# A Grammar of Dogul Dom <br> (Dogon language family, Mali) 

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color coding in main text
blue regular transcriptions for Dogul Dom
green transcriptions for reconstructions, underlying forms in /.../, phonetic transcriptions in [...], other languages, and formulas

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## 1 Introduction

### 1.1 Dogon languages

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

An approximate genetic subdivision of Dogon is in (1). It is not yet clear whether the southwestern Dogon group is nested within western Dogon, or is a distinct genetic unit. Dogul Dom belongs to the tentative genetic subgroup labeled western Dogon. This group occupies two distinct areas, separated by Tommo So: a strip along the western cliffs of the main Dogon plateau (Dogul Dom, Tiranige, Najamba-Kindige), and a section on the eastern cliffse (Yanda Dom, Tebul Ure). Dogul Dom is the most southerly of the languages in the western group.
(1) a. eastern Dogon

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

Dogul Dom
Tiranige
Yanda Dom
Tebul Ure
Najamba and Kindige
c. southwestern Dogon

Mombo (Kolu So)
Ampari
Penange
Bunoge

### 1.2 Dogul Dom language

Dogul Dom (abbreviation DD) is the language (dǒm) of the Dogulu (dógùl), a subgroup of the Dogon people of east central Mali. DD is spoken in a contiguous block of the high plateau that begins a short distance north of Bandiagara. The Dogulu villages known to us are between west $03^{\circ} 29^{\prime \prime}$ (Bendiely) and $03^{\circ} 42^{\prime \prime}$ (Tingourou), and between north $14^{\circ} 26^{\prime \prime}$ (Boro) and $14^{\circ} 40^{\prime \prime}$ (Banguel Toupe). The high plateau is partially separated by an escarpment from the lower plateau to its south including Bandiagara.

To the west, the DD speaking area extends to the edge of the high plateau overlooking a wide sandy valley that runs roughly north to south. The largest Dogulu village cluster at this edge is Bangel Toupe. Following the edge farther north, near the headwaters of the river in the valley, are Fulfulde-speaking villages. Across the valley, on another section of high plateau, are villages where other Dogon languages including Tiranige (aka Duleri) are spoken.

To the south, DD does not quite reach the edge of the high plateau, as Kalibombo and a few other villages near the edge are primarily Kamma So (Donno So) speaking. There is also one Mombo village (Vaou), and one Tommo So outlier (Diommo) in the southwestern fringe of the Dogulu plateau.

To the east, DD extends to the Bandiagara-Ningari-Douentza road in the Ningari area. DD-speaking Nandoli and Tintimbolo are on the road. The DD zone is bounded by Donno So (e.g. at Soroli) to the southeast and by Tommo So (e.g. at Kani-Gogouna) to the northeast.

To the north, DD is bounded by Tommo So-speaking villages including the important market town of Kendié. The main road in the high plateau runs north to south, from Kendié to Bandiagara, passing directly through the Dogulu villages Pelani, Sogodougou, Koundiala, and Bendiely. The important Wednesday market in Kendié is served by buses, vans, and trucks from Bandiagara (some originating as far away as Bamako and Sikasso).

The villages known to us where DD is the primary language are listed in (2). Banguel Toupe, Bendiely, Douro, Ka, Kentaba, Komoni, and Tintimbolo are clusters of two or more villages. Coordinates taken by us in the field are presented in degrees, minutes, and decimal fractions of minutes (. 000 to .999 ). Coordinates in parentheses are rough estimates in degrees and minutes from maps.
(2) Dogulu villages

| officlal name | Dogul Dom name | north | west |
| :---: | :---: | :---: | :---: |
| Aldiouma-Koro (named after | person) | 1436.091 | 0337.627 |
| Andia | ánjà | 1434.738 | 0332.967 |
| Andiné | ànjîn | 1433.396 | 0327.491 |
| Banguel Toupé | bàngù-túbò (or -túbè) (3 villages) |  |  |
| 3 villages: | bàngù-tùbò kà:-nóngù | ? | ? |
|  | bàngù-tùbò kùnjàlày-nóngù | 1439.360 | 0339.383 |
|  | bàngù-tùbò céngèl | 1439.833 | 0338.673 |
| Bendiely | bénèl (3 villages) |  |  |
|  | bènèl-dánà-ク | 1429.673 | 0333.623 |
|  | bènèl-gìrkómbò | 1429.336 | 0333.381 |
|  | bènèl-sìgǎn | 1428.497 | 0335.257 |
| Bini | bínnù | 1428.135 | 0332.021 |
| Bodo | bó:dò | 1434.656 | 0339.311 |



In the compounds, sìgǎ- $\eta$ (variant sìgと̌- $\eta$ ) means 'below' and dánà- $\eta$ means 'above'. Several of the official French names (going back to colonial-era maps) are based on Fulfulde pronunciations, e.g. bangu-tubel, benjeli, kunjala. -Do and -Leye in official names (see under Kentaba) are likewise Fulfulde (-dow 'above', -ley 'below').

The most common surnames (clan-like categories) among Dogulu are Tapily, Karambé, Kassogué, and Nantoummé. Tapily is dominant in Bendiely and parts of Tintimbolo, and the far southeastern zone around Komégou and Ka . Tapily co-occur especially with Karambé in several villages including Tingourou, Nandoly, and Bini. Karambé are dominant in Nantanga, Andiné, Douro, and Dongossoro and are mixed with Tapily and others elsewhere. Kassogué are mixed with others in several villages but, to my knowledge, are not dominant anywhere. Nantoummé are dominant in Koundiala and Pédéni but sparsely represented elsewhere.

Less common but locally concentrated surnames are Tebsougou in Gongo, and Seiba in Menemene. Other surnames that have been noted here and there, but nowhere dominant, are Djiguiba, Sagara, Ouologuem, Kansaye, Dolo, Tembély, Yanogué, Yalkouyé, Banou, and Guindo. Most of these are very common in other Dogon zones.

In Sogodougou the Témé (originally from Yendouma on the eastern cliffs) are a small minority but hold the chiefhood, as descendants of the earliest settlers.

Dogul Dom speakers are often multilingual, primarily with other Dogon languages and with Fulfulde.

There are resident Fulbe near Bendiely and near Banguel Toupe, in separate small villages. Dari near Bendiely consists of two parts: the Dogon village listed above (dà:r-dánà 'Upper Dari') and the small Fulbe village called daar-wuro in Fulfulde. North of Banguel Toupé, still following the edge of the high plateau overlooking the wide sandy valley to the west, are three villages where Fulfulde is the primary language although most are ethnic Dogon. These villages were settled by Fulbe and Dogon from the Tommo So speaking plateau to the north.

To the south of the Dogulu high plateau, the city of Bandiagara is cosmopolitan, with Fulfulde and increasingly Bambara widely spoken but also many ethnic Dogon. Its market days are Monday and Friday. Donno So (including Kamma So) is the primary Dogon language in the villages northeast, east, and south of Bandiagara. The Donno So-speaking zone includes villages on the southern and eastern flanks of the Dogulu plateau. Just to the south of Bendiely, Boro has a large Donno So-speaking minority, and Kalibombo on the edge of the escarpment is primarily Donno So-speaking. One village in the village cluster Koundougou, namely kùntùgù-lúrùgùmmò, is Donno So-speaking.

In the north(-east), DD borders on the large Tommo So-speaking zone. Tommo So is the main language of the regional market on Wednesdays in Kendie, and in much of the plateau to the north and east. DD/Tommo So bilingualism is normal in the more northerly Dogulu villages such as Pelani and Dounali.

In the Komoni cluster, the small village kòmmə̀n-nદ́:mè is mixed Dogul Dom, Donno So, and Tommo So.

There is little bilingualism involving DD and either Tiranige or Mombo because of geographical barriers. Wide sandy valleys separate DD from Tiranige- and Mombo-speaking areas. As mentioned above, Vaou is a recently established Mombo outlier at the southwestern edge of Dogulu country and there is presumably some bilingualism in that vicinity.

### 1.3 Environment

Most of the Dogulu high plateau is remarkably flat once one reaches the top of the escarpment that frames it. There are some cultivated fields on the high plateau itself, but in
many places the earth is hard and rock-strewn, so it is difficult to plow the fields or even to get to them other than on foot or by bush motorcycle. In the western part of the plateau, e.g. around Irigili and to the east of Douro, there is much rocky rubble, making it difficult for even $4 \times 4$ vehicles to reach them. Irigili itself is on one of the few rocky elevations that rise slightly above the remainder of the plateau.

Although virtually all Dogulu villages are on the high plateau, many are strategically located near ravines or wider sandy valleys that provide water and cultivatable land. There are seasonal rivers in the ravines and valleys, and dams have been built to hold the water for purposes of dry-season gardening. In the east, Dogulu villages are mostly located on small rocky elevations overlooking valleys where most of the cultivated fields are.

Much of the high plateau is a semi-arid wooded or shrubby savanna with Combretum dominant. Typical trees and shrubs of the drier areas are gùsá (Combretum glutinosum), and túnú (Combretum micranthum), along with sépè (balanzan, Faidherbia albida), m̌̌:l̀̀ (wild date, Balanites), sómê: (tamarind), kúrê: (wild grape, Lannea microcarpa), símù (borassus palm, Borassus aethiopum), bǐ: (wild prune, Sclerocarya birrea), and òró (baobab, Adansonia), with many other species represented more sparsely or more locally.

The rainy season June to September is the main farming season. The staple crop is millet (Cenchrus spicatus, formerly Pennisetum glaucum). Other cereals grown are sorghum, fonio (Digitaria exilis), and a few pockets of maize and rice. Cow-pea (Vigna unguiculata), peanut, several cultivars of roselle (Hibiscus sabdariffa), and a little sesame are also grown in the rainy season. Dry-season cash crops grown in gardens in the dry season are onion, followed by lettuce, cabbage, cucumber, tomato, African eggplant (Solanum aethiopicum), chili pepper, and calabash (gourd).

### 1.4 Previous and contemporary study of Dogul Dom

### 1.4.1 Previous work

Prior to our project on Dogon languages, the existence of Dogul Dom was mentioned in linguistic surveys, but no substantial analysis of the language was published.

### 1.4.2 Fieldwork

Brian Cansler, then an undergraduate linguistics major at University of North Carolina, did three fieldwork stints of 2-3 months each on DD between 2010 and 2012. He drafted some preliminary morphological chapters of a reference grammar and compiled considerable lexicon, but was unable to complete the work. I took over the work in early 2015 and wrote the present grammar from the ground up, using my Dogon grammar template, since that system is faster and smoother for me.

Nearly all of the elicited material is from my (and Brian's) assistant Malick Kassogue, a native of Koundiala village. The texts, however, were recorded in Nantanga on the eastern part of the DD-speaking area. They were transcribed with the help of Malick.

The geographical mapping of villages was done chiefly by my overall project assistant Minkailou Djiguiba assisted on different occasions by either me or Malick.

### 1.4.3 Acknowledgements

The overall project on Dogon languages began with grant PA-50643-04 (2004-06) from the National Endowment for the Humanities (NEH) for solo fieldwork by me primarily on Jamsay. Brief survey work during that project led to the idea of a comparative Dogon linguistic project. Its three phases have been funded by The National Science Foundation, Documenting Endangered Languages program: grants BCS-0537435 (2006-09), BCS0853364 (2009-13), and BCS-1263150 (2013-17).

My own fieldwork on DD was carried out as part of the third phase.
I and my team are indebted to the people of Bendiely village, where we stayed on several occasions beginning in 2010, and to the people of Nantanga, who hosted us for two days in 2015.

## 2 Sketch

Dogul Dom (DD) is verb-final, with verbs inflected suffixally for aspect-negation (AN) and tense (unmarked versus past, overlaid on aspect marking), and conjugated for pronominalsubject (person-number agreement). Nonpronominal subjects precede other nonpronominal arguments including objects, so the order is SOV. Setting adverbials may precede the subject or may occur somewhere between subject and verb.

Within an unpossessed NP the basic order is N(-Pl)-Adj-Num-Det-Pl/'all'-DiscF (DiscF $=$ discourse-functional element). The adjective and numeral may be inverted under certain conditions. Plurality is marked most reliably by the free plural marker near the end of the NP, but most human nouns other than kin terms also have their own plural suffix. Nonpronominal and occasionally pronominal possessors precede the noun. Pronominal possessors generally occur postnominally, following the numeral slot.

Structural case-marking is limited to an accusative clitic, used especially with pronouns and human NPs, but extendible to other NPs. It is postposition-like and comes at the end of the entire NP. Other basic postpositions are locative, instrumental-comitative, and purposive.

Like other Dogon languages, DD has a rich tonosyntactic system within NPs. If a tone overlay has been applied to a word, a superscript representing the overlay $\left({ }^{\mathrm{L}} \mathrm{HLHL}^{\mathrm{LH}}\right)$ is placed at the edge of the word "pointing" to the controller, which is to the left in the case of a nonpronominal possessor and to the right in other cases. If the overlay applies to a multi-word string, the string is bracketed and the supersript is at the outer edge of the left or right bracket. If a single H -tone has shifted from the end of an /LH/-toned word onto the initial syllable of a following targeted word, the superscript ${ }^{\mathrm{H}+}$ is placed at the left edge of the targeted word. As this is a phonological rule (Rightward H-Tone Shift) rather than a tonosyntactic process it is disregarded in interlinears. It is possible for a word to first be tone-dropped to $\{\mathrm{L}\}$ by tonosyntax (as a possessed noun), then get an initial H by Rightward H -Tone Shift; this is indicated by superscript ${ }^{\mathrm{H}+\mathrm{L}}$ at the word's left edge. These superscripts are not phonetic diacritics and can be removed without affecting the tone transcriptions, which already reflect changes attributable to the tonosyntactic overlay and/or tone shift.
(3a) is a typical transitive sentence showing SOV order and the verb's AN and pronominal-subject inflections. (3b) is a three-word NP in which the final demonstrative controls $\{\mathrm{L}\}$ overlay (tone-dropping) on the noun-adjective string. (3c) is a possessive-type noun-noun compound in which the head, 'tongue', is tone dropped by the "possessor," after which the final H -tone of the possessor is transferred to the onset of the head.

| a. | $[y a ̌:$ | ń] | pésgè |
| :--- | :--- | :--- | :--- |
|  | [woman | Def] | sheep $:-1-\varnothing$ |
|  | shep-PfvNeg- 3 SgSbj |  |  |

'The woman didn't buy (a/the) sheep-Sg.'
b. [pèsgè gèmè- $\eta]^{\mathrm{L}}$ ŋ̀gú
[sheep black] ${ }^{\text {L }}$ Prox 'this black sheep' (pésgè 'sheep' and gémè- $\eta$, with $\{\mathrm{L}\}$ overlay, cf. pèsgè ${ }^{\mathrm{L}}$ gémè- $\eta$ 'black sheep')

$$
\begin{array}{ll}
\text { c. nà:g } & { }^{\mathrm{H}+\mathrm{L}} \text { néndà: } \\
& \text { cow } \\
& \text { 'cow head/tail' (nǎ:g, nèndá:, with }\{\mathrm{L}\} \text { overlay and tone shift) }
\end{array}
$$

Focusing on issues where Dogon languages differ among themselves, this chapter presents a few highlights, in all cases adumbrating more detailed treatment later.

### 2.1 Phonology

### 2.1.1 Segmental phonology

Compared to other Dogon languages the following points stand out: medial voiced stops $\{b d$ $j g\}$ and $N C$ clusters of nasal and homorganic voiced stop are generally preserved; phonemic $\left\{W^{n} r^{n}\right\}$ are absent but there are some cases of $y^{n}$; word-final nasals generally merge as $\eta$.

Vowels: there is extensive syncope of medial short high vowels in CvCvCv and similar trisyllabics (sometimes with a vestigial murmured vowel), and apocope of final short high vowels in $C v C v$ and $C v C v C v$. Long vowels frequently occur word-finally but the length is not always audible (unless the final-syllable tone is contoured $<\mathrm{HL}\rangle$ or $<\mathrm{LH}\rangle$ ). ATR harmony is generally operative within stems.

### 2.1.2 Prosody

The DD tone system is close to that of Donno So (Kamma So), i.e. a semi-pitch accent system with exactly one lexical H-tone per stem, realized on a single syllable or (in the case of a rising tone) on the final mora of a heavy syllable. DD does not distinguish falling $<\mathrm{HL}>$-tones from H-tones on final syllables of nonmonosyllabic words, and differs in this respect from Donno So.

NP tonosyntax is fairly standard for Dogon. $\{\mathrm{L}\}$ overlays on nouns are controlled by following adjectives, demonstratives, or relative clauses (but not the definite marker). These combinations are schematically $\mathrm{N}^{\mathrm{L}}$ Adj, etc. Preposed nonpronominal possessors control $\{\mathrm{L}\}$ on the following noun and its inner modifiers: Poss ${ }^{\mathrm{L}}[\mathrm{N}$ (Adj Num)]. Pronominal possessors are postposed in ordinary (alienable) possession. They are tonosyntactically inert after a noun or N -Adj string, schematically N Poss without superscrips, reflecting their origin as appositional possessed mini-NPs ('house [my thing]'). However, when a pronominal possessor is immediately preceded by a numeral, a compositional \{LHL\} overlay applies to the string beginning with the noun and ending with the numeral: [N...Num ${ }^{\text {LHL }}$ Poss. In effect, the numeral catalyses the latent tonosyntactic power of the pronominal possessor. (A similar phenomenon occurs in Donno So, but there the numeral catalyses a determiner rather than a possessor.) Kin terms (inalienables) have a special construction for pronominal possessors, which are preposed in this case and control an $\{\mathrm{HL}\}$ overlay on the kin term: Poss ${ }^{\mathrm{HL}} \mathrm{N}$. Nonpronominal possessors of kin terms have the "same" Poss ${ }^{\mathrm{L}} \mathrm{N}$ as for alienable possession, but postnominal modifiers are treated differently in alienable and inalienable possessor. See chapter 6 regarding possessives.

The most important tonal process that is basically phonological rather than syntactic is Rightward H-Tone Shift, schematically LH\#LL $\rightarrow$ LL\#HL. However, even this is subject to intricate morphosyntactic conditions. I mentioned just above that DD does not distinguish H - from $<\mathrm{HL}>$ tones in terminal syllables of nonmonosyllabic words. This is true on the surface, but L.H nouns like tàwá: 'hyena' that were originally *L. $<\mathrm{HL}>$ (*tàwâ:) do not allow
the H-tone to shift to the right, and are therefore morphophonemically distinct from other L.H-toned stems.

Grammaticalized "intonation" is mainly variable terminal prolongation (symbol $\rightarrow$ ) with $m a ̀ \rightarrow$ 'or', also a polar interrogative marker (§7.2.1, §13.2.1.2), and in polar interrogatives without this particle (§13.2.1.1). Some expressive adverbials are lexically associated with $\rightarrow$, e.g. té ${ }^{n} \rightarrow$ 'straight' (§8.4.7.2). An unusual nonfinal prolongation occurs in $t o ́ \rightarrow m \grave{\prime}$, the form of ' 1 ' used in a counting progression (§4.6.1.1). When combined with a process shifting an H-tone in third-person perfective verbs, terminal prolongation can simulate Jamsay-style "dying quail" intonation (§13.2.1.1).

### 2.1.3 Segmental phonological rules

There are few phonological rules adjusting consonant clusters. There is no nasalizationspreading from one syllable to the next (via their onset consonants).

Syncope and apocope of short high vowels are common. Frequently "syncope" of a medial short high vowel in $C v C v C v$ is not complete, leaving a brief schwa-like vowel between $C_{2}$ and $C_{3}$. This "vowel" is often little more than a murmur, and may be synchronically interpreted as epenthetic.

### 2.2 Inflectable verbs

Derivational suffixes can be added to simple verb inputs to produce reversive, causative, mediopassive, and transitive stems. As in Donno So, the "mediopassive" has a broad range of functions including reflexive and reciprocal in addition to core mediopassive (middle) function. Only in the latter function is the mediopassive regularly paired with a corresponding transitive derivation.

Verbs have suffixal inflection for aspect-negation (AN) and pronominal-subject agreement. The four key AN stems for jòbé 'run' are illustrated in (4), using the zero 3 Sg subject form in each case.
(4) Four key inflected forms of j$j \grave{b} \bar{\varepsilon}$ 'run'
positive negative

| perfective | j$j$ b́bè- $\varnothing$ | jı̀bă:-1-Ø |
| :---: | :---: | :---: |
| imperfective | jóbè:-b- $\varnothing$ | jóbè-nnú- $\varnothing$ |

There are also more complex periphrastic constructions, including auxiliary verbs ('have', 'be') or special verb-chain-like combinations, for experiential perfect, recent perfect, and progressive.

A few key stative quasi-verbs like 'be' and 'have' lack aspectual marking. Many active verbs also have a derived stative form with similar properties.

A specifically past-tense version of bò 'be', namely bìyè 'was', is cliticized to an AN-inflected stem to push the temporal reference point into the past ('was sweeping', 'had swept'). It can also be used with statives ('was lying down').

In addition to indicative inflections, DD active verbs have an imperative and hortative ('let's'). They follow the usual Dogon pattern in having morphological marking of addressee (not subject) number.

### 2.3 Noun phrase (NP)

The basic order of unpossessed NPs, excluding relative clauses, is (5). "DiscF"= discoursefunctional element (e.g. 'only', 'too', 'as for').
(5) N -Adj-Num-Dem/Def-'all'/Pl-DiscF

Most human nouns other than kin terms can be suffixally pluralized (-we). Any noun can co-occur with the free plural marker yà: near the end of the NP (but not directly after -we). The underlined elements in (5), adjectives and demonstratives, control tonosyntactic overlays $\{L\}$ on the noun and any intervening words. The definite marker is not a tonosyntactic controller.

Nonpronominal possessors always precede the noun and control $\{\mathrm{L}\}$ on the noun. The domain of this $\{\mathrm{L}\}$ overlay extends to cover the noun's immediately following modifiers (adjective, numeral) in the case of alienable possession, but is limited to (at most) the noun in inalienable possession, see $\S 6.2 .2$.

Pronominal possessors are mostly postnominal, with possessive morpheme -ì (except 1 Sg mmı̀). A few kin terms allow prenominal L-toned pronominal possessors, which then control $\{\mathrm{HL}\}$ overlay on the noun. When a string ending in a numeral is immediately followed by a pronominal possessor, the $\mathrm{N}-\ldots$-Num string gets a special $\{\mathrm{LHL}\}$ overlay.

### 2.4 Case-marking and PPs

The postposition-like accusative enclitic $=\grave{y}$ occurs most systematically with human reference, especially pronouns and personal names.

Basic postpositions are yày (instrumental-comitative, temporal, also dative with 'say' only), là: and nì: (locative), and purposive lày. Of the two locatives, nì: is the one generally added to nouns denoting containers. Datives with 'give', 'show' etc. are expressed as direct objects (often marked accusative). Other postpositions are composite.

### 2.5 Main clauses and constituent order

Constituent order is SOV in main clauses, where S and O are nonpronominal subject and object. Setting adverbs may precede or follow the subject. The verb may be followed by an interclausal subordinator like nà: 'if' or by an emphatic particle.


| d. nìná: | isíl-g | túmmè- $\varnothing$ |
| :--- | :--- | :--- |
| yesterday | sun | rise.Pfv- $3 S g S b j$ |

'Yesterday the sun rose.'

### 2.6 Relative clauses

Relative clauses are internally-headed. More perspicuously, we can say that NPs (DPs) are of the general form (excluding possessors) N-Adj-Num-RelCl-Dem/Def-‘all’/Pl-DiscF, where the relative clause is one among several modifiers of the noun.

Relative clauses, like other reference-restricting modifiers to the right of the noun, control an $\{\mathrm{L}\}$ overlay on the noun and on intervening elements. It makes sense to have this overlay applied before relative-head movement, resulting in $[\mathrm{N}-\mathrm{Adj}-\mathrm{Num}]^{\mathrm{L}}$-RelCl... Later, the string to the left of the relative clause moves into the coindexed relativization site within the relative clause proper. The fact that it is tone-dropped identifies it as the head.

The verb in a relative clause is participial and does not allow the usual main-clause pronominal-subject agreement by suffixation. The verb-participle is often followed by definite marking, as part of the NP coda.
a. $\left[\grave{e}-g^{\mathrm{L}}\right.$ ह́:nì ménè:-bù 文]
[child ${ }^{\mathrm{L}}$ tomorrow come-Ipfv.Ppl Def]
[àná: bò- $\varnothing$ ]
[where? be-3SgSbj]
'Where is the child who will come tomorrow?' (can also be ordered as [ह́:nì è-g ${ }^{\mathrm{L}}$ ménè:-bù ̀̀̀])
b. [è-g ${ }^{\mathrm{L}}$ nìpá: mènó: ì $]$ [yesterday child ${ }^{\mathrm{L}}$ come.Pfv.Ppl Def] [àná: bò- $\varnothing$ ] [where? be-3SgSbj]
'Where is the child who came yesterday?' (also [nìjá: è̀-g ${ }^{\mathrm{L}}$ mènó: ŋ̀̀)

Full details are in chapter 14.

### 2.7 Interclausal syntax

DD has both direct and loose verb chaining. A criterion for identifying direct chains is that the nonfinal verb has the same bare-stem form in both past-time (perfective) and future-time (imperfective) frames. In such direct chains, the two chained verbs denote simultaneous co-events, i.e. different aspects of the same complex event.

Many other chains, typically denoting sequenced events rather than simultaneous co-events, have a direct-chain-like appearance in past-time contexts, but switch to a pseudoconditional form with apparent 'if' subordinator in future-time contexts.

Several control verbs have verbal-noun (infinitival) VP complements rather than occurring in chains. The verbal-noun VP usually doesn't have an overt subject (distinct from that of the control verb), but it may in some constructions, often expressing the lower subject as possessor of the verbal noun. Objects and some other nonsubject constituents are expressed, where morphologically possible.

## 3 Phonology

### 3.1 General

This chapter begins with brief coverage of syllabic structure (§3.2), then reviews consonants, consonant clusters, and vowels (§3.3-4). Phonological processes are in $\S 3.5$ and cliticization in $\S 3.6$. Tonology is covered in $\S 3.7$ followed by "intonation" in $\S 3.8$.

NP tonosyntax is deferred to chapter 6, beginning in §6.1.1.

### 3.2 Internal phonological structure of stems and words

### 3.2.1 Syllables

Regular shapes for monosyllabic verb stems are $C \hat{v}\left(\hat{v}_{-}\right), C \hat{v}$;, and $C \check{v}$ : . These are basically long-vowel shapes, though an H-toned stem usually shortens when not followed by a suffix. Nonmonosyllabic verb stems all end in a short vowel, and allow a long vowel only in the initial syllable.

Regular shapes for monosyllabic nouns and other non-verbs, and for the final syllables of are $C \hat{v}$ :, $C \hat{v}$ :,$C \check{v}$ :, $C \dot{v} C, C \hat{v} C, C \check{v} C$, and a few other shapes like $C \check{v}: C$ and $C \hat{v} C C$ that arise mainly due to apocope of a final short high vowel. Non-verbs may have long vowels in any syllable and may end in a vowel or consonant.

Syllable-final consonants are overwhelmingly sonorants $\{y w m n g \eta 1 r\}$. Palatal $n$ does not occur word-finally.

### 3.2.2 Metrical structure and prosodic weight

The medial syllable of underived trisyllabic $C v C v C v$ verb stems is metrically weak. In most cases it is raised to a high vowel $i \sim u$ and may be syncopated. Many $C v C C v$ verbs originated in this fashion, but there may be no synchronic evidence of a medial vowel.

Medial-vowel raising and/or syncope also occur in suffixally derived or inflected verbs of the shape $C v C v-C v$, becoming $C v C i-C v$ or syncopating to $C v C-C v$ under some conditions (§3.5.3.2).

An important distinction in tonal morphophonology of verbs is that between prosodically light and heavy stems. $C v(:)$ and $C v C v$ are light, as are $C v N C v$ stems with medial homorganic nasal plus voiced stop ( $\mathrm{mb}, n d, n j, \eta g$ ). Cvnnv is also treated as light (dènné'look for'). Other $C v C C v$ stems, including many mediopassives syncopated historically from *CvCv-yv, as well as all stems with two or more vocalic moras ( $\mathrm{Cv}: \mathrm{Cv}, \mathrm{Cv}: \mathrm{CCv}, \mathrm{CvCvCv}$, etc.), are heavy.

The light/heavy distinction is important in the imperative, where light stems have an $\{\mathrm{H}\}$ tone overlay while heavy stems retain the distinction between lexical/HL/ and /LH/. See §10.7.1.1 for the data.

### 3.3 Consonants

DD has the consonants in (8). (Double) parentheses indicate (doubly) marginal status, i.e. restriction to unintegrated loanwords, onomatopoeias, and the like.
(8) Consonants

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

$c$ represents IPA $[\mathrm{t}]$ ], $j$ is $\left[\mathrm{d}_{3}\right], \check{s}$ is [ $[\mathrm{J}], y$ is [j], $r$ is tap [ r$]$
key to columns: 1. aspirated voiceless stops ( $c$ is affricated); 2. voiced stops; 3.nasals, 4. voiceless fricatives including sibilants; 5. voiced fricatives including sibilants; 6. lateral; 7. nonnasal sonorants (approximants and tap); 8. nasalized approximant; 9-10. laryngeals

Because $v$ as voiced labial fricative is virtually nonexistent, I use " $v$ " as a vowel variable in formulae like $C \hat{v} C \grave{v}$. The lower-case permits tone markings which are difficult typographically for capital $V$.

Tap $r$ is rare word-initially and does not occur syllable-finally. With this exception, sonorants (semivowels, nasals, liquids) can occur in all positions: initially before a vowel, intervocalically, and syllable- or word-finally.

All obstruents occur mainly in initial position in stems. Voiceless obstruents are rare intervocalically, occurring mainly in loanwords. Voiced obstruents may occur intervocalically, and in medial nasal-stop clusters like $m b$.

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

$j$ (palatoalveolar stop or affricate) is on a par with voiced stops $\left\{\begin{array}{l}b d g\end{array} d\right.$. Its voiceless counterpart $c$ is marginal, occurring in loanwords from Fulfulde and other languages. It is ungeminated initially, as in cárdù 'silver' and càmàcòló 'Tomo Kan speaker'. Medially it is ungeminated as in làcîr 'couscous' or geminated as in néccè 'sifting residue' and dáccè 'gum arabic'.

### 3.3.2 $g$-Spirantization $(g \rightarrow[\gamma])$

There is no noticeable spirantization of $g$ between low vowels in e.g. pàgá: 'thigh'.

### 3.3.3 Labial fricative $f$

$f$ is marginal but does occur in the common quantifier $f u ́ \rightarrow$ (a regional term), the abverb fà: (or $f a ̆ \rightarrow$ ) 'all the way to, until', and the regionally widespread word màlfá 'musket'.

### 3.3.4 Voiceless stops $(p, t, k)$

Voiceless stops $\{p t k\}$ are common stem-initially (e.g. kórò 'drinking trough’, pésgè ‘sheep’, tárè 'put on wall, post'). Medially they are rare, occurring only in loanwords.

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

$h$ is marginal, occurring stem-initially in a few Fulfulde loanwords like hókkò 'fence' and hó:làl 'confidence'.

Glottal stop occurs as a nonphonemic vowel-separator, especially in reduplications of vowel-initial stems, like stative ò-?óbò 'be sitting (seated)'.

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

Only $s$ is a regular member of the consonantal system. Like other voiceless obstruents it occurs chiefly in stem-initial position: sóngò 'dry branch'.
$\left\{\begin{array}{lll}\check{S} Z\end{array}\right\}$ occur in a few regionally widespread loanwords: zàrdípè '(vegetable) garden' (French jardin), fìngôm 'chewing-gum' (English via French).

French [3] is hardened to the affricate $j$ in jàndárùm 'gendarme' and appears as $z$ in zàrdínè '(vegetable) garden'.

### 3.3.7 Nonnasal sonorants ( $1, r, w, y$ )

All of these sonorants are common intervocalically, finally, and as first member of medial $C C$ clusters.

Exept $r$, they are also common stem-initially. Tap $r$ is rare in this position, but attested: $r \hat{\varepsilon}$ : 'furrow (in plowed field)'.

### 3.3.8 Nasalized sonorants $\left(r^{n}, w^{n}, y^{n}\right)$

$y^{n}$ occurs intervocalically in kúy ${ }^{n}$ à: 'ground squirrel' and síy ${ }^{n} \dot{\varepsilon}$ 'extinguish', and word-finally in expressive adverbials té $y^{n} \rightarrow$ 'straight' (§8.4.7.2), sò $y^{n} \rightarrow$ 'having buck teeth', and jóy ${ }^{n}$-jə̀ $y^{n}$ (intensifier for 'red'). It also occurs as the result of a phonological process in plurals with yà: of nouns ending in a nasalized vowel when an $-\eta$ ending in the singular is dropped, e.g. gǒy ${ }^{n}$ yà: 'things' from /gǒ: ${ }^{\text {n }}$ yà:/, plural of gǒ- $\eta$ 'thing'.
$r^{n}$ (nasalized tap) and apparently $W^{n}$ are absent in DD.

### 3.3.9.1 Word- and morpheme-initial NC clusters

Initial $N C$ sequences occur in two verbs, ńdè 'give' and ńjùgè 'get up', and a few nouns and adjectives like ḿbù̀- $\eta$ 'house', ńnù 'water', ńmò- $\eta$ 'hot', and ńjù- $\eta$ 'breast'. Since what I transcribe $n j$ and $n \eta$ are not distinct from $n j$ and $n \eta$, all of the initial clusters can be regarded as homorganic $N C$ or geminate $N N$ clusters.

The initial nasal is its own syllabic nucleus in postpausal position, so it can bear its own tone, as the examples show. However, in constructions where a verb gets an \{HL\} overlay due to a preceding pronominal proclitic, the proclitic (always $C v$ shaped) syllabifies with the verb-initial nasal, and the H-tone is then realized on the verb's first full syllable. Thus ńjùgè 'get up' has H-toned initial nasal postpausally, but in a relative clause with subject proclitic we observe forms like ... mì ǹjúgò: ‘... that I got up’, see (41) in §3.7.4.4.

### 3.3.9.2 Medial geminated $C C$ clusters

The attested geminate clusters are listed in (9), with one example each. Palatals are listed separately (9a) because some instances involve verb-suffix boundaries with either mediopassive $-y v$ - or 3 Pl subject -(î)yà, see Palatal Coalescence $\S 3.5 .3 .4$. Aside from palatals, the only common geminates are $\mathrm{mm}, n n$, and $l l$. Geminated obstruents are uncommon and are generally loanwords or due to syncope or (original) suffixation.
(9) a. palatal (see Palatal Coalescence, §3.5.3.4)
yy: láyyà 'Feast of the Ram'
nn: sún-nè 'carry on back'
jj: híjjù 'pilgrimage to Mecca'
$c c:$ néccè 'sifting residue'
b. nonpalatal obstruents
$b b$ : -
$d d$ : kúddù 'sauce ladle'
$g g: \quad j$ óggù 'bottom layer of millet spikes' (*jóg-gù)
pp: -
$t t$ : búttêl 'bottle'
kk: hókkò 'fence'
$s s: \quad u ́ s s u ̀-\eta \quad$ 'quick' (syncopated, cf. ùsùsú 'faster')
c. nonpalatal sonorants
mm: kùmmé 'smoke'
$n n:$ dènné 'look for'
ทク: -
ll: jéllè 'short-handled pick-hoe'
rr: -
wW: -

### 3.3.9.3 Medial nongeminate $C C$ clusters

These nasal plus voiced stop clusters are very common intervocalically. Only one example of each is given here. I transcribe $n j$ for homorganic [nd3].
(10) $m b: ~ s \varepsilon ́ m b \grave{\varepsilon}$ 'sweep'
nd: bùndé 'hit'
nj: gànjé 'dig'
ŋg: dò g gé 'pound (grain)'
$C V N C v$ verb stems like those in (10) are treated as prosodically light, in contrast to most other $C v C C v$ verbs, notably in the tonal patterns of imperative verbs.

Other clusters are generally limited to a few loanwords, are due to syncope, or occur at original morpheme boundaries.
a. nasal and voiceless stop
homorganic

```
        mp: gùlàmpá 'pigeon'
        \etak: bàràykâ:r 'bier' (< French brancard)
other
    mk: dùmkák 'buttock''
```

b. liquid plus voiced stop
rg: bàrgón ${ }^{n} \quad$ 'gas drum' (< French)
$l b$ : àlàlbá:rè 'Wednesday' (< Arabic)
lg: sólgò 'cream of millet' (*sól-gò)
c. nonhomorganic nasals
mn: kòmnú 'eggshell' (syncopated)
$\eta m:$ yónmè 'camel' (syncopated)

### 3.3.9.4 Medial triple $C C C$ clusters

Triple clusters are generally the result of syncope of a medial short high vowel, especially in mediopassive verbs with suffix $-y v$, as in mòmb-y $\varepsilon^{\text {'come }}$ together'.

### 3.3.9.5 Final $C C$ clusters

Final nongeminate clusters arise due to apocope of a final short high vowel, as in pǎy-g 'wide' from /pày-gú/.

### 3.4 Vowels

The inventory of vowels in DD is (12). The parenthesized short nasalized vowels are unattested at this point but there is no reason to think they are impossible.

| oral | long | nasalized <br> short | long |
| :--- | :--- | :--- | :--- |
| short | $u:$ | $u^{n}$ | $u:^{n}$ |
| $u$ | $o:$ | $\left(o^{n}\right)$ | $o:^{n}$ |
| $o$ | $0:$ | $o^{n}$ | $0:^{n}$ |
| 0 | $a:$ | $a^{n}$ | $a:^{n}$ |
| $a$ | $\varepsilon:$ | $\varepsilon^{n}$ | $\varepsilon:^{n}$ |
| $\varepsilon$ | $e:$ | $e^{n}$ | $e:^{n}$ |
| $e$ | $i:$ | $\left(i^{n}\right)$ | $i::^{n}$ |

### 3.4.1 Oral short and long vowels

The distinction between short and long non-nasalized vowels is made in stem-initial syllables for verb stems and in any position, including word-final, for other stems.

A stem-shape $C \hat{v}$ occurs as a simplification of $C \hat{v}$ : for verb forms with H-tone, as in the bare stems of $s \varepsilon$ 'urinate' and $y \varepsilon$ 'weep', and as in imperatives like gó 'exit!' and ná 'drink!' (§10.1.2.1). Suffixed forms of these verbs are based on $C V$ :- shapes, which I take to be lexically basic (§10.1.2.1).
$C_{V}$ is an acceptable shape for stative quasi-verbs: bò 'be (somewhere)' (§11.2.2.2), jò 'have' (§11.5.1).

In words of two or more syllables, length distinctions of word-final vowels may be indistinct, except when the vowel has a contoured tone. Many original short vowels have been lost by apocope in stems other than verbs, and surviving final short vowels are not always clearly distinct from final long vowels.

### 3.4.2 Nasalized vowels

Independently (phonemically) nasalized vowels are uncommon. In other Dogon languages they tend to occur in monosyllabic stems. In DD , the full list of known $\operatorname{CV}(:)$ verb stems in §10.1.2.1 has no nasalized examples.

Among noun stems, I can cite the examples in (13).

| tâ: ${ }^{n}$ | 'bow and arrows |
| :---: | :---: |
| sî: ${ }^{n}$ | 'fat (n)' |
| tě: ${ }^{\text {n }}$ | 'palm oil' |
| $t e ̂{ }^{\text {n }}$ | 'firewood' |
| $b \hat{\varepsilon}:^{n}$ | 'beard' |
| $k \hat{\varepsilon}:^{n}$ | 'handcuffs' |
| $b \grave{\text { : }}{ }^{n}-\mathrm{ga}:{ }^{n}$ | 'bearded person' |
| nàmìyě: ${ }^{\text {n }}$ | 'grindstone' |

There are also numerous nouns that end in $-\eta$ in isolation (§4.1.1.3). They lose this ending before a vowel or semivowel (especially plural yà:), but for some stems the final vowel is nasalized in this case (14). One might argue that nasalization is what's left of the $-\eta$ ending, or that the nasal is part of the stem rather than a suffix. Some examples are in (14).

| singular | plural | gloss |
| :---: | :---: | :---: |
| $g o ̌-\eta$ | gǒy ${ }^{n}$ yà: | 'thing' |
| dě:-ŋ | dě: ${ }^{n}$ yà: | 'waist' |
| $g \hat{\varepsilon}:-\eta$ | $g \hat{\varepsilon}:^{n}$ yà: | 'gizzard' |
| bô:- $\quad$ ¢ | bô: ${ }^{n}$ yà: | 'branch' |
| tǐ:- $\eta$ | tǐ: ${ }^{n}$ yà: | 'cross-cousin' |
| bǒ:-ŋ | by̌: ${ }^{n}$ yà: | 'co-wife' |
| ùnó-ท | ùnón y yà: | 'dog' (see Palatal Coalescence §3.5.3.4) |
| nàlé-ŋ | nàlén yà: | 'woman's girlfriend' |
| gàngá-ท | gàngán yà: | 'tomtom' |
| pùgǎ:-ŋ | pùgă: ${ }^{n}$ yà: | 'lightweight metal' |
| dúndù-ท | dúndùn ${ }^{n}$ yà: | 'foundation' |
| kóblù-n | kóblù ${ }^{n}$ yà: | 'fingernail' |
| dúmmù- $\eta$ | dúmmù ${ }^{n}$ yà: | 'penis' |

Several adjectives have the same $-\eta$ ending and behave similarly, e.g. mènjé $-\eta$ 'thin'. See $\S 4.5 .1$ for lists of these and other adjectives.

Some other nouns and adjectives end in undeletable $\eta$, e.g. gâ: $\eta$ 'cat', ě: $\eta$ 'hearth', $\check{y}: \eta$ 'without sauce'. There are also some nouns that have deletable final $-\eta$ but do not have a nasalized vowel, e.g. ńbù- $\eta$ 'house' and úllù- $\eta$ 'branch', plurals úmbù yà: and úllù yà: .

An expressive adverbial meaning 'wide open (door)' is $p a^{n} \rightarrow$.

### 3.4.3 Initial vowels

The initial consonantal position in stems like $C v:, C v C v, C v C v C v$, and the like, is not obligatory. Many verbs, nouns, and other stems begin with a vowel, generally a short oral vowel.

Examples of initial short vowels are ínà: 'goat', òn $\quad$ ú 'the bush', ùnó- $\eta$ 'dog', ě- $g$ 'child', órè:- $g$ 'tiny', ámmà- $\eta$ 'sour', and $\varepsilon$ ह́glè 'peanut'. Initial long vowels are uncommon but are attested in ú:g-yè 'be afraid', è:nú- $\quad$ 'pit, hole in ground', and í:ndè 'accompany (a visitor) to the door or street'.

### 3.4.4 Stem-final vowels

In stems of two or more syllables, any oral short vowel may occur finally. However, final short high vowels $\{i u\}$ are regularly apocopated after unclustered consonants, and after clusters that are allowed word-finally, such as yg. For example, one type of deverbal adjective has final -ú, observed in e.g. sìmb-ú 'grilled' and (apocopated) păg- $\varnothing$ ‘bundled’ (§4.5.2).

Nonmonosyllabic nouns, adjectives, and numerals may end in long vowels. Examples: yàlá: 'field’, tìbó: ‘death', pàlé: 'sesame’, nàmàkú: 'ginger', dìyǒ: ‘old’, kòló: 'unripe, raw', kúlè: ' 6 '. In the nouns and adjectives, the long vowel may be a vestige of an original class suffix.

Perfective participles of verbs may likewise end in long vowels (§14.4.1.1). Aside from such participles, nonmonosyllabic verb stems and inflected verb forms do not end in long vowels, except that mediopassive suffix $-y e \sim-y \varepsilon$ is sometimes pronounced $-i$ : word-finally in verb-chains (among other positions).

### 3.4.5 ATR harmony and Back/Rounding Harmony

Underived bisyllabic verb stems are subject to ATR harmony but not to any strong version of back/rounding harmony. Since the lexically basic bare stem of verbs in DD is derived from the original E-stem (ending in e or $\varepsilon$ ), typical verb-stem shapes are $C e C e, C \varepsilon C \varepsilon, C o C e$, and CoCe.

High vowels $\{i u\}$ are extraharmonic, and may combine with either ATR class. For bisyllabic verbs this means that $C i C e, C i C \varepsilon, C u C e$, and $C u C \varepsilon$ are all possible.

The evidence is mixed as to whether a patterns as +ATR or -ATR. It is treated as +ATR when syllable-initial, allowing sequences like $C a C e$ and $C a C o$. For example, verbs with initial-syllable a have imperative shapes like $C a C e$, not $\# C a C \varepsilon(\S 10.7 .1 .1)$. The same is true of derived stative stems (§10.4.1). Non-verb stems like the adjectives mánfò 'dry’ and nályò 'pretty' also follow this pattern. On the other hand, when a follows a mid-height vowel, it patterns as -ATR in some cases (A/O-stem), and as neutral in others. For example, stem-final $\varepsilon$ in the bare stem of verbs becomes $a$ in the imperative, while stem-final e becomes $o$, so typical imperative shapes are -ATR $C \varepsilon C a$ and $C o C a$ versus ATR $C e C o$ and $C o C o$. Non-verb stems like adjective sògòlá 'multicolored' are consistent with this.

| a. +ATR |  |  |
| ---: | :--- | :--- |
| CeCe | pélè | 'clap' |
| CoCe | tómbè | 'jump' |
| CiCe | sígè | 'descend' |
| CuCe | úwè | 'catch' |
| CaCe | ábè | 'accept' |
|  |  |  |
| b. -ATR | dènné | 'look for' |
| $\mathrm{C} \mathrm{\varepsilon C} \mathrm{\varepsilon}$ | dòngé | 'push' |
| $\mathrm{CoC} \mathrm{\varepsilon}$ | jìné | 'bring' |
| $\mathrm{CiC} \mathrm{\varepsilon}$ | túbè | 'ask' |

Many trisyllabic verbs have a short high vowel in the metrically weak medial position. The medial vowel often fluctuates between $i$ and $u$ and is subject to syncope. For such verbs, the harmonic relations are between the vowels of the first and last syllables. Examples are pégìrè 'winnow by shaking' and gòndùré 'hang (sth)'.

Non-verb stems (nouns, adjectives, numerals) also generally obey ATR harmony. Many but not all also reflect back/rounding harmony, since unlike verbs they are not derived from an original E-stem. There are some non-verb stems that obey ATR but not back/rounding harmony, like ké:sò '4', gènǒ: 'good', and dènnó 'short', showing that ATR harmony is stronger than back/rounding harmony. See the inventory of modifying adjectives in $\S 4.5 .1$ and of numerals in $\S 4.6 \cdot 1.2-3$. The situation with nouns is complicated by the existence of (semi-)frozen compounds and the ease of borrowing from other languages.

There are no special interactions between ATR values and nasal consonants.

### 3.4.6 Diphthongs

Diphthongs like $\rho \varepsilon$, oe, and oa do not occur in DD. Syllables with rimes of the shapes aw, ay, $o w$, oy and so forth have no special status. They are parallel to other rimes with a vocalic nucleus and a sonorant coda, such as aŋ and oŋ.

### 3.4.7 Vocalism of verb-stem alternations

In verbal morphology, the original E-stem (ending in $e$ or $\varepsilon$ ) has become dominant, to the point that it can be taken as the unmarked lexical representation of each stem. It is the basis for the bare stem (as in nonfinal position in verb chains), the perfective positive, the imperfective positive (with lengthened stem-final vowel), and the imperfective negative.

The stem-ablaut categories are those in (16). The names are self-explanatory, with $\mathrm{E}=\{\mathrm{e}$ $\varepsilon\}, \mathrm{O}=\left\{\begin{array}{ll}0 & o\end{array}\right\}, \mathrm{A}=a$, and $\mathrm{I}=i$. In the composite types ( $\mathrm{A} / \mathrm{O}, \mathrm{A} / \mathrm{E}, \mathrm{E} / \mathrm{I}$ ) verbs must be divided on some basis into two sets; details are in the relevant sections of chapters 9 and 10. In the cases of $A / E$ and $E / I$, if the E-stem is taken as basic one could alternatively speak of a restricted A-stem and of a restricted I-stem, affecting only one set of verbs.

| stem | category |
| :--- | :--- |
| E-stem | default (bare stem, several inflections) |
| E-stem (lengthened) | imperfective positive <br> imperfective complement |
| A-stem | perfective negative |
| A-stem (lengthened) | future (-ì bó-) |
| O-stem | imperative |
| A/O-stem | hortative (monosyllabic) |
| A/E-stem | hortative (nonmonosyllabic) |
| E/I-stem |  |

Taking the original E-stem as the lexically basic form works very well for bisyllabic and longer stems. However, the few monosyllabic verbs have some forms that, strictly speaking, call for a more nuanced analysis. If we set them up as $C \varepsilon(:)$ and $C e(:)$ based on the bare stem and on the perfective positive, we are unable to account for the fact that there are three rather than just two imperative forms: Cá, Có, and Có. The usual imperatives are Cá for -ATR $C \varepsilon(:)$, and Có for +ATR Ce(:), but ď̌: 'arrive' unexpectedly has imperative dó. In spite of this and a few other vestiges of an older, richer vocalic system for monosyllabics, we can get considerable mileage out of the analysis proposed here.

### 3.4.8 Vocalic sound symbolism

Dogon languages generally have some lexical sets involving a fixed consonantal frame but variable vowel quality. In such sets, $\{e \varepsilon\}$ suggest diminution, while $\left\{\begin{array}{l}\text { o a } 0\}\end{array}\right\}$ suggest size or intensity. An example in DD is (17).

$$
\begin{array}{ll}
\text { ónゝ̀ǹ̀- } \eta & \text { 'smooth, sleek (surface)' }  \tag{17}\\
\text { Énènè- } \eta & \text { 'light, thin (fabric, paper)' }
\end{array}
$$

### 3.5 Segmental phonological rules

### 3.5.1 Trans-syllabic consonantal processes

No processes such as nasalization-spreading have been observed.

### 3.5.2 Vocalism of suffixally derived verbs

### 3.5.2.1 Suffixal Vowel-Spreading

Verbal derivational suffixes include reversive $-l v$-, mediopassive $-y v$-, causative $-m v-$, and transitive -rv-, where " $v$ " is a variable short vowel that gets its features from the input verb's ATR-harmonic class and from the vocalic constraints on particular inflected forms.

The bare stem and simple perfective of derived verbs have e or $\varepsilon$ depending on ATR-harmonic class of the verb, just as with underived verb stems. Other inflectional categories follow the pattern for underived verbs, e.g. final a (-ATR stems) or o (+ATR stems) in the imperative.

### 3.5.3 Other vocalic rules sensitive to syllabic or metrical structure

### 3.5.3.1 Vocalic epenthesis

Whether to recognize epenthesis as a phonological process depends on how we formulate syncope. For example, dàgì-lé 'unlock' is pronounced [dàgə̆lé] with a brief schwa-like break between the $g$ and the $l$, and fully syncopated [dàglé] is also possible. If we take /dàglé/ to be basic, the variant [dàgălé] would require an epenthesis rule.

When this type of alternation involves a potential triple $C C C$ cluster, the "epenthetic" vowel is normally $u$ (varying with $i$ especially in environments containing front vowels), as in jèmùl-yé 'encounter'.

Overall I incline toward positing underlying vowels that are subject to full or partial syncope, rather than epenthesis.

### 3.5.3.2 Syncope

Syncope has occurred historically in many ${ }^{*} C v C v C v$ stems with medial short high vowel * $\{i u\}$. However, unless there is a coexisting unsyncopated version there is no direct evidence available to language learners that a synchronic syncope process is needed.

The most obvious place to look for such doublets is combinations of $C v C V$ (or similar bior trisyllabic) verb stem with $-C v$ suffixes, where e.g. $/ \mathrm{CvCv}-\mathrm{Cv} /$ might syncopate to $C v C-C v$. In inflectional verb morphology, the only cases I can find involve the progressive suffix -là: (§10.2.2.3), which induces syncope of the final vowel of Cvlv and Cvnv stems, as in ból-là: from bòló 'go' and kán-dà: from kánè 'do'. The last form shows that syncope can feed CC-cluster adjustment rules (/nl/ to nd ).

In derivational verb morphology, the most fertile area for syncope is mediopassive verbs with shapes like $C v C-y v$. However, these stems may be lexicalized as such, even though a subset of them correspond to related forms like stative $\mathrm{CvCa} / o$ and transitive $\mathrm{CvCi} / u-r v$. It is not clear how language learners organize these relationships. But a classic generative phonological analysis with $/ \mathrm{CvCv}-\mathrm{yv} / \rightarrow C v C-y v$ would at least work.

In doubly suffixed derived verbs, such as yàmbù-l-yé 'uncover oneself' (reversive -lv- plus mediopassive -yv-) and kómmù-l-mè 'make untie' (reversive -lv-plus causative $-m v-$ ), syncope targets the second of two theoretically vulnerable vowels: /yàmbù-lù-yé/ $\rightarrow$ yàmbù-l-yé.

### 3.5.3.3 Apocope

Word-final short $u$ is frequently elided, with the stranded tone re-docking to the left. The $u$ is often audible before a suffix, clitic, or closely phrased word.

Many nouns end in a marginally segmentable ending - $g(u)$, of high or low tone, that is ordinarily apocopated, with the stranded tone re-linking to the left or right. Examples are demonstrative ǒg 'this' and noun bě: $g$ 'stick', whose full forms ògú and bè:gú can be heard in some combinations.

In verbal inflectional morphology, apocope occurs in 3 Sg and 3 Pl forms in the imperfective positive and perfective negative (sometimes also in the imperfective negative). Examples are 3 Sg imperfective positive ménè:-b- $\varnothing$ 'he/she goes', 3 Pl counterpart ménè:-n. A syllabic form of the suffix occurs in polar interrogatives, e.g. 3Sg ménè:-bì $\rightarrow-\varnothing$, see (339) in §13.2.1.1.

Where the conditions are right for a choice between syncope and apocope, as in $/ \mathrm{CvCuCu} /$ sequences, syncope takes place in ònnú 'the bush, the outback' (compare locative
 'wet' and yòrǔ-g (/yòrù-gú/) 'loose'. See also the verbal nouns in -gù in §4.2.2.1.

### 3.5.3.4 Palatal Coalescence

A number of mediopassive verbs (usual suffix -yv-) have the shape $C v y-y v$. In some cases this is arguably just the combination of $C_{V y v}$ plus $-y v$, since there is a stative form $C_{v y V}(18)$. However, if there is also a transitive derivative (suffix -rv-), it takes the form $C v:-r v$ with a long vowel instead of \#Cvy-rv. So there are ambiguities about the underlying representation, and (therefore) about what phonological processes apply to them.

| a. | jòy-yé | '(sb) hide' |
| :---: | :---: | :---: |
|  | (jò-)jóyà | '(sb, sth) be hidden' (stative) |
|  | jò:-זع | 'hide (sb, sth)' |
| b. | bìy-yé | 'lie down' |
|  | (bì-)bíyò | 'be lying down' (stative) |
|  | bì:-ré | 'lay (sb) down' |
| c. | nòy-yé | '(sb) sleep' |
|  | (nò-)nóyò | '(sb) be asleep' (stative) |
|  | nò:-ré | 'put (sb) to sleep' |
| d. | dày-yé | '(mat) be laid out' |
|  | (dà-)dáyà | '(mat) be laid out' (stative) |
|  | dà:-ré | 'lay out (mat)' |
| e. | dìy-yé | '(sb) hold (sth)' |
|  | (dì-)díyò | '(sb) be holding (sth)' (stative) |
|  | dì:-ré | 'hand over (sth) to (sb)' |
| f. | mùy-yé | 'become immersed (in water)' |
|  | (mù-)múyò | 'be immersed' (stative) |
|  | mù:-ré | 'immerse (sb, sth)' |

In other similar cases, even the stative has $w$ rather than $y(19 \mathrm{a}, \mathrm{c})$. This is the case for certain verbs whose first stem-vowel is $u$, but contrast mù-múyò in (18f) above.

```
a. dùy-y\varepsiloń 'carry (sth) on (one's own) head'
    (dù-)dúwà 'be carrying (sth) on (one's own) head' (stative)
    dù:-r\varepsiloń 'put (sth) up on (sb's) head'
b. dùy-y\varepsiloń '(sb) bathe (oneself)'
    - [no stative form]
    dù:-ré 'bathe (sb)'
c. jùy-yé '(sth, e.g. calabash) flip over'
    (jù-)júwò '(sth) be flipped over, be upside-down' (stative)
    jù:-ré (sb) flip (sth, e.g. calabash) over'
    jù:r-yé '(sth, e.g. calabash) be flipped over'
```

The phonology of these forms is nontransparent. We could set up /Cvyv/ as lexically basic and have special rules to account for Cu:-rv and stative variant Cuwv. Or we could set up $/ \mathrm{Cv}: /$ or $/ \mathrm{Cvwv} /$ as lexically basic and have special rules to account for $C v y-y v$ and stative variant Cvyv, in which case $C v y-y v$ would require a palatal coalescence rule, whereby $/ \mathrm{Cv}$ :-yv/ or /Cvw-yv/ surfaces as $C v y-y v$ (one could alternatively hyphenate at $C v-y y v$ ).

Support for this analysis comes from 3Pl perfective forms from $C e(:)$ and $C \varepsilon(:)$ verbs like gě-yyà 'they exited' from gě:, where one would expect \#/gě:-yà/. Likewise jě-yyà 'they filled' from jě:, ně-yyà 'they ate' from ně., ně-yyà 'they drank' from ně., and wě-yyà 'they saw' from $w \check{\varepsilon}^{\prime}$. Monosyllabic verbs all have mid-height front vowels and so do not directly bear on other vowels. Still, these 3Pl perfective forms tilt the balance in favor of a palatal coalescence analysis, since there is no doubt that the input stems have $C v$ : shapes like gě: and jě: .

Free plural yà:; which occurs after kin terms and nonhuman nouns, undergoes a kind of coalescence in the case of $g \check{o}^{n}$ yyà: 'things'. The singular is gǒ-y.

In a somewhat similar way, /ny/ becomes $n n$, if we assume that sún-nè and $\bar{n} n-\eta \varepsilon ̀ ~ a r e ~ s t i l l ~$ segmentable as suffixed mediopassives.
a. sún-nè
'(sb) carry (child, backpack) on (one's own) back'
(sù-)súnò '(sb) be carrying (child, backpack) on (one's own) back' (stative) súnù-rè 'put (child, backpack) up on (sb's) back'
b. 万ूn-nغ̀ $\quad$ 'get tired'
̀̀nù-nó 'fatigue'
э́nù-mè 'weary (sb)'

### 3.5.4 Processes affecting individual consonants

### 3.5.4.1 Presuffixal deletion of $C_{2}$ in $C v C v$ verb stems

There are a few scatted examples of this, but no productive processwa.
In verbal derivational morphology, the alternations dàl-yé 'get dressed' versus dà:-ré 'dress (sb)', and kúl-yè 'pour (liquid) on oneself' versus kú:-rè 'pour (water) on (sb else)', point to roots /dàlé/ and /kúlè/. They syncopate regularly to dàl- and kúl- in the mediopassive
forms. We then have to get from /Cvlv-rv/ to $C v:-r v$ in the transitive forms. Since tap $r$ is averse to syncope of a preceding vowel, the best analysis is to delete $l$ intervocalically and have the two short vowels combine into a long vowel. See (197b) in §9.4.1 for the data.

Still in derivational morphology, the alternations dùn-yé '(object) be set down' versus dù:-ndé 'set (object) down' and tén-yè '(container) be put down' versus té:-ndè 'put (container) down' indicate roots /dùyé/ and /téy $̀ /$. Although the phonology is nontransparent, we could posit deletion of $\eta$ in /Cvyv-ndv/, resulting in a long vowel. A similar case is mòmb-yદ́ '(people) assemble' versus mò:-ndé '(sb) assemble (people)', though here the deleted element is the cluster $m b$. Since transitive suffix -ndv-functions much like the more common suffix -rv-, one could argue that the $n$ in $-n d v$ - has spread from the deleted nasal. This would require a constructional phonological rule of the type/Cvyv-rv/ $\rightarrow$ / Cvv-nrv/ (then $/ \mathrm{nr} / \rightarrow n d$ ). However, the number of forms involved in these alternations is very limited and they are probably lexicalized.

In inflectional verbal morphology, the isolated truncation of bòlé 'go' in hortative bò-má 'let’s go!' (§10.7.2.1) does not fit the preceding patterns since there is no long vowel. It is best thought of as an idiosyncratic truncation in a high-frequency form.

### 3.5.5 Local consonant cluster processes

### 3.5.5.1 $/ \mathrm{Nl} / \rightarrow n d$

là: is one of the basic locative postpositions, and a (possibly related) -là: occurs in the progressive construction for verbs (§10.2.2.3). The $l$ becomes $d$ after a nasal.
a. ò クùn ${ }^{\mathrm{H}+}$ dá:
'in the bush' (ò $\eta n u ́$ 'the bush')
[kò̀gù wérè-n] dà:
'in the fresh grass'
b. kán-dà: jó- 'be doing' (syncopated from kánè 'do')
$/ \mathrm{N} 1 / \rightarrow n d$ optionally applies to $=$ lò: 'it is not' (§11.2.1.2) when it follows one of the many nouns that end with a nasal (usually the detachable $-\eta$ ).

In the Nantanga recordings, the progressive is heard as -rà:; so it may be that there is dialectal variation between $l$ and $r$ in the relevant forms. For $r$-dialects the rule is therefore $/ \mathrm{Nr} / \rightarrow n d$.
$/ \mathrm{Nl} / \rightarrow n d$ is not a productive phonological rule. Reversive $-l v$ does not change after a nasal in tén-lè 'unhobble' (i.e. remove a restraining rope from an animal's legs) or in kúm-lè 're-open (eyes)'. These reversives are syncopated, but so are 'in the bush' and 'be doing' in (21a-b).
$/ \mathrm{Nl} / \rightarrow$ nd does not apply in combinations involving là 'also, too; even'. Instead, a preceding nasal assimilates to the 1 . An example is ná-ngù ${ }^{\text {L }}$ jìmù- $\eta$ là 'even that disease' (T02 $01: 39)$, where $/ \mathrm{yl} /$ is pronounced [1:].

### 3.5.5.2 /vyr/ $\rightarrow v: r$

Let us take another look at some of the sets discussed in §3.5.3.4 under the rubric of Palatal Coalescence.

```
a. jə̀y-yє́ '(sb) hide'
    (jò-)jóyà '(sb, sth) be hidden' (stative)
    jò:-rモ́ 'hide (sb, sth)'
b. dày-yé '(mat) be laid out'
    (dà-)dáyà '(mat) be laid out' (stative)
    dà:-ré 'lay out (mat)'
c. dùy-yé 'carry (sth) on (one's own) head'
    (dù-)dúwà 'be carrying (sth) on (one's own) head' (stative)
    dù:-ré 'put on (sb else's) head'
```

One possibility is to take /jy̌:/, /dǎ:/, and /dǔ:/ as the basic forms. In this case there is no need for a $/ \mathrm{vyr} / \rightarrow$ v:r rule. Instead, we would need rules to account for the variants with $y$.

If however we take /jòy $\varepsilon /$, /dày $\varepsilon$ /, and /dùwé/ as basic, we need at least a /vyr/ $\rightarrow$ v:r rule. We can presumably account for /dùw-ré/ $\rightarrow$ dù:-ré by a different mechanism (Monophthongization).

### 3.5.6 Vowel-vowel and vowel-semivowel sequences

### 3.5.6.1 vv-Contraction

Assuming that alternations in verb stem-final vowels are handled by ablaut, there is little need for a vv-Contraction rule. However, the handful of not very transparent cases of possible $C v C v$ - to $C V$ :- contraction enumerated in $\S 3.5 .4$.1, if derived phonologically, would require intervocalic consonant deletion followed by contraction of the two adjacent short vowels into a long vowel.

The best case for vv-Contraction is combinations of $2 \mathrm{Sg}-\mathrm{O}$ and $2 \mathrm{Pl}-E$ (unspecified for $\pm$ ATR) with preceding verb forms, which always end (underlyingly) in a vowel. From $-O$ the contracted vowel is $o$ : or 9 : depending on ATR-class of the verb, except that final a (which occurs in some statives) in -ATR stems results in a: as in yè tíg-à: 'you-Sg know' (§11.2.5.1). From $2 \mathrm{Pl}-E$ the contracted vowel is $e$ : or $\varepsilon$ : depending on ATR-class.

### 3.5.7 Local vowel-consonant interactions

### 3.5.7.1 Vowel-Semivowel Assimilation (/uy/ $\rightarrow i y, / i w / \rightarrow u w)$

Assimilation of the type /uy/ $\rightarrow$ iy occurs in verbs with 1 Pl subject suffix $-y$ and in combinations involving nouns with accusative enclitic $=\grave{y}$ or with the 'it is' enclitic $=\dot{y}$. The assimilation is most systematic with $1 \mathrm{Pl}-y$.

For example, jò-nnú- 'not have' combines with 1Pl -y as jò-nní-y, and the personal name sé:dù 'Seydou' combines with either of the two enclitics just mentioned as sé:dì=ỳ (variant sé:dù = ỳ).

Since the resulting iy is word-final and therefore tautosyllabic, it feeds Monophthongization (see next section below). However, I usually transcribe iy with the relevant break $(i-y, i=y)$ to make the morphological structure transparent.

Since there are no suffixes or enclitics of the shape $w$ (i.e. $-w,=w$ ), there are no opportunities for a parallel assimilation of /iw/ to $u w$.

### 3.5.7.2 Monophthongization (/iy/ $\rightarrow i$ i, /uw/ $\rightarrow u:$ )

Tautosyllabic /iy/, which occurs by assimilation from /uy/ (see preceding section), is pronounced [i:].

Tautosyllabic /uw/ is likewise pronounced [u:]. For example, dù:-ré 'put (sth) up on (sb’s) head' is plausibly from /dùw-ré/, cf. stative dúwà 'be carrying (sth) on (one's own) head'.

### 3.6 Cliticization

It can be difficult to distinguish clitics from affixes on the one hand and from free particles on the other. If there are interactions between the segmental forms of a functional morpheme and an adjacent stem-based word (noun, verb, etc.), a good case can be made for cliticization. If there is just a tonal interaction, the case is weaker since tone sandhi need not be word-bound. If a morpheme appears to "move" to a position immediately before or after a stem-based word or larger phrase, a syntactic case can be made for cliticization even without segmental or tonal interactions. In DD this is mainly relevant to proclitics.

The best cases for cliticization are listed in (23) with section cross-references. I use $=$ as the connector symbol for enclitics, because they interact phonologically with the host, but not for the proclitics.
a. enclitics

$$
\begin{array}{lll}
=y & \text { 'it is' after NP } & \S 11.2 .1 .1  \tag{23}\\
=y & \text { Accusative } & \S 6.7 \\
=: \grave{\eta} & \text { reduced postposition } & \S 8.3 .2 \\
=l o ̀: ~ & \text { 'it is not' after NP } & \S 11.2 .1 .2 \\
=b i ̀ y \varepsilon & & \text { Past after partially inflected verb }
\end{array}
$$

b. proclitics
yè Existential, before some predicates
§11.2.2.1
(various)
preverbal subject pronominals §14.3
$=b i ̀ y \grave{\varepsilon}$ is essentially an auxiliary verb that cliticizes to a partially inflected verb. =lò: 'it is not' has a long vowel, which is uncharacteristic of enclitics, but it is morphosyntactically parallel to $=y$ 'it is', and its $l$ optionally hardens to $d$ after a nasal (§3.5.5.1). This also happens with simple locative postposition là: (§8.2.1) and suffixed -là: in the progressive construction ( $\S 10.2 .2 .3$ ). For consistency, I transcribe all postpositions as separate words, but morphophonologically one could argue that locative là: is an enclitic.

One could also argue that quotative wà: and conditional nà: 'if' are enclitics.

### 3.7 Tones

At least in the speech of my primary informant (from Koundiala village), DD has a tone system resembling pitch accent. This is also the case in neighboring Donno So, and it may be that this sytem has spread by contact.

Tonal transcriptions of $C V-C$ final syllables including a suffixed sonorant $-C$ can be presented in different ways. Taking ...na- $\eta$ as example, my preferred transcription for contoured tones is ...nâ- $\eta$ or ...nă- $\eta$ if the suffix is atonal, and ...ná-ŋ̀ or ...nà- $\eta$ if the suffix
bears its own intrinsic tone. For level tones, if the suffix is atonal, ...ná- 1 is interchangeable with ...ná- $\eta$, and ...nà-ŋ̀ is interchangeable with ...nà-ŋ̀.

### 3.7.1 Lexical tone melodies

### 3.7.1.1 One H-tone in each stem

In this type of system, each stem has one lexical H-tone, expressed on one entire syllable or on one syllable-final mora. Bisyllabics therefore are either $C \hat{v} C \grave{v}$ or $C \grave{v} C v ́$, but not $\# C \bar{v} C$ v́ and not (lexically) $C \grave{v} C \grave{v}$, though the latter can be produced by tonosyntax or by regular phonology (Rightward H-Tone Shift). $C V V$ stems can be $C \bar{v} v ́$ or $C \hat{v} v ́$ (there is no phonemic distinction between $C$ v́v́ and $C \bar{v} v ̀$ ).

The one-H-per-stem rule does not apply at the level of complete words. Verbs with inflectional suffixes may have two separate $H$-tones. This is regular in the imperfective negative: bólè-nnú- 'does/will not go'.

In several formulaic expressions àmbà 'God' appears in L-toned form (three examples in text T01 00:14). However, one could explore the possibility of parsing this as a compound initial in these expressions.

### 3.7.1.2 Tones on final long vowels

In my assistant's speech, final long vowels in nonmonosyllabic stems may have $<\mathrm{LH}>$ or H -tone, but not $<\mathrm{HL}\rangle$. Those with final long H-tone represent a conflation of two etymological patterns, one with $\mathrm{H}^{-}$and the other with $<\mathrm{HL}>$-tone. The two remain morphophonologically distinct, in that only those with original H-tone allow the H to shift onto the following word under relevant morphological conditions, by Rightward H-Tone Shift. tàwá: 'hyena' (*tàwâ:), sàmbá: 'wilderness' (*sàmbâ:), pàlé: 'sesame' (*pàlê:), yàlá: 'field' (*yàlâ:), kùrí: 'prayer beads' (*kùrî:), and jàbí: 'henna' (*jàbî:) do not allow the shift. The same is true of loanwords like bìdón 'canister' (Fr bidon). Another noun of this type is àlá: 'rain', but in this case the cognates I know of have final H-tone.

Monosyllabic $\operatorname{Cv}(v)$ distinguishes $\mathrm{H}-,<\mathrm{HL}>-$, and $<\mathrm{LH}>$ tones. The vowel length depends on whether the tone is simple (H) or contoured, see $\S 10.1 .2 .1$ for verb stems. Examples of monosyllabic $C \hat{v}$ : can be found in 3 Sg perfectives of verbs, which have $\{\mathrm{HL}\}$ tone overlay, as in $n \hat{\varepsilon}:-\varnothing$ 'ate (a meal)'. Non-verb examples are the noun tê: 'tea', the adjective $j \hat{o}$ : 'full', and the numeral sô:y ' 7 '. 2 Sg accusative $\delta=\grave{y}$ and 2 Sg possessor $\delta-\grave{\eta}$ are examples involving suffixes or enclitics. There are many additional $C \hat{V} C, C \hat{v}: C$, and similar stems and words that have become falling-toned monosyllabics by apocope of a final short high vowel, e.g. sâr 'rice porridge'.

### 3.7.1.3 Lexical tone melodies of verbs

Nonmonosyllabic verbs have /HL/ or /LH/ melodies. The melody is overt in the bare stem (used in verb chains). For prosodically heavy stems, it is also overt in the imperative stem. The indicative aspect-negation categories (perfective positive and negative, imperfective positive and negative, etc.) have various tone overlays that erase the lexical tones.

As usual in Dogon languages of this type, the initial L-tone (here /LH/) is associated with stem-initial voiced obstruents, and the initial H-tone (in DD, /HL/ rather than $/ \mathrm{H} /$ ) is
associated with stem-initial voiceless obstruents. Stems beginning with sonorants, and those with no initial consonant (V-initial stems), have a lexical choice between /HL/ and /LH/.

For monosyllabic verbs, the /LH/ type is clearly present, as in gě: 'exit' and ně: 'eat (meal)'. The vowel has been lengthened to allow full articulaton of the contour tone (Contour-Tone Mora-Addition, §3.7.4.5). The complementary type is H-initial but does not require articulation of a falling tone. For example, 'weep' has a bare stem yé, contrasting in tone and (therefore) vowel-length with its 3 Sg perfective form $y \hat{\varepsilon}:-\varnothing$ 'he/she wept'.

The verb 'convey' (i.e. 'take away' or 'deliver") $j \varepsilon$-bòlé is a partially fused combination of a 'take' verb and bòlé 'go'. To the extent that it might now be considered a single verb stem, it would constitute an aberrant $/ \mathrm{HLH} /$ pattern. For data and discussion see $\S 10.1 .2 .6$.

### 3.7.1.4 Lexical tone melodies for unsegmentable noun stems

Nonmonosyllabic nouns can be /HL/, /LH/, or /LHL/. All /LHL/ stems are trisyllabic. There are no /HLH/ stems.
a. /HL/

| ह́mmè | 'sorghum' |
| :--- | :--- |
| ínà: | 'goat' |
| pésgè | 'sheep' |
| támı̀r̀̀ | 'date' |

b. /LH/
pònó 'fonio (a cereal)'
bùyă:g 'guava'
gùlàmpá 'pigeon'
c. /LHL/

| màngórò | 'mango' |
| :--- | :--- |
| gàná:jè |  |
| gàmbúlè: | 'okra sauce' |
|  | 'certain (ones)' |

Monosyllabic stems can be $/ \mathrm{H} /$, /HL/, or $/ \mathrm{LH} / . / \mathrm{H} /$ is rather uncommon. Monosyllabic /HL/and /LH/-toned stems ending in a consonant are often the result of apocope of a stem-final short high vowel.
a. /H/
pén 'hip'
sí: 'kind, sort'
b. /HL/
tê: 'tea'
$b \hat{\varepsilon}^{n}{ }^{n} \quad$ 'beard'
nûm 'cowpea'
gâ: $\eta \quad$ 'cat'

```
c. /LH/
    yǎ: 'woman' (variant yǎ:-g)
    jă: 'meal'
    nǎ:g 'cow' or 'foot'
```


### 3.7.1.5 Lexical tone melodies for adjectives and numerals

An inventory of modifying adjectives is in $\S 4.5 .1$. The stems are either $/ \mathrm{HL} /$, including trisyllabic H.L.L, or /LH/, including trisyllabic L.L.H. /HL/ examples are sálà: 'nasty' and ánànà- $\eta$ ‘half-ripe'. /LH/ examples are kòló: ‘unripe; raw' and sògòlá ‘multicolored’.

Numerals are listed in §4.6.1. They may be /HL/ like né:gè ' 2 ' and ké:sò '4', or /LH/ like ǹnó '5' and tà:ndú ' 3 '.

### 3.7.1.6 Tone-break location for bitonal non-verb stems

DD allows only one accented syllable, so /HL/ trisyllabic and longer stems are by definition of H.L.L... type, since if the break were after the second syllable the result would be tritonal /LHL/ (see the following section).

The same is true of / $\mathrm{LH} /$ stems: the H-tone is by definition located in the final syllable. However, since $C V V, C v L$, and other heavy final syllables can be either $\mathrm{H}-$ or $<\mathrm{LH}>$-toned, if the noun ends in such a syllable there is a choice as to which mora the H-tone is attached to. A few examples from the list of adjectives in $\S 4.5 .1$ are in (26).
a. L.H
kòló: 'unripe, raw')
bìnú- $\eta \quad$ 'big; fat'
mìnú-ŋ 'deep'

b. L. $<\mathrm{LH}>$
dìyǒ: 'old (object)'
kàsǎ: 'new'
gènǒ: 'good'
jàlă- $\eta \quad$ 'long; tall'

### 3.7.1.7 Tone-component location for tritonal non-verb stems

/LHL/ tones need to specify the tone-break location only if quadrisyllabic or longer. These are probably all loanwords. The basic pattern is L.L.H.L with the break near the right edge, as in bòròdíyà 'banana'.
L.H.L.L is a tone pattern that can occur in compounds (L.H-L.L) but not in simple stems.

### 3.7.2 Grammatical tone patterns

Lexical tone melodies are subject to tone overlays controlled by adjoining words or affixes, and to overlays that apply in specific grammatical constructions such as compounds.

### 3.7.2.1 Grammatical tones for verb stems

The lexical tone melody is best observed in the bare stem (nonfinal position in verb chains). In different inflections, verbs have $\{\mathrm{HL}\}$ (third person) and $\{\mathrm{LH}\}$ (1st/2nd person) overlays in the perfective positive, $\{\mathrm{L}\}$ before H-toned suffix in the perfective negative, $\{\mathrm{HL}\}$ before L-toned suffix in the imperfective positive, and $\{\mathrm{HL}\}$ before H -toned suffix in the imperfective negative. All melodies can be reduced to $\{\mathrm{L}\}$ tones by defocalization in the presence of preverbal constituents. (27) exemplifies non-defocalized verbs with lexically /HL/-toned késè 'cut' and /LH/-toned jàbé 'run'. Because of the overlays, the two verbs have identical tones here.
'cut' 'run'

| perfective |  |  |
| :---: | :---: | :---: |
| 3Sg | $k \varepsilon ́ s \grave{\varepsilon}-\varnothing$ | jóbè- $\varnothing$ |
| 1 Sg | kèsé- $\eta$ | jòbé-ŋ |
| perfective negative |  |  |
| 3 Sg | kèsǎ:-1-Ø | jòbǎ:-1-Ø |
| 1 Sg | kèsà:-lú-ŋ | jòbà:-lú-ŋ |
| imperfective |  |  |
| 3 Sg | késè:-b-Ø | jóbè:-b-Ø |
| 1 Sg | késè:-bù-ŋ | jóbè:-bù-ๆ |
| imperfective negative |  |  |
| 3 Sg | késè-nnú- $\varnothing$ | $j o ́ b e ̀-n n u ́-\varnothing$ |
| 1 Sg | késè-nnú-ŋ | jóbè-nnú-ŋ |

Other categories (imperative, hortative, etc.) also impose overlays.

### 3.7.2.2 Grammatical tone overlays for noun stems

Tone-dropping, i.e. imposition of an $\{\mathrm{L}\}$ overlay, applies to nouns under the control of a following adjective or demonstrative. The (core) NP also drops its tones when it functions as (internal) head of a relative clause (28b). The noun is unaffected tonally by a single following numeral, definite marker, or pronominal possessor (28c). When preceded by a possessor, the noun usually gets an $\{\mathrm{L}\}$ overlay, but several kin terms have $\{\mathrm{HL}\}$ after an L-toned preposed pronominal possessor (28d). Historically, it is possible that the extra H -tone shifted from the pronoun to the onset of the kin term.

> a. $\begin{aligned} & \text { pésgè } \\ & \text { să:- } \eta\end{aligned}$
> b. tone-dropping
> pèsgè ${ }^{L}$ gémèzpèsgè ${ }^{\mathrm{L}}$ ǒg
> pèsgè ${ }^{\mathrm{L}}$
‘sheep'
'sister'
'black sheep’ §6.3.1
pèsgè ${ }^{\text {L }}$ ǒg 'this sheep' §6.5.2
'the sheep that ...'
§14.2.1
c. no tonal interaction

| pésgè tà:ndú | 'three sheep' | $\S 6.4 .1$ |
| :--- | :--- | :--- |
| pésgè ̀̀ | 'the sheep-Sg' | $\S 6.5 .3$ |
| pésgè ò-r̀ | 'your-Sg sheep' | $\S 6.2 .1 .2$ |

d. possessors

| $X$ L |  |  |
| :--- | :--- | :--- |
| pèsgè | ' X 's sheep' | $\S 6.2 .1 .1$ |
| $X{ }^{\mathrm{L}}$ Sà: | ' X 's sister' | $\S 6.2 .2$ |
| $m i ̀ ~$ |  |  |${ }^{\mathrm{HL}}$ sâ: $\quad$ 'my sister' $\quad \S 6.2 .2$

### 3.7.2.3 Grammatical tone overlays for adjectives and numerals

Adjectives and numerals follow nouns. When such modifiers are themselves followed by a tonosyntactic controller (demonstrative or relative clause), they are included in the target domain of the controller (29a-b). They are generally also included in the target domain of a preposed possessor, the exception being in the relatively uncommon case where a kin term is qualified by an adjective, in which case the noun-adjective combination forms a tonosyntactic island, enclosed by $\subset \ldots \supset(29 \mathrm{c})$.
a. demonstrative

b. relative clause head
[pèsgè gèmè ${ }^{\mathrm{L}} \ldots$
[pèsgè nè:gè] ${ }^{\mathrm{L}}$...
'the black sheep that ...'
'the two sheep that ...'
c. possessor

| $X^{\text {L }}$ [pèsgè gèmè] | 'X's black sheep' | $\S 6.2 .1 .3$ |
| :--- | :--- | :--- |
| $X^{\text {L }}$ [pèsgè nè: $g$ è] | 'X's two sheep' | $\S 6.2 .1 .3$ |
| $X \quad \subset s a ̀:{ }^{\mathrm{L}}$ sálà- $\left.\eta \supset\right]$ | 'X's no-good sister' | $\S 6.2 .2 .1$ |

A distinctive $\{L H L\}$ overlay occurs in combinations of the type [ $N$ (Adj) Num] ${ }^{\text {LHL }}$ Poss, i.e. where an NP-internal string ending in a numeral is immediately followed by a postposed pronominal possessor. The $\{\mathrm{LHL}\}$ overlay begins with the noun and ends with the numeral, with the final H and L realized on the numeral (i.e. on the last two syllables of the target domain).
(30) [ùnò-ŋ tá:ndù ${ }^{\text {LHL }}$ ò-ŋ̀ yà: 'your-Sg three dogs'
§6.2.1.4

### 3.7.3 Tonal morphophonology

### 3.7.3.1 Autosegmental tone association (verbs)

Given that DD has a kind of pitch accent system, the need for autosegmental application of tone melodies and overlays is less important than for other Dogon languages where H as well as $L$ tones spread from the left or right edge toward the middle.

Focusing on the bare stems (as in verb chains), a verb with /HL/ melody has an initial H -tone in both underived and suffixed derivatives. For example, pégè 'knock blade on' has a reversive pégìl-l̀̀ (§9.1).

A verb with $/ \mathrm{LH} /$ melody does shift its accented H -tone to the suffix in a derivative, and here we could make use of an autosegmental approach whereby the tones start out at a higher level and are separately mapped onto the underived and derived forms. An example is bigé 'bury' and its reversive bigì-lह́ 'disinter'.

However, it would not be difficult to handle this alternation by a non-autosegmental phonological rule.

### 3.7.3.2 Tone polarization (dissimilation) in decimal numerals

Decimal numerals (' 20 ', ' 30 ', etc.) are given in $\S 4.6 .1 .3$. Except for suppletive ' 40 ' and ' 80 ', they are compounds with a variant of $p \hat{\varepsilon}: l^{\prime} 10$ ' as initial and the relevant single-digit term as final. In pè-né:gè ' 20 ', pèl-kúlè: ' 60 ', and pès-sŝ:y ' 70 ', the initial is L-toned before a digit term that begins with an H-tone. In pé-rà:ndù ' 30 ', pé-nnò ' 50 ', and pé-tù:wá ' 90 ', the initial is H -toned before a digit term that begins with an L -tone.

### 3.7.4 Low-level tone rules

### 3.7.4.1 Rightward H-Tone Shift

A characteristic of DD is the shift of an H-tone from one word to the initial syllable of the word to its right, leaving the donor word entirely L-toned. In this section the more or less "regular" phonological version is described, whereby an /LH/-toned word shifts its final H -tone onto the onset of the following word. Three related processes are described in subsequent sections: a) merger of final H -tone with a following pre-existing word-initial H-tone (§3.7.4.2); b) shift of H -tone from the onset of an /HL/-toned third-person perfective verb onto a following word (§3.7.4.3), and c) co-occurrence of a (usually L-toned) pronominal with an $\{\mathrm{HL}\}$-overlaid following word (§3.7.4.4).

The (more or less) regular version is of the type $C \hat{v} C \hat{v} \# C v \rightarrow C \hat{v} C \grave{v} \# C \hat{v}$ within a tightlyknit phrase. Even this is subject to morphosyntactic restrictions. It applies in the contexts listed in (31), which are illustrated below or in the sections cross-referred to. Absent from (31) are instrumental-comitative postposition yày, purposive postposition yày, and free plural yà:, which are always L-toned.

$$
\begin{equation*}
\text { donor } \quad \text { recipient } \tag{31}
\end{equation*}
$$

a. to postposition, see (32) below

NP locative là:, (32a) below
NP locative nì:, (32b) below
NP compound postpositions, (34) below
b. possession
possessor NP
possessum
noun
possessum (in compounds), (33) below
postposed pronominal possessor, §4.3.1.2 and §6.2.1.2
definite (syllabic form), §4.4.1, §6.5.3
c. verb

NP positive verb in main clause, (35) below
d. predicate adjective
first comparandum positive predicate adjective, (37) below
e. numerals
numeral $\quad$ sìgà in complex numerals, §4.6.1.3
To indicate that the initial H-tone of a word is attributable to Rightward H-Tone Shift, the superscript ${ }^{\mathrm{H}+}$ will be placed before the recipient word in this section (but not in ordinary trascription). The plus-sign distinguishes this phenomenon from tonosyntactic superscripts such as ${ }^{H L}$ and ${ }^{\mathrm{L}}$, which apply to entire words (or word strings). Furthermore, while tonosyntactic superscripts are repeated in interlinears, ${ }^{\mathrm{H}+}$ superscript indexing tone shift is not (since it is a basically phonological process).

Some nouns ending in long H-toned vowels (probably reflecting original final falling tone) do not allow Rightward H-Tone Shift. An example is tàwá: 'hyena' (§3.7.1.2).

Beginning with PPs, Rightward H-Tone Shift occurs with two simple postpositions, both locative (là: and nì:). It does not occur before other simple postpositions: instrumental yày (§8.1.2) in its various functions (including 'and' in NP conjunction, §7.1.1) or purposive làn (§8.3.1). (32) illustrates with various /LH/-melody nouns. Tone shift occurs in (32a-b) but not in (32c-e).

```
a. pòrò }\mp@subsup{}{}{\textrm{H}+}\mathrm{ lá:
village Loc
'in the village' (< pòró )
b. bò:rò \quad }\mp@subsup{}{}{\textrm{H}}\mathrm{ ní:
sack Loc
'in the sack'(< bò:ró)
c. bè:-gí yà\eta
stick with
'with a stick'
d. yǎ: yà\eta
    woman and
    'and a woman'
e. ǔ:-\eta là\eta
    honey Purp
    'for (or: because of) honey'
```

Tone shift applies in tightly knit "possessive" constructions, especially possessive-type compounds and similar combinations with generic possessor. The possessum first gets the regular possessor-controlled $\{\mathrm{L}\}$ overlay, then (if the possessor is $/ \mathrm{LH} /$-toned) the H -tone shifts onto it. This is represented with superscript ${ }^{\mathrm{H}+\mathrm{L}}$ in the DD transcription and just ${ }^{\mathrm{L}}$ (the tonosyntactic part) in the interlinear. (33a-c) illustrate with nǎ:g 'cow' and yă: 'woman' as (generic) possessors. If the possessor is determined, the shift does not occur (33d). tàwá:
'hyena' in (33e) is one of the /LH/-toned nouns, originally /LHL/, that does not allow Rightward H-Tone Shift.
(33)
a. nà:g ${ }^{\mathrm{H}+\mathrm{L}}$ néndà:
cow ${ }^{\text {L }}$ tongue
'cow's tongue' (< nèndá:)
b. nà:g ${ }^{\mathrm{H}+\mathrm{L} k \hat{1}: g}$
cow ${ }^{\text {L head }}$
'cow's head' (< kî:g)
c. yà: ${ }^{\mathrm{H}+\mathrm{L}}$ dá:rà:
woman ${ }^{\mathrm{L}}$ mother
'a woman's mother'
d. [yă: ì ] ${ }^{\mathrm{L}}$ dà̀:rà:
[woman Def] ${ }^{\text {L }}$ mother
'the woman's mother' (< dà:rá:)
e. tàwá: ${ }^{\mathrm{L}}$ nèndà:
hyena ${ }^{\mathrm{L}}$ tongue
'hyena's tongue’ (< nèndá:)
See $\S 5.1 .4$ for discussion of the possibility of confusion between possessive-type compounds $\left(\mathrm{X}^{\mathrm{H}+\mathrm{L}} \mathrm{Y}\right)$ and the regular $[\mathrm{n} \bar{n}]$ compounds (i.e., $\mathrm{X}^{\mathrm{L}}-\mathrm{Y}$ ) with tonomorphologically tonedropped initial.

Composite postpositions of the type "[X front] Loc" meaning 'in front of X' also allow Rightward H-Tone Shift onto the possessum ('front' or similar). Again 'hyena' is an exception.
a. [àlà: ${ }^{\mathrm{H}+\mathrm{L}}$ bómbò] là:
[rain ${ }^{\text {L }}$ side] Loc
'next to the rain' (< àlá:)
b. tùbà: ${ }^{\mathrm{H}+\mathrm{L}} \mathrm{n}$ inj̀- $_{\mathrm{L}}$ (dà:)
question ${ }^{\mathrm{L}}$ rear (Loc)
'after a question' (< tùbá:)
c. [tàwá: ${ }^{\mathrm{L}}$ bòmbò] là:
[hyena ${ }^{\mathrm{L}}$ side] Loc
'next to the hyena'
Rightward H-Tone Shift can transfer an H-tone from an NP onto a positive main-clause verb (perfective, imperfective, stative). Since imperfective positive and third-person perfective positive verbs are $\{\mathrm{HL}\}$-toned anyway, but subject to tone-dropping (defocalization), it is sometimes difficult to decide whether the verb has first been tone-dropped and has then acquired a new H -tone from the preceding word, or has simply avoided tone-dropping and the preceding H merges with the preexisting one (on this merger, see §3.7.4.2 below). However, the situation is clear with 1 st/2nd person perfective positives, which are otherwise $\{\mathrm{LH}\}-$ toned when not tone-dropped.

The shift has occurred in (35a). It does not occur in an otherwise identical string in an imperfective positive relative clause (35b). It also usually fails to occur after a focalized subject, as in (35c), though it does occur after a focalized object (35d) or other nonsubject. The nouns here are pòró ‘village' and $\check{:}:-\eta$ 'honey'.
a. pòrò
${ }^{\mathrm{H}+}$ bólè:-bù- $/{ }^{\mathrm{H}+}$ bólè- $\eta$
village go-Ipfv-/ go.Pfv-1SgSbj
'I go/went to the village.'
(cf. bólè:-bù- $\eta$ 'I go', bòlé- $\eta$ 'I went' in tone-dropped form bòlè- $\eta$ )
b. dèn ${ }^{\mathrm{L}}$ sé:dù pòró bòlè:-b
day ${ }^{\mathrm{L}} \quad \mathrm{S}$ village go-Ipfv.Ppl
'the day when Seydou will go'
c. ǔ:- $\eta$ tòg-yè-y / tòg-yè:-bì-y
honey spill-MP.Pfv- / -Ipfv-SFoc
'It's honey [focus] that was/will be spilled.'
d. ù:- $\eta \quad{ }^{\mathrm{H}+}$ tógè- $\eta /{ }^{\mathrm{H}+}$ tógè:-bù- $\eta$
honey spill.Pfv- / spill-Ipfv-1SgSbj
'It's honey [focus] that I spilled/will spill.'

WH-interrogatives, which are intrinsically focal, differ as to whether and under what conditions Rightward H-Tone Shift occurs. à:クá: 'how many? does not shift onto any following word (§13.2.2.6). ăm 'who?' allows shift onto a following complex postposition or possessive mı, as in (344d-f), but not onto a following verb either as subject ǎm or accusative object àmí=ỳ; see (343a) and (344a) in §13.2.2.1. ŋ̀gó- $\eta$ 'what?' allows the shift onto complex postpositions, and in object function before a positive verb, but not in subject function; see (345a-f) in §13.2.2.2. à yá: 'where?' behaves like ŋ̀gó- $\eta$ 'what?' with respect to verbs, but does not allow the shift onto postpositions; see (350a-i) in §13.2.2.6.

Rightward H-Tone Shift between noun and verb fails to occur in (36).

| pòró | bòlé- $\eta$ | 'I went to the village' (perfective, when not tone-dropped) |
| :--- | :--- | :--- |
| pòró | bólè-nnú- $\eta$ | 'I won't go to the village' (imperfective negative) |
| pòró | bòl tì jó- $\eta$ | 'I have (once) gone to the village.' (experiential perfect) |
| pòró | ból-là: jò- $\eta$ | 'I am going to the village' (progressive) |
| pòró | bòlà:-lú- $\eta$ | 'I didn't go to the village' (perfective negative) |
| pòró | bólà | 'Go to the village!' (imperative) |
| pòró | bòl-lá | 'Don't go to the village!' (prohibitive) |
| pòró | bò:-má-ŋ̀ | 'Let's go to the village!' |

Rightward H-Tone Shift occurs with positive comparative adjectival predicates when immediately preceded by the first (i.e. topical) comparandum, often the subject (37a). It does not occur with negative counterparts (37b). These examples involve the city name bàmàkó. See §12.1.1.2.


| b. | $\left[\begin{array}{ll}\mathrm{X} & \text { làn }]\end{array}\right.$ | bàmàkó | ${ }^{\mathrm{LH}}$ Wàg $=$ ló |
| :--- | :--- | :--- | :--- |
| $[\mathrm{X}$ | than $]$ | B | ${ }^{\mathrm{LH}}$ be.farther $=$ StatNeg |

'Bamako is not farther away than X.'

There is no Rightward H-Tone Shift onto clause-final particles mà $\rightarrow$ 'or' (also a polar interrogative) or $=l o ̀$ : 'it is not'.
a. pòró
mà $\rightarrow$
village
or
'or a village'
b. pòró = lò:
village=it.is.not
'It isn't a village.'

### 3.7.4.2 Final H-tone amalgamates with following word's H -tone

In most of the examples in the previous section, an H-tone detached from a preceding word appears on the first syllable (or mora) of the following word, which would otherwise either be tone-dropped by an $\{\mathrm{L}\}$ overlay (as with possessums following a possessor) or $/ \mathrm{LH} /$-toned.

There are other examples where the apparent recipient of the H-tone already has an H-tone in the initial syllable (or mora). In this case, it would seem that the detached H-tone merges with the preexisting H -tone.

An example of this is H-toned postposition yáy 'like' (§8.4.1), which differs only tonally from another postposition yàn (instrumental and related functions). Nothing happens in ánà yáy 'like a man'. But when 'like' is added to /LH/-toned yǎ: 'woman the output is yà: yáp. Here yǎ: has lost its H-tone, but there is no audible change in the prosody of the following postposition.

Further examples occur with noun-numeral combinations, which do not involve tonosyntactic overlays. If the noun has / LH/ melody, it appears with L-tones if the numeral begins with an H-tone. For example, děn 'day (as unit of time)' is L-toned in dèn né:gè 'two days' and dèn ké:sj̀ 'four days', compare děn tà:ndú 'three days' and děn ǹnó 'five days'.

Another example is noun plus káybòn 'a lot' (§6.4.3).
A somewhat distinct process is observable in combinations including a focused pronoun. (39a) is a PP whose postposition has gotten an H-tone from the noun (pòró) as explained above. When this PP is followed by another NP, such as the focused subject NPs in (39b), it keeps the same tonal form that it has in isolation (39a). It does not matter whether the following NP begins with an H-tone ('men') or with an L-tone ('women'). It also keeps this tonal form before a verb (39c). However, when followed by an independent pronoun (as subject focus), the H-tone on the postposition vanishes (39d). The independent pronouns are H-toned, as seen in (39e), so the already shifted H-tone of the postposition lá: must have merged with the pronoun's H-tone in (39d).
a. pòrò lá:
village Loc
'in/to the village'
b. [pòrò lá:] ánà-wè / yà:-wé bólè-y
[village Loc] man-Pl/woman-Pl go.Pfv-SFoc
'It was (the) men/women [focus] who went to the village.'
c. [pòrò lá:] bòlè- $\varnothing$
[village Loc] go.Pfv-3SgSbj
'He/She went to the village.' (possible focus on 'to the village')
d. [pòrò là:] mí/í bòlè-y
[village Loc] $1 \mathrm{Sg} / 1 \mathrm{Pl}$ go.Pfv-SFoc
'It was I/we [focus] who went to the village.'
e. mí/í bòlè-y
$1 \mathrm{Sg} / 1 \mathrm{Pl} \quad$ go.Pfv-SFoc
'It was I/we [focus] who went.'

### 3.7.4.3 Third-person perfective verbs plus a following element

Somewhat similar to Rightward H-tone Shift is the treatment of 3 Sg and 3 Pl subject perfective verbs. However, in these verbs the H-tone starts out in initial rather than final position in the donor word: bólè- $\varnothing$ 'he/she went', ból-yà 'they went'. When preceded by other constituents in ordinary conversation, they may appear as L-toned (by defocalization combined with prepausal position).

These perfectives transfer their H-tone to a following clause-final morpheme nà: 'if', 'or' disjunction mà, or quotative particle wà:. The 'if' particle nà: becomes $<\mathrm{HL}>$-toned nâ: in isolation but can be H-toned ná: when grouped prosodically with the following clause, as especially in pseudo-conditional examples. The verb also apocopates before the 'if' particle in the 3 Sg but not the other forms.

| gloss | simple | 'if' (nà:) | 'or' (mà $\rightarrow$ ) | quoted (wà:) |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. | 'he/she came', | ménè- $\varnothing$ | mèn- $\varnothing$ nâ:: | mènغ̀- $\varnothing$ má $\rightarrow$ | mènè- $\varnothing$ wá: |
| b. 'they came' | mén-yà | mèn-yà nâ:: | mèn-yà má $\rightarrow$ | mèn-yà wá: |  |

The tone-shift also applies to the conjugated 'say' verb when it directly follows a quoted passage ending in a perfective positive verb. See (468-471) in §17.1.

Another example of this type of tone-shift is presented by three or so / $\mathrm{HL} /$-toned adjectives that shift their H-tone to a following bò- 'be', as with gállà-ŋ $\boldsymbol{\jmath}$ 'bitter', predicative gàlà bó- 'be bitter'. See (293) in §11.4.1.1.

### 3.7.4.4 L-toned elements that impose $\{\mathrm{HL}\}$ on a following word

Closely related, at least diachronically, to the shift of H -tone from a third-person perfective to a following particle are constructions where L-toned $C \grave{v}$ morphemes appear to control $\{\mathrm{HL}\}$ on a following stem. At least some of these $C \grave{v}$ morphemes likely originated as *Cv́, whose H-tone ended up on the following word, leaving the $C \grave{v}$ morpheme L-toned. It is no longer feasible to account for the data by simple phonological derivations modeled on the historical scenario.

The six basic personal pronouns occur in H-toned and L-toned series, e.g. 1 Sg mí and mì and 3 Sg ná and nà (§4.3.1), and in one tonally mixed series (§4.3.1.3). The H-toned forms can function as independent pronouns and can precede some grammatical morphemes, including postpositions and accusative $=\grave{y}$. The L-toned forms are used as preverbal subject proclitics in relative clauses (and related constructions). The mixed series functions as prenominal possessors of kin terms.
"Verbs" in relative clauses have participle-like properties and do not take the pronominalsubject suffixes typical of main-clause verbs. When the verb of a relative clause is perfective positive, it appears as a lengthened O-stem with $\{\mathrm{LH}\}$ overlay, e.g. bùndó: from bùndé 'hit' and $\grave{\varepsilon} b o ́: ~ f r o m ~ \varepsilon ́ b \grave{\varepsilon}$ 'buy'. In nonsubject relatives, an L-toned pronominal-subject proclitic precedes the verb-participle, which then itself gets $\{H L\}$ tones (§14.4.1.1).

$$
\begin{array}{lll}
\text { a. } \ldots \text { mì }{ }^{\text {HL }} \text { búndò: } & \text { '... that I hit-Past' }  \tag{41}\\
& \ldots \text { mì }{ }^{\text {HL }} \text { हैbò: } & \text { '... that I bought' } \\
\text { b. ... mì }{ }^{\text {HL } \grave{j} j u ́ g o ̀: ~} & \text { '... that I got up'(<ńjùg̀̀ 'get up') }
\end{array}
$$

Example (41b) shows that although the nasal of an initial $N C$ sequence can bear a tone elsewhere, as in bare stem or perfective ńjùgè, it does not bear the H -tone required by the proclitic, presumably because they are syllabified togather. The H-tone therefore appears on the verb's first sull syllable in (41b).

The L-toned pronouns have similar tonal effects on the following verb in various other relative clause types, in addition to the perfective positive. The effect is that a monomoraic L-toned word becomes H-toned, and bimoraic and longer LH- and HL-toned words merge as HL-toned.

Analytical options are to posit a floating H-tone after L-toned pronominals, or to recognize a word-level $\{\mathrm{HL}\}$ overlay. The test is what happens with otherwise LH-toned trisyllabics, i.e. with tone sequence L.L.H. If they become H.L.L after the L-toned pronoun, an $\{\mathrm{HL}\}$ overlay is called for. If they become H.L.H, we would choose a simple floating H -tone that docks on the left edge of the participle, well-separated from the terminal H -tone. Relevant inputs (shown in subject-relative form) are perfective positive participles like kìgìl-yó: 'who/that went back', and perfective negative participles like kèsà:-lú 'who/that did not cut'. In nonsubject relatives with L-toned pronominal subject, I hear the participles as HL-toned (42a-b).

$$
\begin{array}{lll}
\text {... mì } & { }^{\text {HL }} \text { kígìl-yò: } & \text { ‘(a/the day) I went back' }(\S 14.4 .1 .1)  \tag{42}\\
\ldots & \text { mì }{ }^{\text {HL }} k \text { ḱsà:-l(ù) } & \text { '(a/the X) that I didn’t cut' }(\S 14.4 .3 .1)
\end{array}
$$

There is no phonological constraint against HL-H toned inflected verb forms, as shown by imperfective negative késè-nnú- $\varnothing$ 'he/she doesn't/won't cut'. So if the floating H in mì+H merely slides over one syllable onto the onset of the verb-participle, there is no obvious reason why the suffixal H-tone especially in kèsà:-lú should be dropped to L-tone. This suggests that L-toned pronominals like mì do control a tonosyntactic overlay $\{\mathrm{HL}\}$ on the following word, reduced to H -tone on monomoraic words.

The tonally mixed series of H - and L -toned pronominals function as preposed possessors for several kin terms. In this combination the kin term has an $\{\mathrm{HL}\}$ overlay like that just described for verbs. For example, sǎ:- $\eta$ 'sister' has pronominally possessed forms like mì ${ }^{\mathrm{HL}}$ sâ: 'my sister' and $\delta^{\mathrm{HL}}$ Sâ: 'your-Sg sister'; see (58) in §4.3.1.3, and cf. §6.2.2.1.

Existential proclitic yè has similar properties (§11.2.2.1). It precedes stative verbs and quasi-verbs. Its tonal effects are clearest with locational quasi-verb bò- 'be (somewhere)'. In
positive, unfocalized main clauses, this quasi-verb must be preceded either by a locational expression ('here', 'in the market', etc.), or by yè as a default. It is L-toned in the former case, but H -toned after yè.
a. [ńbù̀- $\eta$ dà:] bò-ŋ
[house Loc] be-1SgSbj
'I am in the house.'
$\begin{array}{lll}\text { b. } & \begin{array}{l}\text { yè } \\ \\ \text { Exist }\end{array} & b o ́-\eta \\ \text { be- } 1 \mathrm{SgSbj}\end{array}$
'I am present (here).'
When a derived stative verb is bisyllabic or longer, it is HL-toned after yè, as in yè óbò 'be sitting'. However, the only other form that such statives have is reduplicated ò-?óbò, which has the same stem-tone sequence. So it is only in cases like existential bò that one can observe overt tonal effects of yè.

### 3.7.4.5 Contour-Tone Mora-Addition

Bimoraic $C_{v}$ : and $C v C$ syllables can support contour tones $\langle\mathrm{HL}>$ or $<\mathrm{LH}\rangle$. Monomoraic $C v$ cannot. If a contour-toned $C_{V}$ syllable occurs underlyingly, the vowel is lengthened to accomodate the contour tone.

A process like this may be needed for monosyllabic verbs. As indicated in §10.1.2.1, they have H-toned $C \hat{v}$ imperatives, HL-toned $C \hat{v}: 3 \mathrm{Sg}$ perfectives, and either H-toned $C \hat{v}$ or LH-toned $C \check{v}$ : in the bare stem. In other words, they are $C v$ when monotonal and $C v$ : when bitonal (contoured).

| gloss | bare | imperative | 3Sg perfective |
| :--- | :---: | :---: | :--- |
| 'weep' | $y \hat{\varepsilon}$ | yá | yê: |
| 'exit' | gě: | gó | gê:: |

The alternative to taking $C_{V}$ as basic and adding a mora for a contour tone would be to take $C_{v}$ : as basic and have a rule shortening it to $C v$ when monotonal. An argument in favor of the latter analysis is that the verb stems in question are treated as $C_{v}$ :- when derivational suffixes are added, as in yà:-mé 'cause to weep'. However, it would not be difficult to lengthen $C v$ to $C v:-$ before a derivational suffix, as in some nearby languages (Humburi Senni, for example).

### 3.7.4.6 Contour-Tone Stretching

When a contour-toned $C v$ : syllable is followed by an atonal $-C$ suffix or $=C$ enclitic, the tone break generally occurs at or near the syllable coda. For example, in 3 Sg perfective yê:- $\varnothing$ 'he/she wept', the tone break is naturally in the middle of the vowel. Adding a coda sonorant, as in $y \hat{\varepsilon}$ :-y 'we wept', regardless of how we transcribe it the tone break is around the transition from $\varepsilon$ to $y$. A minor, rather automatic stretching process can account for this.

### 3.7.4.7 Stranded-Tone Re-Linking

When a tone-bearing syllable is apocopated (word-finally) or syncopated (medially), the tone re-links to the left if it was the only syllable carrying that tone. The deleted vowel is short high $i$ or $u$ (§3.5.3.2-3).

Most examples that show an audible change on the surviving syllable involve apocope. For example, demonstrative /ògú/ 'this' is usually realized as ǒg unless followed by an element that protects the final vowel. Likewise /dá:gù/ 'small' is usually heard as dâ:g.

Syncope could also feed the re-linking rule, in theory. However, the affected medial vowel is not always completely deleted. Moreover, most trisyllabic and longer stems are either H.L(...).L or L(...).L.H, in which cases even complete syncope of a medial syllable would not delete an entire H- or L-tone span. The best example of an L.H.L syllable that syncopates is gàmbúlè: 'certain (ones)', which can surface as gǎmblè: .

### 3.8 Intonation-like effects

### 3.8.1 Expressive elements with lexically specified prolongation $(\rightarrow)$

Several expressive adverbials have a lexically built-in prolonged final vowel or semivowel, e.g. pán $\rightarrow$ 'wide open (door)'. See §8.4.7.1 for more examples.
fà $\rightarrow$ 'all the way to' is rhetorically lengthened and stressed (§15.7.4).
In the number-counting sequence, ' 1 ' is tó $\rightarrow m \grave{~(§ 4.6 .1 .1), ~ w i t h ~ u n u s u a l ~ i n t o n a t i o n a l ~}$ prolongation of a nonfinal syllable.

Prolongation is common with $m a \rightarrow$ 'or' as disjunction or in polar interrogatives (§7.2.1, §13.2.1.2).

### 3.8.2 Polar interrogatives and dying quails

In Jamsay, the dying-quail "intonation" effect is grammaticalized, insofar as both left and right conjuncts in a conjoined NP are subject to extended prolongaton of the final vowel or sonorant, combined with slow pitch decline (if not already L-toned). That is, ' X and Y ' is expressed in Jamsay as $X \therefore, Y \therefore$, where $\therefore$ represents the dying-quail effect. Somewhat similar grammaticalized "intonation" effects occur in some other Dogon languages. In Ben Tey and Nanga, verbs with plural pronominal-subject suffixes are derived from corresponding singulars by an elaborate version of dying-quail. Donno So puts the dying-quail effect to use in willy-nilly conditional antecedents.

In DD , other than the greeting reply $\hat{\jmath} \rightarrow$, whose prolongation and pitch decline can be extreme, the best case for an analogue to dying-quail effects elsewhere is in polar interrogatives. The issue is whether prolongation and pitch/tone effects are a unified phenomenon as in Jamsay, or just the accidental combination of terminal prolongation (intonation) and falling tone (phonology). See $\S 13.2 .1 .1$ for data and discussion.

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

### 4.1.1 Simple nouns

### 4.1.1.1 Singular and plural nouns

The minimal shape of a singular noun is $C v$ : or $C v C$ (including $C v-C$ with doubtfully segmentable suffix). The initial $C$ position may be empty. Monosyllabic examples are ě- $g$ 'child', yă: ‘woman', nǒ: 'person', and gǒ- $\eta$ 'thing'. There are fewer monosyllabic stems like these than in some other Dogon languages that have undergone intervocalic deletions (e.g. ${ }^{*}$ Cvlv or $* \mathrm{Cvyv} \rightarrow C v:$ ), and because DD preserves some class suffixes. 'Child' and 'person' arguably have monomoraic underlying roots, to judge by plurals è-wé 'children' and nò-wé 'people’ (contrast yà:-wé 'women').

The common lexical tone melodies for nouns are /HL/ and /LH/. Trisyllabics may be $/ \mathrm{HL} /$, /LH/, or /LHL/. See §3.7.1.4 for examples. The lexical melody is erased when the noun is followed by an adjective or demonstrative, is preceded by a possessor, or is the internal head of a relative clause. The melody is overt elsewhere, for example when the noun is unmodified or is modified only by a definite marker, a postposed pronominal possessor, a numeral, or a discourse-function marker.

Human nouns have an unsuffixed singular. Exceptions to this statement are three nouns (ě-g 'child', yǎ: ~ yǎ:-g 'woman', and yǎl ~ yǎl-g 'place'), whose obligatory or optional $-g$ is confined to the singular, see (48a) in §4.1.1.2 below. The plural adds -wè, raised tonally to -wé when the final H -tone of an $<\mathrm{LH}>$-toned syllable shifts to the plural marker, as in 'farmer' and 'woman' in (45a) below. Two high-frequency ethnonyms have an alternative plural in final - $\grave{\varepsilon}$ : that usually functions as a collective (45c). For a third ethnicity 'Bambara', bàmbúl-દ̀: can have singular or plural reference. Free plural yà: can be added to any of these $-\grave{\varepsilon}$ : forms, with no clear change in reference. yà: cannot directly follow -wè.

Human nouns
singular plural gloss

| a. simple noun |  |  |
| :---: | :---: | :---: |
| bèl-gírù | bèl-gírù-wè | 'herder' |
| írè | írù-wè | 'blacksmith' |
| gòlò-gǒl | gòlò-gòl-wé | 'farmer' |
| bèmmé | bèmmé-wè | 'visitor' |
| dógùl | dógùl-wè | 'Dogulu person' |
| yǎ: | yà:-wé | 'woman' |
| ethnonyms, see also (c) |  |  |
| púndう | púndò-wè | 'Fulbe person' |
| dógò | dógò-wè | 'Dogon person' |

b. noun plus adjective
ìrè ${ }^{\mathrm{L}}$ sálà: ìrè ${ }^{\mathrm{L}}$ sálà:-wè 'bad blacksmith'
c. alternative collective plural for two ethnonyms

| dógò | dóg- $\mathrm{\varepsilon}$ : | 'Dogon (person)' |
| :--- | :--- | :--- |
| pünd $\grave{\grave{o}}$ | pünd- $\mathrm{\varepsilon}$ : | 'Fulbe (person)' |

The free plural marker yà: (which is always L-toned) is the only way to pluralize nonhuman nouns (46). Without yà: such nouns can denote either individuals or groups.
(46) Nonhuman nouns
stem marked plural gloss
a. animate
ùǵ́-ŋ ùy㇒́n yyà: 'dog' (§3.5.3.4)
ínà: ínà: yà: 'goat'
nă:g nà:gí yà: 'cow'
pésgè pésgè yà 'sheep'
gâ:n gâ:n yà: 'cat'
b. inanimate

| bě:g (</bè:gú/) | bè:gí yà: | 'stick' |
| :--- | :--- | :--- |
| dúmbà- |  |  |
| dúmbà yà: | 'rock' |  |
| kígnò | kínnò yà: | 'tree' |

c. noun plus adjective
ìnà: ${ }^{\text {L }}$ gémè-ŋ ìnà: ${ }^{\text {L }}$ gémè yà: 'black goat'
dùmbà- $\mathrm{g}^{\mathrm{L}}$ pílà- $\eta$ dùmbà- $\mathrm{\eta}^{\mathrm{L}}$ pílà yà: 'white rock'
kìnnò ${ }^{\mathrm{L}}$ bánù-ŋ kìnnò ${ }^{\mathrm{L}}$ bánù yà: 'red tree'
yà: is also used after determiners (demonstrative, definite) for human as well as nonhuman nouns. If the noun is human, the suffix -wè and the free plural co-occur but are not adjacent, as in yà:-wè ̀̀gí yà: 'the women'.

### 4.1.1.2 Vestiges of noun-class suffixes ( $-g$, -gu, -ge, -go)

A large number of noun stems end in a frozen class marker $-g(v)$. (For $-\eta$ see the following section.)

With $-g(v)$ the form is generally fixed, and plural yà: is added to the entire form. In the majority of cases there is little synchronic evidence for segmentation. The examples in (47) are of the form $\mathrm{CvC}-\mathrm{gv}$, probably syncopated from ${ }^{*} \mathrm{CvCv}-\mathrm{gv}$. The original suffixal vowel usually harmonizes with a preceding +ATR vowel, but $-g u$ is the default. Only one cognate per item is given in the right-hand column (in most cases there are several others). Some of the cognates from Najamba and Tebul Ure, which like DD belong to western Dogon, include a class suffix that is still synchronically segmentable in that language. Cognates from other languages, belonging to eastern Dogon, show the stem with no trace of the class suffix that is preserved (in frozen form) in DD. In the first few items in (47c), instead of a cognate there is a related DD form without the class suffix.
a. final $g e$ harmonizing with $e$

| gélgè | 'gear' | Najamba gǒn-gó |
| :---: | :--- | :--- |
| pésgè |  |  |
| é:gè |  |  |
| other possible case |  |  |
| pèlgé |  |  |$\quad$ 'sheep' | Tommo So pédú |
| :--- |

b. final $g o$ harmonizing with $o$

| dúmbògò | 'raised threshold' | Tommo So dúmbú |
| :--- | :--- | :--- |
| gògó (< * gòlò-gó ?) | 'fire' | Najamba gólò |
| gòsgó | 'body' | Najamba gòjí-ŋgé |
| ó:gò | 'waterjar' | Penange óy |
| pòlgó | 'knife' | Tommo So pòlú |
| sólgò | 'cream of millet' | Tommo So sólú |

c. final $g u$
related to verb without $g$
àlà:-[dúl-gù] 'thunder (n)' dùlé 'thunder (v)'
jóg-gù 'first layer of millet' jògé 'place first layer'
related to verb with -gùlè (§9.2.2)
pòs-gú 'shard'
other
dòlgú 'tiny window' Tommo So tàà dòlí-yé
ísgù 'sun' Tebul Ure ùdù-gó
jè:gú 'pillar' Donno So jên
gùsgú 'skin’
kàlgú 'boundary'
óbgù 'manure'
nòy-gú 'neighborhood'
Jamsay gùjú
Tommo So kálé
Najamba úbú
Yorno So nòyú
d. metathesized from *-ye (<*-ge) ?
gènné (<*gènŋé ?) 'blood’

## Najamba gěn-gé

The forms in (48) below normally end in nonsyllabic $-g$, becoming $-g u$ in combination with some following elements, notably definite $\grave{j}$. In (48a) are the three known stems that have $-g$ (always or optionally) in the independent singular but not in the plural or as compound initial. The examples in (48b) always have - $g$ as nouns, but have related verbs without $g$. These are probably just lexicalized cases of the verbal noun $-g(\grave{u})$, on which see $\S 4.2 .2 .1$. The examples in (48c) are unsegmentable synchronically, but cognates (either without $-g$, or with a segmentable class suffix including $g$ ) show that the $-g$ was originally a class suffix. Class suffixes survive in western Dogon, most productively in Najamba (-go, -ge) and Tebul Ure ( $-g u$ ), and they appear to be absent from the eastern Dogon languages.

```
a. -g(u) in singular only (segmentable)
    ě-g 'child' Jamsay î:n
        (plural è-wé)
    yă:-g~ yǎ: 'woman' Tommo So yǎ:
        (plural yà:-wé, compound' initial yà:
    yàlǔ-g~ yăl(-g) 'place' Tommo So yàlú
        (plural yàlí yà:, relative head yàl)
```

| b. noun with $-g(u)$, verb without $g$ |  |  |
| :---: | :---: | :---: |
| દ́rù-g | 'braids, coiffure' | Érè 'braid (v)' |
| Wह̂s-g | 'vomit (n)' | wésè 'vomit (v)' |
| jìbú-g | '(woman's) wrap' | jìb-yé 'put on wrap' |
| mándù-g | 'laughter' | màndé 'laugh (v)' |
| $p e ̂:-g(* p e ́ g e ̀-g)$ | 'button (n)' | pégè 'button (v)' |
| síbù-g | 'second layer of millet' | síbè 'place second layer' |
| c. fixed - $g(u)$ |  |  |
| Cv:g |  |  |
| bě:g | 'wood; stick' | Najamba bǎ:-gò |
| dû:g | 'north' | Tommo So dú: 'east' |
| jǐ:g | 'thorn' | Togo Kan jìyé |
| jǒ:g | 'fart' | Najamba gìyè-ngó |
| ò:gò-jǒ:g | 'waterjar-shard' | Tebul Ure -zòg-gó ‘shard' |
| kî:g | 'head' | Najamba kî:-ŋgè |
| kǒ:g | 'grass' | Penange kójí |
| mǒ:g | 'neck' | Najamba mô: |
| nǎ:g (1) (< *nà ${ }^{\text {áá-g) }}$ | 'cow' | Jamsay nàyá |
| nă:g (2) | 'foot' | Najamba nà:-gó |
| ně:g | 'oil' | Najamba ně-пgó |
| š̌:g | 'boubou (garment)' | Penange sòy |
| tă:g (< *tàgú-g ?) | 'ground' | Tiranige tágú |
| wǒ:g (<*ùgó-g ? | 'moon' | Donno So ùgó |
| yŏ:g (< * yògó-g ? | 'grass' | Jamsay yògó |
| yŏ:g (<*yòbó-g ?) | 'mutual understanding' | Tommo So yàbá 'consent' |
| $C v C g$ lor |  |  |
| -sâyg | 'digit (finger, toe)' | Tommo So sǎy |
| sǎyg | 'sister's child' | (contains ě-g 'child') |
| CvCvg |  |  |
| dúlùg | 'donkey' | Tommo So dúlú |
| ósùg | 'road, path' | Jamsay ójú |
| trisyllabic including syncopated CvCCvg |  |  |
| gùmlúg | 'hump (on back)' | Yorno So gúmóló |

### 4.1.1.3 Semi-segmentable $-\eta$ in noun stems

Another large number of nouns end in $-\eta$, which may also be what's left of an old class marker (compare Najamba -ngo and -ŋge). I treat it as segmentable for stems that lose it under some conditions, for example when followed (within the NP) by a vowel or by plural yà: . This excludes a few stable $\eta$-final stems like gâ: $\eta$ 'cat' and pé $\eta$ 'hip'.
(49) a. $-\eta$ usually dropped before plural yà: or any vowel

| $C v-\eta$ |  |
| :--- | :--- |
| $g o \check{n} \eta$ | 'thing' |
| $W e ̌-\eta$ | 'year' |
| $C v:-\eta$ |  |
| $o:-\eta$ | 'medication' |
| $b o ̂:-\eta$ | 'branch' |



dèlé-n 'elder same-sex sibling' has a possessed form dèlè, and its many cognates like dèré (Jamsay) lack a final nasal. However, dèlée-n ends in alveolar -n, not- $\eta$.
$-g$ and $-\eta$ are also common endings for adjectives, where segmentation may be easier when there are associated inchoative verbs ( $\S 4.5 .1$ ). $-g$ and $-\eta$ do not occur with numerals.

### 4.1.2 High-frequency nouns ('woman', 'man', 'child', 'person', 'thing')

'Man' and 'woman' have regular suffixal human plurals with -we. 'Child' has obligatory - $g$ ending in the singular but not in the plural. 'Woman' has optional $-g$ in the singular (chiefly in the possessed sense 'wife') but not in the plural. 'Person' shortens its vowel in the plural; alternatively, it is lexically short-voweled but lengthens its vowel in the unsuffixed singular.
singular plural
gloss
a. human suffixal plural -we
ánà ánà-wè 'man'
yǎ: yà:-wé 'woman'
(possessed yă:-g 'wife')
ě-g è-wé 'child' (accusative è-gí=ỳ)
nǒ: nò-wé 'person'
b. nonhuman free plural yà:
$g \check{\text { ón }} \boldsymbol{\eta} \quad$ gǒ ${ }^{n}$ yyà: 'thing'
'Child' is slightly irregular tonally. The definite plural is è-wé ggì yà: rather than expected \#è-wè ngí yà: . In other words, the H-tone does not shift onto the definite morpheme, as it does in e.g. yà:-wè t̀gí yà: 'the women' and nò-wè j̀gí yà: 'the people.

For compounds containing 'child', 'woman', and 'man' as initials or finals, see §5.1.6-7. Accusative forms of compounds ending in 'child' are tonally variable. Nonhuman compounds have accusative $-\grave{\text { è }}$ gí $=\grave{y}$ like the simple noun 'child', while human compounds have accusative -é-gì $=\grave{y}$.
nǒ: 'person' sometimes appears with short vowel when L-toned, as in nò ${ }^{\mathrm{L}}$ tómò là 'nobody', see (132b) in §6.6.3.

### 4.1.3 'So-and-so' (mâ:n)

'So-and-so' (Fr un tel, une telle), is a variable denoting a function over personal names. It is used in generalizations that require mention of a generic personal name. For example, "if some guy gives you trouble, tell him 'hey so-and-so, ...'"

### 4.1.4 Initial $C v(N)$ - reduplication in nouns

The noun sì-sǎl 'coarsely ground millet' (a common snack) is related to the verb sálè 'stonegrind coarsely'.

### 4.1.5 Final reduplications in nouns

No clear examples of final partial reduplication have turned up.

### 4.1.6 Nouns with full-stem iteration

A few nouns (and compound elements) have the form of iterated stems, with or without some phonological modification of the second iteration.
a. no segmental change
òllò-[kúr-kùr] 'chicken coop'
b. vocalic change
tèngè-tángà 'Dogon dancers on stilts'
c. vocalic ending
dèg-dégò: 'statuette (animist idol)'
kél-kèlò 'donkey's back-harness (saddle)'

### 4.1.7 Frozen initial $a N$ - in nouns

I can cite àn-tèmbú '(archaic) customs, animist rites’, cf. témbè 'find, encounter (by chance); inherit (from the previous generation)', but the pattern is obscure.

### 4.2 Derived nominals

In addition to the more or less productive derivational processes described in the following sections, I mention $n \varepsilon \grave{:-l \bar{\varepsilon}}$ 'food', obscurely related to $n \varepsilon \check{~}$ : 'eat (meal)' and to nă:- $\eta$ 'meal', and j̀nù-nó 'fatigue, suffering' related verb ón-nغ̀ 'get tired'. See also the inventory of cognate nominals for verbs in §11.1.2.4.

### 4.2.1 Characteristic derivative (-gé, rarely -gá: or -gá: ${ }^{n}$ )

The characteristic suffix, converting a noun denoting some attribute into a noun (or adjective) denoting an individual with such an attribute, is $-g \varepsilon \in$ after $\{\mathrm{L}\}$-toned noun. There is no morphological distinction between human, animate, and inanimate referents. Non-high final vowels in the input noun are sometimes reduced to a high vowel or schwa, and may then be syncopated.
noun gloss characteristic gloss
a. condition
jìmú- $\eta$ 'illness' jìm-g $\varepsilon$ 'sick person, patient'
b. body part
kìnjó 'nose' kìnjù-gé 'one with a (big) nose'
nèndá 'tongue' nèndò-gé 'one with a (big) tongue'
súnùnù 'ear' sùnùnù-gé 'one with (big) ears'
gùmlú-g 'hump' gùmlù-gé 'hunchback, one with severely curved back'
c. abstract attribute
jâwd 'wealth' jàwd̀̀-gé 'rich person'

A variant -gá: is attested: sèmbù-gá: ~ sèmbù-gé ‘strong, powerful' (sémbè 'power, strength, force'). From bê.: 'beard' the characteristic derivative is bè:-gá:" 'bearded one'.

Characteristic derivatives compete with relative clauses ('one who has X ') and with bahuvrihi compounds ('big-bellied', 'two-headed', §5.2.1).

### 4.2.2 Verbal nouns

### 4.2.2.1 Productive verbal noun with suffix $-g(\grave{u})$

The suffix $-g$ from L-toned /-gù/ can be added to most verbs. It follows an $\{\mathrm{HL}\}$-toned form of the verb, with I/U-stem vocalism. Monosyllabics are always Cî:-g from /Cí:-gù/. Bisyllabic and longer stems have stem-final $u$, tending toward schwa and subject to syncope especially after semivowels. The syllabic form $-g(\grave{u})$ can occur as a variant especially in syncopated $/ \mathrm{CvC}$-gù/ where $C_{2}$ is an unclustered consonant other than a semivowel, but apocope is more usual: jóbù-g (more common than jób-gù ) 'running' (53b). The mediopassive suffix takes the form -i:- before -g.

$$
\text { verbal noun gloss } \quad \text { verb gloss }
$$

a. monosyllabic

| nî:-g | 'drinking' | $n \varepsilon ̌:$ | 'drink' |
| :---: | :---: | :---: | :---: |
| dî:-g | 'arriving' | $d \varepsilon$ : | 'arrive' |
| wî:-g | 'seeing' | wě: | 'see' |
| gî:-g | 'exiting' | $g e ̌:$ | 'exit' |
| yî:-g | 'weeping' | yé | 'weep' |

b. bisyllabic (apocope more common than syncope)

| gínù-g ~ gín-gù | 'saying' | gìné | 'say' |
| :---: | :---: | :---: | :---: |
| írù-g ~ ír-gù | 'forgetting' | Írè | 'forget'" |
| jínù-g jín-gù | 'bringing' | jìné | 'bring' |
| $j o ́ b u ̀-g \sim j o ́ b-g u ̀ ~$ | 'running' | jòbé | 'run' |
| kánù- $g \sim$ kán-gù | 'doing' | kánè | 'do' |
| késù-g ~ kés-gù | 'cutting' | késè | 'cut' |
| ménù-g ~ mén-gù | 'coming' | mèné | 'come' |
| tárù-g ~ tár-gù | 'posting' | tárè | 'post' |
| CVNCV |  |  |  |
| kámbù-g | 'throwing' | kámbè | 'throw' |
| $N C V$ |  |  |  |
| ńdù-g | 'giving' | ńdè | 'give' |
| syncopating |  |  |  |
| tây-g | 'shooting' | táyè | 'shoot' |
| ûw-g | 'catching' | úwè | 'catch' |
| gîy-g | 'dancing' | gìyé | 'dance' |

c. trisyllabic
góndùrù-g 'hanging up' gòndùré 'hang (sth) up'
d. bipartite 'convey'
jè-bólù-g ~jè-ból-gù 'conveying’ jé-bòlé 'convey’
e. mediopassive
ób-ì:-g 'sitting’ ób-yè 'sit down'
kígìl-ì:-g 'returning' kígùl-yè 'return'
f. compounds with $\{\mathrm{L}\}$-toned initial

| $[b a ̀:-g]-[n a ̂ y-g] ~$ | 'beginning of day' | bâ:-g nàyé | 'day begin' <br> (nàyé 'spend night') |
| :--- | :--- | :--- | :--- |
| $[b a ̀:-g]-[d \varepsilon ́ n u ̀-g] ~$ | 'end of day’ | bâ:-g dèné | 'day end' <br> (dèné 'spend mid-day') |

The $-g$ verbal noun can be formed from existential quasi-verbs, unlike the case in some Dogon languages. From bò- 'be (somewhere), be present, exist' and its negation bò-nnú- 'not be (somewhere), be absent' we get bî:-g 'presence' and bò-nnú-g 'absence, lack, shortage', usually in compounds like ǹ̀nù-[bî--g] 'presence of water' and ǹnù̀-[bò-nnú-g] ‘lack of water'. My assistant also produced nám-ì:-g ‘desire’. However, he rejected \#jî:-g ‘having' from jò'have'.

From tíbè 'die' is formed tibù̀-gú 'dead body, corpse', distinct from tibbó: 'death'.
An imperfective negative verbal noun is attested in a text: jùmbè-nnù-gú ì '(the fact of) not letting go' (with definite $\grave{j}$ ), see (526) in §19.1.1. This is based on imperfective negative júmbè-nnú- 'do(es)/will not leave (let go)' but has an L-toned stem. Follow-up elicitation produced perfective negative jùmbà:-I-gú ì '(the fact ot) not having let go'. It was not possible to elicit verbal nouns of positive inflections such as those with imperfective -bv-.

### 4.2.2.2 Nominals with final -nà: and -à:

An apparent nominalizer -nà: occurs in possessed nouns derived from 'exit' and 'enter' in a few fixed collocations denoting seasonal transitions: bâ:-g ${ }^{L}$ gè:-nà: 'next year' (gě: 'exit'), jènă: ' $n$ nùyè-nà: 'entrance (beginning) of rainy season'.

The pair ìsí-g (isì-gú) 'sun' and ís(î)gà: 'day' suggests that the latter may contain a frozen ending à: of synchronically unclear function. Other nouns denoting times of day and seasons also end in a: (yá:gà: 'night', dèndígà: 'twilight', bà:-sénà: 'daybreak, first light', yè:gá: 'morning', jè:ná: 'rainy season', pàná: ‘dry season').

### 4.2.3 Iterated deadjectival abstractives

Any scalar adjective can form a nominal referring abstractly to the extent or measure of the quality. The modifying adjective, including final $-\eta$ or $-g$ if already present in the adjective, is iterated. The medial $-\eta$ is deleted as usual before a vowel, and it assimilates in position to a following consonant. The first iteration is $\{\mathrm{L}\}$-toned, the second $\{\mathrm{LH}\}$-toned with the tone break near the right edge
(54) a. no suffix
dènnò-dènnó 'shortness'
dògsò-dògsó 'heaviness; thickness (of wall)'
b. with -1]
consonant-initial mìnù-m̀-mìnú-bìnù-m̀-bìnú- - 'size, bigness'
bànù-m̀̀-bànú-y 'redness'
jàlà-ǹ-jàlá-ŋ 'length' or 'distance'
wàgù-ŋ-wàgú-ŋ 'distance'

```
consonant-initial
    غ̀llè- \(̀ l l \varepsilon ́-\eta \quad\) 'sweetness'
    ว̀nònò-ə̀nゝ̀nó- \(\eta \quad\) 'smoothness'
c. with \(-g(u)\)
    pày- \(g-p a ̌ y-g \quad\) 'width'
    mày(-g)-mǎy-g 'difficulty’
    yòrù-g-yòrǔ-g 'looseness'
```


### 4.2.4 Phrasal compound nouns

[yìgè-n]-děn 'omasum', i.e. the third "stomach" of ruminants, contains yìgé 'shake' and děn 'day'. The phrasing alludes to the fact that this organ, also called in archaic English 'psalterium' and 'manyplies', has many internal folds (resembling pages in a book), and takes a long time to clean in butchering.

### 4.3 Pronouns

### 4.3.1 Personal pronouns

Excluding logophorics, DD pronouns make the usual distinctions between first, second, and third persons. Inanimates are not distinguished from animates and humans in third person pronouns.

### 4.3.1.1 Independent, subject, and object pronouns

The forms are in (55). Logophorics behave like other pronouns in some ways. However, logophoric plural contains the nominal free plural particle yà: (except in preverbal subject function). The independent series, which is also the basis for the accusative, is uniformly H-toned. The preverbal subject (proclitic) series is uniformly L-toned. §4.3.1.3 below presents a preposed possessor series (for kin terms) that is mixed, with first and third persons L-toned and second person H-toned.
(55) Personal pronouns (nonpossessive)

|  | independent | accusative | subject |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | preverbal | suffixed |
| 1 Sg | mí | $m i ́=\grave{y}$ | mì | $-17$ |
| 1 Pl | í | $\underline{1}=\grave{y}$ | ì | -y |
| 2 Sg | ó | $o ́=\grave{y}$ | ò | -о: ~-๑: |
| 2 Pl | é | é $=\grave{y}$ | è | -e: $\sim-\varepsilon$ : |
| 3 Sg | ná | ná $=$ y | nà | - $\varnothing$ |
| 3 Pl | bé | $b e ́=y ̀$ | bè | -yà |


| 3Logo | mmé | $m m \varepsilon=\grave{y} \quad m m \bar{\varepsilon}$ | $-1]$ |
| :---: | :---: | :---: | :---: |
| 3LogoPl | mmé yà: | $m m \varepsilon ́ ~ y a ̀:=\grave{y}$ mmè | $-1)$ |

Discourse-definite kó, whose cognates elsewhere in Dogon often also function as inanimate pronouns (as in 'it will fall'), is more noun-like than pronominal in DD. For example, it does not occur as a postposed possessor (see the following section). In text T02 at 02:03 we find kó ná $=\dot{y}$ 'that is it', where kó is resumed by the regular 3 Sg pronoun ná.

### 4.3.1.2 Postposed pronominal possessors

Pronominal possessors are normally postposed to the possessum, including any modifying adjectives and numerals. The forms in (56) are used for alienable and sometimes for inalienable possession. In the logophorics, singular mغ̀ mə- $\eta$ resembles 1 Sg (m)mゝे and is L-toned like all of the regular pronouns. Plural logophoric mé yà:- $\eta$ diverges by keeping its $H$-tone and by including yà: free plural marker. (The "singular" mè mə̀- $\eta$ form can also be used in logophoric plural function.) One could also interpret the final nasal in mè mò- $\eta$ and $m \varepsilon ́ ~ y a ̀:-\eta$ as the definite marker.
(56) Possessor pronouns


V-initial forms like $\grave{o}-\grave{\jmath}$ may be articulated with an initial glottal stop.
The pronominal possessors in (56) are basically L-toned. Except for logophoric mè mò-ŋ̀, they can acquire an H-tone from a preceding/LH/-toned word by Rightward H-Tone Shift if the noun allows it: ìdé: ò-ŋ̀ 'your-Sg father', dà:rá: ò-ŋ̀ 'your mother', pésgè ò-1̀ 'your-Sg sheep-Sg', but bè:-g ó-ì 'your stick' (from /bè:-gú/). Likewise bè:-gù mmó 'my stick', where the stem-final vowel is (faintly) preserved. The H-tone does not extend to the -ì coda, which remains L-toned. Logophoric mè mò-ŋ̀ does not accept a shifted H-tone.

The C-initial possessors ( $1 \mathrm{Sg}, 3 \mathrm{Sg}, 3 \mathrm{Pl}$ ) require the full form of a preceding word including final short vowel or final $-\eta$, while the V -initial possessors ( $1 \mathrm{Pl}, 2 \mathrm{Sg}, 2 \mathrm{Pl}$ ) allow the end of the preceding word to be truncated. 'Rock' and 'stick' have different forms in (57a) and (57b), while 'tree' has constant form.

> 'rock' 'stick' 'tree’
a. vowel-initial possessor

| 1 Pl | dúmbà ì-ŋ̀ | bè:g í-ŋ̀ | kínnò ì-r̀ |
| :---: | :---: | :---: | :---: |
| 2 Sg | dúmbà ò-ŋ̀ | bè:g órì | kínnò ò-r̀ |
| 2 Pl | dúmbà è-ŋ̀ | bè:g é-r̀ | kínnò è-r̀ |

b. consonant-initial possessor, Rightward H-Tone Shift applies

| 1 Sg | dúmbà- $\eta$ mò | bè:gù mmó | kínnò mmò |
| :---: | :---: | :---: | :---: |
| 3 Sg | dúmbà-ŋ nà-ŋ | bè:gù ná-1̀ | kínnò nà-ท̀ |
| 3 Pl | dúmbà-ŋ bè̀n | bè:gù bé-ŋ̀ | kínnò bè̀-ŋ̀ |

c. consonant-initial possessor, Rightward H-Tone Shift fails to apply

3LogoSg dúmbà- $\eta$ mè mò- $\eta$ bě:g mè mò- $\eta$ kínnò mè mò- $\eta$
3LogoPl dúmbà-ŋ mé yà:-ŋ bě:g mé yà:-ŋ kínnò mé yà:-ŋ

### 4.3.1.3 Preposed pronominal possessors (tonally mixed)

Certain kin terms also allow preposed pronominal possessors as an alternative to the postposed possessors described above. Preposed pronominal possessors are segmentally identical to the independent pronoun (e.g. 1 Sg mí). For first and third persons, the preposed possessor takes L-toned form, e.g. 1 Sg mì, identical to the proclitic subject form used in relatives. Second persons, and logophorics, have H-tones, as in independent (not proclitic) pronouns. The noun gets an $\{\mathrm{HL}\}$ overlay, versus $\{\mathrm{L}\}$ after a nonpronominal possessor. The paradigm for '(man's) sister', unpossessed sǎ:- $\eta$, is (58). A list of the affected kin terms is given in §6.2.2. Interestingly, neither 'father' nor 'mother' allows preposed pronominal possessors.
possessed '(man's) sister'
a. possessor L-toned

| mì | $\mathrm{HL}_{\text {Sâ: }}$ | 'my sister' |
| :--- | :--- | :--- |
| ì | ${ }^{\mathrm{HL}}{ }_{\text {sâ: }}$ | 'our sister' |
| nà | ${ }^{{ }^{H L}}{ }_{\text {sâ: }}$ | 'his sister' |
| bè | ${ }^{\mathrm{HL}}{ }_{\text {Sâ: }}$ | 'their sister' |

b. possessor H -toned

| ó | ${ }^{\mathrm{HL}}$ sâ: | 'y |
| :---: | :---: | :---: |
| é | ${ }^{\mathrm{HL}}$ sâ: | 'your-Pl sister' |
| mmé | ${ }^{\mathrm{HL}}$ sâ: | 'his own sister' (logophoric) |
| $m m e ́ ~ y a ̀: ~$ | ${ }^{\mathrm{HL}}$ Sâ: | 'his own sister' (logophoric) |

The same pronominal forms, but with an unusual $\{\mathrm{LH}\}$ overlay on the (pseudo-)possessum, occur in the construction ' X alone', see $\S 4.6 .1 .1$. These tonally mixed pronominal forms are also used for subjects in positive adjectival comparative clauses, see (305a) in §12.1.1.2. Another construction with these tonally mixed pronominals is one type of propositional complement of perception verbs, see (493) and discussion in §17.2.2.

### 4.3.2 Personal pronouns as complements of postpositions

The postpositions that can take the full range of pronominals as complements are composite postpositions, reduced from e.g. '(at) the rear of X', in the fashion of English in back/front of $X$. The postpositional complements are therefore morphosyntactically possessors of the relevant noun ('back', 'front', etc.). See the relevant sections in chapter 8.

### 4.4 Determiners

### 4.4.1 Definite ( $\mathfrak{j}$, $\grave{\mathrm{g}} \mathrm{gì}-)$

The basic definite morpheme is $\grave{\eta}$, extended as ìgì before plural yà:, accusative $=\dot{y}$, and postpositions. The preceding word (noun, adjective, or numeral) is not tone-dropped. The variant $\grave{j}$ could be analysed as an enclitic, since it syllabifies with the word to its left.

Definite ì and $\eta g i$ allow a word-final $u$, otherwise apocopated, to surface: /è-gú/ 'child', in isolation usually é-g, but definite è-gú t̀ 'the child'.

A preceding / $\mathrm{LH} /$-toned word shifts its H -tone to the full syllable in $\eta g i ̀$, but not to free plural yà: : For example, /bè:-gú/ 'stick' appears as bě:-g 'a stick', bè:-gù ̀jgí =y 'the stick (object)', and bè:-gí yà: 'sticks'.

Overt accusative $=\dot{y}$ is associated with a) human NPs, and b) definite NPs. Therefore it is regularly present with definite human NPs, and regularly absent with indefinite nonhuman NPs. (59) is a somewhat idealized paradigm for nouns including number, definiteness, and accusative marking.

|  | indefinite |  |
| :--- | :--- | :--- | :--- | :--- |
| simple | object | definite |
| simple |  |  |$\quad$ object

Paradigms for two basic human nouns are in (60). The plural here is -we, suffixed to the noun (§4.1.1.1). Free plural yà: is not allowed directly after -we, but it is required when the definite marker (or anything else) intervenes between them. 'Man' and 'person' have no irregularities. With 'woman' ( 60 c ), the additional wrinkle is the optional /-gu/ ending on the singular, when not followed by plural -we or by the definite marker.

> | indefinite |  | definite |  |
| :--- | :--- | :--- | :---: |
| simple | object | simple |  |

a. ánà 'man'
singular
plural

$$
\begin{aligned}
& \text { ánù-wè ánù-wè }(=y \text { y } \quad \text { ánù-wè ìggì yà: ánù-wè ìg̀ì yà: }=\text { ỳ }
\end{aligned}
$$

```
b. nǒ: 'person'
```



```
    plural nò-wé nò-wé( \(=\) ỳ) nò-wè ìgí yà: nò:-wè ìgí yà: = y
    c. yǎ: 'woman', yǎ:-g especially in the sense 'wife'
    singular yǎ: yă: \(=\) y \()\) yǎ: \(\grave{j} \quad\) yà: \(\grave{\text { j̀gí }}=\grave{y}\)
    yǎ:-g yǎ:-g ~ yà:-gí = y
    plural yà:-wé yà:-wé( = ỳ) yà:-wè j̀gí yà: yà:-wè j̀gí yà: = y
```

Some nonhuman animate and inanimate nouns are illustrated in (61). The plural is now the free plural marker yà: throughout. Overt accusative marking is shown here for definite but not indefinite objects, but there is some variation not shown here.
indefinite
simple object simple definite
object
a. pésgè 'sheep'

| singular | pésgè | pésgè | pésgè $\eta$ ỳ | pésgè ngì $=y$ |
| :--- | :--- | :--- | :--- | :--- |
| plural | pésgè yà: | pésgè yà: | pésgè ngì yà: | pésgè ngì yà: $=$ y |

b. ùnó-ク 'dog'
singular ùnó- $\quad$ ùnó-ŋ ùnó ŋ̀ ùnò ŋ̀gí=

c. bè:-gú 'stick'
$\begin{array}{lllll}\text { singular } & \text { bě:-g } & \text { bě:-g } & \text { bè:-gú } \grave{\eta} & \text { bè:-gù ìgí=ỳ } \\ \text { plural } & \text { bè:--gí yà: } & \text { bè:-gí yà: } & \text { bè:-gù ìgí yà: } & \text { bè:-gù ض̀gí yà: }\end{array}$

Definite $\grave{\eta} \sim \eta g \grave{\text { l }}$ is not always distinguishable from proximal demonstrative $\grave{\eta} g u ́$ (next section), i.e. 'the sheep' (known from previous discourse) versus 'this sheep' (pointing). The problem is most acute with / $\mathrm{LH} /$-toned nouns like 'dog' and 'stick' in the definite accusative singular $\grave{\eta} g g^{\prime}=\grave{y}$, which is indistinguishable from the accusative form of demonstrative $\grave{\eta} g u ́$, namely $\grave{\eta} g \dot{I}^{\prime}=\grave{y}$. There is no problem with /HL/-toned nouns, which are tone-dropped before the demonstrative but not before the definite: pèsgè ${ }^{\mathrm{L}}$ ๆ̀ $g i ́=y$ 'this sheep' (object) versus pésgè ŋ̀gì $=\grave{y}$ 'the sheep' (object).

Another problem is that some nouns (and adjectives), like ùnó- $\eta$ 'dog' (61b), end in a quasi-suffix $-\eta$ that makes it difficult to distinguish indefinite singular from definite singular in non-object function. My assistant had difficulty distinguishing 'the dog came' from 'a dog came' on the one hand, and (as indicated above) from 'this dog came' on the other. Given indefinite singular ùgó- $\eta$ 'a dog' and demonstrative ù $\grave{̊}{ }^{\mathrm{L}}$ ŋ̀gú 'this dog', my assistant offered two definite singular options: ùyó = $\grave{\eta}$ with final L-tone (only faintly distinct from ùクó- $\eta$ in an actual clausal context), and ùnó ýgù with a syllabic variant of the definite marker but without a tone-shift.

Unmarked indefinite (62a) contrasts with definite (62b).
a. yǎ:
bólè- $\varnothing$
woman
come.Pfv-3SgSbj
'A woman came.'

| b. | [yă: | ì] | bólè- $\varnothing$ |
| :---: | :---: | :---: | :---: |
|  | [woman | Def] | come.Pfv-3SgSbj |
|  | 'The wo | came |  |

### 4.4.2 'This/that' (deictic demonstrative pronouns)

Demonstratives occur as postnominal modifiers within NPs; they may also be used absolutely (in the absence of the noun). (63) shows the unmarked singular, its accusative form, and three plural forms. One is an optional human-only form, while the other two are general plurals (human or nonhuman). Accusative $=\dot{y}$ can be added to any of the plurals in object function, not shown here.

| category | singular | object | plural |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | human | general |
| proximal-1 | $\check{o g} g$ | $\grave{o g} g^{\prime}=\grave{y}$ | ógù-wè | ògí yà: <br> ògù (bè)lé: |
| proximal-2 | ı̀gú | j̀gí ${ }^{\text {y }}$ | ற̀gú-wè | j̀gú yà: <br> ǹgù bèlé: ~ ìgù bùlé |
| distal or discourse-definite | kó | $k o ́=y$ | kò-wé | kó yà: <br> kò bèlé: ~ kò bùlé: |

kó can function as a one-word discourse-definite 'that', either concrete (referring to an object) or abstract (referring to a state of affairs). An example is $k \sigma^{\text {L }} \grave{n} d \grave{\jmath}-\eta$ 'after that; thereafter', e.g. (447a-b) in §15.5.3. In this function, kó can also be elaborated as kó-ŋgù̀ (§6.5.1).

As mentioned in the preceding section, there can be difficulties distinguishing proximal-2 g̀gú from the definite marker in some combinations. This is the case specifically in the accusative form $\grave{j} g i ́=y$, after /LH/-toned nouns (or adjectives).

Demonstratives, unlike the definite marker, control tone-dropping on the preceding noun (or word-string including a noun). Thus pésgè 'sheep', pèsgè ${ }^{\mathrm{L}}$ ŏg 'this sheep', pèsgè ${ }^{\text {L }}$ g̀gú 'this sheep', pèsgè ${ }^{\text {L }}$ kó 'that sheep', versus definite pésgè = ì 'the sheep-Sg'. For /HL/-toned nouns like 'sheep', tone-dropping distinguishes even proximal-2 accusative pèsgè ${ }^{\mathrm{L}}$ j̀gí $=\grave{y}$ from definite accusative pésgè ì̀gì $=\grave{y}$.

### 4.4.3 Demonstrative adverbs

### 4.4.3.1 Deictic and discourse-definite locative adverbs

The basic 'here' and 'there' adverbs are in (64).
form gloss
a. based on locative postposition nì:

```
ò-ní: ~ò- \(\mathfrak{y} \quad\) 'here'
yé, yé-nì: 'there' (discourse-definite)
kó- 1 !́ 'there' (strong discourse-definite)
```

b. based on -ŋ̀à:
í-pà:~ fi-pà: 'here'
yá-nà: $\quad$ '(over) there' (deictic)
kú-yà: $\quad$ 'there’ (strong discourse-definite)
$\grave{o}-n i ́:$ is given in isolation, but in allegro speech the reduced form $\grave{o}-\bar{y}$ is usual. kó-ý is likely a similar compression. ò-ní: contains proximate $\check{o}$ - as in $\check{o} g$ 'this', and locative postposition nì: . Locative morpheme -yà: in (64b) is not otherwise attested.

In the common phrase 'be here', there are two possibilities. One is ò-ní: 'bó- without existential yè but with a downstepped H -tone on bò 'be', possibly pointing to an original *òní(:) yè bó- where the existential particle raised the tone on 'be'. The other is $\check{o}-\eta$ ' 'bó- 'be here' pronounced [ǒmbō], perhaps a further contraction of the preceding.

### 4.4.4 Presentatives ('here's ...!')

Presentatives ('here's X', 'there's X') are suffixally conjugated. They follow an NP (pronominal or otherwise), as in séydù òmbò- $\varnothing$ 'here's Seydou!' They are always predicative. Combinations with pronouns are in (65).
'here's X ' 'there's X '

| 1Sg | mí òmbò- | mí kòmbò- |
| :--- | :--- | :--- |
| 1Pl | í ombò-- | í kòmbò-- |
| 2Sg | ó òmb-ò: | ó kòmb-ò: |
| 2Pl | é ómb-è: | é kòmb-è: |
| 3Sg | ná òmbò- $\varnothing$ | ná kòmbò- $\varnothing$ |
| 3Pl | bé òmbò-n | bé kòmbò-n |

These forms are specialized and highly contracted versions of ò-ní: 'here' and kò-ní: 'in that' (see the preceding section) plus a conjugated form of bò- 'be (somewhere)'.

### 4.5 Adjectives

### 4.5.1 Inventory of adjectives

This section describes the forms of modifying (i.e. attributive) adjectives. For adjectival predicates see $\S 11.4$. For de-adjectival verbs (inchoative and factitive) see $\S 9.5$. For adjectival intensifiers, either suppletive or derived by a special final reduplication, see §8.4.7.4.

Modifying adjectives immediately follow the noun and control tone-dropping on it (and on any intervening adjective). Many of them end in either $-g u$ or $-\eta$, both of which get their tones from the stem. Before plural yà: and before pronominal possessors, either the $-\eta$ ending is deleted, mainly after a nasal syllable (...bìnú yà: 'big-Pl') but also with kéllè-ŋ 'cold', or else it is realized as nasalization of the final vowel (wàgú- $\eta$, wàgún yà:). By contrast, $-g u$ is stable and is not deleted. Whether to hyphenate it, as in bèr(ù)-gú 'nearby' (66c), or to treat it as part of the stem, as in dâ:g 'small' (66a), is based on whether the $g$ is retained in suffixed derivatives like the inchoative ( $\S 9.5$ ) and/or in the diminutive. However, this distinction may be variable across speakers. Word-final $u$ is subject to apocope where phonologically possible; this applies mainly to the $-g u$ adjectives, e.g. pày-gú 'wide'. The tone of the
apocopated vowel then re－links to the left；these forms are shown below in parenthesis，e．g． pǎy－g．The plurals with yà：in（66）are mainly for nonhuman referents．
（66）adjective plural gloss
a．size（2 or 3 dimensional）and age
bìnú－n
pǎy－g（pày－gú）pǎy－g yà：＇wide（passage），spacious（area）＇
dâ：g（dá：gù）dâ：g yà：
dà：g－é：－g（．．．－è：－gú）dà：g－é：－g yà：＇small（Dimin）’（variant dà：k－è：－gù）
órè：－g（órè：－gù）órè：－g yà：＇tiny（baby，sprig）；cramped（space）＇
pǎy pǎy yà：＇aged，elderly（person）＇
dìy̌：dìy̌̌：yà：＇old（object）＇
kàsǎ：kàsǎ：yà：＇new＇
b．length（one－dimensional measure）
jàlǎ－ŋ
dènnó
mìnú－ŋ
jàlǎy ${ }^{n}$ yà：＇long；tall＇
dènnó yà：＇short（rope，person）＇
mìnú yà：＇deep（well，hole）＇
c．distance
wàgú－$\eta \quad$ wàgún yà：＇distant，far away＇
bèr（ù）－gú（bèrǔ－g）bèr－gí yà：＇nearby，close by＇
d．temperature and speed
ḿmう̀－$\quad$ ḿmゝ̀ ${ }^{n}$ yà：＇hot＇
ússù－$\quad$ ússù yà：＇fast＇（comparative form ùsùsú ）
kéllè－$\eta \quad$ kéllè yà：$\quad$＇cold，cool＇$=$＇slow＇
e．surface qualities

| ónònò－ๆ | 万nว̀nゝ̀ ${ }^{n}$ yà： | ＇smooth，sleek（texture）＇ |
| :---: | :---: | :---: |
| búlò̀o－ŋ | búlòlo ${ }^{n}$ yà： | ＇coarse（texture）＇ |
| દ́gè－$\eta$ | غ́gè ${ }^{n}$ yà： | ＇hard（rock）＇（＝＇tight＇） |
| kǒy－g（kj̀－gú） | kǒy－g yà： | ＇soft，breakable（rock）＇ |
| mánnò | mánnò yà： | ＇dry（clothing）＇ |
| òlǔ－g（òlù－gú） | òlù－gí yà： | ＇wet（clothing）；soft（skin） |

f．ease and pressure
mǎy－g（mày－gú）
mǎy－g yà：＇difficult（work）＇＝＇expensive’
bállà
bállà yà：$\quad$＇easy（work）＇＝＇cheap＇
ह́gè－$\quad$ ह́gèn yà＇tight＇（＝＇hard＇）
yòrǔ－g（yòrù－gú）yòrù－gí yà：＇loose，slack＇
g．weight

| dógsò | dógsò yà： | ＇heavy＇ |
| :---: | :---: | :---: |
| mènjé－$\quad$ | mènjéy ${ }^{n}$ yà： | ＇thin＇ |
| yèwùlǔ－g（yèwùlù－gú） | yèwùlǔ－g yà： | ＇lightweight＇ |
| દ́nènè－ŋ | દ́nènè ${ }^{n}$ yà： | ＇light，thin（fabric，paper）＇ |

h. taste

ह̇lè̀n
gállà-n
ámmà-ŋ
ว̆:ท (ò:ŋú)
kòló:
kúrù̀-ŋ
sélò
súmmù-ŋ
i. sharpness
síyò-!
dùmbŭg (dùmbùgú)
j. ripeness
íl̀: (participle)
béndò
ánànà-n
kòló:
ธ́mmう̀-ŋ
k. color
bánù-ท
g $\varepsilon$ m̀̀ $\grave{\varepsilon}-\eta$
pílà-n
wérè-ŋ
pór-mínè
kàbá
sògòlá

1. livestock condition
ámù-n
kómmò
jâ:s (já:sù)

ह́llè yà: $\quad$ 'delicious, sweet'
gállà yà: 'bitter (like some medicines)'
ámmà yà: $\quad$ 'sour, acrid (lemon); curdled (milk)'
̌̌:刀 yà: $\quad$ '(cooked grain) plain, without sauce'
kòló: yà: $\quad$ 'fresh (milk)' (= 'unripe, raw' 66 j )
kúrùn yà: 'undiluted, concentrated (liquid)'
sélò yà: 'weak, diluted'
súmmun yà: 'diluted (with water)'
síy ${ }^{n}$ yà: $\quad$ 'sharp (blade)'
dùmbŭg yà: 'blunt (blade)'
íl̀: yà: $\quad$ 'ripe (grain); cooked, done (meat); curdled (milk)'
béndò yà: 'half-ripe'
ánànà yà: 'half-ripe (fruit)'
kòló: yà: $\quad$ 'unripe (fruit); raw, uncooked' (= 'fresh (milk)' 66h)
ómmò yà: $\quad$ 'rotten (fruit, meat)'
bánù yà: $\quad$ 'red (brown)'
gémè yà: $\quad$ 'black (dark)'
pílà ${ }^{n}$ yà: $\quad$ 'white (light-colored)'
wérin ${ }^{n}$ yà: $\quad$ 'green; fresh (vegetation)'
pór-mínè yà: ‘yellow' (pórógó ‘locust-bean tree')
kàbá yà: 'multicolored'
sògòlá yà: 'multicolored'
ámù yà: $\quad$ 'plump (animal)', homonym of 'sour'
kómmò yà: 'lean (animal)'
jâ:s yà: 'weak, feeble'
m. fullness
$j \hat{o}$ :
úsyò
n. evaluation
nályò
gènǒ:
né:nè
mònjŭg (mònjùgú)
sálà:
jô: yà: 'full'
úsyò yà: $\quad$ 'empty' = 'deserted'

| nályò yà: | 'pretty' |
| :--- | :--- |
| gènš: yà: | 'good' |
| né:nè yà: | 'exact (identity)' |
| mònjŭg yà: | 'bad' = 'ugly' |
| sálà: yà: | 'nasty' |

gènǒ: yà: $\quad$ 'good'
né:nè yà: $\quad$ 'exact (identity)'
mònjŭg yà: 'bad' = 'ugly'
sálà: yà: 'nasty'

Stative adjectival predicates (' X be ADJ') are formed by adding 'be' to the adjectives (§11.4). Many adjectives also have a related inchoative verb ' X become ADJ' that can be directly
inflected. The inchoative can be made factitive ('Y make X ADJ' by adding the regular causative marker (§9.5).

### 4.5.2 Deverbal adjectives ('woven') (-yà-1́, ó:, -ú )

Adjectives denoting states that result from an action performed on the entity can be derived from the relevant verb. -yà- $\boldsymbol{y}$ (67a) is confined to this construction but probably contains the mediopassive suffix. Its relationship to the combination of A-stem verb plus definite(?) ì (§15.2.3) is unclear. The textual occurrence of nàl-yà- $\eta$ 'born’ is in an indefinite environment (T01 05:30), so the final $\eta$ cannot be taken as the definite marker. Final ó: (67b) is an ordinary perfective participle. The type with -ú (67c), often apocopated where phonologically possible, is productive in other Dogon languages (e.g. Jamsay) as verbal nouns or deverbal adjective, but DD -ú is limited to a few deverbal adjectives.

$$
\begin{array}{llll}
\text { adjective } & \text { gloss } & \text { verb } \quad \text { gloss } \tag{67}
\end{array}
$$

a. with -yà- $\boldsymbol{y}$ (mediopassive)


う̀w-yà-1́ 'sewn'
dòng-yà-ŋ́ 'pounded'
б́wè 'sew'
dóngè 'pound (in mortar)'
yigì-yà-1́ 'sifted’ yìgé 'sift'
jà:nd-yà-ý 'cooked in pot' jà:ndé 'cook in pot (with sauce)'
pògùl-yà-1́ 'roasted on fire' pógùlè 'roast on fire'
nàl-yà-ý 'born'
nàl-yé 'be born'
b. with final ó: (perfective participle)
wàsó: 'remaining, left' Wàsé 'remain, be left over'
c. with -ú (deverbal adjective)

| sìmb-ú | 'grilled' | símbè̀ | 'grill, roast' |
| :--- | :--- | :--- | :--- |
| pǒr- $\varnothing(p \grave{r-u ́) ~}$ | 'castrated' | pórè | 'castrate' |
| tànj-ú | 'pounded coarsely' | tánjè | 'pound (grain, first time)' |
| păg- $\varnothing(p a ̀ g-u ́) ~$ | 'bundled' | págè | 'tie (in a bundle)' |

ànjù-[kámb-ù] 'shepherds' bread' (cooked between two hot stones), from verb kámbè 'cook (bread) between two hot stones' may be related, but it has a different tone pattern and the initial is obscure.

### 4.6 Numerals

### 4.6.1 Cardinal numerals

4.6.1.1 'One' (tómゝ̀), 'same (one)', and 'other' (nàgá, â:y)
tómə̀ ' 1 ' functions tonosyntactically as an adjective, so it controls tone-dropping on the preceding noun: ànà ${ }^{\mathrm{L}}$ tómò 'one man' (< ánà).

In the counting progression (' $1,2,3, \ldots$ ') the first vowel is prolonged: tó:mò (perhaps better written $t o ́ \rightarrow m \grave{\jmath}$ ). This anticipatorily mimics the prosodic form of the next few numerals, which begin with $C v$ : syllables.
'(Not) anything' is gò- $\eta{ }^{\mathrm{L}}$ tómò là, rather frozen but still parsable. See (132a) in §6.6.3 below for mark-up.
' X alone' or 'only X ' is expressed as follows: sé: dù ${ }^{\mathrm{L}}$ tòmò: 'Seydou alone', è̀-wé ${ }^{\mathrm{L}}$ tòmò: 'the children alone'. Here ${ }^{\mathrm{L}}$ tòmò: is $\{\mathrm{L}\}$-toned as a possessum. Pronouns likewise show the same tonal form as in preposed inalienable possessors (§4.3.1.3), but with pronouns 'only' has an unusual $\{\mathrm{LH}\}$ overlay as opposed to the $\{\mathrm{HL}\}$ of pronominally possessed kin terms.
'X alone'
a. possessor L-toned

| mì | LH tòmó: | 'I alone' |
| :--- | :--- | :--- |
| ì | LH tòmó: | 'we alone' |
| nà | LH tòmó: | 'he/she/it alone' |
| bè | LH tòmó: | 'they alone' |

b. possessor H-toned
ó ${ }^{\text {LH }}$ tòmó: 'you-Sg alone'
é $\quad{ }^{\text {LH }}$ tòmó: $\quad$ 'you-Pl alone'
mmé ${ }^{\text {LH }}$ tòmó: 'he/she alone' (logophoric)
mmé yà: ${ }^{\text {LH }}$ tòmó: 'they alone' (logophoric)
'Other' in the context of replacement of one entity by another is the adjective nàgá, as in ànà ${ }^{\text {L }}$ nàgá '(an) other man'. Another word, â: $\eta$, can function as noun or adjective, in the (obviative) sense 'the other one', switching from one referent to another that it is paired with, for example in a narrative about two brothers. For the sense 'apart' see §8.4.7.3.

### 4.6.1.2 '2' to ' 10 '

The forms of numerals ' 2 ' to ' 10 ' are in (69). The forms used in the rhythmic counting progression ' $1,2,3,4, \ldots$ ', beginning with $t o \rightarrow m \grave{\prime}$ ' 1 ', are the same as those used in ordinary numeral phrases like 'two cows'.

| gloss | form | in counting sequence |
| :--- | :--- | :--- |
| '2' | né:gè | né:gè |
| '3' | tà:ndú | tà:ndú |
| '4' | ké:sò | ké:sò |
| '5' | ǹnó | ǹnó |
| '6' | kúlè: | kúlè: |
| '7' | sô:y | sô:y |
| '8' | sè:lé | sè:lé |
| '9' | tù:wá | tù:wá |
| '10' | pê:l | pê:l |

In combination with ' 2 ', pronouns take L-toned form and the initial nasal of the numeral is geminated: ì nné:gè 'we two, the two of us', è nné:gè 'you two', bè nné:gè 'the two of them'.

Contrast í tà:ndú 'we three', í ké:sò 'we four', etc. with the usual H-toned independent pronouns and no change in the onset of the numeral.

### 4.6.1.3 Decimal multiples (' 10 ’, ‘20’, ...) and composites ( ${ }^{\prime} 11$ ', ‘59’, ...)

The multiples of ' 10 ' are given in (70). Beginning with ' 20 ', most of them consist of combinations of $p \hat{\varepsilon}: 1$ ' 10 ' with the relevant single-digit numeral, subject to various contractions. The long vowel of $p \hat{\varepsilon}: l$ is shortened and its $l$ assimilates or disappears before a coronal consonant. Its tone also polarizes to the initial-syllable tone of the digit term (§3.7.3.2). /LH/-toned digit terms ' 30 ' and ' 50 ' drop the final H-tone, but ' 90 ' escapes this tone-lowering. There are special suppletive forms for ' 40 ' and ' 80 '.

```
gloss form
    `10' p\hat{\varepsilon}:1
    '20' pè-né:gè
    '30' p\varepsiloń-rà:ndù
    '40' d\varepsiloň:
    `50' p\varepsilońnnò
    `60' pèl-kúlè:
    '70' p\grave{s-sô:y}
    '80' sǐn
    `90' p\varepsiloń-tù:wá
```

Combinations of a decimal multiple with a single-digit from ' 1 ' to ' 9 ' follow the formula [DECIMAL + DIGIT + sìgà]. Compare adverbial sìgà 'more' and predicative sìgá 'be more' (§12.1.1.5, §12.1.2). An example is p $\hat{\varepsilon}$ :l tómò sìgà ' 11 '. The digit terms take slightly different forms in such combinations (71). Observe the shortening of long vowels in bisyllabic digit terms (' 2 ', ' 3 ', ' 4 ', ' 6 ', ' 8 ', ' 9 '), but not in monosyllabic ' 7 '. Also note that / $\mathrm{LH} /$-toned digit terms (' 3 ', ' 5 ', ' 8 ', ' 9 ') transfer their H -tone to the first syllable of sìgà by Rightward H -Tone Shift (§3.7.4.1).

| gloss | form | after decimal term |  |
| :--- | :--- | :--- | :--- |
| ' 1 ' | tómò | tómò | sìgà |
| '2' | né:gè | négè | sìgà |
| '3' | tà:ndú | tàndù | ${ }^{\mathrm{H}+}$ |
| sígà |  |  |  |
| '4' | ké:sò | késò | siggà |
| '5' | ǹnó | ǹnò | $\mathrm{H}+$ sígà |
| '6' | kúlè: | kúlè | siggà |
| '7' | sô:y | sô:y | sìgà |
| '8' | sè:lé | sèlè | $\mathrm{H}+$ sígà |
| '9' | tù:wá | tùwà ${ }^{\mathrm{H}+}$ sígà |  |

The forms taken by the decimal term in these combinations are in (72). An irregular contraction in ' 15 ' is mentioned under ' 10 '. With this exception, there is no systematic reduction. However, composite numerals like these are often pronounced rapidly and may show low-level phonetic reductions.

| gloss | independent | before digit term |
| :---: | :---: | :---: |
| '10' | pê:1 | $p \hat{\varepsilon}: 1$, except in pé-nnò sìgà ' 15 ' |
| '20' | pè-né:gè | pè-né:gè |
| '30' | pé-rà:ndù | pé-rà:ndù |
| '40' | $d \varepsilon$ : | $d \varepsilon$ : |
| '50' | pé-nnò | pé-nnò |
| '60' | pèl-kúlè: | pèl-kúlè: |
| '70' | $p \mathrm{e} s$-sô:y | pès-sô:y |
| '80' | sǐn | sǐn |
| '90' | pé-tù:wá | pé-tù:wà |

### 4.6.1.4 Large numerals (' 100 ', ' 1000 ', ...) and their composites

The stems in (73) are noun-like morphosyntactically.

```
gloss form
'hundred' t\varepsiloń:m(n)dèr\varepsiloǹ (<Fulfulde)
'thousand' mùnjú
'million' mìlyón 
```

For the exact numbers ' 100 ', ' 1,000 ', and ' $1,000,000$ ', the numeral ' 1 ' (tómゝे) need not be added to the numeral. For higher multiples (' 200 ', ' 5,000 ', etc.) the relevant numeral is added: mùnjù né:gè 'two thousand'. té:mdèrè can be reduced to té:mè or té:mèdè when followed by a single-digit term.

Of course the multiples of any of these large numbers can be combined with lower-order numerals.

| pésgè [té:mè | né:gè] | [pé-nnò tàndù | sígà] |
| :--- | :--- | :--- | :--- | :--- |
| sheep [hundred two] | [ten-five three | plus] |  |
| 'two hundred fifty three sheep' |  |  |  |

### 4.6.1.5 Currency

Currency in all local native languages is calculated based on a unit equivalent to five francs CFA except for large amounts beginning with one million francs CFA. This unit is called bû:d (</bú:dù/) in DD, as in Fulfulde and several neighboring Dogon languages.

### 4.6.1.6 Distributive iteration of numerals

Numerals are iterated to indicate distributivity: 'two each', 'two by two', 'two at a time', etc. Forms for the basic numerals are in (75). There are no systematic phonological adjustments, though some phonetic reductions can occur in allegro speech.

| gloss | form | distributive |
| :--- | :--- | :--- |
| ＇1， | tómò | tómò－tómò |
| ＇2＇ | né：gè | né：gè－né：gè |
| ＇3＇ | tà：ndú | tà：ndù－tà：ndú |
| ＇4＇ | ké：sò | ké：sò－ké：sò |
| ＇5＇ | ǹnó | ǹnó－ìnó |
| ＇6＇ | kúlè： | kúlè：－kúlè＂ |
| ＇7＇ | sô：y | sô：y－sô：y |
| ＇8＇ | sè：lé | sè：lé－sè：lé |
| ＇9＇ | tù：wá | tù：wá－tù：wá |
| ＇10＇ | pê：l | pê：l－pê：l |

My assistant even repeated compound numerals in their entirety in this distributive construction，for example，＇ 11 ＇．

See also interrogative à：ŋá：－à：クá：＇how much（each）？＇（§13．2．2．6），and quasi－reciprocal nàgá－nàgá＇other－other＇（§18．4．3）．

## 4．6．2 Ordinal adjectives

Ordinals from numerals are covered in the subsections below．Ordinals are ordinary adjectives syntactically，i．e．，they control tone－dropping on a preceding noun．

## 4．6．2．1＇First＇（kòsá：～gòsá：）and＇last＇（sáktè）

A lexical ordinal adjective＇first＇is kòsá：～gòsá：．However，tó：mゝ̀（lengthened form of tóm̀̀
＇ 1 ＇）is also observed in what amounts to ordinal use．
For gว̀sá：as adverbial＇first（ly）＇see §8．4．6．2．
＇Last（in a series）＇is expressed by the adjective sáktè．

## 4．6．2．2 Other ordinals（－nnó）

Other ordinals are formed by adding－nnó or variant to the numeral，whose tones are dropped． Other than this there are only minor phonological adjustments．

## form

gloss
a．single－digit numeral
nè：gù－nnó
tà：n－nó
késù－nnó
ǹnう̀－nnó
kùlè：－nnó
sò：y－nó
sè：lè－nnó
tù：wà－nnó
pè：－nnó
＇second＇
＇third＇
＇fourth＇
＇fifth＇
＇sixth＇
＇seventh＇
＇eighth＇
＇ninth＇
＇tenth＇
b. decimal
pè-nègè-nnó 'twentieth'
c. decimal plus single-digit numeral
tòmう̀-sìgà-nnó
'eleventh'
d. hundred
tè:mdèrè-nnó 'hundredth'

The interrogative is à:クù-nnó 'which?' (ordinal, e.g. 'second', 'third', etc.), French quantième, from à:ŋá: 'how many?’

### 4.6.3 Fractions and portions

'Half' (or other large division, not necessarily an exact fraction such as one-half or one-third)


## 5 Nominal and adjectival compounds

In the tonal-type notation I use for compounds, $\dot{x}=\{H\}$ tone overlay, $\hat{x}=$ falling $\{H L\}$ overlay, $\check{\mathrm{x}}=$ rising $\{\mathrm{LH}\}$ overlay, $\grave{\mathrm{x}}=\{\mathrm{L}\}$ overlay, and $\overline{\mathrm{x}}=$ regular lexical tone (no overlay). The $x$ variable can be replaced by $n$ (noun), $v$ (verb), adj[ective], or num[eral] as appropriate. For example, $[\mathrm{n} \bar{n}]$ is a noun-noun compound type with tone-dropped initial and unchanged lexical tone on the final. [ǹ $\bar{n}$ ] could also be represented as $X^{L} Y$ using a tonosyntactic superscript.

Certain nonmonosyllabic nouns ending in long vowels (originally due to contracted nounclass suffixes) occur with final short vowels in compounds. Thus nùmó: 'hand, arm', but nùmò-tàgá: 'palm (of hand)'. This is not a productive process, however.

### 5.1 Nominal compounds

### 5.1.1 Compounds of type [ $\bar{n} \bar{n}]$ (no tone change)

This pattern, in which both initial and final preserve lexical tones, has not been observed in noun-noun compounds. It is attested in bahuvrihi compounds with numeral final (§5.2.1.2).

### 5.1.2 Compounds of type [ǹ $\bar{n}$ ]

Here the initial is tone-dropped and the final keeps its tones. I hyphenate, and unless the morphology is in question I usually omit the tone superscript ${ }^{\mathrm{L}}$.

$$
\begin{array}{lll}
\text { compound } & \text { literal gloss } & \text { initial }  \tag{77}\\
\text { ollذ̀ }^{\mathrm{L}} \text {-kúrkùr } & \text { 'chicken coop', } & \text { óllò 'chicken' }
\end{array}
$$

Because of an unusual (in Dogon) phonological feature of DD, it is often impossible to distinguish compounds of this type (with $\{\mathrm{L}\}$-toned initial) from possessive-type compounds whose initial happens to be / $\mathrm{LH} /$-toned. This is because the final H -tone regularly shifts onto the first syllable of the "possessum" in the compound, by Rightward H-Tone Shift (§3.7.4.1). For example, in [tàksì- $g]^{\mathrm{L}}$-ńnù 'pond water', the initial is tàksí- $g$ and the final is ńnù 'water'. We cannot determine from the tones whether this is structurally [ǹ n] so that tàksí-g loses its H-tone abstractly, or structurally [ $\overline{\mathrm{n}} \mathrm{n}$ ] with the final H -tone on the possessor later shifting onto the onset of the possessum.

### 5.1.3 Compounds with nominalized verb and incorporated object

### 5.1.3.1 Nominalized object-verb combinations

A nominalized verb such as a verbal noun may take an $\{\mathrm{L}\}$-toned compound initial denoting a category of object. For example, the nominals in (78a-b) denote the range of agricultural
cultivation (but not herding). gólò: (78a) is a cognate nominal for verb gòlé 'cultivate', while (78b) combines gólò:- in \{L\}-toned compound initial form gòlò:- with the productive verbal noun gólù-g. The examples in (78c) combine the same gólù- $g$ with initials denoting specific crops. sìyè-gólù-g is phonologically compatible with analysis as either a possessive-type compound or an [ǹ $\bar{n}$ ] compound, since sìyé is /LH/-toned. By contrast, èmmè-gólù-g and sàmyògò-gólù-g are unambiguously [ǹ n] compounds.

> nominal
a. gólò:
b. gòlò:-[gólù-g]
c. sìyè-[gólù-g]

غ̀mmè-[gólù-g] sàmyògò-[gólù-g] gèl-[tólù-g]
gloss
'farming'
'farming'
'millet farming' sìyé
'sorghum farming' ह́mmè
'maize farming' sàmyógò
'beginning of the harvest' $\quad g \check{l} l$ 'harvest'
initial

### 5.1.3.2 Nominalized subject-verb combinations

A verbal noun may take a conventional subject as compound initial. This is especially typical of the low-referentiality pseudo-subjects covered in $\S 11.1 .1 .4$, form the compounds in (79).

| nominal | gloss | initial as separate noun |
| :---: | :---: | :---: |
| a. [ìsì-g]-[tíbù-g] | 'sunset' | ìsí-g 'sun' |
| [ìsì-g]-[túmmù-g] | 'sunrise' | ìsí-g 'sun' |
| b. [bà:-g]-[nây-g] | 'daybreak' | bâ:-g 'transition' |
| [bà:-g]-[dénù-g] | 'dusk' | bâ:-g 'transition' |
| [bà:-g]-[gî:-g] | 'new year' | bâ:-g 'transition' |
| c. àlà:-[wísù-g] | 'lightning' | alá: 'rain, storm' |
| d. kìndè-nǒ:g | 'anger' | kíndà 'liver/heart' (with vocalic change) |

It is also possible to create compounds with somewhat more referential, but still generic (nonspecific) nouns as initials: nà:g-[dî:-g] 'the arrival of the cows', [yà:-wè]-[dî:-g] 'the arrival of the women' (with plural yà:-wé 'women').

### 5.1.4 Possessive-type compounds [ $\bar{n}$ ǹ $]$

The possessive construction $X^{L} Y$ meaning ' $X$ 's $Y$ ' where $X$ and $Y$ are NPs, is also used in compounds, with X and Y generally consisting of just nouns. When the compound is interpreted more or less literally, as in 'cow('s) tail', the possessum Y is the semantic head of the compound. X is understood to be generic and nonspecific.

When the possessor X has a lexical tone melody / $\mathrm{HL} /$, the melody is clearly audible. The possessum has possessor-controlled $\{\mathrm{L}\}$ overlay. Examples are in (80).
a. pésgè ${ }^{\mathrm{L}}$ kì:-g/ ${ }^{\mathrm{L}}$ dùlò: / ${ }^{\mathrm{L}}$ nènda:
sheep $\quad{ }^{\mathrm{L}}$ head $/ \mathrm{L}_{\text {tail }} /{ }^{\mathrm{L}}$ tongue
'sheep('s) head/tail/tongue' (kî:g, dúlò:, nèndá:)
b. ínà: $\quad{ }^{\mathrm{L}}$ kì:-g $/{ }^{\mathrm{L}}$ dùlò: / ${ }^{\mathrm{L}}{ }^{\text {nènda: }}$
goat $\quad{ }^{\mathrm{L}}$ head $/{ }^{\mathrm{L}}$ tail $/{ }^{\mathrm{L}}$ tongue
'goat('s) head/tail/tongue' (kî:g, dúlò:, nèndá:)
c. ńnù ${ }^{\text {L }}$ nègè:g
water ${ }^{\mathrm{L}}$ bird
'water bird' (bird inhabiting wetlands)
If the possessor is /LH/-toned, it may undergo Rightward H-Tone Shift, transferring its H -tone onto the first syllable (or mora) of the otherwise $\{\mathrm{L}\}$-toned possessum, which in this case ends up with a falling tone pattern. For the phonology and notation see §3.7.4.1. Examples are in (81) with possessor nă:g (</nà:gú/) 'cow'.

$$
\begin{array}{lll}
\text { a. } & \text { nà:g } & { }^{\mathrm{H}+\mathrm{L}} \text { kî: } \mathrm{g} / \mathrm{H+L} \text { dúlò: }  \tag{81}\\
& \text { cow } \quad{ }^{\mathrm{L}} \text { head / }{ }^{\mathrm{L}} \text { tail } \\
& \text { 'cow head/tail' (<kî:g, dúl̀̀:) }
\end{array}
$$

When the H -tone shifts from the possessor onto the possessum, it leaves the false impression that the possessor has been tonosyntactically tone-dropped to $\{\mathrm{L}\}$, mimic-ing what in fact does happen in the other major type of compound, [ǹ ñ] (§5.1.2). In (81a), since the possessums 'head' and 'tail' have lexical /HL/-tone, there is no overt distinction between a possessor-type compound and an [ǹ $\bar{n}$ ] compound. However, in (81b) 'tongue' is lexically /LH/-toned, so its falling tones in nà: $g^{\mathrm{H+L}} n \varepsilon ́ n d a ̀: ~ c a n ~ o n l y ~ b e ~ d u e ~ t o ~ R i g h t w a r d ~ H-T o n e ~ S h i f t . ~$ By extrapolation from examples like (81b), I use the ${ }^{\mathrm{H}+\mathrm{L}}$ superscript before the possessum also in semantically similar compounds like those in (81a).

Some /LH/-toned nouns, like tàwá: 'hyena' in (82), do not allow Rightward H-Tone Shift, as compound initials or elsewhere. Such stems originally ended in a falling tone (§3.7.1.2, §3.7.4.1).
a. tàwá: ${ }^{\mathrm{L}}$ kì:-g/ ${ }^{\mathrm{L}}$ dùl̀̀: / ${ }^{\mathrm{L}}$ nènda:
hyena ${ }^{\mathrm{L}}$ head $/ \mathrm{L}_{\text {tail }} / \mathrm{L}^{\mathrm{L}}$ tongue
'hyena head/tail/tongue'
b. pègó: ${ }^{\text {L }}$ nègè: $g$
mountain ${ }^{\mathrm{L}}$ bird
'mountain bird' (bird inhabiting rocky places)
A wide range of literal and semi-literal senses are possible, and the break between "true" possession and possessive-type compounding is fluid. A general criterion for recognition as a
compound is that the initial element cannot be construed as an owner or custodian. For example, in yàrà ${ }^{\mathrm{H}+\mathrm{L}}$ dánnè 'lion hunter' (yàrá, dànnê), the lion is obviously an unwilling victim rather than a proprieter.

Possessive-type compounds need not have the more or less literal sense suggested by the translations in (80-82) above. For example, 'cow tongue' (81b) sometimes has its literal sense, but it is also the name of the local aloe species (Aloe buettneri), whose leaves have dentate margins. Some other examples of this type are in (83), where the "comment" column explains the non-literal denotation.
compound literal gloss comment
a. resemblance to animal body part

b. plant inedible/unusable for humans

| ómòlò ${ }^{\text {L }}$ kùrè: | "monkey's wild-grape" | Ampelocissus africana (vine, inedible berries) |
| :---: | :---: | :---: |
| tàwá: ${ }^{\text {L }}$ gàngà-n | "hyena's tomtom" | capped mushroom |
| óllò ${ }^{\text {L }}$ tàgù-ŋ | "chicken's shoe" | Achyranthes aspera (herb) |
| tàwá: ${ }^{\text {L }}$ Sèngìrè | "hyena's jujube" | Ziziphus mucronata (shrub) and Capparis (marginally edible jujubelike fruits) |
| gèm ${ }^{\text {H+L }}$ kámbè | "agama's zaban" | inedible wild melons |
| ${ }_{\text {oflıj }}{ }^{\mathrm{L}} \mathrm{k}$ ¢ l bè | "chicken's eggplant" | spiny bush with tomato-like fruits |
| pèrgírò ${ }^{\text {L }}$ nùm | "dove's cowpea" | wild bean |
| àndúmbùlè ${ }^{\text {L }}$ dàmmà-ŋ |  |  |
|  | "dwarf hoe" | Endostemon teretifolia (herb, hooked fruits) |
| wúlè:-g ${ }^{\text {L }}$ pàlè | "gazelle's sesame" | wild sesame |
| gâ:-ı ${ }^{\text {L }}$ ¢ ${ }^{\text {L }}$ ¢ ${ }^{\text {a }}$ | "cat's awn-grass" | short Aristida grass sp. (awned) |
| nègé:g ${ }^{\text {L }}$ pògò | "birds' fonio" | grass spp. with panicles (crisis food) |

5.1.5 Agentive and locational compounds with objects

### 5.1.5.1 Agentive compounds of type [ǹ v̌]

Agentives may refer to occupations or to characteristic actions such as laughter. Uncompounded agentives are generally absent except for lexicalized caste names that are unrelated to verbs. The productive agentive pattern includes a tone-dropped compound initial, which may be a cognate nominal ('dance-dancer') or a noun denoting the prototypical object ('cloth-weaver'). The compound final is an agentive nominal, the full form being of the type
$C \dot{v} C u ́$ with $\{\mathrm{LH}\}$ tone overlay and final $u$-vowel. Since the final $/ \mathrm{u} /$ is deleted by apocope after unclustered sonorants, the final often ends up in the form $-C \check{v} C$.
agentive gloss initial gloss
a. cognate nominal
gès-gěs 'weaver' gěs 'cotton fabric'
nùŋò:-nǔy 'singer’ nùnó: 'song'
gòlò:-gǒl 'farmer' gólò: 'farming'
[gìrù- $\eta$ ]-ǧ̌r 'herder' gírù- $\eta$ 'herding'
gìyò-gǐ: 'dancer' gíyò 'dance (n)'
dòmbù-dòmbú 'pounder' dómbù 'pounding'
gùnпò-gùnди́ 'thief' gúnпò 'theft'
màndù-màndú 'laugher' mándù 'laughter'
b. noncognate noun (prototypical object)

| m̀bù-ùsú | 'builder', | ḿbù- $\eta$ | 'house' |
| :--- | :--- | :--- | :--- |
| pànà-kǎn | 'cook (n), | pàná | 'meal, cooked food' |

### 5.1.5.2 Locational and instrumental compounds (final with $-\eta$ )

This type of compound denotes a place where an activity type is regularly performed, or an instrument used in the activity. The compound may be used by itself, or adjectivally after yǎl 'place' or some other relevant noun in $\{L\}$-toned form. The compound initial is also $\{\mathrm{L}\}$-toned. It may be a cognate nominal, or it may denote some other conventional or generic object. No agent is specified. The $\{\mathrm{LH}\}$-toned final ends in $-\hat{y}$ (monosyllabic) or -ú (nonmonosyllabic) followed by $-\eta$.
compounds 'place/instrument for...'
a. 'place for...'
verb stem monosyllabic, suffix $-\bar{y}$
pànà-[nì:-ý-n] '...eating meals'
kònjò-[nì:-ý-n] '...drinking beer'
verb stem nonmonosyllabic, suffix -ú
[gò-n]-[dòngú- $\eta$ ] '...pounding' <gǒ- $\eta$ 'thing'
pànà-[kànú-ŋ] '...cooking meals’
kì:g-[kàyú-ŋ] '...shaving heads’
nà:g-[tòrú-ŋ] $\quad$ '...foot-stepping' (=threshold)
b. 'instrument for...'
tèmnù-[màyú- $\eta$ ] '...molding bricks', i.e. wooden mold for mud-bricks
[nèmè-ŋ̀]-[gò:-ndú-ŋ] '...removing filth' i.e. 'soap'

This compound construction competes with regular relative clauses with impersonal 3 Pl subject (86).

$$
\begin{array}{lll}
\text { yàl }^{\mathrm{L}} & \text { [ǹjá: } & S \varepsilon ́:- \text { ǹ̀ }]  \tag{86}\\
\text { place }^{\mathrm{L}} & {[\text { urine }} & \text { urinate-3Pl] }
\end{array}
$$

'a place where they urinate' $=$ 'a place for urinating'

### 5.1.6 Diminutive compounds with -ě- $g$ 'child'

The noun ě-g 'child’ (full form /è-gú/) is common as a compound final. After an animal term it denotes a juvenile. After a plant term it denotes either a young sprig or sapling, or a fruit or seed of the mature plant. With some inanimates it denotes a small exemplar, or a small item associated with a larger item, such as the small rounded grindstone held in the hand while grinding grain on a larger flat stone.

The vowel e often but not always contracts with the final vowel of a nonmonosyllabic stem as e: or (after-ATR vowel) $\varepsilon$ : . The initial is tone-dropped.

Tonally, the accusative form is ègí=ỳ for the uncompounded noun 'child' and for the final in all nonhuman compounds (87a-b,d). Oddly, for human compounds it is $=$ égì $=\grave{y}$ $(87 \mathrm{c})$. This is somehow connected to the irregular tones of definite è-wé ìgì yà: 'the children' (< è-wé ), contrast yà:-wè ngí yà: 'the women' (< yà:-wé ).

$$
\begin{equation*}
\text { stem gloss } \quad \text { 'child' gloss } \tag{87}
\end{equation*}
$$

a. plants

| màngórò | 'mango' | màngòr-[̌̌:-g] | 'mango (fruit)' |
| :---: | :---: | :---: | :---: |
| nûm | 'cowpea' | nùm-[ě:-g] | 'cowpea (pod or bean)' |
| sìyé | 'millet' | sìy-[ě:-g] | 'millet (grain)' |
| uncontracted <br> jàbá | 'onion' | jàbà-โě-g] | 'onion bulb' |

b. animals (accusatives ùy-[è:-gí] = ̀̀, etc.

| ùŋó-ŋ | 'dog' | ùn-[Ě:-g] | 'puppy' |
| :---: | :---: | :---: | :---: |
| gǔ:ท | 'elephant' | gù:ท-[ě:--g] | 'elephant cub' |
| ínà: | 'goat' | ìn-[ě:-g] | 'goat kid' |
| pésgè | '(a) sheep' | pèsg-[ě:-g] | 'lamb' |
| nă:g | 'cow' | nà:g-[ě:-g] | 'calf' |
| nèmèsí-g | 'snake' | [nèmèsì-g] | 'baby snake' |

c. human
'young'
púndò 'Fulbe' pùndò-[ě-g] 'young Fulbe'
(accusative pùndò-[é-gì]=ỳ)
lexicalized, not age-bound nǒ: 'person' nò-[ě-g] 'human' (any age)
(accusative nò-[é-gì] = ỳ)
d. other
small item part of a larger item
nùmó 'hand’ nùm-[દ̌:-g] 'finger'
(also nùmò-[sây-g])
small item (simple diminutive)
bě:-g 'stick' [bè:-g]-[ě:--g] 'twig, small stick'

| small item paired with larger item |  |  |  |
| :---: | :--- | :--- | :--- |
| nàmìyě:n | 'grindstone' | nàmìy- $[\check{\varepsilon}:-g]$ | 'small grindstone' |
| kùnnú- $\eta$ | 'mortar' | kùn-[ě:-g] | 'pestle' |

We observe irregular degemination of medial $n n$ to $n$ in the last example ('pestle').

### 5.1.7 Compounds with variants of 'man' (ánà) and 'woman' (yǎ:)

For ánà 'man' and yǎ: (less often yǎ:-g) 'woman' as simple nouns see §4.1.2. There are fewer irregularities in compounds and noun-adjective combinations for these stems than in most Dogon languages. The nouns may be followed by adjectives like pǎy 'old' and kúnò: 'unmarried'. 'Woman' normally omits the $-g$ ending before an adjective (yà: ${ }^{\mathrm{L}}$ pǎy 'old woman'), though my assistant volunteered that yà:- $g^{\mathrm{L}}$ pǎy could be used as a superlative ('the oldest woman', a special rank in villages and large extended families). The adjectives are ánà 'male' and yǎ: 'female', used for example after animal terms, and also after the 'child' noun in è- $g^{\mathrm{L}}$ ánà 'boy' and è̀- $g^{\mathrm{L}}$ yă: 'girl'. 'Wedding, marriage ceremony' is a compound yà:-[gú:-ì] (final otherwise unattested).

### 5.1.8 Compounds with bàyá: 'owner' and ${ }^{\text {L }}$ bèlè: 'residents of'

bàyá: 'owner', plural bàyá: yà: 'owners', can occur by itself in contexts like 'it doesn't have an owner'. Usually, however, it is the final in a possessive-type compound: bititgg ${ }^{\mathrm{L}}$ bà $\eta a ̀:$
 '(descendants of) the founders of the village, old-stock families (in a village)'.

The possessor can be separately determined: [m̀bù- $\eta^{\mathrm{L}}$ ŋ̀gú] ${ }^{\mathrm{L}}$ bà $\eta a ̀:$ 'the owner of this house' (demonstrative ŋ̀gú ). It can also be quantified by a numeral: [ḿbù- $\eta$ ǹnó] ${ }^{\mathrm{L}}$ bà $\eta a ̀:$ ' $a /$ the owner of five houses'.

In yà- $\eta$ à: ${ }^{\text {L }}$ bàyá: 'the fellow from over there' (T01 at 07:53 and 07:57), demonstrative adverb yá-ŋà: 'over there' is tone-dropped.

Another form ${ }^{\mathrm{L}} b \grave{\varepsilon} \grave{\varepsilon}$ : 'residents of' is attested only as a possessive-type compound final. It normally follows a location expression: kùnjàlán ${ }^{\text {L }} b \grave{l} l \grave{\varepsilon}$ : 'residents of Koundiala (village)', ó
 relationship to the most similar-sounding noun, bèlé 'bush sp. (unidentified)'. A distant relationship to the verb bèle' 'get' is conceivable.

See also the characteristic derivative of nouns (§4.2.1), with suffix -gé, which is used for more personal characteristics such as deformities.

### 5.1.9 dúndù- $\eta$ 'entire (plant)', 'true' and 'false'

Adjective (or compound final) dúndù- $\eta$ can be used with plant species terms to denote an entire plant (e.g. a tree) as opposed to a fruit when there would otherwise be some doubt about the meaning. Thus màngórò 'mango' (tree or fruit), màngòrò ${ }^{L}$ dúndù- $\eta$ 'mango tree', and màngòr-[દ̌:-g] 'mango fruit'.

No general terms for 'true, principal, main' or its antonym 'false, secondary' were elicitable. In flora terminology, instead of 'false $X$ ' we find expressions like 'Y's $X$ ' with some animal term Y , as opposed to the primary X which is useful to people. See the compounds with literal senses (central column) "monkey's wild grape," "hyena's tomtom,"

```
"hyena's jujube," "agama (lizard)'s zaban," "chicken's eggplant," "dove's cow-pea,"
```

"gazelle's sesame," "birds’ fonio," and "God’s chicken" in (83) in §5.1.4 above.

### 5.1.10 Natural-species X-Y-X compounds

### 5.1.11 -mà- as linker in compounds

The karité (or shea) tree, Vitellaria paradoxa, is mùnjúg. The buttery oil made from its seeds, shea-butter, is mùnù-mà-ně: $g$, with a formative -mà- intervening between a reduced form of the species name and the compound final né:g 'oil'. It is possible that the compound is borrowed, in full or in part. For example, Donno So mùnjù-mù-ně: 'shea-butter' has a similar formative -mù-. These elements might be vestiges of an old Dogon possessive marker, related to DD m̀े, see beginning of $\S 6.2$.

### 5.1.12 Function-specifying NPs ('drinking water’)

Functional distinctions like 'drinking water' versus 'water for washing' are expressed as a special kind of imperfective positive object relative clause with nonspecific 3 Pl subjects. Therefore 'drinking water' is expressed as 'water that they drink'. However, unlike the case with normal object relatives, here the verb takes regular main-clause imperfective form with 3 Pl subject suffix -n. (True object relatives have preposed subject pronominals, proclitic to an otherwise unconjugated verb, §17.4.2.)

$$
\begin{array}{lll}
\text { a. } & \text { ǹnù } &  \tag{88}\\
& \text { water } & \text { nê:-n } \\
& \text { drink-Ipfv.3P1Sbj } \\
& \text { 'drinking water' }
\end{array}
$$

b. ǹmù dúy-yè:-n
water $^{\mathrm{L}} \quad$ bathe-MP-Ipfv.3P1Sbj
'water for bathing/washing'
Further examples are in (89).
a. yàl ${ }^{\mathrm{L}}$ óbi-yè̀:-n place $^{\mathrm{L}} \quad$ sit-MP-Ipfv.3PISbj
'a place to sit'
b. yà ${ }^{\mathrm{L}} \quad$ bíy-yè:-n
place ${ }^{\mathrm{L}} \quad$ lie.down-MP-Ipfv.3P1Sbj
'a place to lie down'
c. nè: $g^{\mathrm{L}}$ párìyè:-n
oil $^{\mathrm{L}} \quad$ rub.on-Ipfv.3PlSgj
'rubbing oil (for skin etc.)' (ně:g 'oil')

### 5.1.13 Phrasal compounds

nù-nǒ:n ~ nù-ľ̌:n 'thirst' is not synchronically transparent, but the initial resembles ńnù 'water' (compound initial ǹnù̀-) and the final resembles nà:-lí- 'did not drink' (3Sg nǎ:-1-Ø). The DD verb ně: 'drink' was originally an E-stem, and cognates of the form nǒ(:) occur in other Dogon languages.

### 5.2 Adjectival compounds

### 5.2.1 Bahuvrihi compounds [ $\overline{\mathrm{n}}$ â] or [ $\overline{\mathrm{n}}$ nùm]

A bahuvrihi compound is of the type N -Adj or N-Num where the noun denotes a body part or other attribute of a referent $Z$, and the adjective or numeral describes or quantifies over this attribute as possessed by Z . The whole compound functions as an adjective or noun, denoting Z as a whole. Compare English two-headed (syntactically an adjective in pseudo-participial form) and Blackbeard (name of a pirate). The special stress pattern of Blackbeard (versus black beard) shows that bahuvrihis have a special prosodic structure even in English.

### 5.2.1.1 With adjectival compound final [ $\overline{\mathrm{n}}$ â] ('Blackbeard')

The initial is a noun with its regular tones. The adjective gets an $\{\mathrm{HL}\}$ tone overlay, erasing its lexical melody. In both respects the bahuvrihi differs from the underlying N -Adj combination. The latter is expressed as $\mathrm{N}^{\mathrm{L}}$ Adj, where the noun is tone-dropped and the adjective is tonally free.

| bahuvrihi | gloss | N-Adj | gloss |
| :---: | :---: | :---: | :---: |
| bèrô:-[bínù- $\dagger$ ] | 'big-bellied' | bèrò: ${ }^{\text {L }}$ bìnú-ŋ | 'big belly' |
| gùsú-[gémè-ท] | 'black-skinned' | gùsù ${ }^{\text {L }}$ gémè- $\eta$ | 'black skin' |
| gùsú-[bánù-ๆ] | 'red-skinned' | gùsù ${ }^{\text {L }}$ bánù-ク | 'red (=brown) skin' |
| kî:g-[gémè-n] | 'black-headed' | kì:-g ${ }^{\mathrm{L}}$ gémè- $\eta$ | 'black head' |
| dùlô:-[pínà-n] | 'white-tailed' | dùlò: ${ }^{\text {L }}$ pínà- $\eta$ | 'white tail' |
| dùlô:-[jálà-ı̀̀] | 'long-tailed' | dùlò: ${ }^{\text {L }}$ jàlǎ-ŋ | 'long tail' |
| dùlô:-[dénnò-ỳ] | 'short-tailed' | dùlo ${ }^{\text {L }}$ dènnó | 'short tail' |

### 5.2.1.2 With numeral compound final [ $\bar{n}$ nūm] ('three-legged')

When a numeral is the final in a bahuvrihi, both it and the noun keep their lexical melodies, as they do in simple N-Adj NPs. With /LH/-toned numerals like ' 3 ' and ' 5 ', the final H-tone is often inaudible in prepausal position, both in the bahuvrihi and in regular modifying function, but adding plural yà: brings it out.

> bahuvrihi
gloss
N-Num
gloss
a. /HL/-toned numeral
$\begin{array}{llll}\text { kî:g-né:gè } & \text { 'two headed' } & \text { kî:g né:gè } & \text { 'two heads' } \\ \text { kî:g-ké:sò } & \text { 'four-headed' } & \text { kî:g ké:sò } & \text { 'four heads' }\end{array}$
b. /LH/-toned numeral

| kî:g-tà:ndú | 'three-headed' | kî:g tà:ndú | 'three heads' |
| :--- | :--- | :--- | :--- |
| kî:g-ǹnó | 'five-headed' | kî:g ǹnó | 'five heads' |

### 5.2.1.3 With verb as compound final [ $\bar{n}$ v̀]

The compound noun sémbè-bèlè 'authorities (government)' consists of noun sémbè 'power, authority' plus a form of the verb bèlé 'get'. The morphophonology is close to that of adjectival bahuvrihis and quite unlike that of typical agentive compounds (§5.1.5.1).

## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

### 6.1.1 Linear order and tonosyntax of multi-word NPs

The combinations of (unpossessed) noun, adjective, numeral, demonstrative, and 'all' quantifier are those in (92). These modifiers are all postnominal (prenominal possessors are covered later). Throughout (92), tone-dropping is controlled by an adjective or demonstrative that occurs to the right of the target domain. If the target domain contains more than one word (the noun plus one or more intervening words), the target domain is shown in brackets (tonosyntactic, not phrasal or semantic). Within a multi-word target domain, all words are tone-dropped. If a superscript is present, it is placed on the side of the target domain that "points" toward the controller. In (92), it is always on the right of the target domain for the reason given above. In combinations of a demonstrative plus 'all', the demonstrative has plural form as in ògí yà: fú: 'all these' for count nouns ('all these dogs') but singular form as in ǒg fú: 'all this' for mass nouns ('all this sugar'). Inversion (of numeral and adjective) is explained in §6.4.2.
a. N
b. $N^{L}$ Adj
c. N Num
d. $N^{L}$ Adj Num
e. $N^{L}$ Dem
f. $\quad[\mathrm{N} \mathrm{Adj}]^{\mathrm{L}}$ Dem
g. $\quad[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Dem
h. $\quad[\mathrm{N} \text { Adj Num }]^{\mathrm{L}}$ Dem
[N Num Adj] ${ }^{\text {L }}$ Dem (inverted)
i. N 'all'
j. $\quad \mathrm{N}^{\mathrm{L}}$ Adj 'all'
k. N Num 'all'

1. $\mathrm{N}^{\mathrm{L}}$ Adj Num 'all'
[ N Num $]^{\text {L }}$ Adj 'all' (inverted)
m. $\mathrm{N}^{\mathrm{L}} \operatorname{Dem}(\mathrm{Pl})$ 'all'
n. $[\mathrm{N} \mathrm{Adj}]^{\mathrm{L}}$ Dem (Pl) 'all'
o. [N Num $]^{\mathrm{L}}$ Dem (Pl) 'all'
p. $\quad[\mathrm{N} \text { Adj Num }]^{\mathrm{L}}$ Dem (Pl) 'all'
[N Num Adj] ${ }^{\text {L }}$ Dem (Pl) 'all' (inverted)
Examples of the formulae in (92) are in (93). Others are given later in this chapter. Plural demonstrative ògí yà 'these' is interchangeable with a variant ògù bèlé.
a. ùnó-ŋ / ósùgù
'dog/road'
b. ù $ŋ \grave{j}-\eta^{\mathrm{L}}$ pílà- $\eta$
'white dog'
c. ùnó-ŋ tà:ndú / kúlè: / né:gè
'3/6/2 dogs’
ósùgù tà:ndú / kúlè: / né:gè
'3/6/2 roads'
d. ùnò- $\eta^{\mathrm{L}}$ pílà- $\eta$ tà:ndú / kúlè:
e. ùnò ${ }^{\mathrm{L}} \check{\circ} g$
ùgò ${ }^{\mathrm{L}}$ ògí yà: (~ ògù bèlé $)$
f. [ùỳ̀-ŋ pìlà- $\eta]^{\mathrm{L}}$ ǒg ( $\sim$ ògú $)$
g. [ùŋò-ŋ tà:ndù] ${ }^{\mathrm{L}}$ ògí yà:
h. [ùyò-ŋ pìlà- $\eta$ tà:ndù] ${ }^{\mathrm{L}}$ ògí yà:
[ùnò- $\eta$ tà:ndù pìlà-ŋ]] ${ }^{\mathrm{L}}$ ògí yà:
i. ùŋó-ŋ fú:
j. ùŋ̀̀- $\eta^{\mathrm{L}}$ pílà-ŋ fú:
k. ùŋó- $\eta$ tà:ndú fú:
2. ù ùò- $\mathrm{L}^{\mathrm{L}}$ pílà- $\eta$ tà:ndú fú:
[ùỳ̀-ŋ tà:ndù $]^{\mathrm{L}}$ pílà-ŋ fú:
m. ùnò ògí yà: fú:
n. [ùŋò-ŋ pìlà-ŋ] ${ }^{\mathrm{L}}$ ògí yà: fú:
o. [ùỳ̀-n tà:ndù $]^{\mathrm{L}}$ ògí yà: fú:
p. [ùnò- $\eta$ pìlà- $\eta$ tà:ndù $]^{\mathrm{L}}$ ògí yà: fú: [ùnò-ŋ tà:ndù pìlà- $\eta]^{\mathrm{L}}$ ògí yà: fú:
' $3 / 6$ white dogs'
'this dog'
'these dogs'
'this white dog'
'these 3 dogs'
'these 3 white dogs'
" (inverted)
'all (the) dogs’
'all (the) white dogs'
'all 3 dogs'
'all 3 white dogs'
" (inverted)
'all these dogs'
'all these white dogs'
'all these 3 dogs'
'all these 3 white dogs'
" (inverted)

If there is a prenominal possessor, as in 'Seydou's house', the schemas parallel to the unpossessed strings in (92) above are those in (94). In the absence of a demonstrative, the preposed possessor controls an $\{\mathrm{L}\}$ overlay on the following string, minimally the noun plus any modifying adjective and/or numeral. This is indicated by a superscripted ${ }^{\mathrm{L}}$ on the left of the target domain, "pointing" leftward to the possessor in (94a-d). If a demonstrative is also present ( $94 \mathrm{e}-\mathrm{h}$ ), there is some ambiguity as to whether the possessor or the demonstrative controls $\{\mathrm{L}\}$ on the intervening words, either one of them being capable of this on its own. I therefore hedge by putting the superscript on both left and right edges of the target domain. Neither the possessor nor the demonstrative is itself part of any target domain. fú: 'all' has no tonal effect on the preceding elements, so (94i-p) are identical to (94a-h) except for the addition of 'all'.
a. $\quad \operatorname{Poss}{ }^{L}[\mathrm{~N}]$
b. Poss ${ }^{\mathrm{L}}$ [N Adj]
c. Poss ${ }^{\mathrm{L}}$ [N Num]
d. Poss ${ }^{\mathrm{L}}[\mathrm{N}$ Adj Num]

Poss ${ }^{\text {L }}$ [N Num Adj] (inverted)
e. Poss ${ }^{\mathrm{L}} \mathrm{N}^{\mathrm{L}}$ Dem
f. Poss ${ }^{L}[\mathrm{~N} \text { Adj }]^{\mathrm{L}}$ Dem
g. $\quad \operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Dem Pl
h. Poss ${ }^{\mathrm{L}}$ [N Adj Num ${ }^{\mathrm{L}}$ Dem Pl

Poss ${ }^{\mathrm{L}}$ [N Num Adj] ${ }^{\mathrm{L}}$ Dem Pl (inverted)
i. Poss ${ }^{\mathrm{L}} \mathrm{N}$ 'all'
j. Poss ${ }^{\mathrm{L}}$ [N Adj] 'all'
k. Poss ${ }^{\mathrm{L}}$ [N Num] 'all'

1. Poss ${ }^{\mathrm{L}}[\mathrm{N}$ Adj Num] 'all'

Poss ${ }^{\text {L }}$ [N Num Adj] 'all' (inverted)
m. Poss ${ }^{\mathrm{L}}[\mathrm{N}]^{\mathrm{L}}$ Dem Pl 'all'
n. Poss ${ }^{\mathrm{L}}[\mathrm{N} \text { Adj] }]^{\mathrm{L}}$ Dem Pl 'all'
o. Poss ${ }^{\mathrm{L}}[\mathrm{N} N u m]^{\mathrm{L}}$ Dem Pl'all'
p. Poss ${ }^{\mathrm{L}}\left[\mathrm{N}\right.$ Adj Num ${ }^{\mathrm{L}}$ Dem Pl 'all' Poss ${ }^{\text {L }}\left[\mathrm{N}\right.$ Num Adj] ${ }^{\mathrm{L}}$ Dem Pl 'all' (inverted)

Examples of the formulae in (94) are in (95).

```
a. sé:dù \({ }^{\text {Lù ù } ̀ ̀-\eta ~}\)
b. sé:dù \({ }^{\mathrm{L}}\) [ùŋ̀̀-n pìlà- \(\eta\) ]
c. sé:dù \({ }^{\text {L }}\) [ùŋò-ŋ tà:ndù]
d. sé:dù \({ }^{\text {L }}\) [ùクò-ŋ pil̀à- \(\eta\) tà:ndù]
    sé:dù \({ }^{\text {[ùǹ̀- } \eta ~ t a ̀: n d u ̀ ~ p i ̀ ̀ a ̀-\eta] ~}\)
    sé:dù \({ }^{\mathrm{L}} \mathrm{ùn} \mathrm{\grave{ }}^{\mathrm{L}}\) ǒg
f. sé:dù \({ }^{\mathrm{L}}[u ̀ \eta \grave{-}-\eta \text { pìlàn }]^{\mathrm{L}}\) ǒg
g. sé:dù \({ }^{\mathrm{L}}\left[u ̀ \eta \grave{̀}-\eta\right.\) tà:ndù] \({ }^{\mathrm{L}}\) ògí yà:
h. sé:dù \({ }^{\text {L }}\) [ùǹ̀- \(\eta\) pìlà- \(\eta\) tà:ndù] \({ }^{\mathrm{L}}\) ò gí yà:
    sé:dù \({ }^{\mathrm{L}}[u ̀ \eta \grave{-}-\eta \text { tà:ndù pì̀àn }]^{\mathrm{L}}\) ògí yà:
i. sé:dù \({ }^{L} u ̀ \eta \grave{\jmath}-\eta\) fú:
j. sé:dù \({ }^{\mathrm{L}}\) [ùŋ̀̀-ŋ pìlà-ŋ] fú:
k. sé:dù \({ }^{\text {Lùǹ̀-ŋ tà:ndù] fú: }}\)
1. sé:dù \({ }^{\mathrm{L}}\) [ùnj̀-ŋ pìlà-ŋ tà:ndù] fú:
    sé:dù \({ }^{\mathrm{L}}[\) ùǹ̀- \(\eta\) tà:ndù pìlà-ŋ] fú:
m . sé: dù \({ }^{\mathrm{L}}\) ùno \({ }^{\mathrm{L}}\) ògí yà: fú:
n. sé:dù \({ }^{\mathrm{L}}\left[u ̀ \eta \grave{-}-\eta\right.\) pìlàn \({ }^{\mathrm{L}}\) ò òí yà: fú:
o. sé:dù \({ }^{\mathrm{L}}\) [ùǹ̀-n tà:ndù] \({ }^{\mathrm{L}}\) ògí yà: fú:
p. sé:dù \({ }^{\mathrm{L}}[\text { ùnò- } \eta \text { pìlà- } \eta \text { tà:ndù }]^{\mathrm{L}}\) ògí yà: fú:
'Seydou's dog'
'Seydou's white dog'
'Seydou's 3 dogs'
'Seydou's 3 white dogs'
    " (inverted)
'this dog of Seydou's'
'this white dog of Seydou's'
'these 3 dogs of Seydou's'
'these 3 white dogs of Seydou's'
        " (inverted)
'all Seydou's dogs'
'all Seydou's white dogs'
'all Seydou's 3 dogs'
'all 3 white dogs of Seydou's'
    " (inverted)
'all these dogs of Seydou's'
'all these white dogs of Seydou's'
'all these 3 dogs of Seydou's'
'all these 3 white dogs of Seydou's'
sé:dù \({ }^{\mathrm{L}}\) [ùnò-n tà:ndù pìlàn] ògí yà: fú: " (inverted)
```

If there is a postnominal possessor (which is always pronominal), the equivalents for (92) and (94) above are those in (96) below. Postnominal possessors have interesting inversion and tonosyntactic properties. In the combinations N-Adj-Poss-Dem, N-Num-Poss-Dem, and N-Adj-Num-Poss-Dem, the possessor occasionally moves to the position directly after the noun. My assistant accepted but had misgivings about this order. He definitely disapproved of inserting the possessor between the adjective and the numeral in N-Adj-Num-Poss-Dem (with or without Adjective-Numeral Inversion), though of course he understood the intended meaning. The acceptable outputs for N -Adj-Num-Poss-Dem, bolding Poss to emphasize its locations, are therefore N -Adj-Num-Poss-Dem (basic order), N-Num-Adj-Poss-Dem (only adjective and numeral inverted), N-Poss-Adj-Num-Dem, and N-Poss-Num-Adj-Dem, while N-Adj-Poss-Num-Dem and N-Num-Poss-Adj-Dem with the possessor in the middle of the modifier pack were not accepted (96h).

In combinations ending in a Num-Poss sequence (without a demonstrative), a noncompositional constructional tone overlay $\{\mathrm{LHL}\}$ is applied to the sequence beginning in the noun and ending in the numeral, resulting in [ N (Adj) Num] ${ }^{\text {LHL }}$ Poss. This \{LHL\} cannot be derived compositionally from the independent tonosyntactic properties of the component words. The tone breaks are at the right edge, i.e. the numeral is HL-toned and the preceding word(s) L-toned.

If a demonstrative is added to a sequence ending in a postnominal possessor, the demonstrative fails to impose its usual $\{\mathrm{L}\}$ overlay on all preceding words (beginning with the noun). This is represented by the tonosyntactic island notation $\subset \ldots \supset$ enclosing the string that is now exempt from the demonstrative's control. However, the presence of the demonstrative does disrupt some otherwise expected tonosyntactic processes within the island. In particular, a sequence N -(Adj-)Num-Poss-Dem does not permit the $\{\mathrm{LHL}\}$ overlay on the N -(Adj-)Num sequence, which can therefore surface as [ N Num] or [ $\mathrm{N}^{\mathrm{L}}$ Adj Num], showing no tonosyntactic effect of either the possessor or the demonstrative. In fact, if the adjective and numeral are inverted, resulting in N-Num-Adj-Poss-Dem, I have recorded both
$\subset[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Adj Poss $\supset$ Dem, where the adjective controls $\{\mathrm{L}\}$ on the N -Num sequence, and the puzzling $\subset \mathrm{N}^{\mathrm{L}}$ Num Adj Poss $\supset$ Dem, where the noun is tone-dropped but the numeral isn't. One way to look at all this is that in very bulky NPs, with tonosyntactic controllers piled up to the right of the noun, long-range tonosyntactic control is weakened, and tones elsewhere associated with individual words or two-word phrases re-emerge. This is likely because "fluent" articulation of such improbably complex NPs is somewhat utopian.

Relevant formulae are in (96).
a. N Poss
b. $N^{\mathrm{L}}$ Adj Poss
c. $[\mathrm{N} \text { Num }]^{\mathrm{LHL}}$ Poss
d. $[\mathrm{N} \text { Adj Num }]^{\text {LHL }}$ Poss
[N Num] ${ }^{\text {L }}$ Adj Poss [inverted].
[N Poss Num] ${ }^{\text {L }}$ Adj [inverted]
e. $\subset N$ Poss $\supset$ Dem
f. $\subset \mathrm{N}^{\mathrm{L}}$ Adj Poss $\supset$ Dem
[ N Poss Adj] ${ }^{\mathrm{L}}$ Dem
g. $\subset$ N Num Poss $\supset$ Dem
[ N Poss Num] ${ }^{\mathrm{L}}$ Dem
h. $\subset N^{L}$ Adj Num Poss $\supset$ Dem
$\subset[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Adj Poss $\supset$ Dem [inverted]
$\subset \mathrm{N}^{\mathrm{L}}$ Num Adj Poss $\supset$ Dem
[N Poss Adj Num] ${ }^{\text {L }}$ Dem
[ N Poss Num Adj] ${ }^{\mathrm{L}}$ Dem
[inverted, with the numeral free]
[Poss inverted]
[Poss inverted]
Adj-Poss-Num and Num-Poss-Adj order are not idiomatic:
\# [N Adj Poss Num ${ }^{\text {L }}$ Dem [Poss inverted]
\# [N Num Poss Adj] ${ }^{\text {L }}$ Dem [Poss inverted]
i. N Poss 'all'
j. $\quad \mathrm{N}^{\mathrm{L}}$ Adj Poss 'all'
[ N Poss ${ }^{\mathrm{L}}$ Adj 'all' [inverted]
k. [N Num] ${ }^{\text {LHL }}$ Poss 'all'

N Poss Num 'all' [Poss inverted]

1. $[\mathrm{N} \text { Adj Num }]^{\text {LHL }}$ Poss 'all'
[N Num] ${ }^{\text {L }}$ Adj Poss 'all' [inverted] ?[N Poss Num] ${ }^{\text {L }}$ Adj ‘all' [inverted]
m. $\subset \mathrm{N}$ Poss $\supset \operatorname{Dem}(\mathrm{Pl})$ 'all'
n. $\subset \mathrm{N}^{\mathrm{L}}$ Adj Poss $\supset$ Dem (Pl) ‘all'
o. $\subset N$ Num Poss $\supset$ Dem (Pl) 'all'
p. $\quad \subset \mathrm{N}^{\mathrm{L}}$ Adj Num Poss $\supset \operatorname{Dem}(\mathrm{Pl})$ 'all' $\subset[\mathrm{N} \mathrm{Num}]^{\mathrm{L}}$ Adj Poss $\supset$ Dem (Pl) 'all' [inverted]

Examples are in (97), with 2 Sg possessor. In (97a), the apparent tone-dropping on ùỳ ‘dog' is really just a case of the H-tone of /ù $\mathfrak{y}-\boldsymbol{y}$ / jumping to the following syllable by phonological rule (Rightward H -Tone Shift), as is shown by the regular H-tone in ósùgù 'road' in 'your road'. In (97b), by contrast, we have true tonosyntactic tone-dropping of the noun stem controlled by the following adjective.

To bring out tone changes affecting strings including numerals, I use kúlè: ' 6 ' as well as tà:ndú ' 3 '. Since some numerals like kúlè: ' 6 ' are already lexically /HL/-toned, the \{LHL\} overlay is most obvious when the numeral is lexically /LH/-toned, like tà:ndú ‘ 3 ' ( 97 k ).
a．ùŋゝ̀ ó－ŋ̀（＜／ùŋó ò－ŋ̀／）
ósùgù ò－ŋ̀
b．ùnò－$\eta^{\mathrm{L}}$ pílà ${ }^{n}$ ò－ŋ̀
òsùgù ${ }^{\mathrm{L}}$ sálà ò－ŋ̀ òsùgù ${ }^{\text {L }}$ jàlà ó－ı̀（＜／jàlá ò－ŋ̀／）
inversion of Adj and Poss is not idiomatic here：

$$
\text { \# [ùnò ò- } \eta]^{\mathrm{L}} \text { pílà- } \eta \text { 'your white dog’ (inverted) }
$$

\＃［òsùgù ò $-\eta]^{\mathrm{L}}$ sálà＇your bad road＇（inverted）
c．［ùnò－$\eta$ kúlè：］LHL ò－ŋ̀ yà：
［òsùgù kúlè：$]^{\text {LHL }}$ ò－ŋ̀ yà：
［ùnò－ŋ tá：ndù ］${ }^{\text {LHL }}$ ò－ŋ̀ yà：
［òsùgù tá：ndù ${ }^{\text {LHL }}$ ò－$\grave{\text { j̀ }}$ yà：
＇your 6 dogs＇
＇your 6 roads＇
＇your 3 dogs＇
＇your 3 roads＇
inversion of Num and Poss is not idiomatic here：
\＃［ùnò ó－ŋ̀］${ }^{\mathrm{L}}$ kúlè：（yà：）
\＃［ósùgù ò－ท̀］L kúlè：（yà：）
d．［ùnŋ̀－$\eta$ pìlà－$\eta$ tá：ndù $]^{\mathrm{LHL}}$ ò－ŋ̀ yà：
＇your six dogs＇（inverted）
＇your six roads＇（inverted）
［ùyò－$\eta$ pìlà－$\eta$ kúlè：］${ }^{\text {LHL }}$ ò－$\grave{y}$ yà：
［ùnò－ŋ kùlè：］${ }^{\mathrm{L}}$ pílà ${ }^{n}$ ò－ŋ̀ yà：
＇your 3 white dogs＇
＇your 6 white dogs＇
［ùnò ò－r̀j］${ }^{\mathrm{L}}$ pílà－ŋ̀ kúlè（yà：）

|  |  |
| :--- | :--- |
|  | （inverted） |
|  | $($ inverted $)$ |

［ùp̀े o－1］kile］pila ya：？（inverted）
．［ūo ò－ŋ̀ kùlè］${ }^{\text {L }}$ pílàn yà．
\＃［ùnò－ŋ̀ kùlè ò－ŋ̀ $]^{\mathrm{L}}$ pílàn yà：
\＃ùnò－ŋŋ ${ }^{\mathrm{L}}$ píla ò̀－ŋ̀ kúlè ${ }^{\mathrm{L}}$（yà：）
e．Сùŋว̀ ó－ŋ̀つ ǒg
Сósùgù ò－ŋ̀つ ǒg
f．Сùŋう̀－$\eta{ }^{\mathrm{L}}$ pílàn ${ }^{n} o ̀-\eta \supset \check{o} g$
［ùnò ò－ŋ̀ pìlàn］${ }^{\mathrm{L}}$ ògí yà：
g．Сùŋó－ŋ kúlè：ò－ŋ̀ゝ ògí yà：
［ùnò ò－ŋ̀ kùlè：］ògí yà：
h．Cùŋò－$\eta^{\mathrm{L}}$ pílà－$\eta$ kúlè：ò－$\eta \supset$ ògí yà：
$\subset[u ̀ \eta \grave{\partial}-\eta \text { kùlè：}]^{\mathrm{L}}$ pílàn ${ }^{n}$ ò－ŋ̀つ oggí yà：
＇these 6 white dogs of yours＇

Cùクò－${ }^{\mathrm{L}}$ kúlè：pílàn ${ }^{\text {ò－} \eta \supset \text { ògí yà：}}$
［ùnò ò－ŋ̀ pìlà－ŋ kùlè：］${ }^{\mathrm{L}}$ ògí yà：
［ùnò ò－ŋ̀ kùlè：pìlàn］${ }^{\text {L }}$ ògí yà：
＇your dog＇
＇your road＇
＇your white dog＇
＇your bad road＇
＇your long road＇
？＂（inverted）
\＃＂（inverted）
\＃＂（inverted）
＇this dog of yours＇
＇this road of yours＇
＇this white dog of yours＇
＂（inverted）
＇these 6 dogs of yours＇ ＂（inverted）
＂（inverted）
＂（inverted，with numeral free）
＂（Poss inverted）
＂（Poss inverted）

Adj－Poss－Num and Num－Poss－Adj order are not idiomatic：
\＃［ùnò－ŋ pìlà ò－ŋ̀ kùlè：］${ }^{\text {L }}$ ògí yà：
\＃［ùnò－$\eta$ kùlè：ò－ı̀ pìlàn］${ }^{\mathrm{L}}$ ògí yà：
i．ùnò ó－ŋ̀ fú：
j．ùnò－$\eta^{\mathrm{L}}$ pílà ò－ŋ̀ fú：
［ùyò ò－ì］${ }^{\mathrm{L}}$ pílà－ŋ̀̀ fú：
k．［ùnò－ŋ kúlè：］${ }^{\mathrm{LHL}}$ ò－ŋ̀ fú：
ùgò ó－ì kúlè：fú：
［òsùgù kúlè：］${ }^{\mathrm{LHL}}$ ò－ŋ̀ fú：
ósùgù ò－ŋ̀ kúlè：fú：
［ùnò－$\eta$ tá：ndù］${ }^{\mathrm{LHL}}$ ò－ŋ̀ fú：
ùnò ó－ŋ̀ tà：ndú fú：
［òsùgù tá：ndù］${ }^{\text {LHL }}$ ò－ì fú：
ósùgù ò－ŋ̀ tà：ndú fú：
1．［ùỳ̀－$\eta$ pìlà－$\eta$ tá：ndù $]^{\text {LHL }}$ ò－ŋ̀ fú：
［ùŋò－ŋ tà：ndù］${ }^{\mathrm{L}}$ pílàn ${ }^{\text {ò－r̀ }}$ fú：
［òsùgù jàlà－ท tá：ndù ${ }^{\text {LHL }}$ ò－ŋ̀ fú：
＂（Poss inverted）
＂（Poss inverted）
＇all your dogs＇
＇all your white dogs＇ ＂（inverted）
＇all 6 dogs of yours’ ＂（inverted）
＇all 6 roads of yours＇ ＂（inverted）
＇all 3 dogs of yours＇ ＂（inverted）
＇all 3 roads of yours＇ ＂（inverted）
＇all 3 white dogs of yours＇ ＂（inverted）
＇all 3 long roads of yours＇

$$
\text { [òsùgù tà:ndù] }{ }^{\mathrm{L}} \text { jàlá ò-ı̀ fú: " (inverted) }
$$

［ùnò－ŋ pìlà－$\eta$ kúlè：］${ }^{\text {LHL }}$ ò－ŋ̀ fú：＇all 6 white dogs of yours＇
［ùnò－$\eta$ kùlè：］${ }^{\mathrm{L}}$ pílà ò－ŋ̀ fú：＂（inverted）
［òsùgù jàlà－$\eta$ kúlè：$]^{\text {LHL }}$ ò－ŋ̀ fú：＇all 6 long roads of yours＇
［òsùgù kùlè：］${ }^{\mathrm{L}}$ jàlá ò－ŋ̀ fú：
＂（inverted）
？［òsùgù ò－ı̀ kùlè：］${ }^{\mathrm{L}}$ jàlă－$\eta$ fú：
m．Cùyò ó－ŋ̀つ og̀̀́ yà：fú：
？＂（inverted）
n．Cùŋò－$\eta^{\mathrm{L}}$ pílàn ${ }^{n}$ ò－ŋ̀ゝ og̀́ yà：fú： ＇all these dogs of yours＇
o．Сùŋó－$\eta$ tà：ndù ó－ŋ̀ゝ oğ́ yà：fú： ＇all these white dogs of yours＇
p．Cùnò－$\eta^{\mathrm{L}}$ pílà－$\eta$ kúlè：ò－ŋ̀ゝ og̀í yà：fú：＇all these 6 white dogs of yours＇ $\subset[u ̀ \eta \grave{-\eta} \text { kùlè：}]^{\mathrm{L}}$ pílàn ${ }^{n}$ ò－ŋ̀ゝ og̀í yà：fú：＂（inverted）

For the schemas applicable to internal head NPs in relative clauses，see §14．2．1．

## 6．1．2 Headless NPs（absolute function of demonstratives，etc．）

An adjective，numeral，demonstrative，or＇all＇quantifier may function absolutely，i．e．as an NP in the absence of a noun（98a－b）．（98b）can replace the fuller（98c）if the context is clear．
a．bánù－ì－gù／tà：ndú／kó mí＝ỳ ńdà
red／three／Dist $\quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ give．Imprt
＇Give－2Sg（me）a／the red one／three／that！＇
b．fú：$\quad$ mí＝ỳ ńdà
NearDist－all $\quad 1 \mathrm{Sg}=$ Acc give．Imprt
＇Give－2Sg（it）all（to me）！＇
$\begin{array}{llll}\text { c．} & {[\text { sìy } \varepsilon} & \text { fú：}] & m i ́=y \\ & {[\text { millet }} & \text { all } & 1 \mathrm{Sg}=\text { Accà } \\ \text {＇Give－} 2 \mathrm{Sg} & \mathrm{me}) & \text { give．Imprt the millet！＇}\end{array}$

## 6．1．3＂Bifurcation＂of relative－clause head NP

For the（apparent）bifurcation of the head NP of a relative into an internal portion（maximally Poss－N－Adj－Num）and a postparticipial coda（determiners，＇all＇，discourse－functional elements），see chapter 14．The coda elements are discussed in §14．6．

## 6．2 Possessives

There is almost never a genitive morpheme or resumptive possessor pronoun between a possessor and a following possessum（\＃X mıे Y，\＃X PRON Y）．A possessive morpheme mı̀～ $-\eta$ does occur on postposed pronominal possessors（especially for alienable possession），as in X PRON－$\eta$ ．mə̀ can also function as a default possessum in the absence of a noun，as in àm mó＇whose？＇from ăm＇who？＇．With a human possessor X，the usual interpretation of this default is＇the house of $X$＇，compare English let＇s meet at the Jones＇．An example is in（153） in §8．2．1 Predicative＇ Y belong to X ＇is expressed as $Y$［ $X$ m̀ $]=\grave{y}$ ，ending with the＇it is＇ clitic（§11．5．2）．

I have only two examples of mò as a genitive linker between a possessor and a following posssessum. In both examples the following possessum is tone-dropped, as it would be with no intervening morpheme. One is ná-pgù mò ${ }^{\text {L }}$ là:dà ngù 'that custom', literally 'the custom of that', in T02 03:54. The other is ènnè: mó ${ }^{\mathrm{L}}$ dì:nغ̀ ̀̀gı̀ 'the religion of the past' in T01 03:46. It is probably not an accident that neither ná-ygù 'that' (discourse-definite) nor $\grave{\varepsilon} n n \varepsilon$ : 'past time' is a prototypical possessor (i.e. a specific human referent). In hundreds of elicited and textual examples with normal nonpronominal possessors ('Seydou', 'my father', 'the woman'), I have never observed mò.

The only cases I have observed of resumptive (or appositional) third person possessor pronoun between a nonpronominal possessor and the possessum, as in "Seydou his house," are with ámbà 'God' as possessor: [ámbà ná-ì ${ }^{\text {L }}$ kìndò] =y 'it is God's (own) shade' (T01 00:45), ámbà ná ${ }^{\text {L }}$ sàg 'God's trust' (i.e. trusting in God, T01 00:35), with 3 Sg ná resuming ámbà 'God'. Both expressions are formulaic, archaic, and irregular in terms of the productive grammar. ámbà ná-ì ${ }^{\text {L }}$ kìndò could be grammatical if parsed improbably as [ámbà ná-ì] ${ }^{\text {L }}$ kindò, i.e. 'the shade of [his/her God],' but this does not match the meaning.

### 6.2.1 Alienable possession

### 6.2.1.1 Nonpronominal alienable possessor

A nonpronominal NP functioning as possessor always precedes the possessed noun or NP, which is dropped to $\{\mathrm{L}\}$ tone. There is ordinarily no genitive morpheme other than the tone overlay. The possessor may be specific (99a). If it is semantically generic and morphologically bare, as in (99b), we are in the grey area between possession and compounding. If the referent of the possessed NP is discourse-definite, the definite marker may be added (99c). Usually this entails that the possessor too is definite, so if the possessor is not a personal name it is usually determined by a demonstrative (99d) or the definite marker (99e). For the tonal treatment of modifiers of the possessed noun, see $\S 6.2 .1 .3$ below.
$\begin{array}{lll}\text { a. } & \text { séydù } & { }^{\mathrm{L}} \text { imbù̀- } / \text { / }{ }^{\mathrm{L}} \text { pèsgè } \\ \mathrm{S} & { }^{\mathrm{L}} \text { house } /{ }^{\text {L }} \text { sheep }\end{array}$
'Seydou's house/sheep' (ḿnbù-ŋ, pésgè)
b. ánà ${ }^{\mathrm{L}}$ m̀b̀ù-ŋ man ${ }^{\mathrm{L}}$ house
' $a$ /the house of a man'
c. [ànà ${ }^{\mathrm{L}}$ ற̀ggú] ${ }^{\mathrm{L}}$ m̀mbù-n
[man ${ }^{\mathrm{L}}$ Prox] ${ }^{\text {L }}$ house
'this man's house'
e. [yă: ̀̀ ] ${ }^{\mathrm{L}}$ m̀bù- $n$
[woman Def] ${ }^{\text {L }}$ house
'the woman's house'
Genitive linker mò occurs occasionally in texts after an inanimate nonpronominal "possessor. An example is 'the land that belongs to the tunnel' in text T 02 at 02:03.

### 6.2.1.2 Pronominal alienable possessor

If the alienable possessor is a pronoun, it takes the form in (100), repeated from (56) in $\S 4.3 .1 .2$. The possesor pronominal follows the possessed noun and takes L-toned form. If the noun is omitted, the possessor can function absolutely, but in this case it begins with an H-tone. The $-\grave{y}$ formative is always L-toned. The 1 Sg absolute form begins with $m$ instead of geminated mm .
(100) Alienable possessor pronouns
postnominal absolute (definite)
a. includes mò

| 1 Sg | $X$ m̀mò | mó |
| :--- | :--- | :--- |
| 3LogoSg | $X$ mè mò- $\eta$ | mé mò- $\eta$ |
| 3LogoPl | $X$ mé yà:- $\eta$ | mé yà: mò |

b. includes $-\grave{\eta}$

| 1 Pl | $X$ ì- | í- 1 |
| :---: | :---: | :---: |
| 2 Sg | $X$ ò-ŋ̀ | ó-ı̀ |
| 2 Pl | $X$ è-ı̀ | é-ı̀ |
| 3 Sg | $X$ nà-ŋ̀ | ná-ì |
| 3 Pl | $X$ bè-n | bé-r̀ |

The postnominal possessor pronouns can acquire an H-tone from a preceding word ending in rising tones, by Rightward H-Tone Shift. From bě:g (</bè:gú/) 'stick' we get such possessed forms as bè:gù mmó 'my stick' and bè:-gù ó-ŋ̀ 'your-Sg stick'. Logophoric mè mò- $\eta$ does not allow the shift: bě:g mè $m \grave{-\eta}$ '(X said:) his/her stick'.

Plural yà: follows the postnominal possessor: bè:gù mmó yà: 'my sticks'.
As is shown by these forms of bě:g, the addition of a postnominal possessor prevents apocope of a final short high vowel.

### 6.2.1.3 Tones of modifiers of alienably possessed nouns

In combinations of the type Poss ${ }^{\mathrm{L}}$ [ N Adj], Poss ${ }^{\mathrm{L}}\left[\mathrm{N}\right.$ Num], and Poss ${ }^{\mathrm{L}}[\mathrm{N}$ Adj Num], a prenominal (i.e. full-NP) possessor controls $\{\mathrm{L}\}$ tone overlay (tone-dropping) on a target domain that begins with the noun and extends to its inner modifiers (adjectives and/or numerals).
a. sé:dù
L [ùyò-ŋ
pìlà-n] S
${ }^{\mathrm{L}}$ [dog
white]
'Seydou's white dog.'
$\begin{array}{lll}\text { b. sé:dù } & \begin{array}{l}\text { L } \\ \text { [ùnò- } \eta\end{array} & \text { tà:ndù] } \\ \mathrm{S} & { }^{\mathrm{L}} \text { [dog } & \text { three] }\end{array}$
'Seydou's three dogs.'

If the NP continues with a demonstrative, the string between possessor and demonstrative is L-toned. Either the possessor on the left, or the demonstrative on the right, could control this
$\{\mathrm{L}\}$, so we have a kind of double control. I therefore put superscript ${ }^{\mathrm{L}}$ on both edges of the target domain.

| a. sé:dù | $\mathrm{L}[u ̀ \eta \grave{\jmath}-\eta$ pìlà- $\eta]^{\mathrm{L}}$ | ǒg |  |
| :--- | :--- | :--- | :--- |
| S | ${ }^{\mathrm{L}}[\operatorname{dog}$ | white] ${ }^{\mathrm{L}}$ | Prox |

'this white dog of Seydou's'
$\begin{array}{lllll}\text { b. sé:dù } & { }^{\mathrm{L}}[\text { ùnò- } \eta & \text { tà: }: n d u ̀]^{\mathrm{L}} & \text { ògí } & \text { yà: } \\ \mathrm{S} & { }^{\mathrm{L}}[\operatorname{dog} & \text { three] }{ }^{\mathrm{L}} & \text { Prox } & \mathrm{Pl}\end{array}$
'these dogs of Seydou's'

### 6.2.1.4 $\{$ LHL $\}$ on $\mathrm{N}-\ldots$ Num string before postposed pronominal possessor

Suppose now that the (alienable) possessor is a pronoun, hence postposed to the noun and its modifiers. In a string like N-Num-Poss, one would expect no tonosyntactic operations. This is because neither numerals nor postposed possessors interact tonally with an immediately preceding noun or adjective. For example, in both N -Num and N -Poss the noun preserves its lexical tone melody. But when a numeral and a postposed possessor are adjacent (and not followed by a demonstrative), they trigger an \{LHL\} overlay which applies to the $\mathrm{N}-\ldots$...Num string (including any intervening adjectives).

| $\left[\begin{array}{lll}\text { ùnò- } \eta & \text { tá:ndù }\end{array}\right]^{\text {LHL }}$ | ò- $\grave{y}$ | yà: |
| :--- | :--- | :--- | :--- |
| $\left[\begin{array}{lll}\text { dog } & \text { threee }\end{array}\right]^{\text {LHL }}$ | 2Sg-Poss | Pl |
| 'your three dogs' |  |  |

Further examples are in (97) in $\S 6.1 .1$ above.
This is a very good example of a noncompositional constructional tone overlay. It cannot be generated by simply combining the separate tonosyntactic control properties of the numeral and the postposed possessor, which in any case do not exist. However, since possessors are reference restrictors (like all active tonosyntactic controllers), and since preposed possessors do control overlays, my interpretation of the \{LHL\} overlay in (103) is that the numeral has catalyzed the otherwise latent tonosyntactic power of the postposed possessor. Constructional tonosyntactic overlays in Donno So, Toro So varieties, and Togo Kan are somewhat similar but differ in detail.

### 6.2.2 Inalienable possession

Most kin terms are treated exactly like ordinary alienable nouns. A nonpronominal possessor is preposed and controls $\{\mathrm{L}\}$ on the noun (104a). A pronominal possessor is postnominal (104b).

[^0]However, a few kin terms allow a preposed pronominal possessor (105), which is not possible for alienable possession. The attested kin terms of this type denote siblings, maternal uncle, husband (= 'man'), and affine (parent-in-law) (105a). The pronominal possessor has the segmental form of the independent pronoun, but is L-toned. The possessum is realized with overlaid $\{\mathrm{HL}\}$ after a pronominal possessor (105a), but with the usual $\{\mathrm{L}\}$ overlay after a nonpronominal possessor. Seydou and Hawa in (105b) are male and female personal names, respectively.

```
a. mì ...
```

1SgPoss ...
${ }^{\mathrm{HL}}$ Sâ: / ${ }^{\mathrm{HL}}$ Sénè / ${ }^{\mathrm{HL}}{ }_{\text {nês }}$ / ${ }^{\mathrm{HL}}$ ánà / ${ }^{\mathrm{HL}}$ ámlè / ${ }^{\mathrm{HL}}$ gálà /
${ }^{\mathrm{HL}}$ sâyg / ${ }^{\mathrm{HL}}$ délè / ${ }^{\mathrm{HL}}$ ínjò- $\eta$
${ }^{\mathrm{HL}}$ § sister / ${ }^{\mathrm{HL}} \mathrm{Q}$ brother / ${ }^{\mathrm{HL}}$ uncle / ${ }^{\mathrm{HL}}$ husband / ${ }^{\mathrm{HL}}$ parent-in-law / sib-in-law /
nephew-or-niece / elder.sib / younger.sib
'my ${ }^{\lambda}$ sister / $q$ brother / uncle / $q$ husband / parent-in-law / sib-in-law / nephew-
or-niece / elder same-sex sib / younger same-sex sib'
b.

```
sé:dù / hà:wá...
```

Seydou / Hawa ...
${ }^{\mathrm{L}}$ sà: / ${ }^{\mathrm{L}}$ sènè / ${ }^{\mathrm{L}}$ nès / ${ }^{\mathrm{L}}$ ànà / ${ }^{\mathrm{L}}$ àmlè / ${ }^{\mathrm{L}}$ gàlà / ${ }^{\mathrm{L}}$ sàyg / ${ }^{\mathrm{L}}$ dèlè / ${ }^{\mathrm{L}} \mathrm{i} n j \grave{j}^{n}$
${ }^{\mathrm{L}}$ §sister / ${ }^{\mathrm{L}}$ Obrother / ${ }^{\mathrm{L}}$ uncle / ${ }^{\mathrm{L}}$ husband / ${ }^{\mathrm{L}}$ in-law / ${ }^{\mathrm{L}}$ sib-in-law / ${ }^{\mathrm{L}}$ nephew-or-niece / ${ }^{\text {L elder.sib / younger.sib }}$
'Seydou's/Hawa's đ̂sister / Qbrother / uncle / Qhusband / parent-in-law / sibling-in-law / nephew-or-niece / elder same-sex sib / younger same-sex sib'

The relevant kin terms in their unpossessed forms are in (106). They take this form in utterances like 'I don't have a $\qquad$ ,

| noun | gloss |
| :--- | :--- |
| sǎ:- $\eta$ | 'ôsister' |
| sèné- $\eta$ | 'Ob brother' |
| nês | 'maternal uncle' |
| ánà | 'husband' ('man') |
| àmlé- $\eta$ | 'affine, in-law' |
| gàlá- $\eta$ | 'wife's sibling' |
| sǎyg | 'nephew or niece' |
| dèlé- $\eta$ | 'older same-sex sibling' (note final $n$, not $\eta$ ) |
| injó- $\eta$ | 'nephew or niece' |

One might expect that an inalienable construction limited to a subset of kin terms would specifically include 'father' and 'mother', as the most basic of all kin categories. This is not the case here. However, ǹdé: 'father' may etymologically contain an original 1 Sg pronoun ( ${ }^{\mathrm{m}} \mathrm{m}$ dé: or similar), compare Jamsay $m i{ }^{\text {HL }}$ dê: 'my father' from noun dě: 'father'. Cognates of DD ìdé: (meaning 'father' or 'elder brother'), like the Jamsay form just cited, lack the initial nasal, so the fusion probably took place in the recent history of DD.

A second possible case of fusion with a 1 Sg possessor is m̀bó: '(personal) friend', cf. bǒ:- $\eta$ 'comrade, colleague (e.g. at work)'. The latter has 1 Sg possessor forms bò:- $\eta$ mó and mí bò: 'my comrade' (with unexpectedly H-toned mí). If mbbó: 'friend' is fusional, the prototype
should be *mì bó: or the like, with L-toned 1 Sg possessor, as with other kin terms (see above). Unlike the case with 'father', cognates for this item have the initial nasal ( $m b \ldots$...) in a few other Dogon languages (e.g. Tommo So ḿbs' 'comrade'), so the fusion process predates the recent development of DD.

### 6.2.2.1 Tone contour of modifiers of an inalienably possessed noun

A subtle but syntactically important characteristic of inalienable possession (with preposed pronominal or nonpronominal possessor) is that a numeral following the kin term is not subject to possessor-controlled tone overlays. Therefore the numerals ' 6 ' and ' 3 ' appear in (107a-b) with their respective lexical tone melodies. By contrast, in alienable possession the numeral is included in the tone-dropping domain targeted by the possessor (107c).
a. [[mì ${ }^{\mathrm{HL}}$ sá:-wè $]$ kúlè: / tà:ndú] ból-yà
[[1SgPoss ${ }^{\text {HL }}$ §sister-Pl] six / three] go.Pfv-3PISbj
'My six/three sisters' (man speaking) have gone.'
b. [[sé:dù ${ }^{\mathrm{L}}$ sà̀:-wè $]$ kúlè:/ / tà:ndú] ból-yà
[[S ${ }^{\mathrm{L}}$ ôsister-Pl] six / three] go.Pfv-3PlSbj
'Seydou's six/three sisters have gone.'
c. [sé:dù ${ }^{\mathrm{L}}[$ nà: kùlè: / tà::ndù $\left.]\right]$ már-yà
$\left[\begin{array}{ll}\mathrm{S} & \mathrm{L} \\ \text { [cow } & \mathbf{s i x} / \text { three }]] \text { be.lost.Pfv-3PISbj }\end{array}\right.$
'Seydou's six/three cows have been lost.'
Kin terms do not lend themselves easily to adjectival modification, but combinations of the type Poss-N-Adj can be elicited. Here, unlike the case with alienable possession, the adjective imposes $\{\mathrm{L}\}$ on the kin term, overriding the preposed pronominal possessor's $\{\mathrm{HL}\}$, and the adjective surfaces with its lexical tones (108a-b). This can be modeled as a tonosyntactic island, excluding the preposed possessor. By contrast, in alienable possession the adjective is normally part of the possessor's target domain (108c).

'My no-good sister has gone.'
b. [sé:dù $\subset s a ̀: ~{ }^{\text {L }}$ sálà-ŋつ] bólè- $\varnothing$
[S Co'sister ${ }^{\text {L }}$ badっ] go.Pfv-3SgSbj
'Seydou's no-good sister has gone.'
$\begin{array}{lllll}\text { c. } & \text { [sé: } d u ̀{ }^{\mathrm{L}} & { }_{[\text {[nà: } g} & \text { bànù } & \text { yà:] } \\ {[\mathrm{S}} & { }_{\text {L }} \text { [cow } & \text { red (brown) } & \mathrm{Pl}] & \text { ból-yà } \\ \text { go.Pfv- } 3 \mathrm{SgSbj}\end{array}$
'Seydou's brown cows have gone.'

### 6.2.3 Recursive possession

A possessed NP can itself be a possessor. This results in a sequence of two (or more) $\{\mathrm{L}\}$-toned possessed nouns.
(109)
 'Seydou's friend's house'

'Seydou's dog's tail'

### 6.3 Core NP (noun plus adjective)

6.3.1 Noun plus regular adjective

A noun followed by a modifying adjective is tone-dropped. The adjective retains its tones.
a. pèsgè ${ }^{\mathrm{L}}$ gémè- $\eta$
sheep $^{\text {L }}$ black
'(a) black sheep' (< pésgè)
b. ìnà: ${ }^{\text {L }}$ pílà- $\eta$
goat white
'(a) white goat' (< ínà:)
Human nouns that take plural -we keep the suffix before the adjective. By contrast, free plural yà: (the only plural for nonhuman nouns) is a late-NP marker that follows adjectives and some other constituents. In examples like (111a), free plural yà: is used, because there is a postnominal modifier, even though the noun is already marked as plural by its suffix.
a. yà:-wè ${ }^{\mathrm{L}}$ gènǒ: yà:
woman-Pl good Pl
'good women'
b. nà: $g^{\mathrm{L}}$ gènǒ: yà:
cow good Pl
'good cows'

Example (111a) differs in structure from yà:-pày-wé 'old women', where plural suffix -we follows the "adjective" pǎy 'old'. This shows that yà:-pǎy 'old woman' is a compound rather than an ordinary noun-adjective sequence. It is treated by the morphosyntax like a simple noun.

In ordinary (alienable) possession, the possessor outranks the adjective as tonosyntactic controller and imposes $\{L\}$ overlay on the N-Adj sequence. See (101a-b) in §6.2.1.3 above.

### 6.3.2 Adjective gàmbǔl~gàmbúlè: 'certain (ones)'

gàmbǔl ~ gàmbúlè: is a partitioning quantifier. An open set denoted by a common noun ('dog', 'person', 'village') is divided into two (occasionally more) specific subsets, each associated with a different predicate. The quantifier may occur twice, once in each of two complementary parallel clauses (112).
[yà:-wè ${ }^{\mathrm{L}}$ gàmbúlè:] ból-yà, [woman-Pl certain] go.Pfv-3PlSbj, (yà:-wè) gàmbúlè: wás-yà (woman-Pl) certain] remain.Pfv-3PlSbj
'Some women went away, (whereas) others/other women have stayed.'
A frequent combination is wà: $r^{L}$ gàmbúlè: 'sometimes' from wâ:r '(point in) time, occasion'. gàmbǔl is the form used for a mass that is partitioned into two (or more) divisions (113).

| [sikòrò | gàmbǔl] | jé-bòlé- $\eta$, | gàmbǔl | jùmbé-و |
| :---: | :---: | :---: | :---: | :---: |
| [sugar ${ }^{\text {L }}$ | some] | take-go.Pfv-1 SgSbj , | some | leave.Pfv-1SgSbj |
| 'I took some of the sugar (away), and left some (=the rest).' |  |  |  |  |

In (112-3) above gàmbúlè and gàmbǔl are treated like adjectives. In particular, they control tone-dropping on the noun. However, these quantifiers are no ordinary adjectives, since they can also occur in a partitive construction following an already determined NP. In (114), gàmbúlè: is an adverb.


### 6.3.3 Expansions of adjective

### 6.3.3.1 Adjective sequences

Two adjectives may modify the same noun. In this case, the final adjective retains its lexical tones, but tone-drops the preceding N -Adj sequence. Adjectival order is generally free unless a N -Adj combination is highly lexicalized. The adjectives in (115a) and (115b) can therefore be combined either as (115c) or as (115d).
$\begin{array}{lll}\text { a. } & \begin{array}{ll}\text { pèsgè } \\ \\ \text { sheep }^{\mathrm{L}}\end{array} & \begin{array}{l}\text { gémè-n } \\ \text { black }\end{array}\end{array}$ 'a black sheep' (pésgè)
b. pèsgè ${ }^{\mathrm{L}}$ bìnú- $\eta$ sheep $^{\mathrm{L}} \quad$ big 'a big sheep'
c. [pèsgè bìnù- $\eta]^{\mathrm{L}}$ gémè- $\eta$ [sheep big] ${ }^{\text {L }} \quad$ black 'a big black sheep'
d. $[p e ̀ s g e ̀ ~ g e ̀ m e ̀-\eta]^{\mathrm{L}} \quad$ bìnú- $\eta$
[sheep black] ${ }^{\mathrm{L}} \quad$ big [=(c)]

A textual example is [gò-ì bènnùg] ${ }^{\mathrm{L}}$ sálà: 'a mysterious bad thing' (T01 02:59).

The tonosyntactic structure can be modeled as either a single instance of tone-dropping controlled by the outermost adjective, or in two stages as successive-cyclic tone-dropping, beginning with the inner adjective. The former analysis, which is simpler, is adopted here and is the basis for the bracketing in the examples. That a single controller can control an overlay on a word-string is proved by combinations like [ N Num$]^{\mathrm{L}}$ Dem and Poss ${ }^{\mathrm{L}}$ [ N Adj Num], and this can be extrapolated to argue in favor of a [ N Adj11 ${ }^{\mathrm{L}}$ Adj2 for (115c-d).

### 6.3.3.2 Adjectival intensifiers

Adjectives may be intensified by adding an EA-like intensifier (§8.4.7.4).

### 6.3.3.3 'Good to eat'

In (116), the adjective 'good' is in predicative form. It is accompanied by a verbal noun of the relevant 'eat' or 'swallow' verb. The consumed entity appears as an L-toned compound initial. So ' X is good to eat' is expressed as " X -eating is good," rather than by expanding the adjective 'good' directly.
a. $[k u ̀ r e ̀:-[e ̀-g]]^{\mathrm{L}}-[m i ́ n u ̀-g]$ gènò: bó- $\varnothing$
[wild.grape-child] ${ }^{\mathrm{L}}$-[swallow-VblN] good be-3SgSbj
'Fruits of wild grape are good to swallow (=eat).' (< kùrè:-[ě-g])
b. màngòr ${ }^{2}{ }^{\mathrm{L}}-[t \varepsilon ́ m u ̀-g]$ gènò: bó- $\varnothing$
mango ${ }^{\mathrm{L}}$-[eat-VblN] good be-3SgSbj
'Mangoes are good to eat.' (< màngórò)
a. $[n a ̀:-\grave{\partial} \check{\partial}]^{\mathrm{L}}-[n \hat{i}:-g]$ gènò: bó- $\varnothing$
[meal-baobab.leaf] ${ }^{\mathrm{L}}$-[eat.meal-VblN] good be-3SgSbj
'Millet cakes (with baobab sauce) are good to eat.' (< nà:--̀ř)

### 6.4 Noun or N-Adj plus numeral

### 6.4.1 Regular N -Num and N -Adj-Num sequences

A cardinal numeral follows a noun and any modifying adjectives (117a-b). In the absence of a determiner or possessor, the numeral does not interact tonosyntactically with the preceding words. Both the numeral and the preceding words have the same form (including tones) that they have independently.

```
a. pésgè tà:ndú/ kúlè:
    sheep three / six
    'three/six sheep/goats'
b. pèsgè }\mp@subsup{}{}{\textrm{L}}\mathrm{ gémè-ŋ tà:ndú/ kúlè:
    sheep b black three/six
    'three/six black sheep' (pésgè)
```

The examples in (117) show that free plural morpheme yà: is absent from NPs containing a nonsingular numeral (unless there is an intervening determiner). However, non-kinship human nouns that have a plural with -we retain this suffix before a numeral (118).
a. è-wé / yà:-wé tà:ndú
child-Pl / woman-Pl
three
'three children /women'
b. ánù-wè tà:ndú
man-Pl three
'three men'.

In ordinary (alienable) possession, a numeral modifying the possessum is included in the tone-dropping domain controlled by a preceding possessor. In inalienable possession (kin terms), the numeral is tonally free; see (107a-b) in §6.2.2.1 above.

### 6.4.2 Adjective-Numeral Inversion (N-Adj-Num to N-Num-Adj)

In simple N -Adj-Num combinations, the order of the three words is fixed. When a possessor, demonstrative, or 'all' quantifier is added, inversion to N -Num-Adj is allowed (but not required). These elements are called inversion licensors.

In (93), (95), and (97) in §6.1.1 above, examples of the different combinations of words within an NP are given. Those including inversion are labeled "(inverted)" in the glosses and can easily be spotted.

In the combination N -Adj-Num-Poss including a postnominal (pronominal) possessor, the possessor optionally relocates to a position next to the noun, whether or not the adjective and numeral are inverted. The resulting sequences are N -Poss-Adj-Num and (inverted) N-Poss-Num-Adj. Examples are in (97h) above.

In combinations where the adjective and numeral are inverted with only a postnominal possessor or the 'all' quantifier as licensor, the tonosyntactic difference between numeral and adjective remains operative. That is, in uninverted N-Adj-Num, the only tone-dropped word is the noun, which is under the control of the adjective: $\mathrm{N}^{\mathrm{L}}$ Adj Num. In inverted $\mathrm{N}-\mathrm{Num}-\mathrm{Adj}$, by contrast, the entire N -Num sequence has come under the control of the adjective, so the output is [N Num] ${ }^{\mathrm{L}}$ Adj. See ( $971, \mathrm{p}$ ) for examples. In other words, adjectives control tone overlays only to the left, and only after any relinearizations.

### 6.4.3 káybòn or kúrò: ‘a lot’

Quantifier káybòn 'a lot, many, much' follows a noun. It can be used with masses ('much') or sets ('many'). Human nouns show their usual plural marker -wè (119). The noun is not tonedropped, see 'sheep' in (119a), showing that it functions syntactically as a numeral, not as an adjective. A preceding /LH/-toned noun in the same NP drops to L-tone, see 'cow' and other examples in (119a), by merger of the H-tone with the initial H -tone of the quantifier (§3.7.4.2). In (119d-f), on the other hand, káybòn is adverbial, and it does not absorb the final H-tone of něm 'salt' or gǒ- $\eta$ 'thing'.
káybòn may follow a possessed NP, in a partitive-like construction (119b). Oddly, in combination with a demonstrative, my assistant produced and accepted only the order

N-Quant-Dem, which appears as [N Quant] ${ }^{\text {L }}$ Dem after tonosyntax (119c). káybòn may be used absolutely, without a noun (119f).

In (119a-c), kúrò: is an alternative to káybòn when the latter functions as a numeral. However, my assistant rejected kúrò: in (119d-f), where káybòn is adverbial.
a. nà: / pésgè / nò-wè / yà:-wè / è-wè
cow / sheep / person-Pl / woman-Pl / child-Pl
bòlè:-ǹ
go-Ipfv.3PlSbj
'Many cows/sheep/people/women will go.'
(nǎ:, pésgè, nò-wé, yà:-wé, è-wé )
káybòn / kúrò:
b. [è-wé m̀mò] káybòn / kúrò: bòlè:-ǹ
[child-Pl 1SgPoss] a.lot go-Ipfv.3P1Sbj
'Many of my children will go.'
c. [[nà: / pèsgè kàybòn/kùrò:] ${ }^{\mathrm{L}}$ ògù bèlé] bòlè:-ǹ̀
$\left[\begin{array}{llll}{[\text { cow / sheep }} & \text { a.lot }\end{array}{ }^{\mathrm{L}}\right.$ Prox Pl] go-Ipfv.3PlSbj
'Many (of) these cows/sheep will go.'
d. něm káybòn / \# kúrò: kúndè- $\varnothing$
salt a.lo
put.Pfv-3SgSbj
'He/She put in a lot of salt.'
e. gǒ-n káybòn / \# kúrò: jínè- $\varnothing$
thing a.lot bring.Pfv-3SgSbj
'He/She brought many things.'
f. káybòn / \# kúrò: jínè- Ø
a.lot bring.Pfv-3SgSbj
' $\mathrm{He} /$ She brought a lot.'

Adverbial 'a lot, greatly' is gìnné. My assistant produced gìnné and rejected káybòn in (120a). He produced both in the two versions of (120b).
a. ná
gìnné / \# káybòn
nóy-yè- $\varnothing$
3Sg a.lot / \# a.lot
sleep-MP.Pfv-3SgSbj
'He/She slept a lot.'
b. àlá: gìnné / káybòn $\quad w \hat{\varepsilon}:-\varnothing$
$\operatorname{rain}(\mathrm{n}) \quad$ a.lot / a.lot $\quad$ rain(v).Pfv-3SgSbj
'It rained a lot.'

For gìnnè in comparatives 'be/do more than X ', see $\S 12.1 .1 .3$.

### 6.5 NP with determiner

### 6.5.1 Prenominal discourse-definite marker (ná-ŋgù, kó-ŋggù, kó)

Prenominal discourse-definite markera did not occur in examples spontaneously produced in elicitation. However, in the texts we find combinations of a noun either preceded or followed by ná-ŋgù or kó-ngù. These are compressed forms including 3 Sg pronoun ná or discoursedefinite kó, followed (arguably) by possessive $-\eta$ and definite ( $\eta$ )gù. kó- $\eta g u ̀$ regularly, and ná-ŋgù often, function as discourse-definite demonstrative 'that' (i.e. what we were just talking about). However, a pronominal possessive reading 'his' or 'hers' is also possible for ná-ทgù, and is normal for other pronouns, e.g. í- $\eta g u ̀ ~ ' o u r s ' ~<~ i ́ l i ̀ ~ y ̀ g u ̀ . ~$

In text T02 at 03:54, ná-ngù mò 'là:dà ngù 'that custom' (or 'the custom of that') has a rare instance of possessive mò between possessor and possessum, but the latter is tonedropped as though mò were not present. A simpler example is T02 01:27 kó-ŋgù ${ }^{\mathrm{L}}$ tò:rù là
 text T01, at 03:46 we find [kó-ŋgù̀ ${ }^{\mathrm{L}}$ Sàbà:b] làn 'for that reason'.

The same sense is expressed in T 02 at $01: 55$ as [kó ${ }^{\mathrm{HL}}$ sábà:b] lày, with simple discoursedefinite kó as "possessor." The $\{\mathrm{HL}\}$ overlay is the same as that with preposed pronominal possessors (which precede kin terms). kó can likewise function as "possessor" of a temporal noun, with the same $\{\mathrm{HL}\}$ overlay. Examples in §8.1.3 are [kó ${ }^{\mathrm{HL}}{ }_{W e ̂}^{\mathrm{e}} \mathrm{\eta} \eta$ 门̀gì] yà $\eta$ 'in that year' and [kó ${ }^{\mathrm{HL}}$ Wâ:r ŋ̀gì] yàn 'at that time' in (148a), and kó ${ }^{\mathrm{HL}}$ dénà- $\eta$ 'on that day' in (149). See also [kó ${ }^{\text {HL }}$ kúlù- $\eta$ ] dà: 'therein, inside it' in the discussion following (154) in §8.2.2. kó also occurs in varius clause-initial expressions relating the immediately preceding discourse to the next clause, e.g. kó lày 'because of that; for that (reason)', (507b) in §17.4.3.
ná-ŋgù and kó-ŋgù can also follow a noun, functioning as demonstratives and therefore tone-dropping the preceding noun. An example is tò: $r^{\mathrm{L}}$ ná-ngù 'that fetish' in T01 02:14.

### 6.5.2 Noun (and modifiers) plus demonstrative

Demonstratives follow the noun and any regular adjectives and numerals. For the forms of demonstratives, see $\S 4.4 .2$. Demonstratives control tone-dropping on the noun and any intervening adjective and/or numeral.
a. pè̀gè ${ }^{\mathrm{L}} \quad \check{ } \quad$ g
sheep $^{\mathrm{L}} \quad$ Prox
'this sheep' (pésgè)
b. [pèsgè gèmè $]^{\mathrm{L}} \quad \check{ } \quad$ g
[sheep black] ${ }^{\mathrm{L}} \quad$ Prox
'this black sheep' (< gémè-ŋ)
c. [pèsgè nè:gè $]^{\mathrm{L}}$ ògù bèlé
[sheep two] ${ }^{\mathrm{L}} \quad$ Prox $\quad \mathrm{Pl}$
'these two sheep' (< né:gè)
d. [pèsgè gèmè- $\eta$ nè:gè $]^{\mathrm{L}}$ ògù bèlé
[sheep black two] Prox Pl 'these two black sheep'

When a preposed possessor co－occurs with a demonstrative，either the possessor or the demonstrative by itself could account for tone－dropping of the noun and any intervening modifiers：Poss ${ }^{\mathrm{L}}[\mathrm{N} \ldots]^{\mathrm{L}}$ Dem．The superscripts on both edges hedge the analysis．

| sé：dù | ${ }^{\mathrm{L}}$［pèsgè | nè：gè $]^{\mathrm{L}}$ | ògù | bèlé |
| :--- | :--- | :--- | :--- | :--- |
| S | ${ }^{\mathrm{L}}[$ sheep | two $]^{\mathrm{L}}$ | Prox | Pl |

＇these two sheep of Seydou＇s＇（pésgè，né：gè）

When a postposed pronominal possessor immediately precedes a demonstrative，the possessor blocks the usual tonosyntactic control by the demonstrative，forming a tonosyntactic island with the noun and any intervening modifiers：$\subset N .$. Poss $\supset$ Dem，see（123a）．Some local tonosyntactic processes take place inside the island，if an adjective is present（123b），but the presence of the demonstrative blocks the \｛LHL\} overlay that is otherwise triggered by adjacent Num－Poss combinations（123a）．If the pronominal possessor moves leftward over a modifier，the demonstrative＇s tonosyntactic control power is（re－）activated（123c）．In deliberate speech style，I have also heard（123c）pronounced in a more chunky fashion，with the N －Poss combination tonally autonomous（123c＇）．The difference is subtle phonetically， and NPs of this bulkiness are difficult for a native speaker to articulate smoothly．

| a． | $\subset p e ́ s g e ̀ ~$ | né：gè | ò－$\supset$ | ògù | bèlé |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\subset$ sheep | two | 2Sg－Poss $\supset$ | Prox | Pl |
|  | ＇these two sheep of yours＇ |  |  |  |  |
| b． | $\subset p e ̀ s g e ̀ ~{ }^{\text {L }}$ | gémè | ò－$\eta$ つ | ògù | bèlé |
|  | $\subset$ sheep $^{\text {L }}$ | black | 2Sg－Poss $\supset$ | Prox | Pl |
|  | ＇these black sheep of yours－Sg＇ |  |  |  |  |
| c． | ［pèsgè | $\grave{o}-\eta$ | nè：gè ${ }^{\text {L }}$ | ògù | bèlé |
|  | ［sheep | 2Sg－Poss | two ${ }^{\text {L }}$ | Prox | Pl |
|  | ＇these two sheep of yours＇ |  |  |  |  |
| $c^{\prime}$ ． | $\subset p e ́ s g e ̀$ <br> $\subset$ sheep $[=(\mathrm{c})]$ | ò－クゝ | $n e ̀: g e ̀ ~ L ~$ | ògù | bèlé |
|  |  | 2Sg－Poss $\triangle$ |  | Prox | Pl |
|  |  |  |  |  |  |

## 6．5．3 Noun（and modifiers）plus definite

The definite marker occurs in the same linear＂slot＂as demonstratives．The two do not co－ occur．Unlike demonstratives，the definite marker does not interact tonosyntactically with a simple noun，noun－adjective，or noun－numeral combination．In the plural form g̀gì yà：，it does acquire an H －tone from a preceding word by Rightward H－Tone Shift（124c），a tone sandhi process．

```
a. pésgè \grave{ }
    sheep Def
    'the sheep-Sg'
```

b. nà:gú ì
cow Def
'the cow' (nǎ:g)
b. pèsgè ${ }^{\mathrm{L}} \quad b \grave{\varepsilon} r(\grave{u})-g u ́ \quad$ ŋ̀
sheep near Def
'the nearby sheep-Sg'
c. pésgè tà:ndù j̀gí yà:
sheep three Def Pl
'the three sheep' (< tà:ndú, ìgì yà:)

### 6.6 Nonnumeral quantifiers

### 6.6.1 Free plural yà: or post-demonstrative (bè)lé:

The free plural marker (not tied morphologically to a noun) is yà: . It cannot immediately follow a noun already marked with human plural -wè (125a). However, if an adjective follows the noun, yà: must be added even though the noun still has its plural suffix (125b). The same is true when the noun is followed by the definite marker $(125 \mathrm{c})$. The principle is the same when the noun is followed by a demonstrative, but demonstratives have their own plural marker bèlé;, often reduced to lé: (125d), that is more common than yà:; though the latter is accepted (125e).
(125)
a. yà:-wé (\#yà:)
woman-Pl (\#Pl)
'women'
b. yà:-wè ${ }^{\mathrm{L}}$ gèň̌: yà:
woman- $\mathrm{Pl}^{\mathrm{L}}$ good Pl
'good women'
c. yà:-wè ngí yà:
woman-Pl Def Pl
'the women' (</yà:-wé ggì yà:/)
d. yà:-wè ${ }^{\mathrm{L}}$ ògù lé:
woman- $\mathrm{Pl}^{\mathrm{L}}$ Prox Pl
'these women' (</ògú lè:/)
e. yà:-wè ${ }^{\mathrm{L}}$ ògí yà:
woman- $\mathrm{Pl}^{\mathrm{L}} \quad$ Prox Pl
[=(d)]
yà: is not added directly after a numeral (126a-b) or before or after fú: 'all' (126e). However, yà: is required when a nonsingular numeral is followed by the definite morpheme (126c). (bè)lé: (or less often yà:) is likewise required after a demonstrative (126d).
a. yà:-wé ǹnó
woman-Pl 5
'5 women'
b. yà:-wè ${ }^{\mathrm{L}}$ gèň̌: ǹnó
woman- $\mathrm{Pl}^{\mathrm{L}}$ good 5
'5 good women'
c. yà:-wé ǹnó ngì yà:
woman-Pl 5 Def Pl
'the 5 women'
d. [yà:-wè nnò ${ }^{\mathrm{L}}$ ògù lé:
$\begin{array}{lll}{[\text { woman-Pl 5] }} & \text { Prox } & \mathrm{Pl}\end{array}$
'these 5 women'
e. yà:-wé fú:
woman-Pl all
'all the women' or 'every woman'
For yà: after a relative-clause verb-participle, see §14.6.2.

### 6.6.2 'All' and 'each'

### 6.6.2.1 fú: 'all, every/each'

fú: and its variants occur as the common 'all' quantifier in several Dogon and other regional languages (notably Fulfulde). It can be prolonged as $f u ́ \rightarrow$, but conspicuous prolongation is less common in DD than in several nearby languages. If the noun is countable, fú: is preceded by a plural morpheme (yà:, -wè, bèlé). Accusative clitic $=\grave{y}$ optionally follows fú: in an object NP (127c), indicating that fú: is part of the NP (DP) and is not a free adverbial. fú: may be used absolutely, without an overt noun, whether denoting a mass (127d) or a set (127e).
a. [êm
fú:]
$n \hat{\varepsilon}:-\varnothing$
[milk all]
drink.Pfv-3SgSbj
'He/She drank all the milk.'
b. [pésgè nà-ŋ̀ yà: fú:] dónè- $\varnothing$
[sheep 3Sg-Poss Pl all] sell.Pfv-3SgSbj
'He sold all of his sheep.'
c. ná
$3 \mathrm{Sg} \quad[1 \mathrm{Pl}$
$\begin{array}{ll}\text { fú:(=ỳ)] } & \text { géw } \grave{:}-\mathrm{b}-\varnothing \\ \text { all(=Acc)] } & \text { kill-Ipfv-3SgSbj }\end{array}$
'He/She will kill us all.'
d. fú:
yámè- $\varnothing$
all be.ruined.Pfv-3SgSbj
'Everything was ruined.'
$\begin{array}{lll}\text { e. fú: } & \text { ból-yà } \\ \text { all } & \text { go.Pfv-3PlSbj }\end{array}$
'Everyone went away.'
'All this' is regular (ǒg fú:). Discourse-definite 'all that' is attested as kó fú: (T01 02:45).
An NP with fú: denoting a set ('all dogs', 'all the dogs') has 3 Pl subject agreement (128a). However, fú: can also be used distributively, with a singular count noun like 'child' in the sense 'each child'. If this NP is the subject, subject agreement is 3 Sg (as in English) (128b).
a. [nà: ngí yà: fú:] ból-yà [cow Prox Pl all] go.Pfv-3PlSbj 'All the cows went.' (</nǎ: ŋgì/)
b. [ě-g fú:] [pésgè né:gè] bèlè:-b- $\varnothing$
[child each] [sheep two] get-Ipfv-3SgSbj
'Each/Every child gets two sheep.'
Because fú: is rather emphatic, it is often pronounced with prominently high pitch as well as prolongation. Preceding H-toned elements, like the pronoun in í fú: 'all of us' in (127c), are lowered in pitch but do not become L-toned. This could be considered a kind of downstep (phonological), or as a rhetorically controlled intonational effect. I do not indicate it in transcriptions.

### 6.6.2.2 $X$ wó: $X$ 'every X'

In this construction, a singular noun is iterated, flanking a morpheme wó: . The sense is 'every X', compare English one X after another and similar phrases.
(129) [ě- $g$ wó: ě- $g]$ pónnùrè:-n
[child every child] circumcise-Ipfv.3P1Sbj
'They will circumcise every child (=boy).'
bǎr wó: bǎr and bǎy wó: bǎy are dialectal variants of an expression denoting formal meetings of villagers.

### 6.6.3 Universal and distributive quantifiers with negation

Negation (expressed in the predicate) normally scopes over the universal quantifier (130a-b).
a. [sìyé
fú:]
nà:-lú- $\eta$
[millet all] eat-PfvNeg-1 SgSbj
'I didn't eat all the millet.'
b. [è-wé ngì yà: fú:] wà:-lú-ŋ
[child-Pl Prox $\mathrm{Pl} \quad \mathrm{Pl}] \quad$ see-PfvNeg-1 SgSbj
'I didn't see all the children.'

However, fú: usually does scope over the lexicalized negative 'not be' quasi-verb bò-nnú, which therefore behaves like English 'be absent' rather than 'not be present'. (131) means that not a single child is present.

| [è-wé | ngì | yà: | fú:] | $\grave{o}-1$ ¢́ | bò-n-yà |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [child-Pl | Def | Pl | all] | here | be-Neg-3P1Sbj |
| None of the children are here.' (=`All the children are absent. ) |  |  |  |  |  |

My assistant struggled to translate 'Not all of the children are here' with the scope relationship switched. He preferred a circumlocution of the type 'Some children are here, and some are not here’, involving the partitioning quantifier gàmbúlè: (§6.3.2). However, he did not completely rule out such a reading for (131), in an appropriate context.
'Nothing', 'nobody', etc. are expressed as clausal negation plus 'one thing', 'one person', etc., then discourse particle là 'even' (132a-b). Another '(not) anything' expression is tólè, perhaps etymologically one of the ' 1 ' numerals. It can be used for things or animals (132c).
a. mí=ỳ $[g o ̀-\eta]^{\mathrm{L}}$ tómò là $]$ ndǎ:-l- $\varnothing$ $1 \mathrm{Sg}=\mathrm{Acc}$ [thing ${ }^{\mathrm{L}}$ one even] give-PfvNeg-3SgSbj 'He/She didn't give me anything.'
b. [nò ${ }^{\mathrm{L}}$ tómò là] mènǎ:-1- $\varnothing$
[person ${ }^{\text {L }}$ one even] come-PfvNeg-3SgSbj
'Nobody came.'
c. tólè wà:-lú-ŋ
anything see-PfvNeg-1SgSbj
'I didn't see anything.'

### 6.7 Accusative ( = ỳ )

The accusative morpheme is a postposition-like enclitic that is added at the end of the NP. However, it is uncommon after fú: 'all'. It is segmentally identical to the 'it is' clitic $=y$. Accusative $=\grave{y}$ is always L-toned, while $=y$ ' it is' gets its tone by spreading from the left.

The accusative morpheme is obligatory with direct-object pronouns that have human reference. It is common after nonpronominal NPs with human or less often animate (e.g. livestock animal) reference in direct object function. It is grammatical but somewhat uncommon after inanimate NPs (133c). The accusative is used in imperatives in the same way as in indicative clauses (133e).
a. sé:dì=ỳ $/$ è-wé $=\grave{y}$
Seydou=Acc / children=Acc

```
wě:-\eta / bùndé-\eta
see.Pfv-1SgSbj / hit.Pfv-1SgSbj
```

'I saw/hit Seydou/the children.'
b. ínà: $=$ y $/$ ínà: ${ }^{\mathrm{L}} \quad$ kó $=\hat{y}$
goat $=$ Acc $/$ goat $^{\mathrm{L}}$ Dist=Acc
wě:-ŋ / bùndé- $\eta$
see.Pfv-1SgSbj / hit.Pfv-1SgSbj
'I saw/hit a goat/that goat.'
c. $\operatorname{kínn\grave {̀}(=ỳ)/kì\eta n\grave {~}}{ }^{\mathrm{L}}$ kó $(=y ̀) \quad$ wě:- $\eta$ / bùndé- $\eta$ $\operatorname{tree}(=\mathrm{Acc}) /\left[\operatorname{tree}{ }^{\mathrm{L}} \operatorname{Dist}(=\mathrm{Acc})\right] \quad$ see.Pfv-1SgSbj$/$ hit.Pfv-1SgSbj 'I saw/hit a tree/that tree.'
d. ná=ỳ búndè- $\varnothing$
$3 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-3SgSbj
'She hit him.'
e. ná=ỳ búndò

3Sg=Acc hit.Imprt
'Hit-2Sg him/her!' (also with inverted order: búndò ná = ỳ)
Most "indirect" objects, such as recipients of 'give', can also be marked accusative (§11.1.3.3).

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction [X yàn] [Y yàn] ' X and Y '

Two or more NPs (including independent pronouns) can be conjoined by adding 'and' particle yà $\eta \sim$ yàn ${ }^{n}$ after both conjuncts. A prosodic break is possible after each conjunct.
a. [[mí yàn] [ó yàn]] bò:-má
[[1Sg and] [2Sg and]] go-Hort
'Let's you-Sg and I go.'
b. [[dógò yàn] [púndò yàn]]
[[Dogon and] [Fulbe and]]
fă:m dùlò-nnú- $\varnothing$
understanding(n) be.in-Neg-3SgSbj
'A Dogon and a Fulbe don't get along well.'
[lit. "A Dogon and a Fulbe, understanding is not in (them)."]
c. [[ánù-wè yàn] [yà:-wé yàn]] já:1-ì:-yà
[[man-Pl and] [woman-Pl and]] fight-MP.Pfv-3P1Sbj
'(The) men and (the) women squabbled.'
d. [děn fú:] [[nàmá: yàn ${ }^{n}$ [ísù-g yàn $\left.\left.{ }^{n}\right]\right]$ ह́bè:-bù- $\eta$
[day all] [[meat and] [fish and]] buy-Ipfv-1SgSbj
'Every day I buy meat and fish.'

A conjoined NP may be extended to include a third conjunct (135).
[yà:-wé yàn] [ánù-wè yàn] [è-wé yàn]]
[woman-Pl and] [man-Pl and] [child-Pl and]
'women, men, and children'

Conjunctions can be pronounced with list intonation, whereby yà $\eta$ is articulated at a mid-level pitch in the nonfinal conjuncts and with a noticeably lower pitch on the final conjunct. This is common in extended conjunctions like (135), and is uncommon in simple pronominal conjunctions like (134a).
(136) is phrased as a conjunction, rather than as a disjunction as in English. That is, 'like' is separately predicated of each food, rather than being predicated of their combination.
(136) [[lácìrì yày] [nûm yày]] nàmà-nnú-ŋ [[couscous and] [cowpea and]] like-IpfvNeg-1SgSbj
'I don't like couscous or ("and") cowpeas.'

### 7.1.1.1 Ordering of coordinands

The conjoined NPs are prosodically independent of each other. Except when one conjunct includes the other (for example as a possessor), the linear order of two conjuncts is free. For example, pronouns can occur in either order ('I and you' or 'you and I'). This is unlike the case in English where conjoined NPs are tightly integrated and where linear order is frequently fixed (lexicalized), as in men and women or bread and butter.

In conjunctions of the type ' X and X 's Y ', where X is the possessor of Y , there is naturally a preference for putting simple X first. If X is initially expressed as a nonpronominal NP, the second X is a regular (nonanaphoric) third person pronoun, as in (137).
$\begin{array}{lllll}\text { (137) } & \text { [sé:dù } & \text { yàn }] & \text { [ǹdé: } & \text { nà-ŋ̀े } \\ {\left[\begin{array}{ll}\text { S } & \text { and }]\end{array}\right.} & \text { [father } & \text { yày] } \\ & \text { 3Sg-Poss } & \text { and }]\end{array}$

### 7.1.1.2 ' X and Y ' with a modifier or postposition

Conjunction reduction allowing a modifier or postposition to simultaneously modify both conjuncts is avoided. This is in keeping with the prosodic break after each conjunct. English my sheep and goats and female sheep and goats are rephrased in DD as 'my sheep and my goats' (138a) and 'female sheep and female goats' with the modifier repeated (138b). Likewise for demonstratives (138c), numerals (138d), postpositions (138e), and the accusative clitic (138f). DS places the conjunction in the highest possible syntactic position, so that modifiers do not scope over the entire conjunction.
a. [[pésgè mò yàn] [ínà: mò yàn]] dòné-n
[[sheep 1SgPoss and] [goat 1SgPoss and] sell.Pfv-1SgSbj
'I have sold my sheep(-Sg/Pl) and my goat(s).'
b. [[pèsgè ${ }^{\text {L }}$ yà: $\left.\left.\left.\eta g i ́ ~ y a ̀ n\right] ~[i ̀ n a ̀: ~: ~ y a ̀: ~ \eta g i ́ ~ y a ̀ n]\right] ~\right] ~$
[[sheep ${ }^{\mathrm{L}}$ female Def and] [goat ${ }^{\mathrm{L}}$ female Def and]
jínà-ŋ̀
bring.Imprt-PlAddr
'Bring-2Pl the female sheep and the female goats!'
c. [[pèsgè ${ }^{\mathrm{L}}$ kò bèlé yàn] [ìnà: ${ }^{\mathrm{L}}$ kò bèlé yàn]]]
[sheep ${ }^{\mathrm{L}}$ Prox Pl and] [goat ${ }^{\mathrm{L}}$ Prox Pl and]
દ́bè:-bù-ŋ
buy-Ipfv-1SgSbj
'I will buy these sheep and these goats.'
d. [pésgè tà:ndí yàn] [ínà: tà:ndí yày]
[sheep three and] [goat three and]
ع́bè:-bù-ŋ
buy-Ipfv-1SgSbj
'I will buy three sheep and three goats.'
e. [[ònùn dá: yàn] [[pòrò lá: yàn]
[[outback Loc] and] [[village Loc and]
wâl kànè:-bù-ŋ
work(n) do-Ipfv-1SgSbj
'I work in the bush (=outback) and in the village(s).'

[woman ${ }^{\mathrm{L}}$ Prox=Acc and] [man ${ }^{\mathrm{L}}$ Prox=Acc and]
búnd-yà
hit.Pfv-3PlSbj
'They hit-Past the woman and the man.'

However, appositional or adverbial 'all' quantifiers can be added after the entire conjoined NP with cumulative reference. They are arguably resumptive ('the men and the women, all of them went').

| [ánù-wè | yà $\left.{ }^{n}\right]$ | [yà:-wé | yàn] |
| :---: | :---: | :---: | :---: |
| [man-Pl | and] | [woman-Pl | and] |
| fú: | ból-yà |  |  |
| all | go.Pfv- | Sbj |  |

Conjoined NP ' X and Y ' as relative-clause head NP is usually avoided, but it can be elicited when no paraphrase is possible because the sense is reciprocal ('the X and Y who fought each other'); see §14.2.3.

### 7.1.2 "Conjunction" of verbs, VPs, and clauses

Verbs, VPs, and clauses are not conjoined in the same way as NPs. One cannot add yà to a clause (except when it functions as a 'the fact that ...' NP, under very special circumstances).

The form of combinations of two verbs or predicates depends on the exact relationship between the two, especially whether the combination denotes simultaneous or sequenced events, and whether the two can be construed as aspects of a single complex event. See chapter 15 for the different types of combination, ranging from compound-like "direct chains" to looser forms of subordination of one clause to another.

### 7.2 Disjunction

There is no sharp difference between disjunction and polar interrogative, which asks the listener to choose between two contrary options. On polar interrogatives, see §13.2.1.

### 7.2.1 'Or' $(\mathrm{ma} \rightarrow)$

Th disjunction 'or' is mà $\rightarrow$. The vowel is usually prolonged, to a variable degree. For my assistant, the morpheme normally occurs once, between the two disjuncts. It is phrased prosodically with the left disjunct. A pause or similar intonational break may occur after it but not before it (unless the speaker is struggling to formulate the remainder of the disjunction).

The verb may be repeated, as in (140a), so what translates as an NP disjunction is phrased as a clause disjunction. Or the verb may be uttered only once, as in (140b), making the construction more like the preferred English type with NP disjunction.

| a. | [ísìg | ह̀bè:-b-ò: | mà $\rightarrow$ ] | [nàmá: |
| :--- | :--- | :--- | :--- | :--- |
| [fish | buy-Ip $:-b-o ̀:] ~$ |  |  |  |
|  | 'Will you-Sg buy fish or meat?' |  |  |  |
|  |  |  |  |  |
|  | (lit. "Will you buy fish or will you buy meat?') |  |  |  |

b. [děn fú:] [ísìgù mà $\rightarrow$ ] [nàmá: $\grave{\text { èbè:-bì-y] }}$ [day all] [fish or] [meat buy-Ipfv-1P1Sbj] 'Every day we buy fish or meat.' (lit. "Every day we buy fish or we buy meat.")
c. [ínà: mà $\rightarrow$ ] pésgè Ébà
[goat or] sheep buy.Imprt
'Buy-2Sg either a goat or a sheep!'
If the disjunction involves the quantity of a fixed class of entities, the common noun denoting the set is not repeated (141). In this construction, the disjunction of two numerals is phrased without a prosodic break and usually without noticeable prolongation of mà (141).
(141)


### 7.2.2 Clause-level disjunction

The polar interrogative disjunction (142a) is structurally parallel to the indicative clausal disjunction (142b). At least for my assistant, mà in (142b) must be analysed as a disjunction rather thas as an interrogative.
a. [ò-ní:
$\begin{array}{ll}\text { wâl } & \text { kànè:-bì-y } \\ \text { work(n) } & \text { do-Ipfv-1PlSbj }\end{array}$ mà]
[here $\quad$ work(n) do-Ipfv-1PlSbj or]
[gólò: gòlè:-bì-y]
[farming do.farming-Ipfv-1P1Sbj]
'Shall we work here (at home), or do farm work (in the fields)?'
b. [děn fú:] [ò-ní: wâl kànè:-bì-y mà]
[day all] [here work(n) do-Ipfv-1PlSbj or]
[gólò: gòlè:-bì-y]
[farming do.farming-Ipfv-1PlSbj]
'Every day, either we work here (at home) or we do farm work (in the fields).'

Imperatives and hortatives cannot be coordinated. 'Pay up or leave!' is phrased as 'If you won't pay, leave!' with only the final verb in imperative form.
(143) [sárè-nn-ó: nà:] gó
[pay-IpfvNeg-2SgSbj if] exit(v).Imprt
'If you-Sg won't pay, leave!'

## 8 Postpositions and adverbials

There are some simple lexical adverbs, probably best analysed as nouns that can function as non-argument adjuncts (adverbs). These include the basic temporal and spatial adverbs in §8.4.6, a few others mentioned here and there in this chapter, and the deictic adverbs like 'here' in §4.4.3.1. Expressive adverbials (aka "ideophones") are also adverbial syntactically; see §8.4.7.1-4.

The simple postpositions are mostly L-toned: locative là: and nì:, instrumental-comitative yà̀, conjunctive 'and', and occasionally dative), and purposive lày. Of these, only là: and nì: can acquire an H-tone by Rightward H-Tone Shift. Another postposition, yám 'like, similar to', is always H -toned.

### 8.1 Dative and instrumental

### 8.1.1 Occasional dative use of yàm with 'say'

An "instrumental" PP with postposition yày (or variant) can be used for the indirect object of 'say' (144a-b). Accusative $=\dot{y}$ can also be used with 'say' verbs; the conditions that favor one or the other are not clear. For the phonology of yày and its primary functions, see $\S 8.1 .2$ below.

b. [sé:dù yàn] g̀̀gò-ŋ gín-ò:
[S Dat] what? say.Pfv-2SgSbj
'What did you-Sg say to Seydou?'
By contrast, typologically classic ditransitives 'give' and 'show' put the recipient in the accusative form (145b). This can even be extended to the recipient of 'bring' (145c).

```
a. sé:dù=y bú:dù ǹddé-\eta
    S=Acc money give.Pfv-1SgSbj
    'I gave (the) money to Seydou.'
b. sé:dù=ỳ pésgè pòlé-\eta
    S=Acc sheep show.Pfv-1SgSbj
    'I showed (a/the) sheep to Seydou.'
c. ná ó=ỳ tê: jínè ǹdè:-b-\varnothing
    3SgSbj 2Sg=Acc tea bring give-Ipfv-3SgSbj
    'He/She will bring you-Sg (some/the) tea.'
```

'Reply to X ' was phrased as 'answer [X's question]' (146). This is one example among many where the phrasing avoids the need for a dative.

```
[tùbá: mm\grave{] kìsà:-l-ó:}
[question 1SgPoss] reply-PfvNeg-2SgSbj
'You-Sg didn't answer me.' ('You didn't answer my question.")
```

An easy way to express a dative or benefactive object with a wide range of verbs is to combine the verbs in direct chains with ńdè 'give' (§15.1.6).

See also purposive and causal postposition lày (§8.3.1).

### 8.1.2 Instrumental-comitative yày (~ yàt)

This postposition is used in the full range of instrumental and comitative senses (14a-c). It can function abstractly, as in 'by force' (147d). It can also be used to denote using vehicles as means of conveyance (147e). For occasional dative use with 'say' see the preceding section.
a. ùnó- $\eta$ [bè:gí yàn] bùndè- $\eta$ dog [stick Inst] hit.Pfv-1 SgSbj
'I hit-Past (a/the) dog with (a/the) stick.'
b. [ǔ: yàn] mén-dà: jò-n
[honey Inst] come-Prog have-3PlSbj
'They are coming with (the) honey.' (ǔ:- $\eta$ )
c. [sé:dù yàn ${ }^{n}$ wâl kànè̀:-bù- $\eta$
[S Inst] work(n) do-Ipfv-1SgSbj
'I work with Seydou.'
d. [sémbè yàn] núy-yà
[force Inst] enter.Pfv-3P1Sbj
'They entered by force.' (= 'They barged in.')
$\begin{array}{lllll}\text { e. } \begin{array}{lll}\text { ع́:nì } & \text { [mòpîl } & \text { yày] } \\ \text { tomorrow } & \text { [bus } & \text { Inst }]\end{array} & \begin{array}{l}\text { bàmàkò }\end{array} & \text { bólè:-bù- } \eta \\ & \text { Bo-Ipfv-1SgSbj }\end{array}$
'I (will) go to Bamako by bus tomorrow.'
Phonology: the final $\eta$ is dropped before a vowel or semivowel, but the vowel of the postposition is then nasalized (yà ${ }^{n}$ ). Before other consonants, the $\eta$ assimilates in place of articulation, but this is not shown in my ordinary transcription. The postposition does not allow Rightward H-Tone Shift, as shown by 'with stick' and 'with honey' in the examples above.

### 8.1.3 Temporal yàn 'during' and dènà 'on the day of'

Instrumental-comitative yày 'with' (for its phonology see the preceding section) can also be used with most temporal nouns, including wâ:r '(point in) time', wǒ:g 'month', and wě- $\eta$ 'year', cf. English locative prepositions in, on, at with temporals. yà y can also be used with
seasons. It will be glossed in this construction as 'during'. Examples are in (148a-c). (148b) is a temporal relative construction. For the $\{\mathrm{HL}\}$ overlay after "possessor" kó, see discussion in §6.5.1.
(148)
a. [kó ${ }^{\mathrm{HL}}{ }_{W \hat{e}-\eta /} /{ }^{\mathrm{HL}}$ Wâ:r ìgì] yàn [DiscDef ${ }^{\mathrm{HL}}$ year / ${ }^{\mathrm{HL}}$ time Def] during 'in that (particular) year / 'at that (particular) time'
 [year ${ }^{\mathrm{L}} /$ time $^{\mathrm{L}} \quad 3 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ come.Pfv.Ppl Def] during 'in the year/at the time when you-Sg came, ...'
c. [jèná: yàn tòmò:] gólò: gòlè:-bì-y [rainy.season during only] farm.work farm(v)-Ipfv-1PlSbj 'We only farm during the rainy season.'

However, děn 'day' has a different construction. In (149a), instead of the expected [day Def during] construction as in (148a-b) above, we get ${ }^{H L}$ dénà:, with $\{\mathrm{HL}\}$ overlay, perhaps contracted from *dên yà̀ (but cf. Najamba dénán 'day'). When anything intervenes between 'day' and the normal postpositional position, as in the temporal relative construction (149b), the same form (with different tone) occurs in the latter position.
a. kó
${ }^{\mathrm{HL}}$ dénà- $\eta$
Dem
${ }^{H L}$ on.day
'on that (particular) day'
b. [[dèn ${ }^{\mathrm{L}} \quad \grave{o} \quad{ }^{\mathrm{HL}}$ ménò: ì $]$ dènà::]
[[day ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ come.Pfv.Ppl $\quad$ Def] on.day]
mí [pòrò lá:] bìyè:-ŋ
1 Sg [village Loc] be.Past- 1 SgSbj
'On the day when you-Sg came, I was in the village.'
There are no allative ('to') or ablative ('from') postpositions. Direction is indicated by verbs ('enter', 'exit', 'go') rather than by PPs. For example, given a (static) locative PP such as 'in the house', one can say 'exit [in the house]' to mean 'go out of the house'.

See also bà: 'since' or 'all the way from' in §8.4.6.4 and in (425a-b) in §15.2.5.

### 8.1.4 Adverbial 'by' (X gà)

An infrequent postposition gà occurs in a few 'by X' adverbials. X denotes a mechanism that accomplishes an action, but is not a separate instrument. The attested combinations are nùmò: gá 'by hand' (< nùmó:), nà: gá 'on foot' (< nă:g), and dàm gá 'by (power of) taboo'. nùmò: gá 'by hand' occurs in text T02 03:06.

This is distinct from gà variant of the topic morpheme (§19.1.1).

### 8.2 Locational postpositions

### 8.2.1 Locative 'in, on’ (là:, nì:)

There are two basic locatives, là: (dialectally rà:) and nì: . They can be used with place names including city names, as well as other spatial reference points and containers. This section describes their use as simple locative postpositions, added directly to the landmark NP. They are also part of compound postpositions described in subsquent sections.

They become H-toned lá: and ní: when the final H-tone of a preceding donor word is transferred by Rightward H-Tone Shift. The $l$ of là: becomes $d$ after a nasal consonant (§3.5.5.1), including the semi-segmentable final $-\eta$ of many nouns.

Examples of là: are in (150). This postposition is favored when the landmark is primarily a locator, for example a city, a zone like 'the bush (the outback)', or a human dwelling.
a. [bàmàkò lá:] bò-ŋ
[B Loc] be-1 SgSbj
'I am in Bamako (city).'
b. nò-wé [tènnè lá:] mòmb-ì:-yà
person-Pl [well(n) Loc] assemble-MP.Pfv-3P1Sbj
'The people assembled at the well.' (< tènné )
c. [misí́:rè là:] yè bó- $\varnothing$
[mosque Loc] Exist be-3SgSbj
' $\mathrm{He} /$ She is at/in the mosque.'
d. [òjùn dá:] bò- $\varnothing$
[the.bush Loc] be-3SgSbj
'He/She is in the field(s).' (< òpùnú)
e. [frâ: ${ }^{n} S$ là:] bò- $\varnothing$
[F Loc] be-3SgSbj
'He/She is in France.'
f. [k̂̂:g yà:] [nûm dà:] nún-yà
[insect Pl ] [cowpea Loc] enter.Pfv-3PlSbj
'Insects have gotten into the (stored) cowpeas.'

Progressive -là: in verbal inflection is probably etymologically related.
Examples with nì: are in (151). This postposition is used when the landmark is a small to medium-sized container, a mass into which an object can enter, or a planar surface (vertical or horizontal).
a. ńnù
[dóyò
nì:] yè
dúlò- $\varnothing$
water [waterjar Loc]
be.inside.Stat-3SgSbj
'The water is in(side) the jar.'
b. [ńnù nì:] nún-yà
[water Loc] enter.Pfv-3PlSbj
'They went into the water.'
c. dô: [kógòl nì:] yè tárà- $\varnothing$
paper [wall Loc] Exist be.on.Stat-3SgSbj
'The paper is (posted) on the wall.'
d. mòpîl [sònnò-ìsìlè ní:] íg-yè- $\varnothing$
vehicle [earth-sand Loc] stand-MP.Pfv-3SgSbj
'The vehicle got stuck in the sand.' (< sònnò-ìsìlé )
e. [gélgè j̀gì yà:] [bò:rò ní:] kúndò-ì
[gear Def Pl] [bag Loc] put.in.Imprt-PlAddr 'Put-2Pl the stuff (clothes etc.) into the bag!' (< bò:ró )
f. [ómòlyò yà:] [kòbù-n ní:] yè dúlò-ǹ
$\left[\begin{array}{lll}\text { bee } & \mathrm{Pl}] \quad \text { [apiary Loc] Exist be.in.Stat-3P1Sbj }\end{array}\right.$
'The bees are in the (manmade) apiary.' (< kòbú- $\eta$ )
g. [tê: ${ }^{\text {Lgèlgè }]}\left[\begin{array}{ll}\text { nì:- } \eta & \text { ní: }] \\ \text { yè ténà- } \varnothing \\ \end{array}\right.$
[tea ${ }^{\text {L gear] }}$ [mat Loc] Exist be.on.Stat-3SgSbj
'The tea-kettle is on the mat.' $(<n \check{i}:-\eta)$
With motion verbs, locative marking can be omitted (152).
a. pòrò bólè:-bù-ク
village go-Ipfv-1SgSbj
'I am going to the village.' (pòró )
b. pòró gě:-ŋ
village exit.Pfv-1SgSbj
'I left the village.'

For temporal 'at night, during the night' the noun yá:gà 'night' is used without a postposition.
Adverbial 'chez X' ('at X's house/place') is expressed by là: added to a possessor form of X with unexpressed possessum, rather like English at Sam's.
(153) [[á:màdù mò] là:] náyè:-bù- $]$
$\left[\begin{array}{lll}{[A} & \text { Poss }] ~ L o c] ~ s p e n d . n i g h t-I p f v-1 S g S b j ~\end{array}\right.$
'I will spend the night at Amadou's.'
'Chez moi' is mò-ŋ́ dà: (including post-nasal locative allomorph dà:).
A locative morpheme -ŋà: occurs in demonstrative adverbs like yá-ŋà: 'over there', see (64b) in §4.4.3.1.

### 8.2.2 'Inside $\mathrm{X}^{\prime}$ ([ $X^{\text {L }}$ kùlù-ŋ $]$ dà: $)$

A possessed form of the noun kúlù- $\eta$ 'interior' is followed by locative la:, which becomes dà: after a nasal. The combination is [ $X{ }^{\mathrm{L}}$ kùlù- $\eta$ ] dà: . If X is /LH/-toned this becomes $[X$ ${ }^{\mathrm{H}+\mathrm{L}}$ kúlù- $-\eta$ ] dà: by Rightward H -Tone Shift.
(154) [ńbù- $\eta$ ${ }^{\mathrm{L}}$ kùlù- $\eta$ ] dà: [house ${ }^{\text {Linterior] }}$ Loc
'inside the house'
Further examples are [pòrò ${ }^{\mathrm{H}+\mathrm{L}}$ kúlù-ท] dà: 'inside the village' (pòró, with tone shift), [mìsí:rè $\left.{ }^{\mathrm{L}} k u ̀ l u ̀-\eta\right]$ dà: 'inside the mosque', [dóŋò ${ }^{\mathrm{L}}$ kùlù-ŋ] dà: 'inside the waterjar', and discoursedefinite [kó ${ }^{\text {HL }}$ kúlù- $\eta$ ] dà: 'therein, inside it'. My assistant rejected combinations with 1st/2nd person pronouns.

Without an overt landmark, kúlù- $\eta$ dà: is adverbial '(on the) inside, in the interior'. kúlù- $\eta$ nì: is also attested (T02 00:24).

Predicative 'be inside X ' where X is a container or similar enclosure (such as a house) is usually expressed by a stative verb yè dúlò (yè is the existential proclitic).

### 8.2.3 'On (the head of) $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ kì:gù $]$ nì:)

With persons, 'on X ' often implicitly means 'on the head of X ', as in 'the rock landed on me'. This is made explicit in DD, using a possessed form of kî:g 'head' (155a). When the landmark is a quadruped or any horizontally extended entity (dwelling, mat), 'head' is omitted (155b-c).
a. dúmbà- $\eta$ [[kí:gù m̀mò] nì:] bàg sígè- $\varnothing$
stone [[head 1SgPoss] Loc] fall descend.Pfv-3SgSbj
'The rock fell (=landed) on me.'
b. dúmbà- $\eta$ [dúlù-gù / ḿbù- $\eta$ nì:] bàg sígè- $\varnothing$
stone [donkey/house Loc] fall descend.Pfv-3SgSbj
'The rock fell (=landed) on (a/the) donkey/house.'
$\begin{array}{lllll}\text { c. dúmbà- } \eta & {[\text { nì:- } \eta} & \text { ní: }] & \text { bàg } & \text { sígè- } \varnothing \\ \text { stone } & {[\text { mat }} & \text { Loc }] & \text { fall } & \text { descend.Pfv-3SgSbj } \\ \text { 'The rock fell (=landed) }\end{array}$

### 8.2.4 'Next to, beside $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ bòmbò $]$ là: $)$ or ([ $X^{\mathrm{L}}$ tànà- $\left.\eta\right]$ dà: $)$

These complex postpositions are based on the nouns bòmbó 'side, zone (e.g. part of a village)' or tàyá 'side, flank (e.g. of body)'. The usual translation equivalent of 'next to X ' or 'beside $X^{\prime}$ ' is [ $X^{\mathrm{L}}$ bòmbò] là: . On the other hand, [ $X^{\mathrm{L}}$ tànà- $\eta$ ] dà: 'has a more literal sense 'on the (same) side (or zone) as $X^{\prime}$ and does not require immediate spatial proximity.

| a. | $\begin{align*} & \text { [[sé:dù }  \tag{156}\\ & \text { [[S } \end{align*}$ | $\begin{aligned} & \text { L} \text { bòmbò] } \\ & { }^{\mathrm{L}} \text { side] } \end{aligned}$ | $\begin{aligned} & \text { là:] } \\ & \text { Loc] } \end{aligned}$ | $\begin{aligned} & \text { bò- } \eta \\ & \text { be- } 1 \mathrm{SgSbj} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 'I am (right) next to Seydou.' |  |  |  |  |
| b | [[sé:dù | ${ }^{\text {L }}$ tàyà-n] | dà:] | $b o ̀-\eta$ |
|  | [[S | ${ }^{\text {L }}$ side] | Loc] | be-1SgSbj |
|  | 'I am in the (same) side as Seydou.' |  |  |  |

With pronominal landmark: [bòmbò ó-ì] là: 'next to you-Sg'. With no overt landmark, we get adverbial bòmbò lá: 'to the side, nearby'.
[ $X^{L}$ tà $\left.\eta a ̀-\eta\right]$ dà: can also mean 'toward $X$ ' with a motion verb (157).

| [[sèwá:rè | ${ }^{\text {L }}$ tàyà-ŋ] | dà:] | $t \varepsilon ́ g-y e ̀-\varnothing$ |
| :---: | :---: | :---: | :---: |
| [[S | ${ }^{\text {L }}$ side] | Loc] | head.for-MP-3SgSbj |
| 'He/She h | toward | are |  |

With 1 Sg landmark: [tàyà mmó] là: or [tàyà mmó ŋ̀] dà: 'toward me', with 2 Sg [tàyà $\hat{o}-\eta$ ] dà: or [tàyà ó-ŋù ̣̀] dà: 'toward you-Sg'.

### 8.2.5 'In front of' ([ $X^{\text {L }}$ gìrò $]$ là: $)$

From noun gírò '(the) front' (distinct tonally from gìró 'eye') we get complex postposition [ $X$ ${ }^{\mathrm{L}}$ gìrò] là: 'in front of X ' or 'ahead of X '. X is normally an oriented entity with a front and a back, especially a person or animal.
a. [[sé:dù ${ }^{\mathrm{L}}$ gìrò] là:] bò- $]$
$\left[\left[S \quad{ }^{\text {L front }}\right] \quad \mathrm{Loc}\right] \quad$ be- 1 SgSbj
'I am in front of Seydou.'
b. sé:dù [[gírò mò] là:] bò- $\varnothing$
$\mathrm{S} \quad[[$ front 1 Sg. Poss] Loc] be- 3 SgSbj
'Seydou is in front of me.'
Adverbial 'in front, ahead, forward' is gírò là: .

### 8.2.6 'Behind $X^{\prime}$ ' or 'after $X^{\prime}$ ( $\left[X^{\mathrm{L}}\right.$ ìdò- $\left.\eta\right]$ dà: $)$

The noun ǹdó- $\eta$ 'back (of body)' is the basis for the complex spatial postposition 'behind X '.
$\begin{array}{lll}\text { a. } & {[[\text { sé: } d u ̀} & \left.{ }^{\mathrm{L}} \text { ǹd̀̀- } \eta\right] \\ & {[[\mathrm{S}} & \left.{ }^{\mathrm{L}} \text { back }\right] \\ & \text { 'I am behind Seydou.' }\end{array}$
b. sé:dù [[ǹdò-n mó] là:] bò̀ $\varnothing$
S [[back 1Sg.Poss] Loc] be-3SgSbj
'Seydou is behind me.'

This construction can also be used in the temporal sense ('after X'). My assistant used independent preposed pronouns rather than postnominal possessor pronouns in this construction (160b).
(160)
a. [kèl
ńdò- $\eta$.
${ }^{\text {L }}$ tàyà- ! $]$
bòlè:-bù- $\eta$
go-Ipfv-1SgSbj
'I will travel after the holiday.' (kěl)
b. [[mì ńdò-ŋ] ${ }^{\mathrm{L}}$ tànà- $\left.\eta\right]$ bòlè:-b- $\varnothing$
[[1SgPoss back] ${ }^{L}$ side] go-Ipfv-3SgSbj
'He/She will travel after me (=after I do).'
c. [sé:dù ${ }^{\mathrm{L}}$ ǹdò- $\left.\eta\right] \quad{ }^{\mathrm{L}}$ tà $\left.\eta a ̀-\eta\right] \quad$ bòlè:-bù- $\eta$
[S ${ }^{\mathrm{L}}$ back] ${ }^{\mathrm{L}}$ side] go-Ipfv- 1 SgSbj
'I will travel after Seydou (=after he does).'

Adverbial 'behind, in the rear' is ǹdò- $\eta$ dá: .

### 8.2.7 'Above $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ dànà- $\left.\eta\right]$ dà: $)$, 'below $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ Sìgà- $\eta$ / dùndù- $\left.\eta\right]$ dà: $)$

The nouns dánà- $\eta$ 'top, apex, summit' (also 'head' for humans and animals) and either sìgǎ- $\eta$ (dialectally sìgと̌- $\eta$ ) or dúndù- $\eta$ 'bottom, base' are the bases for the complex postpositions 'over/above X' (161) and 'below/under X' (162).
a. [[dúmbà- $\eta \quad{ }^{\mathrm{L}}$ dànà- $\left.\eta\right]$ dà:] bò- $\eta$
[[stone $\left.{ }^{\text {L top] }} \mathrm{Loc}\right] \quad$ be- 1 SgSbj
'I am over/above the rock.'
b. dúmbà- $\eta$ [[dánà- $\eta$ mò ì $]$ dà:] bò- $\varnothing$
stone [[top 1SgPoss Def] Loc] be-3SgSbj
'The rock is above me.'
a. [[dúmbà- $\eta$
${ }^{\text {L }}$ Sìgà- $\eta$ / ${ }^{\mathrm{L}}$ dùndù-n]
dà:] bò- $\eta$
[[stone ${ }^{\text {L }}$ bottom] Loc] be-1SgSbj
'I am below/under the rock.'
$\begin{array}{lllll}\text { b. dúmbà- } \eta & \text { [[dúndù- } \eta & \text { mò }] & \text { là: }] & \text { bò- } \varnothing \\ & {[[\text { sìgà- } \varnothing} & \text { mó }] & & \\ \text { stone } & {[[\text { bottom }} & 1 \text { SgPoss }] & \text { Loc }] & \text { be- } 3 S g S b j \\ & \text { 'The rock is below/under me.' } & & & \end{array}$

My assistant indicated that sìgǎ- $\eta$ is used by older people, dúndù- $\eta$ by younger people.
dánà- $\eta$ 'above' and sìgă- $\eta$ 'below' can be used as compound finals to denote the upper and lower sections of a village that has one section (generally older) on a hill and another section on flat ground at the base of the hill. In the list of DD-speaking villages in $\S 1.2$ above, see under Bendiely, Kentaba, Komoni, and Solo.

Unpossessed locative PPs dánà- $\eta$ dà: 'at the top' and sìgà- $\eta$ dá: 'at the bottom' may function adverbially ('above, overhead' and 'down below, undeneath') without explicit mention of the landmark.

For the senses '(be) on X ' and '(be) up on X ', expressed by stative verbs in combination with simple locative PPs (là: or ni:), see §11.2.3.

### 8.2.8 'Between' ([[X Y] ${ }^{\text {L }}$ bènnà:] là: or ${ }^{\text {L }}$ bènnà: $]$ nì:)

'Between X and Y ', where X and Y are spatial points, is expressed by conjoining X and Y in the usual way (chapter 7) and making this conjoined NP the complement of the complex postposition ${ }^{\mathrm{L}}$ bènnà:] là: or ${ }^{\mathrm{L}}$ bènnà:] nì: . The noun is bènnǎ: 'middle, center'.
(163)

```
[pòrò m̀mó]
    [village 1Sg.Poss]
    [[[bànjìgàrá 
    [[[B and] [K and] Lmiddle] Loc]
    dùlò
    be.in-3SgSbj
    'My village is (located) between Bandiagara (city) and Kendié (town).'
```

A pronominal example of the same type is (164).


A conjoined NP may be replaced by a single summarizing NP or pronoun denoting the group. If a pronoun, we get the usual construction with the possessor following the noun (165a).
a. [bènnà: í-ท̀]
là: (~ nì:)
[middle 1Pl-Poss] Loc
'between/among us' (ì- $\grave{\eta})$
b. [yà:-wè ${ }^{\mathrm{H}+\mathrm{L}}$ bénnà:] là:
[woman-Pl Lmiddle] Loc
'between/among (the) women' (< yà:-wé)

The corresponding adverbial phrase is bènnà: lá: 'in the middle'.

## 8.3 'For' and 'about'

### 8.3.1 Purposive-causal 'for' or 'because of' (lày)

This postposition can be used in (prospective) purposive sense ('for'), or in (retrospective) causal sense ('because of'). It is always L-toned.
a. [bú:dù làn] wâl kánè:-bù-ŋ [money Purp] do do-Ipfv-1SgSbj
'I work for money.'
b. [síkòrò / ǔ:-ŋ lày] mén-yà
[sugar / honey Purp] come.Pfv-3P1Sbj
'They have come for the sugar/for the honey.'
c. [síkòrò làn] ó mènè-y
[sugar Purp] 2 SgSbj come.Pfv-SFoc
'It was you-Sg [focus] who came for the sugar.'
d. [àlá: làn] nùnè-y
[rain(n) Purp] go.in.Pfv-1PlSbj
'We went in(side) because of the rain.'
e. [ámbà làn] mí=ỳ bàrè- $\varnothing$
[God Purp] 1Sg=Acc help.Pfv-3SgSbj
'He/She helped me for God (i.e. without expecting recompense)'

The phonology is the same as for instrumental-comitative yày. There is no Rightward H-Tone Shift, as shown by 'for honey' in (166b). Before a vowel or semivowel the $\eta$ is dropped, but the vowel is nasalized. Before another consonant the $\eta$ assimilates in place (not indicated in ordinary transcription).

For purposive clauses see §17.4.1.

### 8.3.2 Reduced postposition $=:$ ì

Related to dànné 'hunter' is the collocation (with bòlé 'go') dànné=:ỳ bòlé 'go hunting'. Likewise tà:lá 'collective hunt', tà:lá = :ì bòlé 'go on a collective hunt'. The nouns here appear to be furnished with a contracted postposition, possibly *lày.

A connection with purposive function is suggested by ìsìg-úwà: bòlé 'go fishing', with lengthened A-grade of the verb in purposive function (§17.4.1). The corresponding noun is ìsig-û: 'fishing' (lit. "fish-catching").

In áwgàl bòlé 'go on a collective fishing hunt' there is no postposition. The noun is borrowed from Fulfulde awgal.

### 8.3.3 'About, concerning'

No special postposition with this sense was elicitable. The verb dàmé 'speak' or its mediopassive form dàm-yé, for example, can take a direct object denoting the topic

```
já:lù-g dàm-yè:-bì-y
war speak-MP-Ipfv-1P1Sbj
```

'We'll talk about the war.'

### 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity (yáy 'like’)

'Like $X$ ' is expressed as $X^{\mathrm{L}}$ yáy, not to be confused with L-toned instrumental or temporal postposition yày. The landmark X may be a noun-headed NP or a pronoun. In either case the final word in X is tone-dropped.
a. [yà: ${ }^{\mathrm{L}} /$ ànà ${ }^{\mathrm{L}} /$ sè: $\mathrm{dù}^{\mathrm{L}}$ yán] wâl kànè:-b-ǒ:
[woman/man/S like] work(n) do-Ipfv-2SgSbj
'You-Sg work like a woman/a man/Seydou.' (yă:, ánà, sé:dù)
b. sé:dù [mìlò yán] bò- $\varnothing$
$\mathrm{S} \quad[1 \mathrm{Sg} / 2 \mathrm{Sg} \quad$ like $] \quad$ be- 3 SgSbj
'Seydou is like me/you-2SgSbj.'
c. [tùnó: nè:gè ${ }^{\mathrm{L}}$ ] yán
[tale two ${ }^{\mathrm{L}}$ ] like
'something like (=approximately) two tales' (< né:gè) (T01 08:18)
d. [bè dàmò: $\left.{ }^{\text {L }}\right]$ yán
[3PlSbj speak.Pfv.Ppl] like
'like (what) they said' (T01 00:58) (< bè dámò: < dàmó:) (T01 00:58)
Phonology: the H -tone of the final preceding word merges with the H -tone already present in the postposition. An earlier word within the NP is unaffected, e.g. tùnó: in (168c). This is not tonosyntax in the usual sense, which would extend back to the noun.

For yáp in manner adverbial clauses see §15.7.2.1 and §15.7.2.2.
Deictic 'like this, thus, so' is ògì yán (proximate) or ŋ̀gì yán (proximate or unmarked). The other form in this series is kǎy 'like that' (discourse-definite), probably contracted from *kò yáy.

### 8.4.2 Extent (gìnné ‘a lot', dâ:g ‘a little’)

gìnné 'a lot' can function as a noun ('a lot, plenty') or as an adverb ('greatly'). In (169c), it follows a noun that keeps its lexical melody, showing that gìnné is treated like a numeral or free adverb rather than like an adjective. However, in (169d), from the same speaker, gìnné is forced to be part of the NP by the enclosing postposition, and here it does tone-drop the noun 'village'.

```
a. gìnné jòbé- \(\eta\)
greatly run.Pfv- 1 SgSbj
'I ran a lot.'
```

b. gìnné jòbà:-lú- $\eta$
greatly run-PfvNeg-1SgSbj
'I didn't run much.'
c. màngórò gìnné mí=ỳ ńdè- $\varnothing$
mango a.lot $1 \mathrm{Sg}=\mathrm{Acc}$ give.Pfv- 3 SgSbj
'He/She gave me a lot of mangoes.'
d. [[pòrò ${ }^{\mathrm{L}}$ gìnnè] lá:] nàyé- $\eta$
[[village ${ }^{\mathrm{L}} \quad$ a.lot] Loc] spend.night.Pfv- 1 SgSbj
'I have spent the night in many villages.' (pòró)

Predicates have a conjugated bò- 'be' or its negation. gìnné shifts its H-tone to the auxiliary in positive but not negative forms.
a. gìnnè bó-y
a.lot be-1PlSbj
'There are a lot of us.'
b. [dùbá yà:] gìnné bò-ń-yà
[vulture Pl ] a.lot be-Neg-3PlSbj
'There aren't many vultures.'
c. Énnè-ŋ gìnnè bíy $̇$ - $\varnothing$
dust a.lot be.Past- 3 SgSbj
'There was a lot of dust.'

Without an auxiliary, gìnnè can be used as a conjugated verb-like predicate in the comparative sense 'be more (than)', see §12.1.1.3.

The antonym is dâ:g 'a little, few' or adverbial 'somewhat'.
$\begin{array}{lll}\text { a. dâ:g } & \text { jòbé }-\eta \\ \text { a.little } & \text { run.Pfv- } 1 \mathrm{SgSbj}\end{array}$
'I ran a little.'
b. màngórò dâ:g mí=ỳ ńdè- $\varnothing$
mango a.little $1 \mathrm{Sg}=$ Acc give.Pfv-3SgSbj
'He/She gave me a few mangoes.'

### 8.4.3 Specificity

### 8.4.3.1 'Exactly, truly' (né:nè)

$n \dot{\varepsilon}: n \varepsilon ̀$ 'exactly, precisely' can be added as a discourse-functional morpheme to an already complete NP or pronoun. It can be iterated in adverbial function (172b).
a. sé:dù [[ǹdé: mmゝ̀] né:nè] $=1 \grave{0}:-\varnothing$
$\mathrm{S} \quad$ [[father 1SgPoss] exactly]=it.is.not- 3 SgSbj
'Seydou isn't my real (e.g. biological) father'
b. [mí né:nè-né:nè] [é= j̀ là:] mènè:-bì-y
[1Sg Iter-exactly] [2Pl-Poss Loc] come-Ipfv-SFoc
'I personally [focus] will come to your-Pl place.'
These forms can also be used in the sense 'really, truly' in connection with an adjectival or similar predicate (173).

| [wàl ${ }^{\text {L }}$ | ngú] | né:nè-né:nย̀ | mày-g | bó- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: |
| [work(n) ${ }^{\text {L }}$ | Prox] | exactly | difficult | be-3SgSbj |
| 'This job is | really |  |  |  |

### 8.4.4 Evaluation

### 8.4.4.1 'Well’ (gènǒ:) and 'badly’

gènǒ: 'good’ can be used adverbially ('well'). In (174a-b), it does not behave tonosyntactically like an adjective for 'farming' or 'work (n)', since the nouns show their lexical melodies. (174c) shows gènǒ: without an object noun. The final H-tone in gènǒ: merges with the initial H-tone of an imperfective positive verb (174a, c).
a. gólว̀ gènò: gólè:-b-ò:
farming well do.farming-Ipfv-2SgSbj
'You-Sg cultivate (=do farming) well.' (gèň̌:)
b. wâl gènǒ: kánè-nnú-Ø
work(n) well do-Ipfv-3SgSbj
'He/She works well.'
c. gènò: jóbè:-b- $\varnothing$
well run-Ipfv-3SgSbj
'He/She runs well.'
'Badly' is expressed as 'not well' (175).

```
g\varepsiloǹnǒ: jób\varepsiloǹ-nnú-\varnothing
well run-IpfvNeg-3SgSbj
```

'He she runs poorly.' (lit. "does not run well")

### 8.4.5 Manner adverbs

There is no productive counterpart to English -ly deriving adverbs from adjectives. The usual translation equivalent involves adjectival modification of an object noun, which may be a pro forma cognate nominal:

$$
\begin{array}{lll}
{\left[\text { wàl }{ }^{\mathrm{L}}\right.} & \text { ússù- } \eta] & \text { kánè:-b- } \varnothing  \tag{176}\\
{\left[\operatorname{work}(\mathrm{n})^{\mathrm{L}}\right.} & \text { fast }] & \text { do-Ipfv-3SgSbj }
\end{array}
$$

'He/She works fast.'

Some adjectives may function adverbially with no overt morphological change and no modified noun. We saw gènǒ: 'good' and adverbial 'well' in the preceding section. As another example, bállà 'easy' is adverbial in (177). The noun is not tone-dropped as it would be if bállà were functioning adjectivally here; contrast wàl ${ }^{\mathrm{L}}$ bállà 'easy work'.
(177) wâl bállà tîl kánè- $\varnothing$
work easily finish do.Pfv-3SgSbj
'He/She finished the work easily.'
Adjective wàgú- $\eta$ 'distant' can function adverbially ('far away'). Adverbial 'nearby' is likewise bèrǔ-g.

For manner adverbial relative clauses of the type 'the way (in which) you work', see §15.7.2.1. The noun bâ:n 'manner' is the head, overtly or otherwise. For 'like X' phrases, see §8.4.1.
8.4.6 Spatiotemporal adverbials

### 8.4.6.1 Temporal adverbs

Some of the major temporal adverbs are in (178).
a. íyè
kònnè, kònnèná
ónmé, ónmènè
ónmè hándì
kàndá
ně., nè
b. nìná:
írù-n tà:ndù
íyè dèn kèsò:
gòsá:
ènné:
c. É:nì

દ́n dènè
ùnว̀n dénè
íyè jàlà
jû:
d. gò:lí
wèn-nàgá
núŋà:
'today; nowadays'
'again (another time)' (§19.3.1)
'up to now, so far, as of now; (not) yet'
'up to now, so far; (not) yet'
'now' (temporal adverb)
'now' (discourse marker) (§19.1.2)
'yesterday'
'day before yesterday' (contraction < íyè dèn tà:ndù) ("today day three")
'two days before yesterday'
'long ago, in the old days' (see just below)
'previously; in the old days'
'tomorrow; in the future'
'day after tomorrow'
'second day after tomorrow'
'third day after tomorrow'
'week' (now the modern 7-day week)
'last year'
'next year' (wě- $\quad$ 'year', nàgá 'other')
'this year'

### 8.4.6.2 'First(ly)' (gòsá:)

To emphasize a chronological sequencing, adverb gòsá: 'first(ly), to begin with' can be added to a clause.

| (179) | wâl | gòsá: | kàn | ná: |
| :---: | :---: | :---: | :---: | :---: |
|  | work(n) | first | do.Pfv | if, |
|  | $n \varepsilon$ :--lé | né:-b |  |  |
|  | food | eat.m | fv-1P1Sbj |  |
|  | 'First(ly) | work, | we'll eat.' |  |

For ordinal function see $\S 4.6 .2 .1$.

### 8.4.6.3 Spatial adverbs

The following are the most important simple spatial adverbials, other than the demonstrative adverbs in §4.4.3. Those in (180a) include locative postposition là: (dà: after nasal) and are the bases for composite postpositions described in $\S 8.2$.
a. kúlù-ŋ dà:
dánà- $\eta$ dà:
sìgà- $\eta$ dá:
ǹdò-ŋ dá:
gírò là:
bòmbò lá:
bènnà: lá:
b. jı̀mból
pègél
pàgùlá
dû:g
'(on the) inside'
'above, on top, (at) the summit'
'below, (at) the bottom, down'
'(in) the rear, behind'
'forward, ahead, (in) front'
'to the side, nearby'
'in the middle'
'east'
'west'
'south'
'north'
'Right hand' nùmò: ${ }^{\mathrm{L}}$ nǎ:- $\eta$ and 'left hand' nùmò: ${ }^{\mathrm{L}}$ nàndá- $\eta$ are N -Adj combinations with nùmó: 'hand'. It is nowadays possible to use these adjectives adverbially, with a locative postposition: nà:-ŋ dá: 'to the right', nàndà- $\eta$ dá: 'to the left'.

### 8.4.6.4 '(all the way) from/to' (bà:, fà:)

bà: 'since, all the way from' can follow a spatial expression (181a). fà: 'until, all the way to' can precede a spatial expression (181b).
a. [móttì là:] bà: jòbè- $\varnothing$
[M Loc] all.the.way.from run.Pfv-3SgSbj
'He/She ran (here) all the way from Mopti.'
b. jób-yà [fà: dùwánsà]
run.Pfv-3P1Sbj [all.the.way.to D]
'They ran all the way to Douentza.'

Both bà: and fà: tend to be emphatic, as suggested by the glosses with "(all the way"). They can therefore be prolonged intonationally at will: bà $\rightarrow$, fà $\rightarrow$. Their pitch is also variable though they appear to be basically L-toned.

For bà: 'since' in temporal adverbial clauses and as a kind of postposition after nouns, see $\S 15.2 .5$. For bà: as verb 'be worth, equal' see $\S 12.2 .1 .2$. For fà: 'until' in temporal adverbial clauses, see §15.3.5.

### 8.4.7 Expressive adverbials (EAs)

EAs (cf. "ideophones") are basically adverbs. They may be loosely integrated into clauses, but do not easily form part of syntactic phrases such as NPs. They may be made into stative predicates (e.g. 'be straight') in the same way as adjectives, by adding a conjugated form of
auxiliary bò- 'be' or its negation bò-nnú-. They can be made into dynamic predicates (e.g. 'become straight') in the same way as NPs, by adding a conjugated form of the regular active verb élè 'become' in any of its AN forms. See §8.4.7.2 below for examples with té $y^{n} \rightarrow$ 'straight'.

EAs generally differ from regular stems (nouns, adjectives, numerals, verbs, noun-like adverbs) in form. Some are "intonationally" prolonged as with té $y^{n} \rightarrow$, others are optionally or obligatorily iterated, and some adjectival intensifiers have an unusual final reduplication of the shape $V_{1} C_{x} V_{l} C_{x} C_{x} V_{1}$.

### 8.4.7.1 Representative EAs

A long list of EAs functioning as adjectival intensifiers is in §8.4.7.4 below. A few additional EAs are in (182). Unlike nouns, verbs, adjectives, and numerals, an EA may have lexical /L/ melody (jù $\rightarrow$, sò ${ }^{n} \rightarrow$ ).
a. $C V \rightarrow$
$b u ̌ \rightarrow \quad$ 'dead last'
$j \hat{\varepsilon} \rightarrow \quad$ '(bird in flight) swaying slightly from side to side'
$j u ̀ \rightarrow \quad$ 'slumped over'
$p$ án $^{n} \quad$ 'wide open (door)'
b. $C v C(\rightarrow)$
$k \varepsilon ́ y \rightarrow \quad$ 'looking askance, peeking'
nǎy ${ }^{n} \rightarrow \quad$ 'junk, lots of small items, bric-à-brac'
sò ${ }^{n} \rightarrow \quad$ 'having buck teeth'
yé $W \rightarrow \quad$ '(eyes) slightly open'
c. bi- or trisyllabic, prolonged
bòríl 'staring (at sb)'
dèrí $\rightarrow \quad$ 'tip sticking out (tongue, etc.)'
sòrí $\rightarrow \quad$ 'projecting out, sticking out a long way'
sòrgó $\rightarrow \quad$ 'projecting out, sticking out a long way'
gòbgé $\rightarrow \quad$ '(door) be ajar'
d. iterated
kób-kób 'loose-fitting (garment)'
$g \varepsilon ̌: \eta-g \check{\varepsilon}: \eta \quad$ 'staggering (as one walks)'
$p \varepsilon ́: l \grave{\varepsilon}-p \varepsilon ́: l \grave{\varepsilon} \quad$ 'light breeze'
tòngó-tòngó '(infant) walking unsteadily'
bàmbúg-bàmbúg 'staggering (as one walks)'
with vowel mutation
té $y^{n}$-tá $y^{n}(\rightarrow) \quad$ '(suddenly) face to face'
jîg-jâg 'swaying side to side while walking'
In isolation, iterated H -toned monosyllabics are pronounced with $\mathrm{H}-\mathrm{M}$ pitch level, e.g. té ${ }^{n}$-tá $y^{n} \rightarrow$ [téǰtãj], but the H-tone of the second element is clear when $=l o ̀$ : 'it is not' is added.

### 8.4.7.2 'Straight' $\left(\right.$ té $y^{n} \rightarrow$, téy ${ }^{n}$-tè $\left.y^{\prime \prime}\right)$

This is an example of an EA that has a fundamental lexical sense, not an exotic "ideophone." I use it here to illustrate the grammar of EAs. In adverbial function, it has two forms, one simple but with "intonational" prolongation, the other iterated without prolongation (183).

$$
\begin{array}{ll}
\text { té } y^{n} \rightarrow & \text { 'straight' }  \tag{183}\\
\text { té } y^{n} \text {-tè } y^{n} & \text { 'straight' }
\end{array}
$$

In té $y^{n} \rightarrow$, the nasalized semivowel is prolonged. Its duration is variable, depending on rhetorical function and speaker styles. In the iterated form there is no prolongation.

In adverbial function, these forms generally co-occur with motion verbs. Either form may be used in (184).

$$
\begin{array}{lc}
\text { té }^{n} \rightarrow & \text { bólà }  \tag{184}\\
\text { straight } & \text { go.Imprt } \\
\text { 'Go-2Sg straight (there)!' }
\end{array}
$$

Like other EAs, té $y^{n} \rightarrow$ and té $y^{n}$-tè $y^{n}$ can be made predicative. The stative sense 'be straight' can be predicated of a road or a stick, for example. The auxiliary in this case is bo 'be (somewhere)' or its negation bò-nnú-(§11.2.2.2).

$$
\begin{array}{lll}
\text { bè:-g } & \text { té } y^{n} \rightarrow & \text { bò- } \varnothing / \text { bò-nnú- } \varnothing  \tag{185}\\
\text { stick } & \text { straight } & \text { be- } 3 \mathrm{SgSbj} / \text { be-Neg- } 3 \mathrm{SgSbj} \\
\text { 'The stick is } / \text { is not straight.' }
\end{array}
$$

EAs occur in an inchoative construction with the verb élè 'become'. This verb is also used with nouns as predicates ('become X ').

```
ósù téy \({ }^{n} \rightarrow \quad\) élè- \(\varnothing\)
road straight remain. \(\mathrm{Pfv}-3 \mathrm{SgSbj}\)
    'The road became straight.'
```

To make 'straight' (or other EA) into a postnominal modifier denoting a state, it must be made predicative and then converted into a relative clause.

| $[b e ̀:-g$ | $t e ́ y^{n} \rightarrow$ | bò $]$ | dénnò |
| :--- | :--- | :--- | :--- |
| $\left[\right.$ stick $^{\mathrm{L}}$ | straight | be-Ppl] | get.Imprt |

‘Get-2Sg a straight stick!'

### 8.4.7.3 'Apart' (nàgá, nàgá-nàgá )

'Apart, separate, distinct' is expressed by nàgá (also 'other') or iterated nàgá-nàgá. The concept requires at least two referents (individuals or groups) that are contrasted in some way (prototypically spatial). When the subject NP already includes the two referents, the iterated form is used (188a). In a parallelistic constructions, nàgá is repeated after each referent (188b).
a. [[mótì yàn], [sèwá:rè yàn]] nàgá-nàgá bò-ǹ
$[[\mathrm{M}$ and] [S and]] Iter-apart be-3PlSbj
'Mopti and Sevare (are) apart.'
b. [[ánù-wè nàgá] [yà:-wé nàgá]]
[[man-Pl apart] [woman-Pl apart]]
'Men and women (are) apart.'

### 8.4.7.4 Adjectival intensifiers

This is a class of EAs that are associated with adjectival categories. Lexicalized intensifiers that are phonologically unrelated to the associated adjective are in (189a). These intensifiers typically follow the adjective, especially when predicative. The adjective is heard with low pitch. Compare dùmbà- $\eta^{\mathrm{L}}$ bánù- $\eta$ 'red stone' with intensified dùmbà- $\eta{ }^{\mathrm{L}}$ bànù- $\eta{ }^{\mathrm{L}}$ jóy ${ }^{n}-j o ̀ y^{n}$. Since the intensifier is by definition emphatic, the low pitch on the adjective is arguably intonational in nature (the H-tones of an unemphatic element are suppressed directly preceding a more emphatic one). By contrast, the intensifiers in (189b) which have a unique final reduplication, and those in (189c) which iterate the adjective with -má:- as separator, are phonologically related to the adjective and replace it rather than following it: ìnù ${ }^{\mathrm{L}}$ kéllè- $\eta$ 'cold water', intensified ǹmù ${ }^{\text {L }}$ kèléllè 'ice-cold water'. The type with -má:- (189c) is fully productive and can be used as an option even for the adjectives in (189a-b).

$$
\begin{equation*}
\text { gloss } \quad \text { adjective } \quad \text { intensifier } \tag{189}
\end{equation*}
$$

a. iterated, unrelated phonologically to adjective
'red' bánù-ŋ jóy ${ }^{n}$-jò ${ }^{n}$
'white' pílà- $\eta$ tén-tèn
'black' gémè- $\eta \quad$ kís-kìs
'green' $\quad$ '́ř̀̀- $\eta$ jíbà-jìbà
'new' kàsǎ: pélè-pèlè
'hot' ḿmò- $\eta$ bál-bàl
L-toned
'tight' ह́gè- $\eta \quad$ gàn-gà (predicative gàn-gà bó-)
b. ...XvXXv
... Vvllv with lin adjective
'sweet' ह́llè- $\eta$ èléllè
'bitter' gállà-ŋ gàlállà
'cold' kéllè- $\eta$ kèléllè
'coarse' búlòlò-n bùlóllò
...nvnnv with $n$ in adjective
'smooth' ónŋ̀ǹ̀- $\eta$ ònónnゝ̀
'light, thin’ ह́nènè- $\eta$ ènénnè
...mvmmv with $m$ in adjective

| 'sour' | ámmà- $\eta$ | àmámmà |
| :--- | :--- | :--- |
| 'rotten' | ámmò- $\eta$ | òmómmò |


| c. default type with -má:- between iterations stem ends in short non-high vowel |  |  |
| :---: | :---: | :---: |
| 'easy' | bállà | bàllà-má:-bàllà |
| 'short' | dènnó | dènnò-má:-dènnò |
| 'heavy' | dógsò | dògsò-má:-dògsò |
| 'full' | jô: | jò:-má:-jò: |
| 'unripe, raw' | kòló: | kòlò-má:-kòlò |
| 'lean' | kómmò | kòmmò-má:-kòmmò |
| 'pretty' | nályò | nàlyò-má:-nàlyò |
| 'diluted' | sélò: | sèlò-má:-sèlò |
| 'sharp' | síyò- $\eta$ | sìyò-má:-sìyò |
| stem ends in long non-high vowel (shortened) |  |  |
| 'good' | gènǒ: | gènò-má:-gènò |
| 'nasty' | sálà: | sàlà-má:-sàlà |
| stem ends in non-high vowel, geminate nasal is shortened |  |  |
| stem ends in u subject to apocope |  |  |
| 'feeble' | jâ:s | jà:S-má:-jà:s |
| 'plain' | ǒ:n | j̀:ク-má:-ò:ク |
| stem ends in non-high vowel plus deletable - $\eta$ |  |  |
| 'hard; tight' | Égè-ŋ | غ̀gè-má:-غ̀g |
| 'long' | jàlă-ŋ | jàlà-má:-jàlà |
| stem ends in u plus deletable - $\eta$ ( $u$ is apocopated) |  |  |
| 'plump' | ámù-ๆ | àm-má:-àm |
| 'undiluted' | kúrù-ŋ | kùr-má:-kùr |
| 'deep' | mìnú-ŋ | mìn-má:-mìn |
| 'distant' | wàgú-ŋ | wàg-má:-wàg |
| stem ends in -g |  |  |
| 'near' | bèrǔ-g | bèrù-g-má:-bèrù-g |
| 'blunt' | dùmbǔg | dùmbùg-má:-dùmbùg |
| 'breakable' | kǒy-g | kòy-g-má:-kòy-g |
| 'difficult' | mǎy-g | mày-g-má:-mày-g |
| 'ugly' | mònjǔg | mònjùg-má:-mònjùg |
| 'wet' | òlǔ-g | òlù-g-má:-òlù-g |
| 'wide' | pǎy-g | pày-g-má:-pày-g |
| 'lightweight' | yèwùlǔ-g | yèwùlù-g-má:- yèwùlù-g |
| 'loose' | yòrǔ-g | yòrù-g-má:-yòrù-g |

For dâ:g 'small', in practice the "intensified" form is the diminutive dà:g-é:-g 'tiny'.

### 8.4.7.5 Verb tày- $\varnothing$ 'it is X -ish' with color adjectives

The perfective verb tà $y-\varnothing$ can be added to color adjectives to indicate an impure color: pílà- $\eta$ tày 'be white-ish, off-white', gémè- $\eta$ tày 'be blackish', bánù- $\eta$ tày 'be reddish'. The negatiive is tàyǎ:-1- $\varnothing$.

### 8.4.8 Iterated distributive adverbials

For iterated distributive forms of numerals, e.g. 'three-three' meaning 'three each' or 'three at a time', see §4.6.1.6. These are adverbs syntactically and are made into predicates in the same way as EAs. Agreement is normally plural.
(190)
a. tǎ:n-tǎ:n
bò-ǹ
three-three
be-3P1Sbj
'They are (grouped) three by three'
b. tă:n-tă:n $\grave{1}$-yà
three-three become.Pfv-3P1Sbj
'They have become (grouped) three by three'

## 9 Verbal derivation

The productive suffixal derivations (verb stem to verb stem) for verbs are the reversive ('un...'), the causative, and the mediopassive and transitive (often paired). Deadjectaval verbal derivatives are the inchoative and factitive. There are no derivational prefixes.

All derivational processes produce new verb stems that then take regular suffixal inflection for aspect-negation (AN category) and pronominal subject.

As usual, " v " in a formula like $-l v$ - represents a variable vowel. Given that the lexical form of verbs is the original E-stem, in practice " v " in this context means $e$ or $\varepsilon$, subject to further ablaut modification.

### 9.1 Reversive -lv- (-le-, -le-)

The reversive suffix is $-l v$-, abbreviation for a choice between -le- and $-l \varepsilon$-. We observe -leafter +ATR stems, including stems with dominant vowel a, but -le- after -ATR stems. There are a few cases of apparent $-l l v$ - with geminated $l l(191 \mathrm{c})$ that will be discussed below. The lexical tone melody of the input stem, /HL/ or $/ \mathrm{LH} /$, is retained in the reversive. Reversive stems are nearly all trisyllabic (before syncope) and are never longer than that. To avoid quadrisyllabic reversives, transitive $-r v$ and mediopassive $-y v$ either follow or are replaced by the reversive suffix. Reversives are subject to the general rule that medial syllables in trisyllabic verb stems have their vowel raised to $\{i u\}$, which in favorable environments (involving a medial sonorant) is subject to syncope.

The reversive is common in verb pairs like 'cover' versus 'uncover' that denote complementary actions, (at least) one of which reverses or undoes the other. Verbs of donning and doffing garments are fertile ground. A reversive may be intransitive or transitive. 'Remember' is phrased as 'un-forget'. 'Open (door)' is phrased as 'un-shut'.

Examples of underived verbs and their reversives are in (191).
input gloss reversive gloss
a. medial syllable of reversive is not syncopated
reversive CvCi/u-lv with medial obstruent

| jìbù-ré | 'attach wrap on' | jìbù-lé | 'remove wrap from (sb)' |
| :---: | :---: | :---: | :---: |
| bigé | 'bury' | big̀ìlé | 'disinter' |
| dàgé | 'lock' | dàgì-lé | 'unlock' |
| tágì-rè | 'put shoes on (sb)' | tágì-lè | 'take shoes off (sb)' |
| pégè | 'knock blade on' | pégìl-ı̀ | 'knock blade off handle' |
| tógù-rè | 'roll turban on' | tơgù-lı̀ | 'unroll (remove) turban' |
| mùsé | 'stop up (hole)' | mùsù-lé | 'reopen (hole)' |
| reversive Cv:Ci/u-lv |  |  |  |
| tó:nغ̀ | 'step on' | tó:nù-lè | 'take foot off' |
| reversive CvCCi/u-lv |  |  |  |
| kómmè | 'tie' | kómmù-lè | 'untie' |
| dòmmù-ré | 'put hat on (sb)' | dòmmù-lé | 'take hat off (sb)' |
| mùnné | 'fold' | mù | 'unfold' |



```
g\grave{ndù-r\varepsiloń 'hook, hang' gòndù-l\varepsiloń 'unhook'}
kúmbù-rè 'clench (sb's) fist' kúmbù-lè 'unclench (sb's) fist'
tímbù-rè 'put lid on' tímbù-lè 'take lid off'
yàmbù-ré 'cover (sb)' yàmbù-lé 'uncover (sb)'
```

b. medial syllable of reversive is syncopated reversive $C v C-1 v$ with medial sonorant

| tárè | 'affix, post' | tár-lè | 'un-post (remove)' |
| :---: | :---: | :---: | :---: |
| ténè | 'hobble (animal)' | tén-lè | 'un-hobble' |
| kúm-yè | 'shut (eye)' | kúm-lè | 're-open (eyes)' |
| yèré | 'roll up (pants)' | yèr-lé | 'unroll (pants)' |
|  |  | $\sim y \grave{l}$-lı́ (less often) |  |
| jùy-yé | '(bowl) flip' | jù:-1-yé | '(bowl) be un-flipped' |
| [stative | ù-júwò ] |  |  |

c. reversive with geminated $l l$

| "regular" | from Cv:- input (all known examples) |  |  |
| :---: | :---: | :---: | :---: |
| dà:--ré | 'dress (sb)' | dà:-llé | 'undress (sb)' |
| Í:-rè | 'shut (door)' | í:-llè | 'open (door)' |
| archaic with | Cvrv- input |  |  |
| írè | 'forget' | íl-l-yè | 'remember' |

d. input long vowel shortened té:-ndè 'put/lay (up) on' té-ndù-lè 'take (sth) down off'

Data in (191b) show that syncope to $C v C-1 v$ is normal with $C_{2}$ an unclustered sonorant $\{r \eta m w\}$. Compare (191a) with unsyncopated $C v C v-l v$ when $C_{2}$ is an obstruent. For more details on syncope see §3.5.3.2.

The examples with geminated $l l$ in (191c) seem to be of two distinct types. 'Undress' and 'open (door)' have -llv- after a monosyllabic root $C V$ :-. There being no other attested reversives with monosyllabic roots, it may be that the gemination in -llv- functions to compensate for an otherwise subminimal shape. By contrast, íl-l-yè 'remember' (with final mediopassive suffix) is based on the respectably bisyllabic input írè 'forget'. A possible phonological derivation is therefore /írì-lì-yè/ $\rightarrow$ /ír-l-yè/ (syncope) $\rightarrow$ /íl-l-yè/ with /rl/ assimilating to 11 . There are parallels to such liquid assimilation in other Dogon languages, and this derivation may well be historically correct, but there is no other evidence in DD for synchronic /rl/ $\rightarrow 11$ process; see the syncopated Cvr-lv reversives in (191b).

Reversive verbs may feed into more external derivations, generally producing quadrisyllabic or longer stems (before syncope). Examples are in (192).

$$
\begin{equation*}
\text { derivative } \quad \text { gloss } \quad \text { reversive and gloss } \tag{192}
\end{equation*}
$$

a. reversive followed by mediopassive
yàmbù-l-yé 'uncover oneself' yàmbù-lé ‘uncover (sb)'
b. reversive followed by causative
kómmù-l-mè 'cause to untie'
kómmù-lè ‘untie'
c. reversive followed by mediopassive and causative
yàmbù-l-ì:-mé 'cause to uncover self’ yàmbù-lé ‘uncover (sb)'

### 9.2 Causative

### 9.2.1 Productive causative -mv (-me, $-m \varepsilon$ )

The productive causative suffix is $-m v$, i.e. $-m e$ or $-m \varepsilon$. It can be added rather freely to already transitive as well as intransitive verbs. The input verb may already contain inner derivational suffixes. For the valency syntax, see §11.1.3.4.

Causative verbs adopt the lexical tone melody, /HL/ or /LH/, of the input stem. Unlike its cognates in some other Dogon languages, causative -mv also respects the ATR-harmonic class of the input stem. +ATR stems, including all with dominant vowel a, have causative -me, while -ATR stems have -me.

The vocalism of the input stem (root) before the causative suffix is that of the $\mathbf{A} / \mathbf{O}$-stem for monosyllabics, i.e. Ca:-, Co:-, or (for 'arrive') Co:-. For bisyllabic inputs, the stem-final vowel is in the metrically weak medial position. It is therefore raised to $i$ or $u$ (the choice depending on vocalic and consonantal environment). So input $C v C v$ has causative $\mathrm{CvCi} / u-m v$ or syncopated $C v C-m v$. In quadrisyllabic causatives from trisyllabic inputs, both medial vowels are raised, and one of them may be syncopated. Mediopassive -ye- $\sim-y \varepsilon$ - after a consonant is monophthongized to -i:- instead of expected \#-yi-.

Examples are in (193). One oddity is that 'weep' has an /LH/-toned causative (193a).

$$
\begin{equation*}
\text { input gloss } \quad \text { causative gloss } \tag{193}
\end{equation*}
$$

a. monosyllabic input

| $n \varepsilon ̌:$ | 'drink' | nà:-mé | 'give drink to' |
| :---: | :---: | :---: | :---: |
| गモ̌: | 'eat (meal)' | nà:-mé | 'feed, give meals to' |
| yé | 'weep' | yà:-mé | 'cause to weep' |
| sÉ | 'urinate' | sá:-mè | 'cause to urinate' |
| -ATR Co:-me |  |  |  |
| $d \varepsilon$ : | 'arrive' | dò:-mé | 'cause to arrive' |
| +ATR Co:-me |  |  |  |
| gě: | 'exit' | gò:-mé | 'cause to exit, remove |

jě: (cf. gò:-ndé 'take out, remove') ${ }^{\text {'fill (sth)' }}$
b. bisyllabic input

| dàmé | 'speak' | dàm-mé | 'make speak' |
| :--- | :--- | :--- | :--- |
| nùŋॄ́ | 'enter' | nùŋ-mé | 'take in' |
| Wàsé | 'remain' | Wàsù-mé | 'cause to remain' |
| bàgé | 'fall' | bàgù-mé | 'make fall' |
| sémè | 'slaughter' | sém-mè | 'have (sb) slaughter (sth)' |

c. trisyllabic input (including syncopated CvCCv )
kómmè 'tie' kómmù-mè 'make (sb) tie (sth)'
including reversive
kómmù-lè 'untie' kómmù-l-mè 'make (sb) untie (sth)'
including mediopassive

| ób-yè <br> páy-nd-yè | 'sit down' | 'become old' | óbì:-mè |
| :--- | :--- | :--- | :--- |
| páy-nd-ì:-mè |  |  |  |$\quad$| 'make/have $(\mathrm{sb})$ sit' |
| :--- |
| 'make $(\mathrm{sb})$ old' |

A special sense is observed in nàyé 'spend the night' and irregular "causative" nà:-mé 'say good morning to, greet (sb) in the morning' (§19.7).

For causative-like transitivizing derivations involving suffix -rv- or -ndv-, see $\S 9.4 .1$ and $\S 9.4 .3$. For "causative" look-alike $-m v$ - in potential passive function, see the following section.

For the relationship between causative imperative -ma and hortative positive -ma, see end of $\S 10.7 .4$ below. The two do differ slightly in verb-stem vocalism, however, and the relationship (if any) is likely etymological rather than synchronic.

### 9.2.2 Minor causative suffix -gùlè

This suffix occurs in two known combinations. There is a corresponding intransitive verb denoting an involuntary state change. In the case of 'squash', there is also a possibly related noun pòs-gú ‘shard’.

$$
\begin{array}{llll}
\text { pósè } & \text { 'be squashed' } & \text { pós-gùlè } & \text { 'squash (sth)' }  \tag{194}\\
\text { wòlé } & \text { '(house) collapse' } & \text { wòl-gùlé } & \text { 'cause to collapse' }
\end{array}
$$

### 9.3 Passive suffix $-m v(-m e,-m \varepsilon)$

A suffix homophonous to the productive causative $-m v$ - is used with certain transitive verbs in potential passive function ('be VERB-able' or 'be frequently VERB-ed'). Attested combinations are bغ̀l-mé 'be obtainable (available)', wà:-mé 'be see-able (often seen)', nùnù-mé 'be hear-able (often heard)', and témbù-mè 'be find-able (i.e. present in an area)'. None of these forms is common in causative sense.
a. nàmá: [èbà là:] bél-mè:-b- $\varnothing$
meat [market Loc] get-Pass-Ipfv-3SgSbj
'Meat is gettable (=available) at the market.'
b. kúynà: [ònùn dá:] wá:-m-è:-b- $\varnothing$
squirrel [outback Loc] see-Pass-Ipfv-3SgSbj
'Squirrels are see-able (=can be seen) out in the bush.'
c. [bò:r-é:g ${ }^{\mathrm{L}}$ sògùrù] [[kínnò ${ }^{\mathrm{L}}$ dànà- $\left.\eta\right]$ dà:] núyù-mè:-b- $\varnothing$ [cicada ${ }^{\text {L voice] }}$ [[tree ${ }^{\text {L top] Loc] hear-Pass-Ipfv-3SgSbj }}$
'The sound of cicadas is hear-able (=can be heard) in the treetops.'
Most transitive verbs never occur in this construction. Instead, a generic 3 Pl subject is used (196). This avoids any broad confusion between causative and passive -mv-.
$\begin{array}{lllll}\text { (196) } & \text { něm } & \text { [źbà: } & \text { là:] } & \text { dónè:-n } \\ & \text { salt } & {[\text { market }} & \text { Loc }] & \text { sell-Ipfv.3P1Sbj }\end{array}$
'They sell salt in the market.' (='Salt is sold in the market.')

### 9.4 Mediopassive and transitive derivational suffixes

The mediopassive derivational suffix is $-y v$-, i.e., $-y e-$ or $-y \varepsilon$-. There is a variant $-i:-$, optional word-finally (ób-yè- $\varnothing \sim$ ób-ì:- $\varnothing$ 'he/she sat down') and obligatory before the causative suffix. -yv- can function as a classic mediopassive (middle), in which case it is often paired with a corresponding transitive verb with suffix -rv-, i.e. -re- or -re-. Several of the stems in question also have a reversive with $-l v$ - (§9.1), and mediopassive -yv- may follow the reversive suffix. The input stem (or root) to which these suffixes are added is nearly always bisyllabic, and it may or may not also occur separately without a derivational suffix.

The same suffix -yv-is also used as a passive or reflexive when added to ordinary transitives. In this function it is usually not paired with transitive -rv-. The broad, multifunctional -yv-derivational suffix is a feature shared with neighboring Donno So.

### 9.4.1 Mediopassive -yv-versus transitive -rv-

The stems in (197) have paired mediopassive and transitive forms. There is generally no unsuffixed counterpart, though some cases in (197c) have a related stative derivative. Syncope is regular with $-y v$ - where phonologically possible. Syncope may also occur with $-r v$-, but because $r$ is a tap there is little audible difference between a syncopated form and an unsyncopated form with faintly articulated short high vowel. The one example in the data where the input stem ends in $r v$ has transitive allomorph $-d v-(197 \mathrm{~d})$.
(197) Mediopassive -yv versus transitive -rv

$$
\begin{array}{llll}
\text { Mediop } & \text { gloss } & \operatorname{Tr} \quad \text { gloss }
\end{array}
$$

a. stem bisyllabic

| dàb-yé | 'lie on belly' | dàb(ù)-ré | 'have (sb) lie on belly' |
| :---: | :---: | :---: | :---: |
| jib-yé | 'attach one's wrap' | $j i ̀ b(u ̀)-r e ́$ | 'attach (a wrap) on (a woman)' |
| ób-yè | 'sit' | $o ́ b(u ̀)-r e ̀ ~$ | 'seat (sb), have (sb) sit' |
| tób-yè | 'put on turban' | tób(ù)-rè | 'roll turban on (sb)' |
| úb-yè | '(sb) lie down' | $u ́ b(u)-r \varepsilon ̀$ | 'have (sb) lie down' |
| íg-yè | 'stand up, stop' | íg(i)-rè | 'stand (sth) up' |
| tág-yè | 'put on shoes' | tág(i)-rè | 'put shoes on (sb)' |
| tím-yè | 'bend over, bow' | tím-rè | 'bend (sth) over' |
| túp-yè | 'kneel' | tún-rè | 'cause to kneel' |
| gèn-yદ์ | '(sth) tilt' | gèn-rદ́ | 'tilt (sth)' |
| tón-yè | 'squat' | tónù-rè | 'cause to squat' |
| sún-jè | 'carry on back' | súnù-rè | 'put on (sb's) back' [cf. stative súpò $]$ |
| kúmb-yè | 'clench one's fish' | kúmbù-rè | 'clench sb's fist' |
| yàmb-yé | 'cover self' | yàmbù-ré | 'cover (sb)' |
| dòmm-yé | 'put on hat' | dòmmù-ré | 'put hat on (sb)' |

b. with $I$ before $-y v$

| dàl-yé | 'get dressed' | dà:-ré | 'dress (sb)' |
| :--- | :--- | :--- | :--- |
| kúl-yè | 'pour on self' | kú:-rè | 'pour (water) on (sb else)' |

c. with $y$ before $-y v$

| dùy-yé 'bathe' | dù:-ré | 'bathe (sb) |
| :---: | :---: | :---: |
| dùy-yé 'carry on head' <br> (stative dúwà) | dù:-ré | 'put on (sb's) head' |
| ```j\grave{y-y\varepsiloń 'hide (oneself)'} (stative jóyà )``` | jò:-ré | 'hide (sb, sth)' |
| $\begin{aligned} & \text { jùy-yé '(sth) flip over' } \\ & \text { (also jù:r-yé ) } \end{aligned}$ | jù:-ré | 'flip (calabash) over' |
| bìy-yé 'lie down' (stative bíyò) | bì:-ré | 'lay (sb) down, put to sleep' |

d. with $r$ before $-d v$
gìr-yモ́ '(sth) be entrusted' gìr-d $\varepsilon \quad$ 'entrust (sth, to sb)'

### 9.4.2 Mediopassive -yv-versus underived transitive

The mediopassive suffix -yv-can be added to many underived transitive verbs in passive or reflexive as well as mediopassive (middle) function. In these cases there is usually no counterpart with transitive suffix -rv-.

As an example, (198a) shows the regular transitive use of the verb '(doctor) treat (patient)'. The morphological mediopassive in (198b) can be interpreted as reflexive or passive; i.e., it indexes the absence of an overt external agent.
a. ná $=\grave{y} \quad j \grave{\eta} \eta \varepsilon ́-\eta$
3Sg=Acc treat.Pfv-1SgSbj
'I treated him/her.'
b. $j \grave{y} \eta-y \varepsilon ́-\eta$
treat-MP-1SgSbj
'I treated myself.' or 'I was treated.'
Further examples showing the form of the mediopassive are in (199). Monosyllabic Ce-yye (or $C \varepsilon y-y \varepsilon$ ) occurs instead of expected \#Cع:-yع (199a).
input gloss mediopassive gloss
a. monosyllabic transitive (§3.5.3.4)

| Wě: | 'see' | Wغ̀-yyé | 'see oneself, be seen' |
| :---: | :---: | :---: | :---: |
| $n \varepsilon ̌:$ | 'eat (meal)' | nè-yyé | 'be eaten' |

b. bisyllabic transitive

| kánè | 'do' | kán-yè | 'be done' |
| :--- | :--- | :--- | :--- |
| jìné | 'bring' | jìn-yé | 'be brought' |
| bùndé | 'hit' | bùnd-yé | 'hit oneself, be hit' |
| yù:lé | 'rouse (sb)' | yù:l-yé | '(sb) wake up' |
| sémè | 'slaughter' | sém-yè | 'cut oneself, be cut' |
| gèwé | 'kill' | gèW-yé | 'kill oneself, be killed' |

c. bipartite 'convey'
$j \varepsilon ́$-bòlé 'convey’ jé-bòl-yé 'be conveyed'
Occasionally mediopassive $-y v$ - is added to transitive -rv-instead of replacing it. An example is yàmbù-r-yé 'cover oneself' from yàmbù-ré 'cover (sb)', an alternative to the more common simple mediopassive yàmb-yé- 'cover oneself'. Other examples are í:-r-yè '(door) shut (by itself)' from í:-rè- 'shut (door)' and dà:-r-yé '(mat) be laid out' from dà:-ré 'lay out (mat)', an alternative to simple mediopassive dà-yyé '(mat) be laid out'. It may be that $-r-y v$ - is most common in cases where the segmentation of transitive -rv- is not totally transparent. Another factor favoring the innovation of $-r-y v$ - is parallelism with $-l-y v$-, the mediopassive of the reversive, as in yàmbù-l-yé 'uncover oneself' from yàmbù-lé 'uncover (sb)', reversive of yàmbù-ré 'cover (sb)'. (yàmbù-lé is an accidental homonym of another verb meaning 'spoil, ruin'.)

In any event, $-r-y v$ - and plain $-y v$ - are structurally similar, the principle being to add $-y v$ - to a transitive stem.

### 9.4.3 Transitive (causative) -ndv-versus underived stem

There are a few cases of a transitivizing, more or less causative suffix -ndv-. They have analogues in several other Dogon languages and are probably archaic. The suffix may have originated as a variant of transitive -rv- after a nasal syllable. Some of the -ndv-verbs have a paired mediopassive with $-y v$, others do not.

Three important intransitive motion verbs and the verb 'become full' have causativelike -ndv- transitives that denote transportation (200a). A fourth corresponds to a suppletive transitive, which however also ends in $n d v$ (200b). Two important transitive verbs of the 'put down' type of the shape $C v:-n d v$ correspond to (less common) intransitives, mediopassive and stative, that point to a root $C V \eta v(200 \mathrm{c})$. 'Assemble' in (200d) likewise has transitive $C V$ :$n d v$, this time matching a mediopassive that points to a root Cvmbv. 'Scare' in (200e) is similar, but with a root $C V: g_{V}$. Two $C v C V$ verbs have more or less phonologically regular $C v(N) C u-n d v$ transitives with causative-like sense (200f). (200g) is a unique case involving a delocutive derivation.

|  | intr | gloss | $\operatorname{tr}(-n d v-)$ | gloss | stative |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | sígè | 'descend' | sígù-ndè | 'take down' |  |
|  | $g e ̌:$ | 'exit' | gò:-ndé | 'take out' |  |
|  | $d \varepsilon$ : | 'arrive' | dò:-ndé | 'deliver' |  |
|  | jǒ: | 'become full' | jò:-ndé | 'fill (sth)' |  |
| b. | nùnย์ | 'enter' | kúndè | 'put in' |  |
| c. | dùn-yé | 'be set' | dù:-ndé | 'set down' | dù-dúyò |
|  | (said of objects; transitive also dùn-ró-) |  |  |  |  |
|  | $\begin{aligned} & t \varepsilon ́ \eta-y \grave{\varepsilon} \\ & \quad \text { (said } \end{aligned}$ | (said of containers) |  |  | tè-ténà |
| d. | mòmb-yع́ | 'assemble' | $m o ̀:-n d e ́$ | 'assemble' ( | sitive) |
| e. | ú:g-yè | 'be afraid' | ú:-ndè | 'scare (sb)' |  |


| f. élè | 'become sth' | élù-ndè | (sth, into sth)' |
| :---: | :---: | :---: | :---: |
| dàgé | 'be good' | dàgù-ndé | 'make (sth) good' |
| táyè | 'pass' | tángù-ndè | 'take (sth) across' |
| g. pǒ: | 'hello!' | pó:-ndè | ${ }^{\prime}$ greet (sb) ${ }^{\prime}$ |

Given that $-n d v$ - is associated with contraction of $C v \eta v$ and $C v m b v$ to $C v$ :-, it is possible that at least in $(200 \mathrm{c}-\mathrm{d})$ the suffix $-n d v$ - originated as a nasalized variant of $-r v$-. This would leave (200a) unexplained, but some Dogon languages do have nasalized variants of 'descend' and 'exit'. The matter is flagged for further historical study.

Transitive $-n d v$ - may be related to the adjectival inchoative formation in -nd-yv-, i.e. where mediopassive $-y v$ - is added to an inner derivational suffix $-n d(v)-(\S 9.5)$. The adjectival cases may be the closest analogue to (200f) above.

A few other verbs such as í:ndè 'accompany (departing guest) to the door', bò:ndé 'call, summon', and nà:ndé 'taste (sth)' have phonological shapes suggesting a possible historical affinity to the $C v:-n d v$ - transitives, but lack known intransitive counterparts. The cognate noun-verb combination $k \varepsilon ̌ l ~ k \varepsilon ́: n d \grave{\varepsilon}$ 'have fun, play' suggests that $C v$ :-ndv can also result from contraction of *Cvlv-rv.

### 9.5 Deadjectival inchoative and factitive verbs

A range of morphological relationships link modifying adjectives (ADJ) to inchoative verbs ('X become ADJ'). I use "deadjectival" loosely since in some cases the verb and adjective are simply two equal members of a word-family. Deadjectival verbs are subject to the usual phonological restrictions on verbs, including correlations between initial obstruent voicing and "lexical" tone melody. In all cases the factitive ('Y make X ADJ') is the morphological causative of the inchoative, with $-m v$ - suffix.

In (201a), the inchoative verb has no derivational suffix. In (201b), the inchoative has simple mediopassive suffix $-y v$-, which combines with the causative suffix to form factitive -i:-mv-. My assistant also used -i:-mv- for a few adjectives in (201a) that lack -yv-in the inchoative. In (201c), the inchoative has a suffix complex -nd-yv- (variant $-1-y v-$ ) so the factitive is -nd-i:-mv- (variant -l-i:-mv-). The gu ending that occurs on certain adjectives is sometimes retained and sometimes dropped before the inchoative suffix. Whether it drops or not is evidence bearing on whether it is segmentable as a suffix in the adjective. Since pày-gú 'wide' is one of the adjectives that drops the ending, its inchoative páy-nd-yè is homophonous with the inchoative of pǎy 'old (person)'.

Deadjectival inchoative verb

$$
\begin{array}{llll}
\text { gloss } & \text { adj } & \text { inchoative } & \text { factitive } \tag{201}
\end{array}
$$

a. inchoative without derivational suffix
inchoative and factitive without mediopassive suffix

| 'dry' | mánfò | màné | mànù-mé |
| :--- | :--- | :--- | :--- |
| 'weak, diluted' | sélò: | sélè | sél̀̀-mè |
| 'ripe; cooked' | ílò: | îl̀̇ | ílù-mè |
| 'rotten' | ómmò- $\eta$ | ómmè | ómmù-mè |
| 'full' | jô: | jě: | jò:-ndé |


b．inchoative with mediopassive $-y v$ added directly to stem

| ＇hot＇ | ḿmう－ワ | ḿm－yè | úm－ì：－mè |
| :---: | :---: | :---: | :---: |
| ＇cold＇ | kéllè－ŋ | kéll－yè | kéll－ì：－mè |
| ＇easy＇ | bállà | bàll－yé | bàll－ì：－mé |
| ＇sweet＇ | と́llè－ๆ | ع́ll－yè | ع́ll－ì：－mè |
| ＇bitter＇ | gállà－ŋ | gàll－yé | gàll－ì：－mé |
| ＇sour＇ | ámmà－$\eta$ | ámm－yè | ámm－ì：－mè |
| ＇plain（food）＇ | ò：ทú | ¢：ク－yè | Ǿ：ク－ì：－mè |
| ＇undiluted＇ | kúrù－ๆ | kúr－yè | kúr－ì：－mè |
| ＇diluted＇ | súmmù－ך | súmm－yè | súmm－ì：－mè |
| nchoative with，factitive without mediopassive suffix |  |  |  |
| ＇heavy＇ | dógsò | dògs－yé | dògsù－mé |
| with－gu omitted in verbs |  |  |  |
| ＇lightweight＇ | yèwùlù－gu | yèwùl－yદ́ | yèwùl－ì：－mé |

c．inchoative with－nd－yv－
＇big＇bìnú－ŋ bìmù－nd－yé bìnù－nd－ì：－mé
＇old（person）＇pǎy páy－nd－yè páy－nd－ì：－mè
［also suppletive yàsìl－yé＇（human／animate）grow old＇］
＇long＇jàlǎ－ ＇jàlù－nd－yé jàlù－nd－ì：－mé
＇short＇dènnó dènù－nd－yé dènù－nd－ì：－mé
＇deep＇mìnú－$\eta$ mìnù－nd－yé mìnù－nd－ì：－mé
＇fast＇ússù－$\eta$ úsù－nd－yè úsù－nd－ì：－mè

＇light，thin＇Énènè－$\eta$ Énè－nd－yè Énè－nd－ì̀－mè
＇sharp＇síyò－n sí：－nd－yè sí：－nd－ì：－mè
＇red＇bánù－$\eta$ bànù－nd－yé bànù－nd－ì：－mé
＇black＇gémè－ŋ gèmù－nd－yé gèmù－nd－ì：－mé
＇white＇pílà－$\eta$ pílù－nd－yè pílù－nd－ì：－mè
with gu retained
＇distant＇
＇bad，ugly’ mònjùgú mònjùg－yé mònjùg－ì：－mé
with－gu omitted
$\begin{array}{llll}\text {＇nearby＇} & \text { bèr（ù）－gú } & \text { bèrù－nd－yé } & \text { bèrù－nd－ì：－mé } \\ \text {＇wide＇} & \text { pày－gú } & \text { páy－nd－yè } & \text { páy－nd－ì：－mè }\end{array}$
＇soft＇kj̀y－gú kóy－nd－yè kóy－nd－ìi：－mè
＇wet＇òlù－gú ólù－nd－yè òlù－nd－ì：－mè

Variants with－l－instead of－nd－are also possible：wàgì－l－yé ‘become distant，go far away’．

Adjectives that lack a related verb can be made predicative with élè 'become', in the same fashion as nouns and NPs. The adjectives that are attested only with this predicative construction include sálà: 'nasty', gènǒ: 'good' (but see below), úsyò 'empty’, nályò 'pretty’, já:sù 'weak', ámù- $\eta$ 'plump', kàbá 'multicolored', wérè- $\eta$ 'green', kòló: 'unripe, raw', dógsò ‘heavy’, né:nè ‘authentic’, mày-gú ‘difficult', búl̀̀lo- $\eta$ 'coarse’, and kàsă: ‘new’.

For gènǒ: 'good' the most common predicate is the suppletive dàgé 'be good, turn out well', although gènǒ: élè is also possible.

### 9.6 Denominal verbs

There are many cognate noun-verb pairs, often used together in collocations. In general the verb is not obviously asymmetrically derived from the noun. A few examples where the verb is likely denominal are in (202).

| (202) noun | gloss | verb | gloss |
| :--- | :--- | :--- | :--- |
|  | tìgy̌: | 'family name' | tígì-rè | | '(griot) chant the ancestry of (sb)' |
| :--- |
| némè |$\quad$ 'filth' $\quad$ nèmbùg-yé $\quad$| 'become dirty' |
| :--- |

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

In indicative main clauses, active (non-stative) verbs have the typical structure stem-AN-Sbj. The stem (which may include derivational suffixation, chapter 9) is followed by an aspectnegation (AN) marker. The major aspectual division is perfective versus imperfective. Statives can be derived from some active verbs (e.g. 'be sitting' from active 'sit down') by stem-changes (§10.4). Statives are outside of the perfective/imperfective aspectual system. Both dynamic (aspect-marked) and stative verbs end in pronominal-subject suffixes that agree in person and number with the subject. Imperatives and hortatives constitute a separate inflectional subsystem, with their own stem-forms (imperatives) or modal suffixes, and with terminal suffixes for addressee plurality.

The unmarked temporal reference point for aspect is the present ('is sweeping', 'swept', will sweep'). A shift to a past reference point ('was sweeping', 'had swept', 'was about to sweep') is accomplished by adding a conjugated past clitic to the AN-marked verb (§10.6).

Relative clauses have verb-participles that recognize the AN and stativity values of corresponding main clauses, but replace the pronominal-subject suffixes by preverbal proclitic pronouns (chapter 14).

### 10.1.1 Overview of AN categories for active (nonstative) verbs

The indicative aspect-negation (AN) categories are those in (203). The negative suffixes are portmanteaus that mark aspect as well as polarity.
a. perfective positive system
perfective
reduplicated perfective
experiential perfect ('have ever VPed', includes 'have' as auxiliary)
recent perfect (includes 'have' or 'be' as auxiliary)
b. imperfective positive system
imperfective (unmarked present, habitual, or future)
reduplicated imperfective
progressive (includes 'have' as auxiliary)
future (includes 'be' as auxiliary)
c. perfective negative system
perfective negative
experiential perfective negative (contains perfective negative)
recent perfect negative (includes 'not have' as auxiliary)
d. imperfective negative system
imperfective negative
progressive negative (contains 'not have' as auxiliary)
future negative (contains 'not be' as auxiliary)
The past clitic, conjugated = bíy $\grave{\text { - }}$ (from bíy $\grave{\text { e }}$ 'was') may follow these AN categories, shifting the reference point from the present into the past. The morphology is somewhat complex (§10.6).

### 10.1.2 Verb stem shapes

All verb stems are vowel-final. Monosyllabic verbs alternate between $C v$ and lengthened $C v$ : shape, depending on whether they are monotonal ( $C \dot{v}$ ) or bitonal ( $C \tilde{v}$ :, $C \hat{v}$ :). There are no high-voweled Cu or Ci stems, and no nonmonosyllabic stem ends in a high vowel. Some but not all original ${ }^{*} \mathrm{CvCvCr}$ stems have syncopated to CvCCv . There is no distinction between final-high-vowel and final-nonhigh-vowel verb classes of the sort found in some other Dogon languages.

Verbs of the shapes $C v(:), C v C$, and $C v N C v$, the latter with homorganic nasal plus voiced stop cluster ( $m b$ etc.), are treated as (prosodically) light stems. Stems with three or more vocalic moras, including $C v: C v$ and $C v: N C v$ as well as trisyllabics, are heavy. The distinction is relevant in imperative morphology ( $\S$ 10.7.1.1).

Verbs have stem-final vowel alternations; for a summary see §3.4.7. The etymological E-stem, e.g. bisyllabic $C v C e$ or $C v C \varepsilon$ depending on ATR-harmoic class of the stem, is the basis not only for the perfective positive but also for the imperfective negative and some other inflected forms. For most verbs, the E-stem with lexical tone melody is also the bare stem in nonfinal position in verb chains (for exceptions see §15.1). With a lengthened final E-vowel, the E-stem is also used before imperfective positive suffixes. Because of its broad distribution, the original E-stem can be considered the lexically basic vocalism.

Some inflections require stem-ablaut. Only the stem-final vowel is changed. Aside from the lexically basic form (original E-stem), the ablauted forms are the A-stem (in imperfective complements), the lengthened A-stem (before perfective negative $-l \bar{v}$-), the O -stem (before future -ìm bó-), and the $\mathrm{A} / \mathrm{O}$-stem (imperative, without suffix). Some other inflections allow the lexically basic E-stem for some verbs but require an ablaut change with other verbs. This is the case with hortatives, which have a mixed $\mathrm{A} / \mathrm{E}$-stem for monosyllabics and a mixed $\mathrm{E} / \mathrm{I}$-stem for longer shapes.

Most of the AN inflections require their own tone overlays. Lexical /HL/ and /LH/ melodies are distinguishable in the bare stem (nonfinal position in chains). Since this bare stem also has the lexically basic vocalism (E-stem), it is used as the citation form.

### 10.1.2.1 $C v(:)$ verb stems

There is no distinction between lexical $C v$ and $C v$ : in verb stems. In the absence of suffixes, monosyllabic stems are short-voweled when monotonal (as in $C \dot{v}$ ), and long-voweled when bitonal ( $C \hat{v}$ : or $C v$ :).

There are fewer monosyllabic verbs in DD than in many other Dogon languages because there have been few contractions of old *CvCv stems to $C v$ : by loss of the medial consonant. (204) gives the inventory.

| $C v(:)$ and $C W v(:)$ verbs (all known examples) |  |  |
| :---: | :---: | :---: |
| bare 3 Sg perfective | imperative | gloss |
| a. /H/-toned |  |  |
| +ATR |  |  |
| [none] |  |  |
| -ATR |  |  |
| $s \varepsilon \quad$ 的: | sá | 'urinate' (with noun ǹjá:) |
| $y \varepsilon ́ \quad y \hat{\varepsilon}$ : | yá | 'weep' (with nominal yă:-ŋ) |
| b. /LH/-toned |  |  |
| +ATR |  |  |
| gě: $\quad$ gê: | gó | 'exit, go away, leave' |
| jě: jê: | jó | 'become full' |
| -ATR, imperative Cá |  |  |
| ně: $\quad n \hat{\varepsilon}$ : | ná | 'drink' |
| ně: $\quad \lambda \hat{\varepsilon}$ : | ná | 'eat (meal)' |
| $w \varepsilon ̌: ~ w \hat{\varepsilon}$ : | wá | 'see' |
| $w \varepsilon ̌: ~ W \hat{\varepsilon}$ : | wá | '(rain) fall' |
| $j \varepsilon ̌: \quad j \hat{\varepsilon}$ : | já | 'take (sb)' |
| -ATR, imperative Có |  |  |
| $d \bar{\varepsilon}: \quad d \hat{\varepsilon}:$ | dó | 'arrive (there)' |

When a derivational suffix is added, these stems have $C v$ :- shape. Thus yà:-mé 'cause to weep', jò:-nd $\varepsilon$ 'fill (sth)', wà:-mé 'be seen'. Mediopassives like j $\check{\varepsilon}$-yy (alternatively
 (§3.5.3.4).

Because of the presuffixal $C_{V}$ :- shape, I incline to take $C_{V}$ : rather than $C V$ as basic. This entails a shortening rule applying to monotonal $C v$ : (i.e. $C$ v́: or $C \grave{v}$ :). The alternative is to take $C v$ as basic and recognize two lengthening rules, one before derivational suffixes (regardless of tones), and one for word-final position limited to contoured tones ( $C \hat{V}$ and $C \check{V}$ ). For the latter, see Contour-Tone Mora Addition (§3.7.4.5).

### 10.1.2.2 $N C V$ verb

The only known $N C v$ verb stem is ńdè 'give'. The nasal is its own syllable and can bear its own tone. The paradigm is regular.

Paradigm of 'give'

| ńdè | Pfv $(3 \mathrm{Sg})$ |
| :--- | :--- |
| ńd | bare stem (in chains) |
| ńdù-g | VblN |
| ǹdè tì jó | ExpPrf |
| ńdè:-b | imperfective |
| ńdè-là: | progressive |
| ñdă:-1 | PfvNeg |
| ńdè-nnú | IpfvNeg |


| ńdà | imperative |
| :--- | :--- |
| ǹdè-lá | prohibitive |
| ǹdè-má | hortative |

### 10.1.2.3 Bisyllabic stems

Aside from $N C v$ (see just above), normal stem-shapes for bisyllabic stems are $C v C v, C v N C v$ (with homorganic nasal and voiced stop), other $C v C C v, C v: C v$, and $C v: N C v$. As with all verbs, the lexical melody may be /H/ or /LH/. The choice of melody is largely determined by the initial consonant (voiced obstruents have $/ \mathrm{LH} /$, voiceless obstruents have $/ \mathrm{H} /$ ), so there is a true lexical choice only for stems with initial obstruent or with a vacant initial C-position ( $v C v$ etc.).

Medial consonants in $C v C v$ and $C v: C v$ stems may be voiced stops ( $b g$, I know of none with $d$ ), sibilants ( $s$ ), and sonorants ( $1 r w y m n \eta$ ). For medial $n \eta$ see below. Bisyllabic stems have stable consonantism; an isolated exception is bòlé 'go', with contracted hortative bò:-má. Presuffixal syncope ( $C v C v-C v \rightarrow C v C-C v)$ is very limited. For this reason there are few combinations requiring consonant-cluster adjustment rules, and the few relevant cases involve changes in the suffixal consonant, not the stem consonant.
(206) $C v C v$ and $C v N C v$ (homorganic nasal-stop) verb stems
bare stem 3 Sg perfective imperative gloss

| a. [-ATR] |  |  |  |
| :---: | :---: | :---: | :---: |
| /HL/-toned |  |  |  |
| írè | Ír ${ }^{\text {ch }}$ | írà | 'forget' |
| késè | kÉsè | kÉsà | 'cut' |
| kámbè | kámbè | kámbà | 'throw' |
| /LH/-toned |  |  |  |
| dùwé | dúwè | dúwà | 'insult' |
| nàlé | nálè | nálà | 'give birth' |
| j${ }^{\text {jobé }}$ | jóbè | jóbà | 'run' |
| dòné | dónè | dónà | 'sell' |
| jìmbé | jímbè | jímbà | 'pull' |

b. [+ATR]
/H/-toned

| úwè | úwè | úwò | 'catch' |
| :---: | :---: | :---: | :---: |
| pélè | pélè | pélò | 'clap' |
| tómbè | tómbè | tómbò | 'jump (up)' |
| /LH/-toned |  |  |  |
| bàré | bárè | bárà | 'add' |
| gìyé | gíyè | gíyò | 'dance' |
| yìgé | yígè | yígò | 'shake' |
| jùmbé | júmbè | júmbò | 'leave, aban |

### 10.1.2.4 $C v C C v$ verb stems from syncopated $* \mathrm{CvCvCv}$

Many formerly trisyllabic stems have undergone medial-syllable syncope in all positions. This includes many transparently segmentable $C v C-y v$ mediopassives (§9.4) like íg-yè 'stand', ób-yè 'sit', and tón-yè 'squat'. There are also other verbs of CvCyv shape that may have originally been mediopassives but are no longer morphologically transparent due to the absence of related stative and transitive forms. Examples are kílyè 'fly' and ényè 'winnow (in wind)'.

Other $C_{v} C C_{v}$ verbs, likely syncopated, include táksè 'think'.
$C_{v}: C C v$ verbs with long vowel, like kó:lyè 'crawl', are also probably syncopated.
The case for a synchronic analysis with underlying trisyllabic stems and syncope would have to focus on mediopassive-transitive pairs.

### 10.1.2.5 jìné 'bring'

This is a normal $C v C v$ stem synchronically. The inflected forms are regular: jiǹ $\varepsilon$ - $\quad$ ' I brought', jínà 'bring!', jínè:-bì-y 'we will bring'. Etymologically, however, it may have originated as the fusion of a 'take' verb (not necessarily $j \dot{\varepsilon}$ ) with mèn $\varepsilon$ 'come', parallel to the bipartite structure of 'take + go' $\rightarrow$ 'convey' (following section). Bipartite 'bring' is still observable in neighboring Donno So, but most Dogon languages have fused the two parts.

### 10.1.2.6 jé bòlé 'convey, take (away)'

This is a lexicalized bipartite verb chain that has a tendency to fuse, cf. the comments about 'bring' (preceding section). bòlé is the 'go' verb. $j \varepsilon$ is a grammatically specialised form of $j \check{\varepsilon}$ : 'take'.

In some inflected forms of 'convey', $j \varepsilon$ is H -toned and the first syllable of bj̀lé is L-toned (207a). Two groups of such forms should be distinguished. In the first set, the tones are compatible with a verb-chain analysis, since 'go' has the same tones that it would have without $j \dot{\varepsilon}$. In the other group, the combination of $j \dot{\varepsilon}$ and bj̀l appears to be treated tonally as an indivisible trisyllabic stem. That is, the $\{\mathrm{HL}\}$ overlay that should appear on the final verb in a chain is in fact applied to the entire combination. Finally, in (207b) there are two forms with H-toned bó, before which 'take' appears in L-toned form.

Paradigm of 'convey'
'bring' category 'go’
a. $j \varepsilon \tilde{\varepsilon} \mathrm{H}$-toned, $b \grave{\mathrm{j}} \mathrm{L}$-toned
bj̀ L-toned as in simple 'go' without jé, analysable as verb chain jé bj̀lé bare stem bòlé jé bj̀lă:-1- $\varnothing \quad 3 \mathrm{Sg}$ perfective negative bòlă:-l- $\varnothing$ jé-bòl-lá prohibitive bòl-lá
b̀ would be $H$-toned without $j \hat{\varepsilon}$, jé takes $H$-tone in $\{H L\}$ overlay, not a verb chain j $\dot{-}-b \grave{l} \grave{\varepsilon}-\varnothing \quad$ 3Sg perfective bólè- $\varnothing$ jé-bòlé- $\quad$ 1Sg perfective bòlé- $\eta$ $j \varepsilon ́-b \grave{l} \grave{\varepsilon} \dot{:}-b-\varnothing \quad 3 \mathrm{Sg}$ imperfective $\quad b$ b́lè:-b- $\varnothing$

$$
\begin{array}{lll}
j \varepsilon ́-b \grave{l c ̀-n n u ́-\varnothing} & \text { 3Sg imperfective negative } & \text { bólè-nnú- } \varnothing \\
\text { jé-bòl-là: jò- } & \text { progressive } & \text { ból-là: jò- }
\end{array}
$$

b. $j \grave{\varepsilon}$ - L-toned, bó H-toned
jè-bólà imperative bólà
$j \varepsilon$ èbôl- $\varnothing \quad$ verbal noun (§15.1.1.2) bôl- $\varnothing$

### 10.1.2.7 kánè 'do’

This important verb has a regular paradigm. Like other $C v n v$ verbs, it has a syncopated progressive form.

| Paradigm of 'do' |  |
| :--- | :--- |
|  |  |
| a. unsyncopated |  |
| kánè | bare stem |
| kánè | 3Sg perfective |
| kánè-nnú- $\varnothing$ | 3Sg imperfective negative |
| kánà | imperative |
| kànă:-l- $\varnothing$ | 3Sg perfective negative |
| kánè:-b- $\varnothing$ | imperfective |

b. syncopated
kán-dà: jó- progressive
For collocations including this verb, see §11.1.2.2.

### 10.1.2.8 Trisyllabic stems

The common trisyllabic shapes are $C v C v C v-, C v C C v C v-$ including $C v N C v C v-$, and infrequently $C v: C v C v-$. The initial $C$ position may be empty. The medial syllable is metrically weak; its vowel is raised to $i$ or $u$ and it is subject to syncope under favorable conditions (preceding unclustered sonorant). Therefore many original ${ }^{*} \mathrm{CvCvCv}$ stems now occur only in the form $C v C C v$ throughout their paradigms and are perhaps best considered as heavy bisyllabics synchronically. A consonant cluster before the medial vowel ( CvCCvCv ) is sufficient to block syncope except before $y$ (in mediopassives). Some $C v C v C v$ stems have avoided syncope since their $C_{2}$ and $C_{3}$ would not combined into an optimal cluster; this is the case with $C v C v r v$ verbs, including $C v C v-r v$ derivatives, and verbs with medial obstruent.
(209) Trisyllabic verbs

| 'winnow' <br> (by shaking) | 'hang (sth)' | 'be courageous' | category |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| pégìrè | gòndùré | mà:nd-í: | bare stem |
| pégìrè̀- $\varnothing$ | góndùrè- $\varnothing$ | má:nd-yè- $\varnothing$ | 3Sg perfective |
| pègìrǎ:- $-\varnothing$ | gòndùră:- $-\varnothing$ | má:nd-yǎ:- $-\varnothing$ | 3Sg perfective negative |
| pégìrè:-b- $\varnothing$ | góndùrè:-b- $\varnothing$ | má:nd-yè:-b- $\varnothing$ | imperfective |

```
pégìrè-nnú-\varnothing góndùrè-nnú-\varnothing má:nd-yè-nnú-\varnothing 3Sg imperfective negative
pégùrò gòndùrá mà:nd-yá imperative
```


### 10.2 Positive indicative AN categories

### 10.2.1 Perfective positive system (including perfect)

This subsystem includes the following positive forms: perfective, reduplicated perfective, and two perfect constructions: the experiential perfect ('have ever VPed') and the recent perfect (in two versions). The perfect constructions include variants of 'have' and 'be' quasi-verb, here as auxiliaries.

### 10.2.1.1 Perfective (lexical vocalism, no aspect suffix)

The simple perfective is used to report a bounded event that has been completed in the past, before the present (or other reference time). The stem is segmentally the same as the bare stem used in verb chains. It always ends in e or $\varepsilon$, corresponding to the E-stem in some other Dogon languages. Monosyllabics have + ATR $C e-\sim C e$ :- or -ATR $C \varepsilon-\sim C \varepsilon$ :- segmentally. The stem has a tone overlay $\{\mathrm{HL}\}$ for 3 Sg and 3 Pl and $\{\mathrm{LH}\}$ for $1 \mathrm{st} / 2$ nd persons, erasing the lexical tone melody. The 3 Pl suffix is -yà replacing the final vowel for nonmonosyllabic stems, and -yyà after monosyllabics.
(210) Perfectives

|  | sémbè <br> 'sweep' | bàgé <br> 'fall' | gòndùré <br> 'hang (sth)' | gě: <br> 'exit' | $W \varepsilon ̌:$ <br> 'see' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Sg | sèmbé-ク | bàgé-ŋ | gòndùré- $\quad$ | gě:-ŋ | wě:-ŋ |
| 1 Pl | sèmbé-y | bàgé-y | gòndùré-y | gě:-y | wě:-y |
| 2 Sg | sèmb-ó: | bàg-ó: | gòndùr-ó: | $g$-ǒ: | W-ǒ: |
| 2 Pl | sèmb-દ́: | bàg-é: | gı̀ndùr-દ́: | $g$-ě: | $W-\varepsilon ̌:$ |
| 3 Sg | sémbè- $\varnothing$ | bágè- $\varnothing$ | góndùrè- $\varnothing$ | $g e ̂:-\varnothing$ | $W \hat{\varepsilon}:-\varnothing$ |
| 3 Pl | sémb-yà | bág-yà | góndùr-yà | gé-yyà | wé-yyà |

The H -tone at the beginning of 3 Sg and 3 Pl forms is transferred to certain following particles, such as 'if' in conditional antecedents, leaving the verb L-toned (§3.7.4.3, §16.1). The $1 \mathrm{st} / 2 \mathrm{nd}$ person forms keep their perfective tones before those particles.

In the monosyllabic stems, the position of the hyphen in my transcription, as in 3 Pl gé-yyà and wé-yyà instead of géy-yà and wéy-yà, is perhaps arbitrary.

### 10.2.1.2 Suffixally marked perfectives absent

No perfective forms with syllabic perfective suffix, like the T- and Y/R-perfectives of several other Dogon languages (Jamsay, Tebul Ure, etc.) have been observed in DD.

### 10.2.1.3 Reduplicated perfective

Perfective verbs may be reduplicated. The reduplicant takes the form $C \grave{v}$-, i.e. an L-toned short-voweled copy of the first syllable (excluding the latter's coda). A glottal stop is inserted between two vowels. In the reduplicated perfective, the stem tone overlay is $\{\mathrm{HL}\}$ not only for $3 \mathrm{Sg} / 3 \mathrm{Pl}$ subject but also for $1 \mathrm{st} / 2 \mathrm{nd}$ person subject.

Corresponding to the simple perfectives given in §10.2.1.1 above, the reduplicated perfectives are those in (211).

Reduplicated perfective

|  | sع́mbè <br> 'sweep' | gòndùré <br> 'hang (sth)' | gě: 'exit' |
| :---: | :---: | :---: | :---: |
| 1Sg | $s \grave{\varepsilon}$-sémbè- $\eta$ | gò-góndùrè-ŋ | $g e ̀$-gê:- $\quad$ ] |
| 1 Pl | sè-sémbè-y | gò-góndùrè-y | gè-gê:-y |
| 2Sg | $s \varepsilon$-sémb-ò: | gò-góndùr-ò: | gò-g-ô: |
| 2 Pl | $s \grave{\text {-sémb- }}$ : | gò-góndùr-غ̇: | $g e ̀-g-e ̂:$ |
| 3 Sg | $s$ s̀-sémbè- $\varnothing$ | gò-góndùrè- $\varnothing$ | gè̀-gê:- $\varnothing$ |
| 3 Pl | sè-sćmb-yà | gò-góndùr-yà | gè-gé-yyà |

Note 2 Sg gò- $g$-ô: ‘you-Sg exited’ (verb gě:) with a copy of the surface vowel quality, not \#gè-g-ô: . Likewise nò-n-ô: ‘you-Sg drank' (verb ně̀).

Further examples showing the form of the reduplicant: dà-dámbè- 'ascended (went up)', dè-dénnè- 'looked for', nò-nóy-yè- 'slept', dà-dá:rè- 'laid out (mat)', and à-?ábè- 'accepted'.

Reduplication is associated with verb focus. It is most easily used with intransitive verbs answering a 'What did you do?' type of question ('I swept', 'I went out'). If the answer to the question is a VP including an object or other preverbal constituent ('I cut the meat'), reduplication is not common. However, reduplication is possible (for verb focus) even in such a multi-word clause.

Similar reduplication with imperfective stems and on derived statives will be covered in later sections. The three reduplicated forms are overtly distinguished by stem vocalism, stem tones, and/or suffixation.

### 10.2.1.4 Experiential perfect 'have ever' (tì jó-)

The experiential perfect is translatable as 'have (ever) VPed'. It is used in questions like 'have you ever seen an elephant?' or 'have you ever gone to Bamako?', and in statements that could be used to answer such questions. The event in question is usually a momentous one that leaves a strong memory or other continuing effect.

In DD the experiential perfect is characterized by an $\{\mathrm{L}\}$ tone overlay on the stem, an L-toned morpheme tì (suffix or chained auxiliary verb), and a conjugated 'have' quasi-verb jó- (§11.5.1.1). However, 3Pl jó-yyà has the 3Pl allomorph typical of perfectives of monosyllabic verbs, and is distinct from the form jó-ǹ in the possessive predication yè jó-ǹ 'they have', where the 3 Pl ending is that typical of statives (§10.4.1) and imperfectives ( $\S 10.2 .2 .1$ ). See the remarks on 3 Pl forms in the recent perfect (following section).
(212) Experiential perfect

| stem | $W \varepsilon ̌$ : 'see’ | nùné 'hear' | sémbè 'sweep' |
| :---: | :---: | :---: | :---: |
| 1Sg | wè: tì jó-ท | nùnè tì jó-ŋ | sèmbè tì jó-ŋ |
| 1 Pl | wè: tì jó-y | nùnè tì jó-y | sèmbè tì jó-y |
| 2 Sg | wè: tì j-ó: | nùnc̀ tì j-ó: | sèmbè tì j-ó: |
| 2 Pl | wè: tì j-é: | nùne -tì j-é: | sèmbè tì j-é: |
| 3 Sg | wè: tì jó- $\varnothing$ | nùnè tì jó- $\varnothing$ | sèmbè tì jó- $\varnothing$ |
| 3 Pl | wè: tì jó-yyà | nùnè tì jó-yyà | sèmbè tì jó-yyà |

The tì is optionally separated from the main verb by a preverbal pronominal proclitic in a nonsubject relative. Altnernatively, the proclitic may precede the main verb. See (366b-c) in $\S 14.3$ for examples of the two ordering options.

The negative counterpart means 'have never VPed', see §10.2.3.2 for the forms.

### 10.2.1.5 Recent perfect with jó 'have'

The first of two recent perfect constructions is created by adding a conjugated form of jó 'have' (here H-toned) to an $\{\mathrm{L}\}$-toned form of the stem. As with the experiential perfect, the 3 Pl form is jó-yyà, with the 3 Pl allomorph typical of perfectives of monosyllabic verbs.
(213) Recent perfect with jó-

|  | sémbè <br> 'sweep' | gòndùré 'hang (sth)' | $\begin{aligned} & \text { gě: } \\ & \text { 'exit', } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 1Sg | sc̀mbè jó-ŋ | gòndùrè jó-ŋ | gè: jó-ŋ |
| 1 Pl | sèmbè jó-y | gòndùrè jó-y | gè: jó-y |
| 2 Sg | sèmbè j-ó: | gòndùrè j-ó: | gè: j-ó: |
| 2 Pl | sèmbè j-é: | gòndùrè j-é: | gè: j-é: |
| 3 Sg | sèmbè jó- $\varnothing$ | gòndùrè jó- $\varnothing$ | gè: jó- $\varnothing$ |
| 3 Pl | sèmbè jó-yyà | gòndùrè jó-yyà | gè: jó-yyà |

My assistant explained that this construction emphasizes the definitiveness of a just completed action.

Etymologically, it may be that jó- in this construction is not a reflex of the 'have' quasiverb. The comparative evidence points to a recent perfect or completive with auxiliary ${ }_{\mathrm{j} \varepsilon}$ 'take'. This would account for 3 Pl jó-yyà in particular; compare yè jó-ǹ 'they have' with stative or imperfective form of the 3 Pl suffix. 'Take' and 'have' were probably conflated into the attested DD perfect auxiliary, initially in the recent perfect then extending to the experiential perfect. The two would have been difficult to distinguish in the second person subject forms in DD, due to vocalic contractions.

### 10.2.1.6 Recent perfect with bò- 'be' after lengthened O-stem

In this construction, bò- 'be' (§11.2.2.2) in L-toned form is the conjugated auxiliary. It follows a main verb in $\{\mathrm{HL}\}$-toned O-stem form with lengthened final vowel. Except for the $\{H L\}$ overlay the verb form is identical to the perfective participle (§14.4.1.1). The $\{H L\}$ overlay is realized as $\{\mathrm{H}\}$ on a monosyllabic, before the L-toned auxiliary.
(214) Recent perfect paradigm

|  | sémbè 'sweep' | $g e ̌: ~ ' e x i t ' ~$ | dàgé 'become good' |
| :---: | :---: | :---: | :---: |
| 1 Sg | sémbò: bò-ๆ | gó: bò-п | dágò: bò-ŋ |
| 1 Pl | sémbò: bò-y | gó: bò-y | dágò: bò-y |
| 2 Sg | sémbò: b-ò: | gó: b-ò: | dágò: b-ò: |
| 2 Pl | sémbò: b-è: | gó: b-è: | dágò: b-è: |
| 3 Sg | sémbò: bò- $\varnothing$ | gó: bò- $\varnothing$ | dágò: bò- $\varnothing$ |
| 3 Pl | sémbò: bò-ǹ | gó: bò-ǹ | dágò: bò-ǹ |

The form of the main verb and the L-tone of the auxiliary distinguish this construction from the future construction (-ì bó-), see §10.2.2.4.

### 10.2.2 Imperfective positive system

This subsystem includes imperfective, reduplicated imperfective, future, and progressive. The future and the progressive include auxiliary verbs.

### 10.2.2.1 Imperfective (-b~ -bù-)

The imperfective (positive) is a high-frequency, unmarked form that is used in statements of current eventualities, either ongoing (competing with the progressive construction) or recurring/habitual. For future time it competes with an explicitly future form with $-m$ bò ( $\S 10.2 .2 .4$ below). For its reduplicated counterpart, see the following section. Statives like 'be sitting' are generally expressed with specifically stative derivatives and are therefore outside of the perfective/imperfective aspectual system (§10.4).

The imperfective verb has $\{\mathrm{HL}\}$ tone overlay, a final lengthened e: or $\varepsilon$ :, and what appears to be etymologically a reduced form of the conjugated 'be (somewhere)' quasi-verb bò- (§11.2.2.2).

The initial H-tone is frequently lowered in the presence of preverbal constituents, resulting in an entirely L-toned verb form. However, this L-toned verb can then attract the H -tone of a preceding /LH/-toned word or phrase, by Rightward H-Tone Shift (§3.7.4.1). One could alternatively argue that the (deleted) preceding H -tone merges with the initial H -tone of the verb.

Imperfective (nonmonosyllabic)

| stem | ńdè 'give' | gòndùré 'hang (sth(' | ábè 'accept' |
| :---: | :---: | :---: | :---: |
| 1Sg | ńdè:-bù-ך | góndùrè:-bù-n | ábè:-bù-n |
| 1 Pl | ńdè:-bì-y | góndùrè:-bì-y | ábè:-bì-y |
| 2 Sg | ńdè:-b-ò: | góndùrè:-b-ò: | ábè:-b-ò: |
| 2 Pl | ńdè:-b-è: | góndùrè:-b-è: | ábè:-b-è: |
| 3 Sg | ńdè:-b- $\varnothing$ | góndùrè:-b- $\varnothing$ | ábè:-b- $\varnothing$ |
| 3 Pl | ńdè:-n | góndùrè:-n | ábè:-n |

The lengthening of the $e / \varepsilon$ vowel is conspicuous. It is the most easily processed acoustic indicator of the imperfective. By contrast, the word-final suffixal $-b$ in the 3 Sg is barely audible.

In monosyllabic forms like $g$ ê:- $b-\varnothing$ 'he/she will go out', I am tempted to transcribe géè:-b- $\varnothing$ to bring out the duration of the lengthened vowel. However, there is no audible break between the supposed short and a long vowel.

Historically, $-b(\grave{u})$ is likely a reduced variant of bò- 'be', and the vocalic lengthening may reflect a vanished ${ }^{*}$-m- linker. Compare the future in -m̀ bó- in §10.2.2.4.

### 10.2.2.2 Reduplicated imperfective

Like the simple perfective, the simple imperfective may be reduplicated. The reduplicant has the same form as in the reduplicated perfective and the reduplicated stative (for phonological details see the reduplicated perfective, $\S 10.2 .1 .3$ above). The tones are also the same: L-toned reduplicant, $\{\mathrm{HL}\}$ overlay on the stem. On the other hand, the inflectional and pronominalsubject suffixes of the reduplicated imperfective are the same as in the simple imperfective. Example: gò-góndùrè:-n 'they hang (it) up'.

The reduplicated imperfective indicates verb focus. It can be used in simple intransitive clauses that could be answers to 'what will you do?' questions.

### 10.2.2.3 Progressive (-là: jò-)

The progressive ('is VPing'), denoting a temporally extended process that is taking place at the moment of speaking, is expressed by a stem with $\{\mathrm{HL}\}$ tone overly, an invariant suffix -là:, and a conjugated form of jò- 'have' as auxiliary. This -là: (dialectally -rà:) could be identified with locative postposition là: (§8.2.1), hence 'be in VERB-ing'.
progressive gloss bare stem
a. góndùrè-là: jò- 'be hanging (sth) up' gòndùré
sع́mbè-là: jò- 'be sweeping' sémbè
jóbè-là: jò- 'be running' jòbé
sémè-là: jò- 'be slaughtering' sémè
núnè-là: jò- 'be singing' nùné
úrè-là: jò- 'be skinning and butchering' úrغ̀

| núwè-là: $j o ̀-$ <br> jínè-là: jò- | 'be planting', <br> 'be bringing' | nùwé <br> jìné |
| :--- | :--- | :--- |
| ból-là: jò- | 'be going' | bòlé |
| jé ból-là: jò- | 'be conveying' | jé bòlé |
| bél-là: jò- | 'be obtaining' |  |
| nál-là: jò- | 'be giving birth' | bèlé |
| nàlé |  |  |
| kán-dà: jò- | 'be doing' | kánè |
| bán-dà: jò- | 'be beating (tomtom)' | bàné <br> mén-dà: jò- |
|  | 'be coming' | mèné |

A Cvlv or Cvnv verb stem syncopates its final vowel before -là: . This results in Cv́l-là: in the first case (216b), which needs no further phonological adjustment. In the second case we get CV́n-dà: (216c), since $n l$ is not an acceptable medial cluster (§3.5.5.1).

My assistant always syncopates these forms with a set of high-frequency Cvlv or Cvnv verbs like 'do' and 'come'. Other verbs of these shapes allow either the syncopated or bisyllabic shape of the stem, e.g. nálè-là: jò- 'be giving birth' as an alternative to nál-là: jò-.

Sample paradigms are in (217). The 3 Pl form is $j \grave{o}-n$ with the same 3 Pl stative or imperfective suffix as in yè jó-ǹ 'they have', not jó-yyà as in the perfect constructions.
(217) Progressive paradigms

|  | sémbè 'sweep' | gě: 'exit' |
| :---: | :---: | :---: |
| 1 Sg | sémbè-là: jò- $\eta$ | gê:-là: jò- $\quad$ ] |
| 1Pl | sémbè-là: jò-y | gê:-là: jò-y |
| 2 Sg | sémbè-là: j-ò: | gê:-là: j-ò: |
| 2 Pl | sع́mbė-là: j-è: | gê:-là: $j$-è: |
| 3 Sg | sémbè-là: jò- $\varnothing$ | gê:-là: jò- $\varnothing$ |
| 3Pl | sémbè-là: jò-n | gê:-là: jò-n |

The mediopassive suffix takes the form -i:- before -là:, as in ób-ì:-là: jò- 'be sitting down' (in the progressive rather than the stative-resultative sense).

### 10.2.2.4 Future (-ì̀ bó- after O-stem)

The explicitly future combination -m bó- is added to the O-stem of the verb (final $o$ or $\varsigma$ ) with $\{\mathrm{HL}\}$ tone overlay on the stem. bó- is again the 'be' quasi-verb, functioning as an auxiliary.

| future | gloss | stem |
| :--- | :--- | :--- |
| a. gô:-m bó | 'will exit' | gě: |
| wô:-m bó | 'will see' | wě: |
| b. kánò-m bó | 'will work' | kánè <br> núỳ̀-m bó |
| 'will enter' |  |  |


| góndùrò-m bó | 'will hang up' | gòndùré |
| :--- | :--- | :--- |
| ná:ndò-m bó | 'will taste' | nà:ndé |
| sع́mbò-m bó | 'will sweep' | sémbè |

Sample paradigms are (219). The H-tone on bó- is most easily heard when there is a following element like nà: 'if'. The $-m$ on the verb is the most easily recognized element that distinguishes the future from the recent perfect with L-toned bò- as auxiliary (§10.2.1.6).

Future paradigm

|  | sémbè 'sweep' | $g e ̌: ~ ' e x i t ' ~$ | dàgé 'become good' |
| :---: | :---: | :---: | :---: |
| 1Sg | sémbò-m bó-ŋ | gô:-m bó-п | dágò-m bó-п |
| 1 Pl | sémbò-m bó-y | $g o ̂:-m$ bó-y | dágò-m bó-y |
| 2 Sg | sémbj̀-m b-ó: | $g o ̂:-m \quad b-o ́:$ | dágò-m b-ó: |
| 2 Pl | sદ́mbò-m b-é: | $g o ̂:-m ~ b-e ́: ~$ | dágò-m b-é: |
| 3 Sg | sémbò-m bó- $\varnothing$ | $g o ̂:-m$ bó- $\varnothing$ | dágò-m bó- $\varnothing$ |
| 3 Pl | sémbj̀-m bó-r̀ | gô:-m bó-ǹ | dágò-m bó-ǹ |

The analysis of this construction as having a suffix -m plus the locational-existential 'be' quasi-verb as auxiliary is not as transparent synchronically as it would be if -m̀ also appeared elsewhere as a future or imperfective marker (as it does in some other Dogon languages). However, the corresponding past future (i.e. future in past) is -ı̀ bíy $\grave{\varepsilon}-(\$ 10.6 .1 .3)$, including the regular past-time counterpart of the 'be' quasi-verb, so there is some synchronic evidence for $i t$.

### 10.2.3 Negation of indicative verbs

For active verbs in indicative clauses the primary binary opposition is between perfective negative and imperfective negative. Both are portmanteaus that have little or no phonological connection to the corresponding positive forms. The perfective negative morpheme may combine with (an allomorph of) the experiential perfect morpheme.

Reduplication is generally not allowed in negated verbs.
Other negative morphemes occur with stative and nonverbal predicates ('it is X '). The imperative also has its own special negation (prohibitive).

### 10.2.3.1 Perfective negative (-lí-~ -lú-, 3Pl -ń)

The perfective negative is constructed by adding suffix -lv́- (-lí- -lú-) to an $\{\mathrm{L}\}$-toned and lengthened A-stem. Reduplication is not attested. One could alternatively posit an underlying suffix /-àlv́-/. The $v$ here would represent an underspecified short high vowel that is apocopated word-finally ( 3 Sg form), contracted before another vowel $(2 \mathrm{Sg}, 2 \mathrm{Pl}$ ), and arguably assimilated to a following consonant ( $1 \mathrm{Sg}, 1 \mathrm{Pl}$ ). The 3 Pl form is a portmanteau -ń. For typographic reasons I transcribe the 3 Sg as ...ă:-l- $\varnothing$ rather than ...à:-Í- $\varnothing$.
(220) Perfective negative (did not ...)

|  | sémbè 'sweep' | ábè 'accept' | káyè 'shave' | $n \varepsilon$ : 'drink' |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | sèmbà:-lú-ך | àbà:-lú-ך | kàyà:-lú-ŋ | nà:-lú-ŋ |
| 1 Pl | sèmbà:-lí-y | àbà:-lí-y | kàyà:-lí-y | nà:-lí-y |
| 2 Sg | sèmbà:-1-ó: | àbà:-1-ó: | kàyà:-1-ó: | nà:-1-ó: |
| 2 Pl | sèmbà:-l-é: | àbà:-1-é: | kàyà:-1-é: | nà:-1-é: |
| 3 Sg | sèmbǎ:-1-Ø | àbǎ:-1-Ø | kàyă:-1-Ø | nă:-1-Ø |
| 3 Pl | sèmbà:-ń | àbà:-ń | kàyà:-ń | nà:-ń |
| (3Pl also has variants with -ń-yà) |  |  |  |  |

### 10.2.3.2 Experiential perfect negative (tá:-lì-)

The sense 'have never VPed' is expressed by the experiential perfect negative. No adverb or other element is needed.

The form is tá:-lì- following the $\{\mathrm{L}\}$-toned stem. The $-l \grave{v}-$ is an L-toned variant of perfective negative $-l \bar{v}-$.
(221) Experiential perfect negative

| stem | $W \varepsilon ̌: ~ ' s e e ’ ~$ | sémbè 'sweep' |
| :---: | :---: | :---: |
| 1Sg | wè: tá:-lù-ŋ | sèmbè tá:-lù-ŋ |
| 1 Pl | wè: tá:-lì-y | sèmbè tá:-lì-y |
| 2 Sg | wè: tá:-1-ò: | sèmbè tá:-1-ò: |
| 2 Pl | wè: tá:-l-è: | sèmbè tá:-1-è: |
| 3 Sg | $w \varepsilon$ : tâ:-1- $\varnothing$ | sèmbè tâ:-1- $\varnothing$ |
| 3 Pl | wè: tá:-п̀ | sèmbè tá:-ı̀ |

As a variant I have also recorded wà: tá:-lv̀- where the verb has A-stem form, matching the long a: of -tá:-. This seems to be limited to 'see', which occurs frequently in the experiential perfect (positive and negative).

### 10.2.3.3 Recent perfect negative (jò-nnú-)

The recent perfect with $j o$ 'have' as auxiliary ( $\S 10.2 .1 .5$ ) is negated by using the regular negative forms of 'have', based on jò-nnú- (3Pl jòn-íyà ~ jǒn-yà). Whereas the stem becomes $\{\mathrm{L}\}$-toned before H-toned auxiliary jó, the stem appears with its lexical tones before the initial L-tone in the negative forms: sémbé jò-nnú- 'has not swept', gòndùré jò-nnú- 'has not hung up'.

For the alternative recent perfect with 'be' rather than 'have' as auxiliary, an example of negation is sémbò: bò-nnú- 'has not swept'.

### 10.2.3.4 Imperfective negative (-nnú-, 3Pl -n-íyà)

This form can negate any event that has not yet occurred (present or future). The stem has $\{\mathrm{HL}\}$ overlay as in the imperfective positive, but the stem-final vowel is not lengthened. The suffixal syllable (for 3Pl the suffixal onset) is H-toned, so at word-level we have an HLH sequence (HLHL for 3 Pl ). The 3 Pl form has ungeminated $n$, hence $-n$-íyà, and can be syncopated to -ń-yà. Reduplication is not attested.
(222) Imperfective negative (nonmonosyllabic) ), 'does not ...'

| '... give' <br> (ńdè) | $\begin{aligned} & \text { ‘... sleep' } \\ & \text { (nóy-yè) } \end{aligned}$ | '... accept' <br> (ábè) |
| :---: | :---: | :---: |
| ńdè-nnú-ŋ | nóy-yè-nnú-ŋ | ábè-nnú-ŋ |
| ńdè-nní-y | nóy-yè-nní-y | ábè-nní-y |
| ńdè-nn-ó: | nóy-yè-nn-ó: | ábè-nn-ó: |
| ńdè-nn-é: | nóy-yè-nn-é: | ábè-nn-é: |
| ńdè-nnú- $\varnothing$ | nóy-yè̀-nnú- $\varnothing$ | ábè-nnú- $\varnothing$ |
| ńdè-n-íyà | nóy-yè-n-íyà | ábè-n-íyà |
| $\sim$ ńdè-ń-yà | ~ nóy-yè-ń-yà | ~ ábè-ń-yà |

A monosyllabic example is nê:-nnú- 'does not drink'. A trisyllabic example is góndùrè-nnú'does not hang up'.

### 10.2.3.5 Progressive negative (-là: jò-nnú-)

The progressive form with suffix -là: on the verb, followed by jó 'have' as auxiliary (§10.2.2.3), is negated by simply replacing positive jó by its negative counterpart jò-nnú. Examples are sémbè-là: jò-nnú- 'not be sweeping', ból-là: jò-nnú- 'not be going', and kán-đà: jò-nnú- 'not be doing'. The 3 Pl form is jò-n-íyà.

### 10.2.3.6 Future negative (-ı́ bò-nnú-)

The explicitly future form in -m̀ bó (§10.2.2.4) has a negative form -ḿ bò-nnú. The pronominal-subject suffixes are the same as in the imperfective negative with -nnú-. The L-toned bò- is accompanied by an unusual $\{\mathrm{LH}\}$ overlay on the main verb: sèmbó-ḿ bò-nnú'will not sweep', nùyó-ń bò-mbó- 'will not enter', kìgùlyó-ḿ bò-nnú- 'will not return'. A 3Pl example is sèmbó-ńn bò-n-íyà~ sèmbó-ń bò-ń-yà.

### 10.3 Pronominal paradigms for indicative verbs

### 10.3.1 Subject pronominal suffixes

This section summarizes the forms of pronominal-subject suffixes on regular verbs and other conjugated predicates (excluding imperatives).

The pronominal-subject suffixes on verbs and other predicates are in (223). The 1st/2nd person suffixes are atonal; they acquire their tone from the preceding vowel. These suffixes always follow a vowel (stem-final or in a derivational suffix). The 2 Sg and 2 Pl suffixes can be posited as having underlying short mid-height vowels unspecified for $\pm \mathrm{ATR}$, i.e. /-O/ and $/-E /$. However, they always combine with the preceding vowel to form a long vowel (§3.5.6.1).

## (223) category suffix

| 1 Sg | $-17$ | (homoph |
| :---: | :---: | :---: |
| 1 Pl | - - | (homoph |
| 2 Sg |  | es with p |
| 2 Pl |  | es with pr |
| 3 Sg |  |  |
| 3 Pl |  | ee below) |

logophoric $-\eta \quad$ (homophonous with 1 Sg )
The 3 Sg suffix is zero. The 3 Pl suffix is somewhat variable in form, though less so than in some other Dogon languages (224). The tonal distinction between -ǹ and -ń is due to the inflectional category, not to the 3 Pl suffix as such. In the imperfective positive and perfective negative, the $-n$ suffix is a portmeanteau that replaces the usual aspect-negation suffix.
3Pl suffix category comment
a. -yà perfective positive
-yà imperfective negative
-yà stative negative
-yà $\quad$ past clitic ( $=$ bì-yyà
b. -n stative positive
-ǹ imperfective positive portmanteau replacing -b-
-ń perfective negative portmanteau replacing $-l(\hat{1})$
-yà is occasionally added to the nasal suffixes in (224b). The morpheme combination -ń-yà also occurs with stative negatives like bò-n-íyà ~ bò-ń-yà 'they are not (somewhere)' (§11.2.2.2), but in this case the -ń- can be taken as the negative morpheme (cf. 3 Sg bò-nnú- $\varnothing$ 'he/she/it was not').

### 10.4 Stative form of verbs

This section covers stative forms derived from regular (active) verbs. For defective stative quasi-verbs that do not have active forms, including 'be (somewhere)', 'have', 'want', 'like', and 'know', see chapter 11.

### 10.4.1 Stative positive (reduplicated and unreduplicated)

A number of regular active verbs, i.e. verbs that distinguish perfective from imperfective aspects, also have a distinct stative paradigm that denotes a resulting or continuing state. The stative does not distinguish perfective from imperfective aspect. In unfocalized positive main clauses it requires either initial reduplication or the existential proclitic yè (the two do not co-occur). There is no clear semantic difference between reduplication and yè, though elsewhere reduplication is a verb focalizer while yè can function as a default locational.

Derived statives have an apparent $\{\mathrm{HL}\}$ tone overlay and A/O-stem vocalism (final a for -ATR stems, final $o$ for + ATR). The H -tone is arguably attributable to the preceding reduplication or existential yè (§3.7.4.4). A sample paradigm is (225), using the stative derivative from the active verb ób-yè 'sit down'.

## 'be sitting (seated)' with existential particle

| 1Sg | ò-Róbò- $\eta$ | yè Róbò-ๆ |
| :---: | :---: | :---: |
| 1 Pl | ò-Róbò-y | yè Póbò-y |
| 2Sg | ò-Rób-ò: | yè Rób-ò: |
| 2 Pl | ò-جób-è: | yè Pób-è: |
| 3 Sg | ò-Róbò- $\varnothing$ | yè óbò- $\varnothing$ |
| 3Pl | ò-Róbò-ǹ | yè Róbò-ǹ |

Derived statives like this can be formed from most verbs of stance (position) and carrying/holding, and from some other verbs. Examples of active/stative pairs are in (226). For the stance verbs, both active and stative have the positioned individual as subject. For the verbs of carrying and holding, both active and stative have the carrier (not the object or person carried) as subject. For the verbs in (226c), the stative is intransitive, and is arguably most closely associated cognitively with a transitive verb (though related intransitive mediopassives can also be adduced in some cases).

$$
\begin{array}{llll}
\text { active } & \text { gloss } & \text { stative } & \text { gloss } \tag{226}
\end{array}
$$

a. stance

| ób-yè | 'sit down' | óbò | 'be sitting (seated)' |
| :--- | :--- | :--- | :--- |
| íg-yè | 'stand, stop' | ĺgà | 'be standing, be upright, be stopped' |
| bìy-yé | 'lie down' | bíyò | 'be lying down, prone' |
| tón-y | 'squat' | tónà | 'be squatting' |
| túy-yè | 'kneel' | túyà | 'be kneeling' |
| mùnn-yé | 'curl up (body)' | múnnò | '(body) be curled up' |
| wànd-yé | 'spread out' | wándà | '(limbs) be spread' |
| gèn-yé | '(sth) tilt' | génà | 'be tilted' |
| dàb-yé | 'lie on belly' | dábà | '(sb) be lying on belly' |
| úb-yè | '(an.) lie down' | úbà | '(bird, animal) lie down' |
| gèn-yé | 'become tilted' | génà | 'be tilted' |
| jùy-yé | 'flip over' | júwò | '(calabash) be flipped over' |

b. carrying/holding

| sún-nè | 'carry on back' |
| :--- | :--- | :--- | :--- |
| dùy-yé | 'carry on head' | | súnò |
| :--- |
| dúwà |$\quad$| 'have (child) on back' |
| :--- |
| 'have (basket) on head' |

c. intransitive stative associated with transitive active verb
gòndù-ré 'hang (sth) up’ góndà '(sth) be hanging'
í:-rè 'shut (door)' íyò '(door) be shut'
téyè 'hobble (animal)' ténà 'be hobbled'
dà:-ré 'lay out (mat)' dáyà '(mat) be laid out'
d. other mediopassives
nòy-yé 'sleep' nóyò 'be asleep'
jòy-yદ́ 'hide self’ jб́yà 'be hidden'

> (cf. jò:-ré ‘hide sth/sb’)

All attested stative stems are light bisyllabics, i.e. $C v C v, C v N N v$ with geminate nasal, or $C_{v N C v}$ with homorganic nasal-voiced stop cluster. To achieve this shape, other $C_{V C C v}$ and $C v(C) C v C v$ stems are trimmed, wherever possible by deleting a mediopassive suffix ( -yv ) or transitive suffix (-rv). However, in cases like jóyà 'be hidden' and dáyà '(mat) be laid out' the medial $y$ may be a vestige of a mediopassive suffix, preserved here in order to avoid a monosyllabic (i.e. subminimal) stative.

### 10.4.2 Stative negative (-nnú-, 3P1 -n-íyà)

Derived stative verbs (preceding section) are negated by adding a conjugated stative negative suffix -nnú- to the stative stem. In this negative paradigm, the stative stem is tone-dropped. Reduplication and the existential proclitic are not allowed. The 3Pl form is -n-íyà. Sample paradigms are in (227).

|  | 'be sitting (seated)' | 'have (child) on back' |
| :---: | :---: | :---: |
| 1Sg | òbò-nnú-ŋ | sùnò-nnú-ŋ |
| 1 Pl | òbò-nní-y | sùnò-nní-y |
| 2Sg | òbò-nn-ó: | sùnò-nn-ó: |
| 2 Pl | òbò-nn-é: | sùnònnn-é: |
| 3Sg | òbò-nnú- $\varnothing$ | sùnò-nnú- $\varnothing$ |
| 3 Pl | òbò-n-1́yà ~ òbò-ń-yà | sùnò-n-1́yà ~ sùnò-ń-yà |

### 10.5 Capacity

No special capacitative morphology has been observed. 'Can/is able to VP' is expressed by a direct chain with bèké 'get' (§15.1.4.1).

For 'be VERB-able' one can use a paraphrase with generic 3Pl subject ('they eat it'), or an imperfective mediopassive as in né-yyè:-b- $\varnothing$ 'it is eaten'.

### 10.6 Temporal clitics and particles

### 10.6.1 Past clitic ( = bíyè ~ = bìyè $)$

The various AN categories can be shifted into the past, i.e. the temporal anchor can shift from the moment of speaking to a temporal reference point in the past. This is expressed by adding conjugated past clitic $=$ bíyè $\sim=$ bìyè (the tone depends on the AN category) or its negation = bìyǎ:-l- to a form with unconjugated AN marking. This is simply a cliticized form of the quasi-verb bìyè 'was', the past-time counterpart of bó- 'be' (§11.2.2.2). The pronominal subject suffix appears once, on the clitic. The morphological structure is therefore STEM-AN=Past-PronSubj. The morphological past progressive corresponds functionally both to the imperfective and progressive, otherwise the AN categories in the past systema and the unmarked system are aligned.

The paradigms of the positive and negative forms of the clitic are in (228).
Past clitic and its negation

| 1 Sg | $=b^{\prime} y \grave{\varepsilon}-\eta \sim=b i ̀ y \varepsilon ̀-\eta$ | $=$ bìyà:-lú- $\quad$, |
| :---: | :---: | :---: |
| 1 Pl |  | = bìyà:-lí-y |
| 2 Sg | = bíy-ò: $\sim=$ bìy-ò: | = bìyà:-1-ó: |
| 2 Pl | $=b^{\prime} y$ - $\grave{\varepsilon}: \sim=$ bìy-ò: | = bìyà:-1-é: |
| 3 Sg | $=b i ́ y \dot{z}-\varnothing \sim=b i ̀ ̀ z ̇$ - $\varnothing$ | = bìyǎ:-1-Ø |
| 3 Pl | = bíy-yà~ = bìy-yà | = bìyà:-ń |

It is often difficult to determine whether bíy $\dot{\varepsilon} \sim$ bìy $\grave{\varepsilon}$ is actually cliticized or is a separate word. Evidence for separate-word status could be either of the following: a) the main verb and the past morpheme each have their own H-tone, as in verb chains; or b) demonstrativecontrolled tone-dropping, which affects relative-clause verb-participles, applies only to the past marker and does not affect the main verb (on this point see $\S 14.6 .1$ ). By these criteria, the evidence is mixed for the past progressive, as in sémbè-là: = bìy $\grave{\varepsilon}-\varnothing$ 'he was sweeping'. By contrast, the past stative and past future are single words with cliticized =bìyè, with a single H-tone located on the stem and subject to tone-dropping before a demonstrative. The past perfect positive is hard to call, since the main verb is already tone-dropped and so cannot be tested for demonstrative control; the past perfect negative, however, behaves like a single word on criterion (b) but not (a).

### 10.6.1.1 Past imperfective (positive and negative)

The morphological past imperfective is most often replaced by the past progressive (see below). However, the past imperfective is attested in past habitual contexts ('used to VP', 'would regularly VP'). The unconjugated form =bìyè is added to an already conjugated imperfective form. The portmanteau 3Pl imperfective suffix, elsewhere just $-n$, is syllabic (-ní:-). All of the syllabic pronominal-suffix forms (all except zero 3 Sg ) are H-toned, resulting in an HLH pattern (not including =bìyغ̀), a pattern elsewhere found in the imperfective negative but not in the imperfective positive.
(229) Past progressive

|  | ńdè 'give' |
| :---: | :---: |
| 1Sg | ńdè:-bú- $\eta=$ bìyè |
| 1Pl | ńdè:-bí-y = bìyè |
| 2Sg | ńdè:-b-ó: $=$ bìyè |
| 2 Pl | ńdè:-b-é: = bìyè |
| 3 Sg | ńdè:-b=bìyè |
| 3 Pl | ńdè:-ní: = bìyè (text T02 03:26) |

The corresponding negation is formed by adding unconjugated $=$ bìyè to the conjugated imperfective negative. Thus ńdè-nnú- $\check{\prime}=b i ̀ y \varepsilon ̀ ~ ' I ~(u s u a l l y) ~ d i d ~ n o t ~ g i v e ' . ~$

### 10.6.1.2 Past progressive (positive and negative)

The combination of the regular progressive (unconjugated suffix -là: on the verb) with the conjugated past clitic produces a form that corresponds to the progressive ('is sweeping') and often also the imperfective ('sweeps, will sweep') in the regular system.
(230) Past progressive

|  | ńdè 'give' | sémbè 'sweep' |
| :---: | :---: | :---: |
| 1Sg | ńdè-là: = bìyè- $\quad$ | sémbè-là: = bìyè- $\eta$ |
| 1 Pl | ńdè-là: = bìyè-y | sémbè-là: = bìyè-y |
| 2Sg | ńdè-1à: = bìy-ò: | sémbè-là: = bìy-ò: |
| 2 Pl | ńdè-là: = bìy-è: | sémbè-là: = bìy-غ̀: |
| 3 Sg | ńdè-là: = bìyè- $\varnothing$ | sémbè-là: = bìyè- $\varnothing$ |
| 3 Pl | ńdè-là: = bìy-yà | sémbè-là: = bìy-yà |

See gúl-dà: bìy-yà 'they would dig up' in text T02 00:37.
The negative form is comparable: sémbè-là: bìyǎ:-1- $\varnothing$ 'he/she wasn't sweeping' or 'didn't use to sweep'.

### 10.6.1.3 Past future (future-in-past, positive and negative)

The future form in $-\grave{m}$ bó ( $\S 10.2 .2 .4$ ) has a past counterpart $-\grave{m}=b i ̀ y \varepsilon ̀ . ~ T h e ~ s e n s e ~ i s ~ f u t u r e-i n-~$ past, as in 'was going to VP' or 'was about to VP'. This form is also used in the consequent clause of a past counterfactual ('we would have gone in'), see $\S 16.4$. The verb stem has the same form in the past future as in the regular future. A sample paradigm is (231). I have occasionally heard an H-toned = bíyè- in this construction but I do not think this is regular.
(231) Past future of sémbè 'sweep'

| 1 Sg | sémbò-m = bìyè- $\eta$ |
| :---: | :---: |
| 1 Pl | sع́mbò-m = bìyè-y |
| 2 Sg | sémbò-m = bìy-ò: |
| 2 Pl | sémbò-m = bìy-è: |
| 3 Sg | sع́mbò-m = bìyè- $\varnothing$ |
| 3 Pl | sع́mbò-m = bìy-yà |

The negative counterpart is -m̀ bìyà:-lv́-, as in 3 Sg sémbò-m bìyă:-l- $\varnothing$ 'he/she was not going to sweep'. The 3 Pl form is sémbj̀-m bìyà:-ń.

### 10.6.1.4 Past perfect (positive and negative)

The past form of the morphological perfective is used as a past perfect ('had VPed'). There is a tone change in the positive form. The verb stem is tone-dropped and the past morpheme begins with an H-tone. (The H-tone disappears when the verb is defocalized). This recalls the behavior of the 3 Sg and 3 Pl (but not other) subject forms of the perfective positive before nà: 'if', where the H-tone of the verb shifts to the following morpheme (§3.7.4.3).

| past perfect | gloss | bare stem | 3Sg perfective |
| :---: | :---: | :---: | :---: |
| $s \varepsilon ̀ m b \grave{\varepsilon}=b i ́ y \grave{\Sigma}$ - | 'had swept' | sémbè | sémbè- $\varnothing$ |
| gòndù-rè = bíyè- | 'had hung (sth) up' | gòndù-ré | góndù-rè- $\varnothing$ |
| gè: = bíyè | 'had exited' | gě: | $g e ̂:-\varnothing$ |

While my assistant from Koundiala kept the vocalism of the stem before = bíy $\grave{\varepsilon}$ - consistent with those of the bare stem and perfective (final e or $\varepsilon$ ), the recorded texts from Nantanga sometimes use the $\mathrm{A} / \mathrm{O}$-stem. Positive examples are kùndò = bíy-yà 'they put' (T01 05:16), and both nùnà = bí-yyà 'they entered' and gò: = bí-yyà 'they exited' (T01 07:19).

There are two attested negative constructions. In the one most readily elicited from my Koundiala assistant, the main verb takes (unconjugated) perfective negative form, but with H - instead of $<\mathrm{LH}>$-tone on the lengthened stem-final a : . The past morpheme itself is L-toned. The pronominal-subject suffixes are added at the end.
a. sèmbá:-1= bìyè- 'had not swept'
b. gòndùrá:- $1=$ bìyè- 'had not hung (sth) up'
c. gòwá:- $1=$ bìyè- 'had not exited'

Sample paradigms based on this type are in (234).

Past perfect negative of sémbè 'sweep'

|  | positive | negative |
| :---: | :---: | :---: |
| 1Sg |  | sèmbá:-1 = bìyè- $\eta$ |
| 1 Pl |  | sèmbá:-1 = bìyè-y |
| 2 Sg | sèmbè = bíy-ò: | sèmbá:-1 = bìy-ò: |
| 2 Pl |  | sèmbá:-1 = bìy-غ̀: |
| 3 Sg | $s \varepsilon$ mbè $=$ bíy ¢ $-\varnothing$ | sèmbá:- $1=$ bìyè- $\varnothing$ |
| 3 Pl | $s \varepsilon$ èmbè $=$ bíy-yà | sèmbá:-1 = bìy-yà |

In the second negative construction, = bìyè is negated and the main verb is a bare stem with lexical melody. Thus $s \varepsilon ́ m b \grave{\varepsilon}=$ bìyǎ:-l- $\varnothing$ 'he/she hasn't swept'. This construction is preferred by the speakers from Nantanga in the texts, but as in the past perfect positive the verb sometimes has the A/O-stem or a truncated form with final short high vowel. Examples are nùn-má = bìyà:-ń 'they didn't let (sb) enter' (T02 01:55), the partially defocalized gìn(ì) = bìyǎ:-1- $\varnothing$ 'did not say' (T01 01:45), and já: = bìyă:-1- $\varnothing$ 'it wouldn't take (it)' (T01 03:08).

The past perfect (positive or negative) is the normal verb form in the antecedent clause of the (past) counterfactual conditional construction ('if it had rained yesterday'); see $\S 16.4$. The past perfect in A-stem form plus $\grave{j}(=$ bìyà $\grave{\eta})$, with preverbal subject proclitic in both clauses, constitutes the parallelistic 'as soon as' construction (§15.2.3.2).

### 10.6.1.5 Past experiential perfect (positive and negative)

The regular positive form of the experiential perfect ends in auxiliary jó- 'have'. The past form of jó- produces the past experiential perfect: wè: tì jó=bìỳ̀- $\eta$ 'I had (already once) seen'.

The negative form is produced by negating tì as tâ:-l and adding the conjugated past clitic in its "positive" form: $w \grave{\varepsilon}$ : tâ:- $1=b i ̀ y \grave{\varepsilon}-\eta$ 'I had never seen', variant wà: tâ:- $1=b i ̀ y \grave{\varepsilon}-\eta$.

### 10.6.1.6 Past recent perfect (positive and negative)

As with the past experiential perfect positive, the conjugated past morpheme is added to the final 'have' auxiliary.

Positive: sc̀mbè jó=bìyè- $\varnothing$ 'he/she had (just) swept'.
Negative: sغ̀mbè jó = bìyǎ:-1- $\varnothing$ 'he/she had not (just) swept.'

### 10.6.1.7 Past stative (positive and negative)

Examples of regular and past forms of statives derived from active verbs are in (235). Except for addition of the past clitic, the stem has the same form as in the regular stative. The usual rules for reduplication and the yè existential proclitic apply to the positive forms. In the negative form, the past clitic is morphologically negated.
gloss stative past stative
a. positive (unfocalized main clause)

| 'be sitting' | ò-Róbò- | ò-Róbò= bìyè- |
| :--- | :--- | :--- |
| 'be carrying on head' | yè óbò- | yè óbò = bìyè- |
|  | yè dúwà- | dù-dúwà $=$ bìyè- <br> yè dúwà $=$ bìyc̀- |

b. negative
'not be sitting' òbò-nnú- óbò= bìyà:--lv́-
'not be carrying on head' dùwà-nnú- dúwà = bìyà:-lv́-
Past forms of underived stative quasi-verbs are exemplified in (236). The positive forms simply add $=$ bìyغ̀- plus the pronominal-subject suffix (not shown). In the past forms, only 'did not have' has "positive" = bìyè- following the already negated quasi-verb. 'Was not' is expressed by means of the perfective negative form of bíyè- 'was', namely bìyà:-lv́- ( 3 Sg bìyǎ:-l-Ø). The same bìyà:-lv́- is cliticized to the other specialized stative quasi-verbs to form 'was not in', 'did not want/like', and 'did not know'.

| gloss | regular | Past |
| :---: | :---: | :---: |
| positive |  |  |
| 'have' | yè jó- | yè jó=bìyè- |
| 'be (somewhere)' | yè bó- | yè bó= bìyè- |
| 'be in' | yè dúlò- | yè dúlò= bìyè- |
| 'want/like' | yè námà- | yè námà = bìyè- |
| 'know' | yè tígà- | yè tígà = bìyè- |
| negative |  |  |
| 'not have' | jò-nnú- | jò-nnú = bìyè- |
| 'not be' | bò-nnú- | bìyà:-lv́- |
| 'not be in' | dùlò-nnú- | dúlò = bìyà:-lv́- |
| 'not want/like' | nàmà-nnú- | námà = bìyà:-1v́- |
| 'not know' | ínnù- | tígà = bìyà:-lv́- |

### 10.7 Imperatives and hortatives

### 10.7.1 Imperatives and prohibitives

For quoted imperatives (jussives), see $\S 17.1 .3 .1$.

### 10.7.1.1 Imperative (A/O-stem, plural -ì)

Each verb has an imperative stem that is distinguished by vocalism from the bare stem, perfective, and most other inflected forms. Specifically, it is the A/O-stem, with final $\left\{\begin{array}{l}a \\ o\end{array}\right\}$ or rarely 0 . This is easily distinguishable from the bare stem and perfective positive, which always end in $\{e \varepsilon\}$.

The stem-final vowel in the imperative is $a$ if the stem has a dominant $a$-vowel, as in CaCe bisyllabics and CaCiCe trisyllabics. Otherwise, if the stem is -ATR, the imperative has final a, except for one monosyllabic stem that has $\rho$. If the stem is +ATR, the imperative has final $o$.

Prosodically light stems are those with no more than two vocalic moras, i.e. monosyllabic $C v(:)$ and bisyllabic $C v C v$ or $C v N C v$ (with homorganic nasal and voiced stop). In the imperative, light stems have a tone overlay, $\{\mathrm{H}\}$ for monosyllabics and $\{\mathrm{HL}\}$ for bisyllabics, erasing the distinction between lexical $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ melodies. Examples are in (237).
(237) Imperative singular (prosodically light stems)
imperative $3 \mathrm{Sg} \operatorname{Pfv}$ bare stem gloss
a. monosyllabic
non-low vowel, -ATR, imperative with a

| yá | yह̂:- $\varnothing$ | $y \varepsilon ́$ | 'weep' |
| :---: | :---: | :---: | :---: |
| ná | $n \hat{\varepsilon}:-\varnothing$ | ně: | 'eat (meal)' |
| wá | wê:- $\varnothing$ | wě: | 'see' |
| ná | $n \hat{\varepsilon}:-\varnothing$ | ně: | 'drink' |
| non-low vowel, -ATR, imperative with 0 |  |  |  |
| dó | $d \hat{\varepsilon}:-\varnothing$ | $d \varepsilon ̌:$ | 'arrive' |
| non-low vowel, + ATR |  |  |  |
| gó | $g$ ê:- $\varnothing$ | $g e ̌:$ | 'fall' |

b. light bisyllabic

| dominant a-vowel |  |  |  |
| :---: | :---: | :---: | :---: |
| bágà | bágè- $\varnothing$ | bàgé | 'fall' |
| ábà | ábè- $\varnothing$ | ábè | 'accept' |
| gánjà | gánjè- $\varnothing$ | gànjé | 'dig' |
| dominant non-low vowel, -ATR |  |  |  |
| témà | témè- $\varnothing$ | témè | 'eat (meat)' |
| jínà | jínè- $\varnothing$ | jìné | 'bring' |
| dénnà | dénnè- $\varnothing$ | dènné | 'look for' |
| dóngà | dóngè- $\varnothing$ | dòngé | 'push' |
| dominant non-low vowel, + ATR |  |  |  |
| sígò | sígè- $\varnothing$ | sígè | 'descend' |
| úwò | úwè | úwè | 'catch' |
| tómbò | tómbè- $\varnothing$ | tómbè | 'jump' |
| dóngò | dóngè- $\varnothing$ | dòngé | 'pound (in mortar)' |

Prosodically heavy stems, such as trisyllabics, $C v: C v$ stems, and syncopated $C v C C v$ stems with $C C$ clusters other than homorganic nasal and voiced stop, preserve the lexical tone melody in the imperative. Therefore the tone of the imperative matches that of the bare stem in all cases in (238).
(238) Imperative singular (prosodically heavy stems)

```
imperative 3Sg Pfv bare stem gloss
```

a. trisyllabic (including syncopated $C v C C v$ ) and longer
dominant a-vowel
páy-nd-yà páy-nd-yè páy-nd-yè 'become old' mà:nd-yá má:nd-yè- $\varnothing$ mà:nd-í: 'be courageous'
dominant non-low vowel, -ATR gòndùrá góndùrè- $\varnothing$ gว̀ndùré 'hang sth up' gìr-yá gír-yغ̀- $\varnothing \quad$ gìr-yé 'protect'
dominant non-low vowel, + ATR

| kígùlyò | kígìlyè- $\varnothing$ | kígìlyè | 'go back' |
| :--- | :--- | :--- | :--- |
| pégùrò | pégìrè̀- $\varnothing$ | pégìrè | 'winnow (by shaking)' |

b. heavy $C v C C v$
dominant a-vowel

| táksà | táksè- $\varnothing$ | táksè | 'think' |
| :---: | :---: | :---: | :---: |
| dominant non-low vowel, -ATR |  |  |  |
| íg-yà | íg-yè- $\varnothing$ | íg-yè | 'stand' |
| Ényà | દ́nyè- $\varnothing$ | Ényè | 'winnow (in wind)' |
| dùy-yá | dúy-yè- $\varnothing$ | dùy-yé | 'carry on head' |
| dominant non-low vowel, + ATR |  |  |  |
| kíl-yò | kíl-yè- $\varnothing$ | kíl-yè | 'fly away' |
| ób-yò | ób-yè- $\varnothing$ | ób-yè | 'sit' |
| gùnпó | gúnnè- $\varnothing$ | gùnné | 'steal' |

c. $C v: C v$ and $C v: C C v$
dominant a-vowel

| dà:-rá | dá:-rè- $\varnothing$ | dà:-ré | 'lay out (mat)' |
| :--- | :--- | :--- | :--- |
| nà:ndá | ná:ndè- $\varnothing$ | nà:ndé | 'taste' |
| pá:mà | pá:mè- $\varnothing$ | pá:mè | 'understand' |

dominant non-low vowel, -ATR
tó:nà tó:nè- $\varnothing$ tó:nè 'step on'
ké:ndà ké:ndè- $\varnothing$ ké:ndè 'have fun'
dominant non-low vowel, + ATR

| kó:lyò | kó:lyè- $\varnothing$ | kó:lyè | 'crawl' |
| :--- | :--- | :--- | :--- |
| sí:rò | sí:rè- $\varnothing$ | sí:rè | 'point at' |
| í:-rò | í:-rè- $\varnothing$ | í:-rè | 'shut (door)' |

The (often bipartite) verb 'convey, take away' has imperative jè-bólà, based on imperative bólà 'go' with the preceding 'take' verb tone-dropped.

For plural addressee, suffix $-\grave{\eta}$ is added to the singular imperative stem. Monosyllabics lengthen the stem vowel to form $C \bar{v}:-1 \grave{y}$.

| (239) | gloss | imperative | plural addressee |
| :---: | :---: | :---: | :---: |
|  | 'descend' | gó | gó:-1̀ |
|  | 'eat (meal)' | já | ná:-ŋ̀ |
|  | 'go' | bólà | bólà-ŋ̀ |


| 'sit' | ób-yò | ób-yò-İ |
| :---: | :---: | :---: |
| 'lay out (mat)' | dà:-rá | dà:-rá-r̀ |

Transitive verbs take accusative objects under the same conditions in indicative clauses (240a) and imperatives (240b). This suggests that the imperative "subject" is not completely absent syntactically.
$\begin{array}{lll}\text { a. sé:dù }=\text { y } & \text { búndè- } \varnothing \\ \text { S=Acc } & \text { hit.Pfv- } 3 \text { SgSbj } \\ \text { 'He/She hit } & \text { Seydou.' }\end{array}$
b. sé:dù =ỳ búndò
$\mathrm{S}=$ Acc hit.Imprt
'Hit-2Sg Seydou!'

Imperative verb forms cannot be conjoined ('come and get it!') or disjoined ('sink or swim!'). A pseudo-conditional clause ( $\S 15.5$ ) is used to express an event sequence in the future, whether the second clause is indicative (241a) or imperative (241b).
a. [nغ̀: ná:] bòlè:-bù-ì
[eat if] go-Ipfv-1SgSbj
'I will eat and then go.'
b. [nè: ná:] bòlà
[eat if] go.Imprt
'Eat and (then) go!'
For embedded imperatives (jussive clauses), see $\S 17.1 .3 .1$.

### 10.7.1.2 Prohibitive (-lá, plural -lá-ı̀)

The prohibitive (negative imperative: 'don't!') is formed by adding suffix -lá to the bare stem, which ends in e or $\varepsilon$. Some $C v l v$ and $C v n v$ stems syncopate the final stem vowel. The tones of 'convey' are those of a verb chain. For plural addressee, the same - $-\eta$ found in the positive imperative is added.

$$
\begin{array}{llll}
\text { gloss } & \text { stem } & \text { Sg prohibitive } & \text { Pl prohibitive } \tag{242}
\end{array}
$$

a. after $\{L\}$-toned stem

| 'eat meal' | $n \varepsilon ̌$ : | jè:-lá | $n$ nè-lá-r̀ |
| :---: | :---: | :---: | :---: |
| 'exit (v)' | $g$ ge: | gè:-lá | gè:-lá-r̀ |
| 'descend' | sígè | sìgè-lá | sìgè-lá-ı̀ |
| 'go back' | kígìlyè | kìgìlyè-lá | kìgìlyè-lá-r̀ |

'eat meal' ně:
'descend’ sígè
kìgìlyè-lá kìgìlyè-lá-ŋ̀
b. syncopated

| 'go' | bòló | bòl-lá | bòl-lá-ì |
| :--- | :--- | :--- | :--- |
| 'bring', | jìné | jìn-ná | jìn-ná-ŋ̀ |
| 'come' | mèné | mèn-ná | mèn-ná-ŋ̀ |

c. bipartite
'convey’ jé-bòlé jé-bòl-lá jé-bòl-lá-ı̀
Some Dogon languages have two distinct prohibitive constructions. One of them, more highly marked, includes what appears to be a form of the verb 'forget', which in those languages derives from *nǎ: or the like. This second type has not been observed in DD , which has írè 'forget' belonging to a different cognate set.

### 10.7.2 Hortatives

### 10.7.2.1 Hortative (-má, plural -má-ì )

The hortative ('let's go!') is structurally an imperative aimed at the addressee(s), even though the speaker intends to participate in the action. A distinction is therefore made between a single-addressee hortative ('let's you-Sg and me go!') and a multiple-addressee hortative ('let's you-Pl and me go!'). However, the multiple-addressee form is the default, and it can be used even in the context of a single addressee.

The single-addressee form has a suffix -má, after $\{\mathrm{L}\}$-toned stem. Monosyllabics take the A/E-stem, Cà:- ~ Cè:- if -ATR and Cè:- if +ATR. Nonmonosyllabics have the E/I-stem, with final $\grave{\varepsilon}$ if -ATR but $i$ (varying with $u$ after labial consonant) if +ATR. The cases with $i$ could be attributed to vowel-raising in the metrically weak medial position.

Some Cvlv and Cvnv stems syncopate to $C v C$-má. One might think that this would be limited to +ATR stems, since short high vowels are the favorite targets of syncope, but in fact some -ATR stems also syncopate. The high-frequency hortative 'let's go!' takes a different route and truncates to $C \grave{V}$ :-má.

For plural addressee, the same suffix -ì used with the imperative and prohibitive is added. Representative data are in (243). 'Arrive' has 0: rather than a: (243a).

> stem hortative plural addressee gloss 'let's ...'
a. monosyllabics

| yé | $y \varepsilon ̇:-m a ́ ~$ | yè:-má-ŋ̀ | '... weep' |
| :---: | :---: | :---: | :---: |
|  | ~ yà:-má | ~ yà:-má-ŋ̀ |  |
| $n \varepsilon ̌$ : | nı̀:-má | nı̀:-má-ŋ̀ | '... eat (meal)' |
|  | ~ nà:-má | ~ jà:-má-ı̀ |  |
| $n \varepsilon ̌:$ | $n$ ne:-má | nè:-má-ŋ̀ | '... drink' |
|  | ~ nà:-má | ~ nà:-má-ı̀ |  |
| $g$ ge: | gè:-má | gè:-má-ŋ̀ | '... go out' |
| $d \check{\varepsilon}$ : | dò:-má | dò:-má-ŋ̀ | '... arrive' |

b. light bisyllabic
stem-final vowel not raised, -ATR

| wùlé | wùlè-má | wùlè-má-ı̀ | '... look' |
| :---: | :---: | :---: | :---: |
| gèwé | $g \varepsilon ̀ W \varepsilon ̇-m a ́ ~$ | $g \varepsilon ̀ W \varepsilon ̀-m a ́-\eta) ~$ | .. kill' |
| gìné | gìnè-má | gìnè-má- | '... say’ |
| jìmbé | jìmbè-má | jìmbè-má-ŋ̀ | '... pull' |


| stem-final vowel raised, + ATR |  |  |  |
| :---: | :---: | :---: | :---: |
| káyè | kàyì-má | kàyì-má-r̀ | '... shave' |
| sígè | sìgì-má | sìgì-má-ì | '... go down' |
| dàmbé | dàmbù-má | dàmbù-má-1̀ | '... go up' |
| syncopated |  |  |  |
| mèné | mèn-má | mèn-má-ŋ̀ | '... come' |
| bèlé | bèl-má | bèl-má-ì | '... get' |
| dàmé | dàm-má | dàm-má-ì | '... speak' |
| sémè | sèm-má | sèm-má-ì | '... slaughter' |
| truncated bòlé | bò:-má | bò:-má-ŋ̀ | '... go' |

c. trisyllabic and heavy bisyllabic
mediopassive, + ATR

| ób-yè | òb-ì:-má | òb-ì:-má-ì | '... sit' |
| :---: | :---: | :---: | :---: |
| kígìlyè | kìgìl-ì:-má | kìgìlì:-má-ฑ̀ | '... go back' |
| other |  |  |  |
| gòndùré | gòndùrè-má | gòndùrè-má-ŋ̀ | '... hang up' |
| ké:ndè | kè:ndè-má | kè:ndè-má-ı̀ | '... have fun' |
| pégìrè | pè̀gìrè-má | pè̀gìrè-má-ŋ̀ | '... winnow (by shaking)' |
| táksè | tàksè-má | tàksè-má-ı̀ | '... think' |
| nà:ndé | nà:ndè-má | nà:ndè-má-1̀ | '... taste' |

The hortative resembles the imperative of the causative (§9.2) in form. See $\S 10.7 .4$ for non1 Pl hortative subjects that may reflect this historical origin.

### 10.7.2.2 Hortative negative (-níyà )

A form used as a hortative negative ('let's not eat!' or perhaps 'we must not eat!') is formed with suffix -níyà after the O -stem. No addressee-number distinction could be elicited. The stem has $\{\mathrm{L}\}$ overlay.
(244) Hortative negative

| stem $\quad$ hortative negative | gloss |
| :--- | :--- | :--- |
| Sg | 'let's not $\ldots$ ' |

a. /HL/-toned stem

| kígùl-yè | kìgùl-yò-níyà | '... go back' |
| :--- | :--- | :--- |
| dà:-ré | dà:-rò-níyà | '... lay out (mat) |

b. /LH/-toned stem
bòlé bòlò-níyà '... go'
mèné mènò-níyà '... come'
jé-bòló jé-bòlò-níyà '... convey’
c. monosyllabics
/HL/-toned
yé yò:-níyà '... weep'

```
/LH/-toned
    j\varepsiloň: jò:-níyà '...eat'
    gě: gò:-níyà '...go out'
```

10.7.3 Non-second person imperatives and prohibitives

### 10.7.3.1 Imprecations

Imprecations (wishes, blessings, and curses) with 'God' as subject are expressed with imperative and prohibitive verb forms with no other modal or quotative marker marker (245a-2). 'God' is elsewhere àmbá but is L-toned in these imprecations. This construction is arguably a stripped-down version of the full jussive construction, i.e. a quoted imperative (' $X$ tells/told Y [to VP]'). However, full jussiveshave overt quotative markers, as in (245b), see §17.1.3.
(245)

|  | àmbà | $\delta^{\prime}=\grave{y}$ | gì-yá |  |
| :---: | :---: | :---: | :---: | :---: |
|  | God | $2 \mathrm{Sg}=\mathrm{Acc}$ | protect-M | mprt |
|  | 'May God protect you-Sg!' |  |  |  |
|  | àmbà | $\delta=\grave{y}$ | gì-yè-lá |  |
|  | God | $2 \mathrm{Sg}=\mathrm{Acc}$ | protest-MP |  |
|  | 'May God not protect you-Sg!' |  |  |  |
|  | [sé:dù | wà:] | [bólà | wà] |
|  | [Seydou | QuotSbj] | [go.Imprt | Quot] |
|  | '(Tell) Seydou to go!' |  |  |  |

### 10.7.3.2 Clarification requests

An impersonal imperative can be used to clarify whether the addressee has asked, or would like, the speaker or someone else to perform an action. If a subject is specified, a quotativesubject phrase is used (246b). This construction therefore fits into the rubric of jussive complement (§17.1.3.1), except for the absence of a terminal quotative particle or conjugated 'say' verb.

'(How about we/they) bring (you) some hot water?'
b. [má:/ [í wà:] ménà mà

1Sg.QuotSbj / [1Pl QuotSbj] come.Imprt Q
'(Do you want) me/us to come (to you)?'

### 10.7.4 Non-1Pl hortatives

A hortative verb (always in singular-addressee form in this construction) may occur with a third-person or 1 Sg subject instead of the usual 1 Pl subject. An H -toned independent
pronominal in subject function is obligatory, even when the subject is spelled out by a nonpronominal NP. A second person subject is not allowed.

| a. | sé:dù ná | bò:-má |  |
| :--- | :--- | :--- | :--- |
|  | S | 3SgSbj | go-Hort |
|  | 'Seydou should go!' |  |  |

b. [è-wé ந́gì yà:] bé bò:-má
[child-Pl Def Pl] 3PlSbj go-Hort
'The children should go!'
c. mí bò:-má

1SgSbj go-Hort
'Let me (instead of someone else) go!'
d. \#ó / é
bò:-má
\# 2SgSbj / 2P1Sbj
go-Hort
[ungrammatical]

This construction brings out the double nature of hortatives as imperative-like appeals to the addressee(s) and as representations of actions undertaken by one or more individuals including at least one non-addressee (usually the speaker as in 'let's go!'). It would make little sense for the addressee(s) to also constitute the entire agent set (\#let you go!). The semantic-pragmatic connection between hortative and imperative raises the possibility that the hortative suffix -má may be etymologically related to the imperative of causative -mv (§9.2). However, they differ somewhat in form and they cannot be identified synchronically.

## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

Some examples of complete main-clause sentences are in (248). The verb or other conjugated predicate is regularly clause-final, but it may be followed by a specifically clause-final element such as emphatic particle kòy (248f) or a subordinator like nà: 'if'. Nonpronominal subjects may be preceded by setting adverbials (248a) but precede objects, including receipients of 'give' (248c), as well as adverbs denoting locations embedded in the event structure (248b). Unfocalized pronominal subjects are normally expressed only by agreement suffixes on the predicate (248a). Pronominal objects (accusative) behave much like nonpronominal objects (248d).

| a. nì̀á: | [òjù-n | dá:] | gǔ: $\eta$ | $w \varepsilon ̌:-~$ |
| :--- | :--- | :--- | :--- | :--- |
| en |  |  |  |  |
| yesterday | [the.bush | Loc] | elephant | see.Pfv- 1 SgSbj |
|  | 'I saw an elephant in the bush yesterday.' |  |  |  |

b. sé:dù [dónò- $\eta$ nì:] ńnù kùndè- $\varnothing$ S [waterjar Loc] water put.Pfv-3SgSbj 'Seydou put (=poured) the water in(to) the waterjar.'
c. sé:dù á:màdù $=$ ỳ bú:dù ǹdè- $\varnothing$
$\mathrm{S} \quad \mathrm{A}=\mathrm{Acc}$ money give.Pfv-3SgSbj
'Seydou gave the money to Amadou.'
d. sé:dù mí=ỳ bú:dù ǹ̀dè- $\varnothing$
$\mathrm{S} \quad 1 \mathrm{Sg}=\mathrm{Acc}$ money give.Pfv-3SgSbj
'Seydou gave me the money.'
e. sé:dù bú:dù àmí=ỳ ǹ̀dè- $\varnothing$

S money who?=Acc give.Pfv-3SgSbj
'Who(m) did Seydou give the money to?'
f. ńnù ńmò- $\eta$ bò- $\varnothing$ kòy
water hot be-3SgSbj Emph
'The water sure is hot!'

### 11.1.1 Subjects

### 11.1.1.1 Subjects in indicative main clauses

Tests for subjecthood in main clauses are summarized in (249).
(249) a. clause-initial position, excluding topicalized constituents and setting adverbials like 'yesterday';
b. absence of case-marking (in contrast to object);
c. subject agreement on predicate in main clauses;
d. focalized subjects require the SFoc form of the verb.

In most clauses there is exactly one subject NP (DP) in each indicative main clause containing a verb or quasi-verb.

For pseudo-subjects in certain constructions see $\S 11.1 .1 .4$ below.

### 11.1.1.2 Subjects in relative and complement clauses

In subordinated clauses, subjects are distinguished from non-subject grammatical relations by a different set of features (250). Of these, (250a) is the most rigorous.
(250) a. L-toned preverbal proclitic subject pronouns in nonsubject relative clauses;
b. switch reference (same versus different subjects);
d. quotative-subject marking in quoted clauses.

### 11.1.1.3 Subjects and addressees of imperative and hortative verbs

Imperatives and hortatives mark addressee number in the verb. For imperatives, addressee converges with "subject." For hortatives, addressee ( 2 Sg or 2 Pl ) overlaps with but is not identical to the usual 1 Pl subject or to the other possible non-second-person subjects. Since DD does not have object reflexive pronouns, the issue of whether imperative subjects/addressees can bind reflexives does not arise. However, imperatives do have accusative-marked objects, see (240b) in §10.7.1.1.

### 11.1.1.4 (Pseudo-)subjects of lexicalized subject-verb combinations

The term pseudo-subject can be used for certain nouns that have limited independent referentiality. One domain with such nouns is ambient conditions (time of day, season of year, weather). The best examples are those with bâ:-g (251a), since this noun does not occur outside of these expressions, each of which denotes a transition, either between night and day or from one year to the next. By contrast, ìsí-g 'sun' (今̂sì-gú/) in (251b) and the time-of-day and season terms in (251c) occur elsewhere and have stable meanings, although these subjectverb expressions are standard collocations. The verbs also have identifiable independent senses, except that démè '(daytime) end' is not attested elsewhere.
a. bâ:-g náyè- $\varnothing$ 'day has begun' ("has spent the night")
bâ:-g dénè- $\varnothing \quad$ 'day has ended (at twilight)' ("has spent mid-day")
bâ:- $g$ gê:- $\varnothing \quad$ 'next year has begun' ("has come out")
b. ìsíl $g$ tíbè- $\varnothing \quad$ 'sun has set' ("has died")
ìsí-g túmmè- $\varnothing$
'sun has risen'
c. yá:gà: núŋغ̀- $\varnothing \quad$ 'night has fallen' ("has entered")
dèndá: démè- $\varnothing \quad$ 'daytime has ended’ (i.e. night has fallen)
bà:-sénà: élè- $\varnothing \quad$ 'daybreak (first light) has happened’ ("became")

| dèndígà: ménè- $\varnothing$ | 'twilight has come' |
| :--- | :--- |
| jèná: ménè- $\varnothing$ | 'rainy season has begun' ("has come") |
| jèná: égè- $\varnothing$ | 'rainy season has ended' |
| gěl ménè- $\varnothing$ | 'harvest has begun' ("has come") |
| gél égè- $\varnothing$ | 'harvest has ended'' |

See also the nominals with $\{\mathrm{L}\}$-toned bà:- $g$ - as compound initial in (53f) (§4.2.2.1-2) and bà:-séクà: ‘daybreak, first light’ (§4.2.2.2).
àlá: 'rain' or more generally 'stormy weather' occurs in two combinations with verbs that are not attested in similar senses with other subjects (252a). The verb wě: '(rain) fall' (compare Nanga wǒ:) is likely an accidental homonym of wě: 'see'. àlá: 'rain (n)' also occurs in collocations with a few other verbs denoting weather events (252b).
a. àlá: wê:- $\varnothing \quad$ 'it rained'
àlá: dúsè- $\varnothing \quad$ 'it has stopped raining'
b. àlá: písè- $\varnothing \quad$ 'it drizzled' ("sprayed")
àlá: dúlè- $\varnothing \quad$ 'it thundered' ("roared")
àlá: wísè- $\varnothing \quad$ 'lightning flashed’ ("flickered")

The subjects ('sun', 'rainy season', 'rain') in sentences like those just illustrated are not treated as full-fledged subject NPs in quotations, to judge by the fact that they do not appear in the quotative-subject construction with wà: (§17.1.2.2).
a. sé:dù [bâ:-g nàyè- $\varnothing]$ gínè- $\varnothing$
$\mathrm{S} \quad$ [transition spend.night.Pfv-3SgSbj] say.Pfv-3SgSbj
'Seydou said that day has broken.'
$\begin{array}{llll}\text { b. sé:dù } & \text { [jènǎ: } & \text { ègè- } \varnothing] & \text { gínè- } \varnothing \\ \mathrm{S} & \text { [rainy.season } & \text { finish.Pfv-3SgSbj] } & \text { say.Pfv-3SgSbj }\end{array}$
'Seydou said that the rainy season has ended.'
c. sé:dù [yá-ŋà: àlá: wè:- $\varnothing]$ gínè- $\varnothing$

S [over.there rain(n) rain.fall.Pfv-3SgSbj] say.Pfv-3SgSbj
'Seydou said that it rained over there.'

Dogon languages also often have similar pseudo-subjects in terms for emotions, physical states, and some bodily discharges.

In DD , 'be discouraged’ is a regular active verb kínè (e.g. 1Sg perfective kìné- $\eta$ ). ' $\operatorname{Be}$ (come) tired' is likewise the regular verb ón-nغ̀ ( 1 Sg perfective $\grave{\jmath n}-\eta \varepsilon ́-\eta$ ).

For 'be(come) angry' and 'be(come) happy', the possessed form of kíndà 'liver/heart' (seat of the emotions) is the subject of a relevant verb. kíndà is always in singular (i.e. unmarked) form in this construction.
a. [sé:dù ${ }^{\text {L }}$ kìndà:]
$n o ́ g \grave{2}=b i ̀ y \grave{c}-\varnothing$
[S Lliver/heart] be.angry=Past-3SgSbj
'Seydou was angry yesterday.'

```
b. [kíndà: mò] nógò=bìyè- \(\varnothing\)
    [liver/heart 1 SgPoss ] be.angry \(=\) Past -3 SgSbj
    'I was angry.'
c. nìná: [sé:dù \({ }^{\text {L }}\) kìndà:] Élyò \(=\) bìyè
    yesterday [S liver/heart] sweet.Inch=Past-3SgSbj
    'Seydou was happy yesterday.'
```

'X have a nosebleed (bloody nose)' is expressed by a pseudo-subject kìnjò-dên 'nosebleed', which requires the verb 'exit', plus a true subject denoting the individual. In (255a), the true subject is 1 Sg as shown by subject agreement on 'have'. In quotations, the individual sufferer is treated as true subject. It is phrased with quotative subject wà:, and if plural it can trigger (always optional) plural-subject agreement on the verb (255b).
a. kìnjò-dên gé:-là: jò-ŋ
nosebleed exit-Prog have-1SgSbj
'I have a bloody nose.'
b. sé:dù [é wà:]

S [2Pl QuotSbj]
[kìnjò-dên gé:-là: j-è:] gìǹ̀- $\varnothing$
[nosebleed exit-Prog have-2PISbj] say.Pfv-3SgSbj
'Seydou said that you-Pl are having bloody noses.'
The same construction is used with ' X sweat'. The noun $\grave{\jmath}$ gú- $\eta$ 'sweat' is the pseudo-subject and requires 'exit' as the verb. The true subject is 'the children' in (256a) and 'you' in (256b), as shown by the pronominal-subject agreement on the verb in both examples and by the quotative subject construction in (256b).
a. [è-wé $\quad$ gì yà:] ògú- $\eta$ gě-yyà
[child-Pl Def Pl] sweat(n) exit.Pfv-3PISbj
'The children sweated.'

| b. sé:dù | [ó wà:] | wà:] |
| :---: | :---: | :---: |
| S | [2Sg Quo | QuotSbj \} |
| [ògú-ŋ | $g-o ̌:]$ | gìnè- $\varnothing$ |
| [sweat(n) | exit.Pfv-2SgSbj] | say.Pfv-3SgSbj |

'Seydou said that you-Sg sweated.'
However, in ' X be hungry', phrased as 'hunger have X ' (with yè jó- $\varnothing$ 'it has') or as 'hunger have caught $X$ ' (with úwè- 'caught'), the sufferer $X$ is the direct object and has no subject properties. The 3 Sg subject suffix on the verb agrees with 'hunger', not with the sufferer (257a). However, 'hunger' is insufficiently referential to qualify for expression in the quotative subject construction in a quoted sentence (257b).
a. gìyǎ:
$m i ́=y ̀ \quad y e ̀$
jó- $\varnothing$
hunger $\quad 1 \mathrm{Sg}=$ Acc Exist have-3SgSbj
'I am hungry.'
b. sé:dù $[$ ó =ỳ gìyǎ: yè jó- $\varnothing]$ gìnè- $\varnothing$
$\mathrm{S} \quad[2 \mathrm{Sg}=\mathrm{Acc}$ hunger Exist have-3SgSbj] say.Pfv-3SgSbj
'Seydou said that you-Sg are hungry.'

The 'have' and 'catch' constructions are also used with 'thirst' (nù-nǒ:n). The 'have' construction is also used with kìndà-jîm 'despair' ("heart-sickness").

### 11.1.2 Simple transitives

### 11.1.2.1 Direct objects of simple transitives

Direct object NPs normally follow the subject and setting adverbials, as with 'chicken' in (258).

| $(258)$ | sé:dù | nìyá: | óllò | ébè- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
|  | S | yesterday | chicken | buy.Pfv-3SgSbj |

'Seydou bought a chicken yesterday.'
Accusative $=\grave{y}$ ( $\S 6.7$ ) is especially common with pronouns, personal names, and other referentially specific human NPs. However, even definite human nouns can omit it (259a) or appear with it (259b). It is less common with NPs denoting inanimates.
a. ě-g / [è-gú ì $] \quad$ bùndé-n child / [child Def] hit.Pfv-1SgSbj 'I hit a/the child.'
b. è-gí=ỳ / [è̀-gú ŋ̀̀gì $]=\grave{y} \quad$ bùndé- $\eta$ child=Acc / [child Def] $=$ Acc hit.Pfv- 1 SgSbj [=(a)]

Many morphologically mediopassive (MP) verbs (§9.4), especially verbs of carrying and of wearing (garments), are syntactically transitive and can take accusative objects (260). The verbs are mediopassive since they describe a state that the subject is in, as well as a relationship between subject and object.

```
màlfá gòg-y\varepsiloń-\eta
rifle carry.over.shoulder-MP.Pfv-1SgSbj
    'I carried the rifle (slung over my shoulder).'
```

Many verbs are associated with low-referentiality nouns, including cognate nominals, that might be described as pro-forma objects (§11.1.2.4-5 below). The existence of such objects makes the intransitive/transitive distinction somewhat blurry.

### 11.1.2.2 kánè ‘do’ in collocations

kánè 'do' can combine with a number of nouns to form a conjugatable VP (261). This construction is common with loanwords, from Fulfulde and other languages, for example in the religious and mental-activity domains.
collocation gloss
a. with noun that also occurs separately in the same form

| dànné kánè | 'hunt, go hunting' |
| :--- | :--- |
| gâ:t kánè | 'belch, burp' |
| híjjù kánè | 'perform the pilgrimage to Mecca' |
| jángù kánè | 'study, go to school' |
| jáyrè kánè | 'joke, kid around (like cross-cousins)' |
| múnù kánè | 'be patient, wait' |
| pă:m kánè | 'understand' |
| rê:n kánè | 'protect from harm' |
| sállùg kánè | 'perform ablutions (before prayer)' |
| tâ:m kánè | 'perform dry ablutions' |
| wâ:j kánè | '(imam) deliver a sermon' |
| wâl kánè | 'work, perform work' |
| wírdì kánè | 'say one's (prayer) beads' |
| yâw kánè | 'be disrespectful to (sb)' |
| yê:b kánè | 'neglect (sth, sb)' |

b. with reduced form of noun hô:l kánè 'trust (sb)' (noun hó:làl 'confidence')

Many of these collocations, e.g. 'protect from harm' and 'neglect', also require a regular object, typically human and therefore often marked as accusative.

### 11.1.2.3 Lexicalized low-referentiality noncognate objects

Some common noncognate verb-object collocations are in (262).

| collocation | gloss | includes | gloss |
| :--- | :--- | :--- | :--- |
| ìsàgí: sáyè | '(emit a) sneeze' |  |  |
| gìró kúm-yè | 'close one's eyes' |  |  |
| ìjá: sé | 'urinate' | ǹjá: | 'urine' |
| láydù jě: | 'make a promise' | jž: | 'take (sb)' |
| ńnù dùy-yé | 'bathe (oneself)' | ńnù | 'water' |
| kòmbó táyè | 'wage war' | táyè | 'shoot' |
| jŏ:-g písè | '(let out a) fart' | písè | 'spray (liquid)' |
| jìmú- kómè | 'groan' | jìmú- $\eta$ | 'pain' |
|  |  | kómè | '(animal) bleat' |
| dònjé túwè | 'spit' | dònjé | '(gob of) saliva' |
|  | (túwè also '(iron) rust' or '(fabric) become threadbare') |  |  |

sáyè (cf. 'sneeze' above) is elsewhere attested in the sense '(sth) melt'.

### 11.1.2.4 Forms of cognate nominals associated with verbs

(263) gives a generous sample of collocations involving cognate nominals and verbs. The array is organized around the form of the nominal. The presence of the nominal is more or less obligatory in some cases but not in others.
(263) Cognate nominals

| nominal + verb | gloss |
| :--- | :--- |
| a. nominal with - $\eta$ |  |
| monosyllabic |  |
| yă:- $\eta$ yé | 'weep' |
| bisyllabic |  |
| ébù- $\eta$ ébè | 'make a purchase' |
| génè- $\eta$ gèné | 'beg, go around begging' |
| sìsú- $\eta$ Sísè | 'draw a line' |
| tê:- $\eta$ ténè | 'gather firewood' |
| trisyllabic |  |
| górı̀dj̀- $\eta$ gòrdé | 'snore' |

b. nominal with $-g(u)$
já:lù-g jà:l-í: 'squabble, quarrel' dé:lì-g dè:l-í: 'rest (up)'
pú:rù-g pú:rè 'blow'
c. nominal with final high vowel or apocopated zero
final uafter CC cluster
nínnù nìnné 'breathe' tónnù tónnè 'do a follow-up harvest'
apocopated after unclustered C bêg bègé 'have a hiccough' dâb dàbé 'do magic tricks' dîg dìgé 'tell a lie' kěl ké:ndè 'have fun, play' pêl pélè 'applaud (clap)' sên sénè 'say a prayer'
d. nominal with final long vowel

| dúgò: dùgé | 'practice sorcery' |
| :--- | :--- |
| gólò: gòlé | 'cultivate, do farm work' |
| nùnó: nùné | 'sing a song' |
| núwò: nùwé | 'plant (seeds)' |
| pàlá: pálè | 'do the first round of weeding' |
| tùbá: túbè | 'ask a question' |
| tùyá: túnè | 'tell a tale' |
| trisyllabic (including syncopated bisyllabics) |  |
| kòsgí: kósgè | 'cough, emit a cough' |
| àmblá: ámblè | 'do second round of weeding' |

```
e. nominal with final short nonhigh vowel
    gíyò gìyé 'dance a dance'
    sùgó súgè 'defecate'
    yènó yèné 'ululate (women's cry for joy)'
    sónlò sónlè 'chat, converse'
    yámyò yàmyé 'have a dream'
f. nominal with -nò
    dám-nò dàmé 'speak, say some words'
    kár-nò kárè 'clear one's throat'
    kóm-nò kómè 'shout'
    j\varepsilońb-nò jèb\varepsiloń 'issue a curse'
    jób-nò jòb\varepsiloń 'run a race'
    jó\eta-nò j\grave{\eta\varepsiloń 'provide medical care'}
    mándì-nò màndé 'laugh'
    núg-nò nùgé 'do a calculation; count'
    síf-nò sífè 'give a description, give directions'
    tó\eta-nò tóng̀ 'do some writing'
    w\varepsilońs-nò wès\varepsiloń 'vomit'
g. nominal is composite
    àgmà-kây káyè 'yawn'
    iterated
    kì-kí kíyè 'stutter, stammer'
h. other
monosyllabic
    \jmathă:-\eta n\varepsiloň: 'eat a meal'
    dùwǎ:dùw\varepsiloń 'make an insult'
```

The medial vowel is usually identical in quality in noun and verb. This is not the case with $C v(:)$ monosyllabics, where the verb (original E-stem) must be $C e(:)$ or $C \varepsilon(:)$ while the noun may have a different vowel; see 'eat a meal' (263h) and 'weep' (163a). In 'make a purchase' (163a), the medial vowel of the noun and verb differ in ATR value (e versus $\varepsilon$ ), likely correlated with a following high vowel in the noun.

### 11.1.2.5 Grammatical status of cognate nominal

Although the cognate nominal is often pro forma, functioning as a default in the absence of a more concrete noun, in some combinations it can be quantified over and/or qualified adjectivally.

One combination whose cognate nominal is not easily modified is gólò: gòlé 'cultivate, do farm work'. My assistant rejected numerals (\#'he did three cultivations'), and phrased 'cultivates well' with the adverb gèň̌: 'well' rather than with the homophonous adjective 'good' (264a). However, I was able to elicit (264b) with 'difficult' directly modifying gól̀̀:, as shown by the dropped tones in the latter.
a. gólò: gènò: gólè:-b- Ø
farming(n) well do.farming-Ipfv-3SgSbj
'He/She cultivates well.' (gènǒ:)
b. [gòlò: ${ }^{\text {L }}$ mǎy- $\left.g\right] \quad$ gòlè- $\varnothing$
[farming $(\mathrm{n})^{\mathrm{L}}$ difficult] do.farming.Pfv-3SgSbj
'He/She did the hard farming.'
Many other cognate combinations ('tell a lie', 'sing a song', 'laugh', etc.) denote bounded events and can be quantified over as well as modified adjectivally (265).

b. [dìg ${ }^{\mathrm{L}}$ bìnú- $\left.\eta\right]$
$\operatorname{dìg} \grave{\varepsilon}-\varnothing$
$\left[\operatorname{lie}(n)^{\mathrm{L}} \quad\right.$ big]
tell.lie.Pfv-3SgSbj
'He/She told a big lie'


```
dìgè- \(\varnothing\)
tell.lie.Pfv-3SgSbj
```

' $\mathrm{He} /$ She told three lies.'
11.1.3 Clauses with additional arguments and adjuncts

### 11.1.3.1 Syntax of expressive adverbials (EAs)

The forms of EAs are described in §8.4.7.1 and §8.4.7.4. Syntactically they are single-word adverbs that do not easily combine with other elements to form multi-word phrases such as NP or PP. However, EAs can be made into stative predicates by adding a conjugated auxiliary bò- 'be' (negative bò-nnú- 'not be'). This stative predicate construction is shared with adjectives. EAs can be made into dynamic predicates by adding a conjugated and AN-inflected form of éle- 'become'. This dynamic predicate construction is shared with NPs. See §8.4.7.2 for examples with té $y^{n} \rightarrow$ 'straight'.

### 11.1.3.2 Spatial adverbial phrases with motion verbs

Directionality (ablative 'from', allative 'to') is expressed by verbs. Verbs of motion ('go', 'arrive', 'exit', 'enter') and of putting ('put in', etc.) combine with the same locational expressions (e.g. PPs with locative postposition là: or nì:) as verbs of static location. gě: 'exit' may be chained to a following verb, expressing 'from' (266c). With place names like 'Bamako', the locative postposition is usually omitted before a motion verb like 'go', 'enter', or 'exit' (266b).

```
a. è-wé [[pòrò mó] là:]
    child-Pl [[village 1Sg.Poss] Loc]
    bòl-yà / bò-n
    go.Pfv-3PlSbj / be-3PlSbj
    '(The) children went to/are at (=in) my village.'
b. bàmàkò ból-yà
    B go.Pfv-3P1Sbj
    'They went to Bamako (city).' (bàmàkó )
c. [tèndè lá:] gě: mèn-yà
    [well(n) Loc] exit(v) come.Pfv-3PlSbj
    'They came (here) from the well.'
d. [dó\etaò-\eta nì:] ńnù kùndé-\eta
    [waterjar Loc] water put.in.Pfv-1SgSbj
    'I poured (the) water into (a/the) waterjar.'
```


### 11.1.3.3 Ditransitives

With ńdè 'give' and pólè 'show', the indirect object is treated like a direct object. If it is a noun-headed NP, it is optionally marked as accusative, especially if human (267a). Accusative marking is obligatory with human pronouns (267b). The theme (object transferred) is normally nonhuman and is unmarked for case.
a. [mì

[1SgPoss ${ }^{\text {HL }}$ younger. $\operatorname{sib}(=$ Acc) $]$ sheep
ǹdè- $\eta$ / p $\grave{l}$ l̀- $\eta$
give.Pfv-1SgSbj /show.Pfv-1SgSbj
'I gave/showed (a/the) sheep to my younger same-sex sibling.'

gìr-dé 'entrust (sth, to sb)' occurs in the same frames.
Verbs of carrying and holding, like súp-nè 'carry (child, backpack) on one's back', are mediopassive morphologically but transitive syntactically. The orresponding forms with transitive suffix (§9.4.1), like súnù-rè, 'load (child, backpack) on the back of (someone)' are ditransitive with the same syntax as 'give'.
(268) ě-g [yà: $\quad$ gí = ỳ] sùpù-ré- $\eta$ child [woman Def=Acc] carry.on.back-Tr.Pfv-1SgSbj
'I loaded a/the child on the woman's back.'

### 11.1.3.4 Valency of causatives

In the logical schema [ X cause [ $\mathrm{Y}(\mathrm{Z})$ Verb]], the lower subject Y is expressed as a direct object, optionally marked as accusative, in the flattened causative clause [X Y(=Accusative) (Z) Verb-Causative].
a. [è-gí $\quad \eta g i ̀]=y ̀ ~ n a ̌:-\eta ~ n a ̀:-m \varepsilon ́-\eta ~$
[child Def]=Acc meal eat-Caus.Pfv-1SgSbj
'I had the child eat (a meal).' (i.e. 'I fed the child.')
b. $\quad[\mathrm{mì}$
[1SgPoss HLeldersib $=$ =Acc $)]$
tòmbò-mé- $\eta$
'I made my older same-sex sibling jump.'
If a main clause has an animate direct object (270a), the corresponding causative has two direct objects (270b). My assistant disfavored marking both such NPs as accusative, so only 'blacksmith' in (270b) is overtly accusative. He stated that making 'child' accusative might confuse who killed whom. However, pronouns are reliably accusative in the same syntactic frame (270c). In my (elicited) data, the lower subject precedes the lower object, as it does in the corresponding main clause, so 'my child' precedes 'blacksmith' in both (270a and (270b), but I do not know how consistent this ordering is, especially when a pronoun is included.

b. [è-gú mmò] [írè $\eta g i ̀]=y ̀ ~ g \varepsilon ̀ W-m \varepsilon ́-\eta ~$ [child 1Sg.Poss] [blacksmith Def]=Acc kill-Caus.Pfv-1SgSbj 'I made/had my child kill a blacksmith.'
c. $\delta=\grave{y} \quad[i ́ r e ̀ ~ \eta g i ̀]=y ̀ ~ g e ̀ ̀ W-m e ́ n ~ \eta ~$
$2 \mathrm{Sg}=$ Acc $\quad[$ blacksmith $\quad \mathrm{Def}]=$ Acc kill-Caus.Pfv-1SgSbj
'He/She made you kill the blacksmith.'

### 11.1.4 Verb phrase (VP)

VP is a valid syntactic category in DD. Essentially it is the clause minus the subject, and in some cases minus clause-level inflections (aspect, negation).

A verbal noun can readily take nonsubject complements including direct objects, and less readily a subject; see $\S 17.3 .1$.

Quotative complements frequently divide the quoted clause into the subject and everything else. In this case, the subject is set off as part of a quotative-subject phrase with particle wà:, and this is followed by the rest of the clause which can have its own wà: (§17.1.2.1-2).

Same-subject clause chains are essentially combinations of two VPs associated with the same subject NP (§15.1).

## 11.2 ' $\mathrm{Be}^{\prime}$, 'become', 'have', and other statives and inchoatives

In addition to the forms discussed in the sections below, see gìnnè 'be more', ìró 'be better', and and sìgá 'be more', which occur in comparatives (§12.1.1.3-5).

### 11.2.1 'It is' clitics

### 11.2.1.1 Positive 'it is' (=y)

The 'it is' enclitic $=y$ is added to an NP, often just a common noun or an independent pronoun, occasionally a more elaborate NP. The tone of the clitic is spread from the host word, unlike accusative $=y$ which is L-toned. When added to a form that elsewhere ends in a consonant, the clitic has the apparent form $=i$ : Given the prevalence of apocope of wordfinal short high vowels, we may interpret these cases as $=y$ added to the full (vowel-final) form of the word, with final $u$ combining with $=y$ as $i=y$. Example: bě:- $g$ 'stick' (full form bè:-gú ), bè:- $g i ́=y$ ' 'it's a stick'.
$=y$ is not conjugated for pronominal subject. The theme (subject) may be overtly expressed as an independent NP or pronoun. Often it is unexpressed, but a specific referent is presupposed.

In (280), the referent is assigned to a category.
a. mí / í / sé:dù dógò=ỳ

1Sg/1Pl/S Dogon=it.is
'I am/We are/Seydou is Dogon.'
b. ǒg pésgè $=\grave{y}$

Prox sheep=it.is
'This is a sheep.'
c. pésgè $=\grave{y} /$ ùnón $n=\hat{y} /$ ńbù $=\grave{y} /$ dòmí $=\hat{y}$
sheep/dog/house/talk(n)=it.is
'It's a sheep/a dog/a house/words.' (<ù̀ó- $\eta$, ḿbù- $\eta$ )
(dǒm treated as though /dòmv́/)

The clitic may also be added to a pronoun or to a WH-interrogative. The context here is that an individual of unknown identity (such as a caller) is to be identified. In (272a-b), the H-tone spreads from the host onto the enclitic, avoiding homophony with accusative $=\dot{y}$.
a. $\quad \delta=y ́$
$2 \mathrm{Sg}=$ it.is
'It's you-Sg.'
b. àmí=ý
who? $=$ it.is
'Who is it?' (<ăm)

### 11.2.1.2 'It is not' (= lò:)

The negative counterpart of $=y^{\text {' it }}$ is' is $=l o ̀$ : 'it is not', with an NP (often a simple common noun or pronoun) as complement.
a. mí
dógò = lò: / yǎ: = lò:
1Sg Dogon/woman=it.is.not
'I am not (a) Dogon/a woman.'
b. ǒg pésgè = lò:

Prox sheep=it.is.not
'This is not a sheep.'
c. $\quad m i ́=l o ̀:$
$1 \mathrm{Sg}=$ it.is.not
'It's not me.'
$=l o ̀:$ optionally becomes $=$ dò: after a nasal (274a), see $\S 3.5 .5 .1$. Nouns that drop their final detachable $-\eta$, such as kènnú- $\eta$ 'mouth' (full segmental form seen in kènnù- $\eta$ L ${ }^{\text {L }}$ bìnú- $\eta$ 'big mouth'), drop it before $=l o ̀$ : and so do not trigger $/ \mathrm{Nl} / \rightarrow N d$ (274b).
a. [kò:gù ${ }^{\mathrm{L}} \quad$ wérù- $\left.\eta\right]=1 \grave{\mathrm{j}}: \quad(\sim=d o ̀:)$
[grass green]=it.is.not
'It isn't fresh grass.'
b. kènnú = lò:
mouth=it.is.not
'It isn't a mouth.'
Examples like (274b) also show that Rightward H-Tone Shift does not shift a final H-tone from the noun onto the enclitic. In addition, = lò: usually (but not always) remains L-toned before clause-final morphemes such as nà: 'if' (275a), quotative wà: (275b), and emphatic kòy (275c).
(275)
a. mí dógò=lò: nà:
$1 \mathrm{Sg} \quad$ Dogon=it.is.not if
'if I am not a Dogon'
b. ná dógò=lò: wà:

3 Sg Dogon=it is Quot
'(saying) he/she is not a Dogon'
c. mí dógò=lò: kòy

1 Sg Dogon=it is Emph
'I definitely am not a Dogon.'
I have occasionally heard the 'it is not' clitic as H-toned before a clause-final particle, as in kó [nùmò:-jénù]= ló: wà: '(he said) it wasn't holding up a hand', text T01 at 08:58. The relationship between $=l o ̀:$ and negative $=l o ́$ with predicate adjectives (§12.1.1.2.) is
intriguing. The H -tone of $=l o$ can be explained by its being at the end of the target domain for an $\{\mathrm{LH}\}$ overlay. Word-final long vowels are often heard as short except when contoured.

### 11.2.2 Existential and locative quasi-verbs and particles

### 11.2.2.1 Existential proclitic (yè )

This particle (etymologically most likely a 'there' adverb) procliticizes to a stative that denotes location/existence or possession (for imperfectives see below). It raises the tone of the following syllable. The stative may be derived from an active verb, as with stance verbs. In this case the proclitic is an alternative to reduplication, one or the other being obligatory in unfocalized positive main clauses (277a). Or the stative may be a defective quasi-verb, which cannot be reduplicated (277b). In the high-frequency combination with bò- 'be', the vowel optionally assimilates (yò bó-).

| stative | gloss | with existential |
| :--- | :--- | :--- |
| a. ò-= Póbò | 'be sitting' | yè óbò |
| b. bó- | 'be (somewhere)' <br> jó- | 'have' |
| yè bó- ~ yò bó- <br> yè jó- |  |  |

The existential particle occurs only in unfocalized positive main clauses. In this syntactic context, it is obligatory before the relevant locational-existential quasi-verb in (277b) when no other locational expression is overtly present. In other words, these quasi-verbs require a locational, and yè is the default ( $277 \mathrm{a}-\mathrm{b}$ ). When another locational is present, the particle is normally absent. Examples like (277d) with both yè and an overt locational were accepted as grammatical by my assistant but were not spontaneously produced.
a. [pòrò
[village Loc] be-1SgSbj
'I am in the village.'
b. yè
bó- $\eta$
Exist be-1SgSbj
'I am present.' (in most contexts: 'I am here.')
c. \# bó- $\eta$
\# be-1SgSbj
'I am present.' [ungrammatical version of (b)]
d. [pòrò lá:] yè bó- :
[village Loc] Exist be-1 SgSbj
'I am (present) in the village.' (accepted but not common)

With the possessive quasi-verb jó- 'have', whose complement is the possessum rather than a locational, the existential particle is optional (278a). A possible explanation is that the possessum can sometimes be treated as focal, whereupon existential yè is disallowed. With 'have', the presence of an overt but unfocalized locational (in addition to the possessum) is
entirely compatible with yè (278b). In other words, in the 'have' construction yè does not simply function as a default locational as it does in the 'be (somewhere)' construction described above.

```
a. ù\etaó yè jó-\eta
or:ù\etaó-\eta - jó-\eta
    dog Exist have-1 SgSbj
    'I have a dog.'
```

b. ùnó- [pòrò lá:] yè jó- $\eta$
dog [village Loc] Exist have-1SgSbj
'I have a dog in the village.'

Because the existential particle is confined to unfocalized positive main clauses, it is not allowed in negative clauses (279a-b), relative clauses ( $279 \mathrm{c}-\mathrm{d}$ ), or focalized clauses ( $279 \mathrm{e}-\mathrm{f}$ ).
a. [pòrò
lá:]
(\# yè)
bò-nnú-ŋ
[village Loc] (\# Exist) be-Neg-1SgSbj
'I am not in the village.'
b. ùŋó- $\quad$ (\# yè) jò-nnú- $\eta$
dog (\# Exist) have-Neg-1 Sg Sbj
'I don't have a dog.'
c. [nò: ${ }^{\text {L }}$ [pòrò lá:] (\# yè) bó]
[person ${ }^{\mathrm{L}}$ [village Loc] (\# Exist) be.Ppl]
dénnè:-bù-ך
look.for-Ipfv-1SgSbj
'I'm looking for a person who is in the village.'

'I'm looking for a person who has a dog.'
e. ǎm [pòrò lá:] (\# yè ) bò-y
who? [village Loc] (\# Exist) be-SFoc 'Who is in the village?'
f. ăm ùnó- $\eta$ (\# yè ) jò-y
who? dog (\# Exist) have-SFoc 'Who has a dog?'
yè is also infrequently added to a simple imperfective ('it goes' in the sense 'it extends', text T02 at 02:36). It can also occur in the progressive construction, which ends in (stative) jó'have'. Progressive (280) was accepted by my assistant, although yè did not occur with progressives in spontaneously produced utterances or in my texts.

```
ból-là: yè jó-\varnothing
go-Prog Exist have-3SgSbj
    'He/She is going.'
```

There is one parallelistic textual passage where yè combines twice with the same imperfective verb. In T01 06:31, bárkè yè ménè:-b- $\varnothing$ 'blessings will come' is followed in short order by múnàl yè ménè:-b- $\varnothing$ 'patience (=tolerance) will come'. Since the sense is 'come into existence' or 'appear' (in a given location), the existential is appropriate.

The existential particle is always immediately proclitic to the verb. It follows even a pronominal object (281). It is indeterminate whether the existential particle would precede or follow pronominal-subject proclitics, since the latter occur only in relative clauses, where the existential particle is not allowed.

$$
\begin{array}{llll}
\text { gìyă: } & m i ́=y ̀ & \text { yè } & j o ́-\varnothing  \tag{281}\\
\text { hunger } & \text { 1Sg=Acc } & \text { Exist } & \text { have-3SgSbj } \\
\text { 'Hunger has me' (= 'I am hungry.') }
\end{array}
$$

### 11.2.2.2 Locational-existential 'be' (bó-~ bò-), past biyè 'was'

The conjugated stative quasi-verb bó- ~ bò- 'be (somewhere)' is used in locational-existential contexts, as already illustrated in (277a-d) above. In the absence of an overt locational phrase, it requires the existential proclitic yè in the syntactic contexts which allow the latter (positive main clauses with no focalized constituent, §11.2.2.1). The combination with yè in the absence of any other locational can be translated 'be present' (often implicitly 'be here') or 'exist', compare English there is/are. If there is an overt locational, yè is most often omitted.

The quasi-verb is H-toned bó- after yè, but L-toned bò- after a locational, unless it secondarily acquires an H-tone from a preceding /LH/-toned word by Rightward H-Tone Shift. The overlay on bó- is presumably $\{\mathrm{HL}\}$, here realized as $\{\mathrm{H}\}$ on a monosyllabic; for the full $\{\mathrm{HL}\}$ see bíy ̀̀ in (284) below. The negative counterpart is bò-nnú-, with 3 Pl bò-n-íyà $\sim$ bò-ní-yà, showing morphology typical of statives. The existential particle does not occur in negative clauses, so the presence/absence of an overt locational does not affect the form of the negative quasi-verb. The participle is bó (§14.4.5.1).
(282) Paradigm of locational-existential 'be' ("LOC" = locational phrase)

| category | 'is present' | 'is in LOC' | 'is absent; is not in LOC' |
| :---: | :---: | :---: | :---: |
| 1Sg | yè bó-n | LOC bò-ŋ | (LOC) bò-nnú-n |
| 1 Pl | yè bó-y | LOC bò-y | (LOC) bò-nnú-y |
| 2Sg | yè b-ó: | LOC b-ò: | (LOC) bò-nn-ó: |
| 2 Pl | yè $b$-é: | LOC b-è: | (LOC) bò-nn-é: |
| 3Sg | yè bó- $\varnothing$ | LOC bò- $\varnothing$ | (LOC) bò-nnú- $\varnothing$ |
| 3 Pl | yè bó-ì | LOC bò-n | (LOC) bò-n-íyà ~ bò-ń-yà |

Example (283a) illustrates use with a locational and no yè. (283b) exemplifies the existential as opposed to locational function; it can be used to indicate that there is some milk left. It is negated as (283c).

[^1]```
b. êm yè bó-\varnothing
    milk Exist be-3SgSbj
    'There is (some) milk.'
c. êm bò-nnú-\varnothing
    milk be-Neg-3SgSbj
    'There is no milk.' (i.e., 'We're out of milk.')
```

For bó- as auxiliary verb, see future $\grave{m}$ bó- (§10.2.2.4). It is likely that the imperfective, with suffix complexes like $3 \mathrm{Sg}-b-\varnothing$ (§10.2.2.1), is etymologically a reduced form of bó-, but there is no longer a transparent relationship.
bó- 'be' is replaced by bíyè~ bìyè for past tense 'was (somewhere), was present, existed, there was'. The tones have $\{\mathrm{HL}\}$ overlay in the same positions that require H-toned bó-, i.e. yè bíyè- 'was present', but LOC bìyغ̀- 'was in LOC'. The negative form is bìyà:-lv́- 'was not', with a regular perfective negative conjugation. The paradigms are in (284).
(284) Past locational-existential 'was' ("LOC" = locational phrase)

| category | 'was present' | 'was in LOC' | 'was absent, not at LOC' |
| :---: | :---: | :---: | :---: |
| 1Sg, | yè bíyè- $\eta$ | LOC biỳzèn | (LOC) bìyà:-lú-ŋ |
| 1 Pl | yè bíyè-y | LOC biyèz-y | (LOC) bìyà:-lí-y |
| 2 Sg | yè bíy-ò: | LOC bìy-j̀: | (LOC) bìyà:-1-ó: |
| 2 Pl | yè bíy-¢̀: | LOC bìy-દ̇: | (LOC) bìyà:-l-é: |
| 3 Sg | yè bíyè- $\varnothing$ | LOC bìyè- $\varnothing$ | (LOC) bìyǎ:-1-Ø |
| 3 Pl | yè bíy-yà | LOC bìy-yà | (LOC) bìyà:-ń |

Conjugated forms of bíỳ̀ ~bìyè also cliticize to AN-inflected forms of verbs to shift the temporal reference point into the past, as in the past progressive and similar categories (§10.6).
ò-ní: 'here' often contracts of $\grave{o}-\bar{\eta}$ before bò- 'be' or bìyغ̀- 'was' (§4.4.3.1).

### 11.2.3 Other locational statives ('be in', 'be on')

Some other statives with specific locational functions are derived from active verbs (§10.4). Like other derived statives, they occur with either yè or reduplication, but not both, in unfocalized positive main clauses. Those in common use are in (285).

| reduplicated | existential | gloss |
| :--- | :--- | :--- |
|  |  |  |
| dù-dúlò- | yè dúlò- | 'be inside (container)' |
| tè-ténà- | yè ténà- | 'be on (horizontal surface)' |
| tà-tárà- | yè tárà- | 'be on (wall)' |

### 11.2.4 'Remain', 'become', and 'happen' predicates

These verbs are active, i.e. they have full regular aspect-marked paradigms.

### 11.2.4.1 'Remain' (wàsé)

The common verb 'remain, stay (somewhere)' is the regular active verb wàsé.
[pòrò lá:] $\quad$ wásè:-bù- $\eta$
[village $\quad$ Loc $] \quad$ remain-Ipfv- 1 SgSbj
'I am staying in the village.'

### 11.2.4.2 'Become, turn into' (élè )

The regular active verb élè means 'become $X$, turn into $X$ ' where $X$ is an NP (including certain manner adverbs), not an adjective or an expressive adverbial.
a. túbà:g
élè- $\varnothing$ / èlǎ:-1- $\varnothing$
white.person become.Pfv-3SgSbj / become-PfvNeg-3SgSbj
'He became/did not become a white person.'
b. Ìgò él-ò:
what?=it.is become.Pfv- 2 SgSbj
'What have you-Sg become?'
c. [ìgì yán] èlè- $\eta$
[Prox like] become.Pfv-1 SgSbj
'I have become like that.'

The transitive (semantically causative) form is élù-ndè 'transform, convert, turn (Y) into (X)'. The object $Y$ is accusative if human.

```
sé:dì=ỳ yàrá èlù-ndè-\eta
S=Acc lion become-Tr.Pfv-1SgSbj
    'I transformed Seydou into a lion.'
```

A synonym for élù-ndè 'transform' is bìlé, which also means 'flip (sth) over'.
táyè, which has cognates in some other Dogon languages in the sense 'become X' (X a noun), means 'go past' or '(bride) move (to husband's house)'.

### 11.2.4.3 'Happen' (kánè )

The transitive verb kánè 'do' has an intransitive counterpart of the same form meaning 'be done', also 'happen, occur, take place', e.g. with reference to a holy day or a wedding.

### 11.2.5 Mental and emotion statives

### 11.2.5.1 'Know' (tígà), 'not know' (ínnù-)

The sense 'know' as in 'be aware of (a fact)' is the stative quasi-verb tígà-. It is used with existential yè in the syntactic contexts that permit the latter. A proposed reduplicated form \#tì-tígà- was rejected by my assistant. tígà- has no corresponding active verb. It is negated by suppletive ínnù-. Paradigms are in (289).

| category | 'know' | 'not know' |
| :--- | :--- | :--- |
| 1 Sg | yè tígà- $\eta$ | ínnù- $\eta$ |
| 1 Pl | yè tígà-y | ínnì-y |
| 2 Sg | yè tíg-à: | ínn-ò: |
| 2 Pl | yè tíg-è: | ínn-è: |
| 3 Sg | yè tígà- $\varnothing$ | ínnù- $\varnothing$ |
| 3 Pl | yè tígà-n | ínn-yà |

Like other statives, 'know' and 'not know' can combine with conjugated cliticized = bìyè for past-time reference: yè tígà $=$ bìy $̀$ - $\eta$ 'I knew'. There are two different ways to negate this: tígà = bìyà:-lú- $\eta$ 'I didn't know' with negation carried by the clitic, and ínnù = bìyè- $\eta$ 'I didn't know' with the suppletive negative 'not know' quasi-verb plus a simple (positive) clitic.

For propositional complements see §17.2.1.1-2.

### 11.2.5.2 'Want/like' (námà or íbà) 'not want/like' (nàmà-nnú-, ìbà-nnú-)

This stative quasi-verb is námà or íbà in the positive. Both combine with yè in the syntactic environments that allow yè. They cannot be reduplicated, and there are no related active verbs. They have regular stative negative forms nàmà-nnú- and ìbà-nnú-.

| category | 'want' | 'not want' |
| :---: | :---: | :---: |
| 1Sg, | yè námà- $\eta$ | nàmà-nnú-ŋ |
|  | yè 1 íà- $\eta$ | ìbà-nnú-ŋ |
| 1 Pl | yè námà-y | nàmà-nní-y |
|  | yè íbà-y | ìbà-nní-y |
| 2 Sg | yè nám-à: | nàmà-nn-ó: |
|  | yè íb-à: | ìbà-nn-ó: |
| 2 Pl | yè nám-દ̇: | nàmà-nn-é: |
|  | yè íb-દ̇: | ìbà-nn-é: |
| 3 Sg | yè námà- $\varnothing$ | nàmà-nnú- $\varnothing$ |
|  | yè íbà- $\varnothing$ | ìbà-nnú- $\varnothing$ |
| 3 Pl | yè námà-ǹ | nàmà-n-íyà |
|  | yè íbà-ǹ | ìbà-n-íyà |

Past forms are yè námà $=b i ̀ y \grave{\text { en }} \eta$ or yè 1 íbà $=b i ̀ y \grave{-}-\eta$ ' $I$ wanted' and námà $=b i ̀ y a ̀:-l u ́-\eta$ or íbà = bìyà:--lú- $\eta$ 'I didn't want'.

See also ìbà: bó- $\eta$ 'I want' in text T01 at 00:40.
The noun ìbà-lú-g 'hatred, ill will' is likely related to ìbà-nnú- 'not want', but it may include a different negative morpheme related to the perfective negative suffix for active verbs.

For clausal complements of 'want' see §15.5.2.

### 11.2.5.3 'Resemble' (mùlò), 'not resemble' (mùlò-nnú )

The verb 'resemble' has an active form múl-yè with mediopassive suffix. To describe a state of similarity, the form is stative mùlò (with existential yè múlò), regular stative negative mùlò-nnú. Both active and stative forms are transitive, taking a direct object that may be marked as accusative.
$\begin{array}{llll}\text { a. à: dámà } \quad \text { sé: } d i \grave{ }=\text { y } & \text { yè } & \text { múlò- } \varnothing \\ \mathrm{A} & \mathrm{S}=\mathrm{Acc} & \text { Exist } & \text { resemble. } \mathrm{Stat-3} \mathrm{SgSbj} \\ & \text { 'Adama resembles Seydou.' } & \end{array}$
b. $\delta=\grave{y}$ mùlò-nnú- $\eta$
$2 \mathrm{Sg}=$ Acc resemble-StatNeg- 1 SgSbj
'I don't resemble you-Sg.'

### 11.3 Quotative verb

### 11.3.1 'Say' (gìné )

The usual conjugatable 'say' verb (extendible to 'think' or 'intend') is giné. Less common is pólè. The usual verb for 'speak, talk' is dàmé.

Many quoted clauses are framed by the unconjugated particle wà: rather than by these conjugatable verbs. For detailed discussion of quotative constructions, see §17.1.2.

### 11.4 Adjectival predicates

### 11.4.1 Positive adjectival predicates

### 11.4.1.1 With bò- 'be'

Adjectives can be made into stative predicates ('be red', 'be small') by adding a subjectmarked form of quasi-verb bò- 'be' (§11.2.2.2). The adjective has the same form as in modifying function (see list in §4.5.1), with exceptions discussed below. Adjectives with final $-g(u)$ retain this suffix before bò- (see 'small' in 292e). An /LH/-toned adjective shifts its H-tone onto 'be', which then appears as bó- (292a-b), by Rightward H-Tone Shift. An /HL/-toned adjective is followed by L-toned bò- (292c). Plurality is marked only in the 'be' verb (292b,e).
a．（mí）dògsò／bìnù－ŋ
bó－ŋ （ 1 Sg ）heavy／fat be－1SgSbj
＇I am heavy／fat．＇（dògsó，bìnú－$\eta$ ）
b．（í）
dògsò／bìnù－ŋ
bó－y
（1Pl）heavy／fat be－1PlSbj
＇We are heavy／fat．＇（dògsó，bìnú－$\eta$ ）
$\begin{array}{ll}\text { c．（mí）} & \text { bánù－} \boldsymbol{\eta} / \text { nályò } \\ & (1 \mathrm{Sg}) \\ \text { red } / \mathrm{pretty}\end{array}$
$b o ̀-\eta$
$(1 \mathrm{Sg})$ red／pretty be－1SgSbj
＇I am red（＝brown）／pretty．＇
d．［sì：n mó］jàlà－$/$／yòrù－g bó－$\varnothing$
［rope 1Sg．Poss］long／slack be－3SgSbj
＇My rope is long／slack．＇（＜sǐ：$\eta$ ，jàlǎ－ท，yòrù－gú ）
e．［è－wé mò］dògsò／dà：gè̀－g bó－ǹ
［child－P1 1Sg．Poss］heavy／small be－3PlSbj
＇My children are heavy／small．＇（＜dògsó，dà：gè：－gú ）

The adjectives recorded as losing final $-\eta$ in the predicate are in（293a）．Those that retain final $-\eta$ are listed in（293b）．The $-\eta$ is pronounced［m］before the labial．Independently of this， a few adjectives also shift from $/ \mathrm{HL} /$ lexical tone melody（as seen in modifying function）to L－toned，and these are followed by H－toned bó－．The transfer of a nonfinal H－tone to a following morpheme also occurs with third person perfective verbs（§3．7．4．3）．

> modifying predicate gloss
a．$-\eta$ absent in predicate
ع́llè－$\eta \quad$ ह́llè bò－＇sweet＇
kéllè̀ $\eta$ kéllè bò－＇cold＇
ámmà－$\eta$ ámmà bò－＇sour＇
with tone change／HL／to $L$
gállà－$\eta$ gàllà bó－＇bitter＇
ómmò－$\eta$ ̀̀mmò bó－＇rotten＇
b．$-\eta$ present in predicate

| bìnú－ŋ | bìnù－ $\boldsymbol{y}$ bó－ | ＇big，fat＇ |
| :---: | :---: | :---: |
| jàlă－ŋ | jàlà－ŋ bó－ | ＇long，tall＇ |
| Wàgú－ŋ | wàgù－$\quad$ bó－ | ＇distant＇ |
| ற́mう－ワ | ḿmò－$\quad$ bò－ | ＇hot＇ |
| ússù－ๆ | ússù－$\eta$ bò－ | ＇fast＇ |
| ónう̀nう̀－$\quad$ | 万́nう̀nう̀－ŋ bò－ | ＇smooth＇ |
| ع́nènè－ๆ | ع́nènè－ク bò－ | ＇light，thin（fabric）＇ |
| モ́gè－$\eta$ | ध́gè－ŋ bò－ | ＇hard；tight＇ |
| kúrù－n | kúrù－$\quad$ bò－ | ＇undiluted＇ |
| súmmù－ๆ | súmmù－$\quad$ bò－ | ＇diluted＇ |
| Síyò－$\eta$ | síyò－$\eta$ bò－ | ＇sharp＇ |
| bánù－ŋ | bánù－ŋ bò－ | ＇red＇ |
| gémè－$\quad$ | gémè－$\eta$ bò－ | ＇black＇ |

$$
\begin{array}{ccc}
\text { pílà- } \eta & \text { pílà- } \eta \text { bò- } & \text { 'white' } \\
\text { wérè- } \eta & \text { wérè- } \eta \text { bò- } & \text { 'green' } \\
\text { ámù- } \eta & \text { ámù̀ } \eta \text { bò- } & \text { 'plump' } \\
\text { with tone change /HL/ to } L & \\
\text { búl̀̀lò- } & \text { bùlòlò- } \eta \text { bó- } & \text { 'coarse' }
\end{array}
$$

For dynamic adjectival predicates denoting a change in state ('turn red', 'get fat', etc.), see the inchoative verbs in $\S 9.5$.

### 11.4.2 Negative adjectival and stative predicates

The positive form with bò- is negated with the corresponding conjugated form of bò-nnú- 'not be', e.g. bánù- $\eta$ bò-nnú- 'not be red' and dògsó bò-nnú- 'not be heavy'. /LH/-toned adjectives like 'heavy' do not shift their final H-tone onto bò-nnú-.

### 11.5 Possessive predicates

### 11.5.1 'Have' predicates

### 11.5.1.1 Positive ' X have Y ' (jó- ~ jò-)

' X have Y ' is expressed with X as subject (as in English). The predicate is $j o$ - $\sim j o ̀-$ 'have', which belongs to the set of stative quasi-verbs that have no active counterpart and that do not mark aspect (perfectivity). In positive main clauses not involving an obviously focalized constituent, the existential proclitic yè is allowed but not required (294a). It is possible that absence of yè implies at least pro-forma focalization of the possessum. As usual, the existential particle is not allowed in clauses with an obviously focalized constituent (294b).

|  | ùnó-ŋ / bè:gú | yè | jó-ŋ |
| :---: | :---: | :---: | :---: |
|  | ùnó-ŋ / bè:gù | $\varnothing$ | jó-п |
|  | dog / stick | Exist | have -1 SgSbj |
|  | 'I have a dog.' |  |  |
|  | ǎm ḿbù- $\eta$ | (\# yè ) | jò-y |
|  | who? house | (\# Exist) | have-SFoc |
|  | 'Who has a house? |  |  |

The paradigm is (295), illustrated with existential yè, an /LH/-toned noun 'stick', and an /HL/-toned noun 'house'.

| (295) | category | existential | /bè:gú/ 'stick' | ḿbù- $\boldsymbol{\eta}$ 'house' |
| :---: | :---: | :---: | :---: | :---: |
|  | 1Sg | yè jó-n | bè:g jó-п | ńbù-ŋ jò-ŋ |
|  | 1 Pl | yè jó-y | bè:g jó-y | ḿbù-ๆ jò-y |
|  | 2Sg | yè $j$-ó: | bè:g j-ó: | ḿbù-ŋ j-ò: |
|  | 2 Pl | yè $j$-é: | bè:g j-é: | ńbù-n j-ò: |


| 3Sg | yè jó- $\varnothing$ | bè: $g$ jó- $\varnothing$ | ḿbù- $\eta$ jò- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3Pl | yè jó-ǹ | bè:g jó-ǹ | ḿbù- $j$ jò-ǹ |

H-toned jó- occurs after the existential particle. When directly following the possessum NP, the form is L-toned $j o ̀-$, as seen in the combinations with 'house'. However, an /LH/-toned noun like /bè:gú/ delinks its H-tone, which appears on 'have' (becoming jó-) by Rightward H -Tone Shift.

The past forms are based on yè $j o ́=b i ̀ y \grave{\text { - }}$ (§10.6.1.7). In relative clauses, the participial form used is $j o ́(\S 14.4 .5 .1)$, without the existential particle.

A form of the 'have' quasi-verb also occurs as an auxiliary in some periphrastic verbal inflections. In the perfective system, jó-following the verb is a recent perfect (§10.2.1.5), and following $t \grave{~ i t ~ i s ~ t h e ~ e x p e r i e n t i a l ~ p e r f e c t ~(§ 10.2 .1 .4) . ~ I n ~ t h e s e ~ c o n s t r u c t i o n s, ~ t h e ~ 3 P l ~ f o r m ~}$ jó-yyà is different from jó-ì̀ 'they have'. In the imperfective system, L-toned jò- following verbal suffix -là: is the progressive ( $\S 10.2 .2 .3$ ). Here the regular 3Pl stative form jó-ǹ is used. This detail indicates that the auxiliary is clearly identifiable as the 'have' quasi-verb in the progressive, but not in the recent perfect or experiential perfect, where it is (in part) a reflex of a 'take' verb.

### 11.5.1.2 Negative 'X not have Y ' (jò-nnú )

The negative form of 'have' is jò-nnú-, with 3Pl jò-n-íyà~ jò-ń-yà. The paradigm is (296).
category 'not have'

| 1 Sg | $j o ̀-n n u ́-\eta$ <br> jò-nní-y |
| :--- | :--- |
| 1 Pl | jò-nn-ó: |
| 2 Sg | $j o ̀-n n-e ́: ~$ |
| 2 Pl | jò-nnú-Ø |
| 3 Sg | $j o ̄-n-1 ́ y a ̀ \sim ~ j o ̀-n ́-y a ̀ ~$ |

The existential proclitic is not allowed in negative clauses. An NP denoting the possessum is the only required element.
(297) ḿbù- $\eta$ jò-nnú- $\eta$
house have-Neg-1SgSbj
'I don't have a house.'

### 11.5.2 'Y belong to $X$ ' predicates $(X$ mò $=\grave{y})$

A predicate of (long-standing) possession consists of a possessor form and the 'it is' clitic. If X denotes the possessor, the form is [ $X$ mò] plus 'it is' clitic $=y$ or its negative counterpart =lò: .
(298)
a. ḿbù- $\quad$ [àm mó] = ý
house [who? Poss]=it.is
'The house belongs to who(m)?'
b. ḿbù- $\eta \quad$ [sé:dù mò] = ỳ
house [S Poss]=it.is
'The house is Seydou's.'
c. ńbù- $\eta$ [sé:dù mò]=lò:
house [S Poss]=it.is.not
'The house is not Seydou's.'
If the possessor is pronominal, possessive mò is replaced by $-\eta \grave{\jmath}$ before $=\grave{y}$ and by just $-\eta$ before $=10$ : . The 1 Sg forms are tonally irregular. The paradigms are in (299).

> 'is Xs' 'is not X's

| 1Sg | $m \grave{o}=y^{\prime}$ | $m o ́=10$ : |
| :---: | :---: | :---: |
| 1Pl | 1 ínò $=\grave{y}$ | í-ì = lò: |
| 2 Sg | б-ŋŋ̀ $=\grave{y}$ | ó-ı̀ = lò: |
| 2 Pl | é-ŋò $=\grave{y}$ | é- $\grave{\prime}=10$ : |
| 3 Sg | ná-ŋjo = ̀ | ná-ì = 10 : |
| 3 Pl | bé-пゝ̀ = ̀̀ | bé-ı̀ = lò: |

Examples are in (300).
a. [pésgè ŋgì yà: fú:] ó- $\eta \grave{o}=y$ y $/ m \grave{o}=\hat{y}$
[sheep Def Pl all] 2Sg-Poss=it.is / 1 Sg .Poss $=$ it.is
'All the sheep are yours-Sg / mine.'
b. mó=lò: / ó- $\grave{\eta}=l o ̀:$

1Sg.Poss=it.is.not / 2Sg-Poss=it.is.not
'It isn't mine/yours-Sg.'

## 12 Comparatives

### 12.1 Asymmetrical comparatives

Asymmetrical comparatives contrast one entity, usually the subject of the clause but occasionally another argument, with another entity, the (second) comparandum, with respect to some scalar domain of comparison. The comparandum is usually expressed as a PP with the postposition là $\sim$ là ${ }^{n}$, here glossed 'than' (301a-b). The domain of comparison may be a bare NP or a locative PP with postposition nì: .

The asymmetry may be expressed in the predicate (§12.1.1) as in ' X is more/better/bigger than Y ', ' X exceeds/surpasses Y (in some domain)' or ' X doesn't equal X (in some domain)'. Alternatively, it may be expressed in an adverbial adjunct (§12.1.2), as in ' X eats meat more than Y (does)'. In some cases the "adjunct" might be analysable as a chained verb.

The subject ( X ) of the comparative is frequently, but not obligatorily, overtly focalized. When it is overtly focalized, a pronominal subject appears as an independent pronoun before the predicate, rather than as a pronominal-subject suffix. If the subject is focalized in this way, the verb has the SFoc (subject-focus) suffix -y instead of a pronominal-subject suffix (301a).

Even when there is no overt focalization, the two comparanda are sufficiently focal to prevent verb-focalizing devices, including existential yè and reduplication. In (301b), existential yè is absent (compare yè tígà- $\eta$ 'I know')
a. [ó làn] mí gìnné [bàmàkò lá:] bò-y
[2Sg than] 1Sg a.lot [B Loc] be-SFoc
'I am in Bamako more than you-Sg are.'
b. [ó làn $\begin{array}{ll}n & \text { sìgá tìgà- } \eta ~\end{array}$
[2Sg than] more know- 1 SgSbj
'I know more than you (do).'

### 12.1.1 Asymmetrical predicates

### 12.1.1.1 'Surpass' (táyè )

The transitive verb táyè 'pass (sth, sb)' may occur in the sense '(come to) surpass (X)' with respect to some scalar domain of comparison. The latter may be expressed by a nominal adjunct, like 'wealth' in (302a), or by a chained deadjectival inchoative verb like 'become long' in (302b).

$$
\begin{array}{llll}
\text { a. ná=ỳ } & \text { jáwùd } & \text { tàyè- } \eta  \tag{302}\\
& 3 \mathrm{Sg}=\mathrm{Acc} & \text { wealth } & \text { pass.Pfv- } 1 \mathrm{SgSbj}
\end{array}
$$

'I have surpassed him/her in wealth.'
b. ná=ỳ jàlù-ǹd-í: tàyè- $\eta$

3Sg=Acc long-Inch-MP pass.Pfv-1SgSbj
'I have surpassed him/her in height.'

### 12.1.1.2 Adjectival comparison ('be redder', 'be longer')

Adjectival comparisons (' X is ADJ-er than Y ') use the regular modifying form of the adjective, in some cases with tonal changes.

If the subject X is not phrased prosodically with the final adjective, the adjective has an $\{\mathrm{LH}\}$ overlay. The final detachable $-\eta$ on some adjectives is absent. This is the case when X is a noun-headed NP. Many adjectives are already / $\mathrm{LH} /$-toned, so the overlay is apparent only with /HL/-toned adjectives. The negative counterpart adds enclitic =ló, a variant shortvoweled stative negative clitic. The $\{\mathrm{LH}\}$ overlay remains in force, but the final H -tone is realized on the negative enclitic. (303a-b) illustrate with lexically /LH/-toned birn 'fat' and $j a ̀ l a ̌-\eta$ 'long, tall', and with lexically /HL/-toned dâ:g 'small' and ússù- $\eta$ 'fast', which merge tonally as $\{\mathrm{LH}\} .(303 \mathrm{c})$ adds forms of wàgú- $\eta$ 'distant'. In these examples the subject is clause-initial.
a. sé:du [á:màdù làn] ${ }^{\mathrm{LH}}$ bǐn / ${ }^{\mathrm{LH}}$ jàlá / ${ }^{\mathrm{LH}} d a ̌:-g /{ }^{\mathrm{LH}}$ ùsùsú S [A than] ${ }^{\mathrm{LH}}$ fat $/{ }^{\mathrm{LH}}$ long $/{ }^{\mathrm{LH}}$ small / ${ }^{\mathrm{LH}}$ fast
'Seydou is fatter / longer (=taller) / smaller / faster than Amadou.'

'Seydou is not fatter/longer/smaller/faster than Amadou.'
 'Bamako (city) is / isn't farther away than Bandiagara.'
$=l o ́$ is related to, and arguably just a variant of, = lò: 'it is not', with long vowel, after NPs (§11.2.1.2).

It is also possible, and rather common, for the subject X to follow the 'than Y ' comparandum. In this case, in a positive clause the tone overlay on the adjective is $\{\mathrm{L}\}$ (304a). However, the (tonosyntactically) $\{\mathrm{L}\}$-toned adjective can then acquire an H -tone (by phonological process) when a preceding /LH/-toned noun such as 'Bamako' shifts its tone onto the adjective, resulting in a falling tone pattern, indicated by superscript ${ }^{\mathrm{H}+\mathrm{L}}$, in (304c). The new adjective in (304c) is pǎy 'old'. In negative clauses, the tone overlay on the adjective is again $\{\mathrm{LH}\}$ (304b), as it was in (303b-c) above. The tone shift from /LH/-toned nouns does not occur in the negative form (304d).

$$
\begin{align*}
& \text { a. [á:màdù làn] sé:dù }{ }^{\mathrm{L}} \text { bìn / }{ }^{\mathrm{L}} \text { jàlà / }{ }^{\mathrm{L}} \text { dà:g / }{ }^{\mathrm{L}} \text { ùssù }  \tag{304}\\
& \text { [A than] S }{ }^{\mathrm{L}} \text { fat / }{ }^{\mathrm{L}} \text { long / }{ }^{\mathrm{L}} \text { Small / }{ }^{\mathrm{L}} \text { fast] } \\
& \text { 'Seydou is fatter / longer (=taller) / smaller / faster than Amadou.' }
\end{align*}
$$

b. [á:màdù làn] sé:dù
[A than] S
${ }^{\text {LH }} d a ̀: g=l o ́ ~ / ~{ }^{\text {LH }}{ }^{\text {ùssù }}=l o ́$
${ }^{\mathrm{LH}}$ Small=Stat.Neg / ${ }^{\mathrm{LH}}$ fast=Stat.Neg
'Seydou is not fatter/longer (=taller)/smaller/faster than Amadou.'
c. [bànjìgàrá làn] bàmàkò ${ }^{\mathrm{H}+\mathrm{L}}$ wâg $/{ }^{\mathrm{H}+\mathrm{L}}$ pây $/{ }^{\mathrm{H}+\mathrm{L}}$ bîn
[Ban than] Bam $\quad{ }^{\mathrm{H}+\mathrm{L}}$ distant $/{ }^{\mathrm{H}+\mathrm{L}}$ old $/{ }^{H+L}$ big
'Bamako is farther away/older/bigger than Bandiagara.'
d. [bànjìgàrá làn ] bàmàkó
[Ban than] Bam
${ }^{\mathrm{LH}}$ Wàg $=$ ló $/{ }^{\mathrm{LH}}$ pày $=$ ló/ ${ }^{\mathrm{LH}}$ bìn = ló
${ }^{\text {LH }}$ distant $=$ Stat.Neg $/{ }^{\text {LH }}$ old=Stat.Neg $/{ }^{\text {LH }}$ big=Stat.Neg
'Bamako is not farther away/older/bigger than Bandiagara.'

If the subject X is a pronoun, it is expressed as a proclitic independent pronoun in positive clauses, with $\{\mathrm{HL}\}$ overlay on the adjective. In positive examples (305a), the proclitics take the same tones as preposed inalienable possessors (§4.3.1.3), i.e. L-toned for first and third persons but H -toned for second person and logophoric. In the corresponding negatives in (305b), the pronoun is in H -toned form for all pronouns, i.e. is in independent pronoun form, and the adjective has the same $\{\mathrm{LH}\}$ overlay as in (303b) above, with the same realization of the H-tone on the 'it is not' enclitic.
a. [á:màdù làn] mì / ó ${ }^{\mathrm{HL}}$ bîn / ${ }^{\mathrm{HL}}$ jálà / ${ }^{\mathrm{HL}}$ dâ:g / ${ }^{\mathrm{HL}}$ ússù
[A than] $1 \mathrm{Sg} / 2 \mathrm{Sg} \quad{ }^{\mathrm{HL}}$ fat $/{ }^{\mathrm{HL}}$ long $/{ }^{\mathrm{HL}}$ small $/{ }^{\mathrm{HL}}$ fast
'I am/You-Sg are fatter/longer (=taller)/smaller/faster than Amadou.'
b. [á:màdù làn] mí/ó ${ }^{\text {LH }}[b i ̀ n=l o ́] /$
[A than] $1 \mathrm{Sg} / 2 \mathrm{Sg} \quad{ }^{\mathrm{LH}}[$ fat=Stat.Neg] /
${ }^{\text {LH }}$ [jàlà $=$ ló] / ${ }^{\text {LH }}$ [dà: $\left.g=1 o ́\right] \quad /{ }^{\text {LH }}$ [ùsùsù $=$ ló]
${ }^{\text {LH }}$ [long=Stat.Neg] / ${ }^{\text {LH }}$ [small=Stat.Neg] / ${ }^{\text {LH }}$ [fast=Stat.Neg]
'I am not/You-Sg are not fatter/longer/smaller/faster than Amadou.'
Absolute (bare) pronominal possessors (mó 'mine', ó-ŋ̀ 'yours-Sg', etc.), see §6.2.1.2, are subject to the same tone alternations as non-second-person pronouns when functioning as subjects ( X ) following the comparandum ('than $\mathrm{Y}^{\prime}$ ). They are L-toned before $\{\mathrm{HL}\}$-toned adjective in positive clauses (306a), but contain an H-tone before $\{\mathrm{LH}\}$-toned adjective in the negative (306b).
a. $\left[\left[s i ̀: \eta \eta^{\mathrm{L}} \quad \check{o}-g\right]\right.$ làn] mう̀ / ò-ŋ̀
${ }^{\text {HL }}$ jálà
[rope ${ }^{\mathrm{L}}$ Prox] than] 1SgPoss/2Sg-Poss ${ }^{\text {HL }}$ long
'Mine/yours (i.e. my/your rope) is longer than this rope.'
b. [[sì: $\eta^{\mathrm{L}} \quad$ ǒ-g] làn] mó/ ó-ì $\quad{ }^{\mathrm{LH}}$ jàlà $=$ ló
[rope ${ }^{\mathrm{L}}$ Prox] than] 1 SgPoss/2Sg-Poss ${ }^{\text {LH }}$ long/long=Stat.Neg
'Mine/yours isn't longer than this rope.'
The past clitic =bìyè may be added to a comparative adjectival predicate of the types illustrated above. The past clitic is directly negated (=bìyă:-l) rather than being added to
 /LH/-toned subject shifts its H-tone onto the adjective, as shown in (307c) where bàmàkó keeps its H-tone. By contrast, the past positive does carry over the nonpast positive pattern of L-toned pronoun (e.g. 1 Sg mì ) or bare possessor pronoun (e.g. 1 Sg mı̀ 'mine') followed by $\{H L\}$-toned adjective ( $307 \mathrm{~d}, \mathrm{f}$ ). In previous examples we have seen that adjectives in nonpast forms (positive and negative) are not suffixally conjugated, instead using preposed independent pronouns. The past forms can follow the same pattern, using preposed independent pronouns ( $307 \mathrm{~d}-\mathrm{e}$ ), or they can suffixally conjugate past $=$ bìyè (positive) and = bìyǎ:-l (negative), as in ( $307 \mathrm{~g}-\mathrm{h}$ ). As a result, examples with third person singular subjects, like 'Seydou' in (307a-b), are ambiguous structurally (zero 3 Sg suffix, or no suffix).
$\begin{array}{llll}\text { a. sé: } d u & \text { [á:màdù } & \text { làn] } & { }^{\mathrm{LH}} \text { jàlá }=\text { bìy } \\ \mathrm{S} & {[\mathrm{A}} & \text { than] } & { }^{\mathrm{LH}} \mathrm{l} \text { long=Past }\end{array}$
'Seydou was taller than Amadou.' [compare (303a)]
b. sé:du [á:màdù lày] ${ }^{\text {LH jàlá }=\text { bìyǎ:-1 }}$

S [A than] ${ }^{\text {LH }}$ long=Past-PfvNeg
'Seydou was not taller than Amadou.' [compare (303b)]
c. [bànjìgàrá làn] bàmàkó ${ }^{\text {LH}}$ bǐn $=$ bìyè
[Ban than] Bam $\quad{ }^{\text {LH }}$ big=Past [compare (304c)]
'Bamako was bigger than Bandiagara.'
d. [á:màdù làn] mì/ó HL jálà=bìyè
[A than] $1 \mathrm{Sg} / 2 \mathrm{Sg} \quad{ }^{\mathrm{HL}}$ long=Past
'I was/You-Sg were longer (=taller) than Amadou.' [compare (305a)]
e. [á:màdù làn] míló $\quad$ Ljàlà = bìyă:-l
[A than] $1 \mathrm{Sg} / 2 \mathrm{Sg} \quad{ }^{\mathrm{L}}$ long=Past
'I was/You-Sg were not longer (=taller) than Amadou.' [compare (305b)]
f. [[sì: $\eta^{\mathrm{L}} \quad \check{0}$ ǒ-g] là $] \quad$ mò $\quad{ }^{\mathrm{HL}}$ jálà $=$ bìy
[rope ${ }^{\mathrm{L}}$ Prox] than] 1 SgPoss ${ }^{\mathrm{HL}}$ long $=$ Past
'Mine (i.e. my rope) was longer than this rope.' [compare (306a)]
g. [á:màdù làn] $\quad{ }^{\text {LH }}$ jàlá $=$ bìy-ò:
[A than] ${ }^{\text {LH }}$ long $=$ Past -2 SgSbj
'You-Sg were longer (=taller) than Amadou.'
h. [á:màdù làn] ${ }^{\text {LH }}$ jàlá $=$ bìyà:-l-ó:
[A than] ${ }^{\text {LH }}$ long=Past-PfvNeg-2SgSbj
'You-Sg were not longer (=taller) than Amadou.'

### 12.1.1.3 'Be more (in quantity)' (gìnnè )

The adverb and sometimes adjective gìnné 'a lot' was described in §8.4.2. When directly conjugated as a verb-like predicate, it means 'be more (than)'. Its form and tonal behavior are similar to those of comparative adjectival predicates, except that when it has no \{HL\} overlay it appears in /L/-toned form (apparently lexical), versus the rising tone pattern of other
comparative predicates and in its own mostly adverbial form gìnné 'a lot'. The (nonpast) negative form is gìnn $\grave{\varepsilon}=l o ́$, which looks like the $\{\mathrm{LH}\}$-overlaid negative comparative adjectival forms described in §12.1.1.2 above.
a. [jámà: làn] kúynà: gìnnè- $\varnothing /$ gìnn $\varepsilon=l o ́-\varnothing$
[hare than] squirrel be.more-3Sg/be.more=Stat.Neg-3Sg 'Squirrels are / aren't more numerous than hares.'
b. í [é làn] gìnné-y/ gìnnè $=l o ́(-y)$
$1 \mathrm{Pl}[2 \mathrm{Pl}$ than] be.more-1PlSbj/be.more=Stat.Neg(-1PlSbj)
'We are / aren't more numerous than you-Pl.'
c. [é làn] ì ${ }^{\text {HL } g i ́ n n e ̀ ~}$
[2Pl than] $1 \mathrm{PlSbj}{ }^{\text {HL }}$ be.more
'We are more numerous than you-Pl.'
d. [é làn] í gìnnè =ló
[2P1 than] 1 PlSbj be.more $=$ StatNeg
'We aren't more numerous than you-Pl.'
e. [púnd-è: là $]$ dóg- $\grave{\text { : }}$ :
[Fulbe-Pl than] Dogon-Pl
gìnnè = bìy-yà / gìnnè = bìyǎ:-n
be.more $=$ Past-3PlSbj / be.more=Past-PfvNeg.3P1Sbj
'Dogon were / weren't more numerous than Fulbe.'

### 12.1.1.4 'Be better' (ìró )

ìró is a specialized stative-like predicate 'be better (than)'. It allows no aspectual marking but can be suffixally conjugated like a verb (309a). The 3Pl subject form is ìró-ǹ 'they are better'. Alternatively, a subject pronoun may precede the predicate, in L-toned form, but with \{HL\} tones on the predicate ( ${ }^{\mathrm{HL}}$ írò), as in (309b). My assistant prefers (309b) to (309a). The negative form is ìrò-ló- 'not be better (than)'. Conjugated past clitics can be added to the positive forms (309c-e).
a. mí $\quad\left[\begin{array}{ll}o ́ & \text { làn }\end{array}\right] \quad$ ìró- $\eta$
$1 \mathrm{Sg} \quad[2 \mathrm{Sg}$ than] be.better- 1 SgSbj
'I'm better than you-Sg (are).' [dispreferred, see (b)]
b. [ó lày] mì ${ }^{\mathrm{L}}$ HL írò
[2Sg than] $1 \mathrm{Sg}^{\mathrm{L}} \quad{ }^{\mathrm{HL}}$ be.better
[= (a), preferred]
c. (mí) [ó là $\left.{ }^{n}\right]$ ìró=bìyè- $\eta$
$(1 \mathrm{Sg}) \quad[2 \mathrm{Sg}$ than $]$ be.better $=$ Past- 1 SgSbj
'I was better than you-Sg (were).'
d. [ó làn] $\quad m i ̀{ }^{\mathrm{L}}$
${ }^{\mathrm{HL}}$ írò $=$ bìyè [2Sg than] $1 \mathrm{SgSbj}^{\mathrm{L}} \quad{ }^{\mathrm{HL}}$ be.better $=$ Past [=(c)]
e. ná $\quad\left[\begin{array}{ll}m i ́ & \text { làn }\end{array}\right] \quad$ ìró $=$ bìyă:- $-\varnothing$
$3 \mathrm{Sg} \quad[1 \mathrm{Sg}$ than] be.better=Past-PfvNeg-3SgSbj
'He/She was not better than I (was).'

The domain of comparison is overt in (310).

| [gíyò | nì:] | [mí | $1 \grave{a ̀ ~}^{\text {n }}$ ] | ìró- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: |
| [dance | Loc] | [1Sg | than] | be.better-3SgSbj |

'He/She is better at dancing than I (am).' (=dances better than)

### 12.1.1.5 sìgá 'be more' as predicate

Another specialized comparative predicate is sìgá 'be more'. It can be suffixally conjugated ( 3 Pl sigá-ǹ 'they are more'). Like other comparative predicates, it has a rising tone pattern. Also like them, it can be preceded by a subject pronoun as an alternative to suffixal conjugation, and in this case, if the clause is positive, the pronoun is L-toned but imposes $\{\mathrm{HL}\}$ on the predicate (311a). The negative form is sìgà $=$ ló, which can occur with a preceding subject pronoun in its regular H-toned form (311b-c).

| a. | [ó | $1{ }^{\text {n }}{ }^{\text {] }}$ | sémbè | mì |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{2} 2 \mathrm{Sg}$ | than] | power | 1Sg | be.more |
|  | 'I am stronger than you-Sg.' |  |  |  |  |

b. $\left[\begin{array}{ll}o ́ & l a ̀ n\end{array}\right] \quad$ sémbè mí sìgà $=10$
[2Sg than] power 1 Sg be.more $=$ StatNeg
'I am not stronger than you-Sg.'
c. bú:dù $\left[\begin{array}{ll}m i ́ & \text { làn }\end{array}\right]$ é sìgà $=l o ́$
money $[1 \mathrm{Sg}$ than] 2 Pl be.more $=$ it.is.not
'You-Pl aren't richer than I (am).'
d. sé:dù [mí làn] sémbè sìgá
$\mathrm{S} \quad[1 \mathrm{Sg}$ than] power be.more
'Seydou is stronger than I am.'
e. [ó làn] nǎ:g mì sígà
[2Sg than] cow 1 Sg be.more
'I have more cows than you-Sg (do).'

### 12.1.2 Asymmetrical adjuncts (sìgà, gìnné )

In this general type of construction, a regular predicate in non-comparative form is expanded by adding an adverbial adjunct consisting of or including sìgà 'more' or gìnné 'a lot' (here: 'much more'). If the first comparandum (X) is the subject, as it usually is, we often get the
subject-focus form of the verb. A comparandum with là and an optional domain of comparison complete the construction. sìgà is obviously related to the predicate sìgá 'be more' (§12.1.1.5), and gìnné 'a lot' is likewise related to the predicate gìnnè (§12.1.1.3). My assistant rejected proposed examples of this construction with ìró (or ìrò) 'better'; instead, sìgà 'more' can extend into the sense 'better' as in (312f).

```
a. jă:- \(\eta\) jnê:-bù- \(\eta\)
meal eat.meal-Ipfv-1SgSbj
'I will eat (a meal).'
```

b. [ó làn ${ }^{n}$ sìgà / gìnné jnê:-bù- $\eta$
[2Sg than] more/a.lot eat.meal-Ipfv-1SgSbj
'I will eat more / much more than you-Sg (will).'
c. [ó làn] mí gìnné jè:-bì-y
[2Sg than] 1 Sg a.lot eat.meal-Ipfv-SFoc
'I [focus] will eat much more than you-Sg (will).'
d. [ó làn] gìnné jne:-bù-ŋ
[2Sg than] a.lot eat.meal-Ipfv- 1 SgSbj
'I will eat much more than you-Sg (will).' (no focus)
e. [ó-ŋ̀ làn] gìnné bèlé- $]$
[2Sg-Poss than] a.lot get.Pfv-1SgSbj
'I got (from my field) much more than (you-Sg got from) yours.'
f. [ó làn] mí sìgà sìyé gòlè:-bì-y
[2Sg than] 1 SgSbj more millet do.farming-Ipfv-SFoc
'I cultivate millet more/better than you-Sg (do).'
g. [ó làn] mí gìnné nǎ:g jò-y
[2Sg than] 1 Sg more cow have-SFoc
'I have (many) more cows than you-Sg (do).'

The ordering of the subject, the 'than Y' phrase, and (if overt) the domain of comparison is rather free. However, sìgà or gìnné cannot precede the 'than Y ' phrase. sìgà or gìnné normally also follows the subject in volunteered data, but my assistant did accept reordering in this case, e.g. gìnné mí in (312g).

It is possible for non-subject NPs to be the two comparanda. In (313a) they are direct objects, in (313b) they are instrumentals, and in (313c) they are setting locationals. Usually the second comparandum (' Y ') is reduced to a minimal NP, omitting an accusative enclitic in (313a) or a postposition (313b) that is inferrable from context. However, the spatial PP in (313c) is not reduced.

| a. | yàrá | [ná | $\left.1 \grave{a ̀ n}^{n}\right]$ | $o ́=\grave{y}$ | gìnné |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | lion | [3Sg | than] | $2 \mathrm{Sg}=$ Acc | a.lot |
|  | bárùp |  | kánè- $\varnothing$ |  |  |
|  | wound(n) |  | do.Pfv-3S |  |  |

'The lion wounded you-Sg more (=worse) than (it wounded) him/her.'
b. [màrtó-ŋ làn] [dàmmán yàn] gìnné
[hammer than] [ax Inst] a.lot
wâl kànè:-bù-ŋ
work(n) do-Ipfv-1SgSbj
'I work with an ax more than (with) a hammer.'
c. [pòrò lá: làn] [òjùn dá:] gìnné
[village Loc than] [the.bush Loc] a.lot nàyè:-bù-ŋ
spend.night-Ipfv-1 SgSbj
'I spend the night more (often) in the bush than in the village.'

### 12.1.3 Superlative 'most', 'best'

Superlatives not involving adjectival qualities are expressed with a regular asymmetrical comparative plus an indication of the relevant set of individuals. In (314), 'in the village' and the absence of a more specific comparandum ('than $\mathrm{Y}^{\prime}$ ) combine to express the superlative.
(314) [pòrò lá:] sé:dù gìnné dànné kân bèlè:-bì-y
[village Loc] S a.lot hunt do get-Ipfv-SFoc
'Seydou is the best hunter in the village.'
Example (315) similarly does this with an adjective predicate and a locative PP in partitive function.

| [pòrò | lá:] | [ánù-wè | nì:] | sé:dù | ${ }^{\text {HL }}$ bîn |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [village | Loc] | $[$ man-Pl | Loc] | do | ${ }^{\text {HL }}$ big |

'Seydou is the best hunter among the men in the village.'

### 12.2 Symmetrical comparatives

### 12.2.1 Symmetrical predicates

Symmetrical predicates may be dynamic ('X attain/become equal to Y ') or stative (' X be equal to $\mathrm{Y}^{\prime}$ ).

### 12.2.1.1 ‘Attain’ (kéw-r-yè, dě:)

$k \varepsilon ́ w-r-y \grave{\varepsilon}$ 'become equal' may occur in dynamic predicates denoting a change of state.
gòsá: ná gìnné jǒb bèlè=bìyغ̀-y
previously 3 SgSbj more run get.Pfv=Past-SFoc
kàndá [í nné:gè] kèw-r-yé-y
now [1Pl two] equal-Tr-MP.Pfv-1PISbj
'Previously it was he [focus] who could run better (than me), (but) now the two of us have become equal.' ("get" = 'can')
$d \varepsilon ̌:$ 'arrive (at), reach, attain' may also occur in this abstract sense.
à:bádà mí=ỳ dě: bèlè-nnú- $\varnothing$
never $\quad 1 \mathrm{Sg}=$ Acc attain get-IpfvNeg-3SgSbj
'He/She will never reach me (=achieve equality with me).'

### 12.2.1.2 'Be equal' (tómò, kêw, bàyé ~ bà:)

Stative predications of equality in some respect (symmetrical predicates) can be expressed with either tómı̀ 'one' (by extension, 'one and the same') modifying a noun expressing the domain of comparison, or $k \hat{\varepsilon} W$ ('same, equal') with or without an adjoined PP expressing the domain, followed by the 'it is' (or 'it is not') clitic.
a. [ó yàn] [mí yàn ${ }^{\text {n }}$ [ ìgù-rù- $\eta$ tómò] $=$ ỳ
[2Sg and] [1Sg and] [height one]=it.is
'You-Sg and I are of the same height.'
b. [bè nné:gè] [jóbù-g nì:] $k \varepsilon \in W=i ̀: ~ / ~ k \varepsilon ́ w=l o ̀: ~$
[1Pl two] [run-VblN Loc] same=it.is / =it.is.not
'The two of them are / are not equally (good) at running.'
Transitive verb bàyé 'be worth X ', 'be as good as X ' occurs in stative-like sense in the slightly irregular forms bà: jó (positive) and bà:-l(v́) (negative). 3Pl subject forms are bà: jó-ǹ and bà:-ń (319). Other forms like imperfective báyè:-b- $\varnothing$ 'will be worth $X$ ' are also possible.
(319) sé:dù ó=ỳ [bà: jó- $\varnothing]$ / bǎ:-l- $\varnothing$

S 2Sg=Acc [be.worth have-3SgSbj] / be.worth-PfvNeg-3SgSbj
'Seydou is / is not as good as you-Sg.'

### 12.2.2 Symmetrical adjuncts ( $k \hat{\varepsilon} W$ 'equally')

$k \hat{\varepsilon} W$ can be used as an adjunct, in combination with a 'with Y' PP denoting the comparandum.

| ná | [[mí | yàn] | kêW] | wâl | kànè:-b- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 Sg | [ [1 Sg | Inst] | equally] | work(n) | do-Ipfv-3SgSbj |

'He/She works the same (amount) as I (do).'

## 13 Focalization and interrogation

### 13.1 Focalization

### 13.1.1 Basic syntax of focalization

There is a special subject-focus suffix added to verbs when the subject is focalized. There is no focus-marking on the subject NP or pronoun itself. Focalization is less clearly marked for non-subject constituents, but in some constructions there are clues.

Reduplication and the existential proclitic yè are disallowed when any constituent is focalized. This is helpful for recognizing focalization with positive stative predicates.

In the presence of a preverbal focalized constituent (subject, object, adverb, etc.), the verb is tone-dropped. However, this tone-dropping can occur in almost any clause with at least one nonpronominal preverbal constituent.

The preferred position for focalized constituents is immediately preverbal. This is of some diagnostic value when the verb is preceded by at least two nonpronominal constituents.

### 13.1.1.1 Which constituents can and cannot be focalized?

NPs (pronominal or otherwise) other than postpositional complements or possessors are easily focalized (321a). Adverbs and short adverbial phrases (such as PPs) can also be focalized in the same way (321b).

$$
\begin{array}{lll}
\text { a. sé:dù mènè-y }  \tag{321}\\
& \mathrm{S} \quad \text { come.Pfv-SFoc } \\
& \text { 'Seydou [focus] has come.' }
\end{array}
$$

b. sé: $d u ̀=y$ ỳ $[\varepsilon ́ b a ̀: \quad$ là: $] \quad W \varepsilon ̀:-\eta ~$
$\mathrm{S}=\mathrm{Acc} \quad[$ market Loc] see.Pfv-1SgSbj
'It was at the market [focus] that I saw Seydou.'
For verbs and truth values, see $\S 13.1 .2 .1-3$ below.

### 13.1.1.2 Linear position and form of focalized constituent

Focused subject pronouns are expressed by independent pronouns in immediate preverbal position. The 1 Sg subject suffix in unfocalized (322a) becomes a preverbal independent pronoun in (322b).
a. bàmàkó bòlé-ŋ
Bamako go.Pfv-1SgSbj
'I went to Bamako.'
b. bàmàkó mí bòlè-y

B 1SgSbj go.Pfv-SFoc
'It was I [focus] who went to Bamako.'

Constituents other than subject pronouns show no difference in form when they are focalized. This applies to nonsubject pronouns, such as accusative pronouns ( $o=y$ ' 'you- Sg ' as direct object), and to nonpronominal NPs (and adverbs) in any grammatical function.

The favored position for focalized constituents is immediately preverbal (323a-c). Not all elicited examples show this, probably because my assistant sometimes replicated the constituent order in French translation cues.
a. sé:dù $=$ ỳ ǎm bùndè- $y$
$\mathrm{S}=$ Acc who? hit.Pfv-SFoc
'Who [focus] hit Seydou?'
b. [ǹdé: ò-ı̀] [pésgè ì] à à: sémè:-b- $\varnothing$
[father 2Sg-Poss] [sheep Def] where? slaughter-Ipfv-3SgSbj
'Where [focus] will your father slaughter the sheep?'
c. nǎ:-ŋ ò-nì: né:-bì-y
meal here eat-Ipfv-1P1Sbj
'Here [focus] is where we'll eat.
Object NPs are crosslinguistically the most common focalized constituents, but in an SOV language a shift of the object to preverbal position would usually be inaudible (covert). The shift is most clearly seen when a subject or PP is focalized in a clause that also contains a nonpronominal object.

### 13.1.2 Verbs in focalized clauses

### 13.1.2.1 Verb reduplication and existential yè

In clauses with active verbs like 'eat', 'drink', 'buy', and 'sell' there is no requirement that any constituent be focalized.

Positive perfective and imperfective verbs are sometimes reduplicated (§10.2.1.3, $\S 10.2 .2 .2$ ). The functions of this reduplication are not entirely clear due to their infrequency in the texts transcribed to date, but they may be more common in everyday conversation than this indicates. Based on elicited simulated "conversations" like (324), one function appears to be verb focalization, as here with nè-nê:- $\quad$ 'I drank'.
A: ŋ̀gó- $\eta \quad n$-ô: 'What did you eat?'
B: nà:-lú- $\eta$ nè-nê:- $\eta \quad$ 'I didn't eat, I drank.'

Examples (325a-b) are similar. The verb itself, rather than the whole VP is focalized. (325a) is perfective, (325b) imperfective.

```
a. pésgè dònà:-lú-\eta 立?\varepsilońbè-\eta
    sheep sell-PfvNeg-1SgSbj Rdp-buy.Pfv-1SgSbj
    'I didn't sell the sheep-Sg, I bought (it).'
```

```
b. pésgè dónè-nnú- \(\eta\) è-Rébè:-bù- \(\eta\)
sheep sell-IpfvNeg-1SgSbj Rdp-buy-Ipfv-1SgSbj
'I don't sell sheep, I buy (them).'
```

Reduplication is not allowed when a non-verb constituent is focalized.
Reduplicated perfective/imperfective negative forms are marginal. My assistant accepted as grammatical some examples presented to him, but they do not seem to be in regular use.

With derived stative verbs ( $\S 10.4 .1$ ), on the other hand, if there is no non-verb focalized constituent, a positive verb must be marked as focal. In other words, verb focus is the default for this type of clause. It is marked either by reduplication (possible for derived statives) or by preposing the existential clitic yè (again possible for derived statives, and the only option for defective quasi-verbs like 'be' and 'have'). The derived stative 'be standing' is illustrated in (326). One or the other of reduplication and yè is obligatory if there is no other focalized constituent, but the two cannot co-occur (326a-b). Under negation, reduplication is marginal and yè is ungrammatical (326c).
a. ì-1ígà- $\varnothing \quad$ 'he/she is standing'
yè ígà- $\varnothing$
b. \#ígà- $\varnothing \quad$ intended sense $=(a)$
\#yè ì-Rígà
c. ígà-nnú- $\varnothing \quad$ 'he/she is not standing'
? ì-Rígà-nnú- $\varnothing$
\# yè ígà-nnú
Defective stative quasi-verbs ('be', 'have') likewise are the default focus. They cannot reduplicate, but they are regularly preceded by existential proclitic yè in otherwise unfocalized positive clauses. As with derived statives, yè is disallowed in negative clauses (327b).
a. ḿbù- $\eta$ yè jó-ŋ
house Exist have-1SgSbj
'I have a house.'
b. ḿbù- $\eta$ jò-nnú- $\eta$
house have-Neg-1SgSbj
'I don't have a house.'

### 13.1.2.2 Propositional truth-value focalization

Truth value focalization ('I did go!') is the same as clause-level "emphasis" as expressed by emphatic particles (§19.5).

### 13.1.2.3 VP focalization with verbal noun

A simple VP (single verb or verb-object combination) may be more or less focalized, as in answers to 'what did you do?' questions, by combining an $\{\mathrm{HL}\}$-toned verbal noun (suffix $-g$,
§4.2.2.1) with a conjugated form of kánè 'do', as in 'I did exiting' or 'I did sheepslaughtering'. Intransitive examples are in (328a). An object noun, usually generic or pro forma (such as a low-referentiality cognate nominal), may appear as an $\{\mathrm{L}\}$-toned compound initial (328b-d).
a. gî:-g / bólù-g
kànè- $\eta$
exit- / go-VblN
do.Pfv-1SgSbj
'Exiting / going is what I did.'
b. [pèsgè̀- ${ }_{\mathrm{HL}}^{\text {sémù̀ }}$ / $/{ }^{\mathrm{HL}}$ kómmù- $g$ / ${ }^{\mathrm{HL}}$ góndù-rù-g kànè̀- $\eta$
sheep ${ }^{\mathrm{L}}-\quad{ }^{\mathrm{HL}}$ slaughter- $-{ }^{\mathrm{HL}}$ tie- $-{ }^{\text {HL }}$ hang.up-Tr-VblN do.Pfv- 1 SgSbj
'Slaughtering / tying / hanging-up (the) sheep is what I did.'

[meal ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ eat- $\mathrm{H}^{\mathrm{HL}}$ see-VblN] do.Pfv-1SgSbj
'Eating / seeing the meal is what I did.'
d. [ya: ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ yî:- - - $\left.\varnothing\right]$ kànè- $\eta$
[weeping(n) ${ }^{L}$ - ${ }^{H L}$ weep-VblN] do.Pfv- 1 SgSbj
'Weeping is what I did.'
e. [pòrò $\left.{ }^{\mathrm{L}}-{ }^{\mathrm{HL}}{ }_{d \hat{1}}:-g-\varnothing\right]$ kànè- $\eta$
[village ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ arrive- VblN ] do.Pfv- 1 SgSbj
'Arriving in the village is what I did.'

### 13.1.2.4 Form of verb following a focalized constituent

For subject focalization, a suffix $-y$ is added to the verb, replacing the usual pronominalsubject suffix; see §13.1.3. For both subject and nonsubject focalization, there are also some subtle tonal changes and some trimming of excess morphology (reduplication and the existential proclitic).

Reduplication of perfective positive, imperfective positive, and stative positive verbs is associated with verb focalization, though the fine points need further study.

Especially for active (i.e. nonstative) verbs, reduplicated forms are less common than unreduplicated. This applies even to single-word clauses consisting of just a verb, where no other constituent that could possibly be focused is present. For example, (329a) is a perfectly normal utterance. Reduplicated (329b) can be used in discourse contexts involving a surprising action. My assistant stated that (329b) might be used in answer to a question like 'How do you know that (such-and-such event) happened there?'.
a. bòlé- -1
go.Pfv- 1 SgSbj
'I went.'
b. bò-bólè- $\eta$

Rdp-go.Pfv-1SgSbj
'I went.'

In positive main clauses with active verbs preceded by one or more other constituents, reduplication is possible but uncommon under similar discourse conditions (surprising event, etc.). Except in such special contexts, (330a) is usual. The only difference between (330a) and its object-focalized counterpart (330c) is that the perfective verb is tone-dropped in (330c) to indicate verb-defocalization.
a. ùnó- $\eta$ bùndé- $\eta$
dog hit.Pfv-1SgSbj
'I hit (the) dog.'
b. ùクó-ŋ bù-búndè- $\eta$ dog Rdp-hit.Pfv-1SgSbj
'I hit (the) dog.'
c. ùnó- $\eta$ bùndè-n
dog hit.Pfv.1SgSbj.DeFoc
'The dog [focus] is what I hit.'

The distinction between the regular verb in (330a) and the tone-dropped defocalized verb in (330c) is subtle at best, since the final H-tone on the verb in (330a) is not reliably inaudible. However, in polar interrogatives (". Q " in interlinears) expressed with a final tone change and intonational prolongation $(\rightarrow)$, the distinction is more clearly audible. In (331a), the queried perfective verb keeps its H -tone, though it migrates to the final syllable in the third-person form (§3.7.4.3). In (331b), the defocalized perfective verb is treated as toneless. It acquires an initial-syllable tone by phonological rule (H-tone from /LH/-toned 'here' jumps to the following word). Alernatively, we could say that the H-tone of 'here' amalgamates with the preexisting H -tone of the third-person subject verb, and prevents that H -tone from dropping (§3.7.4.2).

$$
\begin{array}{lll}
\text { a. } & \text { ò-ní: } & m \varepsilon ̀ n-\hat{\imath} \rightarrow / m \grave{\varepsilon} n \hat{\varepsilon} \rightarrow-\varnothing  \tag{331}\\
& \text { here } \quad \text { come.Pfv-2SgSbj.Q / -3Sg.Q } \\
& \text { 'Did you-Sg/he-or-she come here?' }
\end{array}
$$

b. ò-nì: mén-̀̀ $\rightarrow$ / ménغ̀ $\rightarrow-\varnothing$
here come.Pfv-2SgSbj.DeFoc.Q / -3Sg.Defoc.Q
'Was it here [focus] that you-Sg/he-or-she came?'
For positive main-clause statives, whether derived stative verbs ('be seated') or lexical stative quasi-verbs ('be', 'have'), either reduplication or the existential proclitic yè is required unless another overt locational is present (332a-b). They often disappear when another constituent precedes the verb, though their presence is allowed if the preverbal constituent is not especially focal (332c). If there is a genuinely focused element, such as a WH -interrogative, reduplication and yè are disallowed (332d-e).
a. ò-Róbò- $\eta$

Rdp-sit.Stat-1SgSbj
'I am seated (sitting).'
b. yè óbò- $\eta$

Exist sit.Stat-1SgSbj
[= (a)]
c. [ḿbù- $\eta$ dà:] òbò-ŋ / ò-Róbò- $\eta$ / yè óbò- $\eta$
[house Loc] sit.Stat-1SgSbj / Rdp-sit.Stat-1SgSbj / Exist sit.Stat-1SgSbj
'I am seated in the house.'
d. àyà: (\# yè) (\# ò-) ób-ò:
where? (\# Exist) (\# Rdp-) sit.Stat-2SgSbj
'Where are you-Sg seated?'
e. ǎm (\# yè) (\# ò-) òbò-y
who? (\# Exist) (\# Rdp-) sit.Stat-SFoc
'Who is seated?'

### 13.1.3 Subject focalization

The subject (NP or pronoun) must be overt to be focalized. The verb is defocalized by dropping all tones and adding -y to the otherwise unconjugated but AN-marked verb. This suffix is glossed SFoc (subject-focus) and is not to be confused with the homonymous 1 Pl subject $-y$ in unfocalized clauses. The respective forms are segmentally identical, though, and the tonal distinction is not reliable in clauses with preverbal constituents.

Focalized (333a) corresponds to unfocalized (333b).
$\begin{array}{ll}\text { a. mí / íl ó órle } & \text { bòlè:-bì-y } \\ & 1 \mathrm{SgSbj} / 1 \mathrm{PlSbj} / 2 \mathrm{SgSbj} \\ \text { 'It's } & \text { go-Ipfv-SFoc }\end{array}$
'It's I/we/you-Sg [focus] who will go.'
b. bólè:-bù-ŋ / -bì-y / -b-ò:
go-Ipfv-1SgSbj / -1PlSbj / -2SgSbj
'I/we/you-Sg will go.'

The SFoc ending may be added to any positive inflected verb form. Imperfective positive $-b i ̀-y$ is illustrated in (333a). The perfective positive counterpart with SFoc suffix is $b \grave{l} \grave{\varepsilon}-y$. Negative verbs with SFoc suffix are elicitable: imperfective negative bòlè-nnì-y, perfective negative bòlà:-lì-y. However, my assistant generally uses the regular pronominalsubject suffix on the verb in subject-focalized negative clauses. Thus é bòlè-nn-è: 'it's you-Pl [focus] who are not going'.

My assistant put subject-focused pronouns in immediate preverbal position. (334a) shows subject-focus versions of unfocalized (334b). The subject pronoun follows even object pronouns (334c), which are elsewhere usually in preverbal position in unfocalized main clauses.

| a. gò:lí: | nǔm | mí/ íl ó | tòwè-y |
| :--- | :--- | :--- | :--- |
|  | last.year | cowpea | $1 \mathrm{SgSbj} / 1 \mathrm{PlSbj} / 2 \mathrm{SgSbj}$ | plant.Pfv-SFoc

b. gò:lí: nǔm tòw - $\eta$ / tòwè-y/ tòw-ò: last year cowpea plant.Pfv-1SgSbj/-1PlSbj/-2SgSbj 'I/we/you-Sg planted cowpeas last year.'
c. $\delta=y$ mí bùndè- $y$
$2 \mathrm{Sg}=\mathrm{Acc} \quad 1 \mathrm{SgSbj} \quad$ hit.Pfv-SFoc
'It was I [focus] who hit you-Sg.'

However, my assistant did not regularly shift nonpronominal focalized subjects to either clause-initial or immediate preverbal position. (335a) is an example of a spontaneous utterance, with the subject (Seydou) in normal subject position following a setting adverbial and preceding the object. (335b) shows that the nonpronominal subject must precede an object pronoun.
a. gò:lí
sé:dù
nǔm
tòwè-y
last.year S cowpea plant.Pfv-SFoc
'It was Seydou [focus] who planted cowpeas last year.'
b. sé:dù $\quad$ = $=\grave{y}$ bùndè-y (\# ó=ỳ sé:dù bùndè-y)
$\mathrm{S} \quad 2 \mathrm{Sg}=\mathrm{Acc}$ hit.Pfv-SFoc
'It was Seydou [focus] who hit you-Sg.'

### 13.1.4 Object focalization

When the focalized constituent is other than the clause subject, the verb has its regular pronominal-subject suffixation, as in main clauses. The verb drops its tones, but this usually happens in any clause with preverbal constituents. The object is marked by accusative $=\grave{y}$ in the same way, whether focalized or not. There is also no systematic relinearization of a focalized object. As a consequence, there is no overt difference between object-focalized and completely unfocalized transitive clauses.
a. mí=ỳ bùnd-ò:
$1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-2SgSbj
'It's me [focus] that you-Sg hit.'
or: 'You-Sg hit me.'
b. sé:dù ó=ỳ bùndè- $\varnothing$
$\mathrm{S} \quad 2 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-3SgSbj
'It was you-Sg [focus] that Seydou hit.'
or: 'Seydou hit you-Sg.'
c. sé:dù ògí $=\grave{y}$ dènnè:-b- $\varnothing$

S Prox=Acc look.for-Ipfv-3SgSbj
'This [focus] is what Seydou is looking for.' or: 'Seydou is looking for this.'

### 13.1.5 Focalization of PP or other adverbial phrase

As with object focalization, there is no reliably overt difference between focalization of a PP or other adverbial on the one hand, and completely unfocalized clauses that happen to contain a PP on the other.
a. dàmmá- $\eta$ [ònùn dá:] jòmbè- $\eta$ daba [outback Loc] leave.Pfv-1SgSbj
'It was in the fields [focus] that I left the daba (hoe).'
or: 'I left the daba in the fields.'
b. sé:dù [ògí yàn ${ }^{\text {}}$ [âl kànè:-b- $\varnothing$
$\mathrm{S} \quad[$ Prox Inst] $\quad$ work(n) do-Ipfv-3SgSbj
'It's with this [focus] that Seydou works.'
or: 'Seydou works with this.'

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives

### 13.2.1.1 Final L-tone and prolongation

A simple polar interrogative can be produced by adding a final L-tone and variably prolonging the nucleus of the final syllable variably (symbol $\rightarrow$ ). In addition, third-person perfectives also shift their H-tone (elsewhere normally word-initial) onto the final, which combines with the interrogative L-tone to constitute a falling syllable. The tonal polar interrogative is indicated in interlinears as ".Q" (338b). A typical 3Sg perfective example is (338b), from noninterrogative (338a).
a. ménè- $\varnothing$
come.Pfv-3SgSbj
'He/She has come.'
b. mèn $\hat{\varepsilon} \rightarrow$
come.Pfv-3SgSbj.Q
'He/She has come?'

The combination of final L-tone and variable prolongation links the tonal polar interrogative to the "dying quail" effect in other Dogon languages, including Jamsay. However, the pattern is more deeply embedded in the morphophonology in DD. For example, Jamsay does not shift a penult or initial H-tone to the final syllable. A further difference is phonetic: in a final CvC syllable, Jamsay prolongs the final consonant (always a sonorant), while DD mainly prolongs the vocalic nucleus. The question for DD is whether we can separate the two phonetic aspects of the polar interrogative effect and assign them to different levels, intonation in the case of the prolongation and tonal phonology in the case of the pitch decline.
(339) presents a fuller set of data showing how polar interrogatives are formed from verbs of various inflectional categories. In the dying-quail model (rightmost column), the polar interrogative consists morphologically of the noninterrogative verb form plus $\therefore$, my symbol for dying-quail effects. The combination is realized phonetically as indicated in the "polar Q"
column. If the final input syllable is H-toned, the result is a prolonged vocalic nucleus with pitch decline. This is the case in the perfective negative (339b), and in all but the 3 Pl subject forms of the imperfective negative and future ( $339 \mathrm{~d}-\mathrm{e}$ ). If the final syllable is L-toned, except in the third-person perfective, the only audible change is increased duration of the vocalic nucleus. This is the case in the imperfective positive. For the third person perfective forms, which are $\{\mathrm{HL}\}$-toned clause-finally but allow the H-tone to shift to some following morphemes such as nà: 'if' (§3.7.4.3), the H-tone shifts to the final syllable, where it combines with the dying-quail effect to produce a prolonged falling pitch.

One further twist is that the polar interrogative blocks apocope (deletion of word-final vowel). Suffixes that elsewhere take the form $-C$ preserve an original $-C i$ shape in the polar interrogative, which combines with the prosodic effect to result in $-\mathrm{Ci} \rightarrow$ (plus the relevant tone). This applies in the 3 Sg and 3 Pl subject forms of the perfective negative and imperfective positive, and also in the 3 Pl future.

$$
\begin{equation*}
\text { input } \quad \text { polar Q } \quad \text { dying-quail model } \tag{339}
\end{equation*}
$$

a. perfective positive ('came')

| 3 Sg | ménè- $\varnothing$ | $m \grave{̀} \hat{\varepsilon}-\varnothing \rightarrow$ | /ménè- $\varnothing \therefore$. |
| :---: | :---: | :---: | :---: |
| 3 Pl | mén-yà | mèn-yâ $\rightarrow$ | /mén-yà . ./ |
| 2 Sg | mèn-ó: | $m \varepsilon ̀ n-\hat{( }(:) \rightarrow$ | /mèn-ó: $\therefore$ / |
| 1 Sg | mèné-ŋ | $m \varepsilon ̀ n \varepsilon ิ-\eta \rightarrow$ | /mèné-ŋ $\therefore$ / |

b. perfective negative ('didn't come')

3 Sg mènă:-1- $\varnothing$ mènà:-lî- $\varnothing \rightarrow$ /mènà:-lí- $\varnothing \therefore /$
3 Pl mènà:-ń mènà:-nî $\rightarrow$ /mènà:-ní- $\varnothing \therefore /$
1 Sg mènà:-lú-ך mènà:-lû $\rightarrow-\eta$ /mènà:-lú-ŋ../
c. imperfective positive ('comes, will come')

3Sg ménè:-b- $\varnothing$ ménè:-bì- $\varnothing \rightarrow$ /ménè:-bì- $\varnothing \therefore /$
3 Pl ménè:-n ménè:-nì $\rightarrow$ /ménè:-nì.:/
2Sg ménè:-b-ò: ménè:-b-ò(: $\rightarrow$ /ménè:-b-ò:.:/
1 Sg ménè:-bù- $\quad$ ménè:-bù $\rightarrow-\eta$ /ménè:-bù-ŋ $\therefore /$
d. imperfective negative ('does/will not come')
$3 S g \quad$ ménè-nnú- $\varnothing$ ménè-nnû- $\varnothing \rightarrow \quad / m \varepsilon ́ n \varepsilon ̀-n n u ́-~ \varnothing \therefore / ~$
3 Pl ménè-n-1́yà ménè-n-(i)yâ $\rightarrow$ /ménè-n-1́yà../
~ ménè-ń-yà
3 Sg ménè-nnú- $\quad$ ménè-nnû $\rightarrow-\eta \quad / \mathrm{m}$ nè̀-nnú-ŋ $\therefore$ /
e. future ('will come')

3 Sg ménò-m̀ bó- $\varnothing$ ménò-m̀ bô- $\varnothing \rightarrow \quad / \mathrm{m}$ nnò-m̀ bó- $\varnothing \therefore /$
3Pl ménò-m̀ bó-ǹ ménò-m̀̀ bò-nî $\rightarrow$ /ménò-m̀ bó-nì . ./
2Sg ménò-m̀ b-ó: ménò-m̀ b-ô(:) $\rightarrow$ /ménò-m̀ b-ó:..$/$

In the alternative analysis, the prolongation $(\rightarrow)$ is an intonational effect superimposed on the phonology. It could then be equated to the prolongation observed with the clause-final 'or' disjunctive morpheme $m a \rightarrow$ (§7.2.1). In polar interrogatives, prolongation is accidentally combined with the addition of a final L-tone (audible only when combined with an input H-tone), and the additional modification described above for third person perfective positives.

Regardless of which model we choose, there is one further problem. In the regular (noninterrogative) future paradigm (339e), the 3 Sg and 2 Sg inputs differ only in final vowel length. This would also be the case for any predicate ending in bò- 'be' or $j o \partial$ - 'have', in H - or L-toned forms. Since the polar interrogative prolongs the final vowel for both, the question arises whether 'will he/she come?' and 'will you-Sg come?' are overtly distinguishable. My assistant had the intuition that they could be distinguished, in that the 2 Sg form had a slightly longer vowel than the 3 Sg form, but this may be wishful thinking.

In the 2 Sg imperfective positive, on the other hand, the issue is whether the noninterrogative input form ménè:-b-ò: 'you-Sg (will) come', with its final long vowel, is distinguishable from polar interrogative ménè-b-ò(:) $\rightarrow$. In this case the distinction is in fact clear. For one thing, the duration of prolongation in the interrogative is not tightly bounded, while final long vowels in noninterrogatives are often shortened phonetically. Furthermore, the terminal pitch of a polar interrogative is higher than that of noninterrogatives, as in English and other languages. So interrogative méṅ:-b-ò(:) $\rightarrow$ sounds like [mén $\bar{\varepsilon}: b \bar{o}:(:)]$, while noninterrogative ménè:-b-ò: sounds like [ménè:bò(:)].

### 13.2.1.2 Clause-final mà $\rightarrow$

A polar (yes/no) interrogative always implies two possible answers. The interrogative itself can make the two options overt, separated by mà $\rightarrow$, which can function as 'or' disjunction or as interrogative marker (the two are closely related semantically). In this construction, there is no "dying quail" effect on the verb of either clause.

| $[\varepsilon ́ b a ̀:$ | bólè:-b- $\varnothing$ | mà $\rightarrow$ ] | bólè-nnú- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [market | go-Ipfv-3SgSbj | or] | go-IpfvNeg-3SgSbj |

'Is he/she going to the market, or not?'
$3 \mathrm{Sg} / 3 \mathrm{Pl}$ subject perfective positive forms shift the H -tone from the onset of the verb onto $m a ̀ \rightarrow$. The main-clause indicative forms ménè- $\varnothing$ 'he/she came' and mén-yà 'they came' undergo this change in (341). The verbs on the left are now L-toned but the 'or' particle is H -toned.

| [mènè- $\varnothing$ / mèn-yà | má $\rightarrow$ ] | mènă:-1- $\varnothing$ / mènà:-ń |
| :---: | :---: | :---: |
| [come.Pfv-3SgSbj / -3PlSbj | or] | come-PfvNeg-3SgSbj / -3PlSbj |

'Did he-or-she/they come, or not?
No tonal shifts involving verb forms other than $3 \mathrm{Sg} / 3 \mathrm{Pl}$ perfective positives have been observed.

The fact that mà $\rightarrow$ interacts phonologically with the verb to its left suggests that it should be bracketed with that verb.
$m a ̀ \rightarrow$ is also regular in quoted and other embedded polar interrogatives (§13.2.3). Such 'whether' complements occur with 'not know', 'forget', and 'fear' as main-clause verb (§17.2.1.2-3, §17.3.2).

Short answers to polar interrogatives are 1 íyò $(\rightarrow$ ) 'yes') and ǎy $(\rightarrow$ ) 'no!'

### 13.2.1.3 Tag question

A tag question is formed by adding the clitic $=l o ̀$ : 'it is not' to a syncopated form of kánè- $\varnothing$ 'it did'. This form can be used after any main clause. For past-time assertions, an alternative is $l \hat{o} \rightarrow$, articulated with high-to-mid falling pitch, arguably regular falling tone plus nonterminal intonation (ending with higher than normal pitch).
a. ह́:nì ménè:-b-ò:
kán- $\varnothing=1 o ̀:$
tomorrow come-Ipfv-2SgSbj do.Pfv-3SgSbj=it.is.not
'You-Sg are coming tomorrow, right?'
$\begin{array}{lllll}\text { b. [è-wé } & \text { ngì } & \text { yà:] ból-yà } & \begin{array}{l}\text { kán- } \varnothing=l o ̀: ~ \\ \text { lô } \rightarrow\end{array} \\ & & & \\ {[\text { child-Pl }} & \text { Def } & \mathrm{Pl}] & \text { go.Pfv-3P1Sbj }\end{array}$ 'The children have gone, haven't they?'

### 13.2.2 Content (WH) interrogatives

When a WH word such as 'who?' or 'what?' is subject of its clause, the verb takes subject focus (SFoc) form.

### 13.2.2.1 'Who?' (ǎm)

The human WH interrogative noun is ǎm. It has a plural ǎm yà:, used optionally when the number is known to be plural. The H-tone shifts rightward in possessive àm mó 'whose?' and before complex postpositions, but not before verbs.

In subject function, my assistant used the subject-focus suffix on the verb in positive clauses (343a) but not negatives (343b). In either case, the verb does not have 3Pl subject marking when 'who?' is overtly plural.
a. ǎm
(yà:) bòlè:-bi-y / bòlı̀-y
who? (Pl) go-Ipfv-SFoc / go.Pfv-SFoc
'Who(-Pl) will go / went?'
b. ǎm (yà:) bòlè-nnú / bòlă:-1
who? (Pl) go-IpfvNeg / go-PfvNeg
'Who(-Pl) will not go / did not go?'

Other grammatical functions are illustrated in (344).

b. àmí=ý
who? $=$ it.is
'Who is it?' (e.g. to someone knocking at the door)
c. àmí=ý
bìyè- $\varnothing$
who? $=$ it.is be.Past-3SgSbj
'Who was it?'
d. [[àm mó] là:] nàyè:-bì-y
[[who? Poss] Loc] spend.night-Ipfv-1P1Sbj
'At whose (place) will we spend the night?'
e. [m̀ bù- $\eta^{\mathrm{L}}$ ŋ̀gú] [àm mó]=ý
[house ${ }^{\mathrm{L}}$ Prox] [who? Poss]=it.is
'Whose house is this?' (lit. "This house is whose?", cf. §11.5.2)
f. [àm bómbò] là:
[who? side] Loc
'next to who(m)?' (cf. §8.2.4)

### 13.2.2.2 'What?’ (ìgó-ŋ), ‘with what?', ‘why?'

The nonhuman interrogative noun is $\grave{\eta} g o ́-\eta$ 'what?'. The H-tone can shift onto a positive verb in object function ( $345 \mathrm{~b}, \mathrm{~d}$ ) or onto a complex postposition ( 345 f ). In subject function there is no shift onto the verb ( $345 \mathrm{a}, \mathrm{e}$ ). An alternative underlying form is / y gónì/, to judge by ŋ̀gónì = y ' what is it?'.

| a. | ŋ̀gó- $\eta$ | kànè- $y$ |
| :--- | :--- | :--- |
|  | what? | happen.Pfv-SFoc |
|  | 'What (has) | happened?' |

b. ŋ̀gò- $\eta \quad n$-ô: / búnd-ò:
what? eat-/hitPfv-2SgSbj.Q
'What did you-Sg eat / hit?'
c. ǒg ŋ̀gónì $=\grave{y}$

Prox what? $=$ it.is
'What is that?'
d. ŋ̀gò- $\eta$ kánè:-b-ò: / kán-ò:
what? do-Ipfv-/ do.Pfv-2SgSbj
'What are you-Sg doing?' / 'What did you-Sg do?'
e. ŋ̀gó- $\eta$ bàgè:-bì-y
what? fall-Ipfv-SFoc
'What falls/will fall?'
f. [ìgò- $\eta$ bómbò] là:
[what? side] Loc
'next to what?'

Rightward H-Tone Shift, or perhaps absorption of the H-tone by a preexisting initial H -tone in an imperfective verb, applies when $\grave{\eta} g o ́-\eta$ is the object (345d), but not when it is the subject (345e).

With purposive postposition yà $\eta$ we get $\grave{\text { g̀gó yyàn 'with what?' (346a). With purposive }}$ lày we get 'why?’ (346b), pronounced [ỳgól:ày]. An alternative 'why?' construction is literally 'saying what?' (346c).
(346)
a. [ŋ̀gó yyàn] gólò: gòlè:-b-ò:
[what? Inst] farm.work do.farming-Ipfv-2SgSbj
'With what (tool) will you do farm work?'
b. [ŋ̀gó-ŋ làn] mèn-ò:
[what? Purp] come.Pfv-2SgSbj
'Why have you-Sg come?' (pronounced [ท̀gól:à])
c. [ŋ̀gó- $\eta$ gìné] jùmbè-y
[what? say] leave.Pfv-1P1Sbj
'Why have we abandoned (them)? (T01 04:49)

### 13.2.2.3 'Where?’ (àyá:)

'Where?' is à̀á:. It loses its H-tone by Rightward H-Tone Shift onto a following imperfective positive, perfective positive, or stative positive verb (347a-b,d), but not to a negative verb (347e).
a. ànà: bólè:-b-ò:
where? go-Ipfv-2SgSbj
'Where are you-Sg going?'
b. nìná: ànà: ból-ò:
yesterday where? go.Pfv-2SgSbj
'Where did you-Sg go yesterday?'
c. àná: = ỳ
where $=i$ t.is
'Where is it?'
d. àmà: bó- $\varnothing$
where? be-3SgSbj
'Where is he/she?'
e. àyá:
bòlà:-l-ó: / bólè-nn-ó:
where? go-PfvNeg-/IpfvNeg-2SgSbj
'Where did/do you-Sg not go?'
13.2.2.4 'When?' (àg-wá:rù- $\eta$ ), 'on which day?' (á:nà:)

Most ‘when?’ expressions include /àgú/ 'which?’ (§13.2.2.7 below). The most general is the rather fused àg-wá:rù- $\eta$ 'when?' (348a), cf. nouns wá:rù- $\eta$ and wágàt '(point) in time,
moment', probably both from Arabic waqt- 'time' by different routes. For other time-unit terms like 'month' and 'year', a more transparent construction with 'which?' in its normal adjectival position (following a tone-dropped noun) and followed by instrumental postposition yày, is used (348b-c). For 'on which day?' a special suppletive form, unrelated to the noun děn 'day', is used (348c).

```
a. àg-wá:rù-\eta mènè:-b-ò:
    which?-time come-Ipfv-2SgSbj
    'When will you-Sg come?'
```

b. [[wò: $g^{\mathrm{L}} /$ wè $^{\mathrm{L}}$ ág] yàn] mènè:-b-ò:
[[month ${ }^{\mathrm{L}}$ / year ${ }^{\mathrm{L}}$ which?] during] come-Ipfv-2SgSbj
'In which month/year will you-Sg come?' (< wě- $\eta$ )
c. á:nà: mènè:-b-ò:
which.day? come-Ipfv-2SgSbj
'On which day will you-Sg come?'

### 13.2.2.5 'How?' (àg yáy, à yáy)

The manner interrogative is àg yáy or slightly reduced à yáy. The final element is yáy 'like' (§8.4.1), not yà $\quad$ 'with' (instrumental-comitative) or 'during' (§8.1.1-3). à (g) yá ${ }^{\prime}$ appears as L-toned à $(g)$ yày when the H-tone shifts onto the following word or merges with the following H-tone (349b,d). In recorded texts I have heard the interrogative repeatedly as à yán, so àg yát is probably a form limited to careful speech.
àg yá can be used as an alternative to ŋ̀gó- $\eta$ 'what?' with the simple verb 'do' (349b).
a. $\left[\right.$ àg anan $\left.^{n}\right]$ wâl kànè:-b-ò:
[which? like] $\quad$ work(n) do-Ipfv-2SgSbj
'How do you-Sg work?'
b. [àg yàn] kánè:-bì-y
[which? like] do-Ipfv-1PlSbj
'How (=what) will we do?'
c. $[a ̀ g \quad$ yán $]=\varnothing$
[which? like]=it.is
‘How (is it)?' (also [àg yàn] bó-Ø)
d. [àg yàn] bíyè- $\varnothing$
[which? like] be.Past-3SgSbj
'How was it?'

### 13.2.2.6 'How much/many?' (à:ఇá:)

This word is part of the NP headed by the noun, as shown by the fact that a postposition follows the sequence of the two (350e). à:クá: functions tonosyntactically as a numeral (not an adjective), i.e it does not control tone-dropping on preceding words ( $350 \mathrm{c}-\mathrm{f}$ ).

It is used both with masses（＇how much？＇）and count nouns（＇how many？＇）．My assistant did not use accusative $=\grave{y}$ with à：クá：in object function even with human nouns（350f）． Rightward H－Tone Shift does not occur onto any following element．This helps to distinguish à：クá：‘how much／many？’ from àクá：‘where？’，which shifts its H－tone onto following verbs．
a．à：クá：
how．much？
How much（is it）？
b．à：クá：bò－n
how．many？be－3Pl
＇How many are they？＇
c．［pésgè／nǎ：g à：ŋá：］èb－ò：
［sheep／cow how．many？］buy．Pfv－ 2 SgSbj
＇How many sheep／cows did you－Sg buy？＇
d．［yà：－wé à：クá：］mènè－y／mènè：－bì－y
［woman－Pl how．many？］come．Pfv－／come－Ipfv－SFoc
＇How many women came／will come？＇
e．［［dàmmá à：クá：］yàn］sìyé gòlè：－b－è：
［［daba how．many？］Inst］millet do．farming－Ipfv－2P1Sbj
＇With how many dabas（＝hoes）do you－Pl do farming？＇
f．［è－wé à：ŋá：］bùnd－ò：
［child－Pl how．many？］hit．Pfv－2SgSbj
＇How many children did you－Sg hit．＇
h．［bármè ŋ̀gì yà：］à：ŋá：－à：クá：＝ý
［pot Def Pl］how．much？－how．much？＝it．is
＇How much（each）are the pots？＇（distributive iteration，§4．6．1．6）
i．［à：クá：bòmbò］là：
［how．many？side］Loc
＇beside how many？＇
j．à：クá：nì：
how．many？Loc
＇in how many？＇
The quantified－over noun may have a preposed possessor，which induces the usual possessor－ controlled tone overlay on the noun（351a）．However，a postposed pronominal possessor surprisingly follows à：クá：（351b）．
a．［［sé：dù
$[[\mathrm{S}$
${ }^{\mathrm{L}}$ nà：g］
à：クá：］tìbè－y
［［S Lcow］how．many？］die．Pfv－SFoc
＇How many of Seydou＇s cows have died？＇
b. [nǎ:g à:クá: ò̀̀̀] tìbè-y [cow how.many? 2Sg-Poss] die.Pfv-SFoc 'How many of your cows have died?

Ordinal adjective 'how-many-eth?’ (Fr quantième) is à:ŋù-nnó (§13.2.2.6). It has the regular ordinal suffix (§4.6.2.2).
13.2.2.7 'Which?' (ǎg)

The interrogative identificational adjective is ǎg from /àgú/. Its H-tone shifts to some following elements. As with other modifying adjectives, a preceding noun is tone-dropped (352a). The accusative clitic is present for a specific human direct object (352e), and optionally with nonhuman objects. The treatment of postposed pronominal possessors is the same as for à:yá: 'where?' described above, i.e. the pronominal follows the interrogative (352c).
a. [pòrò ${ }^{\mathrm{L}}$ àg] $g$-ô:
[village ${ }^{\mathrm{L}}$ which?] exit.Pfv-2SgSbj
'What (=which) village did you-Sg come from?'
b. [nà: $g^{\mathrm{L}}$ àg] dónغ̀:-b-ò:
[cow ${ }^{\mathrm{L}}$ which?] sell-Ipfv- 2 SgSbj
'Which cow are you selling?'
c. [nà: $g^{\mathrm{L}}$ ǎg $\grave{o}(-\eta) \quad$ ŋ̀gì = y $] \quad$ dònè:-b-ò:
[cow ${ }^{\text {L }}$ which? 2Sg-Poss Def=Acc] sell-Ipfv-2SgSbj
'Which cow of yours will you-Sg sell?'
d. [yà: ${ }^{\mathrm{L}}$ ăg] bóny ỳ̀ndè-y
[woman- $\mathrm{Sg}^{\mathrm{L}}$ which?] $2 \mathrm{Sg}=\mathrm{Acc}$ call.Pfv-SFoc
'Which woman called you-Sg?'
e. [yà: ${ }^{\mathrm{L}}$ àgí=ý] bò:nd-ò:
[woman-Sg ${ }^{\mathrm{L}}$ which?] call.Pfv-2SgSbj
'Which woman did you-Sg call?'

### 13.2.3 Embedded interrogatives

Interrogative clauses may be embedded under a verb like 'know' (353a-c). The question morpheme mà $\rightarrow$ (also 'or') comes at the end of the embedded clause, for both WH questions (353a) and polar interrogatives (353b-c). In embedded polar interrogatives, mà $\rightarrow$ (also 'or') replaces a final prosodic modification that occurs in interrogative main clauses (§13.2.1.1).
a. [ǎm
mènè:-bì-y mà $\rightarrow$ ]
ínnù-ท
[who? come-Ipfv-SFoc
Q]
not.know-1SgSbj
'I don't know who is coming.'
$\begin{array}{lll}\text { b. } \begin{array}{lll}{[\text { sé:dù }} & \text { mènè:-b- } \varnothing & \text { mà } \rightarrow]\end{array} & \text { ínnù- } \eta \\ {[\mathrm{S}} & \text { come-Ipfv-3SgSbj } & \mathrm{Q}]\end{array} \quad$ not.know- 1 SgSbj
'I don't know whether Seydou is coming.'
c. [è-wé mènè:-n mà $\rightarrow$ ] ínnù- $\eta$ [child-Pl come-Ipfv.3P1Sbj Q] not.know-1SgSbj 'I don't know whether the children are coming.'

Interrogative clauses may also occur in quotations (354). For the structure of quoted clauses in general, see §17.1.

```
a. [sé:dù / [è-wé ńgì yà:] ànà: bólè- \(\varnothing\) / ból-yà mà \(\rightarrow\) ]
    \([\mathrm{S} /[\) child-Pl Def Pl] where? go.Pfv-3SgSbj/-3P1Sbj Q]
    mí=ỳ tùbè- \(\varnothing\)
    \(1 \mathrm{Sg}=\mathrm{Acc} \quad\) ask.Pfv-3SgSbj
    'He/She asked me where Seydou / the children had gone.'
```


'He/She asked me whether I was coming.'

The verb 'ask' may follow the quotation as in (354a-b) above. Or it may precede the quoted material as in (355).
(355) [ǹdé: mmò] túbغ̀- $\varnothing$ [í mèné-y mà $\rightarrow$ ]
[father 1SgPoss] ask.Pfv-3SgSbj [1P1 come.Pfv-1P1Sbj Q]
'My father asked whether we had come.'
The form of the verb in a quoted interrogative is the same as in the corresponding main clause, except for some tone shifts. In the perfective positive, 3 Sg and 3 Pl subject verbs shift their H-tone onto mà $\rightarrow$ (becoming má $\rightarrow$ ). There is no change in $1 \mathrm{st} / 2$ nd person perfective positives, which keep their word-final H-tone before mà $\rightarrow$ (356a). In the imperfective negative, the final H-tone shifts onto mà $\rightarrow$ (becoming má $\rightarrow$ ) for all pronominal subject categories (356b). There are no tonal changes when mà $\rightarrow$ is added to imperfective positive or perfective negative verbs ( $356 \mathrm{c}-\mathrm{d}$ ).
indicative quoted interrogative
a. perfective positive 'he/she came'
'they came' mén-yà mèn-yà má $\rightarrow$ mèn-yà (defocalized)
'you-Sg came’
mèn-ó: mèn-ó: mà $\rightarrow$
b. imperfective negative
'he/she will not come' ménè-nnú- $\varnothing$ ménè-nnù- $\varnothing$ má $\rightarrow$
'you-Sg will not come' ménè-nn-ó: ménè-nn-ò: má $\rightarrow$
c. imperfective positive
'he/she will come'
'you-Sg will come'
ménè:-b- $\varnothing$ ménè:-b- $\varnothing$ mà $\rightarrow$ ménè:-b-ò: ménè:-b-ò: mà $\rightarrow$
d. perfective negative
'he/she did not come' mènă:-1- $\varnothing \quad$ mènǎ:-1- $\varnothing$ mà $\rightarrow$
'you-Sg did not come' mènà:-l-ó: mànà:-l-ó: mà $\rightarrow$

## 14 Relativization

Relative clauses are restrictive (not parenthetical). They are often marked as definite.

### 14.1 Basics of relative clauses

The (internal) head NP, maximally Poss-N-Adj-Num (allowing suffixal -we but not other plurals), appears within the relative clause, and is tone-dropped. Late-NP elements such as determiners, free plural yà:; fú: 'all', and discourse-functional (DiscF) elements follow the verb. The "verb" is a noun-like participle in form, marked for the usual aspect-negation (AN) category. If the subject of a nonsubject relative is pronominal, it is expressed as a proclitic preceding the final verb (participle), This proclitic has the same segmental form as the corresponding independent pronoun, except that it is L-toned. It does, however, have an associated floating H -tone that appears on the onset of the following participle.

Relative constructions are best modeled as complex NPs (DPs) of the basic form Poss-N-Adj-Num-RelCl-Det-'all'-DiscF. The relative clause, like an adjective or a demonstrative, is a reference restrictor and therefore a tonosyntactic controller that imposes $\{\mathrm{L}\}$ overlay on the elements to its left, beginning with the noun, i.e. maximally N -Adj-Num. Later, the entire string to the left of the relative clause, Poss-N-Adj-Num, moves into the relativization site, creating (the appearance of) an internally-headed relative clause.

Definite relative clauses end with definite morpheme ì or allomorph (357a), or occasionally with a demonstrative. Undetermined relative clauses with nonspecific reference are elicitable in frames like that in (357b).
$\begin{array}{lllllll}\text { a. } & \begin{array}{lll}\text { nò: } \\ \text { person }\end{array} & \begin{array}{l}\text { gŭ: } \\ \text { elephant }\end{array} & \begin{array}{l}\text { wè: } \\ \text { see }\end{array} & \begin{array}{l}\text { ì }\end{array} & \text { ExpPrf } & \text { have.Ppl }\end{array} \begin{aligned} & \text { Def }\end{aligned}$ 'the person who has (once) seen an elephant'
b. [nò: ${ }^{\mathrm{L}}$ gǔ:ク wè: tì jó] dènnè:-bù-n] [person ${ }^{\mathrm{L}}$ elephant see ExpPrf have.Ppl] look.for-Ipfv-1SgSbj 'I'm looking for someone who has (once) seen an elephant.'

### 14.2 Internal head NP

### 14.2.1 Tone-dropping on final word(s) of head NP in relative clause

The maximal form of the internal head is Poss-N-Adj-Num or, with a postnominal possessor, N-Adj-Num-Poss. If a preposed possessor or an adjective is present, the noun has already been subject to a tonosyntactic $\{\mathrm{L}\}$ overlay. The relative clause, as a "higher" (more external) controller, effectively erases all prior tonosyntactic activity and imposes $\{\mathrm{L}\}$ on the N-AdjNum sequence. This is clear when no preposed possessor is present (358a,c). When there is a preposed possessor (358b), either the possessor or the relative clause would suffice to account
for the $\{\mathrm{L}\}$ overlay, so there is no overt change. This is indicated by doubling the ${ }^{\mathrm{L}}$ superscript, once on each edge of the tone-dropped domain.

$$
\begin{equation*}
\text { independent } \quad \text { as relative head } \tag{358}
\end{equation*}
$$

a. unpossessed

N
$\mathrm{N}^{\mathrm{L}}$ Adj
N Num
$\mathrm{N}^{\mathrm{L}}$ Adj Num
$\mathrm{N}^{\mathrm{L}}$
[ N Adj] ${ }^{\mathrm{L}}$
[N Num] ${ }^{\text {L }}$
[ N Adj Num] ${ }^{\text {L }}$
b. prenominal possessor

| $\operatorname{Poss}{ }^{\mathrm{L}} \mathrm{N}$ | $\operatorname{Poss}{ }^{\mathrm{L}} \mathrm{N}^{\mathrm{L}}$ |
| :--- | :--- |
| $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N}$ Adj $]$ | $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N} \text { Adj }]^{\mathrm{L}}$ |
| $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N}$ Num $]$ | $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N} \text { Num }]^{\mathrm{L}}$ |
| $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N}$ Adj Num $]$ | $\operatorname{Poss}{ }^{\mathrm{L}}[\mathrm{N} \text { Adj Num }]^{\mathrm{L}}$ |

c. postnominal possessor

| N Poss | $\left[\right.$ N Poss $^{\mathrm{L}}$ |
| :--- | :--- |
| $\mathrm{N}^{\mathrm{L}}$ Adj Poss | $[\mathrm{N} \text { Adj Poss }]^{\mathrm{L}}$ |
| N Num Poss | $[\mathrm{N} \text { Num Poss }]^{\mathrm{L}}$ |
| $\mathrm{N}^{\mathrm{L}}$ Adj Num Poss | $[\mathrm{N} \text { Adj Num Poss }]^{\mathrm{L}}$ |

Examples are in (359). Stems within the NP are ínà: 'goat', pílà- $\eta$ 'white', and kúlè: ' 6 '. The preposed possessor in (359b) is the man's name Seydou. Postnominal possessors like 2 Sg ò-ŋ̀ are already L-toned so they are vacuously affected by tone-dropping (359c).
independent as relative head
a. unpossessed
ínà:
ìnà: ${ }^{\text {L }}$
ìnà: ${ }^{\text {L }}$ pílà-ŋ
[ìnà: pìlà-n] ${ }^{\text {L }}$
ínà: kúlè:
ìnà: ${ }^{\text {L }}$ pílà- $\eta$ kúlè:
[ìnà: kùlè:] ${ }^{\text {L }}$
[ìnà: pìlà- $\eta$ kùlè:] ${ }^{\text {L }}$
b. prenominal possessor
sé:dù ${ }^{\mathrm{L}}$ ìnà: $\quad$ sé:dù ${ }^{\mathrm{L}}$ ìnà: ${ }^{\mathrm{L}}$
sé:dù ${ }^{\mathrm{L}}$ [ìnà: pìlà-n] sé:dù ${ }^{\mathrm{L}}$ [ìnà: pì̀à- $\left.\eta\right]^{\mathrm{L}}$
sé:dù ${ }^{\mathrm{L}}$ [ìnà: kùlè:] sé:dù ${ }^{\mathrm{L}}$ [ìnà: kùlè:] ${ }^{\mathrm{L}}$
sé:dù ${ }^{\mathrm{L}}$ [ìnà: pì̀à- $\eta$ kùlè:] sé:dù ${ }^{\mathrm{L}}$ [ìnà: pìlà- $\eta$ kùlè:] ${ }^{\mathrm{L}}$
c. postnominal possessor
ínà: ò-ŋ̀
ìnà: ${ }^{\text {L }}$ pílà ò-ŋ̀
[ìnà: ò $-\grave{\eta}]^{\mathrm{L}}$
ínà: kúlè: ò-ŋ̀
[ìnà: pìlà ò-ŋ̀] ${ }^{\mathrm{L}}$
ìnà: ${ }^{\text {L }}$ pílà-ŋ kúlè:
[ìnà: pìlà- $\eta$ kùlè: ò-ŋ̀̀ ${ }^{\mathrm{L}}$

### 14.2.2 Restrictions on the head of a relative clause

The head NP may be in any grammatical relation within the relative clause: subject, object, possessor, complement of postposition. See §14.7.1-4 for examples organized by grammatical relation.

A pronoun may not be the internal head. A pronoun may, however, be in apposition to a headless relative clause (360). The pronoun is outside the relative and has its lexical tones. In (360b), the resumptive 3 Sg subject pronoun coindexed with Seydou shows that the relative clause restarts after the external 1Pl pronoun, even though 'Seydou' is logically internal to that clause. This bracketing mismatch is avoided by adding an explicit internal head noun 'people', effectively resuming the external pronoun, as in (360c).
$\begin{array}{llllll}\text { a. } 1 \text { í } & \text { [[pòrò } & \text { lá:] } & \text { bò } & \text { j̀gì } & \text { yà:] } \\ & 1 \mathrm{Pl} & {[[\text { village }} & \text { Loc] } & \text { be.Ppl } & \text { Def }\end{array}$ [Lvillage Loc]
'we who are in the village'
$\begin{array}{llllll}\text { b. sé:dù í } & \text { [nà } & { }^{\mathrm{HL}} \text { wó: } & \text { Ǿgì } & \text { yà:] }\end{array}$
$\mathrm{S} \quad 1 \mathrm{Pl} \quad\left[3 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}\right.$ see.Pfv.Ppl Def Pl$]$
'we who(m) Seydou saw'
$\begin{array}{llllll}\text { c. } & \text { í } & {[\text { sé:dù }} & \text { nò-wè }{ }^{\mathrm{L}} & \text { wó: } & \text { j̀gì } \\ & 1 \mathrm{Pl} & {[\mathrm{S}} & \text { person- } \mathrm{Pl}^{\mathrm{L}} & \text { see } \mathrm{Pfv} \mathrm{Ppl} & \mathrm{Def}\end{array}$
'we the people who(m) Seydou saw'
'we the people who(m) Seydou saw'

### 14.2.3 Conjoined NP as head

(361a) is a main clause with a conjoined NP as subject and 3 Pl subject agreement on the verb. (361b) converts this into a subject relative.
a. [[gòlò:-gǒl yàn] [gìrìn-gǐr yàn]]
[[farmer and] [herder and]]
já:1-ì:-yà
fight-MP.Pfv-3P1Sbj
'A farmer and a herder fought.'


My assistant pronounced the entire conjoined subject NP in (361b) with L-tones. For him, the relative-controlled $\{\mathrm{L}\}$ applies to the entire conjoined NP and is not blocked by any of the latter's internal tonal or intonational features. This is unlike the case in Jamsay, for example.

### 14.2.4 Headless relative clause

Headless subject relatives have already been illustrated above, as in 'we who are in the village' phrased as 'we, (those/the people) who are in the village' with covert internal head, see (360a) in §14.2.2 above. A headless object relative, with understood but covert 'thing' as head, is (362).

| Io | námà | 亠̀] | o-n | $b \varepsilon ́ l-m e ̀-n n u ́-\varnothing ~$ |
| :---: | :---: | :---: | :---: | :---: |
| [2SgSbj | want.Ppl | Def] | here | get-Pass-IpfvNeg-3SgSbj |
| 'What y | -Sg wan | n't | ailab |  |

Headless nonsubject relatives (with a pronominal-subject proclitic) are commonly used in narrative where ordinary main clauses would be usual in English. One can posit a covert head such as 'time', making the headless relative a kind of 'when' clause. DD narrative passages therefore intersperse headless nonsubject relatives and regular perfective-aspect main clauses, in addition to various other subordinated clauses.

For example, in the animal tale that begins with 'all the wild animals assembled' in text T01, the clauses containing bè ${ }^{\mathrm{HL}}$ mómb-ỳ̀: 'they assembled' ( $08: 27$ ), bè ${ }^{\mathrm{HL}}$ pégò: 'they nailed' (08:34), and nà ${ }^{\mathrm{HL}}$ núp̀̀: 'he went in’ ( $08: 37$ ) are headless relatives that introduce new events.

Similarly, the first segment of text T02 (at 00:00) contains two headless relatives of this type, both with verb ${ }^{\mathrm{HL}}$ méǹ̀: 'come'. The second segment ( $00: 11$ ) includes one, with verb wúlj: 'look'. The third segment $(00: 16)$ has two more with ${ }^{\text {HL }}$ ménò: and one with ${ }^{\text {HL }}$ pégò: 'implant'. Many other examples occur throughout the texts.

### 14.2.5 Head noun seemingly doubled after relative clause

The head noun (without modifiers) is seemingly repeated in $\{\mathrm{L}\}$-toned form following the relative clause proper in certain combinations. This happens with 'day' (363a) as head in an adverbial relative, but not with other temporal nouns (363b).

> a. [dèn ${ }^{\mathrm{L}}$ ò ${ }^{\mathrm{HL}}$ ménò: ì $]$ dènà: [day ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ come.Pfv.Ppl Def] day '(on) the day (when) you-Sg came' (děn 'day')
b. [wè ${ }^{\mathrm{L}}$ / wà: $\mathrm{r}^{\mathrm{L}} /$ wò̀:-g $^{\mathrm{L}}$ ò ${ }^{\mathrm{HL}}$ ménò: j̀gì] yàn [year ${ }^{\mathrm{L}} /$ time $^{\mathrm{L}} /$ month $^{\mathrm{L}} 2 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ come.Pfv.Ppl Def] during
'(in/at) the year / the time (when) you-Sg came'
However, dènà: in (363a) may be better analysed as a 'day'-specific postposition (§8.1.3), parallel to yàn 'during' ( $(8.1 .3$ ) in (363b), rather than as a "possessed" doubled head. This is because dènà:, like yàg, occurs in relatives that function adverbially, but not in those that function as arguments (subject, object). For example, in contexts like 'I have forgotten [the day when you came', (363a) reduces to [dèn ${ }^{\mathrm{L}}$ ò ${ }^{\mathrm{HL}}$ méǹ̀: ŋ̀], just as (363b) with 'year'


Further examples of temporal adverbial relatives involving final dènà: and yày are in §15.2.1.

### 14.3 Preparticipial subject pronoun in non-subject relative

In a non-subject relative such as an object relative, if the subject is pronominal it is expressed by an L-toned preverbal proclitic that is identical segmentally to the corresponding independent pronoun (364a). There is no required resumptive third person pronoun if the subject is overtly expressed as a nonpronominal NP, as in (364b) and in textual examples like [túbà:gì yà:] mènó: ì '(the time) when the whites came' (T01 02:33).

b. sé:dù pèsgè èbó: ì

S sheep ${ }^{\text {L }}$ buy.Pfv.Ppl Def
'the sheep-Sg that Seydou bought.'

L-toned subject proclitics impose an $\{\mathrm{HL}\}$ overlay on the following word. This accounts for the different tones of the participle in (364a) and (364b). Historically the proclitic may have been H-toned, and the H-tone ended up shifting onto the following word, but there are arguments against a synchronic process of this type. See §3.7.4.4 for discussion. In this chapter, but usually not in texts, the ${ }^{\mathrm{HL}}$ superscript is used to index the $\{\mathrm{HL}\}$ overlay.

In a direct verb chain, the proclitic subject pronoun occurs directly before the final inflected verb. (365) is based on indicative bàgé sígè- $\varnothing$ 'he/she fell and descended' = 'fell down', with the nonfinal verb in bare-stem form. The subject pronominal nà follows 'fall' and immediately precedes 'descended'.

| dèn | bàgé | nà | ${ }^{\text {HL }}$ sígò: | ì |
| :--- | :--- | :--- | :--- | :--- |
| day | fall | 3SgSbj | ${ }^{\mathrm{HL}}$ descend.Pfv.Ppl | Def |
| 'the day | when | he/she fell down |  |  |

The position of the subject proclitic can be used to test whether or not apparently periphrastic aspect-negation constructions are treated synchronically as verb chains, i.e. with auxiliaries that still have a verb-like character. The data show that 'have' is in fact treated as a chainfinal verb in the progressive construction, so the subject pronoun immediately precedes it (366a). However, in the experiential perfect (366b) the subject pronominal may precede either the main verb or tì in simple object relatives ( $366 \mathrm{~b}-\mathrm{c}$ ), and it tends to precede the main verb when there are other preverbal constituents in addition to the head NP (366e). In the recent perfect, the subject proclitic also precedes the main verb.

These details suggest that 'have' is more tightly bound to the verb in the perfect constructions than in the progressive. The two also diverge in that the progressive has the regular stative 'they have' segmental form for 3 Pl subject in the indicative (jò-n), while the two perfects have a distinct form (jó-yyà).

In the future construction, -m̀ bó- likewise behaves as a fused unit, and the proclitic pronoun occurs before the main verb rather than between it and bó- 'be' (366f).

[^2]
'the elephant that I have (once) seen'
c. gù: $\eta^{\mathrm{L}} \quad m i ̀ \quad{ }^{\mathrm{HL}} w \varepsilon ́: ~ t i ̀ ~ j o ̀ ~ i ̀ ~ \grave{~ ̀ ~}$ elephant ${ }^{\mathrm{L}} \mathbf{1 S g S b j}{ }^{\mathrm{HL}}$ see ExpPrf have.Ppl Def [=(b)]
 place ${ }^{\mathrm{L}}$ elephant $\mathbf{1 S g S b j}{ }^{\mathrm{HL}}$ see ExpPrf have.Ppl Def 'the place where I once saw an elephant'
e. gòmbùlờ mì ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ sémbè jò ì courtyard ${ }^{\mathrm{L}} \quad \mathbf{1 S g S b j}{ }^{\mathrm{HL}}$ sweep have.Ppl Def 'the courtyard that I have (now) swept'
f. gòmbùlò ${ }^{\mathrm{L}}$ mì ${ }^{\mathrm{HL}}$ sémbò-m bò ì courtyard ${ }^{\mathrm{L}}$ 1SgSbj ${ }^{\text {HL }}$ sweep-Fut be.Ppl Def 'the courtyard that I will sweep'

### 14.4 Verbal participle in relative clause

Verbs take participial form in relative clauses. There is no pronominal-subject agreement. The form of a participle can vary tonally. In a nonsubject relative, if the subject is an L-toned proclitic pronominal, an H -tone appears on the onset of the participle.

Participles favor stem-final $\left\{\begin{array}{lll}u & 0 & 0\end{array}\right\}$ but allow a where already present in statives. The inflections and quasi-verbs that already end in a back rounded vowel show no change from the conjugatable main-clause verb (e.g. zero 3 Sg subject form) to the participle.

Verb-participles can be followed by determiners, the plural marker, or nonnumeral quantifiers ( $\$ 14.6$ below).

### 14.4.1 Participles of positive perfective-system verbs

### 14.4.1.1 Perfective participle (\{LH\}-toned O-stem)

The perfective participle is the $\{\mathrm{LH}\}$-toned O-stem (bùndó:, kèsó:, etc.). The final syllable (with o: or $0:$ ) gets the H -tone except when this tone pattern is overridden by the $\{\mathrm{HL}\}$ overlay controlled by a pronominal-subject proclitic, such as 1 Sg mì, in nonsubject relatives (§3.7.4.4).

$$
\begin{array}{cccc}
\text { Pfv verb } & \text { subject } \mathrm{Ppl} \quad \begin{array}{c}
\text { nonsubject } \mathrm{Ppl} \\
\text { regular } \quad \text { after } 1 \mathrm{SgSbj}
\end{array} & \text { gloss }
\end{array}
$$

a. bisyllabic or longer

| lexically /LH/ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| búndè- $\varnothing$ | bùndó: | bùndó: mì | ${ }^{\text {HL }}$ búndò: | 'hit' |
| júmbè- $\varnothing$ | jùmbó: | jùmbó: mì | HL júmbò: | 'leave (sth)' |
| dóngè- $\varnothing$ | dòngó: | dòngó; mì | ${ }^{\text {HL }}$ dóngò: | 'pound (grain)' |
| góndù-r-yغ̀- |  | gว̀ndù-r-yô: |  | 'be hung up' |
|  | gòndù-r-yó: mì |  | ${ }^{\text {HL }}$ góndù |  |
| lexically /HL/ |  |  |  |  |
| ह́bè- $\varnothing$ | èbó: | èbó: mì | ${ }^{\mathrm{HL}}$ Ébò: | 'buy' |
| késè- $\varnothing$ | kèsó: | kèsó: mì | ${ }^{\mathrm{HL}}$ kés${ }^{\text {a }}$ | 'cut' |
| kígìl-yè- $\varnothing$ | kìgìl-yó: | kìgìl-yó: mì | ${ }^{\text {HL }}$ kígìl-yò | 'return, go back' |

b. monosyllabic
gê:- $\varnothing \quad$ gǒ: $\quad$ ǒ: $\quad$ mì ${ }^{\mathrm{HL}} g \hat{o ̂}$ : 'exit'
$n \hat{\varepsilon}:-\varnothing$ nǒ: nǒ: mì ${ }^{\mathrm{HL}}$ nô: 'drink'
$d \hat{\varepsilon}:-\varnothing$ dŏ: dǒ: mì ${ }^{\text {HL } d \hat{o}: ~ ' a r r i v e ' ~}$
$w \hat{\varepsilon}:-\varnothing$ wǒ: $\quad$ ǒ: $\quad$ mì ${ }^{\mathrm{HL}}{ }_{W}$.
$\sim W \varepsilon ̌: \quad \sim W \varepsilon ̌: \quad \sim m i ̀ ~{ }^{\mathrm{HL}}{ }_{W \hat{\varepsilon}}:$

Reduplication is not allowed in participles.
The $\Omega / \varepsilon$ variation in participles of 'see', the last verb in (367), is a peculiarity of this verb. Another quirk of 'see' is that it optionally avoids ablaut change to wà:- in the experiential perfect.

An $\{\mathrm{HL}\}$-toned form, identical to the perfective participle following 1 Sg mì in (367), is part of one of the two recent perfect constructions (§10.2.1.6).

In T01 at $02: 14$, a perfective participle seemingly has $\{\mathrm{HL}\}$ for expected $\{\mathrm{LH}\}$ tones in spite of the absence of a preceding proclitic pronoun. The sequence yà ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ júmbò: was initially interpreted as 'the place (i.e. village) that left (it)', i.e. as a subject relative with 'place' in the sense 'village (including villagers)'. The tones are incorrect for this reading, which elsewhere results in $\ldots$ yà $l^{\mathrm{L}}$ jùmbó: 'the place that $\ldots$ left'. The tones are, however, correct for yà $l^{\mathrm{L}}$ bè ${ }^{\mathrm{HL}}$ júmbò: 'the place where they left (it)', a nonsubject relative with an overt 3 Pl subject pronoun. This translation would also make good sense in context, since the speaker's point is that inhabitants of the 'place' collectively abandoned certain customs. So even if we cannot posit an underlying bè that affects the tones of the participle and then conveniently deletes, we must recognize that the tones of the nonsubject relative version have spread to the observed version.

### 14.4.1.2 Experiential perfect participle

The experiential perfect participle is the participle of the final 'have' auxiliary.

| ànà | $g u ̌: \eta$ | $w \varepsilon ̀: ~$ | $t i ̀$ | $j o ́$ | 方 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\operatorname{man}^{\mathrm{L}}$ | elephant | see | ExpPrf | have.Ppl | Def |

'the man who has (once) seen an elephant'

A subject pronominal proclitic may precede tì, which then becomes tí. The H-tone here is the monomoraic reduction of the full $\{\mathrm{HL}\}$ overlay imposed by these proclitics on heavier verbs. Alternatively, the pronominal may precede the main verb. See (366b-c) in § 14.3 above for the two ordering possibilities.

### 14.4.1.3 Recent perfect participle

The participle of the final 'have' is used, as with the experiential perfect.
(369) ànà-wè ${ }^{\mathrm{L}}$ mí=ỳ bùndè jó ngì yà:
man- $\mathrm{Pl}^{\mathrm{L}} \quad 1 \mathrm{Sg}=$ Acc hit have.Ppl Def Pl
'the men who has hit-Past me.'
A subject pronominal precedes the main verb, see (366e) in $\S 14.3$ above.

### 14.4.2 Participles of positive imperfective-system verbs

### 14.4.2.1 Imperfective participle

The imperfective participle is closely related to the main-clause counterpart. It usually appears in definite form, as -bù $\grave{\eta}$. Since the imperfective stem already has initial H-tone, the presence of a subject proclitic does not overtly affect the tones of the participle.
(370) Imperfective participles

$$
\begin{array}{cccc}
\text { verb } & \text { subject } \mathrm{Ppl} & \begin{array}{c}
\text { nonsubject } \mathrm{Ppl} \\
\text { regular }
\end{array} \text { after } 1 \mathrm{SgSbj} & \text { gloss }
\end{array}
$$

a. lexically /LH/
búndè:-b- $\varnothing$ búndè:-b(ì) búndè:-b(ì) mì HL búndè:-b(ù) 'hit'
b. lexically /HL/


As elsewhere, reduplication is not allowed in participles.

### 14.4.2.2 Progressive participle

The participle of the final 'have' element is used, as in the perfects.

| yà: ${ }^{\text {L }}$ <br> woman$\quad$ sémbè-là: | sweep-Prog | jò | have.Ppl |
| :--- | :---: | :--- | :--- |
| 'the woman who is sweeping' |  |  |  |

A proclitic subject pronominal appears directly before jó, see (366a) in §14.3 above.

### 14.4.2.3 Future participle

The future construction with m̀ bó- (arguably a fused suffixal m̀bó-) uses the participle of the final bó- 'be'.

| ànà bólı̀̀m̀ <br> man $^{\mathrm{L}}$ go-Fut <br> 'the man who will go'  | bó | be.Ppl | Def |
| :--- | :--- | :--- | :--- |
| Def |  |  |  |

If a proclitic subject pronominal is present, it precedes the main verb. See (366f) in §14.3 above.

### 14.4.3 Participles of negative perfective-system verbs

### 14.4.3.1 Perfective negative participle

The participle is based on $-1(u$ ú) or $-l(\hat{u})$, dialectally with $i$ rather than $u$.
(373) Perfective negative participles
$\begin{array}{lll}\text { verb } \quad \text { subject } \mathrm{Ppl} & \begin{array}{c}\text { nonsubject } \mathrm{Ppl} \\ \text { regular } \\ \text { after 1SgSbj }\end{array} & \text { gloss }\end{array}$
a. lexically /LH/
bùndà:-lv́- bùndà:-lú bùndà:-lú mì ${ }^{\text {HL }}$ búndà:-lù 'hit'
b. lexically / HL/
kèsà:-lv́- kèsà:-lú kèsà:-lú mì ${ }^{\text {HL } k e ́ s a ̀:-l u ̀ ~ ' c u t ' ~}$
The suffixal vowel is audible in the very common definite and other determined forms. The 'it is' form is $-l i ́=y$. In the occasional undetermined form we get just -1 due to apocope. In this case the suffixal H - or L-tone is realized on the preceding syllable, giving bùndă:-l and kèsă:-1.

### 14.4.3.2 Experiential perfect negative participle

The experiential perfect negative with tá:-lỳ (§10.2.3.2) retains its form and tones in participial function.
(374) ànà ${ }^{\text {L }}$ gǔ:ク wà: tá:-lù ì
man $^{\mathrm{L}}$ elephant see ExpPrf-PfvNeg.Ppl Def
'the man who had never seen an elephant'

### 14.4.3.3 Recent perfect negative participle

The recent perfect negative with jò-nnú- undergoes no segmental or tonal changes in the corresponding participle.
(375) ànà ${ }^{\mathrm{L}}$ sध́mbé jò-nnú ì
man sweep have-Neg.Ppl Def
'the man who has not swept'
14.4.4 Participles of negative imperfective-system verbs

### 14.4.4.1 Imperfective negative participle

The imperfective negative uses its regular main-clause form, including the HLH tone pattern, as the basis for the participle.
(376) Imperfective negative participles
$\begin{array}{cccc}\text { verb } & \text { subject } \mathrm{Ppl} & \begin{array}{c}\text { nonsubject } \mathrm{Ppl} \\ \text { regular }\end{array} \text { after } 1 \mathrm{SgSbj} & \text { gloss }\end{array}$
a. lexically /LH/
búndè-nnú- búndè-nnú búndè-nnú mì ${ }^{\text {HL }}$ búndè-nnù 'hit'
b. lexically /HL/ késè-nnú- késè-nnú késè-nnú mì ${ }^{\mathrm{HL}}$ késè-nnù 'cut'

### 14.4.4.2 Progressive negative participle

The progressive negative with -là: jò-nnú is used without change as the participle.

$$
\begin{array}{llll}
\text { yà: }^{\mathrm{L}} & \text { sémbè-là: } & \text { jò-nnú } & \text { !̀ }  \tag{377}\\
\text { woman } & \text { sweep-Ipfv } & \text { have-Neg.Ppl } & \text { Def } \\
\text { 'the woman who is not sweeping.' } &
\end{array}
$$

### 14.4.4.3 Future negative participle

The future negative in -ń bò-nnú- after $\{\mathrm{LH}\}$-toned O-stem undergoes no changes in the participle.
(378) ànà ${ }^{\mathrm{L}}$ sèmbó-ḿn bò-nnú ì $\operatorname{man}^{\text {L }}$ sweep-Fut be-Neg.Ppl Def
'the man who will not sweep.'

### 14.4.5 Participles of statives

### 14.4.5.1 Stative (positive) participle

Examples of participles from statives that are derived from active verbs are in (379). The existential particle yé that may accompany main-clause statives is absent from relatives.

Reduplication is also disallowed. Since the participle is already HL-toned, the $\{\mathrm{HL}\}$ overlay associated with subject pronominals has no overt effect.

Stative positive participles

| main clause | subject Ppl nonsubject Ppl | gloss |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | regular | after 1 SgSbj |  |
| ò-Róbò-, yè óbò- | óbò | óbò | mì |  |

Participles from underived statives (quasi-verbs) are in (380). Again, the existential particle is not allowed in relatives.
(380)

| quasi-verb | subject Ppl | nonsubject Ppl |  | gloss |
| :---: | :---: | :---: | :---: | :---: |
|  |  | regular | 1 SgSbj |  |
| yè bó, bò | bó | bó |  | 'be (somewhere)' |
| yè jó, jò | jó | jó |  | 'have' |
| yè tígà | tígà | tígà | mì ${ }^{\mathrm{HL}}$ tígà | 'know' |
| yè námà | námà | námà | mì ${ }^{\text {HL }}$ námà | 'want' |
| yè íbà | íbà | íbà | $m i ̀ ~ H L ~ i ́ b a ̀ ~$ | 'want' |

### 14.4.5.2 Stative negative participle

The forms of participles of derived stative negatives are in (381). Combinations like mì ${ }^{\text {HL }}$ óbò-nnù are further evidence that the pronominal-subject proclitic imposes a word-level $\{\mathrm{HL}\}$ contour, rather than just adding a floating H to the left edge of the participle, which would have resulted in \#mì ${ }^{\mathrm{HL}}$ óbò-nnú preserving the final H -tone (§3.7.4.4).
(381) Stative negative participles

| verb | subject Ppl | nonsubject Ppl |  | gloss |
| :--- | :--- | :--- | :--- | :--- |
|  |  | regular | after 1 SgSbj |  |
| òbò-nnú- | òbò-nnú | òbò-nnú | mì ${ }^{\mathrm{HL}}$ óbò-nnù | 'not be seated' |
| bìyò-nnú- | bìyò-nnú | bìyò-nnú | mì ${ }^{\text {HL }}$ bíyò-nnù | 'not be lying down' |

Negative stative quasi-verb participles are in (382).

| quasi-verb | subject Ppl | nonsubject Ppl |  | gloss |
| :--- | :--- | :--- | :--- | :--- |
|  |  | regular | after 1 SgSbj |  |
| bò-nnú | bò-nnú | bò-nnú | mì HL bó-nnù | 'not be (sw) |
| jò-nnú | jò-nnú | jò-nnú | mì ${ }^{\text {HL }}$ jó-nnù | 'not have' |
| ínnù | ínnù | ínnù | mì HL innnù | 'not know' |
| nàmà-nnú | nàmà-nnú | nàmà-nnú | mì HL námà-nnù | 'not want' |
| ibà-nnú | ibà-nnú | ibà-nnú | mì HL íbà-nnù | 'not want' |

14.4.6 Participle of past clitic $=$ bíyè- $\sim=$ bìyè-

### 14.4.6.1 Participle of positive past forms

For positive main clauses, conjugated past clitic $=$ bíyغ̀- $\sim=$ bìyè- is used participially with at most a tonal change (383). Reduplication is not allowed (this is relevant to statives).
(383) Participle of past clitic (positive)

| Past ... | main-clause | participle |
| :---: | :---: | :---: |
| ... progressive <br> ... future <br> ... perfect <br> ... experiential perfect <br> ... recent perfect <br> ... stative | Vb-là: bíyè- <br> Vb-m̆ bíyè- <br> $\mathrm{Vb}=$ bíyè- <br> $\mathrm{Vb}-t i ̀ ~ j o ́=b i ̀ y e ̀ ~$ <br> Vb jó = bìyè- <br> $\mathrm{Rdp}-\mathrm{Vb}=$ bíyè- | Vb-là: bìyò: <br> Vb-m bìyò: <br> $\mathrm{Vb}=$ bíyò: <br> $\mathrm{Vb}-t i ̀ ~ j o ́=b i ̀ y \grave{~}:$ <br> Vb jó = bìỳ̀: <br> $\mathrm{Vb}=$ bìỳ̀: |

If a proclitic subject pronominal is present, it occurs in the same position as in the corresponding nonpast participles.

### 14.4.6.2 Participle of negative past forms

Negative past forms have the main-clause and participial forms in (384). The difference in main clauses between inflectional categories that morphologically negate the past clitic, and those that negate the inner AN-marked verb and have a "positive" past clitic, is respected in the participles.
(384) Participle of past clitic (negative)
category main-clause participle
Past $\ldots$
a. with bìyà:-lv́- (negated past clitic)

| .. progressive | -là: bìyà:-1v́- | -là: bìyà::-1(ú) |
| :--- | :--- | :--- |
| .. future | -ì bìyà:-lv́- | -ì bìyà:-l(ú) |

b. with bìyò ("positive" past clitic following negated inner verb)
... perfect
(á:) $-1=b i ̀ y e ̀$
(á:)-1 = bìyò:
... experiential perfect
tá:- $1=$ bìyè
tá:-1 = bìyò:

### 14.5 Relative clause involving verb- or VP-chain

### 14.5.1 Direct chains

In a relative clause involving a direct verb chain (§15.1), the nonfinal verb has the same form as in the corresponding nonrelative clause. Only the final verb is modified, becoming a
participle in the usual way. In a nonsubject relative, if the subject is expressed by a proclitic pronoun, the pronoun immediately precedes the final participle.
(385a) is a simple perfective example; its relative-clause counterpart is (385b). In both, bàgé 'fall' occurs in its bare stem form (etymologically the E-stem), as usual in verb chains.
a. bàgé sìgé- $\eta$
fall go.down.Pfv-1 SgSbj
'I fell (all the way) down.'
$\begin{array}{lllll}\text { b. } & \begin{array}{lll}\text { dèn }{ }^{\mathrm{L}} & \text { bàgé } & \text { mì }\end{array} \quad{ }^{\mathrm{HL}} \text { Sígò: } & \eta] \\ {\left[\begin{array}{llll}\text { day } & \text { fall } & 1 \mathrm{SgSbj} & { }^{\mathrm{HL}} \text { descend.Pfv.Ppl }\end{array}\right.} & \mathrm{Def}]\end{array}$
The situation is parallel with imperfective (386a) denoting a future event, ands its relativeclause counterpart (386b).
a. bàgé sígè:-bù- $\eta$
fall descend-Ipfv-1SgSbj
'I will fall (all the way) down.'
b. dèn ${ }^{\mathrm{L}}$ bàgé mì ${ }^{\text {HL }}$ sígè:-b
day ${ }^{\mathrm{L}} \quad$ fall $1 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ descend-Ipfv.Ppl
'on the day when I will fall (all the way) down'

### 14.5.2 Relative clauses with 'bring' and 'convey'

As noted in §10.1.2.5-6, although both 'bring' and 'convey, take (there)' are etymologically composite (*'take and come', *'take and go', respectively), 'bring' now behaves as an unsegmentable $C v C V$ verb while 'convey' still has a partially bipartite paradigm. The difference between the two is borne out in relative clauses. (387a) is based on 'bring', (387b) on 'convey'. The 1 Sg subject pronominal mì precedes the fused 'bring' (387a), but it is interposed between the components 'take' and 'go' in the case of 'convey' (387b).
$\begin{array}{llll}\text { a. nà:g }{ }^{\mathrm{L}} & \text { mì } & { }^{\text {HL }} \text { jínò: } & \text { ŋ̀ } \\ \text { cow }^{\mathrm{L}} & 1 \mathrm{SgSbj} & { }^{\text {HL }} \text { bring.Pfv.Ppl } & \text { Def }\end{array}$
'the cow that I brought'
b. nà: $g^{\mathrm{L}} \quad j \varepsilon ́ \quad$ mì ${ }^{\mathrm{HL}}$ bólò: ì
cow $^{\mathrm{L}}$ take $1 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ go.Pfv.Ppl Def
'the cow that I conveyed (there)'

### 14.6 Late-NP elements that follow the verb (or verbal participle)

### 14.6.1 Determiners (demonstrative and definite)

Most relative clauses include the simple definite marker ì or its plural ngì yà: after the participle. Numerous examples occur throughout this chapter.

Demonstratives may also follow the participle. Since demonstratives (unlike the definite marker) control tone-lowering on a preceding word, the participle itself drops its tones. This overrides the normal rule that a proclitic subject pronoun induces an H -tone on the onset of the participle.
(388a) is definite. (388b) has the proximate demonstrative and shows the tone-dropped participle; the double strikethrough on the HL superscript indicates that the $\{\mathrm{HL}\}$ overlay is canceled. Further examples with the demonstrative are (388c-d).

'the man who(m) you-Sg see'
b. ànà ${ }^{\mathrm{L}} \quad \grave{o} \quad{ }^{\text {\# }} W \grave{\text { a }}$ :-bù ${ }^{\mathrm{L}}$ ìgú
$\operatorname{man}^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad{ }^{\mathrm{m}_{\text {see-Ipfv.Ppl }}{ }^{\mathrm{L}} \quad \text { Prox }}$
'this man who(m) you-Sg see'
c. ànà ${ }^{\mathrm{L}}$ sé:dù wò: ${ }^{\mathrm{L}}$ ìgú
$\operatorname{man}^{\mathrm{L}} \quad \mathrm{S} \quad$ see.Pfv.Ppl ${ }^{\mathrm{L}} \quad$ Prox
'this man who(m) Seydou saw'

$\operatorname{man}^{\mathrm{L}} \quad$ go.PfvNeg.Ppl ${ }^{\mathrm{L}} \quad$ Prox
'this man who did not go'
Examples (388b-d) above have a simple verb stem plus (participialized) simple AN inflection, so the verb stem is included in the target domain of tone-dropping. In periphrastic inflections, the main verb (bolded in the following examples) retains its H -tone(s) if it has any, while the auxiliary is tone-dropped. The issue is moot for periphrastic inflections where the main verb is already tone-dropped or simply has no H -tones.

'this elephant that Seydou once saw'
b. yà: sémbè-là: $\quad j{ }^{\mathrm{L}} \quad$ ${ }^{\mathrm{L}} \quad$ ggú
woman sweep-Prog have.Ppl ${ }^{L}$ Prox
'this woman who is sweeping'
c. ànà ${ }^{\mathrm{L}}$ sèmbó-ḿ $\quad$ bò-nnù ${ }^{\mathrm{L}} \quad$ j̀gú
man ${ }^{\text {L }}$ sweep-Fut be-Neg.Ppl ${ }^{\text {L }}$ Prox
'this man who will not sweep'
Verb stems immediately followed by conjugated past clitic =bìyè are, however, included in the target domain for tone-dropping. This applies in theory to the past perfect, the past stative, and the past future (future-in-past).

The past perfect positive already has an $\{\mathrm{L}\}$-toned main verb stem so it cannot show the effects of further tone-dropping. However, the past perfect negative, e.g. sèmbá:-l=bìyè- $\varnothing$ 'he/she had not swept', has an H-toned á: which is dropped to à: in the relative-clause counterpart (390). Brackets are added in (390) to demarcate the tonosyntactic target domain.

```
ànà }\mp@subsup{}{}{\textrm{L}}\quad[\mathrm{ [ṡmbà:-1 = bìyò:]}\mp@subsup{}{}{\textrm{L}}\quad\mathrm{ !̀gú
man }\mp@subsup{}{}{\textrm{L}}\quad[\mathrm{ sweep-PfvNeg=Past.Ppl]}\mp@subsup{]}{}{\textrm{L}}\quad\mathrm{ Prox
```

'this man who had not swept'

The past stative also shows the tone-dropping. Compare (reduplicated) ò-?óbò=bìyè- $\varnothing$ 'he/she was sitting' with the relative clause in (391).

$$
\begin{array}{lll}
\text { ànà }^{\mathrm{L}} & {[\text { [òbò }=\text { bìyò: }]^{\mathrm{L}}} & \text { ̀̀gú }  \tag{391}\\
\operatorname{man}^{\mathrm{L}} & {[\text { be.seated }=\text { Past.Ppl }]^{\mathrm{L}}} & \text { Prox }
\end{array}
$$

'this man who was seated.'

The past future is treated likewise. Compare sémb̀̀-m=bìyغ̀- $\varnothing$ 'he was going to sweep' with relative-clause (392), which has \{L\}-toned sèmb̀̀-m. Also compare (392) with (389c) above ('this man who will not sweep'), which has sèmbó-ḿ.

```
ànà \({ }^{\mathrm{L}} \quad[\text { sèmbò- } m=\text { bìyò: }]^{\mathrm{L}} \quad\) ŋ̀gú
\(\operatorname{man}^{\text {L }} \quad\left[\right.\) sweep-Fut=Past.Ppl] \({ }^{\mathrm{L}} \quad\) Prox
    'this man who was going to sweep'
```


### 14.6.2 Free plural marker (yà:)

Free plural yà: follows the definite marker, and plural bèlé follows demonstrative stems, when the head NP is plural. This applies whether or not the head noun is already marked with human plural suffix -wè.
a. yà:-wè ${ }^{\mathrm{L}}$ mènó: ŋ́gì yà:
woman $-\mathrm{Pl}^{\mathrm{L}}$ come.Pfv.Ppl Def Pl
'the women who came'
b. dùmbà- $\eta^{\mathrm{L}}$ bàgó: ýgì yà: rock ${ }^{\mathrm{L}}$ fall.Pfv.Ppl Def Pl 'the rocks that fell'
c. ànà-wè ${ }^{\mathrm{L}}$ mènò: ${ }^{\mathrm{L}}$ kò bèlé
man- $\mathrm{Pl}^{\mathrm{L}} \quad$ come.Pfv.Ppl ${ }^{\mathrm{L}}$ Dist $\mathbf{P l}$
'those men who came'

In elicitation involving French cues, my (educated) assistant sometimes added demonstratives (singular and plural) directly to the internal head. I suspect French interference (elicitationese), cf. French cet homme que tu vois etc.

### 14.6.3 Universal quantifier ('all')

The universal quantifier fú: 'all' may occur at the end of the relative construction, after the determiner and plural marker. As usual it has no tonal effect on preceding elements.
a. [nò-wè ${ }^{\mathrm{L}}$ bàgó: f́gì yà: fú:] jòń́-y
[person-P1 ${ }^{\mathrm{L}}$ fall.Pfv.Ppl Def Pl all] treat.Pfv-1P1Sbj
'We have treated (medically) all the people who fell.'
b. ànù-wè ${ }^{\mathrm{L}} \quad \grave{o} \quad{ }^{\#} w e ̀:^{\mathrm{L}}$ kò bèlé fú:
man- $\mathrm{Pl}^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ see-Ipfv.Ppl ${ }^{\mathrm{L}} \quad$ Dist $\quad \mathrm{Pl}$ all
'all those men who(m) you-Sg see'

### 14.7 Grammatical relation of relativized-on NP

### 14.7.1 Subject relative clause

From main clause (395a) we get the subject relative in (395b). From (395c) we get the relative clause in (395d).
a. ě- $g$
yégè- $\varnothing$
child fall.Pfv-3SgSbj
'A/The child fell.' (è-gú)
b. [è- $g^{\mathrm{L}}$ yègó: ì $]$ à ${ }^{\text {á: bò } \varnothing}$
[child-Sg ${ }^{\text {L }}$ fall.Pfv.Ppl Def] where? be-3SgSbj
'Where is the child who fell?'
c. yàlú-g kó júmbè- $\varnothing$
place DiscDef leave.Pfv-3SgSbj
'The place (e.g. village) has abandoned that.'
d. [kó-ŋgù̀ yà ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ júmbò:] yò bó- $\varnothing$
[DiscDef-Poss.Def place ${ }^{\text {L }}{ }^{\text {HL }}$ leave.Pfv.Ppl] Exist be-3SgSbj
'There are places where they have abandoned that' (T01 02:14)
(see discussion at end of §14.4.1.1)
There is a discrepancy in the tones of the participle, which is $\{\mathrm{LH}\}$-toned (395b) and $\{\mathrm{HL}\}$ toned in (395d). Elicited examples were all $\{\mathrm{LH}\}$ like (395b), while (395d) occurred in a text. It appears to be an option when an $\{\mathrm{L}\}$-toned head is immediately preverbal.

With a plural head NP we have (396b) from main clause (396a).
a. [è-wé ngì yà:] yég-yà
[child-Pl Def Pl] fall.Pfv-3P1Sbj
'The children fell.'
b. [è-wè ${ }^{\mathrm{L}}$ yègá: ngì yà:] à yá: bò-n
$\left[\right.$ child-Pl ${ }^{\mathrm{L}}$ fall.Pfv.Ppl Def Pl] where? be-3PlSbj
'Where are the children who fell?'

Further examples of subject relatives are in (397).
a. [yà: ${ }^{\mathrm{L}}$ tìbó: ì] [mì ${ }^{\mathrm{HL}}$ Sá:] $=\grave{y}$ bìyè- $\varnothing$
[woman-Sg ${ }^{\mathrm{L}}$ die.Pfv.Ppl Def] [1 SgPoss ${ }^{\mathrm{HL}}$ sister]=it.is was- 3 SgSbj
'The woman who died was my sister.'
b. [yà:-wè ${ }^{\mathrm{L}}$ tìbó: ggì yà:]
[woman-Pl ${ }^{\mathrm{L}}$ die.Pfv.Ppl Def Pl]
[mì $\quad{ }^{H L}$ sá:-wè] =ỳ bìy-yà
[1SgPoss $\quad{ }^{\mathrm{HL}}$ sister- Pl$]=\mathrm{it}$.is was- 3 PlSbj
'The women who died were my sisters.'
c. [ànà ${ }^{\mathrm{L}}$ [ह́bà: là:] mí=ỳ bùndó: ì]
[man ${ }^{\mathrm{L}}$ [market Loc] $1 \mathrm{Sg}=$ Acc hit.Pfv.Ppl Def]
bólè-Ø
go.Pfv-3SgSbj
'The man who hit me in the market has gone.'
d. [[ànà-wè tà:n] $]^{\mathrm{L}}$ mí=ỳ bùndó: ngì yà:]
[[man-Pl three $]^{\mathrm{L}} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv.Ppl $\left.\operatorname{Def} \mathrm{Pl}\right]$
ból-yà
go.Pfv-3PlSbj
'The three men who hit me have gone.'
e. [pèsgè kùlè:] ${ }^{L}$ bàgó: ngì yà:] ból-yà
$\left[\begin{array}{lllll}\text { sheep } & \text { six }\end{array}\right]^{L}$ fall.Pfv.Ppl Def Pl$] \quad$ go.Pfv-3PlSbj
'The six sheep who fell have gone.'

### 14.7.2 Object relative clause

The object NP that functions as internal relative head is tone-dropped. A pronominal subject is expressed by a proclitic to the participle. Unless there is a pronominal proclitic, which requires $\{\mathrm{HL}\}$ overlay on the following word, the participle has the same form as in subject relatives. The ordering of subject and object NPs is not crucial, as shown by the alternative orders in (398b); what matters is the tone-dropping on the head and the presence or (as in this case) absence of accusative marking on the non-head NP ('Seydou').


Accusative marking, which is optional in main-clause objects ('I hit the boy=Acc'), and in objects in non-object relatives ('the day when I hit the boy=Acc'), cannot be added to an object NP that functions as head of a relative. So in (398a-d) the $\{\mathrm{L}\}$-toned head NP ('sheep', 'child', 'children', and 'sheep', respectively) cannot be marked as accusative. Since the accusative clitic behaves like a postposition, its absence from head NPs is consistent with the omission of basic postpositions (see §14.7.4).

However, the entire relative construction (including postparticipial determiners) is a regular NP, so if it happens to function as object in the higher clause it can be marked as accusative, like 'sheep' in (398d).

A specialized variant of object relative, with 3Pl subject suffix $-n$ on the verb rather than a pronominal proclitic, is used in function-specifying NPs like 'drinking water' (= "water that they drink"), see §5.1.12.

### 14.7.3 Possessor relative clause

In a main clause, a nonpronominal possessor precedes, and controls tone-dropping on, the possessum (399a,c). In a corresponding relative in which the possessor is the head, both the possessor and possessum are tone-dropped (399b,d).
a.

| [ $\left[\right.$ nò ${ }^{\text {L }}$ | ngú] | ${ }^{\text {L }}$ mboù-n] |
| :---: | :---: | :---: |
| [[person ${ }^{\text {L }}$ | Prox] | ${ }^{\text {L house] }}$ |

'This person's house fell (collapsed).'
b. [[nò: $\left.{ }^{\mathrm{L}} \quad{ }^{\mathrm{L}} \grave{m} b \grave{\mathrm{~h}}-\eta^{\mathrm{L}}\right]$ bàgó: $̀$ ̀̀ $]$
[[person ${ }^{\mathrm{L}}$ house $\left.^{\mathrm{L}}\right]$ fall.Pfv.Ppl Def]
ménè- $\varnothing$
come.Pfv-3SgSbj
'The person whose house fell has come.'
bágè- $\varnothing$
fall.Pfv-3SgSbj
c. [[ànà ${ }^{\mathrm{L}}$ ŋ̀gú] ${ }^{\mathrm{L}}$ èg] jímè:-b- $\varnothing$ [[man ${ }^{\mathrm{L}}$ NearDist] ${ }^{\mathrm{L}}$ child] get.sick-Ipfv-3SgSbj
'This man's child is sick.'
d. [[ànà $\left.{ }^{\mathrm{L}}{ }^{\mathrm{L}}{ }^{\mathrm{e}} \mathrm{g}^{\mathrm{L}}\right]$ jímè:-bù ̀̀̀] ménè $-\varnothing$
$\left[\left[\operatorname{man}^{\mathrm{L}} \quad{ }^{\mathrm{L}}\right.\right.$ child $\left.{ }^{\mathrm{L}}\right]$ get.sick-Ipfv.Ppl Def] come.Pfv-3SgSbj
'The man whose child is sick has come.'

Clearly the possessor is tone-dropped by virtue of being relative head, since possessors are not tone-dropped when the possessum is the relative head. However, the reason for the tonedropping of the possessum in (399b,d) is ambiguous. It could be $\{L\}$-toned because the possessor-cum-head-NP is still able to control tone-dropping on the possessum. Or it could be that the relative clause extends its tonosyntactic target domain to include the entire NP, including the possessum (compare pied-piping of adpositions in English). In either case, we
would expect the possessor and possessum to be obligatorily adjacent. This is in fact the case; my assistant rejected versions of (399b,d) with an adverb separating the two. Because either analysis of why the possessum is tone-dropped would account for the data, I hedge by putting the ${ }^{\text {L }}$ superscript on both sides of the possessum in (399b,d).

### 14.7.4 Relativization on the complement of a postposition

It was observed in §14.7.2 above that object relatives do not allow an overt accusative clitic in the head NP. The same is the case with basic postpositions, notably simple locatives (la:, ni:) and instrumental-comitative yà ${ }^{n} \sim$ yày. Such postpositions, like accusative $=\grave{y}$, are simply omitted when their complement NP is the head.

In (400a), the simple locative nì: is regular. It is absent from (400b).
a. [[pòrò ${ }^{\mathrm{L}} \quad \check{ }$ ǒg] nì:] gě:- $\eta$ [[village Prox] Loc] exit.Pfv- 1 SgSbj 'I left (=came from) this village.'
b. [pòrò mì ${ }^{\mathrm{L}}$ HL gô: ì ] wàgù- $\eta$ bó- $\varnothing$
[village ${ }^{\mathrm{L}} 1 \mathrm{SgSbj}{ }^{\text {HL }}$ exit.Pfv.Ppl Def] distant be-3Sg
'The village that I left (=came from) is far away.'

Example (401a) has an instrumental PP with postposition yày. It is absent from the relative clause in (401b).
a. [[dàmmà- $\eta{ }^{\mathrm{L}} \quad \eta$ gíl $^{]}$yàn] síyé gòlè:-bù- $\eta$ [[daba ${ }^{\text {L }}$ Prox] Inst] millet do.farming-Ipfv-1SgSbj 'I cultivate (e.g. weed around) millet with this daba (=hoe).'
b. [dàmmà- $\eta^{\mathrm{L}}$ síy ह́ mì ${ }^{\mathrm{HL}}$ góľ̀:-bù ì] [daba ${ }^{\mathrm{L}}$ millet $1 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ do.farming-Ipfv Def] márè- $\varnothing$ get.lost.Pfv-3SgSbj
'The daba with which I cultivate millet has been lost.'

The missing postposition must be recovered by inference from the context.

## 15 Verb (VP) chaining and adverbial clauses

### 15.1 Direct chains

Direct chains are those where nonfinal verbs occur without an overt subordinating morpheme in all temporal contexts, and where the nonfinal and final verbs are adjacent, except that in relative clauses a pronominal-subject proclitic may intervene (§14.5.1).

The form of the nonfinal verb is the bare stem (for most verbs, the etymological E-stem with lexical tone melody). If the nonfinal verb is / $\mathrm{LH} /$-toned and is adjacent to the final verb, the H-tone occasionally (but not usually) undergoes tone shift, in which case it appears on the first syllable of the final verb, or amalgamates with a preexisting H -tone on that syllable. The final verb gets full inflection for AN category and, in main clauses, for pronominal-subject.
a. bàgé
sìgé- $\eta$
fall descend.Pfv-1SgSbj
'I fell (all the way) down.'
b. bàgè Sígè- $\eta$
fall descend.Pfv-1SgSbj
[occasional tone-shifted variant of (a)]
c. bàgé sígè:-bù- $\eta$
fall descend-Ipfv-1SgSbj
'I will fall (all the way) down.'
d. bàgè sígè:-bù- $\eta$
fall descend-Ipfv-1SgSbj
'I will fall (all the way) down.'
[occasional variant of (c) with the two H-tones amalgamating]

The combination of 'fall' and 'descend' can be used in both past and future time contexts, it denotes a conceptually integrated complex event, with the final motion verb specifying direction and telicity. The two verbs are normally directly adjacent except for subject proclitics in relative clauses. This combination therefore qualifies as a true direct chain.

For many other pairs of verbs, a pseudo-direct chain is used to specify a chronological sequence of two events (not necessarily conceptually integrated) in past-time contexts only. It too has a nonfinal verb in bare-stem form, followed by an inflected and conjugated final verb ( $\S 15.3$ below). When the final verb is perfective, there is no overt difference between a direct and a pseudo-direct chain. However, when the time frame moves into the future or habitual present, the two constructions are distinguishable. If the perfective version is a true direct chain, the imeprfective version will also be a direct chain. In particular, the nonfinal verb will remain in bare-stem form. If the perfective version is a pseudo-direct chain, its imperfective counterpart replaces the bare-stem nonfinal verb with a pseudo-conditional clause (§15.5), ending in nà: 'if' but expressing chronological sequencing (not causation).

For most verbs, the bare stem (the form taken by the nonfinal verb) is segmentally identical to the form of the stem used in the perfective positive stem and some other
inflections, etymologically the E-stem, ending in e or $\varepsilon$ depending on ATR-harmonic category of the stem. The bare stem shows the verb's lexical tone melody, /LH/ in (403a) and /H/ in (403b). For some verbs, the bare stem is the etymological I-stem (403c). This includes kánè 'do', which appears as kân- $\varnothing$ from /kán-ì/. Mediopassive suffix -ye $\sim-y \varepsilon$ is sometimes (but not always) heard as $-i$ : in the bare stem, e.g. kígìl-yè 'return, go back' with bare stem kígìl-ì: in chains.

| 3 Sg perfective | bare stem | gloss |
| :---: | :---: | :---: |
| a. $n \hat{\varepsilon}:-\varnothing$ | ně: | 'eat (meal)' |
| $d \hat{\varepsilon}:-\varnothing$ | $d \varepsilon$ : | 'arrive' |
| ménè- $\varnothing$ | $m e ̀ n \varepsilon ́$ | 'come' |
| bíy-yè- $\varnothing$ | bìy-yé | 'lie down' |
| góndù-rè- $\varnothing$ | gòndù-ré | 'hang (sth) up' |
| b. ób-yè- $\varnothing$ | ób-yè ~ób-ì: | 'sit down' |
| c. kánè- $\varnothing$ | kân- $\varnothing$ | 'do' |
| kígìl-yè- $\varnothing$ | kígìl-ì: | 'return' |

In a true direct chain, the verbs denote co-events that combine to express a conceptually integrated complex event. In (402) above, 'fall' describes an action type, while 'descend' indicates direction and telicity. While 'fall' already implies downward direction, tómbè 'jump' is compatible with various directions and therefore combines with any directional motion verb: tómbè sígè 'jump down', tómbè dàmbé 'jump up', tómbè táyè ‘jump across'.

When two events are sequential in time, one of the loose chain constructions, with an overt subordinator on nonfinal verbs, must be used.

### 15.1.1 Verbal noun of directly chained verbs

### 15.1.1.1 Verbal noun of ordinary direct chains

The verbal noun of a direct chain combines an $\{L\}$-toned form of the bare stem of the first verb, here resembling an $\{\mathrm{L}\}$-toned compound initial, with the usual $\{\mathrm{HL}\}$-toned verbal noun of the final verb (§4.2.2.1).
a. bàgè ${ }^{\mathrm{L}}-[s i ́ g u ̀-g]$
fall ${ }^{\mathrm{L}}$-[descend-VblN]
'falling (all the way) down' (< bàgé, sígè )
b. tòmbè ${ }^{\mathrm{L}}$-[dámbù-g]
jump ${ }^{\mathrm{L}}$-[ascend-VblN]
‘jumping up’ (tómbè, dàmbé )

### 15.1.1.2 Verbal nouns of 'bring' and 'convey'

jìné 'bring' is treated as a simple verb, here as elsewhere. It has a verbal noun jín-ù 'bringing' that can combine with a noun (usually denoting an object category) as compound initial
(405a). 'Convey (there)' behaves like a bipartite direct chain of 'take' and 'go' in its verbal noun (405b), which has the tonal pattern of a direct chain parallel to bàgè-[síg-ù] 'falling down' (preceding section).
(405)
a. tè: ${ }^{\mathrm{L}}$-[jín-ù ]
tea ${ }^{\mathrm{L}}$-[bring-VblN]
'bringing tea'
b. $j \grave{\varepsilon}{ }^{\mathrm{L}}-[b b 1-u ̀ ̀]$
take ${ }^{\mathrm{L}}$-[go-VblN]
'conveying, taking (away or to another place)'

### 15.1.2 Arguments of directly chained verbs

In most direct chains except those with bèlé 'get' (§15.1.4) or other verbs that are grammatically specialized in chains, the two verbs have the same valency. In this case, arguments and adjuncts precede both chained verbs. In the transitive examples (406a-b), the object cannot be moved into the position between the two verbs. (406c) is intransitive and has no non-verb constituents.

| a. | pésgè | bùndé |
| :--- | :--- | :--- |
| sheep | hit | $g \varepsilon ́ W \varepsilon ̀-\varnothing$ |
|  | kill.Pfv- 3 SgSbj |  |

'He/She hit and killed a sheep.'
b. ná=ỳ bùndé gèwé- $\eta$

3Sg=Acc hit kill.Pfv-1SgSbj
'I hit and killed him.'
c. jว̀bé ménè- $\varnothing$
run come.Pfv-3SgSbj
'He/She came running.' (or: 'ran here').
There are some chains where the final verb has arguments distinct from those of the first verb. When the sequence is intransitive then transitive, the position of the direct object depends on the intransitive verb. mə̀né 'assemble' can be followed by a transitive verb along with its object, see ( $432 \mathrm{~b}-\mathrm{c}$ ) in $\S 15.3 .4$. However, when an intransitive motion verb precedes the transitive verb, the object precedes both verbs, suggesting a kind of verb compound whose valency derives from that of the transitive. An example is jónù- $\eta$ mèné bè kánò: 'they came and made ladders' in T02 at $02: 18$, where mèné 'come' intervenes between the final 'make' verb kánò: and its object jónù- $\eta$ 'ladder'. However, if the motion verb follows the transitive verb, the direct object precedes the transitive verb, and a locational phrase relating to the motion may intervene between the two verbs, see (429a-b) in §15.3.2.

### 15.1.3 Negation of direct verb chains

Only the final verb is negated. The negation has semantic scope over the chain, which is conceptualized as a single complex event.
'He/She did not fall (all the way) down.'
15.1.4 Constructions with final bèlé 'get'
15.1.4.1 True direct chain 'be able to VP' with bèlé
bèlé 'get' is common as final verb in a direct chain in the sense 'be able to, can'. It follows a VP that ends in a bare verb stem. The subjects are understood to be coindexed. The VP contains whatever nonsubject arguments and adjuncts are appropriate. bèlé is most often imperfective in this construction (408a-b). It can be perfective negative to indicate inability during a past time interval (408c). In the perfective positive, the sense is often 'managed to VP' (408d). For a slightly different sense of the perfective construction, namely 'finish VPing', see the following section.
a. [ǹdé: mmò] [ó=ỳ bàré] bèlè:-b- $\varnothing$
[father 1 Sg Poss] [2Sg=Acc help] get-Ipfv-3SgSbj
'My father can help you-Sg.'
b. [[pòrò lá:] bòlé] bélè-nnú- $]$
[[village Loc] go] get-IpfvNeg-1SgSbj
'I can't go to the village.'
c. [[pòrò lá:] bòlé] bèlà:-lú- $\eta$
[[village Loc] go] get-PfvNeg-1SgSbj
'I couldn't go to the village.'
d. [[pòrò lá:] bòlé] bèlé-ท
[[village Loc] go] get.Pfv-1SgSbj
'I was able (=managed) to go to the village.'

This construction is useful since bè $1 \varepsilon$ in the sense 'be able to' can combine easily with most verbs, intransitive or transitive, including many verbs that otherwise occur only rarely in the bare stem.

### 15.1.4.2 True direct chain 'finish VPing' with bèlé

bèlé can also mean 'finish VPing' in conjunction with a preceding directly chained VP. bèlé often takes perfective form in this sense, whereas it is usually imperfective in the sense 'be able to'. However, it can be imperfective in both senses, leading to ambiguity (409c).

```
a. [wâl kân] bélè- \(\varnothing\) [work(n) do] get.Pfv-3SgSbj
```

'He/She finished working.'
b. àlá: dùlé bélè- $\varnothing$
rain(n) thunder(v) get.Pfv-3SgSbj
'It has finished (=stopped) thundering.'
c. àlá: dùlé bélè:-b- $\varnothing$
rain(n) thunder(v) get-Ipfv-3SgSbj
'It will finish thundering.' or: 'It can thunder.’
15.1.5 True direct chains with final ńdè 'give' in benefactive sense
ńdè 'give' can function as final verb in a true direct chain. It indexes the presence of a beneficiary of the main action. The beneficiary is expressed by an accusative NP or pronoun preceding the main verb. Like other true chains, this one can be used with imperfective or imperative as well as perfective inflections on the final verb.
a. ńnù mí=ỳ mí:mè ńdà water $\quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ heat(v) give.Imprt '(Please) heat me some water!'
b. sé:dù $=\grave{y}$ ób-ì: ńdà-ク̀
$\mathrm{S}=\mathrm{Acc} \quad$ sit-MP give.Imprt-PlAddr '(Please) sit down-2Pl for Seydou!'
c. sé:dù = ỳ ób-ì: ìd $\varepsilon$ - $\eta$
$\mathrm{S}=\mathrm{Acc} \quad$ sit-MP give.Pfv-1SgSbj
'I sat down for Seydou.'
15.1.6 True direct chains with final tíyè 'send'
tíyè 'send' may be combined with a preceding transitive verb such as 'throw'. It adds a centrifugal directional sense similar to English away in throw (it) away. It can also be used with a verb like 'leave' to emphasize that the object is abandoned. It is compatible with future time contexts (411c).
a. tê: yá-ŋà: jùmbé tìyé-ŋ
tea over.there leave send.Pfv-1SgSbj
'I left the tea over there.'
$\begin{array}{lll}\text { b. dúmbà- } \eta & \text { kámbè } & \text { tìy } \grave{\text { b }}-\varnothing \\ \text { stone } & \text { throw } & \text { send.Pfv-3SgSbj }\end{array}$
'He/She threw a stone (away).'
$\begin{array}{lll}\text { c. dúmbà- } \eta & \text { kámbè } & \text { tíyè:-b- } \varnothing \\ \text { stone } & \text { throw } & \text { send-Ipfv-3SgSbj }\end{array}$
'He/She will throw a stone (away).'

### 15.1.7 Distributive verb chains with medial $j \grave{\varepsilon}$ : ('while')

 schematically [ $\mathrm{Vb} 1 j \grave{\mathrm{c}}:] \mathrm{Vb} 2$. The two flanking verbs denote simultaneous co-events, and Vb 2 is a motion verb 'go' or 'come'. The semantic twist that distinguishes $j \dot{\varepsilon}$ : from regular imperfective and progressive subordinators described in $\S 15.2$ below is a distributive element. That is, the co-events denoted by the first verb are described as sporadic, irregular, gradual, and/or scattered around. An example is [gě: jè] ból-yà 'they went out gradually (not all at the same time), they dribbled out'. Textual examples are (412a-b).
a. [gว̀̀ย́ jè:] mèn-yà
[go.around while.Distrib] come.Pfv-3PISbj
'They came here circuitously (not straight or all at one time).' (T01 00:58)
(refers to ancestors coming to Dogon country from far-away Mande)

[[[1PISbj ${ }^{\text {HL }}$ encounter.Pfv.Ppl Def] in]
gě: jè:] ból-dà: jò-y
exit(v) while.Distrib] go-Prog have-1PlSbj
'We are gradually getting away from what we inherited (=traditional customs).' (T01 06:11)

See also T01 01:10, T02 00:00.
15.1.8 True direct chain with disparaging final motion verb

As in Donno So (and English), DS allows the use of a chain-final motion verb, usually 'go', without literal motion sense to index the speaker's disparagement of the event or its agent. This direct chain construction is compatible with future time contexts (413b).
a. írè bólè- $\varnothing$
forget go.Pfv-3SgSbj
'He/She went and forgot.' (cf. regional English '... plum forgot.')
b. írè bólè:-b- $\varnothing$
forget go-Ipfv-3SgSbj
'He/She'll (just) go and forget.'

### 15.2 Adverbial clauses expressing temporal simultaneity or overlap

15.2.1 Noun-headed temporal relative clause ('[at $]$ the time when ...')

An adverbial clause defining a temporal setting can be structured as a relative clause with '(point in) time', 'day', 'month', 'year', etc. as head. The subordinated eventuality may be punctual or durative, but in either case it defines a time interval during which a second eventuality occurs.

Of the temporal nouns, děn 'day' is unusual in that it regularly shows what looks like head-doubling, with dèn ${ }^{\mathrm{L}}$ as internal head and dènà: following the participle and late-NP
elements (414a). For discussion of apparent head-doubling dènà:, which may really be a dayspecific temporal postposition, see $\S 14.2 .5$. The other temporal nouns do not head-double; instead, they make use of postposition yàn $\sim$ yà ' 'during' (§8.1.3) as in (414b-g).
a. [dèn ${ }^{\mathrm{L}}$ pésgè ò
${ }^{\mathrm{HL}}$ sémò:
ì] dènà:
[day ${ }^{\mathrm{L}}$ sheep $2 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ slaughter.Pfv.Ppl Def] day
'(on) the day (when) you-Sg slaughtered a sheep'
b. [wè ${ }^{\mathrm{L}} /$ wà: $r^{\mathrm{L}} /$ wò̀:-g $^{\mathrm{L}}$
$\left[\right.$ year $^{\mathrm{L}} /$ time $^{\mathrm{L}} /$ month $^{\mathrm{L}}$
pésgè ò $\quad$ HL sémò:: !̀gì] yàn
sheep $2 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ slaughter.Pfv.Ppl Def] during
'(in/at) the year/time/month (when) you-Sg slaughtered a sheep'
c. [[sé:dù wà: ${ }^{\mathrm{L}}$ wâl kân=bìyó ìgì] yàn]
[[S time ${ }^{\mathrm{L}}$ work(n) do.Pfv=Past.PPl Def] during]
[í jǎ:- $\eta \quad$ j̀̀: = bìy $̀$ - $-y]$
[1Pl meal eat=Past-1PlSbj]
'While Seydou worked, we were eating.'
d. [[sé:dù wà: ${ }^{\mathrm{L}}$ méǹ̀=bìyó ŋ̀gì] yàn] nè:-y
[[S time ${ }^{\mathrm{L}}$ come=Past.PPl Def] during] eat.Pfv-1PlSbj
'While Seydou was on his way (here), we ate.'
e. [[wà: $r^{\mathrm{L}}$ tê: nà já:ndè=bìyó ngì] yàn]
[[time ${ }^{\mathrm{L}}$ tea 3 SgSbj put.up=Past.Ppl Def] during]
mí $\quad$ gálò: $\quad$ gòlè $=$ bìyè- $\eta$
1 Sg farming farm(v).Pfv=Past- 1 SgSbj
'While he was making tea, I was cultivating (=working in the fields).'
f. [[wà: $r^{\mathrm{L}}$ wâl mì ${ }^{\mathrm{HL}}$ kánè:-bì] yàn]
[[time ${ }^{\mathrm{L}} \quad \operatorname{work}(\mathrm{n}) \quad 1 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ do-Ipfv.Ppl] during]
dǒm dàm-lá
talk(n) speak-Proh
'Don't talk while I'm working.'
$\begin{array}{lllllll}\text { g. ná } & {\left[\left[w a ̀: r^{\mathrm{L}}\right.\right.} & \text { tê: } & \text { nà } & { }^{\mathrm{HL}} \text { já:ndè-bù } & \text { ngì }] & \text { yà̀ }] \\ & \text { 3Sg [[time }{ }^{\mathrm{L}} & \text { tea } & 3 \mathrm{SgSbj} & { }^{\text {HL }} \text { put.up-Ipfv.Ppl } & \text { Def] } & \text { during }]\end{array}$
mí gólò: gòlè:-bù-ŋ
1 Sg farming farm(v)-Ipfv-1SgSbj
'While he is making tea, I will cultivate (=work in the field).'

For spatial adverbial relatives see $\S 15.7 .1$. For manner adverbial relatives see $\S 15.7 .2 .1$.
15.2.2 Progressive and stative same-subject clause (-là:)

A progressive verb form with -là:, minus its usual auxiliary verb, can be used as a samesubject progressive adverbial clause. The higher main clause may be in any tense or aspect.

In (415) -là: is added to the bare stem of the main verb, just as it in in the main-clause progressive construction with auxiliary jó- 'have'.
a. sé:dù [nùyó: núnè-là:] mènغ̀- $\varnothing$ S [song sing-Prog] come.Pfv-3SgSbj
'Seydou came singing.'
$\begin{array}{llll}\text { b. [sé:dù } & \text { mén-dà:] } & \text { nùnó: } & \text { núnè-là: }=\text { bìyè- } \varnothing \\ {[\mathrm{S}} & \text { come-Prog] } & \text { song } & \text { sing-Prog=Past }\end{array}$
'Seydou was singing as he was on his way here.'
c. nìná: [sónlò sónùl-là:] nàyé-y
yesterday [talk(n) chat-Prog] spend.night.Pfv-1P1Sbj
'Yesterday we spent the night chatting.'
A textual example is [gíyò ì] gǐ:-rà: $\rightarrow$ '(he) was dancing' (T01 08:41), where the final vowel is intonationally prolonged as a narrative device. (The progressive is -rà: in Nantanga dialect.)
-là: can also be used with a stative verb in this adverbial construction (416a-b).
a. ígà-là: nàyè- $\varnothing$
stand.Stat-Prog spend.night.Pfv-3SgSbj
'He/She spent the night standing up.' (=stood all night)
b. óbò-là:
sit.Stat-Prog
dènè- $\varnothing$
spend.midday.Pfv-3SgSbj
'He/She spent the (mid-)day sitting.' (=sat all day)
The stative progressive verb forms in (416a-b) do not occur as simple main clauses, since statives are already unbounded temporally: ì-Rígà or yè ígà 'be standing' (stative).

### 15.2.3 A-stem verb plus $\grave{\eta}$

### 15.2.3.1 Past-time imperfective different-subject subordinated clause

This construction can be used as an adverbial clause describing an ongoing activity that served as background to another eventuality that occurred in the past. The subjects of the two clauses are usually but not obligatorily disjoint. The subordinated verb takes the form of an A-stem, unlengthened, followed by $\grave{\eta}$ (arguably the definite marker, but perhaps a nominal ending). For some verbs this form (excluding $\grave{\eta}$ ) is homophonous to the imperative, but this is accidental (imperatives also happen to be based on the A/O-stem). The subject is obligatorily expressed as an L-toned preverbal proclitic pronoun, which explains the HL-tone on the following verb.

| [è-wé | nùnó: | bè | ${ }^{\mathrm{HL}}$ núnà | ̀̀] |
| :--- | :---: | :--- | :--- | :--- |
| [child- Pl | song | 3 Pl | ${ }^{\mathrm{HL}}$ sing | Def] |
| sé:dù | mènè- $\varnothing$ |  |  |  |
| S | come.Pfv- $3 S g S b j$ |  |  |  |
| 'Seydou came while the children were singing.' |  |  |  |  |

This clause type is common as durative complement of perception verbs ('see', 'hear'), again in past-time contexts.
(418)

 nùnદ́-ŋ
hear.Pfv-1SgSbj
'I heard the children sing(-ing).'
c. [è̀-wé bè ${ }^{\text {HL gówà ì }] \quad W \varepsilon ̌:-\eta ~}$
[child-Pl 3PlSbj ${ }^{\text {HL }}$ exit(v) Def] see.Pfv- 1 SgSbj
'I saw the children go(ing) out.'
See nà nâ: ì 'it kept drinking' in text T02 00:33.
In nonpast-time contexts, this construction is replaced by one with -ń suffix on the subordinated verb (§15.2.4).

### 15.2.3.2 'No sooner..., than ...'

This is a parallelistic contruction. It does not matter whether the two clauses have a shared subject (419a) or not (419b). It also doesn't matter whether the events referred to are in past or future time (arguably future-time sequences are construed as perfective). Both clauses take the A-stem form of past clitic = bìy $\grave{\varepsilon}$, followed by $\grave{\eta}$ (arguably the definite morpheme). The main verb stem is in perfective form (original E-stem) as it is in the past perfect (§10.6.1.4). The main verb gets an initial H -tone due to the preceding L-toned subject pronominal.
a. [ì
$d \varepsilon ́:=b i ̀ y a ̀ ~$
ì]
[1P1Sbj arrive.Pfv=Past Def]
[àlá: nà tólè = bìyà ì ]
[rain $3 \mathrm{SgSbj} \quad$ begin. $\mathbf{P f v}=$ Past Def]
'As soon as we arrived, the rain started.'
b. [ì
[1PlSbj
[ì
$d \varepsilon$ : $=$ bìyà
ì]
[1P1Sbj eat.meal.Pfv=Past
门̀]
'As soon as we arrived, we ate.'
'As soon as we arrive, we'll eat.'

Further examples are in $\S 16.2 .2 .1$. For other 'as soon as' constructions see $\S 16.2 .2 .2-3$.

### 15.2.4 Nonpast imperfective clause with -ń or -ǹ

### 15.2.4.1 Same-subject nonpast imperfective with -ń and $\{\mathrm{L}\}$-toned verb

This construction indicates that two activities are carried out simultaneously. The main-clause verb denotes a second activity carried out by the same subject or by a different subject. The time frame is nonpast. The verb of the subordinated clause has $-n$ suffix after an $\{\mathrm{L}\}$-toned bare stem (original E-stem).

Same-subject examples are in (420). The main clause may be an imperfective verb (420a-d) or an imperative or hortative (420e-f).
a. [gólò: gòlè-ń]
[nùyó: núnè:-bù-ŋ]
[farming do.farm.work-Ipfv.NonPast] [song sing-Ipfv-1SgSbj] 'I (will) sing while I cultivate (work in the field).'
b.

'I (will) sing while I work.'
c. sé:dù jòbè-ń [nùyó: núŋè:-b- Ø]

S run-Ipfv.NonPast [song sing-Ipfv-1SgSbj]
'Seydou sings/will sing while he is running.'
d. [kórkà yà̀] [sónlı̀ sònlè-ń]
[Ramadan during] [chat(n) chat(v)-Ipfv.NonPast]
náyè:-bì-y
spend.night-Ipfv-1P1Sbj
'During Ramadan, we (regularly) spend the night chatting.'


| f. | $[n o ̂ y-g$ | $n o ̀ y-y e ̀-n ́] ~$ | dènè-má-ì̀ |
| :--- | :--- | :--- | :--- |
|  | $[\operatorname{sleep}(\mathrm{n})$ | sleep-MP-Ipfv.NonPast] | spend.day-Hort-PlAddr |

'Let's spend the (mid-)day sleeping!' ('Let's sleep all day!')

### 15.2.4.2 Different-subject nonpast imperfective with -ǹ and $\{H L\}$-toned verb

If the subjects of the two clauses are disjoint, the subordinated imperfective clause has an obligatory L-toned subject pronominal proclitic to the verb. The latter then becomes $\{\mathrm{HL}\}$-toned (§3.7.4.4).

```
[è-wé nùpó: bè
[child-Pl song 3PlSbj
sé:dù mènè:-b-\varnothing
S come-Ipfv-3SgSbj
'Seydou comes/will come while the children are singing.'
```

The form of the verb is invariant when the subject category changes (422).
(422)
a. ě- $g$
nùnó: nà nà
3 SgSbj
${ }^{\mathrm{HL}}$ núyè-n
${ }^{H L}$ sing-NonPast.Dur.DS
'while the child is singing'
b. nùŋó:
mì / ò
song $\quad 1 \mathrm{SgSbj} / 2 \mathrm{SgSbj}$
${ }^{\mathrm{HL}}$ núnè-n
'while I am/you-Sg are singing'
${ }^{\mathrm{HL}}$ sing-NonPast.Dur.DS
15.2.5 Temporal 'since ...' clauses and related forms (ní:, bà:)

A 'since' clause is a perfective participial clause plus ní:, arguably the H-toned form of locative postposition nì: . The 'since' clause and the main clause may have same or disjoint subjects.

b. [[mi
${ }^{\mathrm{HL}}$ ménŋ̀:]
ní:]
[[1Sg
${ }^{\mathrm{HL}}$ come.Pfv.Ppl]
Loc]
[nǎ: jà:-lú-ŋ]
[meal eat.meal-PfvNeg-1SgSbj]
'(Ever) since I came, I haven't eaten.'
c. [[[è-wé ngì yà:] bè ${ }^{\mathrm{HL}}$ bólò:] ní:]
[[[child-Pl $\operatorname{Def} \quad \mathrm{Pl}] \quad 3 \mathrm{Pl}{ }^{\mathrm{HL}}$ go.Pfv.Ppl] Loc],
bé = ̀̀ wà:-lú-ŋ
$3 \mathrm{Pl}=\mathrm{Acc} \quad$ see-PfvNeg-1SgSbj
'(Ever) since the children went away, I haven't seen them.'
With an inflectional category other than perfective positive, a different construction with bà: 'since' added to an ordinary main clause is used.

| [è-wé | mènà:-ń | bà:] | nj̀gùmé- $\eta$ |
| :--- | :--- | :--- | :--- |
| [child-Pl | come-PfvNeg.3P1Sbj | since] | be.angry.Pfv-1SgSbj |

'I've been angry since (the time when) the children didn't come.'
bà: 'since' can also occur with NPs as a kind of postposition.
a. [nìná: bà:] [nǎ: nà:-lú-ŋ] [yesterday since] [meal eat-PfvNeg-1 SgSbj ] 'I haven't eaten since yesterday.'

```
b. [gò:lí: bà:] [tàná- \(\eta\) bòlà:-lú-n] [last.year since] [trip go-PfvNeg-1SgSbj] 'Since last year, I haven't travelled (anywhere).'
```

For bà: 'all the way from' with spatial expressions, see §8.4.6.4.

### 15.3 Pseudo-direct chains for past-time event sequences

A pseudo-direct chain mimics a true direct chain. In both cases the nonfinal verb has barestem form, and is followed by an inflected form of the final verb. In a pseudo-direct chain, the two events are chronologically sequenced and belong to a past-time (perfective) context. Examples are in (426).

| a. è-wé | [nàmá: | Símbè $]$ | tém-yà |
| :--- | :--- | :--- | :--- |
| child-Pl | [meat | roast] | eat.meat.Pfv-3P1Sbj |

'The children roasted and ate (the) meat.'
b. [bě:-g yèyé] [pésgè bùndè- $\eta$ ]
[stick take] [sheep hit.Pfv-1SgSbj]
'I picked up (a/the) stick and hit-Past (a/the) sheep-Sg.'
The best way to identify pseudo-direct chains is to elicit counterparts for future-time contexts. A true direct chain will retain its direct chain form. A pseudo-direct chain will be replaced by a pseudo-conditional construction with nà: 'if'. Another less reliable indicator of pseudodirect chains is the presence of an object NP or an adjunct between the two verbs, as with 'sheep' in (426b). In true direct chains, the two verbs are normally adjacent, except that in nonsubject relative clauses a pronominal subject proclitic intervenes (§14.5.1).

In a pseudo-direct chain, the two clauses are more loosely related (except for their chronological sequencing) than in a direct chain. In a pseudo-direct chain, it is possible for negation of the final verb to have narrow scope, not including the nonfinal clause. For example, my assistant indicated that (427) is normally interpreted with negative scope limited to 'eat'.

| è-wé | [nàmá: | Símbè] | tèmà:--ń |
| :--- | :--- | :--- | :--- |
| child-Pl | $[$ meat | roast $]$ | eat.meat-PfvNeg.3P1Sbj |

'The children roasted but didn't eat meat.'

### 15.3.1 Pseudo-direct chains with final jùmbé 'leave (behind)'

jùmbé 'leave (behind), abandon' can follow another transitive VP in a chain, if that VP denotes putting the object somewhere or relinquishing it. The 'leaving' component is normally implied rather than overt in free English translations. The direct-chain (428a) is replaced by the pseudo-conditional with nà: in future contexts (428b).

```
a. dó\etaò t\varepsiloń:-ndè jùmbé-\eta
    waterjar be.put.down-Tr leave.Pfv-1 SgSbj
    'I put the waterjar down (and left it).'
```

b. [dónò tè:-ndè ná:] jùmbè:-bù-ŋ [waterjar be.put.down-Tr if] leave-Ipfv-1SgSbj 'I will put the waterjar down (and leave it).'

### 15.3.2 Pseudo-direct chain with nonfinal 'take' plus final motion verb

Any verb with a meaning like 'pick up', 'take', or 'take hold of' can combine with a following motion verb in senses like 'go/run (somewhere) with (sth)'. This construction can be translated using comitative with, but in DD the construal is sequential (e.g. 'take hold of' and then 'go'), compare (431a-b) in the following section. For future time contexts, the pseudo-conditional replaces the direct chain (429b).
$\begin{array}{lllll}\text { a. } & \text { ě- } g & \text { tér-yè } & {[\text { Ébà: }} & \text { là: }] \\ & \text { child take.hold-MP } & \text { jó }-\eta \\ & \text { [market } & \text { Loc }] & \text { run.Pfv- } 1 \mathrm{SgSbj} \\ & \text { I }(\text { an adult }) \text { ran to the market along with (=holding) a child.' }\end{array}$
b. [ě-g tèr-yè ná:] [źbà: là:] jóbè:-bù-ŋ
[child take.hold.Pfv-MP if] [market Loc] run-Ipfv-1SgSbj
'I (an adult) will run to the market along with (=holding) a child.'

### 15.3.3 Pseudo-direct chain of manner verb and directional verb

Direct chains with two motion verbs, one denoting manner and the other direction, such as 'fall' and 'descend' (i.e. 'fall down') or 'jump' and 'go up' (i.e. 'jump up'), were described in §15.1.

A motion verb like 'go' or 'come' can precede a non-motion VP, which may include its own arguments and adjuncts (430a-b). This direct-chain construction is possible when the entire sequence occurred in the past. It is replaced by the pseudo-conditional in future-time contexts (430c).
a. [yá-ŋà: bòlé] [è:nù ní:] bàgé núp-yà
[over.there go] [pit Loc] fall enter.Pfv-3P1Sbj
'They went there and fell into the pit.'
b. mèné [nǎ:-ŋ jê:- $\varnothing]$
come [meal eat.Pfv-3SgSbj]
'He/She came and ate a meal.'
c. [mèn ná:] [nă:- $\eta$ nê:-b- $\varnothing]$ [come.Pfv if] [meal eat-Ipfv-3SgSbj
'He/She will come and eat a meal.

If the motion verb follows a directly chained non-motion VP, we get examples like (431). The object ('meal') clearly belongs with 'eat' and not with 'go'. Again, this direct chain construction is restricted to past-time contexts (431a), and is replaced by a pseudo-conditional in future-time contexts (431b).
a. [nă:-ŋ nè:] ból-yà
[meal eat] go.Pfv-3PlSbj
'They ate a meal and (then) went (away).'
b. [nǎ:-ŋ jı̀: ná:] bòlè:-n
[meal eat.Pfv if] go-Ipfv.3Pl
'They will eat a meal and (then) go (away).'
15.3.4 Pseudo-direct chains with nonfinal mònદ́ 'assemble, come together'

Intransitive mə̀né 'assemble, come together' may combine with a following directly chained verb. The linear order reflects the fact that the individuals first come together before undertaking the joint action, so the construal is sequential in DD (though not in free English translations with 'together'). The H-tone in mòné shifts to the first syllable of a following perfective positive verb, as in (432a), contrast mòné bòlà:-lí-y 'we did not go together'.
a. í mònè bólè-y

1Pl assemble go.Pfv-1PlSbj
'We went to Bamako together.'
b. é mòné [Wâl kàn-è:]

2Pl assemble [work(n) do.Pfv-2PlSbj]
'You-Pl worked together.'
c. mòné jónù-ŋ̀ jàwè̀-y
assemble ladder carve.Pfv-1PISbj
'We got together and carved a ladder.'

In a future time context, pseudo-conditional nà: replaces the direct chain.

| ḿbù- $\eta$ | [mòn | ná:] | ùsè-má-ì |
| :--- | :--- | :--- | :--- |
| house | [assemble.Pfv | if] | build-Hort-PlAddr |

'Let's- 2 Pl build a house together.'

### 15.3.5 'VPed until got tired' = 'VPed for a very long time'

One common device to accentuate the duration of an activity is to concatenate the VP denoting the activity, in pseudo-direct chain form, to the verb 'get tired', with fà: 'until, all the way to' separating the two verbs. In (434), the tones of màndé show that it is a bare stem, not a 3 Sg perfective.
è-wé màndé [fà: ón- $n-y a ̀]$
child-Pl laugh(v) [until get.tired-MP.Pfv-3PlSbj]
'The children laughed until they got tired.' (pronounced [ón:à]) (i.e. they couldn't stop laughing)

In future time contexts, the first clause is in pseudo-conditional form.

| [è-wé | mànd-yà | ná:] | [fà: | 万́n-nt̀:-n] |
| :--- | :--- | :--- | :--- | :--- |
| [child-Pl | laugh(v).Pfv-3PISbj | if] | [until | get.tired-MP-Ipfv.3PISbj] |

'The children will laugh until they get tired.' (i.e. they won't stop laughing)

For fà: ‘all the way to’ with spatial expressions, see §8.4.6.4.

### 15.3.6 Result clause with kàn-é: plus subjunctive clause with nà

The description of an activity may be followed by a construction with initial kàn-é:, then a headless nonsubject relative clause and final nà. The clause expresses an eventuality that results from the activity. The only textual example I have with both kàn-é: and nà is (436).

| [ $\left[\right.$ yà-yà: ${ }^{\text {L }}$ | bàná: | ngì | yay] | dîg | dígè:-b- $\varnothing$, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [[over.there ${ }^{\text {L }}$ | owner | Def] | Inst] | lie(n) | lie(v)-Ipfv-3SgSbj, |
| [kàn-é: | [ì |  | э́n-nغ̀ |  | nà $]$ ] |
| [do-Result | [1PlSb |  | get.tire | PP.Pfv | Subjunct]] |

'He will tell lies to the fellow from over there. This has the effect that we become weary (=frustrated).' (T01 07:57)

The only regular form of kánè 'do' that resembles kàn-é: is kànê:- $\varnothing$ 'did he/she do?', with 3 Sg subject and polar interrogative tonal form (§13.2.1.1). The grammatical and semantic context in (436) as well as the initial position of kàn-é: make this comparison unprofitable.

The verb, here ón-nغ̀ 'get tired', has main-clause (not participial) perfective vocalism. It is preceded by an L-toned pronominal-subject proclitic and is itself $\{\mathrm{HL}\}$-toned. The following nà is L-toned. The nà clause therefore has the same form as a different-subject complement of 'want' (§15.5.2), and I label nà here "subjunctive."

### 15.3.7 Verb iterations in narrative

Verbs can be repeated (once or more than once) to indicate duration of motion or similar atelic activity, usually as background for the next foregrounded event.

Examples of two constructions are in text T01 at 08:37. In one, the bare verb stem is iterated, with lexical tone on the first iteration and flat $\{\mathrm{L}\}$ on the others. Thus nùné-nùnè gǐ:-gì: 'enter-enter dance-dance', describing a soirée where many individuals came in and danced. This is immediately followed by bè ${ }^{\mathrm{HL}} g \hat{o}$ : $\eta$ ' 'they exited', a nonsubject perfective relative clause (often used in narrative as equivalent of a main clause), repeated twice. The passage can be freely translated ('they were going in, dancing, and coming back out').

### 15.4 Clauses with nغ̀'and then' (different-subject, anterior, past)

In this construction, the verb is followed by $n \varepsilon$ and preceded by an obligatory L-toned subject pronominal. The verb is $\{\mathrm{HL}\}$-toned, e.g. bè ${ }^{\mathrm{HL}}$ júmbò $n \grave{\varepsilon}$ 'they abandoned'. $C v C v$ stems are frequently apocopated.

Typically the construction involves a subject switch, hence "DS" (different-subject) in the interlinear. It is regularly given in elicitation in contexts like (437a-b) where two actions
occur in a specific sequence. Many of the textual examples, however, have a $n \dot{\varepsilon}$ clause that denotes a general situation that serves as backdrop to some action, as in (437c-d).
(437)
a.

| [yà:-wé | лă:-ŋ | bè | ${ }^{\text {HL }}$ jîn | $n غ$ ] |
| :---: | :---: | :---: | :---: | :---: |
| [woman-Pl | meal | 3 PlSbj | ${ }^{\text {HL }}$ bring | Ant.Past.DS] |
| [í | $n \varepsilon \check{c}:-y]$ |  |  |  |
| [1P1Sbj | eat.Pfy | 1 Sbj |  |  |
| The wome | rought | meal, | en we |  |

b. [nă
i 1
jîn nè]
[yà:-wé jé-yyà]
[woman-Pl eat.Pfv-3P1Sbj]
'We brought the meal, and then the women ate.'
c. íyè sáktè ${ }^{n}$ ŝ̂n nà $\left.\quad{ }^{\mathrm{HL}} m \hat{\varepsilon} n \quad n e ̀\right]$
today at.end prayer $3 \mathrm{SgSsbj}{ }^{\mathrm{HL}}$ come Ant.Past.DS]
jùmb-yà
abandon.Pfv-3P1Sbj
'Nowadays since religion (Islam) has come, they have abandoned (that practice).' (T02 00:37)
d. [nìnǒ:n nà ${ }^{\mathrm{HL}}$ gâb nè] [bè ${ }^{\mathrm{HL}}$ jóbò:]
[thirst $3 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ be.tall Ant.Past.DS] [3P1S ${ }^{\mathrm{HL}}$ run.Pfv.Ppl]
'When thirst (=drought) became excessive, they fled and ...' (T02 02:49)
In texts, a common way to switch from one subject to another is to complete one clause, add a short $n \grave{\varepsilon}$ clause with the same subject as the preceding clause, and then introduce a new clause with a different subject. kân nè with kánè 'do' is the default verb but others are possible.
a. [[yàl-gú ì $]$
ì] bè ${ }^{\mathrm{HL}}$ wúlb̀̀:]
[[place Def] 3Pl ${ }^{\mathrm{HL}}$ look.at.Pfv.Ppl]
[sâ: ${ }^{n}$ bò] nà ${ }^{\mathrm{HL}}$ kân $n \hat{\varepsilon}$,
[nice be] $3 \mathrm{Sg}{ }^{\mathrm{HL}}$ do Ant.Past.DS,
í-nà: [kj̀mmò ní:] ǹ̀l-yé ménè- $\varnothing$
here [cave in] go.through-MP come.Pfv-3SgSbj
'They looked at the place. It was a nice place, and it (=group) came through a rocky tunnel here.' (T02 00:11)
b. [[ùnó- $\eta$ ngù] né:-là:] yàgà-nnú] nà $\left.{ }^{\mathrm{HL}} k a ̂ n ~ n e ̀\right] ~$
[[dog Def] drink-Prog] be.right-StatNeg] 3SgSbj ${ }^{\text {HL }}$ do Ant.Past.DS]
pésgè ná:-ń-yà
[sheep drink-Caus-3P1S]
'(The fetish) drinking the dog (in a previous blood sacrifice) not being right, after that they (=people) sacrified sheep.' (T02 00:37)

In future-time contexts, the pseudo-conditional (see the following section) is used. Compare (439) with (437a) above.

| [yà:-wé | nă:-ŋ | jìn-yà | ná:] |
| :---: | :---: | :---: | :---: |
| [woman-Pl | meal | bring.Pfv-3PlSbj | if] |
| [í | né:-bì-y] |  |  |
| [1P1Sbj | eat-Ipfv-1PlSbj] |  |  |
| 'When the women bring the meal, then we will eat.' |  |  |  |
| 'The wome | bring the | al, then we will |  |

### 15.5 Pseudo-conditional nà: for nonpast event sequences

### 15.5.1 Pseudo-conditional

This construction is the usual way of combining two clauses denoting future-time or otherwise imperfective events that are conceptualized as occurring in a sequential order. The final clause is a normal main clause. It is preceded by a pseudo-conditional clause ending in particle nà: . This mimics a regular conditional antecedent clause with nà: 'if' (§16.1). Both clause types usually have perfective positive verbs, and both are usually followed by imperfective, imperative, or hortative clauses. However, there are differences (440).
a. a pseudo-conditional can be (but does not have to be) fused prosodically to the following clause, while a conditional antecedent is often set off prosodically;
b. the verb of a pseudo-conditional is always perfective positive and active; a conditional antecedent may have any predicate (perfective or imperfective, positive or negative, active or stative);
c. the verb in a pseudo-conditional optionally omits its pronominal-subject suffix (if the subjects of the two clauses are coindexed), while the predicate of a conditional antecedent must be conjugated.

The semantic relationship between the first and second clauses can also differ in the two constructions, though there are borderline cases. In a true conditional, the antecedent eventuality has some kind of causal or inferential connection to the consequent eventuality, but the two might be of quite different orders and may be widely separated ('If it rains this week, we'll work in the fields next week'). The truth of the antecedent eventuality is not asserted. In a pseudo-conditional, the (future) truth of both clauses is asserted, promised, or predicted. The connection between the two eventualities is mainly temporal, though they are usually at least loosely connected as actions in a logical sequence ('we'll eat lunch and then rest').

When shifted to past time, a true conditional remains a conditional (counterfactual or otherwise), while a pseudo-conditional is converted into a pseudo-direct chain, with the nonfinal verb in bare-stem form (§15.3).

Phonologically, the nà: particle in both clause types becomes nâ: prepausally after 3 Sg and 3 Pl subject perfective positives, which themselves surface with L-tones (§3.7.4.3). If the two clauses are uttered without a prosodic break, as usual in the pseudo-conditional and as sometimes happens with true conditionals, expected nâ: after 3 Sg or 3 Pl verb appears as ná: .

In (441) the pronominal-subject marking is overt. In this case, there is no formal distinction between this and a true conditional, but a short pseudo-conditional clause is often connected to the final clause without a prosodic break.
a. è-wé [nàmá: sìmb-yà ná:] témè:-ǹ child-Pl [meat roast.Pfv-3P1Sbj if] eat.meat-Ipfv.3P1Sbj
'The children will roast and eat (the) meat.'
b. [bě:-g yèné- $\eta$ nà:] [pésgè bùndè:-bù-ŋ] [stick take.Pfv-1SgSbj if] [sheep hit-Ipfv-1SgSbj] 'I will pick up (a/the) stick and hit (a/the) sheep-Sg.'
c. [bě:-g yèy-ó: nà:] [pésgè búndò]
[stick take.Pfv-2SgSbj if] [sheep hit.Imprt]
'Pick up-2Sg the stick and hit the sheep-Sg!'
d. [bě:-g yènદ́-y nà:] [pésgè bùndè-má-ท̀] [stick take.Pfv-1PlSbj if] [sheep hit-Hort-PlAdd] 'Let's-2Sg pick up the stick and hit the sheep-Sg!'

In (442), pronominal-subject marking is omitted before nà:, as often in the predominant samesubject subtype. Except when the subject is 3 Sg (zero), this variant of the pseudo-conditional is easily spotted.
a. è-wé [nàmá: sìmbè ná:] témè:-ǹ child-Pl [meat roast.Pfv if] eat.meat-Ipfv.3P1Sbj
'The children will roast and eat (the) meat.'
b. [bě:-g yènè ná:] [pésgè bùndè:-bù-ŋ]
[stick take if] [sheep hit-Ipfv-1SgSbj]
'I will pick up (a/the) stick and hit (a/the) sheep-Sg.'
$\begin{array}{lllll}\text { c. } \begin{array}{llll}{[b e ̌:-g} & y e ̀ y \varepsilon ̀ ~ & \text { ná:] } & \text { [pésgè } \\ & {[\text { stick }} & \text { take.Pfv } & \text { if] }\end{array} & \text { [sheep } & \text { hit.Imprt] }\end{array}$
'Pick up-2Sg the stick and hit the sheep-Sg!'
d. [bě:-g yènè ná:] [pésgè bùndè-má-ì]
[stick take.Pfv if] [sheep hit-Hort-PlAddr]
'Let's-2Sg pick up the stick and hit the sheep-Sg!'

In the case of 3 Sg subject, there is no overt difference between presence and absence of the pronominal-subject suffix on the verb. I often transcribe such examples as having no subject suffix in the (pseudo-) 'if' clause.

| sé:dù | [nàmá: | sìmbè | ná:] | témè:-b- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| S | $[$ meat | roast | if] | eat.meat-Ipfv-3SgSbj |

'Seydou will roast and eat the meat.'
The pseudo-conditional can also be used in different-subject combinations, though in such cases context and speaker intention are needed even more than usual to distinguish pseudofrom true conditional. As in the preceding examples, the time frame is future and the two events are sequenced.
[woman Def] meal take.Pfv-3SgSbj if]
né:-bì-y
eat-Ipfv-1PISbj
'The woman will bring a meal, and (then) we will eat.'

'We will bring a meal, and (then) the women will eat.'
15.5.2 'Want' (námà, íbà) with chained, pseudo-conditional, and nà complements

For the forms of these stative quasi-verbs, see §11.2.5.2. In simple main clauses they take an NP direct object as in English.

A clausal (or VP) complement with shared subject can take the form of a directly chained verb (445a-b). Alternatively, it can be a pseudo-conditional with nà: 'if' but without an overt pronominal-subject suffix ( $445 \mathrm{c}-\mathrm{d}$ ). Because the complement does not report an actual event, the construction is not subject to the usual temporal constraints on the pseudo-conditional.
a. [bàmàkó bòlé nàmà-nnú-ŋ / nàmà = bìyà:-lú- $]$
$[\mathrm{B}$ go] want-Neg-1SgSbj / want=Past-Neg-1SgSbj
'I don't/didn't want to go to Bamako.'
b. [[té: è-ŋ̀] $\quad$ हॄ̌:] nàmà-nnú-ŋ
[[tea 2Pl-Poss] see] want-Neg-1 SgSbj
'I don't want to see your-Pl tea.'
c. [bàmàkó bòl ná:] nàmà-nnú-ŋ/ nàmà=bìyà:-lú-ŋ]
[B go.Pfv if] want-Neg-1 $\mathrm{BgSbj} /$ want=Past-Neg- 1 SgSbj
[=(a)]
d. [mì ${ }^{\mathrm{HL}}$ délè] [é:nì pésgè sèmè ná:] [1SgPoss ${ }^{\text {HL }}$ elder.sib] [tomorrow sheep slaughter.Pfv if] nàmà- $\varnothing$

## want-3SgSbj

'My elder (same-sex) sibling wants to slaughter a/the sheep-Sg tomorrow.'
Different-subject examples are (446a-e). The verb of the complement has perfective vocalism. It is preceded by an L-toned pronominal-subject proclitic, which controls $\{\mathrm{HL}\}$ on following words (such as participles in nonsubject relatives). The clause-final nà resembles pseudo-conditional nà: 'if', which requires a similar segmental form of the perfective verb. However, the obligatory pronominal-subject proclitic distinguishes 'want' complements from 'if' clauses. And while 'if' clauses, including pseudo-conditionals, are always preludes to following clauses denoting subsequent events, this is not the case with 'want' complements. I therefore dub nà here as subjunctive).
a. [ǹdé: ò-ท̀] [ò mén nà] nàmà- $\varnothing$ [father 2 Sg -Poss] [2SgSbj come.Pfv Subjunct] want-3SgSbj 'Your-Sg father wants you-Sg to come.'
b. [sé:dù nà mén / kígìl-ì: / gánjè nà]
[S 3SgSbj come.Pfv / go.back-MP.Pfv / dig.Pfv Subjunct]
nàmà- $\varnothing$
want-3SgSbj
'He/She wants Seydou to come/go back/dig.'
d. [ǹdé: mmò] [kònjó mì né: nà]
[father 1SgPoss] [beer 1 SgSbj buy.Pfv Subjunct]
nàmà-nnú-Ø
want-Neg-3SgSbj
'My father doesn't want me to drink beer.'
e. [ǹdé: mmò] [sé:dù kònjó nà né: nà]
[father 1 SgPoss] $[\mathrm{S}$ beer 3 SgSbj drink.Pfv Subjunct]
nàmà-nnú- $\varnothing$
want-Neg-3SgSbj
'My father doesn't want Seydou to drink beer.'
f. [bà:nà ${ }^{\mathrm{L}}$ Øgú] íyè $\quad[m i ́=y ̀ ~ d a ̌ m ~$
$\left[\right.$ manner $^{\mathrm{L}}$ this] today $[1 \mathrm{Sg}=$ Acc speak
ò pól nà ] ìbà: bó- $\eta$
2Sg speak Subjunct] want be-1SgSbj
'Today I would like you-Sg to talk to me in this way (=about that).' (T01 00:40)

I have two attestations of a subjunctive nà clause not involving 'want'. One is part of (436) in $\S 15.3 .6$, where the context is schematically 'it makes [us become weary]'. The other occurs at 07:01 in text T01, where ì kán nà 'we might do' is embedded in an imperfective relative clause meaning 'a thing that, should we do it, will turn out well'.

### 15.5.3 Pseudo-conditional as an alternative to 'before' clauses

When the time reference is future, the pseudo-conditional construction is optionally used as an alternative to a 'before...' clause. The two clauses are then ordered iconically, according to the expected order of occurrence of the events, rather than in reverse. In (447a-b), the verb in the pseudo-conditional clause is not conjugated for pronominal-person, since the two clauses have a shared subject.
a. [sóplo
sònúl nà:]
[conversation converse
if]

[DiscDef ${ }^{\text {Lback] meal eat-Ipfv-2PlSbj }}$
'When you have chatted, after that you-Pl eat.'
(equivalent to 'Before you eat, you will chat.')
b. [ńnù dùy-yè nà:]
[water bathe-MP if]
[kó ${ }^{\mathrm{L}}$ ǹdò-ŋ] jǎ: $\quad n \varepsilon ̀:-b u ̀-\eta ~$
[DiscDef ${ }^{\text {L back] meal eat-Ipfv- } 1 \mathrm{SgSbj}}$
'I'll bathe (=after bathing), after that I'll eat.'
(equivalent to 'Before I eat, I will bathe.')

For an explicit 'before...' construction, see $\S 15.6$ just below.

## 15.6 'Before ...' clause

### 15.6.1 'Before ...' clause with mà

This construction involves an obligatory proclitic subject pronoun plus verb plus mà. The time frame may be past or future.

b. [àlá:
[rain(n) $3 \mathrm{SgSbj}^{\mathrm{HL}}$ rain.fall before]
[mí bòlé-ๆ]
[1Sg go.Pfv-1SgSbj]
'I fled before it rained.' (also wó: mà)
c. [nǎ: mì ${ }^{H L}$ ná: mà]
[meal $1 \mathrm{SgSbj} \mathrm{HL}_{\text {eat }}$ before]
[ńnù dùy-yè:-bù-n]
[water bathe-MP-Ipfv-1SgSbj]
'I will bathe before I eat.'

The verb preceding mà is a mix of $\mathrm{A} / \mathrm{O}$-stem and bare stem (old E-stem) for monosyllabic verbs, and a mix of U-stem and bare stem (old E-stem) for bisyllabics. The bisyllabics that tend to truncate to $C v C$ - in other inflections, e.g. prohibitive (§10.7.1.2), do so here as well.
stem 'before he/she'
gloss
a. monosyllabic
gě:

$$
\text { nà }{ }^{\mathrm{HL}} \text { gó: mà }
$$

$d \check{\text { é: }}$
nà dó: ma
ně:
Wと̌
(àlá:) $w \varepsilon ̌:$ (once recorded as nà ${ }^{\mathrm{HL}}$ Wó: mà)

'exit'
'arrive’
'drink'
'eat (meal)'
'see'
'rain fall'
e'
nà ${ }^{\mathrm{HL}}$ Wé: mà 'see
(àlá:) nà ${ }^{\mathrm{HL}}{ }_{W \varepsilon \text { é: mà }} \quad$ 'rain fall'

| b. bisyllabic |  |  |
| :---: | :---: | :---: |
| [-ATR], regular |  |  |
| ńdè | nà ${ }^{\text {HL }}$ ńdè mà | 'give' |
| nùné | nà ${ }^{\text {HL }}$ núnè mà | 'enter' |
| [-ATR], truncating |  |  |
| bòlé | nà ${ }^{\text {HL }}$ bôl mà | 'go' |
| mèné | nà ${ }^{\mathrm{HL}}$ mên mà | 'come' |
| tíbè | nà ${ }^{\mathrm{HL}}$ tîb mà | 'die' |
| [ + ATR] |  |  |
| bàgé | nà ${ }^{\text {HL }}$ bâg mà | 'fall' |
| tómbò | nà ${ }^{\mathrm{HL}}$ tómbù mà | 'jump' |
| mediopassive |  |  |
| (ńnù) dùy-yé | (ńnù) nà ${ }^{\text {HL }}$ dúy-yè mà | 'bathe' |
| ób-yè | nà ${ }^{\text {HL }}$ Ób-ì: mà | 'sit down' |

### 15.7 Spatial and manner adverbials

### 15.7.1 Spatial relative clause (yà ${ }^{\mathrm{L}}$ 'where ...')

In (450a-b), a relative clause headed by yǎl 'place', in $\{L\}$-toned form as relative head, is an NP argument of the larger clause.
a. [yàl ${ }^{\mathrm{L}}$ mì ${ }^{\mathrm{HL}}$ bágò: ì] wàgù- $\eta$ bó- $\varnothing$ [place ${ }^{\mathrm{L}} 1 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ fall.Pfv.Ppl Def] distant be-3SgSbj '(The place) where I fell is far away.'
b. [è-wé yàl ${ }^{\mathrm{L}}$ bólè:-b] wàgù-n bó- $\varnothing$
[child-Pl place ${ }^{\text {L }}$ go-Ipfv.Ppl] distant be-3SgSbj
'(The place) where the children are going is far away.'

By adding a postposition, such an NP can be made adverbial.
For similar manner adverbial relative clauses see the following section below. For similar temporal relative clauses see $\S 15.2$.1.

### 15.7.2 Manner adverbial clause

### 15.7.2.1 Ordinary manner adverbial (bà:n ${ }^{\mathrm{L}}$ 'how ...')

The noun bâ:n 'way, manner' occurs in $\{\mathrm{L}\}$-toned form bà: $n^{\mathrm{L}}$ or more often variant bà:nà ${ }^{\mathrm{L}}$ as relative head to form manner adverbial relative clauses. The relative construction is optionally followed by postposition yán 'like’ (§8.4.1). If yán is present, bà:nà ${ }^{L}$ is optionally omitted (headless relative). In (451a), yáy 'like’ drops its tones but still has its usual tonal effect (tonedropping) on the preceding word. In (451b), the relative clause has a pronominal subject, but the $\{\mathrm{HL}\}$ it normally controls on the participle is overridden by tone-dropping controlled by yáy.
a. [[sé:dù bà:n ${ }^{\mathrm{L}}$ wâl kanè:-b $\left.{ }^{\mathrm{L}}\right]$ yàn] [[S manner ${ }^{\mathrm{L}}$ work(n) do-Ipfv.Ppl $\left.{ }^{\mathrm{L}}\right] \quad$ like]
[mí kánè:-bù- $七$ ]
[1Sg do-Ipfv-1SgSbj]
'I will work the way Seydou works.'
b. [[bà:n(à ${ }^{\mathrm{L}}$ mòbîl [nà ${ }^{\text {\# }}$ jı̀m-mè:-b $\left.\left.\quad \eta g i ̀\right]^{\mathrm{L}}\right]$ yán]

[dèn ${ }^{\mathrm{L}}$ tóm̀̀] bàmàkó dè:-b- $\varnothing$
[day ${ }^{\mathrm{L}}$ one] B arrive-Ipfv-3SgSbj
'The way he drives, he can reach Bamako in one day.'
Textual examples with bà:nà ${ }^{\mathrm{L}}$ but without yán are T01 at $00: 35$ and at the beginning of $00: 58$ ('how we came'). A bit later in the $00: 58$ segment is an example with yán but without bà:nà ${ }^{\text {L }}$ ('like what our elders said').

### 15.7.2.2 'As though ...' clause

This is a counterfactual manner adverbial relative. The noun gǒ- $\eta$ 'thing' is now the head of the relative and is therefore $\{\mathrm{L}\}$-toned.

| [[è-wé | $g o ̀-y{ }^{\text {L }}$ | nă:-ı | bè | nà:-1 ${ }^{\text {L }}$ ] | yáp] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [[child-Pl | thing ${ }^{\text {L }}$ | meal | 3PISbj | eat-PfvNeg.Ppl ${ }^{\text {L }}$ ] | like] |
| yă:-ŋ | $y \hat{c}$ :-ǹ |  |  |  |  |
| tears | weep-Ipfv.3P1Sbj |  |  |  |  |
| 'The children are crying as though they haven't eaten.' |  |  |  |  |  |

For ordinary counterfactuals see $\$ 16.4$.
15.7.3 Headless adverbial relative clause as spatiotemporal or manner clause

For the use of headless relatives in narrative as equivalents of event-reporting main clauses, see comments at the end of §14.2.4.

Headless relatives can, in some contexts, be interpreted as having a covert head with a sense like 'time', 'place', or more abstractly 'situation'. However, it is difficult to distinguish such cases from the event-reporting narrative cases. See the following section for temporal examples.

### 15.7.4 'From X, until/all the way to) Y ' (fà $\rightarrow$, lèn nì:)

The key element in this construction type is fà: (often prolonged as fà $\rightarrow$ ) 'all the way (to)', which emphasizes the duration of the time interval between two points in time. In (453a), the beginning and starting points are perfective adverbial relatives with covert head ('time' or similar). fà $\rightarrow$ 'all the way (to)' occurs at the beginning of the second phrase. In (453b), the locative postposition ni: is added to both 'from' and 'to' clauses, and the 'to' clause has an extra morpheme lèn between the bare verb stem and the postposition. The 'to' clause in
(453c) also has this structure, but the preceding 'from' clause has an $-\eta$ suffix added to the A-stem verb in the imperfective past subordinated form (§15.2.3.1).
a. [nà
${ }^{H L}$ yégò̀:]
[3SgSbj
${ }^{\mathrm{HL}}$ fall.Pfv.Ppl]
[fà $\rightarrow \quad$ nà $\left.\quad{ }^{\text {HL }} \mathrm{n} j u ́ g \grave{g}:\right]$
[all.the.way $\quad 3 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ get.up.Pfv.Ppl]
yǎ: $\quad y \hat{\varepsilon}:-\varnothing$
weeping(n) weep.Pfv-3SgSbj
'From the time he fell until (the time) he got up, he wept.'
b. [òní ò

${ }^{H L} g o ̂$ :
nì:]
[here $\quad 2 \mathrm{SgSbj}$
${ }^{H L}$ exit(v).Pfv.Ppl Loc]
$[f a ̀ \rightarrow \quad$ HL kígìl-yè lèn nì:]
[all.the.way $2 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ return-MP until Loc]
è-wé témyò: tém-ì:-là: jò-n
child-Pl noise make.noise-MP-Prog have-3P1Sbj
'From the time you leave until (the time) you return, the children make noise.'
c. Lbé
nàl-yà
ń]
[3P1Sbj
give.birth-MP
Def]
[fà $\rightarrow$ bè ${ }^{\mathrm{HL}}$ tíbè lèn nì:]
[all.the.way 3PlSbj ${ }^{\mathrm{HL}}$ die until Loc]
[nă:gí yàn] bò-ǹ
[cow Inst] be-3PlSbj
'From their birth to their death, they (=Fulbe) are with cows.'

## 16 Conditional constructions

### 16.1 Hypothetical conditional (nà:)

The basic 'if' particle is nà:, following the verb in the antecedent clause.
DD makes a distinction between true conditionals and pseudo-conditionals. True conditionals, covered in this chapter, express some kind of causal or inferential relationship between two eventualities that may be, but need not be, sequenced in time. Both clauses are fully inflected and have their own subjects (which may happen to be identical).

Pseudo-conditionals, covered in $\S 15.5$, make use of the same nà: particle in the first clause. Semantically, pseudo-conditional constructions express a sequential rather than causal relationship between two future (or regularly occurring) events. The pseudo-conditional clause (with nà:) may be fully inflected, in which case the entire construction is identical in form to a true conditional, and the two may shade into each other. However, if the subjects of the two clauses are the same, pseudo-conditionals have the option of omitting pronominalsubject marking before nà:. When this happens, the pseudo-conditional construction resembles a direct chain, except for the nà: morpheme. Pseudo-conditional constructions are the future-time counterparts of pseudo-direct chain constructions (§15.3) that express (among other things) the sequential relationship between two past-time events.

### 16.1.1 Phonology of nà: and preceding verb

The phonology of its interaction with the verb is illustrated in (454). Other than low-level nasal assimilation ( $1 \mathrm{Sg}-\eta$ heard as $-\eta$ before nà:), which is not indicated in transcriptions, the only phonological interaction is with 3 Sg and 3Pl perfective positives, whose H -tone shifts onto nà: (which is then heard as nâ: prepausally and as ná: when immediately followed by the consequent). For this tonal pattern, see $\S 3.7 .4 .3$. The 3 Sg perfective form of certain verbs also undergoes truncation, see (455b) below.

```
    main clause 'if'clause gloss
a. perfective positive
    H-tone jumps to 'if' particle for third person ($3.7.4.3)
        ménè-\varnothing mèn nâ: 'he/she came'
        mén-yà mèn-yà nâ: 'they came'
    no change before 'if' particle for first/second person
        m\varepsiloǹn\varepsiloń-\eta mèn\varepsiloń-\eta nà: 'I came'
        mèn\varepsiloń-y mèn\varepsiloń-y nà: 'we came'
        mèn-ó: mèn-ó: nà: 'you-Sg came'
        mèn-\varepsiloń: mèn-\varepsiloń: nà: 'you-Pl came'
            b. perfective negative
        no change before 'if' particle
        mènă:-1-\varnothing mènǎ:-1-\varnothing nà: 'he/she didn't ccme'
        mènǎ:-n mènă:-n nà: 'they didn't ccme'
```

| mènà:-lú- $\eta$ | mènà:-lú- $\eta$ nà: | 'I didn't ccme' |
| :--- | :--- | :--- |
| mènà:-lí-y | mènà:-lí-y nà: | 'we didn't ccme' |
| mènà:-l-ó: | mènà:-l-ó: nà: | 'you-Sg didn't ccme' |
| mènà:-l-é: | mènà:-l-é: nà: | 'you-Pl didn't ccme' |

c. imperfective positive
no change before 'if' particle
ménè:-b- $\varnothing \quad$ ménè:-b- $\varnothing$ nà: 'he/she is coming'
ménè:-ǹ ménè:-n nà: 'they are coming'
ménè:-bù- $\eta$ ménè:-bù- $\eta$ nà: 'I am coming'
ménè:-bì-y ménè:-bì-y nà: 'we are coming
ménè:-b-ò: ménè:-b-ò: nà: 'you-Sg are coming'
ménè:-b-è: ménè:-b-è: nà: 'you-Pl are coming'
b. imperfective negative
no change before 'if' particle
ménè-nnú- $\varnothing \quad$ ménè-nnú- $\varnothing$ nà: 'he/she isn't coming' ménè-n-íyà ménè-n-íyà nà: 'they aren't coming' ménè-nnú- $\eta$ ménè-nnú-ท nà: 'I'm not coming' ménè-nní-y ménè-nní-y nà: 'we aren't coming' ménè-nn-ó: ménè-nn-ó: nà: 'you-Sg aren’t coming' ménè-nn-é: ménè-nn-é: nà: ‘you-Pl aren't coming’

Further examples of the 3 Sg perfective are in (455). Truncation of $C v C v$ to $C v C$ occurs in a small number of high-frequency verbs (455b). As noted before, nâ: is prepausal and corresponds to ná: when there is no prosodic break.

3 Sg perfective positive with 'if'
main clause 'if' clause gloss
a. no truncation
wê:- $\varnothing$
bágè̀- $\varnothing$
tómbè- $\varnothing$
táyè- $\varnothing$
wè: tì jó- $\varnothing$

| wè:- $\varnothing$ nâ: | 'he/she saw' |
| :--- | :--- |
| bàgè- $\varnothing$ nâ: | 'he/she fell' |
| tòmbè̀- $\varnothing$ nâ: | 'he/she jumped' |
| tà̀è- $\varnothing$ nâ: | 'he/she passed' |
| wè: tì jó- $\varnothing$ | 'he has (once) seen' |

b. truncated
ménè- $\varnothing$ mèn- $\varnothing$ nâ: 'he/she came'
bólè- $\varnothing \quad$ b̀̀l- $\varnothing$ nâ: 'he/she went'
kánè- $\varnothing \quad$ kàn- $\varnothing$ nâ:. 'he/she did'
gínè- $\varnothing \quad$ gìn- $\varnothing$ nâ: 'he/she said'
bélè- $\varnothing \quad$ bèl- $\varnothing$ nâ: 'he/she got'
búndè- $\varnothing \quad$ bùn- $\varnothing$ nâ: 'he/she hit'
c. mediopassive $-i$ :
ób-yè- $\varnothing \quad$ òb-ì:- $\varnothing$ nâ: 'he/she sat down'
kígìl-yè- $\varnothing \quad$ kìgìl-ì:- $\varnothing$ nâ: 'he/she returned'

```
d. 'convey' (bipartite)
    j\varepsiloń b\grave{lè-\varnothing j\varepsiloń bòl nâ: 'he/she conveyed'}
```

The transfer of the H-tone from 3 Sg or 3 Pl perfective verbs does not apply to statives, either derived or underived, regardless of whether existential yè is present: [pòrò lá:] bìyè- $\varnothing$ nà: 'if he/she was in the village', ḿbù yè jó- $\varnothing$ nà: 'if he/she has a house'

### 16.1.2 Aspect of verb in antecedent and consequent

In the usual case where antecedent and consequent denote nonoverlapping bounded events, the antecedent is normally in perfective form (positive or negative). The consequent can be anything but perfective, i.e., imperfective, future, imperative, or hortative.
a. mí=ỳ jùmb-ó: nà:, ó=ỳ géwè:-bù- $\eta$
$1 \mathrm{Sg}=\mathrm{Acc}$ leave.Pfv- 2 SgSbj if, $2 \mathrm{Sg}=$ Acc kill-Ipfv- 1 SgSbj
'If you-Sg leave me, I'll kill you.'
b. [sé:dù mí=ỳ bùn- $\varnothing$ ná:]
$[\mathrm{S} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-3SgSbj if,
[ná = ̀̀ géwè:-bù-ŋ]
$[3 \mathrm{Sg}=$ Acc $\quad$ kill-Ipfv-1 SgSbj$]$
'If Seydou hits me, I'll kill him.' (< bùndé)
c. [sé:dì=ỳ $W$-ǒ: nà:] jóbà
$[\mathrm{S}=\mathrm{Acc} \quad$ see.Pfv-2SgSbj if $] \quad$ run.Imprt
'If you-Sg see Seydou, run!'
d. [àlá: wă:-1- $\varnothing$ nà:]
[rain(n) rain.fall-PfvNeg-3SgSbj if]
gə̀lé (bélè-nní-y
do.farming get-IpfvNeg-1P1Sbj
'If it hasn't rained, we can't farm.'

Less often the antecedent denotes a continuing situation that has a causal effect. In this case the antecedent may be imperfective (457).
(457) àlá: $\quad$ ह̂: $-b-\varnothing$ nà:, núnè:-bì-y
rain(n) rain.fall-Ipfv-3SgSbj if, go.in-Ipfv-1P1Sbj
'If it is raining, we'll go in.'

### 16.2 Alternative 'if' particles

### 16.2.1 'Even if ...' (hâl)

Clause-initial hâl can be combined with clause-final nà: . The sense is that the factuality of the (hypothetical) antecedent eventuality would not affect that of the consequent.
a．［hâl é：nì：mèn－ó：nà：］
［even tomorrow come．Pfv－ 2 SgSbj if］
［ò－ní：jêe：－nn－ó：］
［here eat－IpfvNeg－2SgSbj］
＇Even if you－Sg come tomorrow，you won＇t eat．＇
b．［hâl àlá
$w \varepsilon ̀:-\varnothing$
ná：］
［even rain rain．fall．Pfv－3SgSbj if］
tówغ̀－nnú－ク
sow－IpfvNeg－1SgSbj
＇Even if it has rained，I＇m not going to plant（seeds）．＇

## 16．2．2＇As soon as＇

The three constructions described below indicate that there will be little or no time interval between the two events，both of which are positive．

## 16．2．2．1 Parallel clauses with＝bìyà ì

This construction is described in $\S 15.2 .3 .2$ ．Further examples are in（459）．
a．［mì／ì／nà／bè
［1Sg／1Pl／3Sg／3Pl
［mì／ì／nà／bè
［1Sg／1Pl／3Sg／3Pl

| ${ }^{\mathrm{HL}}$ dé：＝bìyà | 门̀］ |
| :---: | :---: |
| ${ }^{H L}$ arrive．Pfv＝Past | Def］ |
| ${ }^{\mathrm{HL}}$ nóy－yè＝biyà | i）］ |
| ${ }^{\mathrm{HL}}$ sleep－MP．Pfv＝Past | Def］ |

＇As soon as I／we／he－or－she／they arrive（s），I／we／he－or－she／they will go to sleep．＇
b．Ló／é
${ }^{\mathrm{HL}}$ dé：＝bìyà $\quad \grave{ }$ 门
$[2 \mathrm{Sg} / 2 \mathrm{Pl}$
${ }^{H L}$ arrive．Pfv＝Past Def］
［ó／é
${ }^{\mathrm{HL}}$ nóy－yè＝bìyà $\quad$ 门̀］
$[2 \mathrm{Sg} / 2 \mathrm{Pl}$
${ }^{H L}$ sleep－MP．Pfv＝PastDef］
＇As soon as you－Sg／you－Pl arrive，you＇ll go to sleep．＇

16．2．2．2 Imperfective bélè：－b－＇finishes＇and a second imperfective clause
Another construction，also parallelistic in form，combines one imperfective clause ending with bèlé in the sense＇finish VP－ing＇（§15．1．4．2）with a juxtaposed imperfective clause（460）． This construction allows either verb to add arguments or adjuncts．
a．［wâl
kân bélè：－bì－y］
nóy－yè：－bì－y
［work（n）do－VblN get－Ipfv－1P1Sbj］sleep－MP－Ipfv－1P1Sbj
＇As soon as we＇ve finished the work，we＇ll sleep．＇
b．［ínà：sémè bélè：－ǹ］nóy－yè：－ǹ
［goat slaughter get－Ipfv．3P1Sbj］sleep－MP－Ipfv．3P1Sbj
＇As soon as they＇ve finished slaughtering the goat，they＇ll sleep．＇

### 16.2.2.3 Imperfective clauses with final prolongation (-bì- $\varnothing \rightarrow$ etc.)

In a third construction, this time with an overt nonpronominal subject disjoint to the secondclause subject, the first clause ends in an imperfective verb with final prolongation. The prolongation is not always audible for first or second person forms when the following clause is uttered without a prosodic break. However, 3 Sg (elsewhere $-b-\varnothing$ ) and 3Pl (elsewhere $-n-\varnothing$ ) prolong the suffix with its underlying /i/-vowel. This vowel is audible even when the verb runs into the next clause without a break. The juxtaposed second clause is a regular imperfective.
(461)

b. [[è-wé ḿmゝ̀] ménè:-nì $\rightarrow$ ] nóy-yè:-bù- $\eta$
[[child-Pl 1SgPoss] come-Ipfv.3P1Sbj] sleep-MP-Ipfv-1SgSbj
'As soon as my children come, I'll sleep.'
For other subject categories the form of 'come' is shown in (462), showing the prolongation even though it is not always audible.
(462) 1 Sg ménè:-bù- $\eta \rightarrow \quad$ 'as soon as I come'

1Pl ménè:-bì-y $\rightarrow$ 'as soon as we come'
2Sg ménè:-b-ò: $\rightarrow$ 'as soon as you-Sg come'
2Pl ménè:-b-è: $\rightarrow$ 'as soon as you-Pl come'
3Sg ménè:-bì- $\varnothing \rightarrow \quad$ 'as soon as he/she comes'
3Pl ménè:-nì $\rightarrow$ 'as soon as they come'
These forms can be interpreted as polar interrogatives of imperfective verbs; see $\S 13.2 .1 .1$. In this construal, an example like (461a) can be parsed literally as "Does my child come? I will sleep."

### 16.3 Willy-nilly antecedents ('whether X or Y ...')

This construction, usually rhetorically emphatic, indicates that whether the core proposition in the antecedent is factual or not, the consequent is factual. The positive and negative verbs are juxtaposed, and followed by fú: 'all' indicating the end (right edge) of the composite antecedent.
[[àlá: wè:- $\varnothing]$ wǎ:- $1-\varnothing$ fú:]
[[rain(n) rain.fall.Pfv-3SgSbj] rain.fall-PfvNeg-3SgSbj all]
[ònùnù bólè:-bù-ŋ]
[outback go-Ipfv-1SgSbj]
'(I don't care) whether it rains or doesn't rain, I'm going to the fields.'
nà: 'if' is absent, but observe that the positive verb wè:- $\varnothing$ in (463) is L-toned instead of the usual $w \hat{\varepsilon}:-\varnothing$. This is the tonal form it would have had before nà:, since a 3 Sg (or 3 Pl ) subject perfective positive transfers its H-tone to the 'if' particle (wè:- $\varnothing$ nâ: 'if it has rained'). The
negative verb wǎ:-l- $\varnothing$ in (463) is also the form that would be used with (or without) a following nà: .

Consideration of 1 st $/ 2 \mathrm{nd}$ and 3 Pl subject perfective positive forms bears out the correlation between the tones of at least the positive verb in the willy-nilly construction and the tones of the same verb before nà: . There is no tonal interaction in 1st/2nd person forms (464-b), but the 3 Pl form is L-toned as predicted (464c).
a. mèn-ó: mènà:-1-ó: fú:
come.Pfv-2SgSbj come-PfvNeg-2SgSbj all
'whether you-Sg have come or not'
b. mèné- $\eta$ mènà:-lú-ŋ fú:
come.Pfv-1SgSbj come-PfvNeg-1SgSbj all
'whether I have come or not'
c. mèn-yà mènà:-ń fú:
come.Pfv-3PlSbj come-PfvNeg.3P1Sbj all
'whether they have come or not'

### 16.4 Counterfactual conditional

In this construction, the eventuality encoded by the antecedent is not true. In a classic counterfactual, the time interval during which the antecedent event failed to occur is in the past. The antecedent uses the past perfect ( $\S 10.6 .1 .4$ ), while the consequent has the past future (§10.6.1.3). Either clause may be positive or negative.
a. [àlá: wè: = bíyè- $\varnothing \quad n a ̀:] ~$
[rain(n) rain.fall.Pfv=Past-3SgSbj if]
núyò- $m=$ bìyè- $y$
enter-Fut=Past-1P1Sbj
'If it had rained yesterday, we'd have gone in.'
b. nìךá: $\quad m i ́=y ̀ ~ b u ̀ n d e ̀ ~=b i ́ y-o ̀: ~ n a ̀: ~$
yesterday $\quad 1 \mathrm{Sg}=$ Acc $\quad$ hit.Pfv $=$ Past $-2 \mathrm{SgSbj} \quad$ if,
$o ́=\grave{y} \quad$ ǵ́wò-m̀ = bìyè- $\eta$
$2 \mathrm{Sg}=$ Acc $\quad$ kill-Fut $=$ Past -1 SgSbj
'If you-Sg had hit me yesterday, I'd have killed you.'
c. [dúmbà ŋ̀gí=ỳ] wǎ:-l=bìyè- $\eta \quad$ nà:,
[stone Def=Acc] see-PfvNeg=Past-1SgSbj if,
bágò-m = bìyè- $\eta$
fall-Fut=Past-1SgSbj
'If I hadn't seen the rock, I would have fallen.'

Another type of counterfactual refers to an ongoing state. In this case, the antecedent has a past stative verb, and the consequent has an imperfective verb (466).
(466) [mòtó yè jó=bìyè- $\eta \quad$ nà:] [motorcycle Exist have-Past-1SgSbj if] [ह́:nì: pòrò bólè:-bù- $\eta$ ] [tomorrow village go-Ipfv=1 SgSbj ]
'If I had a motorcycle, I'd go to the village tomorrow.'
Another kind of counterfactual is an 'as though' clause; see §15.7.2.2.

## 17 Complement and purposive clauses

### 17.1 Quotative complements

Among the ingredients is the conjugatable 'say' verb, quotative particles that often replace the 'say' verb, logophoric pronouns, a logophoric subject suffix on verbs, and some other modifications of the original utterance that is quoted.

### 17.1.1 'Say that ...' with inflectable 'say' verb (gìné)

The verb gìné 'say', if present, follows the quoted material (467). This verb has the full range of AN inflections and is conjugated for subject. After a quotation it is most often perfective positive and $\{\mathrm{L}\}$-toned for defocalization (e.g. 3 Sg gìǹ̀- $\varnothing$ ). This is because the quoted material is more focal than the 'say' verb itself.
(467)

c. [[pòrò lá:] àlá: wè:- $\varnothing]$
[[village Loc] rain(n) rain.fall.Pfv-3SgSbj]
gìnà:-lú- $/$ / gìnǎ:-1-Ø
say-PfvNeg-1SgSbj / -3SgSbj
'I / He-or-she didn't say that it rained in the village.'

'Tell-2Sg your friend to come!'
e. [mì HL gínò: ŋ̀] ògù ná=lò:
[1SgSbj ${ }^{\mathrm{HL}}$ say.Pfv.Ppl Def] Prox $3 \mathrm{Sg}=$ it.is.not
'What I said isn't that.' (predicate also ògú=lò:)
gìné may also take an NP or manner adverb as complement, referring back to something said (468a-b). This is implied in (467e) above, which contains a headless relative.
(468)
a. sé:dù
ŋ̀gò- $\eta$
gínè- $\varnothing$
S what? say.Pfv-3SgSbj
'What did Seydou say?' (ŋ̀gó- $\eta$ )
b. [ŋ̀gì yán] gìnà:-lú-n
[Prox like] say-PfvNeg-1SgSbj
'I didn't say (it) like that.'
In (468a), the H-tone of the preceding $\grave{\eta} g \delta$ - $\eta$ 'what?' is transferred to the first syllable of 'say' by Rightward H-Tone Shift (§3.7.4.1). A similar but slightly distinct process applies when 'say' directly follows a quoted perfective positive verb with third person subject (§3.7.4.3). 3 Sg ménè- $\varnothing$ 'he/she came' in ( $469 \mathrm{~b}, \mathrm{e}$ ) and 3 Pl mén-yà in ( 469 c ) drop to mènè- $\varnothing$ and mèn-yà, respectively, but their H-tone appears on the first syllable of 'say' (gínè- $\varnothing$, gínè-p). No shift occurs when the quoted perfective verb has first or second person subject (469a,d). When there is no tone shift, 'say' usually shows up in its $\{\mathrm{L}\}$-toned defocalized form.


The examples in (469) above have perfective positive 'say' verbs. Rightward H-Tone Shift also occurs when the quoted third person perfective is followed by an imperfective positive (470a) or imperfective negative (471a) 'say' verb. As before, no shift occurs with 2Pl subject 'come' (470b, 471b).
a. [sé:dù
mènè- $\varnothing]$
gínè:-bù-ŋ
[S come.Pfv-3SgSbj] say-Ipfv-1SgSbj
'I will say that Seydou has come.'

(471)
a. [sé:dù mènè- $\varnothing]$ gínè-nnú-ŋ
[S come.Pfv-3SgSbj] say-Ipfv-1SgSbj
'I won't say that Seydou has come.'
b. [é mèn-દ́:] gìnè-nnú-n
[2PISbj come.Pfv-2PlSbj] say-Ipfv-1SgSbj
'I won't say that you-Pl have come.'
When the 'say' verb is perfective negative, quoted 'come' again keeps its final H-tone in first and second person subject forms (472a). It loses the H-tone with third person subject (472b), but the 'say' verb has only its regular tones (L-toned stem then H-toned suffix). One could argue that the lost H -tone has amalgamated with the preexisting suffixal H -tone in spite of their wide separation, i.e. HL\#L-H $\rightarrow$ L\#L-H. Alternatively, one could argue that the $\{\mathrm{L}\}$ overlay controlled by the perfective negative suffix on 'say' includes a preceding third person perfective verb in its target domain.
a. [é
mèn-é:]
gìnà:-lú-ŋ / gìnă:-1- $\varnothing$
[2PISbj come.Pfv-2PlSbj] say-PfvNeg-1SgSbj / -3SgSbj
' $\mathrm{I} / \mathrm{He}$-or-she didn't say that you-Pl have come.'
b. [sé:dù mènc̀- $\varnothing]$ gìnà:-lú-ŋ / gìnă:-I- $\varnothing$
[S come.Pfv-3SgSbj] say-PfvNeg-1SgSbj / -3 SgSbj
'I/He-or-she didn't say that Seydou has come.'

### 17.1.2 Quotative clitic

### 17.1.2.1 Clause final wà:

The unconjugated clause-final quotative particle wà: is often used instead of a conjugated perfective positive 'say' verb when reporting speech that was actually uttered. The attributed author of the quotation is contextually understood but is not overt. The author may be the addressee or a third party. Normally wà: is not used for self-quotation.

```
a. [pòrò lá:] àlá: wè:-\varnothing wá:
    [village Loc] rain(n) rain.fall.Pfv-3SgSbj Quot
    '(... said) it rained in the village.'
b. [pòrò lá:] àlá: wă:-1-\varnothing wà:
    [village Loc] rain(n) rain.fall-PfvNeg-3SgSbj Quot
    '(.. said) it didn't rain in the village.'
c. \(W \varepsilon ́ n \grave{\varepsilon ̀:-b-\varnothing ~}\)
come-Ipfv-3SgSbj wà:
'(X said) he/she will come'
d. àlá: wê:-nnù- \(\varnothing \quad\) wà:
rain(n) rain.fall-IpfvNeg Quot
'(... said) it doesn't rain.'
e. mèn-ó: wà:
come.Pfv-2SgSbj Quot
'(... said) you-Sg have come.'
```

```
f. ménà wà:
    come.Imprt Quot
    '(... said) for you-Sg to come.' (transmitted imperative)
```

The combination of perfective positive verb and following wà: is eligible for Rightward H-Tone Shift. We therefore get H-toned wá: after an L-toned 3Sg perfective verb in (473a), but L-toned wà: after an H-tone bearing verb, if the latter is a non-third-person perfective like 2 Sg in (473e) or is other than perfective positive (473b-d,f).
wà: may follow a noun or other short phrase. This can be used to express surprise or skepticism, or to request confirmation or clarification, focusing on a word or phrase just uttered by an interlocutor.

```
A: gǔ:ク gèWé- \(\eta\)
elephant kill.Pfv-1SgSbj
'I killed an elephant.'
```

B: gǔ:y wà:
elephant Quot
‘An elephant, huh?' (skeptical) or ‘An elephant?’ (incredulous)
In an extended quotation involving multiple main clauses, the clause-final quotative particle may be repeated periodically. However, it is not inserted into the middle of a tightly-knit multiclausal construction. For example, it occurs only at the end of a pseudo-direct chain, and it is not repeated after the nonfinal chained verb 'come' in (475a). Likewise, it comes at the end of an entire conditional construction, and it is not repeated after the antecedent ('if') clause in (475b), which has its own clause-final 'if' particle.
$\begin{array}{lllll}\text { a. } & m m \varepsilon ́ \varepsilon & m e ̀ n \varepsilon ́ ~ & {[o ́=y} & \text { tèmbà:-lú- } \eta]\end{array} \quad$ wà: ' $\left(\mathrm{He}_{\mathrm{x}} /\right.$ She $_{\mathrm{x}}$ ) said that he $\mathrm{x}_{\mathrm{x}} /$ she $_{\mathrm{x}}$ came but ( $\mathrm{he}_{\mathrm{x}} /$ she $_{\mathrm{x}}$ ) didn't find you-Sg.'

' $\left(\mathrm{They}_{\mathrm{x}}\right.$ ) said that if you-Sg go to her $_{\mathrm{y}}$ (house), she $\mathrm{x}_{\mathrm{x}}$ will give you the money.'

Clause-final quotative wà: is not used other than to report actual speech (or thought). That is, it replaces conjugated perfective positive 'said'. It is absent in contexts like negative 'did not say', interrogative 'did he/you say?', future 'will say', and imperative 'say!', all of which regularly use the conjugatable verb gìné 'say'.

### 17.1.2.2 Quotative subject wà:

The subject of a quoted clause can be provided with its own quotative particle wà:, in addition to either a clause-final wà: or 'say' verb. When wà: is added to the subject NP it will be glossed as QuotSbj in interlinears.

The quotative-subject construction is regular with quoted imperatives, whose "subjects" can be NPs or pronouns of any category. In quoted indicatives, the quotative-subject
construction is optional, since pronominal-subject categories are already marked in the quoted verb. In such indicatives, the quotative-subject construction is most common with specific human referents, especially personal names and pronouns. It does not appear to be possible with low-referentiality (pseudo-)subjects in meteorological, seasonal, and emotional collocations of the sort described in §11.1.1.4. Of course, imperatives are addressed to specific individuals.

The combinations of quotative subject wà: with pronouns are in (476). The 1 Sg form is irregular má: or má: wà: for expected \#mí wà: .

QuotSbj with pronouns
a. irregular
1 Sg má: wà:~má:
b. regular

1Pl í wà:
2Sg ó wà:
2 Pl é wà:
3Sg ná wà:
3 Pl bé wà:
3Logo mmé wà:

Examples are in (477).


Quotative subject wà: can be used even when clause-final quotative wà: is disallowed. This is the case in (478), where 'say' is negated, so the utterance as a whole does not quote an actual utterance.

| $[o ́$ | wà: $]$ | mènó: | gìnǎ:-1- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| $[2 S g$ | QuotSbj] | come.Pfv-2SgSbj | say-PfvNeg-3SgSbj |

'He/She did not say that you-Sg have come.'

Quotative-subject particles in Dogon languages generally are somewhat ambiguous as to whether they mark the (syntactic) subject or the addressee of the quoted utterance. In DD, the particle tilts in the direction of addressee somewhat more than in the other languages. An indication of this is the limited use of logophoric mmé in the quotative-subject construction mmé wà: . This is significant because the logophoric pronoun is coindexed with the original speaker, who therefore could not normally have been the original addressee. This is the case in (479a), where my assistant rejected the version with the quotative-subject particle. He volunteered (479b) as an example of how mmé wà: can validly be used. The difference is that (479b) is a stacked quotation ('X said that [Y said that [X ...]]'), where X could plausibly be considered to be the addressee of the embedded 'say' verb.
'Seydou ${ }_{x}$ said that he ${ }_{x}$ has come.'
b. sé:dù

S
[[mmé wà:] mènè- $\varnothing]$
[[3Logo QuotSbj] come.Pfv-3SgSbj]
gín-yà]
say.Pfv-3PlSbj
gìnè- $\varnothing$
say.Pfv-3SgSbj
'Seydou ${ }_{x}$ said that they said that he ${ }_{x}$ has come.'
Furthermore, in hortatives (where the original addressee was 2 Sg or 2 Pl but the original subject was 1 Pl ), the quotative-subject construction refers to the addressee, even though its pronominal category is updated in the current speech event. (480) reports a hortative 'let's go!' uttered by Seydou to one addressee (say, Amadou), neither of whom is a participant in the current speech event. 3Pl bé wà: cannot be used to denote the Seydou/Amadou pair; it can only be used in (480) if Seydou had at least two original addressees.

| sé:dù | [ná | wà:] | [ह́bà: | bò:-má] | gìnè- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S | ${ }^{\text {[ }} \mathrm{Sg}$ | QuotSbj] | [market | go-Hort] | say.Pfv-3SgSbj |
|  |  | him, let's |  |  |  |

However, there is also evidence in favor of original subjects rather than addressees as the basis for the quotative-subject construction. For example, my assistant accepted (481a-b) both with and without quotative-subject wà: . Yet the 1 Sg and 1 Pl subjects cannot refer to the original addressees, who are unspecified.
a. [mí/ má: mèn $\bar{\varepsilon}-\eta]$
come.Pfv- 1 SgSbj$]$ gìnè-1 [1Sg/1Sg.QuotSbj come.Pfv-1SgSbj] say.Pfv-1SgSbj 'I said that I have come.'
b. [í (wà:) mèné-y] gìnè-ŋ [1Pl (QuotSbj) come.Pfv-1PISbj] say.Pfv-1SgSbj
'I said that we have come.'

### 17.1.2.3 Pronominal-subject suffixation in quoted clauses

In quoted indicative clauses, regular pronominal-subject suffixation occurs on the quoted verb. The only difference between quoted and nonquoted main clauses is that quotations allow logophoric subject suffix $-\eta$ ( $(18.3 .2$ ) on the verb, in addition to the full set of regular pronominal categories. Because logophoric subject $-\eta$ is homophonous to 1 Sg subject $-\eta$, there is some possibility of confusion. This is usually avoided by also using logophoric free pronoun mmé (482a) or 1 Sg independent pronoun mí, in the latter case with or without the quotative-subject particle wà: (482b). Free pronouns can also be used with other pronominal categories that are already clearly marked in the verb, like 3Pl in (482c).


### 17.1.3 Jussive complement (quoted imperative or hortative)

### 17.1.3.1 Quoted imperative and prohibitive

A quoted imperative has the same structure as a quoted indicative clauses, with two differences. First, the verb is imperative in form. In spontaneously produced utterances the verb is unmarked for plural addressee. However, my assistant accepted a version with pluraladdressee suffix -ì when I proposed it. Second, the quotative-subject construction is obligatory with quoted imperatives. (For the issue whether this construction involves subjects or addressees, see discussion in the preceding section). Examples with imperative ménà 'come!' are in (483).

```
a. sé:dù [[ó wà:]/ má: ménà] gìnè- \(\varnothing\)
S [[2Sg QuotSbj]/ 1Sg.QuotSbj come.Imprt] say.Pfv-3SgSbj
'Seydou said for you-Sg/me to come.'
```

b. [[sé:dù wà:] ménà] gìnè- $\eta$
[[S QuotSbj] come.Imprt] say.Pfv-1SgSbj 'I told Seydou to come.'
c. [[[è-wé jgì yà:] wà:]
[[[child-Pl $\quad$ Def $\quad \mathrm{Pl}] \quad$ QuotSbj]
ménà(-ı̀)] gìnè-ク come.Imprt(-PlAddr)] say.Pfv-1SgSbj
'I told the children to come.

The corresponding quoted prohibitives, with mèn-lá 'don't come!', are in (484). Again, plural-addressee marking is only marginally acceptable in quotations (484c).
a. sé:dù [[ó wà:]/ má:
mèn-lá] gìnè- $\varnothing$
S [[2Sg QuotSbj]/ 1Sg.QuotSbj come-Proh] say.Pfv-3SgSbj
'Seydou said for you-Sg/me not to come.'


```
c. [[[è-wé \etagì yà:] wà:]
[[[child-Pl Def Pl] QuotSbj]
mèn-lá(-\grave{\eta)] gìnè-\eta}\\mp@code{l}
come-Proh(-PlAddr)] say.Pfv-1SgSbj
'I told the children not to come.'
```


### 17.1.3.2 Quoted hortative

In a quoted hortative, the quotative subject construction treats the original addressee as the "subject." The verb is in the regular hortative form, usually in unmarked (singular-addressee) form -má, though an explicitly plural-addressee form -má- $\mathfrak{\eta}$ was accepted by my assistant. In (485a), Seydou had proposed that he and the current speaker should go. In (485b), Seydou had proposed that he, the current speaker, and at least one other person should go.
a. sé:dù
má:
bò:-má
S 1Sg.QuotSbj go-Hort say.Pfv-3SgSbj
gìnè- $\varnothing$
'Seydou said to me, let's go!'

| b. sé:dù | [í | wà:] | bò:-má(-ı̀) | gìnè- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: |
| S | [1P1 | QuotSbj] | go-Hort(-PlAddr) | say.Pfv-3SgSbj |
| 'Seydous | aid | us, let's go |  |  |

Textual examples are in T 01 at $07: 25,07: 31$, and $07: 35$. The context is generic so there is no overt addressee.

The quoted hortative negative is based directly on the regular hortative negative verb form -níyà, with the original addressee as "subject."

| a. | sé:dù | má: | bòl̀̀-níyà | gìnè |
| :--- | :--- | :--- | :--- | :--- |
|  | S | 1Sg.QuotSbj | go-HortNeg | say.Pfv-3SgSbj |
|  | 'Seydou said to me, let's not go!' |  |  |  |

17.1.4 Quoted imperative as different-subject purposive

A functionally purposive construction involving disjoint subjects takes the form of a quoted imperative plus 'say' verb. The 'say' clause is itself then juxtaposed to a following main clause to form a pseudo-direct chain, allowing intervening constituents (the arguments and adjuncts of the main clause). The pseudo-direct chain morphs into a pseudo-conditional in non-perfective contexts, see (488b) below. The quotative-subject construction is possible (487a) but often omitted. gìn $\varepsilon$ 'say' is a chained verb, so the whole construction is literally of the type, using (487a) as example, 'I've brought some soap, saying "hey you, wash my clothes!", However, the subject of the imperative may be human, animate, or inanimate (487d), so the "imperative" is rather pro forma.
a. nèmè-ŋ̀-gò:-ndú- $\eta$
soap
[[sò:-g mmó]
[[clothes 1SgPoss] wash.Imprt] say] bring.Pfv-1 SgSbj
'I've brought some soap, so that you may wash my clothes.'
b. sé:dì=ỳ [[bàmàkó bólà] gìné] bú:dù ǹdè-1̀ $\mathrm{S}=\mathrm{Acc}$ [[B go.Imprt] say] money give.Pfv-1SgSbj
'I gave money so that Seydou might go to Bamako.'
c. núwò [núwò gìné] ná=ỳ ǹdè-1̀
seeds [sow.Imprt say] $3 \mathrm{Sg}=\mathrm{Acc}$ give.Pfv-1SgSbj
'I gave him/her the seeds, so he could sow (them).'
d. [[ě-g / é:gè / ńnù
[ [child / mouse / water gó:] gìné]
exit.Imprt]
say]
kâ: ${ }^{n} \quad$ ìl-lé- $\eta$
door close-Rev.Pfv-1SgSbj
'I opened the door so the child/mouse/water could go out.'
Since many verbs have imperatives ending in $a$, this construction is easily confusable with the same-subject purposive construction involving lengthened A-grade (§17.4.1). However, the final à in imperative mógà (487a) or bólà (487b) is not lengthened, and +ATR verbs like 'sow' and 'exit' have imperatives with final $o$ rather than a (núwò, gó:).

A negative purposive clause may similarly have a prohibitive verb (488a). An imperfective negative is also possible (488b).

| a. [[ě-g | gè:-lá] | gìné] |
| :---: | :---: | :---: |
| [[child | exit-Proh] | say] |
| [kâ: ${ }^{\text {n }}$ | ì:-ré-ŋ] |  |
| [door | shut-Tr.Pf |  |

'I closed the door so the child won't go out.'
b. [sósè-nnú- $\varnothing$ gìn ná:]
[leak-IpfvNeg-3SgSbj say if]
[dálà: tàrè:-bì-y]
[roof apply-Ipfv-1PlSbj]
'We will replaster the roof (with mud) so it won't leak.'

### 17.2 Propositional complements

In this section are included main-clause-like indicative complements without an overt subordinator, 'whether' complements in the form of polar interrogative clauses, and (generally headless) relatives that denote propositions.

### 17.2.1 Clausal complements of 'know' and 'forget'

### 17.2.1.1 Positive 'know that ...' with main-clause complement

For the stative verbs tígà 'know' and suppletive negative ínnù 'not know' see §11.2.5.1. The positive form (e.g. 'I know' or 'I knew') may take as complement a proposition in the form of a regular main clause. There is no complementizer or other mark of subordination.

b. [è-wé pésgè èb-yà] yè tígà-ŋ
[child-Pl sheep buy.Pfv-3PlSbj] Exist know-1SgSbj
'I know (that) the children bought a sheep.'
c. [[è-wé $\quad$ Dgì yà:] bj̀lè=bíy-yà]
[[child-Pl Def Pl] go.Pfv=Past-3PISbj]
yè $\quad$ tígà $=$ bìy $̀$ - $\eta$
Exist know=Past- 1 Sg Sbj
'I knew (that) the children had gone.'

### 17.2.1.2 'Not know' with 'whether' complement

The complement of 'not know' (or interrogative 'do you know?'), i.e. where the positive form of the complement cannot be asserted by the subject of 'know', takes the form of a polar interrogative with mà $\rightarrow$, which becomes H -toned in some combinations (§13.2.1.2). There is no difference between 'not know that X ' (with the truth of X presupposed by the speaker) and 'not know whether X '.

$$
\begin{array}{lll}
{[b \grave{l e ̀}-\varnothing} & \text { má } \rightarrow \text { ] } & \text { ínnù }=\text { bìỳ̀̀- } \eta  \tag{490}\\
{[\text { go.Pfv }-3 S g S b j} & \text { Q] } & \text { not.know }=\text { Past- } 1 \mathrm{SgSbj} \\
\text { 'I didn't know that/whether he/she had gone.' }
\end{array}
$$

### 17.2.1.3 'Forget' with 'whether' complement

As with 'not know', írè 'forget' with propositional complement (as opposed to the infinitival type 'forget [to VP], §17.3.3) does not presuppose the factuality of its complement. It therefore takes interrogative complements with question particle mà $\rightarrow$ (491).
$\begin{array}{ll}{[i ́ s i ̀ ̀ g} & \text { nê:-nn-ò: } \\ \text { [fish } & \text { eat.meat-IpfvNeg-2SgSbj }\end{array}$
mà $\rightarrow$ I ìré-n
'I forgot that you don't eat fish.'
'Whether' complements also occur in the 'fear (that ...)' construction, §17.3.2.

### 17.2.2 Factive complements of perception verbs ('see', 'hear', ‘find')

In (492), the higher subject has some reason to believe the factuality of the complement proposition, which may be negative as well as positive, either by inference from visual evidence (492a-b) or from hearsay (492c). The complement has regular main-clause form including pronominal-subject marking on the verb.

| a. | [ $[$ è-wé | ngì | yà:] | $\check{o}-\eta$ | bò-ń-yà] |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [[child-Pl | Def | $\mathrm{Pl}]$ | here | be-Neg-3PlSbj] |
|  | wè:-bù-n |  |  |  |  |
|  | see-Ipfv-1SgSbj |  |  |  |  |
|  | 'I see that | child | are n |  |  |

b. [nă:-n $n$-ò:] wě:-n
[meal eat.Pfv-2SgSbj] see.Pfv-1SgSbj
'I see that you-Sg have already eaten.'
c. [bàmàkò bólè:-b-ò:] nùmè-ŋ
[B go-Ipfv-2SgSbj] hear.Pfv-1SgSbj
'I heard that you-Sg are going to Bamako.'
An alternative construction, perhaps pointing to another perfect construction that is not attested as a main clause, is the combination of a main-like clause with a following participialized 'be' clause (493). One could gloss literally as something like "I saw [them being (in a state where) [they slaughtered the sheep]]."


In this construction, unlike ordinary nonsubject relatives, the pronominal proclitic before bó is the tonally mixed series (§4.3.1.3), with H-toned 2 Sg ó, 2Pl é, and logophoric mmé. This participialized 'be' can occur without a preceding main clause, as in "I saw [them being (present)]," as long as this is subordinated to a verb like 'see' or 'find'. An example of this with H-toned 2Pl é is [é bó ̀̀] tèmbé-y 'we found that you-Pl are present' in text T01 at 00:45.

For imperfective complements ('X saw/sees Y dancing', etc.) with A-stem imperfective subordinated clauses, see §15.2.3.1.

### 17.3 Verbal noun complements

The productive verbal noun has suffix $-g(\hat{u})(\S 4.2 .2 .1)$. A VP including a verbal noun (or some other nominalization of the verb) may function as the complement of a higher verb. In many cases the subjects of the two clauses are coindexed, in which case the overt subject is part of the higher clause, and the complement is a VP like the English infinitive. Many of the higher verbs in question also occur in simple intransitive and/or transitive clauses.

### 17.3.1 Structure of verbal-noun complement

Verbal-noun complements may have their own subjects or may be VPs without a subject. Where morphologically possible, other complements and adjuncts are expressed as L-toned compound initials to the verbal noun. These complements and adjuncts are usually generic but are occasionally specific. If there is a subject, it is expressed as the "possessor" of the verbal noun.

If the direct object, for example, is separately determined or otherwise too complex or too long to be incorporated as a compound initial, the tight structure of the simple or compounded verbal-noun complement is abandoned and a more clause-like structure replaces it, but the verb still appears in verbal-noun form.

Likewise, if a verb-chain is converted into a verbal noun, the nonfinal verb becomes the L-toned compound initial, and any other object or adjunct is expressed separately.

Examples of these patterns occur throughout the following sections.

### 17.3.2 'Be afraid to' (ú:g-yغ̀) with verbal-noun or 'whether' complement

This mediopassive verb can be intransitive (' X was afraid') or transitive (' X feared Y '). The perfective form can be used with general present-time reference. A clausal, same-subject complement ('be afraid [to VP]') is expressed as a verbal-noun complement (494a-b).
a. $[\grave{o}-\eta]^{\mathrm{L}}-[m \varepsilon ́ n u ̀-g] \quad u ́: g-y \varepsilon ̀-\varnothing$
[here] ${ }^{\mathrm{L}}$-[come-VblN] fear-MP.Pfv-3SgSbj
' $\mathrm{He} /$ She was afraid to come here.'
b. [[ùnò-n]-nàmà: $\left.]^{\mathrm{L}}-[t \varepsilon ́ m u ̀-g]\right] \quad u ̀: g-y \varepsilon ́-\eta$
[[[dog]-meat $]^{\text {L }}$-[eat.meat-VblN]] fear-MP-1SgSbj
'I was afraid to eat dog meat.'
When the two clauses have different subjects, the complement is a quoted interrogative imperfective clause (as in 'whether ...' complements with 'not know' or 'forget', §17.2.1.2-3) with regular pronominal-suffix conjugation of the predicate.
a. [ùnó-ŋ ó=ỳ kérè:-b- $\varnothing \quad$ mà $\rightarrow$ ù: $g-y \varepsilon ́-\eta$ [dog $2 \mathrm{Sg}=$ Acc bite-Ipfv-3SgSbj Q$] \quad$ fear-MP.Pfv-1SgSbj 'I fear that (the) dog will/might bite you-Sg.'
b. $[o ́=y$ ỳ búndè:-ǹ mà $\rightarrow$ ù: $g-y \varepsilon ́-\eta$ $[2 \mathrm{Sg}=$ Acc hit-Ipfv.3P1Sbj Q$] \quad$ fear-MP.Pfv- 1 SgSbj 'I fear that they will hit you-Sg.'

If the feared eventuality has probably already either happened or not happened, the complement is again a 'whether ...' complement. (496) could be uttered in case the protagonist has not returned from a hunting trip and the speaker fears the worst.
(496) [[yàrá yà:] ná=ỳ gèw-yà má $\rightarrow$ ]
$\left[\begin{array}{lll}{\left[\begin{array}{ll}\text { lion } & \mathrm{Pl}]\end{array} 3 \mathrm{Sg}=\text { Acc }\right.} & \text { kill.Pfv-3PlSbj } & \mathrm{Q}]\end{array}\right.$ ù: $g-y \varepsilon ́-\eta$
fear-MP.Pfv- 1 SgSbj
'I fear that/lest the lions (may) have killed him/her.'
17.3.3 'Forget' (iř̀) with verbal-noun complement

A verbal-noun complement is used in the sense 'forget to VP', with same subject.
(497)
a. mén-gù / kígil-ì:-g
ìré-n
come-VblN / return-MP-VblN
forget.Pfv- 1 SgSbj
'I forgot to come / to go back.'
b. tè: ${ }^{\mathrm{L}}-[\varepsilon \varepsilon b-g u ̀] \quad$ ìr $\varepsilon$ - $\eta$
tea-[buy-VblN] forget.Pfv-1 1 SgSbj
'I forgot to buy the tea.'

market ${ }^{\mathrm{L}}$-[go-VblN] forget-Proh
'Don't-2Sg forget to go to the market!'
For propositional complements ('X forget [that/whether ...]'), see §17.2.1.3.

### 17.3.4 'Prevent' (gà:ndé) with verbal-noun complement

The transitive verb gà:ndé 'prevent' can take a verbal-noun complement, with the subject expressed as possessor.
a. $\left.[[n a ̀:-n]]^{\mathrm{L}}-[n i ́:-g u ̀] ~ m m \grave{]}\right]$ gá:ndè- $\varnothing$
[[meal] ${ }^{\mathrm{L}}$-[eat-VblN] 1SgPoss] prevent.Pfv-3SgSbj
'He/She prevented me from eating.'

' $\mathrm{He} /$ She prevented me from drinking beer.'
c. [è-wé ${ }^{\mathrm{L}}$ [kònjò--[nì:-g]] gà:ndé-n]
[3SgSbj L[beer-[drink-VblN]] prevent.Pfv-1SgSbj
'I prevented the children from drinking beer.'
d. [pòrò ${ }^{\mathrm{L}}-[b$ b́l-gù $]$ mmò $]$ gà:ndà:-ń
[village-[go-VblN] 1SgPoss] prevent-PfvNeg.3PISbj
'They didn't stop me from going to the village.'
e. [[è-wè $]^{\mathrm{L}}$-[búndù-gù] mmò] gá:ndè- $\varnothing$
[[child-Pl] ${ }^{\text {L }}$ [hit-VblN] 1SgPoss] prevent.Pfv-3SgSbj
'He/She prevented me from hitting (the) children.'

'I prevented them from hitting you-Sg.'
If the object of the verbal noun is determined and cannot be incorporated as an L-toned compound initial, the possessed verbal-noun construction must be replaced, either by using an L-toned subject proclitic (499a) or by extracting the lower subject to be a second direct object of 'prevent' (499b). However, both examples have verbal nouns in the complement.
 gà:ndè- $\varnothing$
prevent.Pfv-3SgSbj
' $\mathrm{He} /$ She prevented me from buying these three sheep.'
b. $\left[\left[[m \grave{m} b u ̀-[\grave{o}-\grave{j}]]^{\mathrm{L}}-[p o ́ g-g \grave{g}] \quad m i ́=\grave{y} \quad\right.\right.$ gà: $n d e ̀-\varnothing$
[[[house-[2Sg-Poss]] ${ }^{\text {L }}$-[burn-VblN] $1 \mathrm{Sg}=$ Acc prevent.Pfv- 3 SgSbj
'He/She prevented me from burning your-Sg house.'

### 17.3.5 'Help' (bàré) with verbal-noun or directly chained VP

This verb takes an object (usually a human NP or pronoun in accusative form) as in (500a). This can be elaborated by adding a verbal noun as an adjunct (500b). Alternatively, since the helper participates in the activity, and since helping is therefore part of a conceptually integrated event, the two verbs can be chained. (500c) shows the normal order with 'help' as the final verb in a direct chain. (500d) flips the order.
a. sé:dù mí=ỳ bàrè- $\varnothing$
$\mathrm{S} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ help.Pfv-3SgSbj
'Seydou helped me.'
b. sé:dù nà: ${ }^{\mathrm{L}}-[k$ b́mù- $g] \quad m i ́=y$ y bàrè- $\varnothing$
$\mathrm{S} \quad$ cow $^{\mathrm{L}}$-[tie-VblN] $1 \mathrm{Sg}=$ Acc help.Pfv-3SgSbj
'Seydou helped me tie up the cow.'
c. sé:dù mí=ỳ [gólò: gòlé] bàrè- $\varnothing$
$\mathrm{S} \quad 1 \mathrm{Sg}=\mathrm{Acc}$ [farming(n) do.farming] help.Pfv-3SgSbj
'Seydou helped me do the farming.'
d. dògtórò [mí=ỳ bàré] [ó=y jò jòǹ̀:-b- $\varnothing]$
doctor [1Sg=Acc help] [2Sg=Acc care.for-Ipfv-3SgSbj]
'The doctor will help me treat you-Sg (medically).'

### 17.3.6 'Abandon' (jùmbé) with verbal-noun complement

jùmbé 'leave (sth, sw), leave behind, abandon' is a common transitive verb in simple clauses. It may be used with a verbal-noun or similar nominalized complement to indicate the cessation of a previous activity. The cessation may be definitive (501).
a. tè: ${ }^{\mathrm{L}}-[n \hat{i}:-g]$ jùmbé- $\eta$
tea ${ }^{\mathrm{L}}$-[drink-VblN] leave. Pfv - 1 SgSbj
'I have (permanently) ceased drinking tea.'
b. ó $=\grave{y}$ tê: jìn $\varepsilon^{\mathrm{L}}$-[ńdù-g] jùmbé- $\eta$
$2 \mathrm{Sg}=\mathrm{Acc}$ tea bring $^{\mathrm{L}}$-[give-VblN] leave. $\mathrm{Pfv}-1 \mathrm{SgSbj}$
'I have (permanently) stopped bringing and giving tea.'

Or the cessation may be temporary (502).

```
è-wé nùy\grave{. L}-[nûy-\varnothing] jùmb-yà
child-Pl song}\mp@subsup{}{}{L}-[sing-Nom] leave.Pfv-3P1Sbj
'The children have stopped singing.'
```

The verb íg-rè (ígì-rè) 'cause to stand/stop' can also be used in this way.

### 17.3.7 Obligational 'must' (sémbè =ỳ) with verbal noun as subject

In this construction, the predicate is $S \varepsilon$ émbè $=\grave{y}$ 'it is (by) force' or its negation sémbè $=l o ̀$. . The subject is a verbal noun with a possessor denoting the subject. (503a) is literally 'the children, their Mopti-going is (by) force.'
a. $\check{\text { è-wé }}$
ngì yà:] [[mòtù ${ }^{\text {L }}-[b o ́ l u ̀-g]$
bè-ì̀]
[child-Pl Def Pl] [[Mopti ${ }^{\text {L }}$-[go-VblN] 3Pl-Poss]
$s \varepsilon ́ m b \grave{\varepsilon}=\grave{y}$

## force $=$ it.is

'The children must (are obligated to) go to Mopti (city).'
b. é:nì [gòlò: ${ }^{\mathrm{L}}$-[gól-gù] mmò] sémbè =lò:
tomorrow [farming(n)-[do.farming-VblN] 1SgPoss] force=it.is.not 'Tomorrow I am not obligated to farm.'

In (503b) above, the negation 'it is not' has wide scope, so the speaker can choose whether or not to farm tomorrow. To express the prohibition 'must not', where the obligation scopes over the negation, an alternative construction must be used. In (504) below, the prohibitive verb form is used, with an implied higher clause like 'they say'.

| é:nì | gólj̀: | mí | gòl-lá |
| :--- | :--- | :--- | :--- |
| tomorrow | farming(n) | 1 Sg | do.farming-Proh |

'I must not farm tomorrow.'

### 17.4 Purposive and causal clauses

### 17.4.1 Same-subject purposive clause with lengthened A-stem of verb

The purposive clause in this construction has the lengthened A-stem of the verb with \{HL\} overlay. There is no final definite $\bar{\eta}$ as in the phonetically similar durative complement with unlengthened A-stem (§15.2.3.1).

This construction appears to be limited to same-subject purposives. For purposives with disjoint subjects, expressed as quoted imperatives, see §17.1.4 above.

### 17.4.1.1 Regular purposive clauses (lengthened A-stem)

Often the subject of the main clause and that of the purposive clause are coindexed. One of the most common combinations is with a verb of motion.
$\left.\begin{array}{lll}\text { a. } & {[b a ̀ m a ̀ k o ̀ ~} & \text { lá:] }\end{array} \begin{array}{l}{[\text { kjònjó }} \\ {[\mathrm{B}}\end{array} \mathrm{Loc}\right] \begin{aligned} & {[\text { beer }}\end{aligned}$
${ }^{\text {HL }}$ ع́bà:] bòlè- $\varnothing$
[B Loc] [beer ${ }^{\text {HL }}$ buy.Purp] go.Pfv-3SgSbj
'He went to Bamako in order to buy beer.'
b. [té: ${ }^{\text {HL }}$ nâ:] mén-yà
[tea ${ }^{\text {HL }}$ drink.Purp] come.Pfv-3PlSbj
'They came to drink tea.'
c. [mí=y ${ }^{\text {HL }}$ búndà:] mén-yà
[1Sg=Acc $\quad{ }^{\text {HL }}$ hit.Purp $] \quad$ come.Pfv-3PlSbj
'They came in order to hit me.' (< bùndé)

Verbs other than motion verbs may occur in the main clause, as long as there is some conceivable causal connection between it and the purposive clause.

### 17.4.1.2 'Begin' (tólè) with purposive complement (lengthened A-stem)

tólı̀ 'begin' can be a simple intransitive ('X began') or transitive (' X began the work'). A VP-like complement is expressed with the verb in the A-stem purposive form. This verb may be accompanied by an object (506b) or other nonsubject constituent.
a. ${ }^{{ }^{H L}}$ jóbà: / / ${ }^{\mathrm{HL}}$ nâ:
tòlé- $ŋ$
${ }^{H L}$ run.Purp / ${ }^{\text {HL }}$ eat.Purp begin.Pfv- 1 SgSbj
'I began to run/eat.'
b. [pésgè ${ }^{\mathrm{HL}}$ sémà:] tòlé- $\eta$
[sheep ${ }^{\mathrm{HL}}$ slaughter.Purp] begin.Pfv- 1 SgSbj
'I began to slaughter the sheep-Sg.'

'Start-2Sg eating (the) meat!’
d. ${ }^{\mathrm{HL}}$ gówà: tólè:-n
${ }^{H L}$ exit.Purp begin-Ipfv.3P1Sbj
'They will start going out.'

### 17.4.2 Causal ('because') clauses (' ${ }^{\text {sàbà: } b \text { lày) }}$

A main clause can be converted into a 'because' clause by having the entire clause function as "possessor" of sábà:b 'reason, cause' (<Arabic), which then takes \{L\}-toned possessed form and is followed by purposive postposition lày (507a). This might be rendered literally as 'For [[My friend is coming today]'s reason], ..'. Alternatively, both clauses take main-class form and are linked by a 'for that reason' adverbial phrase including a resumptive discoursedefinite element (507b).
a. [[[ńbò: mmò] íyè ménè:-b- $\varnothing] \quad{ }^{\mathrm{L}}$ sàbà:b] làn] [[[ffriend 1 SgPoss$]$ today come-Ipfv-3SgSbj] ${ }^{\mathrm{L}}$ reason] Purp] gê:-nnú-ŋ
exit-IpfvNeg-1 SgSbj
'For the reason that my friend is coming over today, I'm not going out.'
b. [ḿbò: mmò] íyè ménè:-b- $\varnothing$ ]
[[[friend 1SgPoss] today come-Ipfv-3SgSbj]
[kó lày] gê:-nnú-ŋ
[DiscDef Purp] exit-IpfvNeg-1 SgSbj
'My friend is coming over today. Therefore I'm not going out.'
The construction [X sàbà:b] làn 'because of X ' can also be used with $\mathrm{X}=$ any NP ('because of Seydou', 'because of the heat', etc.

## 18 Anaphora

Reflexive and reciprocal are often expressed by the intransitivizing mediopassive derivation of the verb, as in Donno So (§9.4). Reflexive object can alternatively be expressed by 'my/your/... head' (§18.1.3). Reciprocal object can alternatively be expressed by a construction with 'my/your/... comrade' (§18.4.2).

The only commonly used true anaphoric elements are logophoric, i.e. coindexed to the ascribed author of a reported quotation. For logophoric subject ('X said that [ $\mathrm{X} . . \mathrm{]}$ '), a pseudo-1 Sg subject pronominal suffix can be used, with some restrictions (§18.3.2). The syntactically more flexible third person logophoric element is $m m \varepsilon ́(\$ 18.3 .1)$.

### 18.1 Reflexive

Reflexives in English and French are usually expressed either by intransitivizing the verb (subject-object coindexation) or by using ordinary pronouns that are not specifically reflexive. However, a possessed form of kî:g 'head' can also be used reflexively.

### 18.1.1 Reflexive object expressed by mediopassive verb

The primary reflexive-object construction involves intransitivization of the verb, using the mediopassive suffix (§9.4) in one of its multiple functions. The construction is therefore not transitive ' X hit himself', rather intransitive ' X self-hit'. Compare transitive (508a) with reflexive (508b).

```
    a. ě-g / è-gí=ý bùndé-\eta
    child / child=Acc hit.Pfv-1SgSbj
    'I hit-Past the child.'
b. bùnd-yé-ŋ
    hit-MP.Pfv-1SgSbj
    'I hit myself.'
    c. búnd-yè-\varnothing
    hit-MP.Pfv-3SgSbj
    'He/She hit himself/herself.'
```


### 18.1.2 Reflexive PP complement or possessor expressed by regular pronouns

When postpositional complement NPs are coindexed to the clausemate subject, ordinary (nonreflexive) pronouns are used. 'Next to myself' in (509a) is expressed as 'next to me'; the referent is directly processed by its deictic category, and coindexation with an antecedent is indirectly computed. When a nonsubject pronominal is third person, it may be, but need not
be, coindexed with the subject. In (509b), there are two nonsubject pronouns, so multiple readings are possible, including one reading that involves a threesome.
a. [sò:g mmó] [[bòmbò mó] là:] tèmbé- $\eta$ [boubou 1Sg.Poss] [[side 1Sg.Poss] Loc] find.Pfv-1SgSbj 'I found my boubou (=robe) next to myself.' (š̌:-g, bòmbó )
b. [sò:g ná-ì] [[bòmbò ná] là:] témbè- $\varnothing$ [boubou 3Sg-Poss] [[side 3Sg.Poss] Loc] find.Pfv-3SgSbj ' $\mathrm{He}_{\mathrm{x}}$ found his $_{\mathrm{x} / \mathrm{y}}$ boubou next to himself $\mathrm{f}_{\mathrm{x}}$ him $_{\mathrm{y} / \mathrm{z}}$.'

The same is true of other nonsubject possessors. In (510), the 3 Sg possessor may or may not be coindexed with the subject.

| [sò:-g | ná-ì] | $m i ́=\grave{y}$ | ǹd $\grave{\text { che }}$ - $\varnothing$ |
| :---: | :---: | :---: | :---: |
| [boubou | 3 Sg -Poss] | $1 \mathrm{Sg}=\mathrm{Acc}$ | give.Pfv-3SgSbj |
| 'He ${ }_{x}$ gave me his ${ }_{\text {x/y }}$ boubou.' |  |  |  |

18.1.3 kî:g 'head' in reflexives

A possessed form of kî:g 'head', full form kí:gù, can also be used to indicate coindexation with the subject. For example, 'say' does not lend itself to the reflexive use of the mediopassive, so a 'head' reflexive can be used.
a. [kí:gù m̀m̀̀] pòlé-ŋ
[head 1Sg.Poss] say.Pfv- 1 SgSbj
'I said (that) to myself.'
b. $[k \hat{1}: g$ ì- $g] \quad$ pòlé-y
[head 1Pl-Poss] say.Pfv-1P1Sbj
'We said (that) to ourselves.'
c. $[k \hat{1}-g$ nà- $\bar{j}]$ pólè- $\varnothing$
[head 3Sg-Poss] say.Pfv-3SgSbj
'He/She said to himself/herself.'

### 18.2 Emphatic pronouns

In many cases, emphasis on a pronoun is expressed by the regular focalization system (chapter 13). This is usual when the pragmatic context is ' X instead of others'. For example, (512) has subject focus.
(512) ḿbù- $\eta$ ó ùs - $-y$
house 2 SgSbj build.Pfv-SFoc
'It was you-Sg [focus] who built the house.'

For ' X unassisted', the ' X only, X alone' construction with $\{\mathrm{LH}\}$-toned tòmó: can be used (§19.4.1, §4.6.1.1), as in (513).

| (513)ńbù- $\eta$ $[m i ̀$ tòmó: $]$ | ùs $\varepsilon$ - $-y$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| house | $[1 \mathrm{Sg}$ | only $]$ | build.Pfv-SFoc |

'I built the house myself (i.e. without assistance).'

### 18.3 Logophoric and indexing pronouns

There are two morphological devices that can explicitly index a pronominal referent to the attributed author of the enclosing quotation (speech or thought). One is to use the logophoric subject suffix $-\eta$ on the predicate, as in (514a). This suffix is homophonous to the 1 Sg suffix in nonlogophoric contexts, and could be dubbed pseudo-1Sg, though I will use "LogoSbj" in interlinears. The other device, the only one possible for non-subject or extraclausal (topicalized) arguments and adjuncts, is to use third person logophoric (3Logo) pronoun mmé or its plural mmé yà: in the relevant syntactic position.
 'Why did you say you hadn't seen anything?'
b. [è-wé ngì yà:] [mmé yà:] ménè:-n gín-yà
[child-Pl Def Pl] [3Logo Pl] come-Ipfv.3PlSbj say.Pfv-3PlSbj
'The children said they are coming.'

When the logophoric is expressed preverbally, it is possible for the verb to revert to ordinary third-person suffixation, as in (514b). However, the logophoric can be marked in both positions, see ( $515 \mathrm{a}-\mathrm{e}$ ) below.

### 18.3.1 Third person logophoric (mmé)

Consider the construction ' X said that [ X hadn't seen anything]' with X a third person (nonpronominal NP , or 3 Sg or 3 Pl pronoun), and X is both the attributed author of the quotation and the subject of 'see'. For third person referents, logophoric mmé may occur in subject position within the quoted clause (515a-b). The plural is mmé yà: ( $515 \mathrm{c}, \mathrm{e}$ ); the singular-plural opposition is neutralized (as simple mmè) in L-toned preverbal proclitic function (515e). The mm is sometimes degeminated to m . In ( $515 \mathrm{~d}-\mathrm{e}$ ) there are two layers of logophoric anaphora because of clause embedding, see $\S 18.3 .3$ below. All examples in (515) also have logophoric subject suffix on the verb; see the following section on this point.

[^3]
c. [mmé yà:] [[gò- $\eta^{\mathrm{L}}$ tómò là] wà:-lú-ท] gín-yà [3Logo Pl] [[thing ${ }^{\mathrm{L}}$ one even] see-PfvNeg-LogoSbj] say.Pfv-3P1Sbj 'They ${ }_{x}$ said they ${ }_{x}$ hadn't seen anything.'

```
d. sé:dù [mmé [ìnà: \({ }^{\text {L }} m m \varepsilon ̀ ~{ }^{H L}\) ébò:] sèmé-ท]] S [3Logo [goat \({ }^{\mathrm{L}}\) 3Logo \({ }^{\mathrm{HL}}\) buy.Pfv.Ppl] slaughter.Pfv-LogoSbj]] gìnè- \(\varnothing\)
say.Pfv-3SgSbj
'Seydou \({ }_{x}\) said that he \(\mathrm{e}_{\mathrm{x}}\) slaughtered the goat that he \(\mathrm{e}_{\mathrm{x}}\) bought.'
```

e. ánà-wè [[mmé yà:] [ìnà: ${ }^{\mathrm{L}} \quad m m \varepsilon ̀{ }^{\mathrm{HL}}$ ह́bò:]
man- $\mathrm{Pl} \quad\left[\begin{array}{ll}\mathbf{3 L o g o} & \mathrm{Pl}] \quad\left[\text { goat }^{\mathrm{L}} \quad \text { 3Logo }{ }^{\text {HL }} \text { buy.Pfv.Ppl] }\right] ~\end{array}\right.$
sèmé-ŋ]] gìn-yà
slaughter.Pfv-LogoSbj]] say.Pfv-3SgSbj
'The $\operatorname{men}_{\mathrm{x}}$ said that they ${ }_{\mathrm{x}}$ slaughtered the goats that they $\mathrm{y}_{\mathrm{x}}$ bought.'

Now consider ' $X$ said that [you hit $X$ ]', where $X$ is still the quoted author but is also now the object of the verb of the quoted clause. Again we see mmé indexing coreference to the author, this time with (optional) accusative $=\grave{y}$. There no logophoric-subject marking on the verb.
a. sé:dù [ó wà:] [mmé=ỳ bùnd-ó:] gínè- $\varnothing$
$\mathrm{S} \quad[2 \mathrm{Sg}$ QuotSbj] [3Logo =Acc hit.Pfv-2SgSbj] say.Pfv-3SgSbj
'Seydou ${ }_{x}$ said that you-Sg hit him ${ }_{x}$.'
b. sé:dù [m-á: $[m m \varepsilon ́=y ̀ ~ b u ̀ n d e ́-\eta] ~ g i ́ n e ̀-~ \varnothing ~$
$\mathrm{S} \quad[1 \mathrm{Sg}-$ QuotSbj [3Logo =Acc hit.Pfv-1SgSbj] say.Pfv-3SgSbj
'Seydou ${ }_{x}$ said that I hit him ${ }_{x}$.'
c. [è-wé ngì yà:] [ó wà:]
$\left[\begin{array}{lll}\text { child-Pl } & \text { Def } \mathrm{Pl}] \quad[2 \mathrm{Sg} \quad \text { QuotSbj] }\end{array}\right.$
[[mmé yà:=ỳ] bùnd-ó:] gín-yà
[[3Logo $\mathrm{Pl}=\mathrm{Acc}] \quad$ hit.Pfv-2SgSbj] say.Pfv-3P1Sbj
'The children ${ }_{x}$ said that you- Sg hit them ${ }_{x}$.'
$m m \varepsilon ́$ can also function as possessor of another NP within the quoted clause. It is treated more or less like a regular pronoun, and combines with the postnominal possessive morpheme as $m \grave{\varepsilon}$ mう̀- $\grave{\eta}$, which arguably ends with definite $\grave{\eta}$. The lower clause happens to also have a logophoric subject in (517a), and happens not to in (517b).

| a. | sé:dù | [mmé | [pésgè | $m \grave{\varepsilon}$ | mò-ض̀] | bèté-n] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S | [3Logo | [sheep | 3Logo | Poss] | get.Pfv-LogoSbj] |
|  | gìnè- $\varnothing$ |  |  |  |  |  |
|  | say.Pfv-3SgSbj |  |  |  |  |  |
|  | 'Seydou ${ }_{\text {s }}$ said he ${ }_{\mathrm{x}}$ had found $\mathrm{his}_{\mathrm{x}}$ sheep-Sg.' |  |  |  |  |  |
|  | sé:dù | [「ı̀dé: | $m \varepsilon ̀$ | mò-ı̀] | tàyà-y | bólè-Ø] |
|  |  | [[father | 3Logo | Poss] | side | go.Pfv-3SgSbj] |
| gìnè- $\varnothing$ |  |  |  |  |  |  |
|  | say.Pfv- | $-3 \mathrm{SgSbj}$ |  |  |  |  |
|  | 'Seydou | $\mathrm{u}_{\mathrm{x}}$ said his ${ }_{\text {x }}$ | father ha | gone on | trip.' |  |

In the recordings from Nantanga, a variant nù mò- $\grave{y}$ for $m \varepsilon ̀ m \grave{-} \grave{\jmath}$ was heard. Compare Donno So logophoric ǹjèmé. Nantanga is in the eastern part of DD-speaking country, not far from the more northerly Donno So-speaking villages.
$m m \varepsilon$ is regularly used when the quoted author is a third person, i.e. neither the current speaker nor the current addressee. I will label it 3Logo for this reason. However, it is optionally used under similar syntactic conditions when the quoted author is second (but not first) person.

### 18.3.2 Transpersonal logophoric subject ( $-\eta$ )

Consider the construction ' $X$ said that [ $X$ hadn't seen anything]' with $X$ a first or second person pronoun. My assistant used what could be taken either as true 1 Sg subject or (pseudo1 Sg ) logophoric subject when X is the current speaker, i.e. when X is quoting him-/herself (518a). With 1 Pl subject, my assistant used the 1 Pl subject form, not the logophoric subject form (518b). However, for both 2 Sg and 2 Pl he used the logophoric subject form (518c-d).
a. [[gò- $\eta^{\mathrm{L}}$ tómò là $]$ wà:-lú- $\eta$
[[thing ${ }^{\text {L }}$ one even] see-PfvNeg-1SgSbj/LogoSbj say.Pfv-1SgSbj
'I said I hadn't seen anything.'
b. [[gò- $\eta^{\mathrm{L}}$ tómò là] wà:-lí-y
[[thing ${ }^{\mathrm{L}}$ one even] see-PfvNeg-1PISbj
gìné-y
'We said we hadn't seen anything.'
c. $\left[\left[g o ̀-\eta \eta^{\mathrm{L}}\right.\right.$ tómò là $]$ wà:-lú- $\eta$
gìn-ó:
[[thing ${ }^{\text {L }}$ one even] see-PfvNeg-LogoSbj
say.Pfv-2SgSbj
'You-Sg said you-Sg hadn't seen anything.'
d. [[gò- $\eta{ }^{\mathrm{L}}$ tómò là $]$ wà:-lú- $\eta$ gìn-É:
[[thing ${ }^{\text {L }}$ one even] see-PfvNeg-LogoSbj say.Pfv-2PlSbj
'You-Pl said you-Pl hadn't seen anything.'
Previous examples have shown logophoric-subject suffixation with third-person antecedents, see ( $515 \mathrm{a}-\mathrm{e}$ ) and ( 517 a ). In sum, this suffix is clearly usable when the antecedent is $3 \mathrm{Sg}, 3 \mathrm{Pl}$, 2 Sg , and 2 Pl , ambiguously possible for 1 Sg , and apparently not used for 1 Pl . It comes very close to being a fully transpersonal anaphor.

### 18.3.3 Logophorics in stacked quotations

(519a) includes three distinct protagonists and two levels of quotation. The only logophoric in (519a) is the subject suffix $-\eta$ on 'kill', which is coindexed with 'you', the author of the lower quotation. In (519b), the object in the lower clause is logophoric, coindexed with Seydou, the author of the higher quotation. This shows that nothing prevents the logophoric noun mmé from finding a higher antecedent, at least when there is no intervening third-person antecedent candidate.
a. sé:dù

S
[[ó wà:] [mí=ỳ géwè:-bù-ŋ] gìn-ò:]
[[2Sg QuotSbj] [1Sg=Acc kill-Ipfv-LogoSbj] say.Pfv-2SgSbj]

```
gìnè-\varnothing
say.Pfv-3SgSbj
'Seydou said that you-Sg said that you-Sg will kill me.'
b. sé:dù
S
[[ó wà:] [mm\varepsiloń=ỳ g\varepsilońwè:-bù-\eta] gìn-ò:]
[[2Sg QuotSbj] [3Logo=Acc kill-Ipfv-LogoSbj] say.Pfv-2SgSbj]
gìn\varepsiloǹ-\varnothing
say.Pfv-3SgSbj
'Seydou}\mp@subsup{\mp@code{x}}{\mathrm{ said that you-Sg said that you-Sg will kill him}}{x
```

However, logophoric subject suffix $-\eta$ normally coindexes the clausal subject to the first quoted author up. So In (519b), where both Seydou and 'you' are ascribed authors, the logophoric subject suffix must coindex the 2 Sg author of the lower quotation. A similar example is (520), where logophoric subject $-\eta$ must be coindexed with 'you' rather than with 'Seydou'. Because the clausemate logophoric pronoun mmé also marks the subject, not object as in (519b), it is coindexed with logophoric subject $-\eta$ and therefore to the 2 Sg author of the lower quotation.

| sé:dù | [[ó wà:] |  |  |
| :---: | :---: | :---: | :---: |
| S | [[2Sg QuotSbj] |  |  |
| [mmé | ménè:-bù-ท] | gìn-ò:] | gìnè |
| [3Logo | come-Ipfv-LogoSbj] | say.Pfv-2SgSbj] | say.Pfv-3SgSbj |

'Seydou said that you-Sg said you-Sg will come.

### 18.3.4 No subject-to-subject indexing

There is no explicit coindexing of a relative-clause subject with the subject of the higher main clause, as there is in some Dogon languages. Regular proclitic pronouns are used for the relative-clause subject, which is 1 Sg in (521a) and 3 Sg in (521b).
a. [mì
${ }^{\mathrm{HL}}$ míy ${ }^{\text {è:-b] }}$
kàné-ŋ
[1SgSbj ${ }^{\text {HL }}$ be.able-Ipfv.Ppl]
do.Pfv-1SgSbj
'I did what I could (do).'
$\begin{array}{llll}\text { b. sé:dù } & \text { [nà } & { }^{\text {HL }} \text { míyè:-b] } & \text { kànè- } \varnothing \\ \text { S } & \text { [3SgSbj } & { }^{\text {HL }} \text { be.able-Ipfv.Ppl] } & \text { do.Pfv- } 3 \text { SgSbj } \\ & \text { 'Seydou }{ }_{x} \text { did what he }{ }_{x} \text { could (do).' } & \end{array}$

### 18.4 Reciprocal

As with reflexives, there are two reciprocal constructions.

### 18.4.1 Reciprocal use of mediopassive

The intransitivizing mediopassive verb derivation can be used in reciprocal as well as reflexive sense, if a nonsingular subject and object are coindexed. A reciprocal reading is almost obligatory in (522a), and likely in (522b-c).
a. àyà: $\quad w \varepsilon ́ y-y દ ̀-y ̀ ~$
where? see-MP.Pfv-1PlSbj
'Where have we seen each other?'
b. è-wé búnd-ì:-yà
child-Pl hit-MP.Pfv-3PlSbj
'The children hit each other.'
c. dùw-ì:-lá-1̀
insult-MP-Proh-PlAddr
'Don't-2Pl insult each other!'
18.4.2 Reciprocal object with $X^{\text {L }}$ bò:

A more explicit and compositional reciprocal construction, broken down into its distributive components, has a possessed noun ${ }^{\mathrm{L}}$ bò: with 3 Sg possessor (denoting a representative individual from the set) as object. This is irregularly related to m̀bó: 'comrade, colleague.' The H-tone on the possessor ná is also irregular, compare nà ${ }^{H L}$ sâ: 'his sister' (58a) in §4.3.1.3.

| [nó: | fü:] | [ná | ${ }^{\text {L }}$ bò:] | wánù | kán-yà |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [person | all] | [3SgPoss | $\left.{ }^{\text {L comrade }}\right]$ | hate(n) | do.Pfv-3PlSbj |

'They all (or: both) hated each other.'

The reciprocal object is always ná ${ }^{\mathrm{L}}$ bò: with 3 Sg possessor, even when the subject is 1 Pl or 2Pl (524a-b).

'You all hated each other.'

### 18.4.3 nàgá-nàgá 'other-other’

In iterative distributive form (§4.6.1.6), nàgá 'other’ can be used as a kind of reciprocal, cf. English each other or one another. The only textual attestation of this function is as a compound initial. See [nàgà-nàgà]-dùn í-ì 'our gossiping about one another' (T01 at 06:06).

## 19 Grammatical pragmatics

### 19.1 Topic

19.1.1 Topic (gà~gày~kày)

The topic particle ('as for X ') is gà $\sim$ gày $\sim$ kày, following an independent pronoun or a nonpronominal NP. Usually a topicalized NP occurs at the beginning of a clause. In some cases it is syntactically preclausal, i.e. it is set off prosodically and is resumed by a pronoun in the clause proper. In other cases the topicalized constituent is an argument (subject, object, etc.) within the clause, as in ( 525 c ) with accusative marking on the object.
a. [mí gà] bólè-nnú- $]$
$[1 \mathrm{Sg}$ Topic] go-IpfvNeg-1 Sg Sbj
'As for me, I'm not going.'
b. [sé:dù gà] ǒ- $\eta \quad j \hat{\varepsilon}: b-\varnothing$
[S Topic] here eat-Ipfv-3SgSbj
'As for Seydou, he eats here.'
c. $[s e ́: d i ̀=y$ ỳ gà $]$ ínnù- $\eta$
[S=Acc Topic] not.know-1SgSbj
'As for Seydou, I don't know (him).'
Textual examples include T01 00:45 and 00:51. This topic morpheme is distinct from a minor postposition gà which occurs in a handful of adverbial phrases (§8.1.4).

A verbal noun phrase representing an entire proposition may be topicalized.

19.1.2 'Now' as topicalizer or discourse marker (nと̌:, nغ̀)
nદ̌: 'now' can function as a discourse marker, for example to mark a shift in time and place or in subject matter. In enclitic-like reduced form nè it can follow a phrase introducing a new topical referent or reintroducing one from previous discourse.

Both full and enclitic-like forms occur in (527). The enclitic-like $n \grave{\varepsilon}$ is grouped prosodically and pragmatically with 'those fetishes'. Although ně: follows it immediately without a prosodic break, my assistant emphasized that this ně: functions to introduce the following phrase, hence my bracketing. Since the time frame referred to is well in the past, neither 'now' can be interpreted as a temporal adverb.
[kò-wé [tó:rù ì] nè] ně:, [DiscDef-Pl [fetish Def] now] now, [kò bùlé:], í=ỳ áb-rà: = bìy-yà [DiscDef Pl], $1 \mathrm{Pl}=\mathrm{Acc}$ accept-Prog=Past-3PlSbj
'All those fetishes now, now those (fetishes) accepted us (=fulfilled our prayers)' (T01 04:49)

A good example of topical $n \grave{\varepsilon}$ is T 01 05:16.

### 19.1.3 'Also, too’ (là )

This is a particle (or clitic) that follows a pronoun or other NP. The accusative clitic or a postposition follows the NP directly, preceding là 'also, too' (528b-c).
a. [mí là] bólè:-bù-n
$[1 \mathrm{Sg}$ too] go-Ipfv- 1 Sg bbj
'I too will go.'
b. $[0$ =́́ là $]$ bùndê:- $\varnothing$
$[2 \mathrm{Sg}=\mathrm{Acc}$ too] hit-Pfv-3SgSbj.Q
'Did he/she hit you-Sg too?'
c. [[dàmmán $\begin{aligned} & \text { yàn] là] gól̀̀: gólè:-bì-y }\end{aligned}$
[[daba Inst] too] farming(n) do.farming-Ipfv-1PISbj
'We do farm work with the daba (=hoe) too.'
A dialectal variant lè was heard on a recording from Nantanga. (Not accidentally, this is also the Donno So pronunciation.)

In combination with a negative predicate, 'also, too' on a constituent becomes '(not) either, nor'. Textual examples include 'Nor would a kite (=hawk) take our chickens' in T01 at 03:08. This example, with là attached to 'chicken(s)', also shows that là may, in effect, have pragmatic scope over the whole clause even though it is normally attached to a specific constituent. So a better pragmatic translation would be 'Moreover, a kite would not take our chickens.'

### 19.1.4 'Even’ (hâl, là)

là 'also, too' can spill into the emphatic sense 'even'. This sense is reinforced and made explicit by adding the regionally widespread term hâl 'even' before the relevant constituent or before the VP. In (529b), hâl could be taken as reinforcing là and focusing on its constituent ('the children'), or as having somewhat broader scope over the VP ('killed the children').

> a. [hâl [è̀ $g^{\mathrm{L}}$ dâ:g] là]
> [even [child ${ }^{\text {L }}$ small] even]
> [wà $\left.1^{\mathrm{L}} \quad \check{l}{ }^{\mathrm{L}} \mathrm{g}\right] \quad$ kán bèlè:-b- $\varnothing$
> $\left[\begin{array}{ll}\operatorname{work}(n)\end{array}{ }^{\mathrm{L}}\right.$ Prox] do get-Ipfv-3SgSbj
'Even a small child can do this work.'

```
b. gònnò-gòn_ú (hâl) [è-wé là] g\varepsilońwह̀-\varnothing
    theft-steal.Agent (even) [child-Pl also] kill.Pfv-3SgSbj
    'The thief killed even the children.'
    (or: 'The thief even killed the children.')
```

A good textual example of 'even' is T01 at 01:56.
'Not even' is the same hâl with a negative predicate.
hâl pò:-ndǎ:-1-Ø
even greet-Tr-PfvNeg-3SgSbj
'He didn't even say hello.'

### 19.2 Preclausal discourse markers

### 19.2.1 'But ...' (mè:)

 young people, is my assistant's only 'but' particle.
(531) [[ndé: mmò] bû:d tùbé- $\eta]$
[[father 1 SgPoss$]$ money ask.for.Pfv- 1 SgSbj$]$
$[m e ̀: \quad m i ́=y ̀ ~ n ̀ d a ̆:-1-\varnothing ~$
[but $1 \mathrm{Sg}=$ Acc give-PfvNeg-3SgSbj
'I asked my father for money, but he didn't give it to me.'

### 19.3 Pragmatic adverbs or equivalents

### 19.3.1 'Again' (kónnè )

In (532a) it is not necessary to express 'again' overtly, though the translation would be unidiomatic without such an expression. The three verbs are directly chained together, with the final verb inflected and conjugated. A more explicit expression approximating 'again' is the verb kónnè 'redo' or 'proceed to do'. This verb links two related and sequentially ordered events, but unlike 'again' it does not require that the two events be of the same type.
a. bàgé ńjùgè bàgè- $\varnothing$
fall get.up fall.Pfv-3SgSbj
'He fell, got up, and fell (again).'
b. Ébà: bòlé kónnè mènè- $\varnothing$
market go redo come.Pfv-3SgSbj
'He/She went to the market and came back (again).'
c. [kónnè mí=ỳ bùn- $\varnothing$ ná:] [ná=ỳ géwè:-bù- $\eta$ ]
[redo $1 \mathrm{Sg}=$ Acc hit.Pfv-3SgSbj if] [3Sg=Acc kill-Ipfv-1SgSbj] 'If he hits me again, I'll kill him.' (búndè 'he hit-Past')

```
d. àbádà [kj̀nnè ná:] [pòrò mó] là:] never [redo if] [village 1SgPoss] Loc kígìl-yè-nnú-ŋ return-MP-IpfvNeg-1SgSbj
'I will never again go back to my village.'
```


## 19.4 'Only' particles

### 19.4.1 'Only' ( ${ }^{\text {L }}$ tòmò:)

The direct expression of 'only X ' is with ${ }^{\mathrm{L}}$ tòmı̀: in $\{\mathrm{L}\}$-toned (pseudo-possessed) form after an NP (533a). This is related to tómò ' 1 ' (§4.6.1). It also combines with pronouns, which have inalienable possessor form (533b) and impose a unique $\{\mathrm{LH}\}$ tone overlay to produce ${ }^{\text {LH }}$ tòmó: . See (68) in §4.6.1.1 for the pronominal paradigm.
a. [sé:dù ${ }^{\mathrm{L}}$ tòmò:] mèné-y
[S ${ }^{\text {L only }}$ ] come.Pfv-SFoc
'Only Seydou came.'
$\begin{array}{lll}\text { b. mì / ì / ó } & { }^{\text {LH }} \text { tòmó: } \\ & 1 \mathrm{Sg} / 1 \mathrm{Pl} / 2 \mathrm{Sg} & { }^{\text {LH }} \text { only } \\ & \text { 'only I/we/you-Sg } & \end{array}$
See also the following section on dògò.

### 19.4.2 'Except, other than' (dògò)

dògò can usually be glossed 'except, other than' or as 'in comparison with'. In negative and some other contexts a free translation with 'only' is called for.
a. [ทgò̀- $\quad$ bélè-y] [àlàmǎyg dògò]
[what? get.Pfv-1PlSbj] [drought except]
'What did we gain, other than drought?', (T02 04:13)
b. [ènné: dògò]
[past except]
íyè gìnné [yò:g-àwà í-ì] dá:gù-nd-yò: bò- $\varnothing$
today a.lot [solidarity 1Pl-Poss] small-Inch-MP be-3SgSbj
'As opposed to the past, nowadays our solidarity has diminished.' (T02 07:08)
c. [[nò: ${ }^{\mathrm{L}}$ tómò] dògò] wà:-lú- $\eta$
[[person ${ }^{\mathrm{L}}$ one] except] see-PfvNeg-1 SgSbj
'I only saw one person.' ('I didn't see except one person.")

### 19.5 Final emphatics

### 19.5.1 Confirmation of interlocutor's statement

Either tòy(ù)né: 'it's true' or já:tì 'exactly' can serve as a simple confirmation of the truth of an interlocutor's statement. For já:tì see text T01 00:35.

### 19.5.2 Clause-final kòy (or gò) 'sure' (emphatic agreement)

This clause-final emphatic can be used in repetitions of an interlocutor's statement as in (535), or as a slightly emphatic answer to a polar question as in (536). At least the predicate must be repeated (subjects etc. may be pronominalized or omitted). In a sequence like (535) a translation with sure is appropriate. It doesn't translate well in (536).
A: ḿmı̀- $\eta$ bò- $\varnothing$
'It's hot (out).'
B: ா́m̀̀- $\eta$ bò- $\varnothing$ kòy
'It sure is (hot).'
(536)
A: síkòr yè bô:- $\varnothing \quad$ 'Is there any sugar (left)?'
B: égè- $\varnothing$ kòy
'It's finished.' (= 'We're out of it.')

See also (539) below.
Clause-final gò twice in T01 00:45 and once in 00:51 also seems to be emphatic and may be a dialectal variant of kòy.

### 19.5.3 Clause-final $d \grave{\varepsilon}$ (admonitive)

Clause-final $d \grave{\varepsilon}$ is admonitive. It is used in warnings and when correcting an interlocutor's misimpressions.
a. ìdé: $\quad o ́=y ̀$
father $\quad 2 \mathrm{Sg}=$ Acc
búndè:-b- $\varnothing$
$d \grave{\varepsilon}$
'(Watch out or) Dad will hit you-Sg!'
b. nùnè-lá
$d \grave{\varepsilon}$
enter-Proh Emph
'You-Sg had better not come in!'
$\begin{array}{lll}\text { c. tây } & \text { kánà } & d \varepsilon ̀ \\ \text { watching.out } & \text { do.Imprt } & \text { Emph }\end{array}$
'Be careful, now!'

### 19.6 Backchannel and uptake checks

To verify that an interlocutor has understood something, polar interrogatives like positive (538a) and negative (538b) occur in the recorded texts. They are based on the collocation pǎ:m kân including kân 'do' as auxiliary. The tone and length of the final vowel express the polar interrogative (§13.2.1.1).
a) pǎ:m
kàn-ô: understanding do.Pfv-2SgSbj.Q
'Did you-Sg understand?'
b) pǎ:m kán-dà: jò-nn-ô:
understanding(n) do-Prog have-StatNeg-2SgSbj.Q
'Did you-Sg not understand?' (T01 01:56)
A way to express astonishment at what one has been told is (539). It resembles but is somewhat stronger than English You don't say! or Don't tell me!

| hán $\rightarrow$, | dàm-lá | kòy |
| :--- | :--- | :--- |
| huh?, | speak-Proh | Emph |

'Huh? Don't say (it)!'
wálà: from French voilà is a one-word response when the interlocutor has confirmed or conceded what the speaker had been saying. Cf. English There you have it!

### 19.7 Greetings

A fairly elaborate morning greeting sequence is at the beginning of text T01. The conclusion of that text also has some parting greetings. The transitive verb 'greet (sb)' is pó:-ndè, and another specifically for 'greet in the morning, say good morning to (sb)' is nà:-mé.

Some simple time-of-day greetings and the responses to them are in (540). Some include dialectal or archaic forms. The reply $\hat{\jmath} \rightarrow$ has the same protracted duration and slow pitch decline as in Jamsay-style dying-quail intonation.
a. ná:-mà
ná:-mà-ŋ
$\hat{\jmath} \rightarrow$
'good morning' (up until noon), singular addressee
(plural addressee)
(reply)
b. wǎl pǒ $\rightarrow$
'good day' (noon to 2 PM)
wǎl pǒ $\rightarrow-1$ (plural addressee)
$\hat{\jmath} \rightarrow$
(reply)
c. dèn-má
dèn-má-ŋ̀ $\quad \begin{aligned} & \text { 'good afternoon/evening' (from } 3 \text { PM to evening) } \\ & \text { (plural addressee) }\end{aligned}$
$\hat{\jmath} \rightarrow$
(reply)
ná:-mà and dèn-má are irregularly related to nàyé 'spend the night' and dèné 'spend the midday', respectively. The plural-addressee suffix -ì indicates that these forms are deontics (hortatives, or imperative causatives), likely due to inter-Dogon borrowing. They could be construed as non-1Pl hortatives ('may X spend the night/day [well]!'), or as imperative causatives with e.g. 'God' as covert addressee ('may God have X spend the night/day [well]!'). Compare, for example, the actual DD hortatives nàyè-má 'let ( sb ) spend the night!' and dènè-má 'let ( sb ) spend the mid-day!' Given that the time-of-day reference is retrospective in both cases, one would logically expect a question like 'did you spend the (night/mid-day) (well)?' This in turn suggests a possible, but equally irregular connection to mà $\rightarrow$ as interrogative.

Around the middle of the day the time-of-day greetings default to wǎl pǒ $\rightarrow$, which really means 'work greeting!' and can be used at any time of day to greet someone who is working or involved in a purposeful activity. Other situational greetings of the same type are in (541). In all these greetings, pǒ $\rightarrow$ is articulated with a mid pitch, and is usually prolonged considerably with no pitch decline, as in [wǎlpō:::].
a. ò ŋùnú pǒ $\rightarrow$
'(the) bush greeting'
(to one returning from the fields)
b. $\varepsilon$ bà: $p o \check{ } \rightarrow \quad$ 'market greeting' (to one returning from a market)
c. sìsá: pǒ $\rightarrow$ 'water source greeting' (to one returning with water)
d. dò:ndú- $\eta$ pǒ $\rightarrow$ 'pounding greeting' (to women pounding millet spikes)
e. ûs pǒ $\rightarrow \quad$ 'heat greeting' (to one cooking in a hot kitchen)

The greeting type 'you and X ', common in Malian languages (e.g. riverine Songhay), is also possible.

| $\left[\begin{array}{lll}\text { ó } & \text { yàn }] & \text { [ònù-nó } \\ {[2 \mathrm{Sg}} & \text { and] } & \text { yàn] } \\ \text { [fatigue } & \text { and] }\end{array}\right.$ |  |
| :--- | :---: | :---: | :---: |
| 'You- Sg and fatigue!' |  |

The nouns wǎl 'work' or kórkà 'fasting' can also be used instead of 'fatigue' in this construction if situationally appropriate. Compare English how's the work?

Greetings to departing travelers are in (543a-b). sâg in (543) is a noun regularly used in contexts like ' $(\mathrm{X})$ entrust $(\mathrm{Y})$ (e.g. to God or to a protector)', as in text T01 at 00:35. bò:-má is the 'let's go!' hortative. ámbà 'God' is often L-toned in such formulae.

```
a. sâg bò:-má (plural addressee: bò:-má-\grave{j)}
    entrusting(n) go-Hort
    'Have a good trip!'
```

b. àmbà ó=ỳ rê:n kánà
God $2 \mathrm{Sg}=$ Acc protection do.Imprt
'May God protect you!'

A returning traveler is greeted by (544), literally 'may God bring (you)!'.
(544) àmbà jínà

God bring.Imprt
'Welcome home!'
(545a-b) can be said on learning of a death. Wishes like this can be answered with à:mínè or iterated à:mí: à:mí: ‘amen!'

a. | àmbà | ná=ỳ | yâ:f | kánà |
| :--- | :--- | :--- | :--- |
| God | 3 Sg=Acc | pardon(n) | do.Imprt |
|  | 'May God have mercy | on him/her!' |  |.

b. àmbà ná $=\grave{y}$ bì:-ró

God $\quad 3 \mathrm{Sg}=$ Acc lie.down-Tr.Imprt
'May God have mercy on him/her!'

A standard greeting to anyone on either of the two major Muslim holy days is (546).

| (546) | àmbà | [bâ:-g ${ }^{L}$ gè:-nà:] | Í $=$ | témbù-mà |
| :---: | :---: | :---: | :---: | :---: |
|  | God | [next year (§4.2.2.2)] | $1 \mathrm{Pl}=\mathrm{Acc}$ | find-Caus.Imprt |
|  | 'May God have us encounter (=live until) next year!' |  |  |  |

## Texts

These texts (T01 and T02) were recorded in Nantanga in March 2015 and transcribed with the help of my assistant from Koundiala. Speakers were Oumar Karambé (A) and Boureima Karambé (B). The texts are divided into segments. The codes like $08: 17$ at the beginning of each segment indicate the time on the sound file, starting each text at 00:00.

## Text T 01

The bulk of this nine-and-a-half minute recording is a comparison of life in the old days versus modern life in Nantanga village. A short animal tale begins at 08:27. The beginning and ending of the recording contain greetings and other formulaic language and are not always easily parsable or meaningfully translatable (see $\S 19.7$ for some similar greeting formulae).

00:06 A: [yè:gá: ná:-mà]
A: [morning good.morning!]
B : àwâ $\rightarrow$, yè:gá: ěn nà:-y
B: [reply], morning well spend.night
A: nà:-y
A: spend.night
B : é jámù- $\eta$ nà:-y
B: 2Pl peace spend.night
A: nà:-y jò-y
A: spend.night have-1P1Sbj
B: $\hat{\jmath} \rightarrow$
B: [reply]
A: 'Good morning!'
B: 'Good morning! We spent the night well.'
A: 'We spent the night (well).'
B: 'Did you-Pl spend the night in peace?'
A: 'We have spent the night (in peace).'
B : [greeting response]
[yè:gá: is omitted in 'good morning!' in other dialects; parsing of formulaic nà:-y is unclear]

00:11 A: ěn nà:-y
A: well spend.night
B: nà:-y
B: spend.night
A: ěn nà:-y, jámù- $\eta$ nà:-y
A: well spend.night, peace spend.night

B: nà:-y jò-y
B: spend.night have-1PlSbj
A: 'We spent the night well.'
B: 'We spent the night (well).'
A: 'We spent the night (well). We spent the night in peace.'
B: 'We have spent the night (in peace).'

00:14 A: àmbà jâm í=ỳ dènè-má
A: God peace $1 \mathrm{Pl}=$ Acc spend.day-Caus
B: gà:ná:
B: [reply]
A: àmbà bâ:s [í nì:] pógò
A: God] trouble [1Pl Loc] ward.off.Imprt
B: à:mí: à:mí:
B: amen amen
A : àmbà céllàl $1=$ ỳ ńdà
A: God health $1 \mathrm{Pl}=$ Acc give.Imprt
B: gà:ná:
B: [reply]
A: 'May God have us spend the daytime in peace!'
B: [reply]
A: 'May God ward off trouble from us!'
B: 'Amen, amen.'
A: 'May God give us health!'
B: [reply]
00:19 A: [è-wé jgì yà:] [pày-wé jgì yà:]
A: [child-Pl Def Pl] [old.person-Pl Def Pl]
jámù-ŋ này-yâ:
peace spend.night.Pfv-3PlSbj.Q
B : jámù-ŋ náy-yà
B: peace spend.night.Pfv-3P1Sbj
A: $\hat{\jmath} \rightarrow$
A: [reply]
A: 'Did the children (and) the old people spend the night well?'
B: 'They spent the night well.'
A: [reply]
[này-yâ: (but not này-yà) has polar interrogative tones, §13.2.1.1]

00:21 B: é jámù-ŋ này-ê:
B: 2Pl peace spend.night.Pfv-2PlSbj.Q
A : í jámù- $\eta$ nàyé-y
A: 1Pl peace spend.night.Pfv-1PlSbj
B : [yà:-wé $\grave{\text { j̀ }}$ bíyò-ń-yâ:
B: [woman-Pl Def] lie.down-IpfvNeg-3PlSbj.Q
A: bíyò-ń-yà
A: lie.down-IpfvNeg-3PlSbj
B: 'Did you-Pl spend the night well?'
A: 'We spent the night well.'

B: 'The women don't lie down (sick)?'
A: 'They don't lie down (sick).'

00:24 B: sìló: bò-nn-ê:
B: trouble
be-Neg-2PlSbj.Q
A: jâm
bò-y
A: peace
be-1PlSbj
B: à: ${ }^{n}$
B: [reply]
A: àmbà jâm í=ỳ dènè-má
A: God peace $1 \mathrm{Pl}=$ Acc spend.day-Caus.Imprt
B: gà:ná:
B: [reply]
A: $\hat{\jmath} \rightarrow$
A: [reply]
B: àwá $\rightarrow$
B: [reply]
B: 'You-Pl are not (involved in) trouble?'
A: 'We are at peace.'
B: [reply]
A: 'May God have us spend the daytime in peace.'
B: [reply]
A: [reply]
B: [reply]
[More polar interrogatives: này-ê: < này-é: 'you-Pl spent the night'; bíyò-ń-yâ:
< bíyò-ń-yà 'they didn't lie down']
00:27 A: yè:gá:, jámù- $\quad$ nà:-mà $=\grave{y}$
A: morning, peace spend.night-Caus=it.is
B : háyà dágè- $\varnothing$
B: well be.good.Pfv-3SgSbj
A: pó:ndù [ó nì:] pó:n-dà: mènè-y
A: greeting(n) [2Sg Loc] greet-Prog come.Pfv-1P1Sbj
B : háyà àmbà jâm [pò:ndù ${ }^{\mathrm{L}}$ gí]=ỳ bìsó
B: well God peace $\quad\left[\operatorname{greeting}(\mathrm{n})^{\mathrm{L}}\right.$ Prox]=Acc leave.Imprt
A: à:mí: à:mí: à:mí:
A: amen amen amen
A: '(It's) morning, it's "good morning!"
B: 'Okay, it's good.'
A: 'We have come bearing greetings for you-Sg.'
B: 'Well, may God leave (=allow) greetings in peace.'
A: 'Amen, amen, amen.'

00:35 A: غ̀nné: à-yán táクè- $\varnothing$ mà
A: past how? pass.Pfv-3SgSbj Q
B: íyò $\rightarrow$
B: Yes
A: ně: [ámbà ${ }^{\mathrm{L}}$ sàg] [ó ${ }^{\mathrm{L}}$ sàg]
A: now [God Lentrusting(n)] [2Sg ${ }^{\text {L entrusting }]}$

B: háyà [àmbà ná Lsàg]
B: well [God 3SgPoss ${ }^{L}$ entrusting(n)]
$\mathrm{A}:$ pày-wé bà:nà ${ }^{\mathrm{L}} \quad i ́=\grave{y}$ tànó: ì
A: old.person-Pl manner ${ }^{\mathrm{L}} \quad 1 \mathrm{Pl}=\mathrm{Acc}$ pass.Pfv.Ppl Def
B: já:tì já:tì
B: exactly exactly
A: 'How did things pass (=how were things) in the old days?'
B: 'Yes.'
A: 'Now, (I) entrust (it) to God and to you-Sg.'
B: 'Okay, God's trust.'
A: 'How the old people (sur)passed us.'
B: 'Exactly, exactly.'
[bà:nà ${ }^{\mathrm{L}}$ as head of manner adverbial, §15.7.2.1]
00:40 A: bà:nà ${ }^{\mathrm{L}} \quad i ́=y ̀ \quad$ jùmbó: $\quad$ j̀ A: manner ${ }^{\mathrm{L}} 1 \mathrm{PlSbj}$ leave.Pfv.Ppl Def
B: íyò $\rightarrow$
B: yes
$\mathrm{A}:\left[b a ̀: n a ̀{ }^{\mathrm{L}}\right.$ ทgú] íyè $\quad[m i ́=y ̀ ̀ ~ d a ̌ m$
A: $\left[\right.$ manner $^{\mathrm{L}}$ this] today $\quad[1 \mathrm{Sg}=$ Acc speak
ò pól nà] ìbà: bó- $\eta$

2Sg speak Subjunct] want be-1SgSbj
B : háyà, dágè- $\varnothing$ dágè- $\varnothing$
B: okay, be.good.Pfv-3SgSbj be.good.Pfv-3SgSbj
A: 'How it has left us.'
B: 'Yes.'
A: 'Today I would like you-Sg to talk to me in this way (=about that).'
B: 'Okay, that's fine.'
[subjunctive clause with nà, §15.5.2; ìbà: bó- $\eta$ 'I want', interchangeable with yè íbà-ŋ, §11.2.5.2]

00:45 A: íyò $\rightarrow$
A: yes
$\mathrm{B}:[11$ gà $]$ è-wé=ỳ gò
B: [1Pl Topic] child- $\mathrm{Pl}=$ it.is Emph
A: íyò $\rightarrow$
A: yes
$\mathrm{B}: n \varepsilon ̌$ : $[$ é bó ì] tèmbé-y gò,
B: now [2Pl be.Ppl Def] find.Pfv-1P1Sbj Emph, ně: àmbà [é kíndò ̀̀] kúndò
now God [2P1Poss shade Def] put.Imprt
A: [ámbà ná-j̀ $\quad{ }^{\mathrm{L}}$ kìndò] = ỳ
A: [God 3Sg-Poss ${ }^{\text {L }}$ shade] $=$ it.is
A: 'Yes,'
B: 'We are children (=young people).'
A: 'Yes.'
B: 'We found that you-Pl are present. May God put down your shade (=comfort).'
A: 'It's God's shade.'
[é bó $̀$ j̀ as participialized propositional complement of 'find', cf. (493) in §17.2.2; é
kíndò $\grave{\eta}$ 'your shade' has the form of an inalienable possessive; the irregular and
formulaic àmbà ná-ì ${ }^{\mathrm{L}}$ kìndò has an apparent resumptive 3 Sg possessive ná-ŋ̀ coindexed with ámbà 'God’, see beginning of §6.2]

00:51 B: [í gà] ópmè, gǒ-ŋ nùクà:-lí-y gò
B: [1P1 Topic] until.now, thing hear-PfvNeg-1P1Sbj Emph
A: káytò:, kó gǒ-ŋ bà: jó- Ø
A: bravo, DiscDef thing equal have- 3 SgSbj
B : àmbà [é kíndò ì] kúndò
B: God [2PlPoss shade Def] put.Imprt
A: [ámbà ná-ŋ̀ ${ }^{\text {L }}$ kìndò] = ỳ,
A: [God 3Sg-Poss] Lshade]=it.is,
B: 'As for us, so far we haven't heard anything (much).'
A: 'Bravo. That (=what you said) is worth something.' (= 'well said!')
B: May God put down your shade (=comfort).'
A: 'It's God's shade.'
[káytò: is an exclamation of respect or thanks, used especially by griots; bà:-jó 'is worth $\mathrm{X}^{\prime}$ from verb bàyé, §12.2.1.2]

B: já:tì
B: exactly
$\mathrm{A}:\left[\begin{array}{ll}\left.\text { ì bá:-wè }] \text { bè }{ }^{\#} \text { dàmò: }{ }^{\mathrm{L}}\right] \text { yáy, }\end{array}\right.$
[[1PlPoss kin-Pl] 3PlSbj ${ }^{\text {\# }}$ speak.Pfv.Ppl] like,
[dóg-è: yà $l^{\mathrm{L}}$ bè ${ }^{\mathrm{HL}}$ gô:] ón-mènè ìrà:-lí-y,
[Dogon place ${ }^{\mathrm{L}} 3 \mathrm{PlSbj}{ }^{\mathrm{HL}}$ exit.Pfv.Ppl] up.to.now forget-PfvNeg-1P1Sbj,
[yàl ${ }^{\mathrm{L}}$ ì HL gô:] ìrà:-lí-y,
[place ${ }^{\mathrm{L}}$ 1P1Sbj ${ }^{\mathrm{HL}}$ exit.Pfv.Ppl] forget-PfvNeg-1P1Sbj,
dóg-દ̀: mà:ndé bè HL gô:,
Dogon Mande 3P1Sbj HL exit.Pfv.Ppl,
[gว̀né jè:] mèn-yà,
[go.around while.Distrib] come.Pfv-3P1Sbj,
A: 'Well, how we came here originally.'
B: 'Exactly.'
A: 'Like (what) our elders said, where the Dogon people came from, we haven't forgotten even now. We haven't forgotten where we came from. The Dogon people left Mande, and came here circuitously (not straight or all at one time).
[gé: for gě: nonfinally in chains; yáy attracts H -tone of preceding participle dámò:, §8.4.1; dóg-è: 'Dogon people/nation', collective plural, (45c) in §4.1.1.1; Mande, i.e. the Mande kingdom of southern Mali; $j \dot{\varepsilon}:<j \varepsilon ̌$ : 'take' adds a distributive sense in [gذ̀nદ́ jè:] mèn-yà]

01:10 A: mà:ndé bè ${ }^{\mathrm{HL}}$ gô:,
A: Mande 3PlSbj ${ }^{H L}$ exit.Pfv.Ppl,
kà:n-bònzó- $\quad$ bè ${ }^{\mathrm{HL}}$ ménò:,
Kani-Bonzon 3PlSbj ${ }^{\mathrm{HL}}$ come.Pfv.Ppl,
B: já:tì
B: exactly
A: 'When they left Mande, they came to Kani-Bonzon (village).'
B: 'Exactly.'
[Kani-Bonzon village near Ningari, an early village from which many other villages in the zone were settled]

01:13 A: [kà:n-bònzò-ŋ ní:] bò bè ${ }^{\text {HL }}$ bíỳ̀:,
A: [Kani-Bonzon Loc] be 3PlSbj ${ }^{\text {HL }}$ be.Past.Ppl, [kó-1́ gìnnì-má] gín-yà nè, [there.DiscDef disperse-Hort] say.Pfv-2PlSbj Ant.Past.DS, sàngì-má gìnà:-ń, meet-Hort say-PfvNeg.3PlSbj,
A: 'They stayed in Kani-Bonzon (for a while). There, they said "let's disperse!" They didn't say let's keep together.'

01:18
 nǒ: fú:, person all, [dòngù bé-ỳ yàn] [sìyغ̀-gólò: bè-ŋ̀ yàn], [whatchamacallit? 3Pl-Poss and] [millet-farming 3Pl-Poss and], [[jǎn jè:], [íyè yàl ${ }^{\mathrm{L}}$ bè bò ò òń] [[hit while.Distrib], [today place ${ }^{\mathrm{L}} 3 \mathrm{PlSbj}$ be.Ppl here] bè ${ }^{\mathrm{HL}}$ ménò: ì] ná $=\dot{y}$ $3 \mathrm{PlSbj}{ }^{\mathrm{HL}}$ come.Pfv.Ppl Def] $3 \mathrm{Sg}=$ it.is
A: 'They left there, everyone, with their whatchamacallit, and their millet-farming. With effort they came to here where they are today.'
[ò- $\boldsymbol{\eta}$ 'here' absorbs the H-tone from participial bó ]
01:25 A: [kó-ngù ${ }^{\text {L }}$ kùlù-ŋ ngì] nì:,
A: [DiscDef-Poss.Def Linside Def] Loc,
ènné: sémbè yè jó=bìy-yà [gándà j̀], past power Exist have=Past-3P1Sbj [world Def], bámmà mènà:-ń, freely come-PfvNeg.3P1Sbj,
A: 'In that (situation), in the past they were powerful (tough) in the world. They didn't come easily (without effort).'
[kó-ŋgù 'that', §6.5.1]

01:29
A: [nò àbǎ:-1 fú:] jé:-rà: = bìy-yà,
A: [person accept-PfvNeg.Ppl
all] take-Prog=Past-3PlSbj,
[nò àbă:-l fú:] dón-dà: = bìy-yà,
[person accept-PfvNeg.Ppl all] sell-Prog=Past-3PlSbj,
[nò àbă:-1 fú:] dánà: démè-rà:=bìy-yà, [person accept-PfvNeg.Ppl all] head hit-Prog=Past-3P1Sbj,

A: 'Anyone who didn't accept it, they would seize. Anyone who didn't accept it, they would sell. Anyone who didn't accept it, they would hit (on the) head (=beat him up).'
[bámmà 'freely, cheaply, for nothing'; postvocalic progressive suffix pronounced -rà: rather than -là: in this dialect; past progressive §10.6.1.2]


| [j̀gò: | ngí | yà:] | [kî:g | ì- $\left.{ }^{\text {j }}\right]$ | $b e ́=\grave{y}$ | bìyè- $\varnothing$, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Hogon | Def | $\mathrm{Pl}]$ | [head | 1P1-Poss] | $3 \mathrm{Pl}=\mathrm{it}$.is | Past-3SgSbj, |
| [jogò: | ngí |  | yà: | là], |  |  |
| [Hogon | Def |  | Pl | too], |  |  |
| [tàbà:-to | lgù | ngí] | kàn | témb-y |  |  |
| [flat.sto | e.shelf | Def] | like.th | at fine.Pf | P1Sbj, |  |

A: 'Who was our leadership in the old days? The Hogons, our leadership was them.
The Hogons also found the flat stone shelf like that.'
[kî:g 'head', here abstractly 'chiefhood, leadership'; j̀ǵ: 'Hogon' (traditional chief); tàbá: 'flat stone shelf']

01:45 A: [[tàbà:-tòlgù ngí] nì:], ògó: sémbè bé jò = bìyè-y,
A: [[flat.stone.shelf Def] Loc], Hogon power 3P1Sbj have=Past-SFoc,
[kó- $\eta$ bè ${ }^{\text {HL }}$ ménò:] $\begin{aligned} & \text { ènné: tô:r bùndù }=\text { bìyè-y, }\end{aligned}$
[there 3PlSbj ${ }^{\mathrm{HL}}$ come.Pfv.Ppl] past fetish hit=Past-1PlSbj,
[Wě- $\eta$ bìl-í: mèn- $\varnothing$ ná:] sên gìn $=$ bìyă:-1- $\varnothing$,
[year turn-MP come.Pfv-3SgSbj if] prayer say=Past-PfvNeg-3SgSbj,
[tó:rù ì-ŋì =ỳ] ámbà =y tánù-ndè
[fetish 1Pl-Poss=Acc] God=Acc pass-Tr
$k o ́=y ̀ \quad j o ̀=b i ̀ y غ ̀-y$,
DiscDef=it.is have=Past-1P1Sbj,
A: 'On the flat stone shelf, it was Hogons [focus] who had the power. When they came there, we worshiped fetishes (idols) back then. If the year changed (=from one year to the next), there was no prayer (=Islamic holy day). Transform(ing) our fetish(es) into God, that's what we had.
[tápù-ndè 'cause to pass, take across', here in archaic sense 'transform into']
01:56
là] né:-rà: = bìyè- $\varnothing$,
A: [fetish Def] [person-child=Acc too] drink-Prog=Past-3SgSbj, íyè [dàmó: today [speaking(n) Def] prohibited, nǒ: jé:-rà: = bìyè- $\varnothing \quad$ gàsí: quoi, person take-Prog=Past-3SgSbj prohibited , [tó:rù ì-ŋ̀] nǒ: né:-rà: $=$ bìyè- $\varnothing$, [fetish 1Pl-Poss] person drink-Prog=Past-3SgSbj, [pǎ:m kán-dà: jò-nn-ô:], [understanding do-Prog have-StatNeg-2SgSbj.Q],

A: 'The fetish(es) used to drink (=consume) even people (=human sacrifices). Today, talking about that is tabooed, (saying that) they used to take people is tabooed. Our fetish(es) used to drink people. Did you-Sg not understand?'
[dàmó:-1́ 'talking', likely a frozen participle, used with gàsí: 'be tabooed, not allowed’, cf. [wǒ: ŋ̧] / [nùクó: ý] gàsí: ‘seeing/hearing (it) is tabooed’]

## 02:05



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gàmbǔl, pésgè ná:-mà: tól-yà,
certain, sheep drink-Caus.Purp begin.Pfv-3PlSbj,
[pésgè yà\eta] [ínà: yà\eta] [ù\etaó yà\eta]
[sheep and] [goat and] [dog and]
[kò bùlé:] nà:-m = bíy-yà,
[DiscDef Pl] drink-Caus=Past-3PlSbj,
```

A: 'When they dropped that (practice), wherein it (=the fetish) had drunk people, some (people) began (at that time) to sacrifice sheep. Sheep, goats, and dogs, those [focus] are what they sacrificed.'
[ná: = bìỳ̀: dialectal variant of past perfect participle né: = bìỳ̀: ; nà kân nè to switch topics (subjects), (438a-b) in §15.4; 'begin' with purposive complement (lengthened A-stem), §17.4.2.2]


A: 'The devils having come, up until today, there are places where they have abandoned that, (and) there are places that have not abandoned (it). Those fetishes, there are places that have abandoned (it) and there are places that have not abandoned (it).'
[kó-ŋggù yàl ${ }^{\mathrm{L}}$ júmbò: with $\{\mathrm{HL}\}$ rather than $\{\mathrm{LH}\}$-toned perfective participle, $\S 14.7 .1$, see end of §14.4.1.1; kó-ŋgù and ná-ŋgù 'that', §6.5.1; yò bó dialectal for yè bó


A: 'In the past, at the time of their coming, the Fulbe wouldn't let us alone. Did you understand? The Fulbe wouldn't let us alone.'
[bǐs = bìyà:-ń contracted < bìsé=bìyà:-ń, past perfect negative; púnd-غ̀: collective plural, (45c) in §4.1.1.1]

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02:33 A: kǎ\eta nà bó ỳ,
    A: like.that 3SgSbj be.Ppl Def,
    [nò\etagò-\eta] \etaggí] yà\eta, bé=ỳ jǎn bè NL gó:-ndò:,
    [arms }\mp@subsup{}{}{\textrm{L}}\mathrm{ Def] with, 3Pl=Acc hit 3PlSbj }\mp@subsup{}{}{HL}\mathrm{ exit-Tr.Pfv.Ppl,
    \varepsiloǹndèpàndá\eta bè HL yé\etaò:,
    independence 3PlSbj HL take.Pfv.Ppl,
```

[túbà:gì yà:] mènó: ǹ] ná=ý,
[white.person Pl] come.Pfv.Ppl Def] 3Sg=it.is,

A: 'It (=the situation) being thus, they (=Dogon) expelled them (=Fulbe) by force of arms. When they (=Dogon) took (their) independence (from the Fulbe), that was when the whites came.'

02:40


A: 'At the site of the village, the place where we came from, it's not close to here.'
02:45


A: 'Even now, when the year turns, they serve (=make sacrifices to) Tabi, they serve Gemle, they serve Sambe, they serve Togo, they serve the masks, they serve Ag. They do all those, (to see) how one might possibly get through (hardship).'
[The list is of fetishes and ritual objects. In Nantanga as of 2015, the fetishes were no longer actively sacrificed to because of Islam, but they were kept in reserve in a cave as a kind of insurance policy. Sacrifices were periodically made to them in the event of hardship or threat; bìl-ì:- $\varnothing$ nâ: with mediopassive variant $-i$ : for - ye ; 'head pass' $=$ 'survive, get through (hardship or crisis)', cf. [kî:g ò-ì] tànè 'your head has passed (=you have gotten through)'; \{L\}-toned tàmò: is not a 2 Sg subject verb; it appears to be a participial form "possessed" by 'head'; bùlé 'hit' (variant of bùndè) means 'perform sacrifices for' or more abstractly 'worship, serve (a god)']


A: 'They don't forget what went on in the old days, us. They don't forget the way it was in the old days either. If we did that (=made sacrifices), when(ever) a mysterious
bad thing came upon us, it would not enter (the village), it would make a detour (=go somewhere else).'
[bènnúg 'mysterious, of unknown origin']

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03:08 A: [jìmù- \(\eta^{\mathrm{L}}\) sálà:] [í nì:] mèn- \(\varnothing\) nâ:,
    A: [disease \({ }^{\mathrm{L}}\) bad] [1Pl Loc] come.Pfv-3SgSbj if,
    [núŋà = bìyǎ:-1- \(\varnothing\) bá:1-ì:-là: = bìyè- Ø]
    [enter=Past-PfvNeg-3SgSbj detour-MP-Prog=Past-3SgSbj
    [dì:nغ̀ \({ }^{\mathrm{L}}\) sálà:] [í nì:] mèn- \(\varnothing \quad\) nâ:,
    [religion \({ }^{\mathrm{L}}\) bad] [1Pl Loc] come.Pfv-3SgSbj if,
    [núŋà = bìyǎ:-1- \(\varnothing\) bá:1-ì:-là: = bìyè- Ø],
    [enter=Past-PfvNeg-3SgSbj detour-MP-Prog=Past-3SgSbj,
    [óllò ì-1̀ là], tèbú- \(\eta\) já:=bìyǎ:-1- \(\varnothing\),
    [chicken 1Pl-Poss too], kite take=Past-PfvNeg-3SgSbj,
    pǎ:m kàn-ô:
    understanding do.Pfv-2SgSbj.Q,
```

A: 'If a bad disease (=epidemic) came upon us, it would not enter, it would make a detour. If a bad religion came upon us, it would not enter, it would make a detour. Nor would a kite (=hawk) take our chickens. Did you understand?'

03:20 A: kásàr gìnné [í nì:] pél-dà:=bìyè- $\varnothing$,
A: damage a.lot [1Pl Loc] miss-Prog=Past-3SgSbj, kó-ŋgù ènné: tàクò: ${ }^{\mathrm{L}}$ ทgú, DiscDef-Poss.Def past pass.Pfv.Ppl ${ }^{\text {L }}$ Prox, [ìró: $\quad$ ŋ̀] dó:lò $=\grave{y}$, [forget.Pfv.Ppl Def] unfortunate.thing=it.is, íyè bû:d bè dímb-y-ò: today money 3 PlSbj follow-MP-Pfv.Ppl
B : [kò bùlé:] nモ̌: [à yáy] kánè júmb-yà
B: [DiscDef Pl] now [how?] do leave.Pfv-3P1Sbj
A: 'Many harmful things used to miss (=stay away from) us. That same (custom) which occurred in the past, it should not be forgotten, now that they follow after (=seek) money.'

B: 'Now how did they abandon those (customs)?'
[demonstrative $\eta g u ́$ controls tone-dropping on participle tà $\not 0$ :, §14.6.1]


A: 'Well, the way they stopped doing (them) (was), religion (Islam) came in and they abandoned (them). Religion came in and they abandoned them. Religion came in, and they say that if you don't abandon (them), they won't bury you when you die.'
['say' verb at end has scope over a multi-clause quotation beginning with 'if you don't abandon'; bísè-nnú- $\eta$ has logophoric (pseudo-1Sg) subject suffix $-\eta$ coindexed with 'they' of 'they say']

03:40


A: 'They say that when you have a child they won't shave (=perform) the christening. They say that if you get married, they won't cut (=approve) the religious marriage contract.'
[lábrù- $\eta$ 'baptism, christening of newborn child (seven days after birth)', involves shaving its head; yà:-gú: 'wedding, marriage ceremony'; pólò 'formal marriage agreement contracted in a mosque']

03:46

| A: [[kó-ทgù |  | ${ }^{\text {L }}$ Sàbà:b] | làn] |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A: [[DiscD | Poss.Def | ${ }^{\text {L }}$ reason] | Inst] |  |  |  |
| íyè | [gùrá:nà | nà | $m \varepsilon \hat{n}$ | $n$ ¢̀ |  |  |
| today | [Koran | 3 SgSbj | come.Pfv |  | ast.DS |  |
| [Ènnè: | mó | ${ }^{\text {L }}$ dì:nè | !̀gì] | bilé - |  |  |
| [past | Poss | ${ }^{\text {L }}$ religion | Def] | turn - |  |  |
| [íyè | [dì:nغ̇ ${ }^{\text {L }}$ | kàsǎ:] | jìnè | jó | ì] | ná $=$ ý, |
| [today | [religion ${ }^{\text {L }}$ | new] | bring | have. Ppl | Def] | $3 \mathrm{Sg}=\mathrm{it}$.is, |

A: '(It's) for that reason. Now that the Koran has come, it has replaced the (animist) religion of the past, it's nowadays that it has brought a new religion (=Islam).'
[mò possessive, here unusually with a prenominal possessor, jìnè jó $\grave{\eta}$ participle from recent perfect]

03:53

> A: pày-wé kăy bìyà:-ń,
> old.person-Pl like.that was-PfvNeg-3P1Sbj,
> pǎ:m kán-dà: j-ò:,
> understanding do-Prog have- 2 Sg Sbj ,
> pày-wé [nàsùg bé-ì] kàn-yà nâ:,
> old.person-Pl [mask 3Pl-Poss] do.Pfv-3PlSbj if,
> [tó:r bè-ŋ̀] gèy-yà nâ:,
> [fetish 3Pl-Poss] pray.Pfv-3P1Sbj if,
> ámbà áb-là: = bìyè- $\varnothing$,
> God accept-Prog=Past-3SgSbj

A: 'The old people (in the past) weren't like that. Do you understand? When they did their mask (performances), when they prayed to their fetishes, God would accept (their prayers).'

04:00


A: 'If the rains dry up, they (old men) sit (under) the palaver shelter, they slaughter chickens (as sacrifices), they don't enter houses, they wear their necklaces (with amulets), they perform their prayers, and promptly the clouds come out, the rain falls, and the country is all (rain)water.'
['if the rains dried up' is a genuine conditional antecedent; it is followed by a long string of pseudo-conditional clauses denoting sequenced future events, concluding with the main clause 'the country was all (rain)water'; the events refer to the old days but are phrased here as though in the present and future]

04:13

| A: | pày-wé <br> old.person-Pl |  | [míyè | $\begin{aligned} & \text { là:] } \\ & \text { Loc] } \end{aligned}$ | bìy-yà, <br> be-3PISbj, |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | [control(n) |  |  |
|  | Íyè | [ì | júmbò | $n \grave{¢}]$ |  |
|  | today | [1P1Sbj | leave | Ant.Past.DS] |  |
|  | [ g gò-п | bélè- |  | [àlà-măyg | dògòj, |
|  | [what? | get.P | v-1PISbj] | [drought | except], |
|  | Énnà- $\eta$ | kánè | -b- $\varnothing$ | nà:, |  |
|  | wind | do-Ip | v-3SgSbj | if, |  |
|  | [tô:r | $b e ̀-\eta]$ |  | bùnd-yà | nâ:, |
|  | [fetish | $3 \mathrm{Pl}-\mathrm{P}$ | oss] | hit.Pfv-3P1Sbj | j if |
|  | Énnà-ท | séy-s | y-sèy-sèy | már-là: = | bìẏ̀- $\varnothing$ |
|  | wind | swep | .clean | be.lost-Pro | og=Past 3 |

A: 'The old people were in control (of the rain). Nowadays, having abandoned (those practices), what did we gain, other than drought? When the (dry) wind blew, they would sacrifice to their fetishes, and the wind would disappear completely.'
[séy-sèy, extendible as séy-sèy-sèy, is an expressive adverbial, used for example to emphasize that a just-swept floor is spotless]

04:23 A: síyé tìyè- $\varnothing$ nâ:,
millet sprout.Pfv-3SgSbj if,
$k a ̆: g ~ t \varepsilon ́ m e ̀ ~ j e ́:-b u ̀ ~ i ̀, ~$
grasshopper munch take-Ipfv.Ppl Def.


A: 'When millet had sprouted (in the fields), when grasshoppers were taking and eating it, they would catch the grasshoppers, and go to a place and perform prayers, then the grasshoppers would disappear.'
[tègélèy, adverbial associated with màré 'become lost' in the sense 'disappear']


A: '(When) the millet was ripe, if birds were pecking (=eating the grains), they would catch a bird. There is a (secret) place for putting (it), they would put (it) there, and perform prayers, and birds would disappear.'

04:39 A: sî:-g gè:- $\varnothing$ nâ:, sìyé nê:-b- $\varnothing$ nà:,
larva go.out.Pfv-3SgSbj if, millet eat-Ipfv-3SgSbj if,
[sí:-gù j̀] yèn-yà nâ:,
[larva Def] pick.up.Pfv-3P1Sbj if,
[yàl ní:] kùnd-yà nâ:,
[place Loc] put.Pfv-3P1Sbj if,
[sí:-gù ì] tègélèn már-là:=bìy-yà,
[larva Def] disappear be.lost-Prog=Past-3P1Sbj,
A: 'If larvae (e.g. caterpillars) emerged and were eating the millet, they would take the larvae and put them in a (secret) place, and the larvae would disappear.'

04:46
A: pǎ:m kàn-ô:,
understanding do.Pfv-2SgSbj.Q,

| [kó | fú $\rightarrow$ ] | tô:r | $[i ́$ | nì:] | yè | bíyè- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $[$ DiscDef | all] | fetish | $[1 \mathrm{Pl}$ | Loc] | Exist | be.Past-3SgSbj |

A: 'Did you understand? There were among us (=we had) fetishes (for) all those (dangers).'
[polar interrogative < kàn-ó: 'you-Sg did’]

04:49
B: [kò-wé
[tó:rù
门̀]
$n \grave{\jmath}] \quad n \varepsilon ̌:$, [DiscDef-Pl [fetish Def] now] now,

| [kò | bùlé:], | $\underline{i}=\grave{y}$ | áb-rà: = bìy-yà |
| :---: | :---: | :---: | :---: |
| [DiscDef | $\mathrm{Pl}]$, | $1 \mathrm{Pl}=\mathrm{Acc}$ | c accept-Prog=Past-3P1Sbj |
| ně: | [ற̀gó-ŋ | gìné] jù | jùmbè-y |
| now | [what? | say] ab | abandon.Pfv-1PlSbj |

B: 'All those fetishes now, now those (fetishes) accepted us (=fulfilled our prayers), (so) why have we abandoned (them)?'
[nغ̀ n $\check{\text { : }}$ : sequence is two separate 'now' discourse markers, nغ̀ clause-final then ně: setting up the following clause; gìn $\varepsilon$ 'say' referring to thought, hence 'say what?' = 'why?', §13.2.2.2]

04:54

| A: bon | [kàndá | mì | ${ }^{\text {HL }}$ dámò:] |  | ná $=$ ý, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [now | 1 SgSbj | ${ }^{\mathrm{HL}}$ spe | .Pfv.Ppl] | $3 \mathrm{Sg}=$ |  |  |
| S $\hat{\varepsilon} n$ | bè | ${ }^{\text {HL }}$ gínò:, |  |  |  |  |  |
| prayer | 3P1Sbj | ${ }^{\mathrm{HL}}$ say.Pfy | .Ppl, |  |  |  |  |
| [íyè | [kò | bùlé: | fú $\rightarrow$ ] | kòmmó | ì | kúndò:] | ná $=$ ý, |
| [today | [DiscDef | Pl | all] | cave | 1 PlSbj | put.Ppf.Ppl] | $3 \mathrm{Sg}=\mathrm{it}$.is, |

A: 'Well, it's (like) what I said now. (The fetishes) that they said prayers to, the situation is that nowadays we have put all of them (=fetishes) in a cave.'

04:58

[[bè:-gú ý] jě: bòlè] ó=ỳ ǹd ${ }^{\text {ý- }} \mathrm{y} \quad$ nà:,
[[stick Def] take go] $2 \mathrm{Sg}=\mathrm{Acc}$ give.Pfv-1P1Sbj if, kàsàyálà ó gòlà =bìyè-y, elder's.field 2 Sg cultivate=Past-SFoc,
A: '(Suppose) the status of oldest man in the village devolved (on someone), suppose that the status of oldest man devolved on you-Sg. We would go take the stick (=staff of office) and give it to you. You [focus] would cultivate the special field reserved for the oldest man.'
[cf. pòrò-pây 'oldest man (in a village)', a ritual status]


A: 'It (=the special field) was a field in the village periphery, on the grounds that an old man wouldn't have the strength, he wouldn't be able to walk to a field far from the village, (so) they used to let him cultivate a field in the village periphery.'
[This is especially true in the rocky plateau area where Nantanga is located, where getting around on horseback or donkey cart is not feasible; bòlé bélè-nnù- $\varnothing$ 'can't go' with chain-final bèlé 'get' in sense 'be able to’, §15.1.4.1]

| A | [ògó: | ¢̀] | lè, | sémbè | $j o ́=~ b i ̀ y غ ̀-\varnothing, ~$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [Hogon | Def] | also, | power | have $=$ Past -3 SgSbj |


| [yàlà | bèrǔ-g] | ná $=$ ỳ | ǹd-yà | nâ:, |
| :---: | :---: | :---: | :---: | :---: |
| [field | nearby] | $3 \mathrm{Sg}=\mathrm{Acc}$ | give.Pfv-3P1Sbj | I, |
| kínnò | ná $=$ y | ǹd-yà | nâ:, |  |
| tree | $3 \mathrm{Sg}=$ Acc | give.P | -3PlSbj if, |  |

A: 'The Hogon (traditional chief) too, he had power (authority). They would give him a field not far away. They would give him a tree.'

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05:16 A [ògó: nè] [ŋ̀gó-ŋ là] bìs-yà,
    [Hogon now] [what? Purp] put.down.Pfv-3PlSbj,
    jgó:, [ná bò-ń- Ø nà:]
    Hogon, [3SgSbj be-Neg-3SgSbj if]
    dágè-nnú, nò \({ }^{\mathrm{L}}\) àbà:-lí,
    be.good-StatNeg, person \({ }^{\mathrm{L}}\) accept-PfvNeg.Ppl,
    [nùmò: ná-ì] kùndò = bíy-yà,
    [hand 3Sg-Poss] put=Past-3PlSbj,
```

A: 'A Hogon now, why did they install him (as chief)? The Hogon, if he wasn't there, it wouldn't be good. They would put a trouble-maker ("one who didn't accept") in his hands.
[bò-ń- $\varnothing<$ bò-nnú- $\varnothing ;$ kùndù $=<$ kùndè =]
05:22 A: [nùmò: ná-ท̀] kùnd-yà nâ:, mòmb-yé,
[hand 3Sg-Poss] put.Pfv-3P1Sbj if, assemble-MP,
yàmó: ò ${ }^{H L} k a ̂ n ~ n \grave{\varepsilon}$,
misdeed $2 \mathrm{SgSbj} \mathrm{HL}^{\mathrm{HL}}$ Ant.Past.DS,
j̀g̀̀:-dôm bè dâm nè,
Hogon-talk(n) 3P1Sbj speak Ant.Past.DS,
àbà:-1-ó: nà:,
accept-PfvNeg-2SgSbj if,
[nǎ: tà:ndú] bè túbè nè,
[time 3] 3PlSbj ask Ant.Past.DS,
àbà:-1-ó: nà:,
accept-PfvNeg-2SgSbj if,
ó $=\grave{y} \quad$ nàsúg mín-dà: $=$ bìyè $-\varnothing$,
$2 \mathrm{Sg}=\mathrm{Acc}$ idol swallow-Prog=Past-3SgSbj
A: 'When they put (the trouble-maker) in his hands, th.ey assembled. You (had) committed a misdeed, and they would tell you the Hogon's words (=decision), and if you refused (it), they would ask you (a total of) three times, and if you refused (it), the idol (=fetish) would swallow you.'

| A: [nò: | tùbó: | ض̀] nàl-yà-ý | bìyǎ:-1- $\varnothing$, |  |
| :---: | :---: | :---: | :---: | :---: |
| A: [person | ask.Pfv.Ppl | Def] bear.chil | be.Past-Neg-3SgSbj, |  |
| [kî:g | ò-ŋ̀] | pórè:-n, |  |  |
| [head | 2 Sg -Poss] | cut.off-Ipfv.3P1Sbj, |  |  |
| [ó = y | wà:] [nàsúg | mìnè wá:] | gìn-yà | nâ:, |
| $[2 \mathrm{Sg}=\mathrm{Acc}$ | QuotSbj] [idol | swallow.Pfv-3SgSbj Quot] | say.Pfv-3P1Sbj | if, |
| kóy, |  |  |  |  |
| Emph, |  |  |  |  |

A: 'There was nobody born (on earth) who (could) question (it). They would cut off your head. They would say that the idol (=fetish) has swallowed you. That's all.'
[deverbal adjective nàl-yà-ท́, §4.5.2]

A: child $3 \mathrm{Sg}=$ Acc [boy's.room Loc] go.Pfv-3PlSbj if, dèlé-n-wè tèbùl-yà nâ: elder.sib- $\varnothing$-Pl thrash.Pfv-3PISbj if, gò- $\eta$ bè ${ }^{\text {HL }}$ kánò: fú $\rightarrow$, thing 3 PISbj ${ }^{\mathrm{HL}}$ do.Pfv.Ppl all, ńbù-ŋ mèn-yà nâ:, găs bìyă:-1- $\varnothing$, house come.Pfv-3PlSbj if, trouble be.Past-PfvNeg-3SgSbj,
A: 'If a young person didn't accept (discipline), they would go (with him) to a bachelor's room and the older brothers would thrash him. Whatever they did (to him), when they came to the house, there was no problem (=it was acceptable).'
[i.e. the elder brothers could do whatever they wanted to him; tébùlદ̀ 'whip (sb), slap or hit lightly with hands or a whip']

05:46 A: íyè ě-g tèbl-ó: nà:,
A: house child thrash.Pfv- 2 SgSbj if,
dèléen $\quad \delta=\grave{y} \quad$ bísè-ní- $\varnothing$,
elder.sib $\quad 2 \mathrm{Sg}=\mathrm{Acc}$ leave-IpfvNeg-3SgSbj, ě-g tèbl-ó: nà:, child thrash.Pfv-2SgSbj if, yă: $\quad \delta=y \quad$ bísè-ń- $\varnothing$, woman $2 \mathrm{Sg}=\mathrm{Acc}$ leave-IpfvNeg-3SgSbj, ě-g tèbl-ó: nà:, child thrash.Pfv-2SgSbj if, â:n $\quad$ ó=ỳ bísc̀-ń- $\varnothing$, [ó wà:] other $\quad 2 \mathrm{Sg}=\mathrm{Acc}$ leave-IpfvNeg-3SgSbj, [2Sg QuotSbj] [[č-g nù mò-ı̀] ìbà-lú-g dó:-nd-ò:] gínè:-n, [[child 3Logo Poss] hatred arrive-Caus.Pfv-2SgSbj] say-Ipfv.3PISbj,
A: 'Nowadays, if you thrash a young person (=boy), (his) elder brother won't leave you alone. If you thrash a young person, a woman won't leave you alone. If you thrash a young person, the other (person) won't leave you alone. They will say that you-Sg have brought ill will (=hatred) (to) their child.'
[bíṡ̀-ń- $\varnothing$ < bíš̀-nnú- $\varnothing$; nù mò dialectal for mè mò (logophoric possessor); ìà̀-lú-g 'hatred, ill will', cf. ibà-nnú- 'not want']


A: 'They will say that you don't (even) want to look at their child. How can the country get better?

B: 'It can't get better.'

A: 'It can't get better indeed.'
[quotative-subject construction atypically placed after object NP 'their child'; dăg for the usual dàgé in this construction]

06:02 B: gándà yámè- $\varnothing$
B: country be.ruined.Pfv-3SgSbj
A: yǒ:g
bò-nnú- $\varnothing$
A: understanding
[yò:g-àwá
[solidarity
be-Neg-3SgSbj
pǎ:m
门̀] bò-nnú- $\varnothing$,
understanding do.Pfv-2SgSbj.Q,
B: 'The country has gone bad.'
A: 'There's no mutual understanding (=getting along). There's no solidarity. Did you understand (me)?'

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06:06 A: [[nàgà-nàgà]-dùn í-ì] gábè- \(\varnothing\)
    A: [[other-other]-gossip(n) 1Pl-Poss] be.excessive.Pfv-3SgSbj
        [dîg ì-ì] gábè- Ø,
        [lying 1Pl-Poss] be.excessive.Pfv-3SgSbj,
        [Èsìbìỳ̀ 1 íǹ] gábè- \(\varnothing\),
        [impoliteness 1Pl-Poss] be.excessive.Pfv-3SgSbj,
```

A: 'Our gossiping about one another is excessive. Our lying is excessive. Our impoliteness is excessive.
[nàgá-nàgá 'other-other', a kind of reciprocal 'one another'; dǔn nominal $<$ verb dùné 'gossip about (sb) behind his back'; èsìbìyó 'impoliteness']

06:11 A: [Lì
$\begin{array}{llll}\text { A: [[ì } & \text { HL témbò: } & \text { ŋ̀gì }] & n i ̀:] \\ \text { A: [[1PlSbj } & { }^{\text {HL }} \text { encounter.Pfv.Ppl } & \text { Def] } & \text { Loc }]\end{array}$ [gě: jè:] ból-dà: jò-y, [exit(v) while.Distrib] go-Prog have-1P1Sbj
A: 'We are gradually getting away from what we inherited (=traditional customs).'
[cf. [gě: jè] ból-yà 'they went out gradually (not all together), they dribbled out']
06:14 A: kó jùmbé-y nà:,
A: DiscDef abandon.Pfv-1PlSbj if,
[íyè ónmè nè] gándà yámù-gù dògò
[today up.until.now now] country ruin(n) except
[gò- $\eta$ [dàg- $\varnothing$ ná:]
[thing [become.good.Pfv-3SgSbj if]
[gírò là:] bólè:-b] pàypôr bò-nnú- $\varnothing$ [forward Loc] go-Ipfv.Ppl] at.all be-Neg-3SgSbj
A: 'If we abandon that, as of now, (in) the country, there is nothing at all that can get better and go forward, (there's) just (the country's) going bad.'

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06:20 A: [mà:nd-í: nà:]
    A: [make.effort-MP
        [\varepsiloǹnn\varepsiloń: [ì HL témbò: ìgì] dìy-yè-má-\grave{y,}
        [past [1PlSbj HL encounter.Pfv.Ppl Def] hold-MP-Hort-PlAddr,
        pày-wé bè HL ménò: ỳ,
```

| old.person-P1 3PlSbj | ${ }^{\text {HL }}$ come.Pfv.Ppl Def, |  |
| :---: | :---: | :---: |
| [bǎy wó: bǎy], | [m̀bù- $\eta^{\mathrm{L}}$ pê:ท] yàn, |  |
| [assembly], | [house ${ }^{\mathrm{L}}$ neighboring] and, |  |
| [[pòrò ${ }^{\text {L }}$ pê:y] | bè-r̀j] yày, dágò: | $b o ̀-n ̀$, |
| [[village ${ }^{\mathrm{L}}$ neighboring] | 3Pl-Poss] and, become.good | be-3PlSbj, |
| àlá: kày | géyà = bì-yyà, |  |
| rain(n) like.that | ask.for=Past-3P1Sbj |  |

A: 'Let's make an effort (=try) to hold onto what we inherited. (When) the old people came, (in) meetings, (with) the neighboring house and the neighboring village, they were okay (with each other); they used to ask (=pray) for rain like that.'
[dágò: bò-ǹ recent perfect, §10.2.1.6; géyà = bì-yyà with dialectal vocalism and Htone from preceding kǎy, for gèyغ̀ = bí-yyà]

06:31
A: dágò: bò-ǹ, yǎ: kàn dénnà = bì-yyà,
A: become.good be-3PlSbj, woman like.that look.for=Past-3PISbj, dágò: bò-ǹ, [ỳ̀̀:g-àwá ì] kàp dénnà = bì-yyà, become.good be-3PISbj, [solidarity Def] like.that look.for=Past-3P1Sbj dàgé bìy-ó: nà:, bárkè yè ménè:-b- $\varnothing$, become.good remain.Pfv-2SgSbj if, blessing Exist come-Ipfv-3SgSbj, dàgé bìy-ó: nà:, múnàl yè ménè:-b- $\varnothing$, become.good remain.Pfv- 2 SgSbj if, patience Exist come-Ipfv- 3 Sg Sbj ,
A: ‘They were okay; they used to seek a wife like that. They were okay; they used to seek solidarity (among themselves). If you remain okay (with others), blessings will come. If you remain okay (with others), patience (=tolerance) will come.'
[dénnà $=$ bì-yyà $<d \varepsilon ̀ n n \grave{\varepsilon}=b i ́-y y a ̀, ~ c f . ~ c o m m e n t s ~ o n ~ p r e c e d i n g ~ s e g m e n t ; ~ e x i s t e n t i a l ~ y e ̀ ~$ with imperfective, see discussion preceding (280) in §11.2.2.1]

06:41

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A: ỳ̀:g-àwá
    solidarity be-Neg-3SgSbj if,
    [pàypôr gò-\eta gá:l-yè:-b] bò-ń- }\varnothing\mathrm{ ,
    [at.all thing manage-MP-Ipfv.Ppl] be-Neg-3SgSbj,
    núற\check{\̀-rà: j-ô;,}
    hear-Prog have-2SgSbj.Q
```

A: 'If there is no solidarity, nothing (=no problems) can be managed. Are you hearing?'
[bò-ń- $\varnothing<$ bò-nnú- $\varnothing]$
06:47 A: kó ăg ná $=\grave{y}$ jìnè-bì-y
A: DiscDef what? 3Sg=Acc bring-Ipfv-SFoc nò:-bàbá ná=ỳ jìnè-bì-y, bárkè, person-respect $3 \mathrm{Sg}=\mathrm{Acc}$ bring-Ipfv-SFoc, blessing, ỳ̀:g-àwá bò-ñ- $\varnothing \quad$ nà:, solidarity be-Neg-3SgSbj if, [pàypôr gò: ${ }^{n \mathrm{~L}}$ ì bélè:-b] bò-ń- $\varnothing$, [at.all thing ${ }^{\mathrm{L}}$ 1PISbj-Ipfv] get.Pfv] be-Neg-3SgSbj,
A: ‘That (solidarity), what brings (=causes) it? Respect for people [focus] brings (it). A blessing. If there is no solidarity, there is nothing at all that we can gain.'

| 06:54 | A: íyè | àlà-màygí | yày, | kòndó yày, gìyă: yàn, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | A: today | rain-difficulty | and, | lack | and, | hunger and, |


| sémbè-bèlè | $\underline{i}=\grave{y}$ | bàrà:-ń | nà |
| :---: | :---: | :---: | :---: |
| power-having | $1 \mathrm{Pl}=\mathrm{Acc}$ | help-PfvNeg.3P1Sbj | I, |
|  | kíllè | $b \varepsilon ́ l e ̀:-b] ~$ | bò-ń- $\varnothing$, |
| [[thing any] ${ }^{\mathrm{L}}$ | manage | 1 PlSbj get-Ipfv.Ppl] | be-Neg-3SgSbj, |

A: 'Today with drought, lack (=poverty), and famine. If the authorities don't help us, there isn't anything that we can handle.'
[gò- $\eta$ tólè or simple tólè '(not) anything', (132c) in §6.6.3]
07:01

| A: [àlá: | gèyદ́-y | nà:] | ménè-ń- $\varnothing$, |
| :---: | :---: | :---: | :---: |
| A: [rain(n) | ask.for.Pfv-1P1Sbj | if] | come-IpfvNeg-3SgSbj, |
| [dăg | dènné-y | nà:] | $b \varepsilon ́ l-m e ̀-n ́-\varnothing, ~$ |
| [good | look.for.Pfv-1PlSb | bj if] | get-Pass-IpfvNeg-3SgSbj, |
| [gò: ${ }^{\text {L }}$ | [ì kán | nà] | dágè:-b] |
| [thing ${ }^{\text {L }}$ | [1P1S do.Pfv | Subjunct] | become.good-Ipfv.Ppl] |
| pàypôr | bò-ń- $\varnothing$, |  |  |
| at.all | be-Neg-3SgSbj |  |  |

A: 'When we ask (=pray) for rain, it doesn't come. If we look for something good, it isn't gettable. There is nothing that, should we do it, will turn out well.'
[subjunctive ì kán nà: 'we do and ...', §15.5.2; my assistant suggests emending to imperfective participial ì kánè:- $b$ to make it parallel to dágè:-b]

07:08 A: [ह̀nné: dògò],
A: [past except],


A: 'As opposed to the past, nowadays our solidarity has diminished. So that situation is scary. So the situation is scary.'
[dá:gù-nd-yò: bò- $\varnothing$ and ú:gì:-m-ò: bò- $\varnothing$, recent perfect]


A: 'Nowadays, abandoning the way we were before is unwise.'
[jùmbó:, participle of headless nonsubject relative with genetric subject (hence no pronominal-subject proclitic)]

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07:19 A: pày-wé ènné: [[òsùg tómò] nì:] nùnà=bí-yyà,
    A: old.person-Pl before [[path one] Loc] enter=Past-3P1Sbj,
    [[òsùg tómə̀] nì:] gò:=bí-yyà,
    [[path one] Loc] exit(v)=Past-3P1Sbj,
    [èbà: tómゝ̀] nùクà = bí-yyà,
    [[market one] Loc] enter=Past-3PlSbj,
    [ह̀bà: tómò] gò: = bí-yyà,
    [market one] exit(v)=Past-3P1Sbj,
```

A: 'In the past, the old people entered and exited by the same path. They entered and exited the same marketplace.'
[past perfect gò: = bí-yyà and nùgà = bí-yyà with $\mathrm{A} / \mathrm{O}$-stem of verb in this dialect]

07:25
A: [bǎy wó: bǎy]
gìn-yà nâ:,
A: [assembly] say.Pfv-3PlSgSbj if, bé-ŋ̀ [yò:g tómò] =ỳ = bìyè- $\varnothing$ 3Pl-Poss [understanding one] $=$ it.is $=$ Past 3 SgSbj
A: 'If they called a meeting (of villagers), they had the same (common) understanding.'

07:27 A: [kàn-má gìn-yà ná:] kánè:-n,
A: [do-Hort say.Pfv-3P1Sbj if] do-Ipfv.3PlSbj, [jùmbè-má gìn-yà ná:] júmbè:-n, [abandon-Hort say.Pfv-3P1Sbj if] abandon-Ipfv.P1Sbj,
A: 'If they said let's do it, they would do it. If they said let's leave it (=not do it), they would leave it.'

07:31 A: [tòlè-má gìn-yà ná:] tólè:-n,
A: [begin-Hort say.Pfv-3PlSbj if] begin-Ipfv.PISbj, í kàn témbè-y, 1PlSbj like.that find.Pfv-1PlSbj núnè-rà: $j$-ô:, hear-Prog have-2SgSbj.Q,
A: 'If they said let's begin, they would begin. We found (the situation) like that. Do you hear (=understand)?'


A: 'If they said, tomorrow let's get up and go to war, the old people would not spend the night in the house.'
[náyà = bìyǎ:-1- $\varnothing$ dialectal for náyè $=$ bìyǎ:- $-\varnothing$, past perfect negative]
07:39 A: [òjùn ní:] bòl-yà nâ:,
A: [the.bush Loc] go.Pfv-3PlSbj if,
[[òjùnù ní] nì:] bìy-yé này-yà nâ:,
[[the.bush Def] Loc] lie.down-MP spend.night.Pfv-3PlSbj if,
[yà:-gí yàn] níks-yè-ń-yà
[woman Inst] mix-MP-PfvNeg-3P1Sbj
A: 'They would go into the bush (=outback), they would go to sleep and spend the night in that bush, they wouldn't mix with women (=wives).'

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07:44 A: háyà gìn-yà nâ:,
    A: all.right say.Pfv-3PlSbj if,
    [kěm bé-\eta] j\varepsiloǹ:, [wárà: bè-\grave{y] jè:,}
    [metal.object 3Pl-Poss] take, [spear 3Pl-Poss] take,
    [tâ:n bé-\eta] jèे-yyà nâ:,
    [arrow 3Pl-Poss] take.Pfv-3PlSbj if,
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A: 'They would say, all right. They would take their light metal objects, take their spears, and take their arrows.'
[ $j \grave{\varepsilon}$ : twice for $j \check{\varepsilon}$ : as chained verb]
07:48 A: [kòmbó ì] gùllé
A: [war Def] drive.out
[yàl ${ }^{\mathrm{L}}$ bè ká:rè:-b] kà:r-yà nâ:
[place ${ }^{\text {L }} 3 P 1 S b j$ limit-Ipfv.Ppl] limit.Pfv-3PlSbj if
í-ŋà: pòró hé:rè bélè:-b, here village peace get.Ipfv-3SgSbj, pày-wé kày kán=bìy-yà. old.person like.that do=Past-3PlSbj
A: 'They would drive out the enemy as far as where they drew the limit. Here the village would be in peace. The old people did (it) like that.'

07:53 A: [íyè já:lù-g bò:-má] gìn-ó: nà:, [today fight-VblN go-Hort] say.Pfv- 2 SgSbj if,
[ìgú nòl-yé bòl- $\varnothing$ ná:]
[Prox sneak-MP go.Pfv-3SgSbj if] [[yà-ŋà: ${ }^{\mathrm{L}}$ bàná: ŋgì] yàn] dámè:-b- $\varnothing$, [[over.there ${ }^{\text {L }}$ owner Def] Inst] speak-Ipfv-3SgSbj,
A: 'Nowadays, if you say, let's go fight, this one (one of you) will sneak away and talk with the fellow from over there (=the other side).
['owner of X' compound, §5.1.8]


A: 'This (=another) one too will sneak away, he will tell lies to the fellow from over there. Eventually this wearies (=frustrates) us.'


A: 'There is nothing that can be handled by us, even a little bit. What (=why) is this? We don't have the solidarity.'

$$
\begin{aligned}
& \text { 08:06 A: [kó àgí=ý] [[yà:-wè]-dôm] ì }{ }^{\text {HL }} \text { né:nd-yò:], } \\
& \text { A: [DiscDef which?=it.iis] [[woman-Pl]-talk(n)] 1PlSbj }{ }^{\mathrm{HL}} \text { listen-MP.Pfv.Ppl], } \\
& \text { ènné: ì }{ }^{\mathrm{HL}} \text { bíyò: ygì yàn] } \\
& \text { past } 1 \mathrm{PlSbj}{ }^{\mathrm{HL}} \text { be.Past.Ppl Def and] } \\
& \text { [íyè ì }{ }^{\mathrm{HL}} \text { bó ggì yàn] tómò: = lò:, } \\
& \text { [today 1PlSbj }{ }^{\text {HL }} \text { be.Ppl Def and] one=it.is.not, }
\end{aligned}
$$

A: 'What (=why) is this? (The fact that) we listened to women's talk. They way we used to be and the way we are now are not the same.'

08:11 A: [mí gà] yè:gá: [[dòm dà:g] mì ${ }^{\mathrm{L}}$ mélò:],
A: [1Sg Top] morning $\left[[\operatorname{talk}(n) \quad \text { small }]^{\mathrm{L}} 1 \mathrm{SgSbj}{ }^{\mathrm{HL}}\right.$ get.Pfv.Ppl], [kó ná=ý],
[DiscDef 3Sg=it.is],
A: 'As for me this morning, what little information I have gotten (=learned), that is it.'

08:13 B: háyà, gàsú ó bèlǎ:-l kòy,
B: all.right, trouble 2 SgSbj get-PfvNeg Emph,
[dǒm dàm-ó:], [ǒg kùló bà: jó-Ø],
[talk(n) speak.Pfv-2SgSbj], [Prox share(n) be.worth have-3SgSbj],
A: kùló bà: jó- $\varnothing]$,
A: share(n) be.worth have- 3 SgSb
B: 'All right, you-Sg certainly got no trouble (=you did well). You spoke, this (talk) has been worth a share ( $=\mathrm{it}$ is enough).'

A: 'It has been worth a share.'
[gásù ó bèlǎ:-l is a formulaic appreciation or thanks]
08:18 B: gàsú ó bèlă:-1
B: trouble 2 SgSbj get-PfvNeg
A : [[kó-ngù ${ }^{\mathrm{L}}$ kùlù- $\left.\eta\right] \quad$ nì:]
A: [[DiscDef-Poss.Def ${ }^{\text {Linside }] ~ L o c] ~}$
[tùnò: ${ }^{\mathrm{L}} \quad$ ì ${ }^{\mathrm{HL}}$ témbò: $\quad \grave{ }$ ]
[tale(n) ${ }^{\text {L }} \quad 1$ P1S $\quad{ }^{\text {HL }}$ find.Pfv.Ppl $\quad$ Def]
[[tùnó: nè:gè] yán] tùnè- $\varnothing$ ná:
[[tale two] like] narrate.Pfv-3SgSbj if,
yé bàrè:-n
there.DiscDef add.Ipfv-3PlSbj
B: 'You-Sg got no trouble.'
A: 'In (=with) that, the story that we have found, something like (=approximately) two (more) stories will be told in addition to that.'
[yán 'like' attracts H-tone of preceding né:gè 'two', §8.4.1]
08:24 B: háyà
B: all.right
A: tùnó:, [[tùnò: ${ }^{\mathrm{L}}$ ò jó] yè bó- $\varnothing$ nà:] túŋà
A: story, [[story ${ }^{\mathrm{L}} 2 \mathrm{SgSbj}$ have.Ppl] Exist be-3SgSbj if] narrate.Imprt
B : ô:y háyà
oh all.right,
B: 'All right.'
A: 'A story, if there is a story that you-Sg have, tell (it)!'
B: 'Well, all right.'
08:27 B: fú:, [ámbà ${ }^{\mathrm{L}}$ sàg] [ó ${ }^{\mathrm{L}}$ sàg]
B: all, [God Lentrusting(n)] [2Sg Lentrusting]
A : tùnò: ${ }^{\mathrm{L}}$ tómò, [òŋùn-nàmá fú:] [bè ${ }^{\mathrm{HL}}$ mómb-yò:],
story $^{\mathrm{L}}$ one, [the.bush-meat all] [3P1Sbj ${ }^{\mathrm{HL}}$ assemble-MP.Pfv.Ppl],

B: 'All (that). Entrusting to God and to you.'
A: 'One story. All the wild animals assembled.'
08:34 A: kǒr bè ${ }^{\text {HL }}$ pégò:,
A: soirée 3PlSbj ${ }^{H L}$ nail(v).Pfv.Ppl, gíyò gìy-má gìn-yà, dance(n) dance-Hort say.Pfv-3P1Sbj,
A: 'They held a soirée (festive evening event). They said, let's dance a dance.'
[kǒr p $\varepsilon$ gè, lit. "drive in (=nail) a soirée"]
08:37 A: nùŋ́́-nùnè gǐ:-gì:
A: enter-enter dance-dance
[bè $\left.{ }^{\mathrm{HL}} g \hat{o ̂}: \quad \grave{\eta}\right] \quad[b \grave{e} \quad g \hat{o}:-\grave{\eta}]$ [bè gô:-ŋ̀ ], [3P1Sbj ${ }^{\mathrm{HL}}$ go.out.Pfv.Ppl Def] (repetitions), ínà: nà ${ }^{\mathrm{HL}}$ núỳ̀:, goat $3 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ go.in.Pfv.Ppl,
A: 'They were going in and dancing and going back out. (Then) goat went in.'
08:41 A: [gíyò ì] gǐ:-rà: $\rightarrow$,
A: [dance Def] dance(v)-Prog, tàwá: nà ${ }^{H L}$ núyò:,
hyena $3 \mathrm{SgSbj} \quad{ }^{H L}$ enter.Pfv.Ppl,
[ínà: ${ }^{\text {L }}$ nùmò:] jénè̀- $\varnothing$,
[goat ${ }^{\text {Lhand] hold.up.Pfv-3SgSbj }}$
A: 'He (=goat) was dancing. (Then) hyena went in. He held up goat's arm.'
08:46 A: nà $\quad$ HL jénò:,
A: $3 \mathrm{SgSbj} \quad{ }^{\text {HL }}$ hold.up.Pfv.Ppl,
nùmó: [dánà-n dà:] nà HL jénò:
hand [top Loc] 3SgSbj ${ }^{\text {HL }}$ hold.up.Pfv.Ppl, tàwá: júmbè-ń- $\varnothing$, hyena leave-IpfvNeg-3SgSbj,
A: 'He held up (goat's hand). Hyena held the hand up high and wasn't letting go.'
[júmbè-ń- $\varnothing<$ júmbè̀-nnú- $\varnothing$ ]
08:50 A: júmbè-ń- $\varnothing$ nà kán nè,
A: leave-IpfvNeg-3SgSbj 3 SgSbj do.Pfv Ant.Past.DS, [wàsê: ì] bè [remainder Def] 3PlSbj ${ }^{H L}$ say.Pfv.Ppl, nùmò:-jénù wá:jìbì = ỳ dògò, hand-hold.up.Nom proper=it.is except,
A: 'When hyena didn't let go, the others said: holding (someone's) hand up is proper (at times).'
[different-subject (DS) construction; gô: irregular variant perfective participle of gìné 'say'; holding the hand of a dancer up is a normal expression of congratulation but it should not last too long]

| 08:53 | A: [jènè- $\varnothing$ | ná:] | jùmbè-nnù-gú | ì | kày, |
| ---: | :--- | :--- | :--- | :--- | :--- |
|  | A: [hold.up.Pfv-3SgSbj | if] | leave-IpfvNeg-VbIN | Def | Topic, |

[[mモ́ yà:] [kórò ì] kàbà:-lú-ŋ] gìn-yà, [[Llogo Pl] [meaning Def] separate-PfvNeg-LogoSbj] say.Pfv-3P1Sbj,
A: 'They (animals) said, as for him holding (the arm) up and not letting go, they did not distinguish (=could not discern) the meaning (of it).'
[-nnù-gú verbal noun of imperfective negative -nnú, this example discussed at end of $\S 4.2 .2 .1$ and as (526) in §19.1.1]

08:57 A: [kǎy bè gín nè]
$\begin{array}{llll}\mathrm{A}: ~[l i k e . t h a t ~ & 3 \mathrm{PlSbj} & \text { say.Pfv } & \text { Ant.Past.DS] } \\ \text { tàwá: nà } & \text { HL júmbò:, } & \end{array}$
hyena $3 \mathrm{SgSbj} \quad{ }^{\mathrm{HL}}$ leave.Pfv.Ppl,
A: 'When they said that, hyena let (goat) go.'
08:58 A: [nùmò: ${ }^{\mathrm{L}}$ nà ${ }^{\mathrm{HL}}$ dégò: $\quad$ ग̀gì] $=\grave{y} \quad$ dègé jè:, A: [hand ${ }^{\mathrm{L}} 3 \mathrm{SgSbj}{ }^{\text {HL lick.Pfv.Ppl Def] } \mathrm{Acc} \text { lick take, }}$ [ná-ngù wà:] kó [nùmò:-jénù]=ló: wà:
[3Sg-Poss.Def Quot] DiscDef [hand-hold.up.Nom]=it.is.not Quot
jó:tè bàrá=ý nè,
greed be.added now,
A: 'He was licking all over the hand that he was licking. He said, what he had done wasn't holding up a hand (to congratulate), greed was involved in it.'
[i.e. hyena had hoped to eat goat; bàrá=ý 'be added, be included, be present in addition', irregular stative, negative counterpart bàrà-nnú-]

09:03 A: [[àdúnyà ŋ̀gì] nì:] jó:tè àmbà í=ỳ sà: kánà, A: [[world Def] Loc] greed God $1 \mathrm{Pl}=$ Acc keep.away do.Imprt,
B: gà:ná:
B: [reply]
A: àmbà bâ:s pógò
God trouble ward.off.Imprt
B: à:mí: à:mí:
amen! amen!
A: 'May God keep us from greed in this world.'
B: [greeting reply]
A: 'May God ward off trouble.'
B: 'Amen, amen!'

09:07
A: [jámù- $\begin{array}{ll}\text { [peace } & \text { dèn } \\ \text { spen }\end{array}$
ná:]
[peace spend.day.Pfv if]
àmbà jámù í=ỳ nàyè-má
God peace $1 \mathrm{Pl}=$ Acc spend.night-Caus.Imprt
B: à:mí: à:mí:
amen! amen!

A: 'May God let us spend the daytime in peace and spend the night in peace!'
B: ‘Amen, amen!'
[nàyè-má 'let (sb) spend the night!' is regular, contrast irregular ná:-mà in 'good morning!' greeting]
$\begin{array}{lllll}\text { 09:09 } & \mathrm{A}: \text { àmbà } & \text { céllàl } & \text { í=ỳ } & \text { ǹdà } \\ & \mathrm{A}: \text { God } & \text { health } & 1 \mathrm{Pl}=\mathrm{Acc} & \text { give.Imprt }\end{array}$

B: à:mí: à:mí:
B: amen! amen!
A: àmbà [àlà:-ńnù gèň̌:] í=ỳ ǹdà
A: God [rain(n)-water good] $1 \mathrm{Pl}=$ Acc give.Imprt
B: à:mí: à:mí:
B: amen! amen!
A: 'May God give health!
B: ‘Amen, amen!’
A: ‘May God give us good rainfall!’
B: ‘Amen, amen!’

09:12 A: àmbà-bárkè àmbà í=ỳ ǹdà
A: God-blessing(n) God $1 \mathrm{Pl}=$ Acc give.Imprt,
B: à:mí: à:mí:
B: amen! amen!

A: solidarity God $1 \mathrm{Pl}=$ Acc give.Imprt,
B: à:mí: à:mí:
B: amen! amen!
A: 'May God give us God's blessings!'
B: 'Amen, amen!'
A: 'May God give us solidarity!'
B: ‘Amen, amen!'
09:14 A: kíndà: àmbà í=ỳ ǹdà,
A: liver God $1 \mathrm{Pl}=$ Acc give.Imprt,
B: à:mí: à:mí:
B: amen! amen!
$\mathrm{A}:$ yà:jí àmbà $\quad$ $=$ ỳ ǹdà
A: marriage God $1 \mathrm{Pl}=\mathrm{Acc}$ give.Imprt,
B: à:mí: à:mí:
B: amen! amen!
A: 'May God give us heart (=courage)!'
B: 'Amen, amen!'
A: 'May God give us marriages!’
B: ‘Amen, amen!’

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09:16 A: ègìnnólò àmbà í=ỳ ǹdà,
    A: progeny God 1Pl=Acc give.Imprt,
    B: à:mí: à:mí:
    B: amen! amen!
    A: [bàrkè }\mp@subsup{}{}{\textrm{L}}\mathrm{ gènǒ:] àmbà í=ỳ ǹdà
    A: [blessing }\mp@subsup{}{}{\textrm{L}}\mathrm{ good] God 1Pl=Acc give.Imprt,
    B: à:mí: à:mí:
    B: amen! amen!
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        A: 'May God give us progeny!'
        B: ‘Amen, amen!'
    A: ‘May God give us good blessings!'
    B: ‘Amen, amen!’
    09:19 A: [jámù-ŋ dèn ná:] [peace spend.day if]
jámù í=ỳ nàyè-má
peace $1 \mathrm{Pl}=\mathrm{Acc}$ spend.night-Caus.Imprt
B: à:mí: à:mí:
amen! amen!
A: 'May God let us spend the daytime in peace and spend the night in peace!'
B: ‘Amen, amen!’
09:21 A: àmbà káwràl í=ỳ ǹ dà,
A: God understanding 1Pl=Acc give.Imprt,
B: à:mí: à:mí:
amen! amen!
A: dó:lò pŏ $\rightarrow$
A: thanks greeting
B: háyà
B: all.right
A: 'May God give us mutual understanding!'
B: ‘Amen, amen!’
A: ‘Thank you!’
B: 'All right.'
09:24 B: háyà, [ì ${ }^{\text {HL }}$ béb̀̀:] [ògú ná=ý]
B: well, [1PISbj ${ }^{\mathrm{HL}}$ get.Pfv.Ppl] [Prox $3 \mathrm{Sg}=\mathrm{it} . \mathrm{is}$ ]
A: $\left[i \quad{ }^{\mathrm{HL}} b \varepsilon ́ l \grave{j}:\right] \quad$ [ògú ná=ý]
A: [1P1Sbj ${ }^{H L}$ get.Pfv.Ppl] [Prox $3 \mathrm{Sg}=\mathrm{it}$. is]
(unintelligible)
B: 'Well, what we have gotten (=learned), this is it.'
A: 'What we have gotten (=learned), this is it.'
(unintelligible)

| 09:29 | A: $\left[[g o ̀-\eta]^{\mathrm{L}}\right.$ <br> A: [[thing ${ }^{\mathrm{L}}$ | bàró:] |  | yàn] <br> Inst] |  | $b \grave{o}=\varnothing$ | mà |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | add.Pf |  |  |  | $\mathrm{be}=3 \mathrm{SgSbj}$ |  |
|  | kó | èsàye | nà |  | ká | $n \grave{\varepsilon}$ |  |
|  | DiscDef | try |  |  | do | Ant. |  |

A: 'Is anything to be added?' '(When) he has tried that, ...'
[French essayer]

## Text $\mathbf{T 0 2}$

This recording was four-and-a-half minutes long. It continues the ethnohistorical material from T01. It is in essentially monologue form with A speaking and some murmured backchannel (not transcribed).


A: 'Okay, that (group) was coming. Okay, they were coming and looking around at place(s). Back then, in the world, it wasn't possible to inhabit (just) any place that youSg had gotten. They were coming and looking around at place(s), they were coming all the way to here.'
[ná-ŋgù 'his/her/its (thing)' contracted from ná-1̀ ngù (definite)' but used like a discourse-definite; distributive jè: §15.1.7; bè ménò: (twice) illustrates the use of headless nonsubject relatives in narrative, often equivalent to perfective main clauses; yàl ${ }^{\mathrm{L}}$ 'place' as head in a spatial relative; -dà: (<-là:) progressive subordinated clause §15.2.2]

00:11 [[yàl-gú $\left[\begin{array}{ll}{[\text { place }} & \text { Def] } \\ {\left[s \hat{a}:{ }^{n}\right.} & \text { bò }]\end{array} \quad \begin{array}{c}\text { nà }\end{array}\right]$ [nice be] $3 \mathrm{SgSbj}{ }^{\mathrm{HL}}$ do Ant.Past.DS, ŋ́-пà: [kòmmı̀ ní:] nゝ̀l-yध́ mènغ̀- $\varnothing$, here [cave Loc] go.through-MP come.Pfv-3SgSbj,
'They looked at the place. It was a nice place, and it (=group) came through a rocky tunnel here.'
[ŋ́-ŋà: variant of 1 íŋà: 'here'; kòmmó 'cave, rocky tunnerl']

| 00:16 | [kj̀mmı̀ <br> [cave | $\begin{aligned} & \text { ní:] } \\ & \text { Loc] } \end{aligned}$ | nə̀l-yદ́ <br> go.through-MP | bè | $\begin{aligned} & \mathrm{HL} \text { méǹ̀:, } \\ & { }^{\mathrm{HL}} \text { come.Pfv.Ppl, } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | tû:r bè | ${ }^{\mathrm{HL}}$ mén | tô:r | yé-nì: | pég-yà | quoi, |
|  | turn 3PlSbj | ${ }^{\text {HL}}$ come | fv.Ppl, fetish | there. | f implant.Pfv-3P1Sbj, |  |
|  | yé-nì: | $b e ̀$ | ${ }^{\text {HL }}$ pégò:, |  |  |  |
|  | there.DiscDef | 3P1S | ${ }^{\text {HL }}$ implant.Pf | .Ppl, |  |  |
|  | [ínà:- $\quad$ L dè | gdègò], | [kó | yàn] | mén-yà, |  |
|  | [iron ${ }^{\text {L }}$ sta | tuette], | [DiscDef | Inst] | come.Pfv-3PlSbj, |  |

'After they went through the rocky tunnel, they came in turn (?). They established a fetish there. After they established (a fetish) there, an iron idol (statuette), they came with that.'
[tû:r was interpreted by my assistant as the borrowing from French tour; it may have been mis-heard for tô:r 'fetish' which occurs immediately afterwards, but if so the syntax is broken; French quoi phrase-finally (untranslated)]

00:24 [ínà:-1 L dègdègò],
[tómò ì nغ̀] [kî:g nà-ı̀̀] [kî:g sô:y] bò-y, [one Def Top] [head 3Sg-Poss] [head 7] be-SFoc [kî:g sô:y], tò: $r^{\mathrm{L}}$ ná-ŋgù, [bè ${ }^{\text {HL }}$ jínò:] [head 7], fetish ${ }^{\mathrm{L}}$ 3Sg-Poss.Def, [3PlSbj ${ }^{H L}$ bring.Pfv.Ppl] [kúlù- $\eta$ nì:] tô:r [nò-[é-gì]=ỳ] nà:-m-yà, [inside(n) Loc] fetish [person-child=Acc] drink-Caus-3PlSbj,
'The iron idol, one (of them) now, its head, seven heads [focus] is what it was (=it had). Seven heads. After they brought that fetish, inside (it) they sacrificed a human to the fetish.'
['they sacrificed X to the fetish' phrased as 'they had the fetish drink (the blood of) X', hence nà:-mé 'cause (X) to drink'; nò-[ě-g] 'person-child' here simply means 'human', not necessarily young, and its accusative has irregular tones]

00:33 [[nǒ: nà nâ: ì] [nà nâ: ì]
[[person 3SgSbj drink Def] [3SgSbj drink Def] nà $\quad$ HL yómò:]
3SgSbj $\quad{ }^{\text {HL }}$ be.long.time.Pfv.Ppl] $\begin{array}{llll}\text { bísè̀ńn-yà } & {[n a ̀ ~} & { }^{\mathrm{HL}} k a ̂ n & n \varepsilon ̀] \\ \text { put.down-IpfvNeg-3PlSbj } & {[3 \mathrm{SgSbj}} & { }^{\mathrm{HL}} \text { do } & \text { Ant.Past.DS }]\end{array}$ [ùnò-n gémè-ŋ] nà:-m-yà, [dog black] drink-Caus-3PlSbj,
'It (=fetish) kept drinking people for a long time, they weren't stopping. They sacrificed a black dog to it.'
[nà nâ: ŋ̀, A-stem verb plus $\eta, \S 15.2 .3 .1$; kân nè for topic switch, (438a-b) in §15.4]
00:37 [[ùŋó-ŋ ngù] né:-là:] yàgà-nnú] nà ${ }^{\mathrm{HL}}$ kân nè]
[[dog Def] drink-Prog] be.right-StatNeg] 3SgSbj ${ }^{\text {HL }}$ do Ant.Past.DS] [pésgè ná:-ḿ-yà], [[pésgè ná:-m-là:] [sheep drink-Caus-3P1Sbj], [[sheep drink-Caus-Prog]
íyè sáktè ${ }^{n}$ sên nà mên nè] jùmb-yà, today at.end prayer 3 SgSbj come Ant.Past.DS] abandon.Pfv-3P1Sbj, [kàndà ${ }^{\mathrm{L}}$ ǒg là] [Wと̌- $\eta$ bìl-í: tàn- $\varnothing \quad$ nâ:], [now ${ }^{\mathrm{L}}$ this even] [year turn pass-3SgSbj if], [tô:r ngì =ỳ] gúl-dà: bìy-yà, [fetish Def=Acc] dig-Prog Past-3PlSbj,
'(The fetish) drinking the dog not being right, after that they sacrified sheep, they were sacrificing sheep. Nowadays since religion (=Islam) has come, they have abandoned (that practice). Even now, when the year has passed (=at the end of the year), they would dig up the fetish.'
[past progressive, often generalizing to past imperfective, §10.6.1.2]

00:48 [tô:r $\quad$ ggì $=\grave{y}]$ gùlé, [gírò bè- $\eta]$ gè-yyà nâ:,
[fetish Def=Acc] dig, [ahead 3Pl-Poss] exit.Pfv-3PlSbj if,

| [àmbà-génè | bè-n] | gèn-yà | nâ:], |  |
| :---: | :---: | :---: | :---: | :---: |
| [God-praying | 3Pl-Poss] | pray.Pfv-3P1Sbj | if], |  |
| [kj̀mmı̀ ךgí | nì:] | [gò: ${ }^{\text {L }}$ |  |  |
| [cave Def | Loc] | [thing ${ }^{\text {L }}$ |  |  |
| yé | nòl-yé | tày- $\varnothing$ |  | nâ:, |
| there.DiscDef | go.throug | -MP pass.Pfv |  | if, |
| [ná-ทgù | ${ }^{\text {L }}$ gò: $\left.{ }^{n}\right]$ | yàm-gí = ý |  |  |
| [3Sg-Poss.Def | ${ }^{\text {L }}$ thing] | be.ruined-VblN] |  |  |

'When they dug up the fetish and went out forward, when they prayed to God, if any bad thing passed through the rock tunnel, that (bad) thing was ruined.'
[My assistant from Koundiala prefers bùndé 'hit' for gùlé ‘dig' in this context]

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00:55 [[sâb là] pág-ì: tàn-ó: nà:]
    [[amulet too] tie-MP pass.Pfv-2SgSbj if]
[sábù yàm-gí=ý]
[amulet be.ruined- \(\mathrm{VblN}=\mathrm{it} . \mathrm{is}\) ]
[[ńnù là] dùy-y-ó: nà:]
[[water too] carry.on.head-MP-2SgSbj if]
[[yé-nì: [sálà: yàn] ménè:-b-ò: nà:] yámè:-b-Ø,
[[there.DiscDef [bad Inst] come-Ipfv-2SgSbj if] be.ruined-Ipfv-3SgSbj,
```

'If you have tied an amulet (on your body) and have gone through (the rock tunnel), the amulet is ruined. If you carry water (in a pail) on your head, ${ }^{1}$ if you come there with evil (plans), it (=plan) will be ruined.'

'If a (friendly) war party came, it would go up on it (the roof of the rock tunnel). The people of old now would beat their tomtoms. The village would grind up some ground millet, it would welcome the war party, and they would enter the village.'
[< gàngá- $\eta$ 'tomtom']

01:10 [kı̀mmゝ̀ ý] pégè- ,
[cave Def] plant.Pfv-3SgSbj,
[gò- $\eta^{\mathrm{L}}$ bè jó=bìyò: ì] [kó ná=ý], [thing ${ }^{\mathrm{L}} 3$ 3PlSbj have=Past.Ppl Def] [DiscDef 3Sg=it.is], [kàndà ǒg là] [[kòmmò !̀gí] nì:] [now this too] [[tunnel Def] Loc]

[^4][Wè- $\eta$ bé-ì̀] mèn- $\varnothing$ nâ:,
[year 3Pl-Poss] come.Pfv-3SgSbj if, [[àmbà-génè bè-ท̀] tùn-yè nâ:] [yé génè:-ǹ], [[God-prayer 3Pl-Poss] kneel-MP.Pfv if] [there.DiscDef pray-Ipfv.3P1Sbj]
'The tunnel was prepared (for war, with amulets). What they had, that was it. Even now, when their year (=the right time) came, they would kneel down for their prayer in the tunnel, and they would pray there.'


| 01:27 | [[kòmmò <br> [ [cave | $\begin{aligned} & \text { ý] } \\ & \text { Def] } \end{aligned}$ | $\begin{aligned} & \text { nì:] } \\ & \text { Loc] } \end{aligned}$ | òsùnnó walking | ìn-ó: <br> walk.P | $-2 \mathrm{SgSbj}$ | nà:, if, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [[pòrò | í-ŋù] | nì:] | dègílè |  | = bìyă:- | $\varnothing$, |  |
|  | [[village | 1Pl-PossDef | s] Loc] | measles |  | Past-PfvNeg-3SgSbj, |  |  |
|  | [kó-ngù |  | ${ }^{\text {L }}$ tò:rù | là] | [yàl-gú | n] |  |  |
|  | [DiscDef-Pos |  | ${ }^{\text {L }}$ fetish | too] | [place | Def] |  |  |
|  | yè | bíyè- $\varnothing$ |  | gín-yà, |  |  |  |  |
|  | Exist | be.Past-3SgSbj |  | say.Pfv-3P1Sbj, |  | yè |  |  |
|  | [Énnà | gìné | ènné: | $\left[j i ̀ m u ̀-\eta{ }^{\text {L }}\right.$ | tóm̀] |  | bíyè- $\varnothing$ |  |
|  | [a.disease | say | past | [disease ${ }^{\text {L }}$ |  | Exist | was-3SgSbj |  |
|  | [[jìmú | 门̀] $m$ | $m e ̀ n-\varnothing$ | nâ: | :] [fó: |  | [kèné-ŋ] | $\eta$ nì:] |
|  | [[disease | Def] com | come.Pfv-3 | -3 SgSbj if] | [all. | way | [bone | Loc] |
|  | sògùl-yغ̀- $\varnothing$ |  | ná:] | yè | $d \hat{\varepsilon}:-b-\varnothing$, |  |  |  |
|  | gnaw-MP.P | -3SgSbj | if] | there | arrive-Ip | $v-3 \mathrm{SgSb}$ |  |  |

'If you-Sg walked into the tunnel (and did the sacrifices), measles would not have entered our village. They said that those fetishes (idols) were in the place too. What they call "enna," a disease (leprosy?), was present. When the disease came, it would eat away (at the flesh) and reach all the way to the bone.'
[yàl-gú 1 'the place'; fó $\rightarrow$ variant of fá $\rightarrow$ 'all the way to']

| $01: 39$ | $[p a ́ \rightarrow$ | ná $=$ ỳ | [kòmmò- $\eta$ | dá:] |
| :---: | :--- | :--- | :--- | :--- |
|  | $[$ until | $3 S g=A c c$ | [cave | Loc] |

```
gò:-n ná:] dìy-yè = bìy-yà,
take.out-Caus.Pfv if] hold-MP=Past-3P1Sbj,
\(\left.\begin{array}{llllll}\text { [ná-ngù } & \text { L } & \text { jìmù- } \eta & \text { là }] & \text { [yé } & \text { dغ̀-yyà }\end{array}\right]\) ná:]
```

'To the point that they took him (leper) out (of the village) into the tunnel, and kept (him there). Even that disease, if they (people) arrived there (in the tunnel), it (=disease) wouldn't enter into the village.'
[gò:-n ná: < gò:-ndè ná: 'having taken out', same-subject anterior subordinator; jìmù-ŋ là is pronounced [dzìmùl:a]]

'They had installed (the fetish). Nowadays the strength (=current leadership) has abandoned its (previous) custom. (Formerly) when the sun set, they didn't allow anything (=grain) to be pounded (in mortars) in the village. Once the sun had set, once the daytime was done, they didn't allow anything to be pounded in the village.'
[kàn jó= bìy-yà past form of recent perfect, §10.6.1.6; tǎg 'behavior']
01:55 [tàgú- $\eta$ tàgè- $\varnothing$ nâ:]
[shoes put.on.shoe.Pfv-3SgSbj if]
[[pòrò nú] nì:] nùy-má=bìyà:-ń yà:-wé,
[[village Def] Loc] enter-Caus= Past-IpfvNeg.3P1Sbj woman-Pl,
[yà:-púnò, pùn-yè- $\varnothing$ nâ:]
[woman-flour, be.flour-MP.Pfv-3SgSbj if]
[ná=ỳ [gùsá: là:] này-mà=bìy-yà],
[3Sg=Acc [side.apartment Loc] spend.night-Caus=Past-3PlSbj]
[[kó ${ }^{\mathrm{HL}}$ sábà:b] làn], [[DiscDef ${ }^{\mathrm{HL}}$ reason] Purp],
'If one (=a woman) was wearing shoes, they wouldn't let (her) enter the village, (meaning) women. If a woman was menstruating, they would have her spend the night in a side apartment, for that reason.'
[yà:-wé 'women' added post-clausally, without a prosodic break, for clarification; yà:-púnò with cognate verb pún-yè is euphemistic for 'menstruate, be having her period']

02:03 ふ̀rò-púnò
baobab-flour

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này-má = bìyà:-ń,
spend.night-Caus=Past-PfvNeg.3PlSbj,
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'They wouldn't let baobab flour stay overnight (there). If you made tamarind (=tamarind-flavored porridge), if (you) didn't pour it out, they wouldn't let it stay overnight in the house, because of (=for the sake of) its land. The land that belongs to this tunnel, that's it. Up until now, the village, its head (=essence) is that it sits ( $=$ is based) on prayer.'
[In some Dogon villages, any ground-up dried baobab leaves (main ingredient in sauce for millet cakes) or pounded tamarind pod (flavoring for cream or millet or porridge) had to be thrown away rather than kept overnight; tógè 'pour' plus tíyè 'send', the latter adding the spatial sense 'away, out'; genitive linker mò after nonpronominal possessor, §6.2.1]

| 02:18 | 8 [L[jón |  | ற̀gù] | là:] | gé: |  | ̀̀] | là], |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [[[lad |  | Def] | Loc] | exit(v) | be.Ppl | Def] | too], |
|  | [Wùlé | bè |  | tírò:] |  |  |  |  |
|  | [look | 3PlS |  | attempt |  |  |  |  |
|  | [jónù-ๆ | $m e ̀ n$ |  | bè | ${ }^{\mathrm{HL}}$ kán | ò:] |  |  |
|  | [ladder | com |  | 3 PlSbj | ${ }^{\text {HL }}$ ma | ke.Pfv.P |  |  |
|  | [jónù-ๆ] | ŋ̀gì |  | $b e ̀$ |  | jáwò:] |  |  |
|  | [ladder | Def | Acc] | 3 Pl |  | carve.Pf |  |  |
|  | [[àmbà- |  | $b e ́-\grave{j}$ |  | è | ${ }_{\text {HL }}$ gég |  |  |
|  | [[God-p |  | $3 \mathrm{Pl}-$ | Poss] | PlSbj | ${ }^{\text {HL }}$ pray | v.Ppl] |  |
|  | [jónù-ท] | ŋ̀gì] |  | ùr-yà, |  |  |  |  |
|  | [ladder | Def] |  | ace.aga | st.wall.P | $v-3 \mathrm{PlSb}$ |  |  |

'Those (people) too who go out (=down to the valley below) on (wooden) ladders, they took a look, they came and made (wooden) ladders, they carved the ladders, they prayed their prayer, and they put (the ladders) against the cliff.'
[A Dogon ladder is made from a single tree trunk by carving steps (footholds). Finished ladders are leaned against walls or other vertical surfaces to give access to the roof, where peanuts and other harvested crops are laid out to dry. In Nantanga, on one side of the village, ladders are used to go down the cliff to reach fields below.]

| 02:25 | ènné: | kj̀mbó | [sǒm | yàn] | [mèn- $\varnothing$ | ná:] | tày = bíy-yà, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | past | war | [horse | Inst] | [come.Pfv-3SgSbj | if] | shoot=Past-3P1Sbj, |

 [over.there far come-Ipfv-3SgSbj if] there.DiscDef stand-MP.Pfv-3PISbj if, [[tâ:: bè̀-̀̀] yàn] tíyè:-n, [[arrow 3Pl-Poss] Inst] send-Ipfv.3PISbj, [[màlfà bé-ì] yàn] tíyè:-n, [[rifle 3Pl-Poss] Inst] send-Ipfv.3PISbj
'In the old days, they came and waged war on horses. A horse can't enter (the village). A person can't climb up (to the village), never mind a horse. Over there, if they come from far away and stop there, they will shoot with their bows and arrows and with their rifles.'
[táyè 'shoot' is the regular verb 'wage (war)', with noun kòmbó; bèlé 'get' after a directly chained verb = 'be able to'; sákkò 'a fortiori' can combine with [ $X$ dòm] = lò: 'it isn't talk of X', cf. French ne parlons pas de $X$ in this context; màlfá 'rifle, musket']

'It would take something extraordinary not to be driven away by them. They wouldn't let (anything) get through there (to the village), when they mustered (as a war party). The village was in peace. The village (population) had grown. If you count (include) vacant houses, it goes all the way to over there. There were as many as 240 stilt-dancers, (in) our village here.'
[lit. "a thing that they couldn't chase away, it was an extraordinary thing"; hé:ré 'peace, collective welfare' is Bambara, cf. Dogon jâm ; dancing with masks on stilts is still a Dogon specialty in villages along the eastern cliffs; [[mbù-n]-dúlùg "housedonkey" refers to unoccupied houses; sǐy ' 80 ' is used as a base like 'hundred'; existential yè with imperfective verb, §11.2.2.1]

| 02:4 | [nìnǒ:n <br> [thirst | nà | gâb | $n \grave{\varepsilon}]$ | [bè |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 3 SgSbj | be.tall | Ant.Past.DS] | [3PISb | ${ }^{\text {HL }}$ run.Pfv ${ }^{\text {d }}$ |


| [kómlò | là:] | dàmbé | òb-í:-y |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [rocky.zone | Loc] | go.up | sit-MP. | Pfv-3P1Sbj, |  |
| [kàndá | kómlò | jàt-ó: |  | nà:] |  |
| [now | rocky.zone | count | .Pfv-2SgSbj | if] |  |
| [pòró à | à:クá: | mà $\rightarrow$ | bò- $\varnothing]$ | [ò- 1 ¢ gě:] | bólè- $\varnothing]$ |
| [village h | how.many? | Q | be-3Sg] | [here exit] | go.Pfv-3SgSbj |
| [[mbù-t]]-[c | [dúlgù-n] | [dànà-ŋ] | 亿́-ŋà:] | kàn | bó- $\varnothing 1$ |
| [house-donk | nkey] | [on.top | here] | like.that | be-3SgSbj] |
| [ŋ́-ŋà: | là] |  | bó- $\varnothing$ ], |  |  |
| [here | too] lik | .that | be-3SgSbj] |  |  |

'When thirst (=drought) became excessive, they fled and went up onto the rocky plateau and settled (there). If you count (=include) the rocky plateau, there are any number of villages (whose settlers) went out from here (Nantanga). There are abandoned houses on top (on the rocky plateau) here and there in that way.'
['how many villages?' is a rhetorical question, implying 'any number of villages']

03:00 [[jónù- $\eta$ ngì] nì:] pégè- $\varnothing], ~$
[[ladder Def] Loc] implant.Pfv-3SgSbj],

'(They) set up (a fetish) in the ladders. Nobody came in (to the village). That's how they were. Hunger and thirst drove them away, it wasn't war that drove them away.'

'They dug water (sources) by hand, to drink nothing but water, as opposed to (the method) by which the whites (later) came and made water by machines like this.'
[nùmò: gá 'by hand', §8.1.4].

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03:12 [wè- \(\eta^{\mathrm{L}}\) gàmbǔl] àlá: wá: = bìyǎ:-l- \(\varnothing\),
    [year \({ }^{\mathrm{L}}\) certain] \(\quad\) rain(n) rain.fall=Past-PfvNeg-3SgSbj,
[bànjìgàr \({ }^{n a ́ a} \quad\) yàn] [ǒn yàn]
[Bandiagara and] [here and]
[děn tǎ:n] ínà:=lò: nà:]
[day three] walking]=it.is.not if]
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dò:-mó = bìyǎ:-1- $\varnothing$,
arrive-Caus=Past-PfvNeg-3SgSbj,
'Some years it hadn't rained. Between Bandiagara and here, anything less than three days' walking would not get (them) (there).'
[i.e. they might seek help from the government in Bandiagara]

03:18 [gìyă: ùwè- $\varnothing$ nâ:] [sé:no yá-ŋà: bòl- $\varnothing$ nâ:]
[hunger catch.Pfv-3SgSbj if] [plains over.there go.Pfv-3SgSbj if] [dùlúgì yàn] sìyé dùy-yè- $\varnothing$ nâ:] [donkey Inst] millet carry-MP-3SgSbj if] [[íisigà: ńnò] bò-n ná:] ò-ŋ́ dò:-mó=bìyă:-l- $\varnothing$, [[day five] be-3PlSbj if] here arrive-Caus=Past-PfvNeg-3SgSbj
[bòlé ò mén mà]
[go 2 SgSbj come before]
[kórè:j ò-ŋ] ந́-ŋà: gìyă: géwè:-b- $\varnothing$,
[family 2 Sg-Poss] here hunger kill-Ipfv- 3 SgSbj ,
'If hunger (=famine) caught (someone), to go that way to the plains (east of the plateau) and transport millet (grain) by donkey, nothing less than five days would get (him/her) (back) here. Before (=by the time) you went and came (back), hunger would kill your family here.'

03:26 [bà:nà ${ }^{\mathrm{L}}$ sémb̀̀ jó=bìyó: ì], [manner ${ }^{\mathrm{L}}$ force have=Past.Ppl Def], [dí:nè là] sémbè jó=bìyè], [religion too] force have $=$ Past- 3 SgSbj ], [dí:nè $1=y$ l̀ lâ:m kánè-jò = bìỳ̀: í], [religion $1 \mathrm{Pl}=$ Acc control do-have=Past.Ppl Def], [wě-ŋ fü:] sìý gòl ná], [year all] millet do.farming if], [cent-kilos dámmà-mâ:n] [ná=ì nì:] jé-b̀̀l nâ:, [100.kilo.sack amount] [3Sg=Poss Loc] take-go if, $[n a ́=y ̀ n \quad$ ńdè:-ní: = bìyè $]$ $[3 \mathrm{Sg}=$ Poss $\quad$ give-Ipfv. $3 \mathrm{PlSbj}=$ Past $]$
'The way religion was powerful, religion too was powerful. Religion controlled us. Every year we would do farming, and deliver to it a 100 -kilo sack worth (of millet), they used to give (it) to it (=religion).'
[ńdè:-ní: = bìyè 3Pl past imperfective in habitual sense, §10.6.1.1, cf. ńdè:-n 'they (will) give']
 [sáwàl pź-rà:n] tánà:-1- $\varnothing$, [bushel 30] pass-PfvNeg-3SgSbj, [ó cent-kilos bà: [ó nì:] gó:-ndè:-ǹ̀, [2Sg 100.kilo.sack from [2Sg Loc] exit-Tr-Ipfv.3PISbj [ogiyó: nà gâb nà ] bè ${ }^{\text {HL }}$ jóbò: [difficulty 3 SgSbj be.tall Ant.Past.DS] 3PISbj ${ }^{H L}$ run.Pfv.Ppl, [sìyè HL gólà:] gìnè [kómlò là:] núg-yà, [millet ${ }^{H L}$ do.farming.Purp] say [rocky.zone Loc] enter.Pfv-3PISbj,
'Your (annual) farming (=yield) didn't exceed 30 bushels, (but) they would take the equivalent of a 100 -kilo sack from you. If hardship was great, they fled (=sought refuge) and went into the rocky zone in order to grow millet.'
[ ${ }^{\mathrm{HL}}$ gólà:; purposive with lengthened A-stem, §17.4.1.1]
 [ladder Def too] [thing ${ }^{\text {L }}$ implant-MP-Adj] be.Past- 3 Sg Sbj ,

'The ladders too were something that was set up (magically). Again this village, here on one side it (=villagers) would penetrate into the tunnel, here on the other side it would go up on the ladders (to reach the village on top). The two sides (of the village) are like that. The place where they came from Mande, set up (their fetish), and settled, that [focus] is what it was.'
[pźgè 'implant' here implies preparation by magic (sorcery); purposive with lengthened A-stem, §17.4.1.1]

03:54 [íyè ónmènè] [ná-ngù mò ${ }^{\mathrm{L}}$ là:dà ngù] jùmbà:-ń,
[today up.to.now] [3Sg-Poss.Def Poss ${ }^{\text {L }}$ custom Def] leave-PfvNeg.3P1Sbj, [wò:g pél nègé sìgà fú:], $\left[\begin{array}{lllll}\text { month } & 10 & 2 & \text { plus all] }\end{array}\right.$ [nán ${ }^{\text {L òsùnnò] ín-dà: jò-n, }}$ [that ${ }^{\text {L walking] walk-Prog have-3PlSbj, }}$ [kó-ngù ${ }^{\text {L }}$ kùlù-ŋ] [DiscDef-PossDef ${ }^{\text {L }}$ interior] $\begin{array}{llllll}\text { [jònj̀ } & \text { bè } & \text { kán=bìỳ̀: } & \text { ŋ̀ } & \text { là] } & \text { jùmbà:-ńn, } \\ \text { [medical.care } & \text { 3PlSbj } & \text { do=Past.Ppl } & \text { Def } & \text { too] } & \text { leave-PfvNeg.3PlSbj, }\end{array}$
'Right up to the present, they haven't abandoned that custom. Every twelve months (=once a year), they do that walk. For that reason, they haven't abandoned the treatment that they performed (in the past).'
[possessive mò betweem inanimate possessor and possessum, §6.2.1]
04:04 jùnà: ${ }^{\text {L }}$ Øgú là, [wòlò-úndù là:] bòl- $\varnothing ~ n a ̂:, ~, ~$
gathering ${ }^{\mathrm{L}}$ Prox too, [scrub.acacia-thicket Loc] go.Pfv-3SgSbj if, [génà-ŋ bè-ŋ] jénè-là: jò-ǹ], [worship(n) 3Pl-Poss] worship-Prog have-3PlSbj], [ábùr là] ábrè:-n, [imposition too] impose-Ipfv.3PlSbj,
'If this gathering (of people) will go to the scrub-acacia thicket and are performing their worship (sacrifices), they wring acceptance (from the fetishes).'
[jùnǎ: 'gathering (of people)']

04:10 [nǒ: [kî:-g ò-ŋ] hô:l kànà-l-ó: nà:,
[person [head 2Sg-Poss] trust(n) do-PfvNeg-2SgSbj if,
[óllò ǹd-ó: nà:]
[chicken give.Pfv-2SgSbj if]

| [yàl-gú | ท] | bòlè | j-ó: $=$ bìyè |  | èl | nâ:, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [place | Def] | go | have-2SgS | Past | become |  |  |
| [ó= ${ }^{\text {c }}$ |  |  | dímbà | fú:] | íyè |  | ón-mènè, |
| [2Sg=Acc |  |  | follow.Stat.Ppl | all] | today |  | up.to |
| [ná=y |  | ú- |  |  |  |  |  |
| [3Sg=Acc |  | $f v N$ | -3SgSbj]. |  |  |  |  |

'A person (=you), if you don't have confidence in yourself, if you give (=sacrifice) a chicken, if you have gone to the place, anyone who is following you (in order to harm you), even up to today, it (=harm) won't leave him.'
[bòlè j-ó: = bìyè past recent perfect, 2Sg subject; èl nâ: < élè 'become']

'Furthermore (if) they rob you, if you come and curse (them) there, it (=harm) won't leave the fellow.'

'What they are doing now, that's it. As for what the old people told us, the little that I have gotten (=learned), that's it.'

## Abbreviations and symbols

| Abbreviations |  |
| :---: | :---: |
| Acc | accusative |
| Adj | adjective |
| Agent | agentive nominal |
| AN | aspect-negation inflection |
| Ant | anterior (subordinated clause) |
| ATR | advanced tongue root (vowel feature) |
| C | consonant (in formulae like CvCv ) |
| Caus | causative |
| Char | characteristic nominal derivational suffix |
| Counterf | counterfactual conditional |
| Dat | dative postposition |
| DD | Dogul Dom languageisc |
| Def | definite clitic |
| DeFoc | defocus |
| Dem | demonstrative |
| Det | determiner (demonstrative or definite) |
| Dimin | diminutive |
| DiscDef | discourse-definite ('that same ...') |
| DiscF | discourse-functional element ('only', 'even', topic, etc.) |
| Dist | distal (in NearDist and FarDist demonstratives) |
| DS | different subject |
| EA | expressive adverbial |
| Emph | emphatic (clause-final particle) |
| Exist | existential particle |
| ExpPrf | experiential perfect |
| Foc | focus (in SFoc = subject focus) |
| Fut | future |
| H | high (tone) |
| Hort | hortative |
| Ipfv | imperfective |
| Imprt | imperative |
| Inch | inchoative ('become' with adjective) |
| Inst | instrumental-comitative postposition ('with') |
| Iter | iteration (full reduplication) |
| L | a) low (tone) |
|  | b) any sonorant (in formulae like $C v L$ ) |
| Loc | locative |
| Logo | logophoric (and 3Logo, mostly third-person logophoric) |
| MP | mediopassive |
| N | a) noun (in e.g. 'N-Adj") |
|  | b) nasal consonant (in e.g. "CvN") |
| (n) | noun, in interlinear glosses like 'work(n)' |


| Neg | negative |
| :--- | :--- |
| Nom | nominalization |
| NP | noun phrase |
| Num | numeral |
| O | object (in e.g. SOV) |
| Pfv | perfective |
| Prf | perfect (in ExpPrf) |
| Pl | plural |
| Poss | possessive, possessor |
| PP | postpositional phrase |
| Ppl | verb-participle (in relative clauses) |
| Proh | prohibitive |
| Pron | pronoun |
| Prox | proximal (demonstrative) |
| Purp | purposive |
| Q | question |
| Quot | quotative particle |
| QuotSbj | quotative subject particle |
| Rdp | reduplication |
| RelCl | relative clause |
| Rev | reversive |
| S | subject (in "SOV" etc) |
| SFoc | subject-focus suffix on verb (-y) |
| Sg | singular |
| Stat | stative |
| Subjunct | subjunctive |
| Top | topic |
| Tr | transitive derivational suffix |
| V | a) verb (in e.g. "SOV") |
|  | b) vowel |
| v | vowel (in e.g. CvCv) |
| (v) | verb, in interlinear glosses like 'fight(v)' |
| VblN | verbal noun |
| VP | verb phrase |
|  |  |

## Symbols

| * | reconstructed |
| :---: | :---: |
| \# | ungrammatical, unacceptable, unattested |
| á, à, â, ǎ, â | tones on vowels (or syllables), §3.7 |
| $\overline{\mathrm{x}}$, x , x , x | tone changes on stem in compounds, Chapter 5 |
| /.../ | a) lexical tone melody, e.g. /LH/, /H/ |
|  | b) underlying or lexical representation |
| \{...\} | a) tone overlay, e.g. $\{\mathrm{HL}\},\{\mathrm{H}\},\{\mathrm{L}\}$ |
|  | b) enclosing any set, e.g. $\left\{\begin{array}{l}\text { a a i }\}\end{array}\right.$ |
| [...] | a) phonetic (IPA) representation, e.g. [bǔ:]; or phrasal grouping |
|  | downstep |
| [...] ${ }^{\text {L }}$ | $\{\mathrm{L}\}$ tone overlay controlled by an element to the right |
| ${ }^{\text {L }}$ [...] | $\{\mathrm{L}\}$ tone overlay controlled by a possessor to the left |


| ${ }^{\mathrm{HL}}[\ldots]$ | $\{\mathrm{HL}\}$ tone overlay controlled by a possessor to the left |
| :--- | :--- |
| ${ }^{\mathrm{H}+}[\ldots]$ | H-tone on first syllable that has shifted from a preceding /LH/-toned word |
| $\subset \ldots \supset$ | tonosyntactic island |
| $\rightarrow$ | intonation-like variable prolongation of final vowel or sonorant |
| $\therefore$ | dying-quail terminal intonation effect (prolongation plus pitch fall) |
| $=$ | clitic boundary |
| $\&$ | conjunction (in interlinears, e.g. X.\& Y.\& 'X and Y') |

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verb phrase, §11.1.4 (see also "chaining")
vowels, §3.4
Vowel-Semivowel Assimilation, §3.5.7.1
vv-Contraction, §3.5.6.2
'want', §11.2.5.2
complements, §15.5.2
WH interrogatives, §13.2.2
'with' (see "instrumental-comitative")


[^0]:    a. sé:dù ${ }^{\mathrm{L}}$ ndè: / ${ }^{\mathrm{L}}$ bà:bà: / ${ }^{L}$ dà:rà:

    S ${ }^{\mathrm{L}}$ father/ ${ }^{\mathrm{L}}$ grandfather / ${ }^{\mathrm{L}}$ mother
    'Seydou's father / grandfather'
    b. ǹdé: / bà:bá: / dà:rá: ìmゝ̀ / nà-ク
    father / grandfather / mother $\quad 1 \mathrm{SgPoss} / 3 \mathrm{Sg}$-Poss
    'my / his-or-her father /grandfather'

[^1]:    a. [ńbù- $\eta$ dà:] bò-ŋ [house Loc] be-1SgSbj
    'I am in the house.'

[^2]:    a. gòmbùlò ${ }^{\mathrm{L}}$ sémbè-là: mì courtyard $^{\text {L }}$ sweep-Prog $\mathbf{1 S g S b j}$
    
    'the courtyard that I am sweeping'

[^3]:    a. sé:dù [mmé [[gò- $\eta{ }^{\mathrm{L}}$ tómう̀ là] wà:-lú- $\left.\eta\right]$ gínغ̀- $\varnothing$ S [3Logo [[thing ${ }^{L}$ one even] see-PfvNeg-LogoSbj] say.Pfv-3SgSbj
    'Seydou ${ }_{x}$ said he ${ }_{x}$ hadn't seen anything.'

[^4]:    ${ }^{1}$ women carrying water up to the village from the well below must go through the tunnel in the rocks.

