba, ma $\rightarrow$ has a more circumscribed distribution but it often has both interrogative and disjunctive qualities.

### 13.2.2 Content interrogatives

Content (WH) interrogatives do not require the regular focus particle yà: . Most elicited examples lack the particle, but see textual example (634b) in $\S 17.3 .1$ which does have yà: after yèngé 'what?' Two content interrogatives, ànî: 'where?' and àyĝ̂y 'how much/many?', may be frozen combinations including the 'it is' enclitic (\$11.2.1). Cognate 'it is' enclitics elsewhere in Dogon also function as focus markers.

A content interrogative in subject position may trigger a subject-focus participle, but this is not obligatory. Nonsubject content interrogatives, or constituents that they are a part of, are normally fronted, like other focalized constituents.

### 13.2.2.1 'Who?' (ăm)

'Who?' is ǎm, with <LH> tone. Examples show it as subject (490a), object (490b), possessor (490c), and predicate with 'it is' enclitic (490d).
a. ǎm wò-mb-ê: who? come-Fut-Ppl.SbjFoc
'Who will come?'
b. kěl
[ăm g
gì $] \quad$ ǹd-ǒ.
money.Pl [who? Acc]
give.Pfv-2SgSbj
'To whom did you-Sg give the money?'
c. [ǎm ${ }^{\text {L }} p$ ègè $] \quad$ dìbè- $\varnothing$
[who? ${ }^{\text {L }}$ sheep] be.lost.Pfv-3SgSbj
'Whose sheep was lost?'
d. ǒm
àm = í:
this.AnSg who? $=$ it.is
'Who is this?'

In (490d), /ǎm=i:/ with atonal enclitic is realized as àm=í;, where the contour tone is expressed over the resyllabified full word form (§3.6.4.3).
'Who?' is just a special case of the animate singular form of 'which?'; see §13.2.2.7, below, for the full set of forms.

### 13.2.2.2 'What?' (yèngé ) and related forms

'What?' is yèngé in subject, object, or similar function (491a-b). With the 'it is' enclitic, we get yéngè = y (491c).
(491)
a. yèngé dǔndà-nj-è:
what? look.for-Pres-2P1Sbj
'What are you-Pl looking for?'
$\begin{array}{lll}\text { b. yèngé } & \text { ó } & \text { dùmè- } \varnothing \\ \text { what? } & 2 \mathrm{SgObj} & \text { get.Pfv- } 3 \mathrm{SgSbj}\end{array}$
'What has gotten (=afflicted) you-Sg?'
c. yéngè $=y$
what? $=$ it.is
'What is it?'

Among frequent combinations are 'with what?' (492a) and 'for what?' = 'why?' (492b).
(492)
a. [yèngé má] bírà-nj-ò:
[what? with] $\quad$ work(v)-Pres-2SgSbj
'What do you-Sg work with?'

```
b. [yèngé nèn] W-è:
    [what? for] come.Pfv-2P1Sbj
    'Why did you-Pl come?'
```


### 13.2.2.3 'Where?' (ànî: ~ ǎn-dè)

ànî: 'where?', like all locationals, can be used in static locative, allative, or ablative function depending on the context (presence/absence of allative or ablative verbs like 'go' and 'leave').

| a. ànî: | ínò-nj-ò: |
| :--- | :--- | :--- |
| where? | go-Pres- 2 SgSbj |
|  | 'Where are you-Sg going?' |

b. ànî:
$g w e ̀-\varnothing$
where? go.out.Pfv-3SgSbj
'Where did he/she come from?'
$\begin{array}{lll}\text { c. ànî: } \quad \text { kwà-mbó-ỳ } \\ \text { where? } & \text { eat-Fut-1P1Sbj } \\ & \text { 'Where will we eat?' }\end{array}$
ànî: may be a frozen combination including the 'it is' enclitic (§11.2.1).
Approximative (§4.4.4.2) counterpart ǎn-dè 'whereabouts?' is illustrated in (500b) in §13.2.5.

### 13.2.2.4 'When? (àngí sárà)

'When?' is àngí sárà, literally "(at) which time?" àngí is the E-class inanimate singular form of 'which?' (§13.2.2.7), but here it is simply juxtaposed to the noun 'time' with no tonosyntactic interactions. As an adjective, àngí would follow the modified noun.

```
a. [à\etagí sárà] wò-mb-ô:
[which? time] come-Fut-2SgSbj
'When will you-Sg come?'
```


c. [à̀gí sárà] nàlè- $\varnothing$ ló
[which? time] give.birth.Pfv-3SgSbj Q
'When did she give birth to a child?' (2005-1a)

```
d. [àngí sárà yà:] tò-mbó jè:rà-mb-ê:
[which? time Foc] Recip-Pl encounter-Fut-2PlSbj
'When will you-Pl encounter each other?' (2005-1a)
```

Other time nouns may take the place of sárà, for example àngí dénán '(on) which day?’.

### 13.2.2.5 'How?’ (ànné, àクìné )

The form is variably pronounced ànné and àŋìné, even by the same speaker.
a. ànné bírà-nj-ò:
how? work(v)-Pres-2SgSbj
'How do you-Sg work?'
$\begin{array}{lllll}\text { b. ànné } & \text { [[pègòl̂. } & \text { kó }] & \text { mà }] & \text { ìlè- } \varnothing \\ & \text { how? } & {[[\text { mountain }} & \text { Def.InanSg.O] } & \text { in }]\end{array}$
'How did he/she go up the mountain?'
The forms ànné and àpìné could be parsed as containing adverbial particle né (following an L-toned adverbial stem). For this tonal combination, see (288h) in §8.4.8.1. The transcriptions would then become àn né and ànì né. This would permit a more direct comparison of àn and ànì with other interrogatives (ànî: ‘where?’, àngú and àngí ‘which?’, etc.).

### 13.2.2.6 'How much?', 'how many' (àngêy)

àngêy can be translated 'how many?' with a countable noun (496a-b), and 'how much?' with a measurable mass noun (496c). The same form may be used before a postposition. The distributive iteration (§4.7.1.6) is ànǵe-ànǵg (496d), suggesting that àng $\hat{\varepsilon} y$ originally ended in the 'it is' enclitic (§11.2.1).

| a. | [nàwó: <br> [cow.Pl | àggêy] <br> how.many?] | $\begin{align*} & \text { jòg-ò: }  \tag{496}\\ & \text { have-2SgSbj } \end{align*}$ |
| :---: | :---: | :---: | :---: |
| 'How many cows do you-Sg have?' |  |  |  |
|  | $\begin{aligned} & \text { [pègè-mbó } \\ & \text { [sheep-Pl } \end{aligned}$ | $\text { à } g \underline{\varepsilon} y]$ <br> how.many?] | dìb-ò: <br> be.lost.Pfv-3P1Sbj |
|  | 'How many sheep were lost?' |  |  |
|  | [súkàrà | àngêy] | wàjè- $\varnothing$ |
|  | [sugar | how.much?] | remain.Pfv-3SgSbj |
|  | 'How much | sugar is left?' |  |

$\begin{array}{lllll}\text { d. } & {[[k e ̀ n j i ̂: ~} & \text { àngêy] } & \text { mà }] & \text { bíró: }\end{array} \quad$ bírà-nj-ò:
'With how many axes do you-Sg work?'
e. [pègè-mbó bé] [àngé-àngé mà] tùlà-nj-غ̀ [sheep-Pl Def.AnPl] [how.much?-how.much? in] sell-Pres-3PlSbj '(For) how much each (=at what price) do they sell sheep?'

### 13.2.2.7 'Which?' (à $\eta g u ́, ~ e t c)$.

This is a modifying adjective that induces tone-dropping on the preceding noun.
a. [[sònjè: ${ }^{\text {L }}$
ǎy]
mà]
ìnè- $\varnothing$
[[village.Pl ${ }^{\mathrm{L}} \quad$ which?.InanPl]
in] go.Pfv-3SgSbj
'To which village did he/she go?'
$\begin{array}{llll}\text { b. } & \text { [[kènjù: }{ }^{\text {L }} & \text { àngú }] & \text { mà }]\end{array} \begin{array}{l}\text { bìrà-mb-ô: } \\ {\left[\left[\mathrm{ax}^{\mathrm{L}}\right.\right.}\end{array}$ which?.InanSg.O] $]^{\text {with }]} \begin{aligned} & \text { work(v)-Fut-2SgSbj }\end{aligned}$
'With which ax will you-Sg work?'

The forms for 'which?' agree with the modified noun in animacy, class, and number. The full set of forms is in (498). Except for the initial a, the paradigm is very similar to that of proximate demonstratives in (138) and (140) in §4.4.1.

| InanSg.E | InanSg.O | InanPl | AnSg | AnPl |
| :--- | :--- | :--- | :--- | :--- |
| àngí | àngú | ǎy | ǎm | àbíyè |

Animate singular ǎm is also the interrogative 'who? (§13.2.2.1). Inanimate singular E-class àngí is part of àngí sárà ‘when?’ (§13.2.2.4).

### 13.2.3 'So-and-so' and 'such-and-such' (má:nì~mâ:n, tòmê., pùlâ:l)

má:nì ~ mâ:n 'So-and-so' is a function over personal names of people. It has a plural mâ:n-bò. These forms are used by themselves, not combined with nouns. The homophony with mâ:n 'grey hornbill' (bird) is probably accidental.
(499)
$\begin{array}{lll}\text { a. má:nì } & { }^{\mathrm{L}} \eta g W \varepsilon ̀: \\ & \text { So.and.so } & { }^{\mathrm{L}} \operatorname{dog}\end{array}$
'So-and-so's dog'
b. mâ:n-bò $\quad{ }^{\mathrm{L}}$ ngwè:-mbò
'the dogs of (the) So-and-sos'
nǒ: tòmê., literally 'one person', is also attested in this context, and the pattern 'one X ' may be extended to other nouns: yદ̌: tòmê: 'such-and-such a woman', etc.
pùlâ:l (ultimately < Arabic fulaan-) is used as a 'such-and-such' term for places and other nonhuman entities. It follows a demonstrative, the unmarked category being proximate. This combination is then appositionally juxtaposed to the relevant noun, so that no tonal interactions occur: kéngè [ŋ̀gí pùlâ:1] 'such-and-such a place', dúmé-ngó [ŋ̀gú pùlâ:1] 'such-and-such an animal'.

### 13.2.4 'Whatchamacallit?' (absent)

No all-purpose 'whatchamacallit?' (Fr comment dirais-je?) form, i.e. a filler used while the speaker tries to remember a name or word, has been recorded. A relevant class noun such as kóngò 'thing' or kéngè 'place' is sometimes used for this purpose.

### 13.2.5 Embedded content interrogatives

Embedded content interrogatives occur as complements of 'know', especially 'don't know' or interrogative 'do you know?' The complements take relative-clause form. In (500b) the dubitative context favors the approximative version of 'where?'

[^0]
## 14 Relativization

### 14.1 Basics of relative clauses

A relative clause in Najamba is essentially an expanded NP. It is useful to conceptualize a maximal underlying structure like (501) for an NP that includes a relative clause.

The relative clause includes an NP in some grammatical relation or other (e.g. subject, object, complement of postposition, possessor) that is coindexed to the higher-level NP as a whole. The sequence Poss-N-Adj-Num then moves (downward, or rightward) into the relativization site within the relative clause, becoming what appears superficially to be a clause-internal head NP. This leaves determiners, universal quantifiers, and discourse-functional particles ('only', 'as for', etc.) stranded to the right of the relative clause, functioning in part as rightedge markers. The relative clause itself ends in a verb, or rather in a verbal participle.

The participle agrees with the head, not (as such) with the subject of the relative clause (though the two may converge). We can therefore have animate singular, animate plural, inanimate singular ( O and E classes), and inanimate plural participles, but not e.g. 1 Sg participles. Participles also mark AN categories similar to those in indicative main clauses, but using different morphology.

In several AN categories, the participle has different forms in subject relatives and nonsubject relatives, distinguished by tone formulae.

Since the usual pronominal-subject suffixes on the verb are not allowed in relatives, a pronominal subject in a nonsubject relative is expressed by a preparticipial subject proclitic. Pronouns are not allowed as head NPs (\#'I who am ...').

The relative construction, including the "internal" head NP, functions syntactically as an NP in the higher clause. For example, a relative construction may function as complement of a postposition like mà 'in' (502a), or it may be followed by a discourse-functional particle (e.g. là 'also', dǎn 'like') of the sort that often follow simple NPs (502b-c).

b. [ìngì-n yàg-ê: ké dân]
[stand-Nom be.right-PplNonSbj.InanSg.E Def.InanSg.E like]
ìngì-yá-ỳ
stand-MP-Hort.Pl
'Let's stop (= end up) in (something) like the position that is right.' (2005-1a)
c. [kòndò-ngà
[be.done.well-Pres.PplSbj
jěnjà [í gì]
God [1Pl Acc]
kó
Def.InanSg.O
téndó-m-ná
be.straight-Caus-Hort.3Sg
'May God have us go straight to what is done well also!' (2005-1a)

On the whole, the syntax of relative clauses in Najamba is similar to that in Jamsay or Tommo So, the two adjacent eastern Dogon languages. This is odd, since on the one hand Najamba has a remarkably archaic "western" Dogon morphology, and on the other hand the other western languages to the south (Tiranige, Dogul Dom, and especially the southwestern group starting with Bunoge), have quite different relative clause (and more generally, determiner) syntax. So there is a lot of work to be done to decipher the history.

### 14.2 Syntax of relative clauses

### 14.2.1 Tone-dropping on final word(s) of NP in relative clause

Tone-dropping is a crucial feature of relative clauses, since it identifies which of the NPs in the clauses is the head NP. The relationship between ordinary NPs and the same NPs used as head NPs in a relative is illustrated schematically in (503). Seydou (man's name) here is a possessor. Italicization indicates tone-dropping that occurs already in the ordinary NP (and is carried over to the relative-head NP). Underlining in the rightmost column indicates additional tone-dropping that occurs only in the "internal" head NP of a relative. Square brackets enclose the core NP (noun plus modifying adjectives). Determiners are not shown since, if present, they appear in postparticipial position.
ordinary NP
a. [ dog ]
[ dog black]
[ dog black big ]
b. [ dog ] five
[ dog black ] five
c. Seydou [ dog ]

Seydou [dog] five
d. dog [Pron critter]
as head NP ('a/the __ who ...')
[ dog ]
[ dog black]
[ dog black big ]
[ dog] five
[ $d o g$ black ] five

Seydou [ $\operatorname{dog}$ ]
Seydou [dog] five
dog [Pron critter]

The following points can be made. First, preposed possessors are insulated from tonedropping that applies to the head NP as a whole; they are tonosyntacic islands (503c). Postposed pronominal possessors, which end in L-toned possessive classifiers (arguably already tone-dropped by the pronominal possessor), are unchanged at the end of an internal relative head, creating another island effect (503d). However, in (503d) it is possible that the
appositional structure of postnominal possessors has interrupted the tonosyntactic control coming from the right, or has confined it to the classifier ('thing' or 'critter'), which is already L-toned under the control of the pronominal possessor.

See also §14.4.3 on possessor relatives, where the possessor itself is the head NP, in which case the possessum is treated as a separate NP within the relative clause and is therefore not subject to tone-dropping.

Second, the final (nonpossessor) word is audibly tone-dropped in a relative-clause head (503a-b) except when the possessum has already been tone-dropped by the possessor (503c). In the latter case, we could speak of indeterminate or double control.

Third, while numerals and core NPs do not interact with each other tonally in regular NPs , the final word of the core NP and the numeral are simultaneously and audibly tonedropped in a relative-clause head (503b).

Real examples are in (504a-d) and scattered throughout this chapter. For the audibly tonedropped words, the regular form is given in parentheses after the free translation (504a-b). The noun of the head NP is always tone-dropped. In addition, the adjective 'good' in (504a) and the numeral 'three' in (504b) are tone-dropped. The possessor 'Seydou' in (504a) is a tonosyntactic island and has its lexical melody. In a main clause, the core NPs in (504a-b) would be, respectively, bìrò: ${ }^{\mathrm{L}}$ síyè-ngò and nò-mbó tà:ndî: .

| [ [bìrò: <br> [[work(n) | $\begin{align*} & \text { sìy } \grave{\varepsilon}-\eta g \grave{o ̀}]^{\mathrm{L}}  \tag{504}\\ & \text { good-InanSg.O] } \end{align*}$ | $\begin{aligned} & \text { [bă:-ǹ } \\ & \text { [father-3SgPoss } \end{aligned}$ | mà] <br> with] |
| :---: | :---: | :---: | :---: |
| mó | din-ô: | kó] | gì, |
| AnSgSbj | find.Pfv-PplNonSbj | Def.InanSg.O] | Acc, |
| bìré <br> work(v) | $n \grave{\varepsilon}, \ldots$ <br> then. SS |  |  |

'(Each person,) having performed the good work that he found with (= learned from) his father, ...' (2005-1a) (bíró:, síyغ̀-ŋgò)
b. [nò-mbò tà:ndì:] bármé jòg-â:-mbò bé
[person.Pl three] ${ }^{\mathrm{L}}$ be.wounded Perfect-PplSbj-Pl Def.AnPl 'the three people who were wounded' (< nò-mbó, tà:ndî:)
c. [séydù ${ }^{\mathrm{L}}$ ŋ̀gWè:] tíb-ध́: mó
[S ${ }^{\mathrm{L}}$ dog] die.Pfv-PplSbj.AnSg Def.AnSg
'the dog of Seydou's that died' (< $\grave{\eta} g w \varepsilon ̌$ : $)$
$\begin{array}{lllll}\text { d. } & {[\text { sěydù }} & { }^{\mathrm{L}}[\text { ŋ̀gwè-mbò } & \text { nùmì: }]] & \text { ín-ó: } \\ {[\mathrm{S}} & { }^{\mathrm{L}}[\text { dog-Pl } & \text { five }]] & \text { go.Pfv-PplSbj.AnPl } & \text { bé } \\ & \text { Def.AnPl }\end{array}$
'Seydou's five dogs who went'

For (504d), see also 'my three houses that fell', (216b) in §6.2.2 above.

### 14.2.2 Restrictions on the head noun in a relative clause

A pronoun may not be the head NP directly. However, a first or second person pronoun may occur at the beginning of a relative clause, in what I take to be an appositional relationship to the actual head NP, which may be overt (nò: 'person', plural nò-mbò 'people'), or omitted as in (505). The pronouns é and $\bar{i}$ in this example are at the left edge of the clause (likely outside the clause proper), and do not undergo tone-dropping.


### 14.2.3 Conjoined relatives with a shared head

It is possible for one relative clause to follow another, with a shared head NP that is not repeated in the second such clause. There is no conjunction.


While this type of example is elicitable, in natural Najamba speech the usual construction would be to express the first clause as a loosely chained VP ('a man who, having five fields, has no animal').

### 14.2.4 Relative clause with conjoined NP as head

Usually a translation cue like 'the men and women who went to Bamako' is expressed as 'the men who went to Bamako and the women who went to Bamako', where the two entire NPs with their respective relative clauses are conjoined. However, when the predicate involves reciprocal action or some other event type that does not lend itself semantically to conjunction, the speaker has no choice but to express the relative with a conjoined NP as head. In this case, the conjoined NP acts as a tonosyntactic island, bracketed by $\subset \ldots \supset$, and neither coordinand undergoes tone-dropping.
(507)
$\subset[$ dógò:
mà $\rightarrow$ ]
[púlàndû:
$m a ̀ \rightarrow] \supset$
$\subset[[$ Dogon.Pl
and]
[Fulbe.Pl
and] $\supset$
já:ทí-y-ó:
bé]
nìngá- $m b-a ̀:=$ ỳ
squabble-MP.Pfv-PplSbj.AnPl Def.AnPl] confine-Fut-Pass=it.is
'The Dogon and the Fulbe who fought (each other) will be locked up.'

### 14.2.5 Headless relative clause

Most headless relative clauses (those with no overt head NP) in texts are adverbial relatives that have an implied head NP 'the time/place/situation in which ...'.

Other headless relatives are also attested. In (508a-b), the reference is too indefinite to allow a concrete head NP.
a. [jěnjà [í mà] tàgà-l-è: ké] gì, [God [1Pl Dat] create-PfvNeg-PplNonSbj.InanSg.E Def.InanSg.E] Acc dùndà-mbó-ỳ
look.for-Fut-1P1Sbj
'What (things) God didn't create for us, we will look for (= try to make).' (2005-2a)
b. [nǒ: gì] kóndò-ŋgà kó má Л,
[person Acc] be.good-Pres.PplSbj Def.InanSg.O and,
[nǒ: gì] nàmá-gà-ทgà kó má̀,
[person Acc] be.ruined-Caus-Pres.PpISbj Def.InanSg.O and,
[kó gì] dùmé-y mé
[InanSg.O Acc] get.Pfv-1PlSbj if
'That which makes (=helps) a person, and that which ruins a person, if we have gotten that, ...' (2005-1a)

In (509), the omitted subject is clearly human, and one could rephrase it with overt nò: ${ }^{\mathrm{L}}$ 'a person (who) ...'.
[ké gì] dìmbì-yà-クgà dîn là,
[InanSg.E Acc] follow-MP-Pres.PplSbj all also,
[láy nè] [ùsfó: má] sájà-ndí- $\varnothing$
[Emph Adv] [path in] slide-PresNeg-3SgSbj
'Any person who follows that (path) like that, he certainly does not slide in the road.' (2005-1a)
14.2.6 Pronominal-subject proclitica in nonsubject relative clause

In nonsubject relatives, the subject is not expressed in the verb as it is in main clauses. If there is no nonpronominal subject NP , a proclitic subject pronoun (identical in form to an independent pronoun) precedes the verbal participle. Usually the proclitic is adjacent to the
participle, as shown by the fact that the proclitic follows even an object pronominal (510c) or an immediately preceding chaining form like 'go back' in (510d).
a. $\eta g w \grave{\varepsilon}:{ }^{\text {L }}$
mí
gìy-ê:
mó
$\operatorname{dog}^{\mathrm{L}} \quad \mathbf{1 S g S b j}$
kill.Pfv-PplNonSbj Def.AnSg
'the dog that I killed'
b. dènàn ${ }^{\mathrm{L}}$ [pègé mó]
day ${ }^{\mathrm{L}}$ [sheep Def.AnSg]
bé sém-è: ké
3PISbj slaughter.Pfv-PplNonSbj.InanSg.E Def.InanSg.E
'the day when they slaughtered the sheep-Sg'
c. dèjàn ${ }^{\mathrm{L}}\left[\begin{array}{ll}\text { ó } & \text { gì }\end{array}\right]$ mí $y-\hat{\varepsilon}$ : ké
day ${ }^{\mathrm{L}} \quad\left[\begin{array}{ll}2 S g & \text { Acc }] \quad \mathbf{1 S g S b j} \\ \text { see.Pfv-PplNonSbj.InanSg.E } & \text { Def.InanSg.E }\end{array}\right.$ 'the day when I saw you-Sg'
d. wùjí-y dènàn ${ }^{\mathrm{L}}$
turn.around-MP day $^{\text {L }}$
màmílí-yé mó w-ê:
go.back-MP $\mathbf{3 S g S b j} \quad$ come.Pfv-PplNonSbj.InanSg.E
'the day when he turns around and comes back' (2005-1a)

However, there are some textual examples where the pronoun occurs before the $\{\mathrm{L}\}$-toned head noun, as in (511).

| 1 | kòngo o ${ }^{\text {L }}$ | kànǎ-ggà | díndì |
| :--- | :--- | :--- | :--- |
| 1 PlSbj | thing $^{\mathrm{L}}$ | do-Fut.PplNonSbj | all |

'everything that we will do' (2005-1a)
My assistant commented that this ordering is acceptable, as is the alternative with immediately preparticipial subject pronominal (kòngò í kànă-ngà díndì).

3 Sg mó and 3Pl bé are elsewhere animate. However, they occur in this construction for inanimate as well as animate nouns, instead of inanimate kó, ké, and yé. For example, (512a) below shows that 'sun' is an inanimate noun with O-class agreement, and (512b) shows that 'sun' as head of a subject relative requires O-class agreement on the participle and on the postparticipial determiner. However, when 'sun' is represented by a preparticipial pronoun in a nonsubject relative, the usually animate 3 Sg form mó is required. An example is (512c), where the noun ùjúngó 'sun' (inanimate O/E-class) is a preclausal topical NP, and is resumed by an "animate" 3 Sg pronoun in the following adverbial relative clause headed by 'time'.
a. ùjúngó kó
sun Def.InanSg.O
'the sun'
b. ùjùngò ${ }^{\mathrm{L}}$ túmb-ò: kó
$\operatorname{sun}^{\mathrm{L}} \quad$ sun.rise.Pfv-PplSbj.InanSg.O
Def.InanSg.O
'the sun that rose (e.g. this morning)'
c. ùjúngó, [wàkàtì mó túmb-è: ké], ...
sun, $\quad\left[t i m e ~{ }^{\mathrm{L}} \quad \mathbf{3 S g S b j} \quad\right.$ rise.Pfv-PplSbj.InanSg.E Def.InanSg.E], .. 'the sun, at the time when it rose, ...'

### 14.2.7 Relative clause involving verb- or VP-chain

If the relative clause is based on a verb chain, the final verb takes participial form, and the preceding chained verbs have their usual chaining or subordinated form. In (513a-d), the final verb já- 'can, be able to' has a participial ending for present (513a-b) or present negative ( $513 \mathrm{c}-\mathrm{d}$ ), agreeing in plurality with the head, while the preceding verb biré occurs in its chaining form. For another verb chain see (410d) in §14.2.6 above.

b. nò-mbò ${ }^{\mathrm{L}}$ bíró: bìré jà-ŋgà-mbò bé
person-Pl ${ }^{\text {L }}$ work(n) work(v) can-Pres.PplSbj-Pl Def.AnPl
'the people who can work'
c. nò: bíró: bìré já-nd-è: mó
person ${ }^{\text {L }}$ work(n) work(v) can-PresNeg-PplSbj.AnSg Def.AnSg
'the person who cannot work'
$\begin{array}{llllll}\text { d. } & \text { nò-mbò }{ }^{\text {L }} & \text { bíró: } & \text { bìré } & \text { já-nd-ò: } & \text { bé } \\ & \begin{array}{l}\text { person- } \mathrm{Pl}^{\mathrm{L}} \\ \text { 'the people }\end{array} & \text { work(n) cannot work' } & \text { work(v) } & \text { can-PresNeg-PplSbj.AnPl } & \text { Def.AnPl }\end{array}$

Similar examples with perfective participles of $j \varepsilon$ - 'finish' (§17.5.1) as the final verb in the chain are in (514). Compare bìré jè- $\varnothing$ 'he/she has finished working'.
$\begin{array}{lllll}\text { a. } & \text { nò: }{ }^{\mathrm{L}} & \text { bíró: } & \text { bìré } & j \text {-દ́: } \\ & \text { person }^{\mathrm{L}} & \operatorname{work(n)} & \operatorname{work}(\mathrm{v}) & \text { finis }\end{array}$
mó
person ${ }^{\text {L }}$ work(n) work(v) finish.Pfv-PplSbj.AnSg Def.AnSg
'the person who has finished working'
$\begin{array}{llllll}\text { b. } & n o ̀-m b o ̀ ~ & \text { L } & \text { bíró: } & \text { bìré } & j \text {-ó: } \\ & \text { person- } \mathrm{Pl}^{\mathrm{L}} & \text { work(n) } & \operatorname{work}(\mathrm{v}) & \text { finish.Pfv-PplSbj.AnPl } & \text { bé } \\ \text { 'the people who have finished working' } & & \text { Def.AnPl }\end{array}$

### 14.2.8 Postparticipial determiners and quantifiers

The participle in a relative clause is very often followed by dîn (díndì ) 'any, all' or by any of the set of definite markers (e.g. animate singular mó ). These morphemes are logically part of the overall NP that includes the relative clause. However, they appear after the verbal participle in relative clauses rather than at the end of the head NP proper.

In ordinary NPs, definite markers do not interact tonally with preceding nouns or inner modifiers (§6.5.3), and the universal quantifier interacts tonally only with an immediately preceding determiner or pronoun, which drops from H to L as in bè ${ }^{\mathrm{L}}$ dîn 'all of them' (§6.6.1). It is therefore unsurprising that neither definite markers nor the quantifier have any tonal effect on the participle in a relative. (See below, however, for demonstratives.)

There are many examples of postparticipial definite morphemes (mó, bé, kó, ké, yé) throughout this chapter. Animate singular mó and plural bé are illustrated by examples in the preceding section. Examples of inanimate singular kó and ké are in §14.2.6 above. For inanimate plural yé, see (515a) in $\S 14.3 .12$. In each case the participle has the same tones that it would have without the definite marker.

Some examples with a postparticipial universal quantifier are in (515). The normal tonedropping of an immediately preceding determiner is observed in (515b-c), where bé drops to $b \grave{e}^{\mathrm{L}}$, as it does in simple NPs without relative clauses. The quantifier has no tonal effect on the participle, regardless of whether the two are adjacent (515a) or are separated by the definite marker (515b-c).
$\begin{array}{llll}\text { a. } \begin{array}{lll}\text { kòngò }^{\mathrm{L}} & \text { wé } & \text { jòg-â: }\end{array} & \text { díndì } \\ \text { thing }^{\mathrm{L}} & \text { come } & \text { Perfect-Ppl.Sbj } & \text { all }\end{array}$
'every thing that has come' (2005-1a)
b. òndò: ${ }^{\mathrm{L}}$ wǒ-ngà-mbò bè ${ }^{\mathrm{L}}$ dîn
child. $\mathrm{Pl}^{\mathrm{L}}$ come-Fut.Ppl-Pl $\quad$ Def.AnPl ${ }^{\mathrm{L}}$ all
'all of the children who will come'
c. nò-mbò ${ }^{\mathrm{L}}$ sém-ó: bè ${ }^{\mathrm{L}}$ dîn
person- $\mathrm{Pl}^{\mathrm{L}} \quad$ slaughter.Pfv-PplSbj.AnPl Def.AnP1 $^{\mathrm{L}}$ all
'all the people who have slaughtered (sheep)'

Demonstrative pronouns (as opposed to definite morphemes) are not common as final morphemes with relative clauses. However, the combination does occur in texts, and it is readily elicited. Demonstratives, unlike definite markers, do control tone-dropping on immediately preceding nouns in ordinary NPs (§6.5.2). We would therefore expect them to control tone-dropping on immediately preceding participles, as in fact they do in other Dogon languages like Jamsay. However, in Najamba, demonstratives have no tonosyntactic effect on participles. The participles in (516a-b) below have their usual tone formulae, rather than being tone-dropped by the demonstrative. The distinctive $L^{*} H-L$ tone formula for the participles in these examples allows listeners to recognize them as future rather than present participles, an opposition that would have been neutralized if demonstratives could control tone-dropping on participles. It may be that Najamba, unlike other Dogon languages, has too
much invested in participial tone oppositions to allow participles to be tone-dropped by postparticipial morphemes.
a. Éngú nò: ${ }^{\mathrm{L}} \quad$ sèmǎ-ŋgà $\quad$ ǒm

## ǒm

Prox.AnSg
tomorrow person ${ }^{\mathrm{L}} \quad$ slaughter-Fut.PplSbj Pro
'this person who will slaughter (a sheep) tomorrow.'
$\begin{array}{llll}\text { b. } & \text { nò-mbò }{ }^{\mathrm{L}} & \begin{array}{l}\text { sèmă-nd-ò: } \\ \text { person- } \mathrm{Pl}^{\mathrm{L}}\end{array} & \text { slaughter-FutNeg-PplSbj.AnPl }\end{array} \quad \begin{aligned} & \text { Próíỳ̀ } \\ & \end{aligned}$
'these people who will not slaughter (a sheep)'

In complex relative constructions ('the one who came, and who saw, and who conquered'), any postparticipial morpheme (definite, demonstrative, quantifier) occurs just once, after the participle of the final clause. In addition to its own semantic contribution, in this context the postparticipial morpheme serves as a right-edge marker, making it easier for the addressee to process such a complex construction. In (517), definite ké (inanimate singular E-class) is such a right-edge marker. The entire relative construction (as an NP) functions as object of 'believe' and therefore takes accusative $g i$, which also occurs just once, after definite ké.

| [[bà:-ólé | má] | nă: | í | dìn-ô:] |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [ [father-house | se in] | yesterday | 1PISbj | encounter.Pfv-PplNonSbj.InanSg.O] |  |
| [í gin | gìn-र्टि:] |  |  |  |  |
| [1PlSbj s | say.Pfv-PplNonSbj.InanSg.E] |  |  |  |  |
| [í nv | $\eta W-\check{\varepsilon}$ : |  |  | ké] | gì, |
| [1PlSbj he | hear.Pfv-PplNonSbj.InanSg.E |  |  | Def.InanSg.E] | Acc, |
| [ké | gì] | [yámbí-1 |  | kó] | dògá-lá-ỳ |
| [InanSg.E | Acc] | [believe- | VblN | Def.InanSg.O] | leave-HortNeg-1P1 |
| 'What we fou the family, ma | ound (= in may we no | herited/lear <br> leave (= ab | d), wha ndon) b | we said, and w lieving in it!' | we heard formerly $5-1 a)$ |

### 14.2.9 Final doubling of head noun

Rarely, the noun from the head NP within the relative clause is repeated after the relative clause proper (without modifiers or determiners). It takes $\{\mathrm{L}\}$-toned form, indicating that the repeated noun is "possessed" by the relative clause proper.

I have only one textual example (518).


Doubling of the head noun occurs more frequently in several other Dogon languages. It is probably best developed in Togo Kan. The post-relative doubled element is usually either a
semantically light ontological noun that can head an adverbial relative, such as 'manner', 'place', or '(point in) time' (or 'day', 'year', etc.), or else it functions as a kind of classifier, such as human singular or human plural. (518) is consistent with this pattern, since 'thing' is a semantically light noun, equivalent to an inanimate singular classifier.

### 14.3 Morphology of verbal participles in relative clauses

The "verb" of the relative clause is a participle that agrees with the head NP in intrinsic nominal features (class and number), but not in pronominal person. The participle consists, maximally, of the verb stem, an AN (aspect-negation) suffix except in the suffixless perfective positive, and an ending agreeing with the intrinsic features of the head NP. Tones distinguish subject participles (i.e. when the head NP is a subject) from nonsubject participles (when the head NP is anything else) in some AN categories. Present and future participles are also distinguished by tone. They have a portmanteau suffix - $\eta g a$ distinct from the regular AN suffixes in main clauses (present -njò- §10.1.3.6, future -m-~ -mbò- §10.1.3.4).

The relationship between regular inflectable AN stems and their participles is summarized schematically in (519), which omits stem tones. Symbol - $\alpha$ : represents the longvowel agreement ending (-e:, - $:$; $-0:$, and $-\bigcirc$ :) in mutating (as opposed to suffixing) participles. "E" means E-stem (as in the perfective), "A/O" the A/O stem; see §3.3.5.2 on these vocalically-defined stems.

> category inflected

> participle subject $\quad$ nonsubject
a. suffixing participles
present future

$$
\begin{array}{ll}
\text { A/O-njò } & \mathrm{A} / \mathrm{O}-\eta g a ̀ ~ \\
\mathrm{~A} / \mathrm{O}-\grave{m} & \mathrm{~A} / \mathrm{O}-1 \text { ğgà }
\end{array}
$$

b. mutating participles
zero AN suffix perfective
nonzero AN suffix perfective negative present negative future negative
E E-á: E- $:$

A/O-1 A/O-1- $\alpha$ : A/O-1- $\mathbf{a}^{2}$
A/O-ndì $\quad \mathrm{A} / \mathrm{O}-n d-\alpha ́: \quad \mathrm{A} / \mathrm{O}-n d-\alpha{ }_{\mathrm{a}}$ :
$\mathrm{A} / \mathrm{O}-n ́ d i ̀ \quad \mathrm{~A} / \mathrm{O}-n ́ d-\grave{\alpha}$ :

Suffixing participles can add animate plural -mbo to -nga, but do not allow the inanimate singular suffixes $-\eta g o$ and $-\eta g e$ that can follow nouns (§4.1.3) and adjectives (§4.5.1.2). This suggests that participial - $\eta g a$ represents the neutralization of inanimate $-\eta g o$ and $-\eta g e$ as well as animate singular zero. Participles also do not allow the -ye suffix that occurs in some adjectives (§4.5.1.2).

The final $-\alpha$ : of mutating participles (519b) has two forms, E and O, as is the case with mutating nouns (§4.1.2) and adjectives (§4.5.1.1). For animates and pseudo-animates, E is singular and $O$ is plural. For inanimates, $O$ is singular ( $O / E$ class) and $E$ is either singular
( $\mathrm{E} / \mathrm{E}$ class) or plural (both inanimate classes). The actual vowels are $\varepsilon$ : or e : for the E category, $\jmath$ : or $o$ : for the O category, respecting the ATR-harmonic class of the verb stem.

Stem-tones are omitted from (519) but are described in detail in the following sections. I point out here that participles share the stem-tone formulae of main-clause verbs that, among other things, distinguish present from future. This is hinted at in (519) by the acute accent on the nasals in the future suffixes. For some but not all mutating participles, there is in addition a tonal distinction, expressed chiefly on the final $-\alpha$; between subject and nonsubject participles. The choice depends on whether the head of the relative is subject or has some other function (object, possessor, adverb).

A few examples here will give the general flavor of what relative constructions look like. These are object relatives with inanimate singular O-class noun 'meat' as head.
a. nàmà ${ }^{\mathrm{L}} \quad$ mí
kúb-ò:
kó
meat $^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$
eat.meat.Pfv-PplNonSbj.InanSg.O
Def.InanSg.O
'the meat that I ate'
$\begin{array}{llll}\text { b. } & \text { nàmà }{ }^{\mathrm{L}} & \text { mí } & \text { kùbò-l-ò: } \\ \text { meat }^{\mathrm{L}} & 1 \mathrm{SgSbj} & \text { eat.meat-PfvNeg-PplNonSbj.InanSg.O } & \text { kó } \\ & \text { Def.InanSg.O }\end{array}$
'the meat that I did not eat'
c. nàmà mí kùbò-ngà- $\varnothing$ kó
meat ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ eat.meat-Pres-PplNonSbj.InanSg.O Def.InanSg.O
'the meat that I eat'
d. nàmà ${ }^{\mathrm{L}}$ mí kùbǒ-ŋgà- $\varnothing$ kó
meat ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ eat.meat-Fut-PplNonSbj.InanSg.O Def.InanSg.O
'the meat that I will eat'
e. nàmà ${ }^{\mathrm{L}}$ mí kùbò-nd-ò: kó
meat ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ eat.meat-PresNeg-PplNonSbj.InanSg.O Def.InanSg.O
'the meat that I do not eat'
f. nàmà mí kùbǒ-nd-ò: kó
meat $^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ eat.meat-FutNeg-PplNonSbj.InanSg.O Def.InanSg.O 'the meat that I will not eat'

## 

The mutating participle ends in a long-vowel suffix agreeing with the head NP. The suffixes are $-\varepsilon$ : and $-\bigcirc$ : replacing final $\varepsilon$ in the inflectable perfective stem of -ATR stems, and -e: and $-o$ : replacing final $e$ in the perfective of + ATR stems (§10.1.3.1). The front/back distinction expresses $E$ versus $O$ agreement categories.

Final-syllable tones distinguish subject from nonsubject participles. For all but the three falling-toned verbs in (521d) below, the tones of the stem (i.e. omitting the final participial vowel) are either $/ \mathrm{H} /$ or $/ \mathrm{LH} /\left(\right.$ realized as $\mathrm{LH}^{*}$ ), depending on the lexical melody. In (521b-c),
the initial mora of the participles is L-toned for 'leave' and 'be born', respecting the lexical $/ \mathrm{LH} /$ melody that is also evident in the chaining form. The stem-tone formula is therefore $\mathrm{XH}^{*}$ where X is the initial-mora lexical variable.

The subject participles of (tonally) regular verbs end in an H-toned long vowel. The nonsubject participles end in an L-toned long vowel, except that this vowel is falling-toned for monosyllabic verbs (521a) and for $\{\mathrm{LH}\}$-toned $C v(C) C v$ bisyllabics like 'leave' (521b). In other words, the nonsubject participles end in an L-tone element that fills the entire final long vowel for most verbs including all trisyllabic and longer stems, but is confined to the final mora when the final H -tone of the stem would otherwise be obliterated.

For the three falling-toned verbs, the falling tone is preserved throughout, so for them the subject and nonsubject participles are indistinguishable (521d).
(521) Perfective positive participles

| gloss |  | chaining | main clause | participle |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | subject |  | nonsubject |
| a. | 'come' |  | wé | wè- | w-é: | $w-\hat{\text { en }}$ |
|  |  |  |  | W-ó: | W-ô: |
|  | 'see' | $y \varepsilon ́$ | $y \grave{-}$ | $y-\varepsilon$ : | $y-\hat{\varepsilon}$ : |
|  |  |  |  | $y$-ó: | $y-\hat{0}$ : |
| b. | 'slaughter' | sémé | sèmè- | sém-દ́: | sém-દ̀: |
|  |  |  |  | sém-ó: | sém-ò: |
|  | 'teach' | bă:rย́ | bà:rè- | bă:r-દ́: | bǎ:r-દ̀: |
|  |  |  |  | bǎ:r-ó: | bǎ:r-j̀: |
|  | 'leave' | dògé | dògè- | dı̀g-ध́: | $d \grave{g}-\hat{\varepsilon}$ : |
|  |  |  |  | dòg-ó: | dog-ô: |
|  | 'say' | gìné | gìnè- | gìn-દ́: | gìn- $\hat{\varepsilon}$ : |
|  |  |  |  | gìn-ó: | gìn-ô: |
|  | 'cover' | yàmbí | yàmbè- | yàmb-é: | yàmb-ê: |
|  |  |  |  | yàmb-ó: | yàmb-ô: |
| c. | 'scrub' | túgújé | tùgùjè- | túgúj-દ́: | túgúj$-\varepsilon$ : |
|  |  |  |  | túgúj-ó: | túgúj-ò: |
|  | 'be born' | nàlí-yé | nàlì-yè- | nàlí-y-દ́: | nàlí-y-è: |
|  |  |  |  | nàlí-y-ó: | nàlí-y-ò: |
|  | 'rinse self' | sámbílí-yé | sámbìlì-yè- | sámbílí-y | sámbílí-y-દ̀: |
|  |  |  |  | sámbílí-y | sámbílí-y-ò. |


| 'bring' | $j$ jê: | jê:- | $j$-ê: | $j$-ê: |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $j$-ô: | $j$-ô: |
| 'arrive' | $d w \hat{\varepsilon}$ : | $d w \hat{\varepsilon}$ :- | $d W-\hat{\varepsilon}$ : | $d w-\hat{\varepsilon}$ : |
|  |  |  | $d-\hat{o}$ : | $d-\hat{o}$ : |
| 'find' | dìn $\hat{E}$ : | dìnê:- | dìn- $\hat{\varepsilon}$ : | din- $\hat{\varepsilon}$ : |
|  |  |  | dìn-ô: | dìn-ô: |

Textual examples of perfective subject participles are in (522).
a. táwè dùmí-y-ó: òndú- $\varnothing$
maybe get-MP.Pfv-PplSbj.InanSg.O not.be-3SgSbj
'Basically nothing was gained.' (dùmí-yé )
(lit. "Maybe [what was gained] does not exist.")
b. [[ó ${ }^{\text {L }}$ bà $]$ [ó nàl-é: mó]]
[[2SgPoss ${ }^{\mathrm{L}}$ father] [2SgObj give.birth.Pfv-PpISbj.AnSg Def.AnSg]]
ó kélà- $\varnothing$
2 SgObj not.want-3SgSbj
'your father who bore (= sired) you doesn't want/love you.' (2005-1a) (nǎl)
c. [nǎ: jàyg-é: mó yà:]
[yesterday begin.Pfv-PplSbj.AnSg Def.AnSg Foc]
kúmbí-y jà-mb-è:
keep-MP can-Fut-Ppl.SbjFoc
'(Only) one who began yesterday (= in the past) [focus] can maintain them.' (2005-1a)

Examples of perfective nonsubject participles are in §14.4.2.1 below.

### 14.3.2 Participle of perfective negative verb (-1- $\alpha$ :)

In this participle, the stem is segmentally identical to the inflectable perfective negative with suffix -l- (§10.1.4.2). This is followed by mutating -e: and -o: for the two agreement categories. In the nonsubject participles, the entire word is $\{\mathrm{L}\}$-toned. In the subject participles, the suffix is H-toned, while the stem is H-toned except that lexically/LH/ stems of two or more syllables have an L-toned stem-initial syllable, and monosyllabic stems that have L-tone before perfective negative $-l$ - in the inflectable paradigm (realized as rising tone on the stem before the vowelless $3 \mathrm{Sg}-1-\varnothing$ ) retain this L-tone in the participle.

| gloss | main clause | participle |  |
| :--- | :--- | :--- | :--- |
| a. 'come' | wobject | nonsubject |  |

Textual examples of perfective negative subject participles are in (524).
$\left.\begin{array}{llll}\text { a. } & \text { [gàjí } & \text { dùmá-l-é: } & \text { mó }\end{array}\right]$ là]
[snatch obtain-PfvNeg-PplSbj.AnSg also]
[ànné yà:] ìngì-yá-m
[how Foc] stand-MP-Fut. 3 SgSbj
'(Any-)one who has not gotten (something) to appropriate for himself, he for his part, how will he stop (= end up)?' (2005-1a)

```
b. jángà káná-l-é:,
study do-PfvNeg-PplSbj.AnSg, [kòngò \({ }^{\text {L }}\) mó tìgà-ŋgà] pàlá- \(\varnothing\) [thing \({ }^{\mathrm{L}} 3 \mathrm{SgSbj}\) know-Pres.PplNonSbj] be.small-3SgSbj
```

'One who does not study (= go to school), the thing that he/she knows is small.' (2005-1a)

### 14.3.3 Participle of present positive verb (-ŋgà)

As an inflected stem, the present has suffix -njò- plus pronominal-subject suffix. In the participle, -njò- is replaced by a suffix -ŋgà-. The verb has the $\mathrm{A} / \mathrm{O}$ stem in both the inflected paradigm and the participles. The participle does not agree with the singular noun class of the head NP. However, for animate (including pseudo-animate) head NPs, the plural suffix -mbò
is added after the -ngà- suffix. The subject and nonsubject participles are identical (tonally as well as segmentally).

This participle occurs in two tonal variants, one with $\{\mathrm{L}\}$-tones, and the other with the typical $((\mathbf{X})) \mathbf{H}^{*}(\mathbf{L})$ stem-tone formula also found in the inflectable present with suffux -njòThere may be subtle differences in usage, but I have not been able to distinguish the meanings. I tentatively conclude that the $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ type is primary. Both variant tone formulae are distinguishable from the formula of the corresponding future participles, which always have rising tone on the final stem-syllable.

The variants with $\{\mathrm{L}\}$-tones are illustrated in (525).
(525) Present positive participles, $\{\mathrm{L}\}$-toned variants
gloss main clause participle simple with AnPl -mbò

a. | 'come' |
| :--- | :--- | :--- |
| 'see' | wó-njò-

yá-njò- $\quad$\begin{tabular}{l}
wò-ngà <br>
yà-ngà

$\quad$

wò-ngà-mbò <br>
yà-ngà-mbò
\end{tabular}

The variants with $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ stem formulae are illustrated in (526).
(526) Present positive participles, ((X)) $\mathrm{H}^{*}(\mathrm{~L})$ stem variants
gloss main clause participle

$$
\text { simple } \quad \text { with AnPl -mbò }
$$

| a. | 'come' 'see' | $\begin{aligned} & \text { wó-njò- } \\ & \text { yá-njò- } \end{aligned}$ | $\begin{aligned} & \text { wó-ıgà } \\ & \text { yá-ŋgà } \end{aligned}$ | wó-ngà-mbò <br> yá-ngà-mbò |
| :---: | :---: | :---: | :---: | :---: |
| b. | 'slaughter' 'leave' | $\begin{aligned} & \text { sémà-njò- } \\ & \text { dógà-njò- } \end{aligned}$ | $\begin{aligned} & \text { sémà-ŋgà } \\ & \text { dógà-ŋgà } \end{aligned}$ | sémà-ngà-mbò <br> dógà-ŋgà-mbò |
| c. | 'scrub' <br> 'be born' <br> 'rinse self' | túgújà-njò- <br> nàlí-yá-njò- <br> sámbílí-yà-njò- | túgújà-ŋgà <br> nàlí-yà-ŋgà <br> sámbílí-yà-ŋgà | túgújà-ŋgà-mbò <br> nàlí-yà-ŋgà-mbò <br> sámbílí-yà-ŋgà̀-mbò |

A textual example with $((X)) H^{*}(\mathrm{~L})$ formula is (527a). Textual examples with $\{\mathrm{L}\}$-tones are ( $527 \mathrm{~b}-\mathrm{d}$ ). The relative clauses have nonsubject heads in ( $527 \mathrm{a}-\mathrm{c}$ ) and a subject head in (527d). In the interlinears I indicate whether the head is nonsubject or subject (Ppl.NonSbj, PplSbj),
but for present positive (and future positive) participles this is irrelevant to the participial forms.
a. [[ó
${ }^{\mathrm{L}}$ kì:
mà:mì-n]
mà $\quad$ bìrò: ${ }^{\text {L }}$
[[2SgPoss ${ }^{\text {L head }}$ ability] in] work(n) ${ }^{\text {L }}$
ó bírà-ngà
2SgSbj work(v)-Pres.PplNonSbj
'the work that you perform within your own capabilities’ (2005-1a)
b. bìrò: ${ }^{\text {L }}$ ó bìrà-ggà díndì,
work(n) ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ work(v)-Pres.PplNonSbj all,
[[bíró: ó gò kó] băy nè] bírá
[[work(n) 2SgPoss Poss Def.InanSg.O] learn then.SS] work(v).Imprt '(In) every job that you do, learn your work and do (it).' (2005-1a)
c. $\quad \sigma$

2 SgSb
ìnò-ngà
go-Pres.PplNonSbj
'(the place) where you-Sg are going' (2005-1a)
d. [[nčy-ngò
kó]
[[good-InanSg.O Def.InanSg.O]
[[ǧ̌r mà] ìnò-ggà kó]
[[front in] go-Pres.PplSbj Def.InanSg.O]
'the good (thing), (the one) that goes forward' (2005-1a)

### 14.3.4 Participle of future positive verb (-fǵà)

The regular inflected form of the future verb (§10.1.3.4) has 3Sg portmanteau -m, while other pronominal-subject forms are based on -mbô- (sèmá-m̀ 'he/she will slaughter', sèmà-mbó-m̀̀ 'I will slaughter'). The corresponding participle replaces these suffixes with suffix -ýgà-. The stem proper has a final $<\mathrm{LH}>$-toned syllable, all preceding stem tones being low, just as in the inflectable future stem. The formula is therefore $\mathbf{L} * \mathbf{H}-\mathbf{L}$ including the suffix. The final H -tone of the stem is realized on the nasal of -ngà-. There is no change from subject to nonsubject participles. For animate plural heads, plural -mbo is added (-fygà-mbò).

The future positive participle is segmentally identical to the present positive participle, but they differ in the tone formulae of the stem, notably in the stem-final H-tone in the future.

Future positive participles
gloss main clause ( 3 Sg ) participle

$$
\text { simple } \quad \text { with AnPl -mbò }
$$

a. 'come'
wǒ-m̀
wǒ-ngà
wǒ-ngà-mbò
'see' yă-m̀
yă-ŋgà
yă-ŋgà̀-mbò


The future positive participle is part of the '(know) what to VERB' construction (529).

## (529)

| mí | kànǎ-ngà | éndà:-m |
| :--- | :--- | :--- |
| 1 SgSbj | do-Fut.Ppl.NonSbj | not.know-1 SgSbj |
| 'I don't know what to do.' |  |  |

For a different construction meaning '(know) where to go/come', see §10.5.4.
Textual examples of future positive participles in subject relatives are (530a-b). Further examples are in the section on 'before ...' adverbial clauses (§15.2.8).
a. [íyó $\left[\begin{array}{ll}1 i & g i ̀\end{array}\right] \quad$ kòngò̀ ${ }^{\mathrm{L}}$ gò-mǒ-ngàa éndà:-m [today [1P1 Acc] thing ${ }^{\mathrm{L}}$ go.out-Caus-Fut.PplSbj] not.know-1SgSbj 'I don't know any (other) thing that will get us out nowadays.' (2005-1a)
b. [yè $\left.{ }^{\mathrm{L}} \quad d \hat{\imath} \rightarrow n\right]$ nèn,
$\left[\operatorname{InanP1}^{\mathrm{L}}\right.$ all] for,
nì: bǎl mòmbǎ-ngà mó ノ,
mother gather assemble-Fut.PplSbj Def.AnSg, [ándàl kó]=ý
[knowledge Def.InanSg.O]=it.is
'for all those (things), the mother (= chief) that will gather (them) and put (them) together is knowledge.' (2005-1 a)

### 14.3.5 Participle of present negative verb (-nd- $\mathbf{\alpha}:,-n d-\grave{\alpha}:)$

All negative participles are constructed by mutations among mid-height vowels, applied to the main-clause negative suffix. The participle corresponding to present negative -ndí- (§10.1.4.4) is segmentally identical to the participle corresponding to future negative -ńdì- (following section), just as the regular inflected conjugations of the two categories are segmentally identical. Again it is tones that distinguish the two.

In the present negative participle, subject relatives end in -é: or -ó: depending on agreement category. For nonsubject relatives, the ending is -è: or -ò: . The stem has $((\mathbf{X})) \mathbf{H} *(\mathbf{L})$ formula, similar but (seemingly) not quite identical to the $(\mathrm{X}) \mathrm{H}^{*} \mathrm{~L}$ formula that it has in its inflected present negative paradigm. The apparent difference is that the final L-tone of the stem is not obligatory in the participle, hence the parenthesized (L). However, the final L is absent only in nonsubject participles (i.e. with before L-toned suffixal vowel) of $C V$ - or $C W V$ - monosyllabics, like 'come' and 'see' in (531a) below. For example, wó-nd-è: occurs instead of \#wô-nd-è: . Such stems do have a falling tone in the subject participles, which have
an H-toned suffixal vowel. For example, subject participle wô-nd-é: matches the tones of the main-clause form wô-ndí-. I conclude that there is no structural difference between $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ in the participles and $(\mathrm{X}) \mathrm{H}^{*} \mathrm{~L}$ with obligatory L in the inflected forms. There is just an extra twist in how the formula is realized in monomoraic stems before an L-toned suffix.

Present negative participles

| gloss |  | main clause | participle |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | subject | nonsubject |
| a. | 'come' |  | wô-ndí- | wô-nd-é: | wó-nd-è: |
|  |  |  | wô-nd-ó: | wó-nd-ò: |
|  | 'see' | yâ-ndí- | yâ-nd-é: | yá-nd-è: |
|  |  |  | yâ-nd-ó: | yá-nd-ò: |
| b. | 'slaughter' | sémà-ndí- | sémà-nd-é: | sémà-nd-è: |
|  |  |  | sémà-nd-ó: | sèmà-nd-ò: |
|  | 'leave' | dógà-ndí- | dógà-nd-é: | dógà-nd-è: |
|  |  |  | dógà-nd-ó: | dógà-nd-ò: |
|  | 'scrub' | túgújà-ndí- | túgújà-nd-é: | túgújà-nd-è: |
|  |  |  | túgújà-nd-ó: | túgújà-nd-ò: |
|  | 'be born' | nàlí-yà-ndí- | nàlí-yà-nd-é: | nàlí-yà-nd-è: |
|  |  |  | nàlí-yà-nd-ó: | nàlí-yà-nd-ò: |
|  | 'rinse self' | sámbílí-yà-ndí- | sámbílí-yà-nd-é: | sámbílí-yà-nd-è: |
|  |  |  | sámbílí-yà-nd-ó: | sámbílí-yà-nd-ò. |

I have also heard nonsubject participles that were entirely $\{L\}$-toned, but the forms given above are those given by my assistant in careful speech and appear to me to be basic.

The following examples show the difference between subject (532a) and nonsubject (532b) present negative participles.

| a. | nò: ${ }^{\text {L }} \quad$ yé | kóndò-nd-é: | mó |  |
| :--- | :--- | :--- | :--- | :--- |
|  | person | see | do.well-PresNeg-PplSbj.AnSg | Def.AnSg |
|  | 'a person who doesn't see well' |  |  |  |

b. kèngè ${ }^{\mathrm{L}}$ ó yé kóndò-nd-è: ké place ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ see do.well-PresNeg-PplNonSbj.InanSg.E Def.InanSg.E 'a place where you-Sg do not see well'

Two examples of subject participles with H-toned suffix -nd-é: occur in the textual passage (533).

'Among all of them, there is no-one who is as unable as he (= farmer) (to say) "here, take (this)!" Likewise, there is no-one who progresses less at work than he (= farmer).' (2005-1a)

For dàmb-é:, which occurs twice in this passage, see §8.4.1.

### 14.3.6 Participle of future negative verb (-ńd- $\mathbf{\alpha}$ :)

The participles are based on the inflected future negative (§10.1.4.3) with L-toned suffix -ńdì- following a verb with $L * H$ tones. The stem-final $H$ is realized on the $n$ of the suffix. The participles are mutating, and end in -è: and -ò: for both subject and nonsubject (but see comments below).

For both of my assistants, in positive participles the stem has the same tone formula $\mathbf{L} * \mathbf{H}$ as in the inflected future negative. That is, an initial L-tone and a stem-final H-tone are obligatory, with any remaining medial syllables being L-toned: monosyllabic <LH>, bisyllabic L. $<\mathrm{LH}>$, trisyllabic L.L. $<\mathrm{LH}>$, etc. The stem-final H distinguishes the future negative participle from the present negative participle (preceding section).

One assistant consistently gave the same forms (including tones) for the nonsubject participles as for the subject participles. In particular, the stem-final H-tone element was always audible. In this way, all future negative participles are clearly distinguishable from present negative participles, but at the cost of sacrificing an audible distinction between subject and nonsubject future negative participles.

The second assistant, in elicitation, sometimes gave nonsubject future negative participles identical to the corresponding subject participles, like the first assistant. I therefore take this pattern to be predominant. However, on other occasions his nonsubject future negative participles had $\{\mathrm{L}\}$-tones. In this fashion, the distinction between subject and nonsubject future negative participles is audibly expressed, but at the cost of partially merging the nonsubject future negative participles with the nonsubject present negative participles, which can also be $\{\mathrm{L}\}$-toned. This neutralization of categories cannot be recovered (by the listener) from other clues in the relative clause.

This may reflect leakage between present negative and future negative, which have considerable semantic overlap (the future is often used in Najamba to make general statements). Especially given the subtlety of the tonal distinctions, some confusion in direct elicitation (using French cues) is not surprising. Therefore the tables in (534) are based on the pattern, which I take to be basic, where subject and nonsubject future negative participles are identical in form, having the stem-final H -tone.

| gloss |  | main clause | participle |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | subject | nonsubject |
|  | 'come' |  | wǒ-ndì- | wǒ-nd-è: | wǒ-nd-è: |
|  |  |  | wǒ-nd-ò: | wǒ-nd-ò: |
|  | 'see' | yǎ-ndì- | yǎ-nd-è: | yǎ-nd-è: |
|  |  |  | yǎ-nd-ò: | yǎ-nd-ò: |
| b. | 'slaughter' | sèmǎ-ndì- | sèmǎ-nd-è: | sèmǎ-nd-è: |
|  |  |  | sèmǎ-nd-ò: | sèmǎ-nd-ò: |
|  | 'leave' | dògǎ-ndì- | dògǎ-nd-è: | dògǎ-nd-è: |
|  |  |  | dògǎ-nd-ò: | dògǎ-nd-ò: |
| c. | 'scrub' | tùgùjă-ndì- | tùgùjǎ-nd-è: | tùgùjǎ-nd-è: |
|  |  |  | tùgùjǎ-nd-ò: | tùgùjǎ-nd-ò: |
|  | 'be born' | nàlì-yǎ-ndì- | nàlì-yǎ-nd-è: | nàlì-yǎ-nd-è: |
|  |  |  | nàlì-yǎ-nd-ò: | nàlì-yǎ-nd-ò: |
|  | 'rinse self' | sàmbìlì-yǎ-ndì- | sàmbìlì-yă-nd-è: | sàmbìlì-yǎ-nd-è: |
|  |  |  | sàmbìlì-yǎ-nd-ò: | sàmbìlì-yǎ-nd-ò: |

The identity of subject and nonsubject participles is illustrated in (535a-b). The participle is tùgùjǎ-nd-ò: with stem-final H -tone in both examples.

| a.. | nò-mbò ${ }^{\text {L }}$ | [sò-ngó | kó] |
| :--- | :--- | :--- | :--- |
| person-Pl | [garment-InanSg.O | Def.InanSg.O] |  |
|  | tùgùjă-nd-ò: | bé |  |
|  | scrub-FutNeg-PplSbj.AnPl | Def.AnPl |  |
|  | 'people who will not scrub the garment' |  |  |

b. sò-ngò̀ ${ }^{\mathrm{L}}$ mí tùgùjǎ-nd-ò: kó
garment-InanSg. ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ scrub-FutNeg-PplNonSbj.InanSg.O Def.InanSg.O
'the garment that I will not scrub'

As in these examples, there are usually clues elsewhere in the relative clause that allow the listener to correctly identify the head in spite of the merger of subject and nonsubject participles. For example, the presence of a preparticipial pronominal subject ( 1 Sg ) in (535b) is sufficient to signal a nonsubject relative clause. Of course, selectional restrictions on subjects and objects are also helpful when the verb is e.g. 'slaughter', 'eat', 'chop', 'cook', or the like.

### 14.3.7 Participle of progressive negative verb (-njo-ǹd- $\alpha$ :)

This participle is closely related to the regular inflectable main-clause form for this category, which ends in -njò-ndí- (§10.1.4.5). In the subject participle, the stem has the same tone formula $((\mathbf{X})) \mathbf{H} *(\mathbf{L})$ as in the inflected forms, and the participial ending is mutating -é: or -ó: depending on agreement category. The nonsubject forms are segmentally identical but are $\{\mathrm{L}\}$-toned.
(536) Progressive negative participles

| gloss |  | main clause | participle |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | subject | nonsubject |
| a. | 'come' |  | wó-njò-ndì- | wó-njò-nd-é: | wò-njò-nd-è: |
|  |  |  | wó-njò-nd-ó: | wò-njò-nd-ò: |
|  | 'see' | yá-njò-ndí- | yá-njò-nd-é: | yà-njò-nd-è: |
|  |  |  | yá-njò-nd-ó: | yà-njò-nd-ò: |
| b. | 'slaughter' | sémà-njò-ndí- | sémà-njò-nd-é: | sèmà-njò-nd-è: |
|  | 'leave' |  | sémà-njo-nd-ó: <br> dógà-njò-nd-é: | sèmà-njô-nd-o. <br> dògà-njò-nd-è: |
|  |  | dógà-njò-ndí- | dógà-njò-nd-ó: | dògà-njò-nd-ò: |
| c. | 'scrub' | túgújà-njò-ndí- | túgújà-njò-nd-é: | tùgùjà-njò-nd-è: |
|  |  |  | túgújà-njò-nd-ó: | tùgùjà-njò-nd-ò: |
|  | 'be born' | nàlí-yà-njò-ndí- | nàlí-yà-njò-nd-é: | nàlì-yà-njò-nd-è: |
|  |  |  | nàlí-yà-njò-nd-ó: | nàlì-yà-njò-nd-ò: |
|  | 'rinse self' | sàmbìlì-yá-njò-ndí- | sámbílí-yà-njò-nd-é: | sàmbillì-njò-nd-è: |
|  |  |  | sámbílí-yà-njò-nd-ó: | sàmbìlì-njò-nd-ò: |

### 14.3.8 Participle of perfect verb (jòg-â:-)

The inflectable perfect construction ('have VP-ed') involves an inflected form of either $j o ̀-$ or $j o ̀ g-a ̂:-(\S 10.1 .3 .3)$. The corresponding participles are based on the longer form jòg-â:--

In subject participles, the main verb has its usual chaining form with lexical tone melody, e.g. /LH/ for 'get up' (537a-b).
a. èndè: ${ }^{\mathrm{L}}$
bèlí-yé
jòg-â:
mó
child $^{L} \quad$ get.up-MP Perfect-PplSbj Def.AnSg
'the child who has already gotten up'
b. òndè: ${ }^{\mathrm{L}}$ bèlí-yé jòg-â:-mbò bé
child. $\mathrm{Pl}^{\mathrm{L}}$ get.up-MP Perfect-PplSbj-Pl Def.AnPl
'the children who have already gotten up'

In elicitation, the regular pattern for nonsubject relatives is that both the participle jòg-à:- and the preceding main verb are subject to a wide-scope $\{\mathrm{L}\}$ overlay. I show this in tonosyntactic brackets followed by ${ }^{\mathrm{L}}$ superscript in (538).

| wàkàtit $^{\mathrm{L}}$ [òndô: bé] <br> time $^{\mathrm{L}}$ [child.Pl Def.AnPl] |  |  |  |
| :--- | :--- | :--- | :--- |
| $[$ bèlì-yè | jòg-à: $]^{\mathrm{L}}$ |  | ké |
| [get.up-MP | Perfect-PplNonSbj] $]^{\mathrm{L}}$ | Def.InanSg.E |  |

'the time when the children have already gotten up'

Textual example (539a) confirms the validity of this $\{\mathrm{L}\}$-toned pattern. However, textual example (539b) seemingly presents a distinct construction where the verb há:né 'ought' and the participle jòg-â: retain their tones. Follow-up elicitation revealed that in this version, the participle is optionally followed by the 'it is' enclitic $=y$, hence $j o ̀ g-a ̂:=y$, though the enclitic did not occur in this textual passage. This is exactly the main-clause form of jòg-â., leading me to think that jòg-â: twice in (539b) is really a main-clause rather than a participial form, even though the discourse context tends to favor a relative-clause reading.
a. $o$
[ó [gàn jòg-à:] ${ }^{\text {L }}$ dîn]
[ 2 SgSbj [put.in Perfect-PplNonSbj] all]
'everything you-Sg have put in' (<gǎn ) (2005-1a)
b. [[òlè ${ }^{\mathrm{L}}$-bàndí má] kán-lé há:né jòg-â:]
[[house ${ }^{\mathrm{L}}$-behind in] do-VblN ought Perfect-PplNonSbj]
kánà-mb-à: $=\grave{y}=b \varepsilon$ - $\varnothing$,
do-Fut-Pass $=$ it.is $=$ Past -3 SgSbj ,
[[[sònjǒ: ${ }^{\mathrm{L}}$ kùl] mà] kán-lé há:nè jòg-â:]
[[village ${ }^{\text {Linside] in] do-VblN ought Perfect-PplNonSbj] }}$
kánà-mb-â: $=\grave{y}=b \varepsilon ̀-\varnothing \quad$ [búndán má]
do-Fut-Pass=it.is=Past-3SgSbj [open.space in]
'what one was supposed to do behind (= at the edge of) the village, it used to be done (thus), (and) what one was supposed to do inside the village, it used to be done at the open space.' (2005-1a)

### 14.3.9 Participle of past verb $(=b-\grave{\varepsilon}:,=b-\grave{\partial}:)$

A verb form that ends in the conjugated past enclitic $=b \dot{\varepsilon}$ - or its negation $=b a ̌-l</=$ bà-líl in a main clause ( $\S 10.3 .1$ ) corresponds to a participle with $=b-\varepsilon$ : or $=b-\check{\text { : }}$ : in the positive subject participle, and with $=b-\varepsilon$ : or $=b-\grave{\jmath}$ : in the positive nonsubject participle. The negative counterparts have =bà-l-é: or =bà-l-ó: in subject relatives, and =bà-l-è: or =bà-l-ò: in nonsubject relative. However, in some combinations a morphologically positive participle of $=b \grave{\varepsilon}$ - is added to an already negated form of the same enclitic. The final vowel variation follows the usual rules for E and O agreement classes.

The following subsections illustrate particles for various past-time inflectional categories.

### 14.3.9.1 Participle of past imperfective (positive and negative)

The main-clause past imperfective contains $-m$ (L-toned), which replaces present tense $-n j o ̀-$ before the past enclitic (§10.3.1.5). Positive subject participles are in (540).
a. nò: ${ }^{\mathrm{L}}$ ŋ̀gîn bírà- $m=b-\varepsilon ̌$ : mó person ${ }^{\mathrm{L}}$ here work(v)-Pres=Past-PplSbj.AnSg Def.AnSg 'the person who used to work here.'

```
b. nò-mbò \({ }^{\mathrm{L}}\) ŋ̀gîn bírà- \(m=b-\check{0}\) : bé
person- \(\mathrm{Pl}^{\mathrm{L}}\) here work(v)-Pres=Past-PplSbj.AnPl Def.AnPl
'the people who used to work here.'
```

Negative subject participles are illustrated in in (541).
a. nò: ${ }^{\mathrm{L}} \grave{\text { g̀gú }}$
kánà-m = bà-l-é:
mó
person Prox.InanSg.O do-Pres=Past-Neg-PplSbj.AnSg Def.AnSg 'the person who didn't use to do that'

| b. | nò-mbò ${ }^{\text {L }}$ | ŋ̀gú | kánà-m-bà-l-ó: | bé |
| :--- | :--- | :--- | :--- | :--- |
|  | person-Pl <br> 'the people who didn't use to do that' | Prox.InanSg.O | do-Pres=Past-Neg-PplSbj.AnPl | Def.AnPl |

Positive nonsubject relatives are illustrated in (542).

[^1]Negative nonsubject relatives are in (543). The past enclitic is doubled, negative followed by positive.
a. í $k w a ̀-m=b a ̀-1-e ̀:=b-\grave{\varepsilon}$ :
1 PlSbj
eat-Pres=Past-PfvNeg-PplNonSbj.InanSg.E=Past-Ppl.NonSbjInan
ké
Def.InanSg.E
'what we didn't use to eat'
b. kòngò ${ }^{\mathrm{L}}$ í
thing ${ }^{\mathrm{L}} \quad 1 \mathrm{PlSbj}$
kànà- $m=b a ̀-l-o ̀:=b-\grave{~}$
do-Pres=Past-PfvNeg-PplNonSbj.InanSg.O=Past-PplNonSbj.InanSg.O
kó
Def.InanSg.O
'the thing that we didn't use to do'

### 14.3.9.2 Participle of future-in-past (positive and negative)

The future-in-past form is segmentally identical to the past imperfective, but it has the distinctive future stem-tone formula $\mathrm{L}^{*} \mathrm{H}$ with a single final H -tone (§10.3.1.7).

Below are relatives containing, respectively, a positive subject participle (544a), a positive nonsubject participle (544b), a negative subject participle (544c), and a negative nonsubject participle (544d). Here I gloss $-m$ (H-toned) as future, i.e. as an allomorph of future $-m b \hat{o}-\sim(3 \mathrm{Sg}$ portmanteau $-m)$ in main clauses (§10.1.3.4). The past enclitic is doubled in the negative participles.
a. nò: ${ }^{\mathrm{L}} \quad$ màmìlì-yá- $m=b-\varepsilon$ : mó
person ${ }^{\mathrm{L}}$ go.back-MP-Fut=Past-PplSbj.AnSg Def.AnSg
'the person who was going to go back'
b. dèクàn ${ }^{\mathrm{L}}$ mó màmìlì-yá-m $=b-\varepsilon$ : ké
day ${ }^{\mathrm{L}} \quad 3 \mathrm{Sg}$ Sbj go.back-MP-Fut=Past-PplNonSbj.InanSg.E Def.InanSg.E 'the day (when) he/she was going to go back.
c. nò: ${ }^{\text {L }}$ màmìlì-yá-m $=$ bà- $1-e ́:=b-\varepsilon ̌$ :
person ${ }^{\text {L }}$ go.back-MP-Fut=Past-PfvNeg-PplSbj.AnSg=Past-PplSbj.AnSg
mó
Def.AnSg
'the person who was not going to go back'

```
d. dè\etaàn }\mp@subsup{}{}{\textrm{L}}\quad\mathrm{ mó
day }\mp@subsup{}{}{L
màmìlì-yá-m = bà-l-é: = b-\varepsiloň:
go.back-MP-Fut=Past-PfvNeg-PplNonSbj.InanSg.E=Past-PplNonSbj.InanSg.E
ké
Def.InanSg.E
'the day (when) he/she was not going to go back'
```


### 14.3.9.3 Participle of past perfect (positive and negative)

The past perfect ( $\S 10.3 .1 .8$ ) is formed by adding the past enclitic to the chaining form of the verb in the positive, and to a perfective negative suffix complex in the negative (§10.3.1.8). The entire verb is $\{L\}$-toned in nonsubject relatives, whether the verb has lexical $/ \mathrm{LH} / \mathrm{or} / \mathrm{H} /$ melody. The examples below have, respectively, a positive subject participle (545a), a positive nonsubject participle (545b), a negative subject participle (545c), and a negative nonsubject participle (545d). The negative forms add the participle of the past enclitic to a perfective negative participle.

| a. | nò: ${ }^{\mathrm{L}} \quad$ màmílí-yé $=b-\varepsilon ̌:$ | mó |  |
| :--- | :--- | :--- | :--- |
|  | person | go.back-MP=Past-PplSbj.AnSg | Def.AnSg |
| 'the person who had gone back' |  |  |  |

b. dènàn ${ }^{\mathrm{L}}$ mó màmìlì-y $=b-\varepsilon ̀: \quad$ ké
day ${ }^{\text {L }} \quad 3 \mathrm{SgSbj}$ go.back-MP=Past-PplNonSbj.InanSg.E Def.InanSg.E
'the day (when) he/she had gone back.'
c. nò: ${ }^{\text {L }}$ màmílí-yá-l-é: $=b-\varepsilon ̌: \quad$ mó
person ${ }^{\text {L }}$ go.back-MP-PfvNeg-PplSbj.AnSg=Past-PplSbj.AnSg Def.AnSg 'the person who had not gone back'
d. dènàn ${ }^{\text {L }}$ mó
day ${ }^{\mathrm{L}} \quad 3 \mathrm{SgSbj}$
màmìlì-yà-l-è: $=b-\varepsilon$ :
go.back-MP-PfvNeg-PplNonSbj.InanSg.E=Past-PplNonSbj.InanSg.E
ké
Def.InanSg.E
'the day (when) he/she had not gone back'

Changing 'go back' to 'go down' (to illustrate with a verb that has $/ \mathrm{H} /$ lexical melody), the participial forms would be súgí= b-દ̌: (545a), sùgì=b-દ̀: (545b), súgó-l-é: $=b-\varepsilon ̌: ~(545 \mathrm{c})$, and sùgò-l-è: $=b-\grave{\varepsilon}:(545 \mathrm{~d})$. The $\{\mathrm{L}\}$ overlay in the nonsubject participles applies even to the three irregular verbs with /LHL/ and /HL/ melodies, e.g. dwè: $=b-\dot{\varepsilon}$ : 'arrived' or diǹ̀: $=b-\grave{\varepsilon}$ : 'found' in counterparts to (545b).

In textual passage (546), the $\{\mathrm{L}\}$ overlay on nonsubject participles is observed in the forms based on both the verb gòré with /LH/ melody and the verb túngé with /H/ melody. The speaker's point is that one can reverse the ends of a blanket without affecting its functionality.

'As for a blanket, having turned (= shifted) the part (= edge of the blanket) where you had (previously) stretched out your legs, you can pass (= shift) it toward the (= your) head, (and) if you turn (= shift) (the part) where (= under which) you had (previously) laid down your head, you can pass (= shift) it toward the (= your) feet.' (2005-1a)

### 14.3.10 Participle of stative verbs and quasi-verbs

Positive statives like tígà:- 'know' have two alternative participial formations.
One type is suffixal, like the present and future participles of regular verbs. The suffix -ngà is identical to that used in present positive participles. A stative example is tìgà- $\eta g$ à from 'know', animate plural tìgà- $\eta g a ̀-m b o ̀ . ~ A s ~ w i t h ~ s o m e ~ p r e s e n t ~ p o s i t i v e ~ p a r t i c i p l e s, ~$ all tones are L, or at least any structural H -tones in the stem are not reliably realized. There is no difference between subject and nonsubject participles.
a. nò-mbò ${ }^{\mathrm{L}}$ tìgà-ŋgà̀-mbò
bé
person-P1 ${ }^{\mathrm{L}}$ know-Pres.Ppl.Sbj-Pl Def.AnPl
'the people who know'
b. kòngò ${ }^{\mathrm{L}}$ mí tìgà-ŋgà kó
thing ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ know-Pres.Ppl.NonSbj Def.InanSg.O
'the thing (= what) I know'

A fuller list of suffixing -ŋggà participles of this type from stative quasi-verbs and derived stative stance verbs is in (548). jógò- 'have' (§11.5.1) is replaced by jò- in the participle. Elsewhere $j o ̀-$ is common as a perfect auxiliary, competing with jò-gâ:- (§10.1.3.3).
(548)

Suffixing participles of positive statives

| gloss | inflected | participle | with AnPl suffix |
| :---: | :---: | :---: | :---: |
| 'be' | bò- | bò-ŋgà | bò-ŋgà-mbò |
| 'can, be able' | jà- | jà-ıgà | jà-ŋgà-mbò |
| 'have' | jógò- | jò-ngà | jò-ngà-mbò |
| 'know' | tígà- | tìgà-ygà | tìgà-ŋgà-mbò |
| 'be sitting' | òbò- | òbò-ŋgà | òbò-ŋgà-mbò |
| 'want' | kíyò- | kìyò-ŋgà | kìyò-ŋgà-mbò |

The alternative is a mutating participle constructed by adding the long-vowel agreement suffixes directly to the stem. In this type, jógò- 'have' retains its bisyllabic form. Morphologically, this formation is akin to the perfective participle of regular verbs. The forms are in (549). I was unable to elicit forms of this type for 'can, be able'.
(549) Mutating participles of positive statives

| gloss | inflected form | participle |  |
| :---: | :---: | :---: | :---: |
|  |  | subject | nonsubject |
| 'be' | bò- | $b$-é: | $b$-ê: |
|  |  | b-ó: | $b-o ̂$ : |
| 'have' | jógò- | jóg-è: | jòg-è: |
|  |  | jóg-ò: | jòg-ò: |
| 'know' | tígà- | tíg-è: | tìg- ¢ |
|  |  | tíg-ò: | tìg-ò: |
| 'be sitting' | òbò- | ób-è: | òb-è: |
|  |  | ób-ò: | òb-ò: |
| 'want' | kíyò- | kíy-è: | kìy-è: |
|  |  | kíy-ò: | kìy-ò: |

The interchangeability of the two participial types is exemplified by (550a-b).
a. nò: ${ }^{\mathrm{L}}$ [mí gì] tíg-è: mó
person ${ }^{\mathrm{L}} \quad[1 \mathrm{Sg}$ Acc] know-PplSbj.AnSg Def.AnSg 'the person who knows me'
b. nò: ${ }^{\mathrm{L}}$ [mí gì] tìgà-ngà mó
person ${ }^{\text {L }} \quad[1 \mathrm{Sg}$ Acc] know-Pres.PplSbj Def.AnSg [=(a)]
bò- 'be' is also part of the periphrastic positive progressive -mbò bò-. The English-like mainclause forms are of the type bíró: bírà-mbò bò-m̀ 'I am working', with the uninflectable progressive suffix -mbò on the main verb, followed by the inflected form of bò- 'be' as
auxiliary (§10.1.3.5). The corresponding progressive participle simply replaces conjugated main-clause bò- by a corresponding participle. This can be either suffixed bò-ngà(-mbò) as in (548) above, illustrated in (551a-b), or a form from the mutating set $\{b$-é: b-ó: b-ê: b-ô:) as in (540) above, illustrated in (551c).
a. wàgàtí ${ }^{\mathrm{L}}$ bíró: bírà-mbò mí bò-ŋgà dîn time ${ }^{\mathrm{L}} \quad$ work(n) work(v)-Prog 1 SgSbj be-Stat.PplNonSbj all 'any time when I am working'
b. nò-mbò bíró: bírà-mbò bò- ${ }^{\mathrm{L}}$ gà-mbò bé
person- $\mathrm{Pl}^{\mathrm{L}}$ work(n) work(v)-Prog be-Stat.PplSbj-Pl Def.AnPl
'the people who are working'
c. nò-mbò ${ }^{\text {L }}$ bíró: bírà-mbò b-ó: bé
person-Pl work(n) work(v)-Prog be-PplSbj.AnPl Def.AnPl 'the people who are working'

Negatives of 'have' and of stative stance verbs such as 'be sitting' have inflected forms based on stative negative -ndí- after $\{\mathrm{L}\}$-toned stem (jògò-ndí 'he doesn't have', òbò-ndí 'he is not sitting'). The corresponding participles end in subject -nd-é; or -nd-ó: or in nonsubject -nd-è: or -nd-ò:, after the same $\{\mathrm{L}\}$-toned stem, e.g. jògò-nd-é: for 'have' and òbò-nd-é: for 'be sitting'.

The suppletive negative quasi-verb 'not be' is òndí ~ òndú. Its participles have mutating endings: subject participle ònd-é: or ònd-ó: (552a), nonsubject participle ònd-è: or ònd-ò: . Since òndí ~ òndú is also part of the progressive negative (after a main verb with uninflectable progressive suffix -mbò), these participles also occur in the progressive negative participle (552b).
a. [[sònjǒ: ${ }^{\mathrm{L}}$ kùll] mà] nò-mbò ${ }^{\mathrm{L}}$
ònd-ó: bé
[[village ${ }^{\mathrm{L}}$ inside] in] person- $\mathrm{Pl}^{\mathrm{L}}$
not.be-PplSbj.AnPl Def.AnPl 'the people who are not in the village'
$\begin{array}{llllll}\text { b. } & \text { nò-mbò }{ }^{\mathrm{L}} & \text { bíró: } & \text { bírà-mbò } & \text { ònd-ó: } & \text { bé } \\ & \text { person- } \mathrm{Pl}^{\mathrm{L}} & \text { work(n) } & \text { work(v)-Prog } & \text { not.be-PplSbj.AnPl } & \text { Def.AnPl } \\ & \text { 'the people who are not working' } & & \end{array}$

A fuller list of participles from suppletive negative statives is in (553). 'Not know' and 'not want' have -ATR $\{\varepsilon \rho\}$ vocalism in the participles, versus +ATR $\{\mathrm{e} o\}$ vocalism in the inflected stem, while 'not be' is $\{\mathrm{e} o\}$ in both. The subject participles have an H-tone, while the nonsubject participles are entirely $\{\mathrm{L}\}$-toned.

| gloss | inflected | subject | nonsubject |
| :---: | :---: | :---: | :---: |
| 'not be' | òndú- | ònd-é: | ònd-è: |
|  |  | ònd-ó: | ònd-ò: |
| 'not know' | éndà- | énd-غ̀: | ènd-غ̇: |
|  |  | ह́nd-ò: | ènd-ò: |
| 'not want' | kélà- | kél-è: | $k \stackrel{l}{1-\grave{j}}$ |
|  |  | kél-è: | kèl-ò: |

Examples with participles of 'not know' and 'not want' are in (554).
a. $n o ̀-m b \grave{o}^{\mathrm{L}}$
énd-ò:
bé
person- $\mathrm{Pl}^{\mathrm{L}}$ not.know-PplSbj.AnPl
Def.AnPl
'the people who do not know'

|  | nò-mbò ${ }^{\text {L }}$ | kél-ò: | $b$ |
| :---: | :---: | :---: | :---: |
|  | person-P1 ${ }^{\text {L }}$ | not.want-PplSbj.AnPl | Def.AnPl |
|  | 'the people who do not want' |  |  |


'There is nobody whom he dislikes more.' (2005-1a)

### 14.3.11 Participle of 'it is' $(=y)$ and 'it is not' (=lá) clitics

There is no participle based on the positive 'it is' enclitic $=y$ (and allomorphs). For singular reference, instead of saying e.g. '(the) one who is a dog', one simply says 'a/the dog'. However, one can work around this with a periphrasis when a universal quantifier is added. In this case, the 'it is' expression in its normal form is followed by particle gà, then by a participle based on bò- 'be'. gà is elsewhere a variant of the topic particle (§19.1.1). In (555a-b), however, one might conjecture that it is a vestige of an older *gà that is also preserved in non-perfective participial - $\eta g a ̀$, whose assimilating nasal is likely the same nonperfective morpheme found in $-m=b \grave{\varepsilon}$ (past imperfective, future-in-past, past stative), present -njò-, future -mbô-, and progressive -mbò.
a. nò: púlàndê: $=$ ỳ gà bò-ngà dîn
person Fulbe.Sg=it.is $\mathbf{P p l}(?) \quad$ be-Stat.Ppl.Sbj all
'any person who is a Fulbe'
$\begin{array}{llllll}\text { b. } & \text { nò- } m b \grave{o}^{\mathrm{L}} & \text { púlàndô: = y } & \text { gà } & \text { bò- } \eta g a ̀-m b o ̀ ~ & \text { dîn } \\ & \text { person }-\mathrm{Pl}^{\mathrm{L}} & \text { Fulbe. } \mathrm{Pl}=\mathbf{i t} . i s & \mathrm{Ppl}(\boldsymbol{?}) & \text { be-Stat.Ppl-Pl } & \text { all }\end{array}$ 'any people who are Fulbe'

The 'it is not' enclitic = lá has participial form $=1-\grave{\varepsilon}$ : . Compare the examples below with main-clause ǒm púlàndê: $=$ lá- $\varnothing$ 'this one is not a Fulbe'.
a. nò: ${ }^{\mathrm{L}}$ púlàndê: $=1-\grave{\varepsilon}$ : dîn
person ${ }^{\text {L }} \quad$ Fulbe. $\mathrm{Sg}=$ it.is.not.PplSbj.AnSg all
'any person who is not a Fulbe'
b. nò-mbò ${ }^{\mathrm{L}}$ púlàndû: $=1$-à: dîn
person ${ }^{\mathrm{L}} \quad$ Fulbe. $\mathrm{Pl}=$ it.is.not.PplSbj.AnPl all
'any persons who are not Fulbe'
c. nò: ${ }^{\mathrm{L}} \quad k \grave{n j \varepsilon^{\mathrm{L}}}{ }^{\mathrm{L}}$ né $=1-$ è: dîn
person ${ }^{\mathrm{L}}$ beer ${ }^{\mathrm{L}}$-drink.Agent=it.is.not-PplSbj.AnSg all 'anyone who is not a beer-drinker'
d. $\left[\grave{g} g w \varepsilon ̀:{ }^{\mathrm{L}} \quad\right.$ gémè $]=1-\grave{\varepsilon}: \quad$ dîn
[dog ${ }^{\text {L }}$ black]=it.is.not-PplSbj.AnSg all 'any dog that is not black' (lit. "[any] that is not a black dog")

### 14.3.12 Participle of passive verb

The passive, more correctly a nonspecific-subject construction, was described in $\S 10.5$. The positive participial form is $=b$-à:, identical to the inflectable form but without a following 'it is' enclitic. (557a) is a past passive relative, and (557b) is a present passive relative.
a. $\left[s W e{ }^{\text {: }}{ }^{\mathrm{L}}\right.$
$d a ̌ y=b-a ̀:$
yé]
bàlà-mbó-ìn
[garment.Pl ${ }^{\text {L }}$ lay.out=Past-Pass.PplSbj Def.InanPl] gather-Fut-1 SgSbj 'I will gather the clothes that have been laid out (on the ground).'
b. íyó bìrò: ${ }^{\text {L }}$
bírà-mb-à:
kó
today work(n) ${ }^{\mathrm{L}} \quad$ work(v)-Pres-Pass.Ppl.Sbj
Def.InanSg.O
'the work that is done nowadays'

In the negative, the forms elicited have passive $=b$-à: followed by a participle of 'it is not' enclitic $=$ lá-.
a. $\quad s W \grave{\varepsilon}:{ }^{\mathrm{L}} \quad d a ̌ y=b-a ̀:=1-\grave{\varepsilon}:$
yé
garment.P1 ${ }^{\mathrm{L}}$ lay.out=Past-Pass=it.is.not-PplSbj Def.InanPl
'the clothes that have not been laid out'
$\begin{array}{llll}\text { b. } & \text { sò- } \eta g \grave{o}^{\mathrm{L}} & \text { dǎy=b-à:=l-à: } & \text { kó } \\ \text { garment-InanSg. } \mathrm{O}^{\mathrm{L}} & \text { lay.out=Past-Pass=it.is.not-PplSbj } & \text { Def.InanSg.O } \\ \text { 'the garment that has not been laid out' } & \end{array}$

### 14.4 Relative clauses by grammatical function of head NP

In the sections below, examples are given of subject relatives and various types of nonsubject relatives. Most of the syntactic and morphological features have already been described, but for each type it is useful to see examples showing how the pieces combine.

### 14.4.1 Subject relative clause

The internal head representing the subject is maximally Poss-N-Adj-Num, as for any relative internal head. As with subjects in main clauses, the internal head is initial in the relative clause, except that adverbs may precede it. The internal head undergoes tone-dropping, indicated by a following ${ }^{\text {L }}$, on top of any tone-dropping that may have occurred internally. The verb is a participle, agreeing in intrinsic nominal features with the head, which in this case also happens to be the subject. A determiner and/or 'all' quantifier, if present, follow the participle, agreeing with the head. Other complements and adverbials have their regular mainclause forms and precede the participle.

```
a. ànè }\mp@subsup{}{}{\textrm{L}}\quadW\mathrm{ -é: mó
man come.Pfv-PpISbj.AnSg Def.AnSg
'the man who came'
b. ànè \({ }^{\mathrm{L}}\) wò-ŋgà mó
\(\operatorname{man}^{\mathrm{L}}\) come-Pres.PplSbj Def.AnSg
'the man who comes'
c. ànè \({ }^{\mathrm{L}}\) wò-f́gà mó
\(\operatorname{man}^{\mathrm{L}}\) come-Fut.PplSbj Def.AnSg
'the man who will come'
d. ànè \({ }^{\mathrm{L}}\) [mí gì] tígà-ทgà- \(\varnothing\)
\(\operatorname{man}^{\mathrm{L}}\) [1Sg Acc] know-Pres-PplSbj.AnSg
'the man who knows me'
e. ànè \({ }^{\mathrm{L}} \quad\left[\begin{array}{ll}m i ́ & g i ̀\end{array}\right] \quad\) énd-غ̀:
\(\operatorname{man}^{\mathrm{L}} \quad[1 \mathrm{Sg}\) Acc] not.know-PplSbj.AnSg
'the man who does not know me'
f. cìnù \({ }^{\mathrm{L}}\) dèn-ó:
rock \(^{\mathrm{L}}\) fall.Pfv-PplSbj.InanSg.O
'the rock that fell'
g. cì-mbò \({ }^{\mathrm{L}}\) dèn-ó:
rock-AnPl \({ }^{\mathrm{L}} \quad\) fall.Pfv-PplSbj.AnPl
'the rocks that fell' ('stone/rock' becomes "animate" in the plural)
```

h. tàyà ${ }^{\mathrm{L}}$ dèy-દ́:
granary ${ }^{\mathrm{L}}$ fall.Pfv-PpISbj.InanSg.E
'the granary that fell'
i. tà̀y $\grave{\varepsilon}^{\mathrm{L}}$ dèy-ध́:
granary.Pl ${ }^{\text {L. }} \quad$ fall.Pfv-PplSbj.InanPl
'the granaries that fell'
j. ànè ${ }^{\mathrm{L}} \quad$ dèn-é:
$\operatorname{man}^{\mathrm{L}}$ fall.Pfv-PpISbj.AnSg
'the man who fell'
k. ànà ${ }^{\mathrm{L}} \quad d \grave{\varepsilon} \eta-$ ó:
man. $\mathrm{Pl}^{\mathrm{L}} \quad$ fall.Pfv-PplSbj.AnPl
'the men who fell'

### 14.4.2 Object relative clause

### 14.4.2.1 Ordinary object relative clause

The object NP undergoes tone-dropping as internal head. It has no accusative marking. The subject, if pronominal, is expressed by s proclitic subject pronoun before the verb. There is no resumptive proclitic if the subject is already expressed by a nonpronominal NP. The verb is a participle agreeing with the object NP (i.e. with the head). A determiner and/or quantifier may follow the verb, agreeing in intrinsic features with the head.

In ( $560 \mathrm{a}-\mathrm{d}$ ), the head is the animate noun 'dog' or its plural. The verb stem is dènjé 'hit'.

c. j̀gwè: ${ }^{\text {L }}$ mí dènjă-ŋgà mó
$\left[\operatorname{dog}^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad\right.$ hit-Fut.PpINonSbj Def.AnSg]
'the dog that I will hit.'
d. j̀g ${ }^{2}$ è:-mbò ${ }^{\mathrm{L}}$ mí dènjǎ-ngà-mbò bé $\left[\begin{array}{lll}\text { dog.Pl }\end{array}{ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad\right.$ hit-Fut.PplNonSbj-Pl Def.AnPl 'the dogs that I will hit.'

In (561), the head noun is the inanimate $\mathrm{O} / \mathrm{E}$-class noun 'mango'. The verb stem is $j \hat{e}:$ ' 'bring'.
a. màngòrò mó $j$-ô: kó mango ${ }^{\text {L }}$ 3SgSbj bring.Pfv-PpINonSbj.InanSg.O Def.InanSg.O 'the mango that he/she brought' (< jô:)
b. màngèrè ${ }^{\mathrm{L}}$ mó
mango. $\mathrm{Pl}^{\mathrm{L}} \quad$ 3SgSbj bring.Pfv-PpiNonSbj.InanPl
yé
mango.P1 ${ }^{\text {l }} \quad 3 \mathrm{SgSbj}$ bring.Pfv
'the mangoes that he/she brought
c. màngòrò ${ }^{\mathrm{L}}$ mó jŏ:-ngà mango ${ }^{\mathrm{L}}$ 3SgSbj bring-Fut.PplNonSbj Def.InanSg.O 'the mango that he/she will bring'
d. màngòre ${ }^{\mathrm{L}}$ mó jŏ:-ngà mango. $\mathrm{Pl}^{\mathrm{L}} \quad 3 \mathrm{SgSbj} \quad$ bring-Fut.PplNonSbj 'the mangoes that he/she will bring'

In (562) the head is an inanimate E/E-class noun 'village'. The verb stem is yésee'.

|  | $\begin{align*} & \text { sònjò: }^{\mathrm{L}}  \tag{562}\\ & \text { village } \\ & \text { 'the village } \end{align*}$ | mí <br> 1 SgSbj <br> that I saw | $y-\hat{\varepsilon}:$ <br> see.Pfv-PpINonSbj.InanSg.E | ké <br> Def.InanSg.E |
| :---: | :---: | :---: | :---: | :---: |
|  | sònjè: ${ }^{\mathrm{L}}$ <br> village. $\mathrm{Pl}^{\mathrm{L}}$ 'the village |  | $y-\hat{\varepsilon}:$ <br> see.Pfv-PpINonSbj.InanPl | yé <br> Def.InanSg.E |
|  | $\begin{aligned} & \text { sìnjò: }^{\mathrm{L}} \\ & \text { village } \\ & \text { 'the village } \end{aligned}$ | mí <br> 1 SgSbj <br> that I wil | yă-ggà ké <br> see-Fut.PplNonSbj Def.I <br> see'  |  |
| d. | $\begin{aligned} & \text { sònjèz. } \mathrm{L} \\ & \text { village. } \mathrm{Pl}^{\mathrm{L}} \\ & \text { 'the village } \end{aligned}$ |  | $\begin{aligned} & \text { yă-ygà } \\ & \text { see-Fut.PpINonSbj } \end{aligned}$ ill see’ | ef.InanSg.E |

Textual examples of object relatives are in (563). In (563a), the overall NP containing the relative clause is the direct object of 'put' and is followed by the accusative marker. In (563b), four parallel object relatives are conjoined, with má 'and' at the end of each clause. The four clauses end in the same four words bé sár-è: yé má (indented), except that in the third clause the participle shifts to sár-ò: based on agreement with the head NP. The second clause really should also have sár-ò:; but the incantational quality of the "refrain" here interferes with agreement switches. (563c) is included here since the recipient of 'give' is treated as a direct object.

'the trees that they have asked us (about), and the beetles that they have asked us (about), and the wild animals that they have asked us (about), and the plants that they have asked us (about)' (2005-1a)
c. [jěnjà, ùsfǒ: nò: ${ }^{\mathrm{L}}$ ìdé jòg-â: díndì],
[God, road person ${ }^{\mathrm{L}}$ give Perfect-Ppl.NonSbj all],
ùsfõ: dùmè- $\varnothing$
road get.Pfv-3SgSbj
'(If there is) someone to whom God has given the (correct) path, (then) he has gotten the (correct) path. (2005-1a)

### 14.4.2.2 'What is called " $X$ ",

This construction involves the 'say' verb with suffix complex -mb-à:, which I take to be a participial (relative-clause) version of present passive $-m b-a ̀:=y$ (§10.5.3). The tones and vocalism of the 'say' verb here are consistent with this parsing. Examples are in (564).
a. [ǒm yà:] [yógé ${ }^{\mathrm{L}}$ kèjèmbèlè]
[Prox.AnSg Foc] [millet.Pl ${ }^{\mathrm{L}}$ blister.beetle]
gínà-mb-à: $\quad$ mó $=$ ý
say-Pres-Pass.PplSbj NearDist.AnSg=it.is
'That (deictic) [focus] is what is called "millet's blister beetle".'
b. èbíyè yà: [yógé ${ }^{\mathrm{L}}$ kèjèmbèl-mbò]
[Prox.AnPl Foc] [millet.Pl ${ }^{\mathrm{L}}$ blister.beetle] gínà-mb-à:-mbò bé=ý
say-Pres-Pass.PplSbj-Pl NearDist.AnSg=it.is 'Those (deictic) are what are called "millet's blister beetles" .'
c. [kèjèmběl gínà-mb-à: mó] ên òndí- $\varnothing$ [blister.beetle say-Pres-Pass.PplSbj Def.AnSg] here is.not-3SgSbj 'What they call "blister beeter" isn't (found) here.'

For a construction including participial -mb-à:; see 'water for drinking' type compounds in §5.1.10.

### 14.4.3 Possessor relative clause

The possessor NP is treated like any other relativized NP. The possessor noun is tonedropped. A tone-dropped possessor NP no longer controls the usual tone-dropping on the following possessum, which therefore reverts to its lexical tones, as though unpossessed. For example, kóngò 'thing' and bárkè 'blessed state' usually combine as kóngò ${ }^{\text {L }}$ bàrkè 'the thing's blessed state'. However, in (565a) kóngò is relativized on and drops tones to kòngò ${ }^{\text {L }}$, whereupon bárkè reverts to its lexical tones. (565b) is a similar elicited example. The possessor is bolded in interlinears.
a. kòngò ${ }^{\mathrm{L}}$ bárkè ó kwè jòg-à: díndì thing ${ }^{\mathrm{L}}$ blessedness] 2 SgSbj eat $^{\mathrm{L}}$ Perfect-PplNonSbj all] 'any thing whose blessedness you have eaten' (2005-1a.01)
b. nò: ${ }^{\mathrm{L}}$ párngá ó jàmìlè ${ }^{\mathrm{L}}$ jòg-à: dîn,
person ${ }^{\mathrm{L}}$ donkey 2 SgSbj steal $^{\mathrm{L}}$ Perfect-PplNonSbj all,
[ó gì] dìmbirá-r̀
[2Sg Acc] pursue-Fut. 3 Sg Sbj
'Any person whose donkey you have stolen will pursue you.'

### 14.5 Postpositions omitted when their complements are relativized on

My assistant omitted simple postpositions (dative, instrumental, locative) in examples like ( $566 \mathrm{a}-\mathrm{c}$ ). The missing postposition is bolded in the free translation. The complement of the postposition, as head NP, is tone-dropped. The participle has nonsubject form.
a. ${\underset{[\text { gùlà }}{ }{ }^{\mathrm{L}}}^{\mathrm{L}}$
té:
rewood
mí
kóyò-ŋgà
mó]
[ax ${ }^{\text {L }}$
1 SgSbj
chop-Pres.PplNonSbj
Def.AnSg]
dìbè- $\varnothing$
be.lost.Pfv-3SgSbj
'The ax with which I chop firewood has been lost.'


The overt PPs that would occur in corresponding main clauses are gùlâ: mà 'with (by means of ) an ax', nǒ: mà 'to a person' (dative)', and ólé ${ }^{\text {L }} k u ̀ l ~ m a ̀ ~ ' i n(s i d e) ~ a ~ h o u s e ' . ~$

The listener must use context to infer the exact grammatical function of the head NP in the examples in (566). The distinction between subject and nonsubject participles is helpful in this regard. For example, in (566b), the nonsubject participle gìn- $\hat{\varepsilon}$ : is a clue that excludes the reading 'the person who told me this', which would have gìn- $\varepsilon$ : with final H -tone (it would also have 1 Sg dative ḿ mà). Also relevant is the fact that the postposition mà is used in a variety of functions (dative, instrumental, locative, allative, ablative), so its omission in relative clauses is not as serious as it would be in a language that put a greater functional load on multiple basic postpositions.

Compound postpositions such as [[tìmô: ${ }^{\text {L }}$ dù:] mà 'under a tree' (literally "at the bottom of a tree") are syntactically PPs with possessed noun ('tree's bottom') as complement. In such cases, when the real complement ('tree') is relativized on, the "possessed" noun ('bottom') is freed from the possessor's tonosyntactic control, as described in $\S 14.4 .3$ above. This is seen in (567), where 'tree' becomes tone-dropped tìmò: ${ }^{\text {L }}$, while dû: 'bottom' appears with its lexical tone melody.

| [tìmò: | [dû: | mà $]$ | bé | b-ô:: | kó] | dèỳ̀- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\left[\right.$ tree $^{\mathrm{L}}$ | $[$ bottom | in $]$ | $3 P 1 S b j$ | be.Pfv-Ppl.O | Def.InanSg.O] | fall.Pfv-3SgSbj |

'the tree under which they were has fallen.'
This is literally "the tree that they were [at the bottom]."

## 15 Verb (VP) chaining and adverbial clauses

### 15.1 Chaining

### 15.1.1 Major types of chain

This chapter describes the ways verbs, VPs (without subjects), and to a lesser extent clauses (including subjects) can be combined. A basic distinction is made between direct chains, with no subordinating morpheme, and a wide range of looser chains that do include a subordinator. In all cases, the final verb, VP, or clause in the chain has full main-clause inflection (AN morpheme, pronominal-subject suffix), while nonfinal elements are reduced.

In a direct chain, two or more verbs are directly adjacent, except that in nonsubject relative clauses they may be separated by a pronominal-subject proclitic. The final verb has full inflections. The nonfinal verb(s) are in the chaining form (§10.1.2), which is either the E-stem or the I-stem depending on verb type, and respects the verb's lexical tone melody. There is no subordinating morpheme. NPs and other non-verb constituents precede the entire verb chain.

Direct chains can be thought of as verb-verb compounds, but they do not fuse into a single word prosodically. The component verbs may denote simultaneous or overlapping coevents, i.e. different aspects of a single event. Or they may denote tightly sequenced events that cohere conceptually into a single complex event.
a. dèné tìb-à:
fall die.Pfv-3PlSbj
'They fell and died.' (= 'They died from falling.')
b. kwé sìnè-m
eat be.sated.Pfv-1SgSbj
'I got full by eating.' (= 'I ate and my hunger was satisfied.')
Direct chains appear in several of the following sections within this chapter. First, however, I introduce the most important types of loose chain including a subordinator.

Loose chains are less tightly fused into compound-like combinations. The subordinated element may be a VP including complements and adjuncts. In most types, the subjects of the two VPs are coindexed and are not repeated, but some types are clausal and allow separate specification of subjects. The primary subordinators are those in (569).
a. -mbò 'and (then)' same
b. -mbò progressive same
c. nè sequential same
d. $-n$ (various)
e. mé 'if' or sequential
different
same or different

Conditional mé 'if' or 'when' is described in the following chapter, see especially $\S 16.1 .5-6$ on temporal-sequencing functions.

The remaining subordinators in (569) are covered in sections §15.1.3-6 below, after the section on morphosyntax of direct chains. Several constructions involving relative clauses are the subject of the remainder of this chapter (§15.2).
'And (then)' -mbò and sequential nè are closely related. However, the two -mbò subordinators are sharply distinct in both meaning (temporal profile) and the shape of the verb stem. The most obvious difference in forms is vocalism: the stem ends in $a$ or $o$ before the progressive suffix, but in $\left\{\begin{array}{c}\text { e } i\}\end{array}\right.$ or (after syncope of/i/) zero before the 'and (then)' suffix.
'and (then) -mbò progressive -mbò
a. form

| stem segments | chaining form | A/O-stem |
| :--- | :--- | :--- |
| stem tones | $(\mathrm{X}) \mathrm{H}^{*}((\mathrm{~L}))$ | $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ |

b. meaning
temporal profile often sequential overlapping

### 15.1.2 Morphosyntax of direct chains

### 15.1.2.1 Verbal noun of directly chained verbs

Verbs that are directly chained, without a linking morpheme (e.g. -mbò, nè), may form a verbal noun. The nonfinal verb appears in $\{\mathrm{L}\}$-toned form as a compound initial. The final takes its normal verbal-noun shape with suffix -lé(§4.2.3.1).
a. $k w \grave{c}^{\mathrm{L}}-[$ [sín-lé]
'eating and (= until) being satisfied’ (<kwé, sín $\mid$ sìnè )
b. dènغ̇ ${ }^{\mathrm{L}}$-[tíbí-lé] 'falling down and dying' (<dèné, tíbé $)$

Verbal nouns are not normally formed from loose chains.

### 15.1.2.2 Negation of direct chains

The only way to negate any portion of a direct chain is to negate the entire sequence, with the negative morpheme appearing on the final verb. For example, the negated direct chain (572) denies that the combination of falling and dying took place.

| dèyモ́ | tíbá-l- $\varnothing$ |
| :--- | :--- |
| fall | die-PfvNeg-3SgSbj |

'He/She didn't fall down and die.'
There is really no way to negate just the final verb or VP. For a way to negate just the nonfinal verb or VP ('without VPing'), see §15.1.4.4 below.

### 15.1.2.3 Arguments of directly chained verbs

The issue of possible restrictions on arguments of verbs arises especially in the case of direct chains without intervening subordinators. Direct chains entail considerable conceptual integration of the two co-events. When both chained verbs are transitive, they typically have the same arguments including objects, which are therefore unproblematically expressed before the verb chain (573).

| gǒn-gó | téń | dòg-à: |
| :--- | :--- | :--- |
| waterjar-InanSg.O | set.down | leave.Pfv-3PISbj |
| 'They put $(=$ set $)$ down and left a waterjar.' |  |  |

### 15.1.2.4 Verbs that specialize in direct chains

Some verbs and semantic verb classes are especially common in chains. For example, găn 'put' occurs in wǎl gǎn 'ladle (out) and put', i.e. 'serve (food, from cooking pot to eating bowl), twé găn 'sow (and) put', i.e. 'oversow, sow seeds in spots where the first seeds did not sprout', and $\begin{gathered}\text { ré g gann 'draw (water) and put (it) in (container)'. }\end{gathered}$

Some other common chain-final verbs are described in the following sections. See also §17.5 for examples where chained VPs function semantically as subordinated clauses, in the fashion of English control-verb constructions.

### 15.1.2.5 Direct chains ending in dògé ‘leave’ or $s w \varepsilon ́ \varepsilon$ 'pour, spill'

As in other Dogon languages, dògé 'leave, abandon' may follow another verb where it would be omitted (but implied) in English. For example, English I put the kettle down implies that the kettle was left in that position (at least for a time); this is typically made explicit in Dogon languages.

| Sátàlà: | bèjí | dògè-ḿ |
| :--- | :--- | :--- |
| kettle | put.down | leave.Pfv- 1 SgSbj |
| 'I put down | and left the kettle.' |  |

swé 'pour, spill' and its mediopassive sí-yé occur in a more abstract sense in several recurrent chain combinations, including àbí swé '(rifle) fail to discharge bullets properly' (literally "catch spill"), and in $d \grave{g} \varepsilon ́ ~ s i ́-y \varepsilon ́ ~ ‘ a b a n d o n ’ ~(l i t e r a l l y ~ " l e a v e ~ s p i l l ") . ~$

### 15.1.2.6 Direct chains ending with a motion or conveyance verb

Verbs of motion ('go', 'come', 'enter', 'exit', 'pass', etc.) and their transitive counterparts the verbs of conveyance ('bring', 'take [there]', etc.) can be directly chained to a preceding verb. The motion verb expresses directionality. This use of motion/conveyance verbs is useful in a language without allative or allative postpositions.

```
a. with tí\etag\varepsiloń 'pass by, go past'
    tómbí tíngé 'jump over/across'
    d\grave{lé tí\etag\varepsiloń 'intrude by overstepping (e.g. into a neighboring field)'}
    wùjí tíngé '(bird) swoosh by'
    gǐy tí\etag\varepsiloń 'step over (something)'
    b. with \etaw\varepsiloń 'go in'
        y\grave{b\varepsiloń \etaw\varepsiloń 'travel to a distant location (for work)' (lit. "run and go in")}
        tómbí \etaW\varepsiloń 'jump in'
```

When the motion event precedes in time a second action, it is implied that the motion was undertaken in order to carry out that action. A purposive construction (§17.6.1) is then indicated.

### 15.1.3 Same-subject past anterior -mbò 'and (then)'

In this same-subject 'and (then)' construction, the first VP is subjectless (i.e. like a gerund), and its verb ends in invariant -mbò. This is not the progressive suffix -mbò (§10.1.3.5), although the latter does occur in chains with progressive aspectual character ( $\S 15.1 .4$ below). Verb stems have different forms before progressive -mbò and 'and (then)' -mbò, and they specify distinct temporal relations vis-à-vis the following main clause.

In the 'and (then)' construction, the stem preceding -mbò is segmentally identical to the chaining form ( $\S 10.1 .2$ ), which is based on the E-stem for some verbs and on the I-stem for others. The tone formula for the stem is $\mathbf{( X ) H *}(\mathbf{( L )})$, hence H-tone for a monomoraic monosyllabic, lexical tones for a bimoraic stem, and lexical tones plus a presuffixal L-tone for trisyllabic and longer stems.

The main clause following 'and (then)' -mbò is fully inflected, unless that clause is itself subordinated to another clause at a higher level.

The gloss 'and (then)' is deliberately hedged. In most examples not followed by a motion verb or by 'say', the two events described are understood to have occurred in sequence, so that 'and then' would be a good gloss. However, there are some constructions where chronological sequencing is not indicated, so 'and' but not 'and then' would be correct.

The 'and (then)' construction competes with direct chains as described above, since in both cases the two (co-)events in question have some degree of conceptual integration and require subject coindexation. While there is some functional overlap, direct chains are likely to denote simultaneous co-events, and they do not readily allow independent elaboration of each VP. The 'and (then)' construction is compatible with chronological sequencing and readily allows separate elaboration of the two VPs, whereby each may have its own complements and/or adjuncts.

The 'and (then)' subordinator -mbò also competes with the sequential nè subordinator (§15.1.5). Both are same-subject subordinators, often specifying chronological sequencing. The main difference is that the entire event sequence is construed as completed with -mbò, and as not yet completed (e.g. future, present habitual) with nè. In addition, -mbò occurs in relatively tight VP-chains, in constructions with one subordinated VP and one main clause. $n \grave{\varepsilon}$ chains are looser, and long stretches of narrative may consist entirely of nè VPs strung together. See also the discussion of $(578-579)$ below.

Elicited examples of 'and (then)' -mbò are in (576). Interlinears use 'and.SS'.
a. dèné-mbò tìb-à:
fall-and.SS die.Pfv-3PlSbj
'They fell and died.' (= 'They died from falling.')
b. kwé-mbò sìnè-m
eat-and.SS be.satisfied.Pfv-1SgSbj
'I got full by eating.' (= 'I ate and my hunger was satisfied')

The 'and (then)' construction with -mbò allows each verb to immediately follow its own natural complements. In (577a), an intransitive verb is loosely chained to a following transitive, which is preceded by its complement. In (577b), both verbs are preceded by their respective complements or adjuncts.
a. yòbé-mbò
[ [gǒn-gó
kó] tènغ̀- $\varnothing$
run-and.SS [[waterjar-InanSg.O Def.InanSg.O] set.Pfv-3SgSbj
'He/She ran and put down the waterjar.'


Textual examples follow. (578a) actually contains two subordinated VPs, one with nè and the other with -mbò, each followed by a main clause (in one case, an imperative). Each
subordinator, nè and -mbò, has a subject coindexed to that of the following main clause, and both subordinators specify a chronological sequence. nè is followed by an imperative, i.e. the entire overall sequence is hypothetical and in the future. The -mbò version is more tightly chained than the $n \varepsilon \begin{aligned} & \text { version, and seems to be perfective (already completed). }\end{aligned}$

'Learn your work and do (it)! If you aren't performing your work after having first learning it, ...' (2005-1a)
b. [nwé-mbò [[é gì] sàrè- $\varnothing]]$ kán-ná,
[hear-and.SS [[2Pl Acc] ask.Pfv-3SgSbj]] be.done-Hort.3Sg,
é wé-mbò kúndé [mó mà] dàmgì-yè

2PISbj come-and.SS one.AnSg [AnSg Dat] speak-MP-Pfv kán-ná
be.done-Hort.3Sg
'(Or) be it that he has heard (and) he has asked you-Pl, or be it that you-Pl came and one (of you) has spoken with him.' (2005-1a)

The relative tightness of 'and (then)' -mbò is also suggested by occasional bracketing mismatches, where a constituent to the left of the -mbò verb belongs logically with the following main-clause verb. This is the case with 'the waterjar' in (579). The 'and (then)' verb has gravitated to a position adjacent to the other verb, but it stops short of the compoundlike fusion in direct chains.

| [gǒn-gó | kó] | pwé-mbò | jènjè- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [waterjar-InanSg.O | Def.InanSg.O] | go.in-and.SS | pick.up.Pfv-3SgSbj |

'He/She went in and picked up the waterjar.'

Some larger constructions include an 'and (then)' VP with -mbò. In addition to those described just below, see $\S 15.2 .6$ on a construction with participial gìn-ô: 'say' following an 'and (then)' VP, and $\S 17.5 .1 .1$ for $j \varepsilon$-mbò 'after having ...'. For jànjí-mbò 'on purpose', see (667) in §17.6.1.

### 15.1.3.1 'And (then)' -mbò plus motion verb

In one large set of textual examples, 'and (then)' -mbò occurs with a following motion verb (580). In this combination, the two verbs do not have to denote sequenced events. In (580a) 'speak' and 'go out' are not sequenced (at least not in that order). In (580b), 'go', 'go around', and 'go back' are sequenced, but 'go back' and 'come' are simultaneous co-events
with 'come' specifying direction. (580b) also contains the construction with 'and (then)' -mbò plus 'say' construction covered in §15.2.6.

b. [hâl íyó] í-mbò [[kéré má] sǎy
[until today] go-and.SS [[outback in] now yàlí-yè-mbò] í gìn-ô:, go.around-MP-and.SS] 1PlSbj say.Pfv-PplNonSbj.InanSg.O, màmìlí-yè-mbò wè-ý
go.back-MP-and.SS come.Pfv-1P1Sbj
'Even today we have gone into the bush (outback) and walked around now, and we have come back.' (2005-1a; /ín-mbò/ 'go-and')
c. íyó [í mà] wé-mbò jwè- $\varnothing$ kǒy $\nearrow$ today [1P1 Dat] come-and.SS go.in.Pfv-3SgSbj Emph 'It (= work) has indeed come in to us nowadays (= recently).' (2005-1a)

### 15.1.3.2 gìné-mbò 'say'

gìné-mbò 'say and ...' is combined with an inflected form of perfect jògò- 'have' in (581). The context suggests a sense along the lines of 'although (you say/know that ...)'.

| [[bè ${ }^{\text {L }}$ dîn] [ó | [ó | ${ }^{\mathrm{L}}$ dùmè: $]=$ y | gìné-mbò | jòg-ò:] |
| :---: | :---: | :---: | :---: | :---: |
| [[3P1 ${ }^{\mathrm{L}}$ all] [2 | [2SgPoss | ${ }^{\text {L }}$ animal. Pl$]=\mathrm{it}$.is | say-and.SS | have-2SgSbj] |
| [ǒm | [ó | gì] dìmb | yá-m̀] |  |
| [NearDist.AnSg | g $\quad[2 \mathrm{Sg}$ | Acc] foll | PP-Fut.3Sg |  |
| [ǒm | [ó | gì] dìmb | à-ndí- $\varnothing]$ |  |
| [NearDist.AnSg | gg [2Sg | Acc] follo | MP-FutNeg | SgSbj] |

'Although all of them are your animals, this one (= the favorite) will follow you (and) this (other) one does not follow you.' (2005-1a)
gìné-mbò also occurs in purposive clauses expressing an agent's intentions, see §17.6.2.

### 15.1.4 Progressive -mbò '(while) VP-ing'

In §15.1.3 above I took pains to distinguish the 'and (then)' loose chaining suffix -mbò from the progressive suffix -mbò. Progressive -mbò requires the $\mathrm{A} / \mathrm{O}$-stem of the verb rather than the chaining form, and it imposes a stem tone formula $((\mathrm{X})) \mathrm{H}^{*}(\mathrm{~L})$ that is audibly distinct from
$(\mathrm{X}) \mathrm{H}^{*}((\mathrm{~L}))$ with bimoraic stems (HL versus XH$)$. Both the stem-vocalism and tonal differences are clear in the contrast between dè $\ell \varepsilon$ - $m b o ̀$ 'fall, and then ...' and progressive dénà-mbò bò- 'is falling'. Examples follow.

### 15.1.4.1 Progressive -mbò before a motion verb

A loose chain with progressive suffix -mbò on the chained verb occurs when the motion event is continuous and simultaneous with another process (582).
[ $\eta$ wànǎ: $\eta w a ́ n a ̀-m b o ̀] ~ w-o ̂: ~$
[song sing-Prog] come.Pfv-3PlSbj
'They came singing.'

The regular main-clause progressive (§10.1.3.5) uses bò- 'be (somewhere)' as an auxiliary. That construction is parallel in structure to the one in (582).

### 15.1.4.2 Progressive -mbò before a time-of-day verb

In (583a-b), a time-of-day verb such as né: 'spend the night' or dèné 'spend the (mid-)day' specifies an extended but bounded time interval that a chained activity VP in progressive form (A/O-stem plus mbò) more or less fills up.

b. [bíró: bírà-mbò] dènè-ý
[work(n) work(v)-Prog] spend.day.Pfv-1P1Sbj
'We worked all day.' (= 'We spent the day working.')

When the time period ('day' or 'night') is an interval during which an event (perhaps punctual) took place, a simple temporal adverbial such as a PP is used. The noun denoting the time period ('day', 'night', etc.) is the complement of a locative postposition such as mà 'in' or kùl mà 'inside' (584).

| [nám | má $]$ | dénè $\varnothing \varnothing$ |
| :--- | :--- | :--- |
| $[$ night | in] | fall.Pfv-3SgSbj |

'He/She fell down at night.'

### 15.1.4.3 Progressive jógò-mbò 'have/take with'

There is no suppletive chained element meaning 'taking (something) along', similar to forms of this type in Jamsay and some other eastern Dogon languages. The quasi-verb 'have' may
be used in this sense. In (585), jógò is chained (as it often is in this construction) to a following motion verb.
a. [mó kà] [kó gì] jógò-mbò innè- $\varnothing$ mé [AnSg Top] [InanSg.O Acc] have-Prog go.Pfv-3SgSbj if 'if he for his part has gone taking that with him' (2005-1a)
b. [nǒ: mó] [kó gì] jógò-mbò ìnó-m̀ [person Def.AnSg] [InanSg.O Acc] have-and go-Fut.3SgSbj 'The person will take it along with him.' (2005-1a)

### 15.1.4.4 Progressive negative 'without VP-ing' (-lì bó-mbò )

The 'without VP-ing' construction includes a perfective negative suffix on the nonfinal verb with progressive bó-mbò or a contraction thereof. This allows the speaker to specifically negate a nonfinal chained VP without negating the final VP.

In textual example (586a), the perfective negative suffix has L-toned form -lì, and is followed by a progressive form of bò- 'be'. This combination is chained as a whole to a following same-subject verb or VP. In the text, this was followed in short order by (586b), which compresses the two-word 'without' phrase into a single word. In other textual examples, (586c) is similar to (586a) while (586d) has the same fusion seen in (586b). (586e) resembles (586a,c), but its -mbò is the 'and (then)' rather than progressive subordinator.
a. [bìrá-lì bó-mbò] dùmí-yà-ndí- $\varnothing$
[work(v)-PfvNeg be-Prog] get-MP-PresNeg-3SgSbj
'It (= gain) is not gotten without working.' (2005-1a)
b. [bìrá-l-mbò
là] dùmí-yà-ndí
[work(v)-PfvNeg-Prog also] get-MP-PresNeg-3SgSbj
'It (= gain) is furthermore not gotten without working.' (2005-1a)
c. [áyá-lì bó-mbò]
[become.weary-PfvNeg be-Prog]
[kòngò ${ }^{\mathrm{L}}$ ó dùmà-ŋgà kà] ${ }^{\mathrm{L}}$ kòngò òndú- $\varnothing \quad$ kǒy [thing ${ }^{\text {L }}$ 2SgSbj get-Pres.PplNonSbj Top] ${ }^{\text {L }}$ thing not.be-3SgSbj Emph 'Without (your) getting tired, there is definitely nothing that you get.' (2005-1a)
d. sà:gú-mbó nô:y, [táwè [ ŋ̀gí mà] màmílí-yá-l-mbò]
month-Pl two, [perhaps [Prox.InanSg.E in] go.back-MP-PfvNeg-Prog] [[ké mà] bírà-mbò bă-m̀ ] [[NearDist.InanSg.E in] work(v)-Prog remain-Fut.3SgSbj
'(He may go and stay there) for two months, perhaps without coming back here, he may remain there working.' (2005-1a)

```
e. [[bíró: kó] mà] \etawá:-lì bó-mbò,
[[work(n) Def.InanSg.O] in] go.in-PfvNeg be-and.SS,
bàyé-y mé`
learn.Pfv-1PlSbj if
'if we learn before we go into (= while we have not yet gone into) the work'
(2005-1a)
```


### 15.1.5 Same-subject nonpast sequential nè 'then'

The particle $n \grave{\varepsilon}$ may be added to a VP ending in a verb in its chaining form (§10.1.2). A ǹ̀ VP is nonfinal, so only the final clause has fully inflected form. The subjects of the relevant clauses are coindexed. The events described are normally understood to occur in sequence, and the sequence is not viewed as completed. The particle is glossed 'then.SS' (for "same subject") in interlinears.

```
a. té:-\etagó kér\varepsiloń n\varepsiloǹ, [bèlí-y\varepsiloń n\varepsiloǹ] ìnò-mb-ô:
firewood-Sg gather then.SS, [get.up-MP then.SS] go-Fut-2SgSbj
'You-Sg will gather firewood and get up and go.' (2005-1a.01)
```

b. $[y \varepsilon ́ ~ n \varepsilon ̀] ~ e ́ n d a ̀:-W ~ W ~$
[see then.SS] not.know-2SgSbj
'(if) you saw it and didn't know it' (2005-1a.01)
c. [í yà:] [óbí-y nè] dôm dámà-nj-è:
[1Pl Foc] [sit-MP then.SS] speech speak-Pres-Ppl.SbjFoc 'it's we [focus] who sit and speak the words' (2005-1a)
$\begin{array}{llll}\text { d. } & {[\text { ínjé }} & \text { dìyé } & n \grave{\varepsilon}]\end{array} \quad$ wó-ìm
'He/She will bathe and (then) come.' (= 'Having bathed, he/she will come.')

If the event sequence is viewed as completed, the form with same-subject past sequential -mbò (§15.1.3) is used instead of nè. Compare (587d) above with (588).

```
ínjé dìy\varepsiloń-mbò wè-\varnothing
water bathe-and.SS come.Pfv-3SgSbj
```

' $\mathrm{He} /$ She bathed and then came.'

In narrative style, long strings of VPs with $n \grave{\varepsilon}$ can pile up, preceding a final main clause. In some passages the sequence of $n \grave{\varepsilon}$ VPs goes on and on and has no clear termination. See, for example (723) in the sample text, which has eight such VPs in short order.
$n \varepsilon ̀ ~ i s ~ a l s o ~ f o u n d ~ i n ~ s a m e-s u b j e c t ~ c o m p l e m e n t ~ c l a u s e s ~ w i t h ~ m a i n-c l a u s e ~ v e r b ~ ' w a n t ', ~ a s ~ i n ~$ 'I want [to go]'. In this case, sequencing is not indicated. See $\S 17.2 .1$ for examples and details.

Unlike adverbial nغ̀, which is heard as nè after adverbials with $\{e o\}$ vocalism, samesubject nè is invariant in form. An example showing this is [óbí-y nè] (not \#óbí-y nè) in (587c).

### 15.1.5.1 Chains beginning with mùľ́ nè 'come together and ...'

mùlह́ 'be/do together' may occur a VP with nè, loosely chained to a following clause with an activity verb.

| (589) | [mùlé | $n \grave{\varepsilon}]$ | ìnǒ-mb-à |
| :---: | :---: | :---: | :---: |
|  | [get.together | then.SS] | go-Fut-3PiSbj |
|  | 'They will ga |  |  |

Example (589) could be freely translated as 'they will go together'. In English, the act of assembling (before carrying out a joint activity) is usually unexpressed, but in Dogon languages it is usually overt.

Najamba has an alternative '(do) together' construction with a simple adverb š̌: (§18.3.2).

### 15.1.5.2 'Maybe' (nè bă-m̀ )

Possibility is expressed by converting the main proposition into a loosely chained samesubject sequential clause with $n \varepsilon \begin{gathered}\text { as } \\ \text { described in the preceding section. This is followed by }\end{gathered}$ the invariant form bă-m̀ 'it will be' (590a). It is possible to construe the two constructions as sequential if bă-m̀ is taken to refer to a post-event situation. For example, (590a) could be construed as 'It will be (the case) that rain has fallen'.

The corresponding negation has a perfective negative verb followed by kán 'be done, happen' and the adverbial nè (590b). See §17.3.4 for similar constructions with kán.
a.

| $[$ à:lé | tégé | $n \grave{\varepsilon}]$ | bǎ-m̀̀ |
| :--- | :--- | :--- | :--- |
| $[$ rain(n) | rain.fall | then.SS] | be-Fut. 3 SgSbj | 'Maybe it will rain.'

b. [à:lé tégá-l kán nè] bă-m̀
[rain(n) rain.fall-PfvNeg happen then.SS] be-Fut. 3 SgSbj
'Maybe it won't rain.'

### 15.1.6 Different-subject -n

A verb stem is directly followed by suffix $-n$ in a different-subject (DS) clause. A pronominal subject is expressed by a preverbal pronominal proclitic, from the same series used in nonsubject relatives.

### 15.1.6.1 E-stem (perfective) and A/O-stem (non-perfective) variants of -n

There are two forms of the verb, with distinct vocalism, ending in different-subject subordinator $-n$. Both are $\{\mathrm{L}\}$-toned, except for the three verbs with lexical falling melody ('bring', 'arrive', 'find'), which as usual keep their lexical tones. One form is based on the E-stem of the verb. The other is based on the A/O-stem of the verb, and therefore, in addition to the final $a$ or $o$, has obligatory + ATR $\{\mathrm{e} o\}$ vocalism in the rest of the stem. Examples of the forms are in (591).

| gloss | chaining form | $-n(\mathrm{E}-$ stem $)$ | $-n(\mathrm{~A} / \mathrm{O}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 'go' | ín | ìnè̀n | ìnò-n |
| 'look' | tár | tàrè̀-n | tàrà-n |
| 'run' | yòbé | yòbè-n | yòbà-n |
| 'say' | gìné | gìnè-n | gìnà-n |
| 'bring' | jê: | $j e ̂:-n$ | jô:-n |
| 'find' | dìnê: | dìn $\hat{\varepsilon}:-n$ | dìnô:-n |

Distinctions like those in (592a-b) for 'look' were made in elicitation by my assistant, who was asked to provide examples of tàrè̀n and tàrà-n. In (592a), the act of entering precedes that of seeing (what is seen is circumstantial evidence of the entry), and tàrè- $n$ is used. In (592b), the act of entering is viewed by the protagonist, so the two eventualities are contemporaneous, and tàrà- $n$ is the form used. This is consistent with verbal ablaut elsewhere (E-stem perfective, A/O-stem in non-perfective categories).
a. [bé
tàrè̀-n]
$\eta W \varepsilon ̀-\varnothing$
[3P1Sbj look-DS] go.in.Pfv-3SgSbj
'They looked (and saw) where he went in.'
'They looked (and saw) that he/she had gone in.'
b. [bé tàrà-n] $\eta W \dot{\text { b }}-\varnothing$
[3P1Sbj look-DS] go.in.Pfv-3SgSbj
'While they watched ( $=$ in their presence), he/she went in.'

The construction in (592b) above is corroborated by textual examples like (593a), and indeed the phrase í tàrà-n 'while we observed' is commonly used in the texts to label events that occurred in the memory of the speaker (as opposed to earlier events reported by oral tradition). The textual example of tàrè- $n$ is (593b), which seems basically consistent with its function in (592a) above.

'The dates came in (= were included), they came in while we observed ( $=$ in our memory).' (2005-1a)
b. [mó tàrè-n] [[ké [ùsfó: má] ínò-ndí- $\varnothing]$
[3SgSbj look-DS] [[InanSg.E [path in] go-PresNeg-3SgSbj]
kànè- $\varnothing$ mé là]
be.done.Pfv-3SgSbj if also]
'If on the other hand he looks (= evaluates) and if it isn't going on the (right) path, (he says: ...) (2005-1a)

Elicited data (594a-b) are also available for ín|lìnè 'go'. In (594a), ìnò-n denotes an act of going that is simultaneous with the act of seeing. In (594b), ìnè-n denotes an act of going that leads to another, subsequent event. This example happens to have another instance of $-n$, namely bé òbò-n 'while they were sitting', based on the stative form of óbí-y 'sit'.

b. [[ólé ké] mà] mí ìnè-n,
[[house Def.InanSg.E] in] 1 SgSbj go-DS, [bé òbò-n] dinê:-m [3PISbj sit.Stat-DS] find.Pfv- 1 SgSbj
'When I went to the house, I found them sitting.'

Textual examples of ìnè-n and ìnò-n are in (595). In (595a), the act of going is not (specifically) simultaneous to the (abstract) eventuality denotes by the following clause (which would be recognized by the merchant only after spending some time in the new market), and ìnè-n is used. (595b) is a corroborating example from the same textual passage. On the other hand, inò-n occurs in (595c), since the animal (here, a sheep or other livestock animal) is following directly behind the herder as the herder goes.

'When he (= merchant) goes to that (new) place, if it turns out that the place that he got up (= left) from is better for him than that (new place), ...' (2005-1a)
b. ébán là, [[èbàn ${ }^{\mathrm{L}}$ ग̀gí] mà] ó ìnè-n, $\ldots$ commerce also, [[market ${ }^{\mathrm{L}}$ Prox.InanSg.E] in] 2SgSbj go-DS, ... 'Commerce for its part, when you (= a merchant) go into this (= such-and-such a) market, (if they buy more from you elsewhere ...)' (2005-1a)
c. [ó ìnò-n] [ó gì] dìmbì-yà-njò mé díndì
[2SgSbj go-DS] [2Sg Acc] follow-MP-Pres-3SgSbj if all 'when you (= herder) go, if it (= an animal) follows you, ...' (2005-1a)

### 15.1.6.2 gìnè-n and gìnà-n from gìné 'say'

The elicited examples of $-n$ with 'say' verb are (596a) with gìnè-n, where the following clause denotes a response (necessarily subsequent in time), and (596b) with gìnà-n, where the following clause ('[what] we heard’) denotes a simultaneous event of perception.

'When I asked for you-Sg, (they) said you had gone out.'
b. [nò-mbò ${ }^{\mathrm{L}}$ kúlmá-mbó] bé gìnà-n,
[person-Pl ${ }^{\mathrm{L}}$ elder-Pl] 3PISbj say-DS,
í $\quad$-ŏ:,
1PISbj hear.Pfv-PplNonSbj.InanSg.O

first person [[the.bush in] go.out then.SS]
wó-njò- $\varnothing \quad m \grave{\varepsilon}$,
come-Pres- 3 SgSbj if,
[díyá: [mó gò]] ábà-mb-à: =y
[load(n) [AnSgPoss Psm.InanSg.O]] receive-Pres-Pass=it.is
'(According to) what we heard the elders say, formerly when someone left the bush and was coming (to the village), his load (carried on head) was taken (and carried, by others).' ( $\eta-\mathrm{o}:</ \mathrm{n} w-\hat{\mathrm{o}: /)}$

The form gìnغ̀-n is rather common in texts, as an alternative to participial gìn-̂̂: (§15.1.6.2), in constructions with an ostensible quotative clause. An example is (597).

'when you-Sg have completed the farming, if (the accusation) that you don't work has come, ...' (2005-1a)

In both types 'say' need not be understood literally, and it may be omitted from translations. This construction typically functions like a perfect ('have VP-ed'), indicating a chronological separation between the eventuality in question and that denoted by the following clause.

### 15.1.6.3 $-n$ complements of perception verbs

Perception verbs 'see' and 'hear' lend themselves well to different-subject complements. The elicited examples (598a-d) present the A/O variant of the $-n$ subordinator, as the perception was simultaneous to the event.
a. [[[mí ${ }^{\mathrm{L}}$ dày] mà $]$ íngé ó èrà-n] yè-ń [[[1SgPoss ${ }^{\mathrm{L}}$ well] in] water 2 SgSbj draw.water-DS] see.Pfv- 1 SgSbj 'I saw you-Sg draw water at my well.'
b. [ên mó bìyò-n] yè-ḿ
[here AnSg lie.down-DS] see.Pfv-1SgSbj
'I saw him/her lie down here.'
c. [bé jà: $\eta i ̀-y o ̀-n] ~ \eta w \grave{\varepsilon}-n ́$
[AnPl fight-MP-DS] hear.Pfv-1SgSbj
'I heard them fight(ing).'
d. [túmbúl-mbó bàrí-yé bé kòrò-n] $ŋ W \varepsilon ̀-m ́ n ~$
[hyena-Pl cry-MP 3PlSbj cry-DS] hear.Pfv-1SgSbj
'I heard the hyenas howl(ing).'

### 15.2 Adverbial relative clauses

The structure of relative clauses was the topic of chapter 14 above. The following sections describe various combinations of two clauses, at least one of which is a nonsubject relative clause in form (with a verbal participle). Many of these are adverbial relative clauses. They do not distinguish same-subject from different-subject constructions, since relative clauses are concerned only with their relationship to their heads. The heads (whether overt or covert) determine the class of postparticipial determiners.

### 15.2.1 Temporal adverbial relative ('the time/day when ...')

The temporal noun is overt as the internal head of a relative clause, the whole functioning as an adverbial clause. The lexical forms of the nouns are wákátì (< Fulfulde) and sárà, but as relative heads they appear hear in tone-dropped form (wàkàtì ${ }^{\mathrm{L}}$, sàrà ${ }^{\mathrm{L}}$ ). The 'time' noun may appear anywhere in the clause prior to the participle. In (599), the two 'time' nouns are interchangeable. Both are inanimate E-class, as shown by the form of the final determiner.

| [[kǎ:-mbò | bé] |  |
| :--- | :--- | :--- |
| $[$ grasshopper-Pl | $\quad$ Def.AnPl] |  |
| wàkàtiti $^{\mathrm{L}} /$ sàrà $^{\mathrm{L}}$ | W-ê: | ké] |
| time $^{\mathrm{L}}$ | come.Pfv-PplNonSbj.InanSg.E | Def.InanSg.E] |

'(at) the time when the grasshoppers (=locusts) came'

There is usually no final postposition at the end of the relativized NP, so aside from the overt head noun 'time' there is no explicit indication that this adverbial is temporal rather than spatial or manner.
dépán 'day' in $\{\mathrm{L}\}$-toned form dènàn ${ }^{\mathrm{L}}$ is also common in temporal relatives ('the day when ...'. Examples are (510b) in $\S 14.2 .6$ and (544b) in $\S 14.3 .9 .2$. Other temporal nouns like 'month' and 'year' may also head such adverbial relatives.

### 15.2.2 Spatial adverbial relative ('the place where ...')

The noun kéngè 'place' is the head of a nonsubject relative clause, in L-toned form kèngè ${ }^{\mathrm{L}}$. kéngè is inanimate E-class, like 'time' in the preceding section, and requires E-class determiners. Unlike the 'time' nouns described in the preceding section, the 'place' noun is somewhat redundant since the postposition mà follows the entire relativized NP. However, a spatial sense is not automatic with mà, which can also be temporal, instrumental, and in some contexts dative (§8.1.2).
(600)

| [kèngè ${ }^{\text {L }}$ | mí | bíró: | bírà-ŋgà | ké] | mà |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [place ${ }^{\mathrm{L}}$ | 1 Sg | work(n) | work(v)-Pres.PplNonSbj | Def.InanSg.E] | in |

'at (the place) where I work' $=$ ' where I work'

### 15.2.3 Manner adverbial relative clause ('the way ...')

The 'manner, way' noun is gìró, which also means 'eye', or the Fulfulde loan àlgádrà. They are inanimate O-class, as shown by the determiner kó in (601a). Nonsubject relatives headed by them can be NP arguments as in these examples, or dân 'like' can be added like a postposition to make an adverbial clause, cf. (602a-d) in the following section.

```
a. [àlgàdrå mó kwà-ggà kó]
[manner }\mp@subsup{}{}{\textrm{L}}\mathrm{ 3SgSbj eat-Pres.PplNonSbj Def.InanSg.O]
[mí llì gì èndá-\varnothing
[1Sg Acc] unpleasant-3SgSbj
'The way he/she eats is displeasing to me.'
```

b. [gìrò ${ }^{\mathrm{L}}$ mó bìrà-ngà] éndà:-m
[manner ${ }^{\mathrm{L}}$ 3SgSbj work(v)-Pres.PplNonSbj] not.know-1SgSbj
'I don't know how he/she works.'
(lit. "I don't know the manner ...")

### 15.2.4 Headless relatives as adverbial clauses

Spatio-temporal and manner adverbials often appear in the form of a headless nonsubject relative clause. A covert head noun like 'time', 'place', or 'manner' is understood. Time and place may blur together in abstract contexts, where 'situation' or 'fact' might be a better gloss, cf. the multiple current meanings of English position and the etymological sense of situation.

The distinction between nouns with (singular) E- and $\mathbf{O}$-class agreement plays a role in deciphering such headless relatives. This is because covert 'manner' head noun (gìró 'eye; manner') has O-class agreement, while covert 'place' (kéngè) and 'time' (e.g. wákàtì) have E-class agreement. The participle makes class distinctions in some inflectional categories (e.g. perfective), though not in others (e.g. present, future). In any event, a final definite morpheme is common in such headless adverbial relatives, with O-class kó suggesting 'manner' and E-class ké suggesting 'place' or 'time'. A following postposition ('like', 'in') can mark manner and spatial adverbials.
(602a-d) are identifiable as headless manner adverbials due to postposition dân 'like' (§8.4.1) and/or O-class determiners. The sense may be veridical 'like (the way) ...; as ...' or nonveridical 'as though ...'.

'The way he works, he will never gain (=earn) anything.'
b. [[sǎy kà] hâl é bò-ngà dân dîn]
[[now Top] until 2PISbj be-Stat.PpINonSbj like all]
'even the way you-Pl are now (= numerous)' (2005-1a)
c. [[ó sígírí-yé jòg-â:] dân] ínò-nj-ò:
[[2Sg get.drunk-MP Perfect-PpINonSbj] like] go-Pres-2SgSbj
'You-Sg are walking like (=as though) you had gotten drunk.'
d. [[í dìn-ô: kól dân]
[[1PISbj find.Pfv-PPl.InanSg.O Def.Inan.O] like]
[dògé nè là] ìnò-mbó-ỳ
[leave and.SS also] go-Fut-1PlSbj
'(The same way) as we found (it), we will leave it (behind) and go.' (2005-2a)
Headless spatial adverbials are in (603a-b). Postposition mà 'in' is a clue that the sense is spatial, though it does not rule out a temporal or abstract situational reading. Here the spatial reading is confirmed by the motion verbs. If a determiner follows the participle, it is E-class (not present in these examples).
(603)
a. ùjúngó [[mó tùmbò-m=b-غ̀:] mà]
sun [[AnSgSbj sun.rise-Pres=Past-PplNonSbj.InanSg.E] in]
gwè- $\varnothing$ ló
go.out.Pfv-3SgSbj Q
'Has the sun gone away from (= moved) (the place) where it used to rise?' (2005-2a)
b. [[mó dèクà-ŋgà] mà] gwè- Ø ló
[[AnSg fall-Pres.PplNonSbj] in] go.out.Pfv-3SgSbj Q
'Has it (= sun) gone away from (= moved) (the place) where it sets?' (2005-2a)

When the postposition is kùl mà 'inside', the usual reading is temporal ('while ...'). Determiners are E-class.
a.

| $[[b i ́ r o ́: ~$ | mí | bírà-ทgà- $\varnothing$ | ké] |
| :--- | :--- | :--- | :--- |
| $[[\operatorname{work}(\mathrm{n})$ | 1 SgSbj | work(v)-Pres.PplNonSbj | Def.InanSg.E] |

kùl mà] gó-nù-m
inside in] go.out-FutNeg-1SgSbj
'When I am working, I won't (=don't) go out.'

15.2.5 'Since ...' with $j$ ǎ: plus locative of headless relative
$j a ̌:$ 'since' is placed at the beginning of the 'since' clause, which takes the form of a headless nonsubject relative clause, followed by postposition mà 'in'.
$\begin{array}{lll}\text { a. } & {[[j a ̆:} & \text { mó }\end{array} \begin{aligned} & \text { W-ê: }] \\ & {[[\text { since }} \\ & \\ & \text { 3SgSbj } \\ & \text { come-PplNonSbj.InanSg.E }]\end{aligned}$
mà] gó-1- $\varnothing$
in] go.out-PfvNeg-3SgSbj
'Since she came, she hasn't gone out.'
b. [[jǎ: mó w-ê:] mà] mó yà:-lú-m
[[since 3 SgSbj come-PplNonSbj.InanSg.E] in] AnSgO see-PfvNeg-1SgSbj 'Since she came, I haven't seen her.'

For two-part 'from X to $Y$ ' see $\S 17.5 .1 .1$. For the Songhay etymology of jǎ:, see $\S 1.2 .1$.

### 15.2.6 Headless relative gìn-ô: 'say’ after 'and (then)' -mbò

A perfective nonsubject participle of gìné 'say', namely gìn-ô: (inanimate singular O form), commonly follows a same-subject VP with subordinator -mbò 'and (then)' (§15.1.3). The form gìn- $\hat{0}$ : is immediately preceded by a preverbal pronominal-subject proclitic. This pronoun usually agrees with the subject of the subordinated verb, like 'Muslims' in (606a). However, in (606b) the 3 Sg subject pronominal seems pro forma.

Sometimes the reference is to actual speech, or to articulated thought. Often, however, no actual speech or thought is referred to, in which case it is best to omit 'say' in the free translation. The construction often has perfect value, i.e. it indicates that the eventuality in question has already occurred before the event denoted by the clause that follows gìn-ô: . The two clauses may have same or different subjects.
 'when the Muslims had gathered and performed the blessing, ...' (2005-1a)
b. íyó [yè:-jíngán má $\rightarrow$ ] [èndê: ${ }^{\text {L }}$ ìnèn-tùn-lè mà $\rightarrow^{\dagger}$ ] today [marriage and] [child ${ }^{\text {L }}$ name-put- VblN and]
[yè ${ }^{\mathrm{L}}$ dîn] wé-mbò kégírí-yè-mbò $\left[\operatorname{InanPl}{ }^{\mathrm{L}}\right.$ all] come-and.SS align-MP-and.SS mó gìn-ô:, 3SgSbj say.Pfv-PplNonSbj.InanSg.O, [àngú tóló=ý gìndó: = ỳ mà $\rightarrow$ ] ká:-ŋgó=ý [which? more=it.is big.InanSg. $\mathrm{O}=\mathrm{it} .1 \mathrm{is} \mathrm{Q}$ ] debate-InanSg. $\mathrm{O}=\mathrm{it} . \mathrm{is}$ 'Nowadays, a wedding (= marrying women) and a child's name-giving, (now that) both have come and become equal (in cost), which (of them) is bigger (= more expensive) is a (subject for) debate.' (2005-1 a)

More textual examples are in (607).
a. [íyó nò-mbó énî: wé-mbò] bé gìn-ô:
[today person-Pl here come-and.SS] 3PISbj say.Pfv-PplNonSbj.InanSg.O
'Today some people have come here, ...' (2005-1a)
b. kà: [bé là] dùmé-mbò] bé gìn-ô:,
but [AnPl also] get-and.SS] 3PlSbj say.Pfv-PplNonSbj.InanSg.O, [dàlì:dì bé kànà-ngà ké] dùm-à: mé [knowledge AnPlSbj do-Pres.PplNonSbj Def.InanSg.E] get.Pfv-3PlSbj if 'But when they (i.e. whites) themselves have gotten (knowledge), when they get the (esoteric) knowledge to make (e.g. medicines), ...' (2005-1a)
c. [[yàlî:
[ ffield ó
${ }^{L}$ tè:--ŋgò]
${ }^{\text {L }}$ firewood-InanSg.O]
gìn-ô:
say.Pfv-PplNonSbjInanSg.O
d. [[[dôm mà] íngí-yé jé-mbò] ó gìn-ô:]
[[[speech in] stand-MP finish-and.SS] 2SgSbj say-PplNonSbj.InanSg.O]
[[nǒ: mó] [ó mà] mó jê:-n]
[[person Def.AnSg] [2Sg Dat] 3SgSbj bring-DS]
[[dôm kó] gì] fă:m
[[speech Def.InanSg.O] Acc] understanding dùmá:-1-ó: mé díndī] get-PfvNeg-2SgSbj if all] 'if you have stopped in speaking, if the person has brought you (a case), if you have not gotten an understanding of the words, ...' (2005-1a)

See also the different-subject subordinated form gìnغ̀-n (§15.1.6.2).

### 15.2.7 Nonsubject relative $j$ - $\hat{\varepsilon}$. 'finish' in direct chain at subject switch

When the subject of a sequential temporal adverbial clause is not coindexed with the subject of the main clause, the temporal clause may take the form of a headless nonsubject relative whose primary verb is directly chained to participial $j$ - $\hat{\varepsilon}$. 'finish'. If there is a pronominal subject it precedes the two chained verbs, suggesting that $j$ - $\hat{\varepsilon}$ : 'finish' is halfway toward becoming a suffix on the primary verb. The E-class participles and determiners in (608a-b) are consistent with 'time' as covert head.
a. [mó
$k w \varepsilon ́ \quad j-\hat{\varepsilon}$ :
ké]
ìnè-y
[3SgSbj eat finish-PplNonSbj.InanSg.E
Def.InanSg.E]
go.Pfv-1P1Sbj
'When he/she had finished eating, we went.'
$\begin{array}{lllll}\text { b. } & {[1 ́ 1} & k w \varepsilon ́ & j-\hat{\varepsilon}: & k e ́] \\ & & \text { ìnè- } \varnothing \\ \text { [1PlSbj } & \text { eat } & \text { finish-PplNonSbj.InanSg.E } & \text { Def.InanSg.E] } & \text { go.Pfv-3SgSbj }\end{array}$
'When we had finished eating, he/she went.'
15.2.7.1 bándì mà 'after' following $j$ - $\hat{\varepsilon}$. 'finished'

It is also possible to express the temporal sequence more explicitly by adding the compositve postposition bándì mà 'after'.

| $[m o ́ ~$ | $k w \varepsilon ́$ | $j-\hat{\varepsilon}:$ |
| :--- | :--- | :--- |
| $[3 \mathrm{Sg}$ | eat | finish-PplNonSbj |

bándì mà] ìnè-ý
[3Sg eat finish-PplNonSbj
after in] go.Pfv-1PISbj
'After he finished eating, we went.'
15.2.8 'Before ...' with locative of headless nonsubject future relative

The 'before ...' clause may precede or follow the main clause. It consists of a headless relative with future participle (-ngà- after stem with final H-tone), followed by either postposition mà 'in' or a particle wâ:n.
(610)
a. [à:lé tègǎ-pgà mà] twě twé jè=bè-m [rain(n) rain-Fut.PplNonSbj in] seeds sow finish.Pfv=Past-1SgSbj 'Before the rain fell, I had finished sowing the seeds.'
b. [[bándâ
ké]
Def.InanSg.E]
wǒ-ngà
njúló]
[[courtyard [mó [ 3 SgSbj come-Fut.PplNonSbj
'Sweep-Sg the courtyard, before he/she comes.
c. bé [wé nè] nùmǎ: tùnǒ-lgà mà 3PISbj [come then.SS] hand put-Fut.PplNonSbj in 'before they had come and put their hands (in the bowl)' (2005-2a)
d. [[ó $\left.{ }^{\mathrm{L}} n o ̀-m b o ̀\right] ~ o ́ ~ y a ̌-g g a ̀ ~ w a ̂: n, ~$
[[2SgPoss ${ }^{\text {L }}$ person-Pl] 2 SgSbj see-Fut.PplNonSbj before,
[́́ mà] dámá]
[1Sg Dat] speak.Imprt
'Tell me, before you see your folks!' (2005-1a)
Another way to express 'before ...' is to use the 'without VPing' construction (§15.1.4.4). For example, 'we learned before we entered' could be phrased as 'we learned without (yet) having entered', as long as the listener can infer the truth of the positive 'we (then) entered'.

## 16 Conditional constructions

A conditional construction consists of an antecedent ('if') clause and a consequent ('then') clause.

Most conditionals are hypothetical, specifying a causal or similar entailing relationship between an uncertain future (or generic) eventuality X and a second eventuality Y . This causal relationship shades into a temporal one, more so than in English. The counterfactual conditional asserts a similar causal or entailing relationship between a past eventuality that might have occurred, but did not, and a second eventuality it would have caused to be true. Other special cases are 'even if' and willy-nilly conditionals, which deny causal relationships between antecedent and consequent eventualities.

### 16.1 Hypothetical conditionals

The common 'if' particles following the predicate of the antecedent clause are dé and mé. The universal quantifier dîn ~ díndì 'all' may be added after the 'if' particle. The particle tán 'only' (< Fulfulde) may also follow dé or mé, or it may appear by itself as a substitute 'if' particle.

Since the 'if' particles are H-toned, a preceding 1st/2nd person perfective positive verb form shifts its final syllable from rising to (level) H-tone (§3.6.3.2), unless it is monosyllabic as in $w$-ǒ: 'come' in (613b) in §16.1.2. Occasionally, the 'if' particle itself is omitted, but the tone shift applies nevertheless, serving as an index of the missing 'if' particle. 3 Sg and 3 Pl perfective positive verb forms are strictly $\{\mathrm{L}\}$-toned in conditional antecedents, versus variably $\{\mathrm{L}\}$ or $\{\mathrm{HL}\}$ in main clauses.

In hypothetical conditionals, the unmarked AN sequence is perfective (positive or negative) for the antecedent clause, and future (positive or negative) for the consequent clause. This applies when the two clauses denote events that are relatively well bounded in time. In other contexts, the antecedent clause may be present, stative, or the like, and/or the consequent may be present, or a deontic modal clause (imperative, hortative).
$d e ́ ~ a n d ~ m \varepsilon ́ ~ a r e ~ p a r t i a l l y ~ e x t e n t ~ i n t e r c h a n g e a b l e ~ i n ~ t r u e ~ c o n d i t i o n a l ~ a n t e c e d e n t s . ~ H o w e v e r, ~$ $m \varepsilon ́ ~ h a s ~ a ~ b r o a d e r ~ r a n g e ~ o f ~ f u n c t i o n s . ~ I t ~ c a n ~ m o r e ~ f r e e l y ~ i n d i c a t e ~ s e q u e n t i a l ~ a s ~ o p p o s e d ~ t o ~$ causal relationships, and it is compatible with imperfective antecedents.

### 16.1.1 Particle dé 'if' at end of antecedent

dé is close to English if in hypothetical conditionals, and in this sense it has a narrower functional range than its competitor mé.

The passage in (611), which describes generic situations, contains one perfective positive and one perfective negative antecedent clause, both followed by future consequent clauses.
woman give.birth.Pfv-3SgSbj if,

| [[ó | ${ }^{\text {L tog ù }}$ | dîn] | mà] | dǎ:ndí |  | tìyá-mb-â: = ỳ, <br> send-Fut-Pass=it.is, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [ $[2 \mathrm{SgPos}$ | ${ }^{\text {L }}$ kin | all] | Dat] | tell |  |  |
| [mó | là] | wó-m̀, |  |  |  |  |
| [AnSg | also] | come-Fut. 3 SgSbj , |  |  |  |  |
| [tíyá:-1-ó: |  | dé | là] | [[ó | gì] | pèbá-m̀] |
| [send-Pfv | $-2 \mathrm{SgSbj}$ | if | also] | $[2 \mathrm{Sg}$ | Acc | c] accuse-Fut.3SgSbj] |

'If a woman (= your wife) has given birth, the word will be sent to all of your kin group, it (= your kin) will come. If on the other hand you-Sg don't send (the word), it (= your kin) will denounce you.' (2005-1a)

Further textual examples of dé are (612a-b), see also (616) in §16.1.3.
a.

| $[b e ́ ~$ | là $]$ |
| :--- | :--- |
| $[\mathrm{AnPl}$ | also $]$ |

bày-é:
dé $\nearrow$,
[AnPl also] know.Pfv-2P1Sbj if,
'If you-Pl know (=have come to know) them (= whites), ... '(2005-1a)
b. mà:njì-yé-ý dé, ànìné kàná-ỳ ló
be.energetic-MP.Pfv-1P1Sbj if, how? do.Fut-1Pl Q
'If we do (=have done) our best, how (= what) will we do?' (2005-1 a)

### 16.1.2 Particle $m \varepsilon ́$ 'if' at end of antecedent

$m \varepsilon ́$ 'if' occurs in constructions similar to those with dé. The antecedent is usually perfective, the consequent non-perfective (present, future, imperative), as in (613a-b).
a. màngórè, [[ébán má] dìnê:-y mé] dònà-mbó-ỳ mango.Pl, [[market in] find-1PlSbj if] buy-Fut-1PlSbj 'If we find any mangoes in the market, we'll buy them.'
b. [ìgîn w-ǒ: mé] [mí sìbì-yò-mbó-m̀]
[here come.Pfv-2SgSbj if] [1SgSbj hide-MP-Fut-1SgSbj]
'If you-Sg come here, I will hide.'
c. [à:lé í:gòndì: tègè- $\varnothing ~ m \varepsilon ́] ~$
[rain(n) abundantly rain.fall.Pfv-3SgSbj if]
jènǎ: kóndó-m̀
rainy.season do.well-Fut.3SgSbj
'If the rain falls abundantly, the rainy (=growing) season will turn out well.'

However, $m \varepsilon ́$ is more flexible than dé. It can occur in non-perfective contexts (e.g. future or habitual). The antecedent verb is future negative in (614).

| (614) | [móttì <br> [Mopti |  |  | $\begin{aligned} & \text { ìnó-nù-m } \\ & \text { go-FutNeg-1SgSbj } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [ó | [mí | sôn] | ìnó-nd-ò: | $m \varepsilon]$ |
|  | [2Sg | [1SgObj | with] | go-FutNeg-2SgSbj | if] |
|  | 'I won't go to Mopti unless you-Sg go with me.' <br> (lit. 'I won't go to Mopti if you-Sg won't go with me.") |  |  |  |  |

A clause with mé may reduce semantically to a sequential subordinator ('and then ...') when causality is de-emphasized, see $\S 16.1 .4$ below.

### 16.1.3 Multiple antecedent clauses

When the antecedent contains two clauses, the two antecedent eventualities may be logically related in any of the following ways: a) set-theoretic union (both eventualities must be independently true), b) chronological sequence, or c) logical nesting (the first antecedent clause creates a context for the second).

One way to express such complex antecedents is by using a loose chaining device to combine the two clauses into one complex clause, with a single 'if' at the end (615).
(615)

| [jèná: | kóndí | nè] | [yógé | ìl̀̀- $\varnothing$ | mé] |
| :--- | :--- | :--- | :---: | :---: | :---: |
| [rainy season | be.good | then.SS] | [millet.Pl | ripen.Pfv-3SgSbj | if] |
| $[$ nò-mbó | bé | gì] | èlà-ndá-ìn |  |  |
| [person-Pl | Def.AnPl | Acc] | please-Inch-Fut.3SgSbj |  |  |

'If the rainy season is good, and the millet has ripened, the people will be happy ("it will please the people").'

It is also possible to string two or more perfective antecedent clauses together, each ending in an 'if' particle (616).
(616)

'If that has happened, (and) if we have done our best (to get by), like (the way) we were in the past, let's remain like that.' (2005-1a)

### 16.1.4 Temporal functions of $m \varepsilon$

$m \varepsilon$ may follow an inflected present verb or progressive construction, or their negative counterparts. The general time references (e.g. past, future) of the temporal and main clauses coincide.
a. [mî
bíro:
bírà-njò-m
mé] gó-nù-m
[1Sg work(n) work(v)-Pres-1 1 SgSbj while] go.out-FutNeg-1 1 SgSbj 'When I am working, I won't (=don't) go out.'
$\begin{array}{llllll}\text { b. } & \text { [bíró: } & \text { bírà-njò-nú-m } & \text { mé }] & \text { gwé } & \text { jà-mbò-m } \\ & {[\text { work(n) }} & \text { work(v)-Prog-Neg-1SgSbj } & \text { while] } & \text { go.out } & \text { can-Fut-1SgSbj }\end{array}$
'When I am not working, I can go out.'
mé may occur with perfective clauses, indicating chronological sequence. In the same-subject sequences in ( $618 \mathrm{a}-\mathrm{c}$ ), mé after conjugated perfective competes with unconjugated samesubject nonpast sequential subordinator $n \grave{\varepsilon}$ 'then’ (§15.1.5).

|  | [mùlé-y <br> [get.together.Pfv-1P1 | $m \varepsilon ́]$ <br> and.SS | ìnò-mbó-ỳ <br> go-Fut-1PISbj |
| :---: | :---: | :---: | :---: |
| 'We will assemble and go.' |  |  |  |
|  | [mùl-à: <br> [get.together.Pfv-3PlSbj | $m \varepsilon ́]$ <br> and.SS] | ìnǒ-mb-à go-Fut-3PISbj |
| 'They will assemble and go.' |  |  |  |
|  | [mùl-ध́: <br> [get.together-2PlSbj | $m \varepsilon ́]$ <br> and.SS] | ìnò-mb-ê: <br> go-Fut-2PISbj |

16.1.5 Inflected gìn $\varepsilon$ 'say' plus conditional mé 'if/when ...'
$m \varepsilon ́ ~ c o m b i n e s ~ w i t h ~ w i t h ~ a n ~ i n f l e c t e d ~ f o r m ~(o f t e n ~ 3 S g) ~ o f ~ g i ̀ n e ̀-~ ' s a y-P e r f e c t i v e ' . ~ T h i s ~ c l a u s e ~$ converts a preceding main clause into a kind of temporal adverbial clause. In (619), for example, what translates literally as 'if/when he has said' is tacked onto what is already an explicit temporal clause (with $\{\mathrm{L}\}$-toned 'day' as head of a relative). As in this case, 'say' does not report to a specific speech event. Rather, it expresses a situation that may have been understood without speech.

'When you have a crying young baby, the day when it becomes nasty with you (= cries a lot), you have no choice but to follow (= obey) him.' (2005-2a)

### 16.2 Alternative 'if' particles

### 16.2.1 Particle tán '(if) only' at end of antecedent

The particle tán 'only', from Fulfulde, is largely limited to conditional antecedent clauses in Najamba. as in several other Dogon and Songhay languages of the zone. In (620a), tán follows a regular 'if' particle, as it often does in the texts. When the regular 'if' particle is absent, as in (620b), in effect tán functions as a replacement for it.

b. gólè: kày, [kên tùn-ó: mé gà dîn]
farming(n) Top, [there.Def put.Pfv-2SgSbj if Top all]
[ó gày] í tùn j-ò: tán, [2Sg Top] DiscDef put Perfect-2SgSbj if.only, [ké Lyàl ké gày] tíngá-ì̀ [ó mà] [Near.InanSg.E Lyear Def.InanSg.E Top] pass-Fut.3SgSbj [2Sg Dat]
'As for farming, if you put (= start) farming there, as for you, if you have just put it, that year will happen for you. (2015-1a)

### 16.2.2 Universal quantifier dǐn~díndì with or without an 'if' particle

Universal quantifier dǐn ~ díndì 'all' may occur at the end of a conditional antecedent, after $m \varepsilon ́$ or dé, as a kind of right-edge marker, as in (621b) below, see also (616) and (666d). It is especially important in willy-nilly conditionals, see $\S 16.3$ below. When the usual dé or mé
'if' particle is omitted in a hypothetical antecedent, the quantifier can arguably function metonymically as a substitute for the 'if' particle, as in (621a).
a. [ó
gì nògè- $\varnothing$
díndì, nálá:
dìnô:---ó:
$\left[\begin{array}{ll}2 S g & \text { Acc] }] \text { bother.Pfv-3SgSbj all, good.InanSg find-PfvNeg-2SgSbj }\end{array}\right.$ 'If it bothered you-Sg, you didn't find anything good.' (2005-1a)
b. [ó sòngè- $\varnothing$ mź dîn] ó dǒ:-m̀̀
[2Sg curse.Pfv- 3 SgSbj if all] 2 Sg arrive-Fut. 3 SgSbj
'If he has cursed you, it will reach (you).' (2005-2a)

### 16.3 Willy-nilly and disjunctive antecedents ('whether X or Y ...')

In this construction, the universal quantifier dîn 'all' follows a pair of truth-conditionally incompatible clauses (one the negation of the other), to form a complex conditional antecedent translatable 'whether or not ...'. In (622a) one would expect the first disjunct ('he/she comes') to be 3 Sg present wó-njò- $\varnothing$, but instead it is an abbreviated form $w$ - 0 : identical to the corresponding nonsubject perfective participle, see (521a) in §14.3.1. The second disjunct ('he/she doesn't come') is a regular 3 Sg present negative, not a participle. This is evidently a dedicated willy-nilly construction, perhaps limited to 'come', cf. English come what may and variants. When both disjuncts have regular main-clause form, interrogative particle $m a \rightarrow$ (§13.2.1.2) may be added at the end of both clauses (622b).
a. [w-ô:
wò-ndí- $\varnothing$
dîn] kwà-mbó-ỳ [come-Pfv.PplNonSbj come-PresNeg-3SgSbj all] eat-Fut-1PlSbj 'Whether he/she comes or doesn't come, we will eat.'
b. [yě: mó] [kàndá gwè- $\varnothing$ mà $\rightarrow$ ]
[woman Def.AnSg] [seclusion go.out.Pfv-3SgSbj Q]
[gŏ-1 má $\rightarrow$ ] dîn [yòbè- $\varnothing$ mé] pás!
[go.out-PfvNeg-3SgSbj Q] all [run.Pfv-3SgSbj if] poof!
'whether the woman (= new bride) has emerged from seclusion (after the marriage) or hasn't emerged, if she runs away, (it's) poof!' (2005-1a)

A textual example is (797) in the sample text ('whether it pleases or doesn't please someone').

### 16.4 Counterfactual conditional

In a counterfactual, both antecedent and consequent clauses are shifted into a past time framework. The 'if' particle mé occurs at the end of the antecedent. Both verbs have the conjugated past enclitic $=b \grave{\varepsilon}$-. A positive antecedent is past perfect, i.e. chaining stem plus conjugated $=b \grave{\varepsilon}$-, when denoting a bounded event ( $623 \mathrm{c}-\mathrm{d}$ ), otherwise past imperfective, i.e. $-\grave{m}$ - variant of present stem plus conjugated $=b \grave{\varepsilon}-(623 a)$. A negative antecedent is usually
past perfect negative, i.e. conjugated perfective negative plus $=b \grave{\varepsilon}-(623 b, e)$. The consequent is past imperfective.

```
a. [[dágè [ó y yè] yé] jé=b-ò: m\varepsiloń]
[[medication.Pl [2SgPoss Psm.InanPl] Def.InanPl] take=Past-2SgSbj if]
sá:mí-yà-m = bà-l-ó:
get.sick-MP-Pres=Past-Neg-2SgSbj
'If you-Sg had been taking your medications, you wouldn't have gotten sick.'
```

b.

$\mathrm{c} . \quad \grave{\text { j̀ú }} \quad k w \varepsilon ́=b-\grave{:} \quad m \varepsilon ́, \quad t i ́ b a ̀-m=b-o ̌:$
Prox.InanSg.O eat $=$ Past- 2 SgSbj if, die-Pres $=$ Past- 2 SgSbj
'If you-Sg had eaten this, you would have died.'
d. tár $=b$ è-ḿn dénà- $m=b a ̀-1 u ́-m$
look=Past-1SgSbj if, fall-Pres=Past-PfvNeg-1SgSbj
'If I had looked, I wouldn't have fallen.'
e. [kìnû: kó] yà:-lú-m=bè-ḿ mé,
[stone Def.InanSg.O] see-PfvNeg-1SgSbj=Past-1SgSbj if,
dénà- $m=b$ è-ḿ
fall-Pres $=$ Past -1 SgSbj
'If I hadn't seen the stone, I would have fallen.'

## 17 Complement and purposive clauses

### 17.1 Quotative complement

### 17.1.1 'Say that ...' with inflectable 'say’ verb (gìné )

The verb gìné 'say' can take NP as well as quotative complements. It has a full range of AN categories.
a. yèngé gìn-ò:
what? say.Pfv-2SgSbj
'What did you-Sg say?'
b. [à:lé kén-d̀̀ tègè̀- $\varnothing]$ gìnǎ- $1-\varnothing$
[rain(n) there-Approx rain.fall.Pfv-3SgSbj] say-Pfv.Neg-3SgSbj
'He/She did not say that it (had) rained around there.'

### 17.1.2 Quotative enclitic wa

Clause-final uninflectable quotative particle wa, glossed "Quot" in interlinears, indicates that the preceding material is a quotation. It functions like a 'hearsay' evidential. In many contexts (where the relevant speaker is understood from prior context) it obviates the need for an explicit, pronominally inflected quotative verb 'say' (stem gìné). However, the particle wa may co-occur with gìné or other verbs of speaking.
wa is lexically atonal, acquiring its phonological tone by spreading from the final tone of the preceding word. However, since it occurs in clause-final position, it is subject to intonational modifications depending on discourse context.

| a | à:lé | [ $[\mathrm{m}$ | ${ }^{\text {L }}$ sònjò:] | mà] | $t e ̀ g e ̀$ - $\varnothing$ | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | rain(n) | [[3SgPoss | ${ }^{\text {L }}$ village] | in] | rain.fall.Pfv-3SgSbj | Quot |

'He said that it rained in his village.'
b. kóndé $\rightarrow$ wá gíná
all.right Quot say.Imprt
'Say: "all right!".' (2005-1a)

In an extended quotation, wa may be repeated after each quoted sentence. Presentential elements (topical NP, vocative, independent 'yes!' or 'no!' interjection, etc.) are also followed by their own wa, as in (626).

```
[0: wá] [hákkilè dǔndà-njoò: wà]
[yes! Quot] [idea look.for-Pres-2SgSbj Quot]
'(you) say: yes, you are seeking an idea (= deliberating)' (2005-1a)
```

For lengthened quotative-subject (QuotSbj) wa $\rightarrow$ after subject pronominals in quoted imperatives and hortatives, see $\S 17.1 .4$ below.

### 17.1.3 Unframed quotations

Najamba discourse abounds in phrases taken from quotations, not overtly marked as such (by quotative wa or other subordinators), that function as NPs. In (627), 'you don't work' functions as subject of 'come'.
(627) [ó bíró: bírà-nd-ó:] wè- $\varnothing$ mé díndì [2SgSbj work(n) work(v)-PresNeg-2SgSbj] come.Pfv-3SgSbj if all 'Suppose that it (= accusation) has come that "you-Sg don't work (in the fields)".' (2005-1a)

### 17.1.4 Jussive complements

"Jussive" includes quoted imperatives and hortatives.

### 17.1.4.1 Quoted imperative

In the quoted imperative, the original addressee (i.e. the subject of the imperative clause) appears with a following quotative subject particle wa $\rightarrow$. Most textual examples involve subject pronouns, which are updated to conform to the participant structure of the current speech event. The verb is in imperative form ( $628 \mathrm{a}, \mathrm{c}$ ), as in the original. If the original addressee was plural, the plural-addressee suffix is optionally added (628b,d). Usually no confusion arises from its optional omission, since the (singular or plural) subject is regularly overt in clause-initial position.

b. [é wá $\rightarrow$ ] wó(-mì) gìnè- $\varnothing$
[2Pl QuotSbj] come.Imprt(-PlAddr) say.Pfv-3SgSbj
'He/She told you-Pl to come.'
c. $[m i ́ ~ w a ́ \rightarrow]$ wó-là
[1Sg QuotSbj] come-Proh say.Pfv-3SgSbj
'He/She told me not to come.'
d. [é
wá $\rightarrow$ ]
QuotSbj] come-Proh(-PlAddr)
wó-là(-m̀)
gìnè- $\varnothing$
[2P1
say.Pfv-3SgSbj
'He/She told you-Pl not to come.'
e. [mí wá $\rightarrow$ [ǹjùlû: kó] jô: gìnè- $\varnothing$
[1Sg QuotSbj] [broom Def.InanSg.O] bring.Imprt say.Pfv-3SgSbj
'He/She told me to bring the broom.'

The subject may be a nonpronominal NP (629). In this case the prolongation of wa is sometimes but not always heard.

| [gǐrbà | wà $\rightarrow$ ] | nǒ: térí-yá, | ínò-ndí- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [blind.person | QuotSbj] | person lead.by.arm-MP.Imprt, go-PresNeg-3SgSbj |  |
| 'If (one asks) a blind man to lead someone (by the arm), he doesn't go.' (2005-1a) |  |  |  |

### 17.1.4.2 Quoted hortative

A quoted hortative is treated like a quoted imperative, in that the quotative-subject pronominal denotes the original addressee. The verb takes regular hortative form, for singular addressee (630a) or plural addressee (630b) as the case may be.
a. $[m i ́$
wá $\rightarrow$ ]
ìnò-ý
gìnè- $\varnothing$
[1Sg QuotSbj] go-Hort.SgAddr say.Pfv-3SgSbj
'He/She said to me, let's-2Sg go!'
b. [î
wá $\rightarrow$ ]
ìnó-ỳ
gìnè- $\varnothing$
[1P1 QuotSbj]
go-Hort.PlAddr
say.Pfv-3SgSbj
'He/She said to us, let's-2Pl go!'

### 17.2 Volition-verb complements

### 17.2.1 'Want' and 'need'

17.2.1.1 kíy 'want', kélà- 'not want/dislike' with nè or nonsubject relative

The positive 'want' verb is kíy. In the positive, it occurs most often in the stative form kíyò, though it does have other forms (e.g. perfective kìyè). In the negative, it is suppleted by kélàThe subordinator $n \grave{\varepsilon}$ 'then', occurs at the end of a same-subject complement clause.
a. [[móttì
mà] ín $n e ̀$ ]
kíyó-ì
[[Mopti to] go then.SS] want.Stat- 1 SgSbj
'I want to go to Mopti.'

c. [mànà-níngé kwé nè] kél-è:
[millet.cakes eat then.SS] not.want-3P1Sbj
'They do not want to eat millet cakes (with sauce).'

In other contexts, subordinator $n \grave{\varepsilon}$ is sequential. To harmonize this with examples like (631a-c) in this fashion, it would be necessary to re-gloss kíy as 'like' and construe e.g. (631a) as 'I will go to Mopti and like (it).'

The positive and negative stative paradigms are in (632). Since the stative negative stem ends in $a, 2 \mathrm{Pl}$ and 3 Pl are homophonous in the negative only.

| category | 'want' | 'not want' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | kíyò-m | kélà:-m |
| 2 Sg | kíyò-W | kélà:-W |
| 3 Sg | kíyò- $\varnothing$ | kélà- $\varnothing$ |
|  |  |  |
| 1 Pl | kíyò-y | kélà:-y |
| 2 Pl | kíy-è: | kél-è: |
| 3 Pl | kíy- $:$ | kél-è: |

'Not want' also has some non-stative inflected forms based on kélí-yé, which includes mediopassive $-y \varepsilon ́$, see (728) in the sample text. This form is translatable as 'dislike, detest, hate', and can itself be negativized as in present negative kélí-yà-ndí- 'does not hate', see (716) in the sample text. That kélà- is alo in the process of becoming lexicalized as a distinct verb, rather than as merely a negation of 'want', is supported by the fact that past-time 'did not want' can be expressed either by a negation of 'want' or by adding the past enclitic directly to kélà- (§10.3.1.2). There is also a nominalization kèlǎ-n 'hatred', (126b) in §4.2.3.3, and a variant kèlદ̌-n appears to be part of kèlغ̀-n=lá 'it's not (out of) hatred' (text 2015-2a).

When the complement clause has a different subject, the complement takes the form of a headless nonsubject relative clause (which can function like a that complement in English). A pronominal subject in the complement is then expressed as a preverbal pronominal proclitic. The verb of a positive complement is a future participle with -ŋ́gà (633a). It is possible to elicit negative complements, though as in English the normal way to express 'I want them not to come' is 'I don't want them to come,' with the overt negation on the higher 'want' verb (633b). When the complement itself is negated, its verb appears as a future negative participle with -ńdì- (633c).
a. [pègé bé sèmǎ-ŋggà] [sheep 3P1Sbj slaughter-Fut.PplNonSbj] 'I want them to slaughter the sheep- Sg .'
kíyò-m
want-1 SgSbj
b. [pègé bé sèmǎ-ŋgà̀] kélà:-m
[sheep 3PlSbj slaughter-PplNonSbj] not.want-1SgSbj
'I don't want them to slaughter the sheep-Sg.'
c. [pègè-mbó bé sèmǎ-nd-ò:] kíyò-m
[sheep- Pl 3 PlSbj slaughter-FutNeg-PplNonSbj.InanSg.O] want-1SgSbj 'I want them to not slaughter any sheep-Pl.'

### 17.2.1.2 nàmí-yé 'need'

For ' X need Y ', the verb is nàmí-yé, with locative PP complement. It has a stative form nàmà, as in [ó mà] námà-m 'I need you-Sg'. I have no examples with clausal complements.

### 17.3 Factive complements

A regular main clause can be converted into a nonsubject relative that functions as a factive NP ('the fact that ...', §17.3.1). Either such a headless nonsubject relative, or a regular main clause, may also function as the factive complement of a higher verb such as 'know' or 'see'.

### 17.3.1 'The fact that ...' (headless nonsubject relative)

A proposition (denoting a fact or situation) may function as an NP in a higher clause. In this case it takes headless nonsubject relative-clause form, with implied head NP ('fact', 'situation', or similar). It is inanimate O-class for agreement purpose. It normally ends in definite determiner kó, and may be resumed in a following clause by kó. For example, (634a) alludes to a situation that had previously been stated as a normal main clause (not shown). The speaker then asks why this situation has come about, repeating the proposition in factiveclause form. (634b) begins with a similar factive clause functioning as topic, which is resumed in the following main clause.
a. [[yè
dîn]
mà]
in]
[Lí
gì]
[[InanPl all] in
[1P1
Acc]
mó
dò:-1-ò:
kó], ...
3SgSbj reach-PfvNeg-PplNonSbj.InanSg.O Def.InanSg.O], ...
'The fact that it didn't do us much good in all those (fields), ... (how did it happen?)' (2005-1a)
b. [í
[1P1Sbj
[[yè̀gé
[[what Foc] InanSg.O make Perfect-Ppl.SbjFoc]
'The fact that we do not know, what made (= caused) that?' (2005-1a)

### 17.3.2 'Know that ...' with main-clause or dubitative relative complement

The 'know' verbs are positive tígà:- and suppletive negative éndà:- (§11.2.4). They follow a normal main-clause with no overt subordinator, but third-person perfectives are L-toned, as they are before some other elements ('if' and quotative particles).
(635)
a. ìnè- $\varnothing$ tígà:-m
go.Pfv-3PlSbj know-1SgSbj
'I know that he/she has gone.'
$\begin{array}{llll}\text { b. } & \begin{array}{lll}{[[\text { kôn }} & \text { kámà }] & \text { jògò-nú-m] } \\ {[[t h i n g ~} & \text { any }] & \text { have-PresNeg-1SgSbj] }\end{array} & \begin{array}{l}\text { tígà- } \varnothing \\ \text { know-3SgSbj }\end{array}\end{array}$
'He/She knows that I don't have anything.'
'Know' and especially 'not know' may also take dubitative complements with disjunctive $m a \rightarrow$ 'whether?' after a relative clause. See (500a-b) in §13.2.5.
17.3.3 'See/find that ...' with main-clause or nonsubject relative complement

The 'see', 'find (by chance)', or 'hear' verb follows either an unchanged main clause (636a-b) or an O-class nonsubject participle (636c). In the first case, addition of e.g. 'I saw' could be an afterthought or parenthesis. In either case the sense is ' X see/find that [P]' where P is a proposition denoting an already existing situation. (636c) might alternatively be parsed as a headless object relative "I saw what you-Sg sowed."

```
a. [[nò-mbó bé] gîy gy̌y j-à:]
    [[person-Pl Def.AnP1] harvest(n) harvest finish.Pfv-3PlSbj]
    yè-m
    see.Pfv-1SgSbj
    'I saw that the people had finished harvesting.'
```

b. [[bíró: dîn] òndí- $\varnothing]$ dìnê:-m
[[work(n) all] not.be-3SgSbj] find.Pfv- 1 SgSbj
'I found that there was no work (there).'
$\begin{array}{llll}\text { c. } & \text { [ó } & t \text { - } \hat{0} \text { : } & \text { kó] } \\ \text { [2SgSbj } & \text { sow.Pfv-PplNonSbj.InanSg.O, } & \text { Def.InanSg.O] } & \text { yè-ḿ } \\ \text { see.Pfv-1 } \mathrm{SgSbj}\end{array}$
'I saw that you-Sg had sown (= planted).'
In the sense 'see [NP VP-ing]', where the perception and the perceived event are simultaneous, the different-subject subordinator $-n$ is used (§15.1.6.3).

### 17.3.3.1 Hearsay

A proposition learned by hearsay is expressed using the verb 'hear' and an embedded quotation with overt 'say' verb in different-subject subordinated form (§15.1.6.3).

| (637) | [[L' | wá $\rightarrow$ ] | [bàmàkó | mà | ìnè] | bé | gìnà-n] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [[[2Sg | QuotSbj] | [B | in] | go.Pfv] | 3PISbj | say-DS] |
|  | nwá-njò-m |  |  |  |  |  |  |
|  | hear-Pres-1 SgSbj |  |  |  |  |  |  |
|  | 'I hear | say tha | Sg wen | Bama |  |  |  |

### 17.3.4 Complement of kán ‘do, be done’

The verb kán is transitive 'do, make' or intransitive 'be done, be made, happen' (§11.2.6.2) in simple main clauses. 3 Sg perfective kànè- $\varnothing$ 'it was (or: has been) done' often resumes a preceding passage, especially in the conditional antecedent clause kànè- $\varnothing$ mé (or kànè- $\varnothing$ mé díndì ), literally 'if it has been done', which often serves as a link between paragraph-like units of discourse (cf. English After that, ...).
kán is part of many collocations, since it can make a non-verb (or a morphologically inert borrowing) into a transitive or intransitive verb. In some cases the other element occurs chiefly or solely in this collocation. A representative list is (396c) in §11.1.3.1. kán may also combine with manner adverbs, as in nèné kán ‘do like this'.

In (638), kànè- $\varnothing$ follows an 'it is' predication. kànè- $\varnothing$ appears to add nothing to the basic meaning. The nuance may be something like 'it happens to have been a waste'.

| [biŕs: | kó] | birrè-ý $\nearrow$, |
| :---: | :---: | :---: |
| [work(n) | Def.InanSg.O] | work.Pfv-1PlSbj, |
| nàmô: $=$ y | kànè- $\varnothing$ |  |
| waste $=$ it.is | be.done.Pfv-3 |  |

'We have done the work, (but) it has been a waste.' (2005-1a)

```

An unusual property of kán is that it may occur, in morphologically positive form (any tenseaspect), in combination with a preceding unconjugated perfective negative stem (suffix -l). The pronominal subject category is expressed by a suffix on kán, not on the preceding negative verb. The free translation is negative, but there is usually some modal qualification ('perhaps', 'it may be'). The construction is common in conditional antecedents where such modal qualification is automatic (639a). This combination is also useful in allowing a subject switch in the following clause, without a major "paragraph" break. The syntactic structure, however, is similar to English \(X\) happen [not to VP].

b. [tò-mbó mà] [ă:r-пgó má] b-è: mé, [Recip-Pl with] [understanding in] be-2PlSbj if, áyá-1 kànà-mb-è: be.weary-PfvNeg do-Fut-2P1Sbj 'if you-Pl are in a state of mutual understanding, you-Pl will not suffer.' (2005-1a)

'If you-Sg say (intend) that you go there following him, you will perhaps not find him there.' (2005-1a)

\subsection*{17.3.5 Factive complement with táffòrò or tìlây 'certain, necessary’}
táffòrò ( \(f=\) preglottalized \(y\) or alveopalatal stop) 'it is certain', pronounced as in Fulfulde, may precede an imperfective clause (for a probable future event) or a perfective clause (inferring a past event).
a. táffòrò éngú à:lé tègá-m̀
certainly tomorrow rain(n) rain.fall-Fut.3SgSbj
'It will certainly (definitely) rain tomorrow.'
\(\begin{array}{lllll}\text { b. táffòrò } & \text { jǎ: } & \text { ŋ̀gîn } & \text { à:lé } & \text { tègè- } \varnothing \\ \text { certainly } & \text { yesterday } & \text { here } & \text { rain(n) } & \text { fall.Pfv-3SgSbj }\end{array}\)
'It must have rained here yesterday.'
tìlây, another regionally widespread word also found in Fulfulde, has similar functions (641).
\begin{tabular}{lll} 
tìlây & à:lé & tègá-ì̀ \\
necessarily & rain(n) & rain.fall-Fut. 3 SgSbj \\
'It will definitely & \((\) necessarily \()\) & rain.'
\end{tabular}
táffòrò and tìlây resemble English epistemic adverbs, but I take them to be complementtaking higher-level predicates ('[it is] certain that ...') in Najamba, where they are preposed to, rather than medial in, indicative clauses.

\subsection*{17.4 Verbal noun (and other nominal) complements}

Nominalized verbs, often in phrases including complements and/or adjuncts, serve as complements to several higher verbs. The usual nominalization is the verbal noun with suffix -lé and \(\{\mathrm{H}\}\) tone overlay (§4.2.3.1), but other nominals with verbal sense may also occur. The higher verbs may require a same-subject complement (verbal-noun phrase without
an overt subject), but 'prevent' requires a different-subject complement including overt expression of the lower subject. yàgí 'be right' is a predicate taking the verbal-noun phrase as subject.

\subsection*{17.4. Structure of verbal noun phrase}

The verbal noun may be preceded by an \(\{\mathrm{L}\}\)-toned nominal compound initial denoting the logical object (§5.1.2).
a. ìbì \({ }^{\mathrm{L}}\)-[págí-lé]
mouth \({ }^{\mathrm{L}}-[\) tie- VblN\(]\)
'fasting' (ibí)
b. kàlà \({ }^{\mathrm{L}}-[k a ́ l-l e ́]\)
price \({ }^{\text {L }}\)-[haggle-VblN]
'haggling over prices' (kàlǎ:)

A noun denoting the logical subject may also serve as the compound initial (cf. English sunset), if subject and verb constitute a conventionalized collocation (§11.1.2) and if there is no other compound initial.
(643) ùjùngò \({ }^{\text {L }}\)-[túmbí-lé]
\(\boldsymbol{s u n}^{\mathrm{L}}\)-[(sun)rise-VblN]
'sunrise, dawn' (ùjúngó )
An \(\{\mathrm{L}\}\)-toned compound initial representing the object may be pluralized (644a). However, if the object is a more complex NP, it may not appear as a simple compound initial. Instead, such a complex NP must take the form of possessor, retaining its own usual tones and controlling tone-dropping on the verbal noun (644b). This is the case when the object contains a numeral, a determiner, or a possessor, or if it is a conjunction of two NPs.

b. [pègè-mbó nô:y] \({ }^{\mathrm{L}}\) sèmì-lè
[pègè-mbó èbíyè] \({ }^{\text {L }}\) sèmì-lè [mí pègè] \({ }^{\mathrm{L}}\) sèmì-lè [pègé má \(\rightarrow\) ] [ínè mà:] \({ }^{\text {L }}\) sèmì-lè
'slaughtering a sheep'
'slaughtering sheep-Pl'
'slaughtering two sheep'
'slaughtering these sheep'
'slaughtering my sheep'
'slaughtering a sheep and a goat'

\subsection*{17.4.2 'Prevent' (gámdé) plus verbal noun}

This verb takes NP (645a) and verbal-noun (645b) complements. The person who is prevented is expressed as an object (with optional accusative postposition gì) of the main verb; this may precede or follow the verbal-noun complement.
a. bíró: \(\left[\begin{array}{ll}m i ́ & g i ̀\end{array}\right] \quad\) gàmdè- \(\varnothing\)
work(n) [1Sg Acc] prevent.Pfv-3SgSbj
'He/She prevented me from work(ing).'
b. [mí gì] [[móttì mà \(]\) iń-lé] gàmdè- \(\varnothing\)
\([1 \mathrm{Sg}\) Acc] [Mopti to] go-VbIN] prevent.Pfv-3SgSbj
'He/She prevented me from going to Mopti.'
(alternative ordering: [[móttì mà] iń-lé] [mí gì] gàmdè- \(\varnothing\) )
gámdé is unusual in form, tonally and in its medial cluster. It may be related to gǎy \(\mid\) gànè 'block off (a passage)'. These forms belong to a historically complex set extending from Dogon into Songhay.

\subsection*{17.4.3 'Consent' (àbí) plus verbal noun or nonsubject relative}

The verb àbí 'receive, take (sth given)' is used with a same-subject verbal-noun complement in the sense 'consent, agree (to do sth)'.
wí-lé \begin{tabular}{l} 
àbè- \(\varnothing\) \\
come-VbIN consent.Pfv-3SgSbj \\
'He/She agreed to come.'
\end{tabular}

With different subjects, the complement is a future nonsubject relative.
[mí twě tǒ-ŋgà]
àbè- \(\varnothing\)
[1Sg sowing slash.to.sow-Fut.PplNonSbj]
consent.Pfv-3SgSbj
'He consented that I sow the seeds.'

\subsection*{17.4.4 'Cease' (dòǵ \()\) plus verbal noun}
dògé 'leave, abandon' is common as a simple transitive with NP object. It can take a verbalnoun complement in the sense 'cease (doing sth)', especially in the context of abandoning a formerly practiced activity.
(648) [[gìyâ: b-र̂: kó] gíy-lé] dòg-à:
[[dance(n) 3PlPoss-Psm.InanSg.O Def.InanSg.O] dance-VblN] leave.Pfv-3P1Sbj
'They have left off (= they no longer perform) their dance.'
[b- \(\hat{\varepsilon}:<b \varepsilon ́ g \grave{̀}\) 'their possession', §6.2.2]
17.4.5 'Forget (to ...)' (ìré) plus verbal noun or 'whether' disjunction

A same-subject complement in the sense 'forget to VP' is expressed as a verbal-noun phrase.
\begin{tabular}{llll} 
[[ébám & má \(]\) & ín-lé] & ìrè- - ń \\
{\([[\) market } & to \(]\) & go-VbIN] & forget.Pfv- 1 SgSbj
\end{tabular}
'I forgot to go to the market.'

An example of 'forget' with a factive complement ('forget that ...'), phrased as a 'whether' disjunction (§7.2.2), is (650).
(650) [íyó [bitígì yè] níngé \(=b-a ̀:=y\) mà \(\rightarrow\) ] ìrè-ḿn
[today [shop Def.InanPl] shut=Past-Pass=it.is whether?] forget.Pfv-1 SgSbj
'I forgot that the shops were (=are) closed today.'

\subsection*{17.4.6 'Begin' (jàngí ) plus verbal noun}

This verb takes an NP object (651a) or a same-subject verbal-noun complement (651b).
a. [íngé
ní-lé]
jàng-à:
[water drink-VblN] begin.Pfv-3P1Sbj
'They began to drink the water.'
\(\begin{array}{lll}\text { b. mómbí-y-lé } & \text { jàng-à: } & \text { mé } \\ \text { gather-MP-VbIN } & \text { begin.Pfv-3PlSbj if } \\ \text { '(when) they have begun to assemble' }(2005-1 \mathrm{a})\end{array}\)
17.4.7 'Be afraid to' (íbí-yé) plus verbal noun or 'whether' disjunction
íbí-yદ́ 'fear, be afraid of', which contains mediopassive -yદ́, may take NP objects. It takes verbal-noun form when the subjects are coindexed ('be afraid to VP'). In this case, the experiencer fears the consequences of his/her potential action.
\begin{tabular}{lll}
{\([\) ìgîn } & Wí-lé] & ìbì-yغ̀- \(\varnothing\) \\
{\([\) here } & come-VblN] & fear-MP.Pfv-3SgSbj
\end{tabular}
' \(\mathrm{He} /\) She is afraid to come here.'

A different-subject complement, expressing fear of a future eventuality, has the form of an 'whether' disjunction (§7.2.2), i.e. literally "I am afraid whether ..." (Compare archaic English lest.)
\begin{tabular}{llll}
{\([m i ́\)} & kérà-mb-ò: & mâ \(\rightarrow]\) & ibìi-yè-ḿ \\
{\([1 \mathrm{SgObj}\)} & bite-Fut-2SgSbj & whether?] & fear-MP-1SgSbj
\end{tabular}
'I'm afraid that you-Sg will/might bite me.'

\subsection*{17.4.8 Weak obligational 'ought to' (há:nè ~ há:nà, há:né ) plus verbal noun}

This Fulfulde borrowing can take either of two forms with different morphosyntax. The first is a noun há:nè~há:nà, in collocation with kán 'do'. In the positive this is normally inflected with perfect auxiliary verb jò- (654a). The usual negation is with the perfective negative of kán (654b). The complement is expressed with a verbal noun -lé or a similar nominalization such as -ndá: . I parse (654a-b) with 'an elder' and 'a child' as subjects of há:nà kán, and with the verbal noun as a complement of the latter.
\[
\begin{array}{lllllll}
\text { a. } & {[n o ̀: ~} & \text { kúlmá } & \text { yà:] dám-lé } & \text { há:nà } & \text { kán } & \text { j-è: }  \tag{654}\\
& \text { [person } & \text { elder } & \text { Foc] }] & \text { speak-VbIN } & \text { ought } & \text { do }
\end{array} \text { Perfect-Ppl.SbjFoc }
\]
b. èndê: dám-lé há:nà káná-l- \(\varnothing\)
child speak-VbIN ought do-PfvNeg-3SgSbj
'A child ought not to speak.'

A set of alternative constructions based on the same Fulfulde word-family has a directly inflectable verb há:né. There are several ways to construct the sentence. In (655a) há:né takes perfect auxiliary jò-, in (655b) it takes the same-subject 'and' chaining morpheme nè and is followed by a future form of bé- 'remain' (§11.2.6.1), and in ( 655 c ) it occurs in the past perfect construction with past enclitic \(=b \dot{\varepsilon}\)-. The complement has either a verbal noun ( \(655 \mathrm{~b}-\mathrm{c}\) ) or the same-subject sequential subordinator \(n \grave{\varepsilon}\) (655a).
(655)

'The woman who has (just) given birth ought to eat meat.'
b. mí [jàngà \({ }^{\text {L }}\)-[kán-lé] há:né nè] bà-mbò-m

1 SgSbj [studying \({ }^{\mathrm{L}}\)-[do-VbIN] ought then.SS] remain-Fut- 1 SgSbj
'I ought to study (= go to school).'
c. gíndí-lé há:né=bè- \(\varnothing, \quad\) gìndá-l- \(\varnothing\)
become.big-VblN ought=Past-3SgSbj, become-big-PfvNeg-3SgSbj
'It was supposed to grow (= get bigger), (but) it hasn't grown.'

See textual example (539b) in §14.3.8 for nonsubject relative há:né jòg-â: .

\subsection*{17.4.9 'Be right (proper, acceptable)' (yàgí)}
yàgí occurs in the locution yàgí jòg-â: '(be) what is right' (§8.4.4.2), which classifies a behavior pattern or action as following socially acceptable norms ('it was the right thing to do').
yàgí may have a verbal-noun "complement" that I take to be the subject. The verbal noun precedes yàgí jòg-â:, which is a nonsubject relative with covert E-class head, as shown by the following E-class definite ké. The larger NP is often the complement of all-purpose postposition mà.
\begin{tabular}{llllll} 
(656) & [[jángí-lé & yàgí & jòg-â: & ké] & mà \(]\) \\
& [[begin-VblN & be.right & Perfect-PplNonSbj & Def.InanSg.E] & in] \\
& '(at the place) & where one should begin' \((2005-1 \mathrm{a})\) & &
\end{tabular}

\subsection*{17.5 Direct chain as complement}

Direct chains are compound-like sequences of (usually just two) verbs, of which only the final is inflected. The nonfinal verb appears in its chaining form, unsuffixed E-stem or I-stem depending on the verb. Direct chains are described in detail in §15.1.1-2.

The following sections describe constructions in which a specialized verb, similar semantically to an English control verb, is expressed as the final verb in a direct chain. Complements and adjuncts are those associated with the nonfinal verb.

\subsection*{17.5.1 'Finish' ( \(j \varepsilon\) - \()\) in direct chain}

The verb \(j \varepsilon\) - 'finish' (also a transitive verb 'take') follows a VP ending in a chaining form. It is ordinarily perfective in the sense 'finish', but non-perfective categories are also possible (e.g. 'I will finish eating'), as are imperatives and hortatives. Examples of the 'finish' construction are in (657).
(657)
\begin{tabular}{llll} 
a. & mànâ: \(\quad k w \varepsilon ́\) & \(j\)-ǒ: & ló \\
& meal & eat & finish.Pfv- \(2 S g S b j\) \\
& Q \\
& 'Have you finished eaten?' &
\end{tabular}
b. kwé jà-lú-m
eat finish-PfvNeg-1SgSbj
'I haven't finished eating.'

The positive and negative perfective paradigms are in (658).
(658) category perfective perfective negative
\begin{tabular}{|c|c|c|}
\hline 1 Sg & \(j e ̀\)-ḿn & jà-lú-m \\
\hline 1P1 & \(j \grave{-y}\) & jà-lí-ỳ \\
\hline 2 Sg & \(j\)-ǒ: & jà-1-ó: \\
\hline 2 Pl & \(j-\varepsilon\) : & jà-l-é: \\
\hline 3 Sg & \(j \grave{\varepsilon}-\varnothing\) & jǎ-1 \\
\hline 3 Pl & \(j\)-à: & jà:-ndí \\
\hline
\end{tabular}

The forms, such as perfective negative, that are based on the A/O-stem are homophonous with those of já- 'can, be able to'. In practice this is not much of a problem since the 'can' verb occurs predominantly in the future inflection ( \(\S 17.5 .3 .1\) below).

The Najamba 'finish VP-ing' construction is cognate to a somewhat more highly grammaticalized "recent perfect" ('have just VPed' or completive 'have finished VPing') in some eastern Dogon languages such as Jamsay, where the cognate of \(j \varepsilon\) - is farther along in becoming an inflectional suffix.

\subsection*{17.5.1.1 jध́-mbò 'after having ...'}
\(j \varepsilon\)-mbò is the same-subject subordinated form of \(j \varepsilon\) - 'finish', with -mbò 'and (then)' (§15.1.3). It shows the same direct-chain structure just described above. One may translate freely as 'after having (finished) ...' or 'when ... had (finished)'.
a. [kwé jé-mbò]
ínè- \(\varnothing\)
[eat finish-and.SS] go.Pfv-3SgSbj
'When he had finished eating, he went.'
b. [kwé jé-mbò] ínè-y
[eat finish-and.SS] go.Pfv-1P1Sbj 'When we had finished eating, we went.'
\(j \varepsilon-m b o ̀\) is also featured in the following section.

\subsection*{17.5.1.2 'From X to Y ' with \(j a ̌\) : and hâl plus \(j \varepsilon\)-mbò or \(j\)-ô:}

The clause- or phrase-initial morphemes jǎ: 'since, starting from' and hǎl 'until, all the way to' occur at the beginning of their respective clauses or phrases, in a parallelistic construction. The verb \(j \varepsilon\) 'take' occurs at the end of the 'from X' expression. Literally the first part is 'took (=picked up) from X'. Compare the temporal use of English picking up (at ...), and French reprendre, though these English and French parallels have a more complex temporal structure involving a restart.

In (660a) the verb 'take' has the 'and (then)' subordinator -mbò, and the clause begins with \(j a ̌:\) ' since'. (660b) shows a nonsubject relative clause with participial \(j\) - \(\hat{\imath}\) : .
```

a. [jǎ: [séwà:rè mà] j\varepsiloń-mbò]
[since [S in] take-and.SS] [until [M [M in]

```
[íngà-mbò
[stand.Stat-and
'They (= people) went and stood up all the way from Sévaré to Mopti.'
```

b. [[èyà-\etagó ' tì\etagò:] mà] mó j-ô:\nearrow,
[[marriage 年side] in] AnSgSbj take-Pfv.PplNonSbj.InanSg.O,
[[bí-\etagán }\mp@subsup{}{}{\textrm{L}}\mathrm{ tìngò:] mà]
[[being(n) L
'from the side (=issue) of marriage, to the side (=issue) of (co-)existence'
(2005-1a)

```

See also (146) in §4.4.3 ('all the way to Douentza').

\subsection*{17.5.2 'Help' (bǎr) in direct chain}

In other contexts, bǎr is a simple transitive meaning 'add, increase' or 'help' (i.e. 'lend a hand, add one's own effort'). In the sense 'help', in addition to an NP object, it may take a VP complement, in the form of a preceding directly chained verb and any complements. In English [X help Y [ \(\varnothing_{y}\) do the work], the subject of 'do the work' is understood to be Y, since the 'help' may be indirect (e.g. financial). In Dogon languages with a 'help/add' syncretism, it may be that X and Y are joint subjects of 'do the work'.
\begin{tabular}{|c|c|c|c|c|}
\hline [mí & gì] & [bír & bìré] & bàrè- \(\varnothing\) \\
\hline [1Sg & Acc] & [work(n) & work(v)] & help.Pfv-3SgSbj \\
\hline \multicolumn{5}{|l|}{'He/She helped me work (=do) the work.'} \\
\hline
\end{tabular}

\subsection*{17.5.3 Capacitative constructions}

\subsection*{17.5.3.1 'Be able to, can' ( \(j\) á ) in direct chain}

The basic positive and negative paradigms of já 'can, be able to', used for time reference including the present (including permanent capability), are in (662). The morphology is future rather than present, as indicated by \(3 \mathrm{Sg}-\grave{m}\) in the positive, and by the tones of -ńdì- in the negative.
(662) subject positive negative
\begin{tabular}{lll}
1 Sg & jà-mbò-m & já-nù-m \\
2 Sg & \(j a ̂-m b-o ̀: ~\) & já-nd-ò: \\
3 Sg & \(j a ̀-m-\varnothing\) & já-ndì- \(\varnothing\)
\end{tabular}

Perfective forms are also possible when the time is shifted to the past: \(j \grave{\varepsilon}-\bar{m}\) 'I could', jà-lú-m 'I could not'.

All of these forms except the perfective positive are based on the A/O-stem. These forms are homophonous with corresponding forms of \(j \varepsilon\) - 'take; finish' (§17.5.1). Thus the direct chain [VP jà-lú-m] can mean either 'I could not VP' or 'I didn't finish VP-ing'. Fortunately, \(j \varepsilon\) - in the sense 'finish' is most often perfective, and já- 'be able to' is usually future in form.

The 'be able to' verb follows a VP with verb in the chaining form (663). One can easily see how this combination might develop into a suffixed capacitative derivative.
\begin{tabular}{lllll} 
a. & {\([\) kìnû: } & kó] & jènjé & jà- \(m b-o ̀: ~\)
\end{tabular}\(\quad\) ló
b.
\begin{tabular}{llll}
{\([k i ̀ n u ̂: ~\)} & kó] & jènjé & já-nù-m \\
[stone & Def.InanSg.O] & lift & can-FutNeg-1SgSbj
\end{tabular}
'I can't lift the stone.'
c. [èndê: \({ }^{\mathrm{L}}\) bà:] gìné já-ndì- \(\varnothing\)
[child \({ }^{\text {L }}\) father] say can-FutNeg-3SgSbj
'The father of a child cannot say (that).' (2005-1a)
d. \([t o ́ \rightarrow\) nè] [íyó là] màmílí-yé nè là]
[fast Adv] [today also] go.back-MP and.SS also]
wé jà-m
come can-Fut. 3 SgSbj
'He can come back (to it) quickly today.' (2005-1a)
e. ánì [yě: \({ }^{\mathrm{L}}\) dòm] ǹdíy já-ndì- \(\varnothing\),
man [woman \({ }^{\mathrm{L}}\) speech] listen can-FutNeg-3SgSbj,
yě: [ánì \({ }^{\mathrm{L}}\) dòm] ìdíy já-ndì- \(\varnothing\)
woman [man \({ }^{\mathrm{L}}\) speech] listen can-FutNeg-3SgSbj
'A man can't listen to the words of a woman, a woman can't listen to the words of a man.' (2005-1a)

\subsection*{17.5.3.2 'Have a chance to' (dùmé) in direct chain}

The 'get, obtain' verb dùmé is not the common 'can VP' predicate, though verbs with the basic sense 'get, obtain' do have this function in Jamsay and several other Dogon languages.

In Najamba, dùmé 'get, obtain' does occur occasionally in texts in a construction with the sense 'have a chance (opportunity) to VP'.
(664) óbí-y dúmà-njò-ndí-yà
sit-MP get-Prog-Neg-3P1Sbj
'They (= women) have no chance to sit down.' (2005-1a)

\subsection*{17.6 Purposive, causal, and locative clauses}

\subsection*{17.6.1 Motion verb with purposive complement (-â: )}

A motion verb may take a purposive complement. The verb of the complement clause has purposive suffix -â:, replacing the stem-final vowel, with no further inflectional suffixation. The vocalism of nonfinal syllables is consistent with the \(\mathbf{A} / \mathbf{O}\)-stem. The stem has \(\{\mathbf{L}\}\)-tones in the earlier syllables. The combination of -â: with a monosyllabic stem results in an <LHL> syllable, as (665a).
gloss chaining purposive
a. monosyllabic
\begin{tabular}{lll} 
'shave' & \(k \varepsilon ́:\) & \(k\)-ầ: \\
'pour' & \(S w \varepsilon ́\) & \(S W-a ̆:\) \\
'bring', & \(j \hat{e}:\) & \(j-a ̂:\)
\end{tabular}
b. nonmonosyllabic
\begin{tabular}{lll} 
'bathe' & dìyé & dìy-â: \\
'slaughter' & sémé & sèm-â: \\
'scrub' & tújújé & tùgùj-â: \\
'cut' & kéj́ & kèj-â:
\end{tabular}

Examples of the construction are in (666).
(666)
a. [íngé dìy-â:] ínè- \(\varnothing\)
[water bathe-Purp] go.Pfv-3SgSbj
'He/She went to bathe.'
b. [swě: mòg-â:] ín-ò:
[garment.Pl wash-Purp] go.Pfv-3P1Sbj
'They went to wash the clothes.'
c. kw-ă: wè-ḿ
eat-Purp come.Pfv-1SgSbj
'I have come (in order) to eat.'
d. [pègé mó] [[[ń \({ }^{\mathrm{L}}\) bà] gì] ìd-â:] jè:-ḿn
[sheep Def.AnSg] [[[1SgPoss \({ }^{\text {L }}\) father] Acc] give-Purp] bring.Pfv- 1 SgSbj
'I brought the sheep- Sg in order to give (it) to my father.'
e. [gǒn-gó má] [tàgǎ: má] [íngé èr-â:]
[waterjar-InanSg.O with] [pond in] [water draw.water-Purp]
ìn-ó: mé díndì
go.Pfv-2SgSbj if all
'If you go to the pond to draw water with a waterjar' (2005-1a)
 'if you went in order to (=if you tried to) touch any other (livestock) animals' (2005-1a)
jànjí-mbò, the same-subject 'and (then)' subordinated form (§15.1.3) of jànjí 'do on purpose', may be placed at the beginning of the purposive clause with -â: .

'The person (= the linguist) got up (= came from) as far away as there (= overseas) solely in order to look for things.' (2005-1a)

\subsection*{17.6.2 Purposive clause with gìné-mbò 'having said'}

A more general purposive clause type, expressing the motive for an action and compatible with any type of main clause (not just motion verbs), involves the invariant 'and (then)' form gìné-mbò 'say and (then)', based on gìné 'say', which in this type of context really means 'say to oneself, think, intend'. gìne-mbò is preceded by a same-subject complement VP with a future verb (-mbô- plus pronominal-subject suffix, or 3Sg -mì). Examples with 1st/2nd person subjects bring out the structure most clearly (668).

b. [[kělè dùmà-mb-ô:] gìnह́-mbò] bíró: bírà-nj-ò:
[[money.Pl obtain-Fut-2SgSbj] say-and.SS] work(n) work(v)-Pres-2SgSbj 'You-Sg work (=do) work, in order to get money.'
c. [gúlì: ké]
[shed Def.InanSg.E]
gùlè-ỳ
build.shed.Pfv-1PISbj
'We built the shed in order for us to sleep (there).'

For third person subject, the future verb in the purposive clause takes the fixed form -mbor-m, morphologically a pseudo-1Sg subject that functions as logophoric subject marker (§18.2.2). It is distinct both from 3 Sg future \(-\grave{\mathrm{m}}\) and from 3 Pl future -mb -à. Since the purposive is structured as a (thought) quotation with overt 'say' verb, it might seem that -mbó-mì directly reflects the underlying 1 Sg pronoun in the direct (thought) quotation in 'He built the shed,
saying (=thinking) "I will sleep there". .'However, for 3Pl subject the same pseudo-1 Sg future form -mbó-m̀, rather than \(1 \mathrm{Pl}-m b o ́-y\), is used (669b), showing that this \(-m b o ́-m\) is not a true 1 Sg form.
a. [[mànâ: kwà-mbó-m̀] gìné-mbò] òbì-yè- \(\varnothing\)
[[meal eat-Fut-LogoSbj] say-and.SS] sit-MP.Pfv-3SgSbj
'He/She sat down to eat a meal.'
b. [[mànâ: kwà-mbó-ìm] gìné-mbò] òbì-y-ò:
[[meal eat-Fut-LogoSbj] say-and.SS] sit-MP.Pfv-3PISbj
'They sat down to eat a meal.'
c. [gúlì: ké] [bìyò-mbó-ìn gìné-mbò]
[shed Def.InanSg.E] [lie.down-Fut-LogoSbj say-and.SS]
gùlè- \(\varnothing\)
build.shed.Pfv-1PlSbj
'He built the shed in order for himself to sleep (there).'

\subsection*{17.6.3 Causal ('because') clause}

The most common 'because' clause type begins with sábù, a regionally widespread form related to noun sábà:bù 'reason', ultimately < Arabic. Such clauses describe the causal forces behind an eventuality, or the epistemological basis for drawing a conclusion.

```

because luck]
[[[nǐ: tòmó:] [bǎ: tòmó:]] kì-[\varepsiloǹl-ngè]]] L
[[[mother one] [father one]] luck }\mp@subsup{}{}{\textrm{L}

```
    '(Not everyone is successful.) Because good luck (= fortune), the fortunes of
    (children, even of) the same mother and the same father are not the same.' (2005-1a;
    'luck' = "head-sweetness")

An alternative is to first state the proposition that denotes the causing eventuality, then resume it with inanimate singular demonstrative kó plus purposive postposition nèn (cf. English that's why ...), preceding the proposition denoting the resulting eventuality (671).
\begin{tabular}{|c|c|c|c|c|}
\hline [bàndî:-mbò & [[sònjǒ: & ké] & mà] & nw-à:] \\
\hline [bandit-Pl & [village & Def.InanSg.E] & in] & enter.Pfv-3P1Sbj] \\
\hline [kó & nèn] & kên & & \\
\hline [Near.InanSg.O & for] & there.Def & & .Pfv-3P1Sbj \\
\hline
\end{tabular}
'Bandits came into the village, for that (reason) they (=villagers) went away from there.'

Another construction is exemplified in (672). Again the causing eventuality is expressed before the caused eventuality. Here, however, the clause denoting the causing eventuality ends in gìné-mbò 'saying'. It reflects the (human) motivation for the event of the first clause.
\begin{tabular}{llll} 
[[bàndî:-mbò & kên & \(\eta w-a ̀:]\) & gìné-mbò] \\
[[bandit-Pl & there.Def & enter.Pfv-3P1Sbj] & say-and.SS] \\
[[[sònjó: & ké] & mà \(]\) & \(g-\grave{o}:]\), \\
[[[village & Def.InanSg.E] & in \(]\) & go.out.Pfv-3PlSbj
\end{tabular}
'Because bandits came in there, they (= villagers) left the village,.'

\subsection*{17.6.4 'Because of', '(more) than'}
'Cause, reason, motive (for doing something)' can be expressed by the noun sábà:bù, mentioned in the preceding section, or by the noun dû: 'bottom, base'. The postposition 'for, on account of' is nèn (§8.3).

In (673), a compositve postposition [ \(X^{\text {L }}\) sàbà:bù] mà built on the possessed form of sábà:bù plus the all-purpose postposition mà creates a 'because of X ' construction, compare English on account of.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline [ké & là] & \multicolumn{2}{|l|}{\(b a ̆-1=b \grave{c}-\varnothing\)} & \multicolumn{3}{|c|}{gìn-â:,} \\
\hline [InanSg.E & also] & \multicolumn{2}{|l|}{be-PfvNeg=Past-3SgSbj} & \multicolumn{3}{|c|}{say.Pfv-PplNonSbj,} \\
\hline [ [[jĕnjà & mà \(\rightarrow\) ] & [[dí:nà & kó] & má- & \({ }^{\text {L }}\) sàbà:bù] & mà], \\
\hline [[[God & and] & [ [religion & Def.InanSg.O] & and] & \({ }^{\text {L }}\) reason] & in] \\
\hline [ké & là] & wè- \(\varnothing\) & & & & \\
\hline [InanSg.E & also] & come.P & fv-3SgSbj & & & \\
\hline \multicolumn{7}{|l|}{'That (= slaughtering an animal on a holy day) didn't use to happen (before Islam).} \\
\hline \multicolumn{7}{|l|}{That came because of God and (Islamic) religion.' (2005-1a)} \\
\hline
\end{tabular}
17.6.5 Negative purposive (prohibitive) clause

Elicited negative purposive clauses take the form of future negative nonsubject relatives (O-class) followed by purposive postposition nèn 'for' (§8.3). The subject of the negative purposive clause and that of the main clause may be the same (674a) or different (674b).
a. [èndê: mó] [[[kìnû: kó mà]
[child Def.AnSg] [[[stone Def.InanSg.O with]
mó dìnì-yá-nd-ò:] nèn] tòmbè- \(\varnothing\)

3SgSbj bump-MP-FutNeg-PplNonSbj.InanSg.O] for] jump.Pfv-3SgSbj 'The child jumped (away) so as not to be in a collision with (= so as not to be hit by) the stone.'
b. [[sěydù kéndà: mó já-nd-ò:] nèn] [S liver Def.AnSg take-FutNeg-PplNonSbj.InanSg.O] for] [[tê: ké] mà] súkàrà ígò-ndí gànè-ḿn [[tea Def.InanSg.E] in] sugar a.lot put.Pfv- 1 SgSbj 'So that Seydou wouldn't get angry ("take liver/heart"), I put a lot of sugar in the tea.'

\section*{18 Anaphora}

\subsection*{18.1 Reflexive}
18.1.1 Reflexive nonsubject arguments (with kî: 'head')

A possessed form of kî: 'head', e.g. mí \({ }^{\text {L }}\) kì: 'my head', can have reflexive object function (675a-e). No additional determiner or plural marker is allowed. Accusative marking is optional. Imperatives have the same syntax (675e).
(675)
\(\begin{aligned} \text { a. } & {[[m i ́} \\ & \text { [[1SgPoss } \\ & \text { 'I hit myself.' }\end{aligned}\)
\({ }^{\mathrm{L}}\) kì:]
(gì)]
dènjé
\(j \grave{\text { - }}\) 向

\(\begin{array}{lllll}\text { d. } & {[[[\text { ó }} & \left.{ }^{\text {L }} \text { kì: }\right] & \text { (gì) }] & \text { dènjá-l-ó: } \\ & {[[[2 S g P o s s} & \left.{ }^{\mathrm{L}} \text { head }\right] & \text { (Acc) }] & \text { hit-PfvNeg- } 2 \mathrm{SgSbj}\end{array}\)
[nǒ: mă:mà-nd-ó:]
[person defeat-PresNeg-2SgSbj]
'If you haven't hit yourself (first), you can't handle (= beat) (another) person.' (2005-1a)
\(\begin{array}{llll}\text { e. } & {[[o ́} & \left.{ }^{\text {L }} \text { kì: }\right] & (\text { gì })]\end{array} \quad \begin{aligned} & \text { dénjà } \\ & \\ & \\ & \\ & \\ & \\ & \\ & \text { 'Hit yourself!' }\end{aligned}\)

The only cases involving the complement of a simple (non-composite) postposition and a coindexed clausemate subject that I was able to elicit were with purposive nèn 'for'. Here the explicit reflexive is required (676). For composite postpositions, see the following section.
(676)
\begin{tabular}{|c|c|c|c|}
\hline [ [bé & \({ }^{\text {L }}\) kì:] & nèn] & bírà-nj-ê: \\
\hline [[3PIPoss & \({ }^{\text {L }}\) head] & for] & work(v)-Pres-3PISbj \\
\hline They wor & hemsel & & \\
\hline
\end{tabular}

\subsection*{18.1.2 Reflexive possessor}

There is no special marking of reflexive possessor, as in ' X saw [X's Y]', where the possessor of the nonsubject NP is coindexed with the clausemate subject. Instead, the regular pronominal possessor forms are used. When the subject is third person (677b,d), this results in ambiguity, as in English (He drank \(^{\text {his }} /{ }_{i} /\) his \(_{j}\) tea)'.


Several adverbial postpositions are complex (§8.2), of the type [ \(X\) bàndì] mà] 'in X 's back' \(=\) 'behind X '. When the clausemate subject is coindexed with the complement of the compositve postposition (which is syntactically a possessor), the resulting construction is comparable to e.g. (677d), above, and the overt reflexive pronoun is not required. The plain 3 Sg (animate) possessor mó occurs in (678a), whether or not mó is coindexed with the subject. For emphasis or to avoid confusion, the explicit reflexive is used (678b).
a. \(\begin{array}{lllll}\text { ह́lé } & {[[\text { mó }} & \left.{ }^{\mathrm{L}} \text { bàndì }\right] & \text { mà }] & \text { sìììrè̀- } \varnothing \\ \text { peanuts } & {[[\mathbf{3 S g P o s s}} & { }^{\mathrm{L}} \text { back] } & \text { in }] & \text { hide-Tr.Pfv-3SgSbj }\end{array}\)
'She hid the peanuts behind herself/him.'
\(\begin{array}{llllll}\left.\text { b. } \begin{array}{llll}\text { Élé } & \text { [[[mó } & { }^{\mathrm{L}} \text { kì:] } & \left.{ }^{\mathrm{L}} \text { bàndì }\right] \\ & \text { mà }] & \text { sìbì-rè- } \varnothing \\ & \text { peanuts } & {[[[3 S g P o s s ~} & \left.{ }^{\mathrm{L}} \text { head }\right]\end{array}{ }^{\mathrm{L}} \text { back }\right] & \text { in }] & \text { hide-Tr.Pfv-3SgSbj }\end{array}\)
'She hid the peanuts behind herself.'

\subsection*{18.2 Logophoric and indexing pronouns}

\subsection*{18.2.1 True logophoric function}

No specialized logophoric pronoun has been observed, except for the verbal suffix described in the following section. Instead, regular pronominal forms (including subject-pronominal inflection on verbs) occur in quoted clauses. A third person pronominal in a quoted clause may or may not be coindexed with a third person quoted speaker. Therefore in (679), 3Sg mó as direct object may, but need not be, coindexed with the subject (Sidi).
```

(679) sí:dì [[mí yà:] [mó gì] dènjè] wá,
S [[1Sg Foc] [3Sg Acc] hit.Pfv] Quot,
kà: pàbǎ:=ý
but untruth=it.is
'Sidi says (= claims) that I hit him

```

\subsection*{18.2.2 Pseudo-1Sg -m as logophoric subject suffix}

In (680), the free translation follows the English pattern whereby pronominals and other indexicals are updated in indirect discourse. In Najamba, however, 'you go' in this example is expressed by a form identical to 'I go'. In other words, the (apparent) 1 Sg pronominal-subject suffix on the verb seemingly captures the original first-person quality of the reported speech/thought (quoted directly): "If you say, 'I will go ...'." This is limited to subject position, and is expressed by the (apparent) 1 Sg pronominal-subject suffix \(-m\).
\begin{tabular}{lccl} 
kên & ìnò-njò-m & gìn-ó: & mé \\
there.Def & go-Pres-LogoSbj & say.Pfv-2SgSbj & if \\
'If you-Sg say (intend) that you will go there, \(\ldots\). &
\end{tabular}

That the pseudo- 1 Sg suffix is really a transpersonal logophoric subject marker is shown by its use with plural referents (where we might have expected a 1 Pl suffix), and by its use with second as well as first persons. I therefore gloss it "-LogoSbj" rather than "-1SgSbj."
\begin{tabular}{llll} 
kên & ìnò-njò-m & gìn- \(\varepsilon\) : & mé \\
there.Def & go-Pres-LogoSbj & say.Pfv-2PlSbj & if \\
'If you-Pl say (intend) that you will go there,, .., &
\end{tabular}

In addition, any further anaphoric operations involving referential identity are based on the "real" pronominal category of the referent, as expressed by the higher antecedent. (682a) is a simple quoted transitive clause with NP object, and if this is replaced by a true 1 Sg object there is no reflexive marking (682b). By contrast, in (682c) the object is 2 Sg reflexive ('your head' = 'yourself'), agreeing with the subject of the higher 'say' verb.
\begin{tabular}{lllll} 
a. & kòngò \({ }^{\text {L }}\)-[jàlá-ngó] & gìyà-mbó-m & gìn-ó: & mé \\
thing \({ }^{\mathrm{L}}\)-[long-InanSg.O] & kill-Fut-LogoSbj & say.Pfv-2SgSbj & if \\
& 'if you-Sg say \((=\) intend \()\) to kill a snake, \(\ldots\), & &
\end{tabular}
b. [mí gì] gìyà-mbó-ì gìn-ó: mé
[1Sg Acc] kill-Fut-LogoSbj say.Pfv-2SgSbj if 'if you-Sg say (=intend) to kill me, ...'
c. [[ó \({ }^{\text {L } k i ̀:] ~ g i ̀] ~ g i ̀ y a ̀-m b o ́-m ̀ ~ g i ̀ n-o ́: ~ m e ́ ~}\) [[2SgPoss \({ }^{\text {L head }] ~ A c c] ~ k i l l-F u t-L o g o S b j ~ s a y . P f v-2 S g S b j ~ i f ~}\) 'if you-Sg say (intend) to kill yourself, ...'

Further textual examples of the logophoric subject construction are in (683).
(683)
a. kà: [mó là] àyè-ḿ
but [AnSg also] be.weary.Pfv-LogoSbj say-Pres-3SgSbj
'But he too says (= claims) that he is tired.' (2005-1a)
b. ... gìné-m mé,
... say.Pfv-1SgSbj if,
ó [mí gì] ǹdá-nù-m gìnà-mb-ô:
\(2 \mathrm{Sg} \quad[1 \mathrm{Sg}\) Acc] give-FutNeg-LogoSbj say-Fut-2SgSbj
'If I say (that), you will say that you won't give (him/her) to me.' (2005-2a)

For a similar generalized 1 Sg verb form in an 'owner of X ' compound, see ex. (192) in §5.1.8.

\subsection*{18.2.3 'The guy/fellow' (dòmbâ-n)}

A noun dòmbâ- \(n\) can reintroduce a previously established generic or indefinite discourse referent, as in discussions of general truths, or a referent whose identity is not known to the speaker. Example: 'I ran into a young man in the park; the guy was too drunk to talk clearly'.
dòmbâ-n is irregularly related to dòmbǎ: 'owner', and the plural of both is dòmbà-mbó 'the guys; owners'. An example of dòmbâ- \(n\) is at the end of the extended passage in (684).

'On the other hand, (someone) to whom He (= God) has not given (=shown) the path, it doesn't matter if he been educated, it doesn't matter if he hasn't been educated. If God hasn't given the path to the fellow, ...' (2005-1a)

Another textual example is (685). It has two occurrences of dòmbâ-n, from a similar passage about general truths.
\begin{tabular}{lllllll} 
bárkè & kó \(\nearrow\), & \multicolumn{2}{c}{ dòmbâ-n } & \multicolumn{2}{c}{ dìmbì-yá-m̀, } & \\
blessing & Def.InanSg.O, & guy & follow-MP-Fut.3SgSbj, & \\
bárkè & dòmbân & {\([o ́\)} & mà \(]\) & \(k w a ́:-1-\varnothing\) & mé & dîn, \\
blessing & guy & {\([2 \mathrm{Sg}\)} & in \(]\) & eat-PfvNeg-3SgSbj & if & all,
\end{tabular}
[ó gì] dìmbí-yà-ndí- \(\varnothing\)
[2Sg Acc] follow-MP-PresNeg-3SgSbj
'(If someone has received blessedness [= good treatment] at your home), that blessedness will follow the fellow. If the fellow did not eat (=receive) blessedness at your place, he doesn't follow you.' (2005-1a)

\subsection*{18.2.4 Occasional "obviative" markers}

Given the relatively rich set of demonstrative categories, it is possible for spatial relationships vis-à-vis speaker (and addressee) to be used opportunistically to index a secondary topic (perhaps several times in an extended passage). The far-distant demonstrative, especially animate singular òmá:, is common in this function. An example is the passage in (686), where òmá: occurs twice. It refers to the secondary topic (the tall person) who functions as counterparty (alter ego, Doppelgänger) to the dominant topic (the short person), who is indexed as proximate.
```

X: [[nó: dîn] jóg-è: gà] kánà-ndí-\varnothing,
[[person every] have-Ppl.SbjFoc Top] be.done-Pres.Neg-3SgSbj
[[[nò: }\mp@subsup{}{}{\textrm{L}}\mathrm{ gàbê: mó]
[[[person }\mp@subsup{}{}{\textrm{L}}\mathrm{ tall.AnSg Def.AnSg]
kè\etagè }\mp@subsup{}{}{\textrm{L}
place }\mp@subsup{}{}{\textrm{L}}\mathrm{ reach have-PplNonSbj Def.InanSg.E] in]
[[dèndí: mó là] [ké gì] tú\etagó-m̀]
[[short.AnSg Def.AnSg also] [InanSg.E Acc] reach-Fut.3SgSbj]
Y: kóndò-ndí-\varnothing
be.good-PresNeg-3SgSbj

```
\(\mathrm{X}:\left[\begin{array}{ll}\mathrm{mó} & \text { gì }\end{array}\right.\) pònǎ-mb-à: \(=\grave{y} \quad\) mà \(\rightarrow\),
[[AnSg Acc] wring-Fut-Pass=it.is Q , má òmá: tòndì-yò-mb-ê: mà \(\rightarrow\), or FarDist.AnSg bend-MP-Fut-Ppl.SbjFoc Q,
tóndí-y jòg-â: =ỳ kànè- \(\varnothing\) mé,
bend-MP have- \(\mathrm{PplSbj}=\) it.is be.done. \(\mathrm{Pfv}-3 \mathrm{SgSbj}\) if,
òmá: áy jòg-â: = ỳ, [[ǒm gì]

FarDist.AnSg be.weary have-PplSbj=it.is, [[Prox.AnSg Acc]
jùmbé nè] [ǹgâ:n jùmbé dò:-nd-ò: dé],
pull then.SS] [there pull reach-Caus.Pfv-3PlSbj if],
[mó là] áy jòg-â: =ỳ
[ AnSg also] be.weary have- \(\mathrm{PplSbj}=\) it.is
X: It doesn't happen ( \(=\) is impossible) that every person [focus] has (wealth), (or) that the short (person) reaches the place \((=h e i g h t)\) that the tall person has reached.
Y: It isn't done well (= good).
X: Will he (=short person) be wrung (= stretched), or is it that one (=tall person) [focus] who will bend? If he bends, that one (=tall person) will suffer. If you-Sg pull this one (=short person) and make him reach there (=that height), he too will suffer.
(2005-1a)

Demonstrative adverbs ('here', 'over there', etc.) may also be used in this way. See §4.4.4.2 for an example ('The sun rises here, and the sun sets around here'), where two locations (east and west horizons) are denoted by proximate 'here', the second one adding an approximative suffix ('around here').

\subsection*{18.3 Reciprocal}

\subsection*{18.3.1 Simple reciprocals (tò-mbó, tồ:n)}

Reciprocal constructions are based on the nouns tò-mbó (used for groups of three or more) and tô:n (for two persons). They are related to the noun tǒ: 'comrade, agemate' (plural tò-mbó ). These occur in direct object function to indicate reciprocal coindexation with a nonsingular clausemate subject. There is no agreement with the noun-class or pronominal person of the subject. Accusative gì, which is largely predictable here, is optional. When it is present, /tồ:n gì/ is usually heard as [tô:ngì] with the \(n\) assimilating to the velar.
a. [nò-mbó bè \({ }^{\mathrm{L}}\) dîn] [tò-mbó (gì)] tàr-à:
\(\left[\begin{array}{lll}\text { person- } \mathrm{Pl} & \mathrm{Pl}^{\mathrm{L}} \text { all] [Recip-Pl (Acc)] look.at.Pfv-3P1Sbj }\end{array}\right.\)
'All the people looked at each other.'
b. \([[y \varepsilon ̌: ~ m o ́: ~ m a ́ \rightarrow] ~[a ́ n e ̀ ~ m o ́ ~ m a ̀ ~ \rightarrow]] ~\)
[[woman Sg and] [man Def.AnSg and]]
[tǒ:n gì] tàr-à:
[Recip.Dual Acc] look.at.Pfv-3PlSbj
'The woman and the man looked at each other.'
\(\begin{array}{lll}\text { c. } & \text { tò-mbó } & \text { tàrè-ý } \\ & \text { Recip-Pl } & \text { look.at.Pfv-1P1Sbj }\end{array}\)
'We (three or more) looked at each other.'

In (688), the reciprocal noun is the complement of the locative postposition mà. /tô:n mà/ is often pronounced [tồ:m:à] as the \(/ \mathrm{n} /\) assimilates to the \(m\).
a. [kǐn-bò nô:y] [tŏ:n mà] dìnì-y-à:
[stone-Pl two] [Recip.Dual in] bump-MP.Pfv-3PlSbj
'Two stones bumped into each other.'
b. [nò-mbó bè \({ }^{\mathrm{L}}\) dîn] [tò-mbó mà] dìnì-y-à:
[person-Pl \(\mathrm{Pl}^{\mathrm{L}} \quad\) all] [Recip-Pl in] bump-MP.Pfv-3P1Sbj
'All the people bumped into each other.'
tò-mbó is a possessor in (689). It therefore controls tone-dropping on the possessum.
(689) jěnjà [tò-mbó \({ }^{\mathrm{L}}\) sèmbè kó là]

God [Recip-Pl \({ }^{\text {L }}\) strength Def.InanSg.O also]
[í gì] sémbá-m-ná
[1Pl Acc] strong-Fact-Hort.3Sg
'May God fortify us (with) each other's (= mutual) strength (to work together).' (2005-1a)

\subsection*{18.3.2 'Together' (š̌:)}

The simple adverb sǒ: can indicate joint or collective activity (690).
a. sǒ: bìrà-mbó-ỳ
together work(v)-Fut-1 PlSbj
'We will work together.'
b. [bé kà dîn] [àlhâ:l [bé gò]]
[AnPl Top all] [situation [AnPlPoss Psm.InanSg.O]]
sǒ: ínò-njò- \(\varnothing\)
together go-Pres-3SgSbj
'Both of them (= herder and merchant), their situation goes together ( \(=\) is similar).' (2005-1a)

An alternative is a direct chain involving the verb mùlé 'assemble, come together' (§15.1.5.1, above).

\section*{19 Grammatical pragmatics}

\subsection*{19.1 Topic}

\subsection*{19.1.1 Topic (kày, gày, kà, gà)}

A topicalized constituent is fronted, and may be treated syntactically either as preclausal (in which case it may be resumed later by a pronoun) or as part of the clause (usually subject or adverb). The topic particle has variant forms kà \((y)\) and \(g a ̀(y)\).

Topics are commonly contrastive, i.e. they tend to occur at the point where attention shifts from one discourse referent to another. sǎy kày 'as for now' is common at "paragraph" breaks. The topic particle competes with là 'also, too, likewise' ( \(\S 19.1 .3\) below), in contexts where the two referents occupy parallel semantic positions. Examples below show topic particles with an extended NP (691a), a pronoun (691b), and an adverb (691c).
\[
\begin{array}{llllll}
\text { a. } & \text { mâ:n } & {\left[\begin{array}{ll}
\text { ń } & \text { mà }
\end{array}\right] \begin{array}{l}
j-\hat{o}:
\end{array} \quad \text { kó }} & \text { gày }  \tag{691}\\
& \text { so.and.so }[1 \mathrm{Sg} & \text { Dat }] & \text { bring.Pfv-PplNonSbj.InanSg.O } & \text { Def.InanSg.O } & \text { Top } \\
& \text { 'As for (what) So-and-So has brought to me, } \ldots \text {, }(2005-1 \mathrm{a})
\end{array}
\]

'(the fact) that they have come to us, as for us, the thing that we know is small' (2005-1a)
c. [nǎ: gà] [ìnèn \({ }^{\text {L }}\)-[tún-lé] má \(\left.\nearrow\right], ~ g o ̌: r e ̀ ~=y ̀ ~=b e ̀-~ \varnothing ~\)
[yesterday Top] [name \({ }^{\mathrm{L}}\)-[put-VblN] in], kola. \(\mathrm{Pl}=\mathrm{it} . \mathrm{is}=\mathrm{Past}-3 \mathrm{SgSbj}\)
'As for (what happened) in the past, in name-giving (ceremonies), it used to be kola nuts (that were offered to visitors).' (2005-1a)

A dative PP is topicalized in (692).
(692)
\begin{tabular}{llllll} 
[nè: ndá: & dǎ:-mbò & \(g W\)-è: & mé & là] \\
[bad.InanSg.O & speak-and & go.out.Pfv-2PlSbj & if & also] \\
[[nò-mbó & bé] & mà & kà & kúmbà = ỳ] \\
[[person-Pl & Def.AnPl] & Dat & Top] & unawareness=it.is]
\end{tabular}
'(and) furthermore if you-Pl have gone out and said bad ones (= words), the people for their part are unaware' (2005-1a) (/dàmá-mbò/)

A common device is to introduce an NP or proposition, then resume it as a topicalized discourse-definite demonstrative as a transition to a following clause in which the referent
functions as an argument. An example is kó gà in (693). Compare kó nèn 'for that reason' in (671) in \(\S 17.6 .3\) with a similar resumptive strategy.
\begin{tabular}{|c|c|c|c|}
\hline [kóngò & kó] & ínèn & joògò-ndíl \({ }^{\text {d, }}\) \\
\hline [thing & Def.InanSg.O] & name & have-StatNeg, \\
\hline [kó & gà] & kánà-ndí- \(\varnothing\) & \\
\hline [InanSg. 0 & Top] & be.done-Pre & SgSbj \\
\hline
\end{tabular}
'(the possibility) that the thing does not have a name, that (= being nameless) doesn't happen ( \(=\) is impossible)' (2005-1a)

Topicalization is so common that it is sometimes best disregarded in the free translation, especially since the English as for \(X\) construction is so clumsy. It is not unusual to find two "topics" in the same breath (694).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline 694) & [dè:gó & kó] & [1́yó & gà] & [í & gà \(]\) & íl-̀ \\
\hline & [truth & ef.InanSg.O] & [today & Top] & [1P1 & Top] & see-Prog-Neg-1PlSbj \\
\hline
\end{tabular}
'The truth, as for us nowadays, we don't see (it).' (2005-1a)
It is also not unusual to find a topic particle combined with one or more other discourse particles in ways that make a literal translation sound like gibberish. In (695), the second instance (out of three) of topic morpheme kà is followed by focus yà: and then by là 'also, too, likewise'. The focus particle is clearly appropriate in context, as the clause in question is exactly parallel to the preceding focalized clause. The fact that ìgú 'this' (here a nonspecific place-holder, like 'such-and-such') denotes something different in the two parallel clauses is responsible for both the topic and 'also, likewise' particles.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline [tìmê: & yé] & & [[j̀gú & & \multirow[t]{2}{*}{\[
\begin{align*}
& \text { yà:] }  \tag{695}\\
& \text { Foc] }
\end{align*}
\]} & jónà-njò- \(\varnothing\) ] \\
\hline [tree.Pl & Def.II & \({ }^{\text {Pl] }}\) & [ \({ }^{\text {Prox }}\) & anSg. O & & \multirow[t]{2}{*}{treat-Pres-3SgSbj} \\
\hline ... [í & kà] & \multicolumn{3}{|l|}{dà:ndà:-ndí,} & & \\
\hline . [1P1 & Top] & \multicolumn{3}{|l|}{tell-PfvNeg.3PlSbj,} & & \\
\hline [[ìgú & & kà & yà: & là] & & \\
\hline [[Prox.In & nSg. 0 & Top & Foc & also] & & \\
\hline nǒ: & \multicolumn{2}{|l|}{kóndò-njò- \(\varnothing\) ]} & [í & kà] & \multicolumn{2}{|l|}{dà:ndà:-ndí} \\
\hline person & \multicolumn{2}{|l|}{do.well-Pres} & [1P & Top] & \multicolumn{2}{|l|}{tell-PfvNeg.3PISbj} \\
\hline
\end{tabular}
'(Of) those trees, they didn't tell us (that) this (i.e. disease) [focus] is what it (tree) treats, likewise they didn't tell us (that) this [focus] is what a person makes (from it).' (2005-1a)

\subsection*{19.1.2 'Now’ (sàmgí~ săy, nû:)}
sàmgí with apocopated variant săy is the basic 'now' adverb with temporal sense. Contextual translations include 'until now', 'so far', and 'still (=even now)' (§10.3.2). It is often clauseinitial (specifying a temporal setting for the following). It frequently combines with topic marker kà (or variant). Examples are săy in (580b) in §15.1.3.1 and in (734) in the sample
text, and topicalized sǎy kà in (602b) in §15.2.4. sàmmá 'fast, quickly’ (§3.2.11.2) is probably its combination with the H -toned variant of all-purpose postposition mà (§8.1.2).

A different form, nû:, is more of a pragmatic discourse marker. It may occur clausefinally, an anomalous position for a true spatiotemporal adverb or adverbial phrase. Examples are (710), (716), and (750) in the sample text.

The distinction between 'nowadays' and 'formerly, in the old days' is regularly expressed as íyó 'today’ versus jǎ: 'yesterday'. This opposition is common in my texts from Adia village, which talk at length about how life has changed since the speakers' childhood.

\subsection*{19.1.3 'Also, too, likewise' (là)}

The very common phrase-final particle là can be glossed 'also, too'. However, its semantic range is greater than these glosses suggest. Najamba discourse is full of parallelistic passages (compare Biblical Hebrew, Rotinese, and other poetic traditions favoring parallelism). This lends itself to high-frequency use of là in the noninitial clauses or phrases of a parallelistic sequence. In some cases, 'also, too' is the best free translation, i.e. when a portion of two clauses is identical and only one or two constituents or grammatical categories are changed: 'you went to Douentza; I too went to Douentza'; see (696a-b). However, là is also common in contexts where the segments are parallel but do not involve exactly repeated constituents. In these cases I favor 'likewise' as a gloss in free translations: 'you went to Douentza; I likewise will go to Mopti.' Even 'likewise' is sometimes stretching the parallelism, which may verge into mildly contrastive territory ( 696 c ). Because of this, là sometimes competes with topic morpheme kày (and variants): 'you went to Douentza, as for me (by contrast) I will go to Mopti'.

Even when the logical scope of là would seem to be clausal, it is normally attached (enclitic-like) to an NP or similar constituent. Clause-initial pronouns are especially favored for this purpose.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline a. kó & tóló \(=\) ý & & & ma] & & ìnò-mb-ê: \(\nearrow\), \\
\hline InanSg. O & more \(=\) it.is & & [front & in] & & go-Fut-Ppl.SbjFoc, \\
\hline [kó & tóló & là] & & àndí & mà] & něy \\
\hline [InanSg.O & more & also] & & behind & in] & is.good \\
\hline
\end{tabular}
'That [focus] is what will go in front the most (= is best). That same thing is best in the rear too.' (2005-1 a)
b. [tóndí-y jòg-â: = ỳ] kànè- \(\varnothing\) mé,
[bend-MP Perfect-PplSbj=it.is] be.done.Pfv-3SgSbj if,
òmá: áy jòg-â: = ỳ,
FarDist.AnSg suffer Perfect-PplSbj=it.is,
\(\left[\begin{array}{llll}{[\text { ǒm gì }]} & \text { jùmbé } & \text { nè }\end{array}\right.\)
[[Prox.AnSg Acc] pull then.SS]
[ŋ̀gâ:n jùmbé dò:-nd-ò: dé],
[there pull arrive-Caus.Pfv-3P1Sbj if]
\[
\begin{array}{llll}
{[\text { mó }} & \text { là }] & \text { áy } & \text { jòg-â: }=\text { ỳ } \\
{[\mathrm{AnSg}} & \text { also }] & \text { suffer } & \text { Perfect-PplSbj=it.is }
\end{array}
\]
'If he \((=\) tall person \()\) bends, that one \((=\) tall person) will suffer. If they pull this one (= short person) and make him reach there (= stretch him to the height of the tall person=), he too will suffer.' (2005-1a)
c. [òmá: là] yô:-mbò yálà- \(\varnothing\) [kìr-gé: mó gà] [Far-AnSg also] run-Prog go.around.Stat-3SgSbj [herder Def.AnSg Top] '(A farmer can host a visitor.) That (other) one (= herder), he likewise goes running around, the herder for his part.' (2005-1a) (</yóbà-mbò/)
là is compatible with negation, where the English free translation could have 'nor' or '(not) either'.
(697)

'(Of) the trees, they didn't tell us (that) this (i.e. disease) [focus] is what it (tree) treats, nor did they tell us (that) this [focus] is what a person makes (from it).' (2005-1a)
là is also used in the pragmatic sense 'furthermore, moreover, in addition', where the speaker is adding information to that already expressed, whether or not the eventualities denoted by the respective clauses are themselves parallel in any fashion. Even in such cases, where the logical scope of là includes the entire proposition, it is generally encliticized to a pronominal or other constituent near the beginning of the clause.
\[
\begin{array}{lll}
\text { [bìrá-l-mbò } & \text { là] } & \text { dùmí-yà-ndí }  \tag{698}\\
\text { [work(v)-PfvNeg-Prog } & \text { also] } & \text { get-MP-PresNeg-3SgSbj } \\
\text { 'It (= gain) is furthermore not gotten without working.' (2005-1a) }
\end{array}
\]

Although là is normally cliticized to a pronoun or similar constituent near the beginning of a clause, it readily occurs after clause-final \(m \varepsilon\) ' if' in conditional antecedents. The combination is pronounced mé là.
(699)
[[tò-mbó mà] pă::m jògò-nd-é: mé là]
[[Recip-Pl in] understanding have-StatNeg-2PISbj if also]
'If furthermore you-Pl have no (mutual) understanding among you agemates' (2005-1a)

\subsection*{19.1.4 'Even’ (hâl)}

Phrase- or clause-initial hâl, the 'until' or 'all the way to' particle, is also used in phrases with the sense 'even X'. An example is (580b) in §15.1.1.2 (hâl íyó 'even today'. Examples like (667) in §17.6.1 (hâl ŋ̀gâ:n '[from] as far away as there', i.e. 'even from that far away') are semantically transitional.

For hâl 'until, all the way to' see \(\S 17.5 .1 .2\).

\subsection*{19.2 Presentential discourse markers}

\subsection*{19.2.1 'Well, ...' (háyà)}

As in other languages of the zone, háyà is common as a 'well, ...' particle preceding a clause. Examples in the sample text include (710), (726), (776), and (785).

\subsection*{19.2.2 'All right, ...' (kóndé \(\rightarrow\) )}

The particle kóndé \(\rightarrow\) 'all right' may be used to express assent or acceptance (e.g. of someone's proposal). It is also used as a discourse particle preceding a clause, with functions similar to those of hàyà (see above). It is related to verb kóndí 'do well, make well; be done well'.

In the sample text, see (719) bottom, (733), (736), (749), (762), (781), and (790).

\subsection*{19.2.3 'But ...' (kà:)}

The regionally ubiquitous clause-initial 'but' particle is usually pronounced with low pitch in my data, and I transcribe kà: . Occasional high-pitched variants are also heard; I incline to attribute the high pitch to intonational modification.

Examples in the sample text are (713), (716) line 4, and (728), among others.
19.2.4 'So, ...'

The purposive PP kó nèn 'for that' can be placed at the beginning of a clause as an approximation to (causal) 'so ...' or 'that's why ...'. I have found no close correspondent to the discourse-particle ('So, how's life?').

\subsection*{19.2.5 'Lo, ...' (jákà)}

As in other languages of the zone, jákà is used in anecdotes and narratives as a 'lo and behold' expression preceding a surprising or climactic clause.

\subsection*{19.3 Pragmatic adverbials or equivalents}

\subsection*{19.3.1 '(Not) again, (no) more' (wònd \(\varepsilon^{\text {) }}\)}

The adverb wòndé '(not) again' is used with a negation. For intensification, àbádá 'never' or 'absolutely not' may be added.
a. ên
gǒl
wè- \(\varnothing\),
here last.year come.Pfv-3SgSbj,
kǎ: wว̀ndé màmílí-yé wǒ-l- \(\varnothing\)
but not.again go.back-MP come-PfvNeg-3SgSbj
'She came here last year, but she hasn't come back again.'
b. àbádá wòndé [sê: \({ }^{\mathrm{L}}\) kònjè] ná-nù-m
never not.again [grain \({ }^{\text {Lbeer] drink-FutNeg-1SgSbj }}\)
'I will never again drink millet beer.'

\subsection*{19.3.2 'And so forth'}

Something like 'and so forth' or 'etcetera' can be expressed as 'it has no limit' at the end of a partial list, cf. English boundless.


\section*{19.4 'Only'}

The particle tán ('only' in Fulfulde) functions in Najamba as an alternative 'if' particle at the end of conditional antecedent clauses (§16.2.1).

\subsection*{19.4.1 'Only’ (tómá, tòmá )}

The usual 'only' particle is tómá. It is related to certain forms of the numeral 'one’ (§4.7.1.1). Where possible semantically, tómá is placed at the end of the (non-verb) constituent that defines the limits of the proposition (702). It is invariant in form.
a. [bû:d pǒ:-nòy tómá] [mí gì] ǹdè- \(\varnothing\)
[riyal ten-two only] [1Sg Acc] give.Pfv-3SgSbj 'He/She gave me only ten riyals (100 francs CFA).'
b. [íyó tómá] bìrá-m̀
[today only] work(v)-Fut.3SgSbj
'He/She will work today only.'
c. [òndô: bé tómá] bírà-nj-è:
[child.Pl Pl only] work(v)-Pres-Ppl.SbjFoc
'Only the children work.'
When the verb, VP, or clause as a whole is under the logical scope of 'only', tómá is a predicate nominal, with conjugated 'it is' enclitic that agrees with the subject. As a noun it can be singular tómá or animate plural tómá-mbó. This construction occurs when the temporal scope of the proposition is wide or indefinite, so that 'only' is baked into the nature or characteristic behavior of the subject. The predicate is a nominalization with senses like '(act of) sitting' (703a-b), 'food/eating' (703c), or 'speech, talk', if such a noun is available. Thus 'you only \{eat, drink, talk, sleep\}' is literally "you are only \{food, beverage, words, sleep\}."
```

a. [ó gà bíró: bírà-nd-ò:,
[2Sg Top] work(n) work(v)-Pres.Neg-2SgSbj,
óbì-n tómá= $=\grave{W}$
sit-Nom only=it.is. 2 Sg gbj
'You-Sg don't work, you-Sg just sit.'
b. [é gà] bíró: bírà-nd-è:,
[2Sg Top] work(n) work(v)-Pres.Neg-2SgSbj,
óbì-n tómá-mb=ê:
sit-Nom only-Pl=it.is.2PISbj
'You-Pl don't work, you-Pl just sit.'
$\begin{array}{lll}\text { c. } & k w \varepsilon ́-\eta g o ̀ ~ & \text { tómá }=\grave{W} \\ \text { food-InanSg.O } & \text { only }=\text { it.is. } 2 \text { SgSbj } \\ & \text { 'You-Sg just eat.' } & \end{array}$

```

Another version of this construction is a double predicate with conjugated tómá following a conjugated 'it is' form of an agentive nominal.
a. \(\quad s w e ̀:{ }^{\mathrm{L}}\)-mògé \(=\grave{W}\)
cloth. \(\mathrm{Pl}^{\mathrm{L}}\)-wash. Agent \(=\) it.is. 2 SgSbj
\[
\begin{align*}
& \text { tómá }=\text { फ̀ }  \tag{704}\\
& \text { only }=\text { it.is. } 2 \mathrm{SgSbj}
\end{align*}
\]
'You-Sg just wash clothes.'

'You-Pl just wash clothes.'

It is possible to just add bare adverbial tómá after a predicate. This is not the favored construction, but it can occur when the temporal scope is limited and when there is no convenient direct object or other complement of the verb to hang the 'only' particle on (705).
```

m\grave{g-ǒ: tómá}
wash.Pfv-2SgSbj only
'You only washed.'

```

A tonally distinct form tòmá occurs in mí tòmá 'I by myself, I alone (i.e. without help)'. See also tòmá in (563a) in §14.4.2.1, where the subject pronoun follows tòmá, as a preverbal proclitic in a nonsubject relative.

\subsection*{19.4.2 ‘A mere ...’ (lók)}
lók is a more emphatic 'only' particle, pronounced as an interjection with high pitch (the preceding word lowers its pitch intonationally to increase the pitch contrast). It most often follows 'one', but it can occur after other quantifiers. The pragmatic context is one of dissatisfaction or surprise at the meagerness of the entity. The reduplication lók-lók is also in use. It is not distributive ('one here, one there'), just an alternative to lók.
a. [غ̀lè-ŋgò \({ }^{\mathrm{L}} \quad\) kúndú
lók] [mí
gì] ǹdè- \(\varnothing\) [peanut-Sg \({ }^{\mathrm{L}}\) one.InanSg.O mere] [1Sg Acc] give.Pfv-3SgSbj 'He/She gave me one lousy peanut.'
b. [ìjì \({ }^{\mathrm{L}}\) kúndé lók-lók] dùmè-m [fish.Sg \({ }^{\mathrm{L}}\) one.InanSg.E mere-mere] get.Pfv-1SgSbj 'I got (= caught) one lousy fish.'

\subsection*{19.5 Phrase-final and stand-alone emphatics}

\subsection*{19.5.1 Stand-alone \(j\) á:tì 'exactly right!'}

This word, which also occurs in Fulfulde and other local languages, is a stand-alone word expressing the speaker's strong agreement with what an interlocutor has just said. An example is (782) in the sample text.

\subsection*{19.5.2 Clause-final emphatic kǒy and láy}

This particle emphasizes the truth of the clause that precedes it. The best translation is often 'sure' as in 'it sure is hot today!'. The conversational context may be confirmation of what the interlocutor has just said, or the answer to a polar question.

Examples in the sample text are as (716), (719) line 4, (736), (740) line 4, (751), (765) bottom, (766) line 3, (778) line 2, (785) line 4, (786), (792) line 3, and (795).

A similar emphatic láy is attested in the sample text at (789) line 3, but see §8.4.2.2 for its adverbial functions.

\subsection*{19.5.3 Clause-final '(not) at all!' particles (péy-péy, pés)}
péy-péy and pés are emphatics that may precede or follow the negation. (707) illustrates the possibilities for kwá:-l 'he/she did not eat'.
(707) 'He/She didn't eat at all'
a. pés kwá:-1-Ø
b. kwá:-1-Ø pés
c. péy-péy kwá:-1- \(\varnothing\)
d. kwá:-1-Ø péy-péy

\subsection*{19.6 Greetings}

Time-of-day greetings and their responses are in (708). They tend to be opaque and some may be borrowings or partially nativized loans. Many greetings have a simple version for singular addressee, but add -m suffix for plural addressee. This \(-\grave{m}\) is elsewhere restricted to imperatives or hortatives. pǒ: is the noun 'greeting' but in these formulae it may be borrowed from Jamsay where pǒ: functions as imperative, with plural addressee pǒ:-ỳ. dèndá: (708d) matches the noun 'night' in Yanda Dom, though Najamba has nám. dèné (708e) is the chaining form for 'spend the (mid-)day', but it takes plural-addressee -m as though imperative. ná:-m-ná (708f) is third-person hortative (§10.4.4.1) of the causative of né: 'spend the night'.
a. kàndá
kàndá-ì̀
reply: yó:
b. pǒ:
póyá-m̀
reply: yó:
póyà ú júmá-m̀
reply: yó: póyà dèndá: má-m̀ reply: yó: :
c. pǒ: jùmà 'good afternoon' (from noon to 2 PM , to one person)
d. pǒ: dèndá: má 'good afternoon' (from 2 PM to dusk, to one person)
'good morning' (from pre-dawn prayer to 9 AM , to one person)
[same, to two or more persons]
'good day' (from 9 AM to noon, to one person)
[same, to two or more persons]
[same, to two or more persons]
[same, to two or more persons]
e. dèné 'good evening' (from dusk to pre-dawn prayer, to one person)
dèné-ŋ̀ \(\quad\) [same, to two or more persons]
reply: yó.:
f. jámmà nâ:y 'good night' (to one or more persons)
jěnjà [í mà] síyè-ngè ná:-m-ná [reply, 'May God have us sleep well!']
Situational (activity-related) greetings and their responses are in (709). Cf. regular vocabulary bíró: 'work (n)', \(\eta w \varepsilon ́ ~ ‘ e n t e r ', ~ m a ̀ m i ́ l i ́-y e ́ ~ ‘ g o ~ b a c k ', ~ a n d ~ e ́ b a ́ n ~ ' m a r k e t ' . ~\)
a. póyà bìró: má 'hello' (to one at work, farming, etc.)
póyà bìró: má-m̀ [same, to two or more persons]
reply: yó: :
b. àjě: \(\eta w \hat{\varepsilon}\) :
àjě: ŋWع́-m
reply: yó.:
c. àjê:
àjê:-m
reply: yó:
d. àjá mámìlè
àjá mámìlè-m
reply: yó.:
e. [ó má] [ébám má] 'welcome' (to one returning from the market)
[ó má] [ébám má] [same, to two or more persons]
reply: ébán \(y \varepsilon ̀\)-ḿn 'I've seen the market.'
reply: ébán \(y \grave{\text { è }}\) ý 'we've seen the market.'

\section*{Text}

This is the first part of a recording made in Adia village in 2005. Speaker P is a middle-aged woman, speaker R is a man. P does most of the talking in this passage, with R as the attentive listener, occasionally intervening as at (720).

í dìn-ô:,
1PlSbj find.Pfv-PplNonSbj.InanSg.O,
[í \({ }^{\mathrm{L}}\) bà-mbò \(]\) [í \({ }^{\mathrm{L}} \mathrm{ì}\)-bò \(] \quad\) dìné:- \({ }^{\text {y }}\),
[1PlPoss father-Pl] [1PlPoss \({ }^{\mathrm{L}}\) mother-Pl] find.Pfv-1PlSbj,
P: Is it (= recording) not being begun now? Well, in God's name. My people (= kinsmen), excuse me. What we found (= inherited) from our fathers and our mothers. We found (=were born among) our fathers and our mothers.
[bìsímillâ:y Arabic invocation at the onset of a speech, trip, etc.; kábîl káná 'excuse me!' said by a woman when speaking to a group of men; future passive negative -mb-à: = là §10.5.2]
\[
\begin{array}{lllll}
{\left[\text { dògò }{ }^{\mathrm{L}}-g w a ̌: n\right.} & \text { má }] & \text { nǎ: } & b-o ̂: & \text { kày, }  \tag{711}\\
{\left[\text { Dogon }{ }^{\mathrm{L}}\right. \text {-country }} & \text { in] } & \text { yesterday } & \text { remain.Pfv-PpISbj.O } & \text { Top, }
\end{array}
\]
\[
[m a ̀ n \hat{\varepsilon}: \quad \text { kwá- } m=b \varepsilon \grave{\varepsilon}-y] \quad \text { [sòlé } \quad \text { ná- } m=b \grave{\varepsilon}-y]
\]
[meal.Pl eat-Pres=Past-1PlSbj] [cream.of.millet drink-Pres=Past-1P1Sbj]
\[
[\varepsilon ́ m e ̀: ~ n a ́-m=b \grave{\varepsilon}-y] \quad\left[\left[\left[i ́ 1 ~{ }^{\mathrm{L}} \grave{n}-b o ̀\right] \quad\left[i ́ l e r ~{ }^{\mathrm{L}} b a ̀-m b o ̀ ~\right]\right]\right.
\]
\[
\left[\text { milk drink-Pres=Past-1PlSbj] [[[1PlPoss }{ }^{\mathrm{L}} \text { mother-Pl] [1PlPoss }{ }^{\mathrm{L}} \text { father-Pl] }\right]
\]
\[
\text { í kómándíyà- } m=b \text {-à:;] }
\]
1PlObj take.care.of-Pres=Past-3PlSbj]

As for what there was formerly in Dogon country, we used to eat meals, we used to drink cream of millet, we used to drink milk, our mothers and our fathers used to take good care of us.
[participle \(b\)-ô: from 'remain/be' verb §11.2.6.1; past imperfective \(-m=b \grave{\varepsilon}\) - §10.3.1.5]
(712) [í bà-mbò ] [nàwó: ínà:] jógò- \(m=b\)-à:,
[1PlPoss father-Pl] [cow.Pl goat.Pl] have-Stat=Past-3PISbj, [tò-mbó gì] dìmbí-yè-mbò, [Recip-Pl Acc] follow-MP-and.then,
[tò-mbó mà] <pă:m—> [nă:n nè] pă:m dùmí-yé=bè,
[Recip-Pl with] < .. > [well Adv] understanding get-MP=Past,
kày [íyó nù:], í òndú- \(\varnothing\),
Topic [today now], this not.be-3Sg,
nă: [í \(\quad{ }^{\mathrm{L}}\) bà-mbò \(]\),
yesterday [1PlPoss \({ }^{\mathrm{L}}\) father-Pl]
 [[3PlPoss \({ }^{\text {L child.Pl] Acc] [well Adv] hold-MP do.well then.SS, }}\)

Our fathers had cows and goats, they (= family members) followed each other (= lived together), and understanding (=harmony) among each other was well gotten (= they got along well), as for (that). Nowadays, this does not exist. Formerly, our fathers watched carefully over their children in tranquility.
[reciprocal tò-mbó §18.3.1; -mbò 'and then' after E-stem of verb §15.1.3; Demonstrative í §4.4.2.1; nè same-subject subordinator §15.1.5]
(713) bă: [[mó \({ }^{\text {Lè̀ndè: }] ~ g i ̀] ~ k u ́ m b o ̀-~} \varnothing\) mé,
father [[3SgPoss \({ }^{\mathrm{L}}\) child] Acc] hold.Stat- 3 SgSbj if, èndê: [bă:-ǹ gì] dímbà-m=bè- \(\varnothing, \quad\) kà: [íyó nù:], child [father-3SgPoss Acc] follow-Pres=Past-3SgSbj, but [today now] [èndê: mó] [[bǎ: mó] gì] dìmbà-ndí- \(\varnothing\), [child Def.AnSg] [[father Def.AnSg] Acc] follow-PresNeg-3SgSbj, [[bă: mó] là] [[èndê: mó] gì] dìmbà-ndí- \(\varnothing\),
[[father Def.AnSg]too] [[child Def.AnSg] Acc]follow-PresNeg-3SgSbj,
If a father watched over his child, the child would follow (=obey) his father. But nowadays, the child doesn't follow the father, and the father doesn't follow the child.
[no special reflexive possessor form §18.1.2; stative kúmbò §11.2.3; mé ‘if' §16.1.2; bă:-ǹ ‘his father’ §6.2.4; present negative inflection §10.1.4.4]
kó à̀gú =ý ló,
InanSg. O which?=it.is Q ,
[gwă: ké] jàm j-è;
[country Def.InanSg.E] be.ruined Perfect-Ppl.SbjFoc,
[[gwă:
ké]
năm-bò]
[[country
Def.InanSg.E]
be.ruined-and.then]
[mó gìn-ô:],
[AnSg say.Pfv-PplNonSbj.InanSg.O]
What is it, (the reason why) the country (=world) [focus] has become ruined? The country has become ruined to this extent.
[àngú 'which, what?' §13.2.2.7; subject focalization with \(\{\mathrm{L}\}\)-toned verb plus perfect §13.1.1.5; -mbò 'and then’ §15.1.3; mó gìn-ô: indicating extent §15.2.6]
[à:lé yà:] tégà-nd-è:, wánà: né:mà òndú- \(\varnothing\), [rain(n) Foc] fall-PresNeg-Ppl.SbjFoc, truly good.times not.be-3SgSbj,
né:mà òndú- \(\varnothing\) mé nù:, háwràl bà-m ló, good.times not.be-3SgSbj if now, agreement remain-Fut.3SgSbj Q , [gà:-gé: mà] pă:m dùmà-mb-ò: ló, [hunger-Char in] understanding get-Fut-2SgSbj Q , [áy jòg-â:] [îm mà] síyè-ŋgò gò -m ló, [be.tired Perfect-PplSbj] [[mouth in] good-InanSg.O go.out-Fut.3SgSbj Q
(As for) the ruining of the country, what is (the reason for) that? It's the fact that rain [focus] doesn't fall. Now the good times do not exist. Now if the good times do not exist, will there be agreement (=good relations)? Will you get agreement in (=from) a hungry person? A weary person, will something good come out of his mouth?
[nàmǐ-n 'damage’ §4.2.3.3; present negative focalization with -nj-è: §13.1.1.2; characteristic nominal suffix -gé: §4.2.2.2; îm </íbì/, possessed form of ìbí 'mouth']
kèlǎ-n=lá kǒy,
not.want-Nom=it.is.not Emph,
nǒ: [mó \({ }^{\mathrm{L}}\) èndè:] kélí-yà-ndí- \(\varnothing\),
person [3SgPoss Lchild] not.want-MP-PresNeg-3SgSbj,
[èndê: là] [nî:-n gì] kélí-yà-ndí- \(\varnothing\),
[child too] [mother-3SgPoss Acc] not.want-MP-PresNeg-3SgSbj,
kà: èndê: nû:, [nǐ:-ǹ gì] mà:má-m̀, but child now, [mother-3SgPoss Acc] be.stronger-Fut.3SgSbj,

It's not (from) hatred. A person (=adult) doesn't dislike his/her child, a child doesn't dislike its mother. But a child now, it will be more important than its mother.
[kèlă-n 'not wanting, hatred' §4.2.3.3; ň̌:-ǹ 'mother' §6.2.4]
\begin{tabular}{|c|c|c|c|c|}
\hline 7) & [[èndè \({ }^{\text {L }}\) kónjî & \(\eta w \hat{\varepsilon}: m-\eta \omega \hat{\varepsilon}: m-\eta \omega \hat{\varepsilon}: m\) & mó] & gì] \\
\hline & [ [child \({ }^{\text {L }}\) newborn & weeping(adverbial) & Def.AnSg] & Acc] \\
\hline \multicolumn{5}{|l|}{ó jò-ŋgà} \\
\hline
\end{tabular}
ó jò-ทgà ké,
2 SgSbj have-PplNonSbj Def.InanSg.E
dènàn \({ }^{\mathrm{L}}\) [ó mà] mó néndá-nd-è:
day \({ }^{\mathrm{L}} \quad[2 \mathrm{Sg} \quad\) Dat] AnSgSbj be.bad-Inch-PplNonSbj.InanSg.E
gìnè- \(\varnothing \quad m \varepsilon ́\),
say.Pfv-3SgSbj if,
tílày, [mó gì] dìmbì-yà-mb-ô:,
certainty, \(\quad[\mathrm{AnSg}\) Acc] follow-MP-Fut-2SgSbj,
When you-Sg have a crying young baby, the day when it becomes nasty with you (= cries a lot), you have no choice but to follow (=obey) it.
[jò-ŋgà 'having' §14.3.10; temporal relative with dènàn 'the day when ...' §15.2.1]
[work(n) \(\quad\) work(v)-Pres \(=\) Past- \(2 \operatorname{SgSbj} \quad\) if]
[bìrò: \({ }^{\text {L }}\)
kó] dògà-mb-ô:, [work(n) \({ }^{\mathrm{L}}\) NearDist.InanSg.O] leave-Fut-2SgSbj, òbì-yò-mb-ô., [mó gì] dìyòndò-mb-ô:, sit-MP-Fut-2SgSbj, [AnSg Acc] console-Fut-2SgSbj,

If you-Sg were working, you will leave (=give up) that work. You will sit (=stay home), you will console (=pacify) it (=baby)
[kó near-distant demonstrative after \(\{\mathrm{L}\}\)-toned noun §4.4.1; óbí-y 'sit' §9.3.2]
\begin{tabular}{lll} 
[èndê: & yà:] & kànè- \(\varnothing\), \\
[child & Foc] & do.Pfv-3SgSbj,
\end{tabular}
èndê: [[kéndà: =y kó]=lá mé],
child [[heart=it.is Def.InanSg.O]=it.is.not if],
[mó gì] [pâ \(\rightarrow\) nغ̀] jàr-ò: mé, tíbá-m̀, [AnSg Acc] [violently Adv] knock.down.Pfv-2SgSbj if, die-Fut.3SgSbj,
[tìbè mé] [mó gò] mó w-ô: kǒy,
[die.Pfv if] [AnSgPoss Psm.InanSg.O] AnSg come.Pfv-PplNonSbj Emph, [ó gò] [ày̌̌-n [ó gò ]]
[2SgPoss Psm.InanSg.O] [fatigue [2SgPoss Psm.InanSg.O]]
ó nìmsà-mb-ê:, kóndé \(\rightarrow\)
2 SgSbj regret-Fut-Ppl.SbjFoc, all.right
The child [focus] has done that. The child, if it weren't for (your) heart, you- Sg would knock (=throw) it down violently, it (=child) would die. If it has died, for its part, (the way) it has come; for your part, (in) your weariness, it's you [focus] who will be sorry. All right.
[perfective subject-focalization \(\S 13.1 .1 .1\); possessive classifier gò \(\S 6.2 .2\); future subject-focalization -mb-ê: §13.1.1.3]

R : èndê: \(\grave{\text { élú-m̀ }}\)
child be.good-3SgSbj
R : A child is good.
[predicate adjective with \(3 \mathrm{Sg}-\mathrm{m} \S 11.4 .1\) ]


P: A child is very good. Formerly, our elders, they used to do (=use) fetishes (=idols). Nowadays there are none. Formerly, they used to brew millet beer. Nowadays there is none.
["went and found Najamba," i.e. went to the ancestral Najamba village of Dioni to hold a large-scale animist ceremony before the farming season]
yesterday [get.up-MP then.SS] —,
[ín nè
[go then.SS] [Najamba Acc] find then.SS,
[nàjàmbá
gì] dìnê: nè
[[nàjàmbá dîn] mà] ànî: ló, [jǒn mà]=ỳ,
[[Najamba all] in] where? Q, [Dioni in]=it.is

Formerly, they got up and-, they went and found Najamba. In all of Najamba, where is it? It's at Dioni (village).
kên ín nè [bílá gìné nè] [óbí-y nè],
there.Def go then.SS, [exchange.Imprt say then.SS] [sit-MP then.SS]
[yèpà:bé dîn] kán kír nè,
[thing.Pl all] make do.completely then.SS,
sábárá gìyé nè, kên óbí-y nè,
tall.grass kill then.SS, there.Def sit-MP then.SS,
dǎmgí-y nè, [jǒn mà] ín nè, bàndûl-bây,
debate-MP then.SS, [Dioni in] go then.SS, sacred.meeting,

Going there (=to Dioni village), telling (others) to exchange (views), sitting and making all the things (= disputes) finish, killing (= cutting down) tall grass stems (to cover the sacred objects), sitting there, debating, going to Dioni, (and finally) having a sacred meeting.
[kên discourse-definite 'there’ §4.4.4.1; jussive clause (quoted imperative) §17.1.4.1]
[yè̀ dîn] kánà-m=bè-y, jènà \({ }^{\mathrm{L}}{ }^{\mathrm{L}}\)-gìyâ: gìné nè,
\(\left[\operatorname{InanPl}{ }^{\mathrm{L}}\right.\) all] do-Pres=Past-1P1Sbj, rainy.season \({ }^{\mathrm{L}}\)-dance(n) say then.SS, [kònjé-mbó, [beer-Pl kán nè], dégù: gìné nè, [yè \({ }^{\mathrm{L}}\) dîn] gǒm \(\quad n \grave{\varepsilon}\), [InanP1 all] remove then.SS, gìyâ: [gíyò-mbò dèné] [gíyò-mbò né:], dance(n) [dance(v)-Prog spend.day] [dance(v)-Prog spend.night]

We used to do everything. Saying (let's do) the harvest (lit. "rainy season") dance, making lots of millet beer, saying (=on account of) the idols, taking everything out (from storage), (they would) spend the day dancing and spend the night dancing.
[yè \({ }^{\mathrm{L}}\) dîn with \(\{\mathrm{L}\}\)-toned form before dîn 'all' \(\S 6.6 .1\); my Kubewel assistant prefers dě:rù in this sense ('statuette') and restricts dè-dégè ( Pl dè-dégù:) to another sense, but several cognates of the latter such as Jamsay dì-dégè mean 'statuette'; progressive -mbò after A/O-stem of verb §10.1.3.5; dèné and né: are chaining forms of verbs, trailing off with an implied but unexpressed following inflected verb]


There used to be good times (=prosperity) among us. We found (=experienced) the good times in the hand(s) of certain of our elders. We too used to do it.
[bè- \(\varnothing\) 'was (somewhere)' \(\S 10.3 .1 .1\); gàndí 'certain (ones), some' \(\S 6.3 .2\), the context being that some elders held onto their animist ritual objects while others discarded or sold them under the influence of Islam; past progressive -mbò b̀̀- §10.3.1.6]
háyà [[yè \({ }^{\mathrm{L}} \quad\) dî \(\left.\rightarrow n\right]\) kòngò \({ }^{\mathrm{L}}\left[\begin{array}{ll}11 & \text { gì }] \text { dògá-m-ó: kó] }\end{array}\right.\)
well [[InanP1 \({ }^{\mathrm{L}}\) all] thing \({ }^{\mathrm{L}}\) [1Pl Acc] leave-Caus.Pfv-PplSbj Def.InanSg.O]
 which?=it.is, head \({ }^{\mathrm{L}}\)-big \({ }^{\mathrm{L}}\)-Abstr=it.is.not, \(\quad\) rich \(^{\mathrm{L}}-\mathrm{Abstr}=\) it.is.not, [gà:gó yà:] [í mà] kàn j-è:, [hunger Foc] [1Pl in] do Perfect-Ppl.SbjFoc,

Well, what was the thing that made us (=led us to) leave all that? It wasn't stubbornness. It wasn't wealth (=being too rich). Hunger [focus] is what has done (this) among us.
[dògá-m causative \(\S 9.2 .1<\) dògé ‘leave’, in subject perfective participle form §14.3.1; abstractive nominal -gé §4.2.2.2]
gà:gó àbádá tô:n dìmbí-yá-1-Ø, hunger never Recip follow-MP-PfvNeg-3SgSbj,
háwràl dùmí-yà-ndí- \(\varnothing\), agreement get-MP-PresNeg-3SgSbj,
[gà:gé: kòngò \({ }^{\mathrm{L}}\) kán-ò:] nè:ndá, [hungry thing \({ }^{\text {L }}\) do.Pfv-PplNonSbj.InanSg.O] be.bad

Hunger (= hungry people) never followed each other. No agreement (=good relations) will be gotten (between them). (Any) thing that a hungry person has done is bad.
[tô:n reciprocal for two persons §18.3.1; perfective object relative clause §14.4.2.1]
\begin{tabular}{llllll} 
kà: íyó & {\([[g W a ̌:\)} & {\([i ́\)} & \(g \varepsilon ̀]\) & ké \(]\) & mà \(]\)
\end{tabular}
nàm-gó wè- \(\varnothing\),
difficult-Abstr come.Pfv-3SgSbj,
[nàm-gò \({ }^{\mathrm{L}}\) W-ó: kó]
[difficult.Abstr \({ }^{\mathrm{L}}\) come.Pfv-PplSbj.InanSg.O Def.InanSg.O] [[tò-mbó gì] í kè̀ì-yè \({ }^{\mathrm{L}}\) jòg-à: kó]=ý, [[Recip-Pl Acc] 1PlSbj not.want-MP \({ }^{\text {L }}\) Perfect-PplNonSbj Def.InanSg.O]=it.is,

But nowadays hardship (=high cost of living) has come into our country. The hardship that has come, it's because of the fact that we dislike each other (=don't get along).


That (=the fact that we don't get along) isn't from disliking the fact that people are too numerous (from overpopulation). It's not (from) gaining too much suddenly, nor anything else.
[nǒ: 'person' can be emended to plural nò-mbó; different-subject subordinating suffix -n after E-stem of verb §15.1.6.1; -mbò 'and then' with implied 'say/think' §15.1.3]


If the country has become hard (=full of hardship), every person will be selfish, everyone will look out for for himself. You-Sg are looking out (just) for yourself, not to mention that you will not love your child. After (=besides) that, there is nothing else that is among us.
[nò: \({ }^{\text {L }}\) kámà 'anyone, each person' §6.6.1; hây \({ }^{n}\) hó:ràm 'himself’ is in Fulfulde; [[X bàndì] mà] 'behind X ' §8.2.6]
kà: [nă: í dìn- \(\mathrm{\varepsilon}\) : ké]
but [yesterday 1PlSbj find.Pfv-PplNonSbj.InanSg.E Def.InanSg.E]
[íyó là], jǎ: [[sò-ŋgò]-gìbù \({ }^{\mathrm{L}}\) kúndú], [today too]. yesterday [[cloth-InanSg.O]-wrap \({ }^{\text {L }}\) one.InanSg.O], í [yàwó: té:mdèrè] [[sò-ngò]-gìbù \({ }^{\mathrm{L}}\) kúndú], 1Pl [woman.Pl hundred] [[cloth-InanSg.O]-wrap \({ }^{\text {L }}\) one.InanSg.O] gìbí-yò- \(m=b \grave{\varepsilon}-y\), gird-MP-Pres=Past-1PlSbj,

But what we found (=experienced) formerly, now also (=by contrast), formerly a single wrap (woman's garment), one hundred of us women used to gird ourselves with (=wear) one (=the same) wrap.
[Numerals kúndú 'one’ §4.7.1.1 and té:mdèrè 'hundred' §4.7.1.4; 1Pl í before yàwó: is appositional, not a possessor]


We nowadays, if you take (in your hands) a garment of (even) your a close cousin, (her mother and yours being) of the same mother and the same father, and you gird yourself (=wrap it around your body), you will be denigrated (= gossiped about), (saying) you are poor (impoverished).
 father' is a complex adjectival phrase modifying 'close cousin' though referring to the parentage of the respective parents; future passive \(\S 10.5 .2\); conjugated 'it is' form of adjectival predicate ('impoverished’) §11.4.2]

sǎy [mí dòlé gwè-ḿ mé dîn]
    now \(\quad[1 \mathrm{Sg}\) go.past go.out.Pfv- 1 SgSbj if all]
    \([\mathrm{P}\) gìnè- \(\varnothing \quad\) mé \(]\) yǎ-ndì- \(\varnothing \quad m a ̂ \rightarrow\)
    \([\mathrm{P}\) say.Pfv-3SgSbj if] see-FutNeg-3SgSbj whether?
    [ P wà \(\rightarrow\) lá:rí-yé dòlè- \(\varnothing \quad\) wà], \(\hat{\varepsilon}\) :
    [P Quot be.shiftless-MP exceed.Pfv-3SgSbj Quot], eh!

Now if I go out, P will say (to my husband): won't he see, (namely that) R is very shiftless (good-for-nothing)? Eh.
[phrase-final ma \(\rightarrow\) 'whether?' §7.2.2; wa quotative particle §17.1.2]
\(\mathrm{R}: ~ j\) jěnjâ [[nǒ: dǐn] gì] tàgá ìdá:-1-Ø God [[person each] Acc] character give-PfvNeg-3SgSbj
R: God didn't give everyone the (same) character.
[accusative gì with recipient of 'give' §8.1.1]
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{6) \(P\) :} & [P & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\[
\begin{align*}
& \left.{ }^{\text {L }} \text { là:r-gè }\right]=\text { lá }  \tag{736}\\
& { }^{\mathrm{L}} \text { shiftless-Abstr]=it.is.not }
\end{align*}
\]}} & \multicolumn{2}{|l|}{kǒy,} \\
\hline & [P & & & & \multicolumn{2}{|l|}{Emph,} \\
\hline [ó & yà:] & \([\mathrm{P}\) àybà & bó-m̀ & & \({ }^{\text {L }}\) dòmbà:] \(=\) y, & \\
\hline [2Sg & Foc] & [P hum & te-Fut- & Sbj & \({ }_{\text {L }}^{\text {owner] }}\) ] it .is, & \\
\hline [mí & là] & [ó & dòló & \(g\)-ǒ: & & \(m \varepsilon ́\) \\
\hline [1Sg & too] & [2Sg & leave & go.o & Pfv-2SgSbj & if] \\
\hline
\end{tabular} [yǎ-nd-ò: ló], [see-FutNeg-2SgSbj Q]

P: It's definitely not P's shiftlessness. It's you-Sg [focus] who are involved in humiliating P. All right, I too, if you-Sg have gone out, won't you see?
[dòló variant of dòlé 'leave' in verb chains; dòmbǎ: 'owner' after 1 Sg verb §5.1.8 and cf. §18.2.3]
(737)
\begin{tabular}{|c|c|c|c|c|}
\hline [Y gà] [[mó & \({ }^{\text {L }}\) tò-mbò & غ̀bíyè & dîn] \(}\) & kánà-nj-દ̀:] \\
\hline [Y Top] [[3SgPoss & \({ }^{\text {L }}\) comrade-Pl & Prox.AnPl & all] like.this & do-Pres-3PlSbj \\
\hline [mó \({ }^{\text {L }}\) tò-mbò & èbíyè] & nǒ:ỳ & kánà-nj-غ̇: & \\
\hline [[3SgPoss \({ }^{\text {L }}\) comrade- Pl & Prox.AnPl] & prospering & do-Pres-3P1Sbj & \\
\hline
\end{tabular}

As for Y, all these pals (agemates) of his do like this (to him). These pals of his have prospered.
[ bibíyè animate plural proximate demonstrative pronoun §4.4.1; nèné 'like this' §4.4.4.3]
    jènjà \({ }^{\mathrm{L}}\)-ǹdó: \(=\) ý, [jěnjà mà] bèlí-yà-njò- \(\varnothing\),
    God \({ }^{\mathrm{L}}\)-give=it.is, [God in] get.up-MP-Pres- 3 SgSbj ,
    [[yè \({ }^{\mathrm{L}}\) dîn] gì] í dòg-ô:,
[[InanPl all] Acc] 1PlSbj leave.Pfv-PplNonSbj.InanSg.O,
[jěnjà gì] í lútà kán-ò: kó,
[God Acc] 1PlSbj rejecting do.Pfv-PplNonSbj.InanSg.O Def.InanSg.O,
jěnjà [kó Lyàrù kó]
God [InanSg.O.Poss \({ }^{\text {L }}\) credit(n) Def.InanSg.O]
[í mà ] sójà-njò- \(\varnothing\),
[1P1 in] pay-Pres- 3 SgSbj ,

It's God's giving. It arises in (=due to) God. The fact that we have have left (=abandoned) all those (things), and (that) we have rejected God, God is repaying us for that debt.
[factive clause with final kó §17.3.2 (here takes scope over both 'leave' and 'reject' clauses; final clause lit. "God is repaying that debt among us"]
[néndá-ndí dòl-ó: mé]
[be.bad exceed.Pfv-2SgSbj if]
[[né:mà kó] [[ó \({ }^{\text {L }}\) sònjò:] mà] wǒ-ndì], [[good.times Def.InanSg.O] [[2SgPoss \({ }^{\text {L }}\) village] in] come.FutNeg-3SgSbj, [àlàhórmà jògò-nd-ó: mé] [àlàhórmà dúmà-nd-ó:], [deference have-Neg-2SgSbj if] [deference get-PresNeg-2SgSbj], [nǒ: yàmbá-l-ó: mé] [ó yámbà-ndí-yà], [person cover-PfvNeg-2SgSbj if] [2SgObj cover-PresNeg-3PiSbj], jěnjà áybè kélà- \(\varnothing\), God humiliation not.want-3SgSbj,

If you-Sg are excessively bad, prosperity will not come to your village. If you are are not deferential (to your elders), you won't get deference (from others). If you haven't covered (= been protective of) a person, they will not cover you. God doesn't like humiliation (of people).
['not want' §17.2.1.1] benefit us. May God protect us! God definitely doesn't protect us for nothing. If you-Sg don't remain the way one is (=ought to be), by God, let's remain the way one is.
[3Sg hortative -ná in exhortations §10.4.4.1, 1 Pl hortative \(-\grave{y}\) ‘let's ...!’ §10.4.2.1]

(If) you have followed your child, (if) you have held (=watched out for) your wife, may your wife too hold you.

(If) there is no mother and there is no father, your husband is (the equivalent of) your father. If your husband has blessed you, it (= blessing) will take hold. As for us, formerly our elders and we saw (= experienced) like that.
[traditionally one seeks formal blessings from one's father]
í \({ }^{\mathrm{L}}\) kùlmà-mbò, jǎ: [sò-ŋgò \(]^{\mathrm{L}}\)-yàmbù \({ }^{\mathrm{L}} \quad\) 门̀gú,
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline 1PlPoss & \multicolumn{2}{|l|}{\({ }^{\text {L elder.Pl, }}\), yesterday} & \multicolumn{2}{|l|}{[cloth-InanSg. \({ }^{\text {L }}\) ]-covering \({ }^{\text {L }}\)} & -covering \({ }^{\text {L }}\) & \multicolumn{2}{|l|}{Prox.InanSg.O,} \\
\hline sǎy mí & yàmbà-ŋgà \({ }^{\text {L }}\) & j̀gú, & & nám & kànè- \(\varnothing\) & & \\
\hline now 1SgObj & cover-Pres.Ppl \({ }^{\text {L }}\) & Prox.In & nanSg.O, & night & do.Pfv-3 & SgSbj & if, \\
\hline [[kó & gì] yàmbí-lé & ǹd-à & & & & & \\
\hline [ InanSg. O & Acc] cover-Rev & give & Pfv-3P1Sb & j if] & & & \\
\hline [[kó & gì] yàm & \(b i ̀-y a ̀-m\) & mbó-ỳ], & & & & \\
\hline [[InanSg.O & Acc] cove & r-MP- & Fut-1P1Sbj] & & & & \\
\hline
\end{tabular}

Our elders, formerly this covering (e.g. blanket), (like) this (blanket) that covers me now, when night would fall, when they had taken it off and given it (to us), we would put it over ourselves (=cover ourselves with it).
[present participle -ŋgà with \(\{\mathrm{L}\}\)-toned stem §14.3.3; reversive verb ('uncover') §9.1]
[ègǎ: bèlì-y-à: mé]
[morning get.up-MP.Pfv-3P1Sbj if]
[bé [[kó gì] jìbí-y nè] dándà: gǒ-mb-à], [AnPl [[InanSg.O Acc] gird-MP then.SS] outside go.out-Fut-3P1Sbj],

When they had gotten up in the morning, they would wrap it around themselves, they would go outside.
(745)
\begin{tabular}{llll} 
íyó & {\([\) ó } & \({ }^{\mathrm{L}}\) èndè: & mó \(],\) \\
today & {\([2 \mathrm{SgPoss}\)} & \({ }^{\mathrm{L}}\) child & Def.AnSg \(],\)
\end{tabular}
[swě: gì] [ké:sù mà] jòyó-ndí \(=b-a ̀:=y\),
[cloth.Pl Acc] [trunk in] be.full-Caus=Past-Pass=it.is, [[swě: yé] gì] dǎy \(=b-a ̀:=\grave{y}\),
[[cloth.Pl InanPl] Acc] lay.out=Past-Pass=it.is, [[swě: yé] gì] [[òlè̀ \({ }^{\mathrm{L}}\)-gg̀gèlé] mà] jǎb \(=b\)-à: \(=\grave{y}\), [[cloth.Pl InanPl] Acc] [[house \({ }^{\mathrm{L}}\)-corner] in] hang=Past-Pass=it.is, Nowadays, your child, the clothes have been filled (= stuffed) into a trunk, the (other) clothes have been laid out (on the ground), the (other) clothes have been plastered (=hung) on the corner (=outside wall) of the house.
[jòyó-ndí 'make full' §9.4; past passive \(=b-a ̀:=y\) y \(\S 10.5 .1]\)


Hunger is killing you, (and) you don't watch over (=take care of) your husband.
(747) [ó Lnògò mó] [dénán tòmô:] bèlì-yè mé, [2SgPoss \({ }^{\mathrm{L}}\) husband Def.AnSg] [day one.InanSg.O] arise-MP.Pfv-3SgSbj if, [[ìngè \({ }^{\mathrm{L}}\) tǎ-ngè̀] mà] [dándà: mà] gǒ-m̀,
[water \({ }^{\mathrm{L}}\) plain-InanSg.E] with] [outside in] go.out-Fut.3SgSbj,
Your husband, one day he will go outside with (= having drunk) plain water (i.e. without a solid breakfast).
[dépán tòmô:, variant of dépán tòmê:, no tone-dropping of noun before this numeral, §4.7.1.1]
(748)
[[[ìngè \({ }^{\mathrm{L}}\) tǎ-ngè] mà]
[[[water \({ }^{\text {L }}\) plain-InanSg.E] with]
nò: \({ }^{\text {L }}\) [dándà: mà] \(g W\)-é: mó má \(\rightarrow\) ]
person \({ }^{\text {L }}\) [outside in] go.out-PplSbj.AnSg Def.AnSg and] [ó má \(\rightarrow\) ] [hàwrà-mb-ê: mà \({ }^{\uparrow}\) ], [2Sg and] [get.along-Fut-2P1Sbj whether?]
'Will you and someone (=your husband) who has gone outside with plain water (be able to) get along?'
háwràl dùmí-yà-ndí-Ø, kóndé \(\rightarrow\),
understanding get-MP-PresNeg-3SgSbj, all.right, [[ánè mó] \({ }^{\mathrm{L}}\) kèndà: mó] jàm-ô:, [[man Def.AnSg] \({ }^{\text {L }}\) heart Def.AnSg] be.ruined.Pfv-PplNonSbj.InanSg.O
[[yદ̌: mó] gì] mó jé-ǹ,
[[woman Def.AnSg] Acc] AnSgSbj man.marry-DS,
[yと̌: mó] [mó gì] kóntà-njò-ndí- \(\varnothing\),
[woman Def.AnSg] [AnSg Acc] esteem-Prog-Neg-3SgSbj,
[mó gà] nè:ndá,
[AnSg Top] be.bad,
There will be no mutual understanding (= good relations). All right, when a man's heart is ruined (= he is unhappy), if he has married a woman, the woman doesn't hold him in high regard. She is nasty.
[headless adverbial relative \(\S 14.2 .5\) and \(\S 15.2 .4\), -njò-ndí- progressive negative §10.1.4.5]
[àndí mó nè:ndá gìné-mbò]
[knowing AnSg be.bad say-and.then]
[mó dògó sì- \(y\)-ŏ:],
[AnSg leave pour-MP-2SgSbj],
\(<\) mó gì—> [mó nè:ndá \(\rightarrow\) ] [[mó gì] dògó sì-y-ǒ:]
\(<\ldots>\quad[\mathrm{AnSg}\) be.bad] [[AnSg Acc] leave pour-MP-2SgSbj]
[[yè: \({ }^{\mathrm{L}}\) yúgúl] j-ǒ: mé nû:],
[[woman crazy] man.marry.Pfv-2SgSbj if now],
Saying (= thinking) that she is nasty, you have discarded (= divorced) her. She is nasty, (and) you have discarded her, then if you have taken (= married) a crazy woman (as a new wife) now.
kó bòné bàrì-y-ǒ: kǒy,
            InanSg misfortune add-MP-2SgSbj Emph,
    àbádá dúkùr [ó mà] gǒ-1-Ø,
    never deep.sorrow [2SgPoss Dat] go.out-PfvNeg-3SgSbj,
    [nò: \({ }^{\mathrm{L}}\) mó gà] dúkùr bàrì-yغ̀- \(\varnothing\),
[person \({ }^{\text {L }}\) NearDist.AnSg Top] deep.sorrow add-MP.Pfv-3SgSbj,

You have definitely added misfortune to that for yourself. The deep sorrow has never left you. That person (= man) has added to his deep sorros.
[near-distant animate singular demonstrative mó with \(\{\mathrm{L}\}\)-toned preceding noun §4.4.1]
 [ké NOUN ké determiner sandwich §4.4.3; comparative ìr-ô: §12.1.4]
tínnà kàné-y méll,
effort do.Pref-1PlSbj if,
 [[yesterday [1P1Poss Lelder-Pl] be-PplNonSbj.InanSg.E Def.InanSg.E] Acc] tèwné-y mé, head.for.Pfv-1PlSbj if,
[jènjà òbèlé] ígò-ndí jógò- \(\varnothing, ~ w a ̀ l l a ̂: y-n i ́, ~\) [God Chief] a.lot have-3SgSbj, by.God,

If we make our best effort, if we head for (there) where our elders were in the past, Almighty God has much.
[nonsubject participle \(b-\hat{\varepsilon}\) : from bé- 'remain']
[[ó \({ }^{\mathrm{L}}\) bà \(]\) gì] jòy-ó: mé dîn,
[[2SgPoss \({ }^{\mathrm{L}}\) father] Acc] respect.Pfv-2SgSbj if all, jěnjà ó yàmbì-rá-m̀,
God 2 SgObj cover-Tr-Fut.3SgSbj,
If you are deferential (= obedient) to your father, God will cover (= protect) you.
R: [ó
\({ }^{\mathrm{L}}\) èndè:] ó
jòyá-m̀
[2SgPoss \(\quad\) child] \(\quad 2 \mathrm{SgObj}\)
respect-Fut. 3 SgSbj

R: Your child will be deferential to you.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline P: [ó & \({ }^{\text {L èn }}\) dè̀:]-, & [[LÓ & \({ }^{\text {L }}\) bà \(]\) & gì] & јวу-б: & \\
\hline
\end{tabular} \(\left[2 \mathrm{SgSbj}{ }^{\mathrm{L}}\right.\) child]—, [[[2SgPoss \({ }^{\mathrm{L}}\) father] Acc] respect.Pfv-2SgSbj if] [[ó \({ }^{\text {L èndè:] ó jòyá-m̀ }] \text {, }}\)
[[2SgPoss \({ }^{\mathrm{L}}\) child] 2 SgObj respect-Fut. 3 SgSbj\(]\),
[[[ó \(\left.{ }^{\mathrm{L}} \mathrm{n}\right] \quad\) ì̀ \(] \quad j \grave{y-o ́: ~ m e ́] ~}\)
[[[2SgPoss \({ }^{\text {L mother }] ~ A c c] ~ r e s p e c t . P f v-~} 2 \mathrm{SgSbj}\) if]
[[ó \({ }^{\text {L èndè̀:] ó jòyá-m̀ }], ~}\)
[[2SgPoss \(\left.{ }^{\text {L child }}\right] \quad 2 \mathrm{SgObj}\) respect-Fut. 3 SgSbj\(]\),
P: Your child-. If you are deferential to your father, your child will be deferential to you. If you are deferential to your mother, your child will be deferential to you.

[ó Lyè:] ó jòyá-m̀,
[2SgPoss \({ }^{\mathrm{L}}\) woman] 2 SgObj respect-Fut. 3 SgSbj ,

If you leave (= treat) your mother and your father as your own (true) parents, your wife will be deferential to you.
[sá:rà: 'parent' can denote one's mother or father or any of their younger same-sex siblings; animate plural possessive classifier bj̀ §6.2.2]
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(758)

| síyà, ó | sǎy | $[[$ ó | sà:rà: $]$ | gì $]$ | íyó | í-mbò |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| well, | 2 Sg | now | $[[2 \mathrm{SgPoss}$ | ${ }^{\mathrm{L}}$ parent $]$ | $\mathrm{Acc}]$ | today | go-and.then |

ó dìn-ô:,
2SgSbj find.Pfv-PplNonSbj.InanSg.O,
[ó L Là:rà: mó] ó dwá-ǹ]
[2SgPoss }\mp@subsup{}{}{L}\mathrm{ parent Def.AnSg] 2SgSbj insult-DD]
mí dìnê: mé nû:,
1SgSbj find.Pfv if now,
[[[ó ${ }^{\text {L }}$ sà:rà: mó] gì] [[tégélè: ké] mà]
[[[2SgPoss 'L parent Def.AnSg] Acc] [[side.of.face Def.InanSg.E] in]
dènj\varepsiloń-m mé] [há:ná-1-\varnothing mà->]
hit.Pfv-1SgSbj if] [be.possible-PfvNeg-3SgSbj whether?]
When you now have gone nowadays and found (= met with) your parent, if I find
now that you are insulting (= being disrespectful to) your parent, if (seeing this) I (= your
friend) hit (= slap) your parent on the side of the face, is it impossible?
[í-mbò from stem ín 'go']

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R: Definitely, it's you (the child of the parent) [focus] who have given (= initiated) the hitting.
[Focalization with pronominally unmarked perfective verb §13.1.1.1]
(760)
\begin{tabular}{|c|c|c|c|}
\hline 0) P: ó 2S & gSbj hit & \multicolumn{2}{|l|}{ǹdè, give.Pfv,} \\
\hline [[5́ & yè] & gì] & háybá-1-Ø, \\
\hline [[2SgPoss & Psm.AnSg] & ] Acc] & watch.over-PfvNeg-3SgSbj, \\
\hline [ó & [ó & yè] & jé-mbò] \\
\hline [2SgSbj & [2SgPoss & Psm.AnSg] & take-and.then] \\
\hline [ébán & má] t & tùn-ó: & \(m \varepsilon ́ ~ n u ̂:, ~\) \\
\hline [market & in] p & put.Pfv-2SgSbj & if now, \\
\hline nò-mbó & mó & tàrǎ-ndí-yà & mà, \\
\hline person-Pl & 3 SgObj & look.at-Fut & Neg-3PlSbj \(\quad\), \\
\hline
\end{tabular}

P: It's you [focus] who have given (= initiated) the hitting. He didn't protect yours (= your parent). If now you have taken yours (= your parent) and put him in the market, won't the people look at him?
[perfective with subject focalized §13.1.1.1; yè animate singular possessive classifier §6.2.2]
(761)
\(\mathrm{R}:\) kèné bò- \(\varnothing\)
like.that be-3SgSbj
\(R\) : It is that way.
\(\mathrm{P}:\) kóndé \(\rightarrow\) nǎ: nò-mbó yùgúlì-yò-mbò b-à:,
all.right yesterday person-Pl be.crazy-MP-Prog Past-3PlSbj,
yùgùlì-y-ò: \(\quad\) jé, jónà-mbò b-à:,
be.crazy-MP.Pfv-3PlSbj if, treat-Prog Past-3P1Sbj,
pórò-mbò bè- \(\varnothing\),
escape-Prog Past-3SgSbj,
[nǒ: \({ }^{\mathrm{L}}\) nùmà:] bô:- \(\varnothing \nearrow\), [jěnjà \({ }^{\mathrm{L}}\) nùmà:] bô:- \(\varnothing \searrow\), [person \({ }^{\mathrm{L}}\) hand] be-3SgSbj, [God \({ }^{\mathrm{L}}\) hand] be- 3 SgSbj ,

P: All right, formerly, the people used to be going crazy. If they went crazy, they (= others) treated them, it (= craziness) would escape (=be over). There is the hand of a human, (and) there is the hand of God.
[i.e. some people are cured by human healing, others only by God; past progressive -mbò bè- §10.3.1.6; bô: ‘be present, exist' §11.2.2.1]
\begin{tabular}{|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
[[Ljěnjà \\
[[God
\end{tabular} & \begin{tabular}{l}
nùmà:] \\
\({ }^{\mathrm{L}}\) hand]
\end{tabular} & \[
\begin{aligned}
& \text { mà] } \\
& \text { in] }
\end{aligned}
\] & \[
\begin{aligned}
& \text { bò-ŋggà } \\
& \text { be-PplSbj }
\end{aligned}
\] & \begin{tabular}{l}
kó \\
Def.InanSg.O
\end{tabular} & \[
\begin{aligned}
& \text { gà] } \\
& \text { Top] }
\end{aligned}
\] \\
\hline jěnjà & kán & \multicolumn{3}{|l|}{\(j o g-a ̂:=\grave{y}\),} & \\
\hline God & do & \multicolumn{3}{|l|}{Perfect-PplSbj=it.is.} & \\
\hline [C[Lnǒ: & \multicolumn{2}{|l|}{\({ }^{\text {L }}\) nùmà:]} & mà] gw & gwé-mbò] & \\
\hline [[][person & \multicolumn{2}{|l|}{\({ }^{\text {L }}\) hand]} & in] go & go.out-and.then] & \\
\hline bìré = b-à: & & & kó & má \(\rightarrow\) ] & \\
\hline work(v) \(=\) Past- & assive & & Def.InanSg.O & O and] & \\
\hline [jěnjà ko & & kó & má & \(\rightarrow\) ] kúndú = lá, & \\
\hline [God Psm & InanSg. 0 & Def.In & nanSg.O and & d] one.InanSg.O & is.no \\
\hline
\end{tabular}

As for what is in the hand of God, God has done (it). What has come out of the hand of a human and has been produced (by humans), and God's (work), are not the same (=are not comparable).
[jòg-â: =ỳ is the 'it is' form of a perfect participle, but it can be used predicatively §10.1.3.3; inanimate singular O-class possessive classifier kò dirctly following possessor noun without an intervening pronominal §6.2.2]
kà: jěnjà [nè:ndà \({ }^{\mathrm{L}}\)-kàné gì] kíyò- \(\varnothing\),
but God [bad \({ }^{\text {L }}\)-do.Agent Acc] want.Stat-3SgSbj,
[[nè:ndà \({ }^{\text {L}}\)-kàné gì] mó kìyò-ngà] [àngú=ý ló], [[bad \({ }^{\mathrm{L}}\)-do.Agent Acc] AnSgSbj want.Stat-PplNonSbj] [which?=it.is Q], júkkèrè = ỳ ह́ngú, fine \(=\) it.is tomorrow,

But God likes (= tolerates) an evil-doer. The fact that He likes an evil-doer, what is (the reason for) it? It's punishment in the future ("tomorrow").
[lá:kàrà mà] [jùkkèrè \({ }^{\mathrm{L}}\) gìndó:]
[Hereafter in] [fine(n) \({ }^{\mathrm{L}}\) big.InanSg.O]
[mó gì] dímbà- \(\varnothing\), wá:jìbè,
[AnSg Acc] follow.Stat-3SgSbj, certainly,
[[í \({ }^{\mathrm{L}}\) kùlmà-mbò] \({ }^{\mathrm{L}}\) ìm] mà] ךèné \(\quad\) jwè-ý,
[[1PlPoss \({ }^{\text {L elder-Pl] }{ }^{\mathrm{L}} \text { mouth] in] like.this hear.Pfv-1P1Sbj, }}\)
<í bàbà:-mbò-> [í \({ }^{\mathrm{L}}\) bàbà:-mbò mà \(\rightarrow\) ] [í \({ }^{\mathrm{L}}\) ǹ-bò mà \(\rightarrow\) ]
\(\langle\ldots\rangle \quad\left[1\right.\) PlPoss \({ }^{\mathrm{L}}\) father- Pl and] [1PlPoss \({ }^{\mathrm{L}}\) mother-Pl and]
dìné:-ỳ kǒy,
find.Pfv-1PlSbj Emph,
In the Hereafter (= Afterworld), a great punishment follows (=will afflict) him. We certainly heard this in (= from) our elders' mouth(s). We definitely found (= experienced) our fathers and mothers.
[júkkèrè 'fine (penalty)', by extension 'divine punishment'; agentive compound \(\S 5.1 .4\); 'want' §17.2.1.1; factive clause in nonsubject relative-clause form §17.3.2, can be emended by adding kó after kìyò-ŋggà ; àngú ‘which, what?' §13.2.2.7; ìm </îbí/ 'mouth'; bàbâ: 'father, daddy', alternative to bă: 'father']
[í \({ }^{\text {L }}\) bàbà:] ó wá \(\rightarrow\),
[1PlPoss \({ }^{\text {L }}\) father] 2 Sg (vocative) Quot,
[dôm mà] [[ó ír-ó:]
[speech in] [[2SgPoss \({ }^{\text {L mouth }] ~ b e . m o r e-P p l S b j . I n a n S g . O] ~}\)
bô:- \(\varnothing\) wà kǒy,
be-3SgSbj Quot Emph,
[kwé-ngò mà] [[ó io ìbì] ir-ó:]
[food-InanSg.O in] [[2SgPoss Lmouth] be.more-PplSbj.InanSg.O]
bô:- \(\varnothing\) wà,
be-3SgSbj Quot,
Our father said: hey you, in speech there is definitely something that is bigger than (what comes from) your mouth; in food there is something that is bigger than (what you put in) your mouth.
[quotative particle wa \(\rightarrow\) after vocative, then wa after sentence proper §17.1.2]


He (=our father) said: if you have gone out to the bush and gotten (some) food, having eaten what is possible (=what fits) in your mouth, you (should) bring that which is not possible (= does not fit) in your mouth and give it to your parent.
[quotative wa at the end of the quoted passage and also after an adverbial phrase near the beginning; dìnê: and \(k w \grave{\varepsilon}\) would normally be 2 Sg dìn-ô: and \(k\)-ǒ: in this context; ìdíré is a variant of ǹdé 'give']


Nowadays, your parent is lying down there in the house, (while) you have gone out to the bush, you have roasted (directly on a fire) your sizzling fatty meat and eaten it (out in the bush), without your having given (any) to your parent, and without your having given (any) to a single (= any) wife of yours or to a single your having given any to a single child of yours.
[kên discourse-definite 'there' §4.4.4.1, perfective nonsubject relative §14.3.1; sì:-gé: ~ sì:-gá: characteristic -gá: §4.2.2.1; kw' \(\rightarrow\) 'sizzling’ onomatopoeic adverbial; tı̀mê: 'one' after negation \(=\) '(not even) a single one'; perfective negative clauses following a positive clause can be freely glossed "without having VPed"]
\[
\begin{array}{ccc}
\text { Síyà, } & \text { dúwàw } & \text { bô:- } \varnothing  \tag{769}\\
\text { well, } & \text { blessing } & \text { be- } 3 \mathrm{SgSbj}, \\
& \text { Well, is there a (parental) blessing here? }
\end{array}
\]

R: òndí- \(\varnothing\)
not.be- 3 SgSbj
\(R\) : There is none.

P : ké dân yà:-, [ké dân] bò-y mé dîn,
InanSg.E like Foc-, [InanSg.E like] be-1PlSbj if all,
[[ì gwà: \(\left.{ }^{\text {L } ̀ \text { gí }}\right]\) mà] né:mà bá-m [[1PlPoss country \({ }^{\mathrm{L}}\) Prox.InanSg.E] in] good.times remain-Fut. 3 SgSbj

P: Like that-, if we were (= behaved) like that (i.e. in the old way), prosperity would remain in this land of ours.
\(\mathrm{R}:\) éngú yàrú ó Sòjǎ-mb-à: \(=\) ỳ
tomorrow debt 2 SgObj pay-Fut-Pass=it.is
R : Tomorrow you will be repaid what you are owed.
[future passive -mb-à: = y §10.5.2]
\(\mathrm{P}:\) éngú [yàrú yé]-
tomorrow [debt Def.InanPI]-
P: Tomorrow the debts (owed to you)-.
\(\mathrm{R}:\) síyè-ngò kàn-ó: mé, good-InanSg. O do.Pfv- 2 SgSbj if,
jĕnjà [ó
God [2SgSbj kán-ò:
[ó gì] yóbà kán-ná,
\([2 \mathrm{Sg}\) Acc] repaying do-Hort.3Sg
[ó \({ }^{\mathrm{L}}\) kèndà̀:] sùgè- \(\varnothing\) mé,
[2SgPoss \({ }^{\text {Lheart] defecate.Pfv-3SgSbj if, }}\)
síyè-ngò káná-l-ó:,
good-InanSg. O do-PfvNeg-2SgSbj,
R: If you have done good (deeds), may God repay you (for) what you have done. If you are angry (=evil), you have not done good (deeds).
[lit. "if your heart has defecated" \(=\) 'if you are angry (=evil)']
\begin{tabular}{llll}
{\([\) dôm } & {\(\left[\begin{array}{ll}\text { ǵ } & \text { g̀̀ }]]\end{array}\right.\)} & dìmbí-yá \\
{\([\) speech } & {\([2\) SgPoss } & Psm.InanSg.O] & follow-MP.Imprt \\
{\([\) to the other speaker: \(]\)} & (Please) continue your talk!
\end{tabular}

P : háyà, [ěy gì yà:] dìmbì-yé-y mé díndì, well, [Prox.InanPl Acc Foc] follow-MP-1PlSbj if all,
jěnjà né:mà [í mà \(]\) sùgò-ndó-m̀,
God good.times [1P1 Dat] go.down-Caus-Fut.3SgSbj,
kà: [ěy gì] dìmbí-yá-lì-y mé dîn,
but [Prox.InanPl Acc] follow-MP-PfvNeg-1PlSbj if all,
[àyǐ-n kó] [í \({ }^{\mathrm{L}}\) bàndì] dìmbílíl-yà-ndí- \(\varnothing\),
[fatigue Def.InanSg.O] [1P1 \({ }^{\text {L }}\) behind] follow-Tr-MP-PresNeg-3SgSbj,
P: If these (behaviors) [focus] are what we have followed, God will bring down (= provide) prosperity for us. But if we have not followed these (behaviors), suffering will not stop following us.
[dìmbí-lí-yé'stop following', reversive of dìmbí-yé'follow']
àyè-ý, gà:gì-ỳ̀-ý,
be.weary.Pfv-1PISbj, be.hungry-MP.Pfv-1PISbj,
[[dôm kó]
[speech Def.InanSg.O]
[bìrò: \({ }^{\mathrm{L}}\) síyè-ggò]
[work \({ }^{\text {L }}\) good-InanSg.O]
kà: jěnjà ké [í gì] yámbír-ná,
but God InanSg.E [1Pl Acc] cover-Tr-Hort.3Sg,
We have suffered, we have been hungry. There is no talking (= discussing among ourselves), there is no good work. But may God cover (= remove) that (situation) for us.
[[mó gì]
[[AnSg Acc]
\(\left[\begin{array}{ll}{\left[\begin{array}{ll}i & g i ̀\end{array}\right]}\end{array}\right.\)
[1Pl Acc] [mó gì] (antya-i-y
dìmbì-yé-y
follow-MP.Pfv-1PISbj
mé]
if]
[AnSg Acc] follow-MP-PfvNeg-1PISbj if]
[í gì] yàmbí-rà-ndí- \(\varnothing\),
[1P1 Acc] cover-Tr-PresNeg-3SgSbj,
If we follow Him (= God), He will definitely cover (= protect) us. If we don't follow Him, He will not cover us.
[L-toned 1Pl perfective negative \(-l i\)-y \(\S\) §10.1.4.2]
\begin{tabular}{|c|c|c|c|}
\hline [í & tàrà-n], & [í & \({ }^{\text {L }}\) kùlmà-mbò], \\
\hline [1Pls & look-DS], & [1PIPoss & \({ }^{\text {L }}\) elder-Pl], \\
\hline
\end{tabular}
sògólè, yàwó: gìbì-y-ò: wê;,
yellow.dye, woman.Pl gird-MP.Pfv-3PlSbj ugh!,
ánà:, yé nùní-yà-m \(=b\)-à:,
man.Pl, InanPl wear.garment-MP-Pres=Past-3PlSbj,
As we watched (=in our memory), our elders, (garments of) yellow bogola dye (from Anogeissus tree), what women wore (around their bodies), ugh! (As for) men, they used to wear these (garments, too).
[tàrà-n different-subject form with \(\mathrm{A} / \mathrm{O}\)-stem of verb §15.1.6.1; 'ugh!' expresses the attitude of today's women to old-fashioned bogola clothing made with vegetable dyes; yellow dye for traditional bogola fabric is made froms leaves of the tree Anogeissus leiocarpus; 'gird' because women's wraps (outer garments) are wrapped and tied around the body]
(780)
[tàgùu \({ }^{\mathrm{L}}\) kó:sù-mbò ] \(\nearrow\), [shoe \({ }^{\text {L }}\) leather.sandal-Pl],
[bé gì] tágí-yà-mb-à: \(=\grave{y}=b \grave{c}-\varnothing\),
[AnPl Acc] wear.shoe-MP-Pres-Pass=it.is=Past-3SgSbj,

cow \(^{\mathrm{L}}\)-skin, today [[cow \({ }^{\mathrm{L}}\) skin] [[2SgPoss \({ }^{\mathrm{L}}\) woman] Acc]
tàgì-r-ó:
wear.shoe-Tr.Pfv-2SgSbj if]
\(\left[\begin{array}{ll}\text { gó } & \text { gì bilá-m̀ } \\ m a ̀ \rightarrow ~\end{array}\right]\),
[[2Sg Acc] be.peaceful.for-Fut.3SgSbj Q],
Leather sandals, they were worn, (of) cowhide. Nowadays, if you have your wife wear cowhide (shoes), will it be peaceful (=turn out well) for you?
[animate plural bé gì because 'shoes' is a grammatically animate noun; present passive \(\S 10.5 .3\), differing only in tones from future passive; note co-occurrence of regular compound 'cow-skin' and possessive-type compound 'cow's skin'; mediopassive tágí-yé 'put shoes on (oneself)' vs. transitive tágí-rह́ 'put shoes on (someone else)'; final question is rhetorical]


All right, (formerly) not everyone could get cowhide. By God, if you saw someone wear cow's hide (shoes), he was rich, (it was as though) he was wearing a living one (= entire live cow).
[assistant says tágà-n is also possible instead of the first tàgà ; final comment is a way of exaggerating the wealth of any person wearing leather sandals in the past]
(782)
R: já:tì, jă: kèné yà: bè- \(\varnothing\) exactly, yesterday like.this Foc be- 3 SgSbj

R: Exactly. Formerly like that [focus] is how it was.
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
[mánà \\
[plastic
\end{tabular} & \begin{tabular}{l}
\({ }^{\mathrm{L}}\) tàgì:] nû: \\
\({ }^{\text {L }}\) shoe] now
\end{tabular} & уе̌п what? & \begin{tabular}{l}
kăygòy, \\
be.done,
\end{tabular} \\
\hline & [yènóá & á] & mb \\
\hline astic=it.1s.not & Q, [what? & Dat] & follow.Stat-3SgSbj \\
\hline
\end{tabular}

P: Plastic shoes now, what good was it? Was it not plastic? What was it for?
[lit. kăygòy, roughly 'be done' in this specific phrase, is obscurely related to kán ‘do, make'; the final clause is literally 'what did it follow?']
(784)

R : sòjó-m̀ melt-Fut. 3 SgSbj
R : It would melt.


P: Well, that [focus] was a herder's share. But if you wore cow(-hide) shoes, (it was as though) you were wearing a (whole) cow. Definitely not everyone could get (=afford) it. It's what we call "patas monkey's getting," no? May God make our end (= destiny) good.
["patas monkey's chance" is said to be a Tommo So phrase, cf. Najamba òmélè 'patas monkey', the point being (apparently) that it's difficult to pick high-hanging fruits left by the monkeys]
kà: nàmà-ndè- \(\varnothing\) kǒy [í mà],
[nǎ: kòngò í \({ }^{\mathrm{L}}\) í yà-m=b-ò: mà]
[yesterday thing \({ }^{\mathrm{L}} 1 \mathrm{PlSbj}\) see-Pres=Past-PplNonSbj.InanSg.O in]
[[íyó í yà-ทgà] [hâl kúndú] òndú-Ø] [[today 1P1Sbj see-Ppl.Pres] [until one.InanSg.O] not.be-3SgSbj] [kà:ná: [[[bòné=ý mé] \({ }^{\text {L }}\) bàndì] mà], [except [[[trouble=it.is if] \({ }^{\text {L }}\) behind] in], [tibò: \({ }^{\mathrm{L}}\) kòlô:] mà, [sà:mà-n \({ }^{\mathrm{L}}\) nè:ndá:] má, [death \({ }^{\mathrm{L}}\) unripe] or, [disease \({ }^{\mathrm{L}}\) bad] or,

But it has certainly been difficult on us. In (=among) the thing(s) that we saw formerly, there is not even a single thing that we (still) see nowadays, other than in the aftermath of troubles: unripe (=premature) death or bad disease.

[bèlí-yé nè] kúnjá, tìb-ǒ:,
[get.up-MP then.SS] get.old.Imprt, die.Pfv-2SgSbj,
Furthermore, when we catch a disease, we cannot treat ourselves (medically). (They say:) arise and get old! You are dead.
["our head" = reflexive object §18.1.1]
[today treat-PresNeg-3P1Sbj],
[nǒ: tòmê: mó] kòn-kámà éndà- \(\varnothing\),
[person one Def.AnSg] thing \({ }^{\mathrm{L}}\)-any not.know-3SgSbj,
mó jòné = ̀̀ wà, gwé yàlì-yè- \(\varnothing \quad\) má,

AnSg heal.Agent=it.is Quot, go.out go.around-MP.Pfv-3SgSbj Q,
In the place(s) where (people) used to be treated (by healers), now they don't treat (them). One person (=quack healer) doesn't know anything, (but) he claims to be a healer. Did he (=sick person) go out and walk around (i.e. in good health)?
[jòné uncompounded agentive §4.2.3.5; jòクé=ỳ wà is heard phonetically as [dzòそêw:à], i.e. with /yw/ fusing as [w:].
(789) [sǎ:mà gà] [jěnjà bô:- \(\varnothing\) mà \(\rightarrow\) éndà- \(\varnothing\),
[sick.person Top] [God be-3SgSbj whether?] not.know-3SgSbj,
[mó gì] dìmbì-yá-m̀, [mó gì] táppà kàná-m̀, [AnSg Acc] follow-MP-Fut.3SgSbj, [AnSg Acc] hitting do-Fut. \(3 \mathrm{Sg} \operatorname{Sbj}\), kwǎ-m̀, lày, tìbá-m̀, eat-Fut. 3 SgSbj Emph, die-Fut. 3 SgSbj ,

The sick person doesn't know whether (=that) God is there. He (=sick person) will follow him (=healer). He (=healer) will hit (=fleece) him, (he will) eat (him) up, totally. He (=sick person) will die.


All right, in Dioni (village), at Go, they would treat (the sick), it is said. There used to be praying to (animist) God. We aren't going to Go (any longer). It was (also) at Lamordé, (but) we aren't going (now). It was at Dindari, (but) we we aren't going. It was at Adia, (but) we we aren't going. It was at Gundapari, (but) we we aren't going. It was at Ogoyeri, (but) we we aren't going. It was at Dembeli, (but) we we aren't going. It was at Tabako, (but) we we aren't going. We we aren't going to Mougi.
[Go is a secret place with an underground spring]


Najamba (country) went to (its) boundary at Débéré and stopped at its boundary there. When we left (=ceased practicing) all that, we took out (=adopted) our religion (=Islam).
[[[í \(\quad{ }^{\mathrm{L}}\) dì:nà]
[[[1PlPoss \(\quad\) Leligion]

(Since) we adopted our religion, there is no benefit that we have seen.
[today [cow.Pl hundred] 2 SgSbj have-DS] find.Pfv- 1 SgSbj if, [ह́ndèn wè-া́n mé] [day.after.tomorrow come.Pfv- 1 SgSbj if] [[nè: mó] kúndé=ý] [[cow Def.AnSg] one.AnSg=it.is]

If I find that you have one hundred cows today, if I come (back) in a couple of days, the cow is (just) one.
\(\mathrm{R}:\) ìgí \(\quad\) jòg-à: \(=\grave{y}\) finish Perfect-PplNonSbj=it.is
R: They have finished (= died off).
\begin{tabular}{|c|c|c|c|c|}
\hline ) P: & \begin{tabular}{l}
nă: \\
yesterday
\end{tabular} & \begin{tabular}{l}
[[[sò-ngò̀-jibù \\
[[[cloth-InanSg.O]-wrap
\end{tabular} & \[
\begin{align*}
& \text { kùndù }{ }^{\mathrm{L}}  \tag{795}\\
& \text { one.InanSg.O] }
\end{align*}
\] & \[
\begin{aligned}
& \text { kó] } \\
& \text { NearDist.InanSg.O] }
\end{aligned}
\] \\
\hline [í & gì] & \(n a ́ f \varepsilon ́=b \varepsilon ̇-\varnothing\) & kǒy, & jă:- \\
\hline Pl & Acc] & benefit.Pfv=Past-3SgSbj & Emph, & since- \\
\hline
\end{tabular}
\begin{tabular}{lllll}
R (overlapping): & kó-, & ó & kàbîl & káná, \\
& Near.Inan.O, & 2 Sg & excuse(n) & do.Imprt,
\end{tabular}
kó í wòndè jògà: kó,
Near.Inan.O 1Pl reject Perfect Def.InanSg.O,
[í kìyò- \(1 g\) à dân] bà-mbó-m=ì:, nè:ndá: kànà-mbó-m̀ \(\nearrow\),
[1Pl want-Ppf.NonSbj like] remain-Fut-3Sg=it.is, bad do-Fut-1SgSbj [dě-ngó=ỳ̀ gà là] kànà-mbó-m̀̀, [short-InanSg.O=it.is Ppl too] do-Fut-1SgSbj,
[èndá: \(=\hat{y}\) mé là] kànà-mbó-m̀̀, [not.sweet=it.is if too] do-Fut- 1 SgSbj ,

R(overlapping): ‘That—. Excuse me (for interrupting). We have turned away from that (= old customs). It will remain like we want (it). I will do something bad, I will do something that is short too, even if it's not good I will do it too.'
[dě-ŋggó contracted from dèndú-ŋggó 'short']
kàn-ó:
mé, yesterday [bad Def.InanSg.O] do.Pfv-2SgSbj
if,
[pá: nè] ó tè:rá-m̀ [tó:rù kó],
[immediately Adv] 2SgObj [síyè-ngò kó] [good-InanSg.O Def.InanSg.O] [pó: nغ̀] ó [immediately Adv] 2 SgObj show-Fut.3Sg [fetish Def.InanSg.O], kàn-ó: mé là, do.Pfv-2Sg if too, tè:rá-m̀, áywà,
 today, [[person Dat] be.sweet-3SgSbj be.not.sweet=3SgSbj all] do-Fut-1 SgSbj , [[ń mà] ěl-ngò dân] bà-mbó-m̀ \(ᄀ,<\ldots>\), [[1Sg Dat] sweet-InanSg.O like] remain-Fut-1SgSbj,

Formerly, if you-Sg did the bad thing, the fetish (=idol) would show you immediately. Likewise, if you did the good thing, it would show you immediately. Well, nowadays, whether it pleases or doesn't please someone, I will do (it). I will remain (= live) as I please.'


God too, in this (base) world, doesn't take out (a person) and show you at all that So-and-So is an evil-doer. (If) you have done a certain type of evil, He (= God) will bring down a catastrophe in the land, perhaps as for you, your concern doesn't exist. You're (still) doing it (= evil).
nă: [[tórıù kó], [kàn-ó: mé dîn]
yesterday [[fetish Def.InanSg.O] [do.Pfv-2SgSbj if all]
[pó: ǹ̀] ó tè:rà- \(m=b \grave{\varepsilon}-\varnothing\),
[immediately Adv] 2 SgObj show-Pres \(=\) Past- 3 SgSbj ,
íyó sân gìnè-ỳ, [[sân kó] gì là], today prayer say.Pfv-1PISbj, [[prayer Def.InanSg.O] Acc too], dìmbà-ndí-ỳ, [kèndà-[èjě-n]] òndí- \(\varnothing\), follow-PresNeg-1PISbj, [liver-[clear-Nom]] not.be-3SgSbj

Formerly, the fetish, if you did (something), it would show you immediately. Nowadays, we have said (it's) praying (= Islamic worship), (but) we don't follow (= are not consistent with) the praying either. There is no candor.


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\section*{Abbreviations}
\begin{tabular}{|c|c|}
\hline Abstr & abstractive nominal (§4.2.2.2-3, §4.2.3.3) \\
\hline Acc & accusative \\
\hline Adj & adjective \\
\hline Addr & addressee \\
\hline An & animate \\
\hline AN & aspect-negation suffix or category \\
\hline AnPl & animate plural \\
\hline AnSg & animate singular \\
\hline ATR & advanced tongue root (vowel feature) \\
\hline C & consonant (in formulae like CvCv ) \\
\hline Caus & causative \\
\hline Char & characteristic nominal derivational suffix, §4.2.2.1 \\
\hline Dat & dative \\
\hline Def & definite \\
\hline Dem & demonstrative \\
\hline Det & determiner (demonstrative or definite) \\
\hline DiscFunct & discourse-functional (particle) \\
\hline Dist & distant (demonstrative) \\
\hline DS & different-subject (subordinator) \\
\hline E & E-class form of nouns, etc. \\
\hline EA & expressive adverbial (§8.4.8) \\
\hline E/E & an inanimate noun class ( \(\mathrm{Sg} / \mathrm{Pl}\) ) \\
\hline E/O & animate and pseudo-animate noun class ( \(\mathrm{Sg} / \mathrm{Pl}\) ) \\
\hline Emph & emphatic (clause-final particle) \\
\hline Foc & focus \\
\hline Fr & French \\
\hline Fut & future \\
\hline H & high (tone) \\
\hline Hort & hortative \\
\hline Imprt & imperative \\
\hline Inan & inanimate \\
\hline InanPl & inanimate plural \\
\hline InanSg & inanimate singular \\
\hline Inch & inchoative ('become' with adjective) \\
\hline Inst & instrumental \\
\hline L & a) low (tone) \\
\hline & b) any sonorant (in e.g. \(C v L\) ) \\
\hline Logo & logophoric \\
\hline MP & mediopassive \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{N} & a) noun (in e.g. 'N-Adj") \\
\hline & b) any nasal consonant (in e.g. \(C V N\) ) \\
\hline (n) & noun, in interlinear glosses like 'work (n)' \\
\hline Neg & negative \\
\hline Nom & nominalization \\
\hline NP & noun phrase \\
\hline Num & numeral \\
\hline \multirow[t]{2}{*}{O} & a) O-class of nouns \\
\hline & b) object (in e.g. "SOV") \\
\hline Obj & object \\
\hline O/E & an inanimate noun class ( \(\mathrm{Sg} / \mathrm{Pl}\) ) \\
\hline Pass & passive \\
\hline Pfv & perfective \\
\hline Pl & plural \\
\hline Poss & possessor \\
\hline PP & postpositional phrase \\
\hline Ppl & participle, form of verb in relative clauses \\
\hline PplNonSbj & participle in nonsubject relative \\
\hline PplSbj & participle in subject relative \\
\hline Pres & present (tense) \\
\hline Presntv & presentative ('here's X!') \\
\hline Prog & progressive \\
\hline Proh & prohibitive (negative imperative) \\
\hline Pron & pronoun \\
\hline Prox & proximal (demonstrative) \\
\hline Proh & prohibitive \\
\hline Psm & possessum (possessed entity) \\
\hline Purp & purposive \\
\hline Q & question \\
\hline Quot & quotative particle \\
\hline QuotSbj & quotative subject \\
\hline Recip & reciprocal \\
\hline Rev & reversive \\
\hline S & subject (in e.g. "SOV") \\
\hline Sbj & subject \\
\hline Sg & singular \\
\hline SS & same-subject (subordinator) \\
\hline Stat & stative \\
\hline Tr & transitive derivational suffix, §9.3 \\
\hline V & verb (in e.g. "SOV") \\
\hline \multirow[t]{2}{*}{V} & a) vowel (in e.g. CvCv ) \\
\hline & b) verb in glosses like 'work(v)' \\
\hline Vb & verb \\
\hline VblN & verbal noun \\
\hline VP & verb phrase \\
\hline
\end{tabular}

\section*{Symbols}
\begin{tabular}{|c|c|}
\hline * & reconstructed \\
\hline \# & ungrammatical, unacceptable, unattested \\
\hline á, à, â, ă, ă & tones on vowels (or syllables), §3.7 \\
\hline \(\bar{x}, \hat{x}, \hat{x}, \hat{x}\) & tone changes on stem in compounds, chapter 5 \\
\hline /.../ & a) lexical tone melody, e.g. /LH/, /H/ \\
\hline & b) underlying or lexical representation \\
\hline \{...\} & a) tone overlay, e.g. \(\{\mathrm{HL}\},\{\mathrm{H}\},\{\mathrm{L}\}\) \\
\hline & b) enclosing any set, e.g. \(\left\{\begin{array}{l}u \\ \text { a } i\}\end{array}\right.\) \\
\hline [...] & a) phonetic (IPA) representation, e.g. [bǔ:] \\
\hline & b) syntactic or tonosyntactic phrase \\
\hline [...] \({ }^{\text {L }}\) & \(\{\mathrm{L}\}\) tone overlay controlled by an element to the right \\
\hline \({ }^{\text {L }}\) [...] & \(\{\mathrm{L}\}\) tone overlay controlled by an element (possessor) to the left \\
\hline \(\subset \ldots \supset\) & tonosyntactic island (\$14.2.4) \\
\hline \(\rightarrow\) & (prolongation of final vowel or sonorant), §3.8, §8.4.8.1 \\
\hline \(\downarrow\) & terminal pitch drop (intonation), §3.8 \\
\hline , & terminal pitch rise or sustained high terminal pitch, \(\S 3.8\) \\
\hline = & clitic boundary \\
\hline
\end{tabular}

\section*{Index}

\section*{1. selected morphemes}
notes:
in suffixes, " \(v\) " is a variable vowel;
alphabetization: \(\varepsilon\) follows \(e, ~ \rho\) follows \(o, n\) then \(\eta\) follow \(n\);
atonal morphemes are not tone-marked here;
lexical stems (nouns, verbs, etc.) are shown with lexical tones.
\(-\varnothing \quad\) a) 3 Sg subject on verbs, \(\S 10.2\)
b) perfective positive, \(\S 10.1 .3 .1\) in subject-focus construction, \(\S 13.1 .1 .1\)
\(-\alpha\) :, symbol for mutating vocalic ending, \(\S 14.3\)
perfective participles, \(\S 14.3 .1\)
à-, frozen, in a few nouns, §4.1.6
a: a) -à:, contracted 3 Pl subject suffix on verbs, \(\S 4.3\)
b) -à:, part of \(=b-a ̀:=y\) and \(-m b-a ̀:=y\) y passives, \(\S 10.5\)
c) á:, not-quite-segmentable part of far-distant demonstratives, \(\S 4.4 .1\)
d) -â:, purposive subordinator, \(\S 17.6 .1\)
(see also jòg-â: )
àbí-, 'receive, take (sth given); consent', §17.4.3
ǎm a) 'who?', §13.2.2.1
b) 'which?', animate singular, §13.2.2.7
ànî:, 'where?', §13.2.2.3
ǎn-dè, 'whereabouts?', §13.2.2.3
ànné, ‘how?’, §13.2.2.5
àngêy, 'how much?' or 'how many?', §13.2.2.6
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[^0]:    a. [ǎm wò-mb-ê: mà $\rightarrow$ ] éndà:-m
    [who? come-Fut-Ppl.SbjFoc Q] not.know-1SgSbj
    'I don't know who will come.' (wò-mbê:)
    b. [mó ăn-dè ìn-è: mà $\rightarrow$ éndà:-m
    [3Sg where?-Approx go.Pfv-PplNonSbj.InanSg.E Q] not.know-1SgSbj
    'I don't know where he/she went.'

[^1]:    a. [[í $\eta w a ̀-m=b-\varepsilon ̀: ~ k e ́] ~ m a ̀] ~$
    [[1P1Sbj hear-Pres=Past-PplNonSbj.InanSg.E Def.Inan.Sg.E] in] gwè- $\varnothing$
    go.out.Pfv-3SgSbj
    'It (=Najamba community) has left (=ceased to practice) what we (=young people) used to hear about.' (2005-1a)
    b. [sà:gí-mbó nô:y tà:ndî:]
    [month-Pl two three]
    ó kwà-m=b-ò: kó
    2 SgSbj eat-Pres=Past-PplNonSbj.InanSg.O Def.InanSg.O
    '(They now eat in one day) what you-Sg used to eat in two or three months.' (2005-1a)
    c. [bíró: jǎ: yàlì: ${ }^{\mathrm{L}}$ é gòlà- $m=b-\varepsilon ̀:$
    [work(n) yesterday field ${ }^{\mathrm{L}}$ 2PlSbj farm(v)-Pres=Past-PplNonSbj.InanSg.E
    dîn] [gòlé kìrè-ý $\nearrow$ ]
    all] [farm(v) complete.Pfv-1P1Sbj
    '(For) every field that you-Pl did farm work on in the past, we-Pl completed the farming.' (2005-1 a)

