# A Grammar of Donno So or Kamma So 

(Dogon language family, Mali)

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author's email
schweinehaxen@hotmail.com
color coding
blue ordinary transcriptions for this language
green underlying and phonetic transcriptions, formulas, other languages, reconstructions

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## 1 Introduction

### 1.1 Dogon languages

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

An approximate genetic subdivision of Dogon is in (1). Within eastern Dogon, Donno So is especially close to its northern neighbor Tommo So, which is described in McPherson (2013) and Plungian 1998).
(1) a. eastern Dogon

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

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

### 1.2 Donno So (Kamma So) language

Kervran glosses "donnó" as "concernant les Dogon de la région de Bandiagara jusqu'au Kamma," and the compound "donno so" (i.e. dònnò-sǒ:) as "le parler donno." In some areas, a different local language name is used, generally based on the name of a village cluster or administrative "secteur." From the Kamba ( $\sim$ Kamma) village cluster on the road to Sangha west to Bandiagara, the local variety is called kàmmà-sǒ: . This is also the usual exonym, i.e. the name of the language in neighboring Dogon languages. Farther north, in the Mentely (mèrê:) sector east of Nandoli, the local variety of the same language is called mèndèlì-sǒ: .

This language is spoken in a block in the southeastern portion of the Bandiagara plateau. Approximate boundaries, in degrees and decimal fractions of degrees, are from 14.30 to 14.45 north by from 03.39 to 03.69 west. In theory, Bandiagara itself ( $14.35 \times 03.62$ ) is Donno Sospeaking. However, it has become a bustling and cosmopolitan administrative center, linked to Mopti-Sevare to the west and Bankass to the east by a paved highway, and its major lingua francas now are the regionally important Fulfulde and Bambara. The core Donno So-speaking block consists of over twenty villages, radiating east, north(east), and south(east) from Bandiagara, but not quite reaching the villages on the edge of the high plateau such as Sangha and Dourou.

The most common surnames, which function somewhat like clan labels, are those in (2). The distribution information is based on an informal survey.
(2) spelling pronunciation main concentrations

| Babadji | bàbàjí | Kédiély and Tabitonga (people of caste) |
| :---: | :---: | :---: |
| Banou | bànú | Andioubolo, Dioubairou, Dobolo, Korou |
| Djiguiba | jìgìbá | Andaba, Bargoumou, Daga, Kalibombo, KambaBandie, Sassari, Sibi-Sibi, Tegourou, Wedié, Wolowolo, Yame, Yelema |
| Guindo | gìndó | Bodio, Soroli, Tabagolo |
| Karambé | kàràmmé | Diombolo, Dioubairou, Kalibombo, Kolountanga, Sassari, Sibi-Sibi, Sokolo |
| Kassogué | kàsògé | Dioubairou, Sassambourou, Tognon, entire Mentély sector |
| Kélépily | kèlèpílù | Dagabide, Wendegele |
| Kene | kénè | Bodio, Tabagolo |
| Nantoumbé | nàntúmmè | Gologoudo, Goulombo, Kamba, Lougourougoumbo, Pouralgu, Tognon |
| Napo | nàpô: | Kédiély (people of caste) |
| Ouologuem | wòlògém | Dandoli, Kokolo, Sinde, Sinkarma |
| Tembeli | témbélí | Dandoli, Pelou |
| Togo | tógò | Tabagolo (a few) |
| Yanogué | yánògè | Kédiély (people of caste) |
| Yébéizé | yèbèzé | Sassambourou, Tabagolo (chiefhood), Tabitonga |

Villages known to speak Donno So are listed in (3). An official name (sometimes there are alternate spellings) is followed by a transcribed Donno So name. The coordinates are N. longitude and W. latitude degrees followed by decimal fractions of degrees (not by minutes). The coordinates are from our own GPS readings.


Bodio bódò $14.24 \times 03.69$
village on plateau at southwestern limit of Donno So zone; surnames Kene, Guindo
Boundou bùndú $14.47 \times 03.38$ village on rocky plateau next to Tabitonga, Mentely area; surname Kassogué
Daga dágà $14.24 \times 03.57$ village on plateau near southern limit of Donno So zone; surname Djiguiba
Dagabide dágàbìdè $14.41 \times 03.44$ village on plateau, on Bandiagara-Kamma-Sangha road; extensive gardening (onion, tobacco, mango); surname Kélépily
Dandoli dànnólì $14.39 \times 03.54$
village on plateau overlooking river that flows to Bandiagara, on road Sangha to Bandiagara; extensive gardens (onion, tobacco); surnames Ouologuem and Tembeli
Diombolo
jว̀mbólò
$14.30 \times 03.60$
village on plateau south of Bandiagara, in two sections; surname Karambé
a) Diombolo-Do jว̀mbゝ̀l̀̀-dǒ: $14.28 \times 03.59$
village on rocky elevation; surname Djiguiba
b) Diomobo-Leye jı̀mbゝ̀l̀-lé: $14.30 \times 03.60$
village on plateau on road Bandiagara-Bankass; surnames mainly Karambé and Djiguiba, plus some Napo (leatherworkers)
Dioubairou
jùbôl
$14.32 \times 03.54$
village on plateau; extensive onion gardens; surnames Banou (dominant) plus some Djiguiba, Kassogué, and Karambé
Dobolo dòb̀̀ló 14.29 x 03.53 village on plateau; surnames Banou, Kassogué, Saye
Dologou
dòlògú
14.47 x 03.41
village on rocky plateau, chef-lieu of Mentély secteur; surname Kassogué; school, gardens
Domo
dómù
$14.44 \times 03.46$
village on plateau near Soroli; surname Tapily
Donno(-Mentély) dónnò 14.47 x 03.41
village on rocky plateau next to Dologou, Mentely area; can be called DonnoMentély to distinguish it from Donno village (part of Ningari, Tommo Sospeaking); surname Kassogué
Doumbogou dúmbògù $1443 \times 03.44$ village on plateau; surname Djiguiba
Edé $\grave{\text { été }} 14.28 \times 03.51$
village on rocky prominance in plateau; surnames Kéné and Yébédié
Gologou gólùgù
village in two parts on plateau on opposite sides of river
a) Gologou-Leye gòlùgù-lé:
$14.41 \times 03.51$
village on plateau overlooking river that flows to Bandiagara, on road Sangha to Bandiagara; extensive gardens (onion, tobacco); surname Nantoumbé
b) Gologou-Do gòlùgù-dǒ: $14.40 \times 03.51$ village on plateau; surnames Nantoumbé, Kélépily
Gondodié góndò $14.46 \times 03.40$ village on rocky plateau, Mentely area; surname Kassogué; dam and off-season gardens
Gouloumbo gùlùmbó $14.27 \times 03.52$
village on an elevation in plateau; dam, gardening; surname Nantoumbé
Guinéwolo ginè-wólò $14.36 \times 03.48$ village on flat area in plateau; surname Kassogué
Kalibombo kàlìbòmmó $14.39 \times 03.60$
village on road going due north from Bandiagara to Kendie, on the edge of the high plateau overlooking the lower plateau to the south including Bandiagara; they bring wood to Bandiagara for sale; last Donno So-speaking village before Dogulu-dominated area on high plateau; surnames Djiguiba, Karambé
Kamba (village cluster) kámmà
village cluster on on Bandiagara-Sangha road, close to Sangha; gardening (onion, tobacco, mango); zaban fruits collected from shrubs (Saba senegalensis) among boulders and sold
Kamba-Bandie kàmmà-bánjèn $14.42 \times 03.39$ surnames Djiguiba and Nantoumbé
Kamba-Diguili kòmmò-dígùlù $14.42 \times 03.41$ surname Nantoumbé
Kédiély kèjélù $14.47 \times 03.41$
village on rocky plateau, Mentely area; people of caste, surnames Yanogué, Babadji, and Napo
Kokolo kj̀kòló $14.41 \times 03.54$
village on plateau overlooking river that flows to Bandiagara, on road Sangha to Bandiagara; extensive gardens (onion, tobacco); surname Ouologuem; one of Kervran's two main informants was from here
Kolountanga kòlúntàyà $14.33 \times 03.52$
village on plateau; dam, gardening; culturally traditional (no mosque or church observed); surname Karambé
Kondoli kòjúlù $14.46 \times 03.38$
village on rocky plateau, Mentely area; surname Kassogué
Korou
kó:lù
$14.30 \times 03.45$
village on plateau, almost adjacent to Guimri-Kan speaking Dourou Tanga; surname Banou
Lougourougoumbo lùgùrù-gùmmó $14.41 \times 03.45$
village on plateau overlooking river that flows down to Bandiagara, on road Bandiagara-Kamba-Sangha; extensive gardening (onion, tobacco, mango); surname Nantoumbé
Moé mô: pair of villages (upper and lower) on rocky plateau, Mentely area
a) Moé-Da (Upper)
mò:-dá:
$14.48 \times 03.42$
village on rocky plateau; surnames Kassogué and Fofana (Dogon), Babadji (leatherworker caste)
b) Moé-Joye (Lower) mò:-jóy 14.48 x 03.42
village on rocky plateau; surname Kassogué
Molou mó:lù $14.46 \times 03.44$
village on rocky plateau, Mentely area; surname Kassogué; school
Pelou pè:lú $14.34 \times 03.44$
village on elevation in rocky plateau not far from cliffs at Douro; dam, gardens; one of Kervran's two main informants was from here; surname Tembély
Pouralgu púròlù $14.38 \times 03.54$
village on rocky plateau; dam, gardening; surnames Nantoumbé, Djiguiba, Sagara
Sassambourou sàmbúrù $14.30 \times 03.49$
village on plateau; gardens (onions); surnames Yébédié and Kassogué
Sassadi sàsàrí $14.31 \times 03.57$
village on plateau; dam, gardening; surnames Djiguiba, Karambé
Sibi-Sibi Síbì-sìbì $14.33 \times 03.55$
village on rocky elevation on plateau; extensive gardens (onions, some chili pepper); surnames Djiguiba, Karambé
Sinde séndè $14.42 \times 03.42$ village on plateau, on road Sangha to Bandiagara; farming and herding; gardening (onion, tobacco, mango); zaban fruits collected from shrubs (Saba senegalensis) among boulders and sold; surname Ouologuem
Sinkarma sìgkánùmò $14.37 \times 03.57$
village on plateau overlooking river that flows to Bandiagara, on road Bandiagara-Kamma-Sangha; gardens (onion, tobacco); surname Ouologuem
Sokolo sógòl̀̀ $14.32 \times 03.57$
village on plateau; surnames Karambé and Yébédié
Soroli sóllù $14.44 \times 03.49$
village on rocky elevation in plateau near Bandiagara-Ningari road; surnames Guindo, Tapily, Kélépily, Kassogué
Tabagolo
tàbágòlò
$14.37 \times 03.66$
village in low plateau; surnames Yébédié (they hold the chiefhood), Togo, Nantoumbé, Kassogué, Kéné, Guindo
Tabitonga tàbìtóngò $14.47 \times 03.38$ village on rocky plateau, Mentely area; surnames Kassogué and Yebi-Isse; school
Tegourou
tégùrù
$14.43 \times 03.61$
village on plateau near southwestern limit of Donno So zone; surnames Djiguiba and others
Tognon (Tonniome) tónòn $14.36 \times 03.57$ village on plateau on a rocky shelf; gardening; surnames Kassogué and Nantoumbé
Wedié
wédè
$14.36 \times 03.47$
village on plateau; surname Djiguiba
Wendeguélé (Wendegele) wèndègélè $14.36 \times 03.37$ village on plateau in rocky area; originally split off from Tagabide; surname Kélépily
Wolo-Wolo, Ouolo-Ouolo wòl̀̀-wól̀̀ $14.33 \times 03.51$ village on plateau; surname Djiguiba
Yamé yámè village on plateau; surname Djiguiba
Yelema gìnè-yàlèmó $14.42 \times 03.45$ small village on small rocky elevation across the road from Lougourougoumbou; extensive gardening (onion, tobacco); surname Djiguiba

The Donno So-speaking area is sufficiently large and densely populated that many villagers do not speak a second Dogon language, though they manage simple communication with others with each speaking their own language. Villages on the periphery of the Donno zone
are in contact with another language: Dogul Dom to the northwest (e.g. for Kalibombo and Soroli), Tommo So to the north (e.g. for Nandoli), Toro So varieties near the top of the cliffs to the northeast (e.g. for Kamba), and Tengou Kan (including Guimiri Kan) near the edge of the plateau at the cliffs to the southeast (for e.g. Korou and Konsogoudo).

In spite of the fact that Donno So (eastern) and neighboring Dogul Dom (western) are on opposite sides of the major internal genetic split in Dogon languages, they share many features, especially in tonology.

Aside from French which is learned by those who complete basic schooling, the ambient non-Dogon languages are Fulfulde and Bambara. Fulfulde is widely used in Bandiagara, and there are Fulbe herders around Doucombo just west of Bandiagara, but there appear to be few Fulbe living in the main Donno area, much of which is on terrain that doesn't lend itself well to cattle herding. Bambara is increasingly important in Bandiagara, since many southerners who work or visit there speak no other local language. Bambara is also learned by the many young Dogon who migrate seasonally to southern Mali for work during the dry season.

### 1.3 Environment

The Donno area is part of the Bandiagara plateau and it does not quite reach the cliffs that go down from the plateau to the sandy plains to the east and south. The terrain is irregular and somewhat rocky in many places. A number of rivers, swollen in the rainy season (especially July to September) and completely dry by the middle of the dry season, converge on Bandiagara from the east. Several of the Donno villages straddle these rivers. Combretum glutinosum dominates the lightly wooded savanna except in depressions and riversides.

The grain staple is pearl millet (Pennisetum glaucum), followed by sorghum and a little maize. These are grown in the rainy season with harvests around late October. Other rainyseason crops are fonio (Digitaria exilis), peanut, groundnut (Vigna subterranea), cowpea (Vigna unguiculata), and roselle (Hibiscus sabdariffa), along with a little sesame. Rainyseason agriculture is supplemented by small-scale herding (sheep, goat, cattle).

Gardens along the rivers, or in other spots where irrigation is possible, produce off-season cash crops, primaril onion. Others are garlic, tobacco, chili pepper, European and African eggplant, and salad vegetables such as lettuce and carrots. Mango is the main planted fruit tree, followed by tamarind, guava, banana, and papaya. Wild fruits that can be collected for sale include zaban (Saba senegalensis), karité (Vitellaria paradoxa), and wild grape (Lannea microcarpa). Cash crops and fruits are generally sold in the markets in Bandiagara (Monday and Friday) or Sangha (every fifth day).

### 1.4 Previous and contemporary study of Donno So

### 1.4.1 Previous work

The major previous work on Donno So was carried out by French missionary Marcel Kervran in collaboration with André Prost. It was based on work with one speaker each from Pelou and Kokolo villages.

The second edition of Kervran's Dictionnaire dogon - français, Donno So, Région de Bandiagara was published in 1993, eleven years after the first edition (1982). This document of 643 pages contains a wealth of information about Donno So lexicon and culture.

Kervran and Prost had teamed up to produce Les parlers dogon, 1: Donno so, in 1969. Kervran produced a revision Un parler dogon, le Donno So: Notes de grammaire in 1986. In spite of its modest title this is a substantial work of 188 pages, with much information about segmental phonology, morphology, and basic phrasal syntax.

Donno So data occur in various papers by Christopher Culy and collaborators on Dogon morphosyntax (Culy 1994a, 1994b, 1995; Culy, Kodio \& Togo 1994; Culy \& Fagan 2002)

My practice, based on past experiences, has been to turn to previous literature during the middle of my own fieldwork rather than beforehand. This allows me to first form my own views about grammatical topics, and then use the prior literature as a check and for dialectal elaboration.

### 1.4.2 Fieldwork

I and my junior colleagues have been working on Dogon languages since 2004 when I began work on Jamsay. Donno So was targeted rather late in the overall project, which initially focused on the more northerly languages including Jamsay, Toro Tegu, Ben Tey, and Nanga and has slowly worked south.

The first project member to tackle Donno So was Samantha Farquharson, then an undergraduate at University of North Carolina. When she came in 2012, we had relocated to a base in Bobo Dioulasso, Burkina Faso, because of fighting in northern Mali. A Donno So informant was brought to Bobo and two months of work was done. However, Farquharson did not return for subsequent fieldwork, and subsequent project recruits have done fieldwork on Burkina languages rather than Dogon. I therefore took over the Donno So part of the Dogon project. I began working with an informant from Wendegele village in June 2014 and continued with him into August of that year. I made a short trip to the village with him, during which I went over flora-fauna vocabulary with a "committee" of men of all ages in the public square, and recorded a few stories and interview-type texts, some of which appear at the end of this grammar.

### 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 fieldwork on Donno So was carried out as part of the third phrase.

## 2 Sketch

Like most Dogon languages, Donno So (DS) is verb-final (SOV). Verbs are marked suffixally for aspect, negation, and pronominal-subject (agreement) category. NPs ("DPs") consist of a noun followed by its modifiers, except that nonpronominal (and some pronominal) possessors precede the noun, as in Poss-N-Adj-Num-Dem. There is no case-marking for subject NPs, while animate object NPs and especially pronouns are marked accusative. A simple SOV sentence is in (4a), and an N-Adj-Dem noun phrase is in (4b). The bracketing and superscripts in (4a) are tonosyntactic, see $\S 2.1 .2$ below.
a. ŋà:-ná $=g \grave{~} \quad$ pédù $=\grave{j} \quad$ èb̀̀-lí- $\varnothing$
woman- $\mathrm{Sg}=$ Def $\quad$ sheep=Acc buy-PfvNeg-3SgSbj
'The woman didn't buy (a/the) sheep-Sg.'
b. [pèdù jèm] ${ }^{\mathrm{L}}$ ŋ̀gó
[sheep black] ${ }^{\text {L }}$ Prox
'this black sheep'
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

DS has relatively conservative consonantism (in the context of comparative Dogon). Stops and (medial) nasal-stop $N C$ clusters are generally well-preserved. In the dialect treated here, intervocalic $d$ is sporadically tapped to $r$, but phonemic merger of the two has not occurred. In the dialects emphasized by K\&P, intervocalic *d has shifted to " $z$." There are no phonemic nasalized sonorants $\left\{w^{n} y^{n} r^{m}\right\}$.

There is some attrition and merger of word-final sonorants, especially nasals, though not to the extent seen in e.g. Togo Kan. In the focal dialect, this attrition has led to partial neutralization of the oppositions between $1 \mathrm{Sg}-\eta(*-\mathrm{m}), 1 \mathrm{Pl}-\eta \sim-^{y} \eta(*-\mathrm{n})$, both atonal, and L-toned 2Pl -ì ~ - ${ }^{-} \grave{\eta}$ (*- ${ }^{*}$ ).

Vowels show the seven vowel qualities usual for Dogon. Vowel length is mainly distinguished in word-initial syllables, but there are some word-final long vowels as well. Due to contractions of original $* \mathrm{Cv}$ - reduplications in verbal morphology, vowel-lengthening is now a grammatically meaningful ablaut-like morphophonemic process in DS verbal morphology. For this language I use the term "augmented" to include both overt $C v$ - reduplication and first-syllable vowel lengthening due to contraction of $* \mathrm{Cv}$ reduplication; the two are in complementary distribution.

+ ATR $\{\mathrm{e} o\}$ and -ATR $\{\varepsilon \rho\}$ constitute the polar harmonic sets and do not ordinarily cooccur within noncompound stems. High vowels $\{i u\}$ are extra-harmonic and may co-occur in a stem with either set. Low vowel $a$ is associated with -ATR vowels in verbal derivation
(mediopassive allomorphs). There is also a tendency toward back/roundness harmony, seen especially in forward spreading of back/rounding values into suffixes, but this process is usually not categorical.


### 2.1.2 Prosody

DS is particularly interesting within Dogon because it lends itself to a pitch-accent model for lexical and in most cases word-level (post-phonology) tones. In particular, it lacks $C \hat{v} C \bar{v}$ and other stem- and word-forms with adjacent H-toned syllables. It shares this accentual pattern with Dogul Dom. The two languages belong to different genetic divisions (eastern versus western), but are adjacent and have considerable intermarriage.

Like several other Dogon languages, DS does not allow lexically /L/-toned stems (nouns, verbs, adjectives, numerals). Verbs are lexically /LH/ or /HL/. The choice is preordained for obstruent-initial verbs, lexical for other verbs. Nouns and other non-verb stems allow the H-tone to occur in various positions: the melodies /HL/, /LHL/, and /LH/ are well-attested. There are no /HLH/ stems (leaving compounds aside). This can be summarized as an underlying accentual system (one accented sylllable per stem). However, the lexical melody is regularly overridden by stem-, word- or phrase-level grammatical tone overlays (tonomorphological and tonosyntactic), represented in curly brackets, with $\{\mathrm{L}\}$ the most general overlay (I often call it tone-dropping). Because of the constraint against lexical /L/, the $\{\mathrm{L}\}$ overlay is always audible.

NP-internal tonosyntax fits the predominant Dogon pattern, being strongly associated with reference restriction. $\{\mathrm{L}\}$ is controlled both by postnominal modifiers (adjectives, demonstratives, relative clauses) and by prenominal possessors. A superscripted ${ }^{\mathrm{L}}$ indexes tone-dropping, and is placed on the left or right edge of the affected target domain, "pointing" to the relevant controller. In (4b) above, the proximal demonstrative controls $\{\mathrm{L}\}$ on the preceding N -Adj combination. As usual, a controller targets the lexical head (the noun) and any intervening words. Tonosyntactic conflicts can arise in Poss-N-Mod combinations, where Mod is an adjective, demonstrative, or relative clause, but they are less troublesome in DS than in other Dogon languages where possessors control $\{\mathrm{HL}\}$ rather than $\{\mathrm{L}\}$ on possessed nouns. In NPs with two or more controllers, some of the outputs can be generated simply by allowing the highest controller to operate, but some combinations have quirky noncompositional constructional tonosyntactic patterns. For example, adding a definite clitic (not itself a controller) to Poss ${ }^{\mathrm{L}}\left[\mathrm{N}\right.$ Num] produces Poss [N Num] ${ }^{\mathrm{L}+\mathrm{H}}=$ Def, with an $\{\mathrm{L}\}+\mathrm{H}$ overlay that is only present in certain combinations. Schematic arrays of NP-types are in §6.1.1.

Grammaticalized intonational effects are less conspicuous in DS than in some other Dogon languages (Jamsay, Ben Tey, Nanga). NP conjunction involves a postposition-like particle attached to both conjuncts ( $\left[X\right.$ lè] [Y lè] ' X and $\mathrm{Y}^{\prime}$ ), rather than being expressed just by intonational effects, but the particle (particularly its first occurrence) may be prolonged ([ $\left.\begin{array}{lll}X & l e ̀\end{array}\right]$ ). An analogue of Jamsay "dying-quail" terminal intonational effect (prolongation plus pitch decline) is found in parallelistic willy-nilly conditional antecedents (§16.3).

### 2.1.3 Key phonological rules

There are a few rather minor consonantal alternations, mostly unproductive and limited to derivational verb morphology. There is no nasalization-spreading process of the Jamsay type.

VV-Contraction applies in most cases where two vowels come together within a word (§3.5.6.2). However, some unusual diphthongs like $\boldsymbol{\rho} \boldsymbol{\varepsilon}$ occur in perfective verbs, and sequences like $-i-\mathrm{a}$ : and $-i-\bar{\varepsilon} \grave{\varepsilon}$ with no clear epenthetic semivowel occur in inflected forms of mediopassive verbs.

### 2.2 Inflectable verbs

DS has suffixally derived reversives ('un-tie') and causatives ('cause to jump') of the standard Dogon type. The most distinctive derivational phenomenon in DS verbs is the extremely productive "mediopassive" in -e: $\sim-\varepsilon$ : alternating with $-i$ : . It is used not only in the fashion of cognate mediopassives in the other Dogon languages, but also as a way to express reflexive-object predicates and one way to express reciprocals ( $\S 9.4, \S 18.1 .1, \S 18.4 .1$ ).

Active verbs are inflected suffixally for aspect and negation. The core of the inflectional system is [ $\pm$ perfective] crossed with [ $\pm$ negative], constituting four subsystems whose primary suffixes are aspect-negation (AN) portmanteaus. A sample paradigm is (5).
(5) Four key inflected forms of jj̀bb́ 'run'

|  | positive | negative |
| :---: | :---: | :---: |
| perfective | $j \check{l o b-\varepsilon ̀ ~}$ | jı̀bò-lí |
| imperfective | jòbó-dè |  |

Suffixal inflections are complemented by various periphrastic constructions including auxiliaries 'be' and 'have'. The deictic basis for both the suffixal and periphrastic constructions can be shifted from the time of speaking into the past by means of a conjugatable past clitic or auxiliary bè.

Some active verbs, notably those denoting stance ('sit', 'lie down'), also have derived stative forms ('be sitting/seated', 'be lying down/prone') that do not make perfectivity distinctions. There are also several defective stative-only quasi-verbs ('be', 'have', 'be in', 'know', 'want', 'like') that do not have aspectually-marked active counterparts. Derived statives and stative quasi-verbs share a distinctive negation with suffixed or cliticized $l v ́$ with vowel quality often spread from the stem.

Deontic modals are imperative and hortative ('let's!') and their negations.

### 2.3 Noun phrase (NP)

Excluding possessors, plural -mbè, and relative clauses, the basic order is N-Adj-Num-Det-'all'-DF, where Det[erminer] is demonstrative or definite and DF is discourse-functional particle ('also', Topic, etc.). As mentioned in §2.1.2 above, tonosyntactic patterns are pervasive within multi-word NPs; see §6.1.1 for details.

Nonpronominal possessors are prenominal. Pronominal possessors are usually postnominal, in the slot between numeral and determiner, but especially with kin terms they
may be prenominal. Most human nouns other than kin terms take suffixes -nv (singular) or - $\eta$ ) (plural). There is also a more mobile plural suffix -mbè that may follow adjectives.

### 2.4 Case-marking and PPs

Direct objects, and "indirect" objects of ditransitives like 'give', have a postposition-like accusative clitic $=\eta$ that occurs at the end of the NP. It is limited to animates and is most systematic with pronouns and with definite human NPs. There is no case-marking of subjects, except insofar as they trigger suffixal agreement on predicates.

There are several postpositions that combine with NPs to create PPs (locative, instrumental, dative, etc.). Thus àndó $=\grave{j}$ 'the village', locative àndó $=\grave{\jmath}$ rà: 'in/to/from the village'.

### 2.5 Main clauses and constituent order

As indicated at the beginning of this chapter, DS is an SOV language. More precisely, it is S-Adv-O- $\mathrm{V}_{\text {subj }} \mathrm{Z}$, where Adv means a setting adverbial like 'yesterday', $\mathrm{V}_{\text {subj }}$ means a verb with subject agreement, and Z is either an emphatic particle or a subordinator such as clitic $=y o$ ' if '. An example of $\mathrm{S}-\mathrm{Adv}-\mathrm{O}-\mathrm{V}_{\text {subj }}-\mathrm{Z}$ is (6a). Any other adverbials or additional objects are smuggled in before or after the object ( O ) ( $6 \mathrm{~b}-\mathrm{c}$ ). In some high-frequency subject-verb collocations, the pseudo-subject stays close to the verb (following setting adverbials) and in general has limited subject properties (6d). A pseudo-subject may even co-occur with a distinct true subject (§11.1.1.4).

'if Seydou slaughters the sheep-Sg tomorrow'
b. sé:dù [wó ${ }^{\mathrm{L}}$ bà: $\left.=\grave{1}\right]$ kè:lह́ ób-ì- $\varnothing$ S [3SgPoss ${ }^{\mathrm{L}}$ father=Acc] money give-Pfv-3SgSbj 'Seydou gave the money to his father.'
c. sé:dù mùnjù-mù-ně: [tá:sò=ò rà:] kùnd-ì- $\varnothing$ S shea.tree-oil [bowl=Def Loc] put-Pfv-3SgSbj
'Seydou put the shea-butter in the bowl.'
d. yâ: năy númb-è- $\varnothing$
yesterday sun fall-Pfv-3SgSbj
'Yesterday the sun rose.'

### 2.6 Relative clauses

In a DS relative clause, the core of the head NP (maximally Poss-N-Adj-Num) is internal to the relative clause. If it is the subject of the relative-clause verb, it may (but need not) follow a setting adverbial. The internal head NP, whatever its grammatical function in the relative, is tone-dropped, e.g. ì: ${ }^{\text {L }}$ from $\hat{1}$ : 'child' in (7a-b). Late-NP elements such as determiners
(definite, demonstrative) and 'all' follow the verb, which takes noun-like participial ( Ppl ) form.
a. [yògó ì: $\left.{ }^{\mathrm{L}} \quad y \varepsilon ̀-j-a ̂: \quad s \varepsilon ́:=g \grave{\partial}\right]$ [tomorrow child ${ }^{\mathrm{L}}$ come-Ipfv-PastAnt have.Ppl=Def]
[[yògó rà:] wò- $\varnothing]$
[[which? Loc] be-3SgSbj]
'Where is the child who will come tomorrow?'
b. [yâ: ì: $\left.{ }^{\mathrm{L}} \quad y \grave{\varepsilon} 1-\varepsilon ́=g \grave{̀}\right]$
[yesterday child $^{\mathrm{L}} \quad$ come-Pfv.Ppl=Def]
[[yògó rà:] wò-Ø]
[[which? Loc] be-3SgSbj]
'Where is the child who came yesterday?'
Full details are in chapter 14.

### 2.7 Interclausal syntax

Verb-chaining takes different forms depending on whether the overall event is conceptualized as already completed or future. This applies both to direct chains, where (in the future subtype) the nonfinal verb appears in its chaining form with no other subordinator, and to loose chains, which do have an overt subordinator. DS has analogues to the pseudoconditional construction also found in some other Dogon languages, where the 'if' subordinator is used systematically in the nonfinal verb in a same-subject future-time chain where the two events are chronologically sequenced ( $\S 15.2 .2 .5$ ). The pseudo-conditional is just one of four basic constructions for event sequences, based on a same/different subject division combined with completed versus future time reference. A distinct set of basically imperfective subordinators are used when the two events overlapped.

There are two ways to convert a clause into a nominalized subordinated clause comparable to an English infinitival complement. One is a verbal noun with nonsubject complements. The other is a tonally expressed pattern $\{\mathrm{L}\}\{\mathrm{HL}\}$ with a falling-tone overlay on the subordinated verb following an $\{\mathrm{L}\}$-toned object (or pro forma cognate nominal). The two types are partially interchangeable (§17.3-4).

## 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 §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 $\S 6.1 .1$.

### 3.2 Internal phonological structure of stems and words

### 3.2.1 Syllables

Using "L" for a variable sonorant, attested shapes of monosyllabic words are $C v$ (allowed for particles and quasi-verbs), $C v:, C v L$, and $C v: L$. The initial $C$ position may be vacant, as in $\hat{1}$ : 'child'. In verbs, final $L$ is a suffix like $1 \mathrm{Sg}-\eta$.

The same set of syllabic shapes can occur in final and nonfinal syllables of nonmonosyllabic words.
$C v$ : is the minimal shape for a regular verb stem (I have no examples of $v$ :, probably an accidental gap). $C v$ : and $C v L$ with the initial $C$ optional are minimal shapes for nouns and other non-verb stems. Examples are $\check{0}$ : 'well (for water)', ă: 'who?', yôW 'nasty', mǎy 'dry', and $g \hat{\varepsilon} \eta$ 'black'.

Superheavy $C v: L$ is the most marked syllable type. It is very rare in unsegmentable stems, but I can cite the numeral nǎ:y ' 4 '. $C V: L$ can also be created by combining a $C V$ : syllable with a suffix or clitic. It can also be created by a vowel-lengthening process in augmented verbs that have contracted an original ${ }^{*} \mathrm{Cv}$ - reduplication. Examples are in (8). In e.g. nà:-ǹ-ní the tonal marking on the medial nasal is optional in my transcriptions when it has the same tone as the preceding vowel.
a. 3Pl negative -ǹní (perfective) and -n-nì (imperfective)
nà:-ǹ-ní 'they didn't eat'
ná:-ǹ̀nì 'they don't eat'
gò:-ǹn-ní 'they didn't go out'
gò:-ń-nì 'they don't go out'
b. $C v C C v$ verbs subject to initial-syllable vowel-lengthening
gè:ndé-dè-ŋ̀ 'I will look' (lengthened < gèndé-dè-ŋ̀ 'I look')
c. $=\eta$ clitic (accusative or 'it is')
$i ́:=i ̀ \quad$ 'child' (accusative) $(<\hat{i}:)$
$i:=\grave{\eta} \quad$ 'it's a child'
pà:dé:=̀̀ 'it's bad'

Monosyllabic perfectives like n $\grave{\varepsilon}-\bar{\varepsilon}-\overline{1}$ [nè $(:) \dot{́}]$ 'I ate', and monosyllabic plural-addressee imperatives like ná:-ŋ̀ [ná(:) ̀̀] 'eat!-2Pl', can also be mentioned, but vowel length is not always clearly articulated in these forms. The same is true of mediopassives: dànn-ध́:-ŋो [dàn:é(:) ̀̀] ‘sit!-2Pl’.

### 3.2.2 Metrical structure

The organization of multisyllabic words into metrical subdivisions is not well-developed in DS. However, there are some attritiion processes that apply to the middle syllable in CvCvCv , suggesting that this is a metrically weak position in some morphological patterns.

Segmental alternations such as pegere versus pegiri or peguru for the verb 'winnow by shaking' are our starting point. The former full form occurs in perfective negative pègèrè̀-lí and imperfective positive pégèrè̀-dغ̀. The latter reduced form is found in perfective positive pégìr-ì and chaining form pégùr-ù. The final $-i$ and $-u$ in the latter are endings that also occur in I-class bisyllabics, as in yàbá 'accept', perfective yáb-ì, chaining form yàb-ú. If we recognize /pégèr-i/ and /pégèr-ù/ as pre-surface representations, we need to account for the raising of medial /e/ to $i$ or $u$. We could think of this either as assimilation to the word-final high vowel, or as lenition in a metrically weak environment. (The medial vowels in these forms do sound brief to me.)

We do not, however, find extensive syncope of the sort we would expect if this medial position were fatally weak metrically. See §3.5.3.2 for discussion of a few minor cases of syncope in verbal morphology.

### 3.3 Consonants

The dialect described here (village of Wendegele) has the consonants in (9). (Double) parentheses indicate (doubly) marginal status, i.e. restriction to unintegrated loanwords, onomatopoeias, and the like.
(9) Consonants

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

$c$ represents IPA [t] ], $j$ is [d 3 ], $\check{s}$ is [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. laterals; 7. nonnasal sonorants (approximants and tap); 8-9. laryngeals

For $z$ in some DS dialects corresponding to intervocalic $d$ in the dialect described here, see §3.3.8 below.

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 $V$.

Consonants generally occur initially and medially in stems. All verb stems are V-final, though kán(à) 'do' and a few $C v l v$ verbs have $C v C$ - shape before some inflectional suffixes. At word-level including suffixes, verbs may (and often do) end in a velar nasal $\eta$ or $W$ (pronominal-subject suffixes). Noun, adjective, and numeral stems generally end in vowels. Less often they end in a semivowel $\{w y\}$ or velar nasal $\eta$, e.g. jě $\eta$ 'agama lizard', $k \hat{\varepsilon} y$ 'shrub sp. (Strophanthus)', gذ̀クદ̌y 'elephant', kìmêŋ 'porcupine' yôw 'nasty', mǎy 'dry', jâŋ 'difficult', nǎ:y '4'. In my assistant's dialect, nearly all original *m have become $\eta$, with the exception of jîm 'disease, malady’, cf. verb jìmé ‘be sick'. At word-level, most human nouns other than kin terms can end in plural suffix $-\eta$ after stem-final vowel. Dialectally, $m$ and reportedly $\mu$ also occur word-finally ( $1 \mathrm{Sg}-m, 1 \mathrm{Pl}$ and $2 \mathrm{Pl}-n$ ).

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

These are affricate-like stops. Voiceless $c$ is a marginal consonant. Voiced $j$ is a wellestablished consonant before all vowel qualities, as in jǎ: 'take (sb)'.
$g$ does not palatalize to $j$ before front vowels, so the two are phonemically distinct in this position: $g$ in $g e \check{.}: n$ 'steal', gìné 'house', versus $j$ in jìmbé 'pull', ùnj-é:- 'lie down'.

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

Subphonemic phonetic spirantization of $g$ to fricative [ X ] is observed between two a or 0 vowels. For example, the verb 'catch' has unspirantized $g$ in perfective ág-ì, but the spirantized allophone in imperfective ága-dè.

### 3.3.3 Nasals $(\eta, n, n)$ are distinct before front vowels

$n, \eta$, and $n$ are distinguishable before front vowels as well as other vowels. Examples with $i$ are dànn-í- $\mathrm{\varepsilon} l \mathrm{e}$ 'does not sit', tán-ì 'became (sth)', and nìné 'be afraid'.

### 3.3.4 Labial fricative $f$

$f$ is not present in native Dogon vocabulary, and is replaced by $p$ in well-integrated loanwords like màrpǒ: 'rifle’ (from Arabic, cf. Songhay malfa)

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

Voiceless stops occur stem-initially: pád-ì 'left, abandoned'. kéd-غ̀ 'cut-Past', tò 'be in'. They do not occur medially or finally in native Dogon vocabulary.
$k$ does not palatalize before front vowels: kígùl-ì-ỳ 'went back'.

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

Laryngeals are not regular consonant phonemes. $h$ occurs mainly in Fulfulde loanwords, some of which are now common, e.g.. hákillè 'mind, attention'. The regional (and international) $\grave{j}^{n} h \delta^{n}$ 'uh-huh (yes)' is also present.

Glottal stop ? occurs in $\delta^{n} \not \mathfrak{j}^{n}$ 'no' and in perfective $C V$ - reduplications of vowel-initial stems, as in $\grave{\varepsilon}-2 \varepsilon ́ b-\dot{\varepsilon}$ 'bought' from stem $\varepsilon$ bè 'buy', see (219) in §10.2.1.2. However, most original reduplications of this type have contracted to form a long vowel, as in stative ǔ:njò 'be lying down' (likely < *ù-Rúnjò) related to active verb ùnj-é:- 'lie down'. The same process has created many augmented (formerly reduplicated) perfectives, imperfectives, and statives with long first-syllable vowels (§10.2.1.2, §10.2.2.2, §10.4.1).

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

Of these, only $s$ is a well-established consonant phoneme in the dialect described here. It does not palatalize noticeably before front vowels: síndú 'sharp (blade)', sí:r-è 'pointed at'.

For $z$ dialectally corresponding to intervocalic $d$, see $\S 3.3 .8$ just below.
Alveopalatal $\check{s}$ and $\check{z}$ occur in unassimilated borrowings, especially from French (chanson, gendarme). The same is true of $z$ except in dialects that have $z$ corresponding to $d$.

### 3.3.8 Intervocalic $d / z$ dialectal split

There is a dialectal alternation of $z$ and $d$ intervocalically. The dialect described here (Wendegele) has $d$ in the relevant words, e.g. pédù 'sheep', kéd $\varepsilon$ 'cut', and pádà 'lease (abandon)'. K\&P (p. 11) write " $z$ " in these words and comment that $d$ is typical of Bandiagara and certain other (unnamed) villages; Wendegele is near Bandiagara. K\&P (p. 13) indicate that $z$ does not occur word-initially in any dialect.

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

$\left\{\begin{array}{l}W \\ y\end{array}\right]$ can occur initially: wě.: ‘see', yím-è ‘died', làlá-dè 'gives birth'. Tap $r$ does not occur initially in stems. All four consonants occur intervocalically. The two semivowels $\left\{\begin{array}{l}w\end{array}\right\}$ also occur word-finally, for example in the suffixes $-\grave{W}(2 \mathrm{Sg})$ and $-\grave{y}$ (perfective of some monosyllabic stems).

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

These consonants are absent in DS.
$r^{n}$ (nasalized tap) occurs in several Dogon languages, due to some combination of tapping of original intervocalic nasal stop $*_{n}$ and progressive nasalization of $*_{r}$ following a nasal syllable. Neither process has taken place in DS.
$W^{n}$ in some Dogon languages likewise reflects lenition of original intervocalic $*$ m or else progressive nasalization of ${ }^{*}$ w. Again, neither process has taken place in DS.

### 3.3.11 Dialectology of word-final nasals

K\&P state (p. 13) that, in the dialect(s) that they focus on, all nasal-final $C_{v N}$ stems have a phonetically retroflexed nasal $[\mathrm{n}]$. There are no phonemic oppositions among nasals and the retroflexed nasal does not occur elsewhere (i.e. prevocalically). K\&P also state that words (as opposed to stems) can end in the suffix $-m(1 \mathrm{Sg})$ or $-n(1 \mathrm{Pl}$ or 2 Pl$)$.

K\&P also indicate (p.13) that the final $-\eta(1 \mathrm{Pl}, 2 \mathrm{Pl})$ is pronounced as $n$ in Bandiagara and some other (unnamed) dialects.

In the dialect described here (Wendegele, near Bandiagara), virtually the only word-final nasal I hear is $-\eta$, sometimes faint or reduced to nasalization of the preceding vowel. Final $m$ was recorded only in the noun jîm 'sickness, malady'. The 1 Sg and 1 Pl suffixes are usually merged as $-\eta$ (atonal), while the 2 Pl is L-toned $-\mathfrak{r}$. After a back rounded vowel, the 1 Pl and 2 Pl suffixes (but not 1 Sg ) have a faint palatal onset, hence $1 \mathrm{Pl}-{ }^{-1} 7$ and $2 \mathrm{Pl}^{-y} 7$.

### 3.3.12 Consonant clusters

### 3.3.12.1 Word- and morpheme-initial $N C$ clusters

A handful of words begin with a nasal-stop cluster. However, they pattern as bisyllabic, with the first syllable reduced to a syllabic nasal. The nasal syllable can bear its own tone.

The only known verb of this type is ìd-ध́:- 'bathe', whose paradigm (§10.1.3.5) includes $3 S g$ perfective ńd-ì-ỳ, chaining form ǹd-í- $\grave{y}$, and imperfective $n d-\varepsilon$ e:-dè.

There are only a few nouns of this type: ìdé 'person' (§4.1.2), ŋ̀gábù 'hippopotamus', ìnǎ: 'grindstone', and ìnâ: 'viper sp. (Bitis)'.

### 3.3.12.2 Medial geminated $C C$ clusters

DS has more medial geminated nasals than most Dogon languages. To find them, we need look no father than the two names of the language: dònnò-sy̌: and kàmmà-š̌: . Other examples:
$n n$ : tànná 'stick', ùnnú 'back (body)', bìnné 'middle', dànná:-nà 'hunter', yànná:-nà 'old woman', tónnò 'hard', ordinal suffix -ènné, verb mùnné 'bend', ìnné 'not know', 3Pl perfective negative or stative negative -ǹ-ní;
mm : $\varepsilon m m \grave{\varepsilon}$ 'we', tìmmé 'tree', ómmù 'rotten', kómmò 'lean (animal)', tòmmò-gìn $\varepsilon$ 'north', témmè 'put lid on', kómmò 'tie', námmà ‘step on';
лn : dànn-є́:- ‘sit'. ì̀nn-є́:- ‘stand, stop'.
There are also cases of 11 and $y y$.
ll : hállù 'even’, kèllú 'cold’, èllú ‘sweet', gàllú ‘bitter’, túllò ‘(not) any’ (< *túrù lò); at suffixal boundary, several perfective negative forms like bòl-lí 'did not go' (§10.1.3.9)
yy : yéyy-è: ‘sleep’; at suffix boundary, gíyy-ì-y ‘said to himself’ (<gě:)

Most examples of $\mu \eta$ and yy occur at the boundary between a verb stem and the mediopassive suffix (which is also used in reflexives and some reciprocals), and may be historically secondary (resyllabification of *ni: and *yi:), see §3.5.3.4.

### 3.3.12.3 Medial nongeminate $C C$ clusters

Homorganic nasal-voiced stop clusters are common medially. I transcribe $n j$ for homorganic [nd3].
$m b$ : nùmbó 'fall', dàmbá up', bòmb-é:- 'carry on back', yèmbè-lé ‘awaken (sb)', yàmbà-lá ‘damage (sth)', sع́mbè 'sweep', plural suffix -mbè in NPs;
nd : àndá ‘village’, dògòndó 'last’ (adj), gèndé 'look', kúndò 'put', gà:nd-દ́:- 'prevent', transitive suffix allomorph -ndv;
nj : mùnjú ‘thousand’, kùnjú 'coarse’, ùnj-é:- 'lie down', ìnjú ‘what?’, yògó-njì: ‘how?’;
ŋg : màngòró 'mango', gèทg-દ́:- '(sth) tilt', dòทgó 'push', dòngó 'pound (in mortar)', jángù jàngá 'go to school, study'.

All other medial clusters are uncommon within uncompounded stems except in borrowings, names, and the like. They include homorganic nasal plus voiceless stop (bànànkù tànná 'cassava'), liquid plus stop (kórgò 'fasting'), liquid plus nasal (bármà 'modern pot') and nonhomorganic nasals (kèmněy 'cotton'). Religious vocabulary includes tàbsí:rù 'unofficial sermon' and ná:flè 'surerogatory (optional) prayer'. Some additional clusters occur at morpheme boundaries, especially in compounds, but the inventory is limited by the restriction of word-final consonants to $\{\eta W y\}$ in the focal dialect.

An unusual nonhomorganic cluster $\eta b$ occurs in compounds and was recorded steminternally in dìgb-É:- 'follow'; see $\S 3.5 .5 .3$ for discussion of this word, and cases where a final nasal does assimilate to a following consonant.

A glance through the list of Donno So-speaking villages and surnames in $\S 1.2$ yields $n t$ (nàntúmmè, kòlúntànà), ŋk (sìnkánùmò), and rg (bàrgùmú ).

### 3.3.12.4 Medial triple $C C C$ clusters

Medial clusters of the type nonnasal sonorant plus homorganic nasal-voiced stop cluster occur in a few loanwords: wáyngè̀-nè 'butcher (n)'.

### 3.3.12.5 Final $C C$ clusters

No stem- or word-final consonant clusters have been found, except in unassimilated French words like disque. Even single consonants are limited to nasals (in this dialect, just $\eta$ ) and semivowels.

### 3.4 Vowels

The inventory is (10). Oral vowels are much more common than phonemic nasalized vowels. I recognize the latter only when not followed immediately by a nasal or nasalized consonants.
(10)

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

Long nasalized vowels occur in a few $C V:^{n}$ stems: gě:n 'steal', sô:n 'dip', sê:n '(animal) fat'. Short nasalized vowels occur in $\grave{j}^{n} h 5^{n}$ 'yes' and $\delta^{n} \uparrow \grave{j}^{n}$ 'no', and in tán $y y-\varepsilon ̀$ : 'branch out'. Perfective and imperative forms of $C v:^{n}$ verbs can be pronounced with reduced duration of the vowel, approaching $C v^{n}$, as in $g \hat{e}(:)^{n}$ 'steal!-2Sg'. It is not clear whether the absence of nasalized long or short $u$ and $i$ is accidental (there are very few stems with nasalized vowels) or principled.

### 3.4.1 Short and (oral) long vowels

There is no lexical distinction between $C v$ and $C v$ : verb stems. Stems of this type are basically $C v$ : . The imperative is $C \hat{v}$ :, with inconsistent realization of vowel length: kâ: 'shave!', tĥ: ‘sow!', d $\hat{\varepsilon}$ : 'insult!'. The long vowel is usually clear in the suffixed pluraladdressee form: ká:-ı̀̀ ‘shave!-2Pl'.

Some of these $C v$ : verbs have a monophthongal perfective, e.g. n $n-\grave{\varepsilon}$ 'ate (meal)' from fâ: . In principle this is realized with a long vowel as [nê:], but again the length of the vowel is not always clear. Suffixed forms include $1 \mathrm{Sg} n \grave{\varepsilon}-\grave{\varepsilon}-1$ ' 'I ate (meal)', realized as [nè(:) $\mathfrak{y}]$.
$C v$ : and $C v C$ are also minimal shapes for nouns, adjectives, and other non-verb words; see §3.2.1.
$C V$ is an acceptable shape for stative quasi-verbs, which are preceded by an NP, by the existential particle, and/or by a locational expression: $s \grave{\varepsilon}$ 'have' (§11.5.1.1), wò 'be (somewhere)' (§11.2.2.2). The quasi-verb 'be in' is interesting: yó tò with existential yv́, but tò: following more specific locational expressions (§11.2.3.1).

### 3.4.2 Nasalized vowels

Clearcut phonemically nasalized vowels occur in a very small number of $C v:^{n}$ stems whose initial consonant is not a nasal.

Verbs (all known cases): gě: ${ }^{n}$ 'steal', sô: ${ }^{n}$ 'dip', sê: ${ }^{n}$ 'douse (fire)', tâ: ${ }^{n}$ 'spread (sth) out'.
Nouns (all known cases): $\hat{\varepsilon}:^{n}$ 'soda ash', jî:n'fart (n)', kê: ${ }^{n}$ 'squirrel', k $\hat{\varepsilon}^{n}$ 'handcuffs', sìlèmmén 'folding knife', sê: ${ }^{n}$ '(animal) fat', sùn yî: 'thread'.

Adjectives (all known cases): $\hat{\varepsilon}:^{n}$ 'tight', sê: ${ }^{n}$ 'good'.
Expressive adverbials and similar (examples): tén $\rightarrow$ 'exactly', kán $\rightarrow$ 'wide open (mouth)', sî: ${ }^{n}$ (ǧ̌:) '(make) a derogatory sound with the lips'.

### 3.4.3 Initial vowels

The initial consonantal position in stems like $C v$ : $, C_{v} C v, C_{v} C v C v$ is not obligatory. Many verbs, nouns, and other stems begin with a vowel. There are no restrictions as to which vowel may be initial.

Examples are àndá 'village', $\varepsilon$ b́̀ 'buy', é 2Pl pronoun, óbò 'give', ذ̀bî: 'stepmother', ùnj-é:- 'lie down' and ìdú 'dog'. There are only a handful of cases involving long vowels: ă: 'who?', î: 'child', $\hat{\varepsilon}$ :. 'soda ash'.

### 3.4.4 Stem-final vowels

Any short vowel may occur word-finally in stems and/or suffixes. Among derived verb stems, the mediopassive can end in $-\varepsilon$ : , -e:, or $-i$ : (depending on the inflection and on the ATRharmonic class of the verb).

### 3.4.5 ATR harmony and Back/Rounding Harmony

Within noncomposite verb, noun, adjective, and numeral stems, the +ATR vowels $\{e o\}$ and the -ATR vowels $\{\varepsilon 0\}$ do not normally co-occur. There are a few exceptions involving the order +ATR then -ATR, the latter being word-final after a nasal consonant. This is consistent with the fact that human singular -nv suffix on nouns and causative suffix $-m v$ on verbs have -ATR vowels $\left\{\begin{array}{lll}\varepsilon & a\end{array}\right\}$ even after +ATR stems.

The logophoric pronoun njèm $\varepsilon$ ( $\S 18.3 .1$ ) is one disharmonic example. Another is sìlèmmé 'folding knife, razor'. kólòmm̀̀ 'burrgrass (Cenchrus biflorus)' is a puzzling case; the ending looks like 1 Sg possessor $\grave{\mathrm{m}}$-moे but it is not, at least synchronically. Curiously, the less common but closely related Cenchrus prieurii is called kúlùmmふ̀, which does not violate ATR harmony.

There is no regular phonological rule changing +ATR to -ATR after nasals, cf. émè 'milk (a cow)', yímè 'die', támòrò 'date (fruit)', kómmò 'lean (emaciated)'.

ATR harmony generally extends to verbal derivational suffixes, whose vowels can be predicted from the stem vowel. As noted, causative $-m_{v}$ is an exception and does not allow +ATR quality.

High vowels $\{i u\}$ freely co-occur within stems with either +ATR or -ATR vowels of the same back/front and rounding features. The regular vowel sequences in verb stems whose first syllable has a high vowel are $i_{-} e, i_{-} \varepsilon$, $u_{-} o$, and $u_{-} \rho$. At word-level, suffix $-u$ or $-i$ may be added to verbs with any vowel quality in the preceding syllable.

The low vowel a patterns with the -ATR vowels. This is seen in mediopassive verbs, whose derivational suffix appears as $-\varepsilon:-$ rather than -e:- after stems with $a$-vowels: dànn-


Stems also generally respect Back/Rounding harmony, so that $\left\{\begin{array}{lll}\text { oo }\end{array}\right\}$ and $\left\{\begin{array}{l}\text { e e } \varepsilon\}\end{array}\right\}$ do not easily combine. However, there are some frozen mediopassives like sóyy-è:- 'speak' that respect ATR but not back/rounding harmony and that seem to be turning into unsegmentable stems (sóyyè). There are also a few cases of $\rho \varepsilon$ and oe diphthongs, either in stems (jóè 'bottom') or in perfective verb forms of $C$ : and $C o$ : verbs.

In the perfective paradigm of verbs, the E-stem always ends in $e \sim \varepsilon$ in the otherwise unsuffixed 3 Sg subject form, even when the preceding syllable has a back/rounded vowel as in kómm-è- $\varnothing$ 'he/she became skinny', never \#kómm-ò- $\varnothing$, which would be homophonous
with imperative kómmò. However, the $1 \mathrm{st} / 2$ nd person forms are optionally harmonized: kòmm-è- $\eta$ ~ kòmm-ò-ŋ̆ ‘I became skinny’.

Imperfective negative $-\grave{\ell} l \grave{\varepsilon}$ does not harmonize with the stem, either for ATR or back/rounding. It combines with all $C v(C) C v$ stems as $C v(C) C \varepsilon-\varepsilon l \varepsilon$, regardless of the ATR or back/rounding features of the first vowel.

Back/Rounding Harmony can also work syllable-internally in combinations involving suffixes and clitics. For example, 2 Sg subject suffix $-\grave{W} \sim-\bar{W}$ on verbs and imperfective subordinator $-\grave{W}$ induce optional rounding of a preceding $\varepsilon$ to $\rho$, e to $o$, or $i$ to $u$. This affects many verb forms, for example all 2 Sg forms of E-stem perfectives, imperfective negative - $\grave{\varepsilon} l \grave{\varepsilon}$ (as in $2 \mathrm{Sg}-\bar{\varepsilon} l \grave{j}-\grave{W}$ ) perfective negative $-l \overline{1}$, and imperfective $-d \bar{\varepsilon}$. Definite clitic $=g \grave{~ o p t i o n a l l y ~}$ contracts to $=\grave{j}$, and then contracts with any stem-final short vowel as [ $0 \cdot$ ], written $\ldots \rho=0$. Because definite $=g \grave{\grave{j}} \sim=\grave{o}$ is also regularly added to participles (verb forms in relative clauses), and these participles are usually segmentally identical to any of the inflected verb forms mentioned above (including the aspect-negation suffix), participles also often show back rounded vowels, e.g. imperfective $-d \grave{\jmath}=g \grave{\jmath} \sim-d \grave{\jmath}=\grave{\jmath}$ for main-clause $-d \grave{\varepsilon}$. The vocalism of such participles is at various stages of morphologizing the back rounded variants, creating an unstable synchronic situation.

### 3.4.6 Diphthongs

Sequences like syllable-final aw and ay are structurally similar to e.g. ap, i.e. a vowel plus a sonorant coda.

More interesting are the tightly knit diphthongs $\rho \varepsilon$ and $o e$, where neither element is particularly more syllabic than the other. There is no hiatus. These diphthongs occur primarily in perfective forms of monosyllabic Co: and Co: verbs, but I can also cite the noun jóè 'bottom, base'.

By contrast, the combination of the mediopassive suffix, in the variant $-i$, with a following vowel-initial suffix involves a syllable break (hiatus), though not a glottal stop: mà:ndùg-í-̇llè ‘does not think'.

### 3.4.7 Vocalism of verb-stem alternations

Vocalic alternations within verb stems are limited to stem-final position. Verbs do distinguish a lexically basic form (used before most aspect-negation suffixes, and therefore here called the presuffixal stem) from either an E-stem or an I-stem used in the perfective positive (§10.2.1.1). For a vestigial A-stem, see §15.2.2.8.

### 3.4.8 Vocalic sound symbolism

Vocalic mutations within a word-family, especially bisyllabic and longer verbs, are fairly common in Dogon languages. Since all verb stems in DS have a non-high vowel $\{e \varepsilon$ a o o $\}$, $e$ and $\varepsilon$ are diminutive, for example denoting a small-scale or gentle version of an action type. The following have been noted:
a. gògòdó 'gnaw at'
gègèdé '(mouse) nibble at'
b. pádò-gふ̀l̀ 'crush (bone), squash (sth)'
pódò-gòlò 'squash (e.g. frog) violently'
pédè-gèlè 'crush (bone) into small pieces’
c. dòngó 'push, shove'
dòngó 'pound (grain, in mortar, with pestle)'
dà̀gá 'patch (garment)'
dèngé 'tamp down on (with foot or hand)'
d. póllò 'snap, break in half (cassava, baguette)'
pállà 'snap (rubber band, etc.) by pulling both ends'
péllè 'pull or break off (small piece)'
péllè 'pull or break off (small piece)'
e. lállà 'pull or yank off (chunk, branch)'
léllè 'pull or break off (small piece)
Further examples involving expressive adverbials are in §8.4.7.1.

### 3.5 Segmental phonological rules

### 3.5.1 Trans-syllabic consonantal processes

None observed. There is no progressive nasalization-spreading.

### 3.5.2 Vocalism of suffixally derived verbs

### 3.5.2.1 Suffixal Vowel-Spreading

Some derivational suffixes on verbs have unspecified vowel quality, and adopt their surface quality by spreading from the left. Examples are reversive $-l_{V}$ (§9.1), transitive allomorphs $-n d v,-l v$, and $-r v$ (§9.4), both syllables of suffix $-g_{v} l v$ (§9.2.2), and stative negative -lv́ (§10.4.2). The surface vowels are never high $\{i u\}$ since these do not occur as stem-final segments in verbs.

Causative $-m v(\S 9.2)$, the very limited passive $-m v(\S 9.3)$, and hortative $-m v$ are different in that they are prespecified as -ATR. They can therefore appear as $-m a,-m \varepsilon$, or $-m o$ but not as \#-mo or \#-me.

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

### 3.5.3.1 Vocalic epenthesis (absent)

There are no epenthetic vowels. The only consonant clusters that occur at compound or stemsuffix boundaries are easily pronounceable with at most small adjustments (nasal assimilation).

### 3.5.3.2 Syncope (unproductive)

Syncope is not productive but there are some cases involving the medial syllable in CvCvCv combinations (words or noun-postposition combinations), where $C_{2}$ is a sonorant:
gìné 'house' is syncopated in the high-frequency PP gín da: 'at/in the house(s)', by extension 'in the village' (as opposed to the fields or the outback).

Logophoric pronoun ǹjèmé tends to syncopate in plural ǹjěm-bè (suffix -mbè) and possessive ǹ̀jěm-mò. The flanking m's may have favored the syncope.
jòmmó 'ride (horse)' or 'drive (motor vehicle)' may be derived from *jòbò-mó, causative of j$\grave{\mathrm{b}} \mathrm{b}$ 'run', via syncope and $* \mathrm{bm} \rightarrow \mathrm{mm}$.

A few irregular verbs that have $C v C v$ shape in some inflections have a $C v C$ form in others. Four high-frequency $C v l v$ verbs like bòló 'go', and one $C v n(v)$ verb kán(à) 'do', have perfective negatives of the type $C v C$-lí (bòl-lí, kàn-lí).

In màr(ù)p̌̌: 'rifle', a regional loanword ultimately from Arabic and occurring as malfa in some local languages including Songhay, it isn't clear (synchronically) whether the base form is trisyllabic or bisyllabic, and therefore whether the alternation is due to syncope or to epenthesis (after a tap).

### 3.5.3.3 Apocope (unproductive)

There is no systematic apocope (word-final vowel-deletion).
For ŋ̀gó-nì ~ ŋ̀gó-ǹ 'here' and similar forms see §4.4.3.1 and §8.2.2.
The alternation of prohibitive $-W^{\prime}$ and its plural-addressee counterpart -gí- $\grave{\eta}$, cf. imperative plural-addressee $-\eta$, suggests a combination of spirantization and apocope from *-gí to $-W^{\prime}$ (§10.6.1.3). However, neither process is productive and the alternation is now certainly allomorphic.

### 3.5.3.4 Palatal Coalescence

A number of mediopassive verbs have a stem-final yy or $n \eta$ before the mediopassive suffix, which is $-\varepsilon$ :- ~ -e:- (depending on stem ATR value) in some inflections, and $-i$ : in others. Examples are dànn- $\varepsilon$ :- 'sit', wદ̀yy- $\varepsilon$ :- 'winnow in wind', sóyy- $\varepsilon$ :- 'speak', and yéyy-è: ‘sleep'. In some cases where the mediopassive verb is derived from a $C v$ : verb, the yy is arguably epenthetic, see $y$-Epenthesis $\S 3.5 .4 .6$.

When - $:-\sim$-e:- occurs before a vowel-initial suffix (imperfective negative - $\grave{\varepsilon} \ell \grave{\varepsilon}$, past anterior subordinator -à:), it raises and shortens to -i- by Prevocalic V-Raising (§3.5.6.1). In cases like kígùl-ì-èlı̀ 'does not go back' there is no further change. However, -i-created in this way tends to coalesce with a preceding $n \eta$ or $y y$. Pronunciations approximating the regular dànn-í-èlè 'does/will not sit', wèyy-í-èlè 'does/will not winnow in wind', and sóyy-ì- $̀ l e ̀ ~ ' d o e s / w i l l ~ n o t ~ s p e a k ' ~ c o-o c c u r ~ w i t h ~ c o a l e s c e d ~ p r o n u n c i a t i o n s ~ l i k e ~ d a ̌ n n-~ \varnothing-\grave{\varepsilon l e ̀, ~}$ $w \varepsilon ̌ y y-\varnothing-\grave{\varepsilon} l \grave{\varepsilon}$, and sóyy- $\varnothing-\grave{\varepsilon} l \dot{\varepsilon}$. Historically, the gemination of yy and $\mu \eta$ in these stems may have originated due to ambiguities in segmentation of simple stem-final $*_{\mathrm{y}}$ or ${ }_{\mathrm{n}}$ before $-i$ or $-\varepsilon:-\sim-e:-$ (originally *-yع-), and then generalized.

In the case of /LH/-toned stems like 'sit' and 'winnow in wind', the coalescence also feeds Stranded-Tone Re-Linking (§3.7.4.4), resulting in an initial-syllable rising tone.

### 3.5.4 Processes affecting individual consonants

The second consonant $\left(C_{2}\right)$ in trisyllabic $* \mathrm{CvC}_{2} \mathrm{vCv}$, including suffixed $* \mathrm{CvC}_{2} \mathrm{v}-\mathrm{Cv}$, has been subject over time to various modifications, typically lenitions (including deletions). There are a few synchronic alternations but nothing productive.

### 3.5.4.1 Intervocalic l-Deletion

There are traces of a no longer productive process by which intervocalic *l was deleted, with the resulting vowel sequence contracting into a long vowel. The usual context for the process was $* \mathrm{CvlvCv}$, i.e. with $C_{2}=1$ in a trisyllabic or longer word, not in bisyllabic ${ }^{*} \mathrm{Cvlv}$. As a result, a few alternations of the type $C v l v$ versus suffixed $C v:-C v$ have been preserved.

Mediopassive verb mòl-દ́: '(group) come together, meet' has a transitive counterpart mò:-ndó 'assemble (a group)' with mò:- < *mòlò- (§9.4.4). Similarly, mediopassive kól-દ̀:- 'pour (water) on oneself’ corresponds to transitive kó:-rò < *kólò-rò, see (187c) in §9.4.2.

Four high-frequency $C V l v$ verbs ('go', 'come', 'pass', 'get') delete the 1 in their (irregular) imperfective forms of the type $C v:-j \varepsilon$. See §10.1.3.9.

### 3.5.4.2 Intervocalic Nasal-Deletion

For a few verbs, a $C_{2}$ nasal disappears when a transitive or causative suffix is added. The result is $C v:-(N) C V$ from $* C v N v-C v$. In some cases the suffix itself begins with a nasal that in some way reflects the nasality of the original second syllable.

For dànn-દ́:- 'sit down' and transitive dà:-ndá 'have (sb) sit, seat', and for ìnn-દ́:- 'stand up, stop' and transitive ì:-nd́́ 'stop, erect (sth)', see $\S 9.4 .3$. The prototypes for the transitives may have been *dànà-rá and *ìní-ré, parallel to numerous surviving transitive derivatives with -rv suffix (§9.4.2). The alternations are synchronically opaque, more so than with Intervocalic 1 -Deletion.

### 3.5.4.3 Intervocalic Tapping $(/ \mathrm{d} / \rightarrow \mathrm{r})$

Noninitial intervocalic $d$ frequently lenites to tap $r$ (IPA [ $r$ ]), much as in American English.
This is a significant synchronic issue for locative postposition dà: ~ rà:, which is closely phrased with a preceding noun or NP. The strongly predominant variant in my assistant's speech is rà:, but dà: occurs after a consonant or to avoid two consecutive rv syllables. For details and examples see §8.2.1.

Imperfective -dè is often heard as -rè in allegro speech, but my assistant corrects to -dè whenever queried.

The alternation between $-r v$ and $-n d v$ as transitive suffixes (the latter sometimes accompanied by Intervocalic Nasal-Deletion) is probably explained by the tapping of original *-dv when not blocked by a preceding nasal consonant.

### 3.5.4.4 $d \sim j$ alternation

The normal imperfective suffix is -dè. A few verbs have $-j \grave{\varepsilon}$. Except for kán- $j \grave{\varepsilon}$ 'does', all of the cases involve *Cvlv stems that simultaneously underwent Intervocalic $l$-Deletion in the imperfective, which tales the form $C v:-j \grave{\text {. }}$. See $\S 10.2 .2 .1$.

### 3.5.4.5 $\quad 1 \sim r$ alternation

For mediopassive dàl-દ́:- 'get dressed' and transitive dàrà-ndá 'dress (sb)', see §9.4.3.

### 3.5.4.6 $y$-Epenthesis

A possibly epenthetic yy occurs in a number of mediopassive verbs including dùyy-દ́:- 'carry on head', jòyy- $\varepsilon$ :- 'hide (oneself)', and jùyy-é:- '(sth) flip over'. If an agent is added the verb takes transitive form (suffix -rv), with the yy absent: dù:-ró 'put (load) on (sb's) head', jò:-ró 'hide (sb, sth)', and jù:-ró 'flip (calabash) over'. Stative derivatives have a single $y$, hence dǔ:yò 'be carrying (sth) on one's head', jǒ:yò 'be hidden', and jǔ:yò 'be upside-down'. For a fuller list see of relevant mediopassives see $\S 9.4$.

A similar case is the verb sóyy-દ̀:- 'speak', compare the related noun sǒ: 'words, talk'.
One option is an epenthesis rule inserting $y$ or $y y$, and assuming lexical /dǔ:/, /sô:/, etc. for the verbs. The other is to have lexical /dùyó/, /sóyò/, etc., have one rule geminating it in mediopassives (where the semivowel coalesces with the following nonlow front vowel of the mediopassive suffix), and have a second rule deleting /yv/ before transitive -rv. The phonology is opaque and a more surface-y stem-to-stem relational network would work better than underlying to surface derivations.

### 3.5.4.7 $/ 1 / \rightarrow n$ after nasalized vowel

/l/ becomes $n$ in the common predicate $s \hat{e}:\left({ }^{n}\right)=n a ̌:-\varnothing$ 'it isn't good' from sê: ${ }^{n}$ 'good' (§6.3.3.3). This is pronounced [sê:nà:] with no extra nasalization of the e: over and above the usual subphonemic nasalization before a nasal, so in effect the nasal feature on the vowel is absorbed by the consonant.

In verbal morphology, the relevant forms are those with perfective negative -lí after a $C v:^{n}$ verb. An example is gě: ${ }^{n}$ 'steal', gè: $\left({ }^{n}\right)$-ní 'did not steal'.

This nasalization of /l/ does not happen after a nasal consonant, where $/ \mathrm{yl} /$ outputs $n l$ with just point-of-articulation assimilation and where the one case of pre-surface $/ \mathrm{nl} /$ (due to syncope of 'do') is unchanged. Examples are úlù-n = lǎ:- $\varnothing$ 'it isn't/they aren't (the) children' and kàn-lí ‘did not do’.

### 3.5.5 Local consonant cluster processes

### 3.5.5.1 Intervocalic alternations of $N C$ with simple nasal

For nìné 'be afraid' versus causative nìndù-mś 'frighten, scare', see (180d) in §9.2.1. Tommo So causative nígí-ndé 'scare' suggests that the DS causative is etymologically a double causative with causative $-m v$ superimposed on an already causative form.
pí:ndè 'shut (door)' has a variably pronounced reversive pínè-lè ~ pínè-lè 'open (door)', cf. also augmented stative pr:tpè '(door) be shut'. On the reversive see (178f) in §9.1. Cognates include Tommo So pií-ndé 'shut (door)' and reversive píl-lé 'open (door)'. The morphology is synchronically non-transparent, but DS pí:ndè likely contains an original -ndv suffix (§9.4.3-4) that is absent from the reversive (and stative).

A few alternations of the type $m b \sim m$ have been observed in $C_{2}$ position in the context of derivational suffixation. For yèmé 'wake up' versus yèmbè-lé 'awaken (sb)', and yàmá 'be ruined' versus yàmbà-lá 'ruin (sth)', see §9.4.5. These alternations are unexpected since usually $C_{2}$ is lenited when a suffix is added to make the stem trisyllabic; here the trisyllabic stem has the heavier $N C$ cluster in $C_{2}$ position.

A somewhat opaque case is $t \varepsilon ́:-n d \grave{\varepsilon}$ 'cover with lid' and reversive témmè- $\bar{\varepsilon}$ 'take lid off', cf. nouns témmùrù 'lid of waterjar' and té:ndù 'lid of cooking pot'. For 'cover with lid', cognates include Tommo So tímmé, Jamsay tímné, and Dogul Dom tímbù-rù.

### 3.5.5.2 Intervocalic alternation of mm with m

Medial geminated $m m$ is degeminated to $m$ in verbs derived from two adjectives. Either the heaviness of the overall stem or the presence of another nasal $n$ seems to have degeminated the nasal.

Adjective èmmú 'cramped, confined (space)' has two inchoative verbs: émm-è: and émè-nd-è: , both meaning 'become cramped', see (193) in §9.5.

For kómmò 'lean (emaciated)' I recorded an unsuffixed inchoative kómmò 'become lean', but factitive kómò-mò 'cause/let (animal) become lean', with degemination only in the latter.

### 3.5.5.3 Nasal Assimilation

The only stem-final consonants in the focal dialect are $\eta$ and semivowels $\{w y\}$, so there is little need for $C C$-cluster assimilation processes.

Velar $\eta$ is tolerated before labials. $\eta b$ occurs in dì $b-\varepsilon$ : - follow, an etymologically difficult form that may have once been composite (Toro Tegu dìgú and Ben Tey dìmbì-yí are representative of many potential cognates showing a mix of velar $g$ and labial mb ). It functions synchronically as a simple mediopassive. $\eta b$ is also tolerated at compound boundaries: này-bédè 'hot coal, ember'.

However, $\eta$ does assimilate its point of articulation to coronals at boundaries, except in careful pronunciation: năy 'sun' in nàn-[númbò-lò] 'sunset' and nàn-[túmbò-lò] 'sunrise'.

Though not shown in my (normalized) transcriptions, this assimilation can also happen before postpositions lè and dà: , and to a lesser extent any other coronal-initial word, in tightly connected phrases. Thus jân 'well-being', PP jây lè '(being) well', pronounced with [nl]; děy 'waterjar', děy dà: 'in (a/the) waterjar', pronounced with [nd].

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

### 3.5.6.1 Prevocalic V-Raising

In verbs, a mid-height long vowel is shortened and raised to the homorganic high vowel in some combinations involving V-initial suffixes. The process, which bleeds VV-Contraction (see below), applies to $C v$ : stems ( $C e$ : , $C \varepsilon$ : , $C o:, C o:$ ) and to suffixed mediopassives with $-\varepsilon: \sim-e:(\sim-i:)$, in either case when they are followed immediately by imperfective negative $-\grave{\varepsilon} l \grave{\varepsilon}$ or by past anterior subordinator -a .

$$
\begin{equation*}
\text { stem } \quad \text { with }-\grave{\varepsilon} l \grave{\varepsilon} \quad \text { with }-a: \quad \text { gloss of stem } \tag{12}
\end{equation*}
$$

a. monosyllabics

| $d \varepsilon ̌:$ | dì-Élè | dì-â: | 'insult' |
| :---: | :---: | :---: | :---: |
| tê: | tí-èlı̇ | tí-à: | 'send' |
| dǒ: | dù-દ́lè | dù-â: | 'arrive' |
| gǒ: | gù-દ́lè | gù-â: | 'go out' |

b. mediopassives
dànn-દ́:- dànp-í-દ̀lદ̀ dànn-í-à: 'sit'
kígùl-è:- kígùl-ì-èlè kígùl-ì̀à: 'go back'
The vowel sequences in these forms are optionally improved by a fleeting epenthetic semivowel, often $y$ even in the $u$-a: cases. But the epenthesis is unsystematic and the forms can be pronounced essentially as shown.

Stem-final short vowels do not undergo this process; instead, they contract with a suffixinitial vowel (see just below).

For variants like dănn- $\varnothing$-غ̀l $l$ see Palatal Coalescence (§3.5.3.4) and Stranded-Tone ReLinking (§3.7.4.4).

### 3.5.6.2 VV-Contraction

A case can be made for one or more VV-Contraction processes, but in verbal morphology there are some difficulties in formulating it.

For nouns and other NP-final words, the obvious case is definite clitic $=g \grave{\partial}$, which has a common variant $=j$. The latter contracts with any stem-final short vowel as long 0 :
 definite nà $\mathfrak{y}$ á $=$ g̀ or nàyó $=\grave{j}$ 'the cow'. After a long vowel (or a consonant), only uncontracted $=g \grave{o}$ is allowed: $\hat{\imath}:=g \grave{\jmath}$ 'the child', àn-nà pàd $\hat{\varepsilon}:=g \grave{\jmath}$ 'the bad man'.

The closest analogue to this in verbal morphology is the imperfective negative with suffix - $̀ l$ è. It contracts with any preceding final short vowel of a nonmonosyllabic stem (all examples involve nonhigh vowels) as [ $\varepsilon: 1 \bar{\varepsilon}]$, transcribed $\varepsilon-\varepsilon \grave{\varepsilon} l \grave{\varepsilon}$, as in tómbè- $\grave{\varepsilon} l \grave{\varepsilon}$ 'does not jump' (< tómbò) and yàbé- $̀ l$ ' 'does not accept' (< yàbá ). The suffix may also follow Cv: stems (nonlow vowels) and mediopassives with suffix allomorph $-i$ : The $C v$ : stems divide into $C a$, which combines as Ca:lè (transcribed Ca-alè), and stems with mid-height vowels, which raise and shorten to $\{i u\}$ before $-\grave{\varepsilon} l \bar{\varepsilon}$, see Prevocalic V-Raising §3.5.6.1. Mediopassive -i: also shortens to $-i$ - to produce $-i-\varepsilon ̀ l \varepsilon ̀ . ~ E x a m p l e s ~ a r e ~ k a ́-a ̀ l \grave{~ ' d o e s ~ n o t ~ s h a v e ' ~(<~ k a ̂:), ~ g u ̀-\varepsilon ́ l e ̀ ~}$
'does not go out' (< gǒ:), dì-દ́lغ̀ 'does not insult' (< dと̌:), and mediopassive dànn-í- $̀$ l̀̀ 'does not sit'.

The mediopassive suffix has allomorphs -e:- $\sim-\varepsilon:-$ (ATR-harmonizing) and $-i:-$, depending on the inflectional category. All allomorphs contract with a preceding stem-final vowel. Usually the stem is bisyllabic or longer and the stem-final vowel is short, as we can verify when the unsuffixed stem also occurs independently. The stem-final vowel is absorbed
 oneself, have oneself cared for'; yàbá 'accept', mediopassive yàb-દ́:- ~ yàb-í:- 'accept oneself'. Given the pattern seen above by which $V_{1} V_{2}$ with two short vowels usually contracts as $v_{2}$ : , one could argue that the mediopassive allomorphs have underlying short $e, \varepsilon$, or $i$ and contract with the stem-final vowel to form the observed long vowel.

There is a process of augmentation affecting verb stems by which an original *Cv̀-Cv́... reduplication has contracted to $C \check{v}: \ldots$. Synchronically this is now a first-vowel lengthening process, so it is not necessary to model it by means of VV-Contraction.

In all cases so far, VV-Contraction has resulted in a long vowel. However, there are two other verb forms where we might posit a VV-Contraction rule that produces a short vowel. These are the perfective, whether E-stem or I-stem, and the chaining form. The perfective of nonmonosyllabic nouns ends either in $e \sim \varepsilon$ (E-stem) or in $i$ (I-stem), depending on the verb:
 bare stem (jòbó 'run') and are not at issue, but others end in $u$ (yàb-ú 'accept'). We may disregard monosyllabic stems with chaining form $C v-y$.

If we derive perfectives and chaining forms by addition of a suffixal vowel, the base forms are /jóbò-è/, /yábà-ì/, /yàbá-ú/, and we must then allow VV-Contraction to produce short vowels. The alternative is to take the E-stem, I-stem, and U-stem (chaining form) as ablaut mutations of the lexical stem.

Other contractions may have occurred historically in some of the more archaic nominal diminutives, whose underlying forms are nontransparent (§5.1.6). However, productive compounds with -î: 'child' do not contract.

### 3.5.7 Local vowel-consonant interactions

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

2Sg-subject suffix $-W$ on verbs and other predicates tends (unsystematically) to convert a preceding $\varepsilon$ to $\rho$ (E-stem perfectives, also imperfective -dè and imperfective negative $-\bar{\varepsilon} l \grave{\varepsilon}$ ) and a preceding $i$ to $u$ (I-stem perfectives, also perfective negative -lí). See the paradigms in chapter 10 for examples.

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

Word- or syllable-finally, there is no clear distinction between $i y$ and $i$, or between $u w$ and $u$ : . In cases where the morphological structure points to $i y$ or $u w$ rather than to a long vowel, Monophthongization applies.
/iy/ $\rightarrow i$ : occurs in I-stem perfective $t i ́-y ̀$ 'sent' from tê: 'send', parallel to e.g. perfective yó-ỳ ‘went in’ or ká-ỳ ‘shaved’, see (217) in §10.2.1.1.
/uw/ $\rightarrow$ u: occurs in 2 Sg subject perfective negative /-lí-w/ $\rightarrow$ /-lí-ẁ/ $\rightarrow$-lú-ẁ. Monophthongization is fed by the intervening rule Vowel-Semivowel Assimilation (see the preceding section).

### 3.6 Cliticization

Typologically, clitics may be mobile or phonological. The latter are elements that occur in the syntactically correct linear position but that are phonologically phrased like suffixes on the preceding or following word (the "host").

The best case for mobile clitics is subject pronominals that immediately precede the final verb in a relative clause. These pronominals have the same form as independent pronouns but have arguably moved from their regular clause-initial position. They are in complementary distribution to pronominal-subject suffixes on verbs, which do not occur in relative clauses. The subject pronominals could be considered to be proclitics to the final verb based on their linear position, but there is no systematic phonological interaction between proclitic and verb.

The 'it is' morpheme $=\eta$ and its negative counterpart (§11.2.1.1-2), the accusative morpheme $=\eta$ (§6.7), the definite morpheme $=g \grave{\jmath} \sim=\grave{\jmath}$ (§4.4.1), and the conjugated past morpheme $=b e ̀(\$ 10.5 .1)$ are the best candidates for phonological enclitics, i.e. following rather than preceding their hosts. There is no reason to think that they have moved, but they are pronounced much like suffixes on the preceding host. The first two are realized as syllabic codas after fusing with the host, and both of these are added at the end of full NPs. The definite morpheme is etymologically a reduced demonstrative, and it often contracts with the final vowel of the host to form a long $\Omega$ : The past clitic, although syllabic, is closely fused morphologically to the preceding verb. See the sections cited for examples and discussion.

### 3.7 Tones

Syllables may have $\mathrm{H}[\mathrm{igh}], \mathrm{L}[\mathrm{ow}],<\mathrm{HL}>,<\mathrm{LH}>$, or rarely $<\mathrm{LHL}>$ tones. For $<\mathrm{LHL}>$ I can cite ă: 'who?' (§13.2.2.1) and combinations like = lă:--ो ('it is not' clitic plus 2Pl suffix) and nŏ:-Ẁ ('drink' plus subordinator). Contour tones $\langle\mathrm{HL}\rangle$, <LH $\rangle$, and $<$ LHL $>$ are confined to monosyllabic words and to word-final heavy (bi- or trimoraic) syllables. Word-final heavy syllables ( $C v C, C v$ : , etc.) can be L-toned but cannot be entirely H -toned (an H-tone must choose which mora to fall on).

### 3.7.1 Lexical tone melodies

### 3.7.1.1 One H-tone in each stem

Each lexical stem (verb, noun, adjective, numeral) has one lexically H-toned syllable or mora. That is, /L/ lexical melody is excluded. Exceptions to this exclusion include grammatical particles and stative quasi-verbs: sè 'have', wò 'be', nàmà 'want', etc. However, even these quasi-verbs have some forms (especially participles) suggesting a latent H -tone.

At word-level there is also generally just one H -tone, with a few exceptions involving nominal compounds and morphologically complex hortatives and periphrastic verb inflections which may have two tones. A few expressive adverbials are all-L-toned (§8.4.7).

DS differs from most Dogon languages in limiting the H -tone to a single syllable within a word.

### 3.7.1.2 Lexical tone melodies of verbs

All regular verbs are lexically /HL/ or /LH/. In a pitch-accent model, this means that the accent is either initial or final. In some inflected and derived forms, such as the perfective and perfective negative and some deontic modals, the lexical melody is erased by tone overlays (tonomorphology). Inflected forms that do reflect the lexical melody include the imperfective (positive) and imperfective negative. The latter is most useful for determining the melody because it is not subject to the augmentation process that can affect imperfective positives, and because it is less likely to undergo clause-final tone-dropping due to downdrift. The chaining form also preserves the lexical melody distinction.

Examples of /HL/ are nâ: 'eat (meal)', kédè 'cut', and kígùl-è:- 'return, go/come back'. The chaining forms are nâ: , kédè, and kígùl-ì-ỳ. The imperfective negatives are ná-àlè, $k \varepsilon ́ d \grave{\varepsilon}-\grave{\varepsilon} l \bar{\varepsilon}$, and kígùl-ì-દ̀lè. As these forms show, the lexical H -tone is realized on the onset, and later syllables are L-toned.

Examples of /LH/ are gǒ: 'exit, go/come out', yàbá 'accept', and yàgìl-દ́:- 'reply'. Chaining forms are gǒ:, yàb-ú, and yàgìl-ì-ý. Imperfective negatives are gù-દ́lè (arguably $</$ gòó- $\grave{\varepsilon} l \grave{\varepsilon} /$ ), yàb $\varepsilon$ - $\grave{\varepsilon} l \grave{\varepsilon}$, and yàgìl-í- $\grave{l} l \grave{\text {. As }}$ As these forms show, the H-tone is realized as far to the right as the stem allows, but does not reach the suffix proper except in contracted forms like gù-દ́lè.

As in many other Dogon languages, all stems beginning with a voiceless obstruent are $/ \mathrm{HL} /$-toned, and all those beginning with a voiceless obstruent are $/ \mathrm{LH} /$-toned. By contrast, those beginning with a sonorant have a lexical choice between $/ \mathrm{HL} /$ and $/ \mathrm{LH} /$ : yímè 'die' but yàbá 'accept'.

V-initial stems include /HL/-toned ábà 'catch', óbò 'give', ábàrà 'lay out', and $\varepsilon$ ह́bè 'buy', and /LH/-toned ùró 'skin and butcher'. The /HL/-toned type predominates.
'Bring' and 'convey, take (away)' are more or less fused verb chains. If treated as units, some of their forms will require recognition of an $/ \mathrm{HLH} /$ lexical melody (§10.1.3.10-11).

### 3.7.1.3 Lexical tone patterns for unsegmentable noun stems

Noncomposite noun stems may have/HL/, /LH/, or /LHL/ as basic lexical melody. /LH/ is particularly common in all syllabic shapes. In monosyllabics, the pitch decline for /HL/ stems is not always audible.

The lexical melody is heard in isolation, before a numeral, or before a postposed possessor. It is erased by a following adjective, demonstrative, or relative clause, or by a preposed possessor, all of which impose an overlay $\{\mathrm{L}\}$. Some examples of the melodies follow.
/HL/: kû: 'head', bôy 'name', írù 'milk', ódù 'road', tóyùnù 'red kapok tree (Bombax)', ségètèrè 'tree sp. (Commiphora)', tóクòǹ̀:jò ‘duck';
/LH/: 万̌: ‘well (water)', pòlú 'knife', gìnદ́ 'house', દ̀mmé 'sorghum', kè:lદ́ 'money; cowry', tà:bǒy 'puffball', kùmbǎ: 'fig tree sp.', ògùlú ‘outback, the bush’;
/LHL/: ǹnâ: 'viper (Bitis), sàdâ: 'bird', tàrâ: 'hyena', gìrî: 'eye(s)', ŋ̀gábù 'hippo', nănsà 'cidada', tègúrù 'clapping, applause', pèdínè 'a spice (Xylopia)', ènjégè: 'herb sp. (Achyranthes)', sànàkénè 'sweet sorghum'.

Lexical melodies for nouns and other non-verb words pay no attention to the initial consonant. The pitch range within the syllable is greater for $/ \mathrm{HL} /$ and especially $/ \mathrm{LH} /$ than for /LHL/, which in monosyllabics sounds almost level.

Monosyllabic nouns divide into tone-melody groups as follows ( $L$ in $C v L=$ sonorant):
a. /HL/
(C) $)_{\text {: }}$ stems: $\hat{1}$ : 'child', $\hat{\varepsilon}:^{n}$ 'soda ash', bâ: 'day/night transition', dô: 'paper', jî: ${ }^{n}$ 'fart (n)', k $\hat{\varepsilon}^{n}$ ' 'handcuffs', kû: 'head', dî: 'water', n̂̂: 'blood', yû: 'millet', dô: 'parasitic herb (Striga)', sê: 'tree sp. (Celtis)'
(C) ${ }_{V} L$ stems: bôy 'name', gề 'begging (n)', jâW 'fight (n)', jôn 'medical care', kêy 'black ant (Messor)'
b. /LH/
$(C)_{v: ~ s t e m s: ~ \check{: ~ ' w e l l ~(n) ', ~ d e ̌: ~ ' f a t i g u e ' ~(a l s o ~ d e ̀ y e ́ ~), ~ g e ̌: ~ ' t h o r n ', ~ k a ̌: ~ ' r o a n ~}}^{\text {( }}$ antelope', kě: 'bone', tě: 'granary', ně: 'trunkfish', ně: 'oil, butter', nǒ: 'medication', sǐ: 'kind, sort', sǒ: 'words, talk'
(C) ${ }_{V} L$ stems: ăy 'Nile monitor lizard', bǒy 'tomtom', děn 'waterjar', dǒy 'hip', dǒy 'pestle', jǎy 'flexible branch', jǔๆ 'fromager tree (Ceiba)', kěy 'shrub sp. (Strophanthus)', lǎy 'garlic' (< French), năy 'sun', něy 'honey bee', nǔy 'cowpea', sǒy 'horse', sǔy 'rope', tǒy 'seeds (for sowing)', tǎy 'ground'
c. /LHL/
$(C)_{V}$ : stems: ă: 'who?', sầ: 'man's sister', dâ: 'trust (n)', tû:: 'termite'
(C) $)^{\prime} L$ stems: dằy 'small', nằy 'fire', mồy 'laughter'
$/ \mathrm{HL} /$ and $/ \mathrm{LH} /$ are about equally common for $C v$ : , but $/ \mathrm{LH} /$ is more common for $C v L$. Tonal minimal pairs in (13): kêy versus kěy, bôy versus bǒy.

### 3.7.1.4 Lexical tone patterns for adjectives and numerals

An inventory of the basic modifying adjectives is given in $\S 4.5 .1$. Most are mono- or bisyllabic, with a few trisyllabics. The tone melodies are like those for nouns. A few examples are repeated here.
/HL/: wê: 'fresh (milk)', dây 'small', gên 'black', kómmò 'lean (animal)', púrùgù 'yellow', dógòdo 'heavy’
/LH/: tǒ: 'deep', mǎy 'dry', pàlá 'long', dùmbú 'short' or 'blunt', sògòló 'multicolored'
/LHL/: dầy 'small'
Numerals are listed in §4.6.1.2. Their tone melodies are like those of nouns and adjectives.
/HL/: kúlè: ' 6 ', gágàrà ' 8 '
/LH/: nă:y '4', tà:ndú '3'
/LHL/: lĕy '2'

### 3.7.1.5 Melody or pitch-accent?

Of the Dogon languages I have worked on, DS and Dogul Dom come closest to satisfying a pitch-accent (i.e. tonal accent) model. At the lexical level, each noncomposite stem (verb, noun, etc.) has exactly one H-toned syllable or mora. This can be handled by a model with an obligatory, one-per-word H-tone accent. At word-level too, after all phonological rules have operated, there is almost always exactly one H-toned syllable or mora, except when all tones have dropped due to tonosyntactic control or (in the case of clause-final verbs) downdrift.

The reason this model will work fairly well for DS is that it has no words with adjacentsyllable H-tones. In most other Dogon languages like Jamsay, a $C v C v$ word can be lexically /H/ $C$ v́Cv́, /HL/ $C$ v́Cv̀, or /LH/ $C \hat{v} C v ́$. A Jamsay-type system does not lend itself well to an accentual model, unless on arbitrarily treats one of the three types as lexically unaccented.

The difficulty with fully implementing a pitch-accent model in DS is that H-tone may appear on one mora or the other of a bimoraic syllable, as in gònと̌y 'elephant' and the abovementioned minimal pairs kêy versus kěy and bôy versus bǒy. Therefore DS cannot be compared to pitch-accent languages that are based on syllables rather than moras.

### 3.7.1.6 Candidates for lexically/L/-toned stems

There is no need to recognize any lexically /L/-toned stems. However, one could adopt an abstract analysis that posits such stems underlyingly, then equips them with an H -tone by a phonological rule. Presumably this would involve what I am calling/LH/-toned stems, taking the surface H -tone as secondary.

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

The issue here is the location of the tone break in /HL/- and /LH/-toned nouns when they are not subject to an $\{\mathrm{L}\}$ overlay.

For /HL/, the H-tone is heard on the initial syllable of nonmonosyllabics. For monosyllabics, the pitch decline is heard clearly only on the final mora, and it may not be audible at all if the word is followed by an L-tone.

```
/HL/ melody (nouns)
a. monosyllabic
\begin{tabular}{ll} 
kû: & 'head' \\
bôy & 'name' \\
kú: \(=\grave{\imath}\) & 'it's a head'
\end{tabular}
b. nonmonosyllabic
    írù 'milk'
    sé:rè 'witness’
    tó\etaùnù 'red kapok tree (Bombax)'
    tó\eta\grave{nò:jò 'duck'}
```

For $/ \mathrm{LH} /$, the tone break is as far to the right as possible, i.e. on the final mora if the final syllable is at least bimoraic.
a. monosyllabic
ว̌: $\quad$ 'well (water)'
kă: $\quad$ 'roan antelope'
b. nonmonosyllabic
light final syllable
pòlú 'knife'
kè:lé 'money; cowry'
ògùlú 'outback, the bush'
heavy final syllable
kùmbǎ: 'fig tree sp.'
tà:bǒy 'puffball'
gòněy 'elephant'
3.7.1.8 Tone-Component location for tritonal non-verb stems

In /LHL/ bisyllabics, if the first syllable is light and the final syllable is heavy, the output is L. $<\mathrm{HL}>$. In stems of three or more syllables, the H -tone is located on the penult.
(16) a. bisyllabic
$C v C v$ : and similar ǹnâ: $\quad$ 'viper (Bitis)'
sàdâ: 'bird'
tàrâ: 'hyena'
gìrî: 'eye(s)'
$C v: C v$ (uncommon type)
bŏ:nう̀ 'comrade', cf. bǒ: ‘kin’
CvCCv (uncommon type)
nănsà 'cidada'
b. trisyllabic

ग̀gábù 'hippo'
tègúrù 'clapping, applause'
jàpé:rè 'donkey's back padding'
ènjégè: 'herb sp. (Achyranthes)
c. quadrisyllabic
sànàkénè 'sweet sorghum'
This is also consistent with the common L.L-H.L pattern for (lexically) iterated nouns like mènè-ménè 'ants' (§4.1.6.1).

### 3.7.2 Grammatical tone patterns

### 3.7.2.1 Grammatical tones for verb stems

Verb stems are subject to tone overlays in some inflections. These overlays erase lexical tonemelody distinctions.
$\{\mathrm{L}\}$ overlay, i.e. tone-dropping, applies to stems before perfective negative -lí (and 3 Pl -r̀̀-nî). The effect is that /HL/-toned verbs lose their H-tone element: kâ: 'shave', kà:-lí 'did not shave’ (§10.2.3.1). Alternatively, we could think of a word-level $\{\mathrm{LH}\}$ overlay that includes the suffix. The same situation occurs in the $1 \mathrm{st} / 2 \mathrm{nd}$ person perfective (§10.2.1.1) and the prohibitive with suffix $-W$ (§10.6.1.3).

A clearer case of $\{\mathrm{LH}\}$ occurs in perfective participles (§14.4.1.1).
$\{H L\}$ overlay occurs in the third-person perfective forms (§10.2.1.1). The effect is that /LH/-toned verbs join /HL/-toned verbs in having a falling tone pattern: yàbìl-દ́:- 'reply', 3 Sg perfective yábìl-ì-ỳ, 3 Pl perfective yábìl-ì- $\varnothing$-yà. $\{\mathrm{HL}\}$ also occurs in agentive derivative (§5.1.5.1).

Verbs are subject to a morphophonological process, unique to DS among Dogon languages, that I call augmentation. For monosyllabics, this takes the form of an L-toned $C \grave{v}$ reduplication: gǒ: 'exit, go/come out', augmented gò-gó:-. For nonmonosyllabic stems, an original $* \mathrm{C} \grave{-}-\mathrm{Cv} \ldots$ reduplication has undergone contraction to $C \check{v} . .$. . In addition, the rest of the stem undergoes a tonal change. In the augmented perfective, the overlay on the original stem proper is falling: yàbìl-é:- 'reply', augmented perfective yǎ:bìl-ì-ỳ (<*yà-yábìl...). This is also the case with the augmented stative (§10.4.1). In the augmented imperfective, by contrast, the overlay is rising: pégèrè 'winnow by shaking', augmented imperfective pè:gèré-dغ̀ (<*pè-pègèré...).

### 3.7.2.2 Grammatical tone overlays for noun stems

The lexical melody of a noun stem is subject to the $\{\mathrm{L}\}$ overlay (tone-dropping). It is controlled by reference-restricting modifiers to the right (adjective, demonstrative, relative clause) or to the left (preposed possessor). A postposed pronominal possessor or a definite clitic by itself does not control $\{\mathrm{L}\}$, but there are certain combinations that contain them that trigger a noncompositional constructional tone overlay that also happens to drop tones on the noun. See $\S 6.1 .1$ for a summary of NP tonosyntax.

Nouns are also common as $\{\mathrm{L}\}$-toned compound initials (§5.1.2-3).

### 3.7.2.3 Grammatical tone overlays for adjectives and numerals

Adjectives and numerals are subject to tone overlays imposed by an external tonosyntactic controller: demonstrative, relative clause, or preposed possessor. They are also part of the target domain of certain constructional tone overlays; see §6.1.1.

Adjectives and numerals also occur as finals in bahuvrihi compounds (§5.2.1.1-2).

### 3.7.3 Tonal morphophonology

### 3.7.3.1 Autosegmental tone association (verbs)

Verbs have an /HL/ or /LH/ lexical melody, partially predictable from the initial consonant. There are various ways this can be modeled. One could, for example, take the H -tone in one or both categories as nonlexical, inserted by rule. This would require a lexically specified initial L-tone for stems with the $/ \mathrm{LH} /$ melody. Alternatively, we could take both H and L tones as part of autosegmental melodies, exactly as suggested by the /HL/ versus /LH/ notation.

The benefit of an autosegmental analysis is that the surface location of the H -tone in the /LH/ verbs shifts rightwards in some morphological combinations. For example, in the imperfective and imperfective negative, the H-tone appears on the stem-final syllable, before the inflectional suffix: yàbìl-દ́:- 'reply’, imperfective negative yàbìl-1́-દ̀lè. But in some other forms the H -tone is borne by the suffix, as in verbal noun yàbìl-è:-dú. That these forms present lexical, not grammatical tones is shown by comparison with /HL/-toned kígùl-è:- 'return, go/come back', imperfective negative kígùl-ì-èlè, verbal noun kígùl-è:-dù. The H-tone in $/ \mathrm{LH} /$ is also realized on derivational suffixes such as reversive $-l v$. It therefore suffices to demarcate the morphological domain to which the autosegmental melody attaches in order to generate the forms.

Of course the lexical melody is erased when a grammatical overlay is applied. However, the overlaid melody can also be treated autosegmentally.

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

Decimal multiples of single digits, e.g. ' 20 ' and ' 30 ', are given in $\S 4.6 .1 .3$. They consist of pélù ' 10 ' and the relevant single-digit numeral ' 2 ' to ' 9 '. pélù has the segmental variants $p \varepsilon$ :-, pe:- (by irregular ATR harmony), and in one case the full pelu- in these combinations.

The tone(s) of the ' 10 ' element polarize to the initial tone of the digit term. It is therefore L-toned in pè:-něy ' 20 ', pèlù-kúlè: ' 60 ', pè:-sôy ' 70 ', and pè:-gágàrà ' 80 ', but H -toned in pé:-tà:ndú ‘30', pé:-nă:y ‘40', pé:-ǹnó ‘50', pé:-tù:gó ‘90’.

### 3.7.3.3 Rightward H-Tone Shift from third-person perfectives to particles

Something superficially similar to tone polarization occurs with certain enclitic-like particles including $=y o$ ' if ', but only in the third-person perfective positive. The particle appears as $=y o ̂:$ after $\{\mathrm{L}\}$-toned third-person perfectives, as in pàd-ì- $\varnothing=y o ̂$ : 'if he/she abandoned' (cf. pád-ì- $\varnothing$ ‘he/she abandoned’). It appears as =yò after $\{\mathrm{LH}\}$-toned 1 st/2nd person perfectives, as in pàd-ì-ý= yò 'if you-Sg left', and as =yò in all other inflectional categories regardless of subjet category.

The same tonal alternation occurs in combinations of 3 Sg and 3 Pl subject perfective positives with any of the following: interrogatives mà $\rightarrow$ (§13.2.1.2) and $=l o ̀ \sim=l a ̀$ (§13.2.1.3), quotative wà (§17.1.3.1), and any inflected form of 'say’ (§17.1.2). In quotations, otherwise conjugated verbs are stripped of their pronominal-subject suffix (which reappears in a clause-initial quotative subject phrase), the result is a form identical to the regular 3 Sg (zero) perfective positive, and this form is treated tonally just like the regular 3 Sg form (i.e. the tone shift occurs). Thus [ú wà] pàd-ì gí-y- $\varnothing$ 'he said that you abandoned' (elsewhere
gì- $y$ - $\varnothing$ after a quotation) from pád-ì. With a non-third-person subject of 'say', we have [ú wà] pàd-ì gì-y-1́ ‘I said that you abandoned'.

Since third-person perfectives have an initial H-tone in isolation (pád-ì- $\varnothing$ etc.), a reasonable analysis is that this H-tone shifts rightward onto the following particle or 'say' verb. If the particle or 'say' verb is otherwise L-toned, it grows an initial H-tone. If the particle or 'say' verb already has a H-tone (initial or final), the shifted H-tone fuses with it and there is no audible change (as with $g i ̀-y-\eta$ 'I said').

### 3.7.4 Low-level tone rules

### 3.7.4.1 Contour-Tone Mora-Addition

Single-syllable contour tones $<\mathrm{HL}>$ and $<\mathrm{LH}>$ require at least two moras in DS, so if a monomoraic syllable were to carry a contour tone it would have to lengthen. The only actual alternation of this type is the combination of a word-final $C$ v́ syllable with the final L-tone added to verbs in polar interrogatives (§13.2.1). An example is yèl-lí- $\varnothing$ 'he/she did not come' versus interrogative yèl-lî:- $\varnothing$ ‘didn't he/she come?'.

### 3.7.4.2 Final High-to-Rising Tone

A final H-tone preceded in the word by an L-tone associates with the final mora of the last syllable. In many cases this already happens at stem level: gòyěy 'elephant', where it is understood that the pitch rise is on the final semivowel: [gòyと̀j].

This constraint applies especially to cases where a stem- or suffix-final $C v$ is followed by an atonal suffix or clitic consisting of a sonorant (e.g. $1 \mathrm{Sg}-\eta, 2 \mathrm{Sg}-W$, 'it is' clitic $=\eta$, or accusative clitic $=\eta$ ). In these cases, the final syllable is realized with rising pitch. For example, 1 Sg mí plus either clitic becomes $m i ̀=\emptyset$, and perfective negative bòl-lí 'did not go' has conjugated forms like bòl-lì- $\eta$ ' 'I did not go'. This does not affect tone-marked suffixes like $2 \mathrm{Pl}-\grave{y}$, hence bòl-lí- 1 ‘you-Pl did not go'.

In allegro speech, especially at the end of a long word or phrase, there is little or no phonetic distinction between H and $<\mathrm{LH}>$ tones.

It is less clear whether the H to $<\mathrm{LH}>$ process also applies to medial syllables with long vowels. The relevant forms are imperfectives with L-toned suffix -dè following a lexically /LH/-toned stem with a final long vowel, i.e. monosyllabic $C v$ :- in reduplicated form $C$ v̀- $C$ v́:$d \grave{\varepsilon}$ or mediopassives with final $-\varepsilon:-\sim-e:-$.
a. nò-nó:-dè- $\varnothing$

Augm-drink-Ipfv-3SgSbj
'He/She drinks.'
b. bòmb-é:-dè- $\varnothing$
carry.on.back-MP-Ipfv-3SgSbj
'He/She carries (on back)'
In my assistant's speech, the long vowels in (17a-b) are most often pronounced with level H-tone, though on some occasions I thought I heard a rising tone. The situation is
complicated by the fact that medial syllables normally begin with voiced consonants, which have a slight phonetic depressor effect.

### 3.7.4.3 Contour-Tone Stretching

A $C_{v}: L$ syllable ( $L=$ sonorant ) with $<H L>$ or $<$ LHL> tone tends to have the transition close to the coda. When a suffix or clitic consisting of a sonorant is added to a $C \hat{v}$ : or $C \check{v}$ : syllable, the tone transition is shifted toward the coda.

For example, yă: 'woman, female' occurs in yà:-1斤 'women', with atonal plural suffix - $\eta$. If we start with /yă:-y/ and end up with yà:-1́, we need a minor rule to shift the tone transition. Likewise with $\hat{i}$ : 'child' when atonal 'it is' clitic $=\eta$ is added to produce $\hat{i}:=\eta$. There are also a few $C v y \eta$ syllables, as in $k a ̀-y \grave{y}-\eta$ 'I shaved', with perfective allomorph $-\dot{y}$.

### 3.7.4.4 Stranded-Tone Re-Linking

Neither syncope nor apocope being productive in DS, there is little need for a re-linking process of the type $C \hat{v} C \hat{v}(C v)>C \check{v} C(C v)$ or $C \hat{v} C \hat{v}(C v)>C \hat{v} C(C v)$. Such a process is common in those Dogon languages that do have productive vowel-deletion rules.
§3.5.3.2 mentions gín dà 'at/in (the) house' from gìné dà:, as well as plural logophoric ǹjěm-bè from singular ǹjèmé. §3.5.3.3 mentions alternations in locative adverbs of the type g̀g $g$-nì ~ ŋ̀gǵ-ǹ ‘here’.

A more complex situation is that of imperfective negatives and past anterior subordinated forms of mediopassive verbs based on/LH/-toned stems ending in yy and $\eta \mu$, such as dànn- $\varepsilon$ :'sit' and wèyy- $\varepsilon$ :- 'winnow in wind'. The mediopassive suffix appears as short -í- for these verbs before vowel-initial suffixes, by Prevocalic V-Raising (§3.5.6.1), and the combinations /yyi/ and /nni/ are subject to Palatal Coalescence (§3.5.3.4), effectively erasing -í- segmentally and stranding its tone. This leads to outputs of the type dănn- $\varnothing$ - $\grave{\varepsilon} \ell \grave{\varepsilon}$ 'does not sit' and wěyy- $\varnothing$ - $\grave{l} \grave{\varepsilon}$ 'does not winnow', where the stranded H-tone is realized in the coda of the first syllable. The phonetics (syllabification, duration of palatal) are tricky, but I usually hear a rising tone on the first syllable.

### 3.7.4.5 Leftward Tone-Pushing

$j \dot{\varepsilon}: l \grave{\varepsilon}-\bar{W}$ 'don't bring!' becomes $j \hat{\varepsilon}: l \bar{\varepsilon}-\bar{W}$ with polar interrogative final L-tone, see (282) in §10.6.3.3. When a final L-tone is appended to $\mathrm{H} .<\mathrm{LH}\rangle$, the result is $\langle\mathrm{HL}\rangle .<\mathrm{HL}\rangle$. That is, both tone components of the original <LH> syllable are shifted one mora to the left.

In spite of a suggestive resemblance, this is analytically distinct from what happens in alternations like that in the perfectives yèl-غ̀-y 'I came' versus y $\grave{l}-\dot{\varepsilon}-\bar{\eta}$ ' you-Pl came'. The difference here is that $1 \mathrm{Sg}-\eta$ is atonal while $2 \mathrm{Pl}-\mathrm{\eta}$ is L-toned. The $\{\mathrm{LH}\}$ overlay for $1 \mathrm{st} / 2$ nd person perfectives is therefore realized with the H -tone on the suffixal nasal in the 1 Sg form, but it is blocked by the preexisting L-tone on the 2 Pl suffix. There is no need to push the H-tone leftward in the 2Pl form, rather it never reaches the suffixal nasal.

Leftward Tone-Pushing as in $j \hat{\varepsilon}: 1 \varepsilon \bar{\varepsilon}-\grave{W}$ is a rarity, since only 'bring' and 'convey' (frozen verb compounds) ever have two separate H -toned, and of these only 'bring' ever contracts the onset of the compound into a Cv : syllable.

### 3.8 Intonation contours

### 3.8.1 Phrase-final prolongation

The basic NP conjunction construction ' X and Y ' is [ $X$ lè] [ $Y$ lè]. The two conjuncts may be separated by a prosodic break similar to sentence-final breaks. Especially in the first conjunct, the conjunction particle lè (presumably identifiable as the all-purpose, including comitative, postposition lè), is often intonationally lengthened: [ $X$ lè $\rightarrow$ ] [ $Y$ lè] ' X and Y '. For examples see §7.1.1.
mà $\rightarrow$ is the disjunction ('or') for clauses and NPs (§7.2.1) and the polar interrogative particle (§13.2.1.2). These two functions are related and may be reducible to one, since a yes/no question is logically a choice between two mutually exclusive options (usually positive and negative). The particle is frequently prolonged beyond normal phonemic long-vowel duration.

These are just the most grammaticalized cases of intonational prolongation. In narrative and conversation, above- or below-median pitch can be applied at the end of prosodic groups for rhetorical effect or turn management.

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

Certain expressive adverbials such as těy $\rightarrow$ 'straight' (§8.4.7.2) are regularly pronounced with variable prolongation of the final segment (vowel or sonorant), except when iterated (těy-tèy). The duration of the prolongation is variable, with above-average duration used for rhetorical effect. The fact that a final sonorant can be prolonged shows that this is an "intonational" effect rather than ordinary phonemic gemination (final $C C$ clusters do not occur in DS).

The evaluative adverb $\grave{\varepsilon} d u ́ \rightarrow$ 'well' brings out an important phonetic point. This is because the prolongation here is of an H -toned syllable. Within the regular tone system, a final long vowel would have to be contoured $\langle\mathrm{HL}\rangle$ or $\langle\mathrm{LH}\rangle$ rather than a prolonged H-tone.

### 3.8.3 Dying-quail intonational effect $\therefore$

In some other Dogon languages, a grammaticalized "intonational" effect is found in certain constructions, consisting of variable prolongation of the final segment $(\rightarrow)$ combined with gradual pitch decline. The pitch decline is only audible after a final H-tone, but prolongation is always audible. I call this the dying quail effect. The most obvious example is NP conjunction in Jamsay and a few other languages, where this effect functions as the 'and' conjunction, there being no other conjunctive marker: Jamsay $n \varepsilon ̌$ - $-\therefore$ àr ${ }^{n} \check{u}-m \therefore$ 'women and men', heard as [nغ̀ḿm̄̀̀ à ${ }^{n}$ úm̄̀̀] with a possible prosodic break between the two.

In Dogon languages with an overt 'and' particle following both conjuncts, the only intonational effect is prolongation on the particle, especially after the left conjunct. This was noted for DS as mentioned in the preceding section.

However, a dying-quail effect was observed in "conjoined" antecedents in willy-nilly conditionals, which lack the usual 'if' clitic $=y o$ or any other conjunction or subordinator. The DS construction can be approximated by the formula [[it rained $\therefore$ ] [it didn't rain. $\therefore$ ]], [I'm going to the fields], meaning 'whether it rains or not, I'm going ...'. See $\S 16.3$ for
details and an example. The dying-quail effect applies to both antecedent clauses, though as mentioned above the pitch drop is only audible when the verb otherwise ends in an H-tone.

### 3.8.4 Polar interrogative final L-tone

Polar questions ('Did you go?', 'Aren't you coming?') can be formed by adding a terminal tone modification to the final syllable of the clause-final verb, with no (other) overt interrogative morpheme. There is no audible change if the verb already ends in an L-tone. If it ends in an H-tone (including rising $<\mathrm{LH}>$ ), the change is the addition of a terminal L-tone to make the final syllable $<\mathrm{HL}>$-toned. A final $C \bar{v}$ becomes $C \hat{v}$ : , the vowel lengthened enough to allow the contour tone to be articulated (§3.7.4.1). A final $C \check{v} L$ (with $L$ a sonorant) becomes $C \hat{v} L$, with the H-tone element pushed back (§3.7.4.5) to allow the sonorant to carry to intonational L-tone. For examples see (371a-c) in §13.2.1.

The interrogative modification differs from the dying-quail intonational effect (§3.8.3) found in willy-nilly conditional antecedents (§16.3) in that prolongation of the final segment is absent, except for vowel lengthening necessary to articulate a contour tone. The polarinterrogative effect can be accounted for by the regular tonology; it suffices to add a final L-tone to the verb.

In interlinears, the interrogative effect is indicated by ". Q " at the end of the verb.

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

### 4.1.1 Simple nouns (singular -nv, plural $-\eta$ and -mbè )

Most human nouns, other than kin terms and a few irregular nouns, have a suffixal opposition of $-n v$ (with variable vowel quality) for singular versus $-\eta$ for plural. The plural suffix is sometimes also found on nonhuman nouns. These suffixes are only added to nouns, and are not repeated on adjectives. A second plural suffix, -mbè, is not limited to humans and is added once, to the last word in the $\mathrm{N}(-\mathrm{Adj})(-\mathrm{Det})$ sequence. If -mbè is added directly to human plural $-\eta$, the latter is usually inaudible except in very careful pronunciation. If -mbè occurs on a postnominal modifier, a human noun may take either singular or plural form. -mbè is absent if a nonsingular numeral is present. After a stem-final H-tone, as in ìdú$m b e ̀ ~ ' d o g s ', ~ t h e ~ s u f f i x a l ~ m ~ c o n t i n u e s ~ t h e ~ H-t o n e, ~ i . e . ~[i ̀ d u ́ m b e ̀] . ~$
-mbè also has a second function as a list conjunction, added to each member of a list, usually of three or more elements, but implying that there are additional unmentioned elements beyond the overt ones. In this function, -mbè can be added to singular nouns, including place names (§7.1.3).

The surface forms of the singular suffix, omitting tone, are -na, -ne, and -no. We find -na only after a stem with an a-vowel. Other stems have +ATR -ne or, with Back/Rounding Harmony, -no. Both the singular and plural suffixes are preserved before a modifying adjective.
(18) Human nouns
singular plural gloss
a. simple noun
bèl-gír(ù)-nè bèlì- $\eta-g i ́ r i ̀-\eta \quad$ 'herder'
írì-nè írì- $\eta \quad$ 'blacksmith'
yù:-wán-nè yù:-wálì- $\quad$ 'farmer' (< verb wàlá)
púlò-nò púlò-ŋ 'Fulbe person'
dògò-nó dògò-ŋ́ 'Dogon person'
wònjù-nó wònjù-ŋ́ 'visitor'
dònnò-nś dònnò-ŋ́ 'Donno person'
yà:-ná yà:-ŋ́ 'woman’
b. noun plus adjective
ìrì-n ${ }^{\mathrm{L}}$ pà: $d \hat{\varepsilon}$. $\quad$ ìrì- $\eta{ }^{\mathrm{L}}$ pà: $d \hat{\varepsilon}:-m b e ̀ ~ ' b a d ~ b l a c k s m i t h ' ~$
or: ìrì-n $\varepsilon^{\mathrm{L}}$ pà:dê:-mbè

Nonhuman nouns, whether animate or inanimate, have a basic stem that can be used without modification for singular or plural reference. Those nouns that are semantically individuatable are optionally pluralized by suffix -mbè.
stem marked plural gloss
a. animate

| ìdú | ìdú-mbè | 'dog' |
| :--- | :--- | :--- |
| غ̀né | غ̀né-mbè | 'goat' |
| nàná | nàyá-mbè | 'cow' |
| pédù | pédù-mbè | 'sheep' |

b. inanimate

| tànná | tànná-mbè | 'stick' |
| :--- | :--- | :--- |
| tìbú | tìbú-mbè | 'stone' |
| tìmmé | tìmmé-mbè | 'tree' |

c. noun plus adjective
$\grave{\varepsilon} n \grave{\varepsilon}^{\mathrm{L}} g \hat{\varepsilon} \eta \quad \grave{\varepsilon} n \grave{\varepsilon}^{\mathrm{L}}$ gé( $\left.\eta\right)$-mbè 'black goat'
tìbù ${ }^{\mathrm{L}}$ pílù tìbù ${ }^{\mathrm{L}}$ pílù-mbè 'white stone'
The minimal shape of a noun stem is $C v$ : or $C v L$ with final sonorant. Examples are bôy 'name' and dô: 'parasitic herb sp. (Striga)'. The lexical tone of a bimoraic (monosyllabic or $C v C v$ ) noun stem is either /HL/ or /LH/. Heavier stems may be /HL/, /LH/, or /LHL/ (§3.7.1.3).

### 4.1.2 Irregular nouns ('man', 'child', 'person')

No morphologically irregular nonhuman nouns have been observed, since the only common suffix, plural -mbè, does not interact phonologically with the stem. Among high-frequency nonhuman nouns are kìdé 'thing' and yàlú 'place'.

Irregular nouns with human reference are in (20).

| singular | plural | gloss |
| :--- | :--- | :--- |
| àn-ná | ànà- $\eta$ ́ | 'man' |
| $\hat{1}:$ | úlù- $\eta$ | 'child' |
| ǹdé | ǹdé-( $\eta$ - $) m b e ̀ ~$ | 'person' |

'Man' is only slightly irregular phonologically (syncope of the second vowel of àná in the singular), cf. adjective àná 'male'. 'Child' has a suppletive plural. 'Person' is irregular in being pluralizable only with -mbè instead of just $-\eta$. In ǹdé-( $\eta-) m b e ̀$, the $\eta$ is rarely heard. Historically, it is possible that the etymon of ǹd 'person' is related to the source of the human singular suffix -nv (with variable vowel).
yà:-ná (plural yà:-y) 'woman', not shown in (20), is morphologically regular as a common noun.

For compounds containing 'child', 'woman', and 'man' as initials or finals, see §5.1.6-7.

### 4.1.3 'So-and-so’ (má:nù)

'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 $\operatorname{Cv}(N)$ - reduplication in nouns

This is not a regular pattern in DS, which favors full-stem iteration §4.1.6. The examples in (21) also occur in other Dogon languages and may be inter-Dogon borrowings.
(21) a. $C V-$
bè-bèlé 'tree sp. (Pterocarpus)'
b. $C V N-$
tén-tèyènè 'mole viper (Atractaspis)'
A minor $C \grave{v}-C \hat{v}$ : pattern including well-adapted loanwords is seen in (22).
(22) a. vowel quality constant

```
pà-pây 'papaya' (Fr.papaye)
nà-nây 'mint'(ultimately Arabic na@naa&-)
```

b. vowel quality different sì-sô: 'scissors' (Fr. ciseaux)

### 4.1.5 Final reduplications in nouns

This too is not a regular pattern. One isolated example is in (23).
(23) gàmmà-kònònó 'genet (mammal)'

### 4.1.6 Nouns with full-stem iteration

### 4.1.6.1 Two-part

Quite a few nouns have a lexicalized iterated form. They include flora-fauna and body parts (especially joints) The uniterated stem is generally not attested. Tone melodies are lexically variable, but there is only one H -tone per word. The base is typically bisyllabic.
a. H.L-L.L

| kádù-kj̀dù | 'viper' (Echis) |
| :--- | :--- |
| kóybè-kòybè | 'plant sp.' (Sansevieria) |
| tábù-tàbù | 'shoulder' |
| tóngù-tòngù | 'elbow' |

as compound final

| bìlè-[kólò-kòlò] | 'tree sp.' (Maerua) |
| :--- | :--- |
| nùmう̀-[kárù-kàrù] | 'armpit' |

b. L.L-H.L
kèdè-kédè 'fun, playing'
kìdù-kídù
kìndù-kíndù
'bat'
'soul'
mènè-ménè 'ants'
pèrù-pérù 'sandgrouse'
pùrù-púrù 'millet fritters'
tèbù-tébù
wòbò-wóbò
'hawk spp.'
'thick-knee (bird)'
kìndù-kíndù
'shadow' (cf. kìndê: ‘shade')
as compound final
[kày-kàn]-[bèlè-bélè]
'hiccough'
nùmò-[kòlò-kòló]
'wrist'
c. L.L-L.H
bèrè-bèré
'belly'
gàbà-gàbá
'spitting cobra'
kòl̀-kòló
'neck'
lògò-lògó
'foothold (in well shaft)'
wèlè-wèlé
'swift (bird)'
kàlì-kàlí
'tall grass (Aristida)' (< kàlí ‘bamboo')
dìmmè-dìmmé
gèmmè-gèmmé
'forehead'
'waterjar shard (for carrying embers)'
nòmmù-nòmmú
'low spot, depression in ground'
mediopassive
jùbì:-jùbǐ:
'fan (n)', cf. verb jùb-é:- 'fan oneself'
borrowing
(wògòtòrò-)pù:sù-pù:sú 'push-cart' (local Fr. pousse-pousse)
$k \varepsilon ́ b-k \varepsilon ̀ b \grave{\varepsilon}$ 'herb sp. (Zornia)' is similar tonally to (24a) but it appears to have lost a vowel by syncope.

In each example in (25) we observe a vowel change in an otherwise iterated form. A midheight vowel in the first iteration is replaced by $a$ in the second.

```
gòlòn-gàlǎy 'long-tailed glossy starling'
gòlò-gálà 'tree sp. (Gardenia)'
tèngè-tángà 'Dogon stilt dancers'
gùlò \({ }^{\text {L }}\) lòbù-làbú 'small trimming ax' (< gùló 'ax’)
```

There are a few lexically iterated stems with monosyllabic bases. Cognates in several other Dogon languages have short-voweled $C v$ - reduplication instead of full-stem iteration.

| a. $C \mathrm{v}$ :-Cv: |  |
| :---: | :---: |
| /L/-/HL/ |  |
| $k \stackrel{\text { che }}{ }-k \hat{\varepsilon}$ : | 'beetle, bug' |
| kà:-kâ: | 'grasshopper' |
| bà:-bâ: | 'grandfather' |
|  | 'breeze', cf. $g \varepsilon$ : $d \grave{\varepsilon}$ 'wind (n)' |
| bò:-bô:-nう | 'Bobo (=Bwamu) person' (with Sg suffix) |
| gò:-ĝ:-nう | 'griot' (with Sg suffix) |
| /LH/-/L/ |  |
| gǎ:n-gà: ${ }^{\text {n }}$ | 'pied crow' (onomatopoeic) |
| b. $C v L-C v L(L=$ sonorant $)$ |  |
| /H/-/L/ |  |
| kéy-kèy | 'tree sp. (Combretum)' |
| bóy-bòy | 'carp', variant bó:-bòy |
| /L/-/HL/ |  |
| tùn-tûy | 'leech' |
| pùm-pûp | 'shrub sp. (Calotropis)' |

Another caste name similar to 'griot' is $n \varepsilon ́: n \grave{~ ' g r i o t ~ w h o ~ t r a v e l s ~ w i t h ~ h o l y ~ m e n ', ~ b u t ~ s i n c e ~ t h e ~}$ second syllable is not long it does not qualify as an iteration.

A $C v C v C v-C v C v C v$ iteration with tones in parallel is gòrúbù-gòrúbù 'shrub sp. (Guiera)'.

An intriguing but difficult case is pùdòŋkùď̌y 'menstruation house', which might be "parsed" as [pù-dı̀n]-[kù-ď̌n] though the ingredients do not occur elsewhere. A similar form is bìdìngìdǐn 'traditional animist rites', possibly parsable as [bì-dìn]-[gì-dǐn] attested in bìdìngìdǐn ${ }^{\text {L }}$ sàgùrù-[bà-ỳ], a type of rattle (ságùrù) formerly played (bǎ:) in rites. It is obscurely related to bìdìgìn-né 'traditional animist' (compare Jamsay bìdìgà-bídígé-n 'magician').

### 4.1.6.2 Three-part

In tripartite $\mathrm{X}-\mathrm{X}^{\prime}-\mathrm{X}$, the medial iteration has $a$-vowels. In the fauna terms (27a) the flanking iterations also happen to have a-vowels, so one does not notice the change. In the semionomatopoeic ( $27 \mathrm{~b}-\mathrm{c}$ ) the flanking iterations have a nonlow vowel and the change is obvious. The tone pattern is either L-L-LH (final rise) or symmetrical X-L-X with medial L-tone and some other tone on both flanking iterations.
a. jàn-jàn-jàrú gàn-gày-gǎ: ${ }^{n}$
'climbing vine sp. (Cissus)'.
'noisy bustard sp. (Eupodotis)'
b. hô:-hà:-hô: ~ hò:-hà:-hǒ:
'noisy chatter'
wò:-wà:-wǒ:
'noisy chatter'
c. wêy-wày-wêy~wèy-wày-wĕy
'children's noisy chatter'

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

There are very few candidates for a recognizable a- prefix in noun stems. Among fauna terms I can cite only 'crocodile'. This and 'wrestling' are not clearly segmentable (28a). The prefix is recognizable in (28b), compare verb témbè 'find’, with extended sense 'inherit, acquire (sth passed down by elders)'.
a. ágèn 'crocodile'
àjírì 'wrestling'
b. à-témbù '(animist) rites, customary practices'

### 4.2 Derived nominals

### 4.2.1 Characteristic derivative (-gí-nغ̀ )

This suffix can be added to a noun stem that denotes a chronic attribute, such as a distinctive appendage or a long-lasting condition such as a disease. The noun stem is tone-dropped. The derivative functions as a noun or adjective denoting the whole entity, usually a person or animal. The suffixed human forms, singular -gí-nè and plural -gí- $\eta$, are extended to animals.
noun gloss Characteristic gloss

| a. condition |  |  |  |
| :---: | :---: | :---: | :---: |
| lùló | 'disease' | lùlò-gí-nè | 'sick person' |
| $g \varepsilon ̌:$ | 'hunger' | gè:-gí-nè | 'malnourished one' |
| wédè | 'insanity' | wèdè-gí-nè | 'crazy person' |
| yàmùlú | 'stupidity' | yàmùlù-gí-nغ̀ | 'idiot' |
| b. body part |  |  |  |
| jóngò | 'hump' | jòngò-gí-nè | 'humped' (e.g. cow) |
| gámbùrù | 'wing' | gàmbùrù-gí-nè | 'winged' (e.g. ant) |
| kílè | 'horn' | kîlè-gí-nè | 'horned' (e.g. viper) |
| c. abstract attribute |  |  |  |
| kè:lé | 'money' | kè:lı̀̀-gí-nè | 'rich person' |
| $d \varepsilon ̌ W$ | 'poverty' | dèw-gí-nè | 'poor person' |
| sémbè | 'power' | sèmbè-gí-nغ̀ | 'strong, powerful (one) |
| bìndú | 'stomach' | bìndù-gí-nè | 'glutton' |

This morphological construction competes with a transparent syntactic construction consisting of a relative clause with 'have' plus object, or with 'be' plus a comitative PP.

> a. $\begin{array}{ll}\text { yùgùrù }\end{array}{ }^{\mathrm{L}} \quad$ kílè $\quad s \varepsilon ́:=g \grave{\jmath}$
> snake $^{\mathrm{L}} \quad$ horn $\quad$ have. $\mathrm{Ppl}=\operatorname{Def}$
> 'a snake that has horns'
b．yùgùrù ${ }^{\mathrm{L}}$［kílè lè］wó：＝gò
snake ${ }^{\mathrm{L}}$［horn Comit］be．Ppl＝Def ＇a snake that is with horns＇

When the defining feature is expressed as an N －Adj combination，as in［nùmゝ̀－mày］－gí－nغ̀ ＇miserly＇from nùmゝ̀ mǎy＇dry（＝hard）hand＇（cf．tight－fisted），the characteristic derivative competes with bahuvrihi compounds（§5．2）．

## 4．2．2 Verbal nouns

## 4．2．2．1 Productive verbal noun with suffix－du

This is the productive abstractive verbal noun．For most verbs（but not quasi－verbs）it can be elicited in contexts such as＇dancing／swimming／walking is（not）good＇．For some verbs whose cognate nominal is very common，it can be initially difficult to elicit the verbal noun with $-d u$ ．
／HL／－toned verbs have an initial－syllable H－tone followed by L－tones．／LH／－toned verbs realize the H－tone only on the suffix（－dú）．The irregular Cvlv stems that have imperfectives of the type $C v:-j \grave{\varepsilon}$ have similar verbal nouns of the form $C v:-j u$ ．This detail points to a morphological（and by extension semantic）relationship of this verbal noun with the imperfective aspect．See also（472d－e）and comments thereon in §15．3．2．1．
（31）a．／HL／－toned

| yô： | yó：－dù | ＇go in＇ |
| :--- | :--- | :--- |
| yâ： | yá：－dù | ＇spend night＇ |
| nâ： | já：－dù | ＇eat（meal）＇ |
| kâ： | ká：－dù | ＇shave＇ |
| ágà | ágà－dù | ＇catch＇ |
| ह́gé | ह́gè－dù | ＇hear＇ |
| kédè | kédè－dù | ＇cut＇ |
| kán（à） | kánà－dù | ＇do＇ |
| óbò | óbò－dù | ＇give＇ |
| údò | údò－dù | ＇build＇ |
| yímè | yímè－dù | ＇die＇ |
| támbà | támbà－dù | ＇kick＇ |
| yéyy－è：－ | yéyy－è：－dù | ＇sleep＇ |
| kígùl－è：－ | kígùl－è：－dù | ＇go back＇ |

b．／LH／－toned
gǒ：
wǎ：
ǹd－モ́：－
ùró
yàbá
gèndé
dànn－モ́：－
yàbìl－દ́：－yàbìl－è：－dú
＇go out＇
＇see＇
＇bathe＇
＇skin and butcher＇
＇accept＇
＇look＇
＇sit＇
＇reply＇

| c. irregular Cvlv verbs |  |  |
| :---: | :--- | :--- |
| bèlé | bè-jú | 'get, obtain' |
| bòló | bò-jú | 'go' |
| gàlá | gà-jú | 'pass' |
| yغ̀lé | yغ̇-jú | 'come' |

This verbal noun cannot be formed from any stative quasi-verb. Attempts to elicit 'having X' with $s \grave{\varepsilon}$ 'have' and even 'wanting X ' with nàmà 'want' were rephrased with the verbal noun
 rephrased with bè:-dú from bě: 'remain'. This extends to other constructions involving wò, e.g. ìgù wó 'know', whose verbal noun was rephrased based on ìgù bě: .

In verb chains, only the final verb can be made into a verbal noun. The nonfinal verb may be in the chaining form, or it may have the suffix complex -a:-nì (§15.2.2.4). For examples and discussion see $\S 15.1 .1$.

### 4.2.2.2 Nominalization with suffix -lv

The vowel quality of the suffix is spread from the stem. This suffix is used in compound nominalizations, which are listed in $\S 5.1 .3 .2$. The initial corresponds to a specialized subject noun in predications of temporal transition, whether day-night or seasonal (§11.1.1.4).

### 4.2.2.3 Product-of-action nominals with suffix $-u ́ \sim-y ́$

Some verbs are associated with a nominal in -ú (except -ý after monosyllabic stem or mediopassive derivative) alongside the abstractive verbal noun in -du. The stem is $\{\mathrm{L}\}$-toned. The nominal denotes the product or result of the action.

| nominal | gloss | verb and gloss |
| :--- | :--- | :--- |
| jòr-ú | 'blister (n)' | jòró '(blister) form' |
| pàg-ú | 'bundle (n)' | págà 'tie up, bind' |
| yìm-ú | 'death' | yímè 'die' |
| sàgùnd-ú | 'announcement' | ságàndà 'broadcast, spread (news)' |
| mùy-ú | 'knot' | mùnó 'tie a knot' |
| tùm-ú | 'a dry measure' | túmò 'weigh' |
| tòn-ú | 'writing' | tónj̀ 'write' |
| mà:ndùg-ú | '(a) thought' | mà:ndùg-é:- 'think' |
| kùbò-[nàmm-ú] | 'footprint' | námmà 'step on' (kúbò 'foot') |

Other nouns of this shape such as tǒy in tǒy tô: 'slash earth to sow seeds' may have originated in this way.

These nominals are closely related to deverbal adjectives of the same shapes that are used as modifiers after other nouns, as in nàyà ${ }^{\mathrm{L}}$ pòr-úl 'castrated bull (ox)' from pórò 'castrate' (§4.5.2). Locational and instrumental compounds also have finals with these shapes (§5.1.5.2). There are also many cognate nominals ending in $-u$, though most have a falling rather than rising word-level tone pattern (§11.1.2.5).

### 4.2.3 Derivational suffix -e:

In (33), a nominal appears to have an -ê: suffix related to the mediopassive suffix on the cognate verb. In this case, the nominal denotes the instrument.

| nominal | gloss | related verb |
| :--- | :--- | :--- |
| ùd-ê: | 'bellows (blower)' | ùd-é:- 'blow' |

There is no productive morphology for instrument nominals ('scrubber', 'grinder', etc.). There are a number of cognate nominals of verbs that end in a possibly segmentable $e:, i$, or ( $\varepsilon) y$, see (303e) in §11.1.2.5. mòmê: 'scorpion' is most likely an old diminutive.

### 4.2.4 Uncompounded agentives

Nearly all attested agentive nominals are compounds. For example, 'dancer' is expressed as 'dance( $n)^{\mathrm{L}}$-dance(v)-Agentive', with incorporated object in the form of a cognate nominal. See §5.1.5.1 for examples and discussion.

A possible uncompounded agentive is dùgù-nó 'sorceror'. It is related to the noun-verb collocation dúgù dùgó 'cast spells, practice sorcery', which also yields a productive compound agentive dùgù-dúgù-nè 'sorceror'. The semantic difference is that dùgù-nó is more essentialistic, denoting a member of a caste or guild of sorcerors, while dùgù-dúgù-nè could refer to anyone who practices sorcery.

The few underived "agentive" nominals such as 'hunter' in (34) are likewise best considered caste names rather than agentives in the usual sense. Each (low) caste is associated with one or two specific occupations (hunting, dye-ing, leatherwork, forging metal, etc.).

| "agentive" | gloss | related predicate | gloss |
| :--- | :--- | :--- | :--- |
| dànná:-nà | 'hunter' | dànná kán(à) | 'do hunting, hunt' |
| Wáyngè-nè <br> írù-nè | 'butcher' | wáyngè kán(à) | 'do butchery' |
| (none) |  |  |  |

### 4.2.5 Iterated deadjectival abstractives

A number of adjectives denoting scalar dimensions have an abstractive nominalization with full-stem iteration. The first iteration drops tones to $\{\mathrm{L}\}$. The second iteration has either rising (35a) or falling (35b) tone pattern. The tone pattern partially follows the lexical melody of the adjective, but for adjectives not denoting spatial measurement ('cold', 'sweet') we get the falling pattern even for / $\mathrm{LH} /$ adjectives. Either member of a scale ('tall', 'short') may feed into this derivation.
abstractive gloss adjective gloss

| a. $\{\mathrm{L}\}-\{\mathrm{LH}\}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| adjective /LH/ |  |  |  |
| pàlà-pàlá | 'length' | pàlá | 'long' |
| dùmbù-dùmbú | 'shortness' | dùmbú | 'short' |
| tòlò-tòló | 'height' | tòló | 'tall' |
| tò:-tǒ: | 'depth' | tǒ: | 'deep' |
| wàgù-wàgú | 'distance' | wàgú | 'distant' |
| b. $\{\mathrm{L}\}-\{\mathrm{HL}\}$ |  |  |  |
| adjective /HL/ |  |  |  |
| $g \varepsilon ̇ \eta-g \hat{\varepsilon} \eta$ | 'blackness’ | $g \hat{\varepsilon} \eta$ | 'black' |
| bànù-bánù | 'redness' | bánù | 'red' |
| wàyà-wáyà | 'breadth' | wáyà | 'wide, broad, spacious' |
| tònnò-tónnò | 'hardness' | tónnò | 'hard' |
| dògòdò-dógòdò | 'weight' | dógòdò | 'heavy' |
| adjective /LH/ |  |  |  |
| kèllù-kéllù | 'coldness' | kèllú | 'cold' |
| غ̀llù-Éllù | 'sweetness' | èllú | 'sweet' |

For 'height' there is also an underived synonym gòbě: .
Abstractives may be combined phrasally with other words. The noun dégè means 'statuette' referring to small animist idols carved from wood or stone. It can also mean 'unusually short person (dwarf, pygmy)'. To clarify that the latter sense is at hand one can say dùmbù-dùmbó $=\grave{j}$ dégè with the definite form of dùmbù-dùmbú 'shortness'. The two nouns in this construction are tonally independent; see §5.1.1.

### 4.3 Pronouns

### 4.3.1 Basic personal pronouns

Nonpossessive personal pronouns are in (36). The independent forms also occur in relative clauses as subject proclitics to the verb. Accusative forms are phonologically regular. Pronominal-subject suffixes on verbs may co-occur with optional overt independent pronouns in subject function. The suffixes partially merge $1 \mathrm{Sg}, 1 \mathrm{Pl}$, and 2 Pl . After back rounded vowels, a palatalized onset is audible for 1 Pl and 2 Pl but not 1 Sg . In some inflectional categories the 1 Sg and 1 Pl differ tonally from the 2 Pl : mí yèlè- 'I came', émmè yèlè- ' 'we came', but é yèlé-ŋ̀ 'you-Pl came'. The 1 Sg suffix (or a homophone) is also used for logophoric subject (§18.3.2).
(36) Personal pronouns (nonpossessive)
subject
independent accusative preverbal suffixed

1Sg mí mì=ý mí $-\eta(-\eta ́ \sim-\eta ̀)$
1 Pl ह́mmè $\quad$ ह́mmè $=\grave{\eta} \quad$ ह́mmè $\quad-\left({ }^{y}\right) \eta(-\grave{\eta} \sim-\grave{\eta})$

| 2 Sg | ú | $\grave{u}=\underline{y}$ | ú | $-\grave{W}$（perfective－${ }^{( }$） |
| :---: | :---: | :---: | :---: | :---: |
| 2 Pl | é | $\grave{e}=\underline{y}$ | é | －（ ${ }^{\text {y }}$ ）${ }^{\prime}$ |
| 3 Sg | wó | $w \grave{o}=$ ¢́ | wó | －$\varnothing$ |
| 3 Pl | bé | $b e{ }_{\text {¢ }}=\underline{y}$ | bé | ［varies by AN category］ |

For inanimate kó and related forms，see §4．4．2．
Possession is inalienable（kin terms）or alienable．For inalienable possession，the independent pronouns precede the noun：mí ${ }^{\text {L }}$ bà：＇my father＇，ú ${ }^{\text {L }}$ bà：＇your－Sg father＇，etc．For alienable possession（all other nouns），a special set of L－toned possessor pronouns including a morpheme－mò follow the noun：pédù mòmò＇my sheep－Sg＇，etc．When they occur absolutely， i．e．without a noun（but normally with the definite clitic），the pronominal is H －toned，and the 1 Sg form is resyllabified．
（37）Alienable possessor pronouns

|  | postnominal | absolute（definite） |
| :---: | :---: | :---: |
| 1Sg | $\grave{m}-\mathrm{mo}$ | $m o ́=\grave{\grave{o}}$ |
| 1 Pl | غ̀m－mò | ع́m－mう̀ $=\grave{\jmath}$ |
| 2 Sg | ù－mò | ú－mう̀ $=\grave{ }$ |
| 2 Pl | è－mゝ̀ | é－mo $=$ う |
| 3 Sg | wò－mò | $w o ́-m \grave{~}=\grave{\jmath}$ |
| 3 Pl | bè－mò | bé－mゝ̀＝̀ |

Plural－mbè is added to the postposed possessor，but plural suffix $-\eta$ stays with the noun：pédù $\grave{m}-m \grave{-}-m b e ̀$＇ my sheep－ Pl ＇，yà：－ŋ́ ù－mう̀－mbè＇your－Sg women（wives）＇．

1 Pl ह́mmè is reduced to one syllable in possessive $\grave{\varepsilon} m-m \grave{2}$ ．A similar reduction occurs
 of us＇．

1 Sg ஹ̀－mò usually simplifies to mò after a noun ending in $\eta$（including nouns ending in the plural suffix）：દ̀nè－ $\mathfrak{\eta}$ mò＇my goats＇．Likewise absolute mó＇mine＇in mó rà：＇at my house， chez moi＇（§8．2．1）．

## 4．3．2 Personal pronouns as complements of postpositions

Simple postpositions（not possessive in form）like dative or instrumental lè are added to the independent forms of the pronoun：mí lè＇to me＇，ú lè＇to you＇．

## 4．3．3 Lengthened forms of pronouns

3 Pl bé can be expanded to bě：prepausally or as topic．The shift to rising tone is phonologically regular as the H－tone seeks the final mora．Examples are（556a）and text 01 at 00：31 and 01：30．

```
n\hat{\varepsilon}: yě\eta gì-â: bě:,
now thus say-PastAnt 3Pl,
bǒy=gò tílù bé kàn-ò=j
tomtom=Def finish(n) 3Pl do-Pfv.Ppl=Def
'Now having said that, when they had finished (covering) the tomtom, ...'
```

Likewise 1 Sg mǐ: from mí and 2 Sg ǔ: from ú. This suggests that the ordinary $C v ́$ forms are proclitic, requiring a following clitic or word.

### 4.4 Determiners

### 4.4.1 $\quad$ Definite $=(g) \grave{\partial}($ plural $=(g) \grave{\text { ò }}$ mbè $)$

The definite clitic is $=g \grave{j}$. It optionally contracts with a final short vowel in a nonmonosyllabic stem, resulting in long [ $0:]$ transcribed $\rho-っ$, e.g. pédù $=g \grave{\jmath} \sim p$ éd $\grave{\jmath}=\grave{\jmath}$ 'the sheep-Sg', nà $a ́=g \grave{o} \sim$ nà $\quad$ ó $=\grave{\jmath}$ 'the cow'. Contraction does not occur after a long vowel or after a consonant: pèdù sê: ${ }^{n}=g \grave{\text { ò }}$ 'the good sheep-Sg', sé: $d u ̀$ L ${ }^{\text {ànùgè: }=g \grave{o ̀ ~ ' S e y d o u ' s ~(s a m e-~}}$ sex) friend', $\hat{1}:=g \grave{~ ' t h e ~ c h i l d ', ~ y a ̀:-~} \mathfrak{y}=g \grave{\text { on }}$-mbè 'the women' (variant).

Definite clitic $=g \grave{o}$ may occur with human or nonhuman nouns. Its linear position, following N -Adj-Num sequences and postposed pronominal possessors, is the same as that of demonstratives. Unlike demonstratives, the definite morpheme has no tonal effect on a preceding noun or N -Adj combination. For a constructional tonosyntactic interaction with numerals, see §6.5.3.

For nonnumans, plural suffix -mbè is added to $=(g)$ д̀. The same $=(g) \grave{\jmath}-m b e ̀ ~ c o m b i n a t i o n ~$ is used after human nouns, in which case the noun itself may be singular or plural in form, like yà:-ná (singular) and yà:-ŋ́ (plural) in (39b2).

| a1. pédù = gò | 'the (aforementioned) sheep-Sg' |
| :--- | :--- |
| a2. pédù = gò-mbè | 'the (aforementioned) sheep-Pl' |
| b1. yà:-ná=gò | 'the (aforementioned) woman' |
| b2. yà:-1́=gò-mbè | 'the (aforementioned) women' |
| or: yà:-ná=gò-mbè |  |

$=(g) \grave{̀}$ is an ancient offshoot of demonstrative kó (see just below) but the two are now divergent tonosyntactically.

Semantically, $=(g) \grave{\jmath}$ is a weak (i.e. nonemphatic) discourse-definite marker. It is used when the referent in question has been previously introduced in the discourse. My assistant accepted its combination with a personal name (sé:dù = g̀̀ 'that [same] Seydou'), though I do not believe it is common with such proper nouns except in special contexts like (40a). The definite suffix is not used English-style in connection with unique referents like 'the sun' that are cognitively accessible but that have not been part of the preceding discourse (40b).

$$
\begin{align*}
& \text { a. sé:dù = gò [[hákìlè ù-mò] nì] yèl-â: wò- } \varnothing  \tag{40}\\
& \mathrm{S}=\mathrm{Def} \text { [[mind 2Sg-Poss] Loc] come-PastAnt be-3SgSbj } \\
& \text { 'Is (that) Seydou coming into your mind?' (i.e. 'Do you remember ... ?)' }
\end{align*}
$$

```
b. năy dámb-ì-\varnothing
    sun go.up-Pfv-3SgSbj
    'The sun has gone up.' (around 9 AM)
```


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

Deictics are proximal ŋ̀gó, near-distal kô: (< *kú-kò) and far-distal yó-gò (<*yó-kò). The near-distal demonstrative can also function as a strong discourse-definite, glossable as 'that same X'.

These demonstratives contain skewed cognates of definite $=g \grave{\jmath} \sim=\grave{\jmath}$ but they have diverged in form. ŋ̀gó and yó-gò do not co-occur with an additional definite marker. kú=gò however appears to be a definite-marked form of kô: . It is generally used as a (recent) discourse-anaphoric 'that (same)', but kô: occasionally has this function.

| category | singular | plural |
| :--- | :--- | :--- |
|  |  |  |
| proximal | Ø̀gó | Ø̀gó-ḿbè |
| near-distal or discourse-definite | kô: | kó:-m̀bè |
| discourse-definite | kú=gò | kú=gò-mbè |
| far-distal | yó-gò | yó-gò-mbè |

$k \hat{0}$ : shortens to kó before the locative postposition: ( $X^{\mathrm{L}}$ ) kó-rà: 'in that (X)'. I hyphenate this as a single word (see the next section below). kú or definite $k u ́=g \grave{u}$ occurs instead of $k \hat{o}$ : especially in discourse-definite combinations like [bày ${ }^{\mathrm{L}} k u ́(=g \grave{)})$ ] lè 'on that (same) day', with postposition lè in temporal function. It appears as kó in the combinations kó yà-wôy 'all that' (§6.6.1) and instrumental kó lè 'with that'. In some other Dogon languages, such as Jamsay, kó is an inanimate pronoun, often but not always discourse-definite.

These demonstratives, unlike the definite morpheme, control tone-dropping on a preceding noun or core NP: pèdù ${ }^{\mathrm{L}}$ kô: 'that sheep (nearby)', pèdù ${ }^{\mathrm{L}}$ yó-gò 'that sheep (distant)', [pèdù kùlè:] ${ }^{\mathrm{L}}$ kó:-m̀̀bè 'those six sheep (nearby)'.

### 4.4.3 Demonstrative adverbs

### 4.4.3.1 Deictic and discourse-definite locative adverbs

The basic demonstrative-based locative adverbs are in (42). One type ends in -nì, the other in -rà: . Both endings occur elsewhere as locative postpositions (§8.2.1-2), with dà: ~ rà: being more productive. The near-distal form ko-rà: 'there' with shortened $\rho$ suggests that the postposition has become fused as a suffix in these adverbs. This is confirmed by the optional contraction ì-dâ: for proximal ìgó-rà: . Cf. kó-njì: 'like that' (§8.4.1).

My assistant rejected combinations of -nì with lè in the sense 'toward, in the direction of'. He accepted only the -rà: in this combination (§8.1.4).

$$
\text { form } \quad \text { gloss }
$$

a. with -nì
ŋ̀gó-nì~ ŋ̀̀ĝ̂-n 'here'
kó-nì 'over there' (deictic, not far)
yó-gò-nì 'over there' (deictic, farther away)
(\#kú-nì rejected)
b. with -rà:
ŋ̀gó-rà: ~ ǹdâ: 'here'
kó-rà: 'over there' (not far, or recent discourse-definite)
kú-rà: 'over there' (not far, or recent discourse-definite)
yó-gò-rà: $\quad$ 'over there' (deictic, farther away)
yé-rà: 'there' (discourse-definite)
In elicited utterances, ŋ̀gó-nì is the common 'here' adverb. ŋ̀gó-rà: has a more diffuse spatial sense and can mean 'around here'; see text 05 at 00:40. A similar distinction may be present with the near-distal and far-distal demonstratives, though analysis is difficult. Only -rà: occurs in the discourse-definite category.

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

Presentative forms (cf. French voici $X$, voilà $X$ ) follow the relevant NP (often a pronoun): ú kúwà: 'there you-Sg are!', sé:dù ŋ́gà: 'here's Seydou!'. The distal and proximal forms are related to the regular demonstrative stems. Singular and plural are distinguished, but I have some examples where the singular form is extended to plural NPs.

| distal | singular <br> plural | kú-wò~ kú-wà: <br> kú-wò-yà |
| :--- | :--- | :--- |
| proximal | singular <br> plural | ńgà: |
|  | ńgò-yà |  |

For wálà: (< French voilà) as a preclausal discourse marker, see §19.2.2.

### 4.5 Adjectives

### 4.5.1 Inventory of adjectives

This section describes the forms of modifying adjectives. For adjectival predicates see §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. For other EAs derived from adjectives see §8.4.7.5-6.

Modifying adjectives immediately follow the noun and control tone-dropping on it (and on any intervening adjective). Human nouns that take the -nv singular suffix keep it on the noun and do not repeat it on the adjective. However, plural -mbè is added to the final adjective. For more on the syntax see §6.3.1.

Some adjectives also have an expressive adverbial (EA) counterpart ending in $-i \rightarrow$ with the tone carried over from the adjective. This form is occasionally found in modifying function within an NP, see údú and $\grave{u} d-1 ́ \rightarrow$ in (44a). In this case the EA, like the regular form, may be followed by plural -mbè, as in $n d \grave{\varepsilon}{ }^{L}$ ùd- $1 \rightarrow-m b e ̀ ~ ' s m a l l ~ p e o p l e ' . ~ H o w e v e r, ~ t h e ~ E A ~ i s ~$ especially associated with adjectival predicates involving the 'it is' clitic (§11.4.1.2). Other adjectives add the 'it is' clitic directly to the unmodified stem.

The main modifying adjectives are those in (44), organized roughly into semantic domains.
adjective gloss
a. size ( 2 or 3 dimensional) and age
pô: 'big (house, tree, animal); fat (person'
dăy 'small (house)'
ùdú 'small (house), thin (stick)' (also ùd-î:)
wáyà 'wide (passage), spacious (area)'
èmmú 'cramped, confined (space)'
ə̀r̂̂: 'young (e.g. 2-year old)' (old diminutive)
gùló 'adolescent female (person, animal)'
gàbú 'adult, full-grown (person, animal, tree)'
pǎy 'old, elderly (person)'
pěy 'old, used (object)'
kàndá 'new'
b. length (one-dimensional measure)
pàlá 'long; tall'
tòló 'tall (person); lofty (tree, mountain)'
dùmbú 'short (rope, person)'
tǒ: 'deep (well, hole)'
c. distance (cf. adverbial wàgǔ: and bèrǔ: , §8.4.5)
wàgú 'distant, far away'
bèrú 'nearby, close by'
d. temperature and speed
númò 'hot' = 'fast'
kèllú $\quad$ 'cold, cool' = 'slow
e. surface qualities
ónòǹ̀ 'smooth, sleek (texture)'
kùnjú 'coarse (texture)'
tónnò 'hard'
yòrú 'soft; loose, slack'
mǎy 'dry (clothing)'
òlú 'wet (clothing)'
f. ease and pressure (see also yòrú above)

```
nâ\eta 'difficult (work)' = 'expensive'
    nàná 'easy (work)' = 'cheap'
    \hat{\varepsilon}:}\mp@subsup{}{}{n}\quad\mathrm{ 'tight'
```

g. weight
wêy 'lightweight; weak; thin (wall)'
dógòdò 'heavy; strong; thick (wall)'
h. taste
nǒy '(cooked grain) plain, without sauce'
wê: 'fresh (milk)'
ámà 'sour (lemon, milk)', homonym 'plump'
kúrò 'thick (liquid), undiluted, concentrated'
sèlé 'diluted (with water), watery, soggy'
غ̀llú 'delicious, sweet'
gàllú 'bitter (like some medicines, e.g. from Khaya tree)'
i. sharpness
sìndú 'sharp (blade)'
dùmbú 'blunt (blade)' (homonym 'short', with different inchoative)
j. ripeness
ìlє $\quad$ 'ripe (grain) ${ }^{\prime}=$ 'cooked, done (meat) ${ }^{\prime}$
àdá 'half-ripe (fruit)'
kò:ló 'unripe (fruit)' = 'raw, uncooked'
ómmù 'rotten (fruit, meat)'
k. color
bánù 'red (brown)'
$g \hat{\varepsilon} \eta \quad$ 'black (dark)'
pílù 'white (light-colored)'
wérù 'green; fresh (vegetation)'
púrùgù 'yellow'
sògòló 'multicolored'
tòpî: 'spotted'
sì:dî: 'striped'

1. livestock condition
ámà 'plump (animal)', homonym 'sour'
kómmò 'lean, emaciated (animal)'
m. fullness
sálàn 'empty’ = 'deserted'
[for 'full' see comments below]
n. evaluation
sê: ${ }^{n} \quad$ 'good'
nâ: 'authentic, primary’ (§5.1.9)
```
pà:d\hat{\varepsilon}:}\quad\mathrm{ 'bad' = 'ugly'
yôW 'nasty'
```

nâ: forms a compound-like fusion with 'man' and 'woman', and number suffixes are added at the end, unlike the normal N-Adj pattern: ànná:-nà 'old man', yànná:-nà 'old woman', cf. àná 'male' and yǎ: 'female'. The final -nà in both cases is the human singular suffix.
$j u ̀-a ́:-d \grave{\varepsilon}$ 'full' is a participial derivative of the verb jǒ: 'become full'. The form $j o ́ \rightarrow$ is also used as an expressive adverbial.

### 4.5.2 Deverbal adjectives (-ú~ -ý)

Adjectives denoting states that result from an action performed on the entity can be derived from the relevant verb, with suffix -ú after nonmonosyllabic stem, and -ý after monosyllabic stem. The stem is $\{\mathrm{L}\}$-toned.
adjective verb
a. monosyllabic
$t \varepsilon ̀-y ́$ 'woven' $\quad t \hat{\varepsilon}:$ 'weave'
b. nonmonosyllabic
pòr-ú 'castrated' pórò 'castrate'
dùmb-ú 'emasculated' dùmbó 'emasculate (e.g. bull) by crushing testicles'
dòng-ú 'pounded' dòngó 'pound (in mortar)'
pìd-ú 'pounded into flour'
jàng-ú 'pounded into dough' pídè 'pound (grain) into flour' jàngá 'pound lightly in mortar (sth soft or moist)'

An example is yèn $\grave{\varepsilon}^{\mathrm{L}} t \grave{\varepsilon}-\dot{y}$ 'woven mat' from yèné 'mat'. A number of regular adjectives with shapes like $C \grave{v}(C) C u ́, C \check{y} y$, or even $C \check{v} L$ with $L$ another sonorant ( $\eta$ or $w$ ), may have originated in this way. There are also some product-of-action nouns of these shapes, but they do not normally function as adjectival modifiers (§4.2.2.3). See also the locational and instrumental compounds whose finals are of the same shape (§5.1.5.2).

Most of the verbs in transparent examples as in (45) are transitive action verbs. Intransitive wàdá 'remain' can also be used: dì: ${ }^{\text {L }}$ wàd-ú 'the remaining water (in a container)'.

In pòlù nèn-ú 'file (tool)' from pòlú 'knife' and nèné 'file, smooth (sth) with a file', the verb appears to describe the function of the tool rather than its state. The regular construction for instrumental compounds is described in §5.1.11.

The terms yìmù ${ }^{\mathrm{L}}$ sà-ý 'skeleton', nùmゝ̀ ${ }^{\mathrm{L}}$ sà-ý 'finger', kùbj̀ ${ }^{\mathrm{L}}$ sà-ýy 'toe; claw, talon', and $b u ̀: d u ̀{ }^{L}$ sà-ý 'coin', all denoting hard (ossified) objects, seem to belong in this category, since a verb sâ: 'become a skeleton, become ossified' is attested. However, these combinations are rather compound-like now.

### 4.6 Numerals

### 4.6.1 Cardinal numerals

### 4.6.1.1 'One’ (túrù, tí $\rightarrow$ ), ‘same (one)', and 'other' (yàgá )

Numeral ' 1 ' is túrù. Unlike higher numerals, it behaves like an adjective (cf. English single, sole), tone-dropping the preceding noun (or adjective): ìdù ${ }^{\mathrm{L}}$ túrù 'one dog' (< ìdú ), pèdù ${ }^{\text {L }}$ túrù 'one sheep' (< pédù), yà:-nà ${ }^{\mathrm{L}}$ túrù 'one woman' (< yà:-nâ), nà ${ }^{\mathrm{L}}{ }^{\mathrm{L}}$ túrù 'one cow' (<nàmâ), and with an adjective [pèdù jèm] ${ }^{\mathrm{L}}$ túrù 'one black sheep' (<pèdù̀ ${ }^{\mathrm{L}}$ jém). An exception is mùnjú tùrù 'one thousand.'

In the counting sequence (without nouns): ' $1,2,3,4, \ldots$ ', the form for ' 1 ' is $t i ́ \rightarrow$.
'Other (not the same)' is the adjective yàgá, as in ìdù ${ }^{\text {L }}$ yàgá 'another dog'. For yàgá as an adverb 'more, additionally' or 'again', see $\S 19.3 .2$.

### 4.6.1.2 ' 2 ' to ' 10 '

| gloss | form |  |
| :--- | :--- | :--- |
| '2' | lě̀y | (for lè see below) |
| '3' | tà:ndú |  |
| '4' | nă:y |  |
| '5' | ǹnó |  |
| '6' | kúlè: |  |
| '7' | sôy |  |
| '8' | gágàrà |  |
| '9' | tù:gó |  |
| '10' | pźlù |  |

These numerals do not affect the tones of a preceding noun.
In a counting sequence ( $' 1,2,3,4, \ldots$ '), the vowel of $l \hat{\varepsilon} y$ is prolonged ( $1 \check{\varepsilon} \rightarrow \dot{y}$ ) to match the rhythm of the flanking numerals ( $t i ́ \rightarrow$ ' 1 ' plus the long vowel of tà:ndú ' 3 '). However, the later numerals including sôy ' 7 ' are not prolonged.

After a noun (with or without modifiers), a phrase-final numeral beginning with an H-tone is subject to phonetic downdrift. For example, in ódù lĕy 'two roads' and gìné pélù 'ten houses', the H-tone on the numeral is lower-pitched than that of the noun if the whole phrase is prepausal. However, addition of definite $=g \grave{~ r}$ restores the high pitch, so in gìn $\varepsilon$ $l \check{\varepsilon} y=g \grave{o}$ 'the two houses' the H-tones are at about the same pitch level. '2' appears in L-toned and truncated form in lè wôy, the combination with wôy 'all'. The most common instance is ह́m(mغ̀) lغ̀ wôy 'the two of us (you-Sg and I)'. After 2Pl é and 3Pl bé, the $l$ of $l \grave{\varepsilon}$ is geminated:


### 4.6.1.3 Decimal multiples ('10', ‘20', ...) and composites (' 11 ', ‘ 59 ', ...)

The multiples of ' 10 ' are in (47). Beginning with ' 20 ' they consist of (mostly contracted and in some cases tone-dropped) combinations of pélù ' 10 ' with the relevant single-digit numeral.

| gloss | form |
| :--- | :--- |
| '10' | pélù |
| '20' | pè:-něy |
| '30' | pé:-tà:ndú~ pé:-rà:ndú |
| '40' | pé:-nă:y |
| '50' | pé:-ǹnó |
| '60' | pèlù-kúlè: |
| '70' | pè:-sôy |
| '80' | pè:-gágàrà |
| '90' | pé:-tù:gó |

In ' 30 ', ' 40 ', ' 50 ', and ' 90 ', i.e. those whose digit term has $/ \mathrm{LH} /$ melody, the final H-tone is not heard phrase-finally or in isolation. In this position one hears pé:-tà:ndù etc. wtih final L-tone.

In composites with a decimal and a digit such as ' 11 ' and ' 22 ', the decimal comes first, then the digit, then a particle sìgè related to sìgé 'more' but without the H-tone. A linking suffix -gù ("-Link" in interlinears) is added to the digit term, and also to ' 10 ' but not to other decimal terms. Initial H-tones in the digit term are downstepped after a final H-tone ('20', ' 90 '). In allegro speech, H-tones in the noninitial words in such combinations are not always clearly articulated.

The forms with ' 1 ' as the digit term are in (48).

| '11' | pélù-gù | túrù-gù | sìgè |
| :---: | :---: | :---: | :---: |
| '21' | pè:-něy | túrù-gù | sìgè |
| '31' | pé:-rà:ndù | túrù-gù | sìgè |
| '41' | pé:-nà:y | túrù-gù | sìgè |
| '51' | pé:-ǹnò | túrù-gù | sìgè |
| '61' | pèlù-kúlè: | túrù-gù | sìgè |
| '71' | pè:-ŝ̂y | túrù-gù | sìgè |
| '81' | pè:-gágàrà | túrù-gù | sìgè |
| '91' | pé:-tù:gó | túrù-gù | sìgè |

The forms of the other digit terms in such combinations are illustrated in (49). The lexically /LH/-toned ' 3 ', ' 4 ', ' 5 ', and ' 9 ' shift the H-tone onto -gù (which becomes -gú ), and fallingtoned ' 7 ' tends to spread its H-tone to the syllable break.

| (49) | '62' | pèlù-kúlè: | $1 E ̌ y-g u ̀$ | sìgè |
| :---: | :---: | :---: | :---: | :---: |
|  | '63' | pèlù-kúlè: | tà:ndù-gú | Sìgè |
|  | '64' | pèlù-kúlè: | nà:y-gú | sìgè |
|  | '65' | pèlù-kúlè: | ǹǹ̀-gú | sìgè |
|  | '66' | pèlù-kúlè: | kúlè:-gù | siggè |
|  | '67' | pèlù-kúlè: | sóy-gù | Sigè |
|  | '68' | pèlù-kúlè: | gágàrà-gù | Sìgè |
|  | '69’ | pèlù-kúlè: | tù:gò-gú | sìgè |

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

The stems in (50) are usually noun-like morphosyntactically.

$$
\begin{equation*}
\text { gloss } \quad \text { form } \tag{50}
\end{equation*}
$$

a. 'hundred' témdèrè
(<Fulfulde)
b. 'thousand' mùnjú (mùnjú tùrù)
c. 'million'
mìlyón
( $<$ French)
'Thousand' normally requires a numeral even for 'one thousand'. This is not the case with 'hundred' or 'million' which are used without a numeral in the senses 'a hundred' and 'a million', though of course they can be followed by other numerals beginning with ' 2 ' (témdèrè lẽy 'two hundred', mìlyón lĕy 'two million').

A numeral expressing a multiple of 'hundred', 'thousand', or 'million' can be combined with another numeral based on a lower order. The modified noun occurs at the beginning.
(51) pédù [témdèrè lĕy] [pé:-ǹnò tà:ndù-gú sìgè]
sheep [hundred two] [ten-five three-Link plus] 'two hundred fifty three sheep'

### 4.6.1.5 Currency

As in other Malian languages, except local French, currency is calculated based on a unit equivalent to five francs CFA except for large amounts beginning with one million francs CFA. In Donno So the regular currency unit is búdù. The smallest coin in circulation, now increasingly rare, worth five francs CFA, is therefore bùdù ${ }^{\mathrm{L}}$ túrù 'one boudou'.

### 4.6.1.6 Distributive iteration of numerals

Numerals are iterated to indicate distributivity: 'two each', 'two by two', 'two at a time', etc. The second iteration is L-toned if not phrased with a following word or particle. Forms for the basic numerals are in (52).

| gloss | simple | distributive |
| :--- | :--- | :--- |
| ' 1 ' | túrù | túrú-tùrù |
| '2' | lěy | lěy-lèy |
| '3' | tà:ndú | tà:ndú-tà:ndù |
| '4' | nă:y | nă:y-nà:y |
| '5' | ǹnó | ǹnó-ǹnò |
| '6' | kúlè: | kúlè:-kùlè: |
| '7' | sôy | sôy-sòy |
| '8' | gágàrà | gágàrà-gàgàrà |
| '9' | tù:gá | tù:gó-tù:gò |
| '10' | pélù | pélù-pèlù |

See also àyá-àyà ‘how much (each)?’, §13.2.2.6.
Morphologically complex numerals are simplified by iterating only the final stem. They also tend to be contracted phonologically, though full articulations can be elicited.

| gloss | simple | distributive |
| :--- | :--- | :--- |
|  |  |  |
| '20' | pè:-něy | pè:-něy-nèy |
| '30' | pé:-tà:ndù~pé:-rà:ndù | pé:-tà:n-tà:ndù |
| ' 11 ' | pèlù-kúlè: | pélù-gù túrù-gù sìgè |

Distributive numerals can be made predicative by using the 'it is' and 'it is not' clitics. These also have the effect of restoring a final H -tone in the second iteration for $/ \mathrm{LH} /$-toned numerals like ' 3 '.
a. úlù- $\eta \quad$ tà:ndú-tà:ndù = $\quad$ ǵ
child-Pl three-three=it.is
'The children are three by three (in groups of three).'
b. $\varepsilon m m e ̀ ~ t a ̀: n d u ́-t a ̀: n d u ́=l a ̀:-ŋ ́ ~ z ~$

1Pl three-three=it.is.not-1P1Sbj
'We are not three by three.'

### 4.6.2 Ordinal adjectives

Ordinals from numerals are covered in the subsections below. For interrogative àyà-ènné 'how-manieth?' see §13.2.2.6.

### 4.6.2.1 'First' (nâ: $\eta$, kě:) and 'last' (dògòndó )

These are adjectives, as shown by tone-dropping on the noun: $g i ̀ n \grave{~}{ }^{L}$ nâ: $\eta$ or $g i ̀ n \grave{\varepsilon}{ }^{L} k \check{\varepsilon}$ : 'first house', ǹdè ${ }^{L}$ dògòndó 'last person'.

For adverbial 'first(ly)' see §8.4.6.2.

### 4.6.2.2 Other ordinals (ènné )

Other ordinals are formed by adding ènné to the numeral, whose tones are dropped. There are no glaring irregularities, and in most combinations ènné is pronounced as a separate word, but 'second' (expected \#lèy-ènné) is contracted.
form gloss
a. single-digit numeral
$\begin{array}{ll}\text { lè:-nné } & \text { 'second' } \\ \text { tà:ndù ènné } & \text { 'third' }\end{array}$

| nà:y ènné | 'fourth' |
| :--- | :--- |
| ǹǹ ̀̀nné | 'fifth' |
| kùlè ènné | 'sixth' |
| sòy ènné | 'seventh' |
| gàgàrà ènné | 'eighth' |
| tù:g̀̀ ènné | 'ninth' |
| pèlù ènné | 'tenth' |

b. decimal
pè:-nè ènné 'twentieth'
c. decimal plus single-digit numeral [pèlù-gù tùrù-gù sig̀̀ ${ }^{L}$ ènné 'eleventh'
d. hundred
tèmdèrè énné 'hundredth'

### 4.6.3 Fractions and portions

péjèr̀ c means 'half', and more generally '(substantial) division' (one of two, three, or perhaps more parts, not necessarily exactly equivalent. It can be quantified: péjèrè tà:ndú 'three divisions (=thirds)'. kùló 'share, portion' is a possessed (semantically inalienable) noun that denotes a division allocated to an individual: kùló m̀-mò 'my share'.

## 5 Nominal and adjectival compounds

In the tonal-type notation I use for compounds, $\dot{x}=\{H\}$ tone overlay, $\hat{\mathrm{x}}=\{\mathrm{HL}\}$ 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]. For example, [ǹ n̄] is a noun-noun compound type with tone-dropped initial and unchanged lexical tone on the final. [ñ $\bar{n}$ ] could also be represented as $\mathrm{X}^{\mathrm{L}} \mathrm{Y}$ using a tonosyntactic superscript.

### 5.1 Nominal compounds

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

In this unusual type, the initial and final retain their independent tones, each having one H -tone.

In ànjú-ygò:ló 'a cultivar of roselle (Hibiscus)', the initial is clearly ànjú 'roselle' though the final is not otherwise attested. Each component has an H-tone. A similar example is úlù-ŋ̀ bàràsórò 'scolopender' with úlù-ŋ 'children'.

A compound pattern of type [ $\bar{n} \bar{n}]$ may also be discerned in certain very long nouns, often flora-fauna terms, with two separated H-tones. These sound like compounds even though the components may be nontransparent. Examples are sàné-dòmólò 'herb sp. (Cyanotis)', dùmbún-dèjélé 'tree sp. (Stereospermum)', and ̀̀ró-mè:mé 'herb sp. (Corchorus)'.

As noted in $\S 4.2 .5$, a deadjectival abstractive noun can be juxtaposed to another noun to specify the relevant semantic domain. The two nouns are tonally independent and the combination could be thought of as a loose compound.

### 5.1.2 Compounds of type [ǹ n̄]

Here the initial is tone-dropped and the final keeps its tones. This is the basic noun-noun compound type, rivaled only by the possessive-type compound [ $\bar{n}$ ǹ]. I hyphenate, and generally omit the tone superscript ${ }^{\mathrm{L}}$ word-internally.
compound literal gloss reference

| segmental shapes regular |  |  |
| :---: | :---: | :---: |
| kàyànà-gùnnó | "slave of káyànä" | herb sp. similar to kápànà (both are |
| ògùlù-ìdú | "bush dog" | Senna spp.) <br> jackal; wild dog (Lycaon) |
| ว̀rò-nă: | "baobab meal" | tô (millet cakes), with baobab-leaf sauce |
| kàmà-dî: | "macari water" | macari (spice) mixed with water |
| nèn-tibú | "salt stone" | bar or slab of salt |
| àmà-gìné | "affine(s) house" | family visit to affines' families on a holy day |
| màrpò:-pùnó | "musket powder' | gunpowder |


| b. change in segmental shape of initial |  |  |
| :---: | :---: | :---: |
| à:gà-pàná | "morning food" | lunch (< à:gǎ:) |
| dì:gè-pàná | "afternoon food" | supper (< dì:gă:) |

The initial usually functions semantically as a modifier, as in 'morning food' or 'baobab meal'. Less often it functions as head, but in that case there is no clear boundary between an [ǹ $\bar{n}$ ] compound and a $N^{L}$ Adj sequence, which have the same tones. In specific instances, if the final is obscure and is not used adjectivally with a range of nouns, I treat the combination as a compound.

### 5.1.3 Compounds with nominalized verb and incorporated object

### 5.1.3.1 Nominalized object-verb combinations

The regular object-verb nominalization has $\{L\}$-toned incorporated object noun and $\{H L\}$-toned verb, with no nominalizing suffix.
a. $\grave{m m} \grave{\varepsilon}^{\mathrm{L}}{ }_{-}{ }^{\mathrm{HL}}$ Wálà $\quad$ 'sorghum cultivation'
yù: ${ }^{\mathrm{L}} \mathrm{HL}^{\mathrm{HL}}$ Wálà 'millet cultivation, agriculture'
gìnè ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ údò 'house-building, construction'
b. [gìnè-gà:] ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ gálà 'passing (=end) of rainy season'

The initials here correspond to the nouns $\grave{\varepsilon} m m \dot{\varepsilon}$, yû: , gìné, and the compound gìnè-gǎ: .
This construction can be used in simple argument NPs, as in 'Sorghum cultivation is good'. However, it is also productive productive as an alternative to verbal-noun (infinitival) VP complements in multiclausal syntax. Although ostensibly limited to transitive clauses, cognate nominals can be used to make seemingly intransitive verbs transitive. A typologically unusual consequence of this productivity is that the object can be expanded (determined, quantified over, possessed). See $\S 17.4$ for examples and discussion of $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complements.

### 5.1.3.2 Nominalized subject-verb with suffix -lv̀ or -rùg

This very restricted compound type is associated with lexicalized subject-verb combinations denoting transitions between night and day or among seasons. In full clauses, the "subject" sticks close to the verb and fails some subject tests (§11.1.1.4). In the nominalization, the initial is the incorporated subject, either năy 'sun' or the untranslatable bâ: (associated with day/night and dry-/rainy-season transitions) in the usual L-toned form for compound initials. The nominalized verb is $\{\mathrm{HL}\}$-toned and has suffix $-l \grave{v}$, which gets its vowel quality from the verb stem. The tone pattern is consistent with the suffixless $\{\mathrm{L}\}-\{\mathrm{HL}\}$ type for verb-object compounds (preceding section).

```
a. with nǎy 'sun'
        này-[yímè-lè] 'twilight' (as sun is about to set)
    nàn-[númbò-lò] 'sunset'
    nàn-[túmbò-lò] 'sunrise'
```

b. with bâ: in the sense 'day/night transition'

| bà:-[yá:-là ] | 'daybreak (first light, before dawn)' |
| :--- | :--- |
| bà:-[dénè-lغ̀] | 'twilight' |

Examples (59a-b) are similar but the suffix is now -rùg. Cf. verbs súgò 'descend, go/come down' and gǒ: 'exit'.
a. with gìnè-gă: 'rainy season'
[gìnè-gà:]-[súgù-rùn] 'descent (=onset) of the rainy season'
b. with bâ: in the sense 'dry-/wet-season transition'
bà:-[gó:-rùn] 'exit (=end) of the harvest season'

### 5.1.4 Possessive-type compounds [̄̄̀ ǹ]

Some noun-noun compounds have possessive form: ' X 's Y ', tone type [ $\overline{\mathrm{n}}$ ǹ]. The initial is a noun with its regular tones, and denotes a generic possessor. The final is tone-dropped as it would be following a preposed true possessor. Consider the flora-fauna terms in (60).

> compound literal gloss comment
a. resemblance to animal body part
ìdú 'ìnù "dog's tooth" succulent plant (Caralluma)
nàná ${ }^{\text {hè̀:ndè "cow's tongue" aloe }}$
b. plant inedible for humans

| tàrâ: ${ }^{\text {L }}$ jàbà | "hyena's onion" | wild onion spp. |
| :---: | :---: | :---: |
| jěn ${ }^{\text {L }}$ kàmbù | "lizard's zaban" | tiny melon (Momordica) |
| wílù ${ }^{\text {L }}$ pòlì | "gazelle's sesame" | wild sesame sp. |
| pèrègérè ${ }^{\text {L }}$ ìrù | "dove's milk" | latex-bearing herb (Euphorbia) |
| pèrègérè ${ }^{\text {L nù̀̀ }}$ | "dove's cowpea" | wild legume (Vigna) |
| dòbú ${ }^{\text {L }}$ ¢̇è | "hornbill's peanut" | persistent weed (Commelina) |
| habitat or food |  |  |
| dî: ${ }^{\text {L }}$ sàdà: | "water's bird" | birds found on or near water |
| tǎy ${ }^{\text {L }}$ idù | "ground's fish" | lungfish (Protopterus) |
| nǔy ${ }^{\text {L }}$ kè:-kè: | "cowpea's bug" | a weevil sp. |
| bédè ${ }^{\mathrm{L}} k \stackrel{\text { che }}{ }$-k c : | "dung's bug" | a scarabaeid dung beetle |
| other |  |  |
| àmbá ${ }^{\text {² }}$ ¢ ${ }^{\text {ajè }}$ | "God's chicken" | cattle egret (brilliant white) |
| gùdú ${ }^{\text {L }}$ à̀:bù | "skin's waterbag" | goatskin waterbag for a well |

If the initial denotes a human category it may be pluralized by $-\eta$ (61).

| compound | literal gloss | comment |
| :--- | :--- | :--- |
|  |  |  |
| ènè- $\eta$ gírì- $\eta$ | Lòmbùlù | "goatherds' tamarind" | herb sp. (Chamaecrista)

The initial may itself be composite. In "goatherds' tamarind" (62), 'goatherds' is the plural of an agentive compound. In (62), the initial includes an adjective ('male').

| compound | literal gloss | comment |
| :--- | :--- | :--- |
| [ènjè àná] ${ }^{\text {L kèlè }}$ | "rooster's eggplant"" | poisonous thorny bush (Solanum <br> incanum) |

5.1.5 Agentive and locational compounds with objects

### 5.1.5.1 Agentive compounds of type [ǹ $\hat{\mathrm{v}}$ ]

Agentives may refer to occupations or to characteristic actions such as laughter. Uncompounded agentives are generally absent except for caste names (§4.2.4). 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'). In the case of 'singer' in (63a), the initial may have been reinterpreted as stem-iteration. The verb takes agentive form, consisting segmentally of the chaining form of the stem, but with $\{\mathrm{HL}\}$ tone overlay. Compounds with 'hunter' plus a specific prey type (here illustrated with 'gazelle') are based on -dáy-nè rather than on the uncompounded agentive (or caste) name dànná:-nà. The human singular suffix is -nè in this construction, optionally becoming -nò after a back rounded vowel ('singer', 'builder'), never \#-nà or \#-nò. The corresponding plurals, not shown, have $-\eta$ replacing -nè.
agentive gloss
initial gloss
a. cognate nominal

| nùnù-[nún-ù-nè] | 'singer', | núyò | 'song' |
| :--- | :--- | :--- | :--- |
| gò:-[gó-ý-nè] | 'dancer', | gô: | 'dance (n), |
| mòy-[mónd-ù-nè] | 'laugher' | môy | 'laughter' |

b. noncognate noun (prototypical object)

| $j \varepsilon ̇ d u ̀-[t \varepsilon ́-y ́-n \varepsilon ̀] ~$ | 'weaver' | jèdú | 'cotton thread' |
| :---: | :---: | :---: | :---: |
| gìnè-[úd-ùnè] | 'builder' | gìné | 'house' |
| wìlù-[dá-ý-nè] | 'gazelle hunter' | wílù | 'gazelle' |
| yù:-[wál-ù-nè] | 'farmer' | yû: | 'millet' |
| yù:-[dóng-ù-nè] | 'pounder' | yû: | 'millet' |
| bèlù-[gír-ùnc̀ ${ }^{\text {a }}$ | 'herder' | bèlú | 'goat' |
| nà:-[sí:r-ù-nè] | 'cook (n)' | nă: | 'meal, cooked food' |

The formula [ǹ $\hat{\mathrm{v}}$ ] for compounds is equivalent to $\{\mathrm{L}\}$ plus $\{\mathrm{HL}\}$ on the respective parts. This compound type is therefore tonally equivalent to the $\{\mathrm{L}\}\{\mathrm{HL}\}$ nominalized clause type, common in complements (§17.4). However, that type is not agentive semantically.

### 5.1.5.2 Locational and instrumental compounds (final with $-u^{\sim} \sim-y ́,-\not ̆$ )

This type of compound denotes a place where an activity type is regularly performed, or an instrument used in the activity. The compound may occur by itself, or adjectivally after yàlú 'place' or some other modified noun in $\{\mathrm{L}\}$-toned form. The initial of the compound is also $\{L\}$-toned. It may be a cognate nominal, or it may denote some other conventional object. No agent is specified. The final is a nominalized form of the verb with $\{\mathrm{L}\}$-toned stem and final H-toned -ú (nonmonosyllabic) or -ý (monosyllabic, or mediopassive). Morphologically the final is identical to the deverbal adjective (§4.5.2) and the product-of-action nominal (§4.2.2.3) with the same suffix allomorphs. For monosyllabics and mediopassives it is also identical to the chaining form. The high-frequency verb kán(à) 'do’ has -ŋ́ rather than $-y$.

> compounds 'place/instrument for...'
a. with incorporated nominal (cognate or not)

| nà:-[nè-ý] | '... eating' | jǎ: 'meal', |
| :---: | :---: | :---: |
| kù:-[[kà-ý] | '... shaving heads' | kû: 'head', |
| verb stem nonmonosyllabic, suffix -ú |  |  |
| yù:-[dòmb-ú] | '... pounding millet' | yû: 'millet' |
| kè:lı̀-[bèl-ú] | '... getting money' | kè:lé, bèlé |

b. with iterated verb

| [ùnj-ì-ỳ]-[ùnj-i-ý] | '... lying down' | ùnj-é: |
| :--- | :--- | :--- |
| $[$ yà-ỳ]-[yă-ý] | '.. spending the night' | yâ: |

c. like (a) but with suffix -1́
pànà-[kànì-1́] '... cooking food' i.e. 'kitchen', pàná 'food' wàlù-[kànù-ท́] '... doing work' wálù 'work (n)'
tèmbè:-[mà-ý] from tèmbê: mǎ: 'make (=mold) bricks' can be used in this way, meaning 'brick-making place', preferably with yàlù ${ }^{L}$. It can also mean 'brick mold'.
mànà ${ }^{\mathrm{L}}$ yù:-[tùm-ú] 'plastic (mánà) container for measuring (túmゝे) millet (yû:)' is a good example of an instrumental compound.

### 5.1.5.3 Other nominalized noun-verb compounds

gìnè-sùgó '(sb's) host, one who provides lodging (for sb)' consists of \{L\}-toned gìné 'house' and an apparent perfective participle of súgò 'go down' in the sense 'live, dwell (at a house)'. Even local French descendre is used in this sense, generalized from 'go back down (after work or study) to (a home)'. The full relative clause implied by this would be 'person at whose home (one) lodges'. However, the tone-dropping on 'house' is inconsistent with a synchronic relative-clause analysis.

### 5.1.6 Compounds with $\hat{1}$ : 'child' and other diminutive compounds

î: 'child' is readily compounded with a $\{\mathrm{L}\}$-toned initial denoting a plant or animal species. The compound denotes a juvenile animal, or the fruit or other conspicuous product of a plant.

$$
\begin{equation*}
\text { stem } \quad \text { gloss } \quad \text { with }-\hat{i}: \quad \text { gloss } \tag{65}
\end{equation*}
$$

a. plants

| màngòró | 'mango' | màngòrò-î: | 'mango (fruit)' |
| :---: | :---: | :---: | :---: |
| દ́lè | 'peanuts' | èlè-1̂! | 'peanut fruit (pod, nut) |

b. animals
ìdú 'dog’ ìdù-î: 'puppy’
pédù '(a) sheep' pèdù-î: 'lamb'
nàná 'cow' nànà-î: 'calf’
yùgúrù 'snake' yùgùrù-î: 'baby snake'
Numerous nouns appear to be frozen diminutives with a reduced form of *-î: , either a final -ý or a final contracted -î: or -ê: (perhaps from ${ }^{*}$-ý). The preceding stem is $\{\mathrm{L}\}$-toned, like a compound initial. In some cases the whole diminutive is an $\{\mathrm{L}\}$-toned compound initial. Examples of $(\varepsilon)-\hat{y}$, in some cases unsegmentable, are in (66). The stem-final $\varepsilon$ is a mutation from $a$ or $\Omega$ in some examples. I exclude combinations ending in Cv̌y monosyllables like sà- $-\dot{y}$ in e.g. nùmò sà-ý 'finger' from nùmó 'hand', since the endings might be $C \grave{v}-\bar{y}$ verbal nouns turned deverbal adjective (§4.5.2), in this case from verb sâ: 'become a skeleton'.
form gloss comment
a. $(\grave{\varepsilon})-\bar{y}$

$$
\begin{aligned}
& \text { related to yă: 'female', yà:-ná 'woman' } \\
& \begin{array}{l}
\text { jèn } \\
\text { Là̀̀̀-y }
\end{array} \quad \text { 'female agama' } \\
& \text { jěn 'agama lizard' }
\end{aligned}
$$

b. $(\grave{\varepsilon})-y$ in compound initials
from tìmmé 'tree'
[tìmmè-ỳ]-gállù 'neem tree' gàllú 'bitter'
[tìmmè-ỳj-[pùrg-î̀] 'eucalyptus’ púr(ù)gì ‘yellow'
from nùmó 'hand'
[nùmè-ỳ]-dùmòndó 'pinky finger'
from kùbś 'foot'
[kùbè-ỳ]-dùmòndó 'little toe'
c. ( $(\hat{\varepsilon})-\bar{y}$ as final in possessive-type compounds
from sàdâ: 'bird'
òrò-pùns ${ }^{\text {L }}$ sàdè-ỳ 'bee-eater' (green bird) "baobab-leaf's bird" from màrpy̌: 'musket' úlù-ŋ̀̀ ${ }^{\text {L }}$ màrpò:-ỳ 'toy musket' "children's musket"
d. final $\check{\varepsilon} y$, suggestive but doubtfully segmentable synchronically
bènděy 'loincloth (for circumcised boys)'
dùgěy 'necklace'

```
    g\grave{běy 'hourglass-shaped tomtom'}
    g\grave{nčy 'elephant'}
    kèmněy 'cotton'
    kùnněy 'ladle (n)'
    p\varepsiloǹ:r\varepsiloňy 'small earthenware ablutions bowl'
    gèbìlદ̌y 'short-handled pick-hoe'
iterated
    g\grave{mbù-g\grave{mběy 'butterfly'}}\mathbf{}\mathrm{ \}
    g\grave{ndù-g\grave{nd\varepsiloňy 'herder's staff (one end hooked, one forked)'}}\mathbf{}\mathrm{ ' }
compound final
    tìbù-sàg\varepsiloňy
    `gravel'(tibú` `stone`)
```

Examples of final -î: are in (67). They might alternatively be segmented as (î)-ỳ, but the tone pattern makes direct equation with $(\grave{\varepsilon})-\bar{y}$ difficult. The sense may be diminutive size or, as with 'key' and 'small grindstone', a small object regularly paired with the larger one. (Two grindstones are paired, a large flattish one on which grain is placed, and a small round one that is held in the hand to grind.)
form gloss related form
a. diminutive -î: contrasting with unsuffixed noun

| bòng-î: | '(ordinary) navel' | bòngá 'protruding navel' |
| :--- | :--- | :--- |
| jog-î: | 'exterior throat' | jógù 'Adam's apple' |
| kòd-î: | 'small calabash' | kòdú 'calabash' |
| kòr-î: | 'small trough' | kórò 'animals' drinking trough' |
| tànn-î: | 'twig' | tànná 'stick, staff' |
| tàn-î: | 'key' | tàná 'door' |

b. as compound final
from tìbú 'stone'
ǹnà:-[tìb-î:] 'small grindstone' ìnǎ: 'large grindstone, quern'
kèbùl-[tîb-î:] 'flint (for lighter)'
kìndè-[tìb-î:] 'gizzard' kíndè 'liver/heart'
c. not easily segmentable

| bòmmî: | 'street' |
| :--- | :--- |
| dè̀gî:: | 'earthenware cooking pot' |
| kèbî: | 'crack (narrow gap)' |
| tòmî: | 'turban' |
| pòlî: | 'sesame' |
| tòli:: | 'star' |
| sùnyî: | 'thread' |
| kòmbìlî: | '(finger-/toe-)nail' |
| tèngàrî: | 'conical hat' |

d. phonologically unusual
kè: ${ }^{n}-\hat{1}: \quad$ 'arrow' kěn 'bow (and arrow)'

Nonmonosyllabic nouns ending in ê: (68a) and especially ě: (68b) may involve 'child' etymologically. ě: is the +ATR counterpart of $\grave{\varepsilon}-\hat{y}$ but is less morphologically transparent. The forms in (68) are synchronically unsegmentable. Final ê: is also fairly common in cognate nominals, see (303e) in §11.1.2.5, and it may reflect a different morphological construction.

## form

gloss
comment
a. final ê:
mòmê: 'scorpion'
nènê: 'flank (side of body)'
sònê: 'five-lined skink'
tèmbê: 'mud brick'
in compound final
kùbò-pèlê: 'anklebone'
b. final ě:
àrùgě: $\quad$ 'boubou (garment)'
kòmbě: 'shell'
yàgùrě: 'chaff'
The borrowings nà-nây 'mint' (< Arabic) and pà-pây 'papaya' ( $<$ French) have a similar final $y$ but do not match the tones of the inherited diminutives and have a reduplicative look, see (22b) in §4.1.4.

There are also some compound finals consisting of diminutive forms (-î:) of adjectives, especially color adjectives. They are shown in (69) along with a few unusual bahuvrihi compounds including these adjectives.

$$
\begin{equation*}
\text { compound } \quad \text { gloss } \quad \text { comment } \tag{69}
\end{equation*}
$$

| a. related to pílù 'white' <br> old diminutive |  |  |
| :--- | :--- | :--- |
| tè-[pìl-î:] | 'sparrowhawk' | tèbù- 'hawk' |
| sèl-[pìl-î:] | 'tree sp. (Boscia)' |  |
| bahuvrihi-like semantics |  |  |
| gìlè-pílù | 'bustard sp.' cf. gìr-î: 'eye' |  |

b. related to bánù 'red'
old diminutive
[mènè-mènè]-[bàn-î:] 'brown ants’ mènè-ménè ‘ants’
bahuvrihi-like semantics dúlò-m-bà:nù 'tigerfish’ "tail-red"
c. related to púrùgù 'yellow'
old diminutive [tìmmè-ỳ]-[pùrg-î:] 'eucalyptus' tìmmè-ý'tree-Dimin'
d. related to dùmbú 'short'

غ̀mmè-[dùmb-î:] 'sweet sorghum' غ̀mmé 'sorghum'

The third adjective in the core color triangle is $g \hat{\varepsilon} y$ 'black'. Unlike 'white' and 'red' it ends in a consonant, which may have blocked an overtly suffixed diminutive. 'Black' does, however, occur in several fauna terms of the same general type as the color-diminutive compounds just illustrated, and one suspects they might have had diminutive form if such a form existed.
with gên 'black'
a. possible covert diminutive compounds

| [mènè-mènè]-gê] | 'stinging ant' | -ménè 'ants' |
| :---: | :---: | :---: |
| nànù-gêt | 'paper wasp' | nànú 'wasp' |
| ǹnà:-gên | 'cobra' | ǹnâ: 'viper (Bitis)' |
| mòmè:-gêp | 'emperor scorpion' | mòmê: 'scorpion' |

b. bahuvrihi-like semantics
gìè-gề $\quad$ 'ground hornbill' cf. gìrî: 'eye'
'Ground hornbill' in (70b) is an inter-Dogon borrowing.
For vocalic symbolism, which can involve diminution of an action or diminution of products of an action, see §3.4.8.

### 5.1.7 Compounds with variants of 'man' (àn-ná) and 'woman' (yà:-ná)

àná 'male' and yă: 'female' are adjectives that can be added to any relevant fauna term. Thus sàdâ: 'bird', sàdà: ${ }^{\text {L }}$ àná 'male bird' and sàdà: ${ }^{\text {L }}$ yă: 'female bird'. With human categories (such as ethnicities and castes), the suffixed singular forms àn-ná 'man' and yà:-ná 'woman' are used: púl̀̀-nò 'Fulbe (person)', pùlò-nò ${ }^{\text {L }}$ àn-ná ‘Fulbe man' and pùlò-nò ${ }^{\text {L }}$ yà:-ná ‘Fulbe woman'. However, yà:- rather than yà:-nà is used as compound initial in generic contexts, as in yà:-[tánà-ndà] 'wedding, marriage ceremony' and yà:-să: ‘sister’ (also just să:).

Adjectives àná 'male' and yă: 'female' can be used opportunistically to distinguish two similar species of plants.
'Boy' is àn-nà-î: or contracted àn-nà-y, plural ànà-úlù-ŋ̀ with ungeminated n (cf. î: 'child', úlù-ŋ̀ ‘children'). 'Girl' is yà:-nà-1̂: or contracted yà:-nà-ŷ, plural yà:-úlù-ŋ̀.
yànná:-nà 'old woman' has plural yànná:-1j. The male counterparts are ànná:-nà 'old man', ànná:-1j. The morphology is non-transparent; the geminate $n n$ makes more sense etymologically for 'old man' (*àn ná:-nà) than for 'old woman', where we would expect an ungeminated $n$.
ànà ${ }^{\text {L }}$ kú:-nò 'bachelor', based on àná rather than on suffixed àn-ná, has plural ànà ${ }^{L}$ kú:-rj. For 'unmarried woman' I recorded singular yà:-nà ${ }^{\mathrm{L}}$ kúi:-nò varying with yà: ${ }^{\mathrm{L}}$ kú:-nò, plural yà: ${ }^{\text {L }}$ kú:-j̀.

### 5.1.8 Compounds with báyà 'owner'

bánà or bànâ: 'owner' is usually possessed or compounded, it but can be used in isolation in the sense 'owner' (of an understood entity) or 'master' (of a slave). See also §18.3.5 for its use as 'the (same) guy'. In compounds it appears with a rising (LH) tone pattern. The initial has its regular tones. The human singular suffix $-n v$ is optional in compounds that have singular reference. The plural is bàná-mbè. The unsuffixed form in compounds is bànâ: .

```
gìn\varepsiloń/ bìdígù / nàyá bà\etaâ:/ bà\etaá-nà
house / shop / owner(-Sg)
'house-/shop-/cattle-owner'
```

Aside from the unusual rising tone pattern, this resembles a possessive-type compound. The initial may be a full NP including its own determiner (72).

| [gìn ${ }^{\text {L }}$ | ற̀gó] | bà ${ }^{\text {áá-nò }=\text { j }}$ |
| :---: | :---: | :---: |
| [house ${ }^{\text {L }}$ | Prox] | owner-Sg=Def |
| 'the owner of this house' |  |  |

kû: bàpá or kû:-nゝ̀ means 'chief, head (of a village)', from the body part kû: 'head'.
The 'owner of $X$ ' construction competes with the characteristic derivation with suffix -gí-nغ̀ (§4.2.1) when X is a simple noun.

### 5.1.9 nâ: ('authentic', 'entire')

One can distinguish the normal cultivar of millet (yû:) as yù: ${ }^{\mathrm{L}}$ nâ: from others, such as yù:-tǒ: (an early-ripening variety). For sorghum ( $\varepsilon$ mmé ) one can likewise distinguish the normal cultivar as $\grave{\varepsilon} m m \grave{\varepsilon}{ }^{\mathrm{L}}$ nâ: from sweet sorghum (whose short stem is sucked like sugar cane) sànàkénè or $\grave{\varepsilon} m m \dot{\varepsilon}$-[dùmb-î:], and from a weedy wild sorghum (Sorghum arundinaceum) غ̀mmè sàdàlá.

From tógù 'shed' (any covered shelter with one or more open sides) we get tògù ${ }^{\mathrm{L}}$ nâ: denoting the primary men's palaver shed in a village.

Noncanonical ("false") subcategories opposed to the primary or basic category X are typically expressed by adding a pro forma nonhuman possessor for X, e.g. "hyena's onion" for inedible wild onions, or else by making $X$ the possessor of 'slave' to indicate subordination. See §5.1.4 above for examples.
nâ: can also mean 'entire plant' when the relevant flora term primarily denotes a fruit or other product, as in màngòroò ${ }^{\mathrm{L}}$ nâ: 'mango tree'. However, my assistant preferred compounds with -tìmmé 'tree' as the final.
ǹnǎ: 'large flat grindstone' may have originated as a compound, compare nùm-ná: for this gloss in Jamsay and Tommo So. However, the DS term is quite frozen now. Compare ìnâ: with different tones 'snake sp.', focally Bitis arietens, the puff adder (deadly viper).

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

### 5.1.10.1 $X$-nà:- $X$ compounds

This construction is fairly productive in terms for small insects and prickly herbaceous plants. X is a $C v C v$-stem ending in a high vowel that may be subject to syncope. X is iterated with an intervening -nà:-. The first X is L-toned (tone-dropped) as in many compound initials, but the second is /HL/-toned. Usually X does is unattested elsewhere as a lexical item. The known examples are in (73).
a. fauna

```
dòrù-nà:-dórù 'grasshopper sp.' (Hieroglyphus)
        ~ dòn-nà:-dórù
    sèn-nà:-sénì: 'grasshopper sp.' (Kraussella)
    kèmì-nà:-kêm 'tiny predatory bee' or 'earwig'
        ~ kèmì-nà:-kêm (cf. kěg 'pointed tool, awl; arrow' < *kěm)
    gùdù-nà:-gúdù 'blister beetle' (family Meloidae)
```

b. flora

```
pèn-nà:-pélù 'bristly herb’ (Acanthospermum)
```

    ~ pèn-nà:-pêl
    
### 5.1.10.2 X-Cèm- $X$ compounds

Terms for two rather similar bird spp. show a possible pattern $X$-tèm- $X$ or $X$-dèm- $X$.

```
p\varepsiloǹn-t\varepsiloǹm-pèn\varepsiloń 'thick-knee (Burhinus)'
pèn-dèm-p\varepsilońnè 'lapwing (Vanellus)'
```


### 5.1.11 Instrumental compounds with verbal noun in $-d u$

Substances like 'water' and 'oil' that can be designated for particular functions have compounds with the noun in $\{\mathrm{L}\}$-toned form modified by an adjective or compound final in the form of a verbal noun with suffix $-d u(\S 4.2 .2 .1)$.
(75)
a. compounds of dî: 'water'
dì: ${ }^{\text {L }}$ nò:-dú 'drinking water'
$d i ̀:{ }^{\mathrm{L}}$ ìd-غ̀:-dú 'water for washing'
b. compounds of ně: 'oil'

$$
\begin{aligned}
& \text { nè: }{ }^{\text {L }} \text { ná:-dù 'eating (=cooking) oil' } \\
& \text { nè: }{ }^{\text {L }} \text { pár- } \grave{\text { : }} \text {-dù } \quad \text { 'rubbing (=body or hair) oil' }
\end{aligned}
$$

Compare the possessive compound mò:búlù ${ }^{\text {L }}$ nè: 'vehicle (=motor) oil'.
For pòlù nèn-ú 'file (n)' see §4.5.2.

### 5.1.12 Nasal linker between initial and final

There are a few examples of a nasal linker between the initial and the final. It is syllabified with the initial and my bracketing takes its cue from this, but it assimilates place of articulation from the first consonant of the final.

$$
\begin{equation*}
\text { compound } \quad \text { gloss } \quad \text { comment } \tag{76}
\end{equation*}
$$

a. from kòmbìlî: 'nail (of digit)'
[kùbò-r̀j]-kòmbìlî: 'toenail' kùbó 'foot'
[nùmò-ŋ̀]-kòmbìlî: 'fingernail' nùmó 'hand'
b. other
sòmè:-n-dòngú 'a red spice’ sómè: 'spices’, dòng-ú 'pounded’
c. irregular (cf. bánù 'red')
dúlò-m-bà:nù 'tigerfish’ "tail-red"

### 5.1.13 Final nonpossessive -mv on compound finals

From tànná 'stick, staff' we get tànnà ${ }^{\text {L }}$ jàngá 'forked end (of staff)', which is turn leads to tànnà ${ }^{\mathrm{L}}$ jàngà-mó 'staff with one forked end'. A similar combination is yù: ${ }^{\mathrm{L}}$ jàngà-mó 'forked millet plant (i.e. with divided stem)'. The pronunciation jàngà-má also occurs. The final -mv suffix functions here like the characteristic suffix ( $\S 4.2 .1$ ), except that the $-m v$ word is a modifier (adjective or compound final) requiring a distinct head noun.

In sòy ${ }^{\mathrm{L}}$ sémmèl̀̀-mò 'tattered clothes', the final -mò is not possessive -mò, since the whole phrase 'tattered clothes' can be followed by a real possessor like 1 Sg 币̀-mò. Here sǒy 'cloth, clothing' is L-toned, so the phrase could be a N-Adj combination, a compound, or a relative clause. The other stem from this word-family is inchoative sémmil- $\grave{\text { : }}$ - ' (garment) become tattered'.
[gìr-í:]-[tùrù-mò] 'one-eyed person' is based on gìr-î: 'eye' and túrù ' 1 '.
The vocalism of $-m v$ suggests a relationship with the causative suffix of the same form. Compare the causative verbs jàngà-mó 'form (sth) into a fork' and sémm̀̀l-દ̀:-mò 'make (sth) into tatters' (whose long $\grave{\varepsilon}$ : is often pronounced short). For this connection to be full-fledged, the compounds with -mv would have to be (or have originated as) relative-clause participles of causative verbs, presumably perfective ('stick that has been forked', 'clothes that have been made into tatters'). Given the $\{\mathrm{LH}\}$ overlay on perfective participles, this would be consistent with the tones of jàngà-má but not those of sémmèl̀̀-mò. The tones of these forms are consistent with those of the simple verbs, jàng- $\varepsilon$ :- 'become forked' and sémmil- $̀$ :- 'become tattered'. So it seems best to take the combinations in question as a specialized, specifically compound construction distinct from ordinary relative clauses.

### 5.1.14 Linker -mù- in 'shea-butter' compound

From mùnjú 'shea (karité) tree (Vitellaria)' and ně: 'oil, butter' we get a compound mùnjù-mù-ně: 'shea-butter', with unexplained -mù-. It could be reduplicative or a possessive marker. Compare Dogul Dom mùnù-mà-ně:g 'shea-butter'.

### 5.1.15 Phrasal compounds

dì:-nò:-lú 'thirst (n)' is derived from a form (perhaps participial) of the phrase dî: nò:-lí 'did not drink water'. It has close parallels in several other Dogon languages. For the constructions that it occurs in see $\S 11.2 .1 .3$.
[pób-à:]-nǎ:-yàbà ("strip off [seeds] and take a cow [as a reward]"), cf. póbò 'strip off' and yàbá 'accept, receive', is a tongue-in-cheek name for a grass sp. (Elionurus) whose seeds are difficult to strip off. In this form it is probably an inter-Dogon borrowing, since DS preserves bisyllabic nàyá 'cow' (compare Tommo So nă:). However, pób-à: is a good DS form (past anterior subordinator) and yàbà is a clause-final L-toned (downdrift) version of imperative yábà.

### 5.2 Adjectival compounds

### 5.2.1 Bahuvrihi compounds [ $\bar{n}$ à] or [ $\bar{n}$ 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 the 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 [ $\overline{\mathrm{n}}$ à $]$ ('Blackbeard')

The core noun has its regular tones. The adjective is tone-dropped. In both respects the bahuvrihi differs from the underlying N -Adj combination which is expressed as $\mathrm{N}^{\mathrm{L}}$ Adj with tone-dropped noun and tonally free adjective.

| bahuvrihi | gloss | N-Adj | gloss |
| :---: | :---: | :---: | :---: |
| [bèrè-bèrć]-pò: | 'big-bellied' | bèrè-bèr ${ }^{\text {L }}$ pô: | 'big belly' |
| gùdú-gèn | 'black-skinned' | gùdù ${ }^{\mathrm{L}} g \hat{\varepsilon} \eta$ | 'black skin' |
| kû:-gèท | 'black-headed' | $k u ̀:{ }^{\text {L }} g$ ĝt | 'black head' |
| dúlò-pìlù | 'white-tailed' | dùlo ${ }^{\text {L }}$ pílù | 'white tail' |
| kíndè-pìlù | 'generous, kind' | kìndè ${ }^{\mathrm{L}}$ pílù | 'white liver/heart' |

### 5.2.1.2 With numeral compound final [ $\overline{\mathrm{n}}$ nùm] ('three-legged')

The tone pattern is the same as for deadjectival bahuvrihis. Since numerals do not control tone-dropping on nouns, the tonal difference between the bahuvrihi and the underlying N -Num combination is that the numeral is tone-dropped in the bahuvrihi.

| bahuvrihi | gloss | N-Adj | gloss |
| :--- | :--- | :--- | :--- |
| kû:-lèy | 'two-headed' | kû: lêy | 'two heads' |
| kúbò-kùlè: | 'six-legged' | kúbò kúlè: | 'six legs' |

## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

### 6.1.1 Linear order and tonosyntactic bracketing of multi-word NPs

The combinations of (unpossessed) noun, adjective, numeral, demonstrative, and 'all' quantifier are those in (79). These modifiers are all postnominal. The formulae show the linear order and indicate tone-dropping by superscripted ${ }^{\mathrm{L}}$. In (79), tone-dropping is controlled by an adjective or demonstrative 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). 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 (79), it is always on the right of the target domain for the reason given above. The definite clitic can be added to combinations not including a demonstrative, to indicate discourse-definiteness. When the definite clitic is added to a numeral, a special constructional tone overlay $\{\mathrm{L}\}+\mathrm{H}$ applies not just to the numeral but also to preceding words, as shown in ( $79 \mathrm{c}-\mathrm{d}$ ) and ( $79 \mathrm{k}-1$ ). The definite clitic has no tonal effect when added directly to a noun or adjective. The sequences ending in 'all' (79i-p) are identical to those without 'all' (79a-i), except that for pragmatic reasons the combination of 'all' plus a numeral requires definite marking.
a. $\quad \mathrm{N}(=$ Def $)$
b. $\quad \mathrm{N}^{\mathrm{L}} \operatorname{Adj}(=\mathrm{Def})$
c. N Num
[ N Num] ${ }^{\mathrm{L}+\mathrm{H}}=$ Def
d. $\quad \mathrm{N}^{\mathrm{L}}$ Adj Num [ N Adj Num] ${ }^{\mathrm{L}+\mathrm{H}}=$ Def
e. $\quad N^{L}$ Dem
f. $\quad\left[\mathrm{N}\right.$ Adj] ${ }^{\mathrm{L}}$ Dem
g. $\quad[\mathrm{N} N u m]^{\mathrm{L}}$ Dem
h. $\quad$ N Adj Num $]^{\text {L }}$ Dem
[N Num Adj] ${ }^{\text {L }}$ Dem (inverted)
i. $\quad \mathrm{N}(=\mathrm{Def})$ 'all'
j. $\quad N^{L} \operatorname{Adj}(=$ Def) 'all'
k. $\quad$ N Num $]^{\mathrm{L}+\mathrm{H}}=$ Def 'all'

1. $\quad[\mathrm{N} \text { Adj Num }]^{\mathrm{L}+\mathrm{H}}=$ Def 'all'
m. $N^{L}$ Dem 'all'
n. $[\mathrm{N} \mathrm{Adj}]^{\mathrm{L}}$ Dem 'all'
o. $\quad[\mathrm{N} N u m]^{\mathrm{L}}$ Dem 'all'
p. $\quad[\mathrm{N} \text { Adj Num }]^{\mathrm{L}}$ Dem 'all'
[N Num Adj] ${ }^{\text {L }}$ Dem 'all' (inverted)
Examples are in (80). Further examples are given later in this chapter. Modifying adjectives and demonstratives control tone-dropping on the preceding string (up to and including the
noun). Numerals and the 'all' quantifier usually have no tonosyntactic effects on the preceding string. However, the addition of a definite clitic to a numeral catalyzes a constructional tone overlay applying to the sequence [noun ... numeral], with $\{\mathrm{L}\}+\mathrm{H}$ overlaid, i.e. tone-dropping except for a single H -tone at the right edge of the numeral before the L-toned definite clitic ( $80 \mathrm{c}-\mathrm{d}, \mathrm{k}-1$ ). Because numerals precede demonstratives, a numeral may be included in the tonosyntactic target domain, as in ( 80 g ).
a. ìdú / ódù
ìdú $=$ g̀̀ $(\sim$ ìd $o ́=\grave{ })$
ódù $=$ g̀̀ $(\sim$ ód̀̀ $=\grave{\partial})$
b. ìdù ${ }^{\mathrm{L}}$ pílù

c. ìdú tà:ndú / kúlè: / lĕy
ódù tà:ndú / kúlè: / lĕy
[ìdù $^{\mathrm{L}}$ tà: $\left.n d o\right]^{\mathrm{L}+\mathrm{H}}=\grave{\grave{c}}$
[idù ${ }^{\mathrm{L}}$ kùlé: $]^{\mathrm{L}+\mathrm{H}}=$ gò
[ìdù ľ̌y] ${ }^{\mathrm{L}+\mathrm{H}}=$ gò
d. ìdù ${ }^{\mathrm{L}}$ pílù tà:ndú / kúlè:
[ìdù pìlù tà:ndó ${ }^{\mathrm{L}+\mathrm{H}}=$ ò
[ìdù pìlù kùlé: $]^{\mathrm{L}^{+\mathrm{H}}}=$ g̀̀
e. ìdù ${ }^{\mathrm{L}} \grave{\mathrm{g}} \mathrm{g}$ ́́
f. $\quad[i ̀ d u ̀ ~ p i ̀ l u ̀]^{\mathrm{L}}$ ற̀g ${ }^{\prime}$
g. [ìdù tà:ndù] ${ }^{\mathrm{L}}$ ìg
h. [ìdù pìlù tà:ndù] ${ }^{\mathrm{L}}$ ìǵ
[ỉdù tà:ndù pìhù] $\grave{\mathrm{L}}$ றg ${ }^{\mathrm{L}}$
i. ìdú wôy
$\grave{i} d u ́=g \grave{~}(\sim \mathfrak{i} d o ́=\grave{j})$ wôy
j. ìdù ${ }^{\mathrm{L}}$ pílù wôy
ìdừ ${ }^{\text {L }}$ pílı̀ $=\grave{o}$ wôy
k. [ìdù tà: $n d$ d́ $]^{\mathrm{L}+\mathrm{H}}=\grave{=}$ wôy
[idù kùlé: ${ }^{\mathrm{L}+\mathrm{H}}=$ gò wôy
$[\text { ìdù } \ \varepsilon ̌ y]^{L+H}=g \grave{~ o}$ wôy
2. [ỉdù pìlù tà:ndó] ${ }^{\mathrm{L}+\mathrm{H}}=\grave{j}$ wôy
[ìdù pìlù kùlé:] ${ }^{\text {L+H }}=$ gò wôy
m . ìdù ${ }^{\mathrm{L}}$ ìgó wòy
n. [ìdù pìlù] $\grave{\mathrm{L}}$ gó wòy
o. [ídù tà:ndù] ${ }^{\mathrm{L}}$ ìgó wòy
p. [ìdù pìlù tà:ndù] ${ }^{\text {L }}$ j̀gó wòy [ỉdù tà:ndù pìlù] ${ }^{\mathrm{L}}$ ग̀gó wòy
'dog/road'
'the dog'
'the road'
'white dog'
'the white dog'
'3/6/2 dogs'
' $3 / 6 / 2$ roads'
'the 3 dogs'
'the 6 dogs'
'the 2 dogs'
' $3 / 6$ white dogs'
'the 3 white dogs'
'the 6 white dogs'
'this dog'
'this white dog'
'these 3 dogs'
'these 3 white dogs'
" (inverted)
'all dogs'
'all the dogs'
'all white dogs'
'all the white dogs'
'all 3 dogs'
'all 6 dogs'
'all 2 (=both) dogs'
'all 3 white dogs'
'all 6 white dogs'
'all these dogs'
'all these white dogs'
'all these 3 dogs'
'all these 3 white dogs'
" (inverted)

If there is a preposed possessor, as in 'Seydou's house', the schemas parallel to the unpossessed strings in (79) are those in (81). My assistant required an overt definite or demonstrative in combinations involving 'all'. In the absence of a definite or 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" to the possessor. A demonstrative is not tone-dropped by the possessor. When the definite suffix is directly added to a numeral, the string including the noun and the numeral gets the $\{\mathrm{L}\}+\mathrm{H}$ overlay $(81 \mathrm{c}-\mathrm{d})$. One could argue that the preposed possessor contributed to the L-tone portion of $\{\mathrm{L}\}+\mathrm{H}$ (joint control). A definite morpheme
also protects an adjective from tone-dropping, making it indeterminate whether the possessor or the adjective controls tone-dropping on the noun (81b).
a. Poss ${ }^{\mathrm{L}}[\mathrm{N}(=$ Def $)]$
b. Poss ${ }^{\mathrm{L}}[\mathrm{N}$ Adj]

Poss ${ }^{\mathrm{L}}[\mathrm{N}]^{\mathrm{L}}$ Adj $=$ Def
c. Poss ${ }^{\mathrm{L}}$ [N Num]

Poss [ N Num $]^{\mathrm{L}+\mathrm{H}}=$ Def
d. Poss ${ }^{\mathrm{L}}$ [N Adj Num]

Poss [N Adj Num] ${ }^{\mathrm{L}+\mathrm{H}}=$ Def
Poss ${ }^{\text {L }}$ [N Num Adj] (inverted)
Poss ${ }^{\text {L }}[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Adj=Def (inverted)
e. Poss ${ }^{\mathrm{L}}[\mathrm{N}]^{\mathrm{L}}$ Dem
f. $\quad$ Poss ${ }^{\mathrm{L}}[\mathrm{N} \text { Adj }]^{\mathrm{L}}$ Dem
g. Poss ${ }^{\mathrm{L}}[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Dem
h. Poss ${ }^{\mathrm{L}}$ [N Adj Num $]^{\mathrm{L}}$ Dem

Poss ${ }^{\text {L }}$ [N Num Adj] ${ }^{\text {L }}$ Dem (inverted)
i. Poss ${ }^{\mathrm{L}} \mathrm{N}=$ Def 'all'
j. Poss ${ }^{L}[\mathrm{~N}]$ Adj $=$ Def 'all'
k. Poss [N Num] ${ }^{\mathrm{L}+\mathrm{H}}=$ Def 'all'

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

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

Poss ${ }^{\text {L }}$ [N Num Adj] ${ }^{\text {L }}$ Dem 'all' (inverted)
Examples are in (82). See, however, the comments about the Poss-N-Adj-Num combination in $\S 6.2 .1 .3$ below.
a. sé:dù ${ }^{\mathrm{L}}$ ìdù
sé: $d u ̀{ }^{\mathrm{L}}$ ìdù $=g \grave{o} \sim s e ́: d u{ }^{\mathrm{L}}{ }^{\mathrm{i}} d \grave{\mathrm{c}}=\grave{\jmath}$
b. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù]
sé: ${ }^{\text {ù }}{ }^{\mathrm{L}}[\grave{d} \mathrm{~d}]^{\mathrm{L}}$ pílò=ò
c. sé:dù ${ }^{\mathrm{L}}$ [ìdù tà:ndù]
sé:dù [ìdù tà:ndó] ${ }^{\mathrm{L}+\mathrm{H}}=\grave{~}$
d. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù tà:ndù]
sé:dù [ìdù pìlù tà:ndó] ${ }^{\mathrm{L}+\mathrm{H}}=\grave{~}$
sé: dù ${ }^{\text {L }}$ [ìdù tà:ndù pìlù]
sé:dù ${ }^{\mathrm{L}}$ [ìdù tà:ndù ${ }^{\mathrm{L}}$ pílò =ò
e. sé:dù ${ }^{\mathrm{L}}[i ̀ d u ̀]^{\mathrm{L}}$ ŋ̀ǵó
f. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù] ${ }^{\mathrm{L}}$ ŋ̀gó
g. sé:dù ${ }^{\mathrm{L}}$ [ìdù tà:ndù] ${ }^{\mathrm{L}}$ ŋ̀gó
h. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù tà:ndù] ${ }^{\mathrm{L}}$ ŋ̀gó
sé:dù ${ }^{\mathrm{L}}\left[\right.$ ìdù tà:ndù pìlù] ${ }^{\mathrm{L}}$ ற̀gó
i. sé: ${ }^{\text {ù }}{ }^{\mathrm{L}}[i ̀ d \grave{j}=\grave{\jmath}]$ wôy
j. sé:dù ${ }^{\mathrm{L}}[i ̀ d u ̀]^{\mathrm{L}}$ píl̀̀= ̀̀ wôy
'Seydou's dog'
" (definite)
'Seydou's white dog'
" (definite)
'Seydou's 3 dogs'
" (definite)
'Seydou's 3 white dogs'
" (definite)
" (inverted)
" (definite, 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'
k. sé:dù [ìdù tà:ndó] ${ }^{\mathrm{L}+\mathrm{H}}=$ ò] wôy sé:dù [ìdù kùlé:] ${ }^{\mathrm{L}+\mathrm{H}}=$ gò wôy sé:dù [ìdù lěy] ${ }^{\mathrm{L}+\mathrm{H}}=g \grave{o ̀}$ wôy

1. sé:dù [ìdù pìlù tà:ndó] ${ }^{\mathrm{L}+\mathrm{H}}=\grave{o}$ wôy sé: $d u ̀{ }^{\mathrm{L}}[i ̀ d u ̀ ~ t a ̀: n d u ̀]^{\mathrm{L}} p i ́ l \grave{j}=\grave{o}$ wôy
m. sé:dù ${ }^{\mathrm{L}}[i ̀ d u ̀]^{\mathrm{L}}$ ŋ̀gó wòy
n. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù] ${ }^{\mathrm{L}}$ ŋ̀gó wòy
o. sé:dù ${ }^{\mathrm{L}}$ [ìdù tà:ndù] ${ }^{\mathrm{L}}$ ŋ̀gó wòy
p. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù tà:ndù] ${ }^{\mathrm{L}}$ ŋ̀gó wòy sé:dù ${ }^{\mathrm{L}}$ [ìdù tà:ndù pìlù ${ }^{\mathrm{L}}$ ìgó wòy
'all Seydou's 3 dogs'
'all Seydou's 6 dogs'
'both of Seydou's dogs'
'all 3 of Seydou's white dogs'
" (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'
" (inverted)

If there is a postnominal possessor (always pronominal), the equivalents for (79) and (81) are those in (83). A postnominal possessor has no positive tonosyntactic power over words to its left. It does, however, block a following demonstrative from controlling tone-dropping on words to its left. The string from the noun to the possessor is therefore a tonosyntactic island, which is indicated by the flanking $\subset \ldots \supset$ boundary markers. It is actually indeterminate whether the demonstrative controls tone-dropping on the possessor itself, since these possessors are already /L/-toned. Historically, the construction with a postnominal possessor was originally appositional, i.e. of the type [house [your thing]] where 'thing' is coreferential to 'house' in the fashion of numeral classifiers in various languages. It is difficult for a single tonosyntactic controller to enforce a tone overlay on an entire appositional structure, as it is on a conjunction of two NPs. Probably only 'your thing' was originally subject to control by a following demonstrative.
a. $\quad \mathrm{N} \operatorname{Poss}(=$ Def $)$
b. $\quad \mathrm{N}^{\mathrm{L}}$ Adj Poss(=Def)
c. N Num Poss(=Def)
d. $\quad \mathrm{N}^{\mathrm{L}}$ Adj Num $\operatorname{Poss}(=\mathrm{Def})$

$$
[\text { N Num }]^{\mathrm{L}} \text { Adj Poss }(=\text { Def }) \quad[\text { inverted }]
$$

e. $\subset N$ Poss $\supset$ Dem
f. $\subset \mathrm{N}^{\mathrm{L}}$ Adj Poss $\supset$ Dem
g. $\subset N$ Num Poss $\supset$ Dem
h. $\subset N^{L}$ Adj Num Poss $\supset$ Dem $\subset[\mathrm{N} \text { Num }]^{\text {L }}$ Adj Poss $\supset$ Dem [inverted]
i. N Poss (=Def) 'all'
j. $\quad \mathrm{N}^{\mathrm{L}}$ Adj Poss(=Def) 'all'
k. N Num Poss(=Def) 'all'

1. $N^{\mathrm{L}}$ Adj Num Poss(=Def) 'all'
[N Num] ${ }^{\text {L }}$ Adj Poss(=Def) 'all' [inverted]
m. $\subset N$ Poss $\supset$ Dem 'all'
n. $\subset N^{L}$ Adj Poss $\supset$ Dem 'all'
o. $\subset N$ Num Poss $\supset$ Dem 'all'
p. $\subset \mathrm{N}^{\mathrm{L}}$ Adj Num Poss $\supset$ Dem 'all'
$\subset[\mathrm{N} \text { Num }]^{\mathrm{L}}$ Adj Poss $\supset$ Dem 'all' [inverted]
Examples are in (84), with 2 Sg possessor. The optional definite clitic combines regularly with $-m \grave{~ a s ~}-m \grave{=}=g \grave{(s h o w n})$ or $-m \grave{\jmath}=\grave{\jmath}$.
a．ìdú ù－mò（＝gò）
b．ìdù ${ }^{\mathrm{L}}$ pílù ù－mò（ $\left.=g \grave{\mathrm{o}}\right)$
c．ìdú tà：ndú ù－mò（＝gò）
d．ìdù̀ ${ }^{\mathrm{L}}$ pílù tà：ndú ù－mò（＝gò）
［ìdù tà：ndù ${ }^{\mathrm{L}}$ pílù ù－mò（＝gò）
e．Cìdú ù－mòد ŋ̀gó
f．Cìdù ${ }^{\mathrm{L}}$ pílù ù－mòد ìǵ́
g．Cìdú tà：ndú ù－mòゝ ŋ̀gó
h．Cìdù ${ }^{\mathrm{L}}$ pílù tà：ndú ù－mòゝ ̀̀gó

i．ìdú ù－mò $(=g \grave{)})$ wôy
j．ìdù ${ }^{\mathrm{L}}$ pílù ù－mò $\left.=g \grave{)}\right) w o ̂ y$
k．ìdú tà：ndú ù－mò（＝gò）wôy
1．ìdù ${ }^{\mathrm{L}}$ pílù tà：ndú ù－mò（＝gò）wôy ［ìdù tà：ndù ${ }^{\mathrm{L}}$ pílù ù－mò（＝gò）wôy
m ．Cìdú ù－mòゝ ìgó wòy
n．Cìdù ${ }^{\mathrm{L}}$ pílù ù－mò $\grave{\text { ìgó wòy }}$
o．Cìdú tà：ndú ù－mòゝ ŋ̀gó wòy
o．Cí＇all these 3 dogs of yours＇
p．Cìdù ${ }^{\mathrm{L}}$ pílù tà：ndú ù－mòゝ ŋ̀̀gó wòy＇all these 3 white dogs of yours＇ $\subset[i ̀ d u ̀ ~ t a ̀: n d u ̀]^{\mathrm{L}}$ pílù ù－mò ŋ̀gó wòy＂（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，or demonstrative by itself may function as an NP in the absence of a noun（85a）．My assistant rejected simple wóy＇all＇as an NP，requiring at least the morphological elaboration in（85b），compare（85c）with a common noun as head．
a．bánù／tà：ndú／kô：òb－ú
red／three／NearDist give．me．Imprt
＇Give－2Sg（me）the red one／three／that！＇
b．kó yà－wôy òb－ú
DiscDef all give．me．Imprt
＇Give－2Sg all of it（to me）！＇
$\begin{array}{lll}\text { c．} \begin{array}{ll}\text { fú：}=g \grave{\partial} & \text { wôy }\end{array} \quad \begin{array}{l}\text { òb－ú } \\ \text { millet }=\text { Def }\end{array} & \text { all } & \text { give．me．Imprt }\end{array}$
＇Give－2Sg（me）all the millet！＇

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

In a relative clause，the head NP is seemingly split into two parts，a clause－internal head consisting maximally of Poss－N－Adj－Num，and a postparticipial coda or＂tail＂that contains determiners（definite，demonstrative）and non－numeral quantifiers．This apparent bifurcation is readily accounted for by taking the relative clause as one among several postnominal
modifiers, as in Poss-N-Adj-Num-RelClause-Det-..., and allowing the pre-relative portion of the NP to move into the relativization site (after being tone-dropped by the relative clause). See chapter 14 for details.

### 6.2 Possessives

Inalienable (kinship) and alienable possession are only optionally distinguished in DS.

### 6.2.1 Alienable possession

Alienable possession applies to all nouns except those kin terms that have special inalienable forms or tone patterns.

### 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. A genitive linker mò is infrequently present, especially when the possessor is somewhat complex, as in bà:-bâ: mò ${ }^{\text {L }}$ bà: '(my) grandfather's father'. The linker appears to be more common in the speech of older persons, as is also the case in Tommo So. The possessor may be clearly identified (86a) or generic (86b). If the referent of the possessed NP is discourse-definite, the definite marker may be added (86c). Usually this entails that the possessor too is definite, so if the possessor is not a personal name it is usually marked by a demonstrative (86d) or the definite marker (86e).

$$
\begin{array}{ll}
\text { a. sé:dù }{ }^{\mathrm{L}} \text { gìnè / }{ }^{\mathrm{L}} \text { pèdù }  \tag{86}\\
\mathrm{S} & { }^{\mathrm{L}} \text { house } /{ }^{\mathrm{L}} \text { sheep } \\
& \text { 'Seydou's house/sheep' }(<\text { gìné, pédù })
\end{array}
$$

b. yà:-ná ${ }^{\text {L }}$ gìnè
woman-Sg ${ }^{\mathrm{L}}$ house
'a/the house of a woman'
c. sé: ${ }^{\text {ù }} \quad{ }^{\mathrm{L}}$ gìǹ̀ $=\grave{\jmath}$

S $\quad{ }^{\text {L }}$ house= $=$ Def
'Seydou's house' (discourse-definite)
d. [ànà ŋ̀gó] ${ }^{\text {L gìnò }=\grave{~}}$
[man Prox] ${ }^{\text {L }}$ house=$=$ Def
'this man's house'
e. yà:-nó=̀ $\quad$ Lgìǹ̀=̀
woman-Sg=Def $\quad{ }^{\text {L }}$ house=$=$ Def
'the woman's house'

For the tonal treatment of modifiers of the possessed noun, see §6.2.1.3 below.

### 6.2.1.2 Pronominal alienable possessor

If the alienable possessor is a pronoun, its form is indicated in (87), repeated from (37) in §4.3.1. The possesor pronominal follows the possessed noun and takes L-toned form. If the noun is omitted, the possessor can function absolutely with a definite clitic (cf. English mine), but the pronoun reverts to its usual H -toned form and the 1 Sg degeminates its initial mm and realizes the H -tone on the first vowel.
(87) Alienable possessor pronouns

|  | postnominal | absolute (definite) |
| :---: | :---: | :---: |
| 1Sg | $\grave{m}$-mò | mó= ${ }^{\text {o }}$ |
| 1Pl | èm-mò | $\hat{\varepsilon} m-m \grave{j}=\grave{\grave{o}}$ |
| 2 Sg | ù-mò | $u ́-m \grave{=}=\grave{\grave{c}}$ |
| 2Pl | è-mò | é-mò $=\grave{o}$ |
| 3 Sg | wò-mう̀ | wó-mò $=$ う |
| 3Pl | bè-mò | $b e ́-m \grave{=}=\grave{ }$ |

A postnominal possessor does not normally control a tone overlay on the noun or any intervening modifiers, hence gándà $\grave{\varepsilon} m-m \grave{\partial}(=\grave{\jmath})$ 'our country'. However, there are textual examples where a possessor allows a following demonstrative adverb to tone-drop the noun. An example is gàndà̀ ${ }^{L}$ Ém-mò ǹdâ: 'our country here' (text 02 at $00: 13$ ), i.e. 'this country of ours', with tone-dropped noun but with H-tone preserved on the possessor. Likewise yàlù ${ }^{\mathrm{L}}$ Ém-mò ̀̀gǵ-rà: 'village of there (that area)', text 05 at 00:40.

The possessed noun cannot be marked separately for definiteness. If present, the definite marker appears on the possessor, though it is hard to detect phonetically because possessive $m \grave{~ a l r e a d y ~ h a s ~ a n ~} \rho$-vowel (88).

$$
\begin{array}{ll}
\operatorname{gìn} \varepsilon /(\# g i ̀ n o ́=\grave{j}) & \grave{m}-m \grave{\partial}(=\grave{j})  \tag{88}\\
\text { house } /(\# \text { house }=\text { Def }) & 1 \text { Sg-Poss }=\text { Def }) \\
\text { 'my house' } &
\end{array}
$$

### 6.2.1.3 Tone-dropping of modifiers of alienably possessed nouns

As indicated in §6.2.1.1 above, a preposed possessor controls $\{\mathrm{L}\}$ (tone-dropping) on the possessed noun. The domain of this $\{\mathrm{L}\}$ extends rightward beyond the noun itself to include an adjective and/or a numeral modifying the possessed noun. See schemata (81a-d,i-1) and exemplifying examples ( $82 \mathrm{a}-\mathrm{d}, \mathrm{i}-1$ ) in §6.1.1. One example, here with interlinears, is (89).

$$
\begin{array}{llll}
\text { sé: dù } & { }^{\mathrm{L}} \text { [ìdù } & \text { pìlù } & \text { tà:ndù / kùlè:] }  \tag{89}\\
\mathrm{S} & { }^{\mathrm{L}}[\mathrm{dog} & \text { white } & \text { three / six] }
\end{array}
$$

'Seydou's three white dogs.' (ìdú, pílù, tà:ndú, kúlè:)
However, if a definite clitic is added directly to a a string ending in a numeral like (89), with or without an adjective, the possessor-controlled $\{\mathrm{L}\}$ is pre-empted by a noncompositional constructional overlay $\{\mathrm{L}\}+\mathrm{H}$ attributable to the definite clitic (Heath 2015). Although the first two bracketed words in (90a) have the same L-tones as in (89), it is not clear that the
possessor has anything to do with the tone-dropping in (90a). This is because the same $\{\mathrm{L}\}+\mathrm{H}$ overlay occurs in all strings ending with a numeral-definite combination, even without a possessor (90b).

'Seydou's three (white) dogs' (definite)
b. [ìdù (pìlù) tà: $n d o f]^{\mathrm{L}+\mathrm{H}}=$ j̀ /kùlé: $]^{\mathrm{L}^{\text {+H}}}=g \grave{~}$
[dog (white) three] $\left.{ }^{\mathrm{L}+\mathrm{H}}=\mathrm{Def} / \mathrm{six}\right]^{\mathrm{L}+\mathrm{H}}=$ Def
'the three (white) dogs'
Similarly, a modifying adjective is included in the tone-dropping domain in (91a), but addition of a definite clitic to the adjective protects it from possessor-controlled tonedropping ( 91 b ). It is then indeterminate whether tone-dropping on the noun is controlled by the possessor or by the adjective.
a. sé:dù ${ }^{\mathrm{L}}$ [ìdù pìlù] $\mathrm{S} \quad{ }^{\mathrm{L}}[\mathrm{dog}$ white]
'Seydou's white dog'
b. sé: $d u ̀ \quad{ }^{\mathrm{L}}[i ̀ d u ̀]^{\mathrm{L}} \quad$ pílò $=\grave{o}$
$S \quad{ }^{\mathrm{L}}[\mathrm{dog}]^{\mathrm{L}} \quad$ white=$=$ Def
'Seydou's white dog' (definite)
A preposed possessor and a final demonstrative in the same NP function as flanking joint controllers of the intervening words. Either the possessor or the demonstrative by itself would be sufficient to control tone-dropping on the relevant string. See ( $81 \mathrm{e}-\mathrm{h}, \mathrm{m}-\mathrm{p}$ ) and ( $82 \mathrm{e}-\mathrm{h}, \mathrm{m}-\mathrm{p}$ ) in $\S 6.1 .1$ for schemata and examples. Both the adjective and the numeral are part of the tonedropped domain whether or not these two have been inverted (92a-b).
$\begin{array}{llllll}\text { a. sé:dù } & { }^{\mathrm{L}} \text { [ìdù } & \text { pìlù } & \text { tà:ndù }{ }^{\mathrm{L}} & \text { ìgǵ } \\ \mathrm{S} & { }^{\mathrm{L}}[\mathrm{dog} & \text { white } & \text { three }] & \text { Prox }\end{array}$
'these three white dogs of Seydou's'
b. sé:dù ${ }^{\mathrm{L}}$ İ̀dù tà:ndù pìlù ${ }^{\mathrm{L}}$ ìgó

S ${ }^{\mathrm{L}}$ [dog three white] Prox
[ $=($ a), with adjective and numeral inverted]
As shown in (83-84) in §6.1.1 above, a pronominal possessor follows the possessed noun. Specifically, such a possessor follows the maximal string N-Adj-Num but precedes demonstratives and 'all'. The pronominal possessor controls no tone overlay on the preceding noun or word-string. It does, however, block the expected tonosyntactic control of the possessed noun and its modifiers by a following demonstrative. In (93a), 'dog' is tonedropped by the demonstrative. The intervening pronominal possessor in (93b) allows 'dog' to surface with its lexical /LH/ melody, just as in (93c) with no demonstrative, justifying the tonosyntactic-island notation with $\subset \ldots \supset$ in (93b).
a. ìdù ${ }^{\mathrm{L}}$ ŋ̀gó
$\operatorname{dog}^{L} \quad$ Prox
'this dog'
b. Cìdú ù-mòد !̀gó
$\subset \operatorname{dog} \quad 2 \mathrm{Sg}$-Poss $\supset \quad$ Prox
'this dog of yours-Sg'
c. ìdú ù-mゝ̀
dog 2Sg-Poss
dog 2Sg-Poss

Since pronominal possessors are L-toned, it is indeterminate whether the possessor itself in (93b) is tone-dropped by the demonstrative, or just keeps its regular L-tones as in (93c). One interesting analytic possibility is that the possessor is in fact tone-dropped, effectively absorbing the tonosyntactic power launched by the demonstrative. Historically, these pronominal possessors were probably appositional, e.g. 'dog, [your thing]' meaning 'your dog'. With a demonstrative this would be expanded as 'dog, [your thing Dem]', with the demonstrative phrased prosodically with 'your thing'.

### 6.2.2 Inalienable possession

Basic kin terms such as lédù '(maternal) uncle' are preceded by nonpronominal possessors, in the same fashion as alienably possessed nouns (94a). When the possessor is a pronoun, inalienables permit either the regular construction with postposed pronominal possessor including the morpheme mò after a non-tone-dropped possessed noun (94b), or a specifically inalienable alternative construction with the independent form of the pronoun preceding the possessed noun and behaving tonosyntactically like a nonpronominal possessor (94c).
a. sé:dù
${ }^{\text {L }}$ lèdù
$S \quad$ Luncle
'Seydou's uncle'
b. lédù ù-mò
uncle 2Sg-Poss
'your-Sg uncle'
c. ú ${ }^{\mathrm{L}}$ lèdù
2 SgPoss ${ }^{\text {Luncle }}$
[=(b)]

### 6.2.2.1 Kin and relationship terms

Examples of kin terms that can be used with a preposed pronominal possessor such as 2 Sg ú are in (95). The "alienable" possessive construction (not shown) may also be used. Most kin terms do not allow singular suffix -nv, the exception being 'grandchild', which is likely composite. The plural is -mbè as in $u^{\mathrm{L}} b \grave{\mathrm{D}}:-\mathrm{mbè}$ 'your cross-cousins'.

| stem | 'your ...' | gloss |
| :---: | :---: | :---: |
| bǎ: | $u^{\mathrm{L}}$ bà: | 'father' |
| nǎ: | $u^{\mathrm{L}}$ nà: | 'mother' |
| bǒ: | $u^{\mathrm{L}}$ bò: | 'cross-cousin' |
| sâ: | $u^{\mathrm{L}}$ sà: | 'sister (of a man)', also yà:-sầ: |
| lédù | ú ${ }^{\text {L }}$ lèdù | 'maternal uncle' |
| dénè | $u^{\text {L }}$ dènè | 'elder same-sex sibling' |
| súpò | ú ${ }^{\text {L }}$ Lùnò | 'younger same-sex sibling' |
| bà:-bâ: | $u^{\mathrm{L}}$ bà:-bà: | 'paternal grandfather' |
| ígè | $u^{\mathrm{L}}$ ig g ¢ | 'husband' |
| ámà | $u^{\text {L }}$ Lamà | 'in-law (parent, child, sibling)' |
| sánà | $u$ u ${ }^{\text {L }}$ sànà | 'brother (of a woman)' |
| tìrèmí-nè | $u$ ú ${ }^{\text {tirrèmìn}}$-nè | 'grandchild' |
| áy-nè | $u{ }^{\text {L }}$ ày | '(woman's) same-sex friend' |
| ànùgě: | $u^{\text {L }}$ Lànùgè: | '(man's) same-sex friend' |
| bǒ:nò | $u u^{\text {L }}$ bò:nò | 'colleague; neighbor' |

Some morphologically complex kin terms are yànná:nà 'old woman' or 'grandmother' (either side), ǹdà:-pǎy 'grandmother' (cf. pǎy 'old'). They are treated as alienable.

Other kin and relationship terms that are treated as alienable are dímbì '(man's) girlfriend', yà:-ná ‘woman/wife', î: 'child', ìgù-yǎ: '(woman's) co-wife', i.e. the husband's other wife (contains ígè 'husband' and yà:-ná 'woman'), and $\grave{b} \hat{1}: ~ ' m o t h e r ' s ~ c o-w i f e ; ~$ stepmother'. Possessed examples are yà:-ná ù-mò ‘your-Sg wife' and î: m̀-mò 'my child'.

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

I have found no difference in tonosyntactic bracketing between alienable and inalienable possessors. For example, inalienable 'uncle' and alienable 'cow' occur in the same tonosyntactic constructions. An example is (96), with a numeral following the possessed noun.

| sé:dù | ${ }^{\text {L }}$ [lèdù / nàyà | tà:ndù ${ }^{\text {L }}$ | $s \hat{e}:^{n}=g \grave{~}$ |
| :---: | :---: | :---: | :---: |
| S | ${ }^{\text {L }}$ [uncle / cow | three] ${ }^{\text {L }}$ | good=Def |
| 'Seydou's three good uncles/cows' |  |  |  |

### 6.2.3 Recursive possession

A possessed NP can itself be a possessor. This results in a sequence of two (or more) $\{L\}$ toned possessed nouns.
a. [sé:dù [S ${ }^{\text {L friend }}$ ] ${ }^{\text {Lhouse }}$ 'Seydou's friend's house'
$\begin{array}{lll}\text { b. } & {[s e ́: d u ̀ ~} & \left.{ }^{\text {L }} \text { ìdù }\right] \\ {[\mathrm{S}} & \left.{ }^{\mathrm{L}} \mathrm{dog}\right] & { }^{\mathrm{L}} \text { dùlò }\end{array}$

> 'Seydou's dog's tail'

### 6.2.4 Possessive mə̀ replacing omitted possessum

Possessive mı̀ can be added after a nonpronominal NP to denote an unnamed but contextually understandable possession. Thus sé:dù mò 'Seydou's'. In a sentence like 'We will spend the night at Seydou's', it is understood that the reference is to a dwelling, in DS as in English. In other contexts it might refer to a sheep, vehicle, or other possession.

### 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. pèdù ${ }^{\mathrm{L}} \quad g \hat{\varepsilon} \eta$
sheep $^{\mathrm{L}}$ black
'black sheep' (< pédù)
b. $\grave{\text { è }}{ }^{\mathrm{L}} \quad$ pílù
goat white
'white goat' (< غ̀n $\hat{\varepsilon}$ )
A modifying adjective is included in the tone-dropping domain controlled by a possessor preceding the noun, see (91a) in $\S 6.2 .1 .3$ above. However, if the definite clitic is attached to the adjective, the adjective surfaces with its lexical tones, as in (91b) in §6.2.1.3 above. In this case, it is indeterminate whether the noun is tone-dropped by the possessor or by the adjective.

### 6.3.2 Adjective gàmbǎy 'certain (ones)'

The prototypical construction for this adjective is a parallelistic clause sequence where a set (e.g. 'young men of the village') is partitioned into two (or occasionally more) subsets which are associated with antonymic predicates. An example is (99). gàmbǎy behaves like an adjective in tone-dropping a preceding noun.

$$
\begin{align*}
& \text { jèlú jèl-â: bèlù-m-ì- } \varnothing=y o ̂:,  \tag{99}\\
& \text { harvest(n) harvest-PastAnt get-Pass-Pfv-3SgSbj=if, } \\
& \text { [ànà-ì }{ }^{\mathrm{L}} \text { gàmbǎy] [gín dà:] bè-d-ì, } \\
& \text { [man- } \mathrm{Pl}^{\mathrm{L}} \text { certain] [house Loc] remain-Ipfv-3PlSbj, } \\
& \text { gàmbǎy [wàlù }{ }^{\mathrm{L}} \quad{ }^{\mathrm{HL}} \text { kánà] bò-j-ì } \\
& \text { certain } \quad\left[\operatorname{work}(n)^{\mathrm{L}} \quad{ }^{\mathrm{HL}}\right. \text { do] go-Ipfv-3PlSbj }
\end{align*}
$$

'When the harvest has been completed, some men stay in the houses (=the village), others go (to the city) to work.'
gàmbǎy looks at first sight like a morphological plural (gàmbà-ý ). This may be correct historically, but the final nasal is also found in singular contexts with this adjective, so it is synchronically unsegmentable. Examples are àn-nà ${ }^{\mathrm{L}}$ gàmbǎク 'a certain man', sàgàtàrà ${ }^{\mathrm{L}}$ gàmbǎy 'some of the youth (young men)' with grammatically singular collective ságàtàrà 'youth', and yù: ${ }^{\text {L }}$ gàmbǎg 'some of the millet' in (100).

```
[yù: 'L gàmbǎn] dò:nó-d-ì,
[millet certain] Augm.sell-Ipfv-3P1Sbj,
gàmbǎy jà-ná:-d-ì
certain Augm-eat-Ipfv-3PlSbj
'Some of the millet they will sell, some (=the rest) they will consume.'
```

As these examples show, the noun denoting the set ('men', 'millet') need not be repeated on the second occurrence of gàmbǎy. Both wà:gùrù ${ }^{\mathrm{L}}$ gàmbǎy and bare gàmbǎy occur as adverbs 'sometimes' or 'maybe' (text 03 at 00:10 and 01:24).

### 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 an N-Adj combination is highly lexicalized. The adjectives in (101a) and (101b) can therefore be combined either as (101c) or as (101d).
a. pèdù ${ }^{\mathrm{L}} \quad g \hat{\varepsilon} \eta$
sheep $^{\mathrm{L}}$ black
'a black sheep' (pédù)
b. pèdù ${ }^{\mathrm{L}}$ pô:
sheep $^{\mathrm{L}} \quad$ big
'a big sheep'
c. [pèdù pò:] ${ }^{\mathrm{L}}$ gên
[sheep big] ${ }^{\text {L }}$ black
'a big black sheep'
d. [pèdù $g \grave{y} \eta]^{\mathrm{L}} p o ̂:$
[sheep black] ${ }^{\text {L }}$ big
'a big black sheep'

An alternative analysis would be that the first adjective controls tone-dropping on the noun, then the final adjective controls tone-dropping on the first adjective. However, there is independent justification for a righmost controller imposing $\{\mathrm{L}\}$ on a multi-word sequence, as in [ N Num$]^{\mathrm{L}}$ Dem where the numeral is a non-controller.

### 6.3.3.2 Adjectival intensifiers

$\grave{\varepsilon} d u ́ \rightarrow$ 'very' can precede any adjective: màngòrò ${ }^{\text {L }}$ [z̀dú $\rightarrow$ ìlé] 'a very ripe mango'. For the sense 'well' see §8.4.4.1.

For lexicalized adjectival intensifiers, belonging to the general class of expressive adverbials, see §8.4.7.

### 6.3.3.3 'Good to eat'

The construction consists of an NP, a verbal noun, and a predicate adjective (positive or negative). It is therefore literally 'eating X is/isn't good'. The verbal noun does not undergo tone-dropping so it is not syntactically possessed by the NP.

| [súgù | ${ }^{\text {L }}$ nàmà] | témè-dù | sé: ${ }^{n}=\grave{\eta}$, |
| :--- | :--- | :--- | :--- |
| [francolin | ${ }^{\text {Lancat] }}$ meat | eat.meat-VblN | good=it.is |
| [gă:n-gà: ${ }^{n}$ | ${ }^{\text {L }}$ nàmà] | témè-dù | ${\text { sê: }{ }^{n}=\text { nà: }}^{\text {[crow }}$ |
| ${ }^{\text {L }}$ meat] | eat.meat-VbIN | good=it.is.not |  |

'Francolin meat is good to eat, crow meat isn't good to eat.'


### 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 (103a-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. $\begin{aligned} & \text { pédù / èné tà:ndú / kúlè: } \\ & \text { sheep / goat } \\ & \text { three / six }\end{aligned}$
'three/six sheep/goats'
b. [pèdù ${ }^{\mathrm{L}}$ gên] tà:ndú / kúlè:
[sheep ${ }^{\text {L }}$ black] three / six
'three/six black sheep'
If the definite morpheme is added to the numeral, a special construction $\{\mathrm{L}\}+\mathrm{H}$ overlay applies to the $\mathrm{N}-\mathrm{Num}$ or N -Adj-Num string, with just the final syllable H-toned. This pattern occurs with or without a preposed possessor. Relevant formulae are scatted throughout (79), (81), and (83), and corresponding examples are in (80), (82), and (83), see $\S 6.1 .1$ above (look for the ${ }^{\mathrm{L}+\mathrm{H}}$ superscripts). See also ( $90 \mathrm{a}-\mathrm{b}$ ) in $\S 6.2 .1 .3$. This tonal pattern is most noticeable when the numeral is lexically /HL/-toned, like 'six' as opposed to /LH/-toned 'three'.

In the absence of the definite marker, a numeral is included in the tone-dropping domain controlled by a possessor preceding the noun, and/or by a demonstrative following the
numeral. See formulae and examples in the lists just mentioned, as well as (89) and (92) in §6.2.1.3.

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

This optional reordering process applies to N -Adj-Num combinations that co-occur with an inversion licensor: a possessor (preposed or postposed), a demonstrative, or a relative clause. If inversion applies, the result is the linear order N-Num-Adj within the larger NP. My assistant did not approve of inversion when the only extra determiner is a definite clitic.

The uninverted and inverted orders in the presence of both a possessor and a demonstrative are illustrated in (92a-b) in §6.2.1.3. See also the formulae and examples in (79-84) in §6.1.1 above (look for "inverted" in the translations on the right).

When inversion occurs, the numeral becomes subject to the tonosyntactic power of the following adjective. This fact is masked when the entire sequence is subject to control by a peripheral controller (preposed possessor, demonstrative, relative clause). It is revealed in combinations where the only extra determiner is a postposed pronominal possessor, which is not itself a tonosyntactic controller. This is illustrated by the pair of uninverted and inverted forms in (84d) in §6.1.1, which are marked up here as (104a-b).
a. ìdù ${ }^{\mathrm{L}}$ pílù tà:ndú ù-mò
$\operatorname{dog}^{\mathrm{L}}$ white three 2Sg-Poss
'your three white dogs'
$\begin{array}{llll}\text { b. } \begin{array}{ll}\text { [ìdù } & \text { tà:ndù }]^{\mathrm{L}} \\ {[\text { pog }} & \text { pílù }\end{array} & \text { three }]^{\mathrm{L}} & \text { white } & \text { 2Sg-Poss } \\ {[=(\mathrm{a})]} & & & \end{array}$
In (104a), with the regular N -Adj-Num order, the adjective controls tone-dropping on the noun, while the numeral and postposed possessor have no tonosyntactic interactions with other elements. When the order is switched to N-Num-Adj in (104b), the adjective's regular tonosyntactic control power is now applied to the N -Num sequence. This shows that tonosyntactic control is directional. It also shows that stem-class labels "adjective" and "numeral" are still active after inversion.

Adjective-Numeral Inversion applies in many Dogon languages under very similar conditions. It is effectively impossible to model using conventional syntactic tree structures. Rather, it is a somewhat surface-y linear inversion similar to phonological metathesis. Yet it feeds into tonosyntactic processes (Heath 2016).

### 6.4.3 gǎ:w 'many/much'

gǎ:w behaves like a numeral insofar as it does not control tone-dropping on a preceding noun. Therefore in (105a) each noun shows its lexical tones. Human nouns normally take plural form in this combination, but 'person' does not. The quantifier may be followed by a demonstrative, in which case it is included in the domain of tone-dropping (105b). gǎ:w by itself may function adverbially (105c) or absolutely as a noun (with an implied noun omitted), but 'person' and 'thing' are often explicit.
bǒ:-j-ì
Augm.go-Ipfv-3P1Sbj
'Many cows/sheep/people/women/children will go.'
b. [nàyà / pèdù gà:w] ${ }^{\mathrm{L}}$ ŋ̀gó
[cow / sheep many ${ }^{\mathrm{L}} \quad$ Prox
'many (of) these cows/sheep' or 'these numerous cows/sheep'
c. gǎ:w yèyy-ì-y- $\varnothing$
much sleep-MP-Pfv-3SgSbj
'He/She slept a lot.'
d. [(ńdé) gǎ:w] ból-ì-yà
[(person) many] go-Pfv-3PlSbj
'Many (people) have gone.'
e. [kídè gǎ:w] jè:1-غ̀- $\varnothing$
[thing many] bring-Pfv-3SgSbj
'He/She brought many things.'
For predicative gǎ: 'be more numerous than', see §12.1.1.2.

### 6.5 NP with determiner

### 6.5.1 Prenominal discourse-definite marker absent

No prenominal possessor-like discourse-definite marker, similar to kó (a special use of an inanimate possessor pronoun) in some other Dogon languages, is attested in DS.

### 6.5.2 Noun (and modifiers) plus demonstrative

A regular demonstrative ('this', 'that', §4.4.2) follows the N -Adj-Num sequence and any postposed pronominal possessor. Demonstratives may co-occur with possessors (preposed or postposed) but not with the definite clitic.

In the absence of a postposed possessor, the demonstrative controls tone-dropping on the noun and on intervening words, as in [N Adj Num] ${ }^{\mathrm{L}}$ Dem, or inverted [N Num Adj] ${ }^{\mathrm{L}}$ Dem. Examples are in (80h) in $\S 6.1 .1$. If there is also a preposed possessor, either the possessor or the demonstrative individually could account for the tone-dropping: Poss ${ }^{\mathrm{L}}\left[\mathrm{N}\right.$ Adj Num] ${ }^{\mathrm{L}}$ Dem, or inverted Poss ${ }^{L}\left[\mathrm{~N}\right.$ Num Adj] ${ }^{\mathrm{L}}$ Dem. See (92a-b) in §6.2.1.3.

A postposed possessor, however, prevents a following demonstrative from controlling tone-dropping on the preceding words, indicating that the sequence from the noun up to and possibly including the possessor is a tonosyntactic island. It is possible that the demonstrative does control tone-dropping on the pronominal possessor itself, but since such possessors always appear in L-toned form, it is impossible to prove that (vacuous) tone-dropping is
controlled by the demonstrative. See ( $84 \mathrm{e}-\mathrm{h}, \mathrm{m}-\mathrm{p}$ ) in §6.1.1. One of these is marked up here as (106).
(106) Cìdù ${ }^{\mathrm{L}}$ pílù tà:ndú ù-mòつ j̀gó
$\subset$ dog white three 2Sg-Poss $\supset$ Prox
'these 3 white dogs of yours'
The string within the island, enclosed by $\subset \ldots \supset$, has the same form it would have without the demonstrative. Neither the adjective nor the numeral is affected by the presence of the demonstrative. One can debate whether 2 Sg possessor $\grave{u}-m \grave{~ i s ~ v a c u o u s l y ~ a f f e c t e d ~ b y ~ t o n e-~}$ dropping.

### 6.5.3 Noun (and modifiers) plus definite clitic

The definite clitic is $=g \grave{j}$. It often contracts with a short final vowel in a noninitial syllable in the preceding word, resulting in long [ $0:]$ transcribed $0-0$, e.g. pédù $=g \grave{\sim} \sim$ péd $\grave{=}=\grave{\jmath}$ 'the sheepSg', nàyá $=g \grave{~} \sim$ nàyó $=\grave{\jmath}$ 'the cow'. Contraction does not occur after a long vowel or after a consonant: pèdù sê: ${ }^{n}=g \grave{o ̀}$ 'the good sheep-Sg', sé:dù ${ }^{\mathrm{L}}$ ànùgè̀: = gò 'Seydou's (same-sex) friend', $\hat{\imath}:=g \grave{\jmath}$ 'the child'.

The definite clitic occupies the same linear position as a demonstrative, but it behaves phonologically like a suffix. Definite and demonstrative do not co-occur in the same NP, except insofar as demonstrative yó-gò 'that' and possibly kó 'this' appear to contain the definite morpheme (\#yó does not occur in the absence of $g \grave{\jmath}$ ). Definite marking is permitted, but optional, in combination with a preposed or postposed possessor.

The definite clitic has no tonosyntactic effect on a preceding noun or N-Adj combination. However, it does have an interesting constructional tonosyntactic interaction when it is added to a string ending in a numeral. The entire string (e.g. N-Adj-Num) gets an $\{\mathrm{L}\}+\mathrm{H}$ overlay, with the single H -tone expressed on the final syllable of the numeral before the L -toned clitic. See the formulae and examples with $L+H$ superscript in (79-84) §6.1.1, and examples (90a-b) in §6.2.1.3.

The definite clitic also affects the tonosyntax of a Poss-N-Adj combination. In the absence of the clitic, this combination is realized as Poss ${ }^{L}$ [ $N$ Adj], with the noun and adjective tone-dropped under the control of the possessor. However, adding a definite clitic results in Poss ${ }^{\mathrm{L}}[\mathrm{N}]^{\mathrm{L}}$ Adj-Def, where the adjective retains its lexical tones and where we cannot determine whether the possessor or the adjective tone-drops the noun. See formulae (81b) and examples (82b) in §6.1.1, and examples (91a-b) in §6.2.1.3.

### 6.6 Universal and distributive quantifiers

### 6.6.1 'All’ (wôy, yà-wôy, fû $\rightarrow \sim p \hat{u} \rightarrow$, sé:nèy)

The basic universal quantifier is wôy. It occurs in that form in several examples in (107a-b). After a pronoun it is expanded as yà-wôy (107c).

$$
\begin{align*}
& \text { a. }[i ́ r \grave{~}=\grave{j} \text { wôy] nó- }- \text { - } \varnothing  \tag{107}\\
& \text { [milk }=\text { Def all] drink-Pfv-3SgSbj } \\
& \text { 'He/She drank all the milk.' }
\end{align*}
$$

```
b. [pédù wò-mò=̀̀ wôy] dón- \(\grave{\varepsilon}-\varnothing\)
    [sheep 3Sg-Poss=Def all] sell-Pfv-3SgSbj
    'He sold all of his sheep.'
c. [ह́mmè yà-wóy]= ŋ̀ dà-dá:-dè- \(\varnothing\)
    \([1 \mathrm{Pl}\) all]=Acc Rdp-kill-Ipfv-3SgSbj
    'He/She will kill us all.'
```

'All that' (discourse-definite) is kó yà-wôy.
The 'all' quantifier wôy occurs at the end of a NP, after determiners. If present, an accusative clitic as in (107c) or a postposition follows wôy, showing that it is syntactically part of the NP rather than a floating or adverbial quantifier.

When the NP containing 'all' is the subject of the clause, the verb shows plural subject agreement when the referent is construed as a group, especially of humans (108). This is true of 'everybody' in (108c), even though the noun usually omits plural -mbè.
a. $[$ úlù- $\grave{y}=g \grave{o}$ wôy] ból-ì-yà
[child- $\mathrm{Pl}=$ Def all] go-Pfv-3P1Sbj
'All the children went/have gone.'
b. [yà:-ŋ́=gò wôy] yél-ì-yà
[woman-Pl=Def all] come-Pfv-3PlSbj
'All the women came/have come.'
c. [ǹdó=ò wôy] ból-ì-yà
[person=Def all] go-Pfv-3P1Sbj
'Everyone came/has come.'
[assistant also accepted ńdó= ̀̀-mbè wôy]
d. [é yà-wôy] bǒ:-jè-ŋ̀
$[2 \mathrm{Pl}$ all] Augm.go-Ipfv-2P1Sbj
'You will all go.'
However, the examples in (109) show singular subject agreement on the verb. This suggests an individuative construal ('every [one]' or 'each' as opposed to 'all').
a

[1SgPoss ${ }^{\text {L uncle }}$ al
'All my uncles are sick.'
$\begin{array}{lll}\text { b. } & {\left[\begin{array}{ll}{[\text { nà } 1 \mathrm{á}} & \text { wôy }]\end{array}\right.} & \begin{array}{l}\text { jìmé-dè- } \varnothing \\ {[\text { cow }}\end{array} \\ \text { all }] & \text { get.sick-Ipfv-3SgSbj }\end{array}$
'All the cows are sick.'

A true distributive 'each' in a clause crucially involving a second quantified NP was not elicitable. Instead, the regular plural 'all' was used for the first NP, and distributive iteration (§4.6.1.6) appeared in the other quantified NP or in a quantity adverbial. For example, instead of '[Each child] will take [two sheep]' we get '[All the children] will take [two-two sheep]' in
(110a). In (110b), plural 'children' is juxtaposed to distributively iterated 'one-one' which is part of an adverbial phrase.
a. [úlù-ŋ] wôy] [pédù
lĕy-lèy] yènc̀-d-ì
[child-Pl all] [sheep two-two] take-Ipfv-3PlSbj
'The children will take two sheep each.'
$\begin{array}{llllll}\text { b. } & {[\text { úlù- } \eta} & \text { [túrú-tùrù } & \text { lè }] & \text { sóyy }(-\varnothing) \text {-à:] } & \text { nàmà- } \eta \text { y } \\ & \text { [child-Pl } & {[\text { one-one }} & \text { Comit] } & \text { speak(-MP)-PastAnt] } & \text { want- } 1 \mathrm{SgSbj}\end{array}$
'I want to speak individually with all the children.'
wôy features in formulae (79i-p), (81i-p), and (83i-p), and the corresponding examples in (80), (82), and (84) in §6.1.1. When wôy has scope over a conjoined NP, as in 'all the men and women', it can be phrased appositionally with a resumptive plural pronoun, as in 'the men and the women, all of them', see §7.1.1.2.

An alternative to the regular 'all' quantifier wôy is the regionally widespread expressive $f \hat{u} \rightarrow \sim p \hat{u} \rightarrow$ 'all' or 'entirely', cf. Fulfulde $f u ́ \rightarrow$. Though it can be articulated like an interjection, it can function as part of a NP in the same way as wôy. This is shown by (111), where $p \hat{u} \rightarrow$ is followed by the accusative morpheme.
(111) [ànà-1́ pú $\rightarrow=1 ̀]$ dà-ỳ- $\varnothing$
[man- $\mathrm{Pl} \quad$ all=Acc] , kill-Pfv-3SgSbj
'He/She killed all the men.'
A pronoun is tone-dropped before $f \hat{u} \rightarrow \sim p \hat{u} \rightarrow$, as in $b e ̀ f \hat{u} \rightarrow$ 'all of them, they all' and $\grave{\varepsilon} m m e ̀ ~ f \hat{u} \rightarrow$ 'all of us'. This does not happen before yà-wôy.
$p \hat{u} \rightarrow$ can also be adverbial; see (123b) in §7.1.1.2.
Finally, sé:nè̀ 'all' occurs in texts where it seems to function adverbially. The combination sé:nè̀ p $\hat{u} \rightarrow$ is also attested (112).

| $\left[s \hat{e}:^{n}=g \grave{~}\right.$ | sé:nèn | $p \hat{u} \rightarrow]$ | [nằy | $d a ̀:]$ | yò:-dè- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $[f a t(\mathrm{n})=\operatorname{Def}$ | all | all] | [fire | Loc] | enter-Ipfv-3SgSbj |

'(He said:) "all the fat will go (=drip down) into the fire.""

### 6.6.2 nànây 'all, everything'

nànây 'everything' can be used instead of more or less synonymous phrases like kó yà-wôy 'all that'. It can serve as an NP as in 'I lost everything', or as a modifier within a longer NP.
a. [money 1Sg-Poss all] be.lost-Pfv-3SgSbj
'All my money was lost.'
b. [[ànùgě: m̀-mう̀ nànân] lè] gì-ỳ-ŋ̀
[[friend 1 Sg-Poss all] Dat] say-Pfv- 1 SgSbj
'I told all my friends.'

### 6.6.3 Universal and distributive quantifiers with negation

When wôy 'all' is part of an NP within a negative clause, negation scopes over the quantifier. (114) implies that the protagonist did eat some of the millet.

```
yû:=gò wôy nà:-lù-ý
millet=Def all eat-PfvNeg-1SgSbj
```

    'I didn't eat all the millet.'
    For universal negation, a noun X in a negative clause may be accompanied by adjective túll̀̀ in the slightly emphatic sense '(not) any X (at all)' or 'not a single X '. For example, the greeting in (115a) can be elaborated as (115b).
a. bá:sù wò-ló- $\varnothing$
trouble be-StatNeg-3SgSbj
'There's no trouble (here).' (part of a greeting sequence)
b. [bà:sù ${ }^{\mathrm{L}}$ túllı̀ $]$ wò-ló- $\varnothing$
[trouble ${ }^{\mathrm{L}}$ any] be-StatNeg-3SgSbj
'There's no trouble at all (here).'
túllı̀ ~ túrù-lò is fused from túrù lò 'even one', cf. lè 'also, too' (§19.1.3). The uncontracted pronunciation is attested in kìd $\grave{\varepsilon}^{\mathrm{L}}$ túrì̀-lo '(not) anything', with kìdé 'thing' (116).

$$
\begin{array}{llll}
m \grave{i}=\text { ý } & {\left[k i d \grave{\varepsilon}^{\mathrm{L}}\right.} & \text { túrì̀-l̀̀ }] & \text { òbò-líl- } \varnothing  \tag{116}\\
1 \mathrm{Sg}=\text { Acc } & {\left[\text { thing }^{\mathrm{L}}\right.} & \text { any }] & \text { give-PfvNeg-3SgSbj }
\end{array}
$$

'He/She gave me nothing.'

### 6.7 $\quad$ Accusative ( $=$ p)

The accusative morpheme is postposition-like in that it comes at the end of an entire NP, including one ending in the 'all' quantifier, see (107c) in $\S 6.6 .1$. It cannot itself be followed by a postposition. It behaves phonologically like a clitic, syllabifying with the stem-final vowel. This combination of linear externality and phonological integration suggests that it is a (phonological) clitic. I therefore use the = clitic boundary.
$=\eta$ is atonal. Combinations like 1 Sg pronoun $/ \mathrm{mí}=\eta /$ realized as $m i=\emptyset$ are explained in §3.7.4.2.

In most contexts, accusative $=\eta$ and the equally atonal 'it is' clitic $=\eta$ (§11.2.1.1) are phonologically indistinguishable. An accusative NP is always non-clause-final, while the 'it is' clitic $=\eta$ is predicative and therefore normally clause-final (\$11.2.1.1).

Overt accusative marking is more or less obligatory with referentially specific human direct objects of a transitive verb (117a). It is elicitable but normally omitted with animals (117b), and it does not readily occur with inanimates. It is obligatory with pronouns of human reference in object function (117c). Objects of imperative verbs are treated just like objects of indicative verbs (117d).
a. sé:dù $=\grave{\eta} / / u ́ l u ̀=\grave{\eta} \quad W-\varepsilon ̀-\eta ́ / b \varepsilon ̀ n d-\varepsilon ̀-\eta ́$

Seydou=Acc / children=Acc see-Pfv-1SgSbj / hit-Pfv-1SgSbj
'I saw/hit Seydou/the children.'
b. pédù / [pèdù ${ }^{\mathrm{L}}$ ŋ̀gó] $W-\grave{\varepsilon}-\eta$ দ́ / bènd- $\grave{\varepsilon}-\eta$ g sheep / [sheep ${ }^{\text {L Prox] }}$ see-Pfv-1SgSbj / hit-Pfv-1SgSbj
'I saw/hit a sheep/this sheep.'
c. $w o ̀=\emptyset \quad b \varepsilon ̀ n d-\varepsilon ̀-\varnothing$
$3 \mathrm{Sg}=$ Acc $\quad$ hit-Pfv-3SgSbj
'She hit him.'
d. $w o ̀=$ 亿́ béndè 3Sg=Acc hit.Imprt 'Hit-2Sg him/her!'

For the choice between accusative and dative, see §8.1.1.

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction [ $X$ lè] [ $Y$ lè] ' X and Y '

Two NPs (including pronouns) are conjoined by adding conjunction particle lè after both conjuncts. The particle is optionally prolonged intonationally. Prolongation is most common in the first conjunct.
a. $\begin{array}{lll}{[u ́} & l e ̀ \rightarrow] \\ {[2 \mathrm{Sg}} & \text { and }]\end{array} \begin{array}{ll}{[\mathrm{mí}} & \text { lè }]\end{array} \begin{aligned} & \text { bòlò-mó } \\ & \text { go-Hort }\end{aligned}$
$[2 \mathrm{Sg}$ and] [1Sg and] go-Hort
'Let's you-2Sg and I go.'
b. [dj̀gò-nó lè] [púlò-nò lè] dàgé- $\grave{l e ̀ \text { è- } \varnothing}$
[Dogon-Sg and] [Fulbe-Sg and] be.fine-IpfvNeg-3SgSbj
'A Dogon and a Fulbe (typically) don't get along well.'
c. [ànà-ń lè] [yà:-ý lè] jágùl-ì-yà
[man-Pl and] [woman-Pl and] fight-Pfv-3PISbj
'(The) men and (the) women squabbled.'

'Every day I buy meat and fish.'
An interesting syntactic detail is that a conjunction of two singular NPs in subject position has singular agreement in the verb ( $118 \mathrm{~b}-\mathrm{c}$ ). See also §14.2.3.

In a three-part conjoined NP like (119), a list-type intonation may be used. The pitch of lè is higher in the both nonfinal conjuncts and is lower in the final conjunct. This type of pitch variation is not indicated in transcriptions.


In examples like (120), conjunction ('and') rather than English-style disjunction ('or') is used. The sense is that that the speaker likes neither couscous nor cowpeas (not that he doesn't like their combination in one dish).
[lájùrù lè] [nǔn lè] ìbè-lè-1́ [couscous and] [cowpea and] like-IpfvNeg-1SgSbj
'I don't like couscous or cowpeas.'

### 7.1.1.1 Ordering of coordinands

There is no systematic ordering of coordinands. This is as we would expect, given the disjoint prosodic structure of conjoined and disjoined NPs ('X and Y', 'X or Y'). The combination of speaker and addressee can be expressed as either [ú lè] [mí lè] 'you-Sg and me’ or as [mí lè] [ú lè]. There appears to be some tendency to follow a $1 \mathrm{st}>2 \mathrm{nd}>3$ rd pecking order but it is not systematic. 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 (121).

| $[s e ́: d u ̀ ~$ | lè $]$ | $[[$ ó | ${ }^{\mathrm{L}}$ bà: $]$ |
| :--- | :--- | :--- | :--- |
| $[\mathrm{S}$ | and $]$ | $[[\mathbf{3 S g P o s s}$ | ${ }^{\mathrm{L}}$ father $]$ |

lè]
and]
'Seydou and his father'

### 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. English my sheep and goats and female sheep and goats are phrased as 'my sheep and my goats' (122a) and 'female sheep and female goats' (122b). Likewise for demonstratives (122c), numerals (122d), accusative $=\eta$ (122e), and postpositions (122f). That is, DS places the conjunction in the highest possible syntactic position.

[[sheep-Pl 1SgPoss-Pl] [goat-Pl 1SgPoss-Pl] sell-Pfv-1SgSbj
'I have sold my sheep and (my) goats.'
b. [pèdù ${ }^{\mathrm{L}}$ yǎ: lè $\rightarrow$ ] [ह̀nè ${ }^{\mathrm{L}}$ yǎ: lè] jè:lé
[sheep ${ }^{\mathrm{L}}$ female and] [goat ${ }^{\mathrm{L}}$ female and] bring.Imprt
'Bring-2Sg the female sheep and (female) goats!'
c. [pèdù ŋ̀gó lè $\rightarrow$ ] [ह̀nè ${ }^{\mathrm{L}}$ ŋ̀gó lè] $\varepsilon$ ह́bè-dè-ŋ̀ [sheep ${ }^{\mathrm{L}}$ Prox and] [goat ${ }^{\mathrm{L}}$ Prox and] buy-Ipfv-1SgSbj
'I am buying these sheep and (these) goats.'
d. [pédù tà:ndú lè $\rightarrow$ ] [èné tà:ndú lè] $\varepsilon$ b́è-dè-ŋ̀
[sheep three and] [goat three and] buy-Ipfv- 1 SgSbj
'I am buying three sheep and three goats.'
e. [yà:-nó=ó= ŋ̀ lè] [àn-nó=ó= ̀̀ lè]
[woman- $\mathrm{Sg}=\mathrm{Def}=$ Acc and] [man- $\mathrm{Sg}=\mathrm{Def}=$ Acc and]
bènd- $\grave{\varepsilon}-\varnothing$
hit-Pfv-3SgSbj
'He/She hit the woman and the man.'
f. [[ògùlú rà:] lè] [[gín dà] lè] [[outback Loc] and] [[house Loc] and] wálù kàn-jè-ỳ work(n) do-Ipfv-1SgSbj
'I work in the bush and in the village(s).'
However, appositional or adverbial 'all' quantifiers can be added after the entire conjoined NP with cumulative reference. In (123a), 3Pl bé included in the final 'all' phrase resumes 'men' and 'women'. In (123b) expressive pú $\rightarrow$ is featured.

(lit. "The men and the women, they all came.")
b. [ànà- $\mathfrak{y}=g \grave{~ l e ̀ ~}] \quad[y a ̀:-\bar{y}=g \grave{~} \quad$ lè $]$
[man- $\mathrm{Pl}=$ Def and] [woman- $\mathrm{Pl}=\mathrm{Def}$ and]
$p u ́ \rightarrow \quad y \varepsilon ́ l-i ̀-y a ̀$
all come-Pfv-3PISbj
'All of the men and women came.'
(lit. "The men and the women all/entirely came.")
A conjoined NP ' X and Y ' is usually avoided as relative-clause head NP, 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 =yò to a clause (except when it functions as a NP, as in a direct quotation 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.

### 7.1.3 Plural -mbè in lists

The nominal plural suffix is sometimes found in lists of two or more items, like an 'and' conjunction. The items may be singular in form, or even names of individual villages. This construction implies that the list could go on and on, even if it stops after two or three overt items that serve as examples. -mbè is often intonationally prolonged in this construction (transcription -mbè $\rightarrow$ ), cf exaggerated intonation in reciting English shopping lists. See 'maize and rice' in text 02 at 00:19.

### 7.2 Disjunction

### 7.2.1 'Or' $($ mà $\rightarrow)$

The 'or' particle mà $\rightarrow$ also functions as the polar (yes/no) interrogative. The latter is essentially disjunctive ('did you go? [or didn't you go?]'), see §13.2.1.2.
' X or Y ' disjunctions functioning in English as NPs embedded in a larger clause are typically rephrased as clausal disjunctions (124a). Even without an overt disjunctive particle, a parallelistic clause-sequence like (124b) can be interpreted as a disjunction.

fish buy-Ipfv-2SgSbj or meat buy-Ipfv-2SgSbj
'Will you-Sg buy fish or meat?'
(lit. "Will you buy fish or will you buy meat?')
b. [bǎy wôy] [ídù $\grave{\varepsilon} b \grave{\text { - }}$-dè-ท̀] [nàmá $\grave{\varepsilon} b \varepsilon ̀$-d $\grave{\text { - }-\grave{j}] ~}$
[day all] [fish buy-Ipfv-1P1Sbj] [meat buy-Ipfv-1P1Sbj]
'Every day we buy fish or meat.'
(lit. "Every day we buy fish, we buy meat.")
A more or less clause-internal NP disjunction is also possible. However, in this case both disjunct NPs are phrased as clauses, with the 'it is' clitic $=\eta$ (§11.2.1.1). The combination optionally assimilates phonetically to become $=\dot{m}$ mà $\rightarrow$. Where the coordinated NP functions as direct object, as in (125a), one might mistake $=\eta$ for the homophonous accusative clitic, but $=\eta$ also occurs after inanimate nouns that do not normally allow accusative marking (125b). The clincher is that $=\eta$ 'it is' also occurs in subject function (125c).
a. $\quad[\varepsilon ̀ n \grave{\varepsilon}=$ ந́ $\quad m a ̀ \rightarrow]() \quad,[p e ́ d u ̀=i ̀ \quad m a ̀ \rightarrow](,) \varepsilon ́ b \grave{\varepsilon}$ [goat=it.is or] [sheep=it.is or] buy.Imprt 'Buy-2Sg either a goat or a sheep!'
b. $\quad[t e ́:=\grave{y} \quad m a ̀ \rightarrow]() \quad,[k a ̀ f e ́:=i ̀ \quad m a ̀ \rightarrow](,) \quad \varepsilon ́ b \varepsilon ̀$ [tea=it.is or] [coffee=it.is or] buy.Imprt
'Buy-2Sg either tea or coffee!'
c. $\quad[s e ́: d u ̀=\grave{j} \quad m a ̀ \rightarrow]() \quad,[m i ̀=1 ́ \quad m a ̀ \rightarrow]($,$) bólò$
$[\mathrm{S}=$ it.is or $] \quad[1 \mathrm{Sg}=$ it.is or $] \quad$ go.Imprt
'Either Seydou or I must go.'
A disjunct ending in mà $\rightarrow$ can easily be set off intonationally. For example, in (125c) a distinct pause may occur after both disjuncts, before the final imperative verb. In allegro speech, however, a distinct prosodic break is not required.

In examples like (126) where only the quantity is in play, the common noun is normally not repeated with the second numeral.

| [ìbè-bǎy | wôy] |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| [market-day | all |  |  |  |
| [pédù | tà:ndù = ¢́ | mà $\rightarrow$ ] | [nà: $y=$ ¢́ | mà $\rightarrow$ ] |
| [sheep | three $=$ it.is | or] | [four=it.is | or] |
| dònò-dè-r̀ |  |  |  |  |
| sell-Ipfv-1Sg |  |  |  |  |
| 'Every mark | t day, I sell | ee or four | sheep.' |  |

### 7.2.2 Clause-level disjunction

Two indicative clauses can be disjoined. When mà $\rightarrow$ appears after the first disjunct (and optionally after the second), a polar interrogative interpretation is usual. For example, in (127a) with 'we' as subject, either an assertion or a question would be possible, but my assistant interpreted the utterance as interrogative. An asserted disjunction can be expressed by simple juxtaposition of two clauses, with no overt disjunctive particle (127b).
a. [ìgó-nù wálù kǎ:n-jè-ŋ̀̀ mà $\rightarrow$ ]
[here work(n) Augm.do-Ipfv-1P1Sbj Q]
[yû: wàlà-dè-r̀ (mà $\rightarrow$ ]
[millet do.farming-Ipfv-1SgSbj (Q)]
'Shall we work here (at home), or cultivate millet (in the fields)?'
b. [bǎy wôy] [ŋ̀gó-nù wálù kǎ:n-jè-ŋ̀̀]
[day all] [here $\operatorname{work(n)~Augm.do-Ipfv-1PlSbj]~}$
[yû: wàlá-dè-ŋ̀]
[millet do.farming-Ipfv-1P1Sbj]
'Every day, either we work here (at home) or we cultivate millet (in the fields).
Imperatives and hortatives cannot be coordinated. The cue 'pay (up) or go!' was rephrased in translation as (128b) with two (imperfective) indicatives, or as (128b-c) with a single final imperative following a negative subordinated clause.
a. [ह́:bé-d̀̀-Ẁ
$m a ̀ \rightarrow] \quad$ bǒ:-jò- $\grave{W}$
[Augm.pay-Ipfv-2SgSbj or]
Augm.go-Ipfv-2SgSbj
'You-Sg will pay, or you will go.'
b. $[\varepsilon ́ b \dot{\varepsilon}-\grave{\varepsilon} l \varepsilon ́-y ́=y o ̀] ~ b o ́ l o ̀ ~$
[pay-IpfvNeg-2SgSbj=if] go.Imprt
'If you-Sg won't pay, go!'
c. $[\varepsilon ́ b e ̀-\varepsilon ̀ l e ́-\grave{\imath}=j e ̀]$ bólò- $\left.{ }^{\text {y }} \mathrm{i}\right)$
[pay-IpfvNeg-2PlSbj=if] go.Imprt-PlAddr
'If you-Pl won't pay, go!'

## 8 Postpositions and adverbials

### 8.1 Dative and instrumental

Postposition lè is a basic instrumental-comitative postposition. It can also be used under limited conditions as a dative. lè occurs without change after either pronouns or nonpronominal NPs.

### 8.1.1 Dative lè

A PP with lè is regularly used for the indirect object of 'say' (129a-b).
a. sé:dù
[ú lè] ìjú
$g i ̀-\grave{y}-\varnothing$
$\mathrm{S} \quad[2 \mathrm{Sg} \quad$ Dat $]$ what? say-Pfv-3SgSbj
'What did Seydou say to you-Sg?'
b. [sé:dù lè] ǹjú $g$-ì-Ẁ
[S Dat] what? say-Pfv-2SgSbj
'What did you-Sg say to Seydou?'
Dative lè is also used to indicate a purpose or cause, in combination with particle $j$ ǎ:, see §8.3.1. In addition, lè is the particle 'and' following both conjuncts in NP conjunction (chapter 7).

However, the accusative rather than the dative is used for the indirect object of 'give', 'show', or 'convey', or for the (indirect) object of 'reply'.
a. sé:dù = ̀̀ bú:dù òb-ù-ŋ̀
$\mathrm{S}=$ Acc money give-Pfv-1SgSbj
'I gave (the) money to Seydou.'
b. sé: $d u ̀=\grave{j}$ pédù tàg-ù-1̀
$\mathrm{S}=$ Acc $\quad$ sheep $\quad$ show- $\mathrm{Pfv}-1 \mathrm{SgSbj}$
'I showed (a/the) sheep to Seydou.'
c. $\quad ́ m m e ̀=\grave{\eta} \quad t e ̂: \quad j a ́-y \varepsilon ̀-j \grave{\varepsilon}-\varnothing$
$1 \mathrm{Pl}=$ Acc tea take-come-Ipfv-3SgSbj
'He/She will bring us (some/the) tea.'
$\begin{array}{llll}\text { d. } & \text { ú } & m i ̀=\text { ŋ́ } & \text { yàbìl- } \varepsilon \text { :- }-1 u ́-W ́ \\ & \text { 2Sg } & 1 \mathrm{Sg}=\text { Acc } & \text { reply-MP-PfvNeg- } 2 \mathrm{SgSbj} \\ & \text { 'You-Sg didn't answer me.' }\end{array}$
Bare NPs without accusative or dative marking can be used for some purposive senses (131a). In (131b), the "beneficiary" is phrased as the possessor of 'work' rather than as a separate PP.
a. bú:dù wálù kálà wò-ŋ̀ money work(n) do be-1SgSbj
'I am working for money.'
b. [[mí bà:] wàl] kálà wò-!̀ [[1SgPoss father] work(n)] do be-1 SgSbj 'I work for my father.' (lit. "I do my father's work.")

### 8.1.2 Instrumental-comitative lè

lè is much more productive as an instrumental ('by means of') or comitative ('in the company of') postposition, generally translatable as 'with'. It also occurs in idioms like 'by force, forcibly' (132d) and in connection with vehicles as means of transport (132e).
a. [táná lè] ìdù =ý bènd-غ̀-ỳ
[stick with] dog=Acc hit-Pfv- 1 SgSbj
'I hit-Past (a/the) dog with (a/the) stick.'
b. bé [ígé lè] yèlá wò-yyà

3Pl [honey with] come be-3PlSbj
'They are coming with (the) honey.'
c. [sé:dù lè] wálù kálà wò-ク
[S with] work(n) do be-1SgSbj
'I work with Seydou.'
d. [sémbè lè] yò-ỳ-yà
[force with] enter-Pfv-3P1Sbj
'They entered by force.'
e. [kâ:r lè] bàmàkó bò-jò-r̀
[bus with] B go-Ipfv-1SgSbj
'I (will) go to Bamako by bus.'

### 8.1.3 Temporal lè

lè is also the postposition regularly used with temporal adverbials based on an NP with noun '(moment in) time', 'day', 'year', or the like.
a. [bày ${ }^{\mathrm{L}} /$ ànà-kùdù ${ }^{\mathrm{L}} \quad$ bo
wó $\quad y \varepsilon ̀ l-\grave{\varepsilon}=\grave{\jmath}]$
lè
[day ${ }^{\mathrm{L}} /$ year $^{\mathrm{L}} \quad 3 \mathrm{SgSbj}$ come-Pfv.Ppl=Def] at
'on the day / in the year when he/she came'
$\begin{array}{lll}\text { b. } & {\left[\begin{array}{ll}\text { bày }{ }^{\text {L }} & \text { kú }\end{array}\right]} & \text { lè } \\ {\left[\begin{array}{ll}\text { day } \\ & \text { Dem.Def }\end{array}\right.} & \text { at } \\ \text { 'on that (same) day' } & \end{array}$

### 8.1.4 lè after locational ('toward')

lè can follow a PP denoting a location. This combination means 'toward, in the direction of'.
[[kàló=ó rà:] lè] bòló wò-yyà
[[boundary=Def Loc] toward] go be-3PlSbj
'They are heading for the border (or boundary).'
'Towards here, in this direction, this way' is ndâ: lè.

### 8.2 Locational postpositions

### 8.2.1 Locative 'in, on' (rà: ~ dà:)

The basic spatial locative postposition is rà: ~ dà: . The vowel is optionally shortened. The best gloss is 'at', but in many contexts the postposition can loosely be translated as 'in' as long as being enclosed is not emphasized.
a. [bàmàkó rà:] wò- ${ }^{\prime}$
$\left[\begin{array}{ll}B & \text { Loc }] ~ b e-1 S g S b j\end{array}\right.$
'I am in Bamako (city).'
b. [sèwá:rà dà:] wò-r̀
$\left[\begin{array}{ll}\mathrm{S} & \text { Loc }] ~ b e-1 S g S b j\end{array}\right.$
'I am in Sevare (city).'
My assistant usually pronounces the postposition after a vowel as rà: with a tap: àndá rà: 'in (a/the) village', tě: rà: 'in (a/the) granary', dî: rà: 'in (a/the) water', wálù rà: 'at work'. However, dà: is arguably the more basic form (wálù dà: 'at work' was heard as a variant). My assistant pronounced dà: after 'Sevare' in (135b), probably because of the tap in the final syllable of the place name. 'At/in (a/the) house', by extension 'in the village', is regularly gín dà after syncope from gìné 'house', showing that dà: is also used after a consonant.
$k \hat{0}$ : 'that' combines as kó-rà: .
The difference between 'be at' (emphasis on the location as a Cartesian point) and 'be in' (emphasis on being enclosed) is made by the choice between stative quasi-verbs wò 'be (in/at a location)' and tò 'be in (a container or bounded space)', see $\S 11.2 .2 .2$ and $\S 11.2 .3 .1$. Both regularly co-occur with simple locative PPs.

Allative and ablative direction are not indicated by postpositions. Rather, the PP is in simple locative form, while directionality is expressed by verbs. Aside from explicitly allative 'arrive' and explicitly ablative 'exit, go out', PPs with basic motion verbs including 'go' and 'come' are usually interpreted as allative.

```
a. [àndá rà:] bò-j\varepsiloǹ-!̀
    [village Loc] go-Ipfv-1SgSbj
    'I will go to the village.'
```

b. [àndó=ò rà:] gò-è-ŋ́
[village=Def Loc] go.out-Pfv-1SgSbj
'I left the village.'
nàn-núm̀̀ '(in the) hot season' or '(in the) dry season (hot and cold)' and similar nouns denoting seasons can readily function adverbially without an overt postposition. Likewise with yáyà '(at) night' and other time-of-day nouns.

French 'chez X', i.e. 'at/to the home of X', can be expressed without 'house' by an absolute possessive (§4.3.1) plus locative rà:, as in mó rà: 'at my place, chez moi’.

The simple locative postposition is also part of several complex postpositions of the type 'at (in, on) the Y of X', cf. English in front of and the like. When X is a nonpronominal NP, it functions as preposed possessor and controls tone-dropping on the noun Y , resulting in [ $[X$ $\left.{ }^{\mathrm{L}} Y(=g \grave{\partial})\right]$ rà: $]$. When X is a pronoun, we get the regular postposed pronominal possessor, with no tone change on the noun Y, hence [[YPRON-mò (= ̀)] rà:]. As elsewhere, definite marking on a pronominal possessor is usually absent (or inaudible).

### 8.2.2 Locative nì (suffixed -nì) and nè

An ending -nì ~ -ǹ competes with -rà: in forming deictic spatial adverbs ('here', 'there') from demonstrative stems, e.g. ŋ̀gó-rà: ~ ǹdâ: versus ŋ̀gó-nì ~ ŋ̀gó-ǹ̀ in the sense 'here' see §4.4.3.1. The same competition occurs with the interrogative 'where?', yògó rà: versus yògó-nì, see §13.2.2.3.
nì occurs as a locative postposition after spatial relative clauses that function adverbially in the higher clause, e.g. 'in [the place where ...]'. See $\S 15.3 .1$ for examples.

The complex postpositions ending with dà: $\sim$ rà: described in the following sections also have variants with nì and another variant nè. When the complement of the complex postposition is preposed (i.e. a nonpronominal NP), my assistant uses nì immediately after the definite clitic $=(g) \grave{\partial}$, but $n \dot{\varepsilon}$ if the definite clitic is absent. In either case rà: is also possible.


The role of the definite clitic is harder to determine with postposed pronominal possessors
 hear. For example, 'behind me' can be expressed as either ùnnú m̀mò rà: or ùnnú $\grave{m}-m \grave{( }(=\grave{\jmath})$ $n i ̀$, both literally 'at/to my rear'. In any event, nì is preferred over nè after pronominal possessors.

I cannot identify a semantic distinction between dà: $\sim$ rà: and the less common nì in examples like ( $137 \mathrm{a}-\mathrm{b}$ ). In demonstrative adverbs, -nì is common with 'here', while the variant with rà: is more spatially diffuse ('around here'). Only -rà: occurs with discoursedefinite 'there'; see $\S 44.3 .1$. A similar distinction between two competing locative postpositions in Yanda Dom is based on proximity, e.g. '(here) in this village' versus '(over) in the other village'.

The variant $n \grave{\varepsilon}$ also occurs, instead of nì, in temporal sense 'at (a time), on (a day), in (an hour)'. An example is bày ${ }^{\mathrm{L}}$ túrù nè 'in (no more than) one day', (472b) in §15.3.2.1. Similarly, $n \grave{\varepsilon}$ occurs in temporal 'since' clauses (§15.2.1.6).

Any historical connection between the locative postposition and (-)nì as a verb subordinator (§15.2.1.3-4, §15.2.2.1) is obscure synchronically. Likewise with nè in counterfactual bènè (§16.4).

### 8.2.3 'Inside $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ kòlò] rà: $)$

From the noun kól̀ 'interior' or (for a person or animal) 'gut, entrails' is formed the complex postposition ([ $X^{\mathrm{L}}$ kòl̀] rà: 'inside X '. Here X may be a container, construction, village, forest, or other entity with a more or less well-defined boundary. Examples are [àndá ${ }^{\mathrm{L}} k \grave{l}$ l̀̀] rà: 'inside the village/city', [gìné ${ }^{\mathrm{L}}$ kı̀̀̀] rà: 'inside the house', [děク ${ }^{\mathrm{L}}$ kòlı̀] rà: 'inside the waterjar', and [kúrbù ${ }^{\text {L }} k \grave{l}$ l̀] rà: 'inside the forest'. With a postposed pronominal possessor kólò has its lexical tones (138).
[kólò bè-mò] rà:
[interior 3Pl-Poss] Loc
'inside them' or 'in their gut(s)'
Without an overt landmark we have a simple adverbial kólò rà: 'inside, in the interior'.

### 8.2.4 'On (the head of) X' ([ $X^{\text {L }}$ kù:] rà:)

'In/at the head of X' (cf. kû: 'head') is used loosely for 'on X' where X is a person, animal, or other entity with a head or top. In the case of a person or other erect entity, the phrasing is often at least semi-literal (139a). In the case of a quadruped like 'donkey' or a structure like 'house', the phrase can denote any spot on the "top" such as the donkey's back or anywhere on the house's roof (139b). The phrasing 'in/at the head of X ' is not used with 'mat' or other entity lacking a vertical extension. Instead, a simple locative postposition is used (139c).
a. tìbó=ò [[yû: ì-mò] rà:] bàg-ì- $\varnothing$
stone $=$ Def $\quad[$ head 1 Sg-Poss] Loc] fall-Pfv-3SgSbj
'The rock fell (=landed) on me.' (tìbú)
b. tìbó=ò [[jàngúrù / gìné ${ }^{\mathrm{L}}$ kù:] rà:] bàg-ì- $\varnothing$
stone=Def [[donkey/house ${ }^{\text {L head }] ~ L o c] ~ f a l l-P f v-3 S g S b j ~}$
'The rock fell (=landed) on (a/the) donkey/house.'
c. tìbó=̀̀ [yènó=ò rà:] bàg-ì- $\varnothing$
stone $=$ Def $\quad[$ mat=Def Loc] fall-Pfv-3SgSbj
'The rock fell (=landed) on the mat.' (yèné)
Some complex postpositions described below often occur with the definite clitic on the noun. This does not seem to be usual with [ $X^{\mathrm{L}} k u ̀:$ ] rà.

For [ $\left.X^{\mathrm{L}} k u ̀:\right] n \grave{\varepsilon}$ in the apparent sense '(a tale) about X ', see comments in §8.3.2 below.

### 8.2.5 'Next to, beside X ' ([ $X^{\mathrm{L}}$ bòmbùrù ] dà:)

From noun bòmbùrú 'side, flank' (definite bòmbùró = j) we get complex postposition ( $[X$ ${ }^{\mathrm{L}}$ bòmbùrù ] dà:) or (definite) ([ $X^{\mathrm{L}}$ bòmbùrò-̀̀] rà:) 'next to X , beside X '. Because of the tap in bòmbùrú, my assistant pronounces the locative postposition as dà: rather than rà: when the definite clitic is absent. When it is present, it serves as a buffer between the two taps.
a. [[sé:dù
${ }^{\mathrm{L}}$ bòmbùrò $=$ ò]
rà:]
wò-ŋ̀
$\left[\begin{array}{lll}\mathrm{L} & \text { side=Def] } \quad \text { Loc }] \quad \text { be- } 1 \mathrm{SgSbj}\end{array}\right.$
'I am next to Seydou.'
b. sé:dù [[bòmbùrú ù-mò $(=\grave{)})]$ rà:] wò- $\varnothing$
$\mathrm{S} \quad[$ side $\quad 2 \mathrm{Sg}-\mathrm{Pos}(=\mathrm{Def})] \quad$ Loc] be- 3 SgSbj
'Seydou is next to you-Sg.'
The adverbial counterpart is bòmbùrú dà: 'to the side, nearby' used without an overt reference point (landmark) X.

### 8.2.6 'In front of' ([ $X^{\mathrm{L}}$ gìrù $]$ dà: $)$

From noun gírù 'front' (distinct from but possibly distantly related to gìrú 'eye') we get complex postposition [ $X^{\mathrm{L}}$ gìrù] dà: or (definite) [ $X^{\mathrm{L}}$ gìr̀̀ $=\grave{\jmath}$ ] rà: 'in front of X ' or 'ahead of $\mathrm{X}^{\prime}$. X is normally an oriented entity with a front and a back, especially a person or animal. [ $X$ ${ }^{\mathrm{L}}$ bòmbùrù] dà: 'next to X ' is preferred when X is e.g. a tree.
a. [ [sé:dù

rà:] wò-j̀
[[S ${ }^{\text {L }}$ front] Loc] be-1SgSbj
'I am in front of Seydou.'

Adverbial 'in front, ahead, forward' is gírù dà: .

### 8.2.7 'Behind/ X' ([X ${ }^{\mathrm{L}}$ ùnnò-ò $]$ rà̀:), 'after $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ ùnnù] n $)$

The noun ùnnú 'back (of body)' is the basis for the complex spatial postposition 'behind'.
a. [[sé:dù
${ }^{L}$ ùnnò-̀̀] rà:]
wò-ŋ̀
[[S $\quad{ }^{\text {L }}$ back=Def] $\quad$ Loc $] \quad$ be-1SgSbj
'I am behind Seydou.'
b. sé:dù [[ùnnú m̀-mò( = ̀̀)] rà:] wò- $\varnothing$

S [[back 1Sg-Poss(=Def)] Loc] be-3SgSbj
'Seydou is behind me.'

The temporal sense 'after X' can be expressed by a variant of this complex postposition with $n \grave{\varepsilon}$ (after a nonpronominal NP) or nì (after a pronominal possessor) replacing locative rà. The definite clitic is absent. X can denote either a temporal reference point ('holy day') or an individual.
a.

| [sàná | ${ }^{\text {L }}$ ùnnù] | $n \grave{\varepsilon}]$ | bǒ:-jè- 1 |
| :---: | :---: | :---: | :---: |
| [holy.day | ${ }^{\text {L }}$ back] | Loc] | Augm.go-Ipfv-1SgSbj |
| 'I will trav | after the |  |  |

b. [[ùnnú m̀-mò] nì] bǒ:-jè- $\varnothing$
[[back 1Sg-Poss] Loc] Augm.go-Ipfv-3SgSbj
'He/She will travel after me (=after I do).'

back] Loc] Augm.go-Ipfv-1SgSbj
'I will travel after Seydou (=after he does).'
'After X' when X denotes a temporal reference point can also be expressed by a temporal adverbial relative clause with the verb gàlá (gàl-ú) 'pass (by)'.
[sàná
$\left.{ }^{\mathrm{L}} g a ̀ l i ̀=y o ̂:\right]$
bǒ:-jè- $\grave{\jmath}$
[holy.day $\quad{ }^{\mathrm{L}}$ pass=if]
Augm.go-Ipfv-1SgSbj
'I will travel after the holy day.'

Adverbial 'behind, in the rear' is ùnnú rà: . Adverbial 'afterwards' is pìnná: nì, cf. verb pínnè 'stay put (not go away)'.

### 8.2.8 'Over/above $X^{\prime}$ ([ $X^{\mathrm{L}}$ dà:] rà:), 'below/under X' ([ $X^{\mathrm{L}}$ jòè $]$ rà: $)$

The nouns dâ: 'top, apex, summit' and jóè 'bottom, base' are the bases for the complex postpositions 'over/above X' (145) and 'below/under X' (146).
a. [[tìbó=ò ${ }^{\mathrm{L}}$ dà:] rà:] wò-ı̀
[[stone=Def $\quad$ top] Loc] be- 1 SgSbj
'I am over/above the rock.'
$\begin{array}{lllll}\text { b. tìbó }=\grave{j} & {[[d a ̂:} & \text { m̀-mò }] & \text { rà: }] & \text { wò- } \varnothing \\ & \text { stone }=\text { Def } & {[[\text { top }} & 1 \text { Sg-Poss }] & \text { Loc }]\end{array} \quad$ be- $3 S g S b j$
'The rock is above me.'
$\begin{array}{lllll}\text { a. } & {[[\text { tìbó }=\grave{j}} & \text { L jò̀̀ }] & \text { rà: }] & \text { wò-ì } \\ {[[\text { stone }=\text { Def }} & \text { Lbottom }] & \text { Loc }] & \text { be- } 1 \mathrm{SgSbj}\end{array}$
'I am below/under the rock.'
b. tìbó=j̀ [[jóè m̀-mò] rà:] wò- $\varnothing$
stone $=$ Def [[bottom 1 Sg -Poss] Loc] be- 3 SgSbj
'The rock is below/under me.'
dâ: 'above' and jóè 'below' can be used as compound finals to denote the upper and lower sections of a village like Tognon (tónò y) that has one section (generally older) on a hill and another section on flat ground at the base of the hill: tònı̀n-dâ: 'Upper Tognon', tòỳ̀n-jóè 'Lower Tognon’.

Unpossessed locative PPs dâ: rà: 'at the top' and jóè rà: 'at the bottom' can be used 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 (rà:), see §11.2.3.2.

### 8.2.9 'Between' ([[X Y $]^{\mathrm{L}}$ bìnǹ̀ = ̀̀ ] rà:)

'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 ${ }^{\text {L }}$ bìnǹ̀ $=\grave{\jmath}$ rà: . The relevant noun is bìnné 'middle, center'.

| [àndá m̀-mò] |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [village | $1 \mathrm{Sg}-\mathrm{Poss}$ ] |  |  |  |  |
| [[[bànjàgàrá | $l e ̀$ ] | [bànkás | lè] | ${ }^{\text {L }}$ bìnnò $=$ ̀] | rà:] |
| [[[B | and] | [B | and] | ${ }^{\text {L middle }}=$ Def] | Loc] |
| $t o ̀-\varnothing$ |  |  |  |  |  |
| be.in-3SgSbj |  |  |  |  |  |
| 'My village | s (located) | tween B | diaga | d Bankass (cities) |  |

A pronominal example of the same type is (148).

| [[ú | lè] | [mí | lè]] | ${ }^{\text {L }}$ bìnnò $=$ ¢] |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [[2Sg | and] | [1Sg | and]] | ${ }^{\text {L }}$ middle $=$ Def] |  | O |

An overt conjunction can 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 (149a).
a. [bìnné $\grave{\varepsilon} m-m \grave{\jmath}=\grave{\jmath}]$ rà [middle $1 \mathrm{Pl}-\mathrm{Poss}=\mathrm{Def}] \quad$ Loc 'between/among us'
b. [yà:-1́ rà:] [woman-Pl $\quad$ Liddle=Def] Loc 'between/among (the) women'

The corresponding adverbial phrase is bìnnó= j rà 'in the middle'.

## 8.3 'For' and 'about'

### 8.3.1 Purposive-causal 'for' ([X lè] jǎ:)

As noted in §8.1.1, postposition lè by itself functions as dative only in a construction with a verb of saying. The simple postposition is much more common in instrumental-comitative function (§8.1.2).

However, adding jǎ: to a simple PP with lè, the latter presumably in dative rather than instrumental function, creates a phrase denoting a purpose/goal (prospective) or a reason/cause (retrospective).
a. Émmè [àná lè] jǎ: yò-è-ŋ̀

1Pl [rain(n) Dat] Purp go.in-Pfv-1PlSbj
'We went in(side) because of the rain.'
b. bé [káクèn lè] jǎ: yèl-ì-yà

3P1 [gold Dat] Purp come-Pfv-3P1Sbj
'They came for (the) gold.'
c. [ámbá lè] jǎ: $\quad m i ̀=$ ý bàr-ì- $\varnothing$
[God Dat] Purp $1 \mathrm{Sg}=$ Acc help-Pfv-3SgSbj
'He/She helped me for God (i.e. without expecting recompense)'
jǎ: resembles a chaining form or past anterior subordinated form of the verb jǎ: 'take (sb)'. However, Tommo So purposive diye suggests an alternative etymology.

For purposive clauses see $\S 17.5$.

### 8.3.2 'About, concerning' ([ $X^{\mathrm{L}}$ tàyà $]$ n )

The topic of a discussion or meeting can be expressed with complex postposition ${ }^{\mathrm{L}}$ tà $\eta$ à $n \dot{\varepsilon}$ or, with definite clitic, ${ }^{\mathrm{L}}$ tàỳ̀ = j̀ nì, based on the noun tàyá 'side, area, zone'.

Another combination [ $\left.X^{\mathrm{L}} k u ̀:\right]$ nè based on kû: 'head' roughly translates 'about X ' as the title of a tale. However, this should be construed semi-literally as 'on (the head of) X ' (§8.2.4), since the verb kúndò 'put' is used with 'tale' as object.

### 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity (gìnè 'like', suffix -njì: )

/L/-toned gìnè 'like' (accidentally homophonous to the $\{\mathrm{L}\}$-toned form of gìné 'house') can follow an NP or pronoun to express similarity (151a). It can be made predicative by adding wò 'be (somewhere)'.

| a. | [yà:-ná | gìnè] | wálù | kán-jè-Ẁ |
| :---: | :---: | :---: | :---: | :---: |
|  | [woman-Sg | like] | work(n) | do-Ipfv-2SgSbj |
|  | 'You-Sg wo | k like a | oman.' |  |


| b. sé:dù | $[m i ́$ | gìnغ̀ $]$ | wò- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| S | $[1 \mathrm{Sg}$ | like $]$ | be -3 SgSbj |

'Seydou is like me.'
gìnè resembles gi-ỳ- $\varnothing$ 'he/she said' plus locative postposition allomorph nè, which can function as a clause-final subordinator (§15.2.1.6), e.g. in 'since' clauses. However, it is equally likely that gìnè is an archaic bisyllabic form of 'say', cf. Dogul Dom gínè and cognates especially in western Dogon languages. See comments on (474) in §15.3.2.2.

Deictic 'like this' (e.g. with a simultaneous demonstration) is g̀gó-njì: ~ ŋó-njì:, while recent discourse-anaphoric or post-demonstration 'like that' is kó-njì: and more abstract 'thus' is yěy. Interrogative 'how?' is yògó-njì:, with the same ending. As adverbs, these elements can be made predicative by bě.: 'stay; become (adverb)', as in yěn bì-ỳ- $\varnothing$ 'it has become (=it is) thus', i.e. 'that's how it is'. The two words are rather fused phonetically as [jěmb...], and an apparently unsegmented stative yémbè 'be thus' (negative yémbè-lé ) is also attested.

### 8.4.2 Extent ('much, 'a little’) (èdú $\rightarrow$, gǎ:w, dầy, gà:lદ̌y)

Adverbial 'much, greatly, to a great extent' is $\grave{\varepsilon} d u ́ \rightarrow$. The final vowel is variably prolonged intonationally, sometimes quite conspicuously (in positive utterances). It can occur in negative clauses, with less noticeable prolongation (152b). Where the sense is 'a lot', i.e. a NP rather than an adverbial phrase, $\grave{\varepsilon} d u ́ \rightarrow$ is replaced by the quantifier $g a ̌: W$ 'a lot, many/much', with or without an accompanying NP (152c).

```
a. \(\quad \grave{\varepsilon} d u ́ \rightarrow \quad j \grave{g} g-\varepsilon ̀-\grave{\eta}\)
greatly run-Pfv-1SgSbj
'I ran a lot.'
b. \(\grave{\varepsilon} d u ́ \rightarrow \quad j \grave{\rightarrow} \rightarrow\) ò-lì-l̀
greatly run-PfvNeg-1 SgSbj
'I didn't run much.'
c. \(m i ̀=\) ý (màngòró) gǎ:w òb-ì- \(\varnothing\)
\(1 \mathrm{Sg}=\mathrm{Acc}\) (mango) a.lot give-Pfv-3SgSbj
'He/She gave me a lot (of mangoes).'
d. gǎ:w wò-ló- \(\varnothing\)
    a.lot be-StatNeg-3SgSbj
    'It isn't much.'
```

'A little' is dăy or gà:lžy. Both occur in adverbial and nominal functions, and they may cooccur with an NP (153b). See also adverbial dégè-dègè in text 04 at 00:44.

```
a. dằy/ gà:l\varepsiloňy jòg-\varepsiloǹ-\etá
    a.little
run-Pfv-1SgSbj
    'I ran a little.'
```

b. mì=দ́ (màngòró) dăy / gà:ľ̌y òb-ì- $\varnothing$
$1 \mathrm{Sg}=\mathrm{Acc}$ (mango) a.little give-Pfv- 3 SgSbj
'He/She gave me a little/a few mangoes.'
c. dằ $=l a ̀:-\varnothing$
a.little $=$ it.is.not- 3 SgSbj
'It isn’t (just) a little.'

### 8.4.3 Specificity

### 8.4.3.1 'Exactly, truly, specifically’ $\left(t e^{n} \rightarrow\right)$

$t e^{n} \rightarrow$ may follow an NP to distinguish a primary or "real" kinsman from a classificatory one (154a). When the NP (or pronoun) already identifies the referent, tén $\rightarrow$ is emphatic (' X and not anyone else') (154b); see also text 03 at 00:54. (154c) can disabuse an interlocutor who has mistaken a cow for the speaker's cow of very similar appearance.
a. sé: dù
[mí ${ }^{\text {L }}$ bà:
$\left.t e^{n} \rightarrow\right]=$ lă: $-\varnothing$
S $\quad\left[1 \mathrm{SgPoss} ~{ }^{\mathrm{L}}\right.$ father exactly $]=$ it.is.not- 3 SgSbj
'Seydou isn't my real (e.g. biological) father'
b. [mí tén $\rightarrow$ ] [é-m̀̀ rà:] yě:-jè-ŋ̀̀
$\left[\begin{array}{ll}1 \mathrm{Sg} & \text { exactly] [2Pl-Poss Loc] Augm.come-Ipfv- } 1 \mathrm{SgSbj}\end{array}\right.$
'I personally will come to your-Pl place.'
c. [nàyá m̀̀-m̀̀ tén $\rightarrow$ ]=lă:- $\varnothing$
[cow 1 Sg -Poss exactly]=it.is.not-3SgSbj
'It (=that cow) actually isn't my cow.'
$t e^{n} \rightarrow$ is pronounced like an expressive adverbial, with variable duration and level pitch. The phonemic tone is high, as heard clearly in (154a) where $t e^{n} \rightarrow$ has higher pitch than the preceding ${ }^{\mathrm{L}}$ bà: and the following $=l a ̆:-\varnothing$. However, $t e^{n} \rightarrow$ is downstepped and its pitch is lower than that of the H -tone on the preceding NP or pronoun, so mí tén $\rightarrow$ in (154b) is heard as [mítē $\rightarrow$ ].

Though pronounced as an EA, tén ${ }^{n}$ seemingly forms part of a syntactic NP (DP), which is not usually possible for a true EA. However, it is not clear that the bracketed phrases with $t e^{n} \rightarrow$ in (154a-b) are true syntactic phrases. My assistant rejected $t e^{n} \rightarrow$ on an NP-internal possessor, as in \#[mí tén $\rightarrow$ ] ${ }^{\text {L }}$ bà: 'my own father' or \#gìné [ $[m i ́ t e ́ n \rightarrow]$ m̀̀] 'my own house', instead requiring that $t e^{n} \rightarrow$ follow the entire higher NP. He likewise rejected $t e^{n} \rightarrow$ at the end of an NP functioning as complement of a PP. For example, locative PP bàmàkó rà: tén $\rightarrow$ 'in Bamako itself' with tén $\rightarrow$ after the postposition is fine, but this cannot be rephrased as \# bà̀màkó tén $\rightarrow$ ] rà: :
$t e^{n} \rightarrow$ may be iterated as té: ${ }^{n}$-tè: ${ }^{n}$ with no discernible change in sense, but usually in a more clearly clause-level adverbial sense. As usual with iterations of $C v \rightarrow$ EAs, the first iteration has the H -tone and the duration of the vowels is normalized to match long vowels.
(155)
[wàlù ${ }^{\mathrm{L}}$ ŋ̀gó] té: ${ }^{n}$-tè: ${ }^{n}$ náy-gù wò- $\varnothing$
[work(n) Prox] exactly difficult be-3SgSbj
'This job is really hard.'

### 8.4.4 Evaluation

### 8.4.4.1 'Well' (غ̀dú $\rightarrow$ ) and 'badly'

 form part of a NP or other clause-internal phrase. (For the sense 'very' modifying another adjective, see §6.3.3.2.)
a. yû: $\quad$ èdú $\rightarrow \quad$ à̀là-dè-Ẁ
millet well do.farming-Ipfv-2SgSbj
'You-Sg cultivate millet (=do farming) well.'
b. wálù $\quad$ èdú $\rightarrow \quad$ kàn- $j \grave{\varepsilon}-\varnothing$
work(n) well do-Ipfv-3SgSbj
'He/She works well.'
c. jóbù $\quad$ èdú $\rightarrow \quad j \grave{b} \grave{̀}-d \grave{\varepsilon}-\varnothing$
running(n) well run-Ipfv-3SgSbj
'He/She runs well.'

Given the frequency of cognate nominal "objects," often pro forma, one can also add an evaluative adjective such as $s \hat{e}:^{n}$ 'good' or pà:d $d \hat{\varepsilon}$ : 'bad' to the object noun ('he/she does bad work', etc.).

The verb dàgá 'be good', exemplified in (118b) and (531), can be used in various contextual senses like 'be well-done' or 'turn out well'.

There is no adverb meaning 'badly'. One can simply negate the verb and keep $\grave{\varepsilon} d u ́ \rightarrow$ ('he/she doesn't run well'), or have recourse to some other construction, like that in (157).
[jóbù wò-m̀̀] sê: ${ }^{n}=n a ̀:-\varnothing$
[running(n) 3Sg-Poss] good=it.is.not-3SgSbj
'His/her running is not good.' (i.e. runs badly)

### 8.4.4.2 'Being well’ (jâך, $s \hat{\varepsilon}$ :w)

The abstract noun jân 'well-being' occurs as part of greeting sequences, with the versatile postposition lè (158).
(158) [jây lè] wò-r̀
[well.being Inst] be- 1 Sg Sbj
'I am fine.'

A synonym is $s \hat{\varepsilon}: W$, used as an adverb without a postposition.
'I am fine.'
$j a ̂ \eta$ is not attested in the sense 'right, normal, socially appropriate'. This is expressed by positive or negative forms of the verb dàgá 'be good', or by há:nù kán(à) with auxiliary kán(à) 'do’.

### 8.4.4.3 'Correctly' $\left(s a^{n} \rightarrow\right)$

This expressive adverbial occurs in combinations like sán $\rightarrow$ kánà 'do (e.g. work) right!' and sán $\rightarrow$ bólò 'go correctly (e.g. by the correct route)!'.

### 8.4.5 Deadjectival and other manner adverbials

There is no productive counterpart to English -ly deriving adverbs from adjectives. The usual translation equivalent involves adjectival modification of an object noun, perhaps a pro forma cognate nominal: "he does [fast work]" meaning 'he works fast'.

For the manner adverbial relative clauses type 'the way (in which) you work', see $\S 15.3 .2 .1$. Noun sógònjì 'manner' is the head, overt or not. For 'like $X$ ' phrases, see §8.4.1.

From modifying adjectives wàgú 'distant' and bèrú 'near, close by', adverbs wàgǔ: 'far away' and bèrǔ: 'nearby, not far away' are formed.

### 8.4.6 Spatiotemporal adverbials

### 8.4.6.1 Temporal adverbs

Some of the major temporal adverbs are in (160). The morphologically complex terms are irregular. Some in (160c) are based on bǎy 'day' in L-toned form, but bà:y in (160b) has a long vowel and seems to be bà:y 'since' (i.e. counting back from). The prospective day sequence beginning with 'today' (160a) and contining as (160c) is consistent with the Dogon five-day week (júgù) as still practiced in scheduling the Sangha market (but not the Bandiagara market, which is now fixed as Mondays and Fridays). In some contexts, the notion of a 'year' is focused on the farming season (from planting to harvest). 'Next year' is a pseudo-conditional subordinated clause.
a. íyè
yàgá
ígèlè
námmà, íyè námmà
kàndǒw
kàndò ngá
b. yâ:
íyè bà:y tà:ndú
íyè bà:y nă:y
ágày

```
'today; nowadays'
'again (another time)'
'again'
'up to now, so far, (not) yet'
'now'
'now'
'yesterday'
'day before yesterday'(< tà:ndú '3')
'two days before yesterday' (< nă:y '4')
'long ago, in the old days'
```

c. yògó
yògò-dénè
bày ${ }^{\mathrm{L}}$ nă:y-gù
bày ${ }^{\mathrm{L}}$ ǹnó
íyè jùgù
d. gà:lí
bâ: gò-è- $\varnothing=y o ̂$ : yúgà:
'tomorrow; in the future'
'day after tomorrow'
'second day after tomorrow'
'third day after tomorrow'
'fourth day after tomorrow'
(cf. júgù 'week')
'last year'
'next year', lit. "when the farming season has exited" 'this year'

Numerals occur in several of the day terms in (160b-c). The present day is counted as ' 1 '. Therefore 'day before yesterday' in the retrospective series (160b) includes tà:ndú ' 3 '. Similarly, in the prospective series (160c), the terms for the second and third days after tomorrow contain nă:y '4' and ǹnó '5'.

### 8.4.6.2 'First(ly)’ (kě: = gò) and 'later' (pìnn-á:-nì)

To emphasize a chronological sequencing, adverb $k \varepsilon ̌:=g \grave{~ ' f i r s t(l y), ~ t o ~ b e g i n ~ w i t h ' ~ c a n ~ b e ~}$ added to a clause, and/or pìnn-á:-nì 'later, subsequently' can be added to a following clause. Both occur in (161), whose first clause is a pseudo-conditional, so the chronological sequence is already (unemphatically) marked without the adverbs. nǎ: 'meal' refers to a regular meal with cooked grain, usually millet cakes.

```
k\check{:}=g\grave{ mă: j\grave{-}-y-yà =yô:,}
    first=Def meal eat-Pfv-3PlSbj=if,
    pìnn-á:-nì nàmó=\grave{ ̀ tèmè-d-i}
    later meat=Def eat.meat-Ipfv-3PlSbj
```

'First they'll eat the (regular) meal, then afterwards they'll eat the meat.'
$k \check{\varepsilon}:=g \grave{~ i s ~ a n a l y s a b l e ~ a s ~ a ~ d e f i n i t e ~ f o r m ~ o f ~ o r d i n a l ~} k \check{\varepsilon}:$ 'first'.
pìnn-á:-nì is a tonally irregular nonpast anterior subordinated form (§15.2.2.4) related to pínnè 'return, go back', synonym of kígùl-è:-. The same irregular rising tone pattern occurs in what appears to be a direct verb chain in pìnné sóyy-غ̀:- 'say again, repeat'.

### 8.4.6.3 Spatial adverbs

The following are the main nouns used in simple, nondemonstrative spatial adverbials. rà: ~ dà: is the locative postposition.
a. dâ: (rà:) 'above, on top, (at) the summit'
jóè (rà:) 'below, (at) the bottom, down'
b. dû: (rà:) 'east'
kòlú (rà:) 'west'
wádùbà (rà:) 'south'
tòmmò-gìné (rà:) 'north'
c. ùnnú (rà:)
gírù (dà:)
'(in) the rear, behind'
'forward, ahead, (in) front'
'North' is associated with the Tommo (speakers of Tommo So).
'Right hand' nùmj̀ ${ }^{\mathrm{L}}$ nǎ: and 'left hand' nùmذ ${ }^{\mathrm{L}}$ nà:ndá are N -Adj combinations with nùmó 'hand'. nă: is also a noun 'food, meal', so in theory one could alternatively analyse the first of these as a compound nùmò-nǎ: 'hand-food'. However, one would have expected the opposite ordering ('food-hand'), and jǎ: is also found in kùbj ${ }^{\mathrm{L}}$ nǎ: 'right foot', which takes eating out of the picture. 'Left' and 'right' are not normally used in directional adverbials ('turn left!').

### 8.4.7 Expressive adverbials (EAs)

EAs (cf. "ideophones") are adverbs. In this syntactic function, they may be loosely integrated into clauses, but they are morphologically inert and do not form part of syntactic phrases such as NPs. They may, however, be made predicative by adding either stative quasi-verb wò 'be' or inchoative bě: 'become' (elsewhere this verb means 'remain', see §11.1.3.1).

EAs may differ in phonological form from other stems. One common pattern is "intonational" prolongation of the final segment (vowel or sonorant consonant), represented by $\rightarrow$. This is distinct from vowel length since the duration is highly variable (allowing it to be calibrated for expressiveness or rhetorical force), and since an H -toned syllable may be prolonged without being forced into contoured $<\mathrm{HL}>$ or $\langle\mathrm{LH}\rangle$, as word-final $C v$ : and $C v L$ syllables in normal words are.

Other EAs involve full-stem iteration. Some EAs have two forms, one simple and one iterated. A generous sample of EAs is in §8.4.7.1 just below. The grammar of EAs, in particular their range of predicative is exemplified by 'straight' in §8.4.7.2.

Unlike nouns, verbs, adjectives, and numerals, an EA need not have an H-tone. For example, pìrùgù-pàrùgù 'disordered junk, bric-à-brac' is entirely /L/-toned. This induces a following wò 'be' to raise its tone, so that at the level of the EA-plus-auxiliary combination there is one H-tone. There is no tonal change in negative wò-ló.

```
pìrùgù-pàrùgù wó-\varnothing/ wò-ló-\varnothing
bric-à-brac be-3SgSbj / be-StatNeg-3SgSbj
'It is / isn't junk.'
```

Most EAs are lexical, but EAs can be derived from regular lexical stems in specific circumstances. Verbs denoting manner can be effectively converted to manner adverbials by iteration (§15.1.11). Some adjectives have a corresponding EA with $(g) \grave{u} \rightarrow$ or by iteration (§8.4.7.6).

### 8.4.7.1 List of representative EAs

Some EAs are in (164), organized by form.
(164)
a. $C v^{n} \rightarrow$
$p a^{n} \rightarrow \quad$ 'wide open (door)'
$p o^{n} \rightarrow \quad$ 'wide open (door)'
$p e^{n} \rightarrow \quad$＇narrow hole；mouth slightly open＇
$k a^{n} \rightarrow \quad$＇wide open（mouth）＇
$s a^{n} \rightarrow \quad$＇correctly＇（§8．4．4．3）
b． $\operatorname{CvC}(\rightarrow)$
kém $\rightarrow \quad$＇totally silent，speechless＇
tǒy ${ }^{n} \rightarrow \quad$＇very salty＇
$b \varepsilon ̌ y^{n} \rightarrow \quad$＇glowing light（of embers）＇
（iterated $b \varepsilon ̌ y^{n}$－bè $y^{n}$＇flickering off and on＇）
often iterated
těク $\rightarrow$ ，těy－tè $\quad$＇straight＇
dêך，dêŋ－dèŋ＇apart＇
c．bi－or trisyllabic，prolonged
bòrí $\rightarrow \quad$＇wide open（eyes）＇
dùrí $\rightarrow \quad$＇sticking out slightly＇
jèbègé $\rightarrow \quad$＇ajar，slightly open（door）＇
$j i ̀ g e ́ \rightarrow \quad$＇（pole，tree）swaying back \＆forth＇
d．no prolongation or iteration
òmód̀̀n＇flat－nosed＇
káyày＇blazing sunlight＇
e．trisyllabic，vocalic size symbolism（§3．4．8），no prolongation
sóròdò＇tall and straight（tree，giraffe）＇
sáràdà＇tall and straight（tree，giraffe）＇
sérèdè＇straight（nose）＇
f．iterated
$H$－tone in second iteration only
wìdì－wídì＇（arms）swinging＇
sùdù－súdù＇dragging oneself along＇
gù：gì：－gú：gì：＇dragging oneself along＇（synonymn）
jìgùmù－jígùmù＇（elephant，fat woman）with hips swiveling＇
H－tone in first iteration only
ném－nèm＇light drizzle＇
pádà－pàdà＇illuminated，well－lit（area）＇
pírù－pìrù＇（bird）flapping wings＇
júngù－jùngù＇bobbing up and down＇
kérèn－kèrèŋ＇hot and spicy（taste）＇
sáràw－sàràw＇whipping，lashing＇
túgùn－tùgùn＇lukewarm＇
jàlàgá－jàlàgà＇quivering（dog＇s tongue）＇
kúmòjò－kùmòjò＇（eyes）slightly open’，cf．verb kúmòlò＇open（eyes）＇
$H$－tone present in both iterations
wòbògó－wゝ̀bògó＇poorly encased（shoe，door）＇
wíllèク－wíllè $\quad$＇（flag）flapping in wind’
g. iterated with $a$-vowel(s) in second iteration

| jìbú-jàbú | 'staggering along' |
| :--- | :--- |
| pìdé-pàdà | 'lightning flashing' |
| pirùgù-pàrùgù | 'disordered junk, bric-à-brac' |
| lùgùdù-lágùdù | 'disordered (pile of clothing); roiled (water) <br> cf. verb lúgùd-è: 'be roiled' |
| dèngùdù-dángùdù | '(earth) trampled down (e.g. by cows)' |

h. Cùlv́llv̀, cf. similar shapes in §8.4.7.4
yèléllè 'blinding light (in one's eyes)'
dòlóllò 'bright point of light (e.g. star)'
i. composite (non-iterative)
pìlù-pádèy brightly-lit' (pílù 'white')
See also the adjectival intensifiers in §8.4.7.4 below.

### 8.4.7.2 'Straight' (těy $\rightarrow$, těy-tèn)

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 (165).

$$
\begin{array}{ll}
\text { těy } \rightarrow & \text { 'straight' }  \tag{165}\\
\text { tě̌y-tè } \eta & \text { 'straight' }
\end{array}
$$

In těn $\rightarrow$, the nasal is prolonged. Its duration is highly 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 variant may be used in (166).

| yé-rà: | těn $\rightarrow$ / těy-tè $\eta$ | bólò |
| :--- | :--- | :--- |
| DiscDef-Loc | straight | go.Imprt |
| 'Go-2Sg straight there!' |  |  |

Like other EAs, těg $\rightarrow$ and těy-tèn 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 wo 'be (somewhere)' or its negation wò-ló(§11.2.2.2).
(167)
ódj̀ $=\grave{j} /$ tánǹ̀ $=\grave{\jmath}$
road $=$ Def $/$ stick $=$ Def
těn $\rightarrow$ / těn-tèn
wì- $\varnothing$
road=Def / stick=Def
'The road/stick is straight.'

A distinctive syntactic feature of EAs is that they also have an inchoative construction with auxiliary bě:, which can be used in any aspect or polarity. As an ordinary intransitive, this verb means 'remain' (§11.2.4.1).


```
road=Def / stick=Def straight remain-Pfv-3SgSbj
```

'The road/stick became straight.'

To make 'straight' into a postnominal modifier denoting a state, it must be made predicative and then converted into a relative clause. The participial forms used are wô: , the regular participle of wò 'be', or kánn-ù. The latter is a variant of the usual perfective participle kànn-ú from kán(à) 'do' or intransitive 'be done' (§10.1.3.12).

| $\left[\begin{array}{lll}\text { tànnà }{ }^{\mathrm{L}} & \text { těn } \rightarrow \text { / těn-tèn } & \text { kánn-ù] }\end{array}\right.$ | bélè |  |  |
| :--- | :--- | :--- | :--- |
| [stick | straight | be.done-Pfv.Ppl] | get.Imprt |
| 'Get-2Sg a straight stick!' |  |  |  |

### 8.4.7.3 'Apart' (dêŋ, dêŋ-dè $)$

'Apart, separate, distinct' is expressed by dên or iterated dên-dè $\eta$. The concept requires at least two referents (individuals or groups) that are contrasted in some way (prototypically spatial). In parallelistic constructions, dê $\eta$ must be used. In (170a), dê $\eta$ is final in the "clause," but there is no overt predicate. The nasal in $d \hat{\varepsilon} \eta$ is not prolonged. The negative counterpart (170b) adds the conjugated stative negative -lá- after a tone-dropped form of $d \hat{\varepsilon} \eta$.
a. mó:dù dêy, sèwá:rà dên M apart, S apart
'Mopti and Sevare (are) apart.'
b. mó:dù dè̀-lá- $\varnothing$, sèwá:rà dèn-lá- $\varnothing$
M apart-StatNeg-3SgSbj, S apart-StatNeg-3SgSbj
'Mopti and Sevare are not apart.'

When $d \hat{\varepsilon} \eta$ is not the final word in a clause, for example in true adverbial use (171a) or before wò 'be' (171b), it takes the form dén-gù.

> a. ànà- $\eta=g \grave{o}=\grave{j} \quad$ dén-gù bòd-ù-ỳ,
> man- $\mathrm{Pl}=\mathrm{Def}=\mathrm{Acc}$ apart deposit- $\mathrm{Pfv}-1 \mathrm{SgSbj}$,
> yà:-ŋ́=gò= !̀ dén-gù bòd-ù-ì
> woman- $\mathrm{Pl}=\mathrm{Def}=\mathrm{Acc}$ apart deposit-Pfv-1SgSbj
'I positioned the men and the women apart (separated).'
b. dén-gù wò-yyà
apart be-3PlSbj
'They are apart (or distinct).'

If the two referents are consolidated into a plural NP, dêy-dè $\eta$ is normal. Under these conditions it is required if final in the "clause" (172a) or clause-internally in cases like (172b). It can also be used instead of dén-gù in (171b) above, see (172c). Uniterated déy-gù in (171b) above is allowed because plurality of the referents is marked in the 'be' auxiliary.
'Men and women (are) apart.'
b. [[ànà-ŋ́ lè] [yà:-ŋ́ lè $]]$ dên-dèn bòd-ù-ŋ̀,
[[man-Pl and] [woman-Pl and]] apart deposit-Pfv-1SgSbj
'I positioned men and women apart.'

'They are apart (or distinct).'
See also text 02 at 00:17. Either dén-gù or dên-dè $\eta$ can be used with bě: in the sense 'become separated' or 'separate (themselves)'.

### 8.4.7.4 Adjectival intensifiers

This is a class of EAs that are associated with adjectival categories. Those in (173) are suppletive (vis-à-vis the adjective), and may co-occur with the adjective in predicative function. In this case the adjective drops its tones: bànù bóy ${ }^{n}$-bò $y^{n}$ 'deep red'. The intensifiers in (173b) are built from the adjective by an unusual final reduplication, ending in $\ldots X X \grave{v} X X \grave{v}$ with $X=1$ as default or a nasal if present in the base adjective. These forms replace the adjective rather than co-occurring with it.

$$
\begin{equation*}
\text { gloss } \quad \text { adjective } \quad \text { intensifier } \tag{173}
\end{equation*}
$$

a. iterated, unrelated phonologically to adjective
'red' bánù bóy ${ }^{n}$-bòy ${ }^{n}$
'white' pílù pádà-pàdà
'black' gên kúdù-kùdù
'green' wérù jáy-jày
'yellow' púrùgù túy-tùy
'sour' ámà ntólò-ntòlòn
b. ...XXvXXv
...llvllv with lin adjective
'sweet' èllú èléllèllè
'bitter’ gàllú gàlállàllà
'cold’ kèllú kèléllèllè
...llvllv with default labsent from the adjective
'short' dùmbú dùmbúllùllù
'narrow' èmmú èmméllèllè
like above but irregular, cf. inchoative verb wày-nd-દ́:- 'become wide'
'wide' wáyà wàndállàllà
...mmvmmu with 1 absent from the adjective
'rotten' ómmù ómòmmòmmò

For other adjectives no form of type (173a) or (173b) was elicitable. However, many adjectives may be iterated for intensification, the first iteration being $\{\mathrm{L}\}$-toned and the second showing lexical tones: mày-mǎy 'soaking wet', tònnò-tónnò 'very hard', kùnjù-kùnjú 'very coarse'.

### 8.4.7.5 Deadjectival $C \hat{v} C v \eta-C \grave{v} C \grave{\eta} \eta$ '-ish'

Another de-adjectival EA, this time with attenuating semantics (cf. English -ish), is expressed by an iterative template $C \hat{v} C v \eta-C \grave{v} C \grave{v} \eta$. The initial $C$ position may be vacant. If the adjective has a nongeminate medial $C C$ cluster, it is preserved, but a geminate is reduced. The first vowel of the adjective spreads throughout the iteration, except that if $a$ is the first vowel we get a...e.

$$
\begin{equation*}
\text { gloss } \quad \text { adjective } \quad \text { attenuating EA } \tag{174}
\end{equation*}
$$

a. first vowel quality spreads

| 'wet' | òlú | ólòn-òl̀̀n |
| :--- | :--- | :--- |
| 'sweet' | èllú | élèn-غ̀lèn |
| 'cold' | kèllú | kélèn-kèlèn |
| 'white' | pílù | pílìn-pìling |
| 'black' | gên | gémèn-gèmèn |
| 'coarse' | kùnjú | kúnjùn-kùnjùn |

b. first vowel a

| 'bitter' | gàllú | gálèn-gàlèn |
| :--- | :--- | :--- |
| 'red' | bánù | bánèn-bànèn |
| 'sour' | ámà | ámèn-àmèn |

### 8.4.7.6 Deadjectival EA with suffix $-\eta$ or final $(-g)$ ù:

From pà:dê: 'bad', as an alternative to the regular inchoative verb pá: $d-\bar{\varepsilon}:-$ 'become bad', one can say pà: $d \varepsilon$ '--ŋ̀ bě: 'become bad'. The use of a conjugated form of bě: 'remain' to form an inchoative predicate shows that pà:dé:-ŋ̀ is an EA. The tones of pà:dé:-ŋ̀ suggest direct derivation from the adjective $p a ̀: d \hat{\varepsilon}$ : rather than a derivation from the inchoative verb.

Further examples are in (175).

$$
\begin{align*}
& \text { gloss adjective EA inchoative predicate }  \tag{175}\\
& \text { with }-\eta \\
& \text { 'big' pô: pó:-ì bě: 'become big' } \\
& \text { 'small' ùdî: ùdí:-ŋ̀ bě: 'become small } \\
& \text { 'good' sê: }{ }^{n} \text { sé:-ì bě: 'become good' } \\
& \text { 'white' pílù pílù-ı̀ bě: 'become white' } \\
& \text { 'sweet' غ̀llú èllù-ŋ́ bě: 'become sweet' }
\end{align*}
$$

The formation in $-\eta$ appears to be productive with adjectives. The known exceptions are the handful of adjectives that either lengthen a final $u$ : or in one case add -gu: to the stem in the
stative adjectival predicate with wò 'be' (§11.4.1.1). These stems also use the lengthened forms in the inchoative with $b \check{\varepsilon}$ : , showing that the lengthened forms are EAs similar to those in $-\eta$ above.
(176) gloss adjective EA inchoative predicate
with -gù: or lengthened final ù:
'black’ $g \hat{\varepsilon} \eta \quad$ gén-gù: bě: 'become black'
'yellow' púrùgù púrùgù: bě: 'become yellow'

### 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 $\S 4.6 .1 .6$. These are adverbs syntactically and are made into predicates in the same way as EAs. Agreement is normally singular.
a. tà:ndú-tà:ndú
wì- $\varnothing$
three-three be-3SgSbj
'They are (grouped) three by three'
b. tà:ndú-tà:ndú
$b i ̀-y ̀-\varnothing$
three-three remain-Pfv-3SgSbj
'They have become (grouped) three by three'

## 9 Verbal derivation

The productive suffixal derivations (stem to stem) for verbs are the reversive ('un-...'), the causative, and the inchoative and factitive of adjectives. There are vestiges of a no longer productive alternation of mediopassive and transitive.

### 9.1 Reversive verbs (-lv)

The reversive suffix is $-l v$ with variable vowel depending on stem vocalism. It is common in verb pairs like 'cover' versus 'uncover' that denote complementary actions, (at least) one of which reverses or undoes the other. It may be intransitive or transitive. 'Remember' is construed as 'un-forget'. 'Open (door)' is construed as 'un-shut'. yô: 'go in' and gǒ: 'go out' are not expressed as simple versus reversive.

The stem before $-l v$ is usually bisyllabic. There is only one naturally occurring example with a $C V$ : stem ('remember'), and this pattern seems to be an aberration. My assistant did not respond to my effort to elicit a reversive for kô: 'turn (garment) inside out', even though the semantics are favorable. From synonym bìlé I did elicit bilì-lé 'turn (inside-out garment) back to its normal shape', an action that happens on a daily basis since garments are regularly turned inside-out during washing and later returned to their normal shape for wearing.

Trisyllabic stems are not allowed before reversive -lv. However, $C v C v-r v$ verbs with a final transitive derivational suffix can drop the suffix before -rv. In this case, the alternation is transitive $C_{V} C V-r v$ versus reversive $C v C v-I v$.

The tone melody and vocalism including ATR-harmonic category of the reversive are predictable from those of the input verb. Lexical /LH/ melody is reapplied to the whole derived stem (§3.7.3.1). Bisyllabic stems with initial high vowel, like bìgé 'bury', show a second high vowel in the medial syllable of the reversive throughout, not only in the perfective. An exception is pínè-lè ~ pínè-lè 'open (door)' for which my assistant preferred medial $e$.

Examples of reversives are in (178).
input gloss reversive gloss
a. bisyllabic with initial high vowel medial high vowel in reversive

| bìgé | 'bury' | bìgù-lé | 'disinter' |
| :--- | :--- | :--- | :--- |
| bìlé | 'put inside-out' | bilī-lé | 'put right again' |
| mùnó | 'tie a knot' | mùnò-ló | 'untie (knot)' |
| mùdó | 'stop up (hole)' | mù̀ò-ló | 'reopen (hole)' |
| medial mid-height vowel in reversive |  |  |  |
| mùnnó- | 'bend, braid, fold' | mùnnù-ló | 'unbend, unbraid, unfold' |

b. bisyllabic, initial mid-height vowel

```
sóg\grave{ 'attach (loop)' sógj̀-l̀ 'detach (loop)'}
dè\eta\varepsiloń\varepsilon 'stuff up (well)' téẏघ̀-lغ̀ (re-excavate (stuffed well)'
```

| dònó | 'prop up' | dònò-ló | 'remove prop from' |
| :---: | :---: | :---: | :---: |
| ténè | 'hobble (animal)' | ténè-lè | 'unhobble' |
| gònnó | 'bend' | gònnò-ló | 'straighten' |
| kómmò | 'tie' | kómmò-10 | 'untie' |
| kómbò | 'roll up (pants)' | kómbò-lò | 'unroll (bottom of pants)' |
| témmè | 'put lid on' | témmè-lè | 'take lid off' |

c. bisyllabic with initial a

| dàgá | 'lock' |
| :--- | :--- |
| màná | 'seal up' |
| tárà | 'affix, post' |
| dàygá | 'cover with hide' |
| námmà | 'step on' |


| dàgà-lá | 'unlock' |
| :--- | :--- |
| mànà-lá | 'unseal' |
| tárà-là | 'unpost (remove)' |
| dàygà-lá | 'remove hide covering <br> from' |
| námmà-là | 'remove foot from' |

d. - $l v$ replaces -rv in trisyllabic
gòndj̀-ró 'hook, hang'
pégè-rè 'knock blade on'
gòndò-ló 'unhook'
yغ̀mbè-ré 'cover (sb)'
pégè̀-lı̀ 'knock (hoe, ax) blade off handle'
irregular
jù:-ró 'turn over’ jùl-ló- 'put right-side-up (calabash,
e. monosyllabic
nǎ: 'forget' nà:-1-દ́:- 'remember'
nǎ: 'weave (rope)' nà:-l-દ́:- '(rope) unravel'
f. with $n d$ in input, see $\S 3.5 \cdot 5.1$

| pí:(-)ndè | 'shut (door)' | pínè-lè~pípè-lè | 'open (door)' |
| :--- | :--- | :--- | :--- |
| yá:-ndà | 'put/lay up on' | yánà-là | 'take (sth) down off' |
| té:-ndè | 'cover with lid' | témmè-lè | 'take lid off' |

Bisyllabics like bìgé 'bury' whose perfectives are based on the E-stem (bíg-è 'he/she buried') correspond to reversives whose perfectives (as with all trisyllabic verbs) are based on the I-stem (bígù-l-ì 'he disinterred'). 'Remember' (178e) has I-stem perfective ná:-l-ì 'he/she remembered', but in this case it may be that this is simply carried over from the input 'forget', which also has an I-stem perfective: ná-ỳ 'he/she forgot'.

Apparently underived stems with the shapes $C v: l v$ or $C v C v / v$ that do not function synchronically as reversives (i.e. that are not paired with semantically related Cv : or CvCv stems) may have originated as reversives.

The reversive suffix cannot follow a mediopassive or causative suffix, but it may be followed by either or both of them. The mediopassive is especially common in the context of removing one's own garments. Before the reversive-mediopassive complex -l-é:- ~ -l-é:-, a medial-syllable raises its vowel to $i$ or $u$.
a. reversive followed by mediopassive

| nà:-l-દ́:- | 'remember' | nǎ: | 'forget' |
| :--- | :--- | :--- | :--- |
| jìbì-l-é: | 'take off a wrap' | jìb-é: | 'put on a wrap' |
| páyì-l-દ̀:- | 'undo choking' | páy-غ̀:- | 'choke (on food)' |

```
dòmmù-l-é:- 'take off hat' dòmm-é:- 'put on hat'
nómmù-l-è:- 'spring back' nómmò 'sag under a weight'
kúmbù-l-è:- 'unclench (fist)' kúmb-è:- 'clench (fist)'
kúmù-l-è:- 'open (eyes)' kúm-è:- 'shut (eyes)'
```

b. reversive followed by causative
pínè-lè-mゝ̀ 'cause to open' pínì-lè 'open (door)'
[both also may have $\eta$ instead of $n$ ]
c. reversive followed by mediopassive and causative
nà:-l-દ̀:-mó 'remind' nà:-l-દ́:- 'remember'

Another pair where - $l v$ has somewhat different semantics is gànjá 'dig up (sth buried)', said for example of squirrels digging up peanuts or carrots, and gànjà-lá, which occurred in a text in the context 'dig around (unsuccessfully) for, poke around for'.

### 9.2 Causative

### 9.2.1 Productive causative -mv

The productive causative suffix is $-m v$ with variable vowel. It can be added rather freely to already transitive as well as intransitive verbs. For the valency syntax, see §11.1.3.4.

Causative verbs adopt the tone melody, / $\mathrm{HL} /$ or /LH/, of the input stem, with /LH/ reapplied to the whole stem. Unlike the reversive suffix, the causative suffix does not agree with the stem in ATR-harmonic class. Instead, the causative suffix is always -ATR in inflections that allow a mid-height vowel, even after a +ATR vowel, as in imperfective pí:ndè-mè-dè 'makes (sb) shut (door)'.

The imperative form is always $-m o(\mathrm{H}$ - or L-toned depending on the stem), and the 3 Sg perfective always -m-ì. If the preceding syllable has a front/back vowel, and if there is a suffixal syllable (with any vowel quality), -mo undergoes Back/Rounding Harmony (§3.4.5) to -me-. Note the alternation in imperative pí:ndè-mò 'make (sb) shut (door)!' versus imperfective pí:ndè-m̀̀-d̀̀ 'makes (sb) shut (door)' and hortative pí:ndè-mè-mò-ŋ̀. If the vowel of the preceding syllable is $a$, we get variation between -mo and -ma before a suffix (such as imperfective $-d \grave{\varepsilon}$ ), but with -mo regular word-finally (i.e. in imperatives).

Also unlike the reversive, the causative suffix can be added to a trisyllabic stem without trimming off the third input syllable. In fact, the causative suffix can readily be added to a reversive derivative: kómmə̀-l̀-m̀̀ 'cause to untie'.

Examples are in (180).

$$
\begin{equation*}
\text { input } \quad \text { gloss } \quad \text { causative } \quad \text { gloss } \tag{180}
\end{equation*}
$$

a. monosyllabic input

| nǒ: | 'drink' | nò:-mó | 'give drink to' |
| :--- | :--- | :--- | :--- |
| yô: | 'enter' | yó:-mò | 'take in' |
| nâ: | 'eat (meal)' | ná:-mò | 'feed' |
| bě: | 'stay' | bè:-mó | 'cause' (perfective bí:-m-ì ) |

b. bisyllabic input

| pí:ndè | 'shut (door)' | pí:ndè-mò | 'make (sb) shut (door) |
| :---: | :---: | :---: | :---: |
| sóyy-è:- | 'speak' | sóyy-è:-mò | 'make speak' |

c. trisyllabic input
kómmò-lı̀ 'untie' kómmò-lò-mò 'make (sb) untie'
páy-nd-è:- 'become old' páy-nd-غ̀:-mò 'make (sb) old'
d. irregular $n \sim n d$, see $\S 3.5 .5 .1$
nìné 'be afraid' nìndù-mó 'frighten, scare'
All these causatives, even those of bisyllabic shape $C v:-m v$, are I-stems. Therefore the perfective is always $-m-i$ and the chaining form always $-m-u$. Before $-m-i$ or $-m-u$, any noninitial syllables have their vowels raised: pí:nd-ì-m-ì 'caused to shut', kómmù-lì-m-ì 'caused to untie', páy-nd-ì:-m-ì ‘made (sb) old'.
$C v$ : verbs that have Ci-y perfectives have causatives with Cí:-m-ì perfectives ( 3 Sg form). Thus bè:-mó 'cause to remain' shown in (180a) has 3 Sg perfective bí:-m-ì- $\varnothing$. Likewise gè:-mó 'cause to say', 3 Sg perfective gí:-m-ì.

For other causative-like transitivizing derivations, see §9.4.2-6. For "causative" lookalike $-m v$ in passive function, see $\S 9.3$ below.

Also of at least diachronic interest is the fact that the hortative ('let's go!', $\S 10.6 .2 .1$ ) has the same form as the imperative of a causative.

### 9.2.2 Suffix -gvlv

This derivation is found with a number of bisyllabic stems. The vowel quality of the suffixal vowels depends on those of the stem. For a sample paradigm see $\S 10.1 .3 .14$. The known examples are in (181). Some are causative (valency-changing), others are not.
(181)
a. causative sense

| nùmbò-gòló | 'knock down; defeat' | nùmbó | 'fall' |
| :--- | :--- | :--- | :--- |
| màrà-gàlá | 'lose (sth)' | màrá | 'be lost' |
| wòlò-gòló | 'demolish (house)' | wòló | 'collapse' |
| yòrò-gòló | 'loosen, soften (sth)' | yòró | 'become loose/soft' |
| lólò-gòlò | 'slide (sth) through' | lólò | '(sth) slip through' |

b. partial valency change

| kábà-gàlà | 'separate (them)' | kábà <br> káb-è:- | 'separate (them)' <br> '(they) separate' |
| :--- | :--- | :--- | :--- |
| wòdò-gòló | 'crush, squash (sth)' | wòdó | 'crush (sth)' or 'be crushed' |
| pòdò-g̀ló | 'crush, squash (sth)' | pódò | 'crush (sth)' or 'be crushed' |

c. reversive
tárà-gàlà 'remove (sth posted)' tárà 'post, stick (on wall)'
tál-là 'remove (sth posted)
Perhaps the noun pàlùgílù ~ pàlùgílì 'kneading stick' is related, but I could elicit no related verb ('knead' is wàgàdá).

### 9.3 Passive suffix -mv

While derivational suffix $-m v$ is causative (adding an external agent) for the vast majority of verbs, it also occurs with three verbs in the passive sense 'be VERB-able' or 'be frequently VERB-ed'. The understood agent is a generalized nonspecific human. Verbs attested in this construction are 'get', 'see', and 'hear'.
a. nàmá
[íbè rà:]
bèlè-mè-dè- $\varnothing$
meat [market Loc] get-Pass-Ipfv-3SgSbj
'Meat is gettable (=available) at the market.'
b. kê: ${ }^{n}$ [ògùlú rà:] wà:-mà-dè- $\varnothing$
squirrel [outback Loc] see-Pass-Ipfv-3SgSbj
'Squirrels are see-able (=can be seen) out in the bush.'
c. nǎnsà [tìmmé rà:] $̇$ ègè-mè-dè- $\varnothing$
cicada [tree Loc] hear-Pass-Ipfv-3SgSbj
'Cicadas are hear-able (=can be heard) in the trees.'
The passive of 'get' is also attested in the sense 'have been gotten, be in custody', without a habitual element.

Most transitive verbs are never used in this construction. Instead, a generic 3Pl subject is used (183). This effectively avoids any confusion between causative and passive $-m v$.

| něn | [íbè | rà:] | dj̀nò-d-ì |
| :---: | :---: | :---: | :---: |
| salt | [market | Loc] | sell-Ipfv-3PISbj |
| 'They sell salt in the market.' (='Salt is sold in the market.') |  |  |  |

### 9.4 Mediopassive and transitive derivational suffixes

Several other Dogon languages (e.g. Yorno So) have a mediopassive (middle) suffix of the form $-\varepsilon$ : $\sim-i$ : and a transitive suffix in $-r v$ or $-l v$. Some verbs require one suffix or the other and do not have an unsuffixed form. Others have an unsuffixed stem that alternates with either the mediopassive suffix, the transitive suffix, or both..

DS has a similar system with $-\varepsilon:-\sim-e:-$ alternating with $-i:-$, depending on the inflectional category. The DS mediopassive, however, is also the basic way to express reflexive (§18.1.1) and can be used in reciprocal sense (§18.4.1). DS differs from most Dogon languages, which have anaphoric pronouns or other devices to express reflexive and reciprocal.

The mid-height allomorph $-\varepsilon:-\sim-e:-$ is clearly a long vowel. Vowel length is less obvious for the high allomorph -i:-, but it is long in perfectives of a mediopassive-causative combination, as in páy-nd-غ̀:-mò 'cause (sb) to become old', perfective páy-nd-ì:-m-ì. Except in this combination, the high allomorph occurs only in simple perfective $-i-y$ [ì:], the chaining form $-\grave{i}-\dot{y}$ [ $1:]$, and in the imperfective negative $-1-\overline{1} l \grave{\varepsilon}$ - or $-\grave{i}-\bar{\varepsilon} l \grave{\varepsilon}$-. This require a morphologically restricted shortening rule to convert $/ \mathrm{i}:-\mathrm{y} /$ to $-i-y$, compare monosyllabic I-stem perfectives (ká-ỳ‘shaved’) and related chaining forms (ká-ỳ).

If the mediopassive suffix is preceded by palatal $y$ or $n$, the latter is always geminated. For example, dànp-દ́:- 'sit down', ìnn-દ́:- 'stand; stop', and dùyy-દ́:- 'carry on head' are heard with geminates. Likely proto-forms were *dày-í: ~ -દ́:-, *ìŋ-í: ~ -દ́:-, and *dùy-í: ~ -દ́:-, cf.
statives (yé) dàクà, (yé) ìnè, (yé) dùyò (§10.4.1). If so, the velar nasal in the first two palatalized before the front vowels, and the palatal consonants in all three then coalesced with the onset of the suffixal vowel, initially in the $-i:-$ variant. This is a historical matter, but there is synchronic evidence for an additional coalescence in forms like imperfective negative, where dànp-í-દ̀l̀̀ 'does not sit down' and dùyy-í- $̀ l \bar{\varepsilon}$ 'does not carry on head' are often pronounced as dǎnn- $\varnothing$-غ̀lغ̀ and dǔyy- $\varnothing-\grave{\varepsilon} l \varepsilon ̀$, with no distinct -í- syllable and with rising tone on the first syllable (§3.5.3.4).

Also of this type are kénn-è:- 'listen', mànn-દ́:- 'dry out, harden' from adjective mǎy ‘dry, hardened’, sóyy-غ̀:- 'speak' related to sǒ: 'words, talk', and mediopassive verb stems such as gìyy-દ́:- ‘say to oneself’ (gě: ‘say’), jùyy-é:- '(sth) flip over' (reversive jùl-ló 'unflip, put back right-side-up'), jòyy- $\varepsilon$ :- 'hide’, káyy- $\grave{\text { : }}$ - 'be fractured’ (kâ: ‘shave’), and tányy-غ̀:- '(plant) ramify, branch out' (tâ:." 'stretch [sth]'). Especially sóyy- $\bar{\varepsilon}:-$ and tányy-غे:- may be on the verge of turning into unsegmentable verb stems with noncanonical vowel sequences (mix of back rounded and front unrounded) and with final short vowels: sóyyè and tányyè. However, they still have chaining forms with $-i ̀-y$ (sóyy-ì-ỳ, tán $y y-i ̀-y$ ).

### 9.4.1 Mediopassive (reflexive) - $\varepsilon:-\sim-e:-\sim-i:-$ versus underived transitive

Depending on the semantics of the stem and the context, the derived form may be reflexive (i.e. the agent and patient are coindexed) or mediopassive (middle, i.e. the patient is nonagentive). The derivative from a verb like 'spill' would normally be interpreted as mediopassive ('be spilled, get spilled'). Verbs like 'cut' and 'treat, care for (medically)' have derivatives that can be interpreted either way: 'cut oneself' or 'get cut', 'care for oneself' or 'be cared for, have oneself cared for'. I will use mediopassive as the label (abbreviation MP).

The morphology is most transparent when the lexical stem vocalism has back rounded vowels. In (184) the regular transitive forms are compared with the corresponding reflexive forms. The inflectional categories where confusion might have been possible, due to the use of the E-stem in the regular paradigm (perfective) or due to vowel contraction (imperfective negative), avoid homophony by using allomorph $-i:-$ rather than $-\varepsilon:-\sim-e:-$ in the reflexive.
'treat, care for (medically)'

$$
\text { transitive } \quad \text { mediopassive AN category }
$$

a. mediopassive forms based on $-\varepsilon$ :-

| jònò-lí | jò̀-غ̀:-lí | perfective negative |
| :---: | :---: | :---: |
| jònó-dè | jòn-દ̇:-dè | imperfective |
| jónò | jòn-Eิ: | imperative |
| jò̀ò-ẃ | jòn-غ̀:-W | prohibitive |

b. mediopassive forms based on -i:

| jòyó | jòn-í-ỳ | chaining |
| :---: | :---: | :---: |
| jón-غ̀ | jón-ì-ỳ | perfective (3Sg) |
| jว̀ŋદ́-દ̇lè | jòn-í-દ̀lè | imperfective negative |

The vowel length in suffixal $-\varepsilon:-\sim-e:-$ and $-i:-$ is not always clearly articulated. With verbs that end in $\varepsilon$ or e lexically, the transitive/mediopassive opposition is therefore phonetically subtle or even indistinguishable in the inflectional categories with the $-\varepsilon:-\sim-e:-$ mediopassive
allomorph. (185) shows the verb kédè 'cut' and its mediopassive forms. The transitive and mediopassive forms in (185a) are difficult to distinguish, while those in (185b) are easily separated.
(185) 'cut' transitive mediopassive AN category
a. mediopassive forms with $-\varepsilon$ :-

| kèdè-lí | $k \dot{d} d-\frac{\varepsilon}{\text { e }}$-lí | perfective negative |
| :---: | :---: | :---: |
| kédè-dè | $k \varepsilon ́ d-\frac{1}{\text { : }}$-dè | imperfective |
| kédè | $k \varepsilon ́ d-\varepsilon ̇: ~$ | imperative |
| kèdè-Ẃ |  | prohibitive |

b. mediopassive forms with $-i$ :

| $k \varepsilon ́ d \grave{\varepsilon}$ | $k \varepsilon ́ d-i ̀-\grave{y}$ | chaining |
| :--- | :--- | :--- |
| $k \varepsilon ́ d-\grave{\varepsilon}$ | $k \varepsilon ́ d-i ̀-\grave{y}$ | perfective $(3 S g)$ |
| $k \varepsilon ́ d \varepsilon ̀-\varepsilon \grave{l}$ ) | $k \varepsilon ́ d-i ̀-\grave{\varepsilon} l \grave{\varepsilon}$ | imperfective negative |

Examples of mediopassive verbs with +ATR e: instead of $\varepsilon$ : include tó: $g$-è:-- 'be spilled' from tó:gò 'spill (sth)' and underived kíl-è: 'fly away'.

With I-stem verbs like 'touch' (186), the situation is different. The transitive and mediopassive forms in (186a) are now easily distinguished by vowel quality. In (186b) the chaining form and imperfective negative forms have different vowel qualities, while the perfectives are distinguished only by (subtle) vowel length.
'touch' (làrá, synonym of tábà)
transitive mediopassive AN category
a. mediopassive forms with $-\varepsilon$ :-

| làrà-lí | làr-દ̀:-lí | perfective negative |
| :---: | :---: | :---: |
| làrá-dè | làr-દ́:-dè | imperfective |
| lárà | làr- $\hat{\text { : }}$ | imperative |
| làrà-Ẃ | làr-È:-Ẃ | prohibitive |

b. mediopassive forms based on -i:-

| làr-ú | làr-í-ỳ | chaining |
| :--- | :--- | :--- |
| lár-ì | lár-ì-y | perfective $(3 \mathrm{Sg})$ |
| làré-èlغ̀ | làr-í-èl̀ | imperfective negative |

### 9.4.2 Mediopassive $-\varepsilon: \sim-e: \sim-i$ : versus transitive -rv-

The verbs in (187) require either mediopassive $-\varepsilon: \sim-e: \sim-i$ : or transitive $-r v$ - with variable vowel determined by the stem. This alternation is associated with verbs denoting physical positions of the subject ('sit', etc.), or the interaction of the subject with clothing or with a carried object. 'Bathe' and 'hide' are also included. Semantically, the form with $-\varepsilon: \sim-e: \sim-i$ : is generally mediopassive (middle) rather than reflexive, though one can argue for a reflexive reading in some cases. The transitive form adds an external agent. The stems are bisyllabic
(187a) except for a handful of monosyllabics (187b). These latter appear to add epenthetic -yy-before the suffix; alternatively, yy is part of the stems and is deleted before the transitive suffix (for discussion see §3.5.4.6).

Mediopassive - $\varepsilon:-\sim$-e:- $\sim-i:-$ versus transitive -rv
Mediop gloss $\operatorname{Tr}$ gloss
a. stem bisyllabic

| ǹd-É:- | 'bathe (oneself)' | ǹdè-ré | 'bathe (sb)' |
| :---: | :---: | :---: | :---: |
| jìb-é:- | 'attach one's wrap' | jibè-ré | 'attach (a wrap) on (a woman)' |
| tág-è:- | 'put one's shoes on' | tágà-rà | 'put shoes on (sb)' |
| ùnj-é:- | 'lie down' | ùnjù-ró | 'lie (sb) down, put to sleep' |
| bòmb-é:- | 'carry on back' | bòmbò-ró | 'put on (sb's) back' |
| dòmm-é:- | 'put one's hat on' | dòmmò-ró | 'put hat on (sb)' |
| jìmm-é:- | 'bend over, bow' | jìmmè-ré | 'bend (sth) over' |
| bà:g-દ́:- | 'learn (a trade)' | bà:gà-rá | 'teach (a trade)' |
| tú:n-è:- | 'kneel' | tú:ךò-rò | 'cause to kneel' |
| stem arguably monosyllabic |  |  |  |
|  | 'carry on head' | dù:-ró | 'put on (sb's) head' |
| $j \grave{(-) y y-\varepsilon ́:-~}$ | 'hide (oneself)' | jò:-ró | 'hide (sb, sth)' |
| jù(-)yy-é:- | '(sth) flip over' | jò:-ró | 'flip (sth) over' |

c. with Intervocalic 1 -Deletion (§3.5.4.1)
kól-è:- 'pour on self’ kó:-rò 'pour (water) on (sb else)'
In the case of $g \grave{y} \eta g-\varepsilon$ :- '(sth) tilt' and gèngè-ré '(sth) tilt', there is no change in valency. The causative is $g \varepsilon ̀ \eta g \varepsilon ̀-r \varepsilon ̀-m o ́ ~ '(s b) ~ t i l t ~(s t h) ' . ~$.

### 9.4.3 Mediopassive - $\varepsilon: \sim-e: \sim-i$ : versus transitive $-n d v$

A few verbs have a mediopassive/transitive suffixal alternation similar to the one described in the preceding section, but with $-n d v$ rather than $-r v$ as the transitive suffix. The transitive form also shows various irregular phonological changes in the stem. In (188a), a medial nasal in the stem has disappeared, and the nasal in $-n d v$ arguably preserves a trace of it.
(188) Mediopassive - $:: \sim-e: \sim-i$ : versus transitive $-n d v$

Mediop gloss $\operatorname{Tr}$ gloss
a. transitive stem contracted

| dàņn-é:- | 'sit down' | dà:-ndá | 'have sit, seat' |
| :--- | :--- | :--- | :--- |
| ìnn- $:-$ | 'stand up, stop' | ì:-ndé | 'stop, erect (sth)' |
| énn-è:- | '(sth) be soaking' | é:-ndè | 'soak (sth)' |

b. $1 / r$ alternation
dàl-É:- 'get dressed’ dàrà-ndá 'dress (sb)'
See also the following section.

### 9.4.4 Transitive (causative) -ndv versus underived stem

$-n d v$ also occurs, in opposition to an unsuffixed stem, with a number of motion verbs and 'become (sth)'. The agent conveys the theme referent to or from some location or state. In dàmà-ndá 'put/take up' (189b), the consonantal change avoids two consecutive NC consonant clusters, but this does not seem to be a regular phonological process. In mò:-ndó 'assemble (them)' (189b), it appears than an original *l in *mòl̀̀-ndó was lost.
(189)

Transitive (causative) -ndv
input gloss causative gloss
a. regular
gǒ: 'go out' gò:-ndó 'take out, remove'
dǒ: 'arrive' dò:-ndó 'deliver'
dàgá 'be good’ dàgà-ndá 'make (well), produce'
súgò 'go down' súgù-ndò 'take/bring down' (variant súnù-ndò)
táクà 'become (sth)' táクà-ndà 'transform, convert'
b. irregular
dàmbá 'go up' dàmà-ndá 'put/take up'
yáp-દ̀:- 'be put up on' yá:-ndà 'put/lay up on'
mòl-દ́:- 'meet, assemble' mò:-ndó 'assemble (a group)'
pǐ:ךè '(door) be shut' pí:-ndè 'shut (door)'
[cf. reversive pínè-lè ~ pínè-lè ‘open (door)']

Other transitive verbs of $C v: n d v$ shape whose meaning is similar to some of those in (189) may belong to this type etymologically: dù:ndó 'lay, set (on ground)', ní:ndè 'accompany (sb, to the door)'; gà:ndá 'pester'.

### 9.4.5 Transitive -lv versus unsuffixed stem

The transitive suffix (with vowel quality carried over from the stem) is found in a number of intransitive/transitive pairs where the intransitive is morphologically unmarked.
a. yèmbè-lé 'awaken (sb)'
yèmé '(sb) wake up'
b. yàmbà-lá 'ruin, damage (sth)'
yàmá '(sth) be ruined, damaged'

### 9.4.6 Possible frozen suffix $-d v$

The verb gàgá 'rub' is obscurely related to a morphologically mediopassive verb gàgùd-É:- 'abrade (by rubbing hard)'. A fossilized suffix $-d v$ - may also be present in tágùd-è:- '(skin) form a callus', púgòdò 'mix (pulp) by slapping', and a few other cases.

### 9.5 Deadjectival inchoative and factitive verbs

A range of morphological relationships link modifying adjectives (A) to inchoative verbs ('become A'). In most cases the factitive ('turn X into A') is the morphological causative of the inchoative, with $-m v$ suffix or less often with another suffix.

In (191) the inchoative is phonologically related to the modifying adjective but neither of them has a derivational suffix. Inchoative verbs, like all verbs, are subject to the rule that an initial voiceless obstruent requires lexical /HL/ melody, an initial voiced obstruent requires $/ \mathrm{LH} /$, and an initial sonorant or vowel forces a lexical choice between the two. Only in the latter case is there any chance for the melody of the adjective to influence that of the inchoative. Note the degemination of $m$ in the factitive of 'lean'.
(191) Unsuffixed inchoative gloss adjective inchoative factitive
a. factitive with causative suffix -mv

| 'plump' | ámà | ámà | ámà-mò |
| :---: | :---: | :---: | :---: |
| 'old (thing)' | pěy | $p \hat{\varepsilon}$ : | pé:-mò |
| 'blunt' | dùmbú | dùmbó | dùmbù-mó |
| 'coarse' | kùnjú | kúnjò | kúnjù-mò |
| 'thick (liquid)' | kúrò | kúrè | kúrò-mò ~ kúrù-mò |
| 'lean (emaciated)' | kómmò | kómmò | kómò-mゝ |
| 'hard' | tónnò | tónnò | tónnò-mò |
| 'ugly' | mònjú | mònjó | mònjò-mó |
| adjective possibly $=$ perfective participle of "inchoative" |  |  |  |
| 'watery, diluted' | sèlé | sélè | sélè-mò |
| 'ripe; cooked’ | ìlé | ílè | ílè-mゝ̀ |

b. factitive with suffix $-g_{V} / v$
'slack, loose' yòrú yòró yòrò-gòló
c. factitive with suffix $-n d v$
'tight, narrow' $\hat{\varepsilon}:^{n} \quad \hat{\varepsilon}:^{n} \quad \varepsilon ́:-n d \grave{\varepsilon}$

In (192), the inchoative is suffixed. Therefore the factitive is doubly suffixed in most cases, but if the adjective is trimoraic the mediopassive suffix is most often omitted before the causative. dùmbú 'blunt' in (191a) has a different inchoative than its homonym dùmbú 'short' at the end of (192b).
(192) Suffixal inchoative
gloss adj inchoative factitive
a. mediopassive -e:- $\sim-\varepsilon$ :- added directly to stem

| 'dry' | mǎy | mànл-દ:- | mànn-દ̀:-mó |
| :---: | :---: | :---: | :---: |
| 'red' | bánù | bàn-દ́:- | bàn-È:-mó |
| 'hot' | númò | núm-è:- | núm-è:-mò |
| 'sweet' | èllú | ع́ll-غ̀:- | દ́ll-غ̀:-mò |
| 'cold' | kèllú | kéll-è:- | kéll-è:-mo |


| trimoraic or longer adjective，causative－mo directly on stem |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  | （also pá：d－ì：－mゝ） |
| ＇heavy＇ | dógòdò | dògùd－é：－ | dògòdò－mó |
| ＇smooth＇ | ónว̀nゝ̀ | ónı̀n－દ̀：－ | ónว̀nゝे－mゝ |
| causative－ndv |  |  |  |
| ＇wet＇ | òlú | ól－¢̀：－ | ślo－ndò |
| b．inchoative－nd－e：－～－nd－ع：－，causative－nd－e：－mo $\sim-n d-\varepsilon:-m \supset$ |  |  |  |
| ＇old（person）＇ | pǎy | páy－nd－è：－ | páy－nd－è：－mò |
| ＇big＇ | pô： | pó：－nd－è：－ | pó：－nd－è：－mo |
| ＇deep＇ | tǒ： | tó：－nd－è：－ | tó：－nd－è：－mò |
| ＇small＇ | dằy | dày－nd－દ́：－ | dày－nd－è：－mó |
| ＇nasty＇ | yôW | yòw－nd－é：－ | yòw－nd－غ̇：－mó |
| ＇black＇ | $g \hat{\varepsilon} \eta$ | gèmi－nd－દ́：－ | gèmì－nd－غ̇：－mó |
| adjective bisyllabic |  |  |  |
| ＇wide＇ | wáyà | wày－nd－દ：－ | wày－nd－è：－mó |
| ＇distant＇ | wàgú | wàgì－nd－É：－ | wàgì－nd－è：－mó |
| ＇small；thin＇ | ùdú，ùd－î： | ùdì－nd－é：－ | ùdì－nd－è：－mó |
| ＇long＇ | pàlá | pálì－nd－è：－ | pálì－nd－è：－mò |
| ＇white＇ | pílù | pílì－nd－è：－ | pílì－nd－è：－mò |
| slightly irregular consonantism |  |  |  |
| ＇difficult＇ | jân | náy－nd－è：－ | jáy－nd－è：－mò |
| ＇short＇ | dùmbú | dùmù－nd－é：－ | dùmù－nd－ì：－mò |
| ＇lightweight＇ | Wêy | Wè：－nd－દ́：－ | wè：－nd－ì：－mó |

For trisyllabic＇smooth＇in（192a），the second syllable of the verb has unmodified 0 throughout，including perfectives ónə̀n－ì－ỳ ‘became smooth＇and ónòn－ì：－m－ì ‘smoothed（sth）＇．

For＇bad＇in（192a），my assistant claimed a semantic distinction between causatives pá：dù－mò＇annul，cancel（e．g．a work order）＇and pá：d－غ̀：－mò＇make（sth）bad＇．

For bisyllabic adjectives in（192b），the second vowel becomes $i$ before the inchoative suffix．In wày－nd－$\varepsilon$ ：－the／i／has been absorbed by the $y$ ．

For èmmú＇cramped，confined（space）＇，two variant inchoatives were recorded，one suffixed and one unsuffixed．An alternation of $m m$ with $m$ is also present，compare＇lean＇in （191）．Further study may show other adjectives with a choice of two inchoatives．
a．èmmú＇cramped，confined（space）＇
b．émm－è：＇become cramped＇
émm－è：－mò＇make（sth）cramped＇
c．émè－nd－è：＇become cramped＇
émè－nd－è：－mò＇make（sth）cramped＇

## 9．6 Denominal verbs

There is no productive pattern for denominal verbs．In a small number of cases a verb from the same word－family as a noun（or similar word）might be regarded as denominal．

| (194) | noun | gloss | verb | gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | tìgé | 'family name' | tígè-rè | '(griot) chant the ancestry of (sb)' |
|  | pǒ: | (greeting) | pó:-ndò | 'greet' |
|  | sǒ: | 'words, talk' | sóyy-è: | 'speak' |
|  | némè | 'filth' | némè-g-غ̀:- | 'become dirty' |
|  | wédè | 'insanity' | wèdè-g-é:- | 'go nuts' |

wèdè-g-é:- 'go nuts' might alternatively be derived from characteristic nominal wèdè-gí-nè 'crazy one' (with human singular -nv).

### 9.7 Obscure verb-verb relationships

Listed without comment.

| (195) verb | gloss | related verb | gloss |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |
| yâ: | 'spend night' | yá:-ndà | 'greet in the morning' |
| gə̀yó | 'surround (sth)' | gə̀yù-n- $\varepsilon:-$ | 'go in circles' |

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

In indicative main clauses, active (non-stative) verbs have the typical structure stem-ANSubj. The stem (which may include derivational suffixation, chapter 9) is followed by an aspect-negation (AN) marker. The major aspectual division is perfective versus imperfective, which intersects polarity (positive/negative), so there are four basic quadrants. 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 indicative (aspect-marked) and stative verbs end in a pronominal-subject suffix agreeing in person and number with the subject. In DS there are some syncretisms among the suffixes: 1 Sg and 1 Pl are always homophonous, and (depending on the final tone of the preceding morpheme) may also be homophonous with 2 Pl . Imperatives and hortatives constitute a separate inflectional subsystem, with their own stem-forms (imperatives) or modal suffixes, and final suffixes for addressee plurality.

The unmarked temporal reference point for aspect is the present. All aspectual categories and statives can be shifted to accomodate a past-time reference point by adding a conjugated past clitic $=$ bè to a verb form marked for the basic AN category (§10.5.1).

Relative clauses have verb-participles that mirror the AN and stativity values of corresponding main clauses, but replace the pronominal-subject suffixes by preverbal proclitic pronouns (chapter 14).

### 10.1.1 AN suffixes or chained auxiliary verbs?

Some DS auxiliary-verb constructions correspond to suffixal, or suffix-like, constructions in other Dogon languages. A good example is the recent perfect with conjugated auxiliary dy: 'arrive', which corresponds to a fixed suffix -dè in some other languages.

### 10.1.2 Overview of AN categories

The indicative aspect-negation categories are those in (196). The negative suffixes are portmanteaus also indicating aspect.
a. perfective positive system
perfective
experiential perfect ('have ever VPed', includes 'be' as auxiliary)
present perfect (includes 'be' as auxiliary)
recent perfect (includes 'arrive' as auxiliary)
b. imperfective positive system
imperfective (unmarked present or habitual)
augmented imperfective (unmarked future)
progressive in two versions (includes 'be' as auxiliary)
future (includes 'have' as auxiliary)
immediate future (includes 'be' as auxiliary)
c. perfective negative system
perfective negative
experiential perfective negative (contains perfective negative suffix)
present perfect negative (includes 'not be' as auxiliary)
d. imperfective negative system
imperfective negative
progressive negative in two versions (contains 'not be' as auxiliary)
future negative (contains 'not have' as auxiliary)
immediate future negative (contains 'not be' as auxiliary)

### 10.1.3 Verb stem shapes

All verb stems are vowel-final, though a few allow syncope of the final vowel. Monosyllabics are $C v$ :- with long vowel, like 'shoot' (imperative tâ:, perfective negative tà:-lí-). Typical shapes for nonmonosyllabics are $(C)_{v} C v,(C)_{v C C v},(C)_{v}: C v,(C)_{v}: C C v,(C)_{v C v} C v-$, and (C) $v C C v C v$-. Lexical long vowels are allowed in the initial syllable of nonmonosyllabics.

Cutting across the stem-shape categories is a binary lexical distinction between the E-class, whose perfective (positive) is based on the E-stem, and the I-class, which base the perfective on the I-stem. All trisyllabic and longer stems are in the I-class, so the lexical choice between E-class and I-class is limited to mono- and bisyllabics. Another generalization is that bisyllabics with $a$ in the first syllable are all in the I-class.

Each verb has an E-stem or an I-stem used in the perfective. Some verbs have a U/I-stem in the chaining form used in nonfinal position in verb chains. Most other AN categories are based on the presuffixal stem, which I use in this grammar as the citation form. For some verbs, the presuffixal stem is an abstraction, since inflected forms all show either a segmental or tonal modification. In the lexicon I use the combination of the presuffixal stem and the 3 Sg perfective, since neither one can always be predicted from the other. An example in the lexicon is the mediopassive verb ìnn- $\varepsilon$ :- $\|$ línn $n-i ̀-y$ 'stand', where the presuffixal stem shows the lexical tone melody (here /LH/) and ATR value (here -ATR) while the 3 Sg perfective shows the verb class (here, I-class).

The E-stem ends in e or $\varepsilon$ depending on the ATR-harmonic class of the stem. The I-stem ends in $i$ or, for monosyllabics, $y$. The two lexical classes can be labeled the E-class and the I-class, respectively.

$$
\begin{array}{cll}
\text { stem } & \text { perfective } & \text { gloss }  \tag{197}\\
\text { a. monosyllabic } & & \\
\text { E-class } & & \\
\text { tô: } & \text { tó-̀̀ } & \text { 'sow (seeds)' } \\
\text { gǒ: } & \text { gó-è } & \text { 'go out' } \\
\text { I-class } & \text { ná-ỳ: } & \text { 'forget' }
\end{array}
$$

```
b. bisyllabic
E-class
                dònó dón-\varepsiloǹ 'sold'
                tógó tóg-è 'poured'
                s\varepsilońmb\grave{\varepsilon s\varepsilońmb-\grave{\varepsilon} 'swept'}
                jìmb\varepsiloń jímb-\varepsiloǹ 'pulled'
                sí:rè sí:r-è 'pointed at'
    I-class
                óbò ób-ì 'gave'
        kámbà kámb-ì 'threw'
        sí:rè sí:r-ì 'cooked (meal)'
c. trisyllabic
    E-class
        (none)
    I-class
        ábàrà ábìr-ì 'laid out (e.g. mat)'
        pégèrè pégùr-ì 'clapped (hands)'
        g\grave{ndòró góndùr-ì 'hung (sth) up'}
```


### 10.1.3.1 Cv: verb stems

The vowel of $C v$ : stems is shortened in some inflections, notably the imperative. There appears to be no lexical distinction between $C v$ and $C v$ : based on vowel-length. I will take $C v$ : to be the basic lexical shape. Most $C a$ : stems belong to the I-class. However, 'eat (meal)', 'see', 'weep', and 'take (sb)' (§10.1.3.2) are Ca: stems that belong to the E-class. I know of no $v$ : stem without an initial consonant, but this gap is probably accidental.
(198) $C v$ : verbs (all known examples)
stem chain Pfv 3Sg gloss
a. E-class
with nasal vowel, falling tone

| sê: ${ }^{\text {n }}$ | $s \hat{e ̂}^{\text {a }}$ | $s e^{n}-e^{n}$ | 'douse (fire)' |
| :---: | :---: | :---: | :---: |
| tô: ${ }^{\text {n }}$ | tô: ${ }^{\text {n }}$ | $t 0^{n}-\dot{\varepsilon}^{n}$ | '(milk) fill up' |
| tô: ${ }^{\text {a }}$ | tô: ${ }^{\text {a }}$ | $t 0^{n}-\dot{\varepsilon}^{n}$ | 'turn on (flashlight)' |
| ith nasal vowel, rising tone |  |  |  |
| $g e ̌: n$ | $g e ̌: n$ | $g e^{n}-\grave{e d}^{n}$ | 'steal' |
| ith oral vowel, rising tone |  |  |  |
| bǒ: | dob: | bó- | 'unsheathe' |
| dǒ: | dǒ: | dó- | 'arrive (there)' |
| $d \varepsilon$ : | $d \varepsilon ̌:$ | $d \bar{\varepsilon}-\grave{\varepsilon}$ | 'insult' |
| dě: | dě: | dé-è | 'become tired' |
| gǒ: | gǒ: | gó-غ̀ | 'dance' |
| gǒ: | gǒ: | gó-è | 'exit, go out' |
| jǒ: | jǒ: | jó-è | 'become full' |
| $m \varepsilon ̌:$ | $m \varepsilon ̌:$ | $m \varepsilon ́-\varepsilon$ ¢ | '(rain) fall' |
| nั้: | nŏ: | nó-غ̀ | 'drink' |
| nǒ: | nǒ: | nó-غ̀ | 'sew' |


| with oral vowel, falling tone |  |  |  |
| :---: | :---: | :---: | :---: |
| $k \hat{\varepsilon}$ : | $k \hat{\varepsilon}$ : | $k \varepsilon$ - ¢ | 'raise (child)' |
| $k$ 人, | $k$, | kó-غ̀ | 'pick (fruit)' |
| kô: | kô: | kó-è | 'turn (sth) inside out' |
| $p \hat{\varepsilon}$ : | $p \hat{\varepsilon}$ : | pé-غ̀ | 'grow old, age' |
| $p$ री: | $p$ ô: | pó-غ̀ | 'slap (mud) on (wall)' |
| sô: | sô: | Só-ı̀ | 'take a handful' |
| $t \hat{\text { e }}$ | $t \hat{\varepsilon}$ : | $t \varepsilon ́-\varepsilon ̇$ | 'weave' |
| tô: | tô: | tó-غ̀ | 'sow, plant (seeds)' |
| with a/E alternation (§10.1.3.2) |  |  |  |
| nâ: | nâ: | $n \varepsilon ์-\varepsilon ่$ | 'eat (meal)' |
| jǎ: | jǎ: |  | 'take (sb)' |
| wǎ: | Wغ̌: | Wغ́-غ̀ | 'see' |
| yǎ: | yă: | $y \varepsilon ́-\varepsilon ̇$ | 'weep' (with nominal yǎ:) |


| b. I-class |  |  |  |
| :---: | :---: | :---: | :---: |
| with nasal vowel, falling tone |  |  |  |
| sô: ${ }^{\text {n }}$ | Són ${ }^{\text {- }}$-̀ | són- ${ }^{\text {¢ }}$ | 'dip' |
| $p \mathrm{a}:{ }^{\text {n }}$ | $p a^{n}-\dot{y}$ | $p a^{n}-\grave{y}$ | '(well, pond) dry up' |
| tâ: ${ }^{n}$ | tán ${ }^{n}-\dot{y}$ | tán ${ }^{n}-\dot{y}$ | 'spread out (limbs, digits)' |
| with oral vowel, rising tone |  |  |  |
| bǎ: | bà-ý | bá-y | 'beat (tomtom)' |
| bǎ: | bà-ý | bá-ỳ | 'be enough' |
| dǎ: | dà-ý | dá-ỳ | 'kill' |
| gǎ: | gà-ý | gá-ỳ | 'cut with sickle’ |
| mǎ: | mà-ý | má-ỳ | 'shape (pottery)' |
| nǎ: | nà-ý | ná-ỳ | 'weave, make (rope)' |
| nǎ: | nà-ý | ná-ỳ | 'forget' |
| yâ: | yâ: | yá-ỳ | 'spend the night' |
| with oral vowel, high tone |  |  |  |
| kâ: | ká-ỳ | ká-ỳ | 'shave' |
| sâ: | sá-ỳ | sá-ỳ | 'emit (sneeze, urine)' |
| sâ: | sá-ỳ | sá-ỳ | '(corpse) be reduced to skeleton' |
| tâ: | tá-ỳ | tá-ỳ | 'shoot' |
| yô: | yô: | yó-ỳ | 'enter, go in' |
| with $\varepsilon$ /i or e/i alternation (\$10.1.3.3) |  |  |  |
| $b \varepsilon ̌:$ | bì-ý | bí-y | 'remain' |
| $g \varepsilon ̌:$ | gì-ý | gí-y | 'say' |
| tê: | tê: | tí-ỳ | 'send' |

K\&P (p. 60) also cite "ke" glossed 'façonner' (i.e. give shape to, fabricate), but my assistant did not recognize it.

Monosyllabic verbs differ behaviorally from longer stems in the augmented categories (augmented perfective, augmented imperfective). In these inflections, nonmonosyllabic stems usually lengthen the initial vowel, while monosyllabic stems must reduplicate.

### 10.1.3.2 $C v$ : verbs with $a / \varepsilon$ alternation

These slightly irregular verbs are basically $C a$ : but have $C \varepsilon$ - $-\varepsilon$ perfectives. The chaining forms are variable even in the speech of my assistant, ranging from $C \varepsilon$ : to $C a$ : to $C a-y$.

Paradigms of 'see' and 'eat (meal)'
'see' 'eat (meal)'
a. forms always with $\varepsilon$

$$
\begin{equation*}
w \varepsilon ́-\grave{\varepsilon} \quad n \varepsilon ́-\grave{\varepsilon} \tag{3Sg}
\end{equation*}
$$

b. forms with $\varepsilon$ or a

$$
w \varepsilon ̌: \sim \text { wà-ý } \quad \text { nê: ~ nâ: chaining }
$$

c. forms always with a

| wà:-dú | nǎ: | VblN |
| :---: | :---: | :---: |
| wà:-tíyà | já:-tíyà- | ExpPrf |
| wá:-dè- | ná:-dè- | imperfective |
| wǎ: wò | nâ: wò | progressive |
| wà:-lí | nà:-lí- | PfvNeg |
| wà-álè- | ná-àlè- | IpfvNeg |
| wâ: | nâ: | imperative |
| wà-W | nà-W | prohibitive |
| wà:-má-ŋ̀ | já:-mà-ı̀ | hortative (or -mó-ì) |

Historically, perfective $n \varepsilon ́-\varepsilon$ probably evolved from *ná- $\grave{\varepsilon}$ with a diphthongal *aع. This diphthong does not survive in DS. No similar regular phonological shift can account for the vowel alternation in 'see', which is probably archaic, cf. Yanda Dom wó- 'see' with perfective negative wà-lí-. Most Dogon languages have leveled out vocalic alternations for


The verbs 'weep' and 'take (sb)' in (200) show similar vowel alternations. 'Spend night' is given for comparison with the partially homophonous paradigm of 'weep'.
(200)

Paradigms of 'spend night', 'weep', and 'take (sb)'
'spend night' 'weep' 'take (sb)' category
a. forms with $\varepsilon$ for 'weep' and 'take (sb)' $\begin{array}{cccc}y a ́-y ̀ & y \varepsilon ́-\grave{\varepsilon} & j \varepsilon ́-\grave{\varepsilon} & \operatorname{Pfv}(3 S g)\end{array}$
b. forms always with a
'spend night' and 'weep' homophonous

| yà:-tíyà | yà:-tíyà | jà:-tíyà | ExpPrf |
| :--- | :--- | :--- | :--- |
| yà:-lí | yà:-lí | jà:-lí | PfvNeg |
| yâ: | yâ: | jâ: | imperative |
| yà:-w | yà:-w | jà:--w | prohibitive |

'spend night' and 'weep' distinguished by tone

| yá-ỳ | yà-ý | jă: ~ jà-ý | chaining |
| :---: | :---: | :---: | :---: |
| yá:-dù | yă: | jà:-dú | VblN or nominal |
| yá:-dè | yǎ:-dè | jă:-dè | imperfective |
| yâ: wò | yǎ: wò | jǎ: wò | progressive |
| yá-àlè | yà-álè | jà-álè | IpfvNeg |
| yá:-mà-ỳ | yà:-má-ŋ̀ | jà:-má-1̀ | hortative ( or -mó-ì) |

In principle, yâ: 'spend night' and yǎ: 'weep' are tonal minimal pairs lexically, but they are homophonous in several paradigmatic forms due to tone changes. There is little risk of
ambiguity between 'spend night' and 'weep' in actual discourse since 'weep' is paired with cognate nominal yǎ: , as in yǎ: yé- $\varepsilon$ 'he/she wept'.
jǎ: as transitive verb means 'take (sb)', as when one adult takes a baby into his/her arms from another adult, or '(man) marry (a woman).'

It may not be accidental that the irregular verbs in this section begin with (alveo-)palatals or with $w$, i.e. with consonants that could influence the onset of original diphthongs like $* a \varepsilon$ and $* \rho \varepsilon$, resulting in their monophthongization to $\varepsilon$ : .

### 10.1.3.3 $C v$ : verbs with irregular $\varepsilon / i$, $e / i$, or $o / u$ alternation

All verbs of the shapes $C \varepsilon$ :,$C e$ :,$C 0$ : and $C o$ shorten and raise their vowel (to Ci - or Cu -) before vowel-initial suffixes such as imperfective negative - $\grave{\varepsilon} l \grave{\varepsilon}$, by a regular morphophonological rule, see Prevocalic V-Raising (§3.5.6.1).

Over and above this, $g \check{\varepsilon}$ : 'say', bě: 'stay', and tê: 'send' shorten and raise the stem-vowel to $i$ before $-y$, only reliably in the perfective for 'send' but in both the perfective and chaining form for 'say' and 'stay'.
(201) Paradigms of 'say', 'stay', and 'send'
‘say’ 'stay’ 'send’ category
a. forms with $i$ for at least one verb

| gí-y | bí-ỳ | tí-y | Pfv (3Sg) |
| :---: | :---: | :---: | :---: |
| gì-ý | bì-ý | $t \hat{e ̂}: \sim t i ́-\dot{y}$ | chaining |
| gì- ¢́lè- | bì-દ́lè- | tí- $\grave{\text { l }}$ le | IpfvNeg |

b. forms with $e$ or $\varepsilon$

| $g \varepsilon ̇:-d u ́ ~$ | $b$ be:-dú | té:-dù | VblN |
| :---: | :---: | :---: | :---: |
| gè:-tíyà wò | bè:-tíyà wò | tè:-tíyà wò | ExpPrf |
| $g \varepsilon ̌:-d \bar{~}$ | $b \varepsilon ̌:-d \varepsilon ̀$ | té:-dè | imperfective |
| gě: wò | bě: wò | tê: wò | progressive |
| gè:-lí | $b$ è-lí | tè:-lí- | PfvNeg |
| $g \hat{\varepsilon}$ : | $b \hat{\varepsilon}$ : | tê: | imperative |
| $g e ̀:-W$ | $b \bar{c}:-\frac{1}{W}$ | tè:-W | prohibitive |
| $g \varepsilon ̇:-m a ́-\eta ̀$ | $b \dot{\varepsilon}$ :-má-ŋ̀ | té:-mà-ı̀ | hortative (or -mó-r̀) |

A parallel alternation is seen with the verb mǒ: 'immerse (sth)', whose alternative form is mu-
(202) Paradigm of 'immerse'
'immerse' category
a. forms with $u$
mú-ỳ
Pfv (3Sg)
mù-ý chaining
mù-غ̀lદ̀- IpfvNeg
b. forms with $o$
mò:-dú
VblN
mò:-tíyà wò ExpPrf

| mǒ:-dè | imperfective |
| :--- | :--- |
| mǒ: $w \grave{~}$ | progressive |
| mó:-lí | PfvNeg |
| mô: | imperative |
| mò:-W | prohibitive |
| mò:-má-!̀ | hortative (or -mó-ì) |

### 10.1.3.4 $C v C$ verb stems

Consistently C-final verbs are unattested. However, a few verbs alternate between CvCv - and $C v C$ - from one inflected form to another, arguably due to irregular Syncope. See kán(à) 'do' (§10.1.3.12) and irregular Cvlv verbs like bòló~ bǒl- (§10.1.3.9).

### 10.1.3.5 $n C v(:)$ verb (ǹd-દ́:- 'bathe')

The only known $n C v(:)$ verb is mediopassive ǹd- $\varepsilon$ :- 'bathe'. It is treated morphophonologically as bisyllabic, and the initial nasal can bear its own tone. The perfective $n$ ńd-ì-y shows that this belongs to the I-class. The lexical melody $/ \mathrm{LH} /$ is seen in the chaining form and the imperfective (positive and negative).
(203) Paradigm of 'bathe'

| ńd-ì-ỳ | Pfv (3Sg) |
| :---: | :---: |
| ǹd-í-y | chaining |
| ǹd-غ̀:-dú | VblN |
| ǹd-è:-tíyà | ExpPrf |
| $\grave{n} d-\varepsilon$ : -dè | imperfective |
| ǹd-દ́: wò | progressive |
| ǹd-è:-lí | PfvNeg |
| ǹd-í-̇̀le | IpfvNeg |
| $\grave{n} d-\hat{\varepsilon}$ : | imperative |
| ǹd-غ̇:-W | prohibitive |
| ̀̀d-غ̀:-mó-ı̀ | hortative |

This verb is regularly used with dî: 'water' as complement: dî: ǹd-ì-ỳ 'he/she bathed'. It has a transitive derivative ǹdè-ré 'bathe (sb)'.

### 10.1.3.6 Regular bisyllabic stems, E-class

The majority of underived verb stems are bisyllabic. (C) ${ }_{v} C v-,(C)_{v C C V}$, and ( $\left.C\right)_{v}$ : $C_{V}$ - stems may belong to either the E-class or the I-class, except that those with $a$ or $a$ : in the first syllable are all in the I-class. The majority of $(C)_{v}: C v$ - stems, and all known ( $\left.C\right)_{v}: C C v-$ stems, are I-class, so a bisyllabic E-class verb with a long vowel is a rarity (sí:r-è 'pointed at', cf. I-class sí:r-ì 'cooked'). Both classes are subject to the rule, applicable to the lexical form of verb stems only, that initial voiceless obstruents require /HL/ melody and initial voiced obstruents require $/ \mathrm{LH} /$, while stems beginning with a sonorant or with an empty $C$ position
have a genuine lexical choice. The lexical melody is regularly overridden by overlays associated with particular inflectional categories.
(204) gives examples of the E-class type, the key diagnostics being the 3 Sg perfective with $-e /-\varepsilon$ and the absence of a suffix in the chaining form. Because of ATR and front-back harmony, acceptable lexical vowel-quality sequences in bisyllabic verb stems are $a \ldots a, \varepsilon \ldots \varepsilon$, e..e, $\supset \ldots, \quad$...o, $i \ldots \varepsilon, i \ldots e, u \ldots o$, and $u \ldots$. . Of these, a.... a does not occur with E-class stems. The chaining form expresses the full lexical vocalism of each verb, and contains at least one vowel marked [+ATR] or [-ATR]. Initial-syllable high vowels $\{u i\}$ are compatible with either ATR value of the following vowel. The final vowel of E-class verbs becomes -e or $-\varepsilon$ in the perfective, depending on the ATR category of the stem.
(204) E-class bisyllabics stem chaining 3Sg perfective gloss

| a. [-ATR] |  |  |  |
| :---: | :---: | :---: | :---: |
| /HL/-toned |  |  |  |
| kédè | kédè | $k \varepsilon ́ d-\varepsilon ̇$ | 'cut' |
| ùdó | ùdó | úd-غ̀ | 'build' |
| sémbè | sémbè | sémb-غ̀ | 'sweep' |
| /LH/-toned |  |  |  |
| dònó | dònó | dón-غ̀ | 'sell' |
| dòngó | dòngó | dóng- | 'push' |
| bèndé | bèndé | bénd-غ̀ | 'hit' |
| jìmbé | jìmbé | jímb-غ | 'pull' |
| b. [+ATR] |  |  |  |
| /HL/-toned |  |  |  |
| súgò | súgò | súg-è | 'cut' |
| tógò | tógò | tóg-è | 'pour' |
| yímè | yímè | yím-è | 'die' |
| sí:rè | sí:rè | síli-è | 'point at' |
| /LH/-toned yèré | yèré | yér-è | 'dream' |

10.1.3.7 Regular bisyllabic stems, I-class

All bisyllabics with a-vowel in the first syllable, and some with a nonlow vowel, belong to the I-class. In addition to $-i$ suffix in the perfective, these stems take $-u$ in the chaining form (optionally $-i$ when the preceding syllable has a front vowel). In other inflected forms (not shown), the regular vowel sequences allowed are $a \ldots a, \varepsilon \ldots \varepsilon$, e...e, $\circ \ldots \rho, o \ldots o, i \ldots \varepsilon, i \ldots e$, $u \ldots o$, and $u \ldots o$. The vowel of the second syllable is predictable from that of the first syllable, except that a high vowel is compatible with a mid-height vowel of either ATR value.
(205) I-class bisyllabics
stem chaining 3 Sg Pfv gloss
a. with $a$ in initial syllable
/HL/-toned

| pádà | pád-ù | pád-ì | 'abandon' |
| :---: | :---: | :---: | :---: |
| támbà | támb-ù | támb-ì | 'kick' |
| pá:mà | pá:m-ù | pá:m-ì | 'understand' |
| sá:rà | sá:r-ù | sá:r-ì | 'hold out, stretch out' |
| /LH/-toned |  |  |  |
| yàbá | yàb-ú | yáb-ì | 'accept' |
| jìmbé | jìmb-í/-ú | jímb-ì | 'double up (garments)' |
| wànjá | wànj-ú | wánj-ì | 'dig' |

b. with nonlow vowel in initial syllable
/HL/-toned

| óbò <br> /LH/-toned | ób-ù | ób-ì | 'give' |
| :---: | :--- | :--- | :--- |
| bòló | bòl-ú | ból-ì | 'go' |
| gèndé | gènd-ú | génd-ì | 'look' |
| dòngó | dòng-ú | dóng-ì | 'pound' |

c. with high vowel in initial syllable
/HL/-toned
pí:ndè pí:nd-ù pí:nd-ì 'shut (door)'
kí:nè kí:n-ù kí:n-ì 'rip'
/LH/-toned
[none?]

### 10.1.3.8 óbò 'give'

The only irregularity of this verb is that in addition to the regular imperative óbò there is another form $\grave{o} b-u$ that means 'give (it) to me!' It is not necessary to add an explicit 1 Sg pronominal.
(206) Paradigm of 'give'

```
ób-ì
ób-ù
óbò-dù
òbò-tíyà
óbò-d\grave{\varepsilon}
óbò w\grave{ }
òbò-lí
ób\varepsiloǹ-غ̀l\check{ }
óbò
òb-ú
òbò-Ẃ
óbò-mà-!̀
Pfv (3Sg)
chaining
VblN
ExpPrf
imperfective
progressive
PfvNeg
IpfvNeg
imperative 1
imperative 2 ('give me!')
prohibitive
hortative (or -mó-ı̀)
```


### 10.1.3.9 Irregular Cvlv stems ('go', 'get', 'come', 'pass')

Most Cvlv verbs have uncontracted imperfectives of the form Cỳlv́-dè-, for example $j \grave{l c ̌-}$-dè- ‘harvests', làlá-dè- 'gives birth', kilé-dè- ‘flies away'. However, a few high-frequency verbs of this shape have imperfectives of the form $C \hat{v}-j \grave{\varepsilon}-$ with $j$ rather than $d$ as suffixal consonant and with the medial $I$ deleted, allowing the flanking vowels to contract. The known cases are in (207). The augmented imperfectives, not shown in (207), are of the type bŏ:-jè 'will go' with long rising-toned vowel.
stem chaining imperfective 3Sg Pfv gloss
a. E-stems

| yغ̇lદ́ | yèlé | yé-jè | yél-غ̀ | 'come' |
| :---: | :---: | :---: | :---: | :---: |
| bèlé | bèlé | $b \varepsilon ́-j e ̀$ | bél-غ̀ |  |

b. I-stem
bòló
gàlá gàl-ú gá-jı
bòl-ú
bó-jè
ból-ì
'go'
gál-ì 'pass, go past'
These verbs also syncopate the stem-final vowel before perfective negative -lí, hence yèl-lí- 'did not come', bèl-lí- 'did not get', and bòl-lí- 'did not go', gàl-lí- 'did not pass'. Contrast unsyncopated $j \grave{\varepsilon} 1 \grave{\varepsilon}-1 i \overline{-}$ 'did not harvest', etc.

In the imperfective negative, these verbs have either a regular form of the type bèlé- $\bar{\varepsilon} \varepsilon \grave{c}-$ 'does not get' and yèzéèllè- 'does not come', or a special form with deletion of the stem /1/ and a mutation of the suffix to -ríc, as in bè:-rí- 'does not get' and yè:-rí- 'does not come'.
'Bring' and 'convey' (see just below) share these peculiarities since they include 'come' and 'go', respectively.

### 10.1.3.10 já-yèlé ~jè:lé 'bring'

Several inflected forms of this stem are based on já-yèż with a unique /HLH/ tone melody. The full segmental form is observable in inflections requiring initial H -tone (208a). The $l$ of
 than the usual -d $\grave{\varepsilon}$-. A variant $j \dot{\varepsilon}: 1 \bar{\varepsilon}$ with /LH/ melody occurs in the imperative and the chaining form. This variant is also the basis for the defocalized form of the perfective (208b).

```
Paradigm of 'bring'
a. based segmentally on já-yèl\varepsiloń
    já-yèl-\varepsiloǹ 3Sg perfective
    já-y\grave{-jè < imperfective (truncated)}
    já-yèl-lí perfective negative (syncopated)
    já-yz̀lé-\varepsilonl\varepsiloǹ \quad imperfective negative
    já-yè:-rí (variant imperfective negative)
    já-y\grave{lé wò progressive}
```

b. based segmentally on $j \grave{\varepsilon}: 1 \varepsilon ́$
$j \hat{\varepsilon}: 1-\grave{\varepsilon} \quad 3 \mathrm{Sg}$ perfective
$j \grave{\text { jèlé } \quad \text { imperative }}$
$j$ jè:lé chaining
$j \varepsilon ́: l \grave{\text { é }}$ Ẃ prohibitive
c. based segmentally on chain jǎ: yèlé
jǎ: yè-jú verbal noun (see §15.1.1.2)
This verb behaves like a frozen verb chain, except in the verbal noun where it mimics a true direct chain. já-yèlé consists of yèlé 'come' chained to a preceding verb já. The latteer can be understood as a reduced form of jǎ: 'take (sb)', which as a main verb generally has a human object as in 'take (a baby)' or 'take (=marry) a wife'. The paradigm of 'bring' displays the same morphophonological irregularities as 'come', along with some additional contractions. In careful pronunciation (artificial elicition-ese), the underlying chain jǎ: yغ̀lé can be restored, as in augmented imperfective $j a ̌: y \varepsilon ̌:-j \varepsilon$. The verbal noun is only attested in the full form (208c).

In a nonsubject relative clause with a regular verb chain, a pronominal subject proclitic intervenes between the two verbs, being proclitic to the final verb-participle. The two elements in 'bring' are not separable in this way, confirming that they no longer function as a true verb chain. See $\S 14.5 .2$ for examples.

See also the parallel 'take, convey' (following section).

### 10.1.3.11 jé-bòló 'convey, take (away)'

This verb is the noncentripetal counterpart of 'bring'. It means 'take (sb, sth) away' or 'convey (sth, sb) (to a place)'. Similar to 'bring', it is a semi-frozen chain of $j \varepsilon$ plus the simple motion verb 'go' (bòló ).

Paradigm of 'convey'
a. $j \varepsilon$ - H-toned
jé-bòl-ú chaining
jध́-bòl-ì 3Sg perfective
$j \varepsilon$-bò-jè imperfective
jé-bòl-lí perfective negative (syncopated)
$j \varepsilon ́$-bòlé-غ̀lè $\quad$ imperfective negative
jદ́-bò:-rí (variant imperfective negative)
jદ́-bòló wò progressive
$j \varepsilon$-bòlò-Ẃ prohibitive
b. $j \grave{\varepsilon}$ - L-toned
jè-bólò imperative
c. chain based on $j \varepsilon ̌$ : bòló
$j \check{:}$ bò-jú verbal noun (§15.1.1.2)

The two components of 'convey' remain fused together in relative clauses, rather than being separated by a subject pronoun as with true verb chains; see $\S 14.5 .2$ for the data.

The etymological relationship between $j \varepsilon$ - in 'convey' and já- in 'bring' is obscure. já- is related to the verb jǎ: 'take (sb)', as in 'take a baby (in one's arms)' or 'take (=marry) a woman', which has a perfective form $j \varepsilon$ - $\varepsilon$. This raises the possibility that $j \varepsilon$ - and $j a ́-$ are offshoots of a single proto-form. However, there is no phonological reason for *já- to become $j \varepsilon ́$ - before bòló, or for *jé- to become já- before yèlé, so it may be that two distinct etyma have secondarily become (partially) conflated. The issue is hereby tabled for further committee review. Among possible cognates are Jamsay verbs $j \varepsilon$ : 'scoop up; take (handful) in one's hand' and jǎ: 'convey', and jíjè 'going with, taking along' as nonfinal verb-like element in chains.

### 10.1.3.12 kán(à) 'do’

This verb has some inflected forms based on (or consistent with) bisyllabic kánà, but others based on kán or else produced by irregular syncope. The reduced forms are in the perfective negative and the imperfective, which are also the inflections that have special reduced forms for the irregular Cvlv verbs like bòló 'go' (§10.1.3.9).
(210) Paradigm of 'do'
$\begin{array}{ll}\text { a. consistent with kánà } \\ \text { kán-ù } & \text { chaining } \\ \text { kán-ì } & \text { 3Sg perfective } \\ \text { kánè- } 1 \text { lè } & \text { imperfective negative } \\ \text { kánà } & \text { imperative } \\ \text { kánà wò } & \text { progressive } \\ \text { b. based on kân (or syncopated) } \\ \text { kán-lí } & \text { perfective negative (syncopated) } \\ \text { kán-jè } & \text { imperfective }\end{array}$
The perfective participle kànn-ú shows irregular gemination of the $n$. For a tonal variant kánn-ù with expressive adverbials, see (169) in §8.4.7.2.

Grammatical functions of 'do' are described in §11.1.2.2 (collocations) and §15.2.1.5 (switch reference).

### 10.1.3.13 Trisyllabic stems

The regular trisyllabic shapes are $(C)_{v} C_{v} C v-,(C)_{v C C v} C_{v}$, and infrequently ( $\left.C\right)_{v}: C_{v} C v-$. The medial syllable is metrically weak. Some stems have an invariant medial high vowel (211). Others have a medial nonhigh vowel copied from the vowel of the first syllable that surfaces in imperfectives, but is raised to $i$ or $u$ only in the perfective and the chaining form (212). The lexically distinctive vowels are therefore those of the first and third syllables.

All trisyllabics are I-class verbs with perfective $-i ̀ \sim-y$ and chaining form with $-u$ (for mediopassives, $-i-y$ ). Many trisyllabics are mediopassive in form; diagnostic forms include the chaining form and the imperfective negative ( $-i-\bar{\varepsilon} l \grave{\varepsilon}$ ) (211b). Because final vowel-length is
not always audible, mediopassives mimic regular trisyllabics in the perfective and sometimes in other forms such as the imperfective. This has probably allowed some originally underived stems to become reinterpreted as mediopassive in form, regardless of meaning.
(211) Trisyllabics with fixed medial $\{i u\}$

| 3Sg Pfv | chaining | imperfective | IpfvNeg | gloss |
| :---: | :---: | :---: | :---: | :---: |
| a. causative <br> jígù-m-ì- $\varnothing$ | jìgù-m-ú | jìgù-mé-dè | jìgù-mé- $\varepsilon$ lè | 'shake' |

b. mediopassive

| -1-y- | kígùl-ì-ỳ | kígùl-è:-dè | kigù-i-ċle | 'return' |
| :---: | :---: | :---: | :---: | :---: |
| má:ndìg-ì-y- $\varnothing$ | mà:ndìg-í-ỳ | mà:ndìg-É:-d | mà:ndìg-í-દ̀lè | hink |
| yábìl-ì-y- $\varnothing$ | yàbìl-í-ỳ | yàbìl-É:-dè | yàbìl-í-ėlè | 'reply' |
| yágìl-ì-y- $\varnothing$ | yàgìl-í-ỳ | yàgìl-É:-dè | yàgìl-í-દ̇lè | 'crawl' |

(212) Trisyllabics with copied nonhigh medial vowels in imperfective

3Sg Pfv chaining imperfective IpfvNeg gloss
a. with $a \ldots a \ldots a$ in imperfective ábìr-ì- $\varnothing$ ábùr-ù ábàrà-dè- ábàrè- $̀ l e ̀ \quad$ 'lay out'
b. with non-low vowels
pégùr-ì- $\varnothing$ pégùr-ù pégèrè-d̀̀- pégèrè-غ̀lè 'winnow by shaking' góndùr-ì- $\varnothing$ gòndùr-ú gòndòró-dè- gòndòré- $̇ l e ̀ ~ ' h a n g ~(s t h) ~ u p ' ~$

### 10.1.3.14 Quadrisyllabic stems

Probably all quadrisyllabic verbs are segmentable into a stem and one or more derivational suffixes, or are at least treated as though composite. (213) illustrates the paradigm of one of the derivatives with suffix $-g_{V l v}(\S 9.2 .2)$.
'Separate (them)'

| Kábù-gìl-ì | perfective |
| :--- | :--- |
| kábà-gàlà-dè | imperfective |
| Kábà-gàlı- $\grave{l}$ le | imperfective negative |
| kábù-gùl-ù | chaining |

Causative suffix $-m v$ can be added freely to almost any verb stem including trisyllabics (to produce quadrisyllabic derivatives), if the combination is semantically reasonable. See §9.2.1 for examples and discussion.

### 10.2 Positive indicative AN categories

### 10.2.1 Perfective positive system (including perfect)

This subsystem includes the perfective, the augmented perfective, the experiential perfect ('have ever VPed'), and the present perfect.

### 10.2.1.1 Perfective (E-stem or I-stem)

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 perfective form is based on the E-stem for E-class verbs and on the I-stem for I-class verbs, by definition. Since the tones differ depending on the pronominal subject category, I use the 3 Sg as the citation form for the perfective.

The E-stem replaces the stem-final vowel by e or $\varepsilon$ depending on the ATR class of the stem. In transcriptions I segment it as a suffix but it could also be considered a mutation (ablaut). One could add $-\varnothing$ in the 3 Sg subject form but I often omit it except in formated examples with interlinear glosses.

The third person and the $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are tonally distinct, especially in isolation (when other constituents precede, all perfectives tend to drop H-tones). The tables below give isolation forms. In the $1 \mathrm{st} / 2$ nd person part of the paradigm, the tone overlay is $\{\mathrm{LH}\}$, realized as one or more L-tones leading up to a final-mora H -tone. In careful pronunciation the H -tone is heard on the pronominal-subject suffix in the cases of $1 \mathrm{Sg}-\eta, 1 \mathrm{Pl}-\eta \sim-y \eta$, and $2 \mathrm{Sg}-W$. The 3 Sg and 3 Pl forms, on the other hand, have an initial H -tone followed by L-tones.

The 2 Sg suffix is L-toned in several inflections. In the perfective, its L-tone is overridden by the $\{\mathrm{LH}\}$ overlay when the verb occurs in isolation. In polar interrogatives, however, an additional L-tone is added at the end of the verb (§13.2.1.1), and it pushes the final H -tone of $\{\mathrm{LH}\}$ one mora to the left (§3.7.4.5). Therefore 'you-Sg hit' is bènd- $\grave{\varepsilon}-\bar{W}$ in statements, but with the extra L-tone it becomes interrogative bènd- $\varepsilon$ - $\grave{W}$ 'did you-Sg hit?'. The 1 Sg and 1 Pl forms behave the same way in the perfective, e.g. bènd- $\grave{\varepsilon}-\bar{\eta}$ ' $\mathrm{I} /$ we hit' with $\{\mathrm{LH}\}$, but
 the perfective as elsewhere, so the H-tone of the $\{\mathrm{LH}\}$ overlay is shifted to the stem-final vowel even in statements: bènd- $\varepsilon$ - $\grave{\jmath}$ 'you-Pl hit'. Addition of the interrogative L-tone has no audible effect on this form.

In clauses with preceding constituents, the tones of perfective verbs for any pronominalsubject category are frequently dropped to $\{\mathrm{L}\}$. This can be thought of as verb defocalization, but it can happen after almost any preceding constituent. In particular, the $\{\mathrm{HL}\}$ on the 3 Sg form often flattens to $\{\mathrm{L}\}$ in the 3 Sg perfective after other constituents, but the "same" $\{\mathrm{HL}\}$ contour on singular-addressee imperatives (which are sometimes homophonous to the 3 Sg perfective) can be maintained in similar clausal contexts; see (273a-b) in §10.6.1.1 below. A more systematic shift of third-person perfective forms to $\{\mathrm{L}\}$ also occurs before 'if' clitic $=y o ̀ ~ a n d ~ i n t e r r o g a t i v e ~ m a ̀ ~ \rightarrow ~ e v e n ~ w i t h o u t ~ a ~ p r e c e d i n g ~ c o n s t i t u e n t, ~ b u t ~ i n ~ t h e s e ~ c o m b i n s t i o n s ~$ the H -tone surfaces on the particle; see the last paragraph of this section.

Representative perfective paradigms are in (214). The tones shown are applicable when the verb is pronounced in isolation. For 'jump' and 'fall', the variants given for $1 \mathrm{st} / 2 \mathrm{nd}$ persons have the suffixal e shifting to $o$ by Back/Rounding Harmony (§3.4.5), assimilating to the vowel of the preceding syllable. The shift to $o$ allows the palatal onset of the 1 Pl and 2 Pl suffixes to be (faintly) audible in the speech of my assistant. I did not hear the palatal onset
after front vowels. Unassimilated variants like tòmb-è-ई 'I jumped' and nùmb-è- $\mathfrak{y}$ ' $I$ fell' not shown in (214) are also possible. The Back/Rounding Harmony never applies to the 3 Sg form, which is always tómb-è, númb-è, etc., unless it is followed by a clitic with back rounded vowel as in tòmb-è- $\varnothing=y$ ô: $\sim$ tòmb-ò- $\varnothing=y$ ô: 'if he/she jumps'.

Perfectives of E-class verbs (nonmonosyllabic)

|  | sémbè | tómbò | nùmbó | bèndé | yímè |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'sweep' | 'jump' | 'fall' | 'hit' | 'die' |
| 1Sg | sèmb-غ̀-ŋ́ | tòmb-ò-ŋ́ | nùmb-ò-ı́ | bènd-è- | yìm-è-¢́ |
| 1 Pl | sèmb-غ̇-ŋ́ |  | nùmb-ò- ¹́ $^{\text {b }}$ | bènd-è-ń | yìm-è-¢́ |
| 2Sg | sèmb-غ̇-Ẃ | tòmb-ò-Ẃ | nùmb-ò-Ẃ | bènd-è- ${ }^{\text {ch }}$ | yìm-è-Ẃ |
| 2 Pl | sèmb-É-ŋ̀ | tòmb-ò- ${ }^{\text {² }}$ ¢ | nùmb-ó-'ı̀̀ | bènd-É-1̀ | yìm-é-ì |
| 3Sg | sémb-غ̇- $\varnothing$ | tómb-è- $\varnothing$ | númb-è- $\varnothing$ | bénd-è- $\varnothing$ | yím-è- $\varnothing$ |
| 3 Pl | sémb-ì-yà | tómb-i-yà | númb-ì-yà | bénd-ì-yà | yím-ì-yà |

The $-i$ - in the 3 Pl forms is often elided: sémb- $\varnothing$-yà, etc. It is arguably epenthetic, in which case sémb- $\varnothing$-yà is the structurally correct transcription.

Monosyllabic E-class verbs combine their vowel with suffixal -e or $-\varepsilon$ to form diphthongs (215).

Perfectives of E-class verbs (monosyllabic)

|  | tô: 'sow' | dě: 'insult' | gǒ: 'go out' | $g e ̌:{ }^{\text {n 'steal' }}$ | nâ: 'eat' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Sg | $t \grave{-\grave{\varepsilon}-1 \text { ¢ }}$ | $d \dot{\varepsilon}-\grave{\varepsilon}-\underline{\eta}$ | gò-è-ŋ́ | $g \mathrm{e}^{n}-\mathrm{e}-\grave{\eta}$ | $n \dot{\varepsilon}-\grave{\varepsilon}-\underline{1}$ |
| 1Pl | $t \grave{-\grave{-}-1 ̆}$ | $d \grave{\varepsilon}-\grave{\varepsilon}-\underline{\eta}$ | gò-è-ŋ́ | $g \mathrm{e}^{n}-\mathrm{e}-\grave{\eta}$ | $n \dot{\varepsilon}-\grave{\varepsilon}-\underline{\eta}$ |
| 2 Sg | $t \grave{-\varepsilon}$ - $\underline{W}^{\prime}$ | $d \grave{\varepsilon}-\grave{\varepsilon}-W^{\prime}$ | gò-è-Ẃ | $g \mathrm{e}^{n}-\grave{e}-{ }^{\text {b }}$ | $n \grave{\varepsilon}-\grave{\varepsilon}-\chi^{\prime}$ |
| 2 Pl | tò- | $d \dot{\varepsilon}-\varepsilon$ - 1 ¢ | gò-é-¢̀ | $g \grave{c o}^{n}-e^{-¢}$ |  |
| 3 Sg | $t o ́-\dot{\varepsilon}-\varnothing$ | $d \varepsilon$ - $\grave{\varepsilon}-\varnothing$ | gó-è- $\varnothing$ | $g e^{n}-\grave{e}^{n}-\varnothing$ | $n \varepsilon$ - $\grave{-}$ - $\varnothing$ |
| 3 Pl | tó-ỳ-yà | dé-ỳ-yà | gó-ỳ-yà | $g e^{n}-\grave{y}$-yà | $n \varepsilon$-у̀-yà |

There are no cases of a $\varepsilon$ or ae diphthongs, here or elsewhere in DS. We might have expected \#ná-è for 'he/she ate (meal)' by analogy to tó- $\grave{\varepsilon}$ 'he/she sowed' and gó-è 'he/she went out', but the actual form is $n \varepsilon$ - $\varepsilon$. For wă: 'see' the perfective is $w \varepsilon$ ' $\bar{\varepsilon}$ 'saw' and the chaining form is wě: .

As transcribed, forms like $d \varepsilon$ - $\varepsilon$ and $d \grave{\varepsilon}-\bar{\varepsilon}-1$ g are represented as having long vowels, since $\varepsilon-\varepsilon$ is just an orthographic variant of $\varepsilon$ : designed to clarify the morphological structure. In these monosyllabic perfective forms, the vowel is often shortened, e.g. to [d $\hat{\varepsilon}$ ] and [d $\varepsilon$ y], though my assistant restores the long vowel in careful articulation. Even the diphthongs in $t o ́-\varepsilon ̀ ~ a n d ~ g o ́-e ̀ ~ h a v e ~ a ~ t o t a l ~ d u r a t i o n ~ n o t ~ m u c h ~ l o n g e r ~ t h a n ~ a n ~ o r d i n a r y ~ s h o r t ~ v o w e l . ~$

For I-class verbs, the I-stem replaces the stem-final vowel by $i$ to form the perfective if the stem is nonmonosyllabic. The $/ \mathrm{i} /$ is often backed and rounded to $u$ by Back/Rounding Harmony, triggered by a following $2 \mathrm{Sg}-w$ and/or by a back rounded vowel in the preceding
syllable, except that it is always $i$ in the 3 Sg and 3 Pl forms. Suffix $-\eta$ occasionally triggers this change. When this happens, the palatal onset before the 1 Pl and 2 Pl suffixes is (faintly) audible. My assistant's pronunciation of some of these forms was variable. The forms given in (216) seem to be most typical of his speech.
(216) Perfectives of I-class verbs (nonmonosyllabic)

|  | óbò 'give' | pádà 'leave' | yéyy-è: 'sleep | yàbá 'accept' |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | $\begin{aligned} & \grave{o} b-i ̀-1 ́ \\ & \sim \grave{o} b-\grave{u}-\underline{1} \end{aligned}$ | $\begin{aligned} & \text { pàd-ì- } \mathfrak{y ́} \\ & \sim \text { pàd-ú-ı́ } \end{aligned}$ | yèyy-ì-ỳ-ŋ́ | yàb-ì-ŋ́ <br> ~ yàb-ù-ŋ́ |
| 1 Pl | $\begin{aligned} & o ̀ b-i ̀-1 ́ \\ & \sim \grave{o} b-\grave{-u}-{ }^{-} \nmid \eta ́ \end{aligned}$ |  | yèyy-ì-ỳ-ŋ́ | yàb-ì-ŋ́ <br> ~ yàb-ù- ${ }^{\text {Ý }}$ y |
| 2 Sg | $\begin{aligned} & o ̀ b-\grave{i}-\bar{W} \\ & \sim \grave{o} b-u ̀-w \end{aligned}$ | pàd-ì-Ẃ <br> ~ pàd-ù-Ẃ | yèyy-ì-ỳ-w | yàb-ì-Ẃ <br> ~ yàb-ù-w |
| 2 Pl | $\begin{aligned} & o ̀ b-i_{-}^{-} \backslash \grave{\eta} \\ & \sim o ̀ b-u^{-}-{ }^{-} \grave{\eta} \end{aligned}$ | $\begin{aligned} & \text { pàd-í-ỳ } \\ & \sim \text { pàd-ú- }{ }^{\text {Y }} \text { !̀ } \end{aligned}$ | yèyy-í-ý-ì | $\begin{aligned} & \text { yàb-í-ì } \\ & \sim \text { yàb-ú-ýýy } \end{aligned}$ |
| 3 Sg | ób-ì- $\varnothing$ | pád-ì- $\varnothing$ | yéyy-ì-y | yáb-ì- $\varnothing$ |
| 3 Pl | ób-ì-yà | pád-ì-yà | yéyy-ì- $\varnothing$-yà | yáb-ì-yà |

Monosyllabic I-class verbs add -ỳ to a short-vowel form of the stem. Expected $C \varepsilon$ - $-\grave{y}$ and $C e ́-\grave{y}$ appear as $C i ́-y ̀$, pronounced [Cî:], as in 'send' and 'remain'.
(217) Perfectives of I-class verbs (monosyllabic)

| stem | bǎ: 'beat' | kâ: 'shave' | yô: 'go in' | tê: 'send' | $b \check{\text { č: 'remain' }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Sg | bà- ¢ $^{-1}$ |  | yò- ¢ $^{-1}$ | $t i ̀-\grave{y}-\underline{y}$ | $b i ̀-\grave{-}-\bar{y}$ |
| 1 Pl | bà- $\grave{y}-1$ ¢́ | kà-ỳ-ý | yò- $\grave{y}-\underline{1}$ | tì-ソ̀-1́ | $b i ̀-\grave{y}-\underline{y}$ |
| 2 Sg | $b a ̀-y$ - ${ }^{\text {d }}$ |  | $y o ̀-\grave{y}-{ }^{\prime}$ | $t i ̀-\grave{y}-{ }^{\prime}$ | $b i ̀-\grave{y}-{ }^{\prime}$ |
| 2 Pl | bà-ý-r̀ | kà-ý-r̀ | yò-ý-r̀ | tì-ý-1̀ | bì-ý-ı̀ |
| 3 Sg | bá-ỳ- $\varnothing$ | ká-ỳ- $\varnothing$ | yó-ỳ- $\varnothing$ | $t i ́-\dot{y}-\varnothing$ | bíly ${ }^{\text {c }}$ - $\varnothing$ |
| 3 Pl | bá-ỳ-yà | ká-ỳ-yà | yó-ỳ-yà | tílỳ-yà | bí-ỳ-yà |

The verb 'say' has a chaining form gì-ý and perfective gí-ỳ, similar to 'send', but the regular presuffixal stem is $g \varepsilon ̌$ : .

Trisyllabic verbs, all of which belong to the I-class, require a high vowel in the medial syllable of the perfective (and the chaining form). Thus pégìr-ì 'winnowed (by shaking)', compare imperative pégèrè.

When followed by =yo 'if' (or variant, §16.1), the 3 Sg and 3 Pl perfectives are $\{\mathrm{L}\}$-toned, followed by $<\mathrm{HL}>$-toned $=y \hat{o}$ : . In other words, the H-tone that usually appears at the beginning of the third-person perfective shifts onto the 'if' enclitic. The 1st/2nd person forms before (L-toned) = yò show the forms indicated in the paradigms above, without tone-
dropping. The tonal distinction between $1 \mathrm{Sg} / 1 \mathrm{Pl}$ and 2 Pl (e.g. $1 \mathrm{Sg} / 1 \mathrm{Pl}$ sèmb- $\grave{\varepsilon}-\overline{\text { g }}$ versus 2 Pl $s \grave{\varepsilon} m b-\varepsilon$ - $\grave{\eta}$ for 'sweep') is difficult to maintain in the 'if' form since the 2 Pl spreads its H -tone onto the nasal before the L-toned clitic: $2 \mathrm{Pl} s \varepsilon ̀ m b-\varepsilon-\check{\varepsilon}=j e ̀ ~ ' i f ~ y o u-P l ~ s w e e p ', ~ n o t ~ r e l i a b l y ~$ distinguishable from $s \varepsilon ̀ m b-\grave{\varepsilon}-n ́=j e ̀ ~ ' i f ~ I / w e ~ s w e e p ' . ~ S i m i l a r ~ t o n a l ~ p r o c e s s e s ~ o c c u r ~ b e f o r e ~$ interrogative $\mathrm{ma} \rightarrow$ (§13.2.1). For the phonology see §3.7.3.3.

### 10.2.1.2 Augmented perfective

The perfective (E-stem or I-stem) as described above can be augmented by adding an initial $C \grave{v}$ - reduplication (monosyllabic stems) or by lengthening the first vowel of the stem with an initial L-tone. Lengthening evidently evolved out of reduplication by loss of the initial consonant of the base, followed by VV-Contraction. Nonmonosyllabic verbs now have a choice between lengthening and reduplication, while only reduplication is possible for monosyllabics.

An extensive set of forms with monosyllabic verbs is in (218). There is no tonal difference in this inflectional category between lexically /HL/- and /LH/-toned stems. In (218b), 'steal' shows that the $C \grave{V}$ - reduplicant is denasalized.

$$
\begin{equation*}
\text { stem } \quad \text { perfective }(3 \mathrm{Sg}) \quad \text { gloss } \tag{218}
\end{equation*}
$$

regular augmented
a. /HL/-toned

| E-class |  |  |  |
| :---: | :---: | :---: | :---: |
| jâ: | $n \varepsilon$ - ${ }^{\text {c }}$ | $n \grave{\varepsilon}-n \bar{\varepsilon}-\grave{\varepsilon}$ | 'eat (meal)' |
| $p \hat{\varepsilon}$ : | $p \varepsilon$ - ${ }^{\text {c }}$ | $p$ ¢े-pé- $\grave{\varepsilon}$ | 'grow old' |
| tô: | tó-غ̀ | tò-tó- | 'sow, plant' |
| I-class |  |  |  |
| kâ: | ká-ỳ | kà-ká-ỳ | 'shave' |
| tâ: | tá-ỳ | tà-tá-ỳ | 'shoot' |
| tê: | tíl-y | tì-tí-y | 'send' |
| yô: | yó-ỳ | yò-yó-ỳ | 'go in' |
| yâ: | yá-ỳ | yà-yá-ỳ | 'spend night' |

b. /LH/-toned

E-class $d$ ǒ: dó- $\quad$ dò-dó- $\grave{\varepsilon} \quad$ 'arrive (there)'
$d \check{\varepsilon}: \quad d \varepsilon$ ह́- $\quad d \grave{\varepsilon}-d \bar{\varepsilon}-\bar{\varepsilon} \quad$ 'insult'
gǒ: gó-è gò-gó-è 'go out'
$g$ ǧ: gó- $\grave{\varepsilon} \quad$ gò-gó- $\grave{\varepsilon}$ 'dance'
$j a ̌: \quad j \varepsilon-\varepsilon ̀ \quad j \grave{\varepsilon}-j \varepsilon$ - $\varepsilon \quad$ 'take (sb)'
nǒ: nó-غ̀ nò-nó-غ̀ 'drink'



E-class, nasalized vowel (reduplicant is non-nasal)
gě: ${ }^{n} \quad$ gén $-e^{n} \quad g e ̀ ̀-g e e^{n}-e^{n} \quad$ 'steal'

I-class

| bă: | $b a ́-y ̀$ | bà-bá-ỳ | 'beat (tomtom)' |
| :--- | :--- | :--- | :--- |
| dă: | dá-y | dà-dá-ỳ | 'kill' |

```
g\varepsiloň: gí-ỳ gì-gí-ỳ 'say'
nǎ: ná-ỳ nà-ná-ỳ 'forget'
```

Nonmonosyllabic stems have two augmented forms, lengthened (the first vowel is lengthened) and reduplicated. Representative examples are in (219). The vowel-initial stems at the end of (219a) and (219b) add an initial glottal stop to maintain the reduplicated pattern.

```
stem
```


a. /HL/-toned

E-class, consonant-initial témé tém-غ̀- $\varnothing \quad t \varepsilon ̌: m-\varepsilon ̀-\varnothing \quad t \grave{-}-t \varepsilon ́ m \grave{\varepsilon}-\varnothing \quad$ 'eat (meat)' tómbò tómb-è- $\varnothing$ tǒ:mb-è- $\varnothing$ tò-tómb-è- $\varnothing$ ‘jump' yímè yím-è- $\varnothing$ yǐ:m-è- $\varnothing$ yì-yím-è- $\varnothing$ 'die'
I-class, consonant-initial kámbà kámb-ì- $\varnothing$ kǎ:mb-ì- $\varnothing$ kà-kámb-ì- $\varnothing ~ ' t h r o w ' ~$ pégèrè pégìr-ì- $\varnothing$ pě:gìr-ì- $\varnothing$ pè-pégìr-ì- $\varnothing$ 'winnow by shaking' tárá tár-ì- $\varnothing$ tă:r-ì- $\varnothing$ tà-tár-ì- $\varnothing ~ ' p o s t, ~ a f f i x ' ~$ yéyy-è: yéyy-ì-ỳ yě:yy-ì-ỳ yè-yéyy-ì-ỳ 'sleep'
E-class, vowel-initial $\begin{array}{llll}\varepsilon ́ b \grave{\varepsilon} & \varepsilon ́ b-\varepsilon ̀-\varnothing & \varepsilon \\ : b-\varepsilon ̀-\varnothing \quad \grave{\varepsilon}-1 \varepsilon ́ b-\varepsilon ̀-\varnothing \quad ~ ' b u y ' ~\end{array}$
I-class, vowel-initial ágà ág-ì- $\varnothing$ ă:g-ì- $\varnothing$ à-Yág-ì- $\varnothing$ 'catch' óbò ób-ì- $\varnothing \quad$ ǒ:b-ì- $\varnothing \quad$ ò-?ób-ì- $\varnothing \quad$ 'give'
b. /LH/-toned

E-class, consonant-initial

| bèndé | bénd-غ̀- $\varnothing$ | $b \varepsilon ̌: n d-\varepsilon ̇-\varnothing$ | $b$ c̀-bénd-è- $\varnothing$ | 'hit' |
| :---: | :---: | :---: | :---: | :---: |
| dònó | dón-غ̀- $\varnothing$ | dǒ:n-غे- $\varnothing$ | dò-dón-غ̀- $\varnothing$ | sell' |
| nùnó | nún-è- $\varnothing$ | nŭ:ท-è- $\varnothing$ | nù-nún-è- $\varnothing$ | sing' |

I-class, consonant-initial bòló ból-ì- $\varnothing$ bǒ:l-ì- $\varnothing$ bò-ból-ì- $\varnothing$ 'go' gèndé $\quad g \varepsilon ́ n d-i ̀-\varnothing ~ g \varepsilon ̌: n d-i ̀-\varnothing ~ g \varepsilon ̀-g \varepsilon ́ n d-i ̀-\varnothing ~ ' l o o k ' ~$ yàbìl-દ́:- yábìl-ì-y yǎ:bìl-ì-y yà-yábìl-ì-y 'reply'
E-class, vowel-initial ùró úr-غ̀- $\varnothing \quad$ ǔ:r-غ̀- $\varnothing \quad$ ù-?úr $\varepsilon$ - $\varnothing \quad$ 'butcher'
c. with initial lexical $C v$ : syllable, E- and I-classes

| pá:mà | pá:m-ì- $\varnothing$ | pǎ:m-ì- $\varnothing$ | pà-pá:m-ì- $\varnothing$ | 'understand' |
| :--- | :--- | :--- | :--- | :--- |
| sí:rè | sí:r-è- $\varnothing$ | sǐ:r-è- $\varnothing$ | sì-sí:r-è- $\varnothing$ | 'point at' |
| sí:rè | sí:r-ì- $\varnothing$ | sǐ:r-ì- $\varnothing$ | sì-sí:r-ì- $\varnothing$ | 'cook (meal)' |

A sample paradigm is (220). The tonal distinction between the 3 rd person forms and the 1 st/2nd person forms in the regular perfective is neutralized in the two augmented perfective paradigms.

Paradigm of perfective of 'jump’

|  | regular | lengthened | reduplicated |
| :---: | :---: | :---: | :---: |
| 1 Sg | tòmb-è-ŋ́ | tǒ:mb-è-ı̀ | tò-tómb-è-ŋ̀ |
| 1 Pl | tòmb-è-ŕ | tǒ:mb-è-ŋ̀ | tò-tómb-è-r̀ |
| 2 Sg | tòmb-è-W | tǒ:mb-è-ẁ | tò-tómb-è-W |
| 2 Pl | tòmb-è-r̀ | tǒ:mb-è-ŋ̀ | tò-tómb-è-ı̀ |
| 3 Sg | tómb-è- $\varnothing$ | tǒ:mb-è- $\varnothing$ | tò-tómb-è- $\varnothing$ |
| 3 Pl | tómb-ì-yà | tǒ:mb-ì-yà | tò-tómb-ì-yà |

For 'jump', with its $o$-vowel in the first syllable, Back/Rounding Harmony optionally applies to the suffix in the $1 \mathrm{st} / 2$ nd person forms in all three columns of (220). When this happens, the $1 \mathrm{Pl} / 2 \mathrm{Pl}$ forms can be distinguished from the 1 Sg by the palatal onset, e.g. tǒ:mb-ò- $\grave{y}$ 'I fell' versus tǒ:mb-ò-y $\eta$ 'we/you-Pl fell'.

For the nonmonosyllabics, the reduplicated form indicates a surprising repetition. My assistant gave contexts like this: X is told by his/her parent not to repeat an action, but then repeats it anyway. For these nonmonosyllabics, the lengthened form functions as a simple verb/VP focalizer. My assistant gave contexts such as replies to 'what did he do?' or 'how did he do that?' which place the eventuality type in focus. My interpretation is that the overtly reduplicated variant is a slightly more emphatic verb focalizer than the lengthened variant, for verbs that have both.

For the monosyllabics, the reduplicated form has both functions. In one instance, my assistant suggested that the tò-tó- $\grave{\varepsilon}$ 'he/she sowed' could be used in answering a 'what did he do?' question, suggesting VP focalization. In another instance, he indicated that tò-tó- $\grave{\varepsilon}$ 'could be used in a context where the individual had been told not to sow (again), but went ahead and sowed anyway (surprising repetition).

K\&P (p. 79) refer to the augmented perfective (reduplicated for monosyllabics, with lengthened vowel for other verbs) as the "passé narratif à redoublement" and gloss it as expressing "une idée d'accomplissement, d'une action envisagée comme définitive."

### 10.2.1.3 Experiential perfect 'have ever' (-tíyà wò-)

The experiential perfect is used in the sense '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 answer such questions. The event is usually a momentous one that leaves a strong memory or other continuing effect.

The construction is -tíyà wò, compare the negative counterpart -tà-lí- 'have never VPed' (§10.2.3.2). The relative clause version is -tíyà wô: with the regular participle of ẁ̀ (§14.4.1.2). I know of no construction where -tíyà can be separated from the preceding verb by an intervening element. wò is an existential-locational quasi-verb 'be (somewhere), be present' (§11.2.2.2), here probably encliticized. The main verb preceding -tíyà wò takes the form of the presuffixal stem before -tíyà wò- and is tone-dropped. The suffix combines with 'bring' as já-yèlè-tíyà wò-.

Experiential perfect

| stem | wǎ:/wě: 'see' | $\varepsilon$ égé 'hear' | bòló 'go' |
| :---: | :---: | :---: | :---: |
| 1 Sg | wà:-tíyà wò-r̀ | غ̀gè-tíyà wò-ŋ̀ | bòlò-tíyà wò-ı̀ |
| 1 Pl | wà:-tíyà wò->文 | غ̀gè-tíyà wò- ${ }^{-1}$ ¢̀ | bòlò-tíyà wò-1̀ |
| 2 Sg | wà:-tíyà wò-w | ègè-tíyà wò-Ẁ | bòlò-tíyà wò-w |
| 2 Pl | wà:-tíyà wò-1̀ | غ̀gè-tíyà wò- ${ }^{\text {² }}$ ¢ | bòlò-tíyà wò-̌̀ |
| 3 Sg | wà:-tíyà wò- $\varnothing$ | £̀gè-tíyà wò- $\varnothing$ | bòlò-tíyà wò- $\varnothing$ |
| 3 Pl | wà:-tíyà wò-yà | غ̀gè-tíyà wò-yà | bòlò-tíyà wò-yà |

Etymologically, the comparison of -tíyà with negative -tà-lí- suggests that the yà syllable may go back to the -a: subordinator (§15.2.2.1). A form like *tí-à: would result from addition of *-a: to a proto-form *té(:), which could perhaps also account for the a-vowel in -tà-lí- if we reconstruct stem-ablaut alternations (productive in some Dogon languages) to the relevant proto-language. However, my assistant corrected me when I suggested a pronunciation \#-tíyà: wò with long a: .

### 10.2.1.4 Present perfect (-a: wò or -a: s̀̀ )

This construction has invariant subordinator -a: (§15.2.2.1) on the main verb, followed by a conjugated quasi-verb wò 'be' or $s \grave{\varepsilon}$ 'have' as auxiliary. It functions as a present perfect.
a. $W o ̀=\emptyset ́ \quad o ́ b-a ̀: \quad W \grave{o}-\grave{\eta} / s \grave{\varepsilon}-\grave{\eta}$
3Sg=Acc give-PastAnt be-1SgSbj/have-1SgSbj
'I have given (it) to him/her.'
b. [gìrî: $\grave{m}-m \grave{j}]$ bà:-l-í-à: wj̀- $\varnothing$
[sleep(n) 1Sg-Poss] suffice-Rev-MP-PastAnt be-3SgSbj
'I have gotten (=am) sleepy.'
c. [š̌y m̀-mò] némìg-ì-à: wò- $\varnothing$
[garment 1 Sg -Poss] become.dirty-MP-PastAnt be-3SgSbj
'My clothes have gotten (=are) dirty.
Sample forms are in (223), using wò. Monosyllabics shorten the stem vowel, and if the vowel is mid-height it is raised to $i$ or $u$. The -a: suffix is L-toned except when it carries the H-tone of an /LH/-toned verb (223b), which it can with monosyllabic and simple bisyllabic stems but not trisyllabics or with bisyllabic mediopassives.

$$
\begin{equation*}
\text { stem } \quad \text { perfect } \quad \text { gloss } \tag{223}
\end{equation*}
$$

a. /HL/-toned

| tô: | tú-à: wò | 'sow' |
| :--- | :--- | :--- |
| ágà | ág-à: wò | 'catch' |

```
    pádà pád-à: w\grave{ 'leave'}
    kígùl-è:- kígùl-ì-à:wò 'go back'
initial sonorant
     nâ: já-à wò 'eat'
    yô: yú-à: w\grave{ 'go in'}
mediopassive
    yéyy-è: yéyy(-ì)-à: wò 'sleep'
b. /LH/-toned
    gǒ: gù-â: wò 'go out'
    wǎ: wà-â: wò 'see'
    já-yèl\varepsiloń já-y\varepsiloǹl-â: wò 'bring'
    bènd\varepsiloń bènd-â: wò 'hit'
mediopassives
    dànp-\varepsilon:- dànn-í-à: wò 'reply'
    yàbill-\varepsiloń:- yàbìl-í-à:wò 'reply'
```

The "perfect" nuance is difficult to detect in this present perfect, since there is little practical difference between perfective and present perfect. The perfect sense is clearer in the past perfect with wò replaced by bè (§10.5.1.6).

### 10.2.1.5 Recent perfect (-a: dǒ:)

A conjugated form of the verb dǒ: 'arrive (at), reach' following a past anterior form with anterior subordinator -a: (past) or -a:-nì (nonpast) means 'have (recently) finished VPing'.

| a. $\frac{1}{m m \grave{\varepsilon}}$ | bǒy | yègèr-â: | dò-غ̀- $\dagger$ ' |
| :---: | :---: | :---: | :---: |
| 1PlSbj | tomtom | fix-PastAnt | arrive-Pfv-1PlSbj |
| 'We have | finished | ing the tomto |  |

b. Émmè bǒy yègèr-á:-nì dò-dó:-dè-ŋ̀

1PlSbj tomtom fix-Ant-Nonpast Augm-arrive-Ipfv-1PlSbj
'We will have finished fixing the tomtom.'

Relative clauses based on this construction occur in text 01 at 01:01 and in text 03 at 00:44.

### 10.2.2 Imperfective positive system

This subsystem includes the imperfective, the augmented imperfective, and periphrastic constructions with auxiliaries, including the progressive, the future, and the immediate future.

### 10.2.2.1 Imperfective (-d or $-j \grave{\varepsilon})$

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 its augmented form, 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 regular imperfective (positive) suffix is the presuffixal stem plus -dè, followed (in main clauses) by the usual pronominal-subject marker. A few irregular $C v l v$ verbs have $-j \varepsilon$, in combination with stem-truncation: bó-jè 'goes' (bòló), y $\varepsilon$-jè 'comes' (y $̀ l \varepsilon ́)$, bé-jè 'gets' (bèlé), and gá-jè 'goes past' (gàlá ), see $\S 10.1 .3 .9$. The other verb with $-j \grave{~ i n s t e a d ~ o f ~}-d \grave{\varepsilon}$ is kán- $j \varepsilon ̀$ ‘does’, apparently syncopated from stem kán(à) (§10.1.3.12).

Lexical tones $/ \mathrm{HL} /$ and $/ \mathrm{LH} /$ are distinguished. /HL/-toned verbs have an H-toned first syllable followed by L-toned syllables and suffix. In careful pronunciation, /LH/-toned verbs have the H-tone on the final syllable of the stem as with 'accept' in (225), or on the final mora if the stem is monosyllabic. However, the H-tone in the /LH/ verbs is often dropped by downdrift effects in actual discourse, when the verb is preceded by other constituents. Because -dè- is L-toned and has a front vowel, there is no audible distinction between 1 Sg , 1 Pl , and 2 Pl . The suffixal L-tone also masks the L-tone of $2 \mathrm{Sg}-\grave{w}$.
(225) Imperfective (nonmonosyllabic)

| stem | óbò 'give' | yéyy-è: 'sleep' | yàbá 'accept' |
| :---: | :---: | :---: | :---: |
| 1Sg | óbò-dè-ŋ̀ | yéyy-è:-dè-ŋ̀ | yàbá-dè-1̀ |
| 1 Pl | óbò-dè-r̀ | yéyy-è:-dè-ŋ̀ | yàbá-dè-r̀ |
| 2Sg | $\begin{aligned} & \text { óbò-dè-Ẁ } \\ & \quad(\sim-d \grave{j}-\grave{W}) \end{aligned}$ | $\begin{gathered} \text { yéyy-è:-d } \grave{\varepsilon}-\grave{W} \\ \quad(\sim-d \grave{j}-\grave{W}) \end{gathered}$ | $\begin{aligned} & \text { yàbá-dè-Ẁ } \\ & \quad(\sim-d \grave{-}-\grave{W}) \end{aligned}$ |
| 2 Pl | óbò-dè-1̀ | yéyy-è:-dè-ı̀ | yàbá-dè-ŋ̀ |
| 3 Sg | óbò-dè | yéyye-è:-dè | yàbá-dè |
| 3 Pl | óbò-d-ì | yéyy-è:-d-ì | yàbá-d-ì |

Trisyllabics follow the same patterns: /HL/-toned kígùl-è:-dè-ŋ̀ 'I will return', /LH/-toned yàbìl- $\varepsilon$ :-dè-ŋ̀ ‘I will reply’.

Monosyllabic stems are illustrated in (226). 'Sow' has /HL/ melody while 'drink' and 'beat (tomtom)' have /LH/ melody.
(226) Imperfective (monosyllabic)

| stem | nǒ: 'drink' | tô: 'sow' | bă: 'beat (tomtom)' |
| :---: | :---: | :---: | :---: |
| 1Sg | nǒ:-dè-ŋ̀ | tó:-dè- | bǎ:-dè-ŋ̀ |
| 1 Pl | $n o ̌:-d \grave{c}-\grave{\eta}$ | tó:-dè-ŋ̀ | bǎ:-dè-ŋ̀ |
| 2 Sg |  | tó:-dò-Ẁ ( $\sim-d \grave{o}-\grave{W})$ | bă:-dò- |
| 2 Pl | nǒ:-dè-1̀ | tó:-dè-ŋ̀ | bǎ:-dè-ı̀ |
| 3 Sg | $n \grave{:-d e ̀-\varnothing ~}$ | tó:-dè- $\varnothing$ | bă:-dè- $\varnothing$ |
| 3 Pl | nŏ:-d-ì | tó:-d-ì | bă:-d-ì |

A variant -dò- is very common before $-w(2 \mathrm{Sg}$ suffix) regardess of stem vocalism, as shown in the paradigms. The velar nasal of the $1 \mathrm{Sg}, 1 \mathrm{Pl}$, and 2 Pl suffixes can combine with an $\Omega$ or a
in the preceding syllable to induce forward assimilation: nǒ:- $d \grave{o}-\eta \sim n o ̌:-d \grave{\varepsilon}-\eta$ ' $I$ drink', pádà-dà-ì ~ pádà-dغ̀-1̀̀ 'I leave (behind)'.

### 10.2.2.2 Augmented imperfective

Like the perfective, the basic imperfective form (preceding section) has an augmented variant formed by $C \grave{v}$ - reduplication (monosyllabics) or by lengthening of the first vowel with initial L-tone (nonmonosyllabics). For nonmonosyllabics, reduplication is not attested.

Monosyllabic examples with overt reduplication are in (227). There is no tonal difference between /HL/ melody and /LH/ melody in this formation. Only oral vowels occur in reduplicants.

| stem | imperfective |
| :---: | :---: |
|  | regular augmented |

a. /HL/-toned

| kâ: | ká:-dè | kà-ká:-dè | 'shave' |
| :---: | :---: | :---: | :---: |
| лâ: | já:-dè | nà-ná:-dè | 'eat (meal)' |
| $p \hat{\varepsilon}$. | pé:-dè | $p \grave{\varepsilon}-p \varepsilon^{\prime}-d \underline{\varepsilon}$ | 'grow old' |
| tô: | tó:-dè | tò-tó:-dè | 'sow' |
| tâ: | tá:-dè | tà-tá:-dè | 'shoot' |
| tê: | té:-dè | tè-té:-dè | 'send' |
| yâ: | yá:-dè | yà-yá:-dè | 'spend night |
| yô: | yó:-dè | yò-yó:-dè | 'go in' |

b. /LH/-toned

| bǎ: | bă:-dè | bà-bá:-dè | 'beat (tomtom)' |
| :---: | :---: | :---: | :---: |
| dǎ: | dă:-dè | dà-dá:-dè | 'kill' |
| dǒ: | dŏ:-dè | dò-dó:-dè | 'arrive (there)' |
| $d \varepsilon ̌:$ | $d \check{c}:-d \bar{\varepsilon}$ | $d \grave{\varepsilon}-d \bar{\varepsilon}:-d \grave{~}$ | 'insult' |
| $g \varepsilon ̌:$ | $g \varepsilon ̌:-d \bar{\varepsilon}$ | $g \grave{\varepsilon}-\mathrm{g}$ ع́:-dı̀ | 'say' |
| gǒ: | gǒ:-dè | gò-gó:-dè | 'go out' |
| gǒ: | gǒ:-dè | gò-gó:-dè | 'dance' |
| jǎ: | jǎ:-dè | jà-já:-dè | 'take (sb)' |
| nǎ: | nă:-dè | nà-ná:-dè | 'forget' |
| nǒ: | nŏ:-dè | nò-nó:-dè | 'drink' |
| wǎ: | wă:-dè | wà-wá:-dè | 'see' |
| yă: | yă:-dè | yà-yá:-dè | 'weep' |
| $\begin{gathered} \text { redupli } \\ \text { gě: } \end{gathered}$ | $\begin{aligned} & \text { enasalize } \\ & \text { gě:n-dè } \end{aligned}$ | $g e ̀$-gé: ${ }^{n}$-dè | 'steal' |

Nonmonosyllabic examples showing vowel lengthening are in (228). Lexically /HL/-toned stems again merge with lexically /LH/-toned stems. The H-tone that was likely once on the post-reduplicant base (e.g. *Cv̀-Cv́Cỳ) has gravitated to the final syllable/mora of the stem preceding the imperfective suffix.

```
stem imperfective gloss
regular augmented
```

a. /HL/-toned

| ágà | ágà-dè | à:gá-dè | 'catch' |
| :---: | :---: | :---: | :---: |
| kámbà | kámbà-dè | kà:mbá-dè | 'throw' |
| óbò | óbò-dè | ò:bó-dè | 'give' |
| tárá | tárà-dè | tà:rá-dè | 'post, affix' |
| témé | tદ́mè-dè | tè:mé-dè | 'eat (meat)' |
| tómbò | tómbò-dè | tò:mbó-dè | 'jump' |
| úró | úrò-dè | ù:ró-dè | 'butcher' |
| yímè | yìmé-dè | yì:mé-dè | 'die' |
| yéyy-è: | yéyy-è:-dè | yè:yy-é:-dè | 'sleep' |
| pégèrè | pégèrè-dè | pè:gèré-dè | 'winnow by shaking' |

b. /LH/-toned

| dònó | dònó-dè | dò:nó-dè | 'sell' |
| :---: | :---: | :---: | :---: |
| nùnó | nùnó-dè | nù:ךó-dè | 'sing' |
| bèndé | bèndé-dè | $b$ bè:ndé-dè | 'hit' |
| gèndé | gèndé-dè | gè:ndé-dè | 'look' |
| yàbìl-દ́- | yàbìl-É:-dè | yà:bìl-દ̌:-dè | 'reply' |
| truncated |  |  |  |
| bòló | bó-jè | bǒ:-jè | 'go' |
| gàlá | gá-jè | gǎ:-jè | 'pass' |

c. with initial lexical $C v$ : syllable

| pá:mà | pá:mà-dè | pà:má-dè | 'understand' |
| :---: | :---: | :---: | :---: |
| sí:rè | sí:rè-dè | sì:ré-dè | 'point at' |
| sí:rè | sí:Tè-dè | sì:ré-dè | 'cook (meal)' |
| $b a ̀: g-\varepsilon ́:-~$ | bà:g-é(:)-dı̀ | bà:g-ě:-dè | 'learn (a trade)' |
| ỳ̀:ŕ́ | ỳ̀:ró-dè | ỳ̀:ró-dè | 'roast (on fire)' |

My assistant was uncomfortable with the homophony of the two ỳ̀:ró-dè for the last item in (228c), 'roast (on fire)', though he did not deny it. The homophony is due to the initial $C v$ : syllable in the lexical representation. In the case of 'learn (a trade)', which also begins with such a syllable, he claimed an audible distinction between bà: $g-\varepsilon \in(:)-d \bar{\varepsilon}$ and $b a ̀: g-\check{\varepsilon}:-d \grave{\varepsilon}$, involving some combination of tonal and/or duration distinction on the mediopassive suffix.

A sample paradigm is (229).
Paradigm of imperfective of 'jump'

|  | regular | augmented |
| :---: | :---: | :---: |
| 1 Sg | tómbò-dè-1̀ | tò:mbó-dè-গ̀ |
| 1Pl | tómbò-dè-r̀ | tò:mbó-dè-ŋ̀ |
| 2 Sg | tómbò-dè-Ẁ ( $\sim-d \grave{-}-\hat{W})$ | tò:mbó-dè-ড̀ ( ~-dò-\̀ |
| 2 Pl | tómbò-dè-r̀ | tò:mbó-dè-ŋ̀ |


| 3 Sg | tómbò-dè- $\varnothing$ | tò:mbó-dè- $\varnothing$ |
| :--- | :--- | :--- |
| 3 Pl | tómbò-d-ì | tò:mbó-d-ì |

Augmentation may well be triggered by verb focus. As interpreted by my assistant, the augmented imperfective is associated with future time. There are two other formations that appear to be specifically future. One is a periphrastic construction with $-d$-à: $s \grave{\varepsilon}$ ( $\S 10.2 .2 .7$ ). It is typically confined to nonimmediate future contexts (e.g. something planned for tomorrow) while the augmented imperfective has no restrictions on time gap vis-à-vis the present. The other is the augmented future, which has the same kind of augmentation (reduplication or vowel-lengthening), but lacks the imperfective suffix -dè- and has special 3 Sg and 3 Pl suffix allomorphs (§10.2.2.6).

K\&P (pp. 76-77) distinguish three rather than two imperfective forms and functions, all of them including suffix "-ze" (corresponding to imperfective -dè in the Wendegele dialect) but with different tone patterns. The "progressif" is "une action en train de se faire ou dont la réalisation est prochaine." The "habituel" is "une action fait habituellement." The "itératif" is "une action que est faite de temps en temps." The sample transcriptions, using gèndé 'look' (or 'see') and nǒ: 'drink', are reproduced here verbatim as (230).
(230) K\&P imperfectives

|  | 'look/see' | 'drink' |
| :---: | :---: | :---: |
| progressif | "gendéze" | "nóze" |
| habituel | "gendezè" | "nozè" |
| itératif | "gecndéze" | "nonóze" |

The K\&P "itératif" is clearly the same form as my augmented imperfective (with vocalic lengthening or reduplication), in spite of the different account they give of its semantics. However, their questionable distinction between "progressif" and "habituel" forms may reflect difficulties with the tonal system, and especially the distinction between $/ \mathrm{HL} /$ and $/ \mathrm{LH} /$ lexical melodies. The acute accent diacritics on medial syllables in some of the K\&P forms in (230) are described as representing not H-tone but an "accent d'intensité," while the grave accent on the final syllable of the "habituel" is a "ton bas." In fact, since the verbs used are lexically $/ \mathrm{LH} /$, both have imperfectives with rising-toned stem and L-toned suffix: gèndé-dè and nǒ:-dè

K\&P also state that the same three stem shapes also occur in the imperfective negative. My data indicate that there is only a single imperfective negative form. My assistant rejected reduplication with monosyllabic stems, and lengthening with other stems, in the imperfective negative.

### 10.2.2.3 Progressive-1 (wò 'be' after verb with - $\grave{W}$ suffix)

There are two progressive constructions, both with wò 'be' (existential-locational) as conjugated auxiliary. In allegro speech it is difficult to distinguish the two constructions.

In the first such combination, wò- is added to a form of the main verb suffixed with $-\hat{w}$. The suffix occurs elsewhere as an imperfective marker that cannot be directly conjugated for pronominal subject: past progressive-1 $-\grave{W}=b e ̀-(\S 10.5 .1 .1)$ and imperfective subordinator $-\grave{W}$


Yorno So - $\grave{W} \sim$-gù), less likely of *-m̀. I will gloss it as "Ipfv" in interlinears. Paradigms are given below for bisyllabic (231) and monosyllabic (232) verbs. The lexical melody /HL/ versus $/ \mathrm{LH} /$ is respected; for this reason, the progressive can be a useful diagnostic for lexical tone as well as vocalism. /HL/-toned verbs appear with a falling tone pattern: <HL>, H.L, H.L.L. /LH/-toned verbs are L-toned with a final H-toned vowel before -ẁ, except that monosyllabics put the H-tone on the suffix $\left(C \bar{v}-W^{\prime}\right)$. Stem-final $\{\varepsilon e\}$ often assimilate as $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ by Back/rounding Harmony before the suffixal $w$.
(231) Progressive-1 paradigms (bisyllabic)

|  | sémbè 'sweep' | yàbá 'accept' |
| :---: | :---: | :---: |
| 1 Sg | sémbò-Ẁ Wò-ŋ̀ | yàbá-Ẁ wò-ף |
| 1Pl | sémbò-Ẁ wò-y | yàbá-ẁ wò- ${ }^{\text {º }}$ ¢ |
| 2 Sg | sémbò-Ẁ wò-Ẁ | yàbá-Ẁ wò-Ẁ |
| 2 Pl | sદ́mbò-Ẁ wò-y ${ }^{\text {y }}$ | yàbá-Ẁ wò- ${ }^{\text {² }}$ ¢ |
| 3 Sg | sémbò-ẁ wò- $\varnothing$ | yàbá-Ẁ wò- $\varnothing$ |
| 3 Pl | sع́mbò-ẁ wò-yyà | yàbá-ẁ wò-yyà |

(232) Progressive-1 paradigms (monosyllabic)

|  | kâ: 'shave' | nǒ: 'drink' |
| :---: | :---: | :---: |
| 1 Sg | ká-ẁ wò-ŋ | $n \grave{-W \prime}$ wò-ŋ̀ |
| 1 Pl | ká-ẁ wò- n |  |
| 2 Sg | ká-ẁ wò-w | nò-Ẃ wò-Ẁ |
| 2 Pl | ká-Ẁ wò- ${ }^{\text {² }}$ | nò-w wò- ${ }^{\text {º }}$ ¢ |
| 3 Sg | ká-ẁ wò- $\varnothing$ | nò-ẃ wò- $\varnothing$ |
| 3 Pl | ká-ẁ wò-yyà | nò-ẃ wò-yyà |

Mediopassive examples: dànn- $\varepsilon$ - $\grave{W}$ wò 'is (in the process of) sitting', kígùl-è-Ẁ wò 'is going back', yàbìl-દ-ங̀ wò 'is replying'.

### 10.2.2.4 Progressive-2 (wò after unsuffixed verb)

In the second progressive construction, conjugated wò 'be' follows the unsuffixed main verb in a progressive construction ('be VPing'). Verbs that have a chaining form with $-i$ or $-u$ do not use it in this combination, so this is not a verb chain. /HL/-toned verbs appear with falling tone pattern (H.L.L for trisyllabics: kígùl-è: wò 'be going back'). /LH/-toned verbs appear with their usual rising pattern (L.L.H for trisyllabics: gı̀ndòró wò 'be hanging up').

|  | sémbè 'sweep' | yàbá 'accept' | kâ: 'shave' | nǒ: ‘drink' |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | SÉmbè wò-ŋ̀ | yàbá wò-ŋ̀ | kâ: wò-ŋ | nǒ: wò-ŋ̀ |
| 1 Pl | sémbè wò-\̌̀ | yàbá wò- ${ }^{\text {ºn }}$ | kâ: wò- ${ }^{-1} \eta$ | nǒ: wò- ${ }^{\text {º }}$ ) |
| 2 Sg | sémbè wò- ${ }_{\text {¢ }}$ | yàbá wò-Ẁ | kâ: wò-ẁ | nǒ: wò-w |
| 2 Pl | sย́mbè wò- ${ }^{\text {y }}$ ¢ | yàbá wò->̌̀ | kâ: wò- ${ }^{\text {º }}$ ) | nǒ: wò- ${ }^{\text {º }}$ |
| 3Sg/Inan | sémbè wò- $\varnothing$ | yàbá wò- $\varnothing$ | kâ: wò- $\varnothing$ | nǒ: woे |
| 3 Pl | sémbè wò-yyà | yàbá wò-yyà | kâ: wò-yyà | nǒ: wò-yyà |

Mediopassive examples: dànn- $\hat{\varepsilon}$ : wò 'is (in the process of) sitting', kígùl-è: wò 'is going back', yàbìl- $\hat{\varepsilon}$ : wò 'is replying'.

The progressive-2 appears to be less common than the progressive-1, which overtly marks imperfectivity on the main verb. It is possible that the progressive- 2 is an innovation reflecting the difficulty of hearing the gemination of $w$ in the progressive-1, e.g. yàbá- $\grave{W}$ wò versus yàbá wò.
10.2.2.5 Stative $g \grave{\varepsilon} l \grave{\varepsilon}$ 'be holding' as an alternative progressive auxiliary

A stative form of the verb gèl $\varepsilon$ 'hold (onto), keep' can be used instead of wò in the progressive-1 construction with imperfective $-\grave{W}$ on the main verb. The auxiliary is an unaugmented stative rather than perfective. The negative counterpart has stative negative -lv́.

| bǒy | bă:-W | $g \varepsilon ̀ l e ̀-\eta ́ / ~ g e ̀ l e ̀-l e ̀-\eta ́ ~$ |
| :---: | :---: | :---: |
| tomtom | beat-Ipfv | hold.Stat-1SgSbj / hold-StatNeg-1SgSbj |
| 'I am / am not beating the tomtom.' |  |  |

### 10.2.2.6 Augmented future ( 3 Sg -à, 3 Pl -mmò )

This is only one of several forms that can be used in utterances denoting future events. In fact, the imperfective (often augmented) is the usual form obtained in elicitation.

The future form has some morphological resemblance to the derived stative (§10.4). However, unlike the stative (which can be derived from verbs of stance, holding and carrying, and a few other semantic classes), the future can be formed from any true verb. The mediopassive suffix is compatible with it.

Using bòló 'go', tê. weave, and mediopassive dànn- $\varepsilon$ :- 'sit' as exemplars, the paradigm is (235). Pronominal-subject suffixes are added to an augmented form of the bare verb stem. The 3 Sg form always ends in $-a$, which is unique to this inflectional category. The 3 Pl also has a unique suffix -mmゝ, which vaguely resembles a hortative suffix (§10.6.2.1). Augmentation, in the form of either initial $C \grave{v}$ - reduplication (for monosyllabics) or lengthening to $C \check{v}: \ldots$ of the initial syllable (nonmonosyllabics) is shared with augmented statives, augmented perfectives, and augmented imperfectives.

|  | 'will go' <br> (bòló) | 'will weave' ( $t \hat{\varepsilon}$ :) | 'will sit' <br> (dà:nn-દ:) | 'will eat meal (nâ:) |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | bǒ:lò-ŋ̀ | $t \varepsilon$-té:-ŋ̀ | dǎ:nn-غ̀:-ı̀ | nà-лá:-ı̀ |
| 1 Pl | bǒ:lò-( ${ }^{\text {y }}$ ) $\grave{\square}$ | $t \varepsilon$-té:-ŋ̀ | dă:nn-غ̀:-ı̀ | nà-fá:-ı̀ |
| 2 Sg | bǒ:lò-Ẁ | $t \overline{\text { elté:- }}$ ¢ | dǎ:クn-غ̀:-W | nà-ná:-Ẁ |
| 2 Pl | bǒ:1ò-( ${ }^{\text {y }}$ )! | tè-té:-ŋ̀ | dă:nn-غ̀:-ı̀ | nà-ná:-ı̀ |
| 3 Sg | bǒ:1-à | tè-tí-à | dǎ:nn-(i)-à | nà-ná-à |
| 3 Pl | bǒ:lò-mmò | tè-té:-m̀mo | dă:nл-દ̀:-mmò | nà-ná:-m̀mò |

Verbs with inanimate subjects allow this category: (àná) mè-mí-à '(rain) will fall' (verb mě:). Note the shift of $/ \varepsilon: /$ to $i$ before the suffixal vowel by Prevocalic V-Raising, as also in dò-dú-à 'he/she will arrive' (§3.5.6.1).

As usual, augmentation disappears under focalization:

```
(236) ă
ă: bòl-à
    who? go.Fut-3SgSbj
```

    'Who will go?'
    
### 10.2.2.7 Periphrastic future ( $-d$-à: $s \grave{\varepsilon},-j$-à: $s \varepsilon$ )

A periphrastic future construction is derived from the augmented imperfective (suffix -dè for most verbs, $-j \grave{\varepsilon}$ for a few). The usual pronominal-subject suffix is replaced by what is elsewhere the past anterior subordinator -à: (§15.2.2.1), and this is followed by a conjugated form of s̀̀ 'have' (§11.5.1.1). The 3Pl form sغ̀-yyà (237d) differs slightly from the (probably contracted) form sì-yà used in regular 'have X' predications.
a. bǒ:-j-à:
Augm.go-Ipfv-PastAnt $s \grave{\varepsilon}-\grave{\eta}$ have- 1 Sg Sbj
'I will go.'

| b. yì:mé- $d$-à: | $s \grave{\varepsilon}-\varnothing$ |
| :--- | :--- |
|  | Augm.die-Ipfv-PastAnt <br> 'He/She will die.' |
|  | have-3SgSbj |

c. nà-ná:-d-à:

Augm-eat.meal-Ipfv-PastAnt
'You-Sg will eat (a meal).'
d. tò:mbó-d-à:

Augm.jump-Ipfv-PastAnt
'They will jump.'
e. gò-gó:-d-à:

Augm-go.out-Ipfv-PastAnt
'I will go out (later).'
$s \grave{\varepsilon}$ - $\grave{W}$
have- 2 SgSbj
sغ̀-yyà
have-3PlSbj
$s \grave{\varepsilon}-\grave{\eta}$
have-1SgSbj

This construction can be used in connection with actions and events that are planned for the future, perhaps contingently. Other future events can be expressed with the imperfective, the future, or the immediate future.

### 10.2.2.8 Immediate future 'be about to VP' (-njá: wò)

A construction meaning 'be about to VP', 'be on the verge of VPing' consists of a verb with invariant ending -njá: after tone-dropped stem, followed by a conjugated quasi-verb wò 'be'. I will label -njá: as immediate future ("-ImmFut") before wò.

| stem | immediate future | gloss |
| :--- | :--- | :--- |
| a. /HL/-toned |  |  |
| tô: | tò:-njá: wò | 'sow' |
| ágà | àgà-njá: wò | 'catch' |
| pádà | pàdà-njá: wò | 'leave' |
| kígùl-è:- | kìgùl-è:-njá: wò | 'go back' |
| initial sonorant |  |  |
| nâ: | nà:-njá: wò | 'eat' |
| yô: | yò:-njá: wò | 'go in' |
| yéyy-è: | yèyy-è:-njá: wò | 'sleep' |
|  |  |  |
| b. /L/-toned |  |  |
| gǒ: | gò:-njá: wò | 'go out' |
| wă: | wà:-njá: wò | 'see' |
| já-yèlé | já-yèlè-njá: wò | 'bring' |
| bèndé | bèndè-njá: wò | 'hit' |
| yàbìl-é:- | yàbìl-è:-njá: wò | 'reply' |

One might speculate on a historical connection between -njá: and the verb jǎ: 'take (sb)', see §15.1.9. For L-toned simultaneous subordinator -njà: see §15.2.1.2.

### 10.2.3 Negation of indicative verbs

Corresponding to positive active verbs in indicative clauses, the binary opposition is between perfective negative and imperfective negative. Both are portmanteaus that have no phonological connection to the corresponding positives. The perfective negative morpheme may combine with (an allomorph of) the experiential perfect morpheme.

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 (3Pl -ǹ-ní)

The perfective negative is constructed by adding suffix -lí- to the presuffixal stem. Back/Rounding Harmony in 2 Sg -lú-ẁ is frequent, but the pronunciation -lí- $\grave{W}$ is also
possible. Also notice the L-toned $-\grave{W}$ in the 2 Sg combination, which is masked in other paradigms involving L-toned inflectional suffix. The verb is dropped to $\{\mathrm{L}\}$-tone.
(239) Perfective negative, 'did not ...'

|  | '... sweep' <br> (sع́mbè) | '... accept' <br> (yàbá) | '... shave' <br> (kâ:) | $\begin{aligned} & \text { '... drink' } \\ & \text { (nŏ:) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | sèmbè-lì-1́ | yàbà-lì-ń | kà:-1ì-ŋ́ | nò:-lì-ŋ́ |
| 1P1 | sèmbè-lì-1́ | yàbà-lì-ń | kà:-1ì-ท́ | nò:-lì-ŋ́ |
| 2 Sg | sèmbè-lú-ẁ | yàbà-lú-Ẁ | kà:-lú-Ẁ | nò:-lú-ẁ |
| 2 Pl | sèmbè-lí-r̀ | yàbà-lí-ì | kà:-lí-ŋ̀ | nò:-lí-ì |
| 3 Sg | sèmbè-lí | yàbà-lí | kà:-lí | nò:-lí |
| 3 Pl | sèmbè-ń-ní | yàbà-ǹ-ní | kà:-ǹ-ní | nò:-ǹ-ní |

A few verbs syncopate a stem-final vowel (following $l$ ) before the suffix, creating a geminate $l l$ cluster at the boundary. The relevant verbs are yèlé 'come' (yèl-lí), bòló 'go' (bòl-lí ), bèlé 'get' (bèl-lí), gàlá 'pass, go past' (gàl-lí), and the composite já-yèlé 'bring' (já-yèl-lí) and jé-bòló 'convey' (jé-bòl-lí).
$/ 1 /$ is nasalized to $n$ after a nasalized vowel, but not after a nasal consonant (§3.5.4.7): gè:-ní- ‘did not steal' (< gě: ${ }^{n}$ ), but kàn-lí- ‘did not do'.

The mediopassive derivational suffix is -è:- ~ -غ̀:- before -lí or 3Pl -ǹ-ní. An example is yàbìl-è:-lí- 'did not answer', 3 Pl yàbìl-è:-ǹ-ní.

### 10.2.3.2 Experiential perfect negative -tà-lí

The sense 'have never VPed' is expressed by the experiential perfect negative. No adverb or other element is needed.

The form is -tà-lí following the presuffixal stem. -lí is of course the perfective negative suffix, so the L-tone of the 2 Sg and 2 Pl endings stands out. -tà- is obscurely related to experiential perfect (positive) -tíyà. The stem is tone-dropped as in the positive: sèmbè-tíyà wò 'has (ever) swept', negative sèmbè-tà-lí 'has never swept'.
(240) Experiential perfect negative, 'has never ...'

| '... seen' <br> (wǎ:/wと̌:) | '... heard' <br> ( $\varepsilon$ ǵ $\varepsilon$ ) | '... gone' <br> (bòló) |
| :---: | :---: | :---: |
| wà:-tà-lì-ŕ | غ̀gè-tà-lì-ŕ | bòlò-tà-lì-ŋ́ |
| wà:-tà-lì-1́ | غ̀gè-tà-lì-1́ | bòlò-tà-lì-ń |
| wà:-tà-lú-w |  | bòlò-tà-lú-Ẁ |
| wà:-tà-lí-ì | غ̀gè-tà-lí-ŋ̀ | bòlò-tà-lí-ì |
| wà:-tà-lí | ègè-tà-lí | bòlò-tà-lí |
| wà:-tà-ǹ-ní | £̀gè-tà-ǹ-ní | bòlò-tà-ǹ-ní |

### 10.2.3.3 Present perfect negative (-a: wò-ló) is marginal

Predictably, the present perfect (positive) in -a: wò is negated by converting wò 'be' into its negation wò-ló 'not be' (§11.2.2.2). (241) is therefore possible, but my assistant accepted it only with reluctance, favoring the more general perfective negative with -lí.

$$
\begin{array}{lll}
? \text { ? wò = ́́ } & \text { ób-à: } & \text { wò-lò- } \grave{\eta}  \tag{241}\\
\text { ? } 3 \mathrm{Sg}=\text { Acc } & \text { give-PastAnt } & \text { be-StatNeg- } 1 \mathrm{SgSbj} \\
\text { 'I haven't given (it) to him/her.' }
\end{array}
$$

When the temporal anchor point is shifted from the time of speaking into the past, a past perfect negative is more natural and is more easily elicited, but its morphology is not based on the pattern in (241), see §10.5.1.6.

### 10.2.3.4 Imperfective negative $-\varepsilon \grave{l} \grave{\varepsilon}$ ( 3 Pl -ǹ-nì~ $-n ́-n i ̀ ~)$

The imperfective is negated by adding a suffix that is normally heard as $-\grave{\varepsilon} \grave{\varepsilon}$, except for irregular 3Pl subject -ǹ-nì. The final syllable of the suffix may shift to H -tone if the preceding
 systematic before L-toned conditional enclitic $=y o ̀ ~(§ 16.1 .1)$. In isolation, the final H -tone is most likely to be audible in longer stems, even those of /HL/ melody: kígùl-ì- $\grave{l}$ 官- $\varnothing$ 'he/she doesn't go back'.

The first suffixal vowel contracts with the stem-final short vowel of a nonmonosyllabic stem, see VV-Contraction $\S 3.5 .6 .2$. This contraction does not occur to mediopassive verbs, see below. The output of the contraction is long [ $\varepsilon:]$, transcribed as $\varepsilon-\varepsilon$ to clarify the morpheme boundary. Phonetically it is often reduced to short [ $\varepsilon$ ], especially when entirely L-toned. The 3 Pl form with suffix $-n-n i ̀ ~ i s ~ s t r u c t u r a l l y ~ d i f f e r e n t, ~ w i t h ~ a n ~ L-t o n e d ~ c o u n t e r p a r t ~$ of H -toned perfective negative -ǹ̀ní added to the uncontracted presuffixal stem.
(242) Imperfective negative (nonmonosyllabic), 'does not ...'

| '... give' | '... sleep' | '... accept |
| :--- | :--- | :--- |
| (óbò) | (yéyy-è:--) | (yàbá ) |


|  |  |  | yàbé-غ̀lè-ท̀ |
| :---: | :---: | :---: | :---: |
| 1Sg |  | yeyy(-1)-દ̇દ゙-1) | yàbe-દ1غ-1) |


|  |  |
| :---: | :---: |
|  |  |




3 Pl óbò-ǹ-nì yéyy-è:-ǹ-nì yàbá-ǹ-nì

Monosyllabic $C v$ : verbs and mediopassives with suffix $-e: \sim-\varepsilon$ : are the two classes of verbs that end in a long vowel, and this vowel does not disappear before - $\grave{l} \grave{\varepsilon}$. Ca: combines with $-\varepsilon l \grave{\varepsilon}$ as $C a:-l \grave{\varepsilon}$ (one could also write Ca-alè to make the morphology more transparent, but there is no hiatus). Mid-height long stem-final vowels are shortened and raised to
corresponding high vowels, i.e. $\{\mathrm{e} \varepsilon\}$ become $i$ and $\left\{\begin{array}{l}0 \\ 0\end{array}\right\}$ become $u$, before $-\varepsilon l \varepsilon$, forming diphthongs is and $u \varepsilon$. See Prevocalic V-Raising §3.5.6.1 for the phonology.
(243) Imperfective (monosyllabic), 'does not ...'

|  | $\begin{aligned} & \text { '... drink' } \\ & \text { (nŏ:) } \end{aligned}$ | '... sow' <br> (tô: ) | $\begin{aligned} & \text { ‘... insult' } \\ & (d \check{\varepsilon}:) \end{aligned}$ | '... beat (tomtom) <br> (bă: ) |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | $n u ̀-\varepsilon ́ 1$-ı̀ | $t u ́-\varepsilon ̇ l e ̀-\grave{p}$ | $d i$-̇́lè-ŋ̀ | bà-álè-ŋ̀ |
| 1P1 | $n u ̀-\varepsilon ́ l e ̀-1 \grave{ }$ | $t u ́-\varepsilon ̇ l e ̀-\grave{j}$ | dì-Élè- ${ }^{\text {j }}$ | bà-álè-1̀ |
| 2 Sg | nù-દ́lè-Ẁ | $t u ́-\grave{\varepsilon} \backslash \grave{\varepsilon}-\stackrel{\grave{N}}{ }$ | dì-Élè-Ẁ | bà-álè-Ẁ |
| 2 Pl | $n u ̀-\varepsilon ́ 1$-̇-ŋ̀ | $t u ́-\varepsilon ̇ l e ̀-\grave{j}$ | dì-Élè- $\grave{\text { jo }}$ | bà-álè-ı̀ |
| 3 Sg | nù-ćlè | tú-èlè | dì-ćlè | bà-álè |
| 3 Pl | nò:-ń-nì | tó:-ǹ-nì | dè:-ń-nì | bà:-ń-nì |


Mediopassives are treated the same way, as seen most clearly with 'go back' and 'reply'. Only the 3 Sg and 3 Pl forms are shown in (244), as the $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are predictable from the 3 Sg form. This form is a useful diagnostic of mediopassive morphology, especially for trisyllabics; compare non-mediopassive gòndòré-èlè 'does not hang up' and dàmbé- '̀lè 'does not go up', where we hear a long [ $\varepsilon$ :] at the stem-suffix boundary.
(244) Imperfective (mediopassive), 'does not ...'

| '... go back' <br> (kígùl-è:-) | '... reply' (yàbìl-દ́:-) |
| :---: | :---: |
| kígùl-ì-èlè | yàbìl-í-èlè |
| kígùl-è:--ǹ-nì | yàbìl-è:-ń-nì |

In other mediopassives ('sit', 'winnow in wind', 'carry on head') the $-i$ - is optionally absorbed by a preceding geminated palatal (§3.5.3.4). If the stem is $/ \mathrm{LH} /$, a stranded H -tone from this suffix can re-link leftward to form the second mora of a rising tone (§3.7.4.4).
(245) Imperfective (mediopassive with $n \wedge$ or $y y$ ), 'does not ...'

|  | $\begin{aligned} & \text { ‘... sit' } \\ & \text { (dànn-દ́:- ) } \end{aligned}$ | '... winnow in wind' (wèyy-દ́:- ) | '... carry on head' (dùyy-é:- ) |
| :---: | :---: | :---: | :---: |
| 3 Sg | dànn-í-દ̀lè | wèyy-í-غ̀lè | dùyy-í-èlè |
|  | ~ dănn- $\varnothing$-غ̀lè | $\sim$ wěyy- $\varnothing$-غ̀lè | dǔyy-Ø-èlè |
| 3 Pl | dànn-દ̀:-ń-nì | wèyy-દ̀:-ń-nì | dùyy-è:-ń-nì |

### 10.2.3.5 Progressive-1 and -2 negative (wò-ló)

Both progressive constructions contain conjugated wò 'be' in the positive. As one would expect, they are negated by wò-ló 'not be' (§11.2.2.2). There are no additional tone changes in the negation. Examples are sémbò-ฟ̀ wò-lò-1́ or sémbè wò-lò-1́ ‘I am not sweeping’ and yàbá-Ẁ wò-lò-ŋ́ or yàbá wò-1̀̀-ŋ̆ ‘I am not accepting'.

### 10.2.3.6 Future negative ( $-r i \sim-d i$ )

The positive future form ( $\S 10.2 .2 .6$ ) has a negative counterpart with suffix $-r i$. It is L-toned with lexically /HL/-toned stems: pádà-rì 'will not leave (abandon)'. With /LH/-toned stems, the only H-tone appears on the suffix: bèndè-rí 'will not hit'. As usual with negative categories, the augmentation (reduplication, vowel-lengthening) of the positive is absent. bòló 'go' and the other irregular Cvlv stems that allow contraction to $C \check{v}$ :- take the contracted form (bò:-rí 'will not go', yè:-rí 'will not come', bè:-rí 'will not get'). kán(à)- 'do' has future negative kán-dì 'will not do', reflecting the constraint against tap $r$ after a nasal, cf. §3.5.4.3.

The imperfective negative ( $-\grave{\varepsilon} l \grave{\varepsilon}$ ) competes with this form in future negative contexts. In (246), the two co-occur in parallel clauses.

```
y\grave{w-yów = \grave{ \ gì-ý bè:-rì-\etá,}},\underline{\prime},
bad-bad=it.is say-Chain get-FutNeg-1SgSbj,
yòw-yôW=lă:- gì-ý bèl\varepsiloń-\varepsiloǹl\grave{-\età lá:yè}
bad-bad=it.is.not say-Chain get-IpfvNeg-1SgSbj otherwise
'I won't say that it is (out of) nastiness, and I won't/don't say that it is not (out of)
nastiness either.'
```

The paradigm is (247). 2 Sg and 2 Pl suffixes reveal their L-tones.
future negative 'won't go' (verb bòló)

| 1 Sg | -rì- | bò:-rì-ク́ |
| :---: | :---: | :---: |
| 1 Pl | -rì- | bò:-rì-ŋ́ |
| 2 Sg | -rú-Ẁ | bò:-rú-Ẁ |
| 2 Pl | -rírì | bò:-rí-ŋ̀ |
| 3 Sg | -ríl $\varnothing$ | bò:-rí- $\varnothing$ |
| 3Pl | -rí-yà | bò:-rí-yà |

### 10.2.3.7 Periphrastic future negative (s $\grave{\varepsilon}-1 \varepsilon$ )

The future in $-d$-à: $s \grave{\varepsilon}$ is negated by using the regular negative form of $s \dot{\varepsilon}$ 'have', namely $s \grave{\varepsilon}-l \varepsilon$. A notable aspect of the negative construction is that the main verb with $-d$-à: is tone-dropped to $\{\mathrm{L}\}$. In effect, the stative negative suffix on 'have' controls tone-dropping on a target domain including the main verb. No augment (reduplication or vowel-lengthening) is allowed on the stem.
a. yàlú $\quad$ s̀mbè- $d$-à: ${ }^{\mathrm{L}} \quad s \grave{\varepsilon}-1 \varepsilon$ - $\varnothing ~$ place sweep-Ipfv-PastAnt ${ }^{\mathrm{L}}$ have-StatNeg-3SgSbj 'He/She will not sweep (the place).' (positive $s \varepsilon ́ m b \grave{\text { - }}$ - -à: $s \dot{\varepsilon}$ )
b. yàbà- $d$-à: ${ }^{\mathrm{L}} \quad s \grave{\varepsilon}-1 \varepsilon$ - $\varnothing$
accept-Ipfv-PastAnt ${ }^{L}$ have-StatNeg-3SgSbj
'He/She will not accept (consent).' (positive yàbá-d-à: $s \grave{\varepsilon}$ )
c. nà:-d-à: ${ }^{\text {L }}$
$s \grave{-}-1 \grave{\varepsilon}-\underline{1}$
eat-Ipfv-PastAnt ${ }^{\text {L }}$ have-StatNeg-1SgSbj
'I will not eat (a meal).'
d. bò-j-à: ${ }^{\text {L }}$
$s \grave{\varepsilon}-n ̀ n-n i ́$
go-Ipfv-PastAnt ${ }^{\mathrm{L}}$
have-StatNeg-3PlSbj

### 10.2.3.8 Immediate future negative

For the positive forms ('be about to', 'be on the verge of') see §10.2.2.8. Replacing wò 'be (somewhere)' by its regular negation wò-l'́ 'not be', we get 'not be about to'.
$\begin{array}{ll}\text { tò:-njá: } & \text { wj̀- } 1 \grave{\text { òn }} \text { 亿́ } \\ \text { sow-ImmFut } & \text { be-StatNeg-1SgSbj }\end{array}$
'I am not about to sow (plant).'

### 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).
(250) category suffix
$1 \mathrm{Sg} \quad-\eta$ (atonal), K\&P "-m"
$1 \mathrm{Pl} \quad-{ }^{y} \eta$ (atonal), $\mathrm{K} \& \mathrm{P}$ "-ñ"
$2 \mathrm{Sg} \quad-\grave{W}$ (L-toned, most inflections) $-W^{\prime}$ (due to $\{\mathrm{LH}\}$ overlay in perfective positive)
2Pl - ${ }^{y} \grave{\eta}$ (L-toned, even in perfective positive), $\mathrm{K} \& \mathrm{P}$ "-ñ"
3Sg zero, except -à in augmented future (§10.2.2.6)
3Pl (variable, see below)

The 1st/2nd person suffixes undergo phonological interactions with the conditional antecedent ('if') clitic $=y o ̀$. The 2 Sg combination assimilates to $-y=y o ̀$. The nasal suffixes ( $1 \mathrm{Sg}, 1 \mathrm{Pl}, 2 \mathrm{Pl}$ ) combine as $-n=j o ̀ \sim-n=j e ̀$.

Although $1 \mathrm{Sg}, 1 \mathrm{Pl}$, and 2 Pl are underlyingly distinct, there is extensive surface neutralization among them. They are tonally distinct: 2 Pl L-toned, versus 1 Sg and 1 Pl atonal, acquiring a surface tone by spreading. However, the tonal distinction is only audible when the suffix is added to a stem (with or without AN suffix) that otherwise ends in an H-tone, as in the perfective negative. $1 \mathrm{Pl}-{ }^{-1} \eta$ and $2 \mathrm{Pl}-{ }^{-}$y have an underlying palatal onset that is absent from $1 \mathrm{Sg}-y_{y}$. However, this onset is deleted after a front vowel $\{$ i e $\varepsilon\}$, and it happens that many inflectable AN forms (perfective, perfective negative, imperfective, imperfective negative) end in such a front vowel. The onset is only audible after a few predicates ending in low or back vowels, like wò- 'be', or when Back/Rounding Harmony converts a suffixal front vowel to a back rounded vowel as in tòmb-ò- 'yy 'we jumped'.

K\&P describe a dialect that preserves 1 Sg *-m, which has cognates in several Dogon languages.

The 3Pl form is a wild card. In various positive inflections it appears as -ì (imperfective $-d-i$ ), as -ì-yà (perfective), as -yà (wj̀-yyà 'they are [there]'), and as -mmò in the augmented future. An unusual portmanteau-like 3 Pl form -n-ni occurs, with different tones, in the two main negative inflections.

### 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, notably 'be (somewhere)', 'have', 'want', 'like', and 'know', see Chapter 11.

### 10.4.1 Derived stative positive (augmented and unaugmented)

A number of regular active verbs, i.e. that distinguish perfective from imperfective aspects, also have a stative paradigm that denotes a resulting or continuing state. The stative does not distinguish perfective from imperfective aspect. In unfocalized positive main clauses, it cooccurs either augmentation or the existential particle yé (§11.2.2.1).

In the absence of yé, a more or less focal preceding constituent, or a preceding chained verb, the stative is augmented by lengthening the first vowel. The vowel-lengthening originated as an initial *Cỳ- reduplication that later contracted with the first syllable of the base, as in the augmented perfective and the augmented imperfective. The reduplication is preserved in some other Dogon languages. It is likely that a monosyllabic stative in DS would be augmented by reduplication, since monosyllabic augmented perfectives and imperfectives are reduplicative, but no stative this brief is attested. Nearly all known stative stems are bisyllabic, but trisyllabics are possible (ă:bàrà 'be laid out', see below).

A sample paradigm is (251), using the stative derived from active dànク- $\varepsilon$ :- 'sit down'. For this stem, and others ending in $\left\{\begin{array}{l}\circ \\ a\}\end{array}\right.$, the palatal onglide for 1 Pl and 2 Pl are audible, but because of the stem tones 1 Pl and 2 Pl are homophonous.

> 'be sitting (seated)' with existential particle

1Sg
dă:\à-ŋ̀̀ yé dànà-ı̀̀
1P
dă:yà-->̀
yé dàyà-->̀̀

| 2 Sg | dǎ:ทà-ẁ | yé dàyà-ẁ |
| :---: | :---: | :---: |
| 2 Pl | dă:ทà->市 | yé dànà- ${ }^{\text {º̀ }}$ |
| 3 Sg | dǎ:yà | yé dàyà |
| 3 Pl | dǎ:y-ì-yà | yé dàn-ì-yà |

Derived statives are readily formed from verbs of stance (position) and carrying/holding. Examples of active/stative pairs are in (252). 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 (252c), the stative is intransitive, and corresponds most obviously to a corresponding transitive with a distinct agent. However, some statives in (252c) could also be connected to intransitive verbs from the same word-family.

$$
\begin{equation*}
\text { active gloss } \quad \text { stative gloss } \tag{252}
\end{equation*}
$$

a. stance

| лn versus stative $\eta$ (§3.5.3.4) |  |  |  |
| :---: | :---: | :---: | :---: |
| dànر-є́:- | 'sit down' | dǎ:yà | 'be sitting (seated)' |
| ìnn-દ́:- | 'stand, stop' | İ:ทย̇ | 'be standing, be upright, be stopped' |
| other |  |  |  |
| ùnj-é:- | 'lie down' | ǔ:njò | 'be lying down, prone' |
| tód-દ̀:- | 'squat' | tǒ:do | 'be squatting' |
| tú:Y-è:- | 'kneel' | tǔ:ךò | 'be kneeling' |
| gòmb-દ́:- | 'spread out' | gǒ:mbò | '(limbs) be spread' |
| gèng-દ̇:- | '(sth) tilt' | $g \varepsilon ̌: \eta g \varepsilon ̀$ | 'be tilted' |
| dàb-É:- | 'lie on belly' | dă:bà | '(sb) be lying on belly' |
| ùb-é:- | '(an.) lie down' | ǔ:bò | '(bird, animal) lie down' |
| mùnn-é:- | 'curl body up' | mǔ:nnò | 'have body curled up' |
| b. carrying/holding |  |  |  |
| bòmb-é:- | 'carry on back' | bǒ:mbò | 'have (child) on back' |
| gèl-é:- | 'hold (sth)' | $g \varepsilon ̌: 1 \varepsilon ̀ ~$ | 'be holding' |

c. intransitive stative associated with transitive active verb

| gòndò-ró | 'hang (sth) up' gǒ:ndò | '(sth) be hanging' |  |
| :--- | :--- | :--- | :--- |
| pí:ndè | 'shut (door)' | pǐ:pè | '(door) be shut' |

ténè 'hobble (animal)' tě:クย̀ 'be hobbled' [cf. intransitive active pí:ndè 'become shut']
ábàrà 'lay out (mat)' ǎ:bàrà '(mat) be laid out' dìmb- $\varepsilon$ : 'follow (sb)' dǐ:mbè 'be following, in pursuit'
d. other
yéyy-è:- 'sleep' yě:yyè 'be asleep'

There is a set of verbs that have medial yy in the mediopassive, $y$ in the stative, and zero before transitive -rv (253).

> mediopassive stative transitive transitive gloss
a. 'carry (load) on head'
dùyy-દ́:- dǔ:yò dù:-ró 'put (sth) on (sb's) head'
b. 'flip over, become upside-down'
jùyy-é:- jǔ:yò jù:-ró 'flip (sth) over'
c. 'hide (oneself)'
jว̀yy-દ́:- jǒ:yò jò:-ró 'conceal (sth)'
The phonology of these forms is difficult; see §3.5.4.6 for discussion.
Other than ǎ:bàrà '(mat) be laid out' (252c), the only known stative stem that is seemingly trisyllabic is pìnè-lé '(door) be open'. It is related semantically to pínè-lè ~ pípè-lè 'open (door)', the suffixed reversive of pí:-ndè 'shut (door)'. Note the $\eta / n$ alternation. Stative pìnè-lé '(door) be open' could therefore be taken as the reversive of the irregular stative of 'shut (door)', which is pǐ:ŋè '(door) be shut'. Analysed as such, pìnè-lé is aberrant in that it fails to lengthen its first vowel. This suggests another possibility, namely that pìnè-lé 'be open' is simply the stative negative, rather than the reversive, of 'be shut'.

### 10.4.2 Stative negative (-1v́, 3Pl -ǹ-ní)

Derived stative verbs (preceding section) are negated by adding a conjugated stative negative suffix -lv́ to a form of the stative stem (cf. the 3 Sg subject form of the positive stative). In the negative, the stative stem is tone-dropped and the vowel-lengthening seen in the positive form is erased. The vowel of the stative negative suffix (or enclitic) is copied from the quality of the stem-final vowel. The variant -lá usually shifts to -ló before 2 Sg suffix $-\grave{W}$. The 3 Pl form is -ǹ-ní, as in the perfective negative. Also as in the perfective negative, the suffixal tone allows the underlying L-tone of 2 Sg and 2 Pl suffixes to be heard. Sample paradigms are in (254).

|  | 'be sitting (seated)' | 'have (child) on back' |
| :---: | :---: | :---: |
| 1Sg | dàyà-là-ŋ́ | bòmbò-lò-ŋ́ |
| 1 Pl | dànà-là-Y̌́y | bòmbò-lò-> ¢́ |
| 2Sg | dàyà-ló-Ẁ | bòmbò-ló-W |
| 2 Pl | dàクà-lá- ${ }^{\text {º }}$ | bòmbò-ló- ${ }^{\text {y }}$ ¢ |
| 3 Sg | dànà-lá- $\varnothing$ | bòmbò-ló- $\varnothing$ |
| 3 Pl | dànà-ǹ-ní | bòmbò-ǹ̀-ní |

Further examples are ìnغ̀-lé 'he/she is not standing', tòdò-ló 'he/she is not squatting', pìnè-lé 'it (door) is not shut' (see discussion at the end of the preceding section), and àbàrà-lá 'it (mat) is not laid out'.

### 10.5 Temporal clitics and particles

### 10.5.1 Past clitic (=bè )

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
 verb specifying AN category. The pronominal subject is marked only on the clitic. The morphological structure is therefore STEM-AN=Past-PronSubj. The paradigms of the positive and negative forms of the clitic are in (255).
(255) Past clitic and its negation

| 1 Sg | $=b e ̀-\eta$ | $=b e ̀-l e ̀-\eta ́ ~$ |
| :---: | :---: | :---: |
| 1 Pl | $=b \grave{\mathrm{e}}-\mathrm{\eta}$ | $=b$ è-lè-ŋ́ |
| 2Sg | $=b e ̀-\grave{W}$ | $=b e ̀-l e ́-W$ |
| 2 Pl | $=b e ̀-\grave{̀}$ | $=b e ̀$-lé-r̀ |
| 3 Sg | $=b e ̀-\varnothing$ | $=b e ̀$-lé- $\varnothing$ |
| 3 Pl | $=$ bè-yà | $=b e ̀$-ǹ-ní |

bè is also the past-tense form of (stative) existential-locational quasi-verb wò 'be (somewhere), be present, exist'. Compare yó=̀ 'he/she/it is present', contracted from /yó wò/, to its past counterpart yé bè 'he/she/it was present'. All of the conjugated past forms of AN categories are therefore formally part of the stative system.

In some Dogon languages the past clitic is homophonous with, and is arguably identical to, the verb 'stay'. In DS, bě: 'stay' has no obvious affinity to past $=b e ̀$ or to past-tense quasiverb bè 'was'.

### 10.5.1.1 Past progressive-1 (positive and negative)

Both (nonpast) progressive constructions have counterparts with the past clitic =bè. Because the regular imperfective - $d \grave{\varepsilon}$ cannot combine with $=b e ̀$, the "past progressive" constructions have somewhat broader aspectual ranges than nonpast progressives, extending to habitual and perhaps even future-in-past contexts.

In the past progressive- 1 , conjugated past clitic $=b e ̀$ - is added to a form of the main verb stem with suffix $-\grave{W}$. The tones are parallel to those of the (nonpast) progressive-1 (§10.2.2.3).
(256) Past progressive-1 (nonmonosyllabic)

|  | óbò 'give' | sémbè 'sweep' | yàbá 'accept' |
| :---: | :---: | :---: | :---: |
| 1 Sg | $o ́ b o ̀-\grave{W}=b e ̀-\eta$ | $s \varepsilon ́ m b \grave{-}-\underset{W}{=}=b \grave{\text { èn }}$ ¢ | yàbó- ${ }_{\text {¢ }}=$ bè $-\grave{j}$ |
| 1Pl | óbò- $\grave{W}=b e ̀$ - $\eta$ | sع́mbò-ẁ = bè-ŋ̀ | yàbó-ẁ $=$ bè-r̀ |
| 2 Sg | óbò- $\grave{W}=b$ è $-\grave{W}$ | sémbj̀-ড̀ $=$ bè- $-\grave{W}$ | yàbó-Ẁ $=$ bè- |
| 2 Pl |  | sع́mbj̀-ฑ̀ = bè-ŋ̀ | yàbó-Ẁ=bè-ŋ̀ |

$$
\begin{aligned}
& \text { óbò- } \grave{W}=b e ̀-\varnothing \\
& \text { sémbj̀-Ẁ = bè- } \varnothing \\
& \text { yàbó- } \text { ฟ̀ }=b \text { è- } \varnothing \\
& \text { 3Pl } \\
& \text { óbò-ฟ̀ = bè-yà } \\
& \text { sع́mbò-Ẁ }=\text { bè-yà } \\
& \text { yàbó-ẁ= bè-yà }
\end{aligned}
$$

Further bisyllabic examples: jìmbó- $\grave{W}=b$ è- $\varnothing$ 'he/she used to pull' ( $<$ jìmbé ), dòngó- $\grave{W}=b$ è- $\varnothing$
 used to return', /LH/-toned yàbìl- $\varepsilon$ :-- $=b e ̀-\grave{\eta} ~ ' . . . ~ r e p l y ' . ~$

Monosyllabic verbs have no initial reduplication. For /LH/-toned monosyllabics like 'drink' and 'beat (tomtom)', the $-\grave{W}$ surfaces with the H-tone element to avoid a tritonal <LHL> syllable.
(257)

Past progressive-1 (monosyllabic)

| 'drink' | 'sow' | 'beat (tomtom)' |
| :--- | :--- | :--- |
| nǒ: | tô: | bă: |


| 1 Sg | $n \grave{-}-{ }^{\prime}=b$ è $-\grave{j}$ | $t o ́-\grave{W}=b \grave{e}-\grave{\eta}$ | $b a ̀-W^{\prime}=b \grave{e}-\grave{j}$ |
| :---: | :---: | :---: | :---: |
| 1 Pl | $n \grave{-}-W^{\prime}=b \grave{e}-\grave{j}$ | $t o ́-\grave{W}=b \grave{e}-\grave{¢}$ | $b a ̀-W^{\prime}=b e ̀-\grave{j}$ |
| 2 Sg | $n \grave{-}-W^{\prime}=b \grave{̀}-\underset{W}{ }$ | $t o ́-\grave{W}=b \bar{e}-\grave{W}$ | $b a ̀-W^{\prime}=b \grave{e}-\grave{W}$ |
| 2 Pl | $n \grave{-}-\underline{W}=b \grave{e}-\grave{j}$ | $t o ́-\grave{W}=b \grave{\text { èn }}$ | $b a ̀-W^{\prime}=b \grave{e}-\grave{j}$ |
| 3 Sg | $n \grave{-}-W^{\prime}=b \grave{\text { el }}$ - $\varnothing$ | $t o ́-\grave{\grave{\prime}}=\mathrm{bè}-\varnothing$ | $b a ̀-W^{\prime}=b$ è- $\varnothing$ |
| 3 Pl | $n \grave{-}-W^{\prime}=$ bè- - à | $t o ́-\grave{\text { 人 }}=$ bè-yà | $b a ̀-W$ = bè-yà |

Further examples are $g \grave{o}-\underline{W}=b \grave{e}-\varnothing$ 'he/she used to go out', d $d \grave{\varepsilon}-\hat{W}=b \grave{e}-\varnothing$ '... insult',
 '... eat (meal)'.

The past progressive negative is expressed by simply changing $=b \grave{e}-$ to its negation $=b e ̀-l e ́-$. The stem has the same form as in the positive counterparts, including its tones. Examples are óbò-Ẁ=bè-lè- 1 ' 'I didn't use to give', bà-Ẃ=bè-lé- $\varnothing$ 'he/she was not beating (tomtoms)', and yàbó- $\grave{\text { o }}=$ bè-lè- $\eta$ 'I didn't use to accept'. The 3 Pl form is $=$ bè-ǹ-ní.

### 10.5.1.2 Past progressive-2 (positive and negative)

The past progressive- 2 is morphologically the past equivalent of the (nonpast) progressive- 2 (§10.2.2.4), with wò 'be' replaced by its regular past counterpart bè 'was'. I write a space between the main verb and bè to be consistent with transcription of the regular progressive construction. However, there would be no objection to transcribing both wì and bè as clitics in this construction.
(258) Past progressive-2 (nonmonosyllabic), 'was ...

|  | $\begin{aligned} & \text { '... giving' } \\ & \text { óbò } \end{aligned}$ | '... sweeping' <br> sémbè | '... accepting' yàbá |
| :---: | :---: | :---: | :---: |
| 1 Sg | óbò bè- $\eta$ | sémbè bè-ŋ̀ | yàbá bè-r̀ |
| 1Pl | óbò bè- $\eta$ | sémbè bè-ŋ̀ | yàbá bè-ŋ̀ |


| 2 Sg | óbò bè-Ẁ | sémbè bè-Ẁ | yàbá bè-Ẁ |
| :---: | :---: | :---: | :---: |
| 2 Pl | óbò bè-ŋ̀ | sémbè bè-ŋ̀ | yàbá bè-ŋ̀ |
| 3 Sg | óbò bè- $\varnothing$ | sémbè bè- $\varnothing$ | yàbá bè- $\varnothing$ |
| 3 Pl | óbò bè-yà | sémbè bè-yà | yàbá bè-yà |

(259) Past progressive-2 (monosyllabic), 'was ...

$$
\begin{array}{lll}
\text { ‘... drinking' } & \text { '... sowing' } & \text { '... beating (tomtom)' } \\
\text { nǒ: } & \text { tô: } & \text { bǎ: }
\end{array}
$$

| 1 Sg | nǒ: bè-ŋ̀ | tô: bè-r̀ | bǎ: bè-ŋ̀ |
| :---: | :---: | :---: | :---: |
| 1Pl | nǒ: bè-ŋ̀ | tô: bè-r̀ | bǎ: bè̀r̀ |
| 2 Sg | nǒ: bè-Ẁ | tô: bè-W | bǎ: bè--ָ̀ |
| 2 Pl | nǒ: bè-ŋ̀ | tô: bè-r̀ | bǎ: bè̀-ŋ̀ |
| 3 Sg | $n \check{\prime}$ : bè- $\varnothing$ | tô: bè- $\varnothing$ | bǎ: bè- $\varnothing$ |
| 3 Pl | nǒ: bè-yà | tô: bè-yà | bǎ: bè-yà |

The negative is bè-lé-, as in sémbè bè-lé- $\varnothing$ 'he/she was not sweeping', yàbá bè-lé- $\varnothing$ 'he/she was not accepting'. Only the clitic is overtly negated. The stem maintains its lexical tone melody.

### 10.5.1.3 Past future (future-in-past, positive and negative)

The simple future form ( $\S 10.2 .2 .6$ ) adds conjugated $=b$ è- to the unconjugated future stem, as in bǒ:lò= bè- $\grave{\prime}$ 'I was going to go', bǒ:lò= bè- $\varnothing$ 'he/she was going to go'.

Future negative -rí likewise adds conjugated $=b e ̀-$, as in $b o ̀:-r^{\prime}=b e ̀=\grave{\eta}$ ' $I$ was not going to go'.

### 10.5.1.4 Past periphrastic future (positive and negative)

The periphrastic future construction with $-d-a ̀: s \grave{\varepsilon}(\S 10.2 .2 .7)$ can be shifted to a past time frame, denoting an event that was planned to happen after the reference time. Conjugated past clitic $=b e ̀$ - is added directly to the auxiliary $s \grave{\varepsilon}$ 'have' (260a). The negative (cf. §10.2.3.7) has bè-lé-, and the main verb is tone-dropped.
a. gò-gó:-d-à:

Augm-go.out-Ipfv-PastAnt
'I was going to go out.'
b. gò:-d-à: ${ }^{\text {L }}$
go.out-Ipfv-PastAnt ${ }^{\mathrm{L}}$
'I was not going to go out.'

$$
s \grave{\varepsilon}=b \grave{e}-\grave{\eta}
$$

$$
\text { have }=\text { Past }-1 \mathrm{SgSbj}
$$

$s \grave{\varepsilon}=b$ è-lè- $\check{\prime}$
have $=$ Past-Neg-1SgSbj
?

### 10.5.1.5 Past immediate future (positive and negative)

For the (nonpast) immediate future, see $\S 10.2 .2 .8$. Replacing wò 'be' by its past counterpart bè we get the sense 'was about to, was on the verge of' (261). Because imperfective -dè is not compatible with the past clitic, the form in -njá: bè- is rather common.

```
лǎ: nà:-njá: bè-r̀
meal eat-ImmFut was-1SgSbj
'I was about to eat.'
```

Paradigms are in (262). Only the pronominal-subject suffix after bè- distinguishes one form from another.
(262) Past immediate future paradigms ('was about to')

| óbò 'give' | sémbè 'sweep' | yàbá 'accept' |
| :---: | :---: | :---: |
| òbò-njá: bè-ŋ | sèmbè-njá: bè-r̀ | yàbà-njá: bè-r̀ |
| òbò-njá: bè-n | sèmbè-njá: bè-r̀ | yàbà-njá: bè-ı̀ |
| òbò-njá: bè-w | sèmbè-njá: bè-w | yàbà-njá: bè-W |
| òbò-njá: bè-1̀ | sèmbè-njá: bè-ŋ̀ | yàbà-njá: bè-ı̀ |
| òbò-njá: bè- $\varnothing$ | $s$ sèmbè-njá: bè- $\varnothing$ | yàbà-njá: bè- $\varnothing$ |
| òbò-njá: bè̀-yà | sèmbè-njá: bè-yà | yàbà-njá: bè-yà |

For the regular (nonpast) immediate future negative with wò-ló 'not be', see $\S 10.2 .3 .8$. The past equivalents have bè-lé, the usual 'was not' form (§11.2.2.2).

```
nǎ: nà:-njá: bè-lè-\etá
meal eat-ImmFut was-Neg-1SgSbj
    'I was not about to eat.'
```


### 10.5.1.6 Past perfect (positive and negative)

The (present) perfect with -a: wò (§10.2.1.4) can be made into a past perfect by replacing wò- 'be (somewhere)' with its regular past counterpart bè-.
(264) mì=ŋ́ kè:lé ób-à: bè- $\varnothing$
$1 \mathrm{Sg}=$ Acc money give-PastAnt was- 3 SgSbj
'He/She had (by then) given me the money.'

In the past perfect negative, conjugated bè without negation is added to the invariant perfective negative form -lú (yèl-l-ú bè 'had not come', etc.). This is arguably segmentable as -l-ú with participial -u (cf. §14.4.3.1, §14.4.1.1), but it could also be taken as a variant of -lí favored by the following labial $b$.

| Wò $=$ 亿́ | $k \varepsilon$ : $1 \varepsilon$ ¢ | òbò-1-ú | -ı̀ |
| :---: | :---: | :---: | :---: |

$2 \mathrm{Sg}=\mathrm{Acc}$ money give-PfvNeg was- $1 \mathrm{Sg} \operatorname{Sbj}$
'I had not (yet) given him/her the money.'

The present perfect variants with 'have' instead of 'be' also have past forms.

$$
\begin{array}{lcl}
m i ̀=y ́ & k \dot{y}: l \bar{\varepsilon} & \text { ób-à: }  \tag{266}\\
1 \mathrm{Sg}=\text { Acc } \quad \text { money } & \text { give-PastAnt } \\
s \varepsilon ́:=b e ̀-~ \\
/ & s \varepsilon ́:=b e ̀-l e ́-\varnothing & \\
\text { have=Past-3SgSbj / =Past-Neg-3SgSbj } \\
\text { 'He/She had / had not (by then) given me the money.' }
\end{array}
$$

### 10.5.1.7 Augmented past counterfactual (positive and negative)

In several Dogon languages, a past perfect is regular in counterfactual conditionals ('if Seydou had come, I'd have given him the money'), in one or both clauses. In DS, a different form with the past clitic occurs in the consequent clause of a counterfactual with past-time reference; for examples see $\S 16.4$.

The positive form has the augment (reduplication for monosyllabics, vowel-lengthening for other stems). It is otherwise segmentally identical to the past progressive- 2 as described in §10.5.1.2 just above. Bisyllabic / $\mathrm{LH} /$-toned stems have a rising tone on the lengthened first syllable, followed by L-tone on the second. The negative counterpart lacks the augment and has an $\{\mathrm{L}\}$-toned stem.

$$
\begin{array}{lcc}
\text { stem } & \text { past counterfactual }  \tag{267}\\
& \text { positive } & \text { negative }
\end{array}
$$

gloss
a. /HL/-toned stems

b. /LH/-toned stems
monosyllabic
dǎ: dà-dá: = bè- dà: = bè-lé- 'kill'
nonmonosyllabic
$b \varepsilon ̀ n d \varepsilon ́ \quad b \varepsilon ̌: n d \grave{\varepsilon}=b e ̀-\quad b \varepsilon ̀ n d \grave{\varepsilon}=b e ̀-l e ́-\quad$ 'hit' yàbìl-દ́:- yă:bil-દ̀: = bè- yàbìl-દ̀:=bè-lé- 'reply'
10.5.1.8 Past experiential perfect (positive and negative)

Like the progressive, the experiential perfect construction with -tíyà wò contains wò- 'be (somewhere)', so it is easily shifted to a reference time in the past by replacing wò- 'be' by its
past counterpart bè-- 'was'. Thus wà:-tíyà wò-ı̀ 'I have (ever/once) seen', wà:-tíyà bè- $\mathfrak{\eta}$ 'I had (ever/once) seen’.

The negative is wà:-tà-lí=bè-ı̀ 'I had never seen'. Here the only negative morpheme is -lí. The stem is $\{\mathrm{L}\}$-toned as in the regular (nonpast) experiential perfect negative.

### 10.5.1.9 Past stative (positive and negative)

Examples of regular and past forms of statives derived from active verbs are in (268). The past stative positive preserves the vowel qualities of the regular stative, but the stem has an \{HL\} overlay and the first vowel is not lengthened. The past stative negative simply adds conjugated $=$ bè- to the regular stative negative.

$$
\text { gloss } \quad \text { stative } \quad \text { past stative }
$$

a. positive

| 'be sitting', | dǎ:yà | dáyà $=$ bè- |
| :--- | :--- | :--- |
| 'be carrying on head' | dŭ:ỳ̀ | dúỳ̀ $=$ bè- |
| 'be squatting | tó:dò | tódò $=$ bè- |

b. negative
'not be sitting' dàyà-lá dàyà-lá=bè-
'not be carrying on head'
$\begin{array}{ll}\text { dùyò-ló } & \text { dùyò-ló = bè- } \\ \text { tòdò-ló } & \text { tòdò-ló = bè- }\end{array}$
'not be squatting'
Underived stative quasi-verbs are exemplified in (269).

| gloss | regular | Past | 3Pl Past |
| :---: | :---: | :---: | :---: |
| positive |  |  |  |
| 'be (somewhere)' | wò | bè- | bè-yà |
| with existential |  | yé bè- | yé bè-yà |
| 'be in' | tò: | tò: $=$ bè- | tò: = bè-yà |
| with existential | yó tò | yó tò = bè- | yó tò = bè-yà |
| 'have' | yí sè | $y i ́ s$ è $=$ bè | $y i ́ s$ se $=$ bè-yà |
| 'want' | nàmà | nàmà $=$ bè- | nàmà $=$ bè-yà |
| 'like, love' | ìbé | ìbò-Ẃ $=$ bè- | ìbò-Ẃ = bè-yà |
| 'know' | ìgù wó | ìgù bé- | ìgù bé-yà |
| negative |  |  |  |
| 'not be' | wò-ló | bè-lé- | bè-ǹ̀-ní |
| 'not be in' | tò:-ló | tó: $=$ bè-lé- | tó: $=$ bè-ǹ̀ní |
| 'not have' | $s$ sèlé | $s \varepsilon$ : $=$ bè-lé- | $s \varepsilon$ : $=$ bè-ǹ-ní |
| 'not want' | nàmà-lá | nàmà = bè-lé- | nàmà = bè-ǹ̀-ní |
| 'not like, love' | ìbè-lé | ìbè-lı́ $=$ bè- | ìbè-lé $=$ bè-yà |
| 'not know' | ìnné | ìnné $=$ bè- | ìnné $=$ bè-yà |

For long-voweled $s \varepsilon ́:=b e ̀-~ i n ~ t h e ~ p a s t ~ p e r f e c t ~ c o n s t r u c t i o n, ~ w i t h o u t ~ e x i s t e n t i a l ~ y i ́, ~ s e e ~$ §10.5.1.6.

### 10.6 Imperatives and hortatives

10.6.1 Imperatives and prohibitives
10.6.1.1 Imperative (unsuffixed singular, plural - $\grave{j}$ )

The imperative singular consists of the presuffixal stem (§10.1.3), without a suffix. It therefore always ends in a non-high vowel. An \{HL\} overlay is found with bimoraic stems $(C v:, C v C v)$, comparable to $\{\mathrm{H}\}$ in several other Dogon languages. Heavier stems keep their lexical tone melody, /HL/ or /LH/./LH/-toned mediopassives confine the $\{\mathrm{HL}\}$ overlay to the long-vowel suffix, as in dànر- $\hat{\varepsilon}$ : 'sit!'. Depending on the stem-final vowel, the vocalic class for perfectives (E-class or I-class), the lexical tone, and the heaviness of the stem, the imperative may be homophonous to the 3 Sg perfective and/or to the chaining form. For example, in (270a) 'eat (meat)' has all three forms homophonous, 'catch' has three distinct forms, 'squeeze' has homophonous imperative and chaining forms, and 'fly away' has homophonous 3 Sg perfective and chaining form. In (270b), 'harvest' has homophonous imperative and 3Sg perfective.
(270) Imperative singular (nonmonosyllabic verbs)
imperative $3 \mathrm{Sg} \operatorname{Pfv}$ chaining gloss
a. lexically /HL/-toned with vacuous $\{\mathrm{HL}\}$ overlay on imperative

E-class, stem ends in $\{\mathrm{e} \varepsilon$ \} témè tém- غ̀ témè 'eat (meat)'
E-class, stem ends in $\left\{\begin{array}{lll}0 & 0\end{array}\right\}$ pórò pór-̇̀ pórò 'squeeze'
súgò súg-è súgò 'go down'
tómbò tómb-è tómbò 'jump'
mediopassive kíl-è: kílì̀̀̀ kíl-ì-ỳ 'fly away' kígùl-è: kígùl-ì-ỳ kígùl-ì-ỳ 'go back'
I-class ágà ág-ì ág-ù 'catch' ábàrà ábìr-ì ábùr-ù 'lay out (mat)'
b. lexically /LH/-toned with $\{\mathrm{HL}\}$ overlay on imperative
bisyllabic, I-class

| bólò | ból-ì | bòl-ú | 'go' |
| :---: | :---: | :---: | :---: |
| yábà | yáb-ì | yàb-ú | 'accept' |
| bisyllabic, E-class |  |  |  |
| dónò | dón-غ̀ | dònó | 'sell' |
| jélè | $j \varepsilon \bar{l}-\bar{\varepsilon}$ | jèlé | 'harvest' |
| yélè | yél-غ̀ | yèlé | 'come' |
| dónjò | dónj-غ̀ | dònjó | 'butt with head' |
| trisyllabic [none] |  |  |  |

```
c. bisyllabic /LH/-toned with initial L retained in imperative
bisyllabic (mediopassives)
\begin{tabular}{|c|c|c|c|}
\hline dàņ-Eิ: & dánn-ì-ỳ & dànp-í-y & 'sit down' \\
\hline dùy dê \(^{\text {a }}\) & dúyy-ì-ỳ & dùyy-í-y & 'carry on head' \\
\hline ìmn- \(\hat{\varepsilon}\) : & ínn-ì- & ìnn-1́-y & 'stand; stop' \\
\hline ùnj-ê: & únj-ì-ỳ & ùnj-í-ỳ & 'lie down' \\
\hline wèyy- \(\hat{\varepsilon}\) : & wéyy-ì-ỳ & wèyy-í-ỳ & 'winnow in wind' \\
\hline \multicolumn{4}{|l|}{bisyllabic (first syllable heavy)} \\
\hline gò:-ndó & gó:-nd-ì & gò:-nd-ú & 'take out' \\
\hline
\end{tabular}
```

d. trisyllabic /LH/-toned, melody retained in imperative trisyllabic
gòndò-ró góndù-r-ì gòndù-r-ú 'hang (sth) up'
trisyllabic (mediopassives)
mà:ndìg- $\hat{\varepsilon}$ : má:ndìg-ì-ỳ mà:ndìg-í-ỳ 'think'
yàbìl-̂̂: yábìl-ì-ỳ yàbìl-í-ỳ 'reply’

For plural addressee, imperative plural suffix - ${ }^{y} 1 \mathrm{y}$ is added to the singular imperative stem. This is the same suffix used in 2Pl-subject indicative verbs. (By contrast, several Dogon languages have a special plural-addressee suffix used only with imperatives and other deontics.) As usual, the palatal onset is easily audible only after a back rounded vowel.

|  | gloss | Sg Imprt | Pl Imprt |
| :---: | :---: | :---: | :---: |
| a. | 'go down' | súgò | súgò- - ${ }_{\text {¢ }}$ ¢ |
| b. | 'go' | bólò | bólò- ${ }^{\text {Y ¢ ¢ }}$ |
| c. | 'sit' <br> 'stand; stop' <br> 'reply' | dànn- $\hat{\varepsilon}$ : <br> ìnn- $\hat{\varepsilon}$ : <br> yàbìl- $\hat{\varepsilon}$ : |  |

Imperatives of monosyllabic verbs are in (272).
gloss $\quad$ Sg Imprt $\quad$ Pl Imprt $\quad$ stem
a. /HL/-toned verbs
'send' tê: té:-1̀̀ tê:
'shave' kâ: ká:-ŋ̀ kâ:
b. /LH/-toned verbs

'kill' dâ: dá:-ŋ̀ dǎ:

Transitive verbs take accusative objects under the same conditions in indicative clauses (273a) and imperatives (273b).
(273)
a. $m i ̀=\grave{1} \quad b e ̀ n d-\grave{\varepsilon}-\varnothing$
$1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit-Pfv-3SgSbj
'He/She hit me.'
b. $m i ̀=$ 亿́ béndè
$1 \mathrm{Sg}=\mathrm{Acc}$ hit.Imprt
'Hit-2Sg me!'
In (273), incidentally, we see that the $\{\mathrm{HL}\}$ tone overlay on the imperative is stable, while the \{HL\} that occurs on 3 Sg perfectives in isolation is usually dropped in the presence of preceding constituents.

Imperative verb forms cannot be conjoined ('come and get it!') or disjoined ('sink or swim!'). A final imperative follows a pseudo-conditional clause (§15.2.2.5) to express an action sequence.

| $n-\grave{\varepsilon}-\dot{y}=y \grave{y}$ | bólò |
| :--- | :--- |
| eat-Pfv-2SgSbj=if |  |
| 'Eat and (then) go!' | go.Imprt |

For embedded imperatives (jussive clauses), see §17.1.4.

### 10.6.1.2 hón $\rightarrow \sim h \hat{\delta}^{n} \rightarrow$ 'here, take this!'

This is an irregular imperative-only form that can be used instead of yábà 'receive!' or 'accept!' when handing something to someone. It is not a normal Cv: verb stem, as can be seen by the prolongation of the level high-toned vowel (a true $C v$ : verb has a falling-toned imperative $C \hat{v}$.). It has no prohibitive or hortative forms. However, $h \delta^{n} \rightarrow$ is an imperative, and can take 2 Pl (i.e plural-addressee) - $\mathfrak{j}$. This form is pronounced $h \sigma^{n} \rightarrow-\bar{j}$.

A variant $h \hat{\theta}^{n} \rightarrow$ with a heavily nasalized mid-height front rounded vowel, definitely not part of the regular phonemic system, is also in use. The lips are almost closed during the syllabic nucleus, so most of the air emerges through the nose. The plural-addressee form is hб́: ${ }^{n}-\dot{\eta}$ with a final nasal consonant that can barely be distinguished from the heavily nasalized vowel.

### 10.6.1.3 Prohibitive (-w or -năw, plural -gí-j̀ or -nàw-gì-ŋ́)

The simple form of the prohibitive (negative imperative) has an $\{\mathrm{L}\}$ tone overlay on the stem, followed by H-toned suffix -ẃ for singular addressee and suffix complex -gí-ì for plural addressee. One could also posit a $\{\mathrm{LH}\}$ overlay that includes the prohibitive sufix. Although -w looks like the 2 Sg subject suffix $-\grave{W}$ which occurs on indicative verbs, the H -tone and the morphological context suggest that $-\bar{w}$ is derived from the $\mathrm{F}_{\mathrm{g}}$ in -gi -.

$$
\begin{equation*}
\text { gloss } \quad \text { Sg Prohib } \quad \text { Pl Prohib } \tag{275}
\end{equation*}
$$

a. /HL/-toned
'shave' kà-ẃ kà:-gí-ì
'go down'
sùgò-ẃ
sùgò-gí-ì
b. /LH/-toned

| 'go out' | gò-Ẃ | gò:-gí-ŋ̀ |
| :---: | :---: | :---: |
| 'go' | bòlò-Ẃ | bòlò-gí-ர̀ |
| 'come' | yèlè-Ẃ | yèlè-gí-ı̀ |

c. mediopassive, /HL/-toned
'stand; stop' ìnn-غ̀:-Ẃ ìnp-غ̀:-gí-ŋ̀
d. mediopassive, /LH/-toned
'sit' dànp-è:-Ẃ dànn-غ̀:-gí-ŋ̀ 'reply' yàbìl-غ̀:-Ẃ yàbìl-غ̀:-gí-1̀
e. 'bring' and 'convey'
‘bring' jé:lغ̀-Ẃ jé:lıे-gí-ŋ̀ 'convey' jé-bòlò-Ẃ jé-bòlò-gí-!̀

There is an alternative prohibitive form with singular -nǎw and plural -nàw-gì-ŋ́. These suffixes are added to the chaining form of the verb, suggesting that the construction may have originally had a chained auxiliary verb *nǎ: , possibly identifiable with nǎ: 'forget'.
gloss $\quad$ Sg Prohib Pl Prohib
a. /HL/-toned
'shave' ká-ý-nǎw ká-ý-nàw-gì-ŋ́
'eat meal jé:-nǎw j $\varepsilon$ :-nàw-gì-ŋ́
'go down' súgò-nǎw súgò-nàw-gì-ŋ́
b. /LH/-toned
'go out' gò-ý-nǎw gò-ý-nàw-gì-1́
'go' bòl-ú-nǎw bòl-ú-nàw-gì-ń
'come' yèlé-nǎw yèlé-nàw-gì-ท́
c. mediopassive, /HL/-toned
'go back' kígùl-í:-nǎw kígùl-í:-nàw-gì-ŋ́
d. mediopassive, /LH/-toned
'sit' dànn-í:-nǎW dànn-í:-nàw-gì-ŋ́
'stand; stop' ìnn-í:-nǎw ìnp-í:-nàw-gì-ŋ́
'reply’ yàbìl-í:-nǎw yàbìl-í:-nàw-gì-ŋ́
$C v$ : verbs can show their presuffixal vocalism as an alternative to the chaining form, thus gǒ:-nǎw alongside gò-ý-nǎw.

The final H-tone on -nǎw and $-g \grave{-} \grave{\prime}$ is most easily heard before quotative particle wà (§17.1.3.1).

### 10.6.2 Hortatives

### 10.6.2.1 Hortative (-mっ, plural -mv-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 -mo with optional assimilated variants -me and -ma agreeing in height and frontness (but not ATR) with the adjacent stem vowel. /HL/-toned verbs have a falling tone pattern (H.L.L for trisyllabics). /LH/-toned verbs have the H-tone on the suffix. For multiple addressee, the L-toned 2 Pl suffix -1 ) is added (as in imperatives and prohibitives).
(277) stem hortative hortative Pl gloss 'let's...'
a. /HL/-toned stem
kígùl-è̀:- kígùl-è̀:-mò kígùl-è:-mò- $\eta$ '... go back' ábàrà ábàrà-mò ábàrà-mò-ŋ̀ '... lay out (mat)'
b. /LH/-toned stem
yàbìl-દ:- yàbìl-è:-mó yàbìl-દ̀:-mó-ŋ̀ ‘... reply’
bòló bòlò-mó bòlò-mó-ŋ̀ ‘... go'
jìmbé jìmbè-mó jìmbè-mó-ŋ̀ '... pull'
c. monosyllabics

| $\begin{aligned} & \text { /HL/-toned } \\ & \text { jâ: } \end{aligned}$ | já:-mò | „á:-mò-ı̀ | '... eat (meal)' |
| :---: | :---: | :---: | :---: |
| /LH/-toned |  |  |  |
| gǒ: | gò:-mó | gò:-mó-ŋ̀ | '... go out' |

Interestingly, the hortative has the same form as the imperative of a causative with $-m v$ suffix (§9.2.1).

### 10.6.2.2 Hortative negative (-ǹnì )

A form functioning as hortative negative ('let's not eat!' or perhaps 'we must not eat!') is formed with suffix -ǹnì. No addressee-number distinction could be elicited. For /HL/-toned verbs the tones are like those of the hortative (positive). For /LH/-toned verbs the H -tone appears on the stem-final syllable (including any derivational suffixes).
stem hortative negative gloss 'let's not...'
a. /HL/-toned stem
kígùl-è:- kígùl-è:-ǹnì '...go back'
ábàrà ábàrà-ǹnì '...lay out (mat)'
b. /LH/-toned stem
yàbìl-É:- yàbìl-É:-ǹnì '...reply’
bòló bòló-ǹnì ‘...go’
jìmbé jìmbé-ìnì '...pull'
c. monosyllabics

| /HL/-toned <br> nâ: <br> /LH/-toned <br> gǒ: | ná:-ǹnì | '...eat (meal)' |
| :---: | :---: | :---: |
|  | gǒ:-ńnì | '...go out' |

10.6.3 Non-second person imperatives and prohibitives
10.6.3.1 Positive with third-person agent

Wishes and imprecations, for example with 'God' as agent, are expressed with the imperative verb form. àmbá 'God' appears in L-toned form in such imprecations. (279a) is a standard blessing for someone who is about to go away on a trip ('cause to arrive' version) or who is about to come back ('bring' version). More earthly wishes and indirect commands take other third-party subjects (279b).

> a. àmbà ù=1́ jân dò:-ndó/jè:lé
> God $2 \mathrm{Sg}=\mathrm{Acc}$ in.peace arrive-Caus.Imprt/bring.Imprt
> 'May God take you-Sg there/bring you-Sg (back) without trouble!'
b. sé:dù bólò

Seydou go.Imprt
'May Seydou go!’, or '(Tell) Seydou to go!'

### 10.6.3.2 Prohibitive with third-person agent

The prohibitive in $-\underset{W}{ }$ or plural-addressee -gí-ì (§10.6.1.3) can be used in third-party subject clauses, expressing a wish or indirect command that an action not be performed.

```
úlù-\età bòlò-gí-!̀
child-Pl go-Prohib-PlAddr
```

'Let/May the children not go (away)!' or '(Tell) the children not to go!'

### 10.6.3.3 First person agent

The agent (indirect addressee) of a command may also be first person, but this requires a different construction. A first-person agent occurs when the speaker seeks clarification or confirmation of a wish or command from someone else. The first person pronoun occurs in a quotative subject phrase ( $\S 17.1 .3 .2$ ), showing that the whole construction is syntactically a quotative complement. The verb bears the polar interrogative final L-tone. In (281), this combines with a final H -tone to create a final-syllable $<\mathrm{HL}>$ that induces lengthening of the vowel by Contour-Tone Mora-Addition (§3.7.4.1).

```
má-à / \varepsilońmmà-à tê: jè:l\hat{\varepsilon}:
1Sg-QuotSbj/1Pl-QuotSbj tea bring.Imprt.Q
`(Did you say/Do you want) for me/us to bring tea?' (< j\tilde{:lle})
```

The negative counterpart uses the prohibitive verb form, again with polar interrogative tone (final L-tone). For the tones of $j \hat{\varepsilon}: l \bar{\varepsilon}-\bar{W}$ from noninterrogative $j \dot{\varepsilon}: l \grave{\varepsilon}-\bar{W}$, see Leftward TonePushing (§3.7.4.5).
(282) má-à tê: jê:lé- $\grave{W}$

1Sg-QuotSbj tea bring-Prohib.Q
'(Did you say/Do you want) for me not to bring tea?' (< jé:lغे-w')

## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

The basic clausal order is $\mathrm{S}-\mathrm{Adv}-\mathrm{O}-\mathrm{V}-\mathrm{X}$, where X is limited to clause-final emphatics and various subordinators. The unmarked position for setting adverbials is post-subject, but they also lend themselves to topicalization and can then be clause-initial (or preclausal). Other constituents, not shown, appear near the object and in any case before the verb. See $\S 2.5$ for examples.

### 11.1.1 Subjects

### 11.1.1.1 Subjects in indicative main clauses

In the great majority of clauses there is exactly one subject NP (DP). Tests for subjecthood in main clauses are summarized in (283).
(283) a. clause-initial position, excluding topicalized constituents;
b. no case-marker or postposition;
c. subject agreement on predicate in main clauses.

### 11.1.1.2 Subjects in relative and complement clauses

In subordinated clauses, subjects are distinguished from other grammatical relations by a different set of features (284).
(284) a. preverbal proclitic subject pronoun in relative clauses;
b. relevant to "same-subject" subordinators;
c. relevant to reflexive and reciprocal use of mediopassive derivative;
d. quotative-subject phrase in quoted clauses.

### 11.1.1.3 Subjects of imperative and hortative verbs

Since there is no reflexive object form, we cannot determine whether imperative and hortative objects are capable of binding reflexives (the usual Dogon pattern, clear in Tomo Kan, Togo Kan, and Toro Tegu, is that they cannot).

The morphology of imperatives and hortatives is compatible with the view that both of these categories recognize "addressee" (as opposed to "subject"), and mark addressee number. Thus imperative bólò 'go!-2Sg', bólò-ŋ̀ 'go!-2 Pl ', and hortative bòlò-mó 'let's- 2 Sg go!’, bòlò-mó- $\grave{\eta}$ 'let's- 2 Pl go!'. However, in DS the same suffix is used for plural addressee in imperatives/hortatives as for 2 Pl subject in indicatives.

A same-subject subordinated clause with -a:-nì can precede an imperative (285a) or a hortative (285b), indicating that these deontic clauses have covert subjects. In the hortative case, the subject is first plural.
a. bòl-á:-nì
yélè
go-Ant-Nonpast come.Imprt
'Go and come-2Sg back!'
b. bòl-á:-nì yèlè-mó
go-Ant-Nonpast come-Hort
'Let's go and come-2Sg back!'

For quoted imperatives and hortatives, see §17.1.4.1-2.

### 11.1.1.4 Pseudo-subjects of lexicalized subject-verb combinations

A number of more or less idiomatic subject-verb combinations denote transitions among times of day or seasons, or denote metereology (rain, lightning). Transitions between day and night have can be phrased with năp 'sun' as subject plus either 'rise' or 'set' (286a). Alternatively, a noun bâ: as subject, attested only in day/night and seasonal transitiondenoting expressions, is combined with the perfective of 'spend the day' or 'spend the night' in retrospective sense (286b). For the major seasons such as gìnغ̀-gă: 'rainy season', the verb dǒ: in its strict sense 'arrive at the gate, approach (destination)' is used in the sense 'show signs of being about to begin' (local French s'annoncer). The verb gàlá 'pass (by)' means 'come to an end, be over' with season terms. Excluding semantically unrelated homonyms, the verb mě: is used only with àná 'rain' as subject; likewise the verb $d \check{\varepsilon}$ : is limited to 'night fall' (286d).
a. năy númb-è- $\varnothing$ 'sun has set' (i.e., night has fallen)
năy yím-è- $\varnothing \quad$ 'sun has died' (twilight)
năy túmb-è- $\varnothing \quad$ 'sun has risen' (i.e. day has broken)
b. bâ: dèn-غ̀- $\varnothing$ 'day is finished' (at twilight), lit. "has spent the day"
bâ: yદ́-દे- $\varnothing$ 'day has broken' (at dawn or first light), lit. "has spent the night" (citation form of verb is yâ:)
bâ: gò-è- $\varnothing \quad$ 'harvest season is done', lit. "rainy weather has exited"
c. gìnè-gă: dò-غ̀- $\varnothing \quad$ 'rainy season has approached' (before rains)
gìnè-gă: súg-è- $\varnothing \quad$ 'rainy season has come down (=begun)'
gìnè-gă: gál-ì- $\varnothing \quad$ 'rainy season has passed'
d. àná mé- $\grave{-}-\varnothing \quad$ 'rain fell; it rained'
diggé dé-è- $\varnothing \quad$ 'night fell'
e. [àná ${ }^{\text {L }}$ gìrù génd-ì- $\varnothing$ 'lightning flashed’ (with gèndé 'look at')

Several of the phrases in (286a-b) have corresponding compound nominalizations with nominalizing suffix $-1 v$ (variable vowel quality) or -rup, see §5.1.3.2.

The nouns preceding the verbs in (286a-d) are what I call pseudo-subjects, i.e. lowreferentiality subjects that lack full subject properties. The pseudo-subject is the logical subject of the verb (e.g. 'sun' in 'sun fall'), but it remains close to the verb, unlike true subjects. A setting adverb like 'yesterday' or 'now' frequently follows a true subject like 'Seydou' in (287a), but my assistant did not allow the adverb to intervene between a pseudosubject and its verb (287b-c).

| a. | sé:dù $\quad$ yâ: | wálù | kán-à: | bél-غ̀- $\varnothing$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | S | yesterday | work(n) | do-PastAnt | get-Pfv-3SgSbj |
|  | 'Seydou finished the work yesterday.' |  |  |  |  |

b. yâ: àná mè-غ̀- $\varnothing$
yesterday rain(n) rain.fall-Pfv-3SgSbj
'It rained yesterday.'
c. kànď̌w năy númb-è- $\varnothing$
now sun fall-Pfv-3SgSbj
'The sun has set now.'
There are also some lexicalized expressions for emotional or somatic state that include a pseudo-subject alongside a true subject (X).

$$
\begin{array}{ll}
X \text { kíndè párà-mò } & \text { 'X get angry', cf. párà-mò 'upset (sth)' }  \tag{288}\\
X \text { kíndè dè:lè-mó } & \text { 'X cool off, calm down', cf. dè:lè-mó 'calm (sth)' }
\end{array}
$$

The ' X get angry' construction has a true subject X that is independent of the (unpossessed) pseudo-subject kíndè 'liver/heart'. Specifically, 'liver/heart' is not morphosyntactically possessed by X, and the two may be separated by an adverb (289a). Verb agreement is with the true subject (289b).

$$
\begin{array}{lllll}
\text { a. } & \text { sé: } \text { dù } & \text { yâ: } & \text { kíndè } & \text { párù-m- }-\grave{-}-\varnothing  \tag{289}\\
\text { S } & \text { yesterday } & \text { liver/heart } & \text { be.upset-Caus-Pfv- } 3 \text { SgSbj } \\
& \text { 'Seydou got angry yesterday.' } &
\end{array}
$$

b. kíndè pàrù-m-ù-ı́
liver/heart be.upset-Caus-Pfv-1SgSbj
'I got angry.'
' X get angry' is structured differently from superficially similar constructions describing certain other emotional states. Here X is the possessor of the tone-dropped noun 'liver/heart' (290a) or 'body' (290b), or a postposed pronominal possessor (290c). Verb agreement is with the body-part term, which is always singular. Adverbs may not intervene between X and the possessed body part.
a. yà
[sé:dù $\quad{ }^{\mathrm{L}}$ kìndè] $\quad$ Ellù-lè $=b e ̀-\varnothing$

'Seydou was happy yesterday.'
$\begin{array}{lllll}\text { b. } & \text { kàndǒW } & \text { [sé:dù } & { }^{\mathrm{L}} \text { gòdò=ò:] } & \text { yím-è- } \varnothing \\ & \text { now } & {[\mathrm{S}} & \left.{ }^{\mathrm{L}} \mathrm{body}=\mathrm{Def}\right] & \\ \text { die-Pfv- } 3 S g S b j\end{array}$
'Seydou is sad (heart-broken) now.'
c. [gòdú ì-mò] yím-è- $\varnothing$
[body 1Sg-Poss] die-Pfv-3SgSbj
'I am sad (heart-broken).'
d. [[[sé:dù lè] [ámàdù lè $]] \quad{ }^{\mathrm{L}}$ gòdj̀=ò] yím-è- $\varnothing$
[[[S and] [A and]] ${ }^{\text {L }}$ body=Def] die-Pfv-3SgSbj
'Seydou and Amadou are sad (heart-broken).'

Even 'X get angry' can optionally be phrased in this way, in which case the verb is párà 'be upset' rather than its causative párà-mò 'cause to be upset' (291).

| . | [sé:dù | ${ }^{\text {L }}$ kìndè] | pár |
| :---: | :---: | :---: | :---: |
| yesterday |  | ${ }^{\text {L }}$ liver/heart] | be.upset-Pfv-3SgSbj |
| 'Seydou got angry yesterday.' |  |  |  |

'X have a bloody nose' also requires the possessive construction, with 'nose' as the subject. Here, however, there is also a second noun, nî: 'blood', functioning as pseudo-subject. It is the logical subject of 'go out' but it remains close to the verb. Invariant 3 Sg agreement on the verb could theoretically be indexed to either 'nose' or 'blood' ('nose' is more likely).
a. [sé:dù ${ }^{\mathrm{L}}$ kìnò $\left.=\grave{j}\right]$ nî: gò:-Ẃ wò- $\varnothing$
[S ${ }^{\text {L nose=Def] blood go.out-Ipfv be-3SgSbj }}$
'Seydou has a bloody nose.'
b. yâ: [sé:dù ${ }^{\mathrm{L}}$ kìǹ̀ = ̀̀] nî: gò-c̀- $\varnothing$
yesterday [S ${ }^{\text {L nose }}=$ Def] blood go.out-Pfv-3SgSbj
'Seydou had a bloody nose yesterday.'
c. [kínù m̀-mò] nî: gò-è- $\varnothing$
[nose 1 Sg-Poss] blood go.out-Pfv-3SgSbj
'I had a bloody nose.'
' X sweat (perspire)' has a true NP subject and a pseudo-subject sònòndî: 'sweat (n)'. The latter selects the verb gǒ: 'go/come out', reasonably enough, but the true subject X determines agreement.
a. úlù- $\eta$ sònòndî: gó-ý-yà
child-Pl sweat(n) go.out-Pfv-3PlSbj
'The children sweated.'

```
b. sònòndî: gò-è-ń
sweat(n) go.out-Pfv-1SgSbj
```

'I sweated.'

Constructions like this with gǒ: 'exit, go/come out' and both a true subject and a pseudosubject also denote certain other emissions or secretions as in '(e.g. tea) foam, become frothy, emit froth' (294a), or surface disturbances as in 'become punctured' (294b). In each case, the two NPs are tonally independent (i.e. not compounded or linked as possessor-possessed).

```
a. tê: yúbòlò gò-è- \(\varnothing\)
tea froth(n) go.out-Pfv-3SgSbj
'(The) tea is foaming (frothy).'
```

b. [àrgě: m̀-mう̀] bòndó gò-è- $\varnothing$
[boubou 1Sg-Poss] hole go.out-Pfv-3SgSbj
'My boubou (garment) has got a hole in (lit. "coming out of") it.'
See also the variant 'be hungry' construction (318a-b) in §11.2.1.3 below.

### 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 'rooster' in (295).

| Sé:dù | yâ: | [ènjè ${ }^{\text {L }}$ | àná] | c̀b- $\grave{c}-\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| S | yesterday | [chicken | male] | buy-Pfv-3SgSbj |
| 'Seydou bought a rooster yesterday.' |  |  |  |  |

There is a postposition-like NP-final accusative clitic $=\eta$ (§6.7). It is obligatory in object function with human personal pronouns, e.g. $m i ̀=y$ ' $m$ '. It is common on definite nonpronominal NPs denoting humans and to some extent higher animals such as sheep. It does not normally occur with inanimates like 'stone'.

$$
\begin{align*}
& i ́:=g \grave{o}=\grave{j} / \text { pédù }=g \grave{o}=\grave{j} / \text { tìbú }=g \grave{\jmath} \quad \text { bènd- } \grave{\varepsilon}-1 ́  \tag{296}\\
& \text { child }=\text { Def }=\text { Acc } / \text { sheep }=\text { Def }=\text { Acc } / \text { stone }=\text { Def } \quad \text { hit-Pfv- } 1 \mathrm{SgSbj} \\
& \text { 'I hit the child/sheep/stone.' } \\
& \text { bènd-è- } \check{\prime} \\
& \text { hit-Pfv-1SgSbj }
\end{align*}
$$

The frequency of the accusative declines when the nonpronominal NP is indefinite (and nonspecific), though it is still possible to use it.

```
î: / í:= !
bènd-\varepsiloǹ-\́
child / child=Acc
hit-Pfv-1SgSbj
```

'I hit a child.'

Perception verbs are treated like ordinary transitives and may take accusative objects, though my impression is that the frequency of the accusative is less than that with impact transitives.

```
\hat{1}:=g\grave{̀(=ỳ)}
w\varepsiloǹ-\varepsiloǹ-\etá
child=}=\operatorname{Def(=Acc)
see-Pfv-1SgSbj
'I saw the child.'
```

Many morphologically mediopassive verbs (§9.4) are transitive and can take accusative objects. All verbs of carrying/holding are of this type (299).
$\hat{\imath}:=g \grave{o}=\grave{\eta} \quad$ bòmb $-\grave{1}-\bar{y}-\grave{\jmath}$
child $=$ Def $=$ Acc carry.on.back-MP-Pfv-1SgSbj
'I carried the child on my back.'
Many verbs are associated with low-referentiality nouns, including cognate nominals, that might be described as pro forma objects. See $\S 11.1 .2 .5-6$ below. The existence of such objects makes the intransitive/transitive distinction somewhat blurry.

### 11.1.2.2 kán(à) 'do' in collocations

kán(à) 'do' combines with a number of nouns to form inflectable VPs. A few examples are in (300).
(300) collocation gloss
bàrú kán(à) 'hold a meeting'
wálù kán(à) 'work, perform work'
dànná kán(à) 'hunt, go hunting'
dúwà:w kán(à) 'give a blessing'
wáyrè kán(à) '(be/do) for a fairly long time'
This construction is common with new loanwords, as an alternative to directly borrowing an inflectable verb from another language, which would often be difficult given the tight constraints on the vocalism of DS verb stems. In (300), for example, dúwà:w is ultimately from Arabic and wáyrè is from Fulfulde.
kán(à) is also the normal way to convert those expressive adverbials (§8.4.7) that denote more or less volitional actions, as opposed to states or involuntary events, into predicates. An example is the EA pírù-pìrù 'flapping wings', which is verbalized as pírù-pìrù kán(à) '(bird) flap wings'.

### 11.1.2.3 gě: 'say' in collocations

$g \varepsilon ̌$ : 'say' can combine with (semi-)onomatopoeic forms to form an inflectable VP.

| nominal + verb | gloss | comment |
| :---: | :---: | :---: |
| WôW-wôW gě: | '(dog) bark' |  |
| $g e ̂ W ~ g \varepsilon ̌: ~$ | 'belch' |  |
| [kàn-kàn]-[bèlè-bélè] gě: | 'hiccup' |  |
| sû:ך gě: | 'snort' | with snuff tobacco |

### 11.1.2.4 Lexicalized low-referentiality objects

Some common noncognate verb-object collocations where the object has only limited independent referentiality are in (302). sâ: (302a) is unattested outside of these collocations, and làlá (302b) corresponds only to a semantically unrelated homonym.
collocation gloss includes:
a. with sâ:

$$
\begin{array}{ll}
\text { ìdùgê: sâ: } & \text { '(emit a) sneeze' } \\
\text { ǹjàrî: sâ: } & \text { 'urinate' }
\end{array}
$$

b. with làlá (as simple verb: 'give birth to')
sínjè làlá 'converse'
kàlù-kàlú làlá 'tell a lie'
c. other
á:dù jǎ: 'make a promise' jǎ: 'take (sb)'
dî: ǹd-દ́:- 'bathe (oneself)' dî: 'water'
kòmbó tâ: 'wage war' tâ: 'shoot'
jî:n pídè '(let out a) fart' pídè 'spray (liquid)'
gìr-î: yéyy-è: 'sleep' cf. gìrú 'eye'
tìnú dènné 'go get firewood' dènné 'look for'
jị̂ kómò 'groan’ kómò '(animal) cry'
dònjî: tú:lò 'spit' dònjî: 'saliva'
tálù dù:ndó 'lay egg' dù:ndó 'put down, set'
tínè bèlé 'make a profit' bèlé 'get'
tùbó kúndò 'ask a question' kúndò 'put (in)'
górò dònjó 'snore' cf. dònjó 'butt (with head)'
yà:lè:nú bòló 'go for a walk' bòló 'go'
tègúrù bǎ: 'applaud, clap' bǎ: 'beat (tomtom)'

### 11.1.2.5 Forms of cognate nominals associated with verbs

Array (303) gives a generous sample of collocations involving cognate nominals and verbs. The array is organized around the form of the nominal. The nominal is essentially obligatory in some cases but not in others. For example, 'eat (a meal)' and 'forge (tools)' can take more specific objects as alternatives to the default cognate nominal, while 'weep' and 'defecate' are invariant collocations.

Cognate nominals
nominal + verb gloss
a. nominal and verb segmentally identical
$g \check{0}: g \check{\partial}: \quad$ 'dance (a dance)'
nă: nâ: 'eat a meal'
yǎ: yǎ: 'weep'

| dě: dě: | 'make an insult' |
| :--- | :--- |
| dùbó dùbó | 'forge (tools)' |
| núnò nùnó | 'sing (a song)' |
| bédè bèdé | 'defecate' |
| sé:rè sé:rè | 'ululate (women's cry of joy)' |
| ségèlè ségèlè | 'tell a story' |

b. nominal with final $-u$, including zero $(<*-u)$ after nasal
falling tone pattern
mómù mòmó
dúgù dùgó 'practice sorcery'
jádù jàdá 'do a calculation
sárù sárà 'make a payment; ante up'
sénù sénè 'pray, perform a prayer'
gúndù gùndó 'chew cud'
jángù jàngá 'go to school, study'
nínnù nìnné 'breathe'
tómbù tómbò 'take a jump, leap'
tó:rù tó:rò 'give out an order or authorization'
pó:-ndù pó:-ndò 'greet, say hello'
yàyà-yérù yèré 'dream, have a dream'
falling tone pattern, plus ATR change versus verb
dóbù dòbó 'tell a joke'
dónù dònó 'make a sale'
ébù ébè 'make a purchase'
gên gèクモ́ 'beg, go around begging'
jébù jèbé 'issue a curse (malediction)'
jóbù jòbó 'run a race'
jồ jònó 'provide medical care'
falling tone pattern, plus vowel chift to a in verb
pónjù pánjà 'strip bark off (tree)'
rising tone pattern, product-of-action nominal, see §4.2.2.3
tòn-ú tóỳ̀ 'write, do some writing'
mà:ndùg-ú mà:ndùg-દ́:- 'think (a thought)'
d. partial phonological/morphological identity
verb has extra derivational suffix
mồ mò:-ndó 'laugh'
jâw jàgùl-ध:- 'squabble, quarrel' (with $W \sim g$ )
nominal is iterated
kèdè-kédè kédè 'have fun'
c. nominal with final -ê: , - $\hat{\varepsilon}$ : , $-\hat{1}:$, $-\hat{y}$ (cf. §4.2.3, §5.1.6)
final -ê:
bènd-ê: bènd-દ́:- 'get into a fistfight'
dè:l-ê: dè:lé 'have a rest'
kòm-ê: kóm̀̀ 'shout, give out a shout'
wèd-ê: wèdé 'vomit'
yùg-ê: yùgó 'count (recite numbers)'

```
    kàdìg-ê: kádìg-è:- 'clear one's throat'
    kòdùg-ê: kódùg-è:- 'cough, emit a cough'
final \(-\hat{\varepsilon}\) :
    ànìn- \(\mathrm{\varepsilon}\) : áyìn- \(\mathrm{\varepsilon}:-\quad\) 'yawn'
final -î:
    kì:g-î: kí:g-è:- 'stutter, stammer'
    sì:d-î: sí:d-è:- 'draw a line'
    final -ý
    tǒy tô: 'plant (crops), do the sowing'
    sùdè-ý súd-è:- 'whistle’
```

e. other
yy before mediopassive after monosyllabic stem (§3.5.3.4, §3.5.4.6)
sǒ: sóyy-غ̀:- 'speak, say some words’

### 11.1.2.6 Grammatical status of cognate nominal

In some cases, like jôn jònó 'provide medical care', the cognate nominal is rather pro forma. In others, like núŋò nùŋó 'sing (a song)' 'sing (a song)', the nominal can either be pro forma (generic) or it can denote an individual instance. In the latter case, it can be definite, possessed, quantified over, etc.

### 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. Syntactically they are single-word adverbs that do not generally combine with other elements to form multi-word phrases such as NP or PP. However, they can be made predicative by adding a conjugated auxiliary 'be' or 'become'. For stative 'be EA', the auxiliary is wò 'be' (negative wò-ló). For inchoative 'become EA', the auxiliary is bě:, which elsewhere means 'remain'. The use of bě: as inchoative auxiliary distinguishes EAs from adjectives, and that of wò as stative auxiliary distinguishes EAs from NPs. For examples of the full set of predicative forms, using tě $\boldsymbol{\rightarrow} \rightarrow$ 'straight', see §8.4.7.2.

For EAs denoting more or less voluntary actions, kán(à) 'do' is the auxiliary (§11.1.2.2). For sounds such as onomatopoeias, it is $g \varepsilon ̌$ : 'say' (§11.1.2.3).

### 11.1.3.2 Spatial adverbial phrases with position and motion verbs

Because directionality (ablative 'from', allative 'to') is expressed by verbs ('come', 'go', 'bring', 'take', 'exit/leave', 'arrive'), verbs of motion and of putting combine with the same locational expressions (such as locative PPs) as verbs of location: 'be (somewhere)', 'be in (sth)' (304a). With place names like 'Bamako', the locative postposition is optionally omitted (304b).
a. úlù- $\grave{j}=g \grave{~} \quad$ [ àndá $\grave{m}-m \grave{=}=\grave{j}] \quad$ rà: $]$
child- $\mathrm{Pl}=$ Def $\quad[[$ village $1 \mathrm{Sg}-$ Poss=Def] $\quad$ Loc]
bòl-ì-yà / wò-yyà
go-Pfv-3P1Sbj / be-3P1Sbj
'The children went to/are at (=in) my village.'
b. bàmàkó (rà:) bòl-ì-yà / wò-yyà

B (Loc) go-Pfv-3PlSbj / be-3PlSbj
'They went to/are at (=in) Bamako (city).'
c. [[ǒ: rà:] gù-â:] yèl-ì-yà
[[well Loc] exit(v)-PastAnt] come-Pfv-3P1Sbj
'They came (here) from the well.'
d. [děn dà:] dî: tóg-à: kùnd-ù-ń
[waterjar Loc] water pour-PastAnt put.in-Pfv-1SgSbj
'I poured (the) water into (a/the) waterjar.'

### 11.1.3.3 Ditransitives

'Give' (óbò, I-class) takes two objects. The recipient is marked accusative if animate ( $305 \mathrm{a}-\mathrm{c}$ ). The theme NP is not marked accusative even if human (305b).
a. $\left[m i ́ ~{ }^{\mathrm{L}}\right.$ dèlè $\left.=\grave{\eta}\right] \quad$ pédù òb-ù- $\overline{1}$
[1SgPoss ${ }^{\mathrm{L}}$ elder.sib=Acc] sheep give-Pfv- 1 SgSbj
'I gave (a/the) sheep to my older same-sex sibling.'
b. [î: $\grave{m}-m \grave{j}] \quad k \hat{u}:-n \grave{o}=\grave{\eta} \quad \grave{o} b-u ̀-\eta ́$
[child 1 Sg -Poss] head-Sg=Acc give-Pfv- 1 SgSbj
'I gave my child to the chief.'
$\begin{array}{llll}\text { c. } & \text { pédù }=\grave{\eta} & \text { bèlé } & \text { òb-ù- } 1 \text { ! } \\ \text { sheep }=\text { Acc } & \text { fodder } & \text { give-Pfv- } 1 \mathrm{SgSbj} \\ & \text { 'I gave fodder to (the) sheep-Sg. }\end{array}$
tágà 'show' has the same syntax as 'give'.
Either the theme or the recipient may become subject by intransitivizing the verb. The verb then gets a mediopassive suffix, which can range over reflexive, reciprocal, and other senses. In the case of the theme, the reading is passive-like (306a). In that of the recipient, the normal reading is reciprocal (306b).
$\begin{array}{lll}\text { a. } & k \varepsilon ̀: l \varepsilon ́ & \text { ób-ì- } \varepsilon l \grave{\varepsilon}-\varnothing \\ & \text { money } & \text { give-MP-IpfvNeg-3SgSbj }\end{array}$
'The money will not be given.'
$\begin{array}{llll}\text { b. } & \varepsilon ́ m m e ̀ ~ & k \grave{\varepsilon}: l \bar{\varepsilon} & \text { ób-ì- }-\bar{\varepsilon} l \grave{\varepsilon}-1 \grave{\eta} \\ & \text { 1PlSbj } & \text { money } & \text { give-MP-IpfvNeg-1PlSbj } \\ & \text { 'We will not give each other money.' }\end{array}$

The collocation kàlbú kán(à) 'entrust (sth, to sb)' also has two open-reference object NPs. It has a total of three objects if the invariant noun kàlbú is also considered to be a third object (307).

| [kè:]É | m̀-mı̀ | [mí | $\begin{equation*} \text { dèlè = ̀̀ }] \tag{307} \end{equation*}$ |
| :---: | :---: | :---: | :---: |
| [money | 1Sg-Poss] | [1SgPoss | elder.sib=Acc] |
| kàlbú |  |  |  |
| entrusti |  | $-1 \mathrm{SgSbj}$ |  |
| 'I entrus | my money | y elder | me-sex sibling |

Verbs of carrying and holding like bòmb-é:- 'carry (child, backpack) on one's back' are mediopassive morphologically but transitive syntactically. The orresponding forms with transitive suffix -rv or variant are ditransitive with the same syntax as 'give'.

$1 \mathrm{Sg} \quad\left[\right.$ child ${ }^{\mathrm{L}}$ Prox] woman- $\mathrm{Sg}=$ Acc carry.on.back-Tr-Pfv-1SgSbj
'I had (the) woman carry this child on her back.'
(i.e. 'I loaded this child on the woman's back.')

### 11.1.3.4 Valency of causatives

In the overt expression corresponding to the logical schema [X cause [ $Y(Z)$ Verb]], the lower subject Y is a direct object, marked as accusative, in the flattened causative clause [X Y-Accusative (Z) Verb-Causative].



If a main clause has a direct object (310a), the corresponding causative has two direct objects, both of which can be marked accusative (310b).
a. [î: m-mò] írù-nغ̀ $=\grave{y} \quad d a ̀-\grave{~}-\varnothing$
[child 1Sg-Poss] blacksmith-Sg=Acc kill-Pfv-3SgSbj
'My child killed a blacksmith (member of blacksmith caste).'
b. [î:
$m-m \grave{\jmath}=\grave{\eta}]$
írù-nغ̀ = $\grave{j}$
[child 1 Sg-Poss=Acc] blacksmith- $\mathrm{Sg}=$ Acc
dà:--m-ì-ŋ́
kill-Caus-Pfv-1SgSbj
'I made/had my child kill a blacksmith.'

### 11.1.4 Verb phrase (VP)

VP is a valid syntactic category in DS. 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, though occasionally a subject co-occurs; see §17.3.1.

Quotative complements divide the quoted clause into the subject and everything else. 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 (§17.1.3.1-2). This does not apply to pseudosubjects.

Same-subject clause chains are essentially combinations of two VPs associated with the same subject NP (§15.1-2).

## 11.2 ' $\mathrm{Be}^{\prime}$, 'become', 'have', and other statives and inchoatives

In addition to the defective stative quasi-verbs discussed in the sections below, see sìgé 'be more, be better' and èré 'be better' in comparatives (§12.1.2.1-2).

### 11.2.1 'It is' clitics

### 11.2.1.1 Positive 'it is' $(=\eta)$

The 'it is' clitic $=\eta$ is added to a NP, usually just a common noun or an independent pronoun. The theme (subject) may be overtly expressed, but this referent is usually contextually clear and is often omitted or expressed as an (arguably topical) pronoun or demonstrative.

$$
\begin{align*}
& \text { a. mí dògò-nò= } \mathfrak{y}  \tag{311}\\
& \text { 1Sg Dogon-Sg=it.is.1SgSbj } \\
& \text { 'I am a Dogon.' (< dògò-nゝ̀) } \\
& \text { b. ग̀gó pédù = ì } \\
& \text { Prox sheep=it.is.3SgSbj } \\
& \text { 'This is a sheep.' }
\end{align*}
$$

In theory the 'it is' clitic is conjugated for pronominal subject. However, the original pronominal-subject suffix has coalesced with the nasal of the clitic itself. The only trace of the usual conjugational paradigm is that the 2 Pl form has L -toned $=\grave{j}$ even after an H -tone, matching L-toned 2 Pl suffix -ì on ordinary inflected verbs. For other pronominal-subject categories, the clitic is atonal and acquires its H - or L-tone by spreading from the stem-final tone. After an L-tone, there is no audible distinction between 2Pl -ì and the other categories. Because the suffixal marking makes few distinctions, independent pronouns in subject function usually occur clause-initially.
(312) category 'it is'

| 1 Sg | $=\eta$ | (atonal) |
| :--- | :--- | :--- |
| 1 Pl | $=\eta$ | (atonal) |
| 2 Sg | $=\eta \quad$ (atonal) |  |
|  |  |  |
| 2 Pl |  |  |
|  | (L-toned) |  |
| 3 Sg | $=\eta \quad$ (atonal) |  |
| 3 Pl | $=\eta \quad$ (atonal) |  |

The tonal contrast of 2 Pl versus other subjects is audible in (313), since nàyá 'cow' ends in an H-tone, which is realized on the enclitic in (313a); for the phonology see §3.7.4.2.
a. mí/ wó / ú
nàyà = ŋ́
$1 \mathrm{Sg} / 3 \mathrm{Sg} \quad$ cow=it.is. $1 / 3 / 2 \mathrm{SgSbj}$
'I am / he-or-she is / you-Sg are a cow.'
b. é
nà $\mathfrak{y}$ á = ŋ̀
2 Pl
cow $=$ it.is. 2 Pl
'You-Pl are cows.'
 $C \hat{v}$ pronouns combine as $C \grave{v}=\emptyset ́$ by Final High-to-Rising Tone (§3.7.4.2).
ìnjú 'what?' combines with the clitic as ìnjé: = ì 'what is it?', with a vocalic change suggesting a variant /injêe:/. The unexpected final L-tone here is mirrored in à yá = $̀$ ' 'it is how much/many?'

The 'it is' clitic is easily confused with the NP-final accusative clitic $=\eta$, which is also atonal (§6.7). However, accusative NPs are always non-clause-final, while the 'it is' clitic is regularly clause-final.

### 11.2.1.2 'It is not' (= lǎ:-)

The negative counterpart of $=\eta$ 'it is' is =lǎ: 'it is not', with an NP (often a simple common noun or pronoun) as complement. The final pitch rise is not always heard. The complement is not tone-dropped.
category form


The 3 Sg subject form is the default, i.e. when the "subject" is contextually understood. It can take a pronoun as complement: mí = lă:- $\varnothing$ 'it isn't me', phonetically often reduced to [mílà]. In such combinations, $C$ v́ pronouns keep their tones. Elsewhere I often omit the $3 \mathrm{Sg}-\varnothing$ in transcriptions.
a. mí dògò-nó=là:- $\mathfrak{\prime}$

1Sg Dogon-Sg=it.is.not-1SgSbj
'I am not a Dogon.'
b. ŋ̀gó $\quad$ pédù $=$ lă:- $\varnothing$

Prox sheep=it.is.not-3SgSbj
'This is not a sheep.'
c. $[m i ́ \quad k a ̌: \eta]=$ là:- 1
$[1 \mathrm{Sg} \quad$ only $]=$ it.is.not- 1 SgSbj
'I am (=It is) not just me (alone).'

After a nasalized vowel $/ 1 / \rightarrow n$, as in $s \hat{e}:^{n}$ ' good', $s \hat{e}:^{n}=n a \check{a}:-\varnothing$ 'it isn't good', pronounced as though sê: $=n a \check{:}-\varnothing$. See §3.5.4.7.

### 11.2.1.3 'It is' clitic in predicates of experienced physical states

The 'it is' clitic is used in some idiomatic nominal predicates that take direct objects, including accusative-marked human nouns and pronouns. These constructions denote experienced physical states.
a. sé: $d \grave{u}=\grave{\eta} / m i ̀=$ ŋ́ $\quad g \grave{\varepsilon}:=$ ŋ́
$\mathrm{S}=$ Acc $/ 1 \mathrm{Sg}=$ Acc $\quad$ hunger=it.is
'Seydou is/I am hungry.'
b. sé: $d u ̀=\grave{\eta} / m i ̀=\eta ́ \quad$ ŋì:-nò:-lù = ŋ́
$\mathrm{S}=\mathrm{Acc} / 1 \mathrm{Sg}=$ Acc thirst=it.is
'Seydou is/I am thirsty.'
c. sé: $d \grave{u}=\grave{j} / m \grave{\imath}=$ Ǿ $\quad$ ùgò $=$ ŋ́
$\mathrm{S}=$ Acc $/ 1 \mathrm{Sg}=$ Acc heat=it.is
'Seydou is/I am hot.'

Negative equivalents are in (317).
a. sé: $d \grave{u}=\grave{j} / m i ̀=$ ŋ́ $\quad g \varepsilon ̌:=l a ̀:$
$\mathrm{S}=$ Acc / $1 \mathrm{Sg}=$ Acc hunger=it.is.not
'Seydou is/I am not hungry.'
b. sé:dù= $\grave{j} / \mathrm{mì}=1$ ý dì:-nò:-lú=là:
$\mathrm{S}=$ Acc thirst=it.is.not
'Seydou is/I am thirsty.'

$$
\begin{array}{lll}
\text { c. } & \text { sé:dù = j̀ / mì = ý } & \text { ùgó= là: } \\
& \text { S=Acc } & \text { heat=it.is.not } \\
& \text { 'Seydou is/I am hot.' } &
\end{array}
$$

There is an alternative construction where 'hunger' etc. is the (pseudo-)subject of the verb ágà 'catch’. As with other pseudo-subjects (§11.1.1.4), 'hunger' occurs just before the verb, rather than in the usual clause-initial subject position. Otherwise this is a regular transitive clause type with accusative object.
a. $\quad m i ̀=\eta ́$
$g \varepsilon ̌:$
àg-ì- $\varnothing$
$1 \mathrm{Sg}=$ Acc hunger catch-Pfv-3SgSbj
'I am hungry.' (lit., "Hunger has caught me.")
or: 'I became hungry (at some point in the past).'
b. $m i ̀=y ́ \quad$ ǧ̌: àgà-lì- $\varnothing$
$1 \mathrm{Sg}=$ Acc hunger catch-PfvNeg-3SgSbj
'I am not hungry.'
or: 'I did not become hungry.'
I hypothesize that the 'it is' construction of ' X is hungry/thirsty/hot' as in (316a-c) evolved as a mutation of the construction with 'catch' illustrated in (318).

### 11.2.2 Existential and locative quasi-verbs and particles

### 11.2.2.1 Existential particle (yé, yí, yó, yó )

This particle (etymologically a 'there' locative adverb) procliticizes to a stative that denotes location/existence or possession (for imperfectives see below). The stative may be derived from an active verb, in which case the particle takes the form yé and the stative verb is $\{L\}$-toned. The verb occurs without its augment, i.e. without first-vowel lengthening (319a). Or the stative may be a defective quasi-verb, in which case the particle assimilates the vowel quality of the quasi-verb or (before $s \grave{\varepsilon}$ 'have') shifts to yí (319b).
stative (augmented) with Existential
a. dǎ:yà 'be sitting' yé dàyà
ú:njò 'be lying down' yé ùnjò
dŭ:クò 'be on (surface)' yé dùŋò
$\begin{array}{ll}\text { b. wò 'be (somewhere)' } & \text { yó =ò (contracted) } \\ \text { tò: 'be in' } & \text { yó tò } \\ \text { sغ̀ 'have' } & \text { yí s̀̀ }\end{array}$

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 (319b) when no other locational expression is overtly present. In other words, these quasi-verbs require a locational, and $y v$ is the default (320a-b). When another locational is present, the particle is generally absent, but my assistant accepts examples including it (320d).
a. [àndá rà:] wò-ŋ̀
[village Loc] be-1 Sg Sbj
'I am in the village.'
b. yó=ò-ŋ̀

Exist=be-1SgSbj
'I am present.' (in most contexts: 'I am here.')
c. \#wò-ŋ̀
\#be-1SgSbj
'I am present.' [ungrammatical version of (b)]
d. [àndá rà:] yó=ò-ŋ̀
[village Loc] Exist=be-1SgSbj
'I am (present) in the village.' (accepted but not common)
In unfocalized positive main clauses, derived statives must either have the existential particle or they must be augmented (by reduplication or vowel lengthening).

With the possessive quasi-verb $s \grave{\varepsilon}$, whose complement is the possessum rather than a locational, the existential particle is obligatory in unfocalized positive main clauses, since it does not belong to the same category as the complement. It is obligatory even the presence of an overt locational (321c). In other words, in the 'have' construction, the particle is a pure existential (not a locational).
a. ìdú yí sè-ì
dog Exist have-1SgSbj
'I have a dog.'
b. \#ìdú $\quad \varnothing \quad s \grave{\varepsilon}$-̀̀
\#dog $\quad \varnothing \quad$ have-1SgSbj
'I have a dog.' [ungrammatical version of (a)]
c. [àndá rà:] ìdú yíl (\# $\varnothing$ ) sè-ỳ
[village Loc] dog Exist / (\# $\varnothing$ ) have-1SgSbj
'I have a dog in the village.' (yí still obligatory)
The existential particle is not allowed in negative clauses (322a-b), relative clauses ( $322 \mathrm{c}-\mathrm{d}$ ), or focalized clauses ( $322 \mathrm{e}-\mathrm{f}$ ).
a. [àndá rà:] (\# yó) wò-lo--ŕ
[village Loc] (\# Exist) be-StatNeg-1SgSbj
'I am not in the village.'
b. ìdú (\# yí) sè-lè-
dog (\#Exist) have-StatNeg-1SgSbj
'I don't have a dog.'
c. [àndá rà:] ǹdè (\# yó) wó: = j̀
[village Loc] person ${ }^{\mathrm{L}}$ (\# Exist) be.Ppl=Acc
dènè- $d \grave{\varepsilon}-\grave{\eta}$
look.for-Ipfv-1SgSbj
'I'm looking for a person who is in the village.'
d. ìdè ìdú (\#yí) $\quad$ ह̂: dènè-dè-ŋ̀
person ${ }^{\mathrm{L}}$ dog (\# Exist) have.Ppl look.for-Ipfv-1SgSbj
'I'm looking for a person who has a dog.'
e. ă: [àndá rà:] (\# yó ) wò- $\varnothing$
who? [village Loc] (\# Exist) be-3SgSbj
'Who is in the village?'
f. â: ìdú (\# yí) s̀̀- $\varnothing$
who? dog (\# Exist) have-3SgSbj
'Who has a dog?'

The existential particle is always immediately preverbal. It follows a pronominal object (323). We cannot determine whether the existential particle would precede or follow a pronominalsubject proclitic, since the latter occurs only in relative clauses, where the existential particle is not allowed.

```
\(m i ̀=\eta ́ \quad\) yé bòmbò- \(\varnothing\)
\(1 \mathrm{Sg}=\) Acc Exist carry.on.back.Stat-3SgSbj
'He/She is carrying me on his/her back.'
```

Existential yé is attested but uncommon before imperfective active verbs in texts. It did not occur in spontaneous elicitation but my assistant accepted it before a range of verbs. In the presence of yé, the verb is $\{\mathrm{L}\}$-toned and cannot take the augment (reduplication or vowellengthening). (324a) with augmented imperfective seems to be interchangeable with the much less common (324b) with existential particle.
a. yǎ: yà-yá:-dè- $\varnothing$
weeping(n) Augm-weep-Ipfv-3SgSbj
'He/She weeps.'
b. yă: yé yà:-dè- $\varnothing$
weeping Exist weep-Ipfv-3SgSbj
[=(a)]
Since the existential particle is incompatible with the verbal augment, which is associated with verb/VP focus, it may be that the existential particle is syntactically a focused adverbial, in spite of its frequent lack (especially with 'have') of semantic content.

### 11.2.2.2 Locational-existential 'be' (wò, wò-ló, bè, bè-lé)

This conjugated stative quasi-verb is used in locational-existential functions. In the absence of an overt locational phrase, it requires the existential particle yó in syntactic contexts which allow this particle (unfocalized positive main clauses). The construction with yó= (contraction of yó wò) can be translated 'be present' (often implicitly 'be here') or 'exist'. If there is an overt locational, yó is usually omitted, but my assistant accepts versions where it is present. There is no distinction between human, animal, and inanimate forms in my assistant's dialect (see below on dialectal inanimate kò ).

The negative form is wò-ló 'not be (somewhere), be absent, not exist'. The existential particle is absent in negative contexts, so the optional presence of an overt locational does not affect the rest of the clause.

| Paradigm of locational-existential 'be' ("LOC" = locational phrase) |  |  |  |
| :---: | :---: | :---: | :---: |
| category | 'is present' | 'is in LOC' | 'is absent; is not in LOC' |
| 1 Sg | $y o ́=o ́-\grave{y}$ | LOC wò-ı̀ | (LOC) wò-lò-ı́ |
| 1Pl | $y o ́=o-{ }^{-1}$ | LOC wò- ${ }^{\text {y }}$ ¢ | (LOC) wò-lo- ${ }^{\text {Ýy }}$ |
| 2 Sg | $y o ́=o ́-W ̀$ | LOC wò-ẁ | (LOC) wò-ló-ẁ |
| 2 Pl |  | LOC wò- ${ }^{\text {y }}$ ¢ | (LOC) wò-ló- ${ }^{\text {y }}$ ¢ |
| 3 Sg | $y o ́=\grave{\jmath}$ | LOC wò | (LOC) wò-ló |
| 3 Pl | yó = w-yà | LOC wò-yyà | (LOC) wò-ǹ-ní |

K\&P (p. 57) give examples of the type "X ks" 'there is X ' and negative "X kolo" 'there is no X' for inanimate X. Even in the dialect focused on here (Wendegele village), kò and kò-ló for inanimate X occurred in recordings among middle-aged and older speakers. They have been entirely replaced by wò and wò-ló in the speech of my (younger) assistant, except in the greeting formula yôW kò-ló 'there is nothing wrong', (572b) in §19.7.

Examples of the 'be' quasi-verb are in (326). (326b) illustrates existential as opposed to locational function; it can be used to indicate that there is some milk left. The existential particle is usually absent from (326a) which has an overt locational. For more details on syntactic environments, see $\S 11.2 .2 .2$ above.

```
a. [gín dà] wò-ク̀
[house Loc] be- 1 SgSbj
```

'I am in the house.'
b. írù $\quad y o ́=\grave{j}-\varnothing$
milk Exist=be-3SgSbj
'There is (some) milk.'
c. írù wò-ló- $\varnothing$
milk be-StatNeg-3SgSbj
'There is no milk.' (i.e., 'We're out of milk.')
wò is replaced by bè for past tense 'was (somewhere), was present, existed, there was/were'. bè combines with the existential particle as yé bè. The negative form is bè-lé 'was not'. The paradigms are in (327).

| category | 'was present' | 'was in LOC' | 'was absent, not at LOC' |
| :---: | :---: | :---: | :---: |
| 1 Sg , | yé bè-r̀ | LOC bè-ı̀ | (LOC) bè-lè-ı́ |
| 1 Pl | yé bè-ı̀ | LOC bè-r̀ | (LOC) bè-lè-ŋ́ |
| 2 Sg | yé bè- ${ }_{\text {d }}$ | LOC bè-w | (LOC) bè-lé-ẁ |
| 2 Pl | yé bè-r̀ | LOC bè-r̀ | (LOC) bè-lé-r̀ |
| 3 Sg | yé bè- $\varnothing$ | LOC bè- $\varnothing$ | (LOC) bè̀-lé- $\varnothing$ |
| 3 Pl | yé bè-yà | LOC bè̀-yyà | (LOC) bè-ǹ-ní |

$=b e ̀ ~ a n d=b e ̀-l e ́ ~ c a n ~ a l s o ~ c o m b i n e ~ w i t h ~ A N-i n f l e c t e d ~ f o r m s ~ o f ~ v e r b s ~ t o ~ s h i f t ~ t h e ~ t e m p o r a l ~$ reference point into the past, as in the past progressive and similar categories. In this construction I refer to them as past clitics ( $\S 10.5$ ).

### 11.2.3 Other stative locational and positional quasi-verbs

### 11.2.3.1 tò ~ tò: 'be in' and túyy- $\mathrm{\varepsilon}$ :- 'stay inside'

The stative quasi-verb tò $\sim$ tò: places the reference object (trajector) inside a container or other bounded space such as a house (but not a village). The reference object may be a thing or person, or a mass such as 'water' or 'sugar'. The combination with the existential particle is yó tò with short vowel, versus long-voweled tò: after a specific locational expression. The distinction is clear in the 3 Sg and 3 Pl forms. The negation is tò:-ló.
(328)

| category | 'is in' | 'is in LOC' | 'is not in LOC' |
| :---: | :---: | :---: | :---: |
| 1Sg | yó tò-r̀ | LOC tò:-ı̀ | LOC tò:-lò-ŋ́ |
| 1 Pl | yó tò- ${ }^{\text {y }}$ ¢ | LOC tò:- ${ }^{\text {ºt }}$ | LOC tò:-lò- ${ }^{\text {¢ }}$ ¢ |
| 2 Sg | yó tò- ${ }^{\text {a }}$ | LOC tò:-W | LOC tò:-ló-w |
| 2 Pl | yó tò- ${ }^{\text {y }}$ y | LOC tò:->y | LOC tò:-ló- ${ }^{\text {² }}$ ¢ |
| 3 Sg | yó tò- $\varnothing$ | LOC tò: - $\varnothing$ | LOC tò:-ló- $\varnothing$ |
| 3 Pl | yó tì-yà | LOC tò-yyà | LOC tò:-ǹ-ní |

There is a related regularly inflected (active) verb túyy-è:- 'stay inside (e.g. a house)'.

### 11.2.3.2 Other statives derived from active verbs ('be on')

'Be on (a horizontal surface, e.g. a mat or table)' is expressed by stative dùpò (augmented dǔ:ทò) which is derived from mediopassive dùy-é:- 'be put down or land (on a surface)' or 'put oneself down (on a surface)'. The combination with the existential particle is yé dùmò. For humans, dù̀ò is also possible (e.g. in connection with position on a mat) but is often pre-empted by 'sit' (dàņn-ध́:-).
'(Tea-kettle, cooking pot) be (put) up on (burner, oven)' is stative yàyà (augmented yă:מà), cf. active intransitive yán-غ̀:- 'be put (or put oneself) up on'. The combination with the existential particle is yé yàyà.

### 11.2.4 'Become (noun)', 'happen', and 'remain' predicates

These are regular active verbs, inflectable for aspect (perfective/imperfective).

### 11.2.4.1 'Remain’ (wàdá, bě:, pínnè)

The common verb meaning 'remain, stay (somewhere)' in my assistant's dialect is the regular I -class active verb wàdá, 3 Sg perfective wád-ì.


A synonym is $b \check{\varepsilon}$ :, perfective $b i ́-\overline{-}$, perfective negative $b \grave{\varepsilon}:-1 i ́$, imperfective $b \varepsilon ́-d \grave{\varepsilon}$-, imperfective negative bìýz-غ̀lè-, chaining form bì- $\bar{y}$ ( $\$ 10.1 .3 .3$ ). This verb is important grammatically since it is used to make predicates out of expressive adverbials (§11.1.3.1).

There is also a verb pínnè meaning 'stay put (not go anywhere)'.

### 11.2.4.2 'Become, turn into’ (tánà)

The regular active verb tánà means 'become $X$, turn into $X$ ' where $X$ is an NP (including certain manner adverbs), not an adjective or an expressive adverbial. X takes the 'it is' clitic, except when X is a manner adverbial as in (330c).
a. túbà:gù = ì
tán-ì- $\varnothing$ I tàyà-lí- $\varnothing$
white.person=it.is become-Pfv/PfvNeg-3SgSbj
'He became/did not become a white person.'
b. ìnjé = ì tà̀-ù-̀̀
what?=it.is become-Pfv-2SgSbj
'What have you-Sg become?'
c. ŋŋ́-njì: tà̀-ì-ì
like.that become-Pfv-1SgSbj
'I have become like that.'

The transitive (semantically causative) form is tánà-ndà 'transform, convert, turn (Y) into ( X )', 3Sg perfective táyì-nd-ì, cf. §9.4.4. X still has the 'it is' clitic (331a). The object Y is accusative if human. táyà-ndà can also mean 'translate X into Y ', where Y is expressed as a PP with instrumental postposition lè. (331b) is therefore literally "I converted Bambara [by means of Dogon]."
a. sé:dù = ì
yàrà $=$ 亿́
tàyù-nd-ù-̀̀
$\mathrm{S}=\mathrm{Acc}$ lion=it.is become-Tr-Pfv-1SgSbj
'I transformed Seydou into a lion.'
b. [bàmbàrà-š̌: = gò] [dògò-sǒ: lè]
[Bambara-speech=Def] [Dogon-speech Inst]
tàmù-nd-ù-t̀
become-Tr-Pfv-1SgSbj
'I translated from Bambara to Dogon.'
táyà also means 'cross, go across (road, river)'.

### 11.2.4.3 'Become, turn into' (bilí )

bilé (also found in Tommo So, but not elsewhere in eastern Dogon) has similar meaning and the same syntax as táyà 'become, turn into', but puts more emphasis on transformation from one thing into another. The idiomatic phrase $\grave{n} d \grave{\varepsilon}=\grave{y}$ bilé 'become a person' has about the same pragmatic sense as English become somebody, i.e. 'become a person who matters'.
bilé is distinct from bilé 'roll over, flip' (and other senses). However, bilé does have apparent cognates with similar meaning 'become X' but ending in $e($ or $o$ ) in western Dogon: bílé (Penange), bílè (Bunoge), bilí-yè (Najamba), bíló (Tiranige).

### 11.2.5 Mental and emotional statives

### 11.2.5.1 'Know' (igù wó), 'not know' (ìnné)

'Know (a fact)', French savoir, is expressed by igù plus an H-toned form of the 'be (somewhere)' quasi-verb wò. The stem is sometimes heard as igì, so the $u$ in igù may have originally been influenced by the following $w$ of the quasi-verb. The negation is suppletive ìnné. Paradigms are in (332). The existential particle is not used.

| (332) | category | 'know' | 'not know' |
| :---: | :---: | :---: | :---: |
|  | 1Sg | igù wò-ń | ìnnè- |
|  | 1Pl | igù wò-稇 | ìnnè-1́ |
|  | 2Sg | ìgù wó-Ẁ | ìnné-Ẁ |
|  | 2 Pl | igù wo-- ${ }^{\text {¢ }}$ | ìnné-ŋ̀ |
|  | 3Sg | ìgù wó- $\varnothing$ | ìnné- $\varnothing$ |
|  | 3 Pl | igù wó-yà | ìnní-yà |

The H-tone on wó 'be' in this combination is carried over into the past-time counterpart ìgù bé- 'knew, used to know'. The past negative is ìnné=bè-.

Cognates within eastern Dogon are Tommo So íg-go=wo, Togo Kan í: ${ }^{n}$ wò, Yorno So íg-ó: , and possibly Toro Tegu ùkú.

### 11.2.5.2 'Want' (nàmà), 'not want' (nàmà-lá)

This stative quasi-verb is nàmà in the positive and nàmà-lá in the negative. The 2 Sg form is pronounced with 0 . The existential particle is sometimes added in positive main clauses (yé nàmà).
(333) category 'want' 'not want'

| $\begin{aligned} & 1 \mathrm{Sg}, \\ & 1 \mathrm{Pl} \end{aligned}$ | nàmà-ŋ̀ nàmà-ŋ̀ | nàmà-là-1́ <br> nàmà-là-ท́ |
| :---: | :---: | :---: |
| 2 Sg | nàmò-Ẁ | nàmà-ló-Ẁ |
| 2 Pl | nàmà-ŋ̀ | nàmà-lá-ì |
| 3 Sg | nàmà- $\varnothing$ | nàmà-lá- $\varnothing$ |
| 3 Pl | nàmì-yà | nàmà-ǹ-ní |

Past forms are nàmà $=$ bè- $\grave{\prime}$ 'I wanted' and nàmà $=b e ̀-l e ̀-\eta ́ ~ ' I ~ d i d n ' t ~ w a n t ' . ~$.

### 11.2.5.3 'Like, love' (ibé), 'not like' (ìbè-lé )

'Like $X$, love $X$ ' is expressed by ìbé. It has stative-like and progressive forms. The stative paradigm is (334).

| category | 'like' | 'not like' |
| :---: | :---: | :---: |
| 1Sg | ìbè-1́ | $\grave{i b c}$-lè- 1 ¢ |
| 1 Pl | ìbė-ŋ́ | ìbè-lè-ŋ́ |
| 2Sg | ìbó-Ẁ | ìbè-ló-W |
| 2 Pl | ìbé-ŋ̀ | ìbè-lé- 1 |
| 3 Sg | ibé- $\varnothing$ | ìbè-lé- $\varnothing$ |
| 3 Pl | ìbí-yà | ìbè-ǹ-ní |

Past forms: ìbé= bè- $\grave{\jmath}$ 'I liked', negative ìb $\varepsilon=b e ̀-l e ̀-\eta ' ~ ' I ~ d i d n ' t ~ l i k e ' . ~ . ~$
This verb can also be used in the progressive, like an active verb. The attested forms are
 ìbò-ẃ = bè- $\grave{\text { ' }}$ 'I liked' and negative ìbò-ẃ = bè-lè- $\check{y}$ 'I didn't like'.

My assistant rejected a combination of 'like' with existential yé.

### 11.3 Quotative verb

### 11.3.1 'Say' (gě:)

The inflectable 'say' verb is $g \varepsilon \check{c}$. The vowel is raised before suffix $-y$ in the chaining form gì-ý and the perfective gí-ỳ, as well as (regularly) by Prevocalic Vowel-Raising (§3.5.6.1) before V-initial suffix in imperfective negative gì-દ́lغ̀ and past anterior subordinator gì-â: .

Many quoted clauses are framed by the unconjugated particle wà rather than by this verb.
For detailed discussion of quotatives, see $\S 17.1$.

### 11.4 Adjectival predicates

### 11.4.1 Positive adjectival predicates

### 11.4.1.1 With wò 'be'

Adjectives can be made into predicates with stative sense ('be red') without having recourse to a related adjectival verb, which generally indicates transitions ('redden'). One construction adds quasi-verb wj̀- 'be' (§11.2.2.2) to the adjective, which has the same form as in modifying function (335). As a predicate, it does not allow plural -mbè on the adjective (335c).
a. dógòdò / bánù / dùmbú wò-ŋ̀
heavy / red / short be-1SgSbj
'I am heavy/red (brown)/short.'
b. [sún ìn-mò] pàlá / pílù wò- $\varnothing$
[rope 1Sg-Poss] long/white be-3SgSbj
'My rope is long / white.'
c. [úlù m̀-mò] dógòdò wò-yyà
[children 1Sg-Poss] heavy be-3PlSbj
'My children are heavy.'
Some adjectives whose modifying form ends in $u$ change this to a mid-height vowel before wò (336a). This is common with bisyllabic adjectives that already have a mid-height vowel in the first syllable, but it also applies to gàllú 'bitter' (336a), perhaps by analogy to 'sweet', and it does not affect wérù 'green', perhaps by analogy to primary color adjectives (336b).

| modifying | predicate | gloss |
| :--- | :--- | :--- |
| a. vowel change |  |  |
| kèllú | kèllé wò | 'cold' (also kèlló-ẁ wò) |
| èllú | ह̀llé wò | 'sweet' |
| gàllú | gàlló wò | 'bitter' |
| ómmù | ómmò wò | 'rotten' |

b. no vowel change

| bánù | bánù wò | 'red' |
| :--- | :--- | :--- |
| pílù | pílù wò | 'white' |
| wérù | wérù wò | 'green' |

A handful of adjectives lengthen a final $u$ before wò (337a). 'Black' has an irregular form with an extra syllable, also ending in long $u$ : (337b). These extended forms are morphosyntactically expressive adverbials rather than simple adjectives.
(337)
a. final $u$ lengthened

| sìndú | sìndú: wò | 'sharp' |
| :--- | :--- | :--- |
| dùmbú | dùmbú: wò | 'short' |
| púrùgù | púrùgù: wò | 'yellow' |

b. irregular
gên gén-gù: wò 'black'
nây jân-gù wò 'difficult'
Other adjectives form an EA by adding $-\eta$ (§8.4.7.6). The EA forms can occur both in stative predicates with wò 'be'and in inchoative predicates with bě: 'become (adverbial).

### 11.4.1.2 With 'it is' clitic $=\eta$

An alternative is to add the 'it is' clitic $=\eta$ (§11.2.1.1) to the adjective (338a). The clitic is atonal and adopts the preceding tone. Adjectives that are really expressive adverbials (EA) with $i \rightarrow$, either lexical or derived, have L-toned clitic (338b). A few adjectives that do not have a true EA form nonetheless shift the final vowel to $i$ before $=\eta$, a possible vestige of an original EA with $*_{i} \rightarrow$.
modifying EA predicate gloss
a. predicate not based on EA

| àdá | àdà $=$ ý | 'half-ripe' |
| :---: | :---: | :---: |
| ámà | ámà $=$ ì | 'sour' or 'plump' |
| dằy | dǎy $=$ 门̀ | 'small' |
| dógòdò | dógò ${ }^{\text {do }}$ = ${ }_{\text {jo }}$ | 'heavy' |
| dùmbú | dùmbù = ¢́ | 'short' |
| gàllú | gàllù $=$ ́́ | 'bitter' |
| $g \varepsilon$ ¢ $\eta$ | $g \varepsilon ́ \eta=\grave{\eta}$ [gên] | 'black (dark)' |
| ìlé | $\grave{l} 1 \grave{\varepsilon}=$ ¢́ | 'ripe, cooked' |
| kàndá | kàndà = ந́ | 'new' |
| kò:ló | kò:lò = ¢ | 'unripe, raw' |
| kómmò | kómmò $=$ ì | 'lean (animal)' |
| kùnjú | kùnjù = ¢́ | 'coarse (texture)' |
| mǎy | mày = ¢́ | 'dry (clothing)' |
| nàná | nànà = ¢́ | 'easy' |
| jân | náy = ì [nây] | 'difficult' |
| ómmù | ómmù $=$ ¢̀ | 'rotten' |


| 万́nう̀ǹ̀ | 万́nゝ̀nゝ̀＝¢̀ | ＇smooth＇ |
| :---: | :---: | :---: |
| pà：dर̇： | pà：dé：＝${ }_{\text {jo }}$ | ＇bad＇ |
| pàlá | pàlà＝¢ | ＇long＇ |
| pěy | $p \varepsilon ̀=$ ¢́ | ＇old＇ |
| pô： | pó：$=\grave{\emptyset}$ | ＇big＇ |
| púrùgù | púrùgù $=$ ì | ＇yellow＇ |
| sálà | sálà＝ì | ＇empty＇ |
| sê：${ }^{\text {n }}$ | sé：${ }^{n}=$ ì | ＇good＇ |
| sèlé | sèlè $=$ 亿́ | ＇diluted，watery＇ |
| sìndú | sìndù $=$ 亿́ | ＇sharp（blade）＇ |
| sògòló | sògòló＝¢́ | ＇multicolored＇ |
| tǒ： | tò：$=$ ¢ | ＇deep＇ |
| tòló | tòlò $=$ ¢́ | ＇tall＇ |
| tónnò | tónnò $=$ ¢̀ | ＇hard＇ |
| wê： | wé：＝¢̀ | ＇fresh（milk）＇ |
| wêy | $w \varepsilon ́ y=\grave{\eta}$ | ＇lightweight＇ |
| yòrú | yòrù $=$ ¢́ | ＇soft＇ |
| yôW | yów $=$ 门̀ | ＇nasty＇ |
| òlú | ゝ̀lù $=$ ý | ＇wet＇ |

b．predicate based on EA that is also attested separately

| ùdú | ùd－î： | ù $d-i ́ \rightarrow=\grave{j}$ | ＇small＇ |
| :--- | :--- | :--- | :--- |
| - | t̀ppî： | tôpí：$=\grave{\eta}$ | ＇spotted＇ |
| － | sì：dî：： | sì：dí：$=\grave{j}$ | ＇striped＇ |
| - | jrî：： | oेrí：$=\grave{j}$ | ＇very young＇ |

c．predicate based on apparent EA that is not attested elsewhere

| bánù | bán－ì＝̀̀ | ＇red＇ |
| :---: | :---: | :---: |
| غ̀llú | ċllù $=$ ¢́ | ＇sweet＇ |
|  | $\sim \stackrel{\rightharpoonup}{c} l 1-\stackrel{i}{\prime}=\emptyset$ |  |
| kèllú | kèll－ì＝¢ | ＇cold＇ |
| pílù | píl－ì $=\mathfrak{\eta}$ | ＇white＇ |
| wérù | $w \varepsilon ́ r-i ̀ ~=~ \grave{~}$ | ＇green＇ |

## 11．4．2 Negative adjectival and stative predicates

The positive form with wò is negated with wò－ló＇not be＇，e．g．bánù wò－ló＇not be red＇．The tones of the adjective are not dropped．

The positive form with＇it is＇clitic $=\eta$ is negated by $=l a ̆:$ ．Examples are ùd－ $1 \rightarrow=$ lǎ： ＇not be small＇，yòrú＝lă：＇not be smooth＇，dógòdò＝lă：＇not be heavy＇．

Both wò－ló and＝lă：are conjugated in their usual way．

### 11.5 Possessive predicates

### 11.5.1 'Have' predicates

### 11.5.1.1 Positive ' X have Y ' $(s \stackrel{\varepsilon}{\varepsilon})$

' X have Y ' is expressed with X as subject (as in English). The predicate is $s \grave{\varepsilon}$ '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 without a focalized constituent, the existential particle in the form yí is required, alongside the NP denoting the possessum (339a). As usual, the existential particle is not allowed in clauses with a focalized constituent (339b).

| a | ìdú | $y i ́$ | $S \grave{\varepsilon}-\overline{\text { in }}$ |
| :--- | :--- | :--- | :--- |
|  | dog | Exist | have- 1 SgSbj |

'I have a dog.'
b. ă: gìné (\# yí) s̀̀
who? house (\# Exist) have
'Who has a house?'
The paradigm is (340).

| category | 'have' |
| :---: | :---: |
| 1Sg | yí l ¢̀-ı̀ |
| 1Pl |  |
| 2Sg | yí sè-ẁ |
| 2 Pl | yí Sè-ı̀̀ |
| 3 Sg | yí sè- $\varnothing$ |
| 3 Pl | yí Sì-yà |

In relative clauses, the participial form used is $s \hat{\varepsilon}$ : (§14.4.5.1), without the existential particle. The past forms are based on $s \grave{\varepsilon}=b e ̀ ~(\$ 10.5 .1 .9)$.

In addition to its function as the 'have' quasi-verb, $s \grave{\varepsilon}$ also occurs as an auxiliary in the periphrastic future construction with $-d-$ à: $s \grave{\varepsilon}$, or for a few verbs $-j$-à: $s \grave{\varepsilon}$ ( $\S 10.2 .2 .7$ ). The paradigm there is the same, except that the 3 Pl form is $-d$-à: s se-yyà. Historically, it may be that sì-yà in yí sì-yà 'they have' is contracted from *sè-yyà under the influence of the preceding existential particle. Compare 3 Sg yí tò 'he/she/it is in' with the particle versus tò: without it, and 3 Pl counterparts yí tì-yà versus tò-yyà (§11.2.3.1).

### 11.5.1.2 Negative ' X not have Y ' (sغ̀-lद́ $)$

The negative form of 'have' is $s \grave{\varepsilon}-1 \varepsilon$. The morphology is parallal to that of wò-ló 'not be (somewhere)' and tò-ló 'not be in', with other stative quasi-verbs.

| category | 'not have' |
| :---: | :---: |
| 1 Sg | $s \varepsilon$ - $1 \grave{\varepsilon}-\underline{1}$ |
| 1 Pl | $s \grave{\varepsilon}-1 \grave{\varepsilon}-\underline{\eta}$ |
| 2 Sg | $s$ c̀-lı́- |
| 2 Pl |  |
| 3 Sg | $s \hat{\varepsilon}-1 \bar{\varepsilon}-\varnothing$ |
| 3 Pl | sè-ǹ-ní |

The existential participle is not allowed in negative clauses. A NP denoting the possessum is the only required element.

```
gìn\varepsiloń Sè-lè-\etá
house have-StatNeg-1SgSbj
'I don't have a house.'
```


### 11.5.2 'Y belong to X ' predicates

A predicate of (long-standing) possession consists of a possessor form with mı and the 'it is' clitic $=\eta$, or by its negation = lǎ: . Pronominal possessors begin with an H -tone as they do elsewhere when used absolutely (without a noun). The 1 Sg possessor form is reduced from expected \#ń-mò to mò (343b).
a. gìnó $=\grave{j} \quad[a \check{:} \quad$ mう̀ $=\grave{j}$
house=Def $\quad[$ who? Poss]=it.is
'The house belongs to who(m)?'
b. [pédò=̀̀ $\quad$ ôy] $u ́-m \grave{~=~ \grave{~} / m \grave{~}=\eta ́}$
[sheep=Def all] 2Sg-Poss=it.is / 1 Sg .Poss=it.is
'All the sheep are yours-Sg / mine.'
c. mó=lǎ: / ú-mò = lǎ:

1 Sg.Poss=it.is.not / 2Sg-Poss=it.is.not
'It isn't mine/yours-Sg.'
d. [gìnغ̀ $\left.{ }^{\mathrm{L}} \quad k \hat{o}:\right] \quad$ [sé:dù $\left.\quad m \grave{j}\right]=\grave{j}$
[house ${ }^{\mathrm{L}}$ NearDist] [S Poss]=it.is
'That house (over there) is Seydou's.'

## 12 Comparatives

### 12.1 Asymmetrical comparatives

A recurrent morpheme in asymmetrical comparatives is sìǵ, used as an invariant adverb ('more, to a greater extent') or conjugated as predicate ('be more' or in some contexts 'be better'). sìgé is omitted in adjectival comparatives ('be longer').

Asymmetrical comparatives contrast one entity, usually the subject of the clause but occasionally another argument, with another entity (the comparandum) with respect to some scalar domain of comparison. The comparandum is usually expressed as a PP with the versatile postposition lè (instrumental, dative, temporal), here glossed 'than' (344a-b).

| a. | mí | [ú | lè] | sémbò= | sìgè-ŋ́ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 Sg | $[2 \mathrm{Sg}$ | than] | power=Def | be.more-1SgSbj |
|  | 'I am stronger than you-Sg.' |  |  |  |  |

b. mí $\quad\left[\begin{array}{ll}u ́ & \text { lè }] \quad \text { śmbj̀ }=\grave{j} \quad \text { sìgè- } 1 \grave{\varepsilon}-1 \text { ý }\end{array}\right.$ $1 \mathrm{Sg} \quad[2 \mathrm{Sg}$ than] power=Def be.more-StatNeg-1 SgSbj 'I am not stronger than you-Sg.'

With predications of possession ('have'), the comparandum may either take the form $X$ lè plus adverb sìgé 'more', or else $X$ bǎ: without sìgé.

| a. | ú | [mí | lè] | sìgé | kè:lé |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Sg | [1Sg | than] | more | money |
| $s \grave{\varepsilon}-1 \bar{\varepsilon}-\grave{W} / s \grave{\varepsilon}-\grave{W}$ |  |  |  |  |  |
| have-StatNeg-2SgSbj / have-2SgSbj |  |  |  |  |  |
| 'You-Sg don't have/(do) have more money than I (do).' |  |  |  |  |  |


bǎ: is also possible in symmetrical comparatives in the sense 'as much as' (346).

```
mí [ú bǎ:] tê: ìbc̀-\etá / ìb\grave{c}-l\grave{c}-\etá
    1Sg [2Sg as.much.as] tea like-1Sg/like-StatNeg-1SgSbj
```

'I like / do not like tea as much as you-Sg.'

For bǎ: in the sense 'all the way from/to', see §15.3.3.
The two entities compared, normally the subject along with the comparandum with lè, are normally not overtly focalized, as we can see by the fact that verbs and other predicates are not forced to drop their pronominal-subject suffixes as in true subject focalization. However, the comparison does intrinsically highlight the compared entities by contrasting them, and this makes it difficult and perhaps impossible to overtly focalize a verb (by augmentation, i.e.
reduplication or vowel-lengthening) or a stative quasi-verb (by omitting an otherwise obligatory existential preverbal proclitic). On the latter point, note the absence of existential yí preceding $s \grave{\varepsilon}$ - $\grave{W}$ 'you-Sg have' in the positive version of (345a) above.

Regarding verbs, augmentation (in this case reduplication) is common in ordinary clauses like (347a), but it did not occur in spontaneously produced comparatives like (347b). My assistant, however stopped short of outright rejection of nà-fá:-dè-1̀ as ungrammatical in (347b), so I mark it with a question mark.
a. jǎ: gǎ:w nà-ná:-dè-ŋ̀
meal a.lot Augm-eat-Ipfv-1SgSbj
'I will eat (a meal).'
b. jǎ: [ú lè] sìgé
meal [2Sg than] more
nă:-dè-ŋ̀ / (? nà-ná:-dè-ŋ̀ )
eat-Ipfv-1SgSbj / (? Augm-eat-Ipfv-1SgSbj)
'I will eat more than you-Sg.'
12.1.1 Comparative adjectival predicate
12.1.1.1 Productive type ('be redder', 'be longer')

The same segmental and tonal form of an adjective that is used in modifying function within a NP can be the predicate of a comparative. There is no wò 'be' or 'it is' clitic $=\eta$ as in ordinary adjectival predicates (§11.4.1.2). Negation is by stative negative -lá, with fixed vowel quality, after $\{\mathrm{L}\}$-toned stem. (348a-d) each show positive and negative counterparts. The predicative adjective may be conjugated suffixally for 1 st/2nd person subject (348d) or with -yà for 3 Pl (348e).

## a. [tìbù ŋ̀gó] [kô: lè] bánù / bànù-lá <br> [stone Prox] [NearDist than] red/red-StatNeg

'This stone is/is not redder than that one.'
b. [sǔn ì-mò] [[sǔn ù-mò] lè] pàlá / pàlà-lá
[rope $1 \mathrm{Sg}-\mathrm{Poss}]$ [[rope $2 \mathrm{Sg}-\mathrm{Poss}]$ than] long/long-StatNeg
'My rope is/is not longer than your rope.'
c. [dì: ŋ̀gó] [[dì: kô:] lè] númò/nùmò-lá [water Prox] [water NearDist] than] hot/hot-StatNeg 'This water is/is not hotter than that water.'
d. [ú lè] tòlò- / tòlò-lò-ク́
[2Sg than] tall-1SgSbj / tall-StatNeg-1SgSbj
'I am/am not taller than you-Sg.'
e. [ú lè] tòló-yà / tòlò-ló-yà
[2Sg than] tall-3PlSbj / tall-StatNeg-3PlSbj
'They are/are not taller than you-Sg.'

Conjugatable past $=b e ̀$ can be added: pàlá $=b e ̀$ - ' was longer', negative $p a ̀ l a ́=b e ̀-l e ́-~ ' w a s ~ n o t ~$ longer'.

The adjective may also function like a participle in a relative clause, positive (349a) or negative (349b).
a. [sùn ${ }^{\mathrm{L}}$ [kô: lè] pàlá] dènnè-dè-r̀̀ [rope ${ }^{\mathrm{L}}$ [NearDist than] long] look.for-Ipfv-1 SgSbj 'I'm looking for a rope (that is) longer than that (one).'


### 12.1.1.2 'Be more (in quantity)' (gǎ:)

For 'be more numerous' and more generally 'be in greater quantity, outweigh', gǎ: and its negation gà:-lá are used (350a). This is evidently the same construction as the productive one (see just above), but gǎ: is not attested as a modifying adjective. Instead, it is the predicative equivalent of adverbial quantifier gǎ:w 'a lot', which behaves like numerals rather than adjectives tonosyntactically (§6.4.3). gǎ:w itself may occur nonpredicatively in comparatives with sìgé 'more' (350b).
a. [ògùlú rà:] jòmó [ké:n lè] gǎ: / gà:-lá
[the.bush Loc] hare [squirrel than] much/much-StatNeg
'Hares are (not) more numerous out in the bush than squirrels.'
b. mí [[ú lè] sìgé] tê: gǎ:W sè-ŋ̀
$1 \mathrm{SgSbj}[[2 \mathrm{Sg}$ than] more] tea a.lot have-1 SgSbj
'I have more tea than you-Sg (do).'

In (350b), existential yí is omitted before 'have' to mark the predicate as non-focalized.

### 12.1.1.3 'Be more/better' as predicate (conjugated sìgé)

sìgé 'more' can be conjugated as a predicate in the sense 'be more'. If as in (351a-b) a domain of comparison is not specified and the subject does not denote an obviously measurable commodity, the default interpretation is 'be better', competing with èré (on which see the following section).
a. sé:dù [mí lè] sìgé- $\varnothing$ $\mathrm{S} \quad[1 \mathrm{Sg}$ than] be.better-3SgSbj
'Seydou is better than me.'
$\begin{array}{lll}\text { b. ú } & {\left[\begin{array}{ll}\text { uí } & \text { lè }\end{array}\right]} & \text { Sìgò-Ẃ } \\ & \left.\begin{array}{ll}\text { 2Sg } & {[1 \mathrm{Sg}}\end{array} \text { than }\right] & \text { be.better }-2 \mathrm{SgSbj} \\ & & \\ & \text { You-Sg are better than me.' }\end{array}$

Paradigms are in (352). The positive version has affinities to the perfective positive paradigm of regular verbs, notably including 3 Pl suffix -yà. The $\{\mathrm{LH}\}$ overlay is also shared with that paradigm, but here it is more systematic, extending to 2 Pl (not just 2 Sg ) and the two thirdperson forms. The negative version, however, is a straightforward stative negative paradigm.
'be more/better' 'not be more'

| 1 Sg | sìgè-1́ | sìgè-lè-ŋ́ |
| :---: | :---: | :---: |
| 1Pl | sìgè-ท́ | sìgè-lè-ŋ́ |
| 2 Sg | sìgò-W | Sìgè-lı̀-W |
| 2 Pl | sìgè-1́ | sìgè-lè-1́ |
| 3 Sg | sìgé- $\varnothing$ | sìgè-léz- $\varnothing$ |
| 3 Pl | sigú-yà | sìgè-ǹ-ní |

The domain of comparison may be expressed by a preposed, topic-like NP or PP.
$\begin{array}{llllll}{\left[n a ̀ m a ̀{ }^{\mathrm{L}}{ }_{-}{ }^{\mathrm{HL}} \text { tâ: }\right.} & \text { rà: }] & \text { ú } & {[m i ́} & \text { lè }] & \text { Sìgj̀-Ẃ } \\ {\left[\text { meat }^{\mathrm{L}-{ }^{H L}} \text { shoot }\right.} & \mathrm{Loc}] & 2 \mathrm{SgSbj} & {[1 \mathrm{Sg}} & \text { than }] & \text { be.better-2SgSbj }\end{array}$
'You-Sg are better (or: more active) than me at hunting.'
Participles (in definite form) are sìg $\varepsilon=g \grave{~} \sim$ sìgó=̀ '(the one who) is more'. Conjugatable past forms are sìg $\varepsilon=b e ̀$ - 'was more' and negative sìg $\varepsilon=b e ̀-l e ́-. ~$

### 12.1.1.4 'Be better' (conjugated èré)

The quasi-verb èré can be conjugated for subject. The positive and negative paradigms (354) are of the same type as we just saw with sigg (preceding section).

|  | 'be better' | 'not be better' |
| :---: | :---: | :---: |
| 1 Sg | èrè-ŋ́ | èrè̀-lè-1́ |
| 1Pl | èrè-ŋ́ | èrè̀-lè-ŕ |
| 2 Sg | èrò-Ẃ | èrè-lè-W |
| 2 Pl | èrè-ŕ | èrè-lè-ŕ |
| 3 Sg | èré- $\varnothing$ | èrè-lá- $\varnothing$ |
| 3 Pl | èré-yà | èrè̀-ǹ-ní |

The past forms are èré = bè- 'was better' and èré=bè-lé- 'was not better'. èré may function without change as a participle, with definite clitic èré = gò $\sim$ èró $=\grave{j}$ '(the one who) is better'.

For adverbial uses of invariant èré, see §12.1.2.2, below.
èré has no other sense than '(be) better'. sìgé 'more' can extend into the sense 'better' when no other basis for comparison is specified.

### 12.1.2 Asymmetrical comparatives with adverb and comparandum

In these constructions, a regular VP is expanded by adding an adverb (arguably a chained verb) meaning 'more' or 'better' and a comparandum with postposition lè.

### 12.1.2.1 VP plus adverbial sìgé 'more'

When combined with a following conjugated verb denoting an activity that serves as domain of comparison, sìǵ is invariant, like an adverb or chained verb.
(355)

```
ú [mí lè] sìg\varepsiloń gǒ:-dò-Ẁ
2Sg [1Sg than] more dance-Ipfv-2SgSbj
'You-Sg dance more than me.'
```


### 12.1.2.2 VP plus adverbial èré 'better'

This is similar to the preceding, but replaces sìg $\varepsilon$ with èré 'better'.

| ú | [mí | lè] | èré | gò:-dj̀-Ẁ |
| :---: | :---: | :---: | :---: | :---: |
| 2 SgSbj | [1Sg | than] | better | dance-Ipfv-2SgSbj |

'You-Sg dance better than me.'

### 12.1.3 'Surpass' (gàlá )

The verb 'pass (by)' is gàlá. It can be used in the sense '(come to) surpass (X)' with respect to some scalar quality. The latter is expressed as a loosely chained verb, in anterior subordinated form. An adjectival quality is therefore expressed with a deadjectival inchoative verb.
a. $w o ̀=$ и́
gàb-â:
gàl-ì-ŋ́
$3 \mathrm{Sg}=$ Acc become.tall-PastAnt
pass-Pfv-1SgSbj
'I have surpassed him/her in height.'
b. $w o ̀=\emptyset ́ \quad g a ̀ b-a ́:-n i ̀ ~ g a ̌:-j \grave{\varepsilon}-\grave{\eta}$
$3 \mathrm{Sg}=$ Acc become.tall-Ant-Nonpast Augm.pass-Ipfv-1SgSbj
'I will surpass him/her in height.'

'I have surpassed him in wealth.'
12.1.4 Superlative 'most', 'best'
'Be the most/best of the X 's' is expressed as 'be more/better than all X 's'.

| (358) | sé: dù | [dànná:-nà | wôy | lè] | sìgé- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | S | [hunter-Sg | all | than] | be.more-3SgSbj |

'Seydou is the best hunter.'

Two superlative constructions involving the adjective sǎw 'clever' occurred in a text in the context 'hare is the cleverest of all animals'. One version was the regular adjectival comparative, with 'all' specifically included in the comparandum NP (359a). The other was an iterated adjective (359b).
$\begin{array}{lllllll}\text { a. } & \begin{array}{lll}{\left[\begin{array}{l}\text { lògùlù-nàmá }\end{array}\right.} & \text { Wôy }] & \text { lè }]\end{array} \begin{array}{l}\text { nê: }\end{array} \begin{array}{l}\text { Wó }\end{array} & \begin{array}{l}\text { sàw } \\ \text { [loutback-meat }\end{array} & \text { all] } & \text { than }] & \text { now } & 3 \text { SgSbj } \\ \text { clever }\end{array}$
b. [íyè námmà] sàw-sǎw = gò [bé gì-â:]
[today until.now] clever-clever=Def [3P1Sbj say-PastAnt]
'To this day, they say (=recognize) that he is the clever(est) one.'

### 12.2 Symmetrical comparatives

### 12.2.1 'Equal' (kéy-kèy, kêw, bǎ: , dy̌:)

kéy-kèy is an adverbial that is made predicative by adding the conjugatable quasi-verb wò 'be'. A symmetrical comparative with this as predicate can be structured with a subject and a PP with either bǎ: 'as much as' or lè 'than' (here: 'as much as') (360a). Or the comparanda can be rolled up into a plural subject (360b). The subject can be of any pronominal category. The basis of comparison (e.g. 'height) is expressed by a bare NP.
a. wó [mí lè / bǎ:] gòbě: kéy-kèy wò- $\varnothing$
$3 \mathrm{Sg} \quad[1 \mathrm{Sg}$ as.much.as] height equal be-3SgSbj
' $\mathrm{He} /$ She is the same height as me.'
b. [ém lè wôy] tòlò-tòló=ó kéy-kèy wò-Ỳ̀
[1P1 two all] Iter-tall=Def equal be-1PlSbj
'The two of us are equal in height.'

Predictably, kદ́y-kèy wò 'be equal' is negated as kદ́y-kèy wò-ló 'not be equal'.
$k \hat{\varepsilon} W$ is used without an auxiliary as a predicate 'be equal, be the same'. My assistant is most comfortable with this construction when the comparanda are rolled into a plural subject (361a-b).
a. [Wó lè] [mí lè] gòbě: kêW [3Sg and] [1Sg and] height equal 'He/She and I are of the same height.'
b. [ह́m lè wôy] tòlò-tòló=ó kêW
[1Pl two all] Iter-tall=Def equal 'the two of us are equal in height.'
$k \hat{\varepsilon} W$ is negated as $k \dot{\varepsilon} W$-lá, $3 \mathrm{Pl} k \grave{\varepsilon} W$-lá-yà.
dǒ: 'arrive (at)' can be used in the sense 'attain the level of, come to equal (X, in some way)'. Its negation '(still) has not attained the level of $X$ ' can of course be used in asymmetrical comparatives.
(362) wò = $1 \quad$ dò:-n-ní
$3 \mathrm{Sg}=\mathrm{Acc} \quad$ arrive.at-PfvNeg-3P1Sbj
'They have not (yet/ever) equalled him.'

## 13 Focalization and interrogation

### 13.1 Focalization

### 13.1.1 Basic syntax of focalization

Focalization is not well-developed in DS, at least in the speech of my assistant. Overt focalization of a preverbal constituent is most easily detected when a non- 3 Sg subject pronoun is focalized, so that the expected pronominal-subject suffix on the verb is missing. Focalization is sometimes detectable by observing the fronting of a non-subject focalized constituent to the left of an overt subject in otherwise clause-initial position, but this fronting is not systematic. In positive main clauses involving certain quasi-verbs ('be', 'have', 'be in'), the absence of otherwise obligatory existential particle $y v$ valso indicates that the predicate is not focal. Likewise for positive perfective, imperfective, and derived stative forms of regular verbs, the absence of either $y v$ vor augmentation (reduplication, vowel-lengthening) indicates that the verb is not focal.

When the verb follows one or more other constituents (NPs, adverbs, etc.), the verb often reduced to an $\{\mathrm{L}\}$-toned, unaugmented form. A verb reduced in this way can be considered to be defocalized. However, since the reduction is usual in clauses of reasonable length, the presence of a reduced verb does not entail that any specific preverbal constituent is focalized.

### 13.1.1.1 Which constituents can and cannot be focalized?

NP subjects and objects (including pronouns), and adverbial phrases (including PPs and simple adverbs), can be focalized. The NP complement of a postposition cannot be focalized as such, rather the whole PP is focalized.

Verb (and VP) focalization can be expressed in positive perfective, imperfective, and derived stative clauses by adding the augment (reduplication or first-vowel lengthening).

### 13.1.1.2 Linear position and form of focalized constituent

There is no focus particle or other morphological marking of the focalized constituent, other than the requirement that this constituent must be overt.

Under some conditions, the focalized constituent may be fronted, but this is not consistent. See $\S 13.1 .4$ for discussion of object fronting over a subject NP.

### 13.1.2 Verbs in focalized clauses

### 13.1.2.1 Propositional truth-value focalization

Truth value focalization ('I did go!') is the same as clause-level "emphasis" as expressed by emphatic particles (§19.5).

### 13.1.2.2 VP focalization with $\{H L\}$ verb plus $j a ̌:$

jǎ: occurs elsewhere as a purposive element after PPs with postposition lè (§8.3.1). My assistant also used jǎ: in what appear to be VP clefts with the VP in nominalized form with \{HL\} overlay on the verb, and with 'do' as predicate.
a. [yǎ:
${ }^{H L}$ yâ:] jǎ:
kàn-ù-Ẁ
[weeping(n) ${ }^{\text {HL weep] }}$ Purp do-Pfv-2SgSbj
'Weeping is what you-Sg did.'

[sheep $=$ Def $=$ Acc ${ }^{\mathrm{HL}}$ slaughter $/{ }^{\mathrm{HL}}$ sell] Purp do-Pfv-2SgSbj
'Slaughter/Selling the sheep is what you-Sg did.'

There appears to be no purposive element in the semantics. jǎ: in this construction likely goes back to the original sense 'take'.

### 13.1.2.3 Augmented verb forms as verb or VP focalizers

Augmented verb forms can focalize the verb, and by extension the VP. Augmentation takes the form of initial $C V$ - reduplication for monosyllabics, or first-vowel lengthening for nonmonosyllabics, in both cases along with tone overlays. Augmentation is possible in the perfective positive ( $\S 10.2 .1 .2$ ), the imperfective positive ( $\S 10.2 .2 .2$ ), and the stative positive if derived from an active verb ( $\S 10.4 .1$ ). There is no augmented form for underived stative quasi-verbs like wò 'be'. Augmentation is possible only in unfocalized positive main clauses.
"Focalization" of a verb or VP is not quite as simple semantically as focalization of other constituents. An augmented form is not required in answers to 'what are you doing?' questions, for example. In the imperfective positive, an augmented verb tends to have future, rather than general present, time reference. For statives, see the sections mentioned in chapter 10 for discussion.

The connection of augmentation to verb focus is suggested indirectly by the fact that augmentation is not allowed when some other constituent is clearly focalized, as in WH questions. Consider the augmented perfective (364a), the augmented imperfective (364b), and the augmented stative (364c), all of which can occur in main clauses with no other focalized constituent.

```
a. ìdú bě:nd-\varepsiloǹ-\grave{j}
    dog Augm-hit-Pfv-1SgSbj
    'I hit (the) dog.' (< bènd\varepsiloń )
b. ìdú bè:ndé-dè-\grave{\}
    dog Augm-hit-Ipfv-1SgSbj
    'I will hit (the) dog.'
c. dǎ:\etaà-ỳ
    Augm.sit.Stat-1SgSbj
    'I am sitting (=in a seated position).'
```

If the subject is clearly focalized, as in 'who?'-subject questions, the augmentation is not allowed (365a-c).

```
a. â.: ìdú bènd-\grave{\varepsilon}/(# bě:nd-\grave{\varepsilon )}
    who? dog hit-Pfv / (#Augm.hit-Pfv)
    'Who hit (the) dog?'
b. ă: ìdú bèndè-d\grave{ / (# bè:nd\varepsiloń-dè )}
    who dog hit-Ipfv / (#Augm.hit-Ipfv)
    'Who will hit (the) dog?'
c. ă:: dàyà / (# dă:jà )
    who? sit.Stat / (# Augm.sit.Stat)
    'Who is sitting (=in seated position).'
```

The augmented form is also disallowed if a nonsubject constituent other than the verb is focalized. (366) illustrates this with intrinsically focal 'where?'

| $\grave{i d}{ }^{\prime}=\grave{j}=\grave{j}$ | [yògó | rà:] |
| :---: | :---: | :---: |
| dog | [which? | Loc] |
|  |  |  |
| hit-Ipfv-2SgSbj / (\#Augm.hit-Ipfv-2SgSbj) 'Where will you-Sg hit the dog?' |  |  |
|  |  |  |

### 13.1.2.4 Form of verb following a focalized constituent

There are no "participial" forms of verbs in focalized clauses, of the sort seen in relative clauses. Regular AN-inflected forms of verbs occur, except for the absence of pronominalsubject marking in subject focalized clauses (see below). The preceding section has showed that augmented verb stems are not allowed in the presence of a focal constituent.

In a sentence with preverbal constituents, the H-tones of the verb are often dropped, whether or not any of the preverbal constituents is singled out as the focus. This could be attributed to downdrift. As a result, there is no reliable phonological or morphological marking of the verb to indicate that it co-occurs with a focalized constituent.

However, focalized subjects including 1st/2nd person pronouns conspicuously lack the usual suffixal pronominal-subject agreement on the verb (next section, below).

### 13.1.3 Subject focalization

The subject (NP or pronoun) must be overt. The verb takes unmarked form with AN inflection (aspect/negation), but without an overt pronominal-subject suffix. It is homophonous to the zero 3 Sg subject form of the relevant inflectional category, but there is no reason to mark it up as morphologically a 3 Sg -subject form. Focalized (367a) corresponds to unfocalized (367b) with pronominal-subject suffix.
a. mí / $\varepsilon m m e ̀ ~ b o ̀-j \grave{\varepsilon}$
$1 \mathrm{Sg} / 1 \mathrm{Pl}$ go-Ipfv
'It's $\underline{I / w e}$ [focus] who will go.'
b. bǒ:-jè-ŋ̀

Augm.go-Ipfv-1 SgSbj/1PlSbj
'I/We will go.' (< bòló)
Subjects follow scene-setting temporal adverbs in focalized clauses. Unfocalized (368a) adds a focalized subject in (368b), between the setting adverb and the object.
a. gà:lí nǔy wàl-ì-ŋ̀
last year cowpea do.farming-Pfv-1SgSbj/1PlSbj
'I/We cultivated cowpeas last year.'
b. gà:lí míl ह́mmè nǔg wàl-ì
last year $\quad \mathbf{1 S g} / \mathbf{1 P l}$ cowpea do.farming-Pfv
'It's I/we [focus] who cultivated cowpeas last year.'

### 13.1.4 Object focalization

A focalized object must be overt, but it takes the same (for example, accusative) form as in unfocalized clauses. The only difference between focalized and unfocalized clauses is that the object is optionally fronted to the left of the subject in the focalized clause. I was most successful in eliciting clauses with object fronting in cases like (369c) of the type 'That's what ...' with a demonstrative as focus.
a. $m i ̀=$ ந́ $\quad b e ̀ n d-\varepsilon ̀-W$
$1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit-Pfv-2SgSbj
'It's me [focus] that you-Sg hit.'
or: 'You-Sg hit me.'
b. sé:dù mì= ́́ bènd-غ̀- $\varnothing$
$\mathrm{S} \quad 1 \mathrm{Sg}=$ Acc $\quad$ hit-Pfv-3SgSbj
'It's me [focus] that Seydou hit.'
or: 'Seydou hit me.'
c. kô: sé:dù dènnè-dè- $\varnothing$

NearDist S look.for-Ipfv-3SgSbj
'That [focus] is what Seydou is looking for.'

### 13.1.5 Focalization of PP or other adverbial phrase

An adverb or adverbial phrase, such as a locational PP, shows no consistent overt sign of focalization in morphology or linear position. (370a) can be interpreted as focalizing or not focalizing the PP. However, especially with a demonstrative, a focalized PP can be fronted as in (370b).
a. (mí) [ògùlú rà:] kǒy=gò pàd-ì-ŋ̀ (1Sg) [outback Loc] daba=Def leave-Pfv-1SgSbj 'It was in the fields [focus] that I left the daba (hoe).' or: 'I left the daba in the fields.'
b. [ŋ̀gó lè] sé:dù wálù kàn-jè- $\varnothing$
[Prox Inst] $\mathrm{S} \quad$ work(n) do-Ipfv-3SgSbj
'It's with this [focus] that Seydou works.'

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives

### 13.2.1.1 Final L-tone

In my assistant's speech, a polar question has the same form as a declarative, except that the question has a final floating L-tone. There is no audible difference if the declarative already ends in an L-tone (371a). If it ends in an H-tone, the interrogative changes it to falling tone. In (371b), the floating L pushes the H-tone back from the suffixal sonorant to the vowel of the final syllable (§3.7.4.5). In (371c), the final H-toned vowel is lengthened to accomodate the contour falling tone (§3.7.4.1). In each of these examples the form of the verb in the declarative version follows the free translation in parentheses.

```
a. (ú) íb\grave{\varepsilon} bǒ:-j\grave{\varepsilon}-\grave{W}
    (2Sg) market Augm.go-Ipfv-2SgSbj.Q
    'You-Sg are going to the market?', 'Are you-Sg going to the market?'
    (< bǒ:-j\grave{c}-\grave{W})
b. yèl-\varepsiloń-\grave{j}
    come-Pfv-1SgSbj.Q
    'I came?', 'Did I come?'(< yèl-\grave{\varepsilon-\eta})
c. sé:dù yèl-lî:-\varnothing
    S come-PfvNeg-3SgSbj.Q
    'Seydou hasn't come?', 'Hasn't Seydou come?'(< yèl-lí-\varnothing)
```

In interlinears, a final ". Q " indicates this question intonation.

### 13.2.1.2 Clause-final mà $\rightarrow$

When the implied alternative proposition is overt, as in (372), my assistant adds mà $\rightarrow$. He prefers not to use it in ordinary polar interrogatives and does not use it after content interrogatives like 'who?' and 'what?'. Some other speakers make more extensive use of the particle.

As with its counterparts in other Dogon languages, there is an issue whether mà $\rightarrow$ is at heart a polar interrogative particle or an 'or' disjunction. The two are closely related logically.
mà $\rightarrow$ usually follows the first proposition only. Prosodically, the two propositions can be phrased seamlessly, or there can be a prosodic break after mà $\rightarrow$.

| íbè | $b o ̌:-j \grave{\text { che }}$ - | mà $\rightarrow$ | bòlદ́-̇̀lo- |
| :---: | :---: | :---: | :---: |
| market | Augm.go-Ipfv-2SgSbj | Q | go-IpfvNeg-2SgSbj |

'Are you going to the market, or not going?'
mà $\rightarrow$ is realized as L-toned in most contexts, though subject to intonational effects. However, when it follows a 3 Sg or 3 Pl perfective positive, the verb drops to L-tone, and a falling tone appears on $m \hat{a} \rightarrow$. The tonology here is similar to that of the same perfectives before $=y o ̀ ~ ' i f$ '; see §3.7.3.3 for analysis. The perfective paradigm of 'come' illustrates the difference between third person and $1 \mathrm{st} / 2 \mathrm{nd}$ person interrogatives.

$$
\begin{equation*}
\text { gloss } \quad \text { statement } \quad \text { question } \tag{373}
\end{equation*}
$$

a. initial H -tone shifts to interrogative particle, creating HL-tone

$$
\text { 'he came' } \quad y \varepsilon ́ l-\grave{\varepsilon}-\varnothing \quad y \varepsilon ̀ l-\grave{\varepsilon}-\varnothing m a ̂ \rightarrow
$$

$$
\text { 'they came' } \quad \text { yél-ì-yà } \quad \text { yèl-ì-yà mâ } \rightarrow
$$

b. interrogative particle remains L-toned

| 'I came' | $y \varepsilon$ ¢ $1-\grave{\varepsilon}-\underline{y}$ | $y \varepsilon$ èl-غ̇-ŋ́ mà $\rightarrow$ |
| :---: | :---: | :---: |
| 'we came' | $y \grave{l} l-\varepsilon$ - $¢$ | $y \varepsilon ̀ l-\grave{\varepsilon}-1$ ¢ mà $\rightarrow$ |
| 'you-Sg came' | $y \grave{\varepsilon} 1-\grave{\varepsilon}-\chi^{\prime}$ | $y \varepsilon ̇ l-\varepsilon$ - - m mà $\rightarrow$ |
| 'you-Pl came' | yèl-દ́-ŋ̀ | $y \varepsilon ̇ l-\varepsilon$-1̀ mà $\rightarrow$ |

In the 2 Pl form in (373b), the H-tone optionally spreads (phonetically) to the nasal suffix before the L-toned particle: [j̨̀léŋ́mà $\rightarrow$ ].

With I-class verbs, the 3 Sg perfective $-\grave{-}-\varnothing$ is rounded to $-\grave{u}-\varnothing$ before the labial in $m \hat{a} \rightarrow$ if there is another rounded vowel in the preceding syllable, optionally otherwise: pàd-ì- $\varnothing$ mâ $\rightarrow$ $\sim$ pàd-ù- $\varnothing$ mâ $\rightarrow$ 'did he/she leave (it)?', nearly always bòl-ù- $\varnothing$ mâ $\rightarrow$ 'did he/she go?'.
mà $\rightarrow$ occurs more systematically in quoted questions, and in complements of 'not know (that/whether...)' and 'forget', see §17.2.1.2-3.

Short answers to polar interrogatives are $\grave{\jmath}^{n} h \grave{o}^{n}$ 'uh-huh' (i.e. 'yes') and ǎy or $\varsigma^{n} \uparrow \grave{j}^{n}$ 'no!'

### 13.2.1.3 Clitic $=$ lò or = là (rhetorical tag question)

This clitic is added to the verb as a rhetorical question marker. The utterance functions pragmatically as a statement rather than as a question. The tonal treatment after third-person perfective verbs is the same as for =yò 'if' (§16.1), resulting in =lô: or =lâ: after an L-toned verb. I gloss the particle as 'right?' in interlinears, but it can usually be disregarded in idiomatic translations.

```
íyè j\grave{mò=ý ág-à: bèlì-m-ì- }\varnothing=lô:,
today hare=Acc catch-PastAnt get-Pass-Pfv-3SgSbj=right?,
y\grave{gó-njì: kán-j-ì mà }->
how? do-Ipfv-3PlSbj Q
```

'(They said:) hare has been caught and is in custody, right? So (now) what will we do?'

### 13.2.2 Content (WH) interrogatives

The interrogative word is presumably focalized but this is usually covert. Even as subjects, 'who?' and 'what?' have 3 Sg agreement, which is indistinguishable from the absence of pronominal-subject marking on the verb under subject focalization. 'Who?' and 'what?' have predicative forms including the 'it is' clitic. Adverbial interrogatives occur without the clitic in predicative form, which is identical to the isolation form (e.g. 'when?').

### 13.2.2.1 'Who?' (ă:)

The human WH interrogative noun is â:. It occurs in the normal range of syntactic environments for NPs. When it is clear that multiple individuals will be involved, plural -mbè is optionally added (375a), but it is infrequent. /LHL/-toned â: reduces to /LH/-toned ǎ: when its final L-tone is realized on the tautosyllabic 'it is' or accusative enclitic.
a. ă:(-mbè)
$b o ̀-j e ̀$
who?(-Pl)
go-Ipfv
'Who will go?'
b. [íb̀̀ rà:] ǎ: $=\grave{\eta} \quad W \varepsilon ̀-\grave{\varepsilon}-\grave{W}$
[market Loc] who?=Acc see-Pfv-2SgSbj
'Who(m) did you-Sg see in the market?'
c. $\quad \check{a}:=\grave{j}$
who? $=$ it.is
'Who is it?' (e.g. to someone knocking at the door)
d. ǎ: = ̀̀ bè
who? $=$ it.is be.Past
'Who was it?'
e. [[ă: mò=̀ ] rà:] ùnj-è:-dè-ŋ̀
[[who? Poss=Def] Loc] lie.down-MP-Ipfv-1P1Sbj
'At whose place will we sleep?'
f. [gìnغ̀ ${ }^{\mathrm{L}}$ ngó] [ǎ: mò] = ì
[house ${ }^{\text {L }}$ Prox] [who? Poss]=it.is
'Whose house is this?' (lit. "This house is whose?")

### 13.2.2.2 'What?' (ìnjú~ ǹjí~ ìnjê: ), 'with what?', 'why?'

The nonhuman interrogative noun is ìnjú 'what?' It may be reduced to ǹjú with no clearly articulated initial vowel. Another variant is ǹjí. Before the 'it is' clitic it becomes ìnjê: (376c).

```
a. ìnjú kàn-ì
    what? happen-Pfv
    `What (has) happened?'
```

b. ú ìnjú n $\grave{\varepsilon}-\grave{\varepsilon}-\grave{W}$

2 Sg what? eat-Pfv-2SgSbj
'What did you-Sg eat?'
c. kó
ìnjé: $=$ ì
NearDist
what? $=$ it.is
'What is that?'
d. ìnjú kánà wò-Ẁ
what? do be-2SgSbj
'What are you doing?'
With instrumental postposition lè we get 'with what?' (377a). With jǎ: , with or without an instrumental postposition, cf. §8.3.1, we get 'why?' (377b).
a. [ìjú
lè] tò:-dò-ẁ
[what? Inst] sow-Ipfv-2SgSbj
'With what will you plant (the seeds)?'
b. [ìnjú (lè̀)] jă: yèl-غ̀-ל̀
[what? (Dat)] Purp come-Pfv-2SgSbj
'Why have you-Sg come?'
c. sé:dù ìnjú jă: yèl-è- $\varnothing$

S what? Purp come-Pfv-3SgSbj

### 13.2.2.3 'Where?' (yògó rà: , ỳ̀gó-nì)

The location interrogative has two forms. One is yògó rà:, literally 'at which (one)?' with locative postposition rà. This could also be written as one word, yògó-rà: . The less common alternative is yògó nì, with an alternative locative postposition (§8.2.2). As predicate, as when asking the location of an event such as a concert that one has been talking about, no 'it is' particle is present (378b).
a. [yògó
rà:] bò-jò-ẁ
[which? Loc] go-Ipfv-2SgSbj
'Where are you-Sg going?'
b. yògó rà:
which? Loc
'Where (is it)?'
$\begin{array}{llll}\text { c. } & \text { Ĺ } & \text { [yògó } & \text { rà:] } \\ & \text { 2Sg } & \text { [which? } & \text { wò-ら̀ } \\ & \text { 'Where are you-Sg? } & & \text { Loc] }\end{array}$

### 13.2.2.4 'When?' ([wàgùrù ${ }^{\text {L }}$ yògó] lè, etc.)

Combining noun wágùrù 'time, point in time' with yògó 'which?' and postposition lè in its temporal function, we get a phrase meaning 'when?' (379a). Another noun like úgó 'month' can also be used instead of 'time' (379b). For 'which day?' a special form yògúnà is available $(379 \mathrm{c})$. The 'it is' clitic is absent from the predicative form (379d).
(379)
a. [[wàgùrù ${ }^{\mathrm{L}}$ yògó] lè] yè-jò-Ẁ
[[time ${ }^{\text {L }}$ which?] Temp] come-Ipfv-2SgSbj
'When will you-Sg come?'
b. [[ùgò ${ }^{\mathrm{L}}$ yògó] lè] yè-jò-Ẁ
[[month ${ }^{\text {L }}$ which?] Temp] come-Ipfv-2SgSbj
'In which month will you-Sg come?'
c. yògúnà $y \varepsilon ̀-j \grave{-}-\underset{W}{ }$
which.day? come-Ipfv- 2 SgSbj
'On which day will you-Sg come?'
d. [wàgùrù ${ }^{\mathrm{L}}$ yògó] lè
[time ${ }^{\text {L }}$ which?] Temp
'When (is it)?'

### 13.2.2.5 'How?' (yògó-njì:)

The manner interrogative is yògó-njì. It can be used as an alternative to ìnjú 'what?' with the simple verb 'do' (380b).

```
a. yògó-njì: wálùu kàn-jò-Ẁ
how? work(n) do-Ipfv-2SgSbj
'How do you-Sg work?'
b. yògó-njì: kàn-jè-\grave{j}
how? do-Ipfv-1SgSbj
'How (=what) will we do?'
c. yògó-njì [pègèlén dà] yû: wàlà-dè-ท̀
how? [hill Loc] millet do.farming-Ipfv-2P1Sbj
'How do you-Pl farm millet on the (rocky) hill?'
d. yògó-njì:
```


## how?

```
'How (is it)?'
e. yògó-njì: bè- \(\varnothing\)
how? be.Past-3SgSbj
'How was it?'
```


## 13．2．2．6＇How much／many？＇（à yá ）

The interrogative of quantity is àná．It can be used with masses（＇how much sugar？＇）or count nouns（＇how many sheep？＇）．As predicate，the＇it is＇particle is absent especially in one－word questions（381a），but is used when a separate topic（subject）is present（381b）．Alternatively， if the entities are physically present，wò＇be＇can occur（381c），in which case à $\eta$ á is grouped syntactically with the the subject（381c）．When combined with a noun or NP，it is generally phrased separately，as though in apposition．Nouns that have plurals take plural form． However，postpositions are added only once，to àyá．The accusative clitic is not used with àyá even in human contexts（ 381 g ）．
a．àyá
how．much？
＇How much（is it）？＇
b．bé à yá＝ì
3Pl how．many？$=$ it．is
＇How many are they？＇（with final L－tone）
c．［bé àyá］wò－yyà
［3P1 how．many？］be－3P1Sbj
＇How many of them are there（＝are present）？＇
d．［pédù／nàクá àクá］èb－ò－W
［sheep／cow how．many？］buy－Pfv－ 2 SgSbj
＇How many sheep／cows did you－Sg buy？＇
e．［yà：－ŋ́ àyá］yèl－ì－yà
［woman－Pl how．many？］come－Pfv－3P1Sbj
＇How many women came？＇
f．［kǒn àná lè］yû：wàlà－dò－Ẁ
［daba how．many？Inst］millet do．farming－Ipfv－2SgSbj
＇With how many dabas（＝hoes）do you－Sg do farming？＇
g．［úlù－$\eta$ àクá］bènd－è－Ẁ
［child－Pl how．many？］hit－Pfv－2SgSbj
＇How many children did you－Sg hit？＇
h．bármò＝j̀ à $=$ á－àクà
pot＝Def how．much？－how．much？
＇How much（each）are the pots？＇（distributive，§4．6．1．6）
à $\eta a ́$ is optionally extended by incorporating the possessive marker mò，the combination being pronounced àクá－mò or（irregularly assimilated）àyá－mà．This quantifies the commodity by its price rather than，say，weight．

| súgòrò | àná-mゝ̀ |
| :--- | :--- |
| sugar | how.many/much?-Poss |

nàmò-Ẁ
sugar how.many/much?-Poss
want-2SgSbj
'You want sugar for how much (price)?'

Because of the more or less appositional construction, combinations like (383) can be expressed directly, without an explicit partitive as in English how many of...

$\left.\begin{array}{lll}{[\text { nàyá }} & \text { ù-mゝ̀] } & \text { àyá }\end{array}\right]$| còm-è |  |
| :--- | :--- |
| cow | 2Sg-Poss] | how.many? $\quad$ die-Pfv

'How many of your cows have died?
Ordinal adjective 'how-manieth?' (Fr quantième) is àyà-ènné. This is the regular ordinal formation (§4.6.2.2).

### 13.2.2.7 'Which?' (yògó)

The interrogative identificational adjective is yògó. As with other modifying adjectives, a preceding noun is tone-dropped. If the modified NP is possessed or determined, yògó is treated as appositional and has no tonal effect on the NP (384c). The accusative clitic is present for a specific human direct object (384e).
a. [[àndà ${ }^{\mathrm{L}}$ yògó] rà:] gò:-dò-Ẁ
[[village ${ }^{\text {L }}$ which?] Loc] go.out-Ipfv-2SgSbj
'What (=which) village are you-Sg from?'
b. [nànà ${ }^{\mathrm{L}}$ yògó] dònò-dò-Ẁ
[cow ${ }^{\mathrm{L}}$ which?] sell-Ipfv-2SgSbj
'Which cow are you selling?'
c. [nàná ù-mò] yògó dònò- d-à: $s$ ह̀-Ẁ [cow 2Sg-Poss] which?] sell-Ipfv-PastAnt have-2SgSbj
'Which of your cows will you-Sg sell?'
d. [yà:-nà ${ }^{\mathrm{L}}$ yògó] $\grave{u}=$ ŋ́ bònd-ì
[woman- $\mathrm{Sg}^{\mathrm{L}}$ which?] $2 \mathrm{Sg}=\mathrm{Acc}$ call-Pfv
'Which woman called you-Sg?'
e. [yà:-nà ${ }^{\mathrm{L}}$ yògó= ý] $^{\text {e }}$ bònd-ù-ẁ
[woman- $\mathrm{Sg}^{\mathrm{L}}$ which?=Acc] call-Pfv- 2 SgSbj
'Which woman did you-Sg call?'

### 13.2.3 Embedded interrogatives

Questions embedded under a verb like '(not) know' have their regular form, except that question particle mà $\rightarrow$ is obligatory.
a. [ằ: $y \varepsilon ̀-j \varepsilon \quad m a ̀ \rightarrow] \quad$ ìnnغ̀-ŋ́ [who? come-Ipfv Q] not.know-1SgSbj
'I don't know who is coming.'
b. [sé:dù yé-jè mà $\rightarrow$ ìnnè-
[S come-Ipfv Q] not.know-1SgSbj
'I don't know whether Seydou is coming.'

For the structure of quoted clauses in general, see $\S 17.1$. Quoted interrogatives are illustrated in (386). The subject of the quoted question is in a quotative-subject phrase (§17.1.3.2). Question particle mà $\rightarrow$ is obligatory.
(386) a. [sé:dù/úlù-ŋ̀ wà] [[yògó rà:] bò-jò mà $\rightarrow$ ]
[S / child-Pl QuotSbj] [[which? Loc] go-Ipfv Q]
tùb-غ̀- $\varnothing$
ask-Pfv-3SgSbj
'He/She asked Seydou/the children where he was/they were going.'
b. [má-à
$y \varepsilon ́-j \grave{\varepsilon}$
mà $\rightarrow$ ]
tùb-غ̀- $\varnothing$
[1Sg-QuotSbj come-Ipfv Q] ask-Pfv-3SgSbj
' $\mathrm{He} /$ She asked me whether I was coming.'

## 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, appears within the relative clause, and is tone-dropped. Late-NP elements such as determiners, 'all', plural -mbè, and discoursefunctional (DF) elements follow the verb. The "verb" is a noun-like participle in form, marked for the usual aspect-negation (AN) categories and agreeing in (human) number categories with the head NP, not with the subject as such. If the subject of a nonsubject relative is pronominal, it is expressed as a proclitic preceding the final verb-participle, and takes the same form as the corresponding independent pronoun.

The basic structure is broadly shared with other central and eastern Dogon languages (Jamsay, Tommo So, Toro So, etc.), allowing for some language-specific variation. Relative constructions are best modeled as complex NPs (DPs) of the basic form Poss-N-Adj-Num-RelCl-Det-'all'-DF. 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 segment to its left, Poss-N-Adj-Num, moves into the relativization site, creating the appearance of an internally-headed relative clause.

### 14.2 Internal head NP

### 14.2.1 Tone-dropping on final word(s) of head NP in relative clause

The maximum form of the internal head is Poss-N-Adj-Num or, with a postnominal possessor, N-Adj-Num-Poss. If a prenominal possessor or an adjective is present, the noun has already been subject to a tonosyntactic overlay. The relative clause, as a "higher" (more external) controller, effectively erases all prior tonosyntactic activity and imposes $\{\mathrm{L}\}$ on the $\mathrm{N}(-\mathrm{Adj})(-\mathrm{Num})$ sequence. This is clear when no preposed possessor is present ( $387 \mathrm{a}, \mathrm{c}$ ). When a preposed possessor is present, in theory either the possessor or the relative clause could account for the $\{\mathrm{L}\}$ overlay on the remaining words, hence the double superscripts in (387b). The preposed possessor itself escapes tone-dropping. A postnominal possessor is already L-toned, so it undergoes no overt tone change in relative heads, but because it is to the right of the tone-dropped noun in (387c) I assume it is included in the tone-dropping domain.

$$
\begin{equation*}
\text { independent } \quad \text { as relative head } \tag{387}
\end{equation*}
$$

a. unpossessed

N
$\mathrm{N}^{\mathrm{L}}$ Adj
N Num
$\mathrm{N}^{\mathrm{L}}$ Adj Num
$\mathrm{N}^{\mathrm{L}}$
[N Adj] ${ }^{\text {L }}$
[N Num] ${ }^{\text {L }}$
[N Adj Num] ${ }^{\text {L }}$
b. prenominal possessor

| Poss ${ }^{\text {L }} \mathrm{N}$ | Poss ${ }^{\text {L }} \mathrm{N}^{\mathrm{L}}$ |
| :---: | :---: |
| Poss ${ }^{\text {L }}$ [N Adj] | Poss ${ }^{\text {L }}$ [ N Adj $]^{\text {L }}$ |
| Poss ${ }^{\text {L }}$ [ N Num] | Poss ${ }^{\text {L }}$ [N Num $]^{\text {L }}$ |
| Poss ${ }^{\text {L }}$ [N Adj Num] | Poss ${ }^{\text {L }}$ [N Adj Num $]^{\text {L }}$ |

c. postnominal possessor

N Poss
[ N Poss $]^{\mathrm{L}}$
$\mathrm{N}^{\mathrm{L}}$ Adj Poss
[ N Adj Poss $]^{\text {L }}$
N Num Poss
[N Num Poss] ${ }^{\text {L }}$
$\mathrm{N}^{\mathrm{L}}$ Adj Num Poss
[ N Adj Num Poss $]^{\text {L }}$
Examples are in (388), in the same order. Stems within the NP are $\grave{\varepsilon} n \varepsilon ́ ~ ' g o a t ', ~ p i ́ l u ̀ ~ ' w h i t e ', ~$ and kúlè: ' 6 '. Postnominal possessors like 2 Sg ù-mò are already L-toned so they are vacuously affected by tone-dropping (388c).
independent as relative head
a. unpossessed

غ̀né
$\grave{\varepsilon} n \grave{\varepsilon}^{\mathrm{L}}$
ènè ${ }^{\mathrm{L}}$ pílù
[Ènè pìlù] ${ }^{\mathrm{L}}$
èné kúlè:
ènè ${ }^{\mathrm{L}}$ pílù kúlè:
[Ènè kùlè:] ${ }^{\mathrm{L}}$
[Ènè pìlù kùlè:] ${ }^{\mathrm{L}}$
b. prenominal possessor
sé:dù ${ }^{\mathrm{L}}$ ̀nnè
sé:dù ${ }^{\mathrm{L}}$ [ह̀nè pìlù]
sé:dù ${ }^{\mathrm{L}}$ [ह̀nè kùlè:]
sé:dù ${ }^{\mathrm{L}}$ [ह̀nè pìlù kùlè:]

$$
\begin{aligned}
& \text { sé:dù }{ }^{\mathrm{L}} \text { 立nè }{ }^{\mathrm{L}} \\
& \text { sé:dù }{ }^{\mathrm{L}}[\text { ह̇nè pìlù }]^{\mathrm{L}} \\
& \text { sé:dù }{ }^{\mathrm{L}}[\text { ह̀n } \text { kùlè }]^{\mathrm{L}} \\
& \text { sé:dù }{ }^{\mathrm{L}}[\text { ह̀n } \text { pìlù kùlè: }]^{\mathrm{L}}
\end{aligned}
$$

c. postnominal possessor

غ̀né ù-mò
غ̀nè ${ }^{\mathrm{L}}$ pílù ù-mò
[ ǹnè ù-mう̀ ${ }^{\mathrm{L}}$
[Ènè pìlù ù-mò] ${ }^{\mathrm{L}}$
غ̀nع́ kúlè: ù-mò
غ̀nغ̇ ${ }^{\mathrm{L}}$ pílù kúlè: ù-mò
[ènè kùlè: ù-mò] ${ }^{\mathrm{L}}$
[Ènè pìlù kùlè: ù-mò ${ }^{\mathrm{L}}$
(388c) shows that postnominal possessors are tolerated in relative heads in DS. In some other Dogon languages they must be converted to prenominal possessors.

### 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 (389). The pronoun is outside the relative and has its lexical tones.
a. $\varepsilon$ ह́mmè [[àndó=ò rà:] wó:-ŋ̀= =gò]
1Pl [[village=Def Loc] be.Ppl-Pl=Def]
'we who are in the village'

'we who(m) Seydou saw'

### 14.2.3 Conjoined NP as head

Example (390a) is a main clause with a conjoined NP as subject. (Since both NPs are singular, agreement on the verb is often singular as here (§7.1.1.). (390b) converts this into a subject relative.
a. โyù:-wálù-nè
lè] [bèlù-gírù-nè
lè]
[millet-do.farming.Agent-Sg and] [goat-herd(v).Agent-Sg] and]
jágùl-ì-ỳ- $\varnothing$
fight-MP-Pfv-3SgSbj
'A farmer and a goatherd fought.'
b. [yù:-wálù-ǹ̀=̀̀
[millet-do.farming.Agent-Sg
lè] [bèlù-gìrù-ǹ̀=ò
lè $]^{\mathrm{L}}$
$j a ̀ g u ̀ l-i-1-y-1$ - $=$ gò
and] [goat-herd(v).Agent-Sg] and ${ }^{\text {L }}$
fight-MP-Pfv.Ppl-Pl=Def
yògó-rà: wò-yyà
'Where are the farmer and the goatherd who fought?'

In elicitation, the first occurrence of (390b) was pronounced with the same tones as in (390a), i.e. with no tone-dropping on either conjunct. When (390b) was repeated, sounding more fluent than the first attempt, the H-tone on the second conjunct ('goatherd') was dropped, but the first conjunct maintained its H -tone. The conclusion is that only the final conjunct is accessible as a tonosyntactic target by an external controller.

### 14.2.4 Headless relative clause

Headless relative clauses usually presuppose a covert head with a sense like 'time', 'place', or 'manner'. The absence of an overt head is usually compensated for by a final postposition (temporal, locative, or 'like'). An example is (472a) in §15.3.2.1 ('the way Seydou does work'), where the postposition giǹ ' like' defines the relative clause as a manner adverbial clause.

Headless relatives can also presuppose a covert head meaning 'fact'. Such clauses occur as propositional complements for main-clause verbs like 'be afraid (that)', see (510b) in §17.3.2, and for 'want' with different-subject complement, see (529a-b) in §17.4.8.

See §15.2.1.1 for headless progressive relatives.

### 14.2.5 Head noun not usually doubled after relative clause

Constructions of the type [[the day that you came] day], where a simple noun agreeing lexically with the internal head NP is added after the verb-participle, are not usual in DS though they do occur in some Dogon languages. There is perhaps less justification for this head-doubling in DS than in other Dogon languages, since DS regularly marks even headless temporal, spatial, and manner relative clauses with a category-defining final postposition, e.g. temporal lè.

However, a possible textual example of doubling is text 01 at $00: 45$, if 'country' is appositional to the internal head NP yàlù 'place'.

### 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 a preverbal proclitic identical in form to the independent pronoun (391a). If the subject is expressed by a nonpronominal NP , there is not also a resumptive 3 Sg or 3 Pl proclitic pronoun (391b). Further examples occur in later sections in this chapter.

> a. pèdù ${ }^{\mathrm{L}}$ mí/ú/ $\varepsilon$ mmè/é/ wó/ bé $\quad \varepsilon b-o ̀=j ̀ ~$ sheep ${ }^{\mathrm{L}} \quad 1 \mathrm{Sg} / 2 \mathrm{Sg} / 1 \mathrm{Pl} / 2 \mathrm{Pl} / 3 \mathrm{Sg} / 3 \mathrm{Pl} \quad$ buy-Pfv.Ppl=Def
> 'the sheep-Sg that I/you-Sg/we/you-PI/he-or-she/they bought'

In a direct verb chain or in a construction involving an auxiliary-like (quasi-)verb, the proclitic subject pronoun occurs directly before the final inflected verb. For example, in (392) the 1 Sg subject pronoun precedes the final auxiliary 'have' which is part of the periphrastic future construction.

| $\left[\left[b a ̀ y^{\mathrm{L}}\right.\right.$ | Ø̀gǵ $]$ | lè] |
| :--- | :--- | :--- |
| $\left[\right.$ day $^{\mathrm{L}}$ | Prox] | Temp] |

[[nă: $n \hat{\varepsilon}: \quad b \grave{\varepsilon}-j-\mathrm{à}: \quad m i ́ \quad s \varepsilon ́:=g \grave{\jmath}] \quad$ (lè)]
[[meal eat get-Ipfv-PastAnt 1SgSbj have.Ppl=Def] (Temp)]
'on that day, (when) I will be able to eat (meals) here.'

### 14.4 Verbal participle in relative clause

The verb in a relative clause is morphosyntactically a noun-like participle that agrees with the head NP. Like nouns, it can take a (human) singular form with suffix -nv or a (human) plural
form with suffix $-\eta$, and it is regularly followed by a definite clitic. However, if these suffixes and clitics are pared away, the participle is usually identical to the main-clause form of the verb in the corresponding AN inflection, minus the final pronominal-subject suffix that occurs in main-clause verbs. The main exception is the perfective positive, which has a special participial suffix, though for nonmonosyllabic verbs the regular main-clause 3 Sg and 3 Pl subject forms can also be used as participles (after adopting the tone pattern of the participle).

Each of the AN categories has its corresponding participle, except that augmentation is not allowed.

### 14.4.1 Participles of positive perfective-system verbs

### 14.4.1.1 Perfective participle (-ú, -ý ) and pseudo-participle (-é/-غ́/-í)

The verb in the relative clause may take a participial form, -u for nonmonosyllabics and usually $-y$ for monosyllabics, with $\{\mathrm{LH}\}$ overlay. Alternatively, it can be based on the form of the main-clause 3 Sg or 3 Pl subject perfective, but adjusted to the tone pattern of participles and behaving morphosyntactically exactly like the participle. I will call this second type pseudo-participle, and gloss it like a third-person perfective but with ".Ppl" added, e.g. 'go.down-Pfv-3SgSbj.Ppl'.

The difference between a perfective participle and a 3 Sg perfective main-clause verb (E-stem or I-stem) is obscured by assimilations and contractions. For example, the pseudoparticiple just mentioned, 'go.down-Pfv- $3 \mathrm{SgSbj} . \mathrm{Ppl}$ ', can appear as sùg-é- $\varnothing=g \grave{\text { ò }}$ or as
 down' is the stem. Furthermore, the difference between a pseudo-participle and a true participle is frequently masked by the contraction of the final vowel with definite variant $=\grave{j}$. For example, $\grave{\varepsilon} b-\rho=\grave{\jmath}$ 'who/that bought' could be the definite form of either the true participle $\grave{\varepsilon} b-u$ or of the pseudo-participle $\grave{\varepsilon} b-\varepsilon-\varnothing$ that is based on the main-clause perfective $(3 \mathrm{Sg}$ $\varepsilon ́ b-\varepsilon ̀-\varnothing)$.

For nonmonosyllabics, the (true) participle has $-u$ replacing the stem-final vowel, regardless of whether the main-clause perfective is based on the E-stem or the I-stem (393a). For monosyllabics, most verbs have $-y$ in the participle (393b), which for some verbs (I-class) is segmentally identical to the main-clause perfective (and therefore also to the singular pseudo-participle). However, my assistant rejected $-y$ participles for verbs whose perfective is of the type $C \varepsilon-\varepsilon$ or $C e-e$ (including nasalized $C \mathrm{e}^{n}-\mathrm{e}^{t}$ ) (393c).

Perfective
main clause (3Sg) participle gloss
a. bisyllabic

| lexically $/ L H /$ |  |  |
| :--- | :--- | :--- |
| bénd-̇े | bènd-ú | 'hit' |
| ból-ì | bòl-ù | 'go' |
| dóng-è | dòng-ú | 'pound (in mortar)' |
| lexically $/ H L /$ |  |  |
| Éb-̀े | ह̀b-ú | 'buy' |
| pád-ì | pàd-ú | 'leave' |

b. monosyllabic, participle with $-y$
main-clause perfective also has -y (I-stem)

| ká-ỳ | kà-ý | 'shave' |
| :--- | :--- | :--- |
| yó-ỳ | yò-ý | 'go in' |

main-clause perfective is E-stem gó-è gò-ý 'go out' gó-غ̀ gò-ý 'dance' nó-غ̀ nò-ý 'drink’
c. monosyllabic, participle segmentally $=$ E-stem perfective

| $n \varepsilon ́-\dot{\varepsilon}$ | $j \grave{\varepsilon}-\dot{\varepsilon}$ | 'eat (meal)' |
| :--- | :--- | :--- |
| $W \dot{\varepsilon}-\grave{\varepsilon}$ | $W \grave{\varepsilon}-\varepsilon ́ \varepsilon$ | 'see' |
| $g \varepsilon^{n}-\grave{e}^{n}$ | $g \grave{e}^{n}-e^{n}$ | 'steal' |

Especially for human head NPs, singular $-n v$ and plural $-\eta$ can be added. When either suffix is added, it acquires the H-tone of the LH-toned participles. Definite clitic $=g \grave{o}$ is always L-toned and does not interact tonally with the participle.
(394) gloss Ppl definite $\mathrm{Sg} \quad \mathrm{Sg}$ definite $\mathrm{Pl} \quad \mathrm{Pl}$ definite
'hit' bènd-ú bènd-ú=gò bènd-ù-nó bènd-ù-nó=gò bènd-ù-ý bènd-ù-ń=gò
 'leave' pàd-ú pàd-ú=gò pàd-ù-nó pàd-ù-nó=gò pàd-ù-ŋ́ pàd-ù-ท́=gò

A few pseudo-participial forms for the same verbs are in (395).
(395) Pseudo-participles (based on 3 Sg or 3 Pl perfective)

| gloss | Sg | Sg definite | Pl | Pl definite |
| :---: | :---: | :---: | :---: | :---: |
| 'hit' | $b \varepsilon ̇ n d-\varepsilon ์$ | $b \varepsilon ̀ n d-\varepsilon \in=g \grave{~}$ | bènd-ì-yá | $b \varepsilon ̇ n d-i ̀-y a ́=g \grave{~}$ |
| 'go out' | gò-é | $g o ̀-e ́=g \grave{~}$ | gò-ý-yà | $g o ̀-y ́-y a ̀=g \grave{~}$ |
| 'leave' | pàd-í | pàd-íl $=$ go | pàd-ì-yá | pàd-ì-yá= gò |

My assistant rejected augmented perfective participles and pseudo-participles. So augmented (reduplicated) gò-gó-è 'went out' cannot be participialized (as $\# g o ̀-g o ̀-y ́=g o ̀, ~ \# g o ̀-g o ̀-e ́=g o ̀, ~$ or other variant).

### 14.4.1.2 Experiential perfect participle

The experiential perfect, which ends in wò 'be', uses the regular participle of wò, namely wô: .

| àn-nà ${ }^{\mathrm{L}}$ | gònદ̌y | wà:-tíyà | wó:(-nò)=gò |
| :--- | :--- | :--- | :--- |
| man-Sg $^{\mathrm{L}}$ | elephant | see-ExpPrf | be.Ppl $(-\mathrm{Sg})=$ Def |

'the man who had (once) seen an elephant'

### 14.4.2 Participles of positive imperfective-system verbs

### 14.4.2.1 Imperfective participle

The imperfective with suffix -d $\grave{\varepsilon}$ or for a few verbs $-j \grave{\varepsilon}$ is the basis for the participle. In careful pronunciation there is no tonal change, but in allegro speech all H-tones can be dropped The human singular suffix can be added: $-d \grave{\varepsilon}-n \grave{\varepsilon} \sim-j \grave{\varepsilon}-n \grave{\varepsilon}$. The regular addition of the definite clitic has tended to spread $\rho$-vowels to these suffixes: $-d \grave{\jmath}=g \grave{\jmath}$ and $-j \grave{\jmath}=g \grave{\jmath}$, even $-d \grave{\jmath}-n \grave{\jmath}=g \grave{\jmath}$ and $-j \grave{-}-n \grave{\jmath}=g \grave{\jmath}$. Leaving these $\rho$-variants aside, representative forms are in (397).

| main-clause | participle |  | gloss |
| :---: | :---: | :---: | :---: |
|  | definite | Sg definite | '(who) ... |
| $b o ́-j \dot{\varepsilon}$ | $b o ́-j \dot{\varepsilon}=g \grave{j}$ | $b o ́-j \grave{\varepsilon}-n \bar{\varepsilon}=g \grave{o}$ | '... goes' |
| náa:-dè | ná:- - ¢ $=g$ ò | ná:-dè-nغ̀=gò | '... eats (meal)' |
| $b e ̀ n d \varepsilon$-dè | $b \varepsilon ̀ n d \varepsilon ́-d \grave{\varepsilon}=\mathrm{g} \grave{\mathrm{j}}$ | $b \varepsilon ̀ n d \varepsilon ́-d \grave{c}-n \grave{\varepsilon}=g \grave{ }$ | '... hits' |
| pádà-dè | $p$ ádà $-d \bar{\varepsilon}=g \grave{ }$ | $p a ́ d a ̀-d \grave{-}-n \varepsilon$ = $=g \grave{ }$ | ... leaves (sth) |

The usual optional contraction of $=g \grave{j}$ to $=\grave{\jmath}$ is common, producing variants like $b o ́-j \grave{\jmath}=\grave{j}$.
This participle corresponds semantically to both the simple and augmented imperfectives in main clauses.

### 14.4.2.2 Augmented imperfective participle (absent)

My assistant rejected augmented imperfective participles, for example \#gò-gó:-d $=g \grave{\varepsilon}$ 'who will go out' and \#nà-ná:-dò=̀̀ 'who will eat'.

### 14.4.2.3 Progressive participle

The progressive-1 and progressive- 2 constructions end in wò 'be'. The participle of wò, namely wô: , is used in relative clauses. The verb retains its lexical tone melody.
a. yà:-nà ${ }^{\mathrm{L}}$ yàlú sémbò-Ẁ wô:(-nò) =gò woman- $\mathrm{Sg}^{\mathrm{L}}$ place sweep-Ipfv be.Ppl(-Sg)=Def 'the woman who is sweeping (the place)'
b. ǹd $\grave{\varepsilon}^{\mathrm{L}} \quad$ yàbá-Ẁ $\quad$ ô: $(-n \grave{)})=g \grave{\partial}$
person ${ }^{\text {L }}$ accept-Ipfv be.Ppl $(-S g)=$ Def
'the person who is accepting/consenting'

### 14.4.2.4 Future participle

It was not poassible to elicit a participle of the simple future form (§10.2.2.6). Since the future has no suffix, and since its augmentation would disappear in a partciple, a regularly formed future participle would often be indistinguishable from a perfective participle especially with $=\grave{\jmath}$ definite, except possibly by tones.

Instead, the imperfective participle or one of the periphrastic futures is used.

### 14.4.2.5 Periphrastic future participle

The periphrastic future in $-d$-à: $s \dot{\varepsilon}$ ends in $s \varepsilon$ 'have'. The participle of $s \grave{\varepsilon}$, namely $s \hat{\varepsilon}$ : , is used in relative clauses. The verb with $-d$-à: is tone-dropped to $\{\mathrm{L}\}$.
a. yà:-nà ${ }^{\mathrm{L}}$ yàlú $\quad s \varepsilon ̀ m b e ̀-d-a ̀: ~{ }^{\mathrm{L}} \quad s \varepsilon ́:(-n \grave{)}=g \grave{~}$ woman-Sg ${ }^{\mathrm{L}}$ place sweep-Ipfv-PastAnt ${ }^{\mathrm{L}} \quad$ have.Ppl $(-\mathrm{Sg})=$ Def 'the woman who will sweep (the place)' (<sémbè- $d$-à: $s \grave{\varepsilon})$
b. ǹdè ${ }^{\mathrm{L}} \quad$ yàbà- $d-\mathrm{a}:{ }^{\mathrm{L}} \quad s \varepsilon$ : $(-n \grave{)})=g \grave{o}$
person ${ }^{\mathrm{L}} \quad$ accept-Ipfv-PastAnt ${ }^{\mathrm{L}} \quad$ have. $\operatorname{Ppl}(-\mathrm{Sg})=$ Def
'the person who will accept/consent' (< yàbá- $d$-à: $s \bar{\varepsilon}$ )

### 14.4.2.6 Immediate future participle

The immediate future is -njá: wò after $\{\mathrm{L}\}$-toned verb in main clauses. In relatives, wò 'be' takes its participial form wô. . The negative version has wò-ló 'not be' in both main and relative clauses.
a. yà:-nà ${ }^{\mathrm{L}}$ nǎ: nà:-njá:
wó:(-ǹ̀) = gò
woman- $\mathrm{Sg}^{\mathrm{L}}$ meal eat-ImmFut
be.Ppl $(-S g)=$ Def
'the woman who is about to to eat'
b. yà:-nà ${ }^{\mathrm{L}}$ jǎ̌: jà:-njá:
wò-ló(-ǹ̀) = gò
woman- Sg $^{\mathrm{L}}$ meal eat-ImmFut be-StatNeg.Ppl $(-\mathrm{Sg})=$ Def
'the woman who is not about to eat'

### 14.4.3 Participles of negative perfective-system verbs

### 14.4.3.1 Perfective negative participle

For the regular perfective negative, the basic suffix in main clauses is -lí, combining with 2 Sg $-W$ as $-l u ́-\grave{w}$. In relative clauses, the participial form is $-l-u$. This could be analysed as the combination of -lí with the same $-u$ participial morpheme that occurs in the perfective positive. However, the frequent addition of definite $=g$ ø̀ might also have favored the rounded vowel.
(401)

| main-clause | participle | gloss <br> definite | Sg definite |
| :--- | :--- | :--- | :--- | | '(who) ... |
| :--- |

## 14．4．3．2 Experiential perfect negative participle

In main clauses，the experiential negative is expressed by－tà－lí．The participle－tà－l－ú is based directly on this，with $-1-u ́$ taken from the perfective negative participle（preceding section）．

```
àn-nà }\mp@subsup{}{}{L}\mathrm{ gònદ̌y wà:-tà-l-ú(-nò)=gò
man-Sg elephant see-ExpPrf-PfvNeg-Pfv.Ppl(-Sg)=Def
```

＇the man who has never seen an elephant＇
Alternatively，the corresponding positive participle may be negated by using the participle of wò－ló＇not be＇．

| àn－nà ${ }^{\mathrm{L}}$ | gònǧy | wà：－tíyà | wò－ló（－nゝ̀）$=g \grave{y}$ |
| :--- | :--- | :--- | :--- |
| man－Sg | elephant | see－ExpPrf | be－StatNeg．Ppl（－Sg）$=$ Def |
| ＇the man who had never seen an elephant＇ |  |  |  |

## 14．4．4 Participles of negative imperfective－system verbs

## 14．4．4．1 Imperfective negative participle

The regular main－clause imperfective negative stem with－غ̀lغ is used without change as a participle in relative clauses．

| main－clause | participle |  | gloss |
| :---: | :---: | :---: | :---: |
|  | definite | Sg definite | ＇（who）．．． |
| bòlé－ ¢ 1 c̀ | bòlć－$\grave{l}$ le $=$ go | $b o ̀ l c ́-\varepsilon ̇ l e ̀-n \grave{\varepsilon}=g \grave{0}$ | ＇．．．doesn＇t go＇ |
| ná－àlè | ná－àlè＝gò | ná－àlè－nغ̀＝gゝ̀ | ＇．．．doesn＇t eat＇ |
| bèndé－̇̀lè | $b \varepsilon ̀ n d \varepsilon ́-\grave{\varepsilon} l \grave{\varepsilon}=g \grave{ }$ | $b \varepsilon ̀ n d \varepsilon$－̇̀lè－nè $=$ gò | ＇．．．doesn＇t hit＇ |
| pádé－èlè | pádé－èlè＝go |  | ＇．．．doesn＇t leave |

## 14．4．4．2 Progressive negative participle

The progressive negative ends in wò－ló＇not be＇in main clauses．The participle is also wò－ló， with no further tone changes．

| yà：－nà ${ }^{\text {L }}$ | yàlú | sémbò－Ẁ／yàbá－Ẁ | wò－ló（－nゝे）＝gò |
| :---: | :---: | :---: | :---: |
| woman－Sg ${ }^{\text {L }}$ | place | sweep－Ipfv／accept－Ipfv | be－StatNeg．Ppl（－Sg）＝Def |

＇the woman who is not sweeping（the place）／who is not accepting．＇

## 14．4．4．3 Future negative participle

My assistant rejected a participle based on future negative－ri．

### 14.4.4.4 Periphrastic future negative participle

The periphrastic future negative ends with $s \grave{\varepsilon}-l \varepsilon$ 'not have'. In relative clauses, the participle of $s \dot{\varepsilon}-l \varepsilon$ is used. Since the main verb is already tone-dropped in the main-clause version, no further tone changes occur.

$$
\begin{array}{llll}
\text { yà:-nà }{ }^{L} & \text { yàlú } & s \varepsilon ̀ m b \grave{\varepsilon}-d-a ̀:{ }^{L} & s \grave{\varepsilon}-l \varepsilon ́(-n \grave{)})=g \grave{y}  \tag{406}\\
\text { woman-Sg } & \text { place } & \text { sweep-Ipfv-PastAnt }{ }^{\mathrm{L}} & \text { have-StatNeg.Ppl(-Sg)=Def } \\
\text { 'the woman who will not sweep (the place).' } &
\end{array}
$$

### 14.4.4.5 Immediate future negative participle

The immediate future negative, of the type tò:-njá: wò-lò- 1 ' $I$ am not about to sow' (§10.2.3.8) has participial form tò:-njá: wò-ló-nò '(one) who is not about to sow', with the regular participle of wò-ló 'not be'.

### 14.4.5 Participles of statives

### 14.4.5.1 Stative (positive) participle

Examples of participles from derived statives related to active verbs are in (407). The existential particle yé that may accompany main-clause statives is absent from relatives. The initial H-tone in the participle drops to L-tone after an H-toned subject pronominal (see end of this section).

| main-clause | participle |  | gloss |
| :--- | :--- | :--- | :--- |
|  | definite | Sg definite | '(who) $\ldots$ |
| dǎ:クà / yé dàyà | dánà $=$ gò | dánà-nà $=g \grave{y}$ | '... is sitting' |
| ú:njò / yé ùnjò | únjò $=$ g̀̀ | únjò-nò $=g \grave{~}$ | '... is lying down' |

Participles from underived statives (quasi-verbs) are in (408). Again, the existential particle is not present in relatives. The $<\mathrm{HL}>$ tone in wô: etc. is usually leveled to H before an L-toned suffix or clitic.

| main-clause | participle <br> definite |  |  | Sg definite |
| :--- | :--- | :--- | :--- | :--- | | gloss |
| :---: |
| '(who) $\ldots$ |

For both derived statives and stative quasi－verbs，the participle is L－toned after an H－toned subject pronominal proclitic（a common element in nonsubject relatives）：yàlù ${ }^{\mathrm{L}}$ mí dàyà ＇place where I am sitting＇，kìdè ${ }^{\mathrm{L}}$ mí s̀̀＇thing that I have＇．

## 14．4．5．2 Stative negative participle

The forms are in（409）．

| main－clause | participle |  | gloss |
| :---: | :---: | :---: | :---: |
|  | definite | Sg definite | ＇（who）．．． |
| wò－ló | $w \grave{-l o ́=g \grave{~}}$ | wò－ló－nò＝gò | ＇．．．is not＇ |
| sè－lé |  | $s \varepsilon$－lé－nう $=$ go | ＇．．．doesn＇t have’ |
| tò：－ló | tò：－ló＝gò | tò：－ló－nò＝gò | ＇．．．is not in＇ |
| ìnné | ìnné $=$ gò | ìnné－nう̀＝gò | ＇．．．doesn＇t know＇ |
| nàmà－lá | nàmà－lá $=$ gò | nàmà－lá－ǹ＝gò | ＇．．．doesn＇t want＇ |
| ìbè－lé | $\grave{\grave{l}} \mathrm{~b}$－ $1 \hat{\varepsilon}=g \grave{ }$ | ìbè－lદ́－nò＝gò | ＇．．．doesn＇t like＇ |

14．4．6 Participle of past clitic $=$ bè
14．4．6．1 Participle of positive past forms
The participles replace positive main－clause＝bè with its participial form bé：～bè：（410）．
（410）Participle of past clitic（positive）
Past ．．．
main－clause
participle（definite）
．．．progressive－1
．．．progressive－2
．．．future
．．．future
．．．periphrastic future
．．．immediate future
sémbう̀－$\grave{\text { on }}=b e ̀$
sémbò－$\grave{\text { ì }}$ bé：$=g \grave{~}$
．．．immediate future
．．．perfect
．．．experiential perfect
．．．stative
sémbè bè
sémbè bé：$=g \grave{~}$
$s \check{\varepsilon}: m b \grave{\varepsilon}=b e ̀ \quad$［none］
sع́mbè－d－à：$s \grave{\varepsilon}=b e ̀$
$s \varepsilon ́ m b \grave{\varepsilon}-d-a ̀: s \varepsilon=b e ̀:=g \grave{\jmath}$
sèmbè－njá：bè $\quad$ sèmbè－njá：bè：$=g$ ò
sémb－à：bè
sèmbè－tíyà bè
sémb－à：bé：＝gò
dánà $=$ bè dáyà bé：$=$ gò

The human singular form is bé：－nè＝gò．In nonsubject relatives，a proclitic subject pronoun directly precedes bé：$=g$ д̀，as in（429b）in $\S 14.7 .4$ ．I therefore do not consider participial bé：$=g \grave{o}($ or its negative $b e ̀-l e ́=g \grave{)})$ to be cliticized to the preceding verb．

## 14．4．6．2 Participle of negative past forms

Negative past forms have the main－clause and participial forms in（411）．Those corresponding to main－clause bè－lé have a participle with the same bè－lé．Those whose main－clause counterparts have positive $=b e ̀$ after a negated AN form have bé：．
category main-clause participle
Past ...
a. with =bè-lé
... imperfective
... progressive
... periphrastic future
sémbj̀-ฟ̀ = bè $l$ é
sémbè bè-lé
sémbò- $\grave{\text { on }}=b e ̀-l e ́=g \grave{~}$
... immediate future
$s \varepsilon ̀ m b \grave{\text { - }}$ d-à: $s \varepsilon$ $=b$ è-lé
sémbè bè-lé $=g$ ò
sèmbè-njá: bè-lé
$s \varepsilon ̀ m b \grave{\text { - }}$ d-à: $s \grave{\varepsilon}=b$ è-lé $=g \grave{~}$
sèmbè-njá: bè-lé=gò
b. with $=b$ è
... future

$$
s \varepsilon ́ m b \grave{\varepsilon}-r i ̀=b e ́:=g \grave{~}
$$

... perfect
... experiential perfect

$$
\begin{aligned}
& \text { sémbè-rì = bè } \\
& \text { sèmbèे-l-ú bè } \\
& \text { sèmbèt-tà-lí= bè } \\
& \text { dàyà-lá = bè }
\end{aligned}
$$

sèmbè-1-ú bé: $=$ gò
... stative
$s \varepsilon ̀ m b \grave{\varepsilon}-\mathrm{tà}-\mathrm{li}=\mathrm{bé}:=g \grave{~}$
dàクà-lá = bé: $=g \grave{~}$

Human singular forms are bè-lé-nè = gò for (411a), bé:-nè = gò for (411b).

### 14.5 Relative clause involving verb- or VP-chain

### 14.5.1 True verb chains

In a relative clause involving a verb chain, 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.

For past time contexts, past anterior subordinator -a: (§15.2.2.1-3) occurs on the nonfinal verb in both nonrelative (412a) and relative (412b) constructions.
a. nùmb-â:
sùg-è-ŋ̀
fall-PastAnt go.down-Pfv-1SgSbj
'I fell (all the way) down.'
b. [bày ${ }^{\mathrm{L}}$ nùmb-â: mí sùg-ó- $\left.\varnothing=g \grave{j}\right]$ lè
[day ${ }^{\mathrm{L}}$ fall-PastAnt 1 SgSbj go.down-Pfv-3SgSbj.Ppl=Def] Temp
'on the day when I fell (all the way) down'
(also sùg-é- $\varnothing=$ g̀̀, see §14.4.1.1)

For nonpast time contexts, the chaining form of the nonfinal verb is used in both constructions (413a-b).

```
a. nùmbó sù:gó-dè-\grave{\}
    fall Augm.go.down-Ipfv-1SgSbj
    'I will fall (all the way) down.'
```

b. [bà ${ }^{\mathrm{L}}$ nùmbó mí súgò-d̀̀=g̀̀] lè [day ${ }^{L}$ fall 1 SgSbj go.down-Ipfv.Ppl=Def] Temp 'on the day when I will fall (all the way) down'

The chain construction with -a:-nì is illustrated in (414).
a. nàyá $\varepsilon$ ह́b-à:-nì
$j a ́-y \grave{\text { èjè̀- } \grave{y}}$
cow buy-Ant-Nonpast take-come-Ipfv-1SgSbj
'I will buy and bring a cow.'
b. nàmà ${ }^{\mathrm{L}}$ ह́b-à:-nì mí $\quad j a ́-y e ̀-j \varepsilon ̀=g \grave{~}$
cow $^{\mathrm{L}}$ buy-Ant-Nonpast 1 SgSbj take-come-Ipfv.Ppl=Def 'the cow that I will buy and bring'

### 14.5.2 Frozen verb chains ('bring' and 'convey')

As indicated just above, a proclitic subject pronoun intervenes between the two verbs in a relative clause based on a true verb chain. This can be used to test whether the two components of 'bring' and 'convey, take (away)' (§10.1.3.10-11) behave as chains or are frozen together.

The data show that they are frozen together, so the pronoun precedes the fused combinations. (415) illustrates this with perfective and imperfective relatives of 'bring', and (416) does the same for 'convey'.
a. nànà
mí
$j \hat{\varepsilon}: 1-\grave{\jmath}=\grave{\jmath}$
cow 1SgSbj bring-Pfv.Ppl=Def
'the cow that I brought'
b. nànà mí já-yè-jò=̀̀
cow 1SgSbj take-come-Ipfv.Ppl=Def
'the cow that I will bring'
a. nàyà mí jé-bòl-ò=̀̀
cow 1SgSbj take-go-Pfv.Ppl=Def
'the cow that I conveyed (took away)'
b. nàyà mí jé-bò-j-j̀=̀̀
cow 1SgSbj take-go-Ipfv.Ppl=Def
'the cow that I will convey (take away)'

### 14.6 Late-NP elements that follow the verb (or verbal participle)

### 14.6.1 Determiners (demonstrative and definite)

The preceding sections of this chapter are full of examples with definite $=g \grave{j} \sim=\grave{j}$ cliticized to the verb-participle of a relative clause. The definite clitic cannot occur on the clause-
internal head NP (417a). Demonstratives may also occur following the verb-participle, instead of the definite clitic (417b).
a. àn-nà ${ }^{\mathrm{L}} \quad$ ú $\quad$ à̀:-dò=̀
man- $\mathrm{Sg}^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ see-Ipfv.Ppl=Def
'the man who(m) you-Sg see'
b. àn-nà ${ }^{\mathrm{L}} \quad$ ú $\quad w a ̀:-d \grave{~ L} \quad$ ${ }^{\mathrm{L}} \quad$ gó
man-Sg ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ see-Ipfv.Pp1 ${ }^{\mathrm{L}} \quad$ Prox
'this man who(m) you-Sg see'

Demonstratives, unlike the definite clitic, are tone-dropping controllers. In a relative clause, the domain targeted by the $\{\mathrm{L}\}$ overlay is the verb-participle. In (417b) the tone-dropping is inaudible since the imperfective participle is already $\{\mathrm{L}\}$-toned, but perfective participles contain an H-tone (418a), which disappears when a demonstrative is added (418b).
a. $\begin{array}{lll}\text { àn-nà }{ }^{\mathrm{L}} & \text { ú } & \text { bènd-ú=g̀̀ } \\ \text { man- } \mathrm{Sg}^{\mathrm{L}} & 2 \mathrm{SgSbj} & \text { hit-Pfv.Ppl=Def } \\ \text { 'the man who(m) you-Sg (have) hit' }\end{array}$
b. àn-nà ${ }^{\mathrm{L}}$ ú bè̀nd-ù ${ }^{\mathrm{L}}$ ngá
man-Sg ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ hit-Pfv.Ppl ${ }^{\mathrm{L}} \quad$ Prox
'this man who(m) you-Sg (have) hit'

### 14.6.2 Plural suffix (-mbè )

The optional plural suffix -mbè can be added to a participle. For human head NPs, this suffix is redundant when the clause-internal head NP is already marked for plural (e.g. i: ${ }^{\mathrm{L}}$ 'child' versus ùlù- $\eta^{\mathrm{L}}$ ' 'children') and/or because the participle itself has plural suffix $-\eta$ (419a). For nonhuman head NPs, and for some human nouns such as kin terms, the suffix -mbè is the only way to mark (optional) plurality (419b).
a. $y a ̀:-\grave{\eta}{ }^{\mathrm{L}}$
$y \grave{\varepsilon} 1-\varepsilon \grave{\varepsilon}-\eta ́=g \grave{\partial}(-m b \grave{e})$
woman- $\mathbf{P l}^{\mathrm{L}} \quad$ come-Pfv.Ppl-Pl=Def(-PI)
'the women who have come'
[also yà:-ŋŋ̀ ${ }^{\mathrm{L}} y \grave{\varepsilon} l-\bar{\varepsilon}=g \grave{\partial}(-m b e ̀)$ without plural $\left.-\eta\right]$
b. òdògòlò ${ }^{\mathrm{L}} \quad m i ̀=\eta ́ \quad k \varepsilon ̀ r-\varepsilon ́=g \grave{\imath}(-m b \grave{e})$
mosquito $^{\mathrm{L}} \quad 1 \mathrm{Sg}=$ Acc bite-Pfv. $\operatorname{Ppl}=\operatorname{Def}(-\mathrm{Pl})$
'the mosquito(es) that have bitten me'
If the definite clitic is absent, plural $-\eta$ (if present) can be adjacent to -mbè. In this case the velar nasal usually assimilates, so we cannot detect its presence. An example is yà:- $-\eta^{\mathrm{L}}$
 the participle.

If a demonstrative is present, -mbè follows it, as usual (§4.4.2).
ànà-1̀ ${ }^{\mathrm{L}} \quad$ ú $\quad$ wà:-dj̀ $^{\mathrm{L}} \quad$ ŋgó-mbè
$\operatorname{man}-\mathrm{Pl}^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ see-Ipfv.Ppl ${ }^{\mathrm{L}} \quad$ Prox-Pl
'these men who(m) you-Sg see'

### 14.6.3 Universal quantifier ('all')

The universal quantifier wôy 'all' may occur at the end of the relative construction. As usual, here it has no tonal effect on preceding elements.

b. ànà- $\eta^{\mathrm{L}}$ ú $\quad$ wà:- $d \grave{\mathrm{~L}}{ }^{\mathrm{L}}$ ngó-mbè wôy
man- $\mathrm{Pl}^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ see-Ipfv.Ppl ${ }^{\mathrm{L}} \quad$ Prox-Pl all
'all these men who(m) you- Sg see'

### 14.7 Grammatical relation of relativized-on NP

### 14.7.1 Subject relative clause

From main clause (422a) we get the subject relatives in (422b-d). In (422b), the verb of the relative clause respects the form of the main-clause verb, but with a tone change. In (422c), the verb adopts a participial form with suffix -ú not found in the main clause. Since the head NP is human singular, nominal singular suffix -nó, which draws the H-tone, is optionally added to either the form based on the main clause (422d) or to the participial suffix (422e). Interestingly, the form of the singular suffix is -nó even in nùmb-è- $\varnothing$-nó $=g$ ò in (422d), rather than harmonizing with the preceding $e$. This suggests the possibility that the variant pseudoparticipial relatives based on the main-clause 3 Sg form, as in $(422 \mathrm{~b}, \mathrm{~d})$, may be recent innovations.

$$
\begin{array}{ll}
\text { a. } \begin{array}{l}
\text { í: }=g \grave{y} \\
\text { child=Def } \quad \text { númb-è- } \varnothing \\
\text { fall-Pfv- } 3 \mathrm{SgSbj} \\
\text { 'The child fell.' }
\end{array} \tag{422}
\end{array}
$$

b. [ì: ${ }^{\mathrm{L}}$ nùmb-é- $\varnothing=g \grave{]} \quad$ [yògó rà:] = j̀
[child ${ }^{\mathrm{L}}$ fall-Pfv-3SgSbj.PPl=Def] [which? Loc]=it.is
'Where is the child who fell?'
[pseudo-participle, optionally contracted to nùmb-ó= ̀ ]
c. [ì: ${ }^{\mathrm{L}}$ nùmb-ú=g̀̀] [yògó rà:] = ̀̀
[child ${ }^{\mathrm{L}}$ fall-Pfv.Ppl=Def] [which? Loc]=it.is
[=(b)]
[true participle, optionally contracted to nùmb-ó= ̀ ]
d. [ì: ${ }^{\mathrm{L}}$ nùmb-è- $\varnothing$-nó $\left.=g \grave{\mathrm{a}}\right] \quad$ [yògó rà:] = ̀̀ [child $^{\mathrm{L}}$ fall- Pfv-3SgSbj.Ppl-Sg=Def] [which? Loc]=it.is [=(b)]
[pseudo-participle, optionally contracted to nùmb-è- $\varnothing$-nó= ̀ ]
e. [ì: ${ }^{\mathrm{L}}$ nùmb-ù-nó=gò] [yògó rà:] = ̀̀
[child ${ }^{\mathrm{L}}$ fall-Pfv.Ppl-Sg=Def] [which? Loc]=it.is
[=(b)]
[true participle, optionally contracted to nùmb-ù-nó= ̀ ]
With a plural head NP we have (423b) or (423c) from main clause (423a), below. In (423b) the form of the main-clause verb with 3 Pl subject $-i \grave{-}$-yà is respected except for a tone change. In (423c), the participial form with $-u$ seen in (423c) above is pluralized by suffixing $-\eta$. Variants of (423c) without $-\eta$ were not accepted by my assistant. He did volunteer (423d) as acceptable; here plural $-\eta$ is added to the variant singular form with 3 Sg perfective ending -e$\varnothing$ instead of participial -u.
a. úlù- $\eta$ númb-ì-yà
child-Pl fall-Pfv-3PlSbj
'The children fell.'
b. [ùlù-ì $\left.{ }^{\mathrm{L}} \quad n u ̀ m b-i ̀-y a ́=g \grave{( }(-m b e ̀)\right] \quad$ ă: $=\grave{\eta}$
[child- $\mathrm{Pl}^{\mathrm{L}} \quad$ fall-Pfv-3PlSbj. $\mathrm{Ppl}=\operatorname{Def}(-\mathrm{Pl})$ ] who?=it.is
'Who are the children who fell?'
c. $\left[u ̀ l u ̀-\grave{n}{ }^{\mathrm{L}} \quad n u ̀ m b-\grave{u}-\grave{y}=g \grave{\partial}(-m b e ̀)\right] \quad$ ǎ: $=\grave{\emptyset}$
[child- $\mathrm{Pl}^{\mathrm{L}} \quad$ fall-Pfv.Ppl-Pl= $\operatorname{Def}(-\mathrm{Pl})$ ] who?=it.is
[ $=$ (b) $]$
d. [ùlù-グ $\left.{ }^{\mathrm{L}} \quad n u ̀ m b-e ̀-\varnothing-\eta ́=g \grave{( }(-m b e ̀)\right] \quad$ ǎ: $=\grave{j}$
[child- $\mathrm{Pl}^{\mathrm{L}}$ fall-Pfv-3SgSbj.Ppl-Pl=Def(-Pl)] who?=it.is
[ $=$ (b) $]$
Further examples of subject relatives are in (424).
(424)
a. $\left[y a ̀:-n a ̀{ }^{\mathrm{L}} \quad\right.$ yìm-é- $\left.\varnothing=g \grave{j}\right] \quad\left[m i ́ \quad{ }^{\mathrm{L}} s a ̀:\right]=\grave{j}$ [woman-Sg ${ }^{\mathrm{L}}$ die-Pfv-3SgSbj.Ppl=Def] [1SgPoss ${ }^{\mathrm{L}}$ sister]=it.is 'The woman who died is/was my sister.' (pseudo-participle)
b. [yà:-nà ${ }^{\mathrm{L}}$ yìm-ú- $\varnothing=$ gò] $\quad\left[m i ́ \quad \quad{ }^{\mathrm{L}}\right.$ sà:] $=$ j̀
[woman-Sg ${ }^{\mathrm{L}}$ die-Pfv.Ppl=Def] [1SgPoss $\quad{ }^{\mathrm{L}}$ sister]=it.is
[=(a)] (true participle)
c. $\left[y a ̀:-\grave{\eta}{ }^{\mathrm{L}}\right.$ yìm-è- 1 = $\left.=g \grave{o}(-m b e ̀)\right] \quad\left[m i ́ \quad{ }^{\mathrm{L}}\right.$ sà:-mbè $]=\grave{\eta}$
[woman- $\mathrm{Pl}^{\mathrm{L}}$ die-Pfv-3SgSbj. $\left.\mathrm{Ppl}-\mathrm{Pl}=\mathrm{Def}-\mathrm{Pl}\right]$ [1SgPoss ${ }^{\mathrm{L}}$ sister- Pl$]=\mathrm{it}$. is 'The women who died are/were my sisters.' (pseudo-participle)
d. $\left[y a ̀:-\grave{\eta}{ }^{\mathrm{L}} \quad\right.$ yìm-ù- $\left.\eta^{\prime}=g \grave{( }(-m b e ̀)\right] \quad\left[m i ́ \quad{ }^{\mathrm{L}}\right.$ sà:-mbè $]=\grave{\eta}$ [woman- $\mathrm{Pl}^{\mathrm{L}} \quad$ die-Pfv.Ppl-Pl=Def-Pl] $\quad\left[1 \mathrm{SgPoss} \quad{ }^{\mathrm{L}}\right.$ sister-Pl]=it.is [=(c)] (true participle)
e. [mì=ý [íbè rà:] àn-nà ${ }^{\mathrm{L}}$ bènd- $\grave{\varepsilon}-\varnothing$-nó= ̀̀]
$\left[1 \mathrm{Sg}=\right.$ Acc [market Loc] man-Sg ${ }^{\mathrm{L}}$ hit-Pfv-3SgSbj.Ppl-Sg=Def]
ból-ì- $\varnothing$
go-Pfv-3SgSbj
'The man who hit me in the market has gone.'
[pseudo-participle, cf. true participle: bènd-ù-nó= ̀ ]

$\left[\begin{array}{ll}m a n-P l & 3 / 6\end{array}\right]^{\mathrm{L}} \quad 1 \mathrm{Sg}=$ Acc hit-Pfv-3SgSbj-Pl=Def-Pl]
ból-ì-yà
go-Pfv-3P1Sbj
'The three/six men who hit me have gone.' (pseudo-participle)
g. [nàyà / pèdù tà:ndù / kùlè: $]^{L}$ nùmb-ú $=$ gò ból-ì- $\varnothing$
[cow / sheep $3 / 6]^{L}$ fall-Pfv.Ppl=Def go-Pfv-3SgSbj
'The three/six cows/sheep who fell have gone.' (true participle)

### 14.7.2 Object relative clause

The object NP internal to the relative clause is tone-dropped. The verb may have main-clause form (except for a tone change) or it may be a specifically participial form. A pronominal subject is expressed by a proclitic to the verb, as in all types of nonsubject relative.
a. $\quad\left[p e ̀ d u ̀{ }^{L} / n a ̀ \eta a ̀ a^{L} \quad m i ́ ~\right.$
$\grave{\varepsilon} b-u ́=g \grave{\jmath}]$
sع́m-ì-yà
[sheep ${ }^{\mathrm{L}} /$ cow $^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ buy-Pfv.Ppl=Def] slaughter-Pfv-3P1Sbj
'They slaughtered the sheep/cow that I bought.'
[also contracted $\grave{\varepsilon} b-\grave{\jmath}=\grave{\jmath}$ ]
b. [sé:dù ì: ${ }^{L}$ bènd- $\left.-\varnothing=g \grave{j}\right]$ ból-ì- $\varnothing$
[S child ${ }^{\text {L }}$ hit-Pfv-3Sg.Ppl=Def] go-Pfv-3SgSbj
'The child who(m) Seydou hit has gone.'
[also participial bènd-ú=g̀̀ or contracted bènd-ó= $=$ ]

[S child ${ }^{\mathrm{L}} /$ child- $^{\mathrm{P}}{ }^{\mathrm{L}}$ hit-Pfv-3Sg.Ppl=Def-Pl] go-Pfv-3P1Sbj
'The children who(m) Seydou hit have gone.'
d. bèlù-dónù-nò=gò
goat-sell.Agent-Sg=Def
[pèdù ${ }^{\mathrm{L}} \quad$ mí $\grave{\varepsilon} b \grave{c}-d$-à: $\quad s \varepsilon ́:=g \grave{]}$ gó:-nd-ì- $\varnothing$
[sheep ${ }^{\text {L }} 1 \mathrm{SgSbj}$ buy-Ipfv-PastAnt have=Def] go.out-Caus-Pfv-3SgSbj
'The goat (=livestock) merchant has taken away the sheep-Sg that I will buy.'

### 14.7.3 Possessor relative clause

In a main clause, a nonpronominal possessor precedes, and controls tone-dropping on, the possessed noun (426a,c). In a corresponding relative in which the possessor is the head, the construction observed in elicited data has the possessor NP tone-dropped by the relative construction. It no longer functions morphosyntactically as possessor of the other noun, which is rephrased with a resumptive possessor pronoun (426b,d). For example, the relative in (4261b) is phrased like nonstandard English the person $x_{x}$ who hisx house fell.

In an alternative version, both possessor and possessum are tone-dropped. They are optionally separated by a genitive linker mò that does not appear in corresponding main clauses. (426e) and (46f) are from the same text, but uttered by different speakers.
a. [[ìd $\left.\grave{\varepsilon}^{\mathrm{L}} \quad k \hat{\jmath}:\right] \quad{ }^{\mathrm{L}}$ gìǹ̀ $\left.=\grave{j}\right] \quad$ númb-̀̀- $\varnothing$
[[person ${ }^{\text {L }}$ NearDist] ${ }^{\text {L }}$ house=$=$ Def[ fall-Pfv-3SgSbj
'This person's house fell (collapsed).'
b. [ǹd ${ }^{\mathrm{L}}$ [gìn $\varepsilon$ wò-mò] nùmb-ó= ̀]
[person ${ }^{\text {L }}$ [house 3Sg-Poss] fall-Pfv.Ppl=Def]
yغ̀l-â: wò- $\varnothing$
come-PastAnt be-3SgSbj
'The person whose house fell has come.'
c. [[àn-nà $\left.\left.{ }^{\mathrm{L}} \quad k \hat{0}:\right] \quad{ }^{\mathrm{L}} \mathrm{i}:=g \grave{\jmath}\right] \quad j i ̀ m \varepsilon ́-d \grave{\varepsilon}-\varnothing$
[[man-Sg NearDist] ${ }^{\mathrm{L}}$ child=Def] get.sick-Ipfv-3SgSbj
'This man's child is sick.'
d. [àn-nà ${ }^{\mathrm{L}}$ [î: Wò-mò] jìmé-dò=̀ $]$
[man-Sg ${ }^{\mathrm{L}}$ [child 3Sg-Poss] get.sick-Ipfv.Ppl=Def]
yèl-â: wj̀- $\varnothing$
come-PastAnt be-3SgSbj
'The man whose child is sick has come.'
e. [ǹd $\mathfrak{\varepsilon}$ mò nànà ${ }^{\mathrm{L}}$ bé gèlò=j̀
person Poss cow] ${ }^{\mathrm{L}} 3 \mathrm{PlSbj}$ hold.Stat.Ppl=Def
'the person whose cow they are in charge of (T05 at 01:32)
f. [ǹdè nàmà ${ }^{\mathrm{L}}$ gìró- $\grave{W} \quad$ bé $d$-ò=ò
person cow] tend-Ipfv 3 PlSbj arrive-Pfv.Ppl=Def
'the person whose cow(s) they have been tending' (T05 at 01:36; recent perfect)
14.7.4 Relativization on the complement of a postposition

Example (427a) is a simple main clause with a dative PP. When the complement NP ('woman') is relativized on, this NP is tone-dropped as head of the relative. The postposition remains in its regular position following the complement NP , rather than being rephrased with a resumptive third person pronoun (427b).
a. kô: [yà:-nó=ò lè] gì-ỳ-j̀

NearDist [woman-Sg=Def Dat] say-Pfv-1 1 SgSbj
'I said that to the woman.'
b. [k̂̂: $\left[y a ̀:-n a ̀ a^{L} \quad\right.$ l̀̀ $\left.\quad m i ́ \quad g \grave{i}-\grave{y}=g \grave{j}\right]$
[NearDist [woman-Sg ${ }^{\mathrm{L}}$ Dat] 1 SgSbj say-Pfv=Def]
[wó ból-ì- $\varnothing$ ]
[3SgSbj go-Pfv-3SgSbj]
'The woman to whom I said that, she has gone.'
Since all postpositions are L-toned, there is some ambiguity in the tonosyntactic bracketing in examples like (427b). In one analysis, just the complement NP ('woman') is tone-dropped. In the other, the whole PP is tone-dropped, though this has no audible effect on the postposition itself.

Locative examples are in (428). The locative postposition is optionally omitted in the relative clause (428b).
a. [/àndà ${ }^{\mathrm{L}}$
kó
rà:] gò-è-ı̀
$\left[\begin{array}{lll}{\left[\text { village }{ }^{\mathrm{L}}\right.} & \text { NearDist] Loc] go.out-Pfv- } 1 \mathrm{SgSbj}\end{array}\right.$
'I left (came from) that village.'
b. [ [àndà ${ }^{\mathrm{L}}$
(rà:)] mí
$g o ̀-e ̀-~ \varnothing=g \grave{\jmath}]$
[[village ${ }^{\text {L }}$
(Loc)] 1 SgSbj
go.out-Pfv-3SgSbj.Ppl=Def]
wàgú
wò- $\varnothing$
distant be-3SgSbj
'The village that I left (came from) is far away.'
Instrumental examples are in (429). Again the postposition in (429a) is optionally omitted in the relative clause (429b).

[[daba ${ }^{\text {L }}$ Prox] Inst] millet do.farming-Ipfv=Past- 1 SgSbj
'I used to farm (e.g. weed around) millet with this daba (hoe).'
b. [[kòn ${ }^{\mathrm{L}}$ (lè)] yû: wàlá-Ẁ mí bé: =gò ] [[daba ${ }^{\mathrm{L}}$ (Inst)] millet do.farming-Ipfv $1 \mathrm{SgSbj} \quad$ Past=Def]
már-ì- $\varnothing$
get.lost-Pfv-3SgSbj
'The daba with which I used to farm millet has been lost.'
For structurally similar adverbial relatives of the type '(the time) when you came' and '(the place) where the cows died', with or without an overt head, see §15.2.1.1.

## 15 Verb (VP) chaining and adverbial clauses

### 15.1 Direct chains

In a direct chain, the final verb has full inflections as though the preceding verbs were absent. Nonfinal verbs can occur in the chaining form (which is morphologically unmarked for some verbs, marked by suffix $-u$ or $-y$ for others). In this case, there is no other overt subordinating morpheme. Chains satisfying these criteria are often limited to imperfective (or future) contexts, since those denoting completed events may require an overt subordinator on the nonfinal verb. Chains that do include an overt subordinator are referred to (loosely) as loose chains. For the reasons just given, the direct/loose distinction is not always helpful in connection with chains denoting completed events.

Direct chains denote what are construed as single events that can be decomposed analytically into co-events, generally simultaneous rather than consecutive. Many chains in Dogon languages are expressed by a single verb and an adverbial in English, as in fall down, which in Dogon languages might be a chain with 'fall' followed by an inflected form of 'descend, go down'.
(430a-c) combines 'fall' and 'go down' in three ways. In (430a) we see a direct chain, with the nonfinal verb in its chaining form. This is the key diagnostic for direct chain status. (430b-c) show similar chains, but with overt subordinators on the verb. The past anterior subordinator in (430c) is required when the event has been completed.
a. nùmbó sùgò-dè- $\varnothing$
fall.Chain go.down-Ipfv-3SgSbj
'He/She falls (all the way) down.'
b. nùmb-á:-nì sùgò-dè- $\varnothing$
fall-Ant-Nonpast go.down-Ipfv-3SgSbj
'He/She will fall (all the way) down.'
c. nùmb-â: sùg-è- $\varnothing$
fall-PastAnt go.down-Pfv-3SgSbj
'He/She fell (all the way) down.'
When phrased without a prosodic break, the final verb is often tone-dropped, as it usually is in a main clause with preceding constituents.

Other examples parallel to (430a), involving a chaining form plus a final imperfective verb, are dù:nd-ú pàdà-dè 'put down and leave', jòbó yò:-dè 'run and go in' (='run in'), and marginally bòl-ú yè-jè 'go and come (back)'. The last combination seems to be possible, but a loose chain is preferred since the two events are sequenced, and it is a stretch to conceptualize them as a single event.

### 15.1.1 Verbal noun of directly chained verbs

### 15.1.1.1 Simple verbs

The verbal noun suffix $-d u$ ( $\$ 4.2 .2 .1$ ) is added only to the final verb in a chain. In a direct chain, the nonfinal verb is in the chaining form (431a). The nonfinal verb is not tone-dropped, so the construction cannot be classified as a regular nominal compound. A loose chain with -a:-nì is also possible (431a), but the past anterior subordinated form with simple -a: was not accepted by my assistant.
a. nùmbó súgò-dù
fall go.down-VblN
'falling (all the way) down'
b. nùmb-á:-nì súgò-dù
fall-Ant-Nonpast go.down-VblN
'falling (all the way) down'
c. \#nùmb-â: súgò-dù

### 15.1.1.2 Verbal nouns of 'bring' and 'convey'

In verbal noun formation, unlike other constructions such as relative clauses, 'bring' and 'convey' (§10.1.3.10-11) are treated like true direct verb chains. The effect is that $j a \check{c}$ : and $j \varepsilon \check{z}$ : appear in unreduced form with long, rising-toned vowels.
a. jǎ: $\quad y \grave{c}-j u ́$
take come-VblN
'bringing'
b. jě: bò-jú
take go-VblN
'conveying, taking (away or to another place)'
By contrast, these verbs behave like fused units in relative clauses, where a pronominal subject proclitic precedes them rather than intervening between their two parts (§14.5.2).

### 15.1.2 Arguments of directly chained verbs

Direct objects may function as arguments of both verbs in a direct chain. In many such chains, both verbs are transitive.
a. pédù $=\grave{j}$ bèndह́ dà-dá:-dè- $\varnothing$
sheep=Acc hit.Chain Augm-kill-Ipfv-3SgSbj
'He/She will hit and kill a sheep.'

```
b. tìbú kámb-ù tè-té:-dè-\varnothing
    stone throw-Chain Augm-send-Ipfv-3SgSbj
```

    'He will throw a stone (away).'
    However, a transitive nonfinal verb with an object may combine with a final motion verb. In this case the object is bracketed with the nonfinal verb.

```
[pédù = \grave{ dà-â:] ból-ì-\varnothing}
    [sheep=Acc kill-PastAnt] go-Pfv-3SgSbj
    'He/She killed a sheep and went.'
```

As final verb meaning 'can’ (§15.1.4.1), bèlé is compatible with either intransitive or transitive nonfinal VPs. Since bèlé is elsewhere a transitive verb 'get, obtain', one can argue that the object NP in (435) is jointly bracketed with the two verbs.
pédù $=\grave{\eta} \quad$ sémè
$b \varepsilon ́-j \grave{\varepsilon}-\varnothing$
sheep=Acc slaughter.Chain
get-Ipfv-3SgSbj
'He/She can slaughter a sheep.'

### 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.
a. nùmbó súgè- $\grave{l \varepsilon}-\varnothing$
fall.Chain go.down-IpfvNeg-3SgSbj
'He/She will not fall (all the way) down.'
b. yâ: nùmb-â: sùgò-lì- $\varnothing$
yesterday fall-PastAnt go.down-PfvNeg-3SgSbj
'Yesterday he/she did not fall (all the way) down.'

### 15.1.4 Chains with final bèlé 'get'

A chain ending in this verb can mean 'be able to VP' or 'finish VPing'. The former sense is usual when the verb is imperfective, the latter when it is perfective.

### 15.1.4.1 'Be able to VP' in imperfective contexts

An imperfective (positive or negative) form of bèlé 'get, obtain' follows an open-ended VP ending with a verb in its chaining form. The subject NP belongs to the whole complex, but complements such as objects and directionals are semantically bracketed with the nonfinal verb. This is the regular way to express capability to do something (437a-b). I have found it to be the easiest way to elicit chaining forms of verbs. In contexts where telicity is not involved, a perfective form of bèlé can mean 'was able to VP'. In this case, the subordinated verb is in
past anterior subordinated form (437c). However, perfective bèlé is usually associated with the sense 'finish VP' (next section).
a. [mí $\left.{ }^{\mathrm{L}} b a ̀:\right] \quad[\grave{̀}=\emptyset ́ \quad$ bàr-ú $] \quad b \varepsilon ̌:-j \grave{c}-\varnothing$ [1SgPoss ${ }^{\text {L }}$ father] [2Sg=Acc help-Chain] Augm.get-Ipfv-3SgSbj 'My father can help you-Sg.'
b. [[àndá rà:] bòl-ú] bèlé-èlè-r̀ [[village Loc] go-Chain] get-IpfvNeg-1SgSbj
'I can't go to the village.'
c. [[àndá rà:] bòl-â:] bèl-غ̀-দ́/ bèl-lì-ŋ́
[[village Loc] go-PastAnt] get-Pfv-1SgSbj/get-PfvNeg-1 SgSbj
'I was/wasn't able to go to the village.'

### 15.1.4.2 'Finish VPing'

With bèlé in perfective aspect (positive or negative), the nonfinal verb takes the -a: past anterior subordinating form. The usual sense is 'finish VPing', denoting the successful completion of a bounded (telic) event. The subject may be animate (438a) or inanimate (438b). The substantive verb takes past anterior form, indicating that it and 'get' = 'finish' are conceptualized as chronologically sequential. In the less common situation where 'finish VPing' is projected into the future, bèlé takes periphrastic future form, with the subordinated verb in its chaining form (438c).
a. wálù kán-à: bél-غ̀- $\varnothing$
work(n) do-PastAnt get-Pfv-3SgSbj
'He/She finished working.'
b. àná mì-â: bèl- $\grave{-}-\varnothing$
rain(n) rain.fall-PastAnt get-Pfv-3SgSbj
'It has finished (=stopped) raining.'
c. númò: nǎ: né: $\quad b \varepsilon ́-j$-à: $\quad s \dot{\text { èr }}$ :
quickly meal eat.Chain get-Ipfv-PastAnt have-1SgSbj
'I will finish eating soon.'

### 15.1.5 Direct chains with final pádà 'leave (behind)'

pádà 'leave (behind), abandon' can follow another transitive VP in a direct chain, if the event involves placing the object somewhere (and going away) or otherwise relinquishing it. The 'leaving' component is normally implied rather than overtly stated in free English translations.

```
a. dě:\eta=gò dù:nd-ú pàdà-dह̀-\età
waterjar=Def put.down-Chain leave-Ipfv-1SgSbj
    'I will put the waterjar down (and leave it).'
```

b. [pédù ウ̀-mò] [mí dèlè = ̀̀ ]
[sheep 1 Sg-Poss] [1SgPoss elder.sib=Acc]
sàgú dù:-r-ú pàdà-dè-ŋ̀
trust(n) carry-Tr-Chain leave-Ipfv- 1 SgSbj
'I will entrust my sheep to my elder brother.' (lit. "load in trust and leave")

### 15.1.6 Direct chains with final óbò 'give'

K\&P (p. 73) give examples of óbò 'give' chained to a preceding verb. Their French translations suggest that óbò adds a beneficiary to the case frame of the verb. My assistant spontaneously translated one of the K\&P French glosses into DS with a final 'give'. Since 'give' has a special imperative form for 1 Sg recipient (ób-ú 'give me!'), an overt 1 Sg pronominal is not needed in (440a). The regular imperative óbò is used for other beneficiaries (440b). In both (440a) and (440b) the 'give' verb appears in L-toned form, as we would expect at the end of a long clause. Beneficiaries are preferentially phrased as possessors when this is semantically reasonable, as in (440c) which lacks 'give', so the frequency of benefactives with 'give' as in (440a-b) is not as high as one might expect.
a. dî: núm-ì:-m-ù
òb-ù
water hot-MP-Caus-Chain
give.me.Imprt
'(Please) heat some water for me!'
b. [ú ${ }^{\mathrm{L}}$ bà:] dî: núm-ì:-m-ù òbò [2SgPoss ${ }^{\mathrm{L}}$ father] water hot-MP-Caus-Chain give.Imprt '(Please) heat some water for your father!'
$\begin{array}{llll}\text { c. } & {[[\text { ú }} & \left.{ }^{\mathrm{L}} \text { bà: }\right] & { }^{\mathrm{L}} \text { dì:] } \\ & {[[\mathbf{2 S g P o s s}} & \left.{ }^{\mathrm{L}} \text { father }\right] & \left.{ }^{\mathrm{L}} \text { water }\right]\end{array} \quad$ hot-MP-è:-mゝ̀ $\quad$ hot-Caus.Imprt '(Please) heat some water for your father!' (lit. "Heat your father's water!")

The literal sense of 'give' is not absent from (440a-b), since the expectation is that the hot water will end up with the beneficiary. In the combination yàb-ú òb-ù with yàbá 'take, receive' and ób-ú 'give me!', the sense is 'take it (from someone else) and give it to me!', rather than 'take it (e.g. a heavy load) for me!'. I have not encountered examples with 'give' in an abstract benefactive sense as in 'work for/on behalf of (someone)'.

### 15.1.7 Chains with final tê: 'send'

K\&P (p. 73) observe that tê: 'send' can be combined with a preceding transitive verb, their examples being with kámbà 'throw' and pádà 'leave, abandon'.

With 'throw', my assistant indicated that addition of 'send' adds a directional element to the meaning, and the combination lends itself to directional questions ('where?', 'which way?') and to answers thereto. The substantive verb is past anterior in form, suggesting chronological sequencing. The sense can be roughly captured by English throw away if we filter out the association with trash disposal and focus on the directionality.
a. tìbú kàmb-ì- $\varnothing$
stone throw-Pfv-3SgSbj
'He/She threw a stone.'
b. tìbú [yògó rà:] kámb-à: tì-ỳ- $\varnothing$
stone [which? Loc] throw-PastAnt send-Pfv-3SgSbj
'Where (which way) did he/she threw (the) stone?'

With 'leave, abandon', again a locational element is introduced when 'send' is added. In (442), there is an implication that the subject had gone to the place where the object was left.

| [tànná | ù-m̀] | [yògó | rà:] | pád-à: | $t i ̀-\grave{y}-\grave{W}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [stick | 2 Sg -Poss] | [which? | Loc] | leave-PastAnt | send-Pfv-2SgSbj |
| 'Where did you-Sg (go and) leave your (walking) stick?' |  |  |  |  |  |

15.1.8 Loose chains with nonfinal mə̀l-દ́:- 'assemble, come together'

By itself, mòl-દ́:- means '(e.g. people) assemble, meet, come together', cf. transitive mò:-ndó '(sb) assemble (a group)' (§9.4.4). In the (approximate) sense 'VP together', m̀̀l- $\varepsilon$ :- forms a loose chain with the following verb, suggesting that the act of meeting is conceptualized as a separate event preceding the other event. Therefore my assistant rejected the chaining form $m \grave{l-\varepsilon}:-$ in (443b), and complements of the final verb follow the subordinated form of məl-દ:-(443a-c). By contrast, English translations with together suggest simultaneity of being together and performing an action.
a. mòl-í-à: bàmàkó ból-ì-yà
assemble-MP-PastAnt B go-Pfv-3P1Sbj
'They went to Bamako together.'
b. $\varepsilon m m \grave{\varepsilon}$ mòl-í-à:-nì / (\#mòl-í-ỳ )

1Pl assemble-MP-Ant-Nonpast / (\#assemble-MP-Chain)
bàmàkó bó-jè- $\grave{j}$
B go-Ipfv-1P1Sbj
'We will go to Bamako together.'
c. [[Émmè yà-wôy] mòl-í-à:-nì]
[1PlSbj all] assemble-MP-Ant-Nonpast]
[gìné ùdò-mó-ŋ̀]
house build-Hort-PlAddr]
'Let's build a house together!'
mòl-í-à: and mòl-í-à:-nì can be replaced by mòn-â: and mòn-á:-nì, respectively. However, these forms are related to the verb mə̀n- $\varepsilon$ :- 'line up, form a line'. The phonological similarity may have induced some merging of the subordinated forms.

### 15.1.9 Chaina with nonfinal jǎ: 'take (sb)'

Beside the rather frozen 'bring' and 'convey' (§10.1.3.10-11), I was able to elicit jǎ: 'take (sb)' with other motion verbs. In (444), the image is of the adult holding the hand of the child as they jog along.

$$
\begin{array}{llllll}
\text { mí } & \text { sé:dù }=\grave{y} & {[\text { íbè }} & \text { rà:] } & \text { jǎ: } & \text { jòbò-dè- } \grave{\eta}  \tag{444}\\
1 \mathrm{SgSbj} & \mathrm{~S}=\text { Acc } & \text { [market } & \text { Loc] } & \text { take.Chain } & \text { run-Ipfv-1 } 1 \mathrm{SgSbj} \\
\text { 'I (an adult) run along with Seydou (a child) to the market.' }
\end{array}
$$

K\&P (p. 73) state that jǎ: 'take (sb)' can also occur as a chain-final verb with another transitive preceding it. Their example is "yen gia dya, boli" glossed as 'having finished saying that, he left', where "dyä" (i.e. jǎ:) seems to mean 'finish, complete'. My assistant did not recognize this construction and understood jà-á literally as past anterior subordinator 'having taken (sb) along'.

In some textual passages, $j a ̌:$ in a chain appears to add a distributive quantificational element (§17.5.2).
$j a \check{ }$ : in the original general sense 'take (sb)' may be etymologically present in simultaneous subordinator -njà: (§15.2.1.2) and/or in immediate future -njá: wò (§10.2.2.8).

### 15.1.10 Chains including a motion verb

### 15.1.10.1 Direct chain of manner verb and directional verb

Directional motion verbs like 'descend' (go/come down), 'ascend' (go/come up), 'enter', and 'exit', can be directly chained to a preceding manner verb. Examples with 'fall' and 'descend' in the sense 'fall (all the way) down' were given in §14.5.1. Other examples are tómb-ù dàmbá-dè 'jump up, go up by jumping' tómb-ù yó:-dè 'jump in, enter by jumping', and tómb-ù gǒ:-dè ‘jump out, exit by jumping'.

### 15.1.10.2 Disparaging use of additional motion verb in nonliteral sense

K\&P (p. 73) report that 'go' may be chained to a preceding VP, not necessarily implying actual motion. The examples given (with 'become lost', 'die', and 'forget') resemble the English construction $X$ went and died (on me), with a similar hint of disparagement. My assistant confirms màr-ú bǒ:-jè 'will go and get lost', yím-à: ból-ì 'went and died', and nà-ý $b o ̌:-j \dot{\varepsilon}$ 'will go and forget'. A spontaneously elicited example is the self-disparaging 'I (went and) forgot that you don't eat fish' in (504) in §17.2.1.3. (The French cue did not include a motion verb.)

### 15.1.10.3 Motion event precedes or follows the other event

Chronological sequencing of a motion event and some other event, in either order, is expressed by the regular loose (not direct) chaining machinery for sequenced events. The event that occurred first is expressed with past anterior $-a$ : if the whole sequence is completed (final verb is perfective), and with nonpast anterior -a:-nì if the whole sequence is not
completed (final verb is imperfective, future, imperative, or hortative). In (445a) the motion event occurs first (in a future context). In (445b) the motion event will follow the other event. ( $445 \mathrm{c}-\mathrm{d}$ ) are identical to ( $445 \mathrm{a}-\mathrm{b}$ ) except that they describe completed event sequences.
a. bòl-á:-nì
go-Ant-Nonpast [hole Loc] fall-Ipfv-3SgSbj
'He/She will go (there) and then fall into the pit.'
b. nùy-á:-nì
$b o ̀-j \grave{\text { cl }} \varnothing$
sing-Ant-Nonpast go-Ipfv-3SgSbj
'He/She will sing and then go.'
c. bòl-â: [bòndó rà:] nùmb-è- $\varnothing$
go-PastAnt [hole Loc] fall-Pfv-3SgSbj
'He/She went (there) and then fell into the pit.'
d. nùn-â: bòl-ì- $\varnothing$
sing-PastAnt go-Pfv-3SgSbj
'He/She sang and then went.'
More often, 'go' and 'come' combine with a preceding VP in a purposive construction using the $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tonal pattern (§17.4.4). However, if the utterance is imperative, 'go' or 'come' takes an $\{\mathrm{L}\}$-toned version of the chaining form, and is followed by the main verb in regular imperative (singular or plural) form. (See the following section for similar tonal patterns.)
a. yèlè ${ }^{\mathrm{L}}$ [sínjè lálà / lálà- $̀$ ]
come.Chain ${ }^{\mathrm{L}}$ [conversation converse.Imprt / converse.Imprt-2PISbj]
'Come- $2 \mathrm{Sg} / 2 \mathrm{Pl}$ and talk (converse)!'
$\begin{array}{llll}\text { b. } & \text { bòl-ù }{ }^{\mathrm{L}} \\ & \text { go-Chain } \\ & \text { 'Go-2Sg eat!' } & \text { [nǎ: } & \text { nâ:] } \\ & & & \end{array}$

### 15.1.10.4 Imperative bà as generic motion verb at end of chain

bà can function as a nondirectional motion verb ('go', but compatible with 'come') when directly chained to a preceding verb in imperative function: bèlú gìré bà 'go tend the (livestock) animals!' (text 05 at 00:16), plural-addressee bèlú gìré bà-rj. The form bà is not transparently related synchronically to bòló, though it usually translates as 'go!'. A motion verb like 'go' or 'come' may be preposed to expand the chain: bòlò bèlú gìré bà 'go tend the animals!', yèlè bèlú gìré bà 'come tend the animals!' Both bòló 'go' and yèlé 'come' are tone-dropped in this imperative construction, as they are in (446a-b) in the preceding section. Without bà, the motion verb would follow the other verb (and object), which would then occur in purposive form $\{\mathrm{L}\}$ plus $\{\mathrm{HL}\}$ : [bèlù ${ }^{\mathrm{L}} \mathrm{HL}^{\text {gírè }] ~ b o ́ l o ̀ ~ ' g o ~ t e n d ~ t h e ~ a n i m a l s!' ~}$

One could alternatively consider bà to be a special added-motion derivational suffix, but its restriction to imperative function does not mesh with other derivational verbal suffixes.

### 15.1.11 Verb iterations

In narratives, a verb in the chaining form may be iterated to indicate repetition or prolongation. The tone pattern is $\{\mathrm{L}\}-\{\mathrm{HL}\}$, i.e. the first iteration is (usually) tone-dropped while the second has a falling pattern with at most the first syllable H-toned. One textual passage had three examples: tèmbè-témbè 'find-find', [bà-ỳ]-[bá-ỳ] 'beat-beat (tomtoms)', and [š̀gìr-ì-ỳ]-[ségìr-ì-ỳ] (text 01 at 00:25). See also bòl-bôl (< bòló 'go') in text 05 at 01:08.

The same construction can be applied to verbs denoting the manner of an action (especially of motion). In this case the iteration functions as a manner adverbial and is followed by a motion verb. Examples are [pòbùlù-m-ù]-[póbùlù-m-ù] 'groping along' (from póbòlò-mゝ̀), bùmbò-búmbò 'dragging along', and mediopassive [bùmb-ì-ỳ]-[búmb-ì-ỳ] 'dragging oneself along, crawling on one's belly').

These often colorful manner adverbials can be classified as expressive adverbials (§8.4.7.1).

### 15.2 Temporal adverbial clauses with overt subordinating morpheme

### 15.2.1 Adverbial clauses expressing temporal simultaneity or overlap

### 15.2.1.1 Noun-headed temporal relative clause ('[at] the time when ...')

This is a regular relative construction with a temporal noun such as wágùrù '(point in) time, moment', bǎy 'day', or ànà-kúdù 'year', in $\{\mathrm{L}\}$-toned form as relative heads. Postposition lè is added, here in temporal function (§8.1.3). In (447), the verb-participle is perfective, since the event is used as a temporal locator to identify a time period.

$$
\begin{align*}
& \text { [wàgùrù }{ }^{\mathrm{L}} / \text { bà }^{\mathrm{L}} / \text { ànà-kùdù }^{\mathrm{L}} \text { ú yèl-ó=ò] lè }  \tag{447}\\
& \text { [time }{ }^{\mathrm{L}} / \text { day }^{\mathrm{L}} / \text { year }^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \text { come-Pfv.Ppl=Def] Temp } \\
& \text { 'at the time/on the day/in the year when you-Sg came' }
\end{align*}
$$

### 15.2.1.2 Simultaneous -njà: on activity verb before motion verb

This construction indicates that two activities are or were carried out simultaneously. The subordinated activity is expressed by invariant L-toned simultaneous subordinator -njà: . This is distinct from H-toned -njá: in the immediate future combination -njá: wò (§10.2.2.8). One or both of -njà: and -njá: may be related to the verb jǎ: 'take (sb)', as in 'take a baby/child' or 'take (=marry) a woman'. The main-clause verb denotes a second activity, often but not necessarily motion.

```
a. sé:dù nú\etaò nù\etaó-njà:
    S song sing-Simul
    y\varepsilońl-\varepsiloǹ-\varnothing/ y\varepsiloń-j\grave{-}-\varnothing
    come-Pfv-3SgSbj / come-Ipfv-3SgSbj
    'Seydou came/comes singing.'
```

b. úlù-ŋ̀ núŋò nùŋó-njà: tǒy tò:-d-ì child-Pl song sing-Simul seeds sow-Ipfv-3P1Sbj 'The children are singing as they sow seeds.'

Representative forms of -njà: are in (449). /LH/-melody verbs have the H-tone on the syllable or monosyllabic mora preceding -njà: .

$$
\begin{equation*}
\text { stem } \quad \text { with -njà: } \quad \text { gloss } \tag{449}
\end{equation*}
$$

a. /HL/-toned
kâ: ká:-njà: 'shave’
nâ: já:-njà: 'eat (meal)'
óbò óbò-njà: 'give'
tómbò tómbò-njà: 'jump'
yéyy-è: yéyy-è:-njà: 'sleep'
kígùl-è:- kígùl-è:-njà: 'go back’
b. /LH/-toned

| nǒ: | nŏ:-njà: | 'drink' |
| :---: | :---: | :---: |
| yă: | yă:-njà: | 'weep' |
| bòló | bòló-njà: | 'go' |
| bèndé | bèndé-njà: | 'hit' |
| dànı-É:- | dànn-É:-njà: | 'sit' |
| yàbìl-غ:- | yàbil-Ě:-njà: | 'reply' |

### 15.2.1.3 Imperfective subordinators $-n i$ and $-\grave{W}$

These suffixes appear on the nonfinal verb of a loose chain, where the clause in question denotes a process that takes place simultaneously with that of the main clause. The choice between -ni and -ì depends on the time frame of the larger sequence, with -ni for not-yet completed events and $-\grave{W}$ for completed (examples are given in the following sections). Elsewhere $-n i$ is found in purposive clauses ( $\S 17.5 .1$ ), and as part of the nonpast anterior subordinator -a:-ni which also includes past anterior -a: . In that combination the precise semantic contribution of $-n i$ is difficult to tease out ( $\S 15.2 .2 .1$ ). Given the semantic divergence of these three occurrences of -ni, I label them differently. The cases of -ni covered in this section are labeled imperfective nonpast ("-Ipfv.Nonpast" in interlinears).

There is also a locative postposition nì (§8.2.2) which may or may not be related historically.
$-\grave{W}$ is presumably the same imperfective morpheme ("-Ipfv" in interlinears) as that in progressive $-\grave{W} w \grave{~}(\S 10.2 .2 .3)$ and in past progressive-1 $-\grave{W}=b e ̀-(\S 10.5 .1 .1)$.
$-\grave{W}$ is L-toned and is added to the presuffixal stem with its lexical tones intact (450a-b). -ni by contrast has variable tone. /HL/-toned verbs combine with -ni to produce forms with an H-tone on the first syllable and all following tones low (450a). An /LH/-toned verb appears with an L-toned stem followed by H-toned -ní (450b).

$$
\begin{equation*}
\text { stem } \quad \text { with }-n i \quad \text { with }-\grave{W} \quad \text { gloss } \tag{450}
\end{equation*}
$$

a. /HL/-toned

| kâ: | ká:-nì | ká:-Ẁ | 'shave' |
| :---: | :---: | :---: | :---: |
| jâ: | ná:-nì | गá:-W | 'eat (meal) |
| óbò | óbò-nì | óbò-Ẁ | 'give' |
| tómbò | tómbò-nì | tómbò-Ẁ | 'jump' |
| yéyy-è: | yéyy-è:-nì | yéyy-è:-W | 'sleep' |
| kígùl-è:- | kígùl-è:-nì | kígùl-è:-Ẁ | 'go back' |

b. /LH/-toned
nǒ: nò:-ní nǒ:-Ẁ 'drink’
yǎ: yà:-ní yǎ:-ฟ̀ 'weep'
bòló bòlò-ní bòló-Ẁ 'go’
bèndé bèndè-ní bèndé-Ẁ 'hit'
dànn-દ́:- dànn-દ̀:-ní dànn-દ́:-Ẁ 'sit'
yàbìl-દ́:- yàbìl-è:-ní yàbìl-દ́:-Ẁ 'reply’

Another construction apparently ending in the same -nì, but after a stative quasi-verb (wò-nì) with impersonal sense 'while it was the case that ...', and with a main-like clause as complement, occurs in text 04 at 00:26.

Another subordinated clause type used in complements of perception verbs requires imperfective $-\grave{W}$ even in nonpast time contexts ( $\S 17.2 .2 .1$ ).

### 15.2.1.4 Imperfective -ni or $-\grave{W}$ on activity verb plus time-of-day verb

The verbs dèné 'spend the (mid-)day' and yâ: 'spend the night' (sometimes accompanied by $b a ̂:$, a noun used in collocations denoting day/night transitions) lend themselves to the construction with a preceding subordinated clause denoting a simultaneous activity.

Comparison of (451a) with (451b) shows that the imperfective subordinator is $-n i$ when the main clause denotes a not-yet completed event (i.e. the time frame is general present or future), and $-\grave{W}$ when the main clause denotes an already completed event. "Not-yet completed" here includes imperatives and hortatives as well as imperfective verbs (451c).

```
a. [kórùkò lè] [sínjè làlà-ní]
[Ramadan Temp] [talk(n) converse-Ipfv.Nonpast]
bâ: yà:-dè-ŋ̀
transition spend.night-Ipfv-1P1Sbj
'During Ramadan, we (regularly) spend the night conversing.'
```

b. yâ: [sínjè làlá-ẁ] yغ̀-غ̀-1̀
yesterday [talk(n) converse-Ipfv.Past] spend.night-Pfv-1P1Sbj
'Yesterday we spent the night conversing.'

```
c. [sínjè làlà-ní]
    [talk(n) converse-Ipfv.Nonpast]
    bâ: yá:-1̀
    day/night spend.night.Imprt-PlAddr
    'Spend-2Pl the night conversing!'
```

Example (451a) has H-toned -ní after an \{L\}-toned form of a lexically/LH/-toned verb. (452) illustrates L-toned -nì with a lexically /HL/-toned verb.

| ह́mmè | $[$ gìr-î: | yéyy-è:-nì] | dènè-mò-ń |
| :--- | :--- | :--- | :--- |
| we | $[\operatorname{sleep(n)}$ | sleep-MP-Ipfv.Nonpast $]$ | spend.day-Hort-PlAddr |
| 'Let's spend the (mid-)day sleeping!' |  |  |  |

Main-clause statives do not count as "imperfective" for purposes of choosing -Ẁ or -nì in the subordinated clause. Therefore only $-\grave{W}$ is possible in (453).

| [tê: | jà:ndó-Ẁ / (\# jà:ndà-ní) ] | dànà-ı̀̀ |
| :--- | :--- | :--- |
| [tea put.up.on-Ipfv.Past / (\#put.up.on-Ipfv.Nonpast)] | sit.Stat-1SgSbj |  |
| 'I am sitting, making tea.' |  |  |

Likewise, a presentative main clause (§4.4.4) requires $-\grave{W}$ in the subordinated clause (454a-b).
a. sé:dù [tê: jà:ndó-Ẁ/ (\# jà:ndà-ní)] kú-wò
S [tea put.up.on-Ipfv/(\#put.up.on-Ipfv.Nonpast] there's!
'There's Seydou, making tea!'
b. úlù- $\quad$ [kèdè-kédè kédè-Ẁ / (\#kédè-nì )]
child-Pl [play(n) play-Ipfv.Past / (\#play-Ipfv.Nonpast)]
kú-wò-yà
there are!
'There are the children, playing (having fun)!'

### 15.2.1.5 kán(à) 'do’ plus imperfective clause

While subordinated imperfective clauses normally take $-\grave{W}$ suffix rather than main-clause imperfective $-d \grave{\varepsilon}$-, one construction is attested in texts with the main-clause suffix and a following form of kán(à) 'do’ (455).
(455)
[nàmá njěm-mò],
[meat Logo-Poss],
bèl-â: bé tèmè-dè kánè-غ̀l̀̀
get-PastAnt 3PlSbj eat.meat-Ipfv do-IpfvNeg
'(He said:) you won't be getting and eating my flesh.' (text 01 at 01:56)

An apparent periphrastic causative with 'do' (i.e. 'make') and a subordinated clause (with stative 'not have') is in text 03 at 00:13.

### 15.2.1.6 Temporal 'since ...' clauses and related forms (nغ̀, bà:y, gò-é mò-nì)

In one construction, variant temporal postposition $n \grave{\varepsilon}$ follows a perfective participle (or pseudo-participle) of the verb in a headless relative (456a). nè is an allomorph of locative nì that is used especially in temporal rather than spatial contexts (§8.2.2); here it specifies a temporal starting point ('as of the time when ...'). The subject is expressed by an obligatory proclitic subject pronoun, even if there is also an overt nonpronominal subject NP (456b). See also text 01 at 01:01 and text 02 at 01:57.

b. úlù-ŋ̀ bé bòl-ú nè,
child-Pl 3Pl go-Pfv-3Sg.Ppl Loc,
bè = ́ $\quad$ wà:-lì-ŋ́
$3 \mathrm{Pl}=\mathrm{Acc} \quad$ see-PfvNeg-1SgSbj
'(Ever) since the children went away, I haven't seen them.'
However, the same construction (headless perfective relative plus $n \grave{\varepsilon}$ ) is also attested in a text as a headless object relative ('what they have said [is...]').

English since $X$, where X is a NP denoting a point or interval of time is translated by a) $X$ bà:y, b) X gò-é mò-nì, or their combination c) $X$ bà:y gò-é mò-nì. (457a-b) illustrate with yâ: 'yesterday' and gà:lí 'last year'.
a. [yâ: bà:y]
[yâ: gò-é mò-nì]
[[yâ: bà:y] gò-é mò-nì]
[yesterday ...] since
[nă: jà:-lì-ń]
[meal eat-PfvNeg-1SgSbj]
'Since yesterday I haven't eaten.'
b. [gà:lí (bà:y) gò-é mò-nì] [yàlú bòl-lù-ń]
[last.year (since) since ] [place go-PfvNeg-1 SgSbj]
'Since last year, I haven't gone anywhere (travelled).'
gò-é mò-nì is nontransparent in form. It begins with a perfective pseudo-participle of gǒ: 'go out'. This verb often has the sense 'be ended' (as with seasons of the year which 'come down' and then 'go out'). mò-nì looks like a form of -mì-nì, which is elsewhere attested in 'before ...' clauses (§15.2.3). However, the regular combination of 'go out' with the 'before' subordinator is gò:-mò-nì with gò: rather than gò-é. The sense 'before it has gone out' makes some sense in a 'still' clause, which denotes an extended time interval beginning with the nominate point in time (e.g. 'yesterday') and continues to the present or other reference time.

### 15.2.2 Adverbial clauses expressing a chronological sequence

### 15.2.2.1 Past anterior -a: and nonpast anterior -a:-nì

Past anterior subordinator -a: and its morphological extension nonpast anterior -a:-nì are featured in the sections that follow. In the present section I focus on their segmental and tonal forms.

With a lexically /HL/-toned stem, the -a : form has an initial H-tone followed by L-tones. With a lexically /LH/-toned stem, the -a : form has an L-toned stem and H-toned suffix. The -a: contracts with the final short vowel of a nonmonosyllabic stem. A monosyllabic stem is reduced to short-voweled $C V-$, and mid-height $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ and $\left\{\begin{array}{l}e \varepsilon\end{array}\right\}$ are raised to the high vowels $u$ and $i$, respectively, resulting in $-u-a$ : and $-i-a$ : which are optionally realized with a faint epenthetic $y$ between the vowels. Mediopassive stems with suffixed $-\varepsilon:-\sim-e:-$ likewise become $-i-a$ :, and if the stem is lexically /LH/-toned like 'sit' the H-tone remains on the $-i$ - followed by L-toned -à: . A Ca: stem contracts to what I transcribe as Ca-a to facilitate lexical identification, pronounced [Ca:] without hiatus and without super-long duration. The form in -a:-nì adds -nì to the -a: form, but a preceding falling â: flattens to á: before -nì.
stem with -a: with -a:-nì gloss

| a. /HL/-toned |  |  |  |
| :---: | :---: | :---: | :---: |
| kâ: | ká-à | ká-á-nì | 'shave' |
| tê: | tí-à: | tí-à:-nì | 'send' |
| óbò | ób-à: | ób-à:-nì | 'give' |
| tómbò | tómb-à: | tómb-à:-nì | 'jump' |
| with initial sonorant |  |  |  |
| jâ: | ná-à | ná-á-nì | 'eat (meal)' |
| yéyy-è: | yéyy(-ì)-à: | yéyy(-ì)-à:-nì | 'sleep' |
| kígùl-è:- | kígùl-ì-à: | kígùl-ì-à:-nì | 'go back' |
| b. /LH/-toned |  |  |  |
| nŏ: | nù-â: | nù-á:-nì | 'drink' |
| yǎ: | yà-â: | yà-á:-nì | 'weep' |
| $d \varepsilon$ : | dì-â: | dì-á:-nì | 'insult' |
| gǒ: | gù-â: | gù-á:-nì | 'go out' |
| bòló | bòl-â: | bòl-á:-nì | 'go' |
| bèndé | bènd-â: | bènd-á:-nì | 'hit' |
| dànn-દ́:- | dànn-í-à: | dànn-í-à:-nì | 'sit' |

In addition to the subordinated clause types described below, $-a$ : occurs in certain periphrastic predicates with auxiliary 'be' or 'have': the present perfect -a: wò (§10.2.1.4), the periphrastic future $-d$-à: $s \grave{\varepsilon}(\S 10.2 .2 .7)$, and possibly the immediate future -njá: wò (§10.2.2.8). It may also be, or have once been, part of experiential perfect -tíyà wò (§10.2.1.3).

### 15.2.2.2 Clauses with -a: 'and then' (same-subject, anterior, past)

This high-frequency subordinator is used to "conjoin" (so to speak) two clauses that denote chronologically sequenced events when the whole event sequence is construed as perfective,
i.e. generally completed in the past. When the subjects of the two clauses are the same, there is no proclitic subject pronoun in the first clause. The two underlying VPs may also share nonsubject constituents, as in (459a) where 'meat' is logically the object of both 'cook' and 'eat'. This makes bracketing difficult; in (459a) it might be best to bracket 'meat' with the first verb and think of a silent pronominal copy preceding the second verb. Looser combinations are also quite possible, as in (459b), where each verb has its own object.

```
a. úlù-\età [nàmó=ò ílè-m-à:]
    child-Pl [meat=Def be.cooked-Caus-PastAnt]
    tèm-ì-yà
    eat.meat-Pfv-3PlSbj
    'The children cooked and ate (the) meat.'
```

b. [tànná yèn-â:] [pédù= ̀̀ bènd-غ̀- $\varnothing$ ]
[stick take-PastAnt] [sheep=Acc hit-Pfv-3SgSbj]
'He/She picked up (a/the) stick and hit (a/the) sheep-Sg.'
If the main clause is negated, the scope of negation does not extend to the subordinated clause (460).

```
(460) úlù-\grave{y [nàmó=ò íll̇̀m-à:]}
    child-Pl [meat=Def be.cooked-Caus-PastAnt]
    t\varepsiloǹmè-ǹ-ní
    eat.meat-PfvNeg-3PlSbj
    'The children cooked the meat but did not eat it.'
```

If the first clause is negated, it must take main-clause shape, so the construction is a clause juxtaposition rather than a chain. In (461a), both clauses are negated. In (461b), just the first clause is negated.

```
a. úlù-\grave{ [nàmó=ò ìlc̀-m\varepsiloǹ-ǹ-ní]}
    child-Pl [meat=Def be.cooked-Caus-PfvNeg-3P1Sbj]
    t\varepsiloǹmè-ǹn-ní
    eat.meat-PfvNeg-3PlSbj
    'The children did not cook and eat the meat.'
    (i.e. 'The children neither cooked nor ate the meat.')
```

b. úlù-ŋ̀ [nàmó=ò ìl̀̀-mè-ǹ-ní]
child-Pl [meat=Def be.cooked-Caus-PfvNeg-3P1Sbj]
tèm-ì-yà
eat.meat-Pfv-3P1Sbj
'The children didn't cook the meat but they ate it.'
(i.e. 'The children ate the meat without having cooked it.')

In (462), the subordinated clause with $-a$ : itself contains an embedded purposive clause with -ni.

```
(462)
\begin{tabular}{|c|c|c|}
\hline [ \({ }_{\text {sé }} / \mathrm{dù}=\) ì &  & bòl-â:] \\
\hline [[S=Acc & look.at-Purp] & go-PastAnt] \\
\hline [ wo = \(=\) ¢́ & tèmbè-lì-ń] & \\
\hline [3Sg=acc & find-PfvNe & \\
\hline
\end{tabular}
'I went to see Seydou but I didn't find him (there).'
```

15.2.2.3 Clauses with -a: 'and then' (different-subject, anterior, past)

In this construction, subordinator $-a$ : on the verb of the subordinated clause is accompanied by an obligatory preverbal proclitic subject pronoun. This pronoun is required even when it resumes a co-occurring clause-initial subject (463a). The construction denotes a sequential relationship between two events, the sequence as a whole being construed as completed in the past.

b. [ह́mmè nă: $\begin{gathered}\text { ámmè } j a ́-y \grave{\varepsilon} l-a ̂:] ~\end{gathered}$
[1Pl meal 1PISbj take-come-PastAnt]
[yà:-ń nह́-ỳ-yà]
[woman-Pl eat-Pfv-3PISbj]
'We brought the meal, and then the women ate.'
c. [[mí $\left.{ }^{\mathrm{L}} b a ̀:=\grave{j}\right] \quad k \grave{c}: l \varepsilon ́ \quad$ mí túb-à:]
[[1SgPoss ${ }^{\mathrm{L}}$ father=Acc] money $\mathbf{1 S g S b j}$ ask.for-PastAnt]
[[wó mì= ́ $\quad$ ò $b \grave{c}-1 i ́-\varnothing]$
$[[3 \mathrm{SgSbj} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ give-PfvNeg-3SgSbj
'I asked my father for money, but he didn't give it to me.'

### 15.2.2.4 Clauses with -a:-nì 'and then' (same-subject, anterior, future)

Future-time counterparts of the first examples in the preceding section on -a: subordinators are ( $464 \mathrm{a}-\mathrm{b}$ ). As before, the events denoted by the two clauses are sequenced in time. The main-clause verb is now imperfective (464a-b), future, imperative (464c), or hortative. The subordinated clause has -a:-nì, i.e. with suffix -ni superimposed on the past anterior -a: subordinating suffix.

```
a. úlì-\̀ [nàmó=ò íľ̀-m-à-mì]
    child-Pl [meat=Def be.cooked-Caus-Ant-Nonpast]
    tèmè-d-ì
    eat.meat-Ipfv-3PlSbj
    'The children will cook and eat (the) meat.'
```

b. [tànná yèy-á:-nì] [pédù =ì bèndd̀-dè- $\varnothing$ ]
[stick take-Ant-Nonpast] [sheep=Acc hit-Ipfv-3SgSbj]
'He/She will pick up (a/the) stick and hit (a/the) sheep-Sg.'
c. [tànná yèy-á:-nì]
[stick take-Ant-Nonpast] [sheep=Acc hit.Imprt]
'Pick up-2Sg the stick and hit the sheep-Sg!'
It is not possible to analyse the meaning of -a:-nì as the product of the meanings of its two parts. Elsewhere simple -a: is a past anterior subordinator; only the "anterior" part is valid for -a:-nì. On the other hand, simple -ni occurs as purposive ( $\S 17.5 .1$ ) or past simultaneous subordinator (§15.2.1.3), neither of which is precisely relevant to -a:-nì. In interlinears for -a:-nì, I will trim "-PastAnt" to just "-Ant" for -a: , and will label -nì as "-Nonpast" for lack of a better name.

For tonally irregular pìnn-á:-nì ‘later’ see §8.4.6.2.

### 15.2.2.5 Pseudo-conditional = yò (same- or different-subject, anterior, future)

The sentences in (463a-c) in §15.2.2.3 above are converted into a future time frame in ( $465 \mathrm{a}-\mathrm{c}$ ). This construction is also possible for habitual imperfective, or past imperfective contexts. The first clause takes the form of a conditional antecedent with final =yò 'if' and its variants (§16.1). There is no requirement of a proclitic subject pronoun. Because this construction is normal for future-time event sequences, and therefore has no conditional semantics in the usual sense, I refer to this (and similar constructions in other Dogon languages) as pseudo-conditional.

Examples ( $465 \mathrm{a}-\mathrm{c}$ ) have different subjects in the two clauses.
a. [yà:-ý jă: já-yèl-ì-yà =yô:]
[woman-Pl meal take-come-Pfv-3PlSbj=if]
[ह́mmè ná:-dè-ŋ̀]
[1PISbj eat-Ipfv-1PISbj
'The women will bring the meal, and then we will eat.'
b. [ह́mmè jă: já-yèl-દ́-n=jò]
[1P1 meal take-come-Pfv-1PISbj=if]
[yà:-ý-bè nà:-d-ì]
[woman-Pl-Pl eat-Ipfv-3PlSbj]
'We will bring the meal, and then the women will eat.'
c. [[mí ${ }^{\mathrm{L}}$ bà: $\left.=\grave{\eta}\right] \quad$ kè: $: \bar{\varepsilon} \quad$ tùb-̀̀-ń=jò $]$
[[1SgPoss ${ }^{\mathrm{L}}$ father=Acc] money ask.for-Pfv- $\left.1 \mathrm{SgSbj}=\mathbf{i f}\right]$

$[[3 \mathrm{SgSbj} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ give-IpfvNeg-3 3 SgSbj
'I will ask my father for money, but he won't give it to me.'
The pseudo-conditional also commonly links two or more same-subject clauses referring to a future, present-habitual, or past imperfective event sequence. Out of many examples in the texts, I mention text 01 at 00:40: 'Now, they were drinking their water, now they were
beating tomtoms, they kept dancing their dances. Now in that way they went to look for their dinner.' All clauses but the last clause are pseudo-conditional.

### 15.2.2.6 'VPed until got tired' = 'VPed for a very long time'

One common device to accentuate the duration of an activity is to subordinate the clause denoting the activity to a same-subject clause with perfective 'get tired' and the emphatic particle pâ: 'all the way to, to the point of, until'.

```
sé:dù mò:-nd-â: [pâ: dé-è-\varnothing]
S laugh-PastAnt [until get.tired-Pfv-3SgSbj]
'Seydou laughed until he got tired.' (i.e. he couldn't stop laughing)
```


### 15.2.2.7 'No sooner..., than ...'

This is a parallelistic construction where two clauses have main-clause form, with the same aspectual category, but are phrased together without a prosodic break. There is no overt subordination, but the listener infers that the two events are immediately sequenced. The subjects of the two clauses may be disjoint (467a) or the same (467b).

b. [ह́mm̀̀ yó:-d $\grave{\varepsilon}-\grave{\eta}]$ ná:-d $\grave{\varepsilon}-\grave{\eta}$
[1P1Sbj go.in-Ipfv-1PlSbj] eat-Ipfv-1P1Sbj
'As soon as we get inside, we will eat.'
15.2.2.8 kànà (A-stem) after subject proclitic for switch reference

A construction with 'do' is used as a sequential switch-reference device in narratives. The two clauses denote closely sequenced or otherwise closely related events. An example is the passge in text 04 at $01: 05$ with jòmó yárù wó kànà 'Hare let go (of squirrel's tail), and squirrel ran away.' Adding kànà (a form of 'do') after a proclitic subject pronoun (in this example 3 Sg wó kànà ) following the first clause permits it to segue into another clause (here 'squirrel ran away') with disjoint subject. The proclitic agrees with the subject of the preceding clause (in this example, 'hare'). Another example occurs in the same text at 01:11.

In elicitation follow-up, my assistant produced examples with wó kànà ( 3 Sg ), mí kànà ( 1 Sg ), and so forth following subordinated clauses with past anterior -a: (§15.2.2.2), e.g. jòb-â: wó kànà 'after he/she ran'. He also helpfully volunteered that bòlà can replace kànà in this context (which involves motion), cf. bòló 'go'. The other verb that shows up in this construction in the texts is gèndà 'look at, consider' from verb gèndé, see text 05 at 02:42.

The construction looks like a headless relative clause with a stative participle. However, this construction requires final a (kànà, bòlà, gèndà ). If regular stative forms of bòló and gèndé are elicited, they do not shift to a (yé bòlò- $\varnothing$ 'he/she is en route', yé gèndè- $\varnothing$ 'he/she is looking'). While a stative connection is likely etymologically, synchronically one must take
the type wó kànà as a distinctive construction. The old A -stem represented by kànà, bòlà, and gèndà is not otherwise recognizable in DS, except possibly in the 3 Sg augmented future (§10.2.2.6).

Variants of this construction based one the 'do' verb occur in several Dogon languages. In closely related Tommo So, examples (1008a-b) in McPherson (2013: 537) can be interpreted in this light.

### 15.2.3 'Before ...' clause (-mì-nì )

In this construction, the verb of the 'before' clause is $\{\mathrm{L}\}$-toned and has a subordinating suffix complex -mì-nì. Here $\grave{v}$ represents a vowel ranging over $\{\operatorname{a\varepsilon \rho } \boldsymbol{\}}$, harmonic to the preceding vowel: often -mà-nì after a, -mò-nì after nonlow back rounded vowel (but also in one example after the -e:- variant of the mediopassive suffix), -mغ̀-nì after nonlow front unrounded vowel. There is no pronominal-subject suffix. The subject, if distinct from that of the paired main clause, is overt as a separate NP or proclitic pronoun, like 'thief' in (468a). If a nonpronominal subject NP is present, it is not resumed by a preverbal proclitic subject pronoun. The time frame may be past or future.
a. [mí jòb-غ̀-1́]
[1SgSbj run-Pfv-1SgSbj]
[bé / gè: ${ }^{n}$-gé: ${ }^{n}-n \grave{\jmath}=\grave{\jmath} \quad$ dò:-mò-nì]
[3P1Sbj / theft-steal.Agent-Sg=Def arrive-before]
'I fled before they/the thief arrived.'
b. [ह́mmè sínjè làlà-dè-ŋ̀] [nǎ: jà:-mà-nì]
[1P1Sbj talk(n) converse-Ipfv-1P1Sbj] [meal eat-before]
'We will converse before eating (before we eat).'
$\begin{array}{lll}\text { c. } & m i ̀=y ́ ~ & \text { bé }\end{array} \quad \begin{aligned} & \text { bèndè-mè-nì / kà:-mà-nì } \\ & 1 \mathrm{Sg}=\text { Acc }\end{aligned} \quad 3 \mathrm{PlSbj} \quad$ hit-before / shave-before

The morphological analysis of the subordinator is nontransparent and the hyphenation is speculative. -mì-nì looks like a -ni subordinator (imperfective past) added to the causative suffix (§9.2.1), though there is no causative semantics. For another, somewhat frozen occurrence of -mì-nì, see gó-ý mò-nì ‘since' in §15.2.1.7.

> stem with -mv-ni gloss
a. /HL/-toned

| kâ: | kà:-mà-nì | 'shave' |
| :--- | :--- | :--- |
| nâ: | nà:-mà-nì | 'eat (meal)' |
| tê: | tè:-mè-nì | 'send' |
| óbò | obò̀-mò-nì | 'give' |
| tómbò | tòmbò-mò-nì | 'jump' |
| yéyy-è: | yèyy-è:-mè-nì | 'sleep' |
| kígùl-è:-- | kigùl-è:-mò-nì | 'go back' |

b. /LH/-toned

| nǒ: | nò:-mò-nì | 'drink' |
| :--- | :--- | :--- |
| yă: | yà:-mà-nì | 'weep' |
| dě: | dè:-mè-nì | 'insult' |
| gǒ: | gò:-mò-nì | 'go out' |
| bòló | bòlò-mò-nì | 'go' |
| bèndé | bèndè-mè-nì | 'hit' |
| dànn-é:- | dànn- $:-m \grave{\varepsilon}-n i ̀ ~$ | 'sit' |

15.2.4 gè: as filler in verb chains

In texts, a form gè: is attested following anterior-time subordinators like -a:-nì. It seems to serve to keep the motor running, so to speak, while the speaker formulates the next sentence. See text 01 at 00:04 (twice) and text 04 at 00:13.

### 15.3 Spatial and manner adverbials

15.3.1 Spatial adverbial clause ('where ...')

In (470a-b), a relative clause headed by 'place' is an argument of the larger clause.
a. [yàlıù ${ }^{\mathrm{L}}$ mí nùmb-ò=ò] wàgú wò- $\varnothing$ [place ${ }^{\mathrm{L}} 1 \mathrm{SgSbj}$ fall-Pfv.Ppl=Def] distant be-3SgSbj '(The place) where I fell is far away.'
b. [úlù-ì-mbè yàlùu ${ }^{\mathrm{L}}$ bó-jò=̀̀] wàgú wò- $\varnothing$ [child-Pl-Pl place ${ }^{\text {L }}$ go-Ipfv.Ppl=Def] distant be-3SgSbj '(The place) where the children are going is far away.'

In (471), the same relative-clause construction functions as a spatial adverbial in the higher clause. This function is indicated by locative postposition nì or rà: (§8.2.1-2).
(471) ह́mmè [[úlù-ŋ̀-mbè yàlù ${ }^{\mathrm{L}}$ nǎ: ná:-dò=ò] nì / rà:]

1P1Sbj [[child-Pl-Pl place ${ }^{\mathrm{L}}$ meal eat-Ipfv.Ppl=Def] Loc/Loc]
yá:-dè-ı̀
spend.night-Ipfv-1P1Sbj
'We will spend the night (in the place) where the children ate.'
For similar manner adverbial relative clauses see the following section below. For similar temporal relative clauses see $\S 15.2 .1 .1$.

### 15.3.2 Manner adverbial clause

### 15.3.2.1 Ordinary manner adverbial ('how ...')

Manner adverbial relatives have one or both of the following: a) an $\{\mathrm{L}\}$-toned form of sógə̀njì 'manner' as relative head, and b) final postposition gìǹ 'like, as'. (472a) has just the postposition, with covert relative head. (472b) has both, while (472c) is an NP (usable as an argument in the higher clause) with just the head. kìd ' 'thing' can also function as the head instead of sógònjì (472c). The construction meaning ' $(\mathrm{a} / \mathrm{no})$ way to VP' is expressed by a kind of subjectless relative clause with a verbal noun with -dù/-dú (472d-e). Semantically the verbal noun here functions much like an imperfective participle in a headless relative with unspecified subject. Indeed the verbal noun is morphologically related to the imperfective positive (§4.2.2.1).

| a. | [[sé:dù | wálù | $\begin{equation*} \text { kán- } j \grave{o}=\grave{\jmath}] \tag{472} \end{equation*}$ | gì̀ $\left.{ }^{\text {l }}\right]$ like] |
| :---: | :---: | :---: | :---: | :---: |
|  | [[S | work(n) | do-Ipfv.Ppl=De | like] |
|  | kán-à: |  | nàmà-ı̀ |  |
|  | do-PastAnt |  | want-1 SgSbj |  |
|  | 'I want to do | (work) | the way Seydou does |  |

b. [[sògònjì ${ }^{\mathrm{L}}$ wó jòm-mò-dò=̀̀] gìǹ̀]
[[manner ${ }^{\mathrm{L}} \quad 3 \mathrm{SgSbj}$ run-Caus-Ipfv.Ppl-Def] like]
$\left[\right.$ bày ${ }^{\mathrm{L}}$ túrù nè $\quad$ bàmàkó dò:-dè-j̀
[day ${ }^{\mathrm{L}}$ one Loc] B arrive-Ipfv-1PISbj
'The way he drives, we can reach Bamako in one day.'
c. sògònjì ${ }^{\mathrm{L}} /$ kìdè ${ }^{\mathrm{L}}$ wálù ú kàn-jò=j
manner $^{\mathrm{L}} /$ thing $^{\mathrm{L}} \quad$ work(n) $2 \operatorname{SgSbj} \quad$ do-Ipfv.Ppl=Def
'the way you-Sg work'
d. [wó= $\quad$ sògònjì ${ }^{\mathrm{L}}$ nànnà-dú] wò-ló- $\varnothing$
[3Sg=Acc manner ${ }^{\mathrm{L}}$ expel-VblN] be-StatNeg-3SgSbj
'There was no way to get rid of him.' (text 04 at $00: 40$ )
e. [sògònjì ${ }^{\mathrm{L}}$ námmá-dù] yó=j̀ $\varnothing$
[manner ${ }^{\mathrm{L}}$ tread-VblN] Exist=be-3SgSbj
'There is a way to go (there) on foot.' (e.g. climbining a hill)

### 15.3.2.2 'As though ...' clause

This is a counterfactual manner adverbial relative. The structure is the same as for ordinary 'how...' clauses (see above), except that the relative clause is not marked as definite.

```
a. úlù-\età yă: yà:-d-ì
    child-Pl tears(n) weep-Ipfv-3PlSbj
    [[kid\grave{\varepsilon}\mp@subsup{\grave{\varepsilon}}{}{\textrm{L}}\mathrm{ nă: nà:-l-ú bé wô:] gìnघ̀]}]
    [[thing }\mp@subsup{}{}{L}\mathrm{ meal eat-PfvNeg-Pfv.Ppl 3PISbj be.Ppl] like]
    'The children are crying as though they haven't eaten.'
```

```
b. î: yǎ: yà:-dè-\varnothing
    child tears(n) weep-Ipfv-3SgSbj
    [[kìd\grave{\varepsilon}}\mp@subsup{}{}{\textrm{L}}\quadwò=\emptyset́ mí bènd-\varepsiloń-\varnothing] gìnغ̀]
    [[thing }\mp@subsup{}{}{\textrm{L}}3\textrm{Sg}=Acc 1SgSbj hit-Pfv-3SgSbj.Ppl] like
    'The child is crying, as though I had hit him.'
```

If the 'as though ...' clause is subordinated to a main verb expressing a protagonist's intention to pretend, like 'do' in (474), the logophoric subject suffix occurs in the 'as though ...' clause. The use of a logophoric is unsurprising if gìnè derives from an archaic form of $g \check{\varepsilon}$ : ‘say’ (§8.4.1).

```
[[ù=ýy bèndé-dè-ỳ] gìn\varepsiloǹ] kán-jè-\varnothing / kán-j-ì
[[2Sg=Acc hit-Ipfv-LogoSbj] like] do-Ipfv-3SgSbj / -3P1Sbj
'He does/They do (=act) like he's/they're going to hit you-Sg.'
```


### 15.3.3 'From X, until/all the way to) Y' (nè, bǎ:, pâ:)

To indicate both the starting and ending points of an extended time interval, perhaps with rhetorical emphasis, a 'since' clause with nè can be combined with an 'until' clause in the form of a regular main clause beginning with pâ: 'until, all the way to'.

[3Sg=Acc 3 PlSbj bear-Pfv.Ppl since]
[pâ: yìm-ú wò- $\varnothing]$
[until die-Nom be-3SgSbj]
bòlદ́-દ̀lè- $\varnothing$
go-IpfvNeg-3SgSbj
'From the time he is born ("they have borne him") until he is dead, he won't go.'
(yìm-ú 'death' or 'dead body, corpse')
b. [Wó yغ̀l-غ́ nè] [pâ: ból-ì- $\varnothing]$
[3SgSbj come-Pfv.Ppl since] [until go-Pfv-3SgSbj]
nǎ: jà:-lì- $\varnothing$
meal eat-PfvNeg-3SgSbj
'From the time he came until he went, he didn't eat.'

In spatial contexts a particle bǎ: is translatable 'all the way (to/from)'. It directly follows a locational expression denoting either the starting point or the terminus (476a-b). The neutrality between allative and ablative is consistent with the general restriction of directional specification to verbs ('come', 'go', 'exit', etc.).
a. [íbè rà:] bǎ: jòb-â: yèl-غ̀- $\varnothing$
[market Loc] all.the.way run-PastAnt come-Pfv-3SgSbj
'He/She ran all the way (here) from the market.'
b. [íbè rà:] bǎ: jòb-á:-nì bò-jè-ŋ̀
[market Loc] all.the.way run-Ant-Nonpast go-Ipfv-1SgSbj
'I will run all the way (from here) to the market.'

My assistant was uncomfortable with double bǎ: phrases, one for the origin and one for the terminus. This would also be awkward in English: I ran all the way from the market (?all the way) to the village.

For bǎ: in comparatives, see §12.2.1.

## 16 Conditional constructions

### 16.1 Hypothetical conditional ( $=$ yò $\sim=y e ̀ \sim=j e ̀)$

In addition to its use in constructions with recognizable conditional semantics, the clitic
 regular way to chain a clause with a following main clause when they jointly denote a sequence of events in the future or other imperfective context; see $\S 15.2 .2 .5$. There is no difference in form between a pseudo-conditional subordinated clause and a conditional antecedent clause with $=y o \sim=j$ e. This chapter is about ordinary conditionals, not pseudoconditionals.

### 16.1.1 Positive antecedent

In this construction, the antecedent event is in the future or otherwise uncertain, and the eventual factuality of the antecedent event is a sufficient condition for the factuality of the consequent event.

The 'if' morpheme is =yò or variant (for the phonology, see below). The antecedent clause ending in =yò precedes the consequent clause. The antecedent is imperfective if it denotes a continuing process or state that overlaps in time with the consequent (477a). If the antecedent and consequent events are conceived as consecutive in time, the antecedent is perfective in form ( $477 \mathrm{~b}-\mathrm{c}$ ). The consequent is imperfective ( $477 \mathrm{a}-\mathrm{d}, \mathrm{g}$ ) or a deontic modal such as imperative (477e-f).
a. àná mě:-dè- $\varnothing=y o ̀, \quad y o ́:-d \varepsilon ̀-\grave{\eta}$
rain(n) rain.fall-Ipfv-3SgSbj=if, go.in-Ipfv-1P1Sbj
'If it is raining, we'll go in.'

$1 \mathrm{Sg}=$ Acc leave-Pfv-2SgSbj=if, $\quad 2 \mathrm{Sg}=$ Acc Augm-kill-Ipfv-1SgSbj
'If you-Sg leave me, I'll kill you.'
c. $\quad m i ̀=\emptyset \quad b \varepsilon ̀ n d-\grave{\varepsilon}-\dot{y}=y o ̀, \quad$ ù $=\eta \quad$ gà $d a ́:-d \grave{\varepsilon}-\grave{\eta}$
$1 \mathrm{Sg}=$ Acc hit-Pfv-2SgSbj=if, $2 \mathrm{Sg}=$ Acc Augm-kill-Ipfv-1SgSbj
'If you-Sg hit me, I'll kill you.'
d. sé:dù mì=1́ bènd- $\grave{1}-\varnothing=y o ̂:$,
$\mathrm{S} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit-Pfv$-3 \mathrm{SgSbj}=\mathbf{i f}$,
wò $=$ ந́ $\quad$ dà-dá:-dè- $\grave{l}$
3Sg=Acc Augm-kill-Ipfv-1SgSbj
'If Seydou hits me, I'll kill him.'

```
e. nùmb-è-ý= yò,
    fall-Pfv-2SgSbj=if,
    í\etag\varepsilońl-\varepsiloń
    arise-MP.Imprt
    'If you-Sg fall, get up!'
f. nùmb-è-ń = jè,
    fall-Pfv-2PlSbj=if,
í\etag\varepsilońl-\varepsiloń-ŋ̀
arise-MP.Imprt-PlAddr
'If you-Pl fall, get up!'
g. yé-rà: kìgùl-ì-ỳ-ń=jè,
    DiscDef-Loc go.back-MP-Pfv-1SgSbj=if,
    mì=ý dà-dá:-d-ì
    1Sg=Acc Augm-kill-Ipfv-3PlSbj
    'If I go back there, they'll kill me.'
```

The 'if' particle is phonologically cliticized to the verb of the antecedent clause. $2 \mathrm{Sg}-\mathrm{w}^{\prime}$ generally assimilates to the $y$ of the clitic, hence $-\bar{y}=y o$, though my assistant also produced $-W^{\prime}=y o ̀ ~ i n ~ c a r e f u l ~ s p e e c h . ~ T h e ~ n a s a l ~ o f ~ t h e ~ 1 S g, ~ 1 P l, ~ a n d ~ 2 P l ~ s u f f i x e s ~ c o m b i n e s ~ w i t h ~$ $=y o ̀ ~ a s ~-n ́=j o ̀ ~ v a r y i n g ~ w i t h ~-n ́=j e ̀ . ~$

Combinations of third-person perfective verbs and =yò or = yè show tone changes, as illustrated in (478) with the verbs pádà 'leave (behind), abandon' and yèlé 'come'.
main clause antecedent clause gloss ('if ...')
a. 3rd person perfectives (with $=y \hat{o}:$ )

3Sg subject
pád-ì̀- $\varnothing$ pàd-ì- $\varnothing=y o ̂: \quad$ '... he/she left'
yél-̀̀- $\varnothing \quad$ yèl-غे- $\varnothing=y o ̂: \quad ~ ' . . . ~ h e / s h e ~ c a m e ' ~$
3Pl subject
pád- $\varnothing$-yà pàd-ì-yà =yô '... they left'
yél- $\varnothing$-yà $\quad$ yèl-ì-yà = yô: '... they came'
b. 1st/2nd person perfectives (L-toned $=y o ̀$, after nasal $=j o ̀$ or $=j e ̀$ )

1 Sg subject
pàd-ì-ń pàd-ì-ń=jè $(\sim=j o ̀) \quad$ '... I left'
yèl-غ̀-ŋ́
$y \grave{\varepsilon} l-\grave{\varepsilon}-\bar{n}=j e ̀ ~(\sim=j o ̀) \quad ' . .$. I came'
1 Pl subject pàd-ì- $\quad$ pàd-ì-ń $=j$ è $(\sim=j o ̀) \quad$ '... we left' $y \grave{\varepsilon} l-\grave{\varepsilon}-\bar{\eta} \quad y \grave{l}-\stackrel{\varepsilon}{\mathrm{\varepsilon}}-\underline{n}=j$ è $(\sim=j o ̀) \quad$ '... we came'
2Sg subject pàd-ù-Ẃ pàd-ì-ý=yò '... you-Sg left' $y \grave{q} l-\grave{\varepsilon}-{ }^{\prime}{ }^{\prime}$
$y \grave{l-\varepsilon ̀-y ́=y o ̀ ~ ' . . . ~ y o u-S g ~ c a m e ’ ~}$
2 Pl subject
pàd-í-ì pàd-í-ì =jè $(\sim=j o ̀) \quad$ '.. you-Pl left'
$y \grave{\varepsilon} 1-\varepsilon ́-\grave{\eta} \quad y \varepsilon ̀ l-\varepsilon-\grave{n}=j e ̀(\sim=j o ̀) \quad$ ' $\ldots$ you-Pl came'

The third person subject perfective forms (478a) drop to $\{\mathrm{L}\}$ tone before $=y o ̀$, which itself then shifts to $<\mathrm{HL}>$-tone, and the contour tone required lengthening the vowel. This happens even when the verb is clause-initial (in a one-word clause), as in $y \grave{\varepsilon} l-\grave{\varepsilon}-\varnothing=y o ̂$ : 'if he/she comes'. In the $1 \mathrm{Sg}, 1 \mathrm{Pl}$, and 2 Sg subject forms, the regular perfective $\{\mathrm{LH}\}$ overlay is applied
before =yò, which remains L-toned. In these three forms, the H-tone is realized on the final mora of the verb proper, hence on the pronominal suffix, as in kìgùl-ì- $\grave{-}-n=j e ̀ ~ i n ~(477 \mathrm{~g})$ above. For 2 Pl , the falling-toned syllable before $=j e ̀$ may be flattened to H -tone, hence variants like pàd-í-ń=jè aside from those shown in (478). Monosyllabic verbs express $\{\mathrm{LH}\}$ as rising tone: kà-ỳ-ý= yò 'if you shave'.

There are no special tonal interactions involving imperfective verbs plus $=y o ̀$, though the consonantal processes described above do apply: nă:-dغ̀-ǹ 'we eat' becomes nǎ:-dè-ǹ=jò 'if we are eating'.

The loss of H-tone on third-person perfective positives, combined with the appearance of an unexpected H-tone on the 'if' particle in the same combinations, suggests that the H-tone of the third-person perfective has shifted rightward onto the particle. This also happens with interrogatives $m a ̀ \rightarrow$ and $=1 o ̀(\S 13.2 .1 .2-3)$. For tonal analysis see §3.7.3.3.

### 16.1.2 Negative antecedent

The antecedent and/or the consequent may be (separately) negated. The antecedent is negative in (479a-b). (479b) is shown with imperfective negative and perfective negative alternatives. The consequent is negative in (479a), positive in (479b).

```
a. àná mìy\varepsiloń-\varepsiloǹl\varepsiloǹ- }\varnothing=yò
rain(n) rain.fall-IpfvNeg-3SgSbj=if,
tô: bèlè-m\varepsiloń-\varepsiloǹl\grave{c}-\varnothing
sow get-Pass-IpfvNeg-3SgSbj
'If it doesn't rain/isn't raining, it isn't possible to plant (seeds).'
(= 'Unless it rains, it isn't possible to plant.')
b. sé:dù yèlé- \(̀ l \grave{\varepsilon}-\varnothing /\) yèl-lí- \(\varnothing=y o ̀\),
S come-IpfvNeg/PfvNeg-3SgSbj=if,
\varepsilońmmè ògùlú bò-j\grave{<-\eta}
1Pl outback go-Ipfv-1P1Sbj
'If Seydou isn't coming/has not come, we'll go to the bush (=fields).'
```

In (479a), mìy $\varepsilon$ - $\grave{\varepsilon} l \grave{\varepsilon}-\varnothing=$ yò is phonologically unproblematic, simply adding the L-toned form of the clitic to the imperfective negative form mìy $\varepsilon$ - $\grave{\varepsilon} l \dot{\varepsilon}-\varnothing$. However, when the contracted vowel in the penultimate syllable is L-toned, as in óbè- $\varepsilon$ lè $-\varnothing$ 'he/she doesn't give', the final syllable lè shifts to H-tone (480a). The 3 Pl form is likewise -ǹ̀ní in this environment (480b), in which case it is distinguished from the segmentally identical perfective negative (480c) by the presence of an H -tone in the stem.
a. óbè- $\grave{\varepsilon} l \varepsilon ́-\varnothing=y o ̀$
give-IpfvNeg-3SgSbj=if
'if he/she doesn't/won't give'
b. óbò-ǹ-ní = yò
give-IpfvNeg-3P1Sbj=if
'if they don't/won't give'
c. òbò-ǹ-ní = yò
give-PfvNeg-3PlSbj=if
'if they don't give (i.e. haven't given)'

### 16.2 Alternative 'if’ particles

16.2.1 'Even if ...'

### 16.2.1.1 = yò lò~ = ye lè, hállù

lè 'also' can follow =yò 'if' to form an 'even if' conditional antecedent. The vowels usually assimilate one way or the other, to =yò lò or to = yè lè. The sense is that the factuality of the (hypothetical) antecedent eventuality would not affect that of the consequent. For rhetorical emphasis, clause-initial hállù 'even’ (§19.1.4) may be added (481b).
a. yògó yèl-غ̀-ý=yò lò, jǎ: jâ:-lò-ฟ̀
tomorrow come-Pfv-2SgSbj=if also, meal eat-IpfvNeg-2SgSbj
'Even if you-Sg come tomorrow, you won't eat.'
b. [hállù àná $m \varepsilon ̀-\grave{\varepsilon}-\varnothing=$ yé lè,
[even rain rain.fall- $\mathrm{Pfv}-3 \mathrm{SgSbj}=$ if also,
tǒy tú-èlè-ŋ̀̀
sowing sow-IpfvNeg-1SgSbj
'Even if it rains, I'm not going to plant (seeds).'

### 16.2.1.2 VERB-yà:-VERB

In a text the form yèlù-yà:-yélè means 'even if (X) comes'; see text 02 at 00:20. It consists of an iteration of the verb yèlé 'come' and a linking element -yà:-.

### 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 two poles of the complex antecedent, such as a positive clause and its negation, are juxtaposed without an overt subordinator (such as 'if'). Both clauses are pronounced with what I call dying-quail intonation (symbol $\therefore$ ), i.e. unbounded intonational prolongation of the final syllable and (if the clause ends with an H-tone) a slow pitch decline. In (482), mé- $\grave{\varepsilon}-\varnothing . \therefore$ is realized as [mé $\bar{\varepsilon} \bar{\varepsilon}$ ] with additional prolongation, and $m \grave{\varepsilon}:-l i ́-\varnothing \therefore$ is realized as [mè:líìi] with a noticeable pitch decline in addition to the prolongation.

```
[àná mé-è- \(\varnothing \therefore] \quad[m \grave{:-l i ́-\varnothing . \therefore] ~}\)
[rain(n) rain.fall-Pfv-3SgSbj] [rain.fall-PfvNeg-3SgSbj]
    [ògùlú bǒ:-jè-ŋ̀]
    [outback Augm.go-Ipfv-1SgSbj]
    '(I don't care) whether it rains or doesn't rain, I'm going to the fields.'
```

With 1st/2nd person subjects, the prolongation and pitch fall are realized on the suffixal sonorant. In (483a), the 2 Pl suffix - $\grave{y}$ is already L-toned, so the only audible effect is prolongation. In (483b), with atonal $1 \mathrm{Sg}-\eta$, the verb of the first (positive) clause, theoretically $y \grave{l}-\bar{\varepsilon}-\eta$ 亿́ with optional final H-tone, is heard as all L-toned (as often in perfectives that follow another constituent). In the second (negative) clause, yèl-lì- $\check{y}$ would normally end with an H-toned nasal, but here the pitch decline is audible: IPA [jèl:íì:]. In other words, 2Pl yèl-lí-ì. $\therefore$ in (483a) and 1 Sg yèl-lì-ŋ́ $\therefore$ in (483b) are indistinguishable. My transcriptional practice is to add $\therefore$ after the form in its regular transcription, so yغ̀l-lí- $\check{\prime} . \therefore$ and $y \grave{\varepsilon} l-l i ̀-\eta ́ . \therefore$ are transcribed differently.

b. mí yèl-غ̀-ŋ̀. $\quad$ yèl-lì-ń.
$1 \mathrm{SgSbj} \quad$ come-Pfv-1SgSbj
come-PfvNeg-1SgSbj
'whether I come or not'

### 16.4 Counterfactual conditional (bènè)

In this construction, the eventuality encoded by the antecedent is understood to be not true. It may refer to a present situation (484a) or to a past event (484b). The consequent may therefore refer to a future eventuality that is not expected to happen (484a) or to a past event that did not happen (484b).

The consequent is an augmented imperfective in (484a). In the more typical past counterfactual (484b), the consequent is the augmented past counterfactual form (§10.5.1.7). The antecedent, if based on a normal active verb, is in past anterior subordinated form with -a: (§15.2.2.1-3), followed by a proclitic pronominal subject and bènè. Statives (quasiverbs as well as derived statives) do not allow -a: , so they have regular pronominal-subject suffixes (484c).

\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.
$\quad[$ àná

$[r a i n(n) ~$} \& mì-â:] \& [Wó \& bènè], <br>
\hline \& rain.fall-PastAnt] \& [3SgSbj \& Counterf], <br>
\hline Émmè \& yò-yó:-dè-ŋ̀ \& \& <br>
\hline 1 Pl \& Augm-go.in- \& fv-1PlSbj \& <br>
\hline 'If it we \& raining (=if it we \& to rain), w \& (we'll) go in <br>
\hline
\end{tabular}

b. [yâ: àná mì-â:] [wó bènè],
[yesterday rain(n) rain.fall-PastAnt] [3SgSbj Counterf],
દ́mmè $\quad$ yò-yó: = bè-ŋ̀
1Pl Augm-go.in=Past-1P1Sbj
'If it had rained yesterday, we'd have gone in.'
c. ǔ:njò-Ẁ [ú bènè]

Augm.lie.down.Stat-2SgSbj [2SgSbj Counterf]
'if you-Sg were lying down, ...'

Further examples of the more common type involving counterfactual past eventualities are in (485).
(485)

'If I/we had a motorcycle, I/we would go to the village tomorrow.'
b. [yâ: sé:dù yèl--lú] [wó bènè],
[yesterday S come-PfvNeg-Pfv.Ppl] [3SgSbj Counterf],
àndá $\quad b \check{0}: l o ̀=b e ̀-\grave{j}$
village Augm.go=Past- 1 Sg Sbj
'If Seydou hadn't come yesterday, I'd have gone to the village.'
c. [yâ: mì=́́ bènd-â:] [ú bènè],
[yesterday $1 \mathrm{Sg}=\mathrm{Acc}$ hit-PastAnt] [2SgSbj Counterf],
mí $\quad$ ù= $\grave{j} \quad d a ̀-d a ́:=b e ̀-\grave{j}$
$1 \mathrm{SgSbj} \quad 2 \mathrm{Sg}=\mathrm{Acc} \quad$ Augm-kill=Past-1SgSbj
'If you-Sg had hit me yesterday, I'd have killed you.'
d. [tibó=ò wà:-1-ú] [mí bènè],
[stone=Def see-PfvNeg-Pfv.Ppl] [1SgSbj Counterf],
nй:mbò $=$ bè-ı̀̀
Augm.fall=Past- 1 SgSbj
'If I hadn't seen the stone, I would have fallen.'
e. [sé:dù yèl-â:] [wó bènè],
[S come-PastAnt] [3SgSbj Counterf],
mí $\quad w o ̀=\emptyset ́ \quad k e ̀: l \varepsilon ́ \quad ~ o ́: b o ̀=b e ̀-\grave{y}$
$1 \mathrm{SgSbj} \quad 3 \mathrm{Sg}=\mathrm{Acc}$ money Augm.give=Past-1SgSbj
'If Seydou had come, I would have given him (some/the) money.'
The antecedent ends with bènè (K\&P p. 74 "beni"), which appears to be an irregular participial form of bè 'was', the past tense counterpart of wò 'be (somewhere)'. The antecedent has relative-clause form. It has a covert adverbial head with an implied adverbial sense like 'situation'. A pronominal subject therefore appears as a proclitic to bènè (484a, $485 a$ ), and is required even if the pronoun is coindexed to an overt subject NP (485b).

## 17 Complement and purposive clauses

### 17.1 Quotative complements

Quoted clauses may be marked by a) either a conjugated 'say' verb $g \check{\text { : }}$ : or a clause-final quotative particle wà ; b) an obligatory quotative-subject phrase including another wà particle; c) absence of the usual pronominal-subject suffixes on predicates; and d) logophoric pronominals coindexed to the "author" of the quotation (whether spoken or thought). For logophorics see $\S 18.3$.

### 17.1.1 Direct versus indirect in quotative complements

Basic clause-level inflectional categories (perfective or imperfective aspect, imperative or hortative mood, negation) do not change from regular to quoted clauses. Original 1 Sg and 1 Pl pronouns become logophorics. Original second and third person pronominals are reset in accordance with the deictic structure of the current speech event. Thus an original "Seydou hit me" can be reset as "He said, you hit Logo" if the current speaker is addressing Seydou. Likewise, an original "where are you-Pl?" is usually converted into "where are they," with a third person pronoun, unless the original addressee happens to be the current speaker or addressee.

Animal tales abound in quoted clauses. In (486), 'we' becomes logophoric plural, 'youSg' becomes 3 Sg , and the aspectual category (here imperfective) is carried over.

| háyà | Wò $=$ 亿́ | ǹjěm-bè | yò:r-á:-nì, |
| :--- | :---: | :---: | :--- |
| well | 3Sg=Acc | Logo-Pl | roast-Ant-Nonpast, |
| ǹjěm-bè | má:bà | kán-j-ì |  |

17.1.2 'Say that ...' with inflectable 'say' verb ( $g \check{\varepsilon}$ : )

The regular inflectable verb $g \varepsilon ̌$ : 'say' follows the quoted material. It occurs in all inflectional categories.
a. sé:dù [ǹjjèmé yě:-jè-1̀] gì-ỳ- $\varnothing$
S [Logo Augm.come-Ipfv-LogoSbj] say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that he $\mathrm{e}_{\mathrm{x}}$ is coming.'
b. úlù-ì [ǹjèmé-ḿbè yě:-jè-1̀] g-ì-yà
child-Pl [Logo-Pl Augm.come-Ipfv-LogoSbj] say-Pfv-3PlSbj
'The children ${ }_{x}$ said that they ${ }_{x}$ are coming.'
c. [[àndá rà:] mè- $\grave{-}-\varnothing] \quad g \varepsilon ̀:-l i ̀-\eta ́$
[[village Loc] rain.fall-Pfv-3SgSbj] say-PfvNeg-1SgSbj
'I didn't say that it rained in the village.'
d. [ànùgě: ú-mò wà] yélè gê:
[friend 2Sg-Poss QuotSbj] come.Imprt say.Imprt
'Tell-2Sg your friend to come!'
$g \varepsilon ̌:$ may also take an NP or a manner adverb as complement, referring back to something said.
a. sé:dù yògó-njì: gì-ỳ- $\varnothing$
S how? say-Pfv-3SgSbj
'What did Seydou say?'
b. [sò: ${ }^{\mathrm{L}}$ mí $\left.g \grave{\text { ì }}-\dot{y}=g \grave{]}\right] \quad$ wó $=$ là:- $\varnothing$
[thing ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad$ say-Pfv.Ppl=Def] $\quad 3 \mathrm{Sg}=$ it.is.not -3 SgSbj
'That isn't what I said.'

3 Sg and 3 Pl subject perfective verbs are $\{\mathrm{L}\}$-toned before the 'say' verb (in any inflection and with any pronominal-subject category), as in (487c) above. Furthermore, while perfective gì-ỳ 'he/she said' and g-ì-yà 'they said' are normally tone-dropped to gì-ỳ when they immediately follow a quotation or an NP, as in (487a-b) and (488) above, when they follow a tone-dropped perfective positive they are heard as gí-ỳ and $g$-í-yà with initial H-tone (489a). This also applies when optional 3 Pl subject suffixation is present on a preceding perfective positive verb (489b).
a. sé:dù [ù
[ú wà]
$y \grave{l-\varepsilon ̀ ~ \quad ~} 1$ í- $\grave{-}-\varnothing$
$\mathrm{S} \quad[2 \mathrm{Sg}$ QuotSbj] come-Pfv say-Pfv-3SgSbj
'Seydou said that you-Sg have come.'
b. sé:dù [úlù-ŋ̀ wà] yèl-ì-yà gì-ỳ- $\varnothing$
S [child-Pl QuotSbj] come-Pfv-3P1Sbj say-Pfv-3SgSbj
'Seydou said that the children have come.'

The tonal behavior of perfectives plus $g \varepsilon \varepsilon$ : is matched by their behavior before quotative particle wà, see below. It is also consistent with the tonal behavior of perfectives before $=y o ̀$ 'if' and variants ( $<\mathrm{HL}>$-toned $=y \hat{0}$ : after $\{\mathrm{L}\}$-toned perfective verb). In §3.7.3.3 I interpret this as an actual shift of the initial H-tone of the third person perfective positive verb onto the relevant following morpheme. The isolation form of gí-ỳ- $\varnothing$ 'he/she said' already has an initial H-tone (as with all 3 Sg and 3 Pl perfective positive verbs), so in this case one could argue that the shifted H -tone merely resuscitates an H -tone that would otherwise fall prey to downdrift (or defocalizaiton) after a quotation. Similarly, when the 'say' verb is a $1 \mathrm{st} / 2 \mathrm{nd}$ person perfective positive with word-final H-tone, like gì-ỳ- $\eta$ 'I said', it keeps those tones when preceded by a tone-dropped quoted third-person perfective positive: [ú wà] yغ̀l-غ̀ gì-ỳ-ŋ́ 'I said that you came'. This too is consistent with the view that the shifted H-tone merges with an existing H -tone, rather than behaving like a traditional floating H that docks on the nearest available host syllable or more.
$g \varepsilon ̌: ~ i s ~ o m i t t e d ~ w h e n ~ t h e ~ q u o t a t i v e ~ p a r t i c l e ~ w a ̀ ~ o c c u r s ~ c l a u s e-f i n a l l y . ~ I n ~ e x t e n d e d ~$ quotations, either wà or conjugated $g \varepsilon ̌$ : can be regularly repeated.

In text 01 at 00:20, $g \grave{\varepsilon}$ : (low-toned) after a quotation appears to be unconjugated, functioning like wà.
háyà bǒy=gò,
well tomtom=Def
[nê: gày] wò=1́ bà:-mà-dù kj̀-ló gè:
[now Topic] 3Sg=Acc beat-Caus-VblN be.Nonh-StatNeg saying,
'Well now, there won't be any letting him beat tomtoms," (they) said.'

### 17.1.3 Quotative clitic

### 17.1.3.1 Clause final wà

The unconjugated clause-final quotative particle wà is often used instead of a conjugated '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. | [àndá <br> [village | rà:] <br> Loc] | àná $\begin{equation*} \operatorname{rain}(\mathrm{n}) \tag{491} \end{equation*}$ | $m \dot{\varepsilon}-\grave{\varepsilon}$ <br> rain.fall-Pfv | wá Quot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| '(... said) it rained in the village.' |  |  |  |  |  |
|  | [àndá [village | rà:] <br> Loc] | àná rain(n) | $\begin{aligned} & m \grave{:-l i ́ ~} \\ & \text { rain.fall-Pfv } \end{aligned}$ | wà <br> Quot |
| '(... said) it didn't rain in the village.' |  |  |  |  |  |
|  | $y \varepsilon ̌:-j \varepsilon e^{-1}$ |  |  | wa |  |
|  | Augm.come-Ipfv-LogoSbj |  |  | , Quot |  |
|  | '(X said) he $^{\text {/ }} /$ she $_{x}$ will come.' |  |  |  |  |
|  | àná mì-દ́lغ̀ Wà <br> rain rain.fall-IpfvNeg Quot <br> '(... said) it doesn't rain.'  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

The tonal behavior of wà resembles that of =yò 'if'. wà is always L-toned except when immediately preceded by a perfective positive verb (which in the absence of pronominalsubject marking in quotative clauses is identical in form to the 3 Sg perfective of a main clause). The perfective positive verb loses its own H-tone in the process (491a). In §3.7.3.3 I analyse this type of process as a rightward shift of the verb's H-tone onto the following particle. The fact that wà becomes H-toned wá, not HL-toned \#wâ:, suggests that wà is underlyingly atonal. Contrast $=y o ̀ ~ ' i f$ ', which becomes $=y \hat{o}$ : in the same context (after thirdperson perfective positive), where the alternation suggests that =yò has an underlying L-tone combined with the shifted H -tone to produce HL.

An interesting practical effect of Rightward H -Tone Shift onto wà is that quoted perfective positives are tonally distinguished from quoted imperatives, even when the two are homophonous in main clauses. The shift occurs with the perfective positive in (492a), resulting in L-toned verb and H -toned quotative particle. It does not occur with imperatives,
so (492b) keeps its H-tone on the imperative and the quotative particle surfaces with L-tone. In main clauses, 3 Sg perfective yél-غ̀- $\varnothing$ and imperative yélè are homophonous.
a. [ú
[2Sg QuotSbj] come-Pfv
$y \varepsilon ̀ l-\grave{\varepsilon}$ wá
Quot
'(... said) you-Sg have come.'
b. [ú wà] yélè wà
[2Sg QuotSbj] come.Imprt Quot
'(... said) for you-Sg to come.' (transmitted imperative)

The quoted material preceding wà may be a single word or a clause. Utterances of the type X wà are commonly used in conversation to repeat a word or clause just uttered by the addressee, either for confirmation or to express surprise or skepticism. (493) is a two-part mini-conversation.

```
A: g\grave{yčy dà-ỳ-\etá}
    elephant kill-Pfv-1SgSbj
    'I killed an elephant.'
B: gว̀yěy 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 added at the end of a nonfinal clause that is connected to the main clause by an explicit subordinator such as past anterior -a: (494a-b) or conditional $=y o ̀(494 \mathrm{c})$. Note the ungrammatical occurrences of \#wà in these examples. However, an initial quotative subject construction is fine in the subordinated clause (494c).
a. yغ̀l-â: (\# wà )
come-PastAnt (\# Quot)
$\grave{u}=$ и́ tèmbè-lì-ĺ wà
$2 \mathrm{Sg}=$ Acc find-PfvNeg-LogoSbj Quot
'( $\mathrm{He}_{\mathrm{x}} /$ She $_{\mathrm{x}}$ ) said that he $\mathrm{e}_{\mathrm{x}} /$ she $_{\mathrm{x}}$ came but (he $\mathrm{x}_{\mathrm{x}} /$ she $_{\mathrm{x}}$ ) didn't find you-Sg.'
b. wó [ǹjèmé yèl-â: (\# wà )],

3Sg [Logo come-PastAnt (\# Quot)],
[gín dà] tó: = bè-ló-ẁ] wà
[house Loc] be.in=Past-Neg-2SgSbj Quot
' $\left(\mathrm{He}_{\mathrm{x}} /\right.$ She $\left._{\mathrm{x}}\right)$ said that he $\mathrm{e}_{\mathrm{x}} /$ she $_{\mathrm{x}}$ came, but you-Sg weren't in the house.'
c. sé:dù [ú wà] [ǹjěm-mò rà:]

S [2Sg QuotSbj] [Logo-Poss Loc]
$y \varepsilon ̀ l-\varepsilon ̀-y ́=y o ̀ \quad$ (\# wà ),
come-Pfv-2SgSbj=if (\# Quot),
$\grave{u}=\grave{\eta} \quad$ kè:lદ́ óbò-dè-ŋ̀ wà
$2 \mathrm{Sg}=\mathrm{Acc}$ money give-Ipfv-LogoSbj Quot
'Seydou ${ }_{x}$ said that if you-Sg go to his $_{x}$ (house), he ${ }_{x}$ will give you the money.'

Clause-final quotative wà (unlike quotative-subject wà) is not used other than to report actual speech (or thought). 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 inflectable verb gě: ‘say'.

### 17.1.3.2 Quotative subject wà

A referentially specific subject of a quoted clause is frequently provided with its own quotative particle wà. Quotative subject wà co-occurs readily with either clause-final particle wà or an inflected form of 'say'.

This construction is especially common with $1 \mathrm{st} / 2$ nd person pronominal subjects, since regular 1st/2nd person pronominal-subject suffixation on the verb is not allowed (495a). 1Pl ह́mmè contracts with wà as $\varepsilon$ émm-à: , and 1 Sg mí contracts as má-à (495b). 2 Sg ú wà and 2 Pl é wà are uncontracted (495a), as are 3 Sg wó wà and 3 Pl bé wà.
a.
 '(... said) you-Sg/Pl have come.'
b. Wó Émm-à:/ má-à yélè wà
3SgSbj 1Pl-QuotSbj/ 1Sg-QuotSbj come.Imprt Quot
'He/She says for us/me to come.'

Quotative subject wà may occur in any quoted clause, even one that does not allow a clausefinal quotative wà. This is the case in (496), where 'say' is negated, so the utterance as a whole does not report actual speech.

| $[$ ú | wà $]$ | $y \grave{z} l-\grave{\varepsilon}$ | $g \dot{z}:-1 i ́-\varnothing$ |
| :--- | :--- | :--- | :--- |
| $[2 S g$ | QuotSbj $]$ | come-Pfv | say-PfvNeg-3SgSbj |

'He/She did not say that you-Sg have come.'

### 17.1.3.3 Pronominal-subject suffixation in quoted clauses

When the subject of a quoted clause is coindexed with the quoted author (' X said that X would come'), i.e. when the original utterance had a 1 Sg subject ('X said, "I will come"'), the logophoric subject suffix $-\eta$ is used instead of a regular pronominal-subject suffix. This $-\eta$ is homophous with the 1 Sg subject suffix in unquoted clauses, but it is extendable to plural subjects, as in (' X and Y said that X and Y would come'). Examples are in (487a-b) in §17.1.2 above. For more examples and analysis, see §18.3.2.

The remainder of this section deals with subjects in quoted clauses that are not coindexed with the quoted author. 1st/2nd person subject pronominal suffixes are not allowed, which precludes confusion between logophoric subject $-\eta$ and fully or partially homophonous regular subject suffixes ( $1 \mathrm{Sg}, 1 \mathrm{Pl}, 2 \mathrm{Pl}$ ). This effectively enforces the use of the quotativesubject construction with wà for $1 \mathrm{st} / 2$ nd person pronouns. See the preceding section for examples.

When the subject is a third-person NP or pronoun, the quotative-subject construction is also common. However, when the subject is plural, the verb optionally shows overt 3 Pl
pronominal-subject suffixation, as opposed to the pronominally unmarked form required by $1 \mathrm{st} / 2$ nd person subjects. Therefore in (497a), with 'children' as subject, the perfective verb can either be yèl-غ̀ (pronominally unmarked) or the explicitly $3 \mathrm{Pl} y \grave{l} l-\grave{i}-y a ̀ ~(i n ~\{L\}$-toned form due to Rightward H -Tone Shift). This applies even when an overt 3 Pl pronoun is used with the quotative-subject particle (497b).

```
a. sé:dù [úlù-r̀ wà] yèl-è / yèl-ì-yà
S [child-Pl QuotSbj] come-Pfv / come-Pfv-3PISbj
gí-ỳ- \(\varnothing\)
say-Pfv-3SgSbj
'Seydou said that the children have come.'
```

b. sé:dù [bé wà] yèl-غ̀/ yèl-ì-yà

S [3Pl QuotSbj] come-Pfv/come-Pfv-3PlSbj
gí-ỳ- $\varnothing$
say-Pfv-3SgSbj
'Seydou said that they have come.'
Because of the alternation between unmarked and overtly 3Pl-subject verb forms in (497a-b), when the subject is 3 Sg , we cannot be sure whether a verb form pronounced [jèlè ] should be analysed as yèl-غ̀ (marked only as perfective, without a pronominal-subject suffix) or as 3 Sg $y \varepsilon ̀ l-\grave{\varepsilon}-\varnothing$.

### 17.1.4 Jussive complement (reported imperative or hortative)

### 17.1.4.1 Quoted imperative and prohibitive

A quoted imperative has the same structure as a quoted indicative clause (quotative subject construction, final 'say' verb or quotative particle), except that the verb is imperative in form. If the original addressee was plural, the plural-addressee suffix -ì is optional (498c).

| a. Sé:dù | $\left[\begin{array}{ll}\text { ú wà }] / \text { má-à } & \text { yélè }\end{array}\right.$ | wà |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | S | $[2 \mathrm{Sg}$ QuotSbj] / 1 Sg -QuotSbj | come.Imprt | Quot |
|  | 'Seydou says for you-Sg/for me to come.' |  |  |  |

b. [sé:dù wà] yélè gì-ỳ-ŋ̀
[S QuotSbj] come.Imprt say-Pfv-1SgSbj
'I told Seydou to come.'
c. [úlì-ì wà] yélı̀(-ì) gì-ỳ-ŋ̀ [child-Pl QuotSbj] come.Imprt(-PlAddr) say-Pfv-1SgSbj 'I told the children to come.'

Negative versions of these quoted positive imperatives are the quoted prohibitives in (499). Either the short prohibitive in $-W^{\prime}$ or the longer one with -nǎw may be used.


### 17.1.4.2 Quoted hortative

In a quoted hortative, the quotative subject construction treats the original addressee as the "subject." The verb is the regular hortative, with optional use of the plural-addressee suffix. In (500a), Seydou had proposed that he and the current speaker should go. In (500b), Seydou had proposed that he and a nonsingular group including the current speaker should go.
a.

| sé:dù | má-à |
| :--- | :--- |
| S | 1Sg-QuotSbj |

bòlò-mó gì-y- $\varnothing$
go-Hort say-Pfv-3SgSbj
'Seydou said to me, let's go!'

| b. sé:dù | Émm-à: | bòlò-mó(-ı̀) | $g i ̀-y-\varnothing$ |
| :---: | :---: | :---: | :---: |
| S | 1Pl-QuotSbj | go-Hort(-PlAddr) | say-Pfv-3SgSbj |
| 'Seydo | aid to us, let's |  |  |

The quoted hortative negative is based directly on the regular hortative negative verb form, with the original addressee as "subject."
a. sé:dù
má-à
bòló-ǹnì
$g i ̀-y-\varnothing$
S 1Sg-QuotSbj
go-HortNeg say-Pfv-3SgSbj
'Seydou said to me, let's not go!'
$\begin{array}{llll}\text { b. Sé:dù } & \text { Émm-à: } & \text { bòló-ǹnì } & \text { gì- } y-\varnothing \\ & \text { S } & \text { 1Pl-QuotSbj } & \text { go-HortNeg }\end{array}$

### 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 paradigms of ìgù wó 'know' and suppletive negative ìnné 'not know' see §11.2.5.1. In positive form (e.g. 'I know' or 'I knew'), they may take as "complement" a proposition in the form of a regular main clause. There is no complementizer or other overt mark of subordination. Especially in present (nonpast) contexts, the 'know' predicate (e.g. 'I know') can precede as well as follow the proposition (502b). In either case the two may be separated prosodically, suggesting that the 'know' predicate can function as a parenthesis.
a. yèlé-̇̀lō-ছ̀ [ìgù wò-ý]
come-IpfvNeg-2SgSbj [know be-1SgSbj]
'I know that you-Sg are not coming.'
b. [igù wò-ń] [úlù-ŋ̀-mbè pédù Éd-ì-yà]
[know be-1SgSbj] [child-Pl-Pl sheep buy-Pfv-3PISbj]
'I know (that) the children bought a sheep.'
c. $[u ́ l u ̀-\grave{n}=g \grave{~} \quad$ bòl-ì-yà $] \quad$ igù $=b e ̀-\grave{\prime}$
[child-Pl=Def go-Pfv-3PISbj] know=Past-1SgSbj
'I knew that the children had gone.'

### 17.2.1.2 'Not know' with 'whether' complement

If the 'know' predicate is negated (503a-c) or questioned (503d), the complement clause takes the form of a polar interrogative with mà $\rightarrow$ (§13.2.1.2), which becomes mâ $\rightarrow$ after a thirdperson perfective by Rightward H-Tone Shift (§3.7.3.3). The translation may have either 'whether' or 'that', i.e. the truth of the underlying proposition cannot be presupposed. After a third-person perfective, variant $m \hat{a} \rightarrow$ extends its $H$-tone to the end of the syllable ( $m a ́ \rightarrow$ ) if immediately followed by 'not know' or 'know' (which begin with L-tone).
a. [bàmàkó
bòl-ù- $\varnothing$ / yèl-غ̀- $\varnothing$
má $\rightarrow$ ]
[B
go-Pfv-3SgSbj/come-Pfv-3SgSbj
Q]
ìnné $=b$ è- $\grave{\text { j}}$
not.know $=$ Past -1 SgSbj
'I didn't know that/whether he/she had gone/come to Bamako.'
b. [bàmàkó bòl-ù-দ́/ yèl-è-ý mà $\rightarrow$ ]
[B go-Pfv-1SgSbj / come-Pfv-1SgSbj Q]
ìnné=bè- $\varnothing$
not.know $=$ Past- 3 SgSbj
'He/She did not know that/whether I had gone/come to Bamako.'
c. $[[w o ́ ~ L ~ d e ̀ l \grave{=}$ ̀̀ $] \quad$ bòl-ù- $\varnothing \quad m a ̂ \rightarrow]$
[[3SgPoss Lelder.sib=Def] go-Pfv-3SgSbj Q]
[ìnné- $\varnothing$ ]
[not.know-3SgSbj]
'He/She doesn't know that/whether his/her elder (same-sex) sibling has gone.'

```
d. [ú \(\quad{ }^{\mathrm{L}}\) dèlò=̀̀ \(]\)
bòl-ù- \(\varnothing\)
má \(\rightarrow\) ]
[2SgPoss Lelder.sib=Def]
go-Pfv-3SgSbj Q]
[igù wó-Ẁ mà \(\rightarrow\) ]
[know be-2SgSbj Q]
```

'Do you-Sg know that/whether your elder (same-sex) sibling has gone?'

### 17.2.1.3 'Forget' with 'whether' complement

As with 'not know', nǎ: 'forget' with propositional complement (as opposed to the infinitival type 'forget [to VP], §17.3.4) does not presuppose the factuality of its complement. It therefore takes interrogative complements with question particle mà $\rightarrow(504)$.

| [ídù t |  | mà $\rightarrow$ ] |
| :---: | :---: | :---: |
| [fish e | eat.meat-IpfvNeg-2SgSbj | Q] |
| nǎ: | bòl-ù-ர̀ |  |
| forget.Chain | in go-Pfv-1SgSbj |  |
| 'I (went and) | d) forgot that you don't eat fis |  |

For the disparaging use of a motion verb in (504) see $\S 15.1 .10 .2$.
17.2.2 Complements of perception verbs ('see', 'find', 'hear')

### 17.2.2.1 Imperfective complement $-\grave{W}$

When the higher subject has perceived a nonpunctual process, the complement may be expressed with unconjugated imperfective subordinator $-\grave{W}$. Unlike the similar subordinator described in $\S 15.2 .1 .3$, which is replaced by another suffix $-n i ̀ \sim-n i ́ ~ i n ~ n o n p a s t-t i m e ~ c o n t e x t s, ~$ in this construction $-\grave{W}$ occurs even in future-time examples like ( 505 d ). The lower subject is expressed by an NP (505a-b,d) or by an independent pronoun (505c). A progressive construction with 'be' auxiliary can be used instead of the simple imperfective, but in this case the auxiliary also has subordinator $-\grave{W}$ (505e).
a. [úlù- $\eta \quad g$ ŏ: $\quad g \check{o}-\grave{W}] \quad W \grave{-}-\bar{\varepsilon}-\eta ́$ [child-Pl dance(n) dance-Ipfv] see-Pfv-1SgSbj
'I saw the children dance(-ing).'
b. [úlù-ŋ̀ núŋò nùŋó-ẁ] غ̀g-غ̀-ŋ́
[child-Pl song sing-Ipfv] hear-Pfv-1SgSbj
'I heard the children sing(-ing).'

'I saw you-Pl dance(-ing).'
d. [úlù- $\eta$ gô: $\quad$ ǒ-ẁ] wà-wá:-dè- $\eta$
[child-Pl dance(n) dance-Ipfv] Augm-see-Ipfv-1SgSbj
'I will see the children dance(-ing).'

[dance(n) dance-Ipfv 1PlSbj be-Ipfv] see-Pfv-3SgSbj
'He/She saw us dancing.'
One alternative to this is to structure the complement as an imperfective or progressive relative clause with the lower subject as head NP (506).

| (506) | [ùlı̀-ı̀ ${ }^{\text {L }}$ | $g$ on: | $g$ ǒ:-dò = ̀̀-mbè ] | $w \dot{\varepsilon}-\grave{\varepsilon}-\eta$ 亿́ |
| :---: | :---: | :---: | :---: | :---: |
|  | [child-P1 ${ }^{\text {L }}$ | dance(n) | dance-Ipfv.Ppl=Def-Pl] | see-Pfv-1SgSbj |
|  | 'I saw the | ren who | re dancing.' |  |

### 17.2.2.2 Perception verb ('see', 'hear') with main-clause complement

In (507), 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 ( $507 \mathrm{a}-\mathrm{b}$ ) or from hearsay (507c). The complement has regular main-clause form including pronominal-subject marking on the verb.

'I see that the children are not here.'
b. [pédò =ò sèmè-ǹ-ní] [Wà-Ẃ wò-ì]
[sheep=Def slaughter-PfvNeg-3P1Sbj] [see-Ipfv be-1SgSbj]
'I see that they haven't slaughtered the sheep-Sg.'
c. [bàmàkó bǒ:-jò-ŋ̀/-j̀̀-ŋ̀j] $\grave{\varepsilon} g-\grave{\varepsilon}-1$ j
[B Augm.go-Ipfv-2SgSbj/-Ipfv-2P1Sbj] hear-Pfv-1SgSbj
'I hear/have heard that you $-\mathrm{Sg} / \mathrm{Pl}$ are going to Bamako.'
In (508a-b), the complement in main-clause form is elaborated by addition of a short relative clause with a pronominal copy of the lower-clause subject plus 'be'. The form of 'be' here is wò as in main clauses, not the usual participial form wô: . The construction is resultative, describing a state produced by the past event.

[meal eat-Pfv-2PlSbj] [2P1Sbj be.Ppl=Def] see-Pfv-1SgSbj
'I see/have seen that you-Pl have already eaten.'
b. [nǎ: $\quad n-\grave{\varepsilon}-\bar{W}] \quad\left[\begin{array}{l}\text { ú }\end{array} \quad w \grave{l}=g \grave{]}\right] \quad W-\grave{\varepsilon}-1$ g [meal eat-Pfv-2SgSbj] [2SgSbj be.Ppl=Def] see-Pfv- 1 SgSbj
'I see/have seen that you-Sg have already eaten.'
c. [úlù-ì nǎ: nદ́-ỳ-yà] [bé wò=gò]
[child-Pl meal eat-Pfv-3PlSbj] [3PlSbj be.Ppl=Def]
$W-\varepsilon$ - $\quad$ ́
see-Pfv-1SgSbj
'I see/have seen that the children have already eaten.'

### 17.3 Verbal noun complements

Two complement-clause types that are partially interchangeable are the verbal noun complement (similar to the English infinitival to $V P$ ) and the $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tonal complement. In the latter, the object (construed broadly to include pro forma cognate nominals) is treated like an $\{\mathrm{L}\}$-toned compound initial and the verb has $\{\mathrm{HL}\}$ overlay. See $\S 17.4$ for details.

The productive verbal noun involves the suffix -du (for a few verbs -ju), in H - or L-toned form (§4.2.2.1). In this section I present constructions where a VP including a verbal noun suffix functions as the complement of a control verb or similar higher element. In many such combinations, the subjects of the two clauses are obligatorily coindexed, and the construction denotes a conceptually integrated event. The subject is overtly expressed in the higher clause, so the complement is basically a subordinated VP similar to an English infinitival complement. Most of the control verbs are also transitive verbs that can take ordinary NP objects.

### 17.3.1 Structure of verbal-noun complement

A verbal-noun complement is similar to a main clause, with the conjugated and AN-marked verb replaced by an unconjugated verbal noun. Usually the verbal-noun complement lacks a separate subject, it being understood that the logical subject is the same as that of the main clause. Objects and other nonsubject complements take the same form as in main clauses.

Occasionally a distinct subject is present, like 'dog' in (510a) in $\S 17.3 .2$ below. However, in most cases the presence of an overt subject favors an alternative complement type, such as a headless relative.

### 17.3.2 'Be afraid to’ (nínp-غ̀:) with verbal-noun or other complement

This mediopassive verb can be intransitive or transitive, as in $X$ nípn-ì-ỳ- $\varnothing$ ' X was afraid' and $X$ ìdú nínp-ì-ỳ- $\varnothing$ ' X was afraid of/feared (the) dog.'

With a clausal, same-subject complement ('be afraid [to VP]'), we get a verbal-noun complement (509a-b) or an $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement (509c).

```
a. [ìgó-nì yè-jú] nínn-ì-ỳ- \(\varnothing\)
[here come-VblN] fear-MP-Pfv-3SgSbj
' \(\mathrm{He} /\) She was afraid to come here.'
```

```
b. [[kìdù-kídù
L nàmà]
t\varepsilońmè-dù]
    [[bat 'meat]
                            eat.meat-VbIN]
    nì:\etan-\varepsiloń:-dè-\età
    Augm.fear-MP-Ipfv-1SgSbj
    'I am afraid to eat bat meat.'
c. ì: L_HL béndè nínŋ-\varnothing-à: wò-\grave{j}
    child}\mp@subsup{}{}{L}\mp@subsup{}{}{HL}\mp@subsup{}{}{\mathrm{ hit fear-MP-PastAnt be-1SgSbj}
    'I am afraid (have become afraid) to hit (a/the) child.'
```

Two constructions are found with different-subject clausal complements denoting subsequent hypothetical events. In (510a), the same verbal-noun complement seen above is elaborated by adding a subject ('dog'). In (510b), there is a headless imperfective relative, as shown by the preverbal subject pronominal.
a. [ìdú mì=ý kérè-dù] nì:nn-દ́:-dè-ク̀
[dog $1 \mathrm{Sg}=$ Acc bite-VbIN] Augm.fear-MP-Ipfv-1SgSbj
'I fear that (the) dog will/might bite me.'
b. [mì= ŋ́ ú kérè-dè] nì:nn-モ́:-dè-ŋ̀
[1Sg=Acc 2SgSbj bite-Ipfv.Ppl] Augm.fear-MP-Ipfv-1SgSbj
'I fear that it (=dog) will/might bite me.'

If the feared eventuality has probably already either happened or not happened, the complement is a 'whether' clause with polar interrogative. (511) might be uttered in the context of a search for someone missing in a dangerous area for whom one fears the worst.

| [sé:dù | yìm-è- $\varnothing$ | má $\rightarrow$ ] | nìnn-ì-̀̀-1́ |
| :---: | :---: | :---: | :---: |
| [S | die-Pfv-3SgSbj | Q] | fear-MP-Pfv-1SgSbj |
| fea | est Seydou 1 | ave (a | ) died.' |

17.3.3 'Like' (ibé) with verbal-noun or $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement

For the forms of this stative quasi-verb, see $\S 11.2 .5$.3. In simple main clauses it takes an NP direct object as in English. The relevant complement construction is same-subject ' X want [to VP]'.

Most examples involve a verbal-noun complement (512a-d).
(512)

[money $1 \mathrm{Sg}=$ Acc give-VbIN] like-StatNeg-3SgSbj
'He/She doesn't like to give me money.'

c. [àndá bò-jú] ìbè-1̀̀
[village go-VbIN] like-1SgSbj
'I enjoy traveling.'
d. [gõ:
gò:-dú]
ìbè-1̀
[dance(n) dance-VbIN]
like-1SgSbj
'I enjoy dancing.'

A tonal compound complement with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ overlay is also possible. (513a) was freely elicited as an alternative to the verbal noun in (513b).
a. [èmmè ${ }^{\text {L }}-{ }^{\mathrm{HL}}$ Wálà $]$
ìbè-lદ̀-ク́
[sorghum ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ do.farming]
like-StatNeg-1SgSbj
'I don't like cultivating sorghum.'
b. $\begin{array}{lll}\text { [èmmé } & \text { wàlà-dú] } & \text { ìbè-lè- } \text { ǵ } \\ \text { [sorghum } & \text { do.farming-VbIN] } & \text { like-StatNeg-1SgSbj } \\ {[=(\mathrm{a})]} & & \end{array}$.

### 17.3.4 'Forget' (nă:) with verbal-noun or $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement

This verb can take same-subject infinitival complements ('X forget [to VP]'). A verbal-noun complement is one possibility ( $514 \mathrm{a}-\mathrm{b}$ ).
a. $y \grave{\varepsilon}-j u ́$
nà-ỳ-
come-VblN forget-Pfv-1SgSbj
'I forgot to come.'
b. [tê: jǎ: yغ̀-jú] nà-ý-ŋ̀
[tea take come-VblN] forget-Pfv-2PlSbj
'You-Pl forgot to bring the tea.'

Alternatively, the complement can take the $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tonal form.

$$
\begin{array}{ll}
\text { ìb }{ }_{\varepsilon}{ }^{\mathrm{L}}{ }_{-}{ }^{\mathrm{HL}} \text { bólò } & \text { nà-ý-nǎw }  \tag{515}\\
\text { market }{ }_{-}^{\mathrm{HL}} \text { go } & \text { forget-Chain-Prohib } \\
\text { 'Don't-2Sg forget to go to the market!' }
\end{array}
$$

These infinitive-like complements are of course distinct from full propositional complements ('X forget [that/whether ...]'), on which see §17.2.1.3.

### 17.3.5 yàbá 'consent' with verbal-noun complement

As a simple transitive verb, yàbá means 'receive, accept, take possession of'. It can also mean 'accept (a proposal), consent'. When the complement is an act that the consenting subject will carry out, as in ' X consent [(for X$)$ to come]', the complement takes verbal-noun form: yè-jú 'to come', gò:-dú 'to exit', ná:-dù 'to eat'.

### 17.4 Tonal $\{\mathrm{L}\}$-\{HL\} complements

In this complement-clause type, the verb takes $\{H L\}$ overlay but otherwise appears in its presuffixal stem (not the chaining form). A nonpronominal object, construed broadly, takes the form of an $\{\mathrm{L}\}$-toned compound initial. The range of forms of this initial is described in detail for complements gà:nd-દ́:- 'prevent' (see just below), but those details are applicable to other $\{\mathrm{L}\}$ - $\{\mathrm{HL}\}$ complements. A difference is that the complement of gà:nd- $\varepsilon$ :- 'prevent' also requires a possessor while other verbs do not.

Sections covering some main-clause verbs that can take either verbal-noun or $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complements have been put in subsections under $\S 17.3$ above (see the subsection titles).

The $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tone pattern is equivalent to the $[\mathrm{n} \hat{\mathrm{v}}]$ agentive compound type (§5.1.5.1). However, the general $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement type is not agentive semantically and does not take nominal suffixes like human singular -nv.

### 17.4.1 'Prevent' (gà:nd-દ́:-) with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement

The verb gà:nd- $\varepsilon:-$ is mediopassive in form (but not sense). The complement is a possessed deverbal compound nominal, expressed tonally. The compound initial, is a $\{\mathrm{L}\}$-toned noun denoting the lower object. The compound initial can be expanded to include modifiers. If the lower object is a pronoun, it takes accusative form and is not tone-dropped (see end of this section) The compound final is a $\{\mathrm{HL}\}$-toned form of the presuffixal stem. Unlike other verbs with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complements, gà:nd-દ́:- requires an overt possessor of the (nominalized) complement. A preposed possessor, like 'the children' in (516c), induces no tone change on the compound nominal (arguably it tone-drops just the initial, vacuously).

```
a. [wó nà: }\mp@subsup{}{-}{L}\mp@subsup{}{}{HL}\etaâ: \varepsiloǹm-m\grave{ / m̀-m\grave{]}
    [3SgSbj meal }\mp@subsup{}{}{\textrm{L}}\mp@subsup{}{}{\textrm{HL}}\mathrm{ eat 1Pl-Poss/1Sg-Poss]
    gà:nd-ì-ỳ-\varnothing
    prevent-MP-Pfv-3SgSbj
    'He/She prevented us/me from eating.'
```

b. [Wó kònjò $\left.{ }^{\mathrm{L}}{ }^{\mathrm{HL}}{ }^{\mathrm{n}} n \hat{0}: \quad \grave{m}-m \grave{]}\right]$ gà:nd-ì-ỳ- $\varnothing$
[3SgSbj beer ${ }^{L}$-drink 1 Sg-Poss] prevent-MP-Pfv-3SgSbj
'He/She prevented me from drinking beer.'

[child-Pl beer ${ }^{\text {L}}$-drink] prevent-MP-Pfv-1SgSbj
'I prevented the children from drinking beer.'
d. [gìrì ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ yéyy-è: $\left.\grave{m}-m \grave{]}\right]$ gà:nd-ì-ỳ- $\varnothing$
[sleep(n) ${ }^{\text {L }}$ - ${ }_{\text {sleep-MP }}$ 1Sg-Poss] prevent-MP-Pfv- 3 SgSbj
'He/She prevented me from sleeping.'

If there is no natural nominal complement to the nominalized verb, as with 'come' in (517a) and 'reply' in (517b), the verb stem is simply iterated (as an "instant" cognate nominal).
a. [yèlè ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ yélè $\left.\grave{m}-m \grave{\varepsilon}\right]$ gà:nd-ì- $\varnothing$-yà [come ${ }^{\mathrm{L}}$-come 1 Sg -Poss] prevent-MP-Pfv-3PlSbj
'They prevented me from coming.'
b. [[yàbìl-غ̀:] $]^{\mathrm{L}}{ }^{\mathrm{HL}}$ [yábill-غ̀:] $\left.\grave{m}-m \grave{\jmath}\right]$ gà:nd-ì-ỳ- $\varnothing$
[[reply-MP] ${ }^{\text {L }}{ }^{\mathrm{HL}}$ [reply-MP] $\left.1 \mathrm{Sg}-\mathrm{Poss}\right]$ prevent-MP-Pfv-3SgSbj
'He/She prevented me from replying.'
In (518a), what would normally be a locative PP complement ('to the village') is reduced to a noun ('village') as compound initial. In (518b), the compound initial is a morphologically plural noun. In (518c), a postnominal demonstrative is included in the compound initial. In (518d), a numeral is included.
(518)
a. [àndà ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ bólò $\left.\grave{m}-m \grave{]}\right]$ gà:nd-ì-ỳ- $\varnothing$
[village ${ }^{\mathrm{L}-{ }^{H L}}$ go 1 Sg -Poss] prevent-MP-Pfv-3SgSbj
'He/She prevented me from going to (the) village.'
b. [[ùlù-ı̀̀ $\left.]^{\mathrm{L}}-{ }^{\mathrm{HL}} b \varepsilon ́ n d \grave{\varepsilon} \quad \grave{m}-m \grave{]}\right]$ gà:nd-ì̀̀̀- $\varnothing$
[[child-Pl] ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ hit 1 Sg-Poss] prevent-MP-Pfv-3SgSbj
'He/She prevented me from hitting (the) children.'
c. [[gìnè-1̀gò $]^{\mathrm{L}}{ }^{\mathrm{HL}}$ téggèrè $\grave{\mathrm{n}}$-mò] gà:nd-ì-̀̀- $\varnothing$
[[house-Prox] ${ }^{\text {L}}$ - ${ }^{H L}$ burn 1 Sg -Poss] prevent-MP-Pfv-3SgSbj
' $\mathrm{He} /$ She prevented me from burning this house.'
d. [[pèdù-tà:ndù ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}} \varepsilon ́ d \grave{\varepsilon}$ m̀-mò] gà:nd-ì-ỳ- $\varnothing$
[[sheep-three] ${ }^{\mathrm{L}}-{ }^{\mathrm{HL}}$ buy 1 Sg -Poss] prevent-MP-Pfv-3SgSbj
' $\mathrm{He} /$ She prevented me from buying three sheep.'
My assistant balked at allowing a postnominal pronominal possessor in the compound initial. In (519), gìné ù-m̀̀ 'your-Sg house' with postposed possessor is restructured by using 2 Sg ú as a preposed (pseudo-)possessor, even though the 1 Sg possessor remains in place after the compound. Preposed pronominal possessors are, in ordinary syntactic contexts, restricted to inalienable possession (kin terms), but are here resorted to in order to avoid a complex compound initial. The preposed possessor úhas no overt tonal effect on the compound noun.
(519) [ú gìnè ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}} t \dot{t} g \varepsilon ̀ r \grave{\varepsilon}$ m̀-mò] gà:nd-ì-ỳ- $\varnothing$
[2SgPoss house ${ }^{\text {L }}$ - ${ }^{\text {HL }}$ burn 1 Sg -Poss] prevent-MP-Pfv-3SgSbj
'He/She prevented me from burning your-Sg house.'
If the object of the complement is pronominal, it takes regular accusative form and is not tone-dropped, but the subordinated verb still has $\{\mathrm{HL}\}$ overlay (520).

| $\left[{ }_{\text {[ }}=1\right.$ | ${ }^{\mathrm{HL}}$ béndè | m-mゝ] | gà:nd-ì-y- $\varnothing$ |
| :---: | :---: | :---: | :---: |
| [2Sg=Acc | ${ }^{\mathrm{HL}}$ hit | 1Sg-Poss] | prevent-MP-Pfv-3SgSbj |

'He/She prevented me from hitting you-Sg.'

### 17.4.2 'Help’ (bàrá ) with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ or verbal-noun complement

This verb takes an object (usually a human NP or pronoun in accusative form) as in (521a), and this can be elaborated by adding a complement whose logical subject is coindexed with the main-clause object NP. The $\{L\}-\{H L\}$ complement type is regular (521a-c). In Dogon languages the word translated 'help' sometimes means 'join, pitch in (with someone, in an effort)'. DS bàrá also means 'increase, raise (e.g. a price)'.
a.

| sé:dù | $m i ̀=y ́$ |
| :--- | :--- |
| S | $1 \mathrm{Sg}=\mathrm{Acc}$ |

bár-ì- $\varnothing$
S $1 \mathrm{Sg}=$ Acc help-Pfv-3SgSbj
'Seydou helped me.'
b. sé: dù nàyà ${ }^{\mathrm{L}} \mathrm{HL}^{\mathrm{HL}}$ kómmò / yù̀ ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ wálà

S cow $^{\mathrm{L}} \mathrm{HL}_{\text {tie }} /$ millet $^{\mathrm{L}}{ }^{\mathrm{HL}}$ do.farming
$m i ̀=\eta ́ \quad b a ̀ r i-i ̀-\varnothing$
$1 \mathrm{Sg}=$ Acc help-Pfv-3SgSbj
'Seydou helped me tie up the cow/cultivate the millet.'

doctor $\quad\left[2 \mathrm{Sg}=A c c{ }^{H L}\right.$ treat $] \quad 1 \mathrm{Sg}=\mathrm{Acc}$ help-Pfv- 3 SgSbj
'The doctor helped me treat you-Sg (medically).'
A verbal noun complement is also attested. It may be relevant that the lower verb in (522) is intransitive.
(522) [mí $\left.{ }^{\mathrm{L}} b a ̀:\right] \quad m i ̀=1 ́ \quad y \varepsilon ̀-j u ́ \quad b a ̀ r-i ̀-\varnothing ~$

$$
\begin{aligned}
& {\left[1 \text { SgPoss }{ }^{\text {L }} \text { father }\right] \quad 1 \mathrm{Sg}=\text { Acc } \text { come-VbIN } \text { help-Pfv- } 3 \mathrm{SgSbj}} \\
& \text { 'My father helped me to come.' }
\end{aligned}
$$

### 17.4.3 'Begin' (tólı̀) with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ or -1 g complement

This verb can take a NP complement (' X begin Y ' where Y is a NP denoting some activity), as in wálù tólı̀ 'begin (the) work'. A clausal complement can take tonal $\{\mathrm{L}\}-\{\mathrm{HL}\}$ form. This construction is given by my assistant in spontaneous utterances translating 'begin' when the complement contains an object (or cognate nominal). The overall time frame (completed or not) as expressed in aspectual marking of 'begin' does not affect the form of the complement.

'I/he-or-she began to eat.'
b. nàmà ${ }^{\mathrm{L}}-{ }^{\mathrm{HL}} t \varepsilon ́ m e ̀ ~ t o ́ l \grave{~}$
meat ${ }^{L}-{ }^{\mathrm{HL}}$ eat.meat begin.Imprt
'Begin-2Sg to eat (the) meat!'
An alternative is a form with $-\underline{y}$ suffix after $\{\mathrm{L}\}$-toned verb stem. This subordinating suffix is not attested with any other main-clause verb. For lack of a better gloss I will use "-Comp" in interlinears. This construction is given spontaneously by my assistant in 'begin' constructions
when the complement lacks an object (524a-b). It is accepted by him when there is an object (524c). Again, whether the event is completed or not does not affect the complement. Tommo So has a similarly quirky subordinating suffix $-n$ with this verb, but with lexical tone melody. McPherson argues that it is "plausible" that this $-n$ is a syncopated form of Tommo So -nú, a participial suffix with future-time connections (2013: 531).
a. yàbìl-غ̀:-ŋ́/ jòbò-ń tòl-દ̀- $\varnothing /$ tò:ló-dè- $\varnothing$
reply-MP-/ run-Comp begin-Pfv-/Augm.begin-Ipfv-3SgSbj
'He/She began/will begin to reply/run.'
b. tòmbò-ŋ́ / kà:-1́ tòl-દ̀- $\varnothing /$ tò:ló-dè- $\varnothing$
jump-/shave-Comp begin-Pfv-/Augm.begin-Ipfv-3SgSbj
'He/She began/will begin to jump/shave.'
c. [nàmá tèmè-ń] tòl-غ̀- $\varnothing /$ tò:ló-dè- $\varnothing$
[meat eat.meat-Comp] begin-Pfv-/Augm.begin-Ipfv-3SgSbj
' $\mathrm{He} /$ She began/will begin to eat (the) meat.'
Intransitive 'begin' can also be expressed by tólò, as in àná tòl-غ̀- $\varnothing$ 'the rain has begun'. However, seasons of the year do not usually 'begin', rather they súgò 'descend' (wet season) or they dy:: 'arrive, approach' (any season).

### 17.4.4 Motion verb plus purposive $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement

In this construction, the motion verb is preceded by the $\{L\}-\{H L\}$ complement type, including an L-toned compound initial. The complement expresses the purpose of the motion, which in this case temporally precedes the event denoted by the complement.

'He went to the city in order to do work (=for a job).'

tea ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ drink come-Pfv-3P1Sbj
'They came to drink tea.'
c. $\left[m i ̀=\right.$ и́ $\left.\quad{ }^{H L} b \varepsilon ́ n d e ̀\right] \quad y \varepsilon ̀ l-\varepsilon ̀-\varnothing ~$
[1Sg=Acc ${ }^{\mathrm{HL}}$ hit] come-Pfv-3SgSbj
'He/She came in order to hit me.'
d. jà̀ $\mathrm{L}^{\mathrm{L}}{ }^{\mathrm{HL}}$ dâ: bò-jè- $\grave{y}^{\prime}$
fire ${ }^{\text {L }}{ }^{\text {HL }}$ kill go-Ipfv- 1 SgSbj
'I'm going (there) to put out the fire.'
This construction competes with one that has -ni subordinator in the purposive clause (§17.5.1). In fact (525c), with a pronominal object rather than an $\{\mathrm{L}\}$-toned compound initial, was accepted by my assistant, but for this meaning he spontaneously produced a purposive
clause with -ni. The -ni complement is also useful when the complement is intransitive, so it has no obvious candidate for the $\{\mathrm{L}\}$-toned initial.
17.4.5 pádà 'abandon' with $\{\mathrm{L}\}-\{\mathrm{HL}\}$ or verbal-noun complement
pádà 'leave (behind), abandon' is elsewhere a simple transitive, as in tìbú pàd-ì- 1 'I left the stone (there)'. The verb can also take a clausal complement. An $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tonal complement is favored when the subordinated verb has a natural object that can serve as $\{\mathrm{L}\}$-toned compound initial (526a). Verbal-noun complements are also possible (526b).
a. tè: ${ }^{\mathrm{L}-{ }^{\mathrm{HL}} n \hat{n}: \quad \text { pàd-ì-1́ }}$
tea ${ }^{\mathrm{L}-}{ }^{\mathrm{HL}}$ drink leave-Pfv- 1 SgSbj
'I have abandoned (permanently ceased) drinking tea.'
b. yè-jú pàd-ì-1́
come-VblN leave-Pfv-1SgSbj
'I have abandoned (permanently ceased) coming.'
For temporary cessation, a different construction is used. (527) might be used in the context where an interruption such as a loud noise caused the singers to cut off their song temporarily.

```
úlù-\grave{ [nú\etaò nùnó-Ẁ] í:-nd-ì-yà}
    child-Pl [song sing-Ipfv] stop-Tr-Pfv-3PlSbj
    'The children stopped singing.'
    ["The children were singing and stopped (it)."]
```


### 17.4.6 'Want' (nàmà) with anterior and relative complements

For the forms of this stative quasi-verb, see $\S 11.2 .5$.2. In simple main clauses it takes an NP direct object as in English. The relevant complement constructions are same-subject ' X want [to VP]' and different-subject ' X want [Y to VP]'.

Same-subject examples are in ( $528 \mathrm{a}-\mathrm{c}$ ). The complement clause has the past anterior subordinator -a: .

```
a. [bàmàkó bòl-â:]
    [B go-PastAnt]
    nàmà-là-\etá / nàmà = bè-lè-\́
    want-StatNeg-1SgSbj / want=Past-Neg-1SgSbj
    'I don't/didn't want to go to Bamako.'
b. [mí \({ }^{\mathrm{L}}\) dèlè] [yògó pédò=j̀=ì sém-à:]
[1SgPoss \({ }^{\text {L }}\) elder.sib] [tomorrow sheep=Def=Acc] slaughter-PastAnt]
nàmà- \(\varnothing\)
want-3SgSbj
'My elder (same-sex) sibling wants to slaughter the sheep tomorrow.'
```

c. [te̊: nánà wà-â:] nàmà-là-j̀
[tea even see-PastAnt] want-StatNeg-1SgSbj
'I don't even want to see (the) tea.'

Different-subject examples are (529a-b). The complement usually takes a headless imperfective relative complement, i.e. with $-d \grave{\sim} \sim-j \grave{\varepsilon}$ ( 529 a) or variant $-d \grave{~ b y ~ B a c k / R o u n d i n g ~}$ Harmony (529b). In (529a), my assistant also allowed a perfective pseudo-participle yèl-غ́.
a. [ú

$$
\begin{equation*}
\left.{ }^{\mathrm{L}} b a ̀:\right] \tag{529}
\end{equation*}
$$

[ú
$y \grave{\varepsilon} 1-\varepsilon / y \varepsilon ̀-j \grave{\varepsilon}]$
[2SgPoss $\quad{ }^{\mathrm{L}}$ father] $\quad[2 \mathrm{SgSbj}$
come-Pfv-3SgSbj.Ppl / come-Ipfv.Ppl]
nàmà- $\varnothing$
want-3SgSbj
'Your-Sg father wants you to come.'
b. [mí ${ }^{\mathrm{L}}$ bà:] [kònjó mí èbè-dè/ nò:-dò]
[1Sg ${ }^{\text {L father] }}$ [beer 1 SgSbj buy-/drink-Ipfv.Ppl]
nàmà-là- $\varnothing$
want-StatNeg-3SgSbj
'My father doesn't want me to drink/buy beer.'
c. [mí ${ }^{\mathrm{L}}$ bà:] [sé:dù kònjó nò:-dò]
[1Sg ${ }^{\mathrm{L}}$ father] [S beer drink-Ipfv.Ppl]
nàmà-là- $\varnothing$
want-StatNeg-3SgSbj
'My father doesn't want Seydou to drink beer.'

### 17.4.7 Obligational 'must' with invariant perfective verb

In the obligational construction, the verb is perfective (even though the required event has not yet been performed). The verb is otherwise unsuffixed, so it looks like a 3 Sg subject form. The subject is expressed by an obligatory preverbal subject proclitic. This resembles a perfective relative clause but the verb does not have the $\{\mathrm{LH}\}$ contour of a perfective participle.

| a. úlù- $\grave{y}$ | módù | bé | bòl-ì |
| :--- | :--- | :--- | :--- |
| child-Pl | Mopti | 3PISbj | go-Pfv |

'The children must (are obligated to) go to Mopti.'
b. yògó yû: mí wàl-ì
tomorrow millet $\mathbf{1 S g S b j}$ do.farming-Pfv
'Tomorrow I must do farming (toil in the millet field).'

Negative 'must not' is expressed by a paraphrase such as (531) rather than by directly negating the type (530).
(531) [yògó mí yû: wàlà-dè] dàgà-lí- $\varnothing$
[tomorrow 1 SgSbj millet do.farming-Ipfv] be.good-PfvNeg-3SgSbj
'I must not do farming tomorrow.'
["It would be bad for me to do farming tomorrow."]

### 17.5 Purposive and causal clauses

Preceding a main-clause motion verb, the $\{\mathrm{L}\}-\{\mathrm{HL}\}$ tonal complement may be used in purposive sense (§17.4.4). Other purposives and causals are covered below.

### 17.5.1 Purposive clauses with -ni

A construction with -ni purposive subordinator seems to occur mainly when the $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complement is not easily formed, either because the purposive clause has a pronominal object (532a) or because it is intransitive (532b).
a. [mì=í bèndè-ní] yèl- $\grave{-}-\varnothing$
[ $1 \mathrm{Sg}=$ Acc hit-Purp] come-Pfv-3SgSbj
' $\mathrm{He} /$ She came in order to hit me.'
b. [[àndá rà:] dànn-è:-ní] bòl-ì- $\varnothing$
[[village Loc] sit-MP-Purp] go-Pfv- 3 SgSbj
'He/She went to sit in the village.'
The combination of a lexically /HL/-toned verb with -ni has an initial H-tone followed by L-tones. The combination of a lexically/LH/-toned verbs with -ni has a $\{\mathrm{L}\}$-toned stem with H-toned -ní.
$-n i$ is also an imperfective subordinator in verb/VP chains in nonpast-time contexts. See §15.2.1.3-4 for the form it takes with various types of stem.

### 17.5.2 Purposive clauses with jǎ: particle

A purposive construction with NP complement is [ $X$ lè $]$ jã:, i.e. the combination of a dative PP [ $X$ lè] with a causal-purposive particle $j$ ă: (§8.3.1).
$j$ ă: also occurs in purposive clauses. The main verb of the clause is imperative in form. If the subject of the purposive clause is human, the quotative-subject construction is used (533a-b). If the subject is nonhuman, and therefore not a normal recipient of an actual imperative utterance, it appears as a simple NP or pronoun (533c). The purposive clause normally precedes the main clause.

| [[ú | wà] | [š̌y | mógò | jă:]] |
| :---: | :---: | :---: | :---: | :---: |
| [ $[2 \mathrm{Sg}$ | QuotSbj] | [clothing | wash.Imprt | Purp]] |
| [sàmínè | $j a ́-y \grave{c}-\bar{\varepsilon}-\grave{j}]$ |  |  |  |
| [soap | take-come-Pfv-1 SgSbj$]$ |  |  |  |
| 'So tha | may | the clot | ve broug |  |

b. [[sé:dù wà] [bàmàkó bólò jă:]]
[[S QuotSbj] [B go.Imprt Purp]]
[Wò=ŋ́ kè:lغ́ ób-ù-̀̀]
[3Sg=Acc money give-Pfv- 1 SgSbj$]$
'So that Seydou might go to Bamako, I gave him money.'

| [mìnnó = ̀ | dágà | jǎ:] |
| :---: | :---: | :---: |
| [field= ${ }^{\text {def }}$ | be.good.Imprt | Purp] |
| [úbù | kùnd-ù-̀̀] |  |
| [manure | put-Pfv-1SgSbj] |  |

'So that the field turn out well (=be productive), I have put manure (in it).'
Iif the purpose clause is negative, the verb before $j$ ǎ: takes prohibitive form.
a. [àná
yò-ý-nǎw]
[rain go.in-Chain-Prohib]
jă:
gìnó $=\grave{\jmath} \quad$ dèmbè- $d \grave{\varepsilon}-\grave{1}$
house=Def plaster.roof-Ipfv-1PISbj
'We will (re-)plaster the roof (with mud) so the rain won't get in.'
b. [tàná pígì-l-í:-năW jă:]
[door shut-Rev-MP-Prohib Purp]
[tībú dù:nd-ù-t̆]
[stone put.down-Pfv-1SgSbj]
'I put a stone down, so the door won't open.'

In a different $j$ ă: construction, from text 01 at $00: 15$, my assistant indicated that $j$ ă: implies distributivity (multiplicity of the event type).

$$
\begin{align*}
& \text { [súgùl̀̀=̀̀ kébèl-ò=ò jă:] [bé bòl-â:], }  \tag{535}\\
& \text { [ear=Def pick.a.little-Pfv.Ppl=Def Purp] [3PISbj go-PastAnt] } \\
& \text { 'They went and picked off (lots of) pieces of their ears.' }
\end{align*}
$$

See also text 04 at 00:44 and text 05 at 00:50 (twice).

### 17.5.3 Causal ('because') clause

With an NP complement, 'because of X ' can be expressed by the same combination $[X$ lè $]$ jǎ: that is used in purposives, or by an expression containing sá:bù 'reason' (§8.3.1). For clausal 'because', my assistant often juxtaposed the two clauses with no overt 'because'.
a. [sínjò=ò gàb-â:
bòl-ì- $\varnothing]$,
[noise-Def be.much-PastAnt go-Pfv-3SgSbj]
$[w a ́ l \grave{\jmath}=\grave{j} \quad i:-n d \varepsilon ́-d-i]$
[work=Def stand-Tr-Ipfv-3P1Sbj]
'The noise went and became too much, (so) they are stopping the work.'
b. [íyè [today
[[friend 1 Sg -Poss] Augm.come-Ipfv-PastAnt have-3SgSbj
'I'm not going out today, (because) my friend is about to come over.'
An explicit 'because' element is the PP [ $X^{\mathrm{L}}$ sà:bù] lè, where X is an NP or clause, is also possible. It is based on a variant of a regionally widespread 'cause' noun, ultimately Arabic sabab-.
paske 'because' (French parce que) is ubiquitous in Malian languages, including DS, especially among youth.

### 17.5.4 wó-ẁ nà 'it being the case that' or 'while/when'

This subordinated clause type ends in invariant wó-ẁ nà. Here we can identify quasi-verb wò 'be' in a subordinated imperfective form with suffix $-\grave{w}$, and a particle nà not otherwise attested, but resembling locative allomorph nè as well as topical 'now' adverb nê. . I will gloss it "Loc" in interlinears for lack of a clearer funtion.

If the sense is ' X being (there)', no further verb is needed (537a). Any other predicate, including 'not be (there)' (537b), must precede wó-ẁ nà and end in either imperfective $-\underset{W}{\text { or }}$ past anterior -a: (537b-c).
a. jòmó/ $\varepsilon m m$ è yé-rà: wó-ẁ nà, hare / 1Pl DiscDef-Loc be-Ipfv Loc, 'Hare / We being there, ...'
b. $\varepsilon$ mmè yé-rà: wò-ló-ẁ $\quad w$-̄́-Ẁ nà 1Pl DiscDef-Loc be-StatNeg-Ipfv be-Ipfy Loc,
'We not being there, ...'
c. jòmó yèlé-㸚 / yèl-â: wó- $\quad$ nà hare come-Ipfv / come-PastAnt be-Ipfv Loc, 'Hare being on his way (here) / having already come, ...'

The following clause may have the same or a disjoint subject.
 hare come-Ipfv be-Ipfv Loc, 1Pl meal eat-Pfv-1PISbj 'While Hare was on his way (here), we ate.'
b. jə̀mó yèl-â: $\quad w o ́-\grave{w}$ nà, nǎ: nغ̀-غ̀- $\varnothing$
hare come-PastAnt be-Ipfv Loc, meal eat-Pfv-3SgSbj
'Hare having come, he (=Hare) ate.'

## 17.6 -nú or -nda plus bě: ‘remain’ ('keep VP-ing’)

Extended temporal prolongation of an activity can be expressed by a form of the activity verb with $\{\mathrm{L}\}$-toned stem and H-toned suffix -nú, plus an appropriate form of bě: 'remain'. The suffix is not otherwise attested. I will gloss it as "Dur[ative]" for lack of a better term.

[^0]
## 18 Anaphora

Reflexive is, and reciprocal can be, expressed by the intransitivizing mediopassive derivation of the verb. There is a logophoric noun that coindexes a referent to a quoted speaker-author, and a reciprocal object form that can be used instead of the mediopassive derivation.

### 18.1 Reflexive

Reflexives 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 kû: 'head' can also be used reflexively.

### 18.1.1 Reflexive object expressed by mediopassive verb

The primary reflexive-object construction requires intransitivization of the verb, using the mediopassive (MP) suffix (§9.4) in reflexive sense. The construction is therefore not transitive ' $X$ hit himself', rather intransitive ' $X$ self-hit'. Compare transitive (540a) with reflexive (540b).
a. $i:=\hat{\eta} \quad$ bèn $d-\stackrel{\varepsilon}{\mathrm{\varepsilon}}-\bar{\eta}$
child=Acc hit-Pfv- 1 SgSbj
'I hit-Past the child.'
b. bènd-ì-̀̀-ý
hit-MP-Pfv-1SgSbj
'I hit myself.'
c. bénd-ì- ỳ- $\varnothing$
hit-MP-Pfv-3SgSbj
'He/She hit himself/herself.'
The mediopassive construction can extend to 'say'. The dative complement of this verb is overt even in the reflexive construction (541a-b).
(541)
a. mí
[mí
lè] gìyy-ì-ỳ-ý
$1 \mathrm{SgSbj} \quad[1 \mathrm{Sg} \quad \mathrm{Dat}]$ say-MP-Pfv-1SgSbj
'I said to myself ...'
$\begin{array}{llll}\text { b. Sé:dù } & {[w o ́ ~} & \text { lè }] & \text { gìyy-è:-lí- } \varnothing \\ \mathrm{S} & {[3 \mathrm{Sg}} & \text { Dat] }\end{array} \quad \begin{aligned} & \text { say-MP-PfvNeg-3SgSbj }\end{aligned}$
'Seydou did not say to himself ...'

### 18.1.2 Reflexive PP complement expressed by regular pronouns

Postpositional complement NPs are only occasionally coindexed to the clausemate subject. When they are, ordinary (nonreflexive) pronouns are used. When the pronouns are third person, they may or may not refer to the same entity as the subject (542b).
a. [pòròjá: m̀-mò] [[jóè m̀-mò] rà:] bèl-દ̀-ŋ̀ [boubou 1Sg-Poss] [[under 1Sg-Poss] Loc] get-Pfv-1SgSbj 'I found my boubou (=robe) under myself.'
b. [pòròjá: wò-mò] [jóè wò-mò] rà:] bèl-غ̀- $\varnothing$ [boubou 3Sg-Poss] [[under 3Sg-Poss] Loc] get-Pfv-3SgSbj ' $\mathrm{He}_{\mathrm{x}}$ found his $_{\mathrm{x} / \mathrm{y}}$ boubou under himself $\mathrm{f}_{\mathrm{x} / \mathrm{y} / \mathrm{z}}$.'
18.1.3 Reflexive possessor expressed by regular pronouns

There is no special reflexive possessor marking. In (543) we see that in DS as in English the possessor may or may not be coindexed with the subject.

| [pòròjá: | wò-mò] | mì $=$ ý | òb-ì- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [boubou | 3Sg-Poss] | $1 \mathrm{Sg}=$ Acc | give-Pfv- 3 SgSbj |

' $\mathrm{He}_{\mathrm{x}}$ gave me his $\mathrm{x}_{\mathrm{x} / \mathrm{y}}$ boubou.'
18.1.4 kû: 'head' in reflexives

Reflexives are usually expressed, if overtly at all, by mediopassive verbs as shown above. However, kû: 'head' did occur in a textual example that verges on reflexivity (544).
(544) [ǹdé wôy] [kû: wò-m̀̀= ̀̀]
[person all] [head 3Sg-Poss=it.is]
'Everyone is on his own.' (lit. "Every person is his own head.")
Example (545) occurred during elicitation of expressions meaning ' X imitates Y '.
(545) [kû: wò-mò] [mí lè] túmò-dè- $\varnothing$
[head 3 Sg -Poss] [1Sg than] measure-Ipfv-3SgSbj
'He measures himself by/against me.'

### 18.1.5 "Sama" reflexives

Culy reports "an invariant reflexive pronoun sama ... [that] occurs only in the more conservative outlying variety of DS" (Culy, Kodio \& Togo 1994:320). He argues that it is archaic. I do not find this form in the Kervran dictionary. Similar transpersonal reflexives, used for example as direct objects, occur productively in two other Dogon languages known to me (Togo Kan $s \check{a}^{n}$ and Tomo Kan sà~hà).

### 18.2 Emphatic pronouns

There is no distinctive morphological form for emphatic pronouns ('myself' in 'I built it myself'). Constructions are available for the senses ' X unassisted' and ' X instead of others'.

### 18.2.1 'X unassisted'

To emphasise that the subject has done something unassisted, two constructions are possible. The first is to combine the subject (nonpronominal or pronominal) with túrù ' 1 ' in the sense 'alone, singly', or occasionally a slightly higher numeral like '2' (546a-b).

b. [ह́mmè lè wôy] [tìbú jèné] bèlé- $\mathrm{\varepsilon} l \grave{\varepsilon}-1 \grave{ }$
[1Pl two all] [stone lift] get-IpfvNeg-1PlSbj
'The two of us can't lift the rock (by ourselves).' (<lĕy '2')
The other construction is to add kâ: $y$ 'only' to any NP or pronoun (547).


With either the numeral or kä: $\eta$, if the referent is expressed by a nonpronominal NP, it is optionally resumed by a coindexed independent pronoun, as in (547) and as in English the women (by) themselves. Resumption is not obligatory: (547) could also be phrased with initial úlù-ท̀ kă:ท 'only (the) children'. With a numeral: sé:dù túrù or sé:dù [Wó túrù] 'Seydou alone'.

### 18.2.2 ' X instead of others'

When the pragmatic context is of the type ' X instead of others', the constructions used for ' X unassisted' are not applicable. In most cases 'X instead of others' is expressed by focalization, as in (548), where the 1 Sg subject is a proclitic rather than a suffix on the verb as in unfocalized clauses. It is possible to add a coindexed possessor as an optional emphatic.

| [1: | $\grave{m}-m \grave{o}=\grave{j}]$ | tí-à: | nàmà-là-f́, |
| :---: | :---: | :---: | :---: |
| [child | 1 Sg -Poss=Acc] | send-PastAnt | want-StatNeg-1SgSbj, |
| (mó= ${ }^{\text {a }}$ | mí | $b o ̀-j \grave{c}$ |  |
| (1Sg.Po | $=$ Def] 1 SgSbj | go-Ipfv |  |

'I don't want to send my child, I'm going myself.'

The emphatic $m o ́=\grave{\jmath}$ is the irregular absolute definite form of $\grave{m}-m \grave{~ ' m y ' . ~ S e e ~} \S 6.2 .1 .2$ for the full set of pronominal forms. A nonpronominal NP is resumed by a coindexed pronoun: sé:dù [ $w o ́-m \grave{~=~ ̀ ̀] ~ ‘ S e y d o u ~ h i m s e l f ’ . ~}$

There is one textual example of ǹjèmé, normally logophoric, in apparent 'by himself' function (text 01 at 00:45).

### 18.3 Logophoric and indexing pronouns

### 18.3.1 Third person logophoric noun (ǹjèmé)

The third-person logophoric pronoun, more noun-like than pronominal morphologically, is ǹjèm (549a), plural ǹjèmé-mbè (549b), possessor (optional) ǹjěm-mò (text 01 at 01:23).
a. Sé:dù [ú wà ] [ǹjèm̀̀=́́ bènd- $\bar{\varepsilon}]$ gí-ỳ- $\varnothing$
$\mathrm{S} \quad[2 \mathrm{Sg}$ QuotSbj] [Logo=Acc hit-Pfv] say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that you-Sg hit him ${ }_{x}$.'
b. úlù-ŋ̀ [ú wà] [ǹjèmé-ḿbè =ì bènd-è]
child-Pl [2Sg QuotSbj] [Logo-Pl=Acc hit-Pfv]
g-í-yà
say-Pfv-3P1Sbj
'The children ${ }_{x}$ say that you-Sg hit them ${ }_{x}$.'

### 18.3.2 Transpersonal logophoric subject (- $\eta$ )

A suffix identical in form to the 1 Sg subject subject suffix $-\eta$ (atonal) is used in the quoted clause to index the quoted speaker, whether singular or plural, as subject. The quoted speaker may be the addressee(s) (550a), the current speaker (550b), or a third party (550c). That this $-\eta$ is unpalatalized and is therefore specifically homophonous to the 1 Sg suffix, rather than to the 1 Pl or 2 Pl suffix, is shown by forms like dǎ: $\eta \mathrm{a}-1 \grave{\eta}$ in (550b). This is homophonous

a. [ǹjú jà:] yě:-jè-ŋ̀
[what? cause] Augm.come-Ipfv-LogoSbj
$g \grave{-}-\grave{y}-\grave{W} / g i ̀-\bar{y}-\grave{\eta}$
say-Pfv-2SgSbj / -2PlSbj
'Why did you-Sg/Pl say that you were coming?'
b. mí/ ह́mmè dǎ:クà-ŋ̀ gì-ỳ-ŋ̀
$1 \mathrm{SgSbj} / 1 \mathrm{PlSbj}$ sit.Stat-LogoSbj say-Pfv-1SgSbj/1PlSbj
'I/We said that I am/we are sitting (=seated).'
c. sé:dù [ǹjèmé/wó yèl-lì-ŋ́] gì-ỳ- $\varnothing$
$\mathrm{S} \quad[\mathrm{Logo} / 3 \mathrm{SgSbj}$ come-PfvNeg-LogoSbj] say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that he $\mathrm{e}_{\mathrm{x}}$ didn't come.'
d. úlù-ì [bé yèl-lì-ŋ́] g-ì-yà
child-Pl [3P1Sbj come-PfvNeg-LogoSbj] say-Pfv-3P1Sbj
'The children $\mathrm{n}_{\mathrm{x}}$ said that they ${ }_{\mathrm{x}}$ didn't come.'

The logophoric subject suffix is required in all such quoted clauses. It is therefore a more reliable anaphor than the optional logophoric noun ǹjèmé in sentences like (550c). However, it is limited to subject position.

### 18.3.3 Logophorics in stacked quotations

Example (551a) includes three distinct protagonists and two levels of quotation. The only logophoric is the subject suffix $-\eta$ on 'kill', which is coindexed with 'you', the author of the lower quotation. In (551b), the object in the lower clause is coindexed with Seydou, the author of the higher quotation. This shows that nothing prevents the logophoric noun ìnjèmé from finding a higher antecedent.
a. sé:dù

S
[[ú wà $\quad[m i ̀=1 ́ \quad d a ̀-d a ́:-d e ̀-\grave{̀}] \quad$ gí-ỳ
[[2Sg QuotSbj] [1Sg=Acc Augm-kill-Ipfv-LogoSbj] say-Pfv
$g i ̀-y-\varnothing$
say-Pfv-3SgSbj
'Seydou said that you-Sg said that you will kill me.'
b. sé:dù

S
[[ú wà] [ǹjèmè= ŋ́ dà-dá:-dغ̀-ŋ̀] gí-ỳ]
[[2Sg QuotSbj] [Logo=Acc Augm-kill-Ipfv-LogoSbj] say-Pfv]
gì-y- $\varnothing$
say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that you-Sg said that you will kill him $_{x}$.'
However, logophoric subject $-\eta$ must take the first quoted author up as its antecedent. (552a) shows that the higher quoted author, Seydou, can only be resumed by a regular 3 Sg pronoun (wó) in the lowest quoted clause. Logophoric subject $-\eta$ is allowed in (552b) because it is coindexed with the lower quoted author ('you').
a. sé:dù

S

| $[[$ ú | wà $]$ | $[[$ wó | Wà $]$ | $[y o ́ g u ̀ ~$ | Wò $]]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $[[2 \mathrm{Sg}$ | QuotSbj $]$ | $[[\mathbf{3 S g}$ | QuotSbj] $]$ | $[$ nasty | be $]]$ |

gì-y- $\varnothing$
say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that you-Sg said that he ${ }_{x}$ is nasty.'
b. sé:dù

S
[[ú wà] [yógù wò-ท̀] gí-ỳ]
[[2Sg QuotSbj] [nasty be-LogoSbj] say-Pfv]
gì-y- $\varnothing$
say-Pfv-3SgSbj
'Seydou ${ }_{x}$ said that you-Sg said that you-Sg are nasty.'

### 18.3.4 No subject-to-subject indexing

In DS there is no special anaphoric coindexing of a relative-clause subject with the subject of the higher main clause. Regular pronouns are used for the relative-clause subject, which is 1 Sg in (553a) and 3 Sg in (553b).
(553)

```
a. [kidè̀ \({ }^{\mathrm{L}}\) kán-ù bè-j-à: mí \(\left.\quad s \varepsilon ́:=g \grave{~}\right]\)
[thing \({ }^{\mathrm{L}}\) do-Chain get-Ipfv-PastAnt \(\mathbf{1 S g S b j}\) have.Ppl=Def]
kàn-ù-ý
do-Pfv-1SgSbj
'I did what I could (do).'
```

b. sé:dù $\quad\left[k i ̀ d \grave{\varepsilon}^{\mathrm{L}}\right.$ kán-ù bè-j-à:

S [thing ${ }^{\mathrm{L}}$ do-Chain get-Ipfv-PastAnt
wó sé: = g̀̀ kàn-ì- $\varnothing$
3SgSbj have.Ppl=Def] do-Pfv-3SgSbj
'Seydou ${ }_{x}$ did what he $\mathrm{x}_{\mathrm{x}}$ could (do).'
18.3.5 bàyâ: 'owner' as 'the (same) fellow'

A previously introduced generic discourse referent can be referred to in subsequent sentences as bàyâ: 'the (same) fellow/guy', cf. French le type or le mec, without further determination. Despite the translation there is no gender bias. This is a variant of the noun 'owner', which is otherwise chiefly found as a compound final (§5.1.8). The plural is bàpâ:-mbè 'the fellows'.

### 18.4 Reciprocal

### 18.4.1 Reciprocal use of mediopassive

The versatile intransitivizing mediopassive verb derivation can be used in reciprocals as well as reflexives, if the subject and object are coindexed.
a. Émmè [yò-gó rà:] wèyy-ì- $\grave{y}-\eta ̀$

1Pl [which? Loc] see-MP-Pfv-1P1Sbj
'Where have we seen each other?'
b. úlù-̀̀ bénd-ì-ỳ-yà
child-Pl hit-MP-Pfv-3PISbj
'The children hit each other.'
c. dèyy-è:-gí-ŋ̀
insult-MP-Prohib-PIAddr
'Don't-2Pl insult each other!'
gě: 'say’ normally takes a dative rather than direct-object complement (§8.1.1). However, it can take mediopassive form in reciprocal sense, with no overt dative marking (555).

| ［sò：${ }^{\text {L }}$ | túrù－lò］ | gìyy－દ̀：－gí－r̀ |
| :---: | :---: | :---: |
| ［talk（n）${ }^{\text {L }}$ | any］ | say－MP－Prohib－PlAdd |

＇Don＇t－2Pl say a word to each other！＇

## 18．4．2 Reciprocal object tùmゝ̀＝ŋ́

The alternative is to maintain the transitive clause structure and use tùm̀̀＝$\dot{\eta}$ ，originally the accusative of a noun meaning＇peer（group）＇（tùmó，cf．mí tùmò－ǹ̀＇my generation－mate＇）but now somewhat frozen．The verb may nonetheless be mediopassive in form（556b－c）．
a．bě：tùmゝ̀＝$\quad$ í ìbè－ǹ－ní
3Pl Recip＝Acc like－StatNeg－3P1Sbj
＇They don＇t like each other．＇

c．tùmう̀＝ŋ́ bènd－$\varepsilon$ ：－－ŋ̀
Recip＝Acc hit－MP．Imprt－2P1Sbj
＇Hit each other！＇

See also text 02 at 00：20．
I was unable to elicit a distinct dative form \＃tùmó lè in e．g．＇we said to each other＇．My assistant used the same accusative form tùm̀̀ $=\dot{\eta}$（557）．
（557）
tùmう̀＝ந́
gìyy－è：－lì－ń
Recip＝Acc say－MP－PfvNeg－1P1Sbj
＇we did not say to each other＇

## 19 Grammatical pragmatics

### 19.1 Topic

### 19.1.1 Topic (gày)

An independent pronoun or other NP can be topicalized by adding a final topic particle gày. The topic is commonly clause-initial and sometimes preclausal, though it is not necessarily set off prosodically. The referent is often the subject of the following clause. The topic phrase can be translated as 'as for X ' or 'personally'.

[1Sg Topic] go-IpfvNeg-1 Sg Sbj
'As for me, I'm not going.'
b. [sé:dù gày] ŋ̀gó-nì nǎ: nà:-dè- $\varnothing$
[S Topic] here meal eat-Ipfv-3SgSbj
'As for Seydou, he eats here.'
When the object is topicalized, my assistant produced a preclausal topic phrase, with a resumptive accusative pronoun in the following clause.
(559) [mí gày] sé:dù mì=ý bèndè-lí- $\varnothing$
[1Sg Topic] Seydou $1 \mathrm{Sg}=$ Acc hit-PfvNeg-3SgSbj
'As for me, Seydou didn't hit me.'
19.1.2 'Now' (nê:)
'Now' as a discourse marker is $n \hat{\varepsilon}$. . It is very common in the texts at the beginning of paragraph-like segments, i.e. implying some kind of break with the immediately preceding segment. It may occur in simple form or as nê: gày with the topic particle.

This is distinct from the temporal adverb kàndǒw 'now, at this time', but the latter can also be used in discourse in a similar way.

### 19.1.3 'Also, too' (lè )

This is a particle (or clitic) that follows a pronoun or other NP. The accusative clitic or a postposition (including the homophonous multipurpose lè postposition) follow the NP directly, preceding lè 'also, too' (560b-c).

```
a. [mí lè] bǒ:-jè- \(\grave{m}\) [1Sg too] Augm.go-Ipfv-1SgSbj 'I too will go.'
```

| b. | $[m i ̀=y ́$ | lè $]$ |
| :--- | :--- | :--- |
| $[1 \mathrm{Sg}=$ Acc | too $]$ |  |$\quad$| bénd- $\mathrm{\varepsilon}-\varnothing$ |
| :--- |
| hit-Pfv- -3 SgSbj |

'He/She hit me too.'
c. [[mí lè] lè] kô: gì-y- $\varnothing$
[[1Sg Dat] too] NearDist say-Pfv-3SgSbj
'He/She said that (same thing) to me too.'
lè is not added to to a predicate. For example, in (561), although in context the pragmatic scope of 'too' is the entire VP 'sweep (the place)', the pro forma object 'place' attracts the particle lè.

| [páná |  | kǎ:n-jè-Ø], |
| :---: | :---: | :---: |
| [cooke |  | Augm.do-Ipfv-3SgSbj], |
| [yàlú | lè] | $s$ c̀:mbé-dè- $\varnothing$ |
| [place | too] | Augm.sweep-Ipfv-3SgSbj |
|  |  | g, and sweeps (the place) |

However, the expanded form yàgá lè, with yàgá 'other', can be used adverbially and can have scope over a predicate.

In 'even if $\ldots$ ' conditional antecedents, the combination =yò lè (with =yò 'if') is normally assimilated either to $=y o ̀ ~ l o ̀ ~ o r ~=y e ̀ ~ l e ̀ ~(§ 16.2 .1 .1) . ~-l o ̀ ~ i n ~ t u ́ r u ̀-l o ̀ ~ '(n o t) ~ a n y ' ~ f r o m ~$ túrù ' 1 ' may be related to lè 'also, too'.

### 19.1.4 'Even' (hállù)

hállù 'even', which belongs to a regional diffusional set, can occur before a subject NP (562a) or before a VP (562c). In (562b) one could bracket hállù with 'children' or with the VP 'killed the children', as suggested by the alternative English translations.
a. [hállù î:] [wàlù ${ }^{\mathrm{L}}$ ŋ̀gó] kán-ù bě:-jè- $\varnothing$
[even child] [work ${ }^{\text {L }}$ Prox] do-Chain Augm.get-Ipfv-3SgSbj
'Even a child can do this work.'
$\begin{array}{llll}\text { b. gè: }{ }^{n} \text {-gé: }{ }^{n}-n \varepsilon & \text { hállù } & \text { úlù-1̀ } & \text { dà-ỳ- } \varnothing \\ \text { [theft-steal.Agent-Sg] } & \text { even } & \text { child-P1 } & \text { kill-Pfv-3SgSbj }\end{array}$
'The thief killed even (the) children.'
(or: 'The thief even killed children.')
c. hállù yè̀l-è-ŋ́
even come-Pfv-1SgSbj
'I even came.'
'Not even' is the same hállù in combination with a negative predicate.

```
a. hállù pò:-ndò-lì-ŋ́
even greet-Tr-PfvNeg-1SgSbj
```

'I didn't even say hello.'
b. hállù mì=ý [kè:lè-ỳ túrù-lò] òbò-lí- $\varnothing$
even $1 \mathrm{Sg}=$ Acc [money-child one-too] give-PfvNeg-3SgSbj
'He/She didn't even give me a small coin.'

For hállù in 'even if ...' conditional antecedents, see §16.2.1.1.

### 19.2 Preclausal discourse markers

19.2.1 'Well, ...' (háyà)

The regional word háyà is a common preclausal discourse marker. It is used roughly like English 'well, ...' Like other such markers it connects the clause pragmatically to the preceding discourse. (564) might be used to encourage the addressee to be energetic in a demanding job (cf. French bon courage).
(564) háyà mà:nd- $\hat{\varepsilon}$ :
well, have.courage-MP.Imprt
'Well, be courageous (energetic)!'

### 19.2.2 'So, ...' (wálà:)

The regional word wálà:, from French voilà, is another clause-initial discourse marker. It has weak presentative force, and can be used in an utterance that marks the culmination of a conversation or activity. For the productive presentatives see $\S 4.4 .4$. Like its French souce, wálà can also signal the speaker's vindication on a point, as when the interlocutor has just provided supporting evidence.
a. wálà: dág-ì- $\varnothing$
so be.good-Pfv-3SgSbj
'So, it's fine!'
b. wálà: yèl-غ̀-Ẃ
so come-Pfv-2SgSbj
'So, you-Sg have come!'
In English we would be more likely to use an overt evaluative (e.g. "Great, you have come!"). wàlû: is an 'alas!' particle expressing disappointment.

### 19.2.3 'But ...' (lǎ:- $\varnothing=y e ̀ ~ l a ̌:-~ \varnothing=y o ̀) ~$

This clause-initial form occurs at the beginning of the second clause, indicating that an expectation generated by the preceding clause (or discourse) is not met. Both clauses take main-clause form.
$\begin{array}{lllll}\text { a. } & \text { [yèl-â: } & \text { wò- } \varnothing] & {[l a ̌:-\varnothing=y e ̀ ~} & \text { nǎ: } \\ & \text { [come-PastAnt } & \text { be-3SgSbj] }] & \text { [but } & \text { meal }\end{array}$ 'He/She came, but he/she didn't eat.'
b. yèl-غ̀-ń [lǎ:- $\varnothing=y o ̀ ~ j a ̌: ~ n a ̀:-l i ̀-n ́] ~] ~$
come-Pfv-1SgSbj [but meal eat-PfvNeg-1SgSbj] 'I came, but I didn't eat.'

Morphologically, lă:- $\varnothing=y$ è $\sim$ lă:- $\varnothing=y o ̀ ~ i s ~ t h e ~ c o m b i n a t i o n ~ o f ~ t h e ~ z e r o ~ 3 S g ~ s u b j e c t ~ f o r m ~ o f ~$ the 'it is not' clitic = lǎ: with =yè ~ = yò 'if'. Therefore the form has a literal sense similar to 'otherwise' or 'else'.

### 19.3 Pragmatic adverbs or equivalents

### 19.3.1 'Again’ (ígèlè, kígùl-ì-à: , kígùl-ì-à:-nì )

An invariant adverb 'again' is ígèlè. Ordinarily it has scope over a VP. An alternative is to use a subordinated anterior form of kígùl-è:- 'return, go/come back' in a loose chain with the following verb. The forms are, as expected, kígùl-ì-à: in past-time contexts (567a-b) and kígùl-ì-à:-nì in future contexts (567c), and motion is not necessarily involved.
a. yغ̀l-â:
bòl-â:
come-PastAnt
go-PastAnt
[ígèlè / kígùl-ì-à: $y \varepsilon ̀ l-\grave{\varepsilon}-\varnothing]$
[again / return-MP-PastAnt come
'He/She came, went, and came back.'
b. wàl-â:
do.farming-PastAnt
[ígèlè / kígùl-ì-à:
[again / return-MP-PastAnt do.farming-Pfv-1 SgSbj ]
'I worked (in the field), then I rested, then I worked again.'
c. yògó wàl-ì-ń=jè dè:l-ì- $\varnothing-n ́=j e ̀$
tomorrow do.farming-Pfv-1 $\mathrm{SgSbj}=$ if rest-MP-Pfv-1 $\mathrm{SgSbj}=$ if
ígèlè / kígùl-ì-à:-nì wàlà-dè-ŋ̀
[again / return-MP-Ant-Nonpast do.farming-Ipfv-1 SgSbj
'Tomorow I will work (in the field), then rest, then work again.'
'Again' overlaps pragmatically with 'more, additionally', see the following section.

### 19.3.2 'More, additionally' (yàgá )

The adjective 'other' is yàgá (§4.6.1.1). It can be used adverbially, without a modified noun, in the sense '(some) more, additionally' (568a). In many contexts, like (568b), it competes with the 'again' expressions in $\S 19.3 .1$ just above. (568c) involves a negative predicate ('not again', 'not any more').
a. [nǎ: $n-\dot{\text { - }}$ ý=yò] [yàgá né:-nǎw] [meal eat-Pfv-2SgSbj=if] [other eat-Prohib]
'If you-Sg have (already) eaten, don't eat any more!'
b. yàgá yèl-ì-yà
other come-Pfv-3PlSbj
'They came (back) again.'
c. yàgá [àndá ém-mò rà:] túrù-lò bòlé-દ̀lè-ŋ̀
other [village 1 Pl -Poss Loc] any go-IpfvNeg-1 SgSbj
'I will never again go to my village.'

## 19.4 'Only’ particles

### 19.4.1 'Only’ (kă:ク, -mǒn)

There is a strong preference for phrasing kă: $\eta$ 'only' with an NP or other non-verb constituent, rather than putting it clause-finally with clausal or VP scope. kă: $\eta$ is NP-final, not post-NP, as shown by the fact that a postposition like dative lè may follow it (569a-b).
a. [[ǹdè ${ }^{\mathrm{L}}$ túrù / ľ̆y kǎ:n] lè] gì-ỳ-ŋ́ [[person ${ }^{\text {L }}$ one/two only] Dat] say-Pfv- 1 SgSbj
'I said (that) to only one person/two people.'

For the adjectival numeral túrù ' 1 ', there is an optional lexically specific form tùrù-mǒn 'only one' that can be used instead of túrù kă: $\eta$, compare English sole, single, unique, and (adjectival) only as in my only complaint. (569a) is therefore equivalent to (570). -món is not allowed after other numerals, e.g. \#lغ̀y-món 'only two' is rejected.

| $\left[\left[n ̀ d \varepsilon^{\text {L }}\right.\right.$ | tùrù-món] | lè] | $g i ̀-\grave{-y}$ |
| :---: | :---: | :---: | :---: |
| [[person ${ }^{\text {L }}$ | one-only] | Dat] | say-Pfv-1SgSbj |
| 'I said (th | only one |  |  |

Rarely, kä: $\eta$ occurs clause-finally, but only if the clause is converted into a relative clause, with definite clitic. I was able to elicit (571a) with some difficulty, using the context 'he/she didn't do anything (bad), he/she merely came'. Logically, an 'it is' particle $=\eta$ is needed in (571a). It is segmentally inaudible after the velar nasal of kâ: $\eta$, but its negative counterpart $=$ lă: is audible in (571b).
a. [Wó / bé
$y \grave{\varepsilon} 1-\varepsilon=g \grave{\varepsilon}]$
kă: $\eta(=\grave{\eta})$
[3SgSbj / 3PlSbj come-Pfv.Ppl=Def]
only(=it.is)
'He-or-she / they only came.'
(lit. "It's only that he-or-she/they came.")
b. [wól bé yèl-ह́=g̀̀] kă:t = lă:
[3SgSbj / 3PlSbj come-Pfv.Ppl=Def] only=it.is.not
'He-or-she / they didn't only come.' (lit. "It's not only that he-or-she/they came.")

### 19.5 Final emphatics

### 19.5.1 Confirmation of interlocutor's statement

nánà $=\grave{j}$ ' 'it's the truth' is an all-purpose expression of agreement to something the interlocutor has just said. The regionally widespread já:t̀ 'indeed, exactly' is still in use among older speakers.

### 19.5.2 Clause-final gǒy ‘sure’ (emphatic agreement)

This particle (cf. kòy in several neighboring languages) is a clause-final particle and is not used in isolation. The content of the clause is repeated from an interlocutor's statement or polar interrogative. A says 'It's hot!' or asks 'Is it hot?', and B responds 'It's hot gǒy', i.e. 'It sure is (hot)!'. An example is in text 05 at 00:45.

### 19.5.3 Clause-final dé (admonitive)

This particle is used in warnings and in statements that tend to contradict what the interlocutor has stated or is thought to believe. A has just returned from the fields on a very hot day. B says that he (B) is going to the fields, and A warns: 'It's hot today dé', i.e. 'Watch out, it's hot today!' English clause-final discourse particle (not temporal adverb) now as in 'Don't go near the crocodiles now!' is similar pragmatically.

### 19.6 Backchannel and uptake checks

pà:mú kàn-ú-̇̀ 'did you-Sg understand?' is a common request by a narrator for a confirmation that the listener has understood (uptake check). The phrase contains pà:mú 'understanding', the 2 Sg perfective form of kán(à ' 'do' as auxiliary, and a final L-tone for polar interrogation.
$\delta^{n} h \partial^{n}, \grave{j}^{n} h \check{\partial}:^{n}$ or other variant is the usual 'uh-huh' backchannel form volunteered by listeners at intonational break points in the speaker's narration. Alternatives or add-ons to this are $k \hat{o}: w \bar{j}=i ̀$ 'that's it!' and dágì- $y-\varnothing$ 'it was good'.

To indicate real surprise at something the interlocutor has said, one can say hă:" 'huh?'.

### 19.7 Greetings

Some simple time-of-day greetings and the responses to them are in (572). Some include dialectal or archaic forms.
a. yá:-mゝ̀
jâŋ yà-ý-Ẁ
'good morning' (said before noon)
(reply)
b. [jân nà] wò-Ẁ
'good day' (noon to 2:30 PM) yôw kò-ló
(reply)
c. dènè-mó
jâŋ dènó-Ẁ
'good evening' (said from 3 PM to evening) (reply)
yá:-mゝ̀ (572a) and dènè-mó (572c) are based respectively on the verbs yâ: 'spend the night' and dèné 'spend the (mid-)day'. The -mo suffix is opaque. It resembles the hortative form but could also be parsed as the causative suffix (imperative form). The choice of verbs shows that the greetings are retrospective as in English 'how did you sleep?' or 'how was your day?', rather than prospective as in English 'good morning/night!'. The responses contain the abstract noun jây 'being well' (§8.4.4.2) and a 2 Sg perfective form of the same verb as in the first turn, yâ: or dèné, i.e. 'did you spend the night/day well?' The polar interrogative adds a final L-tone that pushes the normal final H-tone of the perfective leftward one mora in dènó-Ẁ and yà-ý-ẁ.

In (572b), jây nà seems to function as a PP with the same noun jây, made predicative by $W \grave{o}-\grave{W}$ 'you-Sg are'. nà does not occur elsewhere as a postposition, but nì $\sim n \grave{\varepsilon}$ is a locative postposition. The reply means 'there is nothing wrong (no trouble)', with noun yôW 'trouble' and kò-ló 'it (nonhuman) is absent'. Except in this greeting, kò-ló 'it is absent' has been replaced in the focal dialect by generalization of wò-lo' 'he/she/it is absent' to nonhumans.

Another type of greeting is of the type 'you and X', where X is the addressee's current activity or situation. The variants of (573a) involve three synonyms for 'work (n)'. Any variant can be addresseed to someone working in the fields or at a workplace. Elsewhere wálù is the usual noun for 'work'. (573b) 'you and fatigue' is addressed to someone who is doing physical work. Elsewhere 'fatigue' is dě: or dèyyé, while dó:lò occurs in dó:lò= ì 'it isn't worth (the trouble)' and in dó:lò ${ }^{\text {L }}$ pò: 'thanks!' (573c) could be said to someone who is carrying water from the well and garden area to the village proper.
a. [ú lè] [wâl/ bírè / ká:dù lè]
[2Sg and] [work(n) and]
'You-Sg and work!'
b. [ú lè] [dó:lò / dèyyé lè]
[2Sg and] [fatigue and]
'You-Sg and fatigue (working hard)!'

'You-Sg and the garden!'

Greetings to departing and returning travelers, respectively, are in (574a-b). (574b) is an example of an imprecation with 'God' as addressee; àmbá 'God' is L-toned in such imprecations.
a. bòl-ù [jâŋ lè] yélè
go-Chain [being.well Inst] come.Imprt
'Go-2Sg and come (back) without trouble!.'
b. àmbà $\grave{u}=$ ý jâŋ $\quad j \varepsilon ̀: l \varepsilon ́$

God $2 \mathrm{Sg}=$ Acc being.well bring.Imprt
'May God bring you-Sg (back) without trouble!'

Condolences expressed by a visitor (A) at the house of a deceased person and the 'thanks!' response (B) are in (575). Elsewhere both gà:nâ: and dó:lò ${ }^{\mathrm{L}}$ pò: are used as 'thanks!' for a service.
(575)
A: àmbà úlù- $\grave{=}=g \grave{~} \quad k \hat{\varepsilon}$ :
God child-Pl=Def raise.Imprt
'May God raise the children!'

B: gà:nâ:
thanks

A standard greeting to other villagers on one of the two major Muslim holy days is (576). 'Next year' is a subordinated clause with bâ: 'season transition' as pseudo-subject and gǒ: 'exit' as verb, see ( 160 d ) in §8.4.6.1.

A: àmbà [bâ: gù-á:-nì] témbè-mò
God [season exit-Ant-Nonpast] find-Caus.Imprt
'May God have (you) encounter (=live until) next year!'

B: gà:nâ:
thanks,
àmbà [Émmè yà-wôy] gù-á:-nì témbè-mò
God [1P1 all] exit-Ant-Nonpast find-Caus.Imprt
'Thanks. May God have all of us come out (=survive) next year!'
Formal Islamic greetings, in Arabic and used chiefly among men, are the AB sequence in (577).
(577)

A: àssàlà:mú àlè:kûy
peace to.you-Pl
'Peace to you-Pl!'

B: [màlé:kùm àssàlà:mú] [wà-rá:màdù llâ:y] wà-bàràká:dù [to.you-Pl peace] [and-praise of.God] and-his.blessing 'To you peace, and praise and blessing of God!'

## Texts

Texts in Donno So, recorded June 2014 in Wendegele village near Bandiagara speakers: A: Étienne, B: Daouda

## Text 01: Hare outsmarts the other animals

recording DS 02, taped in Wendegele June 2014
00:02 A: mí ségèlòẀ
A: 1 Sg story
B: $\quad$ ह́d $\grave{W}$
B: OK
[formulaic tale-opening phrase and audience response, authorizing the tale to proceed; an alternative sequence is $A$ : mí pá:nìyà, $B$ : némìyà ; the rest of the text is $A$ speaking]

00:04 A: [[ògùlù-nàmá Wôy] ${ }^{\mathrm{L}}$ kù:-nう̀] kùnd-ù-ý, A: [[outback-meat all] ${ }^{\mathrm{L}}$ head-Sg] put-Pfv-1SgSbj, ògùlù-nàmá-mbè bé mòl-í-à:, [bè ${ }^{\mathrm{L}}$ fû:] nê:, outback-meat-Pl 3PlSbj assemble-MP-PastAnt, $\left[3 \mathrm{Pl}^{\mathrm{L}}\right.$ all] now, mòl-í-à:-nì gè: , súgùlù ǹjèmé-mbè-mò, assemble-MP-Ant-Nonpast (filler), ear Logo-Pl-Poss, kébèl-à: kébèl-à: dìg-â: mò:-nd-á:-nì gè: , pick.a.little-PastAnt pick.a.little-PastAnt join-PastAnt gather-Tr-Ant-Nonpast (filler), ǹjèmé-mbè bǒy dàngà-mó wà, Logo-Pl tomtom cover.with.hide-Hort say,

A: 'I have put the head of (=my story is about) all the wild animals. The animals assembled. Now they all assembled and picked off pieces of their own ears and bound them together. They said, "let's put an animal-hide covering on the tomtom.",
['I put head of $X$ ' is a standard phrase for defining the subject of a tale; pronoun tone-dropped before fû: 'all' $\oint 6.6 .1$; mediopassive məl-દ':- 'assemble, come together' and transitive mò:-ndó 'assemble (them), bring together', §9.4.4; past anterior -a: and nonpast anterior -a:-nì, §15.2.2.1; gè: is used as a filler to keep a loose clause chain going, §15.2.4; quoted hortative §17.1.4.2]

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00:15 n\hat{\varepsilon}: y\varepsiloń\etag-ì-à: [bé yà-wôy],
    now discuss-MP-PastAnt [3P1 all],
    lsúgùlò=\grave{ llll}
    n\hat{\varepsilon}: [jòmó gày],
    now [hare Topic],
    [ǹjěm-mò súgùl\grave{=ò] k\varepsilońbèlè-mè-\varepsiloǹl̀̀-\etá gì-ỳ-\varnothing,}
    [Logo-Poss ear=Def pick.a.little-Caus-IpfvNeg-LogoSbj say-Pfv-3SgSbj,
```

'Now after they all discussed that, they went and picked off (lots of) pieces of their ears. Now hare said "I won't let anyone pick off a piece of my ear.",
[kébèl-ò=̀̀ perfective participle in headless relative, §14.2.4; jă: here adds a distributive element $\$ 17.5 .2$; topic gày §19.1.1; ǹjjěm-mò súgùl̀̀=̀̀ shows appositionlike inversion of the usual pronominal possessor pattern, equivalent to súgùlù ѝjěm-m̀̀ (=う); logophoric subject $-\eta$ §18.3.2]

'(The animals said:) 'Well, if that's how it is, if hare has said that he won't let anyone pick off a piece of his (ear), well now there won't be any letting him beat tomtoms," (they) said.'
[yěn 'thus', §8.4.1; clitic = yô:' 'if' with $\{L\}$-toned third person perfective, §16.1; gè: appears to be an unconjugated form of gě: 'say' functioning like quotative particle wà, §17.1.2]

'The other ones (animals) said, let's keep finding some days (occasionally), let's all get together (recreation), beat tomtoms too, and dance our dances.'
[wàdú 'rest, remainder'; three verb iterations §15.1.11 leading up to a single overt hortative; témbè 'find (by accident), encounter', here implies occasional rather than high-frequency activity]

'Now having said that, when they had finished the tomtom, one day when they had deposited the tomtom in a (certain) place, they had put a drinking area nearby in a dense forest.'
[bě: prepausal rising-toned form of bé 'they', $\$ 4.3 .3$; kàn-̀̀=̀ headless perfective relative; -a: sغ̀ present perfect 'have (done)' §10.2.1.4; bèrǔ: adverbial 'neaby’ §8.4.5]

00:40 [nê: gày] [dî: bè-mò] nò-ỳ-yà = yô: [now Topic] [water 3Pl-Poss] drink-Pfv-3P1Sbj=if, $n \hat{\varepsilon}$ : bǒy $=g \grave{~} \quad$ bà- $\grave{-}$-yà = yô: , now tomtom=Def beat-Pfv-3PlSbj=if,
[gô: bè-mò] gò:-nú bì-ỳ-yà = yô: [dance(n) 3Pl-Poss] dance(v)-Dur remain-Pfv-3P1Sbj=if, [nê: kó-njì: [pànà ${ }^{\mathrm{L}} \mathrm{H}^{\mathrm{HL}}$ dénnè bè-mう̀] bò-j-ì, [now DiscDef-like [food ${ }^{\mathrm{L}} \mathrm{H}^{\mathrm{HL}}$ look.for 3Pl-Poss] go-Ipfv-3PlSbj,
'Now, they were drinking their water, now they were beating tomtoms, they kept dancing their dances, then in that way they went to look for their food.'
[=yô: pseudo-conditional §15.2.2.5; durative -nú plus bě: 'keep VP-ing’ §17.5.4; pànà ${ }^{L}{ }_{-} H L$ dénnè $\{L\}+\{H L\}$ complement of motion verb §17.4.4]

| $\begin{aligned} 00: 45 & {[n \hat{\varepsilon}:} \\ & {[\text { now }} \end{aligned}$ | jòmó <br> hare | $\begin{aligned} & \text { [yàlùu }^{\mathrm{L}} \\ & \text { [place }{ }^{\mathrm{L}} \end{aligned}$ | bòd-â: deposit-PastAnt | bé 3PlSbj | $\begin{aligned} & \text { wò:] } \\ & \text { be.Ppl] } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\text {L }}$ tày | wó | kànò= |  |  |  |
| ${ }^{\text {L country }}$ | 3 SgSbj | do.Pp |  |  |  |
| wó | $y \grave{l} l-\grave{\grave{c}}=\grave{\grave{c}}$ |  | пع́ $\quad$ bǒy $=$ gò, |  |  |
| 3 SgSbj | come-Pfv.Ppl=Def |  | tomtom= |  |  |
| wó | [wó lè] | wó | yèn-̇े= ${ }^{\text {, }}$ |  |  |
| 3 Sg | [3Sg too] |  | pick.up-Pfv | $\mathrm{Pl}=$ Def, |  |
| $n \hat{\varepsilon}$ : | $b o ̌ y=g \grave{~}$ |  |  |  |  |
| now | tomtom=Def |  | stAnt, |  |  |

'Now when hare did (that), when he came to the place where they had deposited it in the country, he picked it (=tomtom) up himself. Now he beat (=played) it.'
[nonsubject relative with preverbal subject pronoun bé and $\{L\}$-toned yàlù ${ }^{\mathrm{L}}$ as head, §14.7.2; yغ̀l-̀̀=̀ and yغ̀y-̀̀=̀̀, headless relatives]

## 00:51 غ̀ndè-jòmó

hare
[kèbèlè-mé
gì-ỳ- $\varnothing]$
say-Pfv-3SgSbj]
dán-dày
bang-bang
gì-ỳ- $\varnothing] ~$
say-Pfv-3SgSbj]
[pick.a.little-Caus.Imprt
say-Pfv-3SgSbj]
kèbèlè-mà-lî:- $\varnothing$
dán-dày
pick.a.little-Caus-PfvNeg-3SgSbj.Q
bang-bang
[kèbèlè-mé
[pick.a.little-Caus.Imprt
say-Pfv-3SgSbj]
kèbèlè-mà-lî:- $\varnothing$
pick.a.little-Caus-PfvNeg-3SgSbj.Q
yěŋ gě: wó wò- ,
thus say 3 SgSbj be-Ipfv,
'Hare (sang and beat the tomtom): 'he said to let (them) pick off a piece, didn't he let (them) pick it off? Bang-bang!, he said to let (them) pick off a piece, didn't he let (them) pick it off?" He (=hare) was singing (and beating the tomtom) like that.'
[the song is slightly stylized and has only $3 S g$ pronominals; -lî:- $\varnothing$ is the polar interrogative form of $3 S g$ perfective negative -lí- $\varnothing$, §13.2.1; dán-dàn is onomoatopoeic for the sound of the tomtom; gě: 'say' or 'make (a sound)' is not confined to speech, §11.1.2.3]


00:59 háyà wò $=$ ý kór-à: ,
well $3 \mathrm{Sg}=\mathrm{Acc}$ surround-PastAnt, [súgùlù wò-mò] kébèlè-mè-èlè-ý gì-ỳ- $\varnothing$ [ear 3Sg-Poss] pick.a.little-Caus-IpfvNeg-LogoSbj say-Pfv-3SgSbj
'Well, they surrounded him, (but) he (=hare) said he wouldn't let (them) pick off a piece of his ear.'
[Regular 3Sg possessor wò-mò as alternative to logophoric possessor ǹjěm-mò]

'(Animals:) "The tomtom that we have just fixed (=manufactured), you (=hare) have come and have since been merrily beating that (tomtom). Well, we didn't (=don't) accept that," (they) said. Because of that they arrested him.'
[object relative clause based on recent perfect construction with 'arrive' \$10.2.1.5; kú=g̀̀ 'that (same) one' \$4.4.2; chaining form dàg-ú plus locative nè in 'since' clause §15.2.1.7; stative gèlè 'be holding' as progressive auxiliary §10.2.2.5; bilદ́ 'become, turn into' is hard to translate idiomatically here but emphasizes hare's dramatic change in behavior; purposive jă: §8.3.1]

```
01:07 háyà tàrá:=ì tùb-ì-yà, tàrâ: wà nê,,
    well hyena=Acc ask-Pfv-3PISbj, hyena QuotSbj now,
    íyè j\grave{mò= \́ ág-à: bèlìm-ì- }\varnothing=lô:,
    today hare=Acc catch-PastAnt get-Pass-Pfv-3SgSbj=right?,
    y\grave{gó-njì: kán-j-ì mà }->\mathrm{ ,}
    how? do-Ipfv-3PISbj Q,
```

'Well, they asked hyena (their chief): "hey hyena, now hare has been caught and is in custody, right? So (now) what will we do?""
[bèlé 'get' in passive form 'be gotten, be in custory' $\$ 9.3$; clitic $=$ lò rhetorical tag question (n'est-ce pas?), glossed '=right?', §13.2.1.3]

'(Animals to hare:) "Since you-Sg been saying that you won't allow (us) to pick off a piece of your ear; well, we'll roast you and make meat sauce."'
[meat sauce (red) can be added on top of the regular green baobab-leaf sauce served on millet cakes]

'Well, they said that. Then hare said, "that's true, (but) I (=my flesh) have plenty of fat." '
[fatty meat is preferred to lean meat; gǎ:w 'a lot' is treated tonosyntactically like a numeral, §6.4.3]

01:20 bǎmmòw [[tìnù ${ }^{\mathrm{L}}$ sé: ${ }^{n}$-sè: $\left.{ }^{n}\right]$ lè] ǹjèm̀̀ $=$ ŋ́ kán-à:
by.chance [[wood ${ }^{\text {L }}$ good-good] Inst] Logo=Acc do-PastAnt yò:r-ì-yà = yê: , roast-Pfv-3PlSbj=if,

| $\left[s \hat{e}:^{n}=g \grave{y}\right.$ | sé:nèn | $p \hat{u} \rightarrow]$ | [nầy | dà:] | yò:-dè- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $[f a t(\mathrm{n})=$ Def | all | all] | [fire | Loc] | enter-Ipfv-3SgSbj |

(Hare:) "if by chance you roast me using good firewood, all the fat will go (=drip down) into the fire."
[ = yê: variant of =yô: 'if'; sé:nè̀ 'all' §6.6.1]
01:23 ǹjèmè= ŋ́ pònò-sùděy,
Logo-Acc fonio-greens,

| [b |  |  |
| :---: | :---: | :---: |
|  |  |  |

[3Pl QuotSbj] look.for-PastAnt bring-Pfv-3SgSbj=if,
[pònı̀-sùdと̌y $=g$ è nì] bìg- - $-\varnothing=y o ̂:$,
[fonio-greens=Def Loc] bury-Pfv-3SgSbj=if,
[bé wà] jẵy kúndò,
[3Pl QuotSbj] fire put.Imprt,
jầy kùnd-ù- $\varnothing=y o ̂: \quad$ [nàmá ǹjěm-mò]
fire put-Pfv-3SgSbj=if [meat Logo-Poss]
[wó ${ }^{\text {L }}$ èllù] bě:-d $\mathrm{c}-\varnothing$
[3SgPoss ${ }^{\mathrm{L}}$ sweet] remain-Ipfv-3SgSbj
'(Hare:) "you-Pl look for and bring fonio greens, bury me in the fonio greens, and set the fire. When (you) have set the fire, the good taste of my meat will remain."
[two pseudo-imperatives $=y \hat{0}$ : chained to a terminal imperative kúndò, §15.2.2.5; fonio is a cultivated grass crop, the greens being the stems and leaves after threshing;
the final vowel of kúnd-ì- $\varnothing$ 'he/she put' does not undergo Back/Rounding Harmony except in cliticized forms like kùnd-ù- $\varnothing=y$ ô: with 'if' clitic]

| $\begin{array}{ll} 01: 30 & \text { háyà } \\ \text { well } \end{array}$ | $\begin{array}{ll} \text { yěy } & \text { bì-ỳ- } \\ \text { thus } & \text { be-Pt } \end{array}$ | $\begin{aligned} & -\varnothing=y \hat{0}: \\ & \mathrm{fv}-3 \mathrm{SgSbj}=\mathrm{if}, \end{aligned}$ | $\begin{aligned} & \text { bě: } \\ & \text { 3Pl } \end{aligned}$ | pว̀nว̀-sùděy fonio-greens | dènn-â: , <br> look.for-PastAnt, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| háyà | $j$ jòmó $=\grave{j}=\grave{j}$ | [kú | $n \varepsilon ̀]$ | kúnd-à: , |  |
| well | hare $=$ Def $=$ Acc | c [NearDist | Loc] | put-PastAnt, |  |
| bě: | năg = gò | kùnd-ì-yà |  |  |  |
| 3 Pl | fire= Def | put-Pfv-3P |  |  |  |
| [ $n \mathrm{E}$ : | gày] | gìd-i-yà |  | gìd-ì-yà |  |
| [now | Topic] | block-Pfv-3P1S |  | block-Pfv-3PlSb |  |

'Well, that being the situation, they looked for fonio greens. Well, they put hare in that (pile of fonio greens), and they set the fire. Now they were blocking (hare's escape).'

01:37 [yěn wó-Ẁ] jòmó=ò mè:-mě: kèbú bèl-â:
[thus be-Ipfv] hare=Def gently gap get-PastAnt
lól-ì-à: go.through-MP-PastAn

WÓ 3SgSbj gò-è- $\varnothing=g \grave{\text { oे, }}$ now fonio-greens=Def fire 3PlSbj put-PastAnt,
 fonio-greens=Def burn-Ipfv burn-Ipfv all úndj̀ = ̀̀ wó kàn-ì- $\varnothing=$ lă: = yò, ashes $=\mathrm{it} . \mathrm{is} \quad 3 \mathrm{SgSbj} \quad$ do- $\mathrm{Pfv}=\mathrm{it} . \mathrm{is} . n o t=\mathrm{if}$,
'After hare found a gap (between two animals) in that situation and quietly escaped through it, now they set fire to the fonio greens. The fonio greens were all blazing (with fire). It (fonio greens) had finished becoming nothing but ashes.'
[wó in the last line refers to 'fonio greens';the iteration tégè- $\grave{W}$ tég $\grave{\varepsilon}-\grave{W}$ is reduced from progressive tégè wò 'be burning']

'They poked around (in the ashes), but the meat wasn't in there. They said, "well, it (=meat) was charred, it went and got charred." Being there (nearby), hare said "I am here. Before you-Pl set the fire, as for me, I escaped."
[gànjà-lá 'try to dig up, poke around for' is related to gànjá 'dig up (sth buried)' but is not exactly reversive; 'went and got charred' with disparaging 'go', §15.1.10.2; wó-ẁ
nà 'it being the case that', §17.5.4; yó=ò 'be present' from yó wò, §11.2.2.2; 'before' clause with mò-nì after $\{L\}$-toned verb, §15.2.3]

'They said (=asked), "hey, is that how you ran away? Hey you-Pl, now what was the trick?" they said.'
[mà $\rightarrow$ in 'whether ( $X$ or not-X)' complements (here expressing wondering out loud how hare had escaped), $\S 17.2 .1 .2$; noun dàbìlé can mean 'magical device/solution']

| 01:56 háyà well | [ǹjèmé <br> [Logo | $\begin{array}{ll} \text { gày] } & \text { bòl- } \\ \text { Topic] } & \text { go-F } \end{array}$ | $\begin{aligned} & \grave{u ̀-y ́} \\ & \text { fv-Logo } \end{aligned}$ | wà, <br> Quot, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [nàmá | njěm-mゝ̀], | $b e ̀ l-a ̂:$ | bé | tèmè-dè | kánè-غ̀lè, |
| [meat | Logo-Poss], | get-PastAnt | 3PlSbj | eat.meat-Ipfv | do-IpfvNeg, |
| bǒy-gèlè | [ǹjěm-bè | è yà-wôy | k $\hat{\varepsilon} W]$, |  |  |
| tomtom | [Logo-Pl | all | all], |  |  |
| [bǎ:-nǎW | gày] | [bé | wà] | bèlé-غ̀lè |  |
| [beat-Prohib | Topic] | [3P1 | QuotSbj] | get-IpfvNeg |  |

'(Hare:) "Well, as for me, I went (out). You-Pl won't be getting and eating my flesh. The tomtom is for us all. You-Pl can't tell me not to beat (the tomtom).",
[kán(à) 'do' plus imperfective complement §15.2.1.7; logophoric 'all of us' is understood to be reduced from a possessive predicate 'belongs to all of us' $\S 11.5 .2$; quoted prohibitive §17.1.4.1; bèlé as main-clause verb 'can VP' §15.1.4.1]

'Therefore hare being like that, he is the cleverest of all the animals. To this day, they say (=recognize) that he is the clever(est) one. They have not matched him.'
[comparative clause with predicate adjective, §12.1.1.1; superlative, §12.1.4]

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02:08 kó-njì: bé wó: = gò
    DiscDef-like 3PlSbj be.Ppl=Def
    wò=\etá háyà bòl-â: yèl-\varepsiloǹ-\etá,
    3Sg=it.is well go-PastAnt come-Pfv-1SgSbj,
    à:mbâ:
    (the.end)
```

    'They being like that, that's it. Well, I have gone and come (back). The end.'
    ['I have gone and come back' is a standard tale-ending phrase; à:mbâ: 'the end' in
    tales is not otherwise in use]
    
## Text 02: Report on trip to Burkina.

recording DS 09, taped in Wendegele June 2014

| 00:02 | $\begin{aligned} & \text { A: } \\ & \text { A: } \end{aligned}$ | A: áyw <br> A: well |  |  |  | $\begin{aligned} & n \hat{\varepsilon} . \\ & \text { no } \end{aligned}$ | kàndǒw now | $\begin{aligned} & \text { [é } \\ & \text { [2P1 } \end{aligned}$ | ságàtàrà-mbè], <br> young.man-Pl], |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [é |  | fû |  |  |  | yàlà-ı̀ |  |  |
|  | 2P1 |  | all] |  |  |  | walk.St | 1Sbj, |  |

A: ‘Well nowadays, nowadays you young men, all of you travel.'
[stative form of yàl-દ́:- 'take a walk; travel']
00:06 A: [íyè gày] [yàlù ${ }^{\mathrm{L}}$ é yàlò=ò] nì,
A: [today Topic] [place ${ }^{\mathrm{L}} 2 \mathrm{PlSbj}$ walk.Stat.Ppl=Def] Loc, [kàló=j̀ nì] [kàndò ngó] gènd-ì-ý=yò: bùrgìnè-ḿnbè $\rightarrow$ [boundary=Def Loc] [now Prox] look.at-Pfv-2SgSbj=if Burkina-Pl kó-rà: [bòbó yé gè:-d-ì] [wàgàdùgú yé gè:-d-ì] NearDist-Loc [B Exist say-Ipfv-3P1Sbj] [Ou Exist say-Ipfv-3P1Sbj] yàlú dêy-dèn kó-rà:, place apart-apart NearDist-at, yé yàlà-ŋ̀, nê: kó-rà: gándò=ò yògó-njì: wò- $\varnothing$ Exist walk.Stat-2P1Sbj, now NearDist-Loc country=Def how? be-3SgSbj

A: 'Nowadays, in the places where you-Pl travel, now (concerning) everything that you-Sg have looked at (=experienced), Burkina (cities), they call it Bobo (=Bobo Dioulasso), they call it Ouagadougou, different places, (where) you-Pl travel, now what is the country like there?'
[B had recently spent time in the neighboring country Burkina Faso; yé gè:-d-ì, existential yé with imperfective, end of §11.2.2.1; dêŋ-dèn iterated EA, §8.4.7.3]
$00 \cdot 1$

| B: kó-rà: | [kàndǒw | gày], |  |  |
| :---: | :---: | :--- | :--- | :--- |
| B: NearDist-Loc | [now | Topic] |  |  |
| [[gàndà | [Ém-mò | ǹdâ:]] | lè] | [yé-rà: | lè], $\begin{array}{ll}\text { gándò }=\grave{\grave{c}} & \text { dên } \\ \text { country }=\text { Def } & \text { apart }\end{array}$

A : ìḿn
A: Uh-huh
B: 'There now, our country here (=Mali) and there (=Burkina), the country is different.'

A: ‘Uh-huh?'
[tones in gàndà ${ }^{\mathrm{L}}$ [ह́m-mò=̀̀ ǹdâ:] suggest that gándà here is a compound initial or modified noun, compare gándà èm-mò $(=\mathfrak{)})$ 'our country', discussed in §6.2.1.2]

00:17 B: gándò=̀̀ dêy-dèク
B: country=Def apart-apart
A: kàb-ú separate(v)-Nom Exist be.in- 3 SgSbj
$\mathrm{B}:$ kàb-ú yó tò- $\varnothing, \quad$ ह̀dú $\rightarrow \quad$ èdú $\rightarrow$ yó tò- $\varnothing$, separate(v)-Nom Exist be.in- 3 SgSbj , greatly greatly Exist be.in- 3 SgSbj , B: 'Each country is different.'

A: 'There is a difference (between them).'
B: 'There is a difference (between them). There is a big (difference) (between them).'
[dên-dèท §8.4.7.3; $\mathfrak{\varepsilon} d u ́ \rightarrow$ §8.4.2]

B: 1Pl-Poss=Def here, now, person-Pl 3Pl Recip=Acc like-Ipfv be-3PlSbj

| $\underline{\text { mais }}$ | yé-rà: | bě: | tùmò=ýn | ìbè-ǹ̀-ní, |
| :--- | :--- | :--- | :--- | :--- |
| but | DiscDef-Loc | 3 Pl | Recip=Acc | like-StatNeg-3P1Sbj, |

yé-rà: bòl-ù-ý=yò, ìdó=ò wôy,

DiscDef-Loc go-Pfv-2SgSbj=if, person=Def all,
dìgé $\quad d \grave{\varepsilon}-\dot{\varepsilon}-\varnothing$ : night night.fall-Pfv-3SgSbj night.fall-PfvNeg-3SgSbj, [gìnè-kól̀ rà:] túyy-è:-d-ì, [house-interior Loc] remain.inside-MP-Ipfv-3P1Sbj,

B: 'In our (country) here now, people love each other (=are friendly). But there (in Burkina) they don't love each other. If you-Sg go there, (you'll find that) everyone stays inside the house whether night or day.'
[reciprocal object tùmò=1́ §18.4.2; ìbé 'like, love' §11.2.5.3; conditional 'if you go' §16.1; willy-nilly conditional antecedent (lit. "[night has fallen] (or) [has not fallen]" with dying-quail terminal effect, symbol $\therefore$, $\S 16.3$; túyy-غ̀: mediopassive verb related to stative tò: 'be in' §11.2.3.1]


B: 'Everyone is on his own. They don't go anywhere outside (on the street). Even if they come by they don't say "hey you, hello!" They are almost stepping on your foot (as you sit in a chair). If they pass by, they pass by like that.'
['head' = 'self', §18.1.4; túrù-lò §6.6.3; yèlù-yà:-yદ́lè §16.2.1.2; quotative-subject phrase here represents an original vocative; hállù 'even' §19.1.4; námmà-1̀ gìnè, 'as though' clause with logophoric subject $-\eta$ §15.3.2.2, here after a stative verb, cf. augmented stative nǎ:mmà 'be stepping on (sth)']

| B: B: | $\begin{aligned} & {\left[\text { sò: }{ }^{\mathrm{L}}\right.} \\ & {\left[\operatorname{word}(\mathrm{s})^{\mathrm{L}}\right.} \end{aligned}$ | $\begin{aligned} & \text { túrù-lı̀] } \\ & \text { any] } \end{aligned}$ | $\begin{aligned} & g \varepsilon ̀:-n ́-n i ̀, ~ \\ & \text { say-IpfvNeg-3P1Sbj } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| [yě!] | bò-j-ì] |  | [yěy | $y \varepsilon ̇-j-1$ ] |
| [thus | go-Ipfv-3P1Sbj] |  | [thus | come-Ipfv-3PlSbj] |
| $n \hat{\varepsilon}$ : | [màlî: | ǹdâ:] | kàndǒw, |  |
| now | [Mali | here] | now, |  |
| [hállù | лǎ: |  | $\varnothing=$ yé | lè] |
| [even | mea |  | -Pfv-3SgSbj=if | f too |

[ú wà $\rightarrow$ [yè̀l̀̀ [nǎ: jâ:]] gè-gé:-d-ì
[2Sg QuotSbj] [come.Chain [meal eat.Impt]] Augm-say-Ipfv-3P1Sbj,
B: 'They don't say a word. They go and they come like that. Now here in Mali nowadays, even if the meal has come out (=has been served), they (=Malians) will say "hey you, come and eat!",
['come eat a meal!', direct chain with \{L\}-toned 'come' and imperative, §15.1.10.3, likewise 'come drink tea!’ below]

00:45


B: 'If they (Malians) have put tea up on (the burner) too, they'll say "come and drink some tea!" Everything that they (=Malians) do, that doesn't exist in Burkina now.'
[direct quotation of imperative]
00:50

| B: ${ }^{\text {u }}=$ ¢́ | ìgù | wó-yyà = yè | lè, |  |
| :---: | :---: | :---: | :---: | :---: |
| B: $2 \mathrm{Sg}=\mathrm{Acc}$ | know | be-3P1Sbj=if | too, |  |
| [ìnnè-ท́ | gìnè] | kó-njì: | yěn | $b e ̀:-d-i ̀$, |
| [not.know-LogoSbj | like] | DiscDeft-like | thus | remain-Ipfv-3PlSbj, |

B: 'Even if they know you-Sg, they remain (=behave) as though they don't know (you).'
['as though' manner adverbial clause, §15.3.2.2]
00:53 A: nर̂. [kô: lè] gènd-ù-ý=yò,
A: now [NearDist too] look.at-Pfv-2SgSbj=if
kô: nê: [ìnjú lè] kìdè ${ }^{\mathrm{L}}{ }_{-}{ }^{\mathrm{HL}}$ dígè $=\grave{\eta}$, NearDist now [what? Inst] thing ${ }^{\mathrm{L}}$ - ${ }^{\mathrm{HL}}$ follow=it.is

A: 'Now, regarding that, what is their activity (behavior)?'

00:57
$\mathrm{B}:$ bon, [kô: gày] [mí gày] nê:
B: well, [NearDist Topic] [1Sg Topic] now yò $w-y o ́ w=\grave{j} \quad$ gì-ý $\quad b \dot{\varepsilon}:-r i ̀-\eta ́, ~$ bad-bad=it.is say-Chain get-FutNeg-1SgSbj,
 bad-bad=it.is.not-3SgSbj say-Chain get-IpfvNeg-1 $\mathrm{SgSbj}=\mathrm{it} . i s . n o t=i f$,

B: 'Well, as for that, as for me now, I can't say that it is (out of) nastiness, but I can't say that it is not (out of) nastiness either.'
[bè:-rì-ŋ́future negative of bèlé 'get' or 'can VP']

01:02 B: kô: nê: [jígù bè-mò], [mó nì gày],
B: NearDist now [character 3Pl-Poss], [1SgPoss Loc Topic]
[jìgù ${ }^{\mathrm{L}}$ sê: $\left.=n a ̆:\right]$ gìnè] wò- $\varnothing$, [[character ${ }^{\mathrm{L}}$ good=it.is.not] like] be-3SgSbj,

| A: $̀$ | è $\rightarrow$ | donc | [[gándà | bè-mゝ̀ | ${ }^{\text {j }}$ jigì $]=$ ̀̀ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A: y | yes | so | [[country | 3Pl-Poss] | ${ }_{\text {L }}$ character] $=$ it.is |  |
| B: [L | [[gándà | bè-mò |  | $\left.{ }^{\mathrm{L}} \text { jigì }\right]=\grave{y}$ |  |  |
| B: [[] | [[country | $3 \mathrm{Pl}-\mathrm{Po}$ |  | ${ }^{\text {L }}$ character | it.is |  |
| [ǹdé | wôy] | [gándà | wôy] | [jígù | wò-mゝ̀] | $s \grave{\varepsilon}-\varnothing$ |
| [person | all] | [country | all] | [character | 3Sg-Poss] | have-3SgSbj |
| [gándà | Wô | y] [jígù |  |  | $s \varepsilon$ - $\varnothing$ |  |
| [country | $y ~ a l l] ~$ | [charac |  | Poss] | have-3SgSbj |  |

B: 'So their (Burkina people's) character, in my opinion, it's a somewhat bad character.'

A: 'So, it's the character of their country.'
B: 'It's the character of their country. Everybody, each country has its character. Each country has its character.'

| A: | [kó-njì: | lè] | kìdé |  | kán-i | -ì $\varnothing$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [DiscDef-like | e too] | thing |  | do-P | Pfv-3S |  |
| B: | [kó-nji: | lè] | kìdé |  | kán-i | -ì- $\varnothing$ |  |
| B: | [DiscDef-like | too] | thing |  | do-P | Pfv-3S |  |
| A: | $n \hat{\varepsilon}$ : bě: $k$ | kó-rà: | $n \hat{\varepsilon}$ : | yû: |  | wàlà-d | mà $\rightarrow$, |
| A: | now 3Pl N | NearDist-Loc |  | millet |  | do.farm | Q, |
| mà $\rightarrow$ | bě:, bě: | [Walu |  | $b$ è-m |  |  |  |
| or | 3P1, 3P1 |  | rk(n) | $3 \mathrm{Pl}-\mathrm{P}$ | oss], |  |  |
| [wàlù ${ }^{\text {L }}$ | yògó] | gà:rà |  | kán- |  |  |  |
| [work ${ }^{\text {L }}$ | which?] | ?] mostly |  | do-Ip | fv-3P | P1Sbj |  |

A: 'It (=country) does things like that.'
B: 'It does things like that.'
A: 'Now, do they do farming ("cultivate millet") there? Or their work, which (type of) work do they mostly do?'
["cultivate millet" can mean 'do farming' more generally, cf. yù:-[wálù-nè] 'farmer', lit. "millet-cultivator," so A's question is ambiguous, as B's reply (below) implies; double mà $\rightarrow$ in two-part question, §13.2.1.2]

| B: yé-rà: | lè $\rightarrow$, yû: | wà:lá-d-ì | mais $\rightarrow$, |
| :--- | :--- | :--- | :--- |
| B: DiscDef-Loc | too, millet | Augm.do.farming-Ipfv-3PlSbj | but, |

yû: tén $\rightarrow$ jǎ: [bé-mò rà:] gǎ:w wò-ló- $\varnothing$ millet exactly take [3Pl-Poss Loc] a.lot be-StatNeg-3SgSbj sàmèmmè-ḿbè $\rightarrow$, [árà-mbè lè] gà:lદ̌y-gà:ľ̌y wà:lá-d-ì, maize-Pl [rice-Pl and] a.little-a.little Augm.do.farming-Ipfv-3P1Sbj lă: = yè [wálù bè-mò] bàrâ: , it.is.not=if [work(n) 3Pl-Poss] additionally, [[sàdìnè ${ }^{\text {L }}{ }^{H L}$ kúndò] bè-mò] gǎ:w wò-ló- $\varnothing$, [[garden ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ put] 3Pl-Poss] a.lot be-StatNeg-3SgSbj, [[sàdì̀غ̀ ${ }^{\text {L_HL }}$ kúndò] bè-mò] gǎ:w wò-ló- $\varnothing$, [[garden ${ }^{\text {L }}$ HL put] 3Pl-Poss] a.lot be-StatNeg-3SgSbj,

B: 'They do farming there but there isn't much millet as such in their (country). They grow a little maize and rice. (As for) their work other than that, there isn't a lot of their (vegetable) gardening. There isn't a lot of their (vegetable) gardening.'
[wà:lá-d-ì augmented imperfective answering a polar interrogative, §13.1.2.3; tén $\rightarrow$ 'exactly', §8.4.3.1; plural -mbè in conjunction or list, §7.1.3; sàdìnè ${ }^{L}{ }_{-}^{H L}$ kúndò "gardenputting, " i.e. growing vegetables and fruits]

01:34 A: nê: jàbá -
A: now onion -
B: kô: = lǎ: = yè
B: NearDist=it.is.not=if
bě: [ह́m-mゝ̀=̀̀ ǹdâ:] [[wálù bé kàn-jò=̀̀] gìnè]
$3 \mathrm{Pl} \quad[1 \mathrm{Pl}-\mathrm{Poss}=\mathrm{Def}$ here] [[work(n) 3PlSbj do-Ipfv.Ppl=Def] like]
[[ह́mmè kàn-jò=ò] gìnè]
[[1PlSbj do-Ipfv.Ppl=Def] like]
yé-rà: kánà-n-nì,
DiscDef-Loc do-IpfvNeg-3P1Sbj,
A: 'Now onions-.'
B: 'Other than that, (as for) the way they (in Burkina) and (we) here in our country do work, they don't do (that) there.'

01:38 B: yé-rà: jàbà-ḿnbè [[ìdâ: ह́mmè kùndò-dj̀=ò] gìnè],
B: DiscDef-Loc onion-Pl [[here 1PlSbj put-Ipfv.Ppl=Def] like] jàbà-ḿbè sàdínè [kàndò ngó] dầy $\rightarrow$ kùnd-ì-yà = yô: , onion-Pl garden [now Prox] a.little put-Pfv-3Pl=if, [ह́mmè ndâ:], mèlǒn-mbè $\rightarrow$ kònkǒn, [1Pl here], melon-Pl, cucumber, kòr-î:-mbè kòr-ì-yà =yê: yàlù ${ }^{\mathrm{L}}$ kán-j̀̀ $=\grave{j}$ gìǹ̀, fenced.garden-child-Pl fence.in-Pfv-3PlSbj=if place ${ }^{\mathrm{L}}$ do-Ipfv.Ppl=Ded like, kú-rà: kó-njì: dằy-dày-dày kó-njì: kǎ:n-j-ì, DiscDef-Loc DiscDef-like a.little NearDist-like Augm.do-Ipfv-3Pl

B: 'They do a little gardening and onion (growing) there, like the way we here do it. Here (in Mali), like where they have built small fenced-off gardens (for) onions, melons, and cucumbers, there (Burkina) they do like that a little bit.'



A: 'Now what they have said (is), well, in their (country), even the women go into the bush, gather firewood, and carry their child on their back, they can do all that. In our (country) - '
[nغ̀ after chaining form, here in a headless perfective object relative, compare the same construction in 'since' clauses, §15.2.1.7]

02:06 B: ǹdâ: [ह́mmè ǹ̀dâ:]
B: here [1Pl here] [yà:-nà ${ }^{\mathrm{L}}$ gìdên ág-ù bě:-jè] wò-ló- $\varnothing$, [woman- $\mathrm{Sg}^{\mathrm{L}}$ handlebar catch-Chain Augm.get-Ipfv.Ppl] be-StatNeg-3SgSbj

B: 'Here in our country (Mali), there is no woman who can hold onto the handlebars.'
[imperfective particle §14.2.2.1]

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02:08 A: [nây-gù wò-\varnothing] n\hat{\varepsilon}: [nây-gù woे-\varnothing],
    A: [difficult-Link be-3SgSbj] now [difficult-Link be-3SgSbj],
    n\hat{\varepsilon:}\quad[gándà \grave{m-mò]-}
    now [country 1Pl-Poss]-
```

    B: [[bé-mò=̀ rà:] lè] \([[\varepsilon ́ m-m o ̀=\grave{o}\) rà:] lè]
    B: [[3Pl-Poss=Def Loc] and] [[1Pl-Poss=Def Loc] and]
    [[bé-mò=ò rà:] nàn=lă:
    [[3Pl-Poss=Def Loc] difficult=it.is.not.Q
    A: 'It's difficult, now, it's difficult. Now in our country-'
    B: ‘(Between) their (country) and ours, is not theirs (more) difficult?’
    [gù in adjectival predicate, (337b) in §11.4; final L-tone in này \(=\) lă:: is that of the
    polar interrogative, cf. declarative nàm \(=\) lă:- \(\varnothing\) 'it is not difficult']
    02:11 A: wǎy-wày [[[gándà $\quad$ èm-mò=ò] $\quad{ }^{\text {L }}$ jigù $\left.]=l a ̆: ~-\varnothing\right] ~$
A: yes-yes [[[country 1Pl-Poss=Def] Lcharacter]=it.is.not-3SgSbj]
${ }^{\mathrm{L}}$ sà:bù] lè
${ }^{\text {L }}$ reason] Inst
B: hállè, ề: , [àndá wôy] [jígù wò-m̀̀] s $\grave{-}-\varnothing$,
B: even, yes, [village all] [character 3Sg-Poss] have-3SgSbj,
ê: , kô: $\quad w o ̀=1 ́ l$
yes, NearDist $\quad 3 \mathrm{Sg}=\mathrm{it}$. is
A: 'Yes, yes. Because it is not the (same) character as our country.'
B: 'Even, yes, every village has its (own) character. Yes, that is it.'
02:16 A: háyà [gándà bè-mò=ò] nâp-gù wò- $\varnothing$
A: well [country 3Pl-Poss=Def] difficult be-3SgSbj
A: 'Well, their country is difficult.'

## Text 03: Where's the blacksmith when you need him?

recording DS 10, taped in Wendegele June 2014
00:01 B: nê: írì-mbè [[ándà èm-mò] nì],
B: now blacksmith-Pl [[village 1Pl-Poss] Loc],
[ìnjí lè] jǎ: wò-yyà
[what? Dat] Purp be-3PlSbj
$\mathrm{A}:[[a ́ n d a \quad$ èm-mı̀] nì] gènd-ì-ý=yò
A: [[village 1Pl-Poss] Loc] look.at-Pfv-2SgSbj=if
[ह́mmè gày] ह́mmè gò-é- $\varnothing ~ l e ̀, ~$
[1Pl Topic] 1 Pl exit-Pfv-3SgSbj.Ppl Loc,
nê: írì-nè, wó [ìrì-nè túrù] = ̀̀,
now blacksmith-Sg, 3 Sg [blacksmith one]=it.is,
àmbà sá: kànà,
God protection do.Imprt,
B: 'Now, in our village, why are blacksmiths there?'
A: Concerning our village, as for us, (where) we have emerged (=were born), a blacksmith now, he is (just) one blacksmith, may God save (him)'
[gènd-ì-ý=yò < gènd-ì-w =yò 'if you looked at', i.e. 'concerning, with respect to', also pronounced gènd-ù-w = yò etc.; gò-é- $\varnothing$ perfective pseudo-participle]

00:10 A: [wó lè] [wà:gùrù ${ }^{\text {L }}$ gàmbǎn] bè-bé:-dè- $\varnothing$,
A: [3Sg too] [time ${ }^{\mathrm{L}}$ certain] Augm-stay-Ipfv-3SgSbj,
 [time ${ }^{\mathrm{L}}$ certain] here stay-IpfvNeg-3SgSbj,

A: 'He (=blacksmith) sometimes does stay (in our village), some (other) times he doesn't stay here.'
[gàmbăy §6.3.2; augmented (reduplicated) imperfective for verb focus (allowed in the positive only)]

00:13 A: kó=lǎ: = yè, $\quad$ Émmè írì-nè sè-lı̀- $\eta$,
A: DiscDef=it.is.not=if, 1 Pl blacksmith-Sg have-StatNeg-1PlSbj,
B : írì-nè $\quad s \grave{\varepsilon}-l \grave{\varepsilon}-\eta$,
B: blacksmith have-StatNeg-1PlSbj,


A: 'Other than that, we have no blacksmith.'
B: 'We have no blacksmith. So now, what has happened to make us not have a blacksmith?'
["if it isn't that" = 'otherwise, anyhow'; gè: filler §15.2.4; periphrastic causative §15.2.1.5]

00:20 A: áywà, írì-nè-mbè $\rightarrow$,
A: well, blacksmith-Sg-Pl,

| bé | àbádà | by̌: | dìmb-ì-yà | má $\rightarrow$ | ìnné- $\eta$, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 Pl | always | kin | follow-Pfv-3PlSbj | or | not.know-1SgSbj, |



A: 'Well, blacksmiths, they have always followed (=stayed with) kin, or I don't know (what). So here now, they aren't all that numerous. For (that) reason now, he alone cannot come alone (to the village) and stay very long.'
[L-toned form of túrù 'one' in the sense 'alone, by oneself']
00:28
A: [[kó-njì: wô:] nì] bì-y- $\varnothing=y o ̂:$
A: [[DiscDef-like be.Ppl] Loc] stay-Pfv-3SgSbj=if

| [jùgù | túrù $]$ | mà $\rightarrow$ | kàn-ì- $\varnothing=y \hat{O}:$, |
| :--- | :--- | :--- | :--- |
| [week | one] | or | do-Pfv- $3 \operatorname{SgSbj}=$ if, |

ígèlè yé-rà: bòl-ì- $\varnothing=y o ̂:$,
again DiscDef-Loc go-Pfv-3SgSbj=if,
モ́mmè kàndǒw kǒn mà $\rightarrow$,
1Pl now daba or,
ínè mmà $\rightarrow \quad$ há:jè $\quad b \grave{\varepsilon} l-\grave{\varepsilon}-\eta ́=j o ̀$,
pick-hoe or need(n) get-Pfv-1P1Sbj=if,
kàndǒw bànjà:rá-mbè $\rightarrow$ púròlù-mbè $\rightarrow \quad$ sìngánùmà-mbè $\rightarrow$
now Bandiagara-Pl, Poroli(village)-Pl Sinkarama(village)-Pl
kó-rà: bòl-á:-nì, ínè pégè-rè-dì-mbè, NearDist-Loc go-Ant-Nonpast, pick-hoe attach.blade-Tr-Ipfv.Ppl-Pl,

A: 'If he ramains that way, or if he does (=spends) a week, if he then goes (away) there, if we now need a daba (=hoe) or a pick-hoe (for planting), now (places like) Bandiagara, Poroli, (or) Sinkarama, (we) will go there and have the pick-hoe (blade) fitted (to a wooden handle).'
[plural mbè, often with "intonational" prolongation, is used in extended lists; wooden shafts are punctured at the business end so a prong behind the ax or hoe blade is inserted, or else the blade has a sleeve that fits over the end of the shaft]


A: 'If you-Sg need a daba, you'll go over there and buy (one). We all are doing (=acting) like that.'

ou.bien ándò $=\grave{\jmath} \quad$ ìbè-lé wò- $\varnothing$, or.else village=$=$ Def want-StatNeg be-3SgSbj,

B: 'Now we keep going there (other villages) and buying (tools). (As for) blacksmiths here, (given) that recently he (=a blacksmith) hasn't stayed (very long), is it that he doesn't get the thing that he works on (=the jobs he does)? Or is it that he doesn't like the village?'
[nonsubject relative clause based on recent perfect construction with 'arrive' §10.2.1.5]

00:50 A: áywà, [ngò-ná: gày] gènd-ì-ý = yò,
A: well [that.fellow Topic] look.at-Pfv-2SgSbj=if, [[wálù gă:w kán-à:] nàmà-lá- $\varnothing]$ gínè wò- $\varnothing$, [[work(n) much do-PastAnt] want-StatNeg-3SgSbj] like be-3SgSbj, [mó=ì̀ gà] wò- $\varnothing$, [1SgPoss=Loc Top] be-3SgSbj,

A: 'Well, regarding that fellow, it appears that he doesn't want to work a lot, in my (view).'
[mó= ǹ 'in mine', slightly contracted from mô: 'mine' and locative postposition nì ]
00:54 A: kó=lǎ:=yò,
A: DiscDef=it.is.not=if,
[[ándà èm-mò] nì] tén $\rightarrow$ [ìrì-ǹ̀ túrù]
[[village 1Pl-Poss] Loc] exactly [blacksmith-Sg one]
[wálù èm-mò] kán-ì bèlé-èlè- $\varnothing$,
[work(n) 1Pl-Poss] do-Chain get-IpfvNeg-3SgSbj,
kó-njì: kìdé kán-ì-Ø,
DiscDef-like thing be.done-Pfv-3SgSbj
A: 'Otherwise, in our village specifically, one blacksmith cannot do (all) our work. That's how the thing happens.'

01:01


| 01:08 A: fó: | bànjà:rá, | mà $\rightarrow$ | púròlù, | sìngánùmà, |
| :---: | :--- | :--- | :--- | :--- |
| A: all.the.way | Bandiagara | or | Poroli, | Sinkarama, |
| kú-rà: | bòló-bòlò, |  |  |  |
| DiscDef-Loc | go-go, |  |  |  |


| [írì-nè | ngó-nì: | $\begin{aligned} & \text { yó }=\grave{o}-\varnothing] \\ & \text { Exist=be. } 3 \mathrm{SgSbj}] \end{aligned}$ |  | $\begin{aligned} & \text { bìl-è- } \varnothing=y o ̂: ~, ~ \\ & \text { turn-Pfv-3SgSbj=if, } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| [blacksmith-S | Sg like.that |  |  |  |
| [tóròlo | غ̀m-mò] | gàmbìl-દ́:-dè- $\varnothing$, |  |  |
| [bother(n) | 1Pl-Poss] | reduce-MP-Ipfv-3SgSbj, |  |  |
| ŋ̀gó-nì: | bèrǔ: | [wálù | èm-mò] | kánà, |
| like.that | nearby | [work(n) | 1Pl-Poss] | be.done.Imprt, |
| [wálù | غ̀m-mゝ] | yô: | $b \varepsilon ̌:-j \dot{c}-\varnothing$, |  |
| [work(n) | 1Pl-Poss] | enter | Augm.get-Ip | 3 SgSbj |

A: 'All the way to Bandiagara, or Poroli, (or) Sinkarama, (we are) going there over and over again. If it turns (out) that a blacksmith is there in that situation, our (annoying) problem is lessened. May our work be done nearby ( $=$ in our village) in that way. Our work can come in (=be done here).'

| 01:20 | A: wó <br> A: 3 Sg | ndâ: <br> here | $\begin{array}{ll} b \grave{\varepsilon}:-d i ́ & y a ̀ ~ \\ \text { stay-VblN } & \text { ac } \end{array}$ | yàbé- $\grave{l} l$-̀ $\varnothing$ accept-IpfvNeg-3SgSbj |
| :---: | :---: | :---: | :---: | :---: |
|  | B: $n \hat{\varepsilon}$ : | írì-nè | wó, ǹjé-mbè | dùbò-dè- $\varnothing$ |
|  | B: now | blacksmith-Sg | 3 Sg , what?-Pl | forge-Ipfv-3SgSbj |
|  | A: 'He w | 't agree to stay | (in the village).' |  |
|  | B: 'Now, | blacksmith, wher | (things) does he | forge?' |
|  | [< bè:-d | aying' (verbal |  |  |

01:24 A: wó gènd-ì-ý=yò,
A: $3 \mathrm{Sg} \quad$ look.at-Pfv-2SgSbj=if, [ìnè tòy-tóy] kó=ò, [pick.hoe sow-sow] DiscDef=Def, nê: [wálù wò-mò], gàmbǎy, now [work(n) 3Sg-Poss], sometimes, over.there do-Ipfv-3SgSbj,

A: 'Regarding him, he forges dabas (=hoes). There are (also) sowing pick-hoes, axes, short pick-hoes. Now he sometimes does his work over there (still inside the village).'


B: 'Now, there aren't many other jobs that he has in mind (=is willing) to do?'
A: 'As for you-Sg, right now, concerning pick-hoes, dabas (hoes), and short pickhoes to be forged, if you tell him to attach the blade (to a wooden shaft) and give (it to you), things that need fitting, that's his work, he has gone there.'

01:44 B: nê: wó jànjírù-mbè $\rightarrow$ nàyá-mbè $\rightarrow$ [yû: wàlá-d=ò: mò], B: now 3Sg donkey-Pl cow-Pl [millet cultivate-Ipfv.Ppl=Def Poss], sàrí: = gò [yû: wàlá- $d=$ ò:], plow(n)=Def $\quad[$ millet cultivate-Ipfv. $\mathrm{Ppl}=\mathrm{Def}]$, wó kú=g̀̀ dùb-ú bèléèllè- $\varnothing \quad$ mà $\rightarrow$ 3Sg DiscDef=Def forge-Chain get-IpfvNeg-3SgSbj Q

B: 'Now he, (for) donkeys and cows (=oxen), the thing of when (one) cultivates millet, the plow, can he forge that?'

01:50 A: áywà, wó dùbó bě:jè- Ø [yàgá lè], A: well, 3 Sg forge(v) Augm.get-Ipfv-3SgSbj [other also] [ह́m-mò rà:] gènd-ì-ý=yò [gándà èm-mò=̀̀], [1Pl-Poss Loc] look.at-Pfv-2SgSbj=if [land 1Pl-Poss=Def] bon, hállù táy dăy-dày kán-ì- $\varnothing$, well, even earth little-little be.done-Pfv-3SgSbj, nê: dî: bàlú jă:-d-ì, now water gather-Chain take-Ipfv-3PISbj, [sá:bì lè] pògòlǒn kánà-kánà, [reason Inst] dike.ridge make-make,

A: 'Well, he can forge (plows) too. Regarding our land, a little soil happens (to be there), (rain)water just collects it (and washes it away). That's why (we) keep making dike ridges (in the fields).
[adverbial dăy-dày < dăy 'small'; dî: 'water' treated as plural]
01:57

| A: [kàndǒw <br> A: [now | íyè] today] |  | $j i:$ Def-like | [sàrí: <br> [plow(n) | lè] Inst] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| yàlư ${ }^{\text {L }}$ yû: | wàlà-dú, |  |  |  |  |
| place ${ }^{\text {L }}$ millet | cultivate-VblN, |  |  |  |  |
| [ògùl $=0$ : | nì] | $n \hat{\varepsilon}$ : | yàlú | Émmè | yěg |
| [the.bush=Def | Loc] | now | place | 1Pl | thus |
| yègèr-â: | -lè-1́ |  |  |  |  |
| ir-PastAnt | have-StatN |  |  |  |  |

Neg-IPISbj
A: 'These days, in that way, a place to cultivate millet with a plow, out in the bush now, we have not (been able to) repair places (=fields with dikes) like that.'
[a plow would damage the earthen dike-ridges that are shaped to hold rainwater in the fields]

02:03
A: táy yó=ò [yàgá lè], A: earth Exist=Def [other too], [èmmè fú $\rightarrow$ ] gìd-á:-gìd-á: kánà-W sè- $\eta$, [1Pl all] dam.up-Link-dam.up do-Prf have-1PlSbj, kànď̌w émmè [nùmó lè] yû: wàlá-ẁ sè now 1 Pl [hand Inst] millet cultivate-Prf have-1PlSbj,

A: ‘There is also some land (where) all of us have been damming up (=constructing dikes). Now we have been cultivating millet by hand (=with hand-held hoes).
[< gid-ध́: (mediopassive in form) 'dam up', also 'trap, box in']

02:10 B: [sàrî: lè] wàl-i-yà = yê: nànáy
B: [plow(n) Inst] cultivate-Pfv-3P1Sbj=if all
dî:
bàl-ú
jà:-dè- $\varnothing$
water gather-Chain take-Ipfv-3SgSbj
B: 'If they have cultivated with a plow, then (rain-)water will gather up and take (away) (the earth)?
['all' as right-edge marker of conditional antecedent]
02:12 A: dî: bàl-ú jà:-dè- Ø,
A: water gather-Chain take-Ipfv- 3 SgSbj ,
[sàrî: lè] wàlà-dú bǎ: [plow(n) Inst] cultivate-VblN all.the.way.from [tày ${ }^{\mathrm{L}}$ wáyà] émmè $\quad$ è-lè-1́ [land ${ }^{\mathrm{L}}$ wide] 1Pl have-StatNeg-1P1Sbj

A: '(Rain-)water will gather up and take (away) (the earth). As a result of cultivating with a plow, we don't (=wouldn't) have a wide plot (to farm).'

## Text 04: Squirrel and hare (tale)

recording DS 03, taped in Wendegele June 2014

| 00:00 | A: à: <br> A: ah | ígè̀ľ <br> again | kàndǒw now | [ [[kê: ${ }^{n}$ <br> [[[squirrel | lè] and] | [jòmó [hare | lè $] 7$ <br> and]] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\text {kù:] }}$ | nè] | kùnd-ù-ŋ, |  |  |  |  |
|  | head] | Loc] | put-Pfv-1S |  |  |  |  |



A: 'Now squirrel, if he has taken possession of something, he doesn't give it (to anyone) at all. Now hare too, it has never happened that a person (=anyone else) kept anything of his (=hare's) and he (=hare) went away and left him alone.'
[experiential perfect negative in sense 'has never VPed']

| 00:16 | A: háyà <br> A: well |  | $\begin{aligned} & \text { [bé } \\ & \text { [3P1 } \end{aligned}$ | $11 \grave{~}$ <br> two | wòy] <br> all] | kó-njì: <br> DiscDef-like |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ne: |  | bè-èlé-n |  |  | lè, |
|  | now |  | ve-IpfvN | eg.Ppl-Sg |  | and, |
|  | yàb-â: |  |  | $\grave{\varepsilon}-\varnothing=y \hat{O}$ |  | pádè-èlé-n |
|  | receive-Pas | tAnt |  | Pfv-3SgS |  | leave-Ipfv.Ppl-Sg |
|  | [bé | 11 غ̀ |  |  | ùr-ì-y, |  |
|  | [3P1 | two | all] |  | out.to | meet-MP.Pfv-3Sg |

A: 'Well, the two of them (are) like that. Now the one who doesn't give, and the one who doesn't leave alone someone who has kept (something of his), the two of them went out to meet each other.'

| 00:22 | A: háyà <br> A: well | yěg <br> thus | $\begin{aligned} & \text { bì-y- } \varnothing=y \hat{o}: \\ & \text { stay-Pfv-3SgSbj=if } \end{aligned}$ | $\left[k \hat{e}:^{n}\right.$ <br> [squirrel | gày] <br> Topic |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ró $=\grave{j}$ | [[jòmó | mò] nì] | yàb-ì- $\varnothing$ |  |
|  | credit( n ) $=$ Def | [[hare | Poss] Loc] | receive-P | 3 SgSbj |

A: 'Well, when things were like that, as for squirrel, he took a loan from hare.'
00:26
A: jว̀mó [kìdé
wò-mò] yàb-á:-nì
gè: ,
A: hare, [thing 3Sg-Poss] receive-Ant-Nonpast (filler),
[kígùlù-m-à
yàbà-lí- $\varnothing$ ]
wò-nì]
[return-Caus-PastAnt
receive-PfvNeg-3SgSbj] be-Ipfv]
pádè-غ̀lè- $\varnothing$,
leave-IpfvNeg-3SgSbj,
A: 'Hare would not leave (squirrel) alone after receiving (something of hare's), without him (=hare) getting it back.'
[3Sg yàbà-lí- $\varnothing$ agrees with 'hare', while the following wò-nì is invariant; $1 S g$ version would be kígùlù-m-à: yàbà-lì-ŋ́] wò-nì ]
00:29
A: $\left[k \hat{e}:^{n}\right.$
lè] [[ǹdé
m̀]
nì]
A: [squirrel
yàb-â:
receive-PastAnt
[kó-nji:
too] [[person
Poss] Loc]
$b \grave{\varepsilon}-\grave{\varepsilon}-\varnothing=y$ ô: , yàgá óbè-̇lè $-\varnothing$,
get-Prf-3SgSbj=if, again give-IpfvNeg-3SgSbj,
[DiscDef-like
lè] kìdé kàn-ì- $\varnothing$,

A: 'Squirrel too, if he has gotten (something) from someone, he doesn't give it back again. (The) thing was done like that too.'

00:32 A: nê: $\quad\left[b a ̀ y ~{ }_{\mathrm{L}}^{\mathrm{L}} \quad\right.$ túrù $=$ g̀̀ $]$
A: now [day ${ }^{\mathrm{L}}$ one=Def]
[[jòmó mò] rà̀:] [kidé wò-mò] dímbò-W yèl-غ̀- $\varnothing$, [[hare Poss] Loc] [thing 3Sg-Poss] follow.Stat-Ipfv.Past come-Pfv-3SgSbj A: 'Now one day, hare came following up on his thing (=what he had loaned).' [cf. stative yé dìmbè 'be following, in pursuit']


A: 'Well, squirrel said that he (=squirrel) couldn't give his (=hare's) thing (back). (Hare) said that as long as he (=squirrel) hadn't given (it back), he (=squirrel) would have no peace.'
[logophoric subject of quoted clause]

| 00:40 | A: yěn | [kánà-w]-[kánà-w], | kán-à: | d-ì-yà, |
| :---: | :---: | :---: | :---: | :---: |
|  | A: thus | [do-Ipfv.Past]-[do-Ipfv.Past], | do-PastAnt | get.tired-Pfv-3PIS |
|  | 'ó = $\quad$ \% | sògònji ${ }^{\text {L }}$ nànnà-dú] | wò-ló- $\varnothing$ |  |
|  | Sg=Acc | manner ${ }^{\text {L }}$ expel-VblN] | be-StatN | SgSbj |

A: 'They kept on doing like that until they got tired (=for a very long time). There was no way for him (=squirrel) to get rid of him (=hare).'
[verbal noun in 'a/no way to $V P$ ', §15.3.2.1]
00:44 A: wó kàn-ì- $\varnothing=$ lă: $=$ yè,
A: 3 Sg be.done-Pfv- $3 \mathrm{SgSbj}=\mathrm{it} . \mathrm{is} . n o t=\mathrm{if}$,
háyà íyè [wó wà] [bólò wà], well, today [3Sg QuotSbj] [go.Imprt Quot], jòmó njèmé dégè-dègè dènn-á:-nù, hare Logo a.little-a.little look.for-Ant-Nonpast, wó-mò wó=ங́ jǎ: yह́-jè-ŋ̀ wà, 3Sg-Poss 3Sg=Acc take come-Ipfv-LogoSbj Quot,

A: ‘That being the situation, anyway (squirrel) said, "hey you, go away!" Hare said that he (=hare) would try to bring (=recover) his thing a little at a time.'

| 00:50 | A: | $k e{ }^{\text {. }}{ }^{\text {a }}$ | ̀̀gó-njì: | [dòlú | $n \grave{\varepsilon}]$ | gǒ:- $\eta$ | tòl-غ̀- $\varnothing$, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A: | squirrel | like.this | [drainhole | Loc] | exit(v)-Comp | begin-Pfv-3SgSbj, |
|  | jòmó | yèl-â: |  | wó-mò | dúlò | ág-ì- $\varnothing$, |  |
|  | hare | come- | astAnt | 3Sg-Poss | tail | catch-Pfv-3S |  |

A: 'At that point squirrel began to leave through the drainhole. Hare came and grabbed him by the tail.'
['begin' construction §17.4.3]

00:55 A: dúlò ág-à:,
A: tail catch-PastAnt,

| háyà | [Wó | wà] | [íyè | gàl-ì- $\varnothing=y$ ê:], |
| :---: | :---: | :---: | :---: | :---: |
| well, | [3Sg | QuotSbj] | [today | pass-Pfv-3SgSbj=if], |
| yàgá | yèlé-̇̀lè- $\varnothing$ |  |  | $g \grave{~}$ |
| again | come-IpfvNeg-3SgSbj |  |  | say |
| [wó | wà] | yà:rá |  | $g-i ̀-y$, |
| [3Sg | QuotSbj] | release. |  | say-Pfv-3SgSbj, |

A: 'After he grabbed him by the tail, (squirrel) said "well, you, after today, you will not come back.' (Squirrel) said: "you, let go!",

00:59 A: yà:ré-દ̀lè-ท
A: release-IpfvNeg-LogoSbj

## $g-i ̀-y$,

say-Pfv-3SgSbj, jìmb-â: tán-tàn pull-PastAnt holding.firmly Augm-hold.Stat

A: '(Hare) said, "I won't let go!" He pulled hard (on the tail) to hold (squirrel) in place.'

01:01
A: 3Sg [today
gà̀lì- $\varnothing=y$ ê: $]$
A. 3 Sg [today pass-Pfv-3SgSbj=if]
$y \varepsilon ̀ l \varepsilon ́-\grave{\varepsilon} l \grave{\varepsilon}-\varnothing \quad g \grave{\varepsilon}$, again credit-ask come-IpfvNeg-3SgSbj say,

A: '(Hare) said, "you, after today, you won't again come in order to ask about a loan.",
[purposive with $\{L\}-\{H L\}$ overlays]

| 01:04 | A: [Wó | wà] | yà:rá | $g-i ̀-\grave{y}$, |
| :---: | :---: | :---: | :---: | :---: |
|  | A: $[3 \mathrm{Sg}$ | QuotSbj] | release.Imprt | say-Pfv-3SgSbj |
|  | yà:ré-દ̇l̇̀- $\eta$ |  | $g-i ̀-\grave{y}$, |  |
|  | release-IpfvN | -LogoSbj | say-Pfv-3Sg |  |
|  | A: '(Squi | said: "your | go!" (Hare) | I won't let go!" |

01:05 A: kó-njì: pírgèw-pírgèw jòmó yár-ù wó kànà,
A: DiscDef-like thrashing.around hare release-Nom 3 SgSbj do, $\begin{array}{lll}k \hat{e ́}^{n} & \text { jı̀b-â: } & \text { bòl-ì- } \varnothing, \\ \text { squirrel } & \text { run-PastAnt } & \text { go-Pfv-3SgSbj, }\end{array}$

A: 'At that point, (squirrel) was thrashing around. Hare let go, and squirrel ran away.' [wó kànà, §15.2.2.8]


A: 'When he went away, he didn't (ever) again come back and ask for a(nother) loan from hare.'

01:1

| $\begin{array}{ll} 11 & \text { A: } \\ & \text { do } \\ \text { A: } \end{array}$ | $\begin{array}{ll} \text { donc } & g \dot{\varepsilon} \\ \text { so } & \text { lo } \end{array}$ | $\begin{aligned} & -i \grave{i}-y= \\ & \text { at-Pfv } \end{aligned}$ | bj=if, |  |  | fvNeg.Ppl-Sg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $n \hat{\varepsilon}$ : | [pádè-દ̀lé-n |  | lè] | [bé | $11 \varepsilon]^{\prime}$ | ségùr-ì-yà |  |
| now [1 | [leave-Ipfy | g.Ppl- | and] | [3P1 | two] | go.out.to.mee | -MP |
| wó | kànà |  |  |  |  |  |  |
| 3 Sg | do | no |  |  |  |  |  |
| [námmà | à lè | jว̀mó | Wó |  | sàw, |  |  |
| [now | Loc] | hare | 3 SgSbj |  | wise, |  |  |

A: 'So, considering, one who doesn't give, and one who doesn't leave alone (anyone who has something of his), when they come together, nowadays, now hare is wise(r).'
[another example of wó kànà, cf. 01:05 above in this text, and §15.2.2.8; hare is depicted as a sucker in this story, but A alludes to text 01 in which hare is clever]]

01:17 A: $\frac{\text { donc }}{}$ [[[ògùlù-nàmá $\quad$ Wôy] kù:] $\left.\quad n \grave{c}\right]$
A: so [[[the.bush-meat all] head] Loc] [wó gày] námmà yà-yánà, [3Sg Topic] now Augm-be.on.top yòrú yàb-â: bèl-غ̀- $\varnothing=y e ̂: ~ y a ̀ g a ́ ~ s a ́ r e ̀-\varepsilon ̀ l \grave{\varepsilon}-\varnothing$, credit(n) accept-PastAnt get-Pfv-3SgSbj=if again pay-IpfvNeg-3SgSbj

A: 'So now he (=hare) is placed on top of all the wild animals. If he has taken out a loan, he won't pay it back.'

## Text 05: Fulbe herders

recording DS 11, taped in Wendegele June 2014

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00:00 B: \grave{gó-nì mí y\varepsiloǹl-\varepsiloń-\varnothing n\varepsiloǹ}
    B: here 1SgSbj come-Pfv-3SgSbj.Ppl since,
    púl\grave{-\eta jà-â: gă:w wà-Ẃ wò-lò-\etá,}
    Fulbe-Pl take-PastAnt many see-Ipfv be-StatNeg-1 SgSbj,
    púl\grave{-\eta=gò nê: [àndá è-mò] ìbè-n-ní wò-\varnothing mà }->
    Fulbe-Pl=Def now [village 2Pl-Poss] like-PfvNeg-3PlSbj be-3SgSbj Q
    y\grave{gó-njì: kánà wò,}
    how? be.done be-3SgSbj,
```

B: 'Since I came here, I don't see (notice) that many Fulbe. Is it that they don't like your-Pl village (Wendegele)? Or how is it?
 $g$-ì-yà say-Pfv-3PlSbj

A: 'Regarding the Fulbe in our village at this time, they (=people) say that in the old days Fulbe used to keep coming up (to us) here.'


00:16 A: púlò-ŋ-bè gènd-ì-ý=yò, [bé lè] bǒ: dìmb-ì-yà,
A: Fulbe-Pl-Pl look.at-Pfv-2SgSbj=if, [3Pl too] kin follow-MP-Pfv-3PISbj,
bé [yà̀ù ${ }^{\text {L }}$ gă:W mòl-í-yà wó=j] nì 3PISbj [place ${ }^{\mathrm{L}}$ many gather-MP-Pfv-3PISbj be.Ppl=Def Loc [úl lè] kànď̌w [ì: ${ }^{\text {L }}$ dày-ná:-dày] yí $s \grave{c}-\grave{y}=y o ̀$ [2Sg too] now [child ${ }^{\mathrm{L}}$ small-X-small] Exist have- 2 Sg Sbj=if, ú [gín dà:] b-ì-ý=yò 2 SgSbj [house Loc] remain-Pfv-2SgSbj=if [wó wà] bèlú gìré bà, [3Sg QuotSbj] animals tend go.Imprt,

A: 'Regarding the Fulbe, they too follow (=stay with) kinsmen, in places where many come together. You-Sg too, if you have a very young child now at home, (you'll) tell him to go take the livestock to pasture.'
[dày-ná:-dày §5.1.10.1; bà as general motion imperative at end of a chain, §15.1.10.4]
00:25 A: bé nànân [hánnè bé-mò] kó: = ì,

A: 3Pl entirely [preference 3Pl-Poss] NearDist=it.is,
ह́mmè $n \hat{\varepsilon}$ :, [mìnné èm-mゝ̀] lè], 1 Pl now, [field 1Pl-Poss] than], [bèlú-mbè yàlù ${ }^{\mathrm{L}}$ gìré-dò=̀̀] èdú bèrú wj̀- $\varnothing$, [animal-Pl place ${ }^{\mathrm{L}}$ graze=Ipfv.Ppl=Def] very near be-3SgSbj,

A: 'That their clear preference. As for us now, where the animals graze is near our fields.'

00:30 A: [ì: $\left.{ }^{\mathrm{L}} \quad d a \check{y} y=g \grave{j}\right] \quad$ bèlưu ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ gírè $\quad$ lè
A: [child ${ }^{\mathrm{L}}$ small=Def] animal ${ }^{\mathrm{L}}{ }^{\mathrm{HL}}$ tend( n$)$ too
[[ògùlú èm-mò] rà:] yěn nànàú wò-lò- $\varnothing$, [[the.bush 1Pl-Poss] Loc thus easy be-StatNeg-3SgSbj, kú-gò [[[Émmè yàbé-ėlè-ý] = gò sá:bù] lè ] DiscDef [[[1PlSbj accept-IpfvNeg-1P1Sbj]=Def reason] and] $\left[\left[\left[p u ́ l \grave{\jmath}-\eta=g \grave{y} \quad\left[\left[y a ̀ l \grave{u}{ }^{\mathrm{L}} \quad\right.\right.\right.\right.\right.$ núm̀̀ $\left.] \quad n \grave{\varepsilon}\right]$ [[[FFulbe-Pl=Def [[place ${ }^{\text {L }}$ hot] Loc] íbè-lè- $\varnothing]$ like-StatNeg-3SgSbj] sá:bù] lè] and ǹdâ: bè:-dú gă:W yěn yàbá-ẁ wò-ló- $\varnothing$, here remain-VblN a.lot thus accept-Ipfv be-StatNeg-3SgSbj,

A: 'It isn't easy for the (Fulbe) child to take animals to pasture in our bush (outback) like that. That's why we (Dogon) don't allow (them to tend animals near our fields), (and) why the Fulbe don't like hot (=hostile) places. They refuse to stay around here for very long.'

00:40 B: nê: púlì-ŋ [àndà yé-rà:],
B: now Fulbe-Pl [village DiscDef-Loc],
[yà̀ù ${ }^{\text {L }}$ ह́m-m̀̀ ìggó-rà: kă: $:=$ ì ] mà $\rightarrow$
[place ${ }^{\text {L }}$ 1Pl-Poss Prox.Loc only=it.is] $\quad$ Q
[[pènnè ${ }^{\text {L }}$ yòǵ́] rà:]-mbè
[[side which?] Loc]-Pl
[[yàhù ${ }^{\text {L }}$ yàgá $]$ rà:]-mbè yó =w- wà, [[place which?] Loc]-Pl Exist=be-3P1Sbj,

B: 'Now Fulbe, in some (Dogon) village of there (=that area), is it just in our places (=zone) around here? In what areas and in what places are they (=Fulbe)?'
[ ŋ̀gó-rà: 'here' more spatially diffuse than ŋ̀gó-nı, §4.4.3.1]
00:45 A: ê: , [yé-rà: gày] ògùlú púlò- $\eta$ yó=ẃ-yà gǒy,
A: yes, [DiscDef-Loc Topic] the.bush Fulbe-Pl Exist=be.3PlSbj Emph, yé-rà:
DiscDef-Loc calculation do-Pfv-2SgSbj=if, [púlj̀-nò gày] [yàlù númò] ì $\begin{gathered}\text { è-lè- } \varnothing \text {, }\end{gathered}$ [Fulbe-Sg Topic] [place hot] like-StatNeg-3SgSbj,

A: 'Yes, there sure are Fulbe there in the bush. If you calculate (=think about it), a Fulbe person doesn't like a hot (=hostile) place.'

```
00:50
    A: now DiscDef-Loc
    [párò=ò rà:] nà\etaó=ò, nànná
    [outside Loc] cow=Def, drive.away
    [[bè=ýy dàg-í-\varnothing]
    [[3Pl=Acc be.good-Pfv-3SgSbj.Ppl]
    bòl-ì-yà = yô:,
    go-Pfv-3PlSbj=if,
    t-ì-yà = yô: ,
    send-Pfv-3PlSbj-if,
    n\varepsiloǹ]
    in]
[[gòró bè-mò] rà:],
[[animal.place] 3Pl-Poss]] Loc]
[wàgùrù' }\mp@subsup{}{}{L}\mathrm{ bè={́ dàg-ú] lè
[time }\mp@subsup{}{}{\textrm{L}}\mathrm{ 3Pl=Acc be.good-Pfv.Ppl] Temp
hállù gìnègă: jă: wjo-ló-\varnothing
even rainy.season take be-StatNeg-3SgSbj,
nàn-núm\grave{ jă: wò-ló-\varnothing,}
dry.season take be-StatNeg-3SgSbj,
```

A: 'Now they will go there, they will drive the cattle out into the wilderness, at their pleasure, in their animals' (reserved) area, whenever it suits them. It doesn't even matter whether it's the rainy season or the dry season.'

00:58 B: mìnné bèrú wò-ló- $\varnothing=$ là
B : field near be-StatNeg-3SgSbj=right?
A: mìnné bèrú wò-ló- $\varnothing$
A: field near be-StatNeg
[[wàgùrùu ${ }^{\mathrm{L}}$ bè= 1 ý dàg-ú] lè] bòl-á:-nì,
[[time ${ }^{\mathrm{L}} 3 \mathrm{Pl}=$ Acc be.good-Pfv.Ppl] Temp] go-Ant-Nonpast, [nàyá bè-mò] ségèr-à: yèl-ì-yà = yô: , [cow 3Pl-Poss] go.out.to.meet come-Pfv-3PlSbj=if, [írù bè-mò] घ̀m-ì-yà = yô: , [milk 3Pl-Poss] draw.milk-Pfv-3PlSbj=if, [wálù bè-mò] kó: = ̀̀ [work)n) 3Pl-Poss] NearDist=it.is

B: 'Fields are not nearby, right?'
A: 'Fields are not nearby. They go at whatever time suits them, they go out to meet (=and bring back) their cows, they draw their milk. That is their work.'
[ = là as rhetorical tag question, §13.2.1.3]

| $01: 06 ~ \mathrm{~A}: n \hat{\varepsilon}:$ | [írù | bè-mゝ̀] | ह̀m-ì-yà=yô:, |
| :---: | :--- | :--- | :--- |
| A: now | $[\operatorname{milk}(\mathrm{n})$ | 3Pl-Poss $]$ | draw.milk-Pfv-3PlSbj=if, |
| [yògó-njì: | lè] | kàn-j-ì |  |
| $[$ how? | Inst $]$ | do-Ipfv-3P1Sbj |  |

B: 'Now when they have drawn their milk, what do they do?'


A: 'Well, when they have drawn their milk, they give (the milk) to the Fulbe woman. They (=women) go around selling (the milk) inside villages, where Dogon are.'
[bòl-bôl verb iteration with $\{L\}-\{H L\}$ tones, $\S 15.1 .11]$
01:16 A: [bú:dù lè] bèl-è- $\varnothing$, dònó-dè- $\varnothing$, gàmbǎy,
A: [money too] get-Pfv-3SgSbj, sell-Ipfv-3SgSbj, certain $\begin{array}{llll}\begin{array}{lll}\text { yû: } & \text { [mànî: } & { }^{\mathrm{L}} \text { kı̀̀̀j], } \\ \text { millet } & \text { [plastic } & { }^{\mathrm{L}} \text { interior], }\end{array} & \begin{array}{l}\text { òb-ì- } \varnothing=y \hat{o}:, \\ \text { give-Pfv-3SgSbj=if, }\end{array}\end{array}$

A: 'She sells it for cash. Sometimes, he (=Dogon) gives (her) a dry measure worth of millet (grains).'

01:21 $\mathrm{A}:$ írj̀ $=\grave{\jmath}$ ígèlè [màn̂̂: ${ }^{\mathrm{L}}$ kj̀l̀̀], mà yàb-ì- $\varnothing=y o ̂$ :
A: milk=Def again [plastic ${ }^{\mathrm{L}}$ interior], or receive- $\mathrm{Pfv}-3 \mathrm{SgSbj}=$ if kó-njì: [pàná bè-mò] dènnè-ní DiscDef-like [food 3PIPoss] look.for-Ipfv.Nonpast $n \hat{\varepsilon}: \quad$ kó-nji: $\quad$ gà $-j-i ̀$ now DiscDef-like pass-Ipfv-3PISbj

A: 'Or he (=Dogon) will also get a volume measure of the milk (in exchange). That's how they (=Fulbe) go around to look for food.'
[dènnè-ní with nonpast-time imperfective subordinator, §15.2.1.3]
01:26 B: kó-njì: nê: [pàná bè-mò] nànây
B: DiscDef-like now [food 3Pl-Poss] entirely kó-njì: tò-ǹ-ní DiscDef-like be.in-StatNeg-3PISbj

B: 'That's how they always get their food? Are they not in it like that?'
01:27 A: [púlò-ŋ gày] [pàná bè-mò] kó-njì: tò:- $\varnothing$,
A: [Fulbe-Pl Topic] [food 3Pl-Poss] DiscDef-like be.in-3SgSbj,
B: kj́-nji: tò: $\varnothing$,
B: DiscDef-like be.in-3SgSbj,
A: [kô: =lă: =yè [púl̀-ŋ]
A: [DiscDef=it.is.not=if] [Fulbe-Pl Topic] millet cultivate-VblN yěn gă: $W$ yàbá-亠̀ $\quad$ bòn-n-ní thus a.lot accept-Ipfv be-StatNeg-3PISbj

A: 'As for Fulbe, their food are in it like that.'
B: 'It's in it like that.'
A: 'Anyway, as for Fulbe, in that way they usually refuse to cultivate millet.'
01:32 B: nê: $\quad[n d \grave{\varepsilon} \quad m \grave{~ n a ̀ n a ̀ ~}]^{\mathrm{L}}$ bé $\quad$ gèl̀̀ $=$ j,
B: now [person Poss cow] ${ }^{\mathrm{L}}$ 3PlSbj hold.Stat.Ppl=Def
bàyá bè= owner $3 \mathrm{Pl}=$ Acc food Augm.give-Ipfv-3SgSbj or give-IpfvNeg-3SgSbj

B: 'Now the (Dogon) person whose cow they are in charge of, does the fellow (=the Dogon) give them (=Fulbe) food, or doesn't he give (it to them)?'
[possessor relative, §14.7.3, see also the version without mò in the following segment; augmented imperfective for verb focalization, §10.2.2.2, §13.1.2.3]

01:36 A: [áywà, [ndè nàyà] ${ }^{\mathrm{L}}$ gìró-Ẁ bé $d$-ò= ̀̀] bànâ: = gò
A: [well, [person cow] tend-Ipfv 3PlSbj arrive-Pfv.Ppl=Def] owner=Def, bànâ: [[mìnné wò-mò] nì] dàn-ì-yà = yò, owner [[field 3Sg-Poss] Loc] sit-Stat-3P1Sbj=if, nê: [júgù wôy] [tàdù-sìbè ${ }^{\mathrm{L}}$ túrù-tùrù] now [week all] [basket-layer ${ }^{\mathrm{L}}$ one-one] háyà kô: [pàná bè-mò] bà-bá:-dè- $\varnothing$, well DiscDef [food 3Pl-Poss] Augm-suffice-Ipfv-3SgSbj,

A: 'Well, the (Dogon) person whose cow(s) they are tending, the owner, if they (=Fulbe) are occupying his field (tending his cattle), now every week (they get) one basketful (of millet). Well, that is enough (for) their food.'

01:45
$\begin{array}{ll}\text { A: nê: } & o ́ b-u ̀ \\ \text { A: now } & \text { give-Chain }\end{array}$ [[mìnné wò-mò] nì] [[field 3Sg-Poss] Loc] [nàyá wò-mò] gìré-d-ì [cow 3Sg-Poss] [pàná bè-mò] [food 3Pl-Poss]
$b \varepsilon ̌:-j \grave{-}-\varnothing$,
Augm.get-Ipfv-3SgSbj, dànà-ǹ-ní, sit.Stat-StatNeg-3PlSbj, tend-Ipfv-3PlSbj take-Ant-Nonpast, dùyy-í-̀̀ bèlé- $\grave{l} l \dot{-}-\varnothing$, carry.on.head-MP-Chain get-IpfvNeg-3SgSbj, around tending his cow(s) without staying in his field, he (=owner) cannot carry their food (to them).'

01:52 A: íyè kàndǒW [nàyá ńmò]=ì mais ,
A: today now [cow 1 SgPoss $]=$ it.is but, púl̀̀-nò [kàndòw ngó] jǎ: Fulbe-Sg [now Prox] take.along [párà Lyàlù] rà:] bòl-ì- $\varnothing=$ yô: , [wilderness Lplace] Loc] go-Pfv-3SgSbj=if,

A: 'Today now it's my cow(s), but now the Fulbe person takes (it) and goes to somewhere in the wilderness.'


A: 'Me, I can't carry his food (there). I can't carry his food. I don't (i.e. can't) even ask him, "how are you?",
A: [[bày ${ }^{\mathrm{L}}$
$m i ̀=y$
dàg-ú]
lè]
A: [[day ${ }^{\mathrm{L}} 1 \mathrm{Sg}=$ Acc be.good-Pfv.Ppl] Temp]
nàyó= う̀-mbè
bòl-â:
cow=Def-Pl
go-PastAnt

| $[s \hat{\varepsilon} W$ | $w \grave{j}-y y a ̀$ | mà | gènd-ù-ń=jò, |
| :--- | :--- | :--- | :--- |
| [welfare | be-3PlSbj | Q] | look.at-Pfv-1SgSbj=if |

A: 'On the day that suits me, I will go and see whether the cows are okay.'

02:03
A: kò=
A: DiscDef=it.is

| $[b e ́$ | lè $]$ |
| :--- | :--- |
| $[3 \mathrm{Pl}$ | Loc] |


cow $=$ Def $\quad\left[\left[\right.\right.$ manner $^{\text {L }}$
dònó bě:-j-ì, sell get-Ipfv-3P1Sbj,

A: 'It's fine (this time). Otherwise, if I don't stay near them (=Fulbe), they can sell the cow as it pleases them.'

02:09
A: bé yé-rà: bòl-ì-yà = yê: gày, A: 3Pl DiscDef-Loc go-Pfv-3PlSbj=if Topic, [pàná bè-mò] [nàyá ù-mò] sè-yyà jà-á:-nì, [food 3Pl-Poss] [cow 2Sg-Poss] have-3P1Sbj take-Ant-Nonpast, [pàná bè-mò] dùyy-è:-dú] wò-ló- $\varnothing$, [food 3Pl-Poss] carry.on.head-MP-VblN be-StatNeg-3SgSbj,

A: 'If they have gone there, their food, they have your cow, there is no (way) to carry their food.'

02:15 B: nê:, [ú lè] [[ú ${ }^{\text {L mà:rù }] ~ n e ̀] ~}$
B: now, $[2 \mathrm{Sg}$ too $][[2 \mathrm{SgPoss}$ Lintention $]$ Loc] yé-rà: $\quad$ bòl-ì-yà $=$ yô:
DiscDef-Loc go-Pfv-3P1Sbj=if bé nàyó= ̀̀ dòn-ì-yà = yô: ,
3P1 cow=Def sell-Pfv-3PlSbj=if,
[ú-mò rà:] yèl-ì-yà =yô:
[2Sg-Poss Loc] come-Pfv-3P1Sbj=if
yògó-njì: bé gàmbǎn dò:nó-d-ì
how? 3P1Sbu certain Aug.sell-Ipfv-3P1Sbj
gàmbăn yím-à:-nì bě:-dè- $\varnothing=l o ̀$,
certain die-Ant-Nonpast remain-Ipfv-3SgSbj=right?,
B: 'Now, in your thinking, if they have gone there and sold the cow, then they come to your place. How is it that sometimes they have sold it, and sometimes it has actually died (of natural causes)?'

02:23

| B: bé <br> B: 3Pl | gàmbǎn certain | nàyà-dúlò-mbè cow-tail-Pl | $j a ̌:$ take | yèl-á:-nì, come-Ant-Nonpast, |
| :---: | :---: | :---: | :---: | :---: |
| nànó = j | yím-à: | wò- $\varnothing$ | $g e ̀-g \varepsilon ́:-d-i ̀ ~$ |  |
| cow=Def | die-PastAnt | be-3SgSbj | Augm-say- | pfv-3P1Sbj |
| gàmbǎy | nànà | tùmう̀ = ந́, |  |  |
| ertain | cow | similar $=$ it.is, |  |  |
| nàyá-nàyá | tùmò = ¢́ | mòlò-mòló | gǎ:W | wò- |
| cow-cow | similar=it.is | resemble-re | many | be-3SgSbj, |

B: 'They sometimes bring cow tails, and they say that the cow has died. Sometimes cows are similar-looking (same colors). There are many cows that look the same.'

02:28 B: dúlò-mbè jǎ: yغ̀l-ì-yà=yô: yím-à: wò- $\quad$ mà $\rightarrow$
B: tail-Pl take come-Pfv-3PlSbj=if die-PastAnt be-3SgSbj Q
yògó-njì: mà $\rightarrow \quad$ bé $\quad$ g̀̀-gé:-d-ì, how? $\quad$ Q 3PlSbj Augm-say-Ipfv-3P1Sbj, kú-gò [púlò- $\eta=g \grave{~ m o ̀] ~ n a ́ n a ̀ ~}=\grave{y} \quad$ mà $\rightarrow$ DiscDef [Fulbe-Pl=Def Poss] truth=it.is Q

B: 'If they bring tails, did it (=cow) die (naturally)? How is it that they (=Fulbe) say (that)? That (claim) of the Fulbe, is it true?'

02:34 A: áywà, [kô: $\quad$ Làràgà $] \quad n \varepsilon ̀$, A: well, [DiscDef ${ }^{\text {L }}$ side] Loc
 thus Fulbe-Pl do-Ipfv.Pfv-Pl Exist=be-3P1Sbj,
 $3 \mathrm{Pl}=\mathrm{Acc} \quad$ look.at-Pfv-2SgSbj=if $\quad$ [Fulbe-Pl all]=it.is.not-3PlSbj

A: 'Well, on that side (=concerning that), there are some Fulbe who do that. Regarding them, they (the dishonest ones) are not all of the Fulbe.'

02:39
A: ú
[[nàクá
ù-mò]
lè] bèrú-bèrú
$w \grave{\text { òn }}=\mathrm{y}$ ỳ
A: 2 Sg [[cow 2Sg-Poss] Loc] near-near be-2SgSbj=if kô: kánà-ǹ̀-nì, DiscDef do-IpfvNeg-3P1Sbj,

A: 'If you-Sg are (=stay) close to your $\operatorname{cow}(s)$, they (=Fulbe) won't do that.'

02:42 A: nê: bé gèndà, ùgó bà $\rightarrow$, A: now 3PlSbj look.at, month since, [nànó= j̀-mbè rà:] bòlદ́-દ̀lغ̀-Ẃ mà $\rightarrow$ kàn-ì- $\varnothing=y o ̂:$, [cow=Def-Pl Loc] go-IpfvNeg-2SgSbj Q be.done-Pfv-3SgSbj=if gènd-á:-gènd-á: bé kànà, look.at-PastAnt-look.at-PastAnt 3P1Sbj do,


A: 'They observe, since a month ago it happens that you-Sg haven't gone to the cows. When they have kept observing, if the cows are far away from you. (Now) whatever suits them, they do (something) in that.'
[bé gèndà and bé kànà, §15.2.2.8; sǒ: 'talk (n), words, language; matter, issue']



A: 'Now, (if) the country (=the situation) isn't going well for them, perhaps their tea money is exhausted, if they catch and sell one cow, they go on foot maybe to the (weekly) market there, they go to the market (to buy) a cow's tail, they go and buy a cow's tail, (one) that the butchers have slaughtered. They say to you, one cow (of yours) died.'
['not remain' in the last line is euphemistic for 'die']


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## Abbreviations and symbols

| Abbreviations |  |
| :---: | :---: |
| Acc | accusative |
| Adj | adjective |
| Agent | agentive nominal |
| Ant | anterior (subordinated clause) |
| ATR | advanced tongue root (vowel feature) |
| C | consonant (in formulae like CvCv ) |
| Caus | causative |
| Char | characteristic nominal derivational suffix, §4.2. |
| Comp | complementizer (-1́ in 'begin' complement) |
| Counterf | counterfactual conditional |
| Dat | dative postposition |
| Def | definite clitic |
| Dem | demonstrative |
| Det | determiner (demonstrative or definite) |
| DF | discourse-functional elements |
| Dimin | diminutive |
| DiscDef | discourse-definite ('that same ...') |
| Dist | distal (in NearDist and FarDist demonstratives) |
| DS | Donno So (language) |
| Dur | durative (subordinator) |
| EA | expressive adverbial |
| Emph | emphatic (clause-final particle) |
| Exist | existential particle |
| ExpPf | experiential perfect |
| Fact | factitive ('cause to become' with adjective) |
| Foc | focus |
| Fut | future |
| H | high (tone) |
| Hort | hortative |
| Ipfv | imperfective |
| ImmFut | immediate future |
| Imprt | imperative |
| Inch | inchoative ('become' with adjective) |
| Inst | instrumental postposition |
| Iter | iteration (full reduplication) |
| K\&P | Kervran \& Prost |
| L | a) low (tone) |
|  | b) any sonorant (in formulae like CvL ) |
| Loc | locative |
| Logo | logophoric |
| MP | mediopassive |


| N | a) noun (in e.g. "N-Adj") |
| :---: | :---: |
|  | b) nasal consonant (in formulae like $C v N$ ) |
| (n) | noun, in interlinear glosses like 'work(n)' |
| Neg | negative |
| Nom | nominalization |
| Nonh | nonhuman |
| NP | noun phrase |
| Num | numeral |
| O | see "SOV" |
| Pfv | perfective |
| Pl | plural |
| Poss | possessive, possessor |
| PP | postpositional phrase |
| Ppl | participle, in relative clauses |
| Prf | perfect (in ExpPrf) |
| Pron | pronoun |
| Prox | proximal (demonstrative) |
| Prohib | prohibitive |
| Purp | purposive |
| Q | question |
| Quot | quotative particle |
| QuotSbj | quotative subject particle, §17.1.4 |
| Rdp | reduplication |
| RelCl | relative clause |
| Rev | reversive |
| Sbj | subject |
| Sg | singular |
| Simul | simultaneous (subordinator) |
| Stat | stative |
| SOV | subject-object-verb order |
| Temp | temporal postposition ('at' a time) |
| Top | topic |
| Tr | transitive derivational suffix, $\S 9.4$ |
| V | a) see "SOV" |
|  | b) vowel (in names of phonological rules) |
| v | vowel (in formulae like CvCv ) |
| (v) | verb, in interlinear glosses like 'fight(v)' |
| VblN | verbal noun |
| VP | verb phrase |

## Symbols

| * | reconstructed |
| :---: | :---: |
| \# | ungrammatical, unacceptable, unattested |
| á, à, â, ǎ, â | tones on vowels (or syllables), §3.7 |
| $\overline{\mathrm{x}}$, x̀, $\mathrm{x}, \mathrm{x}$ | tone changes on stem in compounds, Chapter 5 |
| /.../ | a) lexical tone melody, e.g. /LH/, /H/ <br> b) underlying or lexical representation |
| $\{\ldots\}$ | a) tone overlay, e.g. $\{\mathrm{HL}\},\{\mathrm{H}\},\{\mathrm{L}\}$ <br> b) enclosing any set, e.g. $\left\{\begin{array}{l}u \\ \text { a } i\}\end{array}\right.$ |
| [...] | a) phonetic (IPA) representation, e.g. [bǔ:]; or phrasal grouping |
| $\downarrow$ | downstep |
| [...] ${ }^{\text {L }}$ | $\{\mathrm{L}\}$ tone overlay controlled by an element to the right |
| $[\ldots]^{\text {L+H }}$ | like preceding but with extra H-tone on final syllable/mora |
| ${ }^{\mathrm{HL}}$ [...] | $\{\mathrm{HL}\}$ tone overlay in compound finals and verbs in $\{\mathrm{L}\}-\{\mathrm{HL}\}$ complements |
| ${ }^{\text {L }}$ [...] | $\{\mathrm{L}\}$ tone overlay controlled by a possessor to the left |
| $\subset \ldots \supset$ | 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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notes:
in suffixes, " $v$ " is a variable vowel;
alphabetization: $\varepsilon$ follows $e, ~ s$ follows $\mathrm{o}, n$ then $\eta$ follow $n$;
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[^0]:    [gõ: bè-mò] gò:-nú bì-ỳ-yà = yô: [dance(n) 3Pl-Poss] dance(v)-Dur remain-Pfv-3PlSbj=if
    'They kept dancing their dances, and ...'

