# A Grammar of Tebul Ure (Dogon, Mali) 

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## 1 Introduction

### 1.1 Dogon languages

The Dogon family consists of about $80-100$ locally named varieties that linguists have tentatively grouped into approximately $20-22$ languages. The languages are spoken in an essentially continuous geographical block comprising the Dogon plateau, the sandy plains that stretch out especially to the north and east, and the cliffs and lower slopes that separate the plateau from the plains.

Dogon is often considered to be a very early branch of Niger-Congo, though skepticism about this is widespread. If the NC affiliation of Dogon comes to be established, it will remain to determine its precise position within the macro-family.

A reasonable working hypothesis is that Dogon languages can be split genetically into "western" and "eastern" genetic divisions, though (as with Mande) the cardinal-direction adjectives are slightly misleading due to migrations subsequent to the initial split and due to the slant of the defining lines of cliffs. In this view, the western languages occur on and around the western cliffs of the plateau from Najamba-Kindige through Tiranige and down to the southwestern group (Bunoge, Penange, Mombo, Ampari), plus the adjacent Dogul Dom on the plateau, plus two languages spoken in a separate area on the eastern cliffs. These two are Yanda Dom (YD) and Tebul Ure (TU). YD and TU are adjacent, but are separated from NajambaKindige by part of the intervening Tommo So (eastern Dogon) population.

### 1.2 Tebul Ure language

Although the internal genetic structure of western Dogon remains to be worked out, a case can be made that TU, YD, and Najamba-Kindige form a genetic subgroup. This is also geographically plausible, since the TU-YD area on the eastern cliffs is separated from the Najamba-Kindige area only by the most northeasterly Tommo So speaking area on the plateau. The TU material in this grammar can therefore be directly compared with previously published works on YD (Heath 2017a) and Najamba (Heath 2017b). YD and Najamba are featured in a recent diachronic study of NP tonosyntax (Heath 2022).
"Tebul" denotes the area where the TU villages are located. The "Ure" in the language name is òré: 'words, talk', plural of òrú-gó 'word, talk (n), language'.

In Calame-Griaule (1956) and following her Hochstetler (2004), TU is named "Oru yille". The name "Tebul Ure" was given in Blench (2012) and is adopted here.

### 1.3 Environment

Traditionally, TU was spoken natively only in a closely spaced set of villages on an irregular rocky shelf at the summit of the cliffs above the Jamsay-speaking villages of the Bamba cluster.

Sandy plains stretch out to the south and east from the base of the cliffs, but the plains also cut into the plateau in the form of a short and narrow valley that reaches to the base of the cliffs near the main TU villages.

The two major zones are therefore the somewhat irregular rocky plateau and the sandy plains, which have quite different ecologies and flora-fauna.

### 1.4 Geography

The TU-speaking villages are listed in (1).
(1) map name TU name N latitude W longitude
a. villages on flat shelf near the edge of the high plateau above the cliffs Bedié bédè cluster consisting of ...

| Bedié Na | bèdè-déngè | 1441.35 | 0306.91 |
| :--- | :--- | :--- | :--- | :--- |
| Didimgo | bèdè-dídìm(gò) | 1441.77 | 0306.92 |
| Tabade | bèdè-tàbàdé | 1441.50 | 0306.99 |
| nde | béndè | 1440.29 | 0306.62 |
| anga | zǎ: $^{\text {n }}$ | 1440.89 | 0306.14 |
| dekandou | èndègàndú $^{\text {èndèlgó }}$ | 1440.57 | 0305.74 |
| delgo (abandoned) | è | 140.78 | 0305.97 |
| màndé | 1441.41 | 0306.45 |  |
| douma | pédùmà | 1440.98 | 0306.13 |
| mbogo | tómbògò | 1440.97 | 0306.55 |

b. villages at the base of cliffs (part of the larger Bamba village cluster)

| Daga | dà:gá | 1439.70 | 0305.17 |
| :--- | :--- | :--- | :--- | :--- |
| Hamdallaye | hámdàlày | 1440.25 | 0306.71 |
| Saradine | sáràdí:nè | 1440.43 | 0304.64 |
| Sarapondou | sàrnàpòndú | 1440.90 | 0303.91 |
| Tene | (bàmbá-)tèndé | 1441.18 | 0303.74 |
| Yreban | ùlò-bán | approx. 1440 | 0306 |

As elsewhere in Dogon country, the trend in recent decades has been for villages on the edge of the high plateau, or on the middle slopes, to move down to the lower slopes or the sandy plains at the base of the cliffs and slopes. This movement has facilitated access to the weekly market at Bamba (Saturday), and to transportation routes and government services. Another motivation has been access to reliable water supplies.

Endelgo is abandoned, the residents having moved down to Sarapondou. Pedouma is largely abandoned, with a mere three families living there in 2011; the others have moved down to Sarapondou. Hamdallaye down below was settled by a group from Tombogo. The other villages down below contain people who moved from several upper villages. Yreban was
settled recently. Bamba (bàmá) consists of several Jamsay-speaking villages as well as the few TU-speaking villages in (1b).

Dianga has two nearly adjacent sections, zà: ${ }^{\text {nL }}$ ná: or zà: ${ }^{\text {nL }}$ dé-ygg̀ ("big") and zà: ${ }^{\text {nL }}$ sèǵ́ ("small"), but they have a single chief who is resident in zà: ${ }^{\text {LL }}$ s $\grave{g}$ ǵ.

### 1.5 People

The dominant surname throughout TU-speaking country is Guindo.
The main productive activities are farming and light herding. Pearl millet (Cenchrus americanus, ex Pennisetum glaucum) is the staple wet-season crop. Secondary wet-season crops include sorghum, sesame, cow-pea (Vigna unguiculata), peanut, and roselle (Hibiscus sabdariffa). Dry-season gardening (onion, tobacco) is possible in a few low-lying areas or near small retaining dams. There is small-scale pottery, weaving, carpentry (manufacture of pounding mortars and other wooden objects), and traditional healing in most of the villages. Bedie Na is noted regionally for bone healing.

Neighboring languages are Fulfulde and three Dogon languages. Jamsay is the lingua franca of the Bamba market, and of a a vast area in the plains stretching through Madougou and on to Koro. YD is spoken in several villages on the lower slopes of the cliffs just to the south. On the plateau itself, the main contact language is Tommo-So, which is spoken in a wide area including the Kassa village cluster.

### 1.6 Previous and contemporary study of Tebul Ure

### 1.6.1 Previous scholarship

The existence of TU, as "Oru yille," was noted in Calame-Griaule's Dogon dialect survey (1956:67), and in the SIL Dogon languages survey (Hochstetler et al. 2004).

Roger Blench visited the TU area in 2005 as part of his campaign to identify and publicize the endangered languages of the region. His website has pages on the languages that he surveyed. The TU page (Blench 2012) has a wordlist, a list of TU-speaking villages with coordinates, and a discussion of the information in previous scholarship.

No previous work on the grammar has been done, to my knowledge.

### 1.6.2 Fieldwork

By the time I began working on TU in linguistics project, I was either done or well along with grammatical and lexical study of several other Dogon languages, and had developed a Dogonspecific reference grammar template and a substantial lexical spreadsheet.

As usual I began with a three-day trip in which I met with the assembled elders of the main villages, and went over flora-fauna vocabulary with several of them. This short visit was in 2010. In 2011 I began real grammatical and lexical study. A native speaker who speaks some French was recruited locally and I worked with him for about 8 days while staying in nearby

Yanda. He later came to our Sevare base for two weeks. At that point I had written drafts of the morphology and some simple syntax sections of the grammar, and had a basic vocabulary of some 2000 lexemes (other than flora-fauna). After an interruption due in part to conflict in northern Mali, I resumed working with him in Sevare in 2013. After relocation of the project base to Burkina Faso, the work on TU was completed in Bobo Dioulasso in December 2022January 2023.

### 1.6.3 Acknowledgements

The primary fieldwork on TU was carried out under grant BCS-0853364 from the National Science Foundation (NSF), Documenting Endangered Languages (DEL) program, 2009-12.

The larger work on Dogon languages began with grant PA-50643-04 from the National Endowment for the Humanities (NEH) for solo fieldwork on Jamsay. This led to the idea of a comparative Dogon linguistic project. The first phase thereof was funded by NSF, grant BCS 0537435, for the period 2006-08. The BCS grant referenced above was for the second phase.

Collaborating linguists in the collective Dogon project have been Abbie Hantgan, Laura McPherson, Kirill Prokhorov, Steve Moran, Vadim Dyachkov, and the late Stefan Elders. Our Malian project director (and my Jamsay native-speaker assistant) is Minkailou Djiguiba.

### 1.6.4 Lexicon and other supporting materials

A spreadsheet lexicon has been prepared and will be archived as an adjunct to this grammar. It is based on the TU entries in a comparative Dogon lexical spreadsheet, so quite a few TU stems occur in multiple cells with distinct English and French glosses. However, I did go over it with the TU speaker at in the 2022-2023 session and made additions, cuts, and clarifications.

Other archived media are these:
Dogon Tebul Ure Audio Files, DOI 10.7302/5t10-By20. These are the 2015 recordings, in wav format as well as in the original mov format. They correspond to the texts from 2015-01 to 2015-06 at the end of this grammar, plus one text on farming methods (2015-04) that has not been transcribed (others are welcome to transcribe it). The 2022 recordings will be added.
https://deepblue.lib.umich.edu/data/concern/data sets/5712m722m?locale-en
Tebul Ure-speaking (Dogon, Mali) village photos, DOI 10.7302/2dnx-pp51
https://deepblue.lib.umich.edu/data/concern/data sets/tb09j625m?locale=en
In addition, many videos presenting practical activities and cultural events from other Dogon communities have been made. They are archived in avi, qt/mov, and wmv formats in the collection "Central Mali documentary videos" at the following link:
$\underline{\mathrm{https}: / / d e e p b l u e . l i b . u m i c h . e d u / d a t a / c o l l e c t i o n s / 9019 s 315 v ? l o c a l e=e n ~}$

## 2 Sketch

### 2.1 Phonology

### 2.1.1 Segmental phonology

The consonantal and vocalic segments of TT are similar to those of other Dogon languages, especially those with conservative consonantism such as Tommo So.

Voiceless obstruents occur chiefly stem-initially, but also initially in perfective suffixes (arguably still auxiliary verbs). Medial NC clusters like mb are generally preserved, and there are a few word-initial cases of these clusters. Nasalized $\left\{r^{n} w^{n} y^{n}\right\}$ are present, $r^{n}$ intervocalically and $\mathrm{w}^{\mathrm{n}}$ and $\mathrm{y}^{\mathrm{n}}$ mostly syllable-finally. Both s and z occur in native vocabulary.

The usual Dogon 7-vowel qualities occur: short $\{i$ e $\varepsilon$ a $\rho \circ \mathrm{ou}\}$ and their long counterparts. Phonemic nasalization is possible for long vowels. [-ATR] $\{\varepsilon \rho\}$ and [+ATR] \{e o $\}$ constitute two opposing harmonic sets and cannot co-occur within uncompounded stems.

### 2.1.2 Prosody

TU has a prosodic system that is intermediate between the classic Dogon tone system as in Jamsay on the one hand, and the modified pitch-accent system found in Donno So and Dogul Dom on the other hand. The key difference can be seen in the way bisyllabic stems are organized into lexical tone-melodic classes. In the Jamsay-style classic Dogon system, bisyllabic nouns can be H.H (/H/ melody), H.L (/HL/ melody), or L.H (/LH/ melody), with "." as a syllable separator. This already has some affinities with pitch accent insofar as L.L is disallowed at the lexical level, so that each stem has an H-tone peak whether realized on one syllable, one mora, or the whole stem. In the Dogon pitch-accent version, there is no distinction between H.H and H.L, so in effect there is an obligatory accent (at lexical level) on one syllable or the other.

TU does distinguish H.H from H.L, so it does not have a pitch-accent system. However, unlike Jamsay and several other Dogon languages, it has phonetic stress on the first of two or more H-toned syllables. While the distinction between H.H and H.L is not erased, /H/-melodic bisyllabics (especially the many that end in long vowels) are pronounced in isolation or before a pause with the equivalent of H.M pitch, with the second syllable noticeably lower-pitched than the first.

Another suggestion that TU may be moving toward pitch accent is the virtual absence of $<\mathrm{HL}>$-toned syllables at both lexical and phonetic levels. However, there are many $<\mathrm{LH}>$ toned syllables including several /LH/-melodic monosyllabic stems.

As in many Jamsay-type Dogon tone systems, verb stems have a more restricted set of lexical tone melodies. For obstruent-initial verb stems (those beginning in a stop or fricative)
the melody is predictable from the voicing of the initial consonant (voiced obstruent determines /LH/ melody, voiceless obstruent determines /H/ melody).

TU also has a tonosyntactic system for multi-word NPs, whereby H-tones on some words are dropped to $L$, and a somewhat similar tonomorphological system for suffixed or compounded verbs.

In addition, TU uses the dying-quail effect (§3.7.3), a type of "tonation" expressed by combining uncalibrated prolongation of the final segment with a final low-pitch target. This effect is the sole expression of NP conjunction (§7.1.1) and of willy-nilly conditional antecedents (§16.3).

### 2.1.3 Key phonological rules

With the exception of some vocalic ablaut in verbal morphology, the segmental phonology of TU is generally straightforward. In weak metrical positions, short high vowels $\{\mathrm{i} u\}$ are subject to deletion (syncope, apocope). The resulting consonant sequences are then subject to some adjustments, since some consonants are not allowed as first consonant in clusters. Thus $\mathrm{r}^{\mathrm{n}}$ shifts to n or assimilates to 1 , and j shifts to g , in this context (§3.4.5).

No Nasalization-Spreading from one syllable to the next, e.g. from stem to suffix, has been observed.

There are few opportunities for $v v$-Contraction to apply because the only commonly occurring vowel-initial morphemes are pronouns, and pronouns tend to resist contraction. The most likely candidates for a contraction analysis can also be interpreted in other ways (§3.4.6.2).

Back/rounding assimilations like $\mathrm{iw}^{\mathrm{n}} \rightarrow \mathrm{uw}^{\mathrm{n}}$ and $\mathrm{uy}^{\mathrm{n}} \rightarrow$ iy ${ }^{\mathrm{n}}$ occur on a limited basis in combinations of verb-stem final vowels and pronominal-subject suffixes. Sometimes im becomes um in the same context.

### 2.2 Inflectable verbs

Simple verb stems can have suffixal derivatives expressing causative and reversive. Examples: ní: ‘sleep (v)', causative ní:-mì 'put (sb) to sleep', and mèndí 'fold', reversive mèndì-lí 'unfold’. Some verbs occur in paired suffixally derived forms here called "mediopassive" and "transitive," interlinear abbreviations MP and Tr. Representative pairs are bànj-í: 'hide (oneself)' versus bàngì-rí 'hide ( $\mathrm{sb}, \mathrm{sth}$ )', and kób-í: 'put one's hat on' versus kóbí-rí 'put hat on (sb)'. For verbs with meanings like 'carry' and 'wear (garment)', the "mediopassive" describes a change of state of the subject and it can be syntactically transitive.

Verb stems, whether simple or derivationally derived, feed into an inflectional suffixal system. The verb undergoes some changes in vocalism and tone in various inflectional combinations. The vocalic changes are normally limited to the final syllable (§3.3.6). In the $\mathrm{A} / \mathrm{X}$-stem, which occurs in imperfective, perfective negative, and deontic modal categories, final [-ATR] vowels $\{\varepsilon \rho\}$ and some cases of final short high $\{i u\}$ are lowered to a, while other vowels are unchanged. In the A-stem, which occurs in statives derived from regular verbs, all stems end in a. In the E/I-stem, which occurs in the 3 Sg simple perfective, a final nonhigh
vowel is fronted (a and $\rho \rightarrow \varepsilon$, but $\mathrm{e} \rightarrow \mathrm{o}$ ) while high vowels are unchanged. One could argue for another stem-vocalism type that occurs in quoted imperatives, but for some verbs this form is suffixed with -y (§10.6.3.1).

The main inflectional categories are [ $\pm$ perfective] and [ $\pm$ negative], i.e. aspect and polarity, which usually combine into portmanteaus. Tense is not obligatory, but the reference time can be shifted into the past, as in the past imperfective ('was VPing') by adding a past-time enclitic to the verb.

The verb plus inflectional suffixes (or the past-time enclitic) is then conjugated by adding a word-final pronominal-subject suffix. Some examples are in (2).
(2) a. wà:-lú-w ${ }^{n}$
come-PfvNeg-2SgSbj
'You-Sg did not come.'
b. bànj-í:-yà-dà
hide-MP-Pfv1a-3P1Sbj
'They hid (themselves).'
c. sémbé-m $=$ bì- $\mathrm{m}=\mathrm{bì}-\mathrm{m}$
sweep-Ipfv=Past-Ipfv=be-1SgSbj
'I was sweeping.'

There is a separate morphological system for deontic modals (imperatives, hortatives) and their negations. These also have special forms in quotations, e.g. quoted imperative (§10.6.3.1, §17.1.4.1).

### 2.3 Multi-verb combinations

Two verbs can be directly chained (or serialized), see $\S 15.1$. The first verb takes bare-stem form, while the second verb is fully inflected. In (3), the second verb adds directionality to the action denoted by the first verb.
(3) tómbó súg-à:-m
jump descend-Pfv1a-1SgSbj
'I jumped down.'

There are also several ways in which one VP (which is minimally just a verb) can be overtly subordinated to a following one. These subordinators usually specify the temporal relationship between two events, whether the two events have already occurred or not, and whether the two VPs have same or different subjects. For example, gín specifies anterior temporal relationship, past time, and same subject (4).

| [tómbó | súgó | gin] | ínjílí-yà-m |
| :---: | :---: | :---: | :---: |
| [jump | descend | Ant.Past.SS] | get.up-Pfv1a-1SgSbj |
| 'I jumped down and got (back) up.' = 'Having jumped down, I got back up.' |  |  |  |

### 2.4 Nominal and adjectival morphology

At word-level, postnominal modifying adjectives can distinguish three forms based on [+animate] crossed in part with [+plural]. Animate singular and inanimate plural, which have opposite values in both categories, are syncretic. In (5), N represents the noun. Superscript ${ }^{\mathrm{L}}$ indicates that the H -toned in the noun are dropped to L under the influence of the adjective.
(5) 'good, beautiful'

| $\mathrm{N}^{\mathrm{L}}$ £́dé: | AnSg, InanPl |
| :---: | :---: |
| $\mathrm{N}^{\mathrm{L}}$ £́dú-mbò | AnPl |
| $\mathrm{N}^{\mathrm{L}}$ édú-ŋgó | InanSg |

Nouns have similar forms, but since each noun is either animate or inanimate it has just two forms. Examples are the animate noun in (6a) and the inanimate noun in (6b).

$$
\text { singular } \quad \text { plural }
$$

$\begin{array}{lll}\text { a. 'woman' } & \text { yá } & \text { yà-mbó } \\ \text { b. 'talk (n)' } & \text { òrú-gó } & \text { òré: }\end{array}$

Forms like $\varepsilon$ dé: and òré: are not transcribed with hyphens. They are treated here as stem-final vocalic mutations.

Plurality is not always overtly marked, especially for inanimates. In other words, the singular can function as a collective. For some inanimates, no plural form could be elicited.

There is a rich system of nominal derivations (§4.2) and of nominal compounds (§5.1).

### 2.5 Noun phrase (NP)

The noun can be preceded either by a possessor or by demonstrative kú. The noun can be followed, in order, by a modifying adjective, a cardinal numeral, a pronominal possessor, a demonstrative, the definite marker, and the universal quantifier ('all'). The pronominal possessor can also directly precede a cardinal numeral if no noun is present.

NP tonosyntactic processes can modify the tones of some words in a multi-word NP. For example, a preposed possessor requires $\{\mathrm{L}\}$ overlay (all H-tones are dropped to L ) on the noun (7b). A postnominal demonstrative drops tones on the noun and on intervening modifiers (7c). The superscripted ${ }^{\mathrm{L}}$ is a sign that such tonosyntactic tone-dropping has occurred.
a. úló
'house'
nàmá
'meat'
b. séédù ${ }^{\text {Lùlò }}$
séédù ${ }^{\mathrm{L}}$ nàmà
'Seydou's house'
'Seydou's meat'
c. ùlò ${ }^{\text {L }}$ kú
'this house'
nàmà ${ }^{L}$ kú
'this meat'

### 2.6 Case-marking and PPs

The only case-marking as such is with accusative gì for objects. The accusative particle is NP-final (i.e. like a postposition) and is generally optional.

Two NPs are conjoined by applying the dying-quail effect (final prolongation and lowpitch target) to both NPs (§7.1.1).

Postpositions follow entire NPs or simple pronominals. There is a dative (bènè) which can also mean 'chez, at the place of, in the presence of' (§8.1.1, §8.2.3). Other postpositions include an instrumental ni: of variable tone, two basic locatives nè and bàrì (the latter expressing displacement from the deictic center), a purposive dùg̀̀, and many composite postpositions expressing various spatial relationships (chapter 8).

### 2.7 Main clauses and constituent order

TU is a verb-final language. Since main-clause verbs carry pronominal-subject suffixation, an intransitive verb may function as a complete clause; see ( $2 \mathrm{a}-\mathrm{c}$ ) in $\S 2.2$ above for examples. The primary constituents of a transitive clause occur in subject-object-verb order if the subject is overtly expressed as a separate NP. The object is optionally marked with accusative gì.
(8) sě:dù [nǎ: (gì)] źbé-tì-Ø

S [cow (Acc)] buy-Pfv1b-3SgSbj
'Seydou bought a/the cow.'

Spatio-temporal adverbs like 'yesterday' can precede the subject, arguably as preclausal topics establishing the overall setting (9a). Often, however, such adverbs follow the subject (9b-d).

c. sě:dù yéngì mí-gì púngó-tì-Ø

S yesterday $1 \mathrm{Sg}-A c c$ hit-Pfv1b-3SgSbj
'Seydou hit me yesterday.'
d. sě:dù yéngì [ámádù gì] púngó-tì-Ø

S yesterday [1Sg Acc] hit-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'Seydou hit Amadou yesterday.'

Instrumental PPs preferentially follow the subject (10).
(10) b. sě:dù [bé: ní:] ìnjě: púygó-tì-Ø

S [stick Inst] dog hit-Pfv1b-3SgSbj
'Seydou hit a/the dog with a/the stick.'

### 2.8 Focalization

Subject focalization is expressed by the verb. This is done by omitting the usual pronominalsubject suffix and replacing it by a special subject-focus (SbjFoc) form of the relevant aspectnegation ending. For example, perfective-1a -yà- $\sim$-â: and perfective-1b -tì- are both replaced by -غ̀: . If the subject is pronominal it must be expressed as an independent pronoun in regular (clause-initial) subject position. For example, unfocalized (11a) corresponds to subject-focused (11b).
a. yàg-â:-m
fall-Pfv1a-1SgSbj
'I fell.'
b. mí Lyàg- $\grave{\text { L }}$

1 Sg fall.Pfv-Sbj.Foc
'It was I [focus] who fell.'

Focalization of nonsubject NPs can be expressed by replacing a suffixally marked perfective positive verb form (Pfvla, Pfv1b) with the simple perfective. For statives including 'be (somewhere)' and 'have', omission of existential proclitic yé also points to the presence of a focalized constituent.

### 2.9 Verbal nouns

Most verbs correspond to one or more nominals, including the productive suffixally derived verbal noun (§4.2.2.1) and an instrument nominal with suffix -ngó (§4.2.3).

Verbal nouns, -ygó nominals, and switch-reference subordinators can function as complements to a number of main-clause verbs such as 'want (to VP)' and 'begin (to VP)', see §17.3. In most cases the nominal phrase omits the notional subject and inflectional (aspect-
negation) marking, so the phrase functions like a simple English to-infinitive. The nominal phrase can readily take nonsubject complements similar to those for the underlying verb in main clauses. Examples with the two anterior nonpast subordinators, same-subject né and different-subject nè, are in (12).
(12)

| a.[nǎ: ह́b $\varepsilon$ ń́] <br> [cow buy Ant.NonP.SS] | m̀bá-m̀ |
| :--- | :--- | :--- | :--- |
| want- 1 SgSbj |  |

'I want to buy a cow.'
b. [sě:dù nǎ: ńné ébé nè] m̀bá-m̀
[S cow 3Sg buy Ant.NonP.DS] want-1SgSbj
'I want Seydou to buy a cow.'

### 2.10 Relative clauses

Like several other Dogon languages, TU has a special kind of "internally-headed" relative. This term is misleading, since the relative clause is really part of the larger NP. Before movement, the relative clause occurs within the NP in the slot between the Poss/Dem-N-Adj-Num-Poss string and late-NP elements (postnominal determiners, 'all', pragmatic elements such as topic markers).

Before movement, the N -Adj-Num string is subject to tone-dropping, since relative clauses are tonosyntactic controllers (like other reference-restricting words within NPs). This string then moves into the relative clause, occupying the position of the coindexed relativized-on constituent. The verb of the relative clause is participial in form, without the pronominal-subject marking that occurs in main-clause verbs. The participle has an animacy-number suffix that agrees with the head NP. For perfective positive relatives, the verb is combined with kárnà (originally a form of 'do'). In nonsubject relatives, the subject requires a preverbal pronominal proclitic. Simple postpositions are deleted when their complements are relativized on.

A few simple examples are given here; see chapter 14 for full coverage.

c. sě:dù dèn ${ }^{\mathrm{L}}$ ńné tíbá-ygó

S day 3 Sg die-Ipfv.Ppl.InanSg
‘the day Seydou will die’ (< dén-gó ‘day’)

### 2.11 Quotation

Reported speech can take the form of direct quotation, which has no special grammatical properties, or indirect speech. Here a few highlights from the fuller discussion of indirect speech in §17.1 are adduced.

Indirect quotation is characterized by a) logophoric pronouns and/or the logophoric-subject suffix on verbs, replacing original 1 Sg and 1Pl pronominals, b) adding tonally variable QuotSbj particle wa $\rightarrow$ (or a contracted variant thereof) to the subject if the latter is overt, and c ) adding Quot particle wà at the end of the clause (but before clause-final emphatics). There is no singular-plural distinction for logophorics in TU.

| a. | $\left[\begin{array}{lll}\text { á } & { }^{\text {Há }} & \text { wá } \rightarrow]\end{array}\right.$ | ò-lú-Ø | wà |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $[$ Logo | father | QuotSbj] | go-PfvNeg-3SgSbj |
|  | Quot |  |  |  |

'Hex said that his ${ }_{x}$ father went away.'
b. $[\mathfrak{a ́}=\quad$ á $\rightarrow$ ] yǎy-yà-m wà [Logo QuotSbj] go-Pfv1a-LogoSbj Quot ' $\mathrm{He}_{\mathrm{x}}$ said that he $\mathrm{x}_{\mathrm{x}}$ went away.' or: 'They ${ }_{\mathrm{x}}$ said that they $\mathrm{y}_{\mathrm{x}}$ went away.'

## 3 Phonology

### 3.1 Internal phonological structure of stems and words

### 3.1.1 Syllables and stem weight

Basic syllable shapes are $\mathrm{Cv}, \mathrm{Cv}$ :, and CvL and occasionally $\mathrm{Cv}: \mathrm{L}$, where L is a final sonorant. Word-final sonorants are fairly uncommon and may involve apocope, as in pélú ~pél'ten' and dǎy (<dàyí) 'cover (v)'. However, stable final \{n m l\} occur in certain nouns, e.g. púgám 'bowl in lightweight metal', sámál 'agricultural day labor', and sán 'prayer'. Semivowels also occur finally, as in $\varepsilon y^{n}$ 'tomorrow' and gáw 'onion'. Final obstruents are limited to expressive forms like jík '(stopping) still'.

In word-initial syllables, the C position may be vacant (§3.3.3).
Among monosyllabic stems, monomoraic Cv and bimoraic Cv : stems are distinguished. See $\S 10.1 .3 .1$ for lists of Cv and Cv : verbs.

Overall stem-weight is a factor in verbal morphology. Stems of the shapes $\mathrm{Cv}, \mathrm{Cv}$ :, and CvCv (including CvNCv ) can belong to either the final-high-vowel or final-nonhigh-vowel classes (§10.1.3.1-14). Most monosyllabics belong to the final-nonhigh-vowel type. All heavy bisyllabics (Cv:Cv, $\mathrm{Cv}: \mathrm{NCv}$ ) and all trisyllabics are of the final-high-vowel class (§10.1.3.15). Overall weight correlates, in part categorically, with this class distinction, which is overt in the bare stem and in perfective positives.

### 3.1.2 Stress and accent

There is no fully-developed pitch-accent system. However, in sequences of H -toned syllables within a word that is pronounced in isolation or otherwise in prepausal (clause-final) position, the first such syllable is phonetically stressed and this entails a partial drop in pitch on the remaining syllables. This is particularly conspicuous with final Cv : syllables, which are very common for nouns and adjectives. For example, pédé: 'sheep-Sg' is heard as ['pédē(:)] in isolation, with mid pitch on the second syllable and no conspicuous prolongation of its vowel. In clause-medial position, on the other hand, it is heard as ['pédé:] with level H-tone and more noticeable length on the final vowel.

In CvCvCv words, the medial vowel is in the weak metrical position. If it is a short high vowel $\{\mathrm{i} u\}$, it can be subject to syncope, depending on the specific consonantal environment (§3.4.3.1). Full syncope occurs on a limited basis in specific morphological contexts.

### 3.2 Consonants

The regular consonants of TU are those shown in (15) without parentheses. Marginal phonemes are enclosed in parentheses, very marginal ones in double parentheses

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

c is IPA [t f$]$, j is [d3], s is [ $[J], \mathrm{y}$ is [j].
key to columns: 1. aspirated voiceless stops (c is affricated); 2. voiced stops; 3.nasals, 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants);
6. laterals; 7-8. unnasalized then nasalized sonorants; 9-10. laryngeals

### 3.2.1 Alveopalatals ( $\mathrm{c}, \mathrm{j}$ )

There is some variation between c and k , and between j and g , before front vowels. However, for most items I was able to identify a primary pronunciation in the speech of my assistant. Extensive bilingualism with Jamsay, where palatalization to c and j has tended to generalize before front vowels, is a likely factor on the speech of young Tebul people.

Examples of k versus c before front vowels are in (16).

| $\begin{array}{ll}\text { a. } & \text { kédé } \\ \text { bárkè } \\ \text { kédé } \\ \text { cerd } \\ \text { kéd } \\ & \text { kèrèmbú }\end{array}$ | 'cut' |
| :---: | :---: |
|  | 'blessing' |
|  | 'four' |
|  | 'runty' |
|  | '(mouth) bit' |
| b. cíné | 'nose' |
| cílá | 'horn' |
| cílé | 'gather up (baggage)' |
| cílé | 'weave (leather strips into basket)' |
| cíllí | 'resolve (a problem)' |
| cìndé: | 'shade' |
| cìcìndé: | 'ghost' |
| cé | 'shout' |
| cèré | 'flute' |
| céndí | 'fix, resolve' |
| cénd-í: | 'turn out well' |
| céndèy ${ }^{\text {n }} \rightarrow$ | 'a little' |
| cèr-gó | 'stem' |


| cé | 'thing' |
| :--- | :--- |
| célbá | 'African egplant' |
| cèl-gó | 'crack, crevice' |
| céndí | 'bury' |
| cèmdé | 'cotton' |

Examples of g versus j before front vowels are in (17).
(17)

```
a. gàygìlí 'rub (eyes)'
    lìgìdú 'cooked leaves'
    dégé 'statuette'
    zìgé 'scoop up in hand'
    -ge, -\etage (frozen inanimate }\textrm{Sg}\mathrm{ suffixes)
b. jìré
'eyes'
jìgìlí 'spin, rotate (sth)'
jìnǎ: 'soil, earth'
jìndé 'disperse'
jíndílá 'mane'
bàrà:jí 'divine reward'
-jě: characteristic derivational suffix (Pl -jì-mbó)
jě 'dance (v)' or 'fart (v)'
jèr-í: 'divide, share'
```

For synchronic alternations of $g$ with $j$, see §3.4.5.4.

### 3.2.2 Fortis articulation of d and j

d has a more laminal articulation in TU than in other Dogon languages, a trait shared with the necessarily laminal j . Both d and j have a fortis articulation in word-final syllables before a long vowel, especially in bisyllabics. Indeed, this is a useful acoustic cue that a word-final syllable is bimoraic Cv : instead of monomoraic Cv .

The fortisness is striking in cases like pédé: 'sheep-Sg' versus its plural pédú-mbò. The former is pronounced [pédé:], where the fortis diacritic indicates increased duration and reduced voicing. In early fieldwork the singular was incorrectly transcribed "péddé(é)."

Also striking are cases where $g$ is palatalized to $j$ before mediopassive suffix -í: in verbs. For example, in transitive dègì-rí 'teach (how)' the g has normal duration and voicing, but j in its mediopassive dèj-í: 'learn (how)' is phonetically tense. It too was initially mistranscribed as a geminate.

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

Spirantization of $g$ to $[\mathrm{x}]$ between $\{\mathrm{a} \rho\}$ vowels does not occur systematically.

### 3.2.4 Back nasals ( $\mathrm{n}, \mathrm{n}$ )

n and y are distinguishable before i and other front vowels. Examples of ni are tó:ní 'pester' and (sǎn) sán-í: ‘adorn oneself, dress up’. Examples of yi are nígíriní '(e.g. pebble under mat) hurt (sb)' and pínílíl- ‘open (door)'.

### 3.2.5 Voiceless labials (p, f)

p is common stem-initially: pá: ‘long', pél(ú) 'ten', pégé 'attach (blade to shaft)'. It can occur medially: òpá: ~ àpó: 'bark fiber'.
f occurs in a few loanwords: márfá 'rifle' (< Arabic), fùrù-fúrú 'fritters'.
The 'all' quantifier, also regionally widespread, is pronounced pú $\rightarrow$.

### 3.2.6 Laryngeals (h, ?)

h occurs stem-initially in a few loanwords (it is a common consonant in Fulfulde): hólà:rù 'trust (n)', hà:râm 'a Muslim holy day', háccé 'sin', hátá 'refuse, forbid'.

A phonetic glottal stop can appear at the beginning of otherwise vowel-initial words. It is noticed especially in 2 Sg possessor ú-wó, which can be heard as [?(ú)wó] after a vowel. No initial Cv - reduplications have been observed in verbal morphology, so the glottal stops that show up in reduplications of vowel-initial verbs in other Dogon languages are not present in TU.

### 3.2.7 Sibilants (s, š, z, ž)

$s$ is a regular phoneme in TU. Examples: sá: ‘take off (garment)', ságú 'pounded millet', sérné ‘drain (v)', sógó 'pick-hoe'. In verbal suffixes s optionally and inconsistently weakens to z.
z is also a regular phoneme. Examples: zと̌ '(man) marry (woman)', zégé zèj-í: 'have a fight', zègìrá: zègìrí 'incite', zùgó 'know'.
ž (IPA [3]) occurs in some pronunciations of 'gendarme', but zándárá appears to be usual.

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

$r^{n}$ is common intervocalically. Examples: árná 'man', sír"é 'spit (in a jet)', gò:-bòrn̄ 'ember'. It still alternates with $n$ especially due to syncope (§3.4.5.3).
$w^{n}$ and $y^{n}$ occur very commonly in pronominal-subject suffixes on predicates ( $2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}$, $\left.1 \mathrm{Pl} / 2 \mathrm{Pl}-\mathrm{y}^{\mathrm{n}}\right) . \mathrm{w}^{\mathrm{n}}$ is otherwise unattested ( ${ }^{*} \mathrm{~m}$ does not lenite). I have recorded $\mathrm{y}^{\mathrm{n}}$ in óy $\mathrm{y}^{\mathrm{n}}(\mathbf{1})$ 'spin (thread)', gว̌y ' 'wait for', àn-táy 'hand span', éy $^{\mathrm{n}}$ 'tomorrow', déy ${ }^{\mathrm{n}} \rightarrow$ 'apart', áy" 'how?', and
intervocalically or finally under the influence of a preceding nasal syllable as in mìyn' 'grind into powder' and sómòy 'spices'.

None of these nasalized sonorants occurs word-initially.

### 3.2.9 Consonant clusters

As in other Dogon languages, CC clusters are very restricted, except in loanwords.

### 3.2.9.1 Word- and morpheme-initial CC clusters

Initial NC including NN clusters are uncommon. The known examples are ńdí 'give', ǹdé 'empty', ǹdó 'younger same-sex sibling', ńné ( 3 Sg pronoun), m̀bá 'want', m̀bù-gó 'mouth', ỳgó 'not be (present)', ýgò 'over there', and ỳgó 'here'. The nasal-stop clusters could also be analysed as prenasalized stops (unit phonemes).
ínjé 'water' was heard with and without the initial i, as was ínjílí 'get up'.

### 3.2.9.2 Medial geminated CC clusters

A search through the lexicon produced the cases in (18).


| yy | - |  |
| :--- | :--- | :--- |
| pp | - |  |
| rr | - |  |
| $\mathrm{r}^{\mathrm{n}} \mathrm{r}^{\mathrm{n}}$ | - |  |
| ss | - |  |
| tt | - |  |
| ww | - |  |
| $\mathrm{w}^{\mathrm{n}} \mathrm{w}^{\mathrm{n}}$ | - |  |
| yy | běy-yà- | 'lie down' (and other Pfv1a forms) |
| $\mathrm{y}^{\mathrm{n}} \mathrm{y}^{\mathrm{n}}$ | - |  |
| zz | - |  |

Disregarding known loanwords, and clusters arising at morpheme boundaries, the following comments are germane.
gg may be limited to cases where an original inanimate Sg suffix -go $\sim$-go has become more or less fused to a noun stem, perhaps after syncope of a medial-syllable short high vowel. This is most obvious in dìg-gó 'joint'.

11 is the most popular medial geminate. Some examples are loanwords or involve boundary clusters. Some remaining cases (mìll-í:, cíll-í:) may reflect post-syncope *ly clusters involving mediopassive *-yv-. For example, compare TU cíll-í: ‘fly (away)’ with YD kílíyé. 11 is also the output of /rl/ due to syncope (§3.4.5.1).

### 3.2.9.3 Medial non-geminate CC clusters

Homorganic nasal plus voiced stop clusters are fairly common intervocalically within stems. One could argue that they are unit phonemes (prenasalized stops). One example of each is given in (19).
(19) mb kùmbó 'great-great-grandparent'
nd pàndá 'cheek'
jj zònjě: 'healer'
ทg bóngó 'spots on body'

Similar clusters with voiceless stop occur stem-medially only in (probable) loanwords and frozen compounds. Among the few examples are zóntè 'fever' (< Fulfulde), bàntóndó-mbò 'young men and women, (the) youth', málé:ncè 'angel' (<Arabic), bùŋká:rná 'reed flute', yóykù 'vital spirit' (variant), and máykòrò 'mango'. Inflectional suffixes like perfective1 b -tì- can follow various stem-final consonants after syncope.
ns occurs in ánsá:rà 'white person' (< Arabic 'Nazarene'), cf. Jamsay ànìsá:rá-n. Underlying /ns/ may also be present in cases where a nasalized vowel is followed by s, as in àndà sà: ${ }^{\text {n }}$ só 'full outback',

In addition to gg (see above), various sonorants occur before g in nouns and adjectives with (synchronic or frozen) inanimate Sg suffix *-gO or the like: mg (òm-gó 'udder'), ng (kón-gó
'cough (n)'), lg (sàl-gó 'diarrhoea'), rg (cèr-gó 'stem'), tàygó 'dancing ground'. There are no known examples of $w g, w^{n} g$, or $y^{n} g$.
mn occurs in $\varepsilon$ mné 'milk (noun)' and cèmné 'fun, festivity'. TU is the only Dogon language with mn in 'milk (noun)', but geminated mm in Bankan Tey $\varepsilon$ émmèy ${ }^{\mathrm{n}}$ points to an original cluster. The TU verb 'milk (a cow)' is $\varepsilon$ émé. An isolated $\mathrm{mn} \sim \mathrm{m}$ alternation in TU is singular dèmé: 'ratel (honey badger)' and its plural dèmné-mbò. The plural points to an original stem *dèmíné- or the like, cf. Nanga singular dèmír ${ }^{\mathrm{n}} \hat{\varepsilon}$.

The cluster lt is found in bèltyá: 'harvest pile', probably an original compound.
yr occurs in in záyrá 'mocking (n)' and in Fulfulde loan wáyrí 'be a fairly long time'.

### 3.2.9.4 Medial triple CCC clusters

No medial triple CCC clusters have been recorded, though they could occur in Fulfulde loanwords.

### 3.2.9.5 Final CC clusters

No word-final clusters have been recorded.

### 3.3 Vowels

The inventory is (20). Oral vowels are much more common than nasalized vowels. Nasalized vowels are long.
(20) short oral long oral nasalized (long)

| $u$ | $u:$ | $u:^{n}$ |
| :--- | :--- | :--- |
| $o$ | $o:$ | - |
| 0 | $\rho:$ | $\rho:^{n}$ |
| $a$ | a: | $a:^{n}$ |
| $\varepsilon$ | $\varepsilon:$ | $\varepsilon:^{n}$ |
| $e$ | e: | - |
| $i$ | $i:$ | $i:^{n}$ |

Uppercase E represents the set $\{\varepsilon \mathrm{e}\}$ and $O$ represents the set $\{00\}$. These symbols are used in suffixes whose vowel acquires the ATR value of the stem, e.g. animate plural -mbO.

### 3.3.1 Short and (oral) long vowels

Cv and Cv : monosyllabic stems are distinguished. For verbs see §10.1.3.1.1-2.

In nonmonosyllabic stems, long vowels are fairly common in initial syllables in nouns and verbs: gò:ndó 'river', è:lé 'dew'. For nouns and adjectives, long vowels can occur finally as well, though often only in the singular or only in the plural: lùgǎ: 'apiary', tìně: 'firewood', tyǎ: 'basket (woven from branch strips)', jìnǎ: 'soil', kàlě: 'neighborhoods' (Sg kàl-gó), gàbě: 'tall' (InanSg gàbù-gó). Verb stems do not have noninitial-syllable long vowels, but they do combine with some suffixes containing long vowels, e.g. perfective-1a allomorph -à:- and some participial (i.e. noun-like) endings. In trisyllabic and longer stems, medial syllables can have long vowels, but the examples are loanwords, as in sàlá:tù 'pre-dawn prayer' (<Arabic via Fulfulde).

### 3.3.2 Nasalized vowels

Nasalized vowels are fairly uncommon. They are long, and occur in monosyllabic stems (21). Nasalized [+ATR] vowels are rare; $e^{.}{ }^{n}$ is attested once while $o:^{n}$ is not attested.

```
(21) u: mǔ: }\mp@subsup{}{}{\textrm{n}}\mathrm{ 'cut (wound)'
    o:}\mp@subsup{:}{}{n}\quad
    0:n}\quad py:.n 'fonio (cultivated grain)'
    a: }\mp@subsup{}{}{n}\quad\mathrm{ gwǎ: }\mp@subsup{}{}{n}\quad\mathrm{ 'chest (body)'
    \varepsilon:n (\varepsilońrń\varepsilon) \varepsilon.: ' 'drain off'
    e:"
    in}\quad\mp@subsup{\textrm{ti}}{}{\prime}->\quad 'long ago'
```


### 3.3.3 Initial vowels

Stems may begin with a vowel, i.e. with a vacant initial C position. Some examples are in (22).

| u | údú | 'air' |
| :--- | :--- | :--- |
| o | ób-í: | 'sit' |
| o | òm | 'hot' |
| a | àrná | 'rain' |
| $\varepsilon$ | ह́mné | 'milk' |
| e | èré | 'rivalry' |
| i | íj-í: | 'stop, stand' |

Since Cv : is an allowable initial syllable, so is v : with the C position vacant, though examples are few: á: ‘brew (beer)', à:l-í: ‘crawl on all fours', $\varepsilon$ : ‘dispossess', è:lé ‘dew', ǒ: 'enclosure'.

### 3.3.4 Stem-final vowels

All vowel qualities can occur word- and stem-finally in nouns and adjectives.

### 3.3.5 Vocalic harmony

The [+ATR] vowels are $\{\mathrm{e} o\}$, the [-ATR] vowels are $\{\varepsilon \rho\}$. Bisyllabic and uncompounded longer stems including all known verbs respect ATR harmony.

To some extent, ATR harmony extends to suffixes. In nominal and adjectival morphology, inanimate singular -( y$) \mathrm{gO}$ (§4.1.1.4) and animate plural -mbO (§4.1.1.3) harmonize with stem vowels ("O" represents an alternation of o with 0 ). In verbal morphology, derivational suffixes harmonize, but those inflectional morphemes with syllabic shape behave more like chained verbs and do not harmonize (perfective-2, recent perfect, experiential perfect). Imperfective verbs do not harmonize beyond the basic -m formative.

There are a number of cases where a word-family contains stems of different categories that fail to agree in ATR value. This is most conspicuous when a cognate nominal and a verb co-occur, as in òrú-gó órú 'speak, talk' and zóbú-gó zòbó 'run (a race)'. In addtiion, agentive nominals (whose final vowel shifts to é:) do not respect harmony.

Within a stem, high vowels $\{i \mathrm{u}\}$ may co-occur with either [+ATR] or [-ATR] vowels. Verbal E/I-stem forms (defocalized 3 Sg simple perfective) have final $\varepsilon$ rather than e after an a-vowel, as in 'bà̀̀- $\varnothing$ 'he/she gathered' and ${ }^{\text {L }}$ bàrn ${ }^{\text {e }}$ - $\varnothing$ 'he/she beat (tomtom)'. However, in nouns there is no prohibition on combining a with an [+ATR] vowel, as seen in àdě: 'bird' and àpó: ~ òpá: 'tree-bark fiber'. Stem-final e:, originally due to contraction of a suffix, is common with nouns, for example deverbal agentives, regardless of the vocalism of preceding syllables.

### 3.3.6 Vocalism of verb-stem alternations

Although not lexically basic, the $\mathrm{A} / \mathrm{X}$-stem is the form of the verb found in the majority of inflectional categories. Other surface forms of verb stems are the bare stem (which I take as lexically primary), the $\mathrm{E} / \mathrm{I}$-stem (found in the 3 Sg -subject perfective), and the A -stem (stative).
stem AN category (examples)

| bare stem | simple perfective (except 3Sg), perfective-1b and -2, past perfect |
| :--- | :--- |
| E/I-stem | simple perfective (3Sg subject only) |
| A/X-stem | imperfectives, perfective negative, deontic modals |
| A-stem | stative |

In the $\mathrm{A} / \mathrm{X}$-stem, $[-\mathrm{ATR}]\{0 \varepsilon\}$ in the final syllable or monosyllabic mora are lowered to a, but other vowels $\{$ u io e $\}$ are unchanged. This stem is especially associated with imperfectives (§10.2.2.1). In the A-stem that defines derived statives (§10.4.1), all verbs end in a. In the E/I-stem, found in 3Sg-subject simple perfectives, all verbs end in $\{e \varepsilon \mathrm{i}\}$, in semivowel y , or in zero after a sonorant (§10.2.1.1).
a. 'abandon'

| dògó | bare stem |  |
| :--- | :--- | :--- |
| ${ }^{\mathrm{L}}$ dògè-Ø | 3 Sg simple perfective | $\mathrm{E} / \mathrm{I}$-stem |
| dógà-m-dò-Ø | 3 Sg imperfective | $\mathrm{A} / \mathrm{X}$-stem |

b. 'squat'

| tón-í: | bare stem (mediopassive) |  |
| :--- | :--- | :--- |
| Lt̀̀n-ì:-Ø | $3 S g$ simple perfective | E/I-stem |
| tón-èà-m-dò-Ø | $3 S g$ imperfective | A/X-stem |
| tónà | stative | A-stem |

c. 'put down'

| dèlí | bare stem |  |
| :--- | :--- | :--- |
| ${ }^{\mathrm{L}}$ dèlì-Ø | 3 Sg simple perfective | E/I-stem |
| délì-m-dò-Ø | $3 S g$ imperfective | A/X-stem |

For the verb ób-í: 'sit', stative óbà 'be seated' with A-stem idiosyncratically shifts the initial vowel from [+ATR] to [-ATR]. óbà is also the stative of ób-í: 'become laid out', which may be a secondary formation (§10.4.1).

The quoted imperative is formed for some verbs by suffixation of $-y$, for others by final vowel mutation to $u$ or (for some monosyllabics) to i. One might therefore speak of a distinct U/I-stem for this category.

### 3.3.7 Irregular a/o alternations

There are four word-families showing irregular a/o alternations from noun to verb (25). They all have a in the verb, versus o in related nouns, which have stem-final $u$ (sometimes syncopated) and then inanimate singular -gó. The u rather than the suffix is responsible for the shift of a to $o$. There is no productive vowel-harmony process.
a. lǎ: (<*làlá
'give birth'
cf. yà-làlě: 'midwife'
lól-gó
'labor pains'
b. màndí
móndú-gó
'laugh (v)'
'laughter'
c. págí-rí
pógúr(ú)-gó
'tie on (belt)'
'belt'
d. wǎ: (<*wàlá) 'do farm work' cf. wà:-wàlé: 'farmer'
wòl-gó
'(cultivated) field'

| d. góndú-gó | 'pawing' (digging by a bird or mammal) |
| :--- | :--- |
| gàndí | '(bird/mammal) dig up with paws' |

Such a/o alternations can be reconstructed, perhaps all the way to Proto-Dogon. For example, the noun-verb combination móndú-gó màndí 'give out a laugh' (25b) matches Nanga equivalent móndì màndí, and there is similar evidence for old a/o alternations in the other three word-families in (25). However, the vocalic alternations are often leveled out, with the vowel of the noun spreading to the verb or vice versa.

### 3.3.8 Diphthongs

Rising "diphthongs" are really just combinations of regular nuclear vowels with final semivowel codas, parallel to combinations with final nasals or 1. Examples are kóy (emphatic particle), sǎy 'only', pègà-léy 'twenty', dáwlá 'renown', màwgó 'interethnic joking relationship', háybí 'guard, conserve', tàyǵ́ 'dancing ground'. These include Fulfulde borrowings and frozen noun-suffix combinations.

Combinations of mid-height vowels with each other or with a are more interesting. In these cases, the two vocalic segments are tautosyllabic, and the first segment may be partially desyllabified. Attested noncomposite stems with such diphthongs are ̀̀̀ 'bits of pounded grain spike' and óe 'medication' with back-to-front directionality, and óá: ‘darkness' and bèz: 'chin’ with mid-height to low directionality.

In verbal morphology, the $\mathrm{E} / \mathrm{I}$-stem (3Sg subject simple perfective) results in similar diphthongs for some monosyllabic stems, as in ${ }^{\text {Lbàè- }}$ ' 'he/she gathered' < bà: and ${ }^{\text {L tò̀è-Ø }}$ 'he/she pounded' < tó: (§10.2.1.1). Another diphthong occurs in the A-stem stative beâ 'be lying down' < bě (§10.4.1). In these verb forms, the regular transcription here uses mid-height vowels for the onset according to the lexical vowel to make stem identification easier. For example, Cea- is written as the $\mathrm{A} / \mathrm{X}$-stem of a $\mathrm{C} \varepsilon$ : verb, although the diphthong can be pronounced [ea] or [ia].

The mediopassive suffix is -í: word-finally, but its $\mathrm{A} / \mathrm{X}$-stem is monophthongal -é:- with [ + ATR] stems, and partially diphthongal -ia- $\sim$-ea- $\sim-\varepsilon:-$ with [-ATR] stems (§3.4.2.1).

### 3.4 Segmental phonological rules

### 3.4.1 Trans-syllabic consonantal processes

### 3.4.1.1 Nasalization-Spreading

Some Dogon languages have Forward Nasalization-Spreading: /Nvrv/ $\rightarrow$ Nvr ${ }^{\mathrm{n}} \mathrm{v}, / \mathrm{Nvwv} / \rightarrow$ $\mathrm{Nvw}^{\mathrm{n} v} \mathrm{v}$, and $/ \mathrm{Nvyv} / \rightarrow \mathrm{Nvy}^{\mathrm{n}} \mathrm{v}$. That is, sonorants $\{\mathrm{w} y \mathrm{r}\}$ shift to their nasalized counterparts $\left\{\mathrm{w}^{\mathrm{n}} \mathrm{y}^{\mathrm{n}} \mathrm{r}^{\mathrm{n}}\right\}$ when they are preceded by a nasal syllable (a nasalized vowel or a nasal-initial syllable). This process is most conspicuous in languages like Jamsay. The -rv and -wv verbal derivational suffixes in this language appear with nasalized sonorant only after stems that end in a nasal syllable.

TU is disadvantaged in this respect because most of its verbal derivational suffixes have shapes like -lí, -mí, -gí, and -ndú, whose consonants and consonant clusters are not candidates for nasalization. Furthermore, the mediopassive derivational suffix is vocalic -i: (versus -yv in several Dogon languages). This leaves transitive -rí (§9.4.1) as the only hope in verbal derivational morphology. Inflectional morphology is no better; only -yà- (perfective-1 a variant) has an eligible sonorant and can follow a vowel.

I can cite no relevant example of secondary nasalization of transitive -rí. Based on perfective-1a nú-yà- 'went in' from nú, there is no synchronic Forward Nasalization-Spreading. There are many stems like nà:rná 'easy' whose stem-internal consonantism is compatible with spreading, but in these cases there is no clear evidence that nasalization originates in one syllable and spreads to another, as opposed to just being part of the lexical spelling. There are also some cases like màrá 'get lost' where spreading has not occurred (this stem likely reconstructs as *mbàrá)

Backward Nasalization-Spreading of the type $/ \mathrm{yvNv} / \rightarrow \mathrm{y}^{\mathrm{n} v N v}$ or $/ \mathrm{wvNv} / \rightarrow \mathrm{w}^{\mathrm{n} v N v}$, is absent as a synchronic process in TU. A possible vestige is nǎ: 'take' if from an immediate prototype *yàná from still earlier *yàngá) via *y"àná, cf. Jamsay yàná (Pergué dialect yèngé) Togo Kan nàná. However, yá 'woman’ (simplified from singular *yà-nú) is unnasalized (contrast Jamsay nı̌̌-n, Toro Tegu ynà-rnú.

### 3.4.1.2 Metathesis (absent)

Metathesis as such has not been observed.

### 3.4.2 Vocalism of suffixally derived verbs

### 3.4.2.1 Suffixal Vowel-Spreading

Suffixally derived verbs include reversives (-lí), causatives (-mí), mediopassives (-í:), and transitives (-rí). See chapter 9 for details.

Causatives diverge from the other suffixal derivatives since the vowel of the suffix is in some forms (e.g. bare stem, perfective) and $\rho$ in other forms (e.g. imperative, imperfective) regardless of the vocalism of the preceding input stem.

The mediopassive (MP) suffix takes the form -i: in some inflections (e.g. bare stem, perfective), absorbing the final vowel of the input stem. In the other inflections (e.g. imperative, imperfective) it either diphthongizes or is lowered to mid-height. If the verb has a nonfinal [ + ATR] vowel, the variant is monophthongal -e:- (26a). If the verb has a high vowel, the variant is -ia- (26b). If the verb has a [-ATR] vowel or the low vowel a, the variant is diphthongal -ia- $\sim-\varepsilon$ a- varying with monophthongal - $:-(26 \mathrm{c}-\mathrm{d})$. These alternations are difficult to model phonologically since they are special cases of vv-Contraction.
bare gloss IpfvNeg
a. with $[+$ ATR $]$ vowel

| kób-í: | 'put hat on' | kób-é:-ygò- |
| :--- | :--- | :--- |
| tónd-í: | 'curl up' | tónd-é:-ygò- |

b. with high vowel
túnj-í: 'kneel' túnj-íá-ngò
c. with [-ATR] vowel
tób-í: 'roll on turban' tób-íá-ŋgò ~ tób-éá-ngò ~ tób-é:-ŋgò
jènj-í: 'be tilted' jènj-íá-ŋgò ~ jènj-éá-ŋgò ~ jè̀nj-ć:-ŋgò
d. with low vowel
bàmb-í: 'carry on back' bàmb-íá-ŋgò̀ ~ bàmb-éá-ŋgò- ~ bàmb-é:-ygò

Reversive -lí and transitive -rí have more transparent vocalism. In inflections requiring final nonhigh vowels, if the stem is [+ATR] the suffixal vowel is e or o with the stems characteristic vowel. If the stem is [-ATR] or has a high or low vowel, the suffixal vowel is a. Reversives are illustrated in (27).

$$
\begin{equation*}
\text { reversive gloss } \quad \text { Imprt } \quad \text { IpfvNeg } \quad \text { input (bare/Imprt) } \tag{27}
\end{equation*}
$$

a. [+ATR]

| mìndì-lí | 'unroll' | mìndì-lé | mìndi-lé- goò- mìndé/míndé 'roll up' |
| :--- | :--- | :--- | :--- | :--- |
| tóndú-lí | 'unbend' | tóndú-ló | tóndú-ló-ŋgò- tóndó/tóndó 'bend' |

b. other

| pégí-lí | 'remove nail’ | pégíllá | pégí-lá-ngò- | pégé/pégá ‘drive in nail' |
| :--- | :--- | :--- | :--- | :--- |
| tímbíllí | 'uncover' | tímbí-lá | tímbíl-lá-ngò- | tímbí/tímbí 'cover' |

Verbs with transitive -rí are in (28). They are generally paired with mediopassives rather than with unsuffixed inputs.

$$
\begin{array}{llll}
\text { transitive } & \text { gloss } & \text { Imprt } & \text { IpfvNeg }
\end{array}
$$

a. [+ATR]
kóbí-rí 'put hat on’ kóbú-ró kóbú-ró-ŋgò-
b. [other]
bàngì-rí 'hide (sth)' bàngì-rá bàygì-rá-ngò-
ígí-rí 'stop (sth)’ ígí-rá ígí-rá-ngò-
tóbí-rí 'put turban on’ tóbú-rá tóbú-rá-ngò-

### 3.4.2.2 Presuffixal $\mathrm{V}_{2}$-Raising

Causative -mí, reversive -lí, and transitive -rí are consonant-initial derivational suffixes, so they preserve the final syllable of the preceding stem. In the reversive and transitive derivatives, the final vowel of the input stem is raised to $i$ before the derivational suffix, becoming $u$ in the environment of rounded vowels.

bare \begin{tabular}{c}
underived <br>
Imprt gloss

 bare 

derived <br>
Imprt gloss
\end{tabular}

a. reversive

| dàgá | dágá | 'lock' | dàgì-lí | dàgì-lá | 'unlock' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mìndé | míndé | 'roll up' | mìndì-lí | mìndì-lé | 'unroll' |
| mùndó | múndó | 'crumple' | mùndù-lí | mùndù-ló | 'uncrumple' |
| pégé | pégá | 'nail' | pégí-lí | pégí-lá | 'remove nail' |

b. transitive

| bě bé | 'lie down' | bì-rí | bì-ré | 'put to bed' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| dě | dé | 'bathe' | dì-rí | dì-ré | 'bathe (sb)' |

underived form is stative

| bángà | - | 'be hidden' | bàngì-rí | bàngì-rá | 'hide (sth)' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bámbà | - | 'carry' | bàmbì-rí | bàmbì-rá | 'put on (sb's) back' |
| túygà | - | 'kneel' | túygú-rú | túygú-rá | 'cause to kneel' |

In cases like mediopassive reversive tál-l-í: '(affixed item) come off' from simple mediopassive tár-í: 'be affixed', the medial high vowel is syncopated and triggers $/ \mathrm{rl} / \rightarrow \mathrm{ll}$ (§3.4.5.1). However, it is the suffixal vowel in -rí- and -lí- that is vulnerable to syncope in combinations with suffixes like perfective-1b -tì-.

Causative -mí (§9.2.1) does not induce the raising of the preceding vowel. Rather, the causative suffix is added to the $\mathrm{A} / \mathrm{X}$-stem (§3.3.6).

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

### 3.4.3.1 Syncope

Short high vowels $\{i \mathrm{u}\}$ are subject to syncope to a limited extent in metrically weak medial positions when flanked by single consonants that can form medial clusters, as especially in suffixed forms like $\mathrm{CvCi} / \mathrm{u}-\mathrm{Cv}$. The clearest cases are those where syncope results in a homorganic or geminate consonant cluster. For example, in íl-1-í: 'remember' from ìré 'forget', syncope of medial i in the reversive derivative initially produces an $/ \mathrm{rl} /$ cluster which then assimilates to 11 (§3.4.5.1). This particular example is complicated by an irregular tone shift.

However, in the majority of trisyllabic or longer combinations with a metrically weak medial short high vowel, full syncope is optional. This is especially the case with $\mathrm{CvrvC}_{3} \mathrm{~V}$
where $\mathrm{C}_{3}$ is other than a liquid. For example, 'off-white' varies between [púrgé:] and [púrúgé:]. Depending on which transcription one takes to be more basic, the other variant is produced by syncope or by epenthesis

See also the following subsection.

### 3.4.3.2 Vowel reduction versus syncope

As noted above, the vowels that tend to be syncopated are short high $\{\mathrm{i} u\}$ in metrically weak medial positions, generally in a penultimate syllable as in $\mathrm{CvC} C v$. Syncope is only possible in favorable syllabic contexts. The situation is complicated by the fact that the short high vowel may alternate with nonhigh vowels. For nouns and adjectives, the nonhigh vowel is often EE (i.e. either e: or $\varepsilon$ :), and there is some ambiguity as to whether EE is the result of a vocalic suffix -E plus vv-Contraction or is just the unsuffixed stem.

Consider the inanimate singular-plural pairings in (30).

| singular | plural | gloss |
| :---: | :---: | :---: |
| a. án-gó <br> tál-gó <br> zóm-gó <br> túngúr-gó | áné: <br> tálé: <br> zómé: <br> túngúré: | ```'macari (spice)' 'egg' 'handle (of kettle etc.)' 'stool'``` |
| b. dìg-gó | dìjě: <br> zògě: | $\begin{aligned} & \text { 'joint (n)' } \\ & \text { 'shard' } \end{aligned}$ |
| c. èdù-gó zèbù-gó | èdě: zèbě: | 'waterjar' <br> 'fan (n)' |

In (30a-b), the inanimate singular suffix -gO allows full syncope of the stem-final vowel, resulting in a cluster of sonorant plus $g$ or geminate gg . On the other hand, in (30c) the stemfinal vowel appears as short $u$, since it is preceded by a different consonant that does not readily combine into a cluster with $g$ ( $d g$ and $b g$ are unattested). It is $u$ rather than $i$ because of the following back rounded O .

There are similar data for animate singular-plural pairs, where the animate plural suffix is -mbO (31). Full syncope of the stem-final occurs in (31a) after $m$ and $n$, where the suffix is simplified to -bO. Syncope can also occur after 1 and $r$ (31b). However, the suffixal $m$ is not deleted and is either semi-syllabic or allows an epenthetic $u$, often faint and not always clearly rounded (31b). Preceding stops require an overt u (31c). 'Chicken' irregularly reduces $\mathfrak{j j}$ to $\mathfrak{y}$ (31d).
singular
plural
gloss
a. sàné:
ámé:
sǎn-bò
'mosquito'
ám-bò
'honey bee'
b. bàlé:
círé:
bǎl-mbò 'lefty'
cír-mbò
'aquatic tortoise'
c. pédé:
bìdìgà-bìdìgě:
dùmbě:
pédú-mbò 'sheep'
bìdìgà-bìdìgù-mbó
'magician'
dùmbù-mbó
d. غ̀njé
غ̀yú-mbò
'chicken'

There are similar alternations among adjectives, many of which allow both inanimate singular -ygO and animate plural -mbO.

In verbs, syncope is generally an optional process that applies to short high vowels following sonorants ( $\mathrm{m}, \mathrm{n}$, semivowels, liquids) before consonantal suffixes. In verbs of the shape CvCiLi or CvCuLu with $\mathrm{L}=$ a liquid $\{\mathrm{r} 1\}$ or m (as in the causative suffix), syncope is fairly common but optional before suffixes beginning with coronals $\{\mathrm{t}$ s l$\}$.
a. ségírí
ségír(í)-tì-
ségír(í)-sò-
sègìr(i)-lí-
b. wà:mí
wǎ:-m-tì- ~ wà:mí-tì-
'encounter'
perfective-1b
perfective-2
perfective negative
'fry in light oil'
perfective-1b, etc.

Rarely, syncope in a suffixal derivation becomes obligatory (lexicalized). The two word families in (33) illustrate this. In (33a), -dí is a minor variant of transitive -rí (§9.4.5). In (33b), $/ \mathrm{rl} / \rightarrow 1 \mathrm{l}$ after syncope in a reversive derivative (§3.4.5.1); see also ìré 'forget' and its reversive íl-1-í: ‘remember’ (§9.1).
a. dùmó
dùm-dí
b. jìrí
jìl-lí
'be finished, end (v)'
'finish (sth)'
'immobilize (sth) ${ }^{\prime}$
'free (immobilized object) to move again' (§9.1)

In each case of alternation between $\{\mathrm{i} u\}$ and zero, correlated with syllabic and metrical position, two analyses are possible. In one, $\{\mathrm{i} u\}$ is present in pre-surface representations, in some cases having been reduced from EE, and is then syncopated in positions that allow it. In the other analysis, syncope is a morphophonological rule, but is followed by the phonological
process epenthesis, which inserts i or $u$ where required. The difference between $i$ and $u$ is not material, since where the short high vowel appears its fronting and rounding is determined by surrounding environment. In many examples the pronunciation of the short high vowel is weak and the vocalic features may be indeterminate.

### 3.4.3.3 Idiosyncratic raising $\mathrm{Ce} / \mathrm{C} \varepsilon$ to Ci and $\mathrm{Co} / \mathrm{C}$ to Cu

High-frequency monomoraic nouns né 'person' and će 'thing' have variants of the shape Ci as compound initials and before modifying adjectives (34a-b). Similarly, yó 'millet' takes the form yù- as compound initial and before adjectives (34c).
a. jì ${ }^{\mathrm{L}}$ dímé
jì ${ }^{\text {L }}$ pàngà-jě:
‘even-tempered person’ 'powerful person'
b. cì-kámá
$\mathrm{cil}^{\mathrm{L}} \mathrm{s} \varepsilon$ ह́- $\mathrm{g} g \varepsilon$
'(not) anything' 'good thing'
c. yù-íyé
yù-púrnó

```
'millet grain'
'millet flour'
'millet grain head'
```

Given the very small number of monomoraic Cv noun stems, it is difficult to determine how productive this raising process is.

### 3.4.4 Apocope

Word-final short high vowels $\{i \mathrm{u}\}$ can be deleted under conditions similar to those for wordinternal syncope, i.e. after an unclustered sonorant. There are many words that have variant pronunciations, e.g. pélú ~ pél 'ten'. Diachronically, apocope is likely responsible for some CvL and Cv -y verbal nouns (§4.2.2.2), but their phonology is not transparent.

### 3.4.5 Local consonant sequence rules

### 3.4.5.1 $/ \mathrm{r} 1 / \rightarrow \mathrm{ll}$

When /rl/ come together after syncope in reversive verbs (/...ri-lí), §9.1, the result is 11 . Examples are jill-lí 'free (sth) to move after being immobilized' from jìrí 'immobilize', tál-l-í: '(affixed/posted item) come off' from tár-í: 'be affixed', and îl-1-í: 'remember' from ìré 'forget'.

This process does not have a chance to occur in perfective negative verbs (suffix -lí-). The known verbs that end in ri or ru in the bare stem shift to ra/ro/re before -lí-, as in pòrò-lí- ‘did not greet' from pórú and sìmbìrè-lí- ‘did not put upside-down' from símbírí.

### 3.4.5.2 Intervocalic 1-Deletion

Original *Cvlv (and perhaps *Cvrv) stems with identical nonhigh vowels generally appear as Cv: in TU. Nouns of this type include gǎ: 'indigo bush', cf. gàrá in several other Dogon languages. See $\S 10.1 .3 .1 .2$ for lists of Cv : verbs of this type. A notable exception is bèlé 'grass'. Dogon cognates show variation between bèLé and bèLú with "L" = 1 or r (e.g. Jamsay bèrú, Najamba bèlé).

In many cases there is no synchronic evidence for a medial 1 in underlying (i.e., lexical) representations. However, there are some archaic alternations that reflect the shift. Agentive nominals (usually compound finals) from Cv: stems with nonhigh vowels take the form -Cv̀lě:, like -bàlě: 'collector' from bǎ: 'gather'. For synchronic CvCv stems, the agentive mutates the stem-final vowel to ě: (Cv̀Cě:), and -bàlě: was originally of this type. The known cases of agentive lě: are presented in (116) in §5.1.4.2.

The same Cv: verbs also have a quoted imperative form Cvlu, as in bàlú from bǎ: 'gather'. Again CvCu is regular for CvCv stems (§10.6.3.1).
*bèlé 'get' occurs as bě: in the absence of a derivational suffix, for example in recent perfect bě: dè-m 'I got'. The *l is preserved in mediopassive bèl-í: 'be gotten' which occurs in the texts, e.g. 2015-02@ 05:40.

In the cognate noun-verb combinations pél pé: 'clap, applaud', kà-kǎl ká: 'tell a lie', and tól tó: 'pound (grain, in a mortar)', the cognate nominal preserves the 1, (393c) in §11.1.2.4. Cognates in other Dogon languages show that pél, kà-kǎl, and tól ended originally in *u. The flanking vowels were identical in the verbs (e.g. *pélé), but not in the nominals (e.g. *pélú). Whether or not the final $*_{u}$ had already been apocopated when l-Deletion took place, the conditions for l-Deletion were not met in the nominals.
yàl-í: 'take a walk, stroll' has some derivatives based on a theoretical/yǎ:/ including quoted hortative yà:-ḿ (2015-02 @ 01:49) and inanimate imperfective participle yá:-ggó (2015-02 @ $01: 45)$. A similar case is jèl-í: 'hold' (morphologically mediopassive but syntactically transitive), A-stem stative jéà ~ jíà 'be holding', simplified to jâ: in a progressive construction (§10.2.2.3).

Positing synchronic underlying/Cvlv/ for verb stems of the shape Cv :, and recognizing Intervocalic 1-Deletion as a living process, would not capture the synchronic dynamics. The alternations are archaic, lack transparent phonetic motivation, and affect about twenty verb stems. Current speakers have probably just learned to associate Cv: verbs with Cvl- allomorphs in productive derivations like the agentive and the quoted imperative. The few relevant cognate nominals are easily learned as lexical items.

### 3.4.5.3 Alternation of $\mathrm{r}^{\mathrm{n}}$ and n

Nasalized tap $\mathrm{r}^{\mathrm{n}}$ does not occur in consonant clusters and must be converted to n when clustered with a following consonant. The three suffixal forms of the adjective 'red' are bárn' $\varepsilon$ :, bán-gó, and bán-bó (§4.5.1.1).

### 3.4.5.4 Alternation of $j$ with $g$ and of jj with $\eta(g)$

Some unproductive alternations of these types occur in nominal morphology. The examples likely involve stem-final vowels that were reduced to $*_{u}$ and sometimes then syncopated to zero before a suffix or a modifier. The j and nj variants occur before front vowels.
singular plural gloss comment
a. dìg-gó dijž: 'joint'
b. dùjě: dùgù-mbó 'sorceror' agentive of dùgó 'cast spells'
bòjě: bògù-mbó 'slave-snatcher'
c. غ̀njé غ̀yú-mbò 'chicken’
zònjě: zòyù-mbó 'healer'
d. cènjé: cèy-bó 'agama lizard' plural < * cèngú-mbò

The plurals in $(35 \mathrm{c})$ have $y$ that was perhaps reduced from original *yg. For 'chicken', there is a compound $\begin{gathered}\text { nggì- } ̀ \text { dé (varying with regularized } \\ \text { ènjè-èd } \varepsilon \text { ) 'chick'. }\end{gathered}$

Likewise, ènjé 'roselle' has an optional variant èngú before some modifiers or as compound initial. èngú may then syncopate to èn-. There are two main cultivars of this crop plant, respectively red (for beverages) and green-white (for sauce). The former variety is called èggù ${ }^{L}$ bár ${ }^{\mathrm{n}} \varepsilon$ : or regularized ènjè ${ }^{\mathrm{L}}$ bár $^{\mathrm{n}} \varepsilon$ : 'red roselle'. A similar syncope occurs in jè̀n-gó 'tilted' (inanimate singular) from /jèngù-gó/, compare its unsuffixed plural jènjě̌: and related stative verb jéngà 'be tilted'.
$\mathrm{j} / \mathrm{g}$ alternations involving verbs are in (36). jè̀ggì-rí (36a) and ígí-rí (36c) have g before a metrically weak (and arguably epenthetic) medial short $i$, where $i$ and $u$ are not clearly distinguished.

| a. jènj-í: | '(sth) tilt' |
| :---: | :---: |
|  | 'be tilted (stative)' |
| jèngì-rí | 'tilt (sth)' |
| b. táj-í: | 'put on (one's shoe)' |
| tágí-rí | 'put on (sb else's shoe)' |
| táy | 'shoe(s)' |
| c. íj-í: | '(sb) stop, stand' |
| ígí-rí | 'stop (sb)' |
| ígà | 'be standing, be up' (stative) |
| d. gòj-í: | 'carry slung over shoulder' |
| gógà | 'be carrying over shoulder' (stative) |

```
e. dèj-í: 'learn (a trade)'
    dègì-rí 'teach (a trade)'
f. zégé 'fight (n)' (originally with *-gé suffix?)
    zèj-í: 'fight (v)'
```


### 3.4.5.5 Alternation of 1 and d

The disallowed consonant cluster $/ \mathrm{nl} /$ hardens 1 to d to produce an acceptable nd cluster.
Perfective negative -lí- combines with Cvn verbs as Cvn-dí-, as in kán-dí- ‘did not do’ and gàn-dí- ‘did not put/pour in'. Likewise, prohibitive -lì becomes -dì in kán-dì ‘do not do!’. There are no relevant combinations involving reversive -lí.
lă:-Ø dè 'if it is not' combines with kán 'do' as kán dă:-Ø dè, 2015-01 @ 03:45.
There are some obscure correspondences between 1 and nd in various other negative morphemes, but the alternations are not transparent phonologically. In the perfective negative paradigm, most forms consist of -lí- plus a pronominal suffix, but for 3Pl subject there is a portmanteau -ndá (§10.2.3.1). The conjugated stative negative is = ndǎ- (§10.4.2) but a variant with 1 occurs in stative negative m̀bí-lă- 'not want' (\$11.2.5.2), and = lă- is the productive 'it is not' enclitic (§11.2.1.2).

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

### 3.4.6.1 Glottal stop between adjacent vowels in reduplications

Glottal stop $?$ is not a basic phoneme in TU. However, a glottal stop does separate the two vowels in reduplications of vowel-initial stems: غ̀-lèdù-ngó 'goodness, beauty' (§4.2.6), áy"-Ráy 'how?' (variant, §13.2.2.5).

### 3.4.6.2 vv-Contraction (mostly absent)

There are few opportunities for vv-Contraction in TU.
3Pl-subject forms of verbs are a possible context for vv-Contraction. However, the phonology is nontransparent. It may be best to think of morphophonological vocalic mutation rather than suffixation in the 3 Pl simple perfective, as in 'dòg-à: 'they abandoned', compare 1 Sg ${ }^{\mathrm{L}}$ dòg̀̀-m and (mutated $\mathrm{E} / \mathrm{I}-\mathrm{stem}$ ) $3 \mathrm{Sg}{ }^{\mathrm{L}}$ dògè- $\varnothing$. Combinations of 3 Pl subject with nonzero inflectional suffixes tend to be too idiosyncratic for reduction to vv-Contraction.

There are many similar alternations in nominal and adjectival morphology that might also be analysed as morphophonogical vowel mutation or as simple allomorphy instead of productive suffixal morphology. For example, adjective 'slender' has animacy-number forms mèndé: ( AnSg , InanPl), mèndú-mbò (AnPl), and mèndú-ŋgó (InanSg). The long-vowel forms like mèndé: might be segmented as e.g. /mèndú- $\varepsilon$ / subject to vv-Contraction, but there are no
cases of simple short $\varepsilon$ as a surface suffix in nominal morphology. No adjective has more than three forms, and no noun (in the same meaning) has more than singular versus plural, so lexical memory is not strained by just learning the individual forms.

Reduplications of vowel-initial stems, as with غ̀-fèdù-ngó 'goodness, beauty' (§4.2.6), use glottal stops to separate the vowels. Likewise, a glottal stop can appear in otherwise vowelinitial words, as in 2 Sg possessor (?)ú-wó after a noun (§3.2.6). This too has the effect of preempting vv-Contraction.

### 3.4.6.3 Vowel-Semivowel Assimilation

A short high vowel can assimilate in rounding and backness to a following semivowel. The effect in this case is that $/ \mathrm{u}-\mathrm{y} /$ becomes $\mathrm{i}-\mathrm{y}$, and $/ \mathrm{i}-\mathrm{w} /$ becomes $\mathrm{u}-\mathrm{w}$. Under some conditions suffixal -m can behave like semivowel w . The only actual alternations involve pronominalsubject suffixes on verbs: $1 \mathrm{Pl} / 2 \mathrm{Pl}-\mathrm{y}^{\mathrm{n}}, 2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}, 1 \mathrm{Sg}-\mathrm{m}$. These can be added to any of the forms in (37).
a. final-high-vowel verb
monosyllabic $C v$

| yǐ | 'see' |
| :--- | :--- |
| tí | 'send' |
| dǐ | 'carry on head' |
| nú | 'enter' |
| bù | 'be' |
| $N C v$ |  |
| ńdí | 'give' |
| longer stems (examples) |  |
| mèndí | 'fold' |
| óbú | 'lay out (mat)' |

b. inflectable enclitic

$$
=\text { bì- past-time }
$$

c. inflectional suffix

| -tì- | perfective- 1 b |
| :--- | :--- |
| -lí- | perfective negative |

The situation is clearest with the inflectional suffixes -tì- and -lí- and with bù 'be', becuase their lexical vocalism is unmistakable in the zero 3 Sg form. The key combination for -ti- and -lí- is $2 S g-w^{n}$. The suffixal i assimilates as $u$, optionally in the perfective- 1 b and regularly in the perfective negative. The key combination for 'be' is $1 \mathrm{Pl} / 2 \mathrm{Pl}-y^{n}$, to which the suffixal $u$ optionally assimilates as i. Presumably the assimilated variants in the variable cases are usual in allegro speech.
a. Pfv1b
-tì-Ø -tì-m
$\begin{array}{ll}-t u ̀-w^{n} & -t i ̀-y^{n} \\ \sim-t i ̀-w^{n}\end{array}$

c. 'be'
${ }^{\text {L }}$ bù-Ø $\quad{ }^{\text {Lbù }}$-m
${ }^{\text {L }}$ bù-m $\quad{ }^{\text {L }}$ bù-w ${ }^{\text {n }}$
${ }^{\text {L }}$ bì-y ${ }^{n}$
$\sim{ }^{\text {L }}$ bù-y ${ }^{n}$

The situation is messier with past-time enclitic = bì, probably because it can be (re)interpreted as a special case of bu 'be'. The two often combine, resulting in quasi-reduplicative combinations that make morpheme identification tricky (§10.5.1). Assimilation of i to u is usual for 2 Sg and apparently fairly common for 1 Sg .

|  | 3 Sg | 1 Sg | 2 Sg | $1 \mathrm{Pl} / 2 \mathrm{Pl}$ |
| :--- | :--- | :--- | :--- | :--- |
| past-time | $=b \grave{̀}-\varnothing$ | $=b i ̀-m$ | $=b u ̀-w^{n}$ | $=b_{1}-y^{n}$ |
|  |  | $\sim=b u ̀-m$ |  |  |

Assimilation is not usual with other Cv verbs. In normal speech they allow unassimilated $u-y^{n}$ and $\mathrm{i}-\mathrm{w}^{\mathrm{n}}$ combinations. The forms in (40) are simple perfectives, which occur following a focalized constituent. The bolded items show that assimilation does not occur.

| 3 Sg | 1Sg | 2 Sg | $1 \mathrm{Pl} / 2 \mathrm{Pl}$ |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {L }}$ yì-y | ${ }^{\text {L }}$ yì-m | ${ }^{\text {L }}$ yì $-\mathbf{w}^{\mathbf{n}}$ | ${ }^{\text {L }}$ yì-y ${ }^{\text {n }}$ |
| ${ }^{\text {L tì-y }}$ | ${ }^{\text {L }}$ tì-m | ${ }^{\text {L }}$ ì $-\mathbf{w}^{\mathbf{n}}$ | ${ }^{\text {L }}$ tì- $\mathrm{y}^{\text {n }}$ |
| ${ }^{\text {L }}$ dì-y | ${ }^{\text {L }}$ dì-m | ${ }^{\text {L }}$ dì $-{ }^{\text {n }}$ | ${ }^{\text {L }}$ dì-y ${ }^{\text {n }}$ |
| ${ }^{\text {L }}$ nù-y | ${ }^{\text {L }}$ nù-m | ${ }^{\text {L }}$ nù-w ${ }^{\text {n }}$ | ${ }^{\text {L }}$ nù-y ${ }^{\text {n }}$ |

With ńdí 'give' and with nonmonosyllabic final-high-vowel verbs, assimilation is usual in the simple perfective before $-\mathrm{w}^{\mathrm{n}}$ and $-\mathrm{y}^{\mathrm{n}}$, and it is optional before -m . This is clearest for 'give', whose 3 Sg form shows its lexical vocalism. For the longer verbs, the apparent lexical final vowel is $u$ when there is another back rounded vowel in the stem, otherwise $i$, thus mèndí 'fold' but óbú 'lay out'. My assistant occasionally "corrects" u to i before a suffix, and centralized pronunciations between $i$ and $u$ have been heard. Because the final vowel is subject to syncope/apocope under favorable syllabic conditions (after an unclustered sonorant), as with děl (< dèlí) and ór (< órú) 'speak', it is possible that the final i or u is better analysed as an epenthetic rather than lexical vowel.
$1 \mathrm{Pl} / 2 \mathrm{Pl}$

| a. 'give' | ${ }^{\text {L }}$ ndì-Ø | ${ }^{\text {L }}$ ndì-m | ${ }^{\text {L }}$ ǹdù $-\mathbf{w}^{\mathbf{n}}$ | ${ }^{\text {L }}$ ndì- ${ }^{\text {n }}$ |
| :---: | :---: | :---: | :---: | :---: |
| b. 'fold' | ${ }^{\text {L }}$ mèndì-Ø | $\begin{aligned} & \text { L} \text { mèndù-m } \\ & \sim{ }^{\mathrm{L}} \text { mèndì-m } \end{aligned}$ | ${ }^{\text {L }}$ mèndù-w ${ }^{\text {n }}$ | ${ }^{L}$ mèndì-y ${ }^{\text {n }}$ |
| c. 'lay out' | Lòbù-Ø | ${ }^{\text {L }}$ ¢̀bù-m |  | ${ }^{\text {L }}$ òbì- ${ }^{\text {n }}$ |

### 3.4.6.4 Monophthongization (absent)

No clear cases of monophthongization of e.g. iy to i : or $u w$ to $u$ : have been observed. The closest thing would be combinations including $1 \mathrm{Pl} / 2 \mathrm{Pl}-\mathrm{y}^{\mathrm{n}}$ or $2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}$, but these do not fully monophthongize.

### 3.5 Cliticization

There are no moveable (e.g. second-position) clitics. Certain suffix-like elements in verbal morphology can be considered to be phonological enclitics, but the distinction between clitic and suffix is not sharp.

The 'it is' enclitic with predicate NPs is manifested as a final L-tone and lengthening of a final short vowel: pédê: $=\varnothing$ 'it's a sheep' (pédé:), árnâ: = Ø 'it's a man' (<árná). For 1st/2nd person subjects (topics) this is replaced by a regular pronominal-subject suffix (§11.2.1.1). The negative counterpart is $=$ lǎ-, which is also conjugatable, e.g. $3 \mathrm{Sg}=$ lǎ:-Ø (§11.2.1.2).

The stative negative morpheme (=ndǎ-, $3 \mathrm{Sg}=$ ndǎ:-Ø) can also be considered to be a clitic, since it is added to an already well-formed predicate (§10.4.2).

Finally, the conjugatable past morpheme = bì- which is added to various aspect-negation forms of verbs may also be considered a clitic (§10.5.1).
$=$ rather than - is used as the clitic boundary marker.

### 3.6 Tones

### 3.6.1 Lexical tone melodies

### 3.6.1.1 One H-toned peak per stem (no $\{\mathrm{L}\}$ or $\{\mathrm{HLH}\}$ melodies

TU, like many (but not all) Dogon languages, requires that each noun (including spatiotemporal "adverbs"), verb, adjective, numeral, or demonstrative have a single H-toned peak in its lexical form (prior to grammatical tone overlays). The H-toned peak may encompass the entire stem or be aligned with a portion thereof, minimally a short syllable or the second mora of a heavy syllable. For example, CvCv may be Cv́Cv́, Cv́Cv̀, or Cv̀Cv́, but not \#Cv̀Cv̀. There are also no noncomposite stems that have two separate peaks, e.g. \#Cv́Cv̀Cv́.

This constraint applies only at the lexical level. Lexical melodies are routinely overridden by grammatical tone overlays and word-internal morphophonology.

An argument can be made that the stems that are here analysed as having melody $/ \mathrm{L} /+\mathrm{H}$ are actually lexically /L/-melodic and acquire a final H -tone by an automatic phonological process. This is mentioned at the end of §4.1.1.1 but is not developed here.

### 3.6.1.2 Tone melodies or H-tone accent?

Since /L/ melody is disallowed for lexical stems (excluding expressive adverbials) and since each melody has a single H -tone peak, the tone system has some similarities to pitch-accent systems. A pitch-accent model would work without problems for stems like hólà:rù 'trust (n)', (g)àsègé 'animal', and àlmúnjill 'imam's respondent', where the H-tone is aligned with one syllable.

The difference is that in classic pitch-accent systems the H-tone always aligns with a syllable. In TU, the H-tone peak can be limited to a mora that is part of a syllable, as in nă: 'cow'. In other stems the H-tone peak spreads over two or more adjacent syllables, as in wágádú 'time', which is pronounced [wágádū] in isolation.

The optimal analysis is that both H and L tones are represented in lexical melodies, which therefore include $/ \mathrm{LH} /$, /HL/, and $/ \mathrm{LHL} /$ as well as $/ \mathrm{H} /$. Each stem has a single H-tone peak that can be aligned with as little as the second mora of a long vowel or with as much as the entire stem. The constraint in favor of a single H -tone peak is equivalent to the combination of a constraint against/L/ melody and another constraint against double-H peaks as in /HLH/ and /HLHL/.

Nevertheless, bisyllabic and longer stems of $/ \mathrm{H} /$ melody are pronounced in isolation (or otherwise before a pause) with a phonetic primary accent on the initial syllable. The effect is that e.g. $\varepsilon$ dé: ‘good' is pronounced as [ $\varepsilon$ diè:] with mid pitch on the second syllable. In nonfinal position the tones are level: [ $\varepsilon$ d́ć: ...].

Some other Dogon languages like Donno So have taken this farther and no longer distinguish $/ \mathrm{H} /$ and $/ \mathrm{HL} /$ melodies. Those languages have approached the status of classic pitchaccent systems. Conversely, a few Dogon languages like Toro Tegu allow/HLH/ melodies and so diverge sharply from pitch-accent.

### 3.6.1.3 Lexical tone melodies of verbs

Verbs of all syllabic shapes have lexical $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ melodies.
For Cv - verbs, the distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ is partially suppressed, since a complex $<\mathrm{LH}>$ tone cannot be expressed audibly on a single mora that is nonfinal in a word. However, a lexical distinction between Cv́ and Cv̌ is manifested in the perfective-2 (Cv́-sò- versus Cv̀-só) and in the experiential perfect (Cv́-téré-bì- versus Cì-téré-bì-).

Verbs of two or more moras (Cv:-, CvCV-, etc.) audibly distinguish/H/from/LH/melodies in several inflections, especially positive perfectives, e.g perfective-1b Cv́:-tì- versus Č̌:-tì-.
/H/ lexical melody is obligatory for stems beginning with voiceless obstruents. /LH/ melody is obligatory for native Dogon stems beginning with voiced obstruents, though some
borrowings do not respect this, e.g. bárímí 'wound (v)'. Native Dogon stems that begin with a sonorant, or with no consonant, divide into lexically arbitrary / $\mathrm{H} /$ and /LH/ melodic classes; the melody of each such stem must be learned.

For /LH/ verbs, the tone break is at the right edge, e.g. L.L.H for trisyllabic stems, L.H for bisyllabics (including Cv̀CCv́- and Cv̀:Cv́- as well as Cv̀Cv́-), and $<\mathrm{LH}>$ for bimoraic monosyllabics ( $\mathrm{C} \check{\mathrm{v}}:-$ ). These tone patterns are heard before the basic perfective positive forms (except perfective-2). Because trisyllabics are L.L.H, rather than L.H.H as in some other Dogon languages, syncope of CvCvCv - to CvCCv - creates no tonal anomalies in TU of the type found in e.g. YD (where Cv̀Cv́Cv́- can syncopate to Cv̌CCv́-, tonally distinct from inherited Cv̀CCv́).
zと̌: 'bring' has a tonally irregular quoted hortative zé-lù for expected \#zè-lú. Its antonym zǎy/zo- 'take, convey' also has a tonally irregular quoted hortative zây for expected \#zǎy. This verb also has an irregular imperative zá-dà. These forms are isolated vestiges of a lexical /HL/ melody that may have once been more consistent for 'bring' and 'take, convey'. Cognates of these two verbs in other Dogon languages (e.g. Toro Tegu) show similar tonal (and other) irregularities. Both verbs originated as verb-verb compounds of 'take, pick up' plus 'come' or 'go', respectively.

Lexical tone contours of verbs are regularly overridden or modified in inflections other than basic positive perfectives.

### 3.6.1.4 Lexical tone melodies of uncompounded nouns

Uncompounded nouns with exceptions among loanwords have /H/, /HL/, /LH/, or /LHL/ melodies, some of which have subtypes. Examples given in the following subsections are inanimate nouns that have no morphological singular versus plural opposition. For animate nouns (with plural -mbO ) and those inanimates with a singular suffix ( -gO or variant), see §4.1.1.3-4.

### 3.6.1.4.1 /H/-melodic nouns

/H/-melodic nouns of two or more syllables are downstepped prepausally (for example, in isolation) to mid pitch on the final syllable, resulting in a $\mathrm{H}^{*} \mathrm{M}$ pitch sequence. They revert to all-H in non-prepausal position, i.e. within clauses. Prepausal phonetic downstep is disregarded in the transcription used here, and in the lexical spreadsheet.

A generous list of /H/-melodic nouns is in (42). Those that allow inanimate singular or animate plural suffixes are in §4.1.1.3-4.
singular
gloss
a. monosyllabic
bé:
té:
gáw
kól
pél

## sán

sáy
sém
táy
tóm
zám
b. bisyllabic
ándá
búlá
cíné
dí:né
ómbó:
sá:dá
témé:
úló
wá:gá
c. trisyllabic
ámá:né
gábírú
gúdúbá
kánbárá
támbárá
wágádú

```
‘stick’
'tea'
'onion'
'pulley (at well)'
'applause'
'prayer'
'jaundice'
'first sprouts (of plant)'
'shoe'
'hump (on back)'
'peace (in greetings)'
```

'the bush'
'thread'
'nose'
'religion'
'torch'
‘carrion’
'mud brick’
'house'
'leather baggage container'
'vow (n)'
'tomb'
'shrub (any)'
'calabash jewel holder'
'metal trap'
'time, moment'
'tomb'
'shrub (any)'
'calabash jewel holder'
'metal trap'
'time, moment'

### 3.6.1.4.2 /HL/-melodic nouns

$/ \mathrm{HL} /$ melody is a cover term for lexical tone patterns that begin with H and end with L . The possibilities increase as the syllable count increases. Notably, no noun ends in an $<\mathrm{HL}>$-toned syllable, and there are no monosyllabic nouns of $/ \mathrm{HL} /$ melody.

Most/HL/-melodic nouns are inanimates that do not allow suffixes. This melody is typical of borrowings from Fulfulde and other languages. The melody is especially favored for extra-
heavy stems, including those of four or more syllables. For the few/HL/-melodic nouns that do allow suffixes see chapter 4.

In (43), the stems are too short to distinguish between $/ \mathrm{H}^{*} \mathrm{~L} /$ and $/ \mathrm{HL}^{*} /$ subtypes.
(43)/HL/-melodic nouns of up to two syllables
singular gloss
a. monosyllabic
(none)
b. bisyllabic
dádà 'cowfest (contest among herders)'
kánà
'gold (n)'
láyà
'Feast of the Ram'
sádè
'expense'
sárdù 'silver (metal)'
sćlàl '(good) health'
sérè 'witness (person)'
yéngì 'yesterday'
zákà 'zakat (Islamic tax)'
záwdù 'livestock (collective)'
zóntè 'fever'

In (44), $/ \mathrm{H}^{*} \mathrm{~L} /-$ melodic nouns are presented. They have a single final L-toned syllable, preceded by two or more H -toned syllables.
(44)/ $\mathrm{H}^{*} \mathrm{~L} /-m e l o d i c ~ n o u n s$
singular gloss
a. trisyllabic
bólé:sù '(modern) thread'
káráwàl 'milk bucket'
músórò 'shawl'
b. quadrisyllabic
(none)

Array (45) presents /HL*/-melodic stems. They have a single H-toned syllable followed by two or more L-toned syllables. This subtype is common with Fulfulde loanwords, some of which are ultimately from Arabic.
(45)/HL*/-melodic nouns
singular
a. trisyllabic
dúwà:gù
hólà:rù
lá:kàrà
lá:sàrà
lásìrù
lósòrù
máykòrò
néทgèrè
pégèrè
púdùrò
sánbàr ${ }^{\text {nà }}$
sátàlà
síkòrò
téngàrù
tógòrò
b. quadrisyllabic
zákàgàdà
gloss
'blessing'
'trust (n)'
'afterworld, the Hereafter'
'4PM prayer'
'couscous'
'rollup with stomach and fat'
'mango'
'toilet'
'half'
'twilight prayer'
'2pm prayer'
'kettle'
'sugar'
'Fulbe-style conical hat'
'name-mate'

The noun búgútùrù 'gunpowder horn' has H.H.L.L tones and does not fit into either $/ \mathrm{H}^{*} \mathrm{~L} /$ or $/ \mathrm{HL}^{*}$ / subtypes. It can be labeled informally as $/ \mathrm{H}^{*} \mathrm{~L}^{*} /$. As with all nouns of four or more syllables, it may be interpreted by native speakers as a compound, which would be outside of the framework of simple lexical melodies for noun stems.

### 3.6.1.4.3 /LH/- and /L/+H-melodic nouns

$<\mathrm{LH}>$ syllables, specifically Cv̌:, are common. They occur as monosyllabic stems, and as the final syllables of longer stems. $<\mathrm{LH}>$ syllables in nonfinal position in stems are very rare but attested as the result of recent elision of a medial consonant. For stems with three or more moras, one can distinguish $/ \mathrm{L}^{*} \mathrm{H} /$ from $/ \mathrm{LH}^{*} /$ subtypes. A melodic type labeled $/ \mathrm{L} /+\mathrm{H}$ is only identifiable for nouns that allow an inanimate singular or animate plural suffix, since the H -tone shifts onto the suffix if present; these are presented in §4.1.1.1.

For the bimoraic stems in (46), the L and H tones each have one mora.
(46)/LH/-melodic nouns of two vocalic moras
singular gloss
a. monoyllabic
lă: 'foot'
b. bisyllabic
àrná
'rain (n)'
tèmbú
'protector'
In (47), $/ \mathrm{L} * \mathrm{H} /$ stems have a right-biased tone break, preceding the final mora.
(47)/L*H/-melodic nouns
singular gloss
a. bisyllabic with final long vowel
àngǎ:
'(lower) jaw’
àrjě:
'boubou (garment)'
bènǎ: 'interior'
nùmǎ: 'hand'
ว̀mbǒ: 'idol'
b. bisyllabic with long first syllable
tà:gám
‘bier'
c. trisyllabic
àsògó
'chaff'
bàr"àkú: ${ }^{\text {n }}$
'cassava'
kàsà:rá
'scourge, plague'
lìgìdú
'snack of millet grain mixed with leaves'
màtàrá:s
'medersa (koranic school)'
mòtilàatóm
'menthol lip balm'
òdう̀ká:
'throat'
yìgìná 'filtering basket'

In (48), /LH*/-melodic nouns have the tone break at the leftmost syllable boundary.
(48)/LH*/-melodic nouns
singular gloss
a. bisyllabic with final long vowel
bàrkó:
cìndé:
pòlé:
s $\check{\text { gá: }}$
sèrzó:
sòbé: 'sticks laid on cross-beams in ceiling'
tèbá:
tòngá:
tùmbá
wòmí: 'rice or millet cake'
b. trisyllabic
àdúná
àrkámná
àtémbú
jìngírú
làsá:sú
làsúgó
mèndér ${ }^{n}$ モ́
pèdíŋ́́
sè:wá:lá
sèwárá
'world (of the living)'
'a spice seed (Ammodaucus)'
'traditions'
'guitar'
'rifle'
'wooden mask (n)'
'needle'
'spice for cream of millet (Xylopia)'
'fat around stomach'
'Sevare (Sévaré)' (a city)

In one case, the tone break occurs on a long vowel in a penultimate syllable. This is sǎ:gá 'alms', which reconstructs as trisyllabic *sàrágá, originally from Arabic.

Two nonsuffixing quadrisyllabic nouns have the tone break in the middle and are labeled $/ \mathrm{L} * \mathrm{H}^{*} /$. As always with quadrisyllabics, these may be treated prosodically as compounds.
(49)/L* ${ }^{*} /$-melodic nouns
singular
a. quadrisyllabic
àlpà:tíyá
sàyàwílí
sàpèréndé
gloss

[^0]
### 3.6.1.4.4 /LHL/-melodic nouns

These nouns have an H-toned peak flanked by L-tones. In addition to the simple stems listed below there are also some examples among suffixing nouns (§4.1.1.3-4).
(50) /LHL/-melody

> singular gloss
a. bisyllabic
jàyâm 'aromatic sedge tubers'
b. trisyllabic
àljénè 'paradise’
c. quadrisyllabic
(none)
d. quinquesyllabic
pèndídìmbùlà 'arboreal gecko sp.',

### 3.6.1.4.5 Double-H-peak melodies /HLHL/ and /LHLHL/

A couple of fauna terms, not transparently composite or onomatopoeic, have two H -toned peaks separated by an L-tone. Their singulars are bámzǐ:ndè 'chameleon', and bìnékògórò plantaineater (bird)'. They take the usual animate plural suffix (§4.1.1.3).

### 3.6.1.5 Lexical tone melodies of modifying adjectives

Modifying adjectives have the same suffixal morphology as nouns, with the exception that many adjectives have both inanimate and animate paradigms while common nouns are one or the other. The syllabic suffixes are animate plural -mbO and inanimate singular -( y$) \mathrm{gO}$. These suffixed forms contrast with a merged animate singular = inanimate plural, which is either clearly suffixless or ends in a long front vowel EE (ee or $\varepsilon \varepsilon$ ). The EE ending is morphemically and phonologically nontransparent. It could be taken as part of the lexical stem (subject to truncation before -mbO and -ggO ), as a suffix -E that undergoes vv-Contraction, or more directly as a final-vowel mutation.

The majority of modifying adjectives have $/ \mathrm{H} /$ melody, though the H -tone does not extend into $\mathrm{AnPl}-\mathrm{mbO}$ (51a). A respectable minority have one or another of the rising melodies $/ \mathrm{LH} /$, $/ \mathrm{L} /+\mathrm{H}$, or $/ \mathrm{LHL} /(51 \mathrm{~b})$. /HL/ melody is rare (51c). See $\S 4.5 .1$ for analysis and adjective lists.
InanSg InanPl AnSg

AnPl gloss
a. /H/ melody

| dé-ngé | d $\varepsilon ́$ | d $\varepsilon$ |  | dé-mbò |
| :--- | :--- | :--- | :--- | :--- |
| nóm-gó | nómé: | nómé: | nóm-bò | 'big' |
| 'difficult' |  |  |  |  |

b. rising melodies

| òl-gó | òlč: | òlč: | ̀̀l-mbó | 'wet' |
| :--- | :--- | :--- | :--- | :--- |
| - | - | mòdé: | mòdú-mbò | 'evil, nasty' |
| mèndú-ŋgǵ | mèndé: | mèndé: | mèndú-mbò | 'slender' |

c. $/ \mathrm{HL} /$ melody (rare)

| - | - | nárnà | nár"à-mbò | 'respectable' |
| :--- | :--- | :--- | :--- | :--- |
| búlò | búlò | - | - | 'blue' |

### 3.6.1.6 Lexical tone melodies of numerals

Basic uncompounded numerals are those from ' 2 ' to ' 10 '. The melody can be $/ \mathrm{H} /$ as with kúlé ' 6 ' or $/ \mathrm{LH} /$ as with tà:ndú ' 3 '. It is / $\mathrm{L}-\mathrm{HL} /$ in the case of the reduplicative stem gà-gárà ' 8 '.
/HL/ occurs with té:mdèrغ̀ 'hundred', which however is noun-like and can itself be quantified by a simple numeral.

### 3.6.1.7 Monosyllabic <HL>-toned particles

There are no monosyllabic nouns or adjectives with /HL/-melody, but there are a handful of grammatical morphemes of this type (52).

| nân | 'now' |
| :--- | :--- |
| yâ: | 'again' |
| ôy $y^{n}$ | 'thus' |

nân may have originated as ná: 'now' plus definite ǹ.

### 3.6.2 Grammatical tone patterns

Lexical tone melodies are overridden in many cases by morphosyntactically controlled tone overlays, represented in curly brackets, e.g. $\{\mathrm{L}\}$ and $\{\mathrm{HL}\}$.

### 3.6.2.1 Grammatical tones for verb stems

Verbs have lexical melody $/ \mathrm{H} /$ or $/ \mathrm{LH} /$, the choice being predictable from the [ $\pm$ voiced] feature of an initial obstruent if there is one, otherwise arbitrarily lexical (§3.6.1.3). Examples of $/ \mathrm{H} /$ are ká ‘shave', nú 'enter', and tíbé ‘die'. Examples of/LH/ are gǒ 'exit (v)', jě ‘dance (v)', and zòbó 'run'. The comments below are summaries; see chapter 10 for details.

The lexical melody of regular $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ stems of two or more moras is preserved before suffixed perfective positive inflections (Pfv1b -tì-, Pfv1a -à:/-yà-, and Pfv2 -so-). Cv̌ and Cv́ merge in perfective-1b Cर́-tì- but this is attributable to a phonological constraint.

In the perfective negative ( $\$ 10.2 .3 .1$ ), the stem is tone-dropped, merging $/ \mathrm{H} / \mathrm{and} / \mathrm{LH} /$, e.g. tìbà-lí- ‘did not die’ and zòbò-lí' ‘did not run'.
$\mathrm{An}\{\mathrm{HL}\}$ tone overlay on the stem is regular in the imperfective positive (§10.2.2.1). Thus bìŕ́ 'work (v)', imperfective bírà-m-dò-Ø 'he/she works'. $\{\mathrm{HL}\}$ is also the basic overlay for derived statives ( $\S 10.4 .1$ ). In certain specific constructions the $\{\mathrm{HL}\}$ overlay occurs on perfective or bare verbs to describe enduring back-and-forth activities and the like (§10.2.1.9).

Imperfective negatives (§10.2.3.5) have an H-toned verb and L-toned suffix: tíbá-ygò:-Ø ‘he/she doesn’t die’, zóbá-yù-m ‘I don’t run'. A similar $\{\mathrm{H}\}$ overlay occurs on imperatives of prosodically light verbs (those of one to two moras) that end in a nonhigh vowel. This merges /H/ and /LH/ melodies. Thus imperatives nú 'enter!' and gó 'exit!', compare bare stems nú and gǒ.

In defocalizing contexts, verbs in several inflectional categories are subject to tonedropping to all-L (§13.1).

### 3.6.2.2 Grammatical tones for noun stems

Nouns have a wide range of lexical tone melodies. However, nouns (and N -Adj combinations) are subject to morphosyntactically controlled tone-dropping. Postnominal modifiers that trigger tone-dropping on the noun are adjectives and demonstratives. Preposed possessors also trigger tone-dropping on the possessum, except that kin terms have an $\{\mathrm{H}\}$ overlay after preposed pronominal possessors (§6.2.2.2). Numerals, the definite marker ǹ, free quantifiers like 'all', postposed pronominal possessors, and pragmatic markers like 'as for' (topic), do not affect nominal tones. Details are in chapter 6 on NP structure. In addition, internal heads of relative clauses are subject to tone-dropping (§14.2.1).

Most nominal compounds are prosodically as well as semantically right-headed. The final keeps its lexical tones, while the initial is tone-dropped (§5.1.3). This does not apply to compounds that are structured as possessor-possessum combinations (§5.1.2).

### 3.6.2.3 Grammatical tones for adjectives

Modifying adjectives are morphologically closely related to nouns. For example, both nouns and adjectives take animate plural suffix -mbO, and many of both take inanimate singular suffix $-(\mathrm{g}) \mathrm{gO}$.

Additional modifers have the same tonal effects on N -Adj combinations as on simple nouns. N-Adj is tone-dropped as a unit before demonstratives, as internal heads of relatives, and as possessums with prenominal possessor. Numerals, definite ǹ, and postposed pronominal possessors have no tonal effect on them.

### 3.6.2.4 Grammatical tones for numerals

Numerals ' 2 ' to ' 10 ' come with H-toned prefixal animacy classifiers yí- (inanimate), bú(animate), and jé- (human). A distinction between /H/ and /LH/ melodies, e.g. kúlé 'six' versus nǔm 'five', is observable in the counting recitation (where classifiers are omitted) and after the human classifier. It is partially obscured after yí- and bú-, which drop /H/ melody to L-toned, e.g. bú-kùlè and yí-kùlè 'six'.

Aside from this tone-dropping internal to the numeral word, numerals are not subject to tone-dropping triggered by external tonosyntactic controllers, such as demonstratives and prenominal possessors. This is unusual and perhaps unique in Dogon languages, most of which have numerals without classifiers, and do allow numerals to be included in tone-dropped target strings, as in [N Num] ${ }^{\text {L }}$ Dem.

### 3.6.3 Tonal morphophonology

### 3.6.3.1 Atonal-Morpheme Tone-Spreading

Consonant-only pronominal-subject suffixes on verbs ( 1 Sg or logophoric $-\mathrm{m}, 2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}$, and $1 \mathrm{Pl} / 2 \mathrm{Pl}-\mathrm{y}^{\mathrm{n}}$ ) have no intrinsic tones. They form codas to the preceding syllable, whether the latter is stem-final or part of an inflectional suffix. Syllabic inflectional suffixes on verbs such as perfective- 1 b -tì- and perfective negative -lí- do have tones.

In nominal and adjectival morphology the clearly recognizable suffixes are inanimate singular $-(\mathrm{y}) \mathrm{gO}$ and animate plural -mbO (where O is o or $\rho$ ). The animate plural suffix is L-toned, except when it acquires the mobile (floating) H-tone of /L/+H-melodic stems. Thus pédé: 'sheep', plural pédú-mbò showing that the suffix does not acquire H-tone by spreading from the left.

On the other hand, inanimate singular -(y)gO appears with H-tone not only after /L/+H-melodic stems but also whenever the preceding syllable is H -toned. As a result, the suffix is H-toned in great majority of nouns and adjectives that allow it, unless the entire word is tone-dropped by an external tonosyntactic process. Only occasional examples like ìdà ${ }^{L}$ pú-pùndù-gò 'dust storm' show that the suffix is L-toned after an HL-toned stem. The conclusion is that $-(\mathrm{y}) \mathrm{gO}$ is atonal, unlike L-toned animate plural -mbO , and gets its tone secondarily, either from a mobile tone that lands on it or by spreading from the preceding syllable.

### 3.6.4 Low-level tone rules

### 3.6.4.1 Contour-Tone Mora-Addition

Monomoraic Cv stems and particles, and final Cv syllables on longer stems, can be monotonal (simple H or L ) or bitonal $<\mathrm{LH}>$..

When a final L-toned Cv̀ syllable in a clause-final verb is modified by adding a terminal H-tone in connection with a content (WH) interrogative word (§13.2.2), the vowel is usually lengthened. An example is 'kàr ${ }^{\text {nì̀-m-d-ž: 'they do' in a 'how?' question (2015-06 @ 01:25), }}$ from ${ }^{\mathrm{L}} \mathrm{kàr}^{\mathrm{r}} \mathrm{i}-\mathrm{m}-\mathrm{d}-\varepsilon$.

### 3.6.4.2 L-Tone Spreading (/LH/ to all-L)

In a number of constructions a bare verb stem of $/ \mathrm{LH} /$ melody flattens to all-L before a suffix or word that begins with H -tone. In these constructions an $/ \mathrm{H} /-$ melodic verb stem remains H-toned, so the shift of $/ \mathrm{LH} /$ to all-L is tone-spreading rather than an $\{\mathrm{L}\}$ overlay that erases lexical tones.

This spreading applies to /LH/-melodic bare verbs when chained to a following verb. For example, yàgá 'fall' appears as yàgà when chained to another verb that begins with H -tone, but as unchanged yàgá before L-tone (§15.1.2).

The process also occurs in combinations of an /LH/-melodic bare verb before kárnà in different-subject subordinated clauses (§15.2.2.5) in perfective relatives (§14.4.1), and before gín and né in two types of same-subject subordinated clauses (§15.2.2.2-3).

### 3.6.4.3 <LH>-to-H Flattening yyyy

Monomoraic /LH/-melodic verbs, i.e., Cv̌, are flattened to Cv́ before most inflectional suffixes that are not associated with tone overlays. This includes perfective-lb -tì-, recent perfect dè-, and prohibitive -lì. Examples: jě 'dance' (and homonyms) in jé-tì-, jé dè-, and jé-lì, and jě 'kill' in jé-tì-, jé dè-, and jé-lì.

In other combinations, these Cv̌ verbs become C $\grave{v}$ - by L-Tone Spreading (see the preceding subjection). In one case, the H-tone element reappears on the suffix (perfective-2 jè-só-, jè-só). This is the key test for /LH/-melody for monomoraic verb stems.

All of these processes are moot in combinations (imperfectives, perfective negative, etc.) that impose stem-wide tone melodies that erase all lexical tone melodies.

For nouns, alternations like yá 'woman' and its plural yà-mbó are best handled by positing /L/+H melody, i.e. /L/ melody plus an H-tone that is realized on the final syllable of the word. The singular would then be $/ \mathrm{yà}+\mathrm{H} /$, which would initially fuse as $/ \mathrm{yǎ} /$ and then undergo $<\mathrm{LH}>$-to-H Flattening.

The phonetic motivation for flattening of Cv̌ verbs to Cv́ is that Cv̌ is too short to allow full expression to a contour tone. This is also the motivation for Contour-Tone Mora-Addition (§3.6.4.1), which applies in a different environment.

Less systematically, it has been observed that word-final Cv̌: syllables on nonmonosyllabic stems sometimes level $<\mathrm{LH}>$ tone to H before another word. This has been noticed with nouns and adjectives preceding postpositions and numerals. For example, the noun nùmǎ: 'hand' occurs in combinations like nùmǎ: nè 'in (the) hand', nùmǎ: ní: 'with (the) hand, by hand', and nùmǎ: yí-lèy 'two hands', in all of which the noun has sometimes been transcribed as nùmá: . However, this flattening does not appear to be systematic and transcriptions have been normalized with nùmǎ: and so forth.

### 3.7 Intonation contours

### 3.7.1 Phrase and clause-final terminal contours

See $\S 13.2 .1 .2$ for discussion of terminal H -tone in polar interrogatives under limited pragmatic conditions. See $\S 13.2 .2$ for a more systematic H-tone on the final syllable of the verb in content (WH) questions.

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

Several expressive adverbials (aka "ideophones") are regularly pronounced with uncalibrated prolongation of the final segment (vowel or sonorant). Uncalibrated means that the duration is highly variable and may extend well beyond the normal duration of a word-final long vowel (there are no word-final long sonorants in regular phonology).

```
pá-> '(door) wide open, gaping'
dém }->\quad\mathrm{ 'straight' or 'straight up, towering'
gǎy }->\quad\mathrm{ 'leaning back'
pàyǎw }\mp@subsup{}{}{n}->\quad\mathrm{ 'bright point of light in the distance (star, fire)'
gògùlí-> '(door) rickety, poorly encased'
```

dém $\rightarrow$ 'straight' can be iterated as dém $\rightarrow$ dém $\rightarrow$ with slightly greater emphasis. The prolongation of the final m is preserved in both iterations.

For more on expressive adverbials, see §8.4.7.
Some quantifiers have similar shapes: $\mathrm{t}^{\text {n }} \rightarrow$ 'firstly, at first', měm $\rightarrow$ 'a lot', and pú $\rightarrow$ 'all'.

### 3.7.3 Dying-quail tonation $(\therefore)$

The symbol $\therefore$ added to a word transcribed in its independent form indicates that the final vowel or sonorant is prolonged in an uncalibrated manner (i.e. with highly variable duration), along with a final pitch drop unless it is already L-toned. This is the dying-quail effect. It is an example of tonation, the use of intonation-like phonetic features to express grammatical (or lexical) categories. The dying-quail effect is indicated in transcriptions by adding $\therefore$ to the otherwise normally transcribed form.

This effect is the sole expression of NP conjunction. It is applied at the end of both conjunct, hence $\mathrm{X} \therefore \mathrm{Y} \therefore$ ' X and Y ' (§7.1.1).

This is not to be confused with phonological vowel length, which is calibrated (i.e., the duration of long vowels varies within tight limits). In particular, the fact that the prolongation and pitch drop are expressed on final sonorants distinguishes this from phonological length, since long or geminated final sonorants do not otherwise occur.

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

The system of nominal morphology is similar to that in Najamba.

### 4.1.1 Simple nouns

The grammatical categories relevant to nouns are animate/inanimate and singular/plural. While many adjectives are compatible with all four combined categories, nouns are typically either animate or inanimate.

Animate nouns regularly distinguish singular (unmarked) from plural (marked by a suffix -mbO with $\mathrm{O}=\mathrm{o}$ or $\rho$ ). Inanimates denoting readily counted entities divide into those that distinguish number by singular suffix -(y)gO versus unsuffixed plural, and those that have the unmarked stem in both singular and plural contexts. For the latter, a covert number distinction is expressed when modifiers (including adjectives, demonstratives, and postposed pronominal possessors) are added. For example, the covert distinction between singular and plural úló 'house' can be expressed by a modifying adjective (54a-b). Nouns denoting masses (sand, salt, water, honey, ashes) are treated as plural in such concord 54c), suggesting that for inanimates the singular category is marked.

|  | ùlò ${ }^{\text {L }}$ | jém-gó |
| :---: | :---: | :---: |
|  | house | black-InanSg |
|  | 'a black house' |  |
|  | ùlò ${ }^{\text {L }}$ | jémé: |
|  | house | black.InanPl |
|  | 'black houses' |  |
| c. | sòlmà ${ }^{\text {L }}$ | jémé: |
|  | sand | black.InanPl |
|  | 'black |  |

The main lexical tone melodies of uncompounded noun stems are /H/, /HL/, /LH/, and /LHL/. Both $/ \mathrm{HL} /$ and $/ \mathrm{LH} /$ have two versions depending on whether the tone break is left- or rightbiased in heavy (e.g. trisyllabic) stems, hence $/ \mathrm{H}^{*} \mathrm{~L} /$ versus $/ \mathrm{HL}^{*} /$ and $/ \mathrm{L}^{*} \mathrm{H} /$ versus $/ \mathrm{LH} /$. There is a third LH-type melody here labeled $/ \mathrm{L} /+\mathrm{H}$, with mobile H-tone. The melodies except $/ \mathrm{L} /+\mathrm{H}$ are illustrated in §3.6.1.4.1-5 above using nonsuffixing nouns that do not overtly distinguish singular from plural. In the following subsections, suffixing nouns of various melodies are described.

## 4．1．1．1 Mobile／L／＋H versus fixed／LH／melody for nouns

Nouns of $/ \mathrm{L} /+\mathrm{H}$ type have a final H －tone that is realized on the final mora or syllable of the unsuffixed stem（singular for animates，plural for inanimates），but on the suffix in the suffixally marked form．Nouns with this mobile H－tone behave differently from／LH／－melodic nouns whose H－tone is associated with the same stem－final syllable in both unsuffixed and suffixed forms．Among theoretical possibilities is to reanalyse／L／＋H melody as／L／melody which triggers the secondary addition of a nonlexical final H to satisfy the constraint against all－L－toned stems．

Using animate examples，（55a）is an $/ \mathrm{L} /+\mathrm{H}$ noun，while（ 55 b ）is an $/ \mathrm{LH} /$ noun．The animate plural suffix is elsewhere L－toned－mbO（－mbò or－mb⿳亠口冋），so in（55a）the suffix has acquired its H－tone secondarily from the noun stem．
singular
plural
gloss
$\begin{array}{lll}\text { a．} & \text { àdě：} & \text { àdù－mbó } \\ \text { b．cènó：} & \text { cènó：－mbò } & \text {＇bird＇} \\ & \text {＇blister beetle＇}\end{array}$

For yá＇woman＇（plural yà－mbó），one could posit／L／＋H melody．In this case the monomoraic singular would first fuse／yà／with H as／yă／，then undergo＜LH＞－to－H Flattening（§3．6．4．3）to yá．A similar analysis might work for né＇person＇（plural nù－mbó）but is complicated by segmental irregularity．

Using inanimate examples，（56a）is an／L／＋H noun，while（56b）is an／LH／noun．Inanimate singular suffix－gO does not have an intrinsic tone，and always gets its tone from the noun．As a result，it appears in both（56a）and（56b）as H－toned－gó．The difference between the two singular forms is that the medial syllable is L －toned in（56a）but H －toned in（56b）．

|  | singular | plural | gloss |
| :--- | :--- | :--- | :--- |
| a． | gòdù－gó | gòdě： | ＇skin＇ |
| b．kòbú－gó | kòbé： | ＇shell＇ |  |

When the unsuffixed form ends in a long vowel，its tone predicts the tones of the suffixed form． Stems of the type ．．．Cv́：with long H－toned vowel have presuffixal H－tone in the suffixed form： animate plural ．．．Cv́（：）－mbò／̀̀，inanimate singular．．．Cv́（：）－gó／ó）．Stems of the type ．．．Cv̌：with long $\langle\mathrm{LH}\rangle$－toned vowel have presuffixal L－tone followed by suffixal H－tone in the suffixed form：animate plural ．．．C̀̀（：）－mbó／b́，inanimate singular ．．．C̀̀（：）－gó／b．This is the case even though the stem－final vowel is often shortened and／or raised to $u$ ，as long as this vowel is not deleted by full syncope（on which see below）．

The ．．．Cv́：type was exemplified above by＇blister beetle＇（55b）and＇shell＇（56b）．A fuller list is（57）．
singular
a. animate

| cèné: | cènú-mbò | 'ant sp. (Messor)' |
| :--- | :--- | :--- |
| cènó: | cènó:-mbò | 'blister beetle' |
| dèmé: | dèmné-mbò | 'ratel (mammal)' (m~mn §3.2.9.3) |
| dùnyá: | dùnyá:-mbò | 'owl' |
| sànà-gùlyá: | sànà-gùlyá:-mbò | 'sun squirrel' |
| jèné: | jènú-mbò | 'fly (insect)' |
| màlé: | màlú-mbò | 'mud-dauber wasp' |
| mèlé: | mèlú-mbò | 'ant' |
| mòmbó: | mòmbó:-mbò | 'scorpion' |
| òmó: | òmó:-mbò | 'green monkey' |
| wò-wó: | wò-wó:-mbò | 'swift (bird)' |

b. inanimate

| dùrú-ŋgó | dùré: | 'pole for fruits' |
| :--- | :--- | :--- |
| èmbú-gó | èmbé: | 'tweezers' |
| gòbú-ngó | gòbé: | 'trigger (n)' |
| kòbú-gó | kòbé: | 'shell; apiary' |
| mìnìyàmú-ŋgó | mìnìyàmé: | 'fishhook' |
| pà:dú-ŋgó | pà:dé: | 'cotton card' |
| ìdìlú-ŋgó | ìdìlé: | 'broom' |
| sògú-ngó | sògé: | 'button (n)' |

The ...Cv̌: type was exemplified above by 'bird' (55a) and 'skin' (56a). A fuller list is (58).
singular plural
gloss
a. animate
àbě:
àdě:
bà:ndě: ${ }^{\text {n }}$
bòjě:
cìgìdě:
dèjě:
də̀rò-jě:
gàngàm-dònjě:

## gòròmpě:

gù-gùdě:
ìnjě:
kònə̀nદ̌:
kògòdě:
lògòdě
àbù-mbó
àdù-mbó
bà:ndù-mbó
bògù-mbó
cìgìdù-mbó
dègù-mbó
dòrò-jì-mbó
gàngàm-dòyù-mbó
gòròmpè:-mbó
gù-gùdù-mbó
ìnjè:-mbó
kònว̀nù-mbó
kògòdù-mbó
lògòdù-mbó
'orphan'
'bird (any)'
'firefinch'
'slave-snatcher'
'insectivorous bat'
'pauper'
'sick person, patient'
'buffalo-weaver (bird)'
'bunting (bird)'
'giant pouched rat'
'dog'
'genet (mammal)'
'viper sp. (Echis)'
'visitor, guest'

| tòjě: | tògù-mbó | 'grandchild' |
| :--- | :--- | :--- |
| ù:ndé: | ù:ndù-mbó | 'terrestrial monitor lizard' |
| zègǎ: | zègà:-mbó | 'twin' |

b. inanimate

| èdù-gó | èdě: | 'waterjar' |
| :--- | :--- | :--- |
| gòdù-gó | gòdě: | 'body' |
| gùdù-gó | gùdě: | 'skin' |
| kòmbù-gó | kòmbě: | 'cave' |
| nòmbù-gó | nòmb $:$ | 'concave depression' |
| ùndù-[kùndù-gó] | ùndù-kùndě: | 'calabash with protrusions' |
| yòrù-gó | yòrě: | 'credit, loan (n)' |
| zغ̀bù-gó | zèbě: | 'fan (n)' |

However, it is not possible to predict the tones of suffixed forms of either monosyllabic Cv̌: or stems with stable final short vowel.

The Cv̌: stems relevant to this point are in (59). In the suffixed form, three have suffixonly H and two have presuffixal H. Moreover, kǎ: 'grasshopper' has plural kǎ:-mbò when uncompounded, but plural -kà:-mbó in compounds denoting individual species, e.g. nàngà-kǎ: (Sherifuria) and pèndè-kǎ: (Hieroglyphus).
singular
plural
gloss
a. animate
suffix-only $H$

| nǎ: | nà:-mbó | 'cow' |
| :--- | :--- | :--- |
| sě: | sè:-mbó | 'large mongoose spp.' |
| presuffixal $H$ |  |  |
| tǎ: | tǎ:-mbò | 'hyena' |
| kǎ: | kǎ:-mbò | 'grasshopper (any)' |

b. inanimate
suffix-only $H$ gà:-ŋgó gǎ:
'fig tree’

This is also relevant to resolving an apparent exception to the generalization that nonmonosyllabics ending in <LH>-toned long vowel have suffix-only H-tones. kòròn-kě: 'louse' has plural kòròy-kと̌:-mbò, where the final $<\mathrm{LH}>$ tone persists in the suffixed plural. Since (59) shows that both suffix-only $H$ and presuffixal $H$ are viable for (animate) monosyllabic Cv̌: nouns, treating -kと̌: in kòrə̀y-ǩ̌: as a nominal compound final makes sense of the exception.

It is also not possible to predict the tones of suffixed forms of stems that have nonsyncopating final short vowels. Only animate nouns are concerned, since suffixing inanimates all have EE in the unsuffixed form.
a. animate
suffix-only $H$
àsègé
bàlmá
sànà-gà:nd gùndó
nò:rón
ว̀gó
ògว̀nŋ̧̀̀́
òè-sìndú
sìngó
zàm-tàgú
tè:yá
yùlgú
presuffixal $H$

| àbá | àbá-mbò | 'spitting cobra' |
| :--- | :--- | :--- |
| àngé | àngé-mbò | 'friend' |
| bònònó | bònònó-mbò | 'snake sp. (Bamanophis)' |
| cègé | cègé-mbò | 'beetle, bug' |
| dàndá | dàndá-mbò | 'hunter' |
| dèré | dèré-mbò | 'elder same-sex sibling' |
| dòmdó | dòmdó-mbò | 'wood-eating termite' |
| dùbá | dùbá-mbò | 'hooded vulture' |
| ènjé | èyú-mbò | 'chicken' (note nj/n alternation) |
| gògó | gògó-mbò | 'tomtom-beating griot' |
| nòndó | nòndó-mbò | 'snake (any)', |
| mò:sú | mò:sú-mbò | 'Mossi (person)' |
| ǹdó | ǹdó-mbò | 'same-sex younger sibling', |
| j̀ngó | òngó-mbò | 'husband' |
| sàmá | sàmá-mbò | 'caste of leatherworkers', |
| tèré | tèré-mbò | 'grandparent' |
| yàkàná | yàkàyá-mbò | 'antlion larva' |
| yàrá | yàrá-mbò | 'lion' |
| yòndó | yòndó-mbò | 'blind person' |
| zèngé | zèygé-mbò | 'great-grandparent' |
| zòmó | zòmó-mbò | 'hare' |
| zùmó | zùmó-mbò | 'Egyptian cobra' |

b. inanimate
(none)
àsègè-mbó 'animal'
bàlmà-mbó 'cat'
sànà-gà:ndà-mbó 'slender mongoose'
gùndò-mbó 'slave’
nò:r"̀̀-mbó 'spider'
ògò-mbó 'village chief, Hogon'
ògว̀nク̀ク̀̀-mbś 'camel'
òè-sìndù-mbó 'shrew (Crocidura)'
sòngò-mbó 'korrigum (antelope)'
zàm-tàgù-mbó 'Nile perch'
tè:yà-mbó 'stone partridge'
yùlgù-mbó 'sand fox'
dùbá dùbá-mbò 'hooded vulture'
غ̀njé غ̀yú-mbò 'chicken’ (note $\mathrm{jj} / \mathrm{y}$ alternation)
gògó gògó-mbò 'tomtom-beating griot'
nòndó nòndó-mbò 'snake (any)'
mò:sú mò:sú-mbò 'Mossi (person)'
ǹdó ǹdó-mbò 'same-sex younger sibling'
ə̀ngó òngó-mbò 'husband'
sàmá sàmá-mbò 'caste of leatherworkers'
tèré tèré-mbò 'grandparent'
yàkàyá yàkàyá-mbò 'antlion larva'
yàrá yàrá-mbò 'lion'
yòndó
yòndó-mbò
'blind person'
zèngé zèngé-mbò 'great-grandparent'
zòmó zòmó-mbò 'hare'
zùmó zùmó-mbò 'Egyptian cobra'

One observation about (60a) is that terms with human reference, especially kin and relationship terms, are prominent in the presuffixal-H group.

In view of all the preceding data, it would be possible to analyse the $/ \mathrm{L} /+\mathrm{H}$ cases, i.e. those with suffix-only H-tones, as stems that have L-tones plus a final mobile (or floating) H-tone that attaches to the final mora of the word, whether suffixal or stem-final. It would even be possible to argue that the mobile H itself is secondary, a product of the constraint against all-L-toned lexical melodies.

### 4.1.1.2 Stem-final vowel reduction and syncope in suffixed nouns

Many of the examples of animate plural - mbO and or inanimate singular -(y)gO in preceding sections show an alternation between unsuffixed stem-final EE (e: or $\varepsilon$ :) and presuffixal u. The principal diachronic source of this is the set of suffixal oppositions in (61) in the immediate ancestor of TU and Najamba-Kindige. As usual $\mathrm{O}=\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ and $\mathrm{E}=\{\mathrm{e} \varepsilon\}$, reflecting the ATR value of the stem. The suffixes are animacy-number portmanteaus that themselves originated as semantically light nouns meaning 'critter', 'critters', 'thing', and 'things'. A subclass distinction also occurred in the singular of 'thing'. (61) may be compared with (156) in §6.2.1.2, which presents a reconstructed proto-paradigm of possessive classifiers, and with the numeral classifiers in §4.6.1.2.

|  | singular | plural |
| :--- | :--- | :---: |
| a. animate 'critter' | (zero) <br> *-yE | *-mbO |
| b. inanimate 'thing' | *-(y)gO $^{*}$ | *-yE $^{\text {*-(y)gE }}$ |

Synchronically, however, stem-final EE in the relevant nouns is no longer transparently suffixal. The transcription used here takes EE as part of the lexical item. This means that the system of suffixes is now (62).

$$
\begin{equation*}
\text { singular } \quad \text { plural } \tag{62}
\end{equation*}
$$

a. animate _ $\quad$ - mbO
b. inanimate

$$
\begin{array}{ll}
*_{-}^{-(y) g O} & - \\
*_{-}(\mathrm{y}) \mathrm{gE} & -
\end{array}
$$

For many nouns, like gòdù-gó 'body' and plural gòdě:, the stem undergoes a reduction and raising of its final vowel before the suffix, generally to $u$ before the two common suffixes ${ }^{*}$-mbO and ${ }^{*}-(\mathrm{y}) \mathrm{gO}$.

This $u$ is, moreover, vulnerable to deletion by syncope if the resulting consonant cluster would be viable. See §3.4.3.2 for possible analyses. Here we focus on tonal patterns. As long as the $u$, or other vowel, remains unsyncopated, the tonal patterns described in the preceding subsections are valid. However, when syncope does occur, it can result in a shift of the tone of the deleted vowel to another syllable.

In (63) there is no phonological problem. For the animates in (63a-b) the syncopated H-toned vowel is preceded by another H-tone. For the $/ \mathrm{L} /+\mathrm{H}$ inanimates in (63c) the singular suffix is expected to carry the only H-tone whether or not the penult is syncopated.
singular plural gloss
a. animate, /H/ melody

| ámé: | ám-bò | 'honey bee' |
| :--- | :--- | :--- |
| bílé: | bíl-mbò | 'white-tailed mongoose' |

céné: cén-bò 'porcupine'
círé: cír-mbò 'aquatic tortoise'
írné: írní-mbò ~í:n-bò 'goat'
kó-kólé: kó-kól-mbò 'honey ant'
kúgúlé: kúgúl-mbò 'viper sp. (Bitis)'
with H-toned suffix (§4.1.1.3)
tólé: tól-mbó 'pig'
b. animate, $/ \mathrm{LH}^{*} /$ melody or similar
yòlkúmé: yòlkúm-bò
zàmdílé: zàmdíl-mbò 'donkey'
kòndòndá:né: kòndòndá:n-bò 'python'

| c. inanimate |  |  |
| :--- | :--- | :--- |
| cèl-gó | cèlě: | 'crack, gap' |
| cèm-gó | cèmě: | 'large needle' |
| dìg-gó | dìjž: | 'joint' |
| dùm-gó | dùmč: | 'outfit, set of clothes' |
| gòn-gó | gònč: | '(piece of) equipment, baggage' |
| kàbùl-gó | kàbìľ̌: | 'split-off half (e.g. of nut)' |
| kàl-gó | kàlě: | 'neighborhood' |
| mòn-gó | mòně: | 'resin of shea tree (karité)' |
| nèm-gó | nèmě: | '(piece of) salt' |
| pòl-gó | pòlě: | 'knife' |
| sì:l-gó | sì:lě: | '(a) rip' |
| wòl-gó | wòlě: | 'field' |
| zìm-gó | zìmě: | 'injury, pain' |
| zòg-gó | zògž: | 'shard' |

By contrast, the animates in (64a) would, without syncope, be expected to have presuffixal Htones, e.g. /bòmbú-mbò/. Syncope of the penultimate H-toned vowel forces repositioning of the H-tone onto the suffix. The exception is 'lefty' at the end of (64a), which optionally shifts the syncopated H-tone of plural /bàlú-mbò/ leftward and keeps the suffix L-toned. The two inanimates in (64b) show a similar leftward shift, but the inanimate singular suffix is also H toned since this suffix gets its tone by spreading from the left.
singular plural gloss
a. animate

H-tone shifts to suffix

| bòmbé: | bòm-bó | 'Toro So speaker' |
| :---: | :--- | :--- |
| bùràgùlé: | bùràgùl-mbó | 'bee-eater (bird)' |
| sòmé: | sòm-bó | 'horse' |
| zòmé: | zòm-bó | 'leatherworker (caste)' |
| like preceding but with $\mathrm{jj} \sim \mathrm{y}($ (§3.4.5.4) |  |  |
| cènjé: cèy-bó | 'agama lizard' |  |
| H-tone can remain presuffixal <br> bàlé: | bǎl-mbò ~ bàlé:-mbò | 'lefty' |

b. inanimate
bǒn-gó
sògǔr-gó
bòné:
sògùré:
'tomtom'
'loud noise'

### 4.1.1.3 Form of animate plural suffix -mbO

The suffix is always -mbO with mb after a stem-final vowel, or after a liquid. The m is deleted when syncope creates a cluster n-mb, as in céné: 'porcupine', plural cén-bò 'porcupine'. Arguably the same has happened when the cluster created by syncope is $\mathrm{m}-\mathrm{mb}$, as in sòmé: 'horse', plural sòm-bó. In cènjé: 'agama lizard', plural cèy-bó, a pre-surface form of the plural can be posited as /cèngú-mbó/, with u then lost by syncope followed by consonantal and tonal adjustments (§3.4.5.4).

The vowel of -mbO is o or $\rho$ depending on the ATR-harmonic class of the stem. Examples like bùràgùlé: 'bee-eater' with plural bùràgùl-mbó show that even if the syncopated vowel is the only stem vowel with a clear ATR value, this determines the ATR features of the suffixal vowel.
-mbO becomes H-toned with $/ \mathrm{L} /+\mathrm{H}$ melodic nouns that have suffix-only H -tones. Other nouns, those with a stable H-tone in the stem proper, have L-toned suffix, with rare exceptions involving nominal and adjectival animate plurals of the shape Cv́L-mbO or Cv́N-bO (after syncope). Among nouns, tól-mbó 'pigs' (singular tólé:) is such an exception, but most nominal plurals even of the shapes indicated have L-toned animate plurals. H-toned suffixes in Cv́L-mbO or Cv́N-bO is more common among adjectives (§4.5.1).

### 4.1.1.4 Inanimate nouns with singular suffix

For inanimates that allow the singular suffix, tones and syncope are considered in the preceding subsections. Inanimate nouns with no morphological singular-plural opposition are listed in §3.6.1.4.1-5. Here the focus is on the segmental form of the suffix for stems that allow it. There are three issues: $g$ versus $\eta g, O$ versus $E$ as the suffixal vowel, and the ATR value of $O$ and $E$.

As shown more fully below, the primary allomorph is -gO (§4.1.1.4.1) The nasal variant ggO is mostly deverbal (§4.1.1.4.2). -gE and -ggE are rare and their diachronic background is nontransparent (§4.1.1.4.3).

### 4.1.1.4.1 Inanimate singular -gO

This is the usual suffix for those inanimates that have a morphologically marked singular. As noted elsewhere, for many inanimates including flora species, liquids, and masses the "plural" is unmarked and functions as a collective. However, for objects like 'waterjar' (singular èdùgó, plural èdě:) the singular is required when referring to a single object.

Nouns with singular -gO have plurals/collectives that end in EE (e: or $\varepsilon$ :), originally due to contraction with inanimate plural suffix *-yE.
-gO is easily distinguished from- ygO when the preceding stem ends in a vowel that avoids full syncope, or ends in a nonnasal sonorant. A list of singular-plural pairs is in (65), which is organized by tone melodies. Of interest is the absence of $/ \mathrm{HL} /$ melody, which is associated with loanwords (especially from Fulfulde) and with abstract meanings that do not lend themselves to singular marking.
singular
a. /H/ melody
gúndú-gó
kóbú-gó
kúdú-gó
kúndú-gó
móndú-gó
pógúr-gó
séy-gó
tádú-gó
tál-gó
túygúr-gó
úndú-gó
wár-gó
wól-gó
yágúr-gó
yól-gó
zóbú-gó
plural
gúndé:
kóbé:
kúdé:
kúndé:
móndé:
pógúré:
sé:
tádé:
tálé:
túngúré:
úndé:
wáré:
wólé:
yágíré:
yólé:
zóbé:
gloss

```
'log, slab (intact)'
'(piece of) tree bark'
'handle (of tool)'
'log'
'laughter'
'belt'
'sharp-angled ax'
'straw basket'
'egg'
'stool'
'calabash'
'main ceiling beam'
'vein; tendon'
'itch (n), rash'
'néré tree (Parkia)'
'race (running)'
```

b. /HL/ melody
(none)
c. /LH/ melody with presuffixal H-tone in singular
èmbú-gó
kòbú-gó òrú-gó
èmbé:
kòbé: 'shell; apiary'

d. /L/+H melody with suffix-only tone in singular

| bùdù-gó | bùdě: | 'hole' |
| :--- | :--- | :--- |
| cèl-gó | cèlč: | 'crack, gap' |
| dìg-gó | dìjě: | 'joint' |
| èdù-gó | èdě: | 'waterjar' |
| gòdù-gó | gòdě: | 'body' |
| gùdù-gó | gùdě: | 'skin' |
| kàbùl-gó | kàbùlč: | 'split-off half (e.g. of nut)' |
| kàl-gó | kàľ̌: | 'neighborhood' |
| kòmbù-gó | kòmbě: | 'cave' |
| ùndù-[kùndù-gó] | ùndù-kùndě: | 'calabash with protrusions' |
| nòmbù-gó | nòmbě: | 'concave depression' |
| pòl-gó | pòlě: | 'knife' |
| sì:l-gó | sì:lě: | '(a) rip' |
| wòl-gó | wòlě: | 'field' |
| yòrù-gó | yòrě: | 'credit, loan (n)' |
| zèbù-gó | zèbě: | 'fan (n)' |
| zòg-gó | zògě: | 'shard' |

When syncope occurs and the syncopated stem ends in a nasal $\mathrm{N}=\{\mathrm{nm}\}$, no distinction is possible between -gO and -ngO since / $\mathrm{N}-\mathrm{ng}$ / reduces to $\mathrm{N}-\mathrm{g}$. / $\mathrm{LH} /$ and /L/+H are not distinguishable in the singular, but the relevant stems have final rising tone in the plural and so are probably /L/+H (66c).
singular plural gloss
a. /H/ melody

| án-gó | áné: | 'roselle' |
| :--- | :--- | :--- |
| bón-gó | bóné: | 'call (n)' |
| bón-gó | bóné: | 'name' |
| dín-gó | díné: | 'root' |
| kólólém-gó | kólólémé: | 'bell' |
| tín-gó | tíné: | 'mortar' or 'ladder' |
| zóm-gó | zómé: | 'handle (of pail or kettle)' or 'private field' |

b. /HL/melody (none)
c. probably $/ \mathrm{L} /+\mathrm{H}$

| cèm-gó | cèmě: | 'large needle' |
| :--- | :--- | :--- |
| dùm-gó | dùmě: | 'outfit, set of clothes' |
| gòn-gó | gònč: | '(piece of) equipment, baggage' |
| mòn-gó | mòně: | 'resin of shea tree (karité)' |
| nèm-gó | nèmě: | '(piece of) salt' |
| zìm-gó | zìmě: | 'injury, pain' |

tín-gó 'mortar (for pounding)' or 'ladder' in (66a) reflects the convergence of two etyma, but the relationship is synchronically motivated since both are hewn out of single blocks of wood. For 'mortar' compare tìn-íyé 'pestle' (diminutive, originally "mortar-child"), and Najamba túngó 'mortar', plural túní: . For 'ladder' compare Jamsay and Toro Tegu tìrú 'ladder'.

Some nouns end in gO, likely the inanimate singular suffix etymologically, but do not have an attested plural, so morphemic segmentation is not transparent. In some of these cases (67) there is a semantically related form (such as a verb) without gO .

$$
\begin{equation*}
\text { noun } \quad \text { gloss } \quad \text { related form } \tag{67}
\end{equation*}
$$

a. unsyncopated

| kú-gó | 'head' | kù-wól 'headache' |
| :--- | :--- | :--- |
| ládú-gó | 'roof' | làdǐ-ilú- $\mathrm{ygó}$ 'for climbing to roof' |
| móndú-gó | 'laughter' | màndí 'laugh (v)', cf. §3.3.7 |
| nìndù-gó | 'breath' | nìndí 'breathe' |
| ùdù-gó | 'sun' | ùdú 'daytime' |
| òrú-gó | 'language' | órú 'speak' |
| nùmà:-[kúmbú-gó] | 'fist; handful' | kúmb-í: 'clench (fist)' |

b. syncopated after liquid

| ínjír-gó | 'thirst' | ìnjìr-bòyó 'ladle' |
| :--- | :--- | :--- |
| lól-gó | 'labor pains' | lǎ: 'give birth', yà-làlě: 'midwife' |

c. syncopated after $m$ or $n$ (ambiguous -gO or -ygO )

| dén-gó | 'day' | dèn ${ }^{\text {L }}$ (form as relative head, §14.2) |
| :--- | :--- | :--- |
| èm-gó | 'conversation' | émé 'converse' |
| kón-gó | 'cough $(\mathrm{n})$ ' | kónó 'cough $(\mathrm{v})$ ' |

ùdù-gó 'sun' (67a) corresponds to Najamba ùjú-ŋgó, and synchronic segmentation is supported by ùdù-pílé-ygó ~ (archaic) ùdù-píl-é:-m-gó 'sunset; west' as well as by ùdú 'daytime', cf. e.g. Ben Tey ùsú 'sun; daytime'. YD ìzùgè 'sun' suggests that the fusion of stem and suffix might be older than in the other cases, since YD does not usually preserve traces of *-gO or *-gE.

There are also some nouns ending in gO for which no suffixless counterpart is known within TU. Here the synchronic segmentation is fairly opaque, but one could argue for it based on the analogy of the more readily segmentable cases in semantically similar domains. In some cases (68a), but so far not in others (68b), there is comparative Dogon evidence that gO was originally segmentable.

| noun | gloss | sample cognate |
| :--- | :--- | :--- |
|  |  |  |
| a. evidence for (original) | segmentation |  |
| àndùngó | 'gap in teeth' | YD àndòl |
| dùgó | 'base, foundation' | YD dù |
| gòngó | 'enclosed courtyard' | Yorno So gònó, Jamsay sì-sè:n gǒn |
| jì̀è-nòmgó | 'face' | YD gìdè-nòm |
| kòngùlú-ngó | 'trigger guard' | YD kóyòl |
| kùndúgó | 'back (body)' | Jamsay gǔn |
| pòl-gàngó | 'fighting knife', | YD pòl-gàn |
| sògó | 'sweat (n)' | Tommo So sǒ: |
| tódúgó | 'hernia' | YD tózú |
| yù-dúndúlúgó | 'millet bundle' | Jamsay nù:-dúnúrnúm |
|  |  |  |
| b. no clear evidence known |  |  |
| éndúgó | 'threshold' |  |
| lè:gó | 'day' |  |

àsògó 'splinter-like chaff' superficially looks like another example, but in this case the comparative analysis shows that go is part of the stem (YD àsògò, Jamsay cèm-sògó, etc.).
zób(ú)-gó 'race; running (n)' is related to the verb zòbó 'run', showing that -gO can occur in some deverbal nominals as an alternative to -ngO.

### 4.1.1.4.2 Inanimate singular -ngO

The nasal variant - ngO is regular for deverbal nominals. The latter include instrument nominals (§4.2.3), nouns derived from imperfective participles (§5.1.4.3, §15.2.2.7, §17.3.3), and a few verbal nouns or cognate nominals. Some instrument nominals are lexicalized, e.g. gòbú-ngó 'trigger (n)', plural gòbé:, cf. verb gòbó 'pull (trigger)'. Some modifying adjectives also have inanimate singular - $\mathfrak{g g O}$ instead of -gO (§4.5.1.1).

Some examples of lexicalized verbal nouns or deverbal abstractives with -ygO are in (69). They have no morphological plurals.

| (69) noun | gloss | related forms |
| :--- | :--- | :--- |
|  |  |  |
| bè:-ygó | 'herding (n)' | bè:-mí 'tend (livestock)' |
| ígúr(û)-ŋgó | 'height' | íj-í: 'stand', ígí-rí 'stop, erect (sth)' |


| tó- ggó | 'sowing (millet)' | tó 'sow by slashing', tǒ: 'seedstock' |
| :--- | :--- | :--- |
| twá:-ngó | 'beginning' | tó:'begin' |

$-\mathrm{\eta gO}$ is otherwise very rare with nouns. Only two nouns that have no known connection to verbs but contrast singular - ggO with a morphological plural are known (70). Some cognates of 'fig tree' have a stem-final nasal (e.g., YD gàm, Jamsay gǎ:"). 'Hooked pole' has the tones and vocalism of an instrumental nominal.

$$
\begin{array}{lll}
\text { gǎ:-ŋgó } & \text { gǎ: } & \text { 'fig tree (spp.)' }  \tag{70}\\
\text { dùrú-ŋgó } & \text { dùré: } & \text { 'hooked pole for fruits' }
\end{array}
$$

### 4.1.1.4.3 Inanimate - ggE and -gE

Najamba distinguishes -(y)gO from -(y)gE inanimate singulars, not only in nouns but also in adjectival and participial agreement with nouns. In this light it is natural to assume that the few cases of -( $\mathfrak{y}) \mathrm{gE}$ in TU nouns are vestiges of an older, more productive Najamba-style inanimate noun-class system. However, it is also possible that the TU examples, unlike those in Najamba, are diachronically secondary, reflecting forward vocalic assimilation.

The cases of -ygé in (71) are collocations of cognate noun and verb, where the noun has an apparent suffix -ygé. The first two verbs are homophonous with each other and also with the verb in jé jě 'dance, do a dance'. In (71c) the initial is jìré 'eye'.

```
a. jé-\etagé jě 'do the millet harvest'
b. jì-\etagé jě 'fart, let out a fart'
c. jìrè-[ní-\etagé] ní: 'sleep (v)'
```

Compare (71a) with YD jèl jèlé 'do the millet harvest' and (71b) with YD jìy jé- 'let out a fart'. Najamba has gî: gy̌y 'do the millet harvest' and gìyè- $\mathfrak{g}$ ǵ gìyn $\varepsilon$ 'let out a fart'.

A similar case involving -gé on the nominal is in (72). No cognates in other Dogon languages are known.
cé-gé cé 'yell, give out a shout'
 (inanimate singular) and dé-ŋg $\varepsilon$ 'big' (inanimate singular), versus inanimate plural and animate singular sé and dé, (94c) in §4.5.1.1.

Therefore all cases of TU -(y)gE follow monomoraic Cv-stems with front vowels $\{\mathrm{i}$ e $\varepsilon\}$. No direct connection has been found between the TU nouns in question and specific Najamba nouns of the $-(\mathrm{y}) \mathrm{gE}$ class. One hypothesis is that $\mathrm{TU}-(\mathrm{y}) \mathrm{gE}$ is a secondary development due to forward vocalic assimilation and has nothing to do with Najamba -(y)gE. A more complex but fairly plausible hypothesis would be that TU did inherit *-( y$) \mathrm{gE}$ from a proto-language but has preserved it only in favorable phonological environments and has done some analogical redistribution.

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

High-frequency TU nouns whose cognates are often irregular in Dogon languages are presented in (73). 'Man' is morphologically and phonological regular. 'Person' and 'woman' are tonally regular if the stems are understood to be of /L/+H melody (73a-b). 'Child' and 'person' (73b) have (synchronically) suppletive plurals. Like many inanimate nouns, 'thing' (73c) has no morphological plural.

| Sg | Pl | gloss |
| :---: | :---: | :---: |
| a. yá ár ${ }^{\text {ná }}$ | $\begin{aligned} & \text { yà-mbó } \\ & \text { árná-mbò } \end{aligned}$ | $\begin{aligned} & \text { 'woman' } \\ & \text { 'man' } \end{aligned}$ |
| b. èdé né | ùlé: nù-mbó | 'child' 'person' |
| c. cé | - | 'thing(s)' |

For compounds involving 'man' and 'woman', see $\S 5.1 .6$. For compounds involving 'child', see §5.1.5.1.

For 'person', né is the independent form. It is usually heard as jii ${ }^{\mathrm{L}}$ before an adjective, as in $\mathfrak{j i ̀}{ }^{L}$ dímé 'even-tempered person'. In addition, né- ~ jí' occurs as a human classifier with numerals ' 2 ' to ' 10 ' (§4.6.1.2). For gentilic compounds with -né 'person' as final, see §5.1.7.
cé 'thing' likewise has a variant cì ${ }^{\mathrm{L}}$ as initial element in a number of combinations: cì ${ }^{\mathrm{L}}$ ómò 'creature (unspecified animate being)', cì-kámá '(not) anything'. It is also part of cì-njé 'what?', which varies with simple ì̀jjé (§13.2.2).

For the raised vowels in $\mathrm{jì}^{\mathrm{L}}$ and $\mathrm{ci}^{\mathrm{L}}$, see §3.4.3.3.

### 4.1.3 'So-and-so' (àmá:n, dámbá nè)

àmá:n (perhaps segmentable as à-má:n, cf. §4.1.7) is used, as in Jamsay, to mean 'So-and-so’ in generic contexts as a variable over personal names. Example: 'if you meet someone in the field, you say "Hey So-and-so, come!", A textual example is 2015-02 @ 01:16.
dámbá ${ }^{\text {L }}$ nè, literally 'village's person', can be used as a vocative instead of a real personal name when directed at a fellow villager. It is mainly used among friends.

### 4.1.4 Initial Cv - and CvN - reduplication in nouns

A number of noun stems and nominal compound finals have the appearance of beginning with a Cv - reduplication.
a. $\mathrm{Cv}-\mathrm{Cv}$ :
bè-bě: 'tree sp. (Pterocarpus lucens)'
dè-dě: $\quad$ 'tall grass sp. (Andropogon)'
gò-gǒ: $\quad$ 'gourd'
tò-tǒ: 'pit (in earth)'
wò-wó: 'swift (bird)'
b. other Cv -
bí-bílé
sàdà-[bó-bóŕ́]
yù-[bù-bùré:]
'magical transformation'
cì-cìndé:
'fairly good quality millet'
'shadow (of someone)'
gù-gùdě: $\quad$ 'giant pouched rat'
kà-kǎl
kà-kàrá
'lie (n), untruth'
'armpit; wing'
kó-kól 'tree sp. (Maerua angolensis)'
kó-kólé: 'honey ant (Camponotus)'
lò-lògòdó $\quad$ 'niche in wall or well shaft'
ló-lòmè: 'trailing vine sp. (Ipomoea asarifolia)'
nà-nǎy" 'mint'
pà-pǎy 'papaya'
pé-péndé 'wooden board, plank'
pí-pírú
pó-pòlóm
pú-pùm-gò
nùmà:-[tó-tógó]
tù-tùgùlá
[zغ̀-zèw] -kíré
'butterfly'
'tree sp. (Stereospermum)'
'latex-bearing shrub sp. (Calotropis)'
'elbow'
'climbing vine sp. (Kleinia)'
'nightjar (bird)'
c. $\mathrm{CvN}-$

| jén-jémé: | 'balsam-spurge (shrub)' |
| :--- | :--- |
| sòn-sóné: | 'tiny ant spp.' |
| tín-tìm | 'bushy herb sp. (Scoparia)' |
| zén-zèbílù | 'rock martin (bird)' |

In most cases the unreduplicated base does not occur elsewhere. However, unreduplicated cìndé: does occur in the sense 'shade', and kà-kǎl 'lie (n)' is obscurely related to the verb ká: 'tell (a lie)' (< *kálá). The bird name wò-wó: may be onomatopoeic.

See also kà-kàrà-kây in the following subsection.
Initial Cv - reduplication regularly combines with inanimate singular suffix -ngO in deadjectival abstractive nominals like pà-pà:-ngó 'length' (§4.2.6).

An CvN- pattern with distinctive tone pattern is observed in (75). These onomatopoeic terms denote notoriously noisy birds. The Jamsay counterparts kì-kàrâw and cì-cèrn ${ }^{\mathrm{n}} \mathrm{w}^{\mathrm{n}}$ also form a tight set.

Another possible CvN - example is bèm-bénmá 'middle, center'.
nà:-nàr"ú 'balls of butter (on milk)' has a reduplicative look but may really be an pseudoreduplicative compound with nă: 'cow' as initial.
tǎ: 'hyena' and kǎ: 'grasshopper (any sp.)' are unreduplicated. Jamsay tì-tǎ: and kì-kǎ: are among other reduplicated Dogon forms for these fauna.

### 4.1.5 Final -Cvy and -Cv: reduplication in nouns

A minor final reduplicative pattern is observed in (76a-c).
a. péĺm-pèy 'grasshopper sp. (Oedaleus)'
kà-kàrà-kây 'open bare land with some gravel'
bòndòm-bǒy 'bulbul (bird)'
b. tà: ${ }^{\text {L }}$ kóngóró-kòy 'striped hyena'
c. kə̀rò̀-kž: 'louse'

All of these except 'bulbul' correspond to similar forms in Jamsay and other Dogon languages.

### 4.1.6 Nouns with invariant full-stem iteration

Nouns that have an intrinsically iterative shape include the usual CvCv parental vocatives (77a), which are too short to distinguish full iteration from Cv - reduplication. There are also a number of other, nononomatopoeic nouns and nominal modifiers that show full iteration involving at least two moras in each segment ( $77 \mathrm{~b}-\mathrm{c}$ ). Some of these include a vocalic shift to a in the second iteration; compare (243b) in §8.4.7.2. Tonal relationships between the two segments range from identical to various asymmetrical patterns, the most common being an L-toned initial followed by an H -toned final, as in many nominal compounds.
a. Cv̀Cv́ kin vocatives

| màmá | 'mother!' (vocative) |
| :--- | :--- |
| pàpá | 'father!' (vocative) |

b. full iteration, segments are heavy syllables
tones identical

$$
\begin{array}{ll}
\text { ìdàL pé:-pź: } & \text { 'breeze' } \\
\text { ùndù-[kǔ:-kǔ:] } & \text { 'coucal (bird)' }
\end{array}
$$

| $H-L$ tones |  |
| :---: | :---: |
| bál-bàl | 'bush sp. (Senna italica)' |
| L-H tones |  |
| gòn-gón | 'tin can' |
| c. full iteration, segments are bisyllabic |  |
| tones identical |  |
| cìrú-cìrú | 'epilepsy' |
| kúbú-kúbú | 'machete blade' (< local French coupe-coupe) |
| ywà: sénćy ${ }^{\mathrm{n}}$-séy $\mathrm{c}^{\text {y }}{ }^{\text {n }}$ | 'herb sp. (Chamaecrista)' |
| L-H tones |  |
| fûrù-fúrú | 'fritters' |
| kòrù-kórú | 'thorny liana sp. (Capparis)' |
| òndò-óndó | 'shrub sp. (Grewia)' |
| d. with shift to a-vowel |  |
| tones identical bírìgù-bárùgù | 'junk, bric-à-brac, miscellany’ |
| L-H tones |  |
| pù:dù-pá:dú | 'lung' |
| tèngè-tángá | 'troop of Dogon stilt dancers' |

Few onomatopoeic bird or frog terms have been recorded. However, pèrè-kéré 'laughing dove' is a probable example, with an interesting shift in onset consonant.

A number of other iterative stems are presented elsewhere under the rubric of expressive adverbials (§8.4.7.2). In addition, cognate noun-verb collocations (§11.1.2.4) like bírígá bìrìgí (variant bídígá bìdìgí) 'do magic tricks’ have a quasi-iterative feel. Such pairings also generate nominalizations like agentive bìrìgà-bìrìgě: 'magician'.

### 4.1.7 Frozen initial a(:)- in nouns

For àmá:n (or à-má:n) see §4.1.3 above. àzèrú '(traditional) wrestling', àgúlú 'tree sp. (Diospyros)', and àgólò 'shrub sp. (Vepris)' are possible examples of an original *à- but are rather isolated and opaque. àdúná 'life' is one of several borrowings ultimately from Arabic that have traces of Arabic definite al- or an assimilated variant.
à:-béndú 'swimming (n)' in the cognate combination à:-bèndú bèndí 'swim', and à:-jígùlù 'spinning around’, (394a) in §11.1.2.4, also appear to have an initial vocalic element.
àt mbú 'traditional customs', àsògó 'outer chaff', and à:búndú 'locust-bean flower'are other possibilities.

A few nouns beginning with $\mathrm{aNC} . .$. may preserve an original aN - prefix. They are àntúngà 'cripple', àndùkò:rń 'giant millipede', àygúngúrú (and variants) 'giant tortoise', and àntúmbúlé: ‘evil dwarf'. Similar forms occur in other languages of the zone including montane Songhay.

### 4.2 Derived nominals

### 4.2.1 Characteristic derivative (-jě:)

This derivative may be used as a noun or modifying adjective. The input is a noun denoting some attribute, such as a conspicuous body part or a medical condition. The input noun drops its tones. It is usually uncompounded (78a) but may be a compound (78b). -jě: does not harmonize with the ATR value of the stem. The (animate) plural form is -jì-mbó.

$$
\begin{equation*}
\text { noun } \quad \text { gloss } \quad \text { Characteristic } \quad \text { gloss } \tag{78}
\end{equation*}
$$

a. input noun uncompounded

| bèrǎ: | 'belly' | bèrà:-jě: | 'pregnant' |
| :--- | :--- | :--- | :--- |
| tóm | 'hump' | tòm-jě: | 'hunchback' |
| sé: | 'fat (n)' | sè:-jě: | 'plump (animal)' |
| pàngá | 'power' | pàngà-jě: | 'strong, powerful' |
| dòŕ | 'disease' | dòrò-jě: | 'sick person, patient' |
| némé | ''eprosy' | nèmè-jě: | 'leper' |
| wàlá | 'laziness' | wàllà-jě: | 'lazy person' |

b. input noun compounded
bèà:-kúlá 'beard' bèà:-kùlà-jě: 'bearded man'
See also the 'owner (of X)' compounds in §5.1.2.2.

### 4.2.2 Verbal nouns

The productive verbal noun is with suffix -lé, but other nominalization processes are also available. For verbal nouns added to adjectival predicates, as in 'good to eat', see §6.3.3.3. Verbal nouns of transitive verbs often incorporate a noun denoting a typical object (§5.1.4.1).

### 4.2.2.1 Verbal noun in -lé

The fully productive verbal noun suffix is -lé, after an H-toned stem. It is used after regular inflectable verb stems. The $\{\mathrm{H}\}$ overlay is clear in e.g. yáy-lé 'going' (< yăy) and zóbú-lé 'running' (< zòbó). The latter often incorporates a cognate nominal: [zòb-gò]-[zóbú-lé] (§5.1.4.1). Further examples are given in the paradigms in chapter 10. This form with H-toned stem is distinct from the purposive-clause verb form with -lé following an L-toned stem (§17.4.1).

The $\{H\}$ overlay on the stem distinguishes this verbal noun from a purposive verb form with the "same" -lé suffix but with tone-dropped verb stem (§17.4.1).

### 4.2.2.2 Verbal noun in final $u$ or zero

Though not fully productive, there is another deverbal nominal for bisyllabic verb stems, formed by mutating the final vowel to $\mathrm{u}(79 \mathrm{a}-\mathrm{b})$. A final ${ }^{*} \mathrm{u}$ may have been apocopated in ( $79 \mathrm{c}-\mathrm{d}$ ).
a. LH-toned
bàrú 'formal meeting' bàrá, bàr-í: 'hold (meeting)'
m̀̀bù-pàgú 'fasting' m̀̀bù-gó 'mouth', págá 'tie'
pìgú 'injection’ pígé ‘jab, vaccinate’ (< French piquer)
b. H-toned (excluding compound initial)
kù-દ́rú 'hair-braiding’) kú-gó 'head', દ́ré 'braid (v)'
c. final apocope

| yǎy-Ø | 'going' | yǎy 'go' |
| :--- | :--- | :--- |
| sán-Ø | 'prayer' | sárná 'pray' |

d. Cí
jí-Ø 'consumption' jé 'eat, drink' (2015-05 @ 02:11)

In the compound [òbà-m]-[này-gó] '27th night of Ramadan', literally "sitting all night" (§5.1.4.3.5), này-gó from ná 'spend the night' points to a nominalization *nǎy-Ø.

### 4.2.3 Deverbal instrument nominals (Sg -ngó, Pl stem-final é:)

Instrument nominals are produced by adding suffix -ŋgó to a verb, which has $\{\mathrm{LH}\}$ overlay and end in ú. The corresponding plural, if elicitable, has stem-final é: regardless of the ATR value of the preceding stem. -ŋgó occurs elsewhere in the inanimate singular participle for imperfective or stative verbs (§14.4.2).
(80)Instrument nominals (...ú-ทgó, ...é:)
singular plural gloss related form
a. implements
gòbú-ngó gòbé: 'trigger' gòbó 'pull (trigger)'
sògú-ŋgó sògé: 'button' sógó 'button (up)'
(~ sǒ:-ŋgó)
pà:dú-ŋgó pà:dé: '(cotton) card' pá:dé 'card (cotton)'
b. location
zòngú-ŋgó zòngé: 'medical place' zòngó zòngú 'treat (medically)'
zèbù-gó (plural zèbé:) 'fan (n)' represents a distinct but related formation, cf. verb zùbó 'fan (sth)'.

These (inanimate) deverbal instrument nominals resemble (animate) deverbal agentives. The latter have stem-final ě: in the singular, and stem-final ù followed by animate plural -mbó. However, the suffixed forms differ tonally in the two cases: (singular) instrument gòbú-ngó 'trigger' with L.H-H tones versus (plural) agentive ìnjè̀-[kòbù-mbó] 'water-carriers' with L.LH tones (disregarding the compound initial).

Many instrument nominals have an additional compound initial; examples are presented in §5.1.4.3.1. Those compounds are mostly instrumental in sense but also include some locatives.

A variation on the regular instrument nominal is the noun in (81), which is based on a causative verb. Note the suffix-only H-tone and -mò- not shifted to -mù-.

| ńné | zòbà-mò-ŋgó |
| :--- | :--- |
| 3Sg | run-Caus-Ipfv.Ppl.InanSg |
| 'The way he/she drives is not good.' |  |

èdù = lá
be.good=StatNeg

### 4.2.4 Uncompounded agentives

Agentives that are transparently related to a corresponding verb, but without compound initials, are in (82). The agentive derivative has $\{\mathrm{LH}\}$ overlay. Its final vowel mutates to ě: in the singular. A preceding $g$ palatalizes to $j$ before this front vowel in some examples. Agentives are most often compounded, the initial being either a cognate nominal or another noun denoting a prototypical object; see §5.1.4.2. The few known uncompounded agentives are presented in (82a). Before animate plural -mbó, the ě: mutates to ù, which is then subject to syncope after an unclustered liquid. There is one irregular agentive (-mé) based on the causative derivational suffix (82b).

$$
\begin{equation*}
\text { singular plural gloss } \quad \text { verb gloss } \tag{82}
\end{equation*}
$$

a. based on underived verb (singular with final ě:)

| zònjě: | zònù-mbó | 'healer' | zòngú | 'treat (medically)' |
| :--- | :--- | :--- | :--- | :--- |
| dùjě: | dùgù-mbó | 'sorceror' | dùgó | 'cast spells' |
| gùně: | gùnù-mbó | 'thief' | gùné | 'steal' |
| tèjě: | tègù-mbó | 'one who limps' | tégé | 'limp (v)' |

b. based on causative (singular with final é)
bè:-mé bè:-m-bó 'herder' bè:-mí 'tend (herd)'

Some other nouns may be frozen agentives that no longer co-occur with the original verb. An example is yèlě: 'dyer (caste)', plural yèl(ù)-mbó.

In (82a) the verb zòngú has a lexicalized agentive zònjě: with medial [+ATR] o harmonizing with stem-final ě: . This idiosyncratic harmony is not typical of productively formed agentives; note the bolded $\varepsilon$ in [èbù-gò]-દ̀bě: 'buyer' from verb ébé 'buy'.

The deverbal agentive is arguably the animate counterpart to instrument nominals with final -ygó in the singular. However, the tones are different. In the agentive, just the final mora (suffixal or stem) is H-toned, as with nouns of $/ \mathrm{L} /+\mathrm{H}$ lexical melody (§3.6.1.4.3). In the instrument nominal, the stem-final syllable is fully H-toned and remains so before the suffix, as in gòbú-ŋgó 'trigger', plural gòbé: (§4.2.3).
'Hunter' is uncompounded dàndá, plural dàndá-mbò. dàndá is also the noun 'hunting, (a/the) hunt'.

### 4.2.5 Nominalizing suffix -né

This suffix is attested in two cognate nominals (83).

| nominal | gloss | related verb |
| :--- | :--- | :--- |
| ày-né | 'fatigue' | áy 'become tired' |
| zèbì-né | 'curse (n), | zèbé 'curse (v)' |

This formation is historically related to a nominal type with suffix -n in YD and Najamba. Probable exact matches are TU ày-né with YD j̀nì-n 'fatigue', and TU zèbì-né with YD zèbú-n. There are no exact correspondences with Najamba forms, but Najamba sòngǎ-n 'curse (n)' is at least a semantic match.

### 4.2.6 Reduplicated deadjectival abstractive nouns

De-adjectival abstractives like 'length', denoting a scale, are formed by taking the segmental shape of the inanimate singular modifying adjective, adding an initial Cv - reduplication, and overlaying $\{\mathrm{LH}\}$ tones on the whole, with only the final syllable H-toned. Adjective 'nasty' elsewhere requires animate referents but presents the InanSg suffix in this formation. nà: $\mathrm{r}^{\mathrm{n}}$ á 'easy' does not allow inanimate singular suffixes (84b). If the adjective is vowel-initial, either the reduplicant is omitted or a glottal stop separates the reduplicant from the base, depending on the stem (84c).
abstractive gloss

Adj (InanSg) gloss
a. with inanimate singular suffix

| clearly -gO |  |  |  |
| :---: | :---: | :---: | :---: |
| gò-gòy-gó | 'shortness' | gǒy-gò | 'short' |
| mò-mòdù-gó | 'nastiness, cruelty' | mòdé: ( AnSg ) | 'nasty' |
| wà-wày-gó | 'width' | wǎy-gó | 'wide' |
| clearly -ngO |  |  |  |
| pà-pà:-ŋgó | 'length' | pá:-ygó | 'long' |
| tò-tò:-ŋgó | 'depth' | tó:-ŋgó | 'deep' |


| ambiguously -gO or -ygO after nasal bà-bàn-gó 'redness' | bán-gó | 'red' |
| :---: | :---: | :---: |
| b. adjective does not allow InanSg -(y)gO |  |  |
| nà-nà:r r á 'easiness, cheapness' | nà:r ${ }^{\text {ná }}$ | 'easy, cheap' |
| c. vowel-initial adjective |  |  |
| reduplicant separated by glottal stop |  |  |
| غ̇-१દ̀dù-ŋgó 'goodness, beauty' | ćdú-ŋgó | 'good; pretty' |
| reduplicant absent |  |  |
| èlù-ŋgó 'sweetness' | ćl(ú)-ŋgó | 'sweet, pleasing' |

        ambiguously -gO or -ngO after nasal
    bà-bàn-gó 'redness' bán-gó 'red'
b. adjective does not allow InanSg -(y)gO
nà-nà:rná 'easiness, cheapness' nà:rná 'easy, cheap'
c. vowel-initial adjective
reduplicant separated by glottal stop
eduplicant absent
èlù-ŋgó 'sweetness' ह́l(ú)-ŋgó 'sweet, pleasing'
mù-mùlò-gó 'resemblance' also belongs here but is based on the stative quasi-verb mùlú 'resemble' (§11.2.3.3). tètè:ygó 'intelligence' has a similar form but does not correspond to a known verb or adjective.

Deadjectival abstractives can be used in conjunction with predicates containing the verb lógó 'be extreme', especially in perfective-1a form. An example in è-Rèdù-ngó lóg-à:y-Ø 'he/she/it was extremely beautiful'.

### 4.3 Pronouns

### 4.3.1 Basic personal pronouns

Key forms of personal pronouns are in (85). Each person-number category has a basic form that occurs in independent function as well as in proclitic functions (preverbal object, complement of postposition, inalienable possessor). In subject function, a special set of verb suffixes occurs except in some morphosyntactic contexts (such as relative clauses) that require a preverbal pronominal proclitic.
(85) Personal pronouns

|  |  |  | subject <br> preverbal |  |
| :--- | :--- | :--- | :--- | :--- |
|  | basic | accustixixed |  |  |
| 1 Sg | mí | mí-gì | mí | -m |
| 1 Pl | í | í-gì | í | $-\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | ú | ú-gì | ú | $-\mathrm{w}^{\mathrm{n}}$ |
| 2 Pl | bí | bí-gì | bí | $-\mathrm{y}^{\mathrm{n}}$ |
| 3 AnSg | ńné | ńné-gì | ńné | $-\varnothing$ |
| 3 AnPl | bú | bú-gì | bú | [varies by AN category] |


| InanSg | kú | kú-gì | ńné | $-Ø$ |
| :--- | :--- | :--- | :--- | :--- |
| InanPl | yí-gì | ńné | $-\varnothing$ |  |
| Logo/3Refl | á | á-gì | á | $-m$ |

Accusative -gì is an NP-enclitic similar to postpositions, and whether to write it here as a suffix or as a separate word is an arbitrary choice. With pronouns it is often reduced to -g or inaudible. For example, mí can occur as an alternative to mí-gì in 1 Sg object function. -gì optionally assimilates to a preceding u-vowel, e.g. 3Pl bú-gì ~ bú-gù. This is not surprising since the distinction between word-final $u$ and $i$ is often blurred.

Overt kú and yí are generally confined to discourse-definite contexts, and they are glossed as discourse-definite demonstratives ("DemDef"). They are replaced by the regular 3Sg and 3 Pl pronouns as preverbal subject proclitics (e.g. in nonsubject relatives). In weakly discoursedefinite contexts, kú and yí are usually just omitted (86). kú ní: is an adverbial phrase ('then, at that point') and does not refer to the objects.

| (86) | [nà: | gín] | [kú | ní:] | tágè-Ø |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [pick.up | Ant.Past.SS] | [DemDef | Inst] | show.Pfv-3SgSbj |
|  | 'He picked (them-inanimate) up and then showed (them).' (2015-01 @ 06:19) |  |  |  |  |

There is no number distinction among logophoric and third person reflexive pronouns. For logophoric subject, -m suffixed to the verb is identical in form to the 1 Sg subject suffix; see §18.3.1 for discussion and examples.

As independent pronouns, the basic pronominals are often combined with topic marker gà(y) or variant (§19.1.1.2), e.g. mí gày '(as for) me'.

### 4.3.2 Personal pronouns as possessors

The simple basic form of the pronoun (§4.3.1 above) occurs in inalienable possession, preceding the kin-term possessum: ú ${ }^{H}$ bá 'your father'. For 3 Sg possessor there is a possessor suffix -n for kin terms (bà-ń 'his/her father'). Possessums other than kin terms, such as úló 'house', are followed by special possessor pronominals: úló ú-wó 'your-Sg house'). Most of the postposed pronominal possessors were originally composite ('house ${ }_{x}$ your-thing ${ }_{x}$ ', ' $\operatorname{dog}_{x}$ your-creature ${ }_{x}$ '), with a generic noun resuming the main noun, but this analysis is no longer transparent. The postposed forms are presented in (155) in §6.2.1.2.

### 4.3.3 Personal pronouns as complements of postpositions

Accusative forms of pronouns are in $\S 4.3 .1$ above. Accusative gì functions like a postposition since it is added once, at the end of a NP, but the transcription here treats it as a suffix with pronouns. Other postpositions can be added to pronouns as to noun-headed NPs.

The instrumental-comitative postposition ní: 'with, in the presence of (someone)' allows pronominal complements: mí ní: 'with me' (§8.1.2).

Most other postpositions that have full pronominal paradigms are composite postpositions of the type 'at [the side of X]', with pronominal complements e.g. 'at [my/your side]'. The pronoun therefore takes possessive form.

### 4.4 Determiners

### 4.4.1 Definite and demonstrative morphemes

### 4.4.1.1 Definite morpheme (ǹ)

Definite n is exemplified in (87). It is a weak discourse-definite element and is not sensitive to grammatical number. It follows other NP subconstituents, except the 'all' quantifier. It has no morphological similarity to any demonstrative, but it does resemble the 3 Sg inalienable possessor suffix -ń (§6.2.2.2). Definite ǹ has no tonal effect on the preceding word(s). Since it is nonsyllabic, it cliticizes phonetically to the preceding syllable. However, it is written here as a separate word.

| úló ǹ | 'the house' |
| :--- | :--- |
| nǎ: ǹ | 'the cow' |
| nà:-mbó ǹ | 'the cows' |
| nà: ${ }^{\text {L }}$ bíné: ǹ | 'the big cow' |
| úló yí-tà:ndú ǹ | 'the three houses' |
| ùlò ${ }^{\text {L mà-gú ǹ }}$ | 'that house' |
| úló kǒ: ǹ | 'my house' |
| úló ǹ pú $\rightarrow$ | 'all the houses' |

In the absence of definite ì, a noun can (but need not) be interpreted as indefinite.

### 4.4.1.2 'This/that' (demonstrative pronouns)

There are two deictic categories (proximate and distal), and a (strong) discourse-definite category ('that same/aforementioned X '). These categories are cross-cut by animacy and number. Demonstratives can be self-standing (absolute), or they can modify a preceding noun (§6.5.2).

Inanimate demonstratives are in (88). The stems for the deictic categories (88a-b) are proximate ò- $\sim$ è- and distal mà-. The endings are inanimate singular -gú and inanimate plural $-y ́$. These endings are related to discourse-definite demonstratives in (88c).
(88) Inanimate demonstratives

|  |  |  |
| :---: | :--- | :--- |
| a. proximate | textual example |  |
| ò-gú $\quad(\sim$ ǒ: $)$ | 'this' | 2015-01@02:31 |
| è-ý | 'these' | $2015-03 @ 02: 21$ |

b. distant
mà-gú ~ mà-ẃ 'that (over there)' 2015-02 @ 05:40
mà- $\mathrm{y}^{\text {n }} \quad$ 'those (over there)'
c. discourse-definite

| kú | 'that (definite)' | 2015-02@ 00:06 |
| :--- | :--- | :--- |
| yí | 'those (definite)' | 2022-04@ 02:15 |

kú is common as a self-standing demonstrative resuming a situation, as in 'that's why ...' or 'after that', or recalling a previously introduced referent. It can precede a noun as a (pseudo-)possessor (§6.5.1).

Animate demonstratives are in (89). The stems in the deictic categories (89a-b) are proximate j̀- and distal mà-. Endings are animate singular -ń and animate plural -b́́. The ending -bó is obscurely related to bú. The definite forms ńné and bú are identical to the corresponding third person personal pronouns.
(89) Animate demonstratives
textual example
a. proximate
ò-ḿ 'this’ 2015-01 @ 04:20
ò-bó 'these' 2015-02 @ 00:47
b. distant
mà-ḿ 'that (over there)'
mà-bó 'those (over there)'
c. discourse-definite (identical to third person pronouns)
ńné 'that (definite)' 2015-03 @ 01:37
bú 'those (definite)'
Another form kôn resembles the combination of kú and the definite morpheme ǹ. However, kú ǹ itself is separately attested. kôn can be animate or inanimate but apparently not human. kôn is distinct grammatically and tonally from pronominal possessor form kò-ń $\sim$ kò-ní 'his/her/its (inanimate singular)' (§6.2.1.2), and from topic marker kìn(î) (§19.1.1.1). The assistant suggested that kôn is archaic and is being replaced by kú among younger speakers. Attestations of demonstrative kôn are 2015-03 @ 01:33 (animal) and 2022-04 @ 02:08 (granary). The topic form is kón gày or variant (§19.1.1.2).

The interrogative adjective 'which?' has similar morphology with animacy-number suffixes -gú, -ý, -ḿ, and -bó (§13.2.2.7).

### 4.4.2 Demonstrative adverbs

### 4.4.2.1 Demonstrative locative adverbs

The demonstrative adverbs in (90a) are mostly morphologically simple. Those in (90b), with postposition bàrì (§8.2.2.2), presuppose a spatial displacement (cf. English over here, over there). The phrases in (90c) include gándá 'place', tone-dropped here like a compound initial.

|  | form | gloss |
| :---: | :---: | :---: |
|  | j̀gó | 'here' |
|  | ńgò | 'over there' |
|  | モ̌:, દ̌: nè | 'around here' (can replace j̀̀gó among young speakers) |
|  | と̌:-gà | 'around here' |
|  | mà-g.gá | 'over there' (deictic) |
|  | mǎ: | 'over there' (deictic) |
|  | yé | 'there' (discourse-definite) |
| b. | č:-bàrì | 'over here, around here' |
|  | yé-bàrì ~ yí-bàrì | 'over there' (discourse-definite) |
|  | gàndà ${ }^{\text {º̀gó }}$ | 'around here' |
|  | gàndà ${ }^{\text {L }}$ mà-ygá | 'around (over) there' |
|  | gàndà ${ }^{\text {L }}$ mǎ: | 'around there' |

A textual passage that contrasts $\check{\text { ě:-bàrì and yí-bàrì as nonspecific nearby versus distant (and }}$ discourse-definite) locations is 2015-06 @ 00:33. In 2015-02 @ 07:16, two new discourse referents are both located as yí-bàrì, presumably referring to two separate but nearby locations.

### 4.4.2.2 Emphatic and approximative modifiers of adverbs

For emphatic 'right here', ǹgó té $\rightarrow$ 'exactly here' was recorded, with té $\rightarrow$ 'specifically' (§8.4.3.2).

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

The regular predicate forms (§11.2.3.2) of deictic demonstratives (§4.4.1.2) can function as presentatives.
a. [èdù-gó
ǹ] ò-gû: = Ø
[waterjar-InanSg Def] Prox-InanSg=it.is
'Here's the waterjar.' (literally, "the waterjar, it is this")

$$
\begin{array}{lll}
\text { b. } & \begin{array}{ll}
\text { [èdě: } & \text { ǹ] }
\end{array} & \text { mà- } \hat{\mathrm{y}}=\emptyset \\
& \text { [waterjar.Pl } & \text { Def] }
\end{array}, \begin{aligned}
& \text { Dist-InanPl=it.is } \\
& \\
& \text { 'There are the waterjars.' }
\end{aligned}
$$

Alternatively, the demonstrative may function as the focus of the clause, with the verb in subject-focus form (§13.1.1.4)

## (92)



### 4.5 Adjectives

This section discusses the forms of modifying (i.e. attributive) adjectives that occur within NPs. For multi-word NPs including modifying adjectives see §6.3.1. For stative adjectival predicates, see §11.4. For aspect-marked inchoative and factitive (causative) verbs related to adjectives, see $\S 9.6$. For intensifiers see $\S 6.3 .3 .2$. For reduplicative deadjectival abstractive nominals like 'length' and 'redness' see §4.2.6.

### 4.5.1 Forms of modifying adjectives

Those adjectives that are compatible with both inanimate and animate referents have a maximum of three distinct forms, corresponding to four categories, as shown in (93). Animate singular and inanimate plural are syncretic. O represents $\{0 \quad 0\}$ and $E$ represents $\{e \varepsilon\}$, depending on the ATR harmonic class of the stem. The suffixal morphology is the same as for nouns.
category suffix
a. InanSg -gO, -ngO, except -ngE after two Ce stems
b. $\mathrm{AnSg}=\mathrm{InanPl}$
zero, or stem-final EE (e: or $\varepsilon$ :)
c. $\mathrm{AnPl}-\mathrm{mbO}$

The syncretic category (93b) often ends in EE (e: or $\varepsilon$ :), which reflects contraction of two phonologically similar and perhaps homophonous animacy-number markers of the approximate form *-yE, see (61) in §4.1.1.2). The contraction has close parallels in Najamba.

Animate plural -mbO reduces to -bO after a nasal by regular phonology. Since both -ngO and - gO are well-attested allomorphs of the Inanimate Sg suffix, when -gO occurs after a stemfinal nasal it is indeterminate which underlying allomorph is involved. Clusters written nb, ng, and mg can be pronounced [ nmb ], [ ngg ], and [myg], respectively, in careful speech. Even when EE is syncopated or reduced to $u$, its ATR value (e: versus $\varepsilon$ :) is reflected in the ATR value (o versus $\rho$ ) of the suffixes.

In the following arrays, some "cells" are empty because the adjective is limited either to animate or to inanimate nouns. Adjectives limited to liquids, like 'diluted (milk)', occur in inanimate plural form since liquids like 'water' and 'milk', along with grains, have inanimate plural agreement.

### 4.5.1.1 Modifying adjectives that allow InanSg -(y)gO

Many modifying adjectives are $/ \mathrm{H} /-$ melodic (94). Prepausally (e.g. in isolation), the initial syllable has phonetic stress, so that noninitial syllables in/H/-toned words have mid pitch. Most /H/-melodic adjectives have the EE ending in the unsuffixed category (94a). However, there are two monomoraic Cv stems that have zero ending in the unsuffixed category, and have inanimate singular -yge instead of the usual -ngO either as archaisms or due to stem-suffix vowel harmonization (94c). The suffixed forms in (94a) are based on stems that end in u (e.g. dúdú-) or in a sonorant (e.g. bán-). The latter could be the result of syncope, e.g. /bánú-/ $\rightarrow$ bán-. However, lexical learning of individual forms is cognitively manageable.

The H-tone of the stem extends regularly into the inanimate singular suffix -(y)gO. Animate plural -mbO is basically L-toned, but the H-tone does spread into this suffix in several cases, where the output form is CvN-bO (nóm-bó, bán-bó, góm-bó, jém-bó, mán-bó, óm-bó) or CvL-mbO (píl-mbó).
/H/-melodic modifying adjectives
InanSg InanPl AnSg AnPl gloss
a. with EE ending
[+ATR] stems

| cé:lú-gó | cé:lé: | cé:lé: | cé:lú-mbò | 'cold, cool' |
| :--- | :--- | :--- | :--- | :--- |
| démbú-gó | démbé: | - | - | 'thick, massive' |
| nóm-gó | nómé: | nómé: | nóm-bó | 'difficult' |
| púrúgú-gó | púrúgé: | - | - | 'tan, off-white' |

[-ATR] or ATR-neutral stems

| bán-gó | bár ${ }^{\text {né }}$ | bár ${ }^{\mathrm{n}}$ ¢́: | bán-bó | 'red; ripe (mango)' |
| :---: | :---: | :---: | :---: | :---: |
|  | ~ báné: | ~ báné: |  |  |
| dúdú-ŋgó | dúdé: | dúdé: | dúdú-mbò | 'heavy' |
| ع́l(ú)-ŋgó | ¢́lé: | ¢́lé: | ćl-mbò | 'sweet, delicious' |
| ع́dú-ŋgó | ćdé: | ćdé: | ćdú-mbò | 'good, beautiful' |
| ย́n-gó | $\varepsilon^{\prime} \mathrm{r}^{\mathrm{n}}$ ¢́: | $\varepsilon^{\prime} \mathrm{r}^{\mathrm{n}}$ ¢ | દ́r ${ }^{\text {nú }}$-mbò | 'lightweight; thin (wall)' |
| gál-ŋgó | gálé: | - | - | 'bitter' |
| góm-gó | gómé: | gómé: | góm-bó | 'rotten' |
| jém-gó | jémé: | jémé: | jém-bó | 'black (dark)' |
| - | kùrě: | - | - | 'undiluted (milk)' |
| mán-gó | már ${ }^{\text {né }}$ | már ${ }^{\mathrm{n}}$ ¢́: | mán-bó | 'hard, solid' |
| óm-gó | ómé: | ómé: | óm-bó | 'hot' |


| óg-gó | ógé: | ógé: | ógú-mbò | 'fast, rapid' |
| :---: | :---: | :---: | :---: | :---: |
| วr ${ }^{\text {nón-gó }}$ |  |  | ór ${ }^{\text {nón-bò }}$ | 'smooth, sleek' |
| pá:-ŋgó | pá: ~ páé: | pá: ~ páé: | pá:-mbò | 'long; tall' |
| píl-ŋgó | pílé: | pílé: | píl-mbó | 'white' |
| sí:-ygó | sí: ~ síć: | - | - | 'sharp (point, blade)' |
| wér-gó | wéré: | - | - | 'green, fresh (vegetation)' |
| yágúr-gó | yágíré: | yágíré: | yágúr-mbò | 'coarse, rough' |
| yòr(ù)-gó | yòrě: | - | - | 'soft' |

b. without EE ending

| - | kómbó | kómbó-mbò | 'lean, skinny' |  |
| :--- | :--- | :--- | :--- | :--- |
| ómó-ŋgó | ómó: | ómó: | ómó-mbò | 'living, alive' |
| tó:-ŋgó | tó: | - | - | 'deep' |

c. Cv stems

| dé-ŋgé | dé | dé | dé-mbò | big' |
| :---: | :---: | :---: | :---: | :---: |
| S $\varepsilon$-ŋgé | sع́ | sع́ | sé-mbò | good' |

Other modifying adjectives have rising tone melodies, /LH/ or /L/+H (95). /LH/ realizes its Htone on the stem-final syllable even before a suffix, though this can be obscured by syncope of the stem-final vowel. By contrast, $/ \mathrm{L} /+\mathrm{H}$ shifts its H -tone onto the suffix. Most adjectives in (95) have the EE ending in the syncretic unsuffixed category. If EE is H-toned, the stem is /LH/-melodic; if it is <LH>-toned, the stem is /L/+H melodic. A few stems have a Cvy- shape before suffixes; the $y$ disappears before $\mathrm{E}(\mathrm{E})$ in the unsuffixed category, which then diphthongizes or monophthongizes (wàé, sě:, pě:)
(95)/LH/ and similar melodies
InanSg InanPl AnSg AnPl gloss
a. /LH/-melodic (L-toned suffixes unless syncopated), cf. sègé (following subsection) with EE ending

| - | - | àmé: | àm-bó | 'good-sized (animal)' |
| :---: | :---: | :---: | :---: | :---: |
| bǐn-gó | bìné: | bìné: | bǐn-bò | 'fat, stout' |
|  |  |  | ~ bìní-mbò |  |
| mèndú-ygó | mèndé: | mèndé: | mèndú-mbò | 'slender' |
| - | - | mòdé: | mòdú-mbò | 'evil, nasty' |
| Cvy-stem before suffixes |  |  |  |  |
| gǒy-gó | gwě: | gwě: | gǒy-mbò | 'short' |
| wǎy-gó | wà | - | - | 'wide, spacious' |


| b. /L/+H -melodic (H-tone on suffixes) |  |  |  |
| :---: | :---: | :---: | :---: |
| with EE ending, [+ATR] |  |  |  |
| dùmbù-gó dùmbě: | - | - | 'blunt (blade)' |
| sě: | - | - | 'diluted (milk)' |
| with EE ending, [-ATR] |  |  |  |
| èmbù-gó غ̀mbě: | - | - | 'narrow' |
| gàbù-gó gàbě: | gàbě: | gàbù-mbó | 'tall' |
| jèy-gó jénjě: | - | - | 'tilted' (§3.4.5.4) |
| ゝ̀l-gó ذ̀lě: | òlě: | ̀̀l-mbó | 'wet' |
| sàm-gó sàmě: | sàmと̌: | sàm-bó | 'bad, ugly' |
| NCv stem |  |  |  |
| ǹdò-ทgó ǹdé | - | - | 'empty' |
| Cvy-stem before suffixes |  |  |  |
| mày-gó mà ${ }^{\text {n }}$ | mà ${ }^{\text {n }}$ | mày-mbó | 'dry' |
| pèy-gó pě: | pě: | pèy-mbó | 'old' |
|  |  | ( p pè:-mbó) |  |

$/ \mathrm{HL} /$ melody is rare among modifying adjectives. (96) presents one example; see also 'blue' in the following subsection.
(96)/HL/ melody

| InanSg | InanPl | AnSg | AnPl | gloss |
| :--- | :--- | :--- | :--- | :--- |
| - | - | nár$^{n}$ nà | nár${ }^{n}$ nà-mbò | 'respectable' |

### 4.5.1.2 Modifying adjectives that do not allow InanSg -(y)gO

There are some adjectives that do not distinguish number for inanimates, i.e. they do not allow inanimate singular -(y)gO suffix even when they clearly describe singular inanimates (as opposed to liquids, which have inanimate plural concord). Those adjectives of this type that can also be used with animate nouns do take animate plural -mbO (97a). This is parallel to the situation with nouns, where some inanimates have only a single, unsuffixed form used both as singular and plural. The adjectives in (97b) probably belong here, but have defective paradigms because of semantic incompatibility with animates. 'Blue' (97b) is a regionally widespread loanword but has been nativized more cleanly in TU than in most other languages, though speakers refrain from adding an InanSg suffix.
InanSg InanPl AnSg AnPl gloss

| a. full paradigms |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| /L/+H melody |  |  |  |  |
| kàndá | kàndá | kàndá | kàndà-mbś | 'new' |
| nà:rná | nà: $\mathrm{n}^{\text {na }}$ | nà:rná | nà: ${ }^{\text {nàà-mbó }}$ | 'easy, cheap' |
| wàndá | wàndá | wàndá | wàndà-mbó | 'other' |
| /LH/melody |  |  |  |  |
| s g̀ ¢́ | sègé | sègé | sègé-mbò | 'small' |

b. inanimate only
/H/melody
bá bá - _ 'full (container)'

| rising melody |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| bòdòró | bòdòró | - | - | 'half-ripe (fruit)' |
| ìĺ | ìĺ | - | - | 'ripe; fermented' |
| kǒ: | kǒ: | - | - | 'unripe, raw' |
| HL/ melody <br> búl̀े | búloे | - | - |  |
|  |  |  |  | 'blue' |

The forms in (98) can function as adjectival modifiers but have invariant form. 'Yellow' is really the word for '(bright yellow) pulp inside pods of néré tree (Parkia biglobosa), which is the exemplar for yellowness throughout the zone.

```
a. yòl-púrn'ś 'yellow'
b. sògòló 'spotted, multi-colored'
```


### 4.6 Numerals

### 4.6.1 Cardinal numerals

### 4.6.1.1 'One’ (túré:, túrú-gó) and ‘other’ (wàndá)

Forms for 'one' are in (99). The animate/inanimate distinction and the long $\varepsilon$ : are typical of adjectives. However, the noun X is not tone-dropped: nǎ: túré: 'one cow', úló túrú-gó 'one house'. In this respect, 'one' behaves tonosyntactically like other numerals rather than like adjectives.
a. modifying a noun ( X )

X túré: 'one X (animate)'
X túr(ú)-gó 'one X (inanimate)'
b. in counting sequence (' $1,2,3, \ldots$ '), see $\S 4.6 .1 .2$ below
tí:-rú

A related form tùrù is used as an 'only' particle at the end of NPs (§19.4.1). Another related form is the adverb tín $\rightarrow$ 'firstly' or 'previously, in the past'.

The adjective 'other' is wàndá, invariant for animacy and number. The noun is tonedropped as with other adjectives: nà: ${ }^{L}$ wàndá 'another/the other cow', ùlò ${ }^{\mathrm{L}}$ wàndá 'another/the other house', [ùlò wàndà] ${ }^{\mathrm{L}}$ yí 'those other houses'.

### 4.6.1.2 '2' to ' 10 '

The numerals from ' 2 ' to ' 10 ' are shown in their postnominal forms in (100). They are preceded by classifying prefixes (similar to those in YD). For human reference, either the specifically human form (based on né 'person') or the more general animate form may be used. Nonhuman animals use only the animate form. Another possible classifier is là/lá 'time(s)' (§6.4.3).

The prefixes are H-toned. Numeral stems are of two main tonal types. One type is bimoraic $/ \mathrm{LH} /\left({ }^{\prime} 3,{ }^{\prime}{ }^{\prime} 5\right.$ ') or trisyllabic /LHL/ ('8-9)' and is tonally stable. The other type (' 2 ', ‘ 4 ', ‘ 6 ', ‘ 7 ', ' 10 ') appears as H-toned after né- and as L-toned after bú- and yí-.

| (100) | gloss | human | animate | inanimate |
| :---: | :---: | :---: | :---: | :---: |
|  | '2' | né-léy | bú-lèy | yílèy |
|  | '3' | né-tà:ndú | bú-tà:ndú | yí-tà:ndú |
|  | '4' | ग né-kédé | bú-kèdè | yí-kèdè |
|  | '5' | né-nǔm | bú-nǔm | yí-nǔm |
|  | '6' | né-kúlé | bú-kùlè | yí-kùlè |
|  | '7' | né-só | bú-sò | yí-sò |
|  | '8' | né-[gà-gárà] | bú-[gà-gárà] | yí-[gà-gárà] |
|  | '9' | jé-[gà-gárà]-bà | bú-[gà-gárà]-bà | yí-[gà-gárà]-bà |
|  | '10' | né-p $\mathrm{c}^{\prime}(\mathrm{u})$ | bú-pèl(ù) | yí-pèl(ù) |

Numerals can also be preceded by pronominal (pseudo-)possessors as in bí lèy 'you two' and í tà:ndú 'we three'. For third person, the regular pronominal in this context is reflexive (3Refl) á. An example is á tà:ndú 'the three of them' in 2015-03@ 02:21.

The preceding noun (or noun-adjective combination) has its regular tones, as well as its regular plural marking. Numerals do not induce tone-dropping on these preceding words. For example, yà-mbó 'women' occurs without change in yà-mbó né-léy 'two women'. nù-mbó 'people' is grammatical before a human numeral, but it is normally omitted: né-léy 'two people'.

In counting sequences, there is no preceding noun and no classifying prefix. This reveals lexical tones of the various stems. There are special forms for ' 1 ' and ' 2 ', both ending in rú. The numerals that shift between H - and L-toned forms after classifying prefixes are H -toned in the counting sequence. This suggests that they have lexical $/ \mathrm{H} /$ melodies.
(101) numeral in counting sequence

| '1' | tí:-rú |
| :--- | :--- |
| '2' | lé:-rú |
| '3' | tà:ndú |
| '4' | kédé |
| '5' | nǔm |
| '6' | kúlé |
| '7' | só |
| '8' | gà-gárà |
| '9' | [gà-gárà]-bà |
| '10' | pélú ~ pél |

### 4.6.1.3 Decimal multiples ( ${ }^{\prime} 10^{\prime}, ~ ‘ 20 ', \ldots$ ) and combinations ( ${ }^{\prime} 11^{\prime}, ~ ‘ 59 ', \ldots$ )

Numerals denoting decimal multiples up to ' 70 ' are in (102). They do not combine with classifying prefixes, so they are invariant across animacy categories. They consist of a rather chewed-up variant of pélú ' 10 ', plus the relevant single-digit numeral. The ' 10 ' initial has the segmental form pe-, pe:-, or pega-. Historically, the reduction to p $\varepsilon$ - in ' 30 ' probably reflects syncope and $* \mathrm{rt}>\mathrm{t}$. The reduction to p :- is most likely from *pega-, less likely from *pele. This variant occurs before velars but not coronals. The ' 10 ' element is L-toned (pègà-, pè:-) before single-digit numerals that begin with an H-tone. However, '10' ends with an H-tone (pé, pègá-) before an L-tone.
(102) gloss form

| '20' | pègà-léy |
| :---: | :---: |
| '30' | p -tà:ndú |
| '40' | pè:-kédé |
| '50' | pègá-nǔm |
| '60' | pè:-kúlé |
| '70' | pègà-só |

Like the single-digit terms ' 2 ' to ' 10 ', decimal multiple terms follow nouns (or noun-adjective combination) that takes their regular plural form: yà-mbó pè:-kédé ' 40 women'.

Composite numerals can be formed by adding a single-digit numeral (without a classifier) to a decimal-multiple term from ' 10 ' to ' 70 '. This combination is followed by a unique terminal morpheme sàgà (roughly 'plus'). ' 10 ' has yet another irregular variant in this construction. The other decimal-multiple terms through ' 70 ' are regular, except that their final syllable is raised to H-tone if it is otherwise L or $\langle\mathrm{HL}\rangle$ ('20', '40', ' 60 ').
gloss with single-digit increment X

| '10' | pé:-rṅ̀ X sàgà |
| :---: | :---: |
| '20' | pègà-léy X sàgà |
| '30' | pé-tà:ndú X sàgà |
| '40' | pè:-kédé X sàgà |
| '50' | pègá-nǔm X sàgà |
| '60' | pè:-kúlé X sàgà |
| '70' | pègà-só X sàgà |

The single-digit numeral, X in (103), is invariant and does not agree with the referent in animacy, but né- optionally precedes the entire sequence (i.e. precedes the decimal term) if the referent is human. The forms of the single-digit numerals after these decimal-multiple terms are given in the right-hand column of (104). ' 1 ' has no animacy suffixes. ' 3 ' has a slightly contracted form. ' 5 ' usually contracts the decimal term, so that -m is realized as a suffix or enclitic on the noun.

| numeral | regular form | after decimal-multiple term |
| :--- | :--- | :--- |
| ' 1 ' | túr- $\varepsilon:, ~ t u ́ r u ́-g o ́ ~$ | túr(ú) sàgà |
| '2' | léy | léy sàgà |
| '3' | tà:ndú | tǎ:n sàgà |
| '4' | kédé | kédé sàgà |
| '5' | nǔm | -m sàgà (less often: nǔm sàgà) |
| '6' | kúlé | kúlé sàgà |
| '7' | só | só sàgà |
| ' 8 ' | gà-gárà | gà-gárà sàgà |
| '9' | [gà-gárà]-bà | [gà-gárà]-bà sàgà |

The reduced -m in 'five' triggers further contractions in the preceding numeral. ' 15 ' is just pém sàgà, ' 25 ' is pègà-lê-m sàgà, and ' 55 ' is pègá-nǔm-Ø sàgà. In the latter, only the final sàgà 'plus' alerts a listener to the otherwise inaudible presence of -m 'five'. Raising of tones of final syllables in the decimal-multiple term does not occur before $-m$, hence pè:-kédè-m sàgà ' 45 ' and pè:-kúlè-m sàgà ' 65 '.

The decimal-multiple term for ' 80 ' requires separate treatment (see below). ' 90 ' is expressed as ' 80 ' plus ' 10 ' (with inanimate prefix yí- in unmarked contexts, as in counting sequences).

$$
\begin{array}{ll}
\text { '80' } & \text { sùngó (or dògò-sùngó) }  \tag{105}\\
\text { '90' } & \text { sù ggó yí-pèl(ù) }
\end{array}
$$

' 80 ' is the notorious "Dogon hundred" lexical item. It is more noun-like than the lower decimalmultiple terms, and it has a different microsyntax when it is combined with an incremental single-digit numeral. Here the decimal-multiple and single-digit numerals are rather
independent of each other. When the single-digit is ' 1 ', the noun appears twice, so ' 81 cows' is '[cows 80] [cow 1]' (106). When the single digit is ' 2 ' to ' 9 ', the noun is optionally repeated and the numeral takes the relevant classifying prefix, without sàgà. sùngó takes the form sùngó $\therefore$ in such combinations, pronounced [sùngó( $\bar{o})$ ò ] and often set off prosodically from the following digit expression. This is the conjoining form for nouns (tonation symbol $\therefore$ ) and is represented in interlinears by ".\&" (see §7.1.1).

| a. | [nà:-mbś | sùygó $\therefore]$ | [nă: | túré: $]$ |
| :--- | :--- | :--- | :--- | :--- |
|  | [cow-AnPl | $80 . \&]$ | $[$ cow | one.AnSg] |
|  | ' 81 cows'' |  |  |  |



As noted above, sùngó yí-pèlù ‘ 90 ’ is already composite (' 8010 '). When it modifies a core NP, the ' 10 ' portion shows animacy concord (107a). When a further single-digit term is added, the phrasing is of the type ' 80 cows, 11 (cows)', i.e. with the single-digit term grouped with ' 10 '. The noun ('cows') is optionally repeated (107b).
a. $\begin{array}{lll}\text { [nà:-mbó } & \text { sùggó } \therefore \text { ] } & \text { bú-pèl(ù) } \\ \text { [cow-AnPl } & 80 . \&] & \text { An-ten }\end{array}$ (90)
'90 cows'
 '91 cows'
sùngó ' 80 ', without a compound initial, can also be used in the sense ' 100 ', especially in connection with currency. However, in this sense it is usually supplanted by té:mdèrè, see below.

### 4.6.1.4 Large numerals (' 100 ', ' 1000 ', $\ldots$ ) and their composites

The stems in (108) are somewhat noun-like morphosyntactically.

$$
\begin{equation*}
\text { gloss } \quad \text { form } \tag{108}
\end{equation*}
$$

| a. 'hundred' | té:mdèrè (< Fulfulde) |
| :--- | :--- | :--- |
| b. 'thousand' | mùdó |
| c. 'million' | mílýn $^{\text {n }}$ (< French $)$ |

These numerals generally omit ' 1 ' ('hundred' $=$ ' 100 ', 'thousand' $=$ ' 1,000 ', 'million' $=$ ' $1,000,000$ '). When multiplied by a higher numeral (as in ' 200 ' or ' 2000 '), 'hundred' and 'million' are treated like regular quantified-over nouns, so a following single-digit term has inanimate yí- prefix, agreeing with 'hundred' or 'million', not with the referent (109a-b). 'Thousand' is followed by the bare numeral (109c).


Since not many people have a hundred cows or other physical objects, much less a thousand or a million, these higher numerals are mainly used in connection with currency.

### 4.6.1.5 Currency

The currency unit is bú:dù, equivalent to 5 francs CFA and originally equivalent to a longdefunct colonial coin (sometimes called the riyal). In the singular, this is pronounced bù:dù túrú 'one riyal', denoting the smallest coin (5 FCFA) in recent circulation. This form is unusual in that túrú ' 1 ' is treated as an adjective or compound final, so it uncharacteristically controls tonedropping on bú:dù. The same tones are heard in bù:dù léy ' 2 riyals', which denotes the 10 FCFA coin. Higher numerals combine regularly with bú:dù. For example, in bú:dù yí-tà:ndú ' 3 riyals' (15 FCFA), bú:dù has its normal tone contour, and the numeral has an Inanimate classifying prefix agreeing with bú:dù.

For 'million' and its multiples, one does not multiply by 5 to get the conversion. So 'two million (bú:dù) means 'two million francs FCFA'.

### 4.6.2 Ordinal adjectives

### 4.6.2.1 'First' (tí:rú) and 'last' (dùmdó)

Ordinal 'first' is tí:rú, and 'last, final' is dùmdó. Both are adjectives and control tone-dropping on the noun.

| a. | ci $^{L} /$ dàmbà | tí:rú |
| :--- | :--- | ---: |
| thing / village | first |  |
|  | 'the first thing / village' |  |

b. cì ${ }^{\mathrm{L}}$ dàmbà ${ }^{\mathrm{L}}$ dùmdó thing / village last 'the last thing / village'

For adverbial 'firstly, at first' see §8.4.6.2

### 4.6.2.2 Other ordinals (suffix -né)

The ordinal suffix for numerals higher than ' 1 ' is -n£́, after L-toned stem. There are only slight segmental irregularities in comparison to the cardinal forms (syncope of second syllable in ' 3 rd' and ' 10 th', monophthongization in '2nd').
form
gloss
a. single-digit numeral
lè:-n $\sim$ nè:-rń $\dot{\text { n }}$ 'second'
tà:n-né 'third'
kèdè-né 'fourth'
nùm-né 'fifth'
kùlò-nと́ 'sixth'
sò-nદ́ 'seventh'
gàgàrà-n $\varepsilon \quad$ 'eighth'
gà-gàrà-bà-né 'ninth'
pèl-ň́ 'tenth'
b. decimal
pègà-lè̀:-né 'twentieth'
c. decimal plus single-digit numeral
pé:nè tùrù sàgà-né 'eleventh'
pé:nè lèy sàgà-né 'twelfth'
d. hundred
tè:mdèř̀-nદ́ 'hundredth’
e. hundred plus ' $1-99$ ' numeral (two levels)
té:mdèrè pègà-lè̀:-né 'hundred and twentieth’
f. interrogative
àngà-nと́ 'how many-eth?' (Fr quantième)
Tone-dropping controlled by the suffx does not extend to the decimal term in (111c), or to 'hundred' in (111e). However, it does apply to the combination of the single-digit term plus sàgà in (111c).

### 4.6.3 Fractions and portions

pégèrè 'half' is not mathematically precise. It really means '(substantial) part', e.g. a third, a half, or the like.

## 5 Nominal and adjectival compounds

The compound types in this chapter are subcategorized by the word-classes of the initial and final, and by tone patterns. Using n for noun, a for adjective, num for numeral, v for verb, and x for a variable word class (noun, adjective, perhaps adverb), one can represent the types with notation like [ $\mathrm{x} n$ ], [ n n ], [ $\mathrm{n} v$ ], and (with a suffix) [ $\mathrm{n} \mathrm{v-VblN]} ,\mathrm{plus} \mathrm{diacritics} \mathrm{to} \mathrm{mark} \mathrm{tones} \mathrm{( } \mathrm{x}$ all high tone, $\hat{\mathrm{x}}=$ falling HL contour, $\check{\mathrm{x}}=$ rising LH contour, $\grave{\mathrm{x}}=$ all-low tone, and $\overline{\mathrm{x}}=$ regular lexical tone). Example: [ $\grave{n} \bar{n}$ ] is a noun-noun compound whose initial is dropped to $L$ tones and whose final has its lexical tone melody. An alternative notation would be $\mathrm{N}^{\mathrm{L}}-\mathrm{N}$.

### 5.1 Nominal compounds

In TU, lexicalized nominal compounds are mostly of the [ǹ n̄ type with the initial tone-dropped to $\{\mathrm{L}\}$. They get competition from possessive-type compounds $[\overline{\mathrm{n}} \mathrm{n}]$ in which only the final (the "possessum") is tone-dropped.

In both of these primary types, only one of the initial and final presents with its regular melody, which always includes exactly one H-toned peak (of whatever length). In effect, the constraints on lexical tones of individual noun stems are reapplied to the noun-noun compound.

### 5.1.1 Compounds of type [ $\bar{n} \bar{n}]$ (absent)

No compound pattern in common use presents lexical tones of both the initial and the final. Such compounds are very rare in Dogon languages, but do occur in 'owner' compounds in Jamsay.

The closest parallel in TU is a handful of obscure polysyllabic fauna terms with two H -tone peaks (§3.6.1.4.5). These could be modeled at least prosodically as compounds in which the initial and final present their lexical melodies. However, the "initials" and "finals" are not separately recognizable.

### 5.1.2 Possessive-type compounds [̄̄̀ ǹ]

Some possessor-possessum combinations have become lexicalized as compounds, cf. English Adam's apple as body-part term. As with ordinary alienable possessives, the possessor presents its independent tone pattern, and the possessum has $\{\mathrm{L}\}$ overlay.

### 5.1.2.1 Examples of possessive-type compounds

Some TU possessor-type compounds function as natural-species terms. The initial may denote a habitat or other encompassing entity. Compounds of this type are best transcribed as two words separated by a space.

| compound | gloss | gloss of initial | final |
| :---: | :---: | :---: | :---: |
| ándá ${ }^{\text {L }}$ à | 'buffalo' | 'the bush' | nǎ: 'cow' |
| ándá ${ }^{\text {L }}$ tòlè: | 'warthog' | 'the bush' | tólé: 'pig' |
| àr ${ }^{\text {ná }}$ Lnàr ${ }^{\text {na }}$ | 'velvet mite' | 'rain (n)' | nàr ${ }^{\text {ná }}$ 'mother' |
| cèmdé Làdè: | 'cordon-bleu (finch)' | 'cotton' | àdě: 'bird' |
| dàbá ${ }^{\text {tòndò }}$ | 'finch-lark' | 'mountain' | tóndó 'star' |
| ínjé ${ }^{\text {L }}$ sìrìbè | 'aloe' | 'water' | sìrìbé 'folding knife' |

There is no sharp functional distinction between possessive-type compounds and regular [ǹ $\bar{n}$ ] compounds. It is likely that some combinations start out at possessive-type compounds and, as they become fully lexicalized, evolve into regular compounds.

### 5.1.2.2 Possessive-type compounds with bàyá 'owner'

The final, which functions as head, is based on bà yá 'owner, master', plural bàyá-mbò. It is treated tonally as a possessum, i.e. with $\{\mathrm{L}\}$ overlay when the initial is nonpronominal. The formulae are therefore singular $\mathrm{X}^{\mathrm{L}}$ bàyà and plural $\mathrm{X}^{\mathrm{L}}$ bàyà-mbò where the initial X retains its independent tones.

| compound | gloss | initial | gloss of initial |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| úló ${ }^{\text {L bàyà }}$ | 'homeowner' | úló | 'house' |
| gándá 'bàyà | 'landowner' | gándá | 'country, place' |
| ándá 'bàyà | 'field owner' | ándá | 'the bush' (hence: 'fields') |
| yàgùnúm ${ }^{\text {L bàyà }}$ | 'diviner' | yàgùnúm | 'ant-lion larva'(used in divination) |

Plurals are úló ${ }^{\text {Lbànà-mbò 'homeowners' and so forth. }}$
'Owner' compounds are somewhat circumscribed by competition with the characteristic derivativational suffix -jě:, which derives nouns like 'bearded (one)' from a more or less definining physical or other feature (§4.2.1). See also ògò-íyé 'rich person', literally "wealthchild," (130d) in §5.1.5.2.

### 5.1.3 Right-headed compounds of type [ì $\bar{n}]$

In this type, the initial gets $\{\mathrm{L}\}$ overlay (tone-dropping) and the final presents its lexical tone melody. The initial is invariant in form; it cannot be independently pluralized or otherwise
modified. The final functions as the morphological and semantic head and can be pluralized. Modifiers other than possessors follow the entire compound.

This is the productive tone pattern for more or less lexicalized noun-noun compounds. Some of the subtypes described in the following subsections are morphological schemata that readily produce new combinations.

The end of the initial is often truncated by omitting final $u$ or an old inanimate suffix like go. Some high-frequency monomoraic Cv nouns with mid-height vowels (yó 'millet', né 'person', cé 'thing’) often raise the vowels when functioning as initials (§3.4.3.3), producing yù-, nì-, and cì-.

### 5.1.4 [ǹ $\bar{n}$ ] with incorporated object and deverbal nominal

In the compounds described below, the final is a deverbal nominal (verbal noun or agentive) and the initial is an incorporated noun.

### 5.1.4.1 With verbal noun as final

In this productive construction, the L-toned initial either denotes a characteristic object or is a cognate nominal. The final is a verbal noun (§4.2.2) or cognate nominal and has its independent tones.
a. [zòb-gò]-[zób-í] nôm
[run-InanSg]-[run-VblN] be.difficult
'Running a race is hard.'
$\begin{array}{lll}\text { b. } & \text { [zòb-gò]-[zóbí-lé] } & \text { nôm } \\ {[\text { run-InanSg]-[run-VblN] }} & & \text { be.difficult } \\ {[=(a)]} & \end{array}$

### 5.1.4.2 With agentive as final

This is another special case of [ $\bar{n} \bar{n}$ ] compound. The final is a deverbal agentive nominal. Such nominals have $\{\mathrm{LH}\}$ overlay and end in ě: in the singular, becoming ù (subject to syncope) before animate plural -mbó (§4.2.4). The initial is a cognate nominal or a noun that denotes a prototypical object of the underlying transitive verb.

Of two speakers for whom data are available, one fluctuates between $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ overlays for the final in some combinations (e.g. wà:-wálé: alongside wà:-wàlě: 'farmer'). The other speaker has consistent $\{\mathrm{LH}\}$.

Examples of singular compound agentives are in (115).
noun plus transitive agentive gloss
a. initial is cognate nominal sán sárná-'pray' sàn-sàrně: ~ -sàně: 'Muslim' ím ímé 'stutter' ìm-ìmě: 'stutterer'
suffix on cognate nominal omitted in agentive zóbú-gó zòbó 'run' zòbù-zòbě: '(fast) runner' dòn-gó dòrn' 'make a sale’ dòn-dòně: 'seller' èbù-gó ébé 'make a purchase’ èb(ù)-èbě: 'buyer'
~ [èbù-gò]-غ̀bě:
móndú-gó màndí ‘laugh’ mòndù-màndě: 'laugher’, 2015-02 @ 01:02
b. initial is noncognate noun

| غ̀dě: té 'weave cloth' | èdè:-tě: | 'weaver' |
| :---: | :---: | :---: |
| ínjé kóbś 'draw water’ | ìnjè-kòbě: | arrier' |
| kórn's màdá 'toss | kı̀r ${ }^{\text {n }}$ | cowry-tosse | kórņ́ màdá 'toss cowries’ kòrǹ̀-màdě: 'cowry-tosser'

(synonym sèbá: màdá, agentive sèbà:-màdě:)
úló óndú 'build a house' ùlò-òndě: 'house-builder'

Most Cv : verbs derive historically from *Cvlv etyma (§3.4.5.2). The old bisyllabic form is preserved in agentive compound finals of the form -Cỳlě: (116a). The -Cv̀lě: agentive pattern has extended analogically to jǎ: 'pick up', which originally had medial *y rather than *1 (116b).

$$
\begin{array}{lll}
\text { noun plus transitive } & \text { agentive } & \text { gloss }
\end{array}
$$

a. -Cvle: from original *Cvlv verb
final is HL- or LH-toned

| kà-kăl ká: 'tell a lie' | [kà-kàl]-kálé: | 'liar' |
| :---: | :---: | :---: |
| wá: wǎ: ‘do farm work’ | ~ [kà-kàl]-kàlě: wà:-wálé: | 'farmer' |
| yù-wá: wǎ: ‘farm millet' | ~ wà:-wàlě: <br> [yù-wà:]-wálé: | '(millet) | ~ [yù-wà:]-wàlě:

final is LH-toned
kòndó á: 'brew beer’ nìmdé bǎ: 'gather trash' غ̀dé lă: ‘bear child' yá lă:-m 'help bear child' pélú pé: 'clap, applaud' tól tó: 'pound (grain)' yó tó: 'pound millet'
kòndò-àlě: 'beer brewer'
nìmdè-bàlě: 'trash collector'
غ̀dè-làlě: 'child-bearing woman’
[yà-mbò]-làlě: 'midwife'
pèl-pèlě: 'applauder'
tòl-tòlě: $\quad$ 'pounder (of grain)'
yù-tòlě: 'millet pounder'

```
b. -Cv̀lě: from original *Cvgv verb
    g\grave{n-gó nǎ: 'pick up gear' gòn-nàlě: 'gear picker-upper'}
```

Synchronically, the extra 1 arguably functions as a meaningless filler stem extension, rather than as part of the stem (116a). Compare lú with the same verbs in the quoted imperative (368e) in §10.6.3.1, and in instrumental nominal gò:-[pèlú-ggó] 'flint lighter' (120a) in §5.1.4.3.1 below.

The only high-voweled Cv: stem in TU is ní: ‘sleep (v)’, which does not show the extension with 1 . Instead, it has an agentive of the shape -Cě: (117).

$$
\begin{array}{cll}
\text { noun plus transitive } & \text { agentive } & \text { gloss }  \tag{117}\\
\text {-Cě: from Cí: verb } \\
\text { jìrè-[ní-ngí] ní: ‘sleep (v)' } & \text { [jìrè-[nì-ngì]]-ně: } & \text { 'sleeper' }
\end{array}
$$

Cv verbs with short vowels do not have bisyllabic etyma. Their agentive compound finals have various shapes depending on vowel quality. The only Cu verb (nú 'enter') does not have an agentive derivative in regular use. Cv verbs with other vowels are attested in agentives (1183). The type with -Cwě: (118b) reflects the merger of /-Còé/ and /-Còé/, desyllabifying the initial $\{00\}$ to w . A different resyllabification in the plural restores the ATR distinction as shown in (119b) below.
noun plus verb agentive gloss
a. -Cě: from $\mathrm{C} \mathrm{\varepsilon}, \mathrm{Ce}, \mathrm{Ci}$
kòndó né 'drink beer' kòndò-ně: 'beer drinker'
jé jě 'dance'
yó dĭ 'carry millet'
b. -Còé from Co or Co
dọá dǒ ‘insult'
yó tó 'sow millet'
tó-ngó tá 'sow millet'
émné dǒ ‘suckle milk’
c -Cáá from Ca
kú-gó ká 'shave head' kù-kač: 'one who shaves heads'

The final ě: in an agentive mutates to a high vowel \{ì ù\} before animate plural suffix -mbó. Monosyllabic -Cě: becomes -Cì-mbó (119c). All nonmonosyllabic agentives have stem-final u , which is syncopated after an unclustered medial sonorant. Nevertheless, -mbó is always [+ATR], harmonizing with the underlying stem-final ě: rather than with preceding stem vowels, as seen in 'buyers' and 'water carriers' with [-ATR] penults (119a). Singular agentives of type -Cwě: recover their underlying $\boldsymbol{o}$ or o (119b).
a. from bisyllabic final
syncopating (medial unclustered sonorant)
wà:-wálé: wà:-[wàl-mbò] 'farmer(s)'
~ wà:-wàlě: ~ wà:-[wàl-mbó]
[kà-kàl]-kálé: [kà-kàl]-[kál-mbó]
'liar'
kù-kàě:
kù-[kày-mbó] 'one who shaves heads'
nonsyncopating
èbì-èbě::
èbì-[z̀bù-mbó]
'buyer(s)'
ìnjè-kòbě:
zòbù-zòbě:
ìnjè-[kòbù-mbó]
'water carrier(s)'
yùlùgù-bùmbě:
zòbù-[zòbù-mbó]
'(fast) runner(s)'
yùlùgù-[bùmbù-mbó]
'fortune-teller (reads fox tracks)'
b. from -Cwě:
yò-twě: yò-[tòy-mbó] 'millet planter(s)'
èmnè-dwě: èmnè-[dòy-mbó] 'nurseling(s)'
c. from-Cě:
$\begin{array}{lll}\text { kòndò-ně: } & \text { kòndò-[nì-mbó] } & \text { 'beer drinker(s)' } \\ \text { jè-jě: } & \text { jè-[jì-mbó] } & \text { 'dancer' }\end{array}$

Plurals with unsyncopated stem-final u after a cluster or an obstruent are [zòbù-gò]-[zòbù-mbó] '(fast) runners', ìnjè̀-[kòbù-mbó] 'water-carriers', and kòrrò-[màdù-mbó] 'cowry-tossers'. Syncope is blocked here because the resulting consonant clusters would not be viable. Plurals with syncopated stem-final $/ \mathbf{u} /$ after an unclustered sonorant are sàn-[sàn-bó] 'Muslims', ìm-[ìm-bó] 'stutterers', and દ̀dè-[làl-mbó] 'midwives'.
5.1.4.3 With inanimate participle (e.g. -ygó) as final

### 5.1.4.3.1 With instrument nominal (-ygó) as final

Simple instrument nominals derived from transitive verbs are covered in §4.2.3. The verb has $\{\mathrm{LH}\}$ overlay and ends in ú-ŋgó in the singular, with ú subject to syncope after sonorants, and in é: in the plural. -ngó simplifies to -gó after another nasal $n$ or $m$. Although the endings are [+ATR], there is no stem-wide ATR-harmony in this construction. Nonfinal [-ATR] vowels in the stem can co-occur with the [+ATR] suffix. -ŋgó is elsewhere the inanimate singular participial suffix for imperfective or stative verbs (§14.4.2).

Most compounds of this type denote instruments. A few denote locations associated with specific activities or body functions. A noun may be added as compound initial, denoting a prototypical object that the instrument or tool is applied to. The initial has the usual $\{\mathrm{L}\}$ overlay of [ǹ $\bar{n}$ ] compounds.

$$
\text { noun plus transitive } \quad \text { instrument } \quad \text { gloss }
$$

a. initial is noncognate noun nonsyncopating
ǐn bùbś 'brush teeth' ìn-[bùbú-ygó] 'toothbrush, chewstick'

Érn' $\varepsilon$ tégírí 'strain soda ash' èrnè-[tègùrú-ggó]
kángá dàgá ‘lock door’ kàngà-[dàgú-ngó]
syncopating after unclustered medial sonorant
gǒ: zž: ‘bring embers’ gò:-[zǐy-ŋ̧gó]
Cv extended as Cv̌yínjé dĭ 'bathe' ìnjè̀-[dǐy-ygó] 'outhouse for bathing'
kòró yǎy 'play b. game'
kว̀rò-[yǎy-ngó] 'board game'
Cv : extended as Cv̀lúgǒ: pé: ‘strike fire’ gò:-[pèlú-ŋgó] 'flint lighter'
based on causative verb
òdùbǎ: zàgìl-è:-mí 'cause road to divide'
òdùbà:-[zàgìl-č:-m-gó] 'intersection or fork'
b. initial is cognate nominal sùgă: súgó 'defecate’ sùgà:-[sùgú-ygó] 'area for defecating'
'Flint lighter’ reflects the original bisyllabic form of the verb pé:, namely *pélé (§3.4.5.2).
Compounds of this type can also function as adjectival modifiers. In this case, the initial noun is not an incorporated object, rather the semantic head of the entire NP.
a. lǎ: gàgá
č̌n ~ cìnú
cin ${ }^{\text {L }}$ là:-[gàgú-ngó]
'rub foot'
'stone'
'pumice, stone rubbed on scaly skin of feet'
b. àdě: tá
'shoot bird(s)'
már ${ }^{\text {ná }}$
'plastic, rubber'
màr ${ }^{n}{ }^{\mathrm{L}}$ àdì-[tǎy-ŋgó]
'slingshot'
c. gǎ
(cf. Togo Kan kòró ‘sickle’)
kòrò-[gǎy-ŋgó] 'sickle'

In (121c), the assistant rejected an uncompounded variant, on the grounds that uncompounded kòró in TU is pre-empted by kə̀ró 'wooden board for board game'.

The compound type described in this section, with LH-toned final, differs from another one that ends in the "same" -ngó suffix (see just below). The two differ semantically and can differ tonally.

### 5.1.4.3.2 With Pfv-2 participle (-sú-ŋgó) as final

In (122), the initial noun 'spear' is the semantic head. The final, based on causative já-mí 'cause to consume' (including 'cause to drink'), means '(having been) drenched (with liquid), having been made to absorb (liquid)'. -sú-ŋgó is the perfective-2 inanimate singular participle in relative clauses (§14.4.1).

```
wàrà }\mp@subsup{}{}{L}\mathrm{ já-m-sú-ygó
spear consume-Caus-Pfv2.Ppl-InanSg
'poison-tipped spear'
```


### 5.1.4.3.3 Meteorological and seasonal transitions with -ŋgó finals

The compounds in (123) have a somewhat fuzzier semantics. Those in (123a) are marked up as compounds rather than (head) noun plus modifier, but there is little difference between 'rising/setting sun' and 'sunrise/sunset'. The finals are inanimate singular participles with -ygó, but the verb stems are morphologically problematic. One would expect the mediopassive suffix in 'sunrise' and its absence in 'sunset', but the opposite is the case, and 'sunset' has an inexplicable causative -m-. (123b) is more straightforward morphologically, and the initial 'rain (n)' is not the semantic head so it is clearly a compound.

$$
\begin{array}{lll}
\text { compound } & \text { gloss } & \text { verb } \tag{123}
\end{array}
$$

a. daily events
[ùdù(-gò)]-[túmbú-1gó] 'sunrise' túmb-í: '(sun) rise'
[ùdù(-gò)]-[píl-é:-m-gó] 'sunset' pílé '(sun) set', causative
píl-é:-mí
b. seasonal event
àrnà-[1́lá-ŋgó] 'end of wet season' ílé 'ascend'

### 5.1.4.3.4 Function-specifying compounds with participial finals

Each compound in this category includes the name of an entity and a specification of the function to which it is put. The construction takes the form of an imperfective relative clause with the name of the entity as head. (124a-b) illustrate with ínjé 'water' as head. It takes inanimate plural agreement.

[^1]```
b. ìnjè }\mp@subsup{}{}{L}\mathrm{ dé-m-&́:
water bathe-Ipfv-Ppl.InanP1
'bathwater'
```

In (125a-b), nùr"ó 'oil' is the head.
(125)
a. nùr ${ }^{\mathrm{n}}{ }^{\mathrm{L}}$
já-ŋgó
oil consume-Ipfv.Ppl.InanSg
'cooking oil'
b. nùr ${ }^{\mathrm{n}}{ }^{\mathrm{L}}$ pár-દ́:-ŋgó
oil rub.on-MP-Ipfv.Ppl.InanSg
'rubbing oil (lotion)' (cf. pár-í:- 'rub oil on oneself')

In (126), tábá 'tobacco' is the head.

| tàbà $^{L}$ | síndé-ygó |
| :--- | :--- |
| tobacco | snort-Ipfv.Ppl.InanSg |
| 'snuff tobacco' |  |

### 5.1.4.3.5 [òbà-m]-này-gó 'night of 27th Ramadan'

This unusual compound is based on a causative of ób-í: 'sit down', cf. stative óbà 'be seated', plus a nominalized form of the verb ná 'spend the night', here in the sense 'stay up all night'. It denotes the night of the 27 th day of the Ramadan lunar month, when Muslims stay up late in the hope of encountering angels bearings gifts.

### 5.1.5 Compounds with 'child' and 'grain, seed'

### 5.1.5.1 $\grave{\text { èdé 'child' in compounds }}$

غ̀dé 'child' and plural ùlé: 'children' denote juvenile individuals or offspring of humans and animals. - $\varepsilon$ dé and its plural occur as finals in compounds that denote such offspring (127a). A few other compounds denote a type of child (127b). Compare -íyé compounds with human reference described at the end of the following subsection.
compound gloss
initial gloss

| a. pèdè:-દ̀dé | 'lamb' | pédé: | 'sheep-Sg' |
| :---: | :---: | :---: | :---: |
| ìnè-દ̀dé | 'goat kid' | íné: | 'goat' |
| nà:-غ̀dé | 'calf' | nǎ: | 'cow' |


| ìnjè-દ̀d $\varepsilon$ <br> nòndò-èdé | 'puppy’ <br> 'snake offspring' | ìnjě: <br> nòndó | 'dog' 'snake' |
| :---: | :---: | :---: | :---: |
| b. gàr̀̀:bù-dé cènèrnそ̀-غ̀dé | 'beggar child' 'circumcised boy' | gàrí:bù (none) | 'beggar' |

cèmd $\varepsilon$ 'cotton' may be etymologically segmentable as cèm-d́́, compare cèms-íyé 'cottonseed', but the morphology is obscure. Another possible candidate for this is cébdé 'scale (of fish or snake)'.

For $\grave{\text { dé }}$ as compound initial, see (irregular) èdà-1́yé ~ èdà-áyé 'young girl' in (130c) below and the discussion in §5.1.6.

### 5.1.5.2 íyé 'grain, seed' or 'fruit' as diminutive compound final

This noun prototypically denotes either entire fruits or just seeds (grains) from a crop plant (e.g. millet) or other plant. It has invariant form, whether functioning as a collective, or as a countable noun as in íyé yí-lèy 'two grains'. It is usually possessed or compounded (128a). When the plant type is already known, uncompounded íyé may function as a unit term in counting ('two units', etc.). -íý́ has individuating (and diminutive) function in (128b), diminutive function in (128c). In most of the examples in (128d), the compound with -íyé denotes a specific object, body part, or the like that is associated with a larger entity. Inanimate singular suffix -gO is dropped before -íyé, and final long vowels are sometimes but not consistently shortened.

| compound | gloss | initial | gloss |
| :---: | :---: | :---: | :---: |
| a. غ̀jè-1íyé | '(a) peanut' | ع́j ${ }^{\text {c }}$ | 'peanut' |
| màykòrò-íyé | 'mango (fruit)' | máykòrò | 'mango' |
| mwà:-íyé | 'wild date fruit or pit' | mwǎ: | 'wild date (tree)' |
| tìmà-1́yé | '(any) tree fruit' | tìmǎ: | 'tree' |
| ว̀rà:-1́yé | 'baobab fruit' | òrǎ: | 'baobab (tree)' |
| yù-íyé | 'millet grain(s)' | yó | 'millet' |
| irregular cèms-íyé | 'cottonseed' | cèmdé | 'cotton' (§5.1.5.1) |
| b. cìn-íyé | '(a) small stone' | cǐn | 'stone, rock' |
| kùŋ-kùlà-1́yé | '(a) head hair' | kúy-kúlá | 'head hair' |
| c. bùndà-1́yé | 'portable waterjar' | búndá | 'beer vat' |


| d. jèndè-kà:-1́yé gàw-1́yé | 'earthenware whorl' 'onion bulb' | jèndè-ká: gáw | 'spinning gear' 'onion' |
| :---: | :---: | :---: | :---: |
| kànj-1́yé | 'key' | kángá | 'door (shutter)' |
| kòrò-1́yé | 'piece in board game' | kòró | 'wooden game board' |
| kùmbùrù-íyé | 'baobab seed' | kúmbúrú | 'baobab fruit' |
| là:-1́yé | 'toe' | lǎ: | 'foot' |
| màrfà-1́yé | 'bullet' | márfá ~ márpá | 'rifle' |
| nùmà:-1́yé | 'finger' | nùmǎ: | 'hand' |
| sàgù-1́yé | 'sifting residue' | ságú | 'pounded but unsifted grain' |
| singular suffix -gO on related form omitted before -íyé |  |  |  |
| bòn-íyé | 'tapstick' | bǒn-gó | 'tomtom' |
| tìn-íyé | 'pestle' | tín-gó | 'mortar' |
| nòm-1́yé | 'hand-held grindstone' | nòm-gó | 'flat stone to grind on' |

In (129a), the noun ending in -íyé is semantically compatible with the preceding examples, but no related noun is known. In (129b), the known related form is a verb. In (129c) the relationship makes sense semantically but the stem is not tone-dropped.


For human referents, -íyé competes with -દ̀dé (see the preceding subsection). In several human compounds, -íyé has a plural -úlé: (130a-b), cf. ùlé: 'children' (plural of $\varepsilon$ èdé 'child’). The irregular term for 'young girl' (130c) is discussed in §5.1.6. 'Rich person' (130d), literally "wealth-child," functions semantically rather like an 'owner' compound (§5.1.2.2).

| singular | plural | gloss | related |
| :---: | :---: | :---: | :---: |
| a. bà-íyé | bà-úlé: | 'kinsman' | bá 'father' |
| sà-1́yé | sà-úlé: | 'sister's child' | sá 'sister' |
| b. sàgàrà-íyé | sàgàrà-úlé: | 'able-bodied man' | (none) |
|  | ùlè-àmbílé | 'young girl' | èdé 'child' |
| d. ògò-1́ý์ | ògò-úlé: | 'rich person' | ògó 'wealth' |

### 5.1.6 Compounds with 'man’ (árná) and 'woman' (yá)

'Boy' and 'girl' terms are in (131). árná-yè ‘boy' consists of árná 'man’ plus a diminutive final 'child' whose fullest form elsewhere is -íyé (§5.1.5.2). Its plural árná-mbùlè 'boys' involves the fusion of árn'á-mbò 'men' with ùlé: 'children'. èdà-íyé ~ غ̀dà-áyé 'girl' has a different morphological structure since it begins with the otherwise gender-neutral $̀$ ed $\varepsilon$ 'child'. It may have originated as a triple compound of èdé 'child' plus yá 'woman, female' plus -íyé, i.e. *èdè-yà-1́yé. Its plural ùlè-àmbílé ~ ùlà-àmbílé 'girls' begins and ends with forms of ùlé: 'children' and appears to reflect the fusion of ùlé: + yà-mbó + ùlé:.

| singular | plural | gloss |
| :--- | :--- | :--- |
| árná-yè | árná-mbùlè | 'boy' |
| غ̀dà-1́yé ~ ̌̀dà-áyé | ùlè-àmbílé ~ ùlà-àmbílé | 'girl' (§5.1.6) |

Other combinations beginning with 'man' and 'woman' include semi-lexicalized nounadjective strings with regular forms, e.g. àr ${ }^{n}{ }^{\text {L }}{ }^{\text {L }}$ p ̌̌: 'old man' and yà ${ }^{L}$ p ž: 'old woman'. More specialized combinations for women are in (132). For those in (132a), the plural often includes morphological pluralization of both the noun and the modifier, in the fashion of N -Adj strings. Those in (132b) are more compound-like and are not prone to this double pluralization.
singular plural
a. behave like N -Adj

| yà ${ }^{\text {L }}$ dé | yà(-mbò) ${ }^{\text {L }}$ dé-mbò | 'senior wife' |
| :---: | :---: | :---: |
| yà ${ }^{\text {L }}$ sègé | yà(-mbò) ${ }^{\text {L }}$ sègé-mbò | 'junior wife’ |
| yà ${ }^{\text {L }}$ kàndá | yà-mbj̀ ${ }^{\text {L }}$ kàndà-mbó | 'newlywed |

b. behave like compounds
yà-pàndě:
yà-lòlé ~ -lòé- ~ lòl-gó
yà-kúmé: yà-kúm-bò
gloss

$$
\begin{array}{ll}
\text { yà(-mbò) })^{\text {d }} \text { £́-mbò } & \text { 'senior wife' } \\
\text { yà(-mbò }{ }^{\text {L }} \text { sqgé-mbò } & \text { 'junior wife' } \\
\text { yà-mbò }{ }^{\text {kàndà-mbó }} & \text { 'newlywed wife' }
\end{array}
$$

| yà-pàndù-mbó | 'widow (not remarried)' |
| :--- | :--- |
| yà-lǒl-mbò | 'co-wife' |
| yà-kúm-bò | 'unmarried adult woman' |

'co-wife'
'unmarried adult woman'

As postnominal modifiers，árná＇male＇and yá＇female＇can be added to animal terms．The plurals are identical to the plural nouns＇men＇and＇women＇．

| singular | plural | gloss | related |
| :---: | :---: | :---: | :---: |
| a．$\grave{\text { èjjè }}{ }^{\text {L }}$ yá | غ̀nj⿺ ${ }^{\text {L }}$ yà－mbó | ＇hen＇ | غ̀njé＇chicken＇ |
| غ̀nj⿺尢 ${ }^{\mathrm{L}}$ ár ${ }^{\mathrm{n}} \mathrm{a}$ | غ̀nj⿺尢丶 ${ }^{\mathrm{L}}$ ár ${ }^{\mathrm{n}}$ á－mbó | ＇rooster＇ |  |
| b．pèdè：${ }^{\text {L }}$ yá | pèdè：${ }^{\text {L }}$ yà－mbó | ＇ewe＇ | pédé：＇sheep＇ |
| pèdè：${ }^{\text {L }}$ ár${ }^{\text {ná }}$ | pèdè：${ }^{\text {L }}$ ár ${ }^{\text {ná－mbò }}$ | ＇ram＇ |  |

For adult male livestock animals，more specialized modifiers are also available．

| pèdè：${ }^{\text {L }}$ pòrž： | ＇castrated ram＇ |
| :--- | :--- |
| pèdè：${ }^{\text {L }}$ zànjě： | ＇uncastrated stud ram＇ |

## 5．1．7 Gentilic compounds with ${ }^{\text {L }}$ nè＇person＇，plural ${ }^{\text {L }}$ b－ò：

Village names can be followed by ${ }^{\text {L }}$ nè，possessed form of né＇person＇，to form a gentilic meaning＇resident of X＇or＇native X＇．Compare English New Yorker，Floridian，American，etc． Thus zǎ：${ }^{n}$（～3ǎ：${ }^{n}$ ）＇Dianga（village）＇，zǎ：${ }^{\text {n }}$ nè＇person of／from Dianga＇．The morphologically regular plural would be zǎ：${ }^{\text {n }}$ nù－mbò＇Dianga people＇．The actual plural form that is in use is zǎ：${ }^{\mathrm{n}}$ b－ò：，which has the appearance of an irregular contraction of the regular plural but which is probably an archaic animate plural participle b－ó：（§14．4．2．2）．

These forms can also be used in combinations like＇top person／people＇and＇bottom person／people＇，for example people living on the high plateau above the cliffs versus those living on the sandy plains that stretch out from the base of the cliffs．témbé ${ }^{\mathrm{L}} \mathrm{b}-\mathrm{ò:} \mathrm{'top} \mathrm{people'}$, dùgó ${ }^{\text {L }} \mathrm{b}$－ò：＇bottom people＇．

## 5．1．8 Ethnicity compounds with－né＇person＇as final

In some terms for persons of specific ethnicities，in the singular the noun is L－toned as compound initial，followed by né＇person＇as final with its regular tones．By contrast，the animate plural suffix is added directly to the ethnicity term，which reveals its lexical tones．

> singular plural gloss
a．bàmbàrà－né bámbárá－mbò＇Bambara＇
b．tòmbò－лé tómbó－mbò＇Tommo＇

Some other ethnicity terms are simple nouns，e．g．púlá（plural púlá－mbò）＇Fulbe’．

### 5.1.9 'True/main' and 'false/secondary' species

### 5.1.9.1 Village name plus ná: ('main')

The village Dianga (ză: ${ }^{\text {n }}$, Jamsay jàná) has two neighborhoods. The larger one is called zà: ${ }^{\text {nL }}$ ná: or zà: ${ }^{\text {:L }}$ dé-lggè, the latter with dé 'big'. The smaller one is zà: ${ }^{\text {nL }}$ sègé with the adjective 'small'.
ná: is not otherwise attested in TU in similar senses. For example, kùrà:-tìmǎ: 'wild grape tree' is distinguished from kùř: 'wild grape (fruit)' by adding 'tree' as compound final. In Jamsay, ná: is productive in expressions either for the 'main' settlement in a village cluster or for entire plants as opposed to fruits. It is possible that TU zà: ${ }^{\text {LL }}$ ná: is adapted from the Jamsay name jà̀à ${ }^{L}$ ná: for this neighborhood.

### 5.1.9.2 "False" (nonprototypical) species

A few flora-fauna taxa are subdivided into primary or authentic versus nonprototypical species. The latter species may be less useful, or may be a wild counterpart to a cultivated plant. One way to distinguish them is to give the nonprototypical species a possessor or compound initial: 'hyena' (136a-c), 'monkey' (136d), 'bachelor' (136e), 'dog' (136f). 'agama lizard' (136g), 'cat' (136h), 'dove' (136i), or 'twins' (136j).
term
a. è:mé:
tà:-è:mé:
'jujube (shrub)'
"hyena-jujube"
b. célbá
tà:-célbá
c. án-gó
tǎ: ${ }^{\text {Làn-gò }}$
d. kùř:
ə̀mò:-kurǎ:
e. gàngǎ:
àrnà-kùm]-gàngǎ:
f. gáw
ìnjè̀:-gáw
'African eggplant'
"hyena-eggplant"
'macari' (spice)
"hyena's macari"
'wild grape (tree)'
"monkey-wild grape"
'herb sp. (edible)'
"bachelor-Senna"
'onion'
"dog-onion"

## Ziziphus mauritiana

Ziziphus mucronata
species

Solanum aethiopicum
Solanum incanum
(fermented roselle seeds)
Caralluma acutangula
Lannea microcarpa
Ampelocissus africana

Senna obtusifolia
Senna occidentalis

Allium cepa
Ornithogalum viride

| g. kámbé: cè:n-kámbé: sǒm-bèl-kámbé: | 'zaban (liana w. fruit)' <br> "agama-zaban" <br> "horse-grass-zaban" | Saba senegalensis Coccinea \& Cucumis spp. Alysicarpus ovalifolius |
| :---: | :---: | :---: |
| h. $\varepsilon^{\text {cjés }}$ | 'peanut' | Arachis hypogaea |
| bàlmà-¢̌jé: | "cat-peanut" | Ruellia cyanea |
| i. nímé: | 'cow-pea' (cultivated) | Vigna unguiculata |
| pèrèkèrè-nímé: | "dove-cow.pea" | Vigna spp. (wild) |
| yól-gó | 'néré tree' | Parkia biglobosa |
| zègà:-mbś Lyòl-gò | "twins' néré tree" | Cassia sieberiana |

Similarly, introduced species that resemble a native species can be expressed with 'white person' as initial.
a. mwǎ: 'wild date (tree)'
ànsà:rà-mwǎ: "white’s wild date"
Balanites aethiopica
Phoenix dactylifera (date palm)
$\begin{array}{lll}\text { b. nímé: } & \text { 'cow-pea' (cultivated) } & \text { Vigna unguiculata } \\ \text { ànsà:rà-nímé: } & \text { "white's cow-pea" } & \text { Canavalia spp. (climbing vine) }\end{array}$

Another strategy is to express the nonprototypical species as the 'slave' of the other.
term gloss ("..." = literal) species

| a. ànmùr"ó | 'fruit tree sp.' | Vitex doniana <br> ànmùr"ò-gùndó |
| :--- | :--- | :--- |
|  | "Vitex-slave" | Vitex madiensis |

A similar device is with bùmbá as the second element. Elsewhere it means 'track(s), trail' (e.g. of snake).

| term | gloss ("..." = literal) | species |
| :--- | :--- | :--- | :--- |
| a. bàrnàkú: ${ }^{\text {n }}$ | 'cassava' |  |$\quad$| Manihot exculenta |
| :--- |

### 5.1.10 Iterative compounds of type X-mà:-X

This minor compound type repeats a bisyllabic stem with intervening -mà:-. The compounds denote unpleasant referents. Two examples are known (140). ăy means 'mouse'.

| bègù-mà:-bégù | 'hiccup (n)' |
| :--- | :--- |
| ǎy-dòngò-mà:-dóngó | 'burry herb sp. (Pupalia)' |

### 5.1.11 Clause or VP as nominal compound

No nominal compounds in clause- or VP-like form, cf. English forget-me-not, have been observed.

### 5.1.12 Equational compounds

Usually the $\mathrm{N}-\mathrm{N}$ compounds in TU are semantically right-headed in the sense that the final is the semantic head and the initial is a modifier. Occasionally the initial and final are semantically more fused, as in (141). Compare English Batman, Catwoman.
(141) òdù-ìnjž:
fruit.bat-dog
'fruit bat that resembles a $\operatorname{dog}$ (Rousettus)'

### 5.2 Adjectival compounds

### 5.2.1 Bahuvrihi ("Blackbeard") compounds

### 5.2.1.1 With adjectival compound final [n̄ à ]

A simple noun-adjective combination is expressed as $\mathrm{N}^{\mathrm{L}} \mathrm{Adj}$, as in kú-gó 'head' plus jém-gó 'black' (inanimate singular) combining as kù-gò ${ }^{\text {L }}$ jém-gó '(a/the) black head’. Here 'black' agrees in intrinsic features (animacy, number) with 'head'. The corresponding bahuvrihi, functioning as an adjective modifying 'cow' (nǎ:), is (142). The compound initial 'head' takes its regular morphological and tonal form and the adjective is tone-dropped, so the formula is an [ $\bar{n}$ à]. Since the bahuvrihi as a whole modifies 'cow', the final adjective 'black' now agrees in animacy and number with animate 'cow', not with inanimate 'head'. Compare nà: ${ }^{\mathrm{L}}$ jémé: '(a) black cow' and kù-gò ${ }^{\text {L }}$ jém-gó '(a) black head’.

```
nà: \({ }^{\text {L }} \quad[k u ́-g o ́]-{ }^{\text {L }}\) jèmè:
cow [head-InanSg]-black
'a black-headed cow'
```

Further examples are in (143), when the overall referent is animate singular. Nouns here are bèrǎ: 'belly', m̀bù-gó 'mouth', and lǎ: 'foot'.

| (143) | bahuvrihi | gloss | regular noun-adj | gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | bèrǎ:- ${ }^{\text {L }}$ bìnè: | 'big-bellied' | bèrà: ${ }^{\text {L }}$ bǐn-gó | 'a big belly' |
|  | [m̀bù-gó]- ${ }^{\text {L }}$ à: | 'long-mouthed' | m̀bù-gò pá:-ygó | 'long mouth (snout)' |
|  | lǎ:- ${ }^{\text {L }}$ gwè: | 'short-footed' | là: ${ }^{L}$ gwě: | 'a short foot' |

### 5.2.1.2 With numeral compound final [ñ nùm]

Basic numerals ' 2 ' to ' 10 ' in TU begin with an animacy classifier (§4.6.1.2). For inanimates, the numerals are already L-toned after the inanimate classifier yí-, except for yí-tà:ndú ' 3 ', yí-nǔm ' 5 ', and yí-[gà-gárà] ' 8 '. In the corresponding bahuvrihis, the inanimate classifier remains (even when, as usual, the bahuvrihi modifies an animate or human referent). The classifier also keeps its H-tone, but the numeral (if not already L-toned) drops to L. With '1', which has no classifier prefix, the bahuvrihi has the tonal form of a regular noun-adjective combination (tone-dropped noun, ' 1 ' with lexical melody). ' 1 ' takes the neutral form túrú, agreeing in animacy neither with the compound initial nor with the referent.
bahuvrihi gloss regular noun-adjective gloss
a. numeral already L-toned after yí-

| [kú-gó]-[yí-lèy] | 'two-headed' | kú-gó yí-lèy | 'two heads' |
| :--- | :--- | :--- | :--- |
| lǎ:-[yí-kùlè] | 'six-footed' | lǎ: yí-kùlè | 'six feet' |

b. numeral drops audibly to $\{\mathrm{L}\}$

| [kú-gó]-[yí-tà:ndù] | 'three-headed' | kú-gó yí-tà:ndú | 'three heads' |
| :--- | :--- | :--- | :--- |
| lă:-[yí-gà-gàrà] | 'eight-footed' | lǎ: yí-gà-gárà | 'eight feet' |

c. numeral ' 1 '
jìrè L-túrú 'one-eyed’ jìré túrú-gó 'one head'
 eye'. nà: ${ }^{\text {L }}$ jirè L'túrú 'one-eyed cow' can take the regular animate plural suffix: nà: ${ }^{\text {L }}$ jìrè ${ }^{\text {L }}$-túrúu-mbò 'one-eyed cows'.

## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

### 6.1.1 Linear order

The basic linear order of words within NPs is (145), with the (head) noun in position zero.
(145) -1 preposed possessor, OR preposed demonstrative (kú) pseudo-possessor

0 (head) noun
+1 modifying adjective
$+2,+3$ possessor pronoun and/or cardinal numeral (in either order)
+4 demonstrative
+5 definite morpheme
+6 universal quantifier ('all')

Examples illustrating all pairwise orderings of adjacent elements are in (146).
type
a. kú
Def
Lìrìi-mbò
[def-n]
'those (same) goats'
b. ámádù
Lìrnì-mbò
[poss-n]
A
goat-AnPl
'Amadou's goats'
c. ìr ${ }^{n}$ è: ${ }^{\text {L }}$ jémé:
goat black
'a black goat'
d. ìr ${ }^{n}$ è: ${ }^{\text {L jém-bó bú-nǔm } \text { [n-a-num] }}$
goat black-AnPl An-five
'five black goats'
e. ìrnè: ${ }^{\text {L }}$ jém-bó wž:-mbò [n-a-poss]
goat black-AnPl 1SgPoss-AnPl
'my black goats'

|  | írì̀-mbò <br> goat-AnPl | wě:-mbò <br> 1SgPoss-An |  | bú-nǔm <br> An-five | [n-poss-num] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| or: |  |  |  |  |  |
|  | ír'ì-mbò | bú-nǔm |  | wě:-mbò | [n-poss-num] |
|  | goat-AnPl | An-five |  | 1SgPoss-A |  |
| 'my five goats' |  |  |  |  |  |
|  | [irnì-mbò | bù-nùm] ${ }^{\text {L }}$ | ò-bó |  | [n-num-dem] |
|  | [goat-AnPl | An-five] | Prox- | AnPl |  |
|  | 'these five goats' |  |  |  |  |
|  | ìrnì-mbj̀ $^{\text {L }}$ | ò-bó |  | pú $\rightarrow$ | [n-dem-'all'] |
|  | goat-AnPl | Prox-AnPl |  | all |  |
|  | 'all these goats' |  |  |  |  |
|  | gàndà ${ }^{\text {L }}$ | kú |  | ǹ | [ n -dem-def] |
|  | place | DemDef |  | Def |  |
|  | 'that (same) place' |  |  |  |  |

For optional inversion of adjectives and numerals under certain conditions, see §6.4.2.

### 6.1.2 Headless NPs (absolute function of nominal modifiers)

Headless NPs have the core noun slot empty.

| category | example | gloss |
| :--- | :--- | :--- |
|  |  |  |
| adjective | bán-gó | 'a red one' (inanimate) |
| demonstrative | kú | 'that one (inanimate)' |
| numeral | túrú-gó | 'one' (inanimate) |
|  | yí-nǔm | 'five' (inanimate) |
| possessor | wž: | 'mine (animate singular)' (§6.2.4) |
| quantifier | pú $\rightarrow$ | 'all, everything' |

Any of these can function as NPs in a context like 'give me $\qquad$ !'.

### 6.1.3 Bifurcation of relative-clause head NP

A relative construction is based on a full NP containing a relative clause that is positioned after inner nominal modifiers (adjective, numeral) and before determiners (148).

The bracketed string on the left in (148) undergoes tone-dropping controlled by the relative clause, though the possessor is not affected. The resulting string is therefore Poss [ N Adj Num $]^{\mathrm{L}}$. This string is then relocated into the relative clause proper, where it occupies the position of the relativized-on NP. Adverbial heads like 'time', 'place', and 'manner' have more freedom in their positioning inside the relative clause.

For details and examples see chapter 14.

### 6.1.4 Internal bracketing and tone-dropping in unpossessed NP

Leaving possessors and relative clauses out for the time being, the relevant NP components are noun ( N ), adjective (Adj), numeral (Num), demonstrative (Dem), and 'all', in that (linear) order. Of these, adjectives and demonstratives are tonosyntactic controllers; they induce tonedropping (i.e., $\{\mathrm{L}\}$ overlay) on preceding words within the NP. Numerals and 'all' do not control tone overlays; they are tonosyntactically inert. A tone overlay is applied to a target that includes the noun and any intervening words within the NP. Numerals can be included in the target string, in which case they too are tone-dropped, but numeral classifiers remain H toned. Representative outputs are given formulaically in (149), with superscripted ${ }^{\mathrm{L}}$ on the right edge indicating that the word or word-sequence in question has dropped all tones to L under the control of the following word. Words without ${ }^{\mathrm{L}}$ are tonally independent, i.e. present their lexical tones. The rightmost word is always tonally free.
(149) N
$\mathrm{N}^{\mathrm{L}}$ Adj
[ N Adj] ${ }^{\text {L }}$ Adj
N Num
$\mathrm{N}^{\mathrm{L}}$ Adj Num
$\mathrm{N}^{\mathrm{L}}$ Dem
[ N Adj] ${ }^{\text {L }}$ Dem
[ N Num] ${ }^{\text {L }}$ Dem
[ N Adj Num] ${ }^{\text {L }}$ Dem
N 'all'
$\mathrm{N}^{\mathrm{L}}$ Adj ‘all'
N Num 'all'
$\mathrm{N}^{\mathrm{L}}$ Dem 'all'

A few examples will be given here; others appear in the relevant sections below. In (150) we see that adjectives and demonstratives control tone-dropping on preceding words. The noun is the focal target, but an adjective is also tone-dropped before another adjective (150b) or before a demonstrative (150d).
a. pèdè: ${ }^{\text {L }}$ bìné:
sheep big.AnSg
'a big sheep’ (< pédé:)
b. [pèdè: bìnè: $]^{\mathrm{L}} \quad$ jémè:
[sheep big] black
'a big black sheep' (< bìné:)
c. pèdè: ${ }^{\text {L }}$ j̀ń
sheep Prox-AnSg
'this sheep'
d. [pèdè: bìnè: $]^{\mathrm{L}} \quad$ ò-ḿ
[sheep big] Prox-AnSg
'this big sheep'

Numerals and 'all' do not control tone-dropping on preceding words (151a-b). A numeral is itself tone-dropped as part of the target string when followed by a demonstrative, though the numeral's classifying prefix remains H -toned ( $151 \mathrm{c}-\mathrm{d}$ ). 'All' cannot be followed by a demonstrative.
a. pédú-mbò bú-tà:ndú
sheep-AnPl An-three
'three sheep'
b. pédú-mbò pú $\rightarrow$
sheep-AnPl all
'all (the) sheep'
c. [pèdù-mbò bú-tà:ndù] ${ }^{\text {L }}$ ò-bó
[sheep-AnPl An-three] Prox-AnPl
'these three sheep'
d. [yà-mbò né-kùlè] ${ }^{\mathrm{L}}$ ò-bó
[sheep-AnPl An-six] Prox-AnPl
'these six women'

In N-Adj-Num strings, the adjective and the numeral are optionally inverted in the presence of an additional reference-restricting element (determiner, possessor, or relative clause). See §6.4.2 for examples. Adjective-Numeral Inversion of this type occurs in several other Dogon languages as well.

There is a distributive quantifier kámá 'each' which can follow a noun or N -Adj.

### 6.2 Possessives

Nonpronominal NP possessors are always preposed to the possessed NP, in both alienable and inalienable constructions. There is no genitive or possessive morpheme as such. Instead, the preposed possessor controls tone-dropping on the possessed NP.

A pronominal possessor also precedes the possessed NP in the inalienable construction used with kin terms. Otherwise a pronominal possessor is postposed to the core NP (noun plus adjective). Postposed pronominal possessors are still partially segmentable into a pronominal morpheme per se and a possessive classifier (animate/inanimate, singular/plural), but the combinations are no longer fully transparent.

### 6.2.1 Alienable possession

### 6.2.1.1 Nonpronominal NP as preposed alienable possessor

A preposed nonpronominal possessor NP of an alienable noun (animal, house, etc.) controls an $\{\mathrm{L}\}$ overlay (tone-dropping) on the possessed noun. This is true whether the possessor is a single word, such as a personal name or an undetermined noun, or is itself a multi-word NP (determined, possessed, quantified, etc.). In (152), the lexical form of the possessed noun is shown in parentheses.

| a. ámádù | L <br> pèdè: <br> sheep |  |
| :--- | :--- | :--- |
|  | 'Amadou's sheep-Sg' (< pédé: $)$ |  |

It is possible, but much less common, to phrase the nonpronominal possessor with one of the classifying morphemes that are usual with postposed pronominal possessors (see below). This phrasing appears to be possible when the possessum is heavy (e.g. including a numeral) and when the boundary between possessor and possessor is prosodically marked. The classifiers are inanimate kò and animate wè and do not mark plurality of the possessum. The possessum is not tone-dropped, showing that the construction is more or less appositional. The possessor has the same classifiers when the possessum is omitted (§6.2.4). In textual example (153a), the speaker paused after the possessor.

b.

| $[$ yàrá | kò $]$ | $[$ ǐn | yí-lèy $]$ |
| :--- | :--- | :--- | :--- |
| $[$ lion | Poss.Inan $]$ | $[$ tooth | Inan-two $]$ | 'two of the lion's teeth'

$\begin{array}{lllll}\text { c. } & \left.\begin{array}{ll}\text { yàrá } & \text { wè }\end{array}\right] & {\left[\begin{array}{l}\text { èd } \varepsilon ́ \\ \\ {\left[\begin{array}{ll}\text { lion } & \text { Poss.An }\end{array}\right]}\end{array}\right.} & \text { túré: } & \text { ǹ }] \\ \text { 'one of the lion's children' } & & \text { one.AnSg } & \text { Def] }\end{array}$
$\begin{array}{llll}\text { d. } & {\left[\begin{array}{ll}\text { yàrá } & \text { wè }\end{array}\right.} & \text { [ùlé: } & \text { bú-lèy] } \\ & {\left[\begin{array}{ll}\text { lion } & \text { Poss.An] }\end{array}\right.} & \text { [children } & \text { An-two] } \\ & \text { 'two of the lion's children' } & & \end{array}$

### 6.2.1.2 Pronominal alienable possessors

A pronominal possessor for an alienable noun (i.e. anything but a kin term) is postposed to the noun, and to any modifying adjective. The relative order of numerals and pronominal possessors is variable, but Num-Poss order appears to be unmarked in nonpartitive contexts (154c-d).


The pronominal originally functioned as possessor of a semantically light noun specified for animacy and number ('critter', 'critters', 'thing', 'things'). This light noun was appositional to the possessed NP, as in 'dog, my critter' and 'house, my thing'. These appositional light nouns have long since evolved into possessive classifiers. The internal segmentation of the pronoun-
classifier combination is now rather opaque in parts of the paradigm. Inanimate plural and animate singular are identical for all pronominal possessors, as they are with modifying adjectives. A K/W distinction between inanimate singular (k-initial) and everything else (w-initial) subsists for 1 Sg and 3 Sg possessors (the two categories that have no pronominal prefix). Even this has been leveled in $1 \mathrm{Pl}, 2 \mathrm{Sg}, 2 \mathrm{Pl}$, and 3 Pl categories. However, animate plural possessed NPs may be followed by animate plural suffix -mbO on the possessor: pédú-mbò wě:-mbò 'my sheep- Pl '. The second -mbO is redundant and it is sometimes omitted from the possessor, see í:n-bò á-gá 'his goats' reduced from í:n-bò á-gá-mbò in text 2015-06 at 01:25. The 1 Sg pronominal morpheme itself has disappeared segmentally, as in counterparts in some other Dogon languages (Ben Tey, Nanga). 3Sg possessor forms have -ń suffixed to the classifying element. -ń occurs without the classifier in inalienable possession, §6.2.2.2 below.

The paradigms are in (155). They may be compared with suggested proto-paradigms for nominal and adjectival suffixes in §4.1.1.2, and with the numeral classifiers in §4.6.1.2.

| category | InanSg | InanPl | AnSg | AnPl |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | kǒ: | wě: | wě: | wě:-mbò |
| 1Pl | 1́-gé | 1́-gé | 1́-gé | í-gé-mbò |
| 2Sg | ú-wó | ú-wó | ú-w' | ú-wó-mbò |
| 2Pl | bí-gé | bí-gé | bí-gé | bí-gé-mbò |
| 3 AnSg | kò-ń | wè-ń | wè-ń | wè-ń-bò |
| 3 AnPl | bú-gó | bú-gó | bú-gó | bú-gó-mbò |
| InanSg | kò-ń | wè-ń | wè-ń | wè-ñ-bò |
| InanPl | wè-ń | wè-ń | wè-ń | wè-ń-bò |
| Logo/3Refl | á-gá | á-gá | á-gá | á-gá-mbò |

The third person -ń is expanded as -ní (subject to lengthening and further tonal changes) in two contexts. One is the 'it is' construction ( $\$ 11.2 .1 .1$ ) with final L-tone ([úló kò-nî:] = $\varnothing$ 'it is his/her house'). The other is NP conjunction (§7.1.1) with final dying-quail tonation (úló kj̀-ní.: ‘his/her house and ...').

Comparative Dogon data suggest two competing paradigms of the basic inanimate noun ('thing', 'things') and the basic nonhuman animate noun ('critter', 'critters') that can be schematized as (156a) and (156b). The key to diachronic unpacking of the TB paradigm in (155) above is whether w-initial forms like 1 Sg wと̌: derive from k -initial or y -initial protoforms, allowing for the possibility of analogical spreading.

> 'thing' 'things' 'critter' 'critters’
a. *ko
*yع
*y
*y
b. *ko
*k
*уع
*y

### 6.2.1.3 Tone contour of modifiers following an alienably possessed noun

The target domain of a the $\{\mathrm{L}\}$ overlay controlled by a preposed nonpronominal possessor on a possessum ('Amadou's 'house') extends into an adjective modifying the possessum, as in 'Amadou's '[house big]' (157a). There is no clear evidence that the target domain extends farther to include a postnominal numeral. Most numerals have an H -toned classifying prefix and an already /L/-melodic stem. The prefix is not tone-dropped due to a possessor. In most cases it is difficult to determine whether the possessor tone-drops the numeral stem itself, since most numeral stems are already L-toned after classifying prefixes and since the final H of /LH/-melodic numerals is unreliably audible. However, if the optional animate plural suffix -mbO is added to the numeral, the lexical tone of /LH/-melodic stems is audible, as in tà:ndú-mbò 'three' in (157b-c). This shows that in Poss-N-(Adj-)Num strings, the target domain of the possessor-controlled $\{\mathrm{L}\}$ overlay stops with the noun and adjective: Poss ${ }^{\mathrm{L}}[\mathrm{N}$ (Adj)] Classifier-Num.

| a. ámádù | ${ }^{\text {L }}$ [ùlò | dè-ggè] |
| :---: | :---: | :---: |
| A | [house | big-InanSg] |
| Ama | ho | ó, dé-ng |

b. ámádù Lùlè: né-tà:ndú-mbò
né-tà:ndù
A children Human-six(-AnPl)
'Amadou's six children' (ùlé:)
c. ámádù ${ }^{\text {L }}$ [ùlè: mòdù-mbò] né-tà:ndú-mbò né-tà:ndù
A [children nasty-AnPl] Human-three(-AnPl)
'Amadou's three nasty children' (mòdú-mb̀̀)

In the string Poss-N-Dem, only the noun is tone-dropped. The $\{\mathrm{L}\}$ overlay could be attributed to either the possessor or the demonstrative, or to both (double determination). The schema can be formulated as Poss ${ }^{\mathrm{L}} \mathrm{N}^{\mathrm{L}}$ Dem.

| ámádù $\quad$ Lùlò $^{\text {L }}$ | mà- $y^{n}$ |  |
| :--- | :---: | :---: |
| A | house | Dist-InanPl |
| 'those houses of Amadou' | (deictic) |  |

Postposed pronominal possessors (in alienable possession) do not control tone overlays, but are included in the domain targeted by a following demonstrative.

| [ìr ${ }^{\text {nìmbò }}$ | wè:-mbゝ̀ ${ }^{\text {L }}$ | mà-bó |
| :---: | :---: | :---: |
| goat-AnPl | $1 \mathrm{SgPoss}-\mathrm{AnPl}]$ | Dist-An |
| ore goats of mine' (deictic) (< wě:-mbò) |  |  |

### 6.2.2 Inalienable possession

Kin terms and a few other relationship terms like 'friend' and 'neighbor' are morphosyntactically inalienable. Treated as alienable, even in kinship sense with a possessor, are $̀$ è $\varepsilon$ 'child' and yá 'woman, wife'. The distinctive characteristic of inalienables is that they have preposed pronominal possessors (except for 3 Sg suffixed possessor). These preposed pronominal possessors are associated with an unusual $\{\mathrm{H}\}$ tone overlay on the kin term.

### 6.2.2.1 Nonpronominal NP as possessor

Nonpronominal NP possessors are preposed, for inalienable as well as alienable nouns: ámádù bà 'Amadou's father', parallel to ámádù ${ }^{\text {L}}$ pèdè: 'Amadou's sheep'. The possessed noun is tone-dropped in both cases, compare unpossessed bá 'father' and pédé: 'sheep'.

However, if the nonpronominal possessor of a kin term is animate (i.e. human) singular, it is often resumed by a third person pronominal possessor. For singular possessor an example is ámádù bà-ń 'Amadou's father', literally "Amadou father-his." For ùlé: 'children' as possessor, examples are ùlé: bú Hbá 'the children's father' and plural ùlé: bú Hbá-mbò 'the children's fathers'. However, the resumptive pronominal is not obligatory, and one can also say e.g. ùlé: 'bà-mbò 'the children's fathers', with the $\{\mathrm{L}\}$ overlay controlled by a nonpronominal possessor.

### 6.2.2.2 Pronominal inalienable possessors (mostly preposed)

Except for 3 Sg , a pronominal possessor is preposed to inalienably possessed nouns, and takes the normal nonsuffixal form (independent, preverbal subject). 3 Sg possessor, however, is expressed as a simple suffix -ń added directly to a tone-dropped noun.

Inalienable possessors are always animate and generally human. There are no classifying elements in the pronominal possessor agreeing with the possessed noun (animate/inanimate, singular/plural). A sample paradigm is that of 'father' in (160).

Pronominal possessors with inalienable nouns

| category | form | with 'father' | with plural 'f |
| :---: | :---: | :---: | :---: |
| a. 1 Sg | mí | mí ${ }^{\text {H}}$ bá | mí ${ }^{\text {H}}$ bá-mbò |
| 1 Pl | 1 | í ${ }^{\text {H}}$ bá | í ${ }^{\text {H}}$ bá-mbò |
| 2 Sg | ú | ú ${ }^{\mathrm{H}}$ bá | ú ${ }^{\text {H bá-mbò }}$ |
| 2 Pl | bí | bí Hbá | bí ${ }^{\text {H}}$ bá-mbò |


| 3 Pl | bú | bú ${ }^{\text {H bá }}$ | bú Hbá-mbò |
| :---: | :---: | :---: | :---: |
| Logo/3Refl | á | á ${ }^{\text {H}}$ bá | á ${ }^{\text {H}}$ bá-mbò |
| 3 Sg | -ń ~ -ní | bà-ń ~ bà-ní | bà-ń-bò |

Pronominally-possessed kin and relationship terms are shown in the 'my' and 'your-Sg' columns in (161). For comparison, the ' X 's' column showns the regular $\{\mathrm{L}\}$ overlay after nonpronominal possessors. With pronominal possessors, the tones of the possessum depend on the latter's prosodic weight. The overlay is $\{\mathrm{H}\}$ on uncompounded light stems, those of one or two syllables (161a-b). There is one uncompounded inalienable with three syllables, the loanword tógòrò 'name-mate (one who shares ego's personal name)'. Its tones do not change when a pronominal possessor is preposed (161c). The fact that bà ${ }^{L}$ d $\varepsilon$, an $N$-Adj combination ("father big"), becomes ${ }^{\mathrm{HL}}$ [bá dè] after a pronominal possessor (161d) suggests that tógə̀rò after the same possessors may also have an $\{\mathrm{HL}\}$ overlay that has no overt effect on an already /HL/melodic stem. If so, the rule is that $\{\mathrm{HL}\}$ is the overlay for trisyllabics (161c) as well as for N Adj (161d).
noun gloss 'X's_, 'my_, 'your-Sg_,
a. Cv possessed noun
bá 'father'

$$
\mathrm{X} \text { Lbà mí bá ú bá }
$$

b. bisyllabic possessum

| nàr ${ }^{\text {ná }}$ | 'mother' | X ${ }^{\text {L }}$ nà ${ }^{\text {nà }}$ | mí ${ }^{\text {n }}$ nár ${ }^{\text {ná }}$ | ú ${ }^{\text {n }}$ nár ${ }^{\text {ná }}$ |
| :---: | :---: | :---: | :---: | :---: |
| lèdú | 'uncle (MoBr)' | $\mathrm{X}{ }^{\text {L }}$ lèdù | mí ${ }^{\text {H}}$ lédú | ú ${ }^{H}$ lédú |
| zèngé | 'great-grandparent' | X ${ }^{\text {Lzèngè }}$ | mí ${ }^{\text {zzéngé }}$ | ú ${ }^{\text {zzéngé }}$ |
| àngé | 'friend' | $X{ }^{\text {Làngè }}$ | mí Hángé | ú Hángé |
| òngó | 'husband' | $X{ }^{\text {L }}$ ¢̀ngò | mí Hóngó | ú Hóngó |
| tòjě: | 'grandchild' <br> (plural tògù-mbó) | $X{ }^{\text {L }}$ tòjè: | mí ${ }^{\text {H }}$ Oójé: | ú ${ }_{\text {tójé: }}$ |

c. heavy possessum (trisyllabic)
tógòrò 'namemate' X Ltògòrò mí ${ }^{H L}$ tógòrò ú ${ }^{H L}$ tógòrò
d. composite possessed noun
bà ${ }^{\mathrm{L}}$ dé 'father's elder brother' $\mathrm{X}^{\mathrm{L}}\left[\right.$ bà dè] mí ${ }^{H L}$ [bá dè] ú ${ }^{\mathrm{HL}}$ [bá dè]

In isolation and otherwise prepausally, pronominally possessed monosyllabic kin terms are downstepped phonetically to mid pitch: mí ${ }^{\text {H}}$ bá 'my father' pronounced [míbā].

### 6.2.2.3 Inventory of kin terms and other inalienables

Kin and relationship terms treated as inalienable are listed in (162). The 1 Sg form is proxy for the other categories with preposed possessors, in contrast to the suffixed 3 Sg . The latter has variants -ń and -ní, the latter especially in constructions that give prominence to final syllables, as explained following (155) in §6.2.1.2 above.
gloss noun after NP $1 \mathrm{Sg} \quad 3 \mathrm{Sg}$
a. monosyllabic
monomoraic

| 'father' | bá | $\mathrm{X}^{\text {L }}$ bà | mí ${ }^{\text {H }}$ bá | bà-ń |
| :---: | :---: | :---: | :---: | :---: |
| '(man's) sister' | sá | $\mathrm{X}^{\mathrm{L}}$ sà | mí ${ }^{\text {H }}$ sá | sà-ń |
| 'neighbor' | zú | $\mathrm{X}^{\mathrm{L}} \mathrm{zu}$ | mí ${ }^{H}$ Zú | zù-ń |
| 'co-wife' | lwé | $\mathrm{X}^{\mathrm{L}}$ lwè | mí ${ }^{\text {H}}$ lwé | lwè-ń |
| 'younger same-sex sib' | ǹdó | X ${ }^{\text {L ǹdò }}$ | mí Hédó | ǹdò-ń |
| bimoraic |  |  |  |  |
| 'cross-cousin' | té: | $\mathrm{X}^{\mathrm{L}}$ tè: | mí ${ }^{H}$ té: | tè:-ń |
| 'sib-in-law' | gá: | $\mathrm{X}^{\mathrm{L}}$ gà: | mí ${ }^{\text {H }}$ gá: | gà:-ń |

b. bisyllabic

CvCv
'elder same-sex sib' dèré $\quad X^{L}$ dèrè mí ${ }^{H}$ déré dèrè-ń
'mother'
'uncle' (MoBr)
nàrná $\quad X^{\text {L }}{ }^{\text {nàr }}{ }^{\text {nà }}$
mí ${ }^{H}$ nár ${ }^{\text {ná nà-ń }}$
lèdú $\quad \mathrm{X}^{\mathrm{L}}$ lèdù mí ${ }^{\mathrm{H}}$ lédú lèdì-ń
'paternal grandfather'
pàpá $\quad \mathrm{X}^{\text {L pàpà } \quad m i ́ ~}{ }^{\text {Hápá }}$ pàpà-ń
'grandmother'
tèré $\quad \mathrm{X}$ tèrè mí ${ }^{\mathrm{H}}$ téré tèrè-ń

$C v N C v$
'friend' àngé $\quad \mathrm{X}$ Làngè mí ${ }^{\text {Hángé àngè-ń }}$
'husband' òngó $\mathrm{X}^{\mathrm{L}}$ ว̀ngò mí ${ }^{\text {Hóngó òngò-ń }}$
 'great great grandfather' kùmbó $\mathrm{X}^{\mathrm{L}}$ kùmbò mí ${ }^{\mathrm{H}}$ kúmbó kùmbò-ń $C v C C v$ 'grandchild' tòjě: $\quad \mathrm{X}$ Ltòjè: mí Hójé: tòjè:-ń
$C v C C v$ : 'parent-in-law' òmlě: $\mathrm{X}^{\mathrm{L}}$ òmlè: mí ${ }^{\text {ómlé: òmlè:-ń }}$ (~ òmùlě:)
c. trisyllabic
'namesake' tógòrò $X^{L}$ tògòrò mí ${ }^{H L}$ tógòrò tògòrò-ń

Composite kin terms are in (163). In (163a), yà-lòé ( $\sim$ yà-lwě) includes 'woman, female' as compound initial, cf. lǎ: 'give birth' (< *làlá) and lól-gó 'labor pains'. In (163b), the forms for

3Sg and nonpronominal ( X ) possessors show that the combination is, or can be, expressed as a recursive possessive.

$$
\begin{array}{lllll}
\text { gloss } & \text { noun } & \text { after NP } & 1 \mathrm{Sg} & 3 \mathrm{Sg} \tag{163}
\end{array}
$$

a. simple compound

| 'co-wife' | yà-lòé | $X^{\text {L }}$ yà-lòè | mí $^{H L}$ yá-lòè | yà-lòè-ń |
| :--- | :--- | :--- | :--- | :--- |
|  | yà-lòlé | $X^{\text {L }}$ yà-lòlè | mí $^{H L}$ yá-lòlè | yà-lòlè-ń |

b. recursive possessives
'sister's child' sà-íyé $\quad X^{L}$ sà-yè mí ${ }^{H L}$ sá-ìyè sà-ń yè ~X sà-ń yè
'Mo's younger sister' nà-sě: $\quad X^{L}$ nà-ń sègè mí ${ }^{H L}$ nár ${ }^{\text {ná-sègè nà-ń sègè }}$

Animate plural -mbO can be added to any kin term (164a). This suffix follows the 3 Sg suffix (164b).

| a. | mí | ${ }^{\text {H}}$ lédú-mbò |
| :--- | :--- | :---: |
|  | 1 Sg | uncle-AnPl |
|  | 'my (maternal) uncles' |  |

b. lèdì-ń-bò
uncle-3SgPoss-AnPl
'his/her uncles'

### 6.2.2.4 Tone contour of modifiers following an inalienably possessed noun

With an inalienably possessed noun, a following modifying adjective is not included in the target domain of a possessor-controlled overlay. Instead, the adjective controls tone-dropping on the noun. If the possessor is a preposed pronoun, otherwise H-toned, the possessor is included in the target domain of the adjective. Contrast (165a) with unmodified mí ${ }^{\mathrm{HL}}$ lédù 'my maternal uncle'. A nonpronominal possessor like 'Amadou' in (165a) is not tone-dropped, and in such combinations the noun could be analysed as being tone-dropped by either the possessor or the adjective, or jointly by both.
a. [mì lèdù ${ }^{\mathrm{L}}$ mòdé: ǹ
[1Sg uncle] nasty Def
'my nasty uncle'
$\begin{array}{llll}\text { b. ámádù } & { }^{\mathrm{L}} \text { lèdù }^{\mathrm{L}} & \text { mòdé: } & \text { ǹ } \\ \mathrm{A} & \text { uncle } & \text { nasty } & \text { Def }\end{array}$
'Amadou's nasty uncle’

Given that the tonosyntactic control power of inalienable possessors is limited to the noun, not even including a modifying adjective, not surprisingly it does not extend to other postnominal modifiers. Numerals are resistent to tonosyntactic tone-dropping even in alienable possessives, so as expected the tones of the numeral in (166a) are unaffected by the inalienable possessor. (166b) shows that the $\{\mathrm{H}\}$ overlay controlled by the pronominal possessor takes precedence over the $\{\mathrm{L}\}$ overlay controlled by the demonstrative. In (166c) it is indeterminate whether tone-dropping of 'uncles six' is controlled by the possessor or by the demonstrative, or jointly by both.
(166)
a. mí
${ }^{\mathrm{H}}$ lédú-mbò
né-tà:ndú / né-kúlé
ámádù
${ }^{\text {L }}$ lèdù-mbò
1SgPoss / A
uncle-AnP1
Human-three / Human-six
'my/Amadou's three/six uncles'
b. mí ${ }^{\text {H lédú mà-ḿ }}$

1SgPoss uncle Dist-AnSg
'that uncle of mine' (deictic)
c. ámádù ${ }^{\mathrm{L}}\left[\right.$ lèdù-mbò né-kùlè ${ }^{\mathrm{L}}$ mà-bó

A uncle-AnPl Human-six Dist-AnPl
'those six uncles of Amadou's' (deictic)

The unusual suffixed 3 Sg inalienable possessor $-n$ n $\sim$-ní is always added to the possessum directly, and it may be followed by modifiers (often with final definite ì). In (167a-b), the adjective or demonstrative controls tone-dropping on the possessed noun, elsewhere lèdì-ń. There is no tonal interaction between the possessed noun and the numeral in (167c).
(167)
a. lèdì-n
mòdé:
ǹ
uncle- 3 SgPoss nasty
Def
'his/her nasty uncle' (lèdù-ń)
b. lèdì-n ${ }^{\mathrm{L}}$ mà-ḿ
uncle-3SgPoss Dist-AnSg
'that uncle of his/hers' (< lèdù-ń)
$\begin{array}{ll}\text { c. lèdì-ń-bò } & \text { né-kúlé } \\ \text { uncle-3SgPoss-AnPl } & \text { Human-six }\end{array}$
'his/her six uncles'

### 6.2.3 Recursive possession

Possessives can be recursive (stacked), as in '[X's Y]'s Z]'. (168) illustrates with ìnjě: 'dog' and dúlá 'tail'.
(168)
$\begin{array}{lr}\text { a. ámádù } \quad \text { Lìnjè: } \\ \text { A } & \operatorname{dog} \\ & \text { 'Amadou's dog' }\end{array}$
b. ìnjě: $\quad$ dùlà
dog tail
'(the) dog's tail'
c. [ámádù ${ }^{\text {Lìnjjè:] }} \quad{ }^{\text {L }}$ dùlà
$\left[\begin{array}{ll}\mathrm{A} & \operatorname{dog}]\end{array}\right.$
'Amadou's dog's tail'

The first possessor may also be an inalienable: [mí 'bá] ${ }^{\text {Lì̀njè: 'my father's dog'. }}$

### 6.2.4 Default possessum

If the possessum is not expressed, a possessive classifier is sufficient. With pronominal possessors, the regular postnominal alienable possessor forms are used. Thus pédé: wě: 'my sheep- $\mathrm{Sg}^{\prime}$, with 1 Sg possessor in animate singular form, can be simplified to wě: 'mine'. A textual example is ú-wó 'yours-2Sg' meaning 'your waterjar', 2015-05 @ 03:45. Pronominal forms of this type can also be used for (unspoken) kin categories, e.g. 'mine' meaning 'my sister'.

When the possessum is omitted after a nonpronominal possessor X , a classifier takes its place.
singular plural

| animate | X wè | X wè-mbò |
| :--- | :--- | :--- |
| inanimate | X kò | X w $̀ ~$ |

In (170a) the preceding discourse had been about teeth. In (170b) 'necklace' occurs in the preceding phrase. In ( $170 \mathrm{c}-\mathrm{d}$ ) kò represents an abstraction ('the issue/matter/situation of').
a. [[tǎ:
wè]
jè̀ŕ]
Ljìn-Ø
[[hyena Poss.InanPI] look.at.Imprt] say.Pfv-3SgSbj
'He said, "look at hyena's (=teeth)!' (2015-02 01:12)
b. [cé
dùgà-íý́, yàngì],
[thing necklace, (it)self],
と̌:-bàrì [zòmó kò] yé ${ }^{\text {Lbù- }}$,
over.here [hare Poss.InanSg] Exist be.Loc-3SgSbj
'A necklace. Hare’s (necklace) was around here.' (2015-02 @ 05:50)


The singular classifiers kò and wè also occur in appositionally structured possessor-possessum combinations when the possessum is heavy, see (153) in §6.2.1.1.

### 6.3 Noun plus modifying adjective

The order is noun-adjective. N-Adj combinations have tonal features in common with the productive pattern for lexicalized nominal compounds, those of type [ǹ n̄] (§5.1.3-4). However, in N-Adj both words can be morphologically pluralized, whereas noun-noun compounds are right-headed and only the final can be pluralized.

### 6.3.1 Noun plus regular adjective

The adjective agrees with the noun in animacy and number, though for some nouns (like úló 'house') and some adjectives (like kàndá 'new') the distinction between inanimate singular and inanimate plural is covert, expressed only by other forms of agreement. The noun is tonedropped before the adjective. Besides úló, the nouns used here are ùndú-gó (plural ùndé:) 'calabash' and ír"é: (plural írn'í-mbò ~ í:n-bò) 'goat'.

b. ùndù-gò ${ }^{\text {L }}$ sé-gǵ $\quad$ 'good calabash'
ùndè: ${ }^{\text {L }}$
'good calabashes'
c. ìrnè: ${ }^{\text {L }}$ jémé: 'black goat'
ìn-bò ${ }^{L}$ jém-bó 'black goats'
d. ùlò ${ }^{\mathrm{L}}$ kàndá 'new house'
'new houses'

The end of the noun is optionally reduced before the adjective. Inanimate singular suffix -(y)gO can be omitted: ùndùL sé-ggé 'good calabash' from úndú-gó (plural úndé:). The EE ending of singular nouns is also sometimes omitted: ìn ${ }^{\mathrm{L}}$ jémé: 'black goat' from írné: (plural í:n-bò ~ írńlmbì).

### 6.3.2 gàrá: 'a certain (one)', gàrá $\rightarrow$ 'sometimes'

gàrá:, often repeated in two parallel phrases, functions to divide a group into subsets (or individuals), or to divide a mass into portions. The sense is specific indefinite. The most common form is animate plural gàrà-mbó 'some, certain ones (people or animals)' (172a). Inanimate plural gàrá: can denote masses ('water', 'sugar'), which have inanimate plural agreement in TU (172b). Singular (animate or inanimate) gàrá: occurs in nè ${ }^{\mathrm{L}}$ gàrá: 'a certain person' and dàmbà ${ }^{L}$ gàrá: 'a certain village', where the tone-dropping confirms that gàrá: can function as an adjective. gàrá $\rightarrow$ can also be an adverb 'sometimes' (by extension 'maybe'), reduced from a noun-adjective phrase with a noun like 'time' (172c). In this adverbial function it does not tone-drop a noun that happens to precede it (172d).

'Some (people) have left, some (others) are (still) around.'
b. gàrá: yàm-â:y- $\square \rightarrow$ gàrá: sर́w $\rightarrow$ Lbù-Ø some be.ruined-Pfvla- 3 SgSbj , some fine be-3SgSbj 'Some (of it) is spoiled, some (=the rest of it) is fine.'
c. gàrá $\rightarrow$ ỳgó bírà-m-nè-y ${ }^{\mathrm{n}}$, gàrá $\rightarrow$ má: bírà-m-n - $\mathrm{y}^{\mathrm{n}}$ some here work-Ipfv-1PlSbj, some there work-Ipfv-Ipfv-1P1Sbj
'Sometimes we work here, sometimes (=at other times) we work over there.'
d. wágádù gàrá $\rightarrow$
time some
'sometimes, on occasion'(2022-03@00:21)

Textual examples include ùlè: ${ }^{\text {L }}$ gàrà-mbó 'certain young people' 2015-06@ 03:04, quickly followed by dèn ${ }^{\mathrm{L}}$ gàrá: ‘a certain day' @ 03:08, and gàrá $\rightarrow$ 'sometimes'2022-03@00:21.

### 6.3.3 Expansions of adjective

### 6.3.3.1 Adjective sequences

In a sequence of noun plus two or more adjectives, the final word presents its lexical tones and the noun and nonfinal adjectives are tone-dropped.
a. [ùlò dè-ngè $]^{\mathrm{L}}$ píl-gó
[house big-InanSg] white-InanSg
'(a) big white house' (< úló, dé-ngé)
b. [nà:(-mbò) bìn-bò ${ }^{\mathrm{L}}$ jém-bó
[cow(-AnPl) fat-AnPl] black-AnPl
'big (=fat) black cows' (nǎ:, nà:-mbó, bǐn-bò)

Unless a noun-adjective combination is lexicalized, the order of adjectives is flexible. One could therefore switch 'big' and 'white' in (173a), and 'fat' and 'black' in (173b). As in (173ab), only the final adjective would show its lexical tones.

### 6.3.3.2 Adjectival intensifiers

Certain adjectives have a corresponding intensifier. They are generally invariant and expressively iterative in form. They have no phonological resemblance to the adjective itself or to any other lexical items. They are not exemplars (cf. snow white, jet black), but they function in a similar way. Intensifiers are a subtype of expressive adverbial (§8.4.7). A typical context is a predication with the adjective followed by the intensifier (174a-b).

|  | [ùlò ${ }^{\text {L }}$ | kú] | jém-gó | kúrúm-kúrúm | ${ }^{\text {L }}$ bù-Ø |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [house | Dem.InanSg] | black-InanSg | black.Intens | be-3SgSbj |
|  | 'That house is jet black.' |  |  |  |  |

 'Those houses are jet black.'

Intensifiers are especially associated with color adjectives (175).

| modifying (InanSg) | gloss | intensifier |
| :--- | :--- | :--- |
|  | 'red' | bǔy $^{\mathrm{n}} \rightarrow$ bǔy $\rightarrow$ |
| bán-gó $\rightarrow$ |  |  |
| píl(ú)-gó | 'white' | pár-pár $^{\text {jém-gó }}$ |
| 'black' | kúrúm-kúrúm |  |

### 6.3.3.3 'Good to eat'

A verbal noun may be added to an adjectival predicate (176), but not to a simple N-Adj.
[kà: ${ }^{\text {L }} \quad$ ò-ń]
kúbú-lé
$\hat{\varepsilon} 1=\varnothing$
[grasshopper Prox-AnSg]
eat.meat-VblN
sweet $=$ it.is
'This grasshopper (species) is good to eat.'

### 6.4 N(-Adj) plus numeral

### 6.4.1 With ordinary numerals

A noun, with or without modifying adjectives, may combine with a following numeral. If the noun is animate it may be morphologically plural. Numerals from ' 2 ' to ' 10 ' have a special set of classifying prefixes to agree with the animacy (human, animate, inanimate) of the core NP (§4.6.1.2). The human prefix is based on né 'person', and is optional after a plural-marked noun (177a). Plural noun nù-mbś 'people' is usually omitted in favor of the human prefix (177d). The animate and inanimate prefixes are obligatory for nonhuman referents (177b-c). There is no tonal interaction between the numeral and the preceding core NP.
a. yà-mbó (né-)nǔm
woman-AnPl (Hum-)five
'five women'
b. cǐn yí-nǔm
stone Inan-five
'five stones'
c. nà:(-mbò) bǐn-bò bú-nǔm
$\operatorname{cow}(-\mathrm{AnPl}) \quad$ fat-AnPl An-five
'five fat cows'
d. né-nǔm

Hum-five
'five people'

When N-(Adj-)Num is itself in a tone-dropping position (as when followed by a demonstrative or as internal head of a relative), tone-dropping applies simultaneously to the numeral and to the core NP but leaves the classifying prefix H-toned.

Pronouns may also combine with following numerals. The phrase can define the number of individuals, as in í lèy 'the two of us, both of us', or it can be partitive 'two (out) of us'. For third person, Logo á is of course the pronominal form in logophoric contexts, as with á lèy 'the two of them' or 'two (out) of them' in 2015-02@ 01:35 (two) \& 01:49 \& 01:55 \& 03:18. However, 3 Refl á is also common in nonlogophoric contexts instead of 3 Sg ńné, as with á lèy in 2015:02 @ 00:32 \& 01:45 \& 06:08, and with á tà:ndú 'the three of them' 2015-03 @ 02:21.

### 6.4.2 Adjective-Numeral Inversion

With no further modifiers, the linear order N-Adj-Num is fixed (178a). If an additional modifier that restricts reference, the adjective and the numeral are optionally inverted, resulting in N -Num-Adj. The reference-restricting elements that can function in this way as inversion licensors are demonstratives, possessors, and relative clauses. For example, wheh a
demonstrative is added to (178a), either N-Adj-Num-Dem (178b) or N-Num-Adj-Dem (178c) is possible. The interlinears for the numeral are bolded.
a. ùlò ${ }^{\mathrm{L}}$ dé
house big.InanPl
'five big houses'
yí-nǔm
b. [ùlò dè
[house big.InanPl

$$
\text { yí-nùm }^{\mathrm{L}} \quad \text { yí }
$$

'those five big houses'
c. [ùlò yí-nùm
[house Inan-five [ $=$ (b)]

The variable ordering of adjective and numeral in (178b-c) suggests that in the presence of an inversion licensor, a numeral is treated syntactically (at least for linearization purposes) as an adjective, or the two merge into an undifferentiated supercategory of postnominal modifiers. It was noted above that in N-Adj1-Adj2 combinations, there is no fixed order of the two adjectives (except when a N -Adj1 phrase is lexicalized). When a second adjective is added to ( $178 \mathrm{~b}-\mathrm{c}$ ), all six possible orders of the adjectives and the numeral are possible (179). The noun and all three following modifiers, except for the numeral classifier, are tone-dropped under the control of the final demonstrative.

| ca. [ùlò | bìnè: | yí-nùm |
| :--- | :--- | :--- |
| [house | fat.InanPl | Inan-fiv | $\begin{array}{ll}\text { pìlè: }]^{\mathrm{L}} & \text { yí } \\ \text { white.InanPl] } & \text { DemDef.InanPl }\end{array}$ 'those five big white houses'

b. [ùlò bìnè: pìl̀̀: yí-nùm] ${ }^{\mathrm{L}} \quad$ yí
c. [ùlò pìlè: yí-nùm bìnè:] ${ }^{\text {L }}$ yí
d. [ùlò pìl̀ bìnè: yí-nùm] $]^{\mathrm{L}}$ yí
e. [ùlò yí-nùm pìk̀: bìnè:] $]^{\text {L }}$ yí
f. [ùlò yí-nùm bìnè: pìľ̀: $]^{\mathrm{L}}$ yí

### 6.4.3 là/lá 'time(s)'

The number of recurrences of an event is specified by noun là/lá plus a numeral or other quantifier. là/lá polarizes to the following tone. It does not occur without a quantifier. The usual animacy classifier on numerals ' 2 ' to ' 10 ' is absent, suggesting that là/lá itself functions like a classifier.

| a. là túrú(-gó) | 'once' | 2015-04 @ 00:15 (three) |
| :--- | :--- | :--- | :--- |
| b. là léy | 'twice' |  |
| c. lá tàndú | 'three times' |  |
| d. là kúlé | 'six times' |  |
| e. lá měm $\rightarrow$ | 'many times' |  |
| f. lá àngá | 'how many times?' |  |

### 6.5 NP with determiner

Determiners (demonstratives and the definite morpheme) are postnominal except for the special case in §6.5.1.

### 6.5.1 Prenominal pseudo-possessor kú 'that (same)'

kú is an inanimate pronoun ('it') or demonstrative ('that one'). It is usually self-standing (absolute), and functions to resume a discourse-definite situation or recall a discourse referent. As a (pseudo-)possessor preceding a tone-dropped noun, it marks the referent as strongly discourse-definite 'that same X '. There are two textual examples (181).

| a. | $[$ [kú | ${ }^{\text {L gàndà }}$ | ǹ] | nè |
| :--- | :--- | :--- | :--- | :--- |
| [DemDef | place | Def] | Loc |  |

'in that (just mentioned) zone' (2022-03 @ 00:21)
b. kú ${ }^{\text {L dàlìrì }}$

DemDef ruse
'a clever ruse for that (just-described problem)' (2015-02 @ 02:21)
The assistant rejected the combination of kú with a human noun in discourse-definite sense (\#kú ${ }^{\text {Lnè è 'that same person'). He did accept a combination that also includes a real possessor. }}$ A preposed possessor like 'Amadou' in (182a) keeps its regular tones, rather than being tonedropped by kú (182a). Likewise, when a possessed noun is sandwiched between (pseudo-)possessor kú and a real pronominal possessor, the noun is not tone-dropped (182b). In other words, in the presence of a real possessor the pseudo-possessor kú loses its tonosyntactic control powers. In effect, it behaves here like an appositional NP rather than like a possessor.

b. [kú úló ú-wó] èdù = lá-Ø
[DemDef house 2SgPoss-InanSg] good=not.be-3SgSbj
'That house of yours-Sg is no good.'

### 6.5.2 Postnominal demonstratives

A postnominal demonstrative pronoun (for the forms, see §4.4.1.2) can follow a noun, N -Adj, or N -(Adj-)Num, with or without a possessor.

In (183), the demonstrative follows a noun, which has its usual suffixes if relevant. The noun is tone-dropped by the demonstrative.
a. ùlò ${ }^{\text {L }}$ yí
house DemDef.InanPl
'those houses' (< úló)
b. yà ${ }^{\text {L }}$ ńné
woman DemDef.AnSg
'that woman' (< yá)
c. yà-mbò ${ }^{\mathrm{L}} \quad$ bú
woman-AnPl DemDef.AnPl
'those women' (< yà-mbó)

In (184) the demonstrative follows a N-Adj combination. Both the noun and adjective are tonedropped. The noun would have been tone-dropped by the adjective anyway. The markup assumes that the demonstrative tone-drops the entire N -Adj string, even if this is partially redundant.
a. [ùlò dè ${ }^{\mathrm{L}}$
[house big.InanPl] DemDef.InanPl
'those big houses' (ùlò ${ }^{\text {L }}$ d $\varepsilon$ )
$\begin{array}{lll}\text { b. } & \text { [yà-mbò } & {\text { sègè-mb̀̀ }{ }^{\mathrm{L}}}^{\mathrm{L}} \\ \begin{array}{l}{[\text { woman-AnPl }} \\ \text { small-AnPl] }]\end{array} & \text { bú } \\ \text { (those small women' } & \end{array}$

In (185), the demonstrative follows a numeral in absolute function (without an overt noun). The classifier (human né-, inanimate yí-, animate bú-) remains H-toned. The numeral stem itself is tone-dropped by the demonstrative. This is clearest when the input is human né- plus an /H/melodic numeral like kúlé 'six'. After yí- and bú- the /H/-melodic numeral stems are L-toned anyway so there is no further overt tone-dropping. However, /LH/-melodic numerals like 'three' are tone-dropped.
(185)
a. né-kùlè ${ }^{L} /$ né-tà:ndù ${ }^{L}$
bú
Hum-six / Hum-three DemDef.AnPl
'those six people' (<né-kúlé, né-tà:ndú)
b. yí-kùlè ${ }^{(\mathrm{L})} /$ yí-tà:ndù $^{\mathrm{L}}$

Inan-six / Inan-three
DemDef.InanPl
'those six (inanimate)'
c. bú-kùlè ${ }^{(L)} /$ bú-tà:ndư ${ }^{L}$
bú
An-six / An-three
DemDef.AnPl
'those six (animate)'

When an $\mathrm{N}(-\mathrm{Adj})$-Num string is followed by a demonstrative, tone-dropping applies to the $\mathrm{N}(-$ Adj) and to the numeral, in the same way as illustrated above. Only the numeral classifier remains H-toned, flanked by tone-dropped forms. Examples are in (186).



See §6.4.2 above for optional reordering of the adjective and numeral in examples like (186b).
Demonstratives follow possessed NPs, including pronominally possessed alienable nouns, resulting in N -Poss-Dem. The demonstrative has no tonal effect on the N -Poss combination. If the demonstrative has rising tones, as with mà-gú and ò-gú, they are preserved, but monosyllabic H -toned demonstratives drop to L after N -Poss. Note the tone-dropped ${ }^{\mathrm{L}} \mathrm{kù}$ in ( $187 \mathrm{a}-\mathrm{b}$ ) and ${ }^{\mathrm{L}}$ yì and ${ }^{\mathrm{L}}$ bù in ( $187 \mathrm{c}-\mathrm{d}$ ).
a. úló
kǒ: / kò-ń / ú-wó
${ }^{\text {L }}$ kù / mà-gú / ò-gú
house my/his-or-her/your DemDef./Dist-/Prox-InanSg
'that house of mine/of his-or-hers/of yours'
(all modifiers are inanimate singular)


For demonstratives following the verbal participle in a relative clause, see §14.6.1.

### 6.5.3 Postnominal definite morpheme ( n )

Definite ǹ may follow a simple noun (188a), N-Adj (188b), N-(Adj-)Num (188c), or a possessed NP (188d-e). The combination with a preceding demonstrative (188f) was frowned on by the assistant in elicitation, but inanimate singular kú ǹ occurs frequently in the texts (2015-05 @ 03:17 \& 03:20 \& 03:49; 2015-06 @ 03:08; 2022-04 @ 00:53). ǹ has a single invariant form, not agreeing with the NP in animacy or number. It has no effect on the tones of preceding words.
(188)
a. úló ǹ
house Def
'the house', 'the houses'
b. ùlò ${ }^{\mathrm{L}}$ bǐn-gó ǹ
house fat-InanSg Def
'the big house'
c. úló yítà:ndú ǹ
house Inan-three Def
'the three houses'
d. mí Há ǹ

1SgPoss father Def
'my father (definite)'
e. nǎ: wě: ǹ
cow 1SgPoss.AnSg Def
'my cow (definite)'
f. nà: ${ }^{\text {L }}$ ńné ǹ
cow DemDef.AnSg Def
'that cow (definite)'

For ǹ after a participle in a relative clause, see §14.6.1.

### 6.6 Universal and distributive quantifiers

### 6.6.1 'All' (pú $\rightarrow$, yàngù pú $\rightarrow$ )

The universal quantifier ('all') is pú $\rightarrow$. This is a regional form (pú $\rightarrow$, fú $\rightarrow$, fúk) that also occurs in some other Dogon languages, in Fulfulde, and here and there in Songhay and Tamashek. pú $\rightarrow$ is interjection-like, and its prolongation is unbounded, as with expressive adverbials. The pitch of the word preceding pú $\rightarrow$ is lower than modal, but this is an intonational rather than phonological effect, framing the more conspicuous pú $\rightarrow$.
$\begin{array}{llll}\text { a. } & \text { [yó } & \text { á-gá } & \text { pú } \rightarrow \text { ] } \\ & \text { [millet } & \text { 3Refl-Poss } & \text { all] }\end{array}$
dı̀r ${ }^{\mathrm{n}}$ ó-tì- $\varnothing$
[millet $\quad$ 3Refl-Poss all $]$
'He has sold all his millet.'
b. [àdù-mbó pú $\rightarrow$ ] cíll-í:-yà-dà:
[bird-AnPl all]
fly-MP-Pfv1a-3P1Sbj
'All the birds flew away.'
pú $\rightarrow$ can combine with pronouns and demonstratives, as in bú pú $\rightarrow$ 'all of them (animate)' and yí pú $\rightarrow$ 'all of them (inanimate)'. When bú pú $\rightarrow$ and yí pú $\rightarrow$ modify a noun, bú and yí function tonally as discourse-definite demonstratives and tone-drop the noun (190a-b); see also the relative clauses in (545a-b) in §14.6.2.
a. ùlò ${ }^{\mathrm{L}}$
yí
pú $\rightarrow$
house DemDef.InanPl all
'all the houses' (< úló)
b. ùlè: ${ }^{\text {L }}$
bú
pú $\rightarrow$
child DemDef.AnPl
all
'all the children' (< ùlé:)
pú $\rightarrow$ also combines with $1 \mathrm{st} / 2$ nd-person pronouns, as in bí pú $\rightarrow$ 'all of you', and í pú $\rightarrow$ 'all of us'. There is no clear evidence whether the pronoun is the head or is a possessor.

For emphasis, the pronominal and demonstrative combinations can be elaborated by adding yàngù, as in bú yàngù pú $\rightarrow$ 'all of them'. This occurs in text 2015-05@ 03:38.
pú $\rightarrow$ is NP-final, and there are some indications that it is can detach from the rest of the NP when the latter is complex. In 2015-03 @ 02:21 pú $\rightarrow$ follows the topic marker gà. In 2015$01 @ 01: 50$ it follows dè 'if'.

### 6.6.2 'Each' (kámá)

Distributive 'each' and universal 'all, every' are not consistently distinguished. In (191), the first version of 'each child' has just the singular noun plus pú $\rightarrow$ 'all, every'. In this combination, the usual subphonemic pitch-lowering of the preceding word before pú $\rightarrow$ does not apply,
possibly because 'each child' is less emphatic than 'all the children'. The alternative, explicitly distributive version has 'child' followed by kámá 'each' plus pú $\rightarrow$. kámá behaves tonally like an adjective or demonstrative in tone-dropping 'child'.
(191)

| $[$ ह̀d $\varepsilon ́ ~$ |  | pú $\rightarrow$ ] | sùngó | lêy-lêy | L̀̀d-à: |
| :--- | :--- | :--- | :---: | :---: | :---: |
| $\left[\right.$ ह̀d $\varepsilon^{L}$ | kámá | pú $\rightarrow$ ] | $"$ | $"$ | $"$ |
| [child | each | all] | hundred | two-two | give.Pfv-3P1Sbj |

'They gave 200 (riyals, i.e. 1000 CFA) to each child.'

Combinations of kámá with various nouns are in (192). Those in (192a) are highly lexicalized and show a vocalic shift typical of 'person' and 'thing' in N-Adj strings and as compound initials. Many of the other combinations appear to be uncommon in discourse, as the simple version with just pú $\rightarrow$ is always available.

| noun | gloss | 'each _ |
| :---: | :---: | :---: |
| a. né | 'person' | jì-kámá |
| cé | 'thing' | cì-kámá |
| b. $\grave{\text { b }}$ ¢́ | 'child' | èdè ${ }^{L}$ kámá |
| pédé: | 'sheep' | pèdè: ${ }^{\text {L }}$ kámá |
| úló | 'house' | ùlơ ${ }^{\text {L }}$ kámá |
| ár ${ }^{\text {ná }}$ | 'man' | àr ${ }^{\text {na }}{ }^{\text {L }}$ kámá |

Alternatively, pú $\rightarrow$ 'all' can function distributively by itself when added to a singular noun. Thus singular né pú $\rightarrow$ 'each person' versus plural nù-mbó pú $\rightarrow$ 'all persons'.

Pronouns cannot be directly followed by kámá. An independent pronoun can, however, occur in apposition to jì-kámá, as in í nì-kámá pú $\rightarrow$ 'each (person) of us'.

### 6.6.3 Interaction of quantifiers with negation

Negation normally scopes over a university quantifier in nonsubject function (193a). However, this is flipped when the universal quantifier is part of the subject (193b); see also text 2022-04 @ 01:28. The assistant gave parallelistic paraphrases for 'Not all of the children came', e.g. 'Some children came, some didn't.' For nonsubjects, 'not any' can be expressed as 'one too' ( $=$ 'even one') in connection with a negative predicate (193c).

[^2]$\begin{array}{lll}\text { b. } \begin{array}{ll}\text { [ùlé: } & \text { pú } \rightarrow \text { ] } \\ \text { [children } & \text { all] }]\end{array} & \begin{array}{l}\text { wà:-ndá } \\ \text { come-PfvNeg.3PISbj }\end{array}\end{array}$
'None of the children came.'


The inanimate noun nàndùr-ǵ (plural nàndìré:), clumsily glossed 'entity' in interlinears, can function as somewhat emphatic '(not) a thing' expression under negation (194a). In positive examples like (194b) it is harder to interpret but it seems to have mildly emphatic sense. It is said to be used in such contexts mostly by young people.


| b. nàndùr-ǵ entity-InanSg |  | [mí | (gì)] | yí = bì-Ø |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $[1 \mathrm{Sg}$ | (Acc)] | see=Past-3SgSbj |
| 'He/She really (?) saw me.' |  |  |  |  |

Elsewhere nàndùr-gó and related forms (inanimate and animate) function to pick up the referent of a preceding topicalized phrase (§19.1.5).

For interjection-like péy as an emphatic 'at all' negative, see §19.2.2.

### 6.7 Accusative (gì)

Accusative gì can be added to NPs in object function, interpreted broadly to include the recipient of ditransitive 'give', as in 'they give it to a weaver' (675) in text 2012-02. It is optional, even with pronouns, and is absent in most elicited utterances. In allegro speech it can be difficult to distinguish weakly articulated gì from its absence, and transcriptions in the texts should not be relied on. gì is NP-final, like a postposition, and so it follows any determiners or quantifiers. Objects of imperative verbs are treated like those of indicative verbs.

| a. | [ìjjè̀-mbó | $p u ́ n$ | (gì)] | yí = bù-m |
| :---: | :---: | :---: | :---: | :---: |
|  | [dog-AnPl | all | (Acc)] | see=Past-1 SgSbj |
|  | 'I saw the dogs.' |  |  |  |


| b. | $[\mathrm{mí}$ | (gì) $]$ |
| :--- | :--- | :--- |$\quad$| yí= bì-Ø |
| :--- |
| $[1 \mathrm{Sg}$ |
| (Acc) $]$ |$\quad$| see=Past-3SgSbj |
| :--- | 'He/She saw me.'

c. [ìnjě: ǹ (gì)] búndó
[dog Def (Acc)] hit.Imprt
'Hit-2Sg the dog!'
d. [ìnjě:-mbó pú $\rightarrow$
(gì)] búndó
[dog-AnPl all
(Acc)] hit.Imprt
gì is most common with pronouns denoting animates. In this case it is transcribed as a suffix, but this is a judgement call. gì can also occur with inanimates that denote specific individuals, i.e. when overtly determined (196).

| (196) | [úló | ǹ] | gì] | y í = bù -m |
| :---: | :---: | :---: | :---: | :---: |
|  | [house | Def] | Acc] | see $=$ Past -1 SgSb |

'I saw the house.'

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction (' X and Y ') by dying-quail effect

NP conjunction is expressed prosodically by the dying-quail effect (§3.7.3). The coda of the final syllable of each conjunct, usually a vowel but sometimes a sonorant (\$3.1.1), is prolonged in an uncalibrated fashion. There is also a final low-pitch target that is audible unless the syllable is already L-toned. This combination of prolongation and L-tone target is called the dying-quail effect. It occurs in some other Dogon languages, including Jamsay, mainly in NP conjunction and in willy-nilly conditional antecedents, both of which involve parallelism. It is an example of tonation, the use of intonation-like phonetic features to express grammatical (or lexical) categories. The dying-quail effect is indicated in transcriptions by adding $\therefore$ to the otherwise normally transcribed form.

For NP conjunction, which has no other expression, this is glossed in interlinears as ".\&". The duration and pitch fall are most pronounced on the left conjunct, which is clearly distinct from the simple vowel length and final L -tone of the 'it is' clitic.

Conjunctions may be extended by adding a third conjunct (197e), but usually more than two conjuncts result in a distinct enumeration intonation.
a. ú.: mí.:

2Sg.\& 1Sg.\&
'you-Sg and me'
(phonetic [úúù mî̀])
b. yà-mbó: án"á-mbò: :
woman-AnPl.\& man-AnPl.\&
'women and men'
(phonetic [jàmbśóárnámbò̀])
c. yá: árná $:$ :
woman.\& man.\&
'a woman and a man'
(phonetic [jáāàárnáà])
d. yǒ $: \therefore \quad \varepsilon y^{n}: \therefore$
today. \& tomorrow. $\boldsymbol{\&}$
'today and tomorrow' (y̌̌:, દ́y")
(phonetic [jòóòşjnjn])
e. yà-mbó $\therefore$ ár ${ }^{\text {ná-mbò } \therefore \text { ùlé: } \therefore \text {. }}$
woman-AnP1.\& man-AnP1.\& children.\&
'women and men and children'
(phonetic [jàmbśòáf nàmbòòùléè])
d. tǎ. $\therefore$, zòmó $\therefore, \ldots$
hyena.\&, hare.\&,...
'hare and hyena,...'(2015-01@ 00:32)
e. ńné $\therefore$ á $\therefore, \ldots$

3Sg.\&, Logo.\&, ...
'(said:) 'you-Sg and me, ..."' (2015-02 @ 02:29)

### 7.1.1.1 Ordering of coordinands

The order of conjuncts is not fixed. For 'you and I' the assistant prefers the order 1 Sg then 2 Sg (mí $\therefore$ ú $\therefore$ ) but accepts the other order.

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

A conjoined NP is occasionally combined with a preceding or following possessor that is not repeated on each conjunct, though the repeat phrasing is usually preferred when it is logically possible.

When the unrepeated possessor precedes, the assistant did not apply the usual tonedropping to the possessed nouns (198b). In other words, the conjoined NP constitutes a tonosyntactic island (shown in $\subset \ldots \supset$ ) that cannot be modified tonally. The issue is moot regarding postposed possessors, which do not affect the tones of possessums (198a).
a. [pédú-mbò $\therefore$ ír nú-mbò $\therefore$ wě:-mbò] yǎy-yà-dà:
[sheep-AnPl.\& goat-AnPl.\& 1SgPoss-AnPl] go-Pfv1a-3PlSbj
'My sheep and goats have gone.'
b. [ámádù $\subset$ pédú-mbò $\therefore$ írnú-mbò $\therefore \supset$ ] yǎy-yà-dà:
[Amadou $\subset$ sheep-AnPl.\& goat-AnPl.\&ゝ] go-Pfv1a-3P1Sbj
'Amadou's sheep and goats have gone.'

Similarly, when a conjoined NP functions as relative-clause head, it is not subject to tonedropping. See $\S 14.2 .3$ for this combination.

Other types of modifier (demonstrative, modifying adjective, 'all') were repeated by my assistant in conjunctions ('the black sheep and the black goats' rather than 'the black [sheep and goats]').

### 7.1.1.3 No reflexive possessor in [X and [his X Z]]

There is no overt distinction between ' X and [his $\left.\mathrm{S}_{\mathrm{x}} \mathrm{Z}\right]$ ]' with coindexed possessor, and ' X and [his-or-her ${ }_{Y}$ Z]]' with disjoint reference. Regular 3 Sg possessors, not reflexive possessors, occur in both situations (§18.1.4).

### 7.1.2 "Conjunction" of verbs or VP's

There are no conjunctions of verbs, VPs, or clauses comparable to the NP conjunction type described above. Instead, various chaining and subordinating constructions occur (§15.1-2).

### 7.2 Disjunction

### 7.2.1 'Or' (mà) with NPs

The disjunctive particle mà can follow both coordinands, so ' X or Y ' is expressed as [ X mà ] [Y mà]. In elicited examples, mà is intonationally prolonged (mà $\rightarrow$ ) with pronouns but not with other NPs.

The examples in (199) are constructed in such a way that the disjunction is clearly among NPs rather than clauses.
a. [lè:gé
pú $\rightarrow$ ] [pédé: mà $\rightarrow$ ]
[íné: mà $\rightarrow$ ] sémà-m-nù-m [day all] [sheep or] [goat or] slaughter-Ipfv-Ipfv-1SgSbj 'Every day I slaughter (either) a sheep or a goat.'
b. [mí mà $\rightarrow$ ] [ú mà $\rightarrow$ ] Éy $^{\mathrm{n}}$ mǎ: ${ }^{\text {Lò̀-m-dò-Ø }}$ $[1 \mathrm{Sg}$ or $] \quad[2 \mathrm{Sg}$ or] tomorrow there go-Ipfv-Ipfv-3SgSbj 'You-Sg or I will (i.e. should) go there tomorrow.'
c. [pédú-mbò bú-tà:ndù mà] [bú-kèdè mà] źbà-m-nù-m̀ [sheep-AnPl An-three or] [An-four or] buy-Ipfv-Ipfv-1 SgSbj 'I will buy three or four sheep.'

### 7.2.2 Clause-level disjunction

mà can also be used in clause-level disjunctions. However, in this case there is no clear difference between disjunction and polar interrogation. In elicited examples, mà is grouped prosodically with the preceding clause and is intonationally prolonged.

'Will you come tomorrow, or will you stay at home?'
mà $(\rightarrow)$ is optionally repeated after the second clause, as in the long double interrogative in 2015-05@02:20.

## 8 Postpositions and adverbials

The morphologically simple postpositions are dative bènと̀, instrumental-comitative ni:, locative $\mathrm{n} \grave{\varepsilon} \sim \mathrm{r}^{\mathrm{n}} \dot{\varepsilon}$ and bàrì, and purposive dùgò. One might add accusative gì (§6.7) which patterns as a postposition.

Some spatial relationships are expressed by intransitive or transitive verbs of position, especially in stative form, rather than by postpositions. Examples are tárà 'be on (wall or similar vertical plane)', dúnà 'be (placed) on', nángà 'be (put) up on', and túnà 'be (put) inside/underneath'. These can be combined with simple locative PPs, as in [nìngé rè n nángà 'be (put) on a mat'.

Similarly, direction of motion is specified by verbs like yǎy/ó- 'go', w̌̌: 'come', and gǒ 'exit (v), leave'. There are no allative or ablative postpositions. Postpositions with senses like 'in/at X ' or 'behind X ' can denote static locations, or can combine with direction-specifying verbs to denote starting and ending points.

Simple postpositions are deleted when their complements are relativized on, as in 'the woman (\#to) who you will say that' (§14.7.4).

### 8.1 Dative and instrumental

### 8.1.1 Dative bènè

Ditransitive 'give' and 'show' treat the recipient as a direct object, with optional accusative gì (201a-b).

'Give-2Sg Seydou one mango!'
b. [úló kǒ:] [mí ${ }^{\text {H}}$ bá (gì)] ${ }^{\text {Làgà }} \mathrm{m}$ [house 1 SgPoss.InanSg] [1Sg father (Acc)] show.Pfv-1SgSbj 'I showed my house to my father.'

Wiith verbs of speaking, the indirect object (i.e. addressee or conversational partner) is expressed with bènè (202). The 3 Sg combination is ńné bènè 'to him/her' or 'chez him/her'.

| ỳjé | $[$ ú | bènè $]$ | òrǐ:- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| what? | $[2 S g$ | Dat $]$ | say.Pfv-3SgSbj |

'What did he/she say to you-Sg?'
Elsewhere bènè can mean 'chez, in the presence of’ (§8.2.3). One can therefore construe (202) as 'said in your presence'.

However, a more general benefactive sense is observed in (203).
(203)

| [ńné | bènè] | غ̇lù-ngó | lóg-à:y-Ø |
| :---: | :---: | :---: | :---: |
| [3Sg | Dat] | sweetness-InanSg | be.excessive-Pfv1a-3SgSbj |
|  | was | ely delicious for | lf).' (2015-01 @ 04:11) |

Likewise 2015-05 @ 02:23 ('donkeys are good/valuable for Dogon’).

### 8.1.2 Instrumental or comitative (ni:)

This postposition is used prototypically with tools and similar instruments. The postposition acquires its tone by spreading from the final tone of the complement NP. Instrumental function is illustrated in (204).
a. [bé: ní:] ìnjě: púngó-tì-m [stick Inst] dog beat-Pfv $1 \mathrm{~b}-1 \mathrm{SgSbj}$ 'I beat-Past the dog with a stick.'


An alternative is to replace the instrumental postposition with a subordinated verb nà: gín, literally 'take/pick up (and then ...).

The phrase 'by force' is pàngá ní: .
With human (including pronominal) complements, ni: is comitative 'with, in the presence of'.

| a. [mí$\begin{equation*} [1 \mathrm{Sg} \tag{205} \end{equation*}$ |  | ní:] | bèrú: | ${ }^{\text {L }}$ bù-Ø |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inst] | near | be.Loc-3SgSbj | ' $\mathrm{He} /$ She is near/beside me.'

b. [í ní:] ${ }^{\mathrm{L}}$ bù- Ø
[1Pl Inst] be.Loc-3SgSbj
'He/She is with us.'

Related to the human use just described are adverbial phrases. kú ní: 'with that (inanimate, definite)' is one of the most common phrases in the texts. It has an abstract sense that can be glossed in context as 'then, at that point', 'in that situation', or 'in that way, thus'. It is often
transitional from one scene to another in narrative. There are many examples in text 2015-01, e.g. @ 01:50. The ní in the different-subject subordinator -ngó ní (§15.2.2.7.2) may be related.

### 8.2 Locational postpositions

As noted at the beginning of this chapter, any PP that denotes a location can also combine with a direction-specifying verb ('go', 'come', 'exit') to denote the starting or ending point of a trajectory. For example, literal "exit (v) [in my village]" means 'leave/come from my village', in the beginning of (681) in text 2012-04.

### 8.2.1 Simple and complex PPs

Locative nè and bàrì (described below) are the only simple spatial postpositions. Most spatial postpositions are composite and were at least originally based on nouns, like English in back of or behind (be-hind). Complex postpositions are generally of the form 'in/at [the X of Y]' or a slight reduction thereof. These complex postpositions end in one of the simple locatives, usually nè.

### 8.2.2 Basic locative postpositions

### 8.2.2.1 Locative (nغ̀)

nè occurs in a wide range of locative contexts, and can be translated contextually as 'in, at, on' as well as allative and ablative counterparts. It is the most common locative marker. The assistant sometimes pronounces it as $\mathrm{r}^{\mathrm{n}} \bar{\varepsilon}$.

| (206) | noun | locative | gloss |
| :---: | :---: | :---: | :---: |
|  | dámbá | dámbá nè | 'in the village' |
|  | sògó | sògó nè | 'at the well' |
|  | úló | úló nè | 'in/at the house' |
|  | ládú-gó | ládú-gó nè | 'on the roof' |

With high-frequency nouns denoting locations, like 'village' and 'the bush', the locative postposition is optionally omitted, especially when combined with a verb of stance or motion or with the 'be' quasi-verb. Examples are 'village' in 'as I was going along in the village at night', in (683) in text 2012-06, and 'went out into the bush' (2015-01 @ 00:32).

The assistant rejected the locative postposition with temporal NPs like 'at night' and 'in/during the rainy season' (207a).
(207)
a. dèndé bírá: bírá-yù-m
night work(n) work-IpfvNeg-1SgSbj
'I don't work at night.'
b. zìné [nù-mbó pú $\rightarrow$ ] ándá ${ }^{\text {Lò }}$-m-d-è
rainy.season [person-AnPl all] the.bush go-Ipfv-Ipfv-3P1Sbj
'In/During the rainy season, everyone goes out to the fields.'

### 8.2.2.2 Displaced locative (bàr ~ bàrì)

This postposition is similar in meaning to nè. It adds an extra nuance, namely displacement from the currently relevant deictic center, and is glossed "Loc.Dist" in interlinears. Compare English over as in over in Boston, spoken in a nearby city.
a. [dámbá
nè / bàr]
${ }^{\text {L }}$ bù-m
[village Loc/Loc.Dist]
be- 1 Sg Sbj
'I am (over here) in the village.'
b. [dámbá
nè / bàr]
ó-nù-m
[village
Loc / Loc.Dist]
go-IpfvNeg-1SgSbj
'I am not going (over) to the village.'

bàrì is part of the demonstrative adverbs ě:-bàrì 'over here, around here' and yí-bàrì 'over there (definite)' (§4.4.2.1).

### 8.2.2.3 Locative postpositions with place names

Since place names are intrinsically locative, adding a postposition is usually unnecessary. In (209a) there is no postposition, but bàr appears in (209b) since displacement is relevant. The data were elicited in Sevare, which is a few kilometers from Mopti.
(209)
a. sèwárá ${ }^{\text {Lbù }}$ bu
Sevare be.Loc-3SgSbj
'He/She is in Sevare (city).'
$\begin{array}{llll}\text { b. ìnjě: } & {[\text { mótì }} & \text { bàr] } & { }^{\text {L }} \text { bù- } \varnothing \\ \text { dog } & {[\text { Mopti }} & \text { Loc.Dist }] & \text { be.Loc-3SgSbj }\end{array}$
'The dog is over in Mopti (city).'

### 8.2.3 'Chez' (bènè)

For dative bènè with 'say' and in general benefactive function, see §8.1.1. A PP with bènè can also mean 'chez X', i.e. 'at the house of X' (210a) or 'in the presence of X'.

| a. | [ú bènc̀ $]$ | ná-m <br> chez | L <br> sò-m <br> eat-Ipfv | have-1SgSbj |
| :--- | :--- | :--- | :--- | :--- |

'I am eating at your house.'
b. [ $\left[\begin{array}{cc}\text { mí } & \text { 'bá }] \quad \text { bènè }] \quad{ }^{\text {L }} \text { ò-m-nù-m }\end{array}\right.$
[[1Sg father] chez] go-Ipfv-Ipfv- 1 SgSbj
'I am going to my father's (place).'
c. [ámbá bènè] á yày kárnà
[God chez] 3Refl go Pfv.Ppl
'having gone into God's presence, ...'(2015-@ 06:12)

### 8.2.4 'Inside $X^{\prime}$ ' or 'between $X$ and $Y^{\prime}\left(\left[\mathrm{X}(Y){ }^{\text {L }}\right.\right.$ bèrnà: $\left.(\grave{n})\right]$ nè $)$

This complex postposition is literally 'in the interior of X '. It is based on a slightly modified possessed form of bènǎ: 'interior' (compare bèrǎ: 'belly'), followed by definite ǹ and locative postposition nè (211a). The definite morpheme is optional. The landmark is most often a structure (such as a house) or a container. In variant (211b), bèr nǎ: ǹ is tonally independent of 'my house'.
a. [[úló
kǒ:]
${ }^{\text {L }}$ bèr ${ }^{\text {nà: }}$
(ì)] nè
[[house 1SgPoss.InanSg]
interior
(Def)] Loc 'inside my house'

| b. | $[$ úló | kǒ:] | [bèrnǎ: |
| :--- | :--- | :--- | :--- |
|  | ǹ $]$ | nè |  |
| [house | 1SgPoss.InanSg] | $[$ interior | (Def) $]$ | Loc

To indicate displacement from the current deictic center, bàr(ì) is substituted for nغ̀.
An alternative construction when the complement is a simple noun is a nominal compound $\mathrm{X}^{\mathrm{L}}$-bènǎ:, which can be used adverbially by itself, without a postposition.

$$
\begin{align*}
& \text { ùlò }{ }^{\mathrm{L}} \text {-bènǎ: }  \tag{212}\\
& \text { house-interior } \quad{ }^{\mathrm{L}} \text { tùnà-m } \\
& \text { 'I am inside the house.' }
\end{align*}
$$

'Between X and Y ' is phrased as 'inside X and Y ', using the same bènǎ: 'interior' but this time with the complement (landmark) a nonsingular NP, for example a plural pronoun (213a) or a conjoined NP (213b).
(213)
$\begin{array}{llll}\text { a. } & \text { č̌n } & {[[\text { bènǎ: }} & \text { í-g } \varepsilon ́] \\ & \text { stone } & {[[\text { interior }} & 1 P l-P o s s]\end{array}$
nè] $\quad$ Lùnyà-Ø
stone [interior The stone is (lying) between us'


### 8.2.5 'On (the head of) $\mathrm{X}^{\prime}$ ([ $\mathrm{X}^{\mathrm{L}}$ kù-gò $]$ n $\grave{)}$ )

This complex postposition has a fairly literal sense, with a human landmark.

| (214) | [č̌n | [[kú-gó | kǒ:] | nè] | ćll-1́ | gín] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [stone | [[head-InanSg | 1SgPoss.InanSg] | Loc] | escape-MP | Ant.Past.SS] |
|  | ${ }^{\text {L }}$ sùgè- Ø |  |  |  |  |  |
|  | 'A stone (got loose and) fell on my head.' |  |  |  |  |  |

The 3 Sg form is [kú-gó kò-ń] nè 'on his/her head'. An example with a nonpronominal NP is
 more on the semantics see the following subsection.

### 8.2.6 'On $X^{\prime}$ ([ $\mathrm{X}^{\mathrm{L}}$ dàr $\left.^{\mathrm{n}}{ }^{\text {à }}\right]$ nè $)$

'On X' where X denotes a surface is often expressed by the simple locative: ládú-gó nè 'on the roof', nìngé nè 'on the mat'. An alternative construction is [ $X^{L}$ dàr ${ }^{n}$ à] nè, used especially when X is a horizontally extended surface, such as a tabletop or a laid-out mat. With a pronominal possessor the noun is dárná. As independent noun it is replaced by the compound dàrnà-bándá. The sense is 'crown/top of head' in contrast to the more inclusive and often more abstract kúgó 'head'.

$$
\begin{array}{llll}
\text { a. } & {\left[\begin{array}{lll}
\text { nìngé } & \left.{ }^{\text {L dàr }} \text { nà }\right] & \text { nè }]
\end{array}\right.} & \text { dùyí }  \tag{215}\\
& {\left[\begin{array}{lll}
{[\text { mat }} & \text { flat.top }] & \text { Loc }]
\end{array}\right.} & \text { put.down.Imprt } \\
& \text { 'Put-2Sg it down on the mat!' }
\end{array}
$$

| b. | dár ${ }^{\text {ná }}$ | kǒ:] |
| :--- | :--- | :--- | nè

A hat is worn [kú-gó ky̌:] nè 'on my head', but a basket carried on my head, or (figuratively) a financial burden that I bear, is [dárná kǒ:] nè 'on the crown/top of my head'.

### 8.2.7 PPs of proximity

### 8.2.7.1 'Next to X ; under $\mathrm{X}^{\prime}$ ([ $\mathrm{X}^{\mathrm{L}}$ dùgò $]$ nè)

The adverb-like noun dùgó means primarily 'area under or below' (e.g. a mat), or 'base, bottom, foundation; shoulder (of a mountain)'. It can function adverbially without a postposition, as in ámádù dùgó bò- $\varnothing$ 'Amadou is at the bottom/down below'. The related compound postposition is [ $\mathrm{X}^{\mathrm{L}}$ dùgò] nè including the locative postposition. Before a pronominal possessor the noun is dúgó. The tonal distinction between dùgó and dúgó resembles that between jìré and jíré (§8.2.8.1) and that between kùndúgó and kúndúgó (§8.2.8.2).

The compound postposition can mean 'under X, below X', but it can also mean 'next to $X$ ', where $X$ is a person, animal, or house. With a tall landmark like 'tree', there is no clear difference between 'next to' and 'under'.

| a. | [dúgó | ky̌:] |
| :--- | :--- | :--- |
|  | $[$ nase | 1 SgPoss.InanSg] | 'next to me, near me'

b. [dúgó í-gé] nè
[base 1Pl-Poss] Loc
'next to us'
c. [ámádù ${ }^{\text {L }}$ dùgò] nè
[Amadou base] Loc
'beside Amadou'
d. cǐn [[nìngé ${ }^{\mathrm{L}}$ dùgò $] \quad$ nè $] \quad{ }^{\mathrm{L}}$ tùnà- $\emptyset$
stone [[mat base] Loc] be.put.Stat-3SgSbj
'The stone is under the mat.'
e. [[tǎ: ${ }^{\text {L dùgò }] ~ n \grave{~}] \text { wò:-Ø dé }}$
[[hyena base] Loc] come.Pfv-3SgSbj if '(and) he came up next to hyena, ...' (2015-01 @ 00:42)

Variants with bàr(ì) instead of nè are elicitable.

### 8.2.7.2 'Next to $X^{\prime}$ ([X ${ }^{L}$ àrà $] n$ nè

'For 'next to $X$, beside $X$ ' there is an alternative PP based on the noun àrá 'side, area to the side, proximity'. After a nonpronominal NP the form is ... Làrà ] nè. With a pronominal possessor the form is [àrá ...] nè.
(217)
a. [ámádù $^{\text {Làrà }] ~ n e ̀ ~}$
[nìngé ${ }^{\text {Làrà }] ~ n \varepsilon ̀ ~}$
'next to Amadou'
'next to the mat'
b. [àrá ky̌:] nè 'beside me'

### 8.2.7.3 'Next to $\mathrm{X}^{\prime}$ ([ $\mathrm{X}^{\mathrm{L}}$ jè̀ggùr(ù)gò $]$ nè $)$

A noun meaning 'edge (of a pond, of a large rock' or 'proximity' is jéngúr(ú)gó. It too forms complex postpositions meaning 'beside, next to' with locative nè.
a. [ámádù ${ }^{\text {L }}$ jèngùr(ù)gò] nè
'next to Amadou'
[nìngé ${ }^{\text {L }}$ jèngùr(ù)gò] nè 'next to the mat'
b. [jéngúr(ú)gó kǒ:] nè 'beside me'

The complement is often a larger entity such as a body of water or a village. An example is [dèbé ${ }^{\text {L }}$ jèngùrùgò] nè 'next to the (big) river' (2015-01 @ 00:59).

### 8.2.8 'In front of' and 'behind'

### 8.2.8.1 'In front of' ([ $\left.\mathrm{X}^{\mathrm{L}} \mathrm{jìrè}\right]$ nè $)$

This complex postposition is based on possessed forms of jíré 'front'.

| a. | [jíré kò-ń] <br> [front InanSg-3SgPoss] | nè |
| :--- | :--- | :--- |
|  | Loc |  |

in front of him'
b. [jíré ky̌:] nè
[front 1SgPoss.InanSg] Loc
'in front of me'
c. [ámádù ${ }^{\text {Lìrè }] ~ n e ̀ ~}$
[A front] Loc
'in front of Amadou'

Variants with bàr(ì) instead of nè are elicitable. The related adverb is jíré nè 'in the front, forward, up ahead'.
jíré 'front', mostly in adverbial contexts, differs tonally from jìré 'eye', its likely source. The same tonal distinction occurs in kúndúgó versus kùndúgó (following subsection).

### 8.2.8.2 'Behind/after $X^{\prime}$ ([ $X^{\text {L }}$ kùndùgò $]$ nè $)$

This complex postposition is based on possessed forms of the noun kùndúgó 'back'.
$\begin{array}{lll}\text { a. } & \text { [kùndúgó } & \text { kò-ń] }\end{array}$ nè
'behind him/her/it'
$\begin{array}{lll}\text { b. } & {[\text { kùndúgó }} & \text { kǒ:] } \\ {[\text { back }} & \text { 1SgPoss.InanSg }] & \text { Loc }\end{array}$
'behind me'
c. [ámádù ${ }^{\text {L kùndùgò ] nè }}$
[Amadou back] Loc 'behind Amadou'

This can also be used in the temporal sense 'after $X$ ', as in [láyà Lkùndùgò] nè 'after the Feast of the Ram'. This however can also be phrased as 'when the Feast of the Ram has taken place'.
kúndúgó is the adverb 'in the rear'. It differs in tone from the noun kùndúgó 'back', compare the tones of jíré 'front' versus jìré 'eye(s)'.

### 8.2.9 Adverbs of vertical relationship

### 8.2.9.1 'Over X'

Superior vertical position can be expressed by témbé 'above, overhead; on the high plateau' or óngó '(in the) sky', both of which can be directly followed by ${ }^{\text {L bù }}$ 'be.Loc' or another predicate. 'Above/over me', for example referring to the position of a bird or an airplane, also involves témbé as adverb (not postposition).
(221) àdě: [mí ní:] dém $\rightarrow$ témbé ${ }^{\text {Lbù }}$ - $\quad$
bird $\quad[1 \mathrm{Sg}$ with] straight above be.Loc-3SgSbj
'The bird is directly above/over me.'
8.2.9.2 'Under $X$ ' and 'at the base of $X$ '

For [ $\mathrm{X}^{\mathrm{L}}$ dùgò $]$ nè 'under X ' or 'next to X ' see $\S 8.2 .7 .1$ above.
'At the base of X , under X ' (e.g. for $\mathrm{X}=$ tree or boulder) is [ $\mathrm{X}{ }^{\mathrm{L}}$ dùmbò] nè. It implies a covered space in the shade next to the base of a landmark object that spreads out overhead. The noun is dúmbó 'rear end', or more abstractly 'base, bottom'.

```
(222)
\begin{tabular}{lll}
{\([\) tìmǎ: } & \({ }^{\text {L }}\) dùmbò \(]\) & nغ̀ \\
{\([\) tree } & base \(]\) & Loc
\end{tabular}
    'under (=in the shade of) a tree' (2015-01@ 04:17)
```


### 8.2.10 'From X to $\mathrm{Y}^{\prime}$ (pó $\rightarrow$, bà $\rightarrow$ )

Trajectories with starting and ending points can be described using verbs like 'exit (v), leave' and 'arrive' (or 'come' or 'go'). In (223a), the 'exit' verb is chained to a main clause with 'come' (in the sense 'arrive here'). The distance (in time or space) can be emphasized using either of two emphatic particles, the prospective pó $\rightarrow$ 'all the way to, until' (223b) or the retrospective bà $\rightarrow$ '(ever) since' $(223 \mathrm{c})$. pó $\rightarrow$ is common in both spatial and temporal contexts, while bà $\rightarrow$ is essentially temporal.

b. pó $\rightarrow$ bàndàrá yày-m
all.the.way Bandiagara go.Pfv- 1 SgSbj
'I went as far as Bandiagara.'
c. [[ódógón bà $\rightarrow$ bírá: bírá-m]
[[early.morning since] work(n) work(v)-Ipfv]
[nân ${ }^{\text {L dò̀-m] }}$
[now arrive.Pfv-1SgSbj]
'I have been working from early morning to now.'

### 8.3 Purposive-Causal dùgò 'for; because of; about'

This postposition creates PPs that denote the goal of an activity ('for') as in (224a-c). With a verb of speaking the dùgò PP can also mean 'about' (224d).
a. [ìdé dùgò] ${ }^{\text {Li w-à: }}$
[honey Purp] come.Pfv-3P1Sbj
'They came for the honey.'
b. [bírá: dùgò] ${ }^{\text {L wòè- }}$ -
[work(n) Purp] come.Pfv-3SgSbj
'He came for the work.'
c. [kú dùgò $] \quad{ }^{\text {L }}$ kà-m-nò-w ${ }^{n}$
[Dem.InanSg Purp] do-Ipfv-Ipfv-2SgSbj
‘That's why you-Sg do it.' (2015-03 @ 01:23)
d. [[gàndà ò-gú] dùgò] órà-m-d-દ̀
[[place Prox-InanSg] Purp] speak-Ipfv-Ipfv-3PISbj
‘They speak about this place.' (2015-06 @ 01:22)
dùgò can also be used in a retrospective sense, denoting the cause of a subsequent eventuality (225a). It also appears in the phrase 'for God', in connection with a gift or service provided charitably without compensation (225b).
(225)
a. [àrná dùgò ] ${ }^{\mathrm{L}}$ zòb-à:
[rain Purp] run.Pfv-3PISbj
'They fled because of the rain.'
b. [ámbá dùgò] zá mí ${ }^{\text {Lìdì-Ø }}$
[God Purp] meal 1 Sg give.Pfv- 3 SgSbj
'He/She gave me food for (= in the name of) God.'
c. [[ày-né ǹ $]$ dùgò], pú $\rightarrow$ [zògò gín] ${ }^{\text {L }}$ sùg-à:
[[fatigue Def] Purp], all [run Ant.Past.SS] descend.Pfv-3PISbj
'Because of hardship (with water), they all fled (the high plateau) and moved down.’ (2015-05 @ 03:38)

For [ìnjé dùg̀̀] 'why?' (for what?) see §13.2.2.2. For X dùgò 'than X' in comparatives, see Chapter 12 passim.

### 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity ('like X') construction

### 8.4.1.1 With postposition ni:

Adverbial phrases specifying similarity to a landmark (reference object) often involve instrumental (and comitative) postposition ni: 'with’ (§8.1.2), either alone (226a) or, more clearly, as part of a larger phrase such as a headless relative with 'be' (226b).

$$
\begin{array}{lll}
\text { a. } & {\left[\begin{array}{ll}
\text { mín } & \text { ní: }
\end{array} \quad\right. \text { ỳgó-Ø }}  \tag{226}\\
& {[1 \mathrm{Sg}} & \text { Inst }]
\end{array} \quad \text { not.be-3SgSbj }
$$



The assistant prefers to include the basis for comparison, which changes the syntax (227).
a. [yà-mbó
º̀dùbà:]
'ò-m-dò
[woman-AnPl road] go-Ipfv-3SgSbj
'He walks like a woman.'
[lit. "he goes (with) women's road (gait)"]
b. [[yà-mbó òré: órá-ngó] ní:]
[[woman-AnPl word.Pl speak-Ipfv.Ppl.InanSg] Inst]
万́rà-m-dò-Ø
speak-Ipfv-Ipfv-3SgSbj
'He talks like a woman.'
[lit. "he speaks with (the way) women speak words"]

### 8.4.1.2 'Like this, thus’ (kú ní: , ôy ${ }^{\mathrm{n}}$ )

'Like this/that, thus' is kú ní: with inanimate pronoun kú, or a simple adverb $\hat{\text { on }}$ ". These forms can resume fuller phrases in the fashion of correlatives (228).

| [mí | bú-ygó] | ôy ${ }^{\text {n }}$ | ${ }^{\text {L }}$ bù-Ø |
| :---: | :---: | :---: | :---: |
| [1Sg | be-Ppl.InanSg] | thus | be-3SgSbj |
| 'He is like me.' |  |  |  |
| [lit. "(the way) I am, thus he is."] |  |  |  |

### 8.4.2 Extent ('a lot' and 'a little')

Though adverbial syntactically, they can occur in sentences where 'a lot' or 'a little' translate as objects or other arguments, as with 'give a lot/a little'.

### 8.4.2.1 měm $\rightarrow$ ' $a$ lot'

měm $\rightarrow$ ' $a$ lot, greatly' is an expressive adverbial. It can occur initially or medially in a clause. It is not part of a syntactic NP and it does not interact tonally with an adjacent noun.

[^3]b. měm $\rightarrow \quad[\mathrm{mí} \quad$ (gì)] ńdí-tì-Ø
a.lot $\quad[1 \mathrm{Sg} \quad$ (Acc) $] \quad$ give-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'He/She gave me a lot.'

$\begin{array}{llll}\text { c. } & {[\mathrm{mí}} & \text { (gì) }] & \text { měm } \rightarrow \\ {[1 \mathrm{Sg}} & \text { (Acc) }] & \text { ádí-lì̀ } \\ {[=(\mathrm{b})]} & & & \text { give-Pfv1b-3SgSbj }\end{array}$

Textual examples: 2015-02 @ 05:28, 2022-04 @ 00:32.

### 8.4.2.2 gá:rá 'a lot, greatly’

An alternative to měm $\rightarrow$ is the adverb gá:rá 'a lot, greatly'. It is adverbial and does not affect the tones of a noun that may happen to precede it (230).
a. yว̌: àrná gá:rá mìr" ${ }^{\text {ne-tì-Ø }}$
today $\operatorname{rain}(\mathrm{n})$ a.lot rain.fall-Pfv $1 \mathrm{~b}-3 \mathrm{Sg} \mathrm{Sbj}$
'It rained heavily today.'
b. bòrň́ í gá:rá ${ }^{\text {Le}}$ wòr-ì̀-s-ò:
fatigue 1Pl a.lot become.accustomed-MP-Pfv2-SbjFoc
'We are very accustomed to fatigue (=hard work).' (2015-05 @ 03:17)

Seven examples of gá:rá occur in text 2015-03 between 01:37 and 01:55.
In Jamsay, gá:rá 'more’ occurs in comparatives.

### 8.4.2.3 bǐ: ${ }^{\text {n }}$-bà ${ }^{\mathrm{n}} \rightarrow$ 'plenty'

This is a colorful expressive adverbial meaning 'many' (cf. English plenty, galore, etc.). It occurs once in the recordings.
(231) [nân gà] ínjé kàlé só-ndǒ:- $\varnothing$,
[now Top] water limit(n) have-Neg-3SgSbj,
[gàndà pú $\rightarrow$ ] óndó $\quad$ bǐ: ${ }^{\mathrm{n}}$ bầ ${ }^{\mathrm{n}} \rightarrow \quad{ }^{\mathrm{L}} \mathrm{b}-\mathrm{\varepsilon}$ :
[country all] garden plenty be-3PlSbj
'The water has no limit (=is abundant), there are (vegetable) gardens aplenty in the whole country.' (2015-05 @ 00:49)

This excerpt also illustrates the construction ' X have no limit', another emphatic expression for 'a lot, greatly'.

### 8.4.2.4 'A little' (dágám $\rightarrow$, céndèy ${ }^{\mathrm{n}} \rightarrow$, jébdé, gàrá-gàrà)

These are adverbs meaning 'a little, slightly'. They function as free adverbs and can occur in various positions in a clause. The tonational prolongation in céndèy ${ }^{\mathrm{n}} \rightarrow$ and dágám $\rightarrow$ can be omitted when they are nonfinal in a clause.
dágám $\rightarrow$ is the common form (232a), see also 2015-01 @ 02:24 \& 03:40 \& 04:28 \& 04:48, 2015-02 @ 06:29, and iterated dágám-dágám 2015-01 @ 05:47. The sense varies across ‘a small amount', ‘slightly’, and 'lightly, gently'.
céndè ${ }^{\mathrm{n}} \rightarrow$ has a similar semantic range but is more emphatically diminutive (232a-b). It is readily elicited ( $232 \mathrm{~b}-\mathrm{c}$ ) but it does not occur in the texts.

Both dágám $\rightarrow$ and céndèy ${ }^{\mathrm{n}} \rightarrow$ allow prolongation of their final sonorants (unless iterated), in the fashion of expressive adverbials.
jébdé is attested in one textual passage where it appears to mean 'somewhat, fairly'. It appears to be fronted in (232d), but the assistant would prefer it to occur immediately before the predicate $\varepsilon$ ع́ù-m = bì- $Ø$.

Iterative gàrá-gàrà is attested in one passage in the distributive sense 'little by little' or 'a little at a time' (232e). Compare gàrá: 'a certain (one)', §6.3.2.
a. àr ${ }^{n}$ à-[bòr-gó]
dágám ìré
man-[addition-InanSg] a.little be.more
‘The extra (amount) from (the) man is a little more.' (2022-04 @ 00:32)
b. bírá: céndè ${ }^{\mathrm{n}} \rightarrow$ bìré-tì-Ø
work(n) a.little work(v)-Pfv1b-3SgSbj
'He/She worked a little.'
c. céndèy ${ }^{\mathrm{n}} \rightarrow \quad[\mathrm{mí} \quad(\mathrm{gì)}] \quad$ ńdí-tì-Ø
a.little $\quad[1 \mathrm{Sg} \quad$ (Acc)] give-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'He/She gave me a little.'
d. jébdé [[ll yì kárnà gà] [í bènè] f́lù-m=bì-Ø
a.little [[1Pl see Pfv.Ppl] Top] [1Pl chez] be.sweet-Ipfv=Past-3SgSbj 'What we saw (=experienced) was fairly pleasant.' (2022-03@ 00:11)

### 8.4.3 Specificity

The usual way of talking about the exactness of a number or amount is to use the verb 'arrive, reach' in the sense 'amount to, add up to'. In (233), dò-s- $\hat{\varepsilon}$ : 'they have arrived/reached' shortens to dò-s-દ́ before mà $\rightarrow$ 'or'.

| [pèdù-mbò ${ }^{\text {L }}$ | ú | só-mbó] |  |
| :---: | :---: | :---: | :---: |
| [sheep-AnP1 ${ }^{\text {L }}$ | 2 Sg h | have-Ppl.AnPl] |  |
| pègá-nǔm | dò-s-غ́ | mà $\rightarrow$ | dơà-ndá |
| ten-five | arrive-Pfv2-3P1Sbj | j or | arrive-PfvNeg.3PlSbj |

'The sheep that you-Sg have, do they amount to 50 or not?'

### 8.4.3.1 'Specifically' $(p a ́ \rightarrow)$

This adverb can be added to an NP, especially a pronoun, in the sense 'precisely X (not anybody else)' or ' X in person'. There are no tonosyntactic interactions. In (234), 'chief' is resumed by a coindexed third person pronoun, but ámbírú pá $\rightarrow$ without the pronoun is also possible.

| ámbírú $\quad$ ńné | pá $\rightarrow$ | wâ:-m-dò-Ø |  |
| :--- | :--- | :--- | :--- |
| chief | $3 S g$ | specifically | come-Ipfv-Ipfv-3SgSbj |
| 'The chief is coming in person.' |  |  |  |

There is also an expressive adverbial pá $\rightarrow$ 'wide open', in context also '(travel) freely’ (2022$03 @ 00: 17$ ).

### 8.4.3.2 'Specifically’ (té $\rightarrow$ )

This particle functions similarly to pá $\rightarrow$. For 'right here' see §4.4.2.2. In text 2015-01@ 02:19, té $\rightarrow$ is added to '(sat down) on the (billygoat's) horns' in the emphatic sense 'right on the horns'.

There is an iterated form té-té without prolongation of the vowel(2015-02@06:34).

### 8.4.4 Evaluation

### 8.4.4.1 'Well' and 'badly'

The adjectives for 'good' are sé and $\varepsilon$ d́dé: . The latter is distinct from $\varepsilon$ ع́ $\varepsilon$ : 'sweet, delicious', but દ́lé: too has a positive evaluative element that can be captured by 'tasty, delicious; pleasing'. 'Bad' (especially 'nasty, cruel') is sàmě: For all of these adjectives, see §4.5.1.1. There are no morphological adverbs corresponding to these adjectives. Instead, the adjectives are added to an NP in the clause, perhaps a pro forma cognate nominal.

| $[$ bìrà $:$ | sé-ngé / sàm-gó $]$ | Lbìrà-m-dò |
| :--- | :--- | :--- |
| $[$ work(n) | good-InanSg / bad-InanSg] | work(v)-Ipfv-3SgSbj |
| 'He/She does good/bad work.' (i.e. works well/badly) |  |  |

The verb dàgá means 'turn out well, be well made/done', among other senses.

### 8.4.5 Manner adverbs

For 'like this' and 'like X', see §8.4.1.1-2. For manner adverbial relative clauses see §15.4.2. For adverb-like predicative forms of adjectives, see $\S 11.4 .1$. There is no morphological process to derive adverbs from other stem classes.

A verbal noun or similar nominal can be made into an adverbial phrase with a postposition, like the instrumental postposition in (236).

| [zób(ú)-gó ní:]$\quad$ yé | ${ }^{\text {L }}$ nù-m |  |  |
| :--- | :--- | :--- | :--- |
| [run.Nom-InanSg | Inst] | Exist | enter.Pfv-1SgSbj |
| 'I entered running.' = 'I ran in.' |  |  |  |

### 8.4.6 Spatiotemporal adverbials

### 8.4.6.1 Temporal adverbs

Some key temporal adverbs are in (237). The major weekly market for the Tebul villages is Bamba, which takes place on Saturdays. The important Tommo So markets on the plateau (Kassa, Mori) are on the traditional Dogon five-day rotation, as is the minor market in Yanda.

```
a. yy̌:
    yǒ: là 'again' or 'today too'
    yâ:, yâ: là 'again'(§19.3.1)
    yéngì 'yesterday'
    yé dèmbè tà:ndú 'day before yesterday'
    yǒ: dèmbè tà:ndú 'day before yesterday'
    nân, ná: 'now'
    ná: gày 'now'(topical, see §19.1.2)
    àsú}->\mathrm{ , àsú }->\mathrm{ là 'always'
    dùmó 'later, afterwards'
b. \varepsilońy' 'tomorrow; in the future'
    zúgó 'week'
    bàlàgá 'the next day'(French le lendemain)
    \varepsiloǹrn
    [dèrn}\mp@subsup{}{}{n}\mathrm{ g̀ gín] dèr n}\mp@subsup{}{}{n}\grave{\varepsilon}\quad\mathrm{ 'second day after tomorrow' (third from today)
    [[dèrn}\mp@subsup{}{}{n
    [[dèrrn}\mp@subsup{}{}{n}\mathrm{ gín] dèrn}\mp@subsup{}{}{n
    [[dèr'n}\mp@subsup{}{}{n}\mathrm{ gín] dèr`}\mp@subsup{}{}{n}\grave{\varepsilon}] dèmbè kèdè-n\varepsiloń 'fifth day after tomorrow'
c. jélù
'last year'
    nwǎ: 'this year'
    bá-gò-nè 'next year'
```

| bá-gò-dè | 'next year' |
| :--- | :--- |
| bá-nà-dè | 'some day (in the future)' |

The last few examples in $(237 \mathrm{c})$ are slightly reduced from subordinated clauses with bá as a semantically variable time reference (§11.1.1.4.1), gǒ 'exit (v)' or ná 'spend the night' as the verb, and either subordinator nè (§15.2.2.6) or conditional dè.

### 8.4.6.2 'First(ly)' $\left(t \mathrm{t}^{\mathrm{n}} \rightarrow\right)$

$t \mathrm{t}$ ' $\rightarrow$ means 'firstly, at first' (implying something that comes after), or 'formerly, long ago, in the old days' in opposition to 'today, nowadays'. The second sense is present in (238).

```
(238) tîn}->\mathrm{ nù-mbò }\mp@subsup{}{}{\textrm{L}}\mathrm{ (lábá kárnà-mbò
    first person-AnPl pass Pfv.Ppl-AnPl
    'the people who passed on long ago'
```

See also 2015-05 @ 00:25 ('there used to be no water here'), 2015-06@ 03:04 ('the old people used to speak like that'), and 2022-03@00:06 ('how it was in the past versus how it is now').

The sense 'firstly' is clear in 2015-01@ 04:48, where a clause with tín $\rightarrow$ sets up a second clause with ordinal 'second'. See also 2015-06 @ 02:11 \& 02:17 \& 02:28 \& 02:57. The senses 'firstly' and 'long ago' are both relevant to 2015-03 @ 00:10 ('at first I began herding with donkeys, later I herded goats').

### 8.4.6.3 Spatial adverbs

The following are the main nondemonstrative spatial adverbs.
a. témbé
'above, top, summit'
dùgó
'below, bottom, down'
b. tèngì-dágá
'east' (= "Tengou-direction")
ùdù-[túmbú-gó]
dù-dágá
tòmbò-dá:
'west' (= ‘sunset')
'south'
'north' (= "Tommo-direction")
c. kúndúgó 'in the rear'
jíré
'forward; in front'

Aside from 'sunset' = 'west', note -dágá ~ -dá: in the cardinal direction terms in (239b). 'East' and 'north' include terms for Dogon sub-ethnicities (Tengou, Tommo).
jíré 'forward' (239c) is tonally distinct from jìré 'eye(s)', and kúndúgó 'in the rear' is tonally distinct from kùndúgó 'back (body part)'.

### 8.4.7 Expressive adverbials (EAs)

EA's are adverb-like elements that do not form part of NPs or other phrases. They can be made predicative by means of auxiliaries (§11.1.3.1). Many of them are either iterative in form or end in a vowel or sonorant that can be prolonged at will.

### 8.4.7.1 'Straight' $($ dém $\rightarrow$ )

dém $\rightarrow$ 'straight', referring either to an object (such as a stick) or to a road or trajectory, is a typical EA. It can also mean 'straight up' or 'towering, lofty' with a vertical emphasis. Nonpredicative adverbial function is illustrated in (240a). Predicative forms are exemplified in (240b-d).
(240)
a. dém $\rightarrow$ Lyà-dà: straight go.Pfv-3P1Sbj
'They went straight (to the destination).'
b. bé: dém $\rightarrow$ Lbù-Ø
stick straight be-3SgSbj
'The stick is straight.'
c. dém $\rightarrow$ ỳgó-Ø
straight not.be-3SgSbj
'It (stick, road) is not straight.'
d. dém $\rightarrow$ bê-m-dò-Ø
straight become-Ipfv-3SgSbj
'It will become straight.'

### 8.4.7.2 Forms of EAs

Some examples of EAs will be given here to indicate the range of phonological forms as well as typical meanings. First, there are many unreduplicated EAs of one (241a), two (241b), or three syllables (241c). The characteristic phonological feature is tonational prolongation of the final segment (vowel or sonorant).

| a. pá $\rightarrow$ | '(door) wide open, gaping' |
| :---: | :---: |
| $\mathrm{ka}^{\text {n }} \rightarrow$ | '(mouth, door) open (but not widely)' |
| $k^{\text {en }} \rightarrow$ | '(mouth) open (but not widely)' |
| $\mathrm{s} \varepsilon^{\mathrm{n}} \rightarrow$ | 'looking straight at, staring at' |
| kǎy ${ }^{\text {n }} \rightarrow$ | 'wide open (eyes)' |
| gǎy ${ }^{\text {n }} \rightarrow$ | 'staring (at sth)' |


| gǎy $\rightarrow$ | 'leaning back' |
| :--- | :--- |
| cém $\rightarrow$ | 'motionless' |
| dém $\rightarrow$ | 'straight' or 'straight up, towering' |
| jěw ${ }^{n} \rightarrow \sim$ jěy ${ }^{n} \rightarrow$ | '(eyes) slightly open' |

b. pàyǎ $w^{n} \rightarrow \quad$ 'bright point of light in the distance (star, fire)'
cè: ${ }^{\text {n }} \mathrm{í} \rightarrow \quad$ '(door) ajar, open a crack'
c. gògùlí $\rightarrow$ '(door) rickety, poorly encased'

Of the same phonological type and similar expressive nature, but extending into specific grammatical contexts, are tín $\rightarrow$ 'firstly, at first', měm $\rightarrow$ 'a lot', dágám $\rightarrow$ 'a little', and pú $\rightarrow$ 'all'.

The shape CvC with final stop and no prolongation is attested but uncommon. The examples in (242), which are followed by the verbs íj-í: 'stop, halt' and tíbé- 'die' respectively, convey abruptness or thoroughness of the action rather than depicting a stable process or situation as in the preceding examples.
(242) jík '(stop) still, dead in one's tracks'
kák '(die) abruptly, drop dead'

Thus jík íj-í:-yày-Ø 'he/she stopped still'.
Other EAs have iterative or reduplicative form, though the base is in most cases not otherwise attested (cf. English flim-flam, riff-raff). A few do show some relationship to an uniterated stem elsewhere in the lexicon. The EAs in (243a) involve full iteration. Of interest is the fact that the iteration does not erase the prolongation associated with the $\mathrm{CvC} \rightarrow$ shape illustrated above. Those in (243b) are similar but also show a vocalic change, with a high vowel in the first iteration shifting to $a$ in the second; if there is a third iteration, it repeats the first to form an ABA sequence. For the vocalic shift, compare (77d) in §4.1.6. The examples in (243c) show multiple final -Cv reduplications, the number of repetitions being somewhat flexible. Iterations and reduplications are partially iconic since these EAs denote sequences of repeated sub-events, repetitive sensory patterns, and the like.
a. iterative
pírú-pírú
sì:dé-sì:dé
tágàlà-tágàlà
with prolongation

$$
\text { měy }{ }^{\mathrm{n}} \rightarrow \text { mžy }{ }^{\mathrm{n}} \rightarrow
$$

měy ${ }^{\mathrm{n}} \rightarrow$ měy ${ }^{\mathrm{n}} \rightarrow \quad$ 'flickering'
л $\varepsilon ́ m \rightarrow$ ném $\rightarrow$ '(rain) drizzling lightly', cf. verb nèmé with this sense
t $\check{W} W^{n} \rightarrow$ ť̌ $W^{n} \rightarrow \quad$ 'spotted, dotted, having many small spots'
b. iterative plus shift to a
jìgíjà̀á 'swaying (like elephant, cow, fat woman)'
yùgú-yàgú 'chubby, puffy’
pìré-pàrá 'stumbling along'
tripartite
dìbú-dàbú-dìbú́ 'walking unsteadily, groping (in the dark)'
dóy-dà:-dóy (melons bursting on fire), 2015-02 @ 05:36
c. multiple final - Cv reduplication
wèdédé(dé) 'well-lit (place)'
wàdádá(dá) 'well-lit (place)'
yègérédédé 'well-lit (place)'
pàdádádá 'beam, sharp directed light (e.g. flashlight in one's face)'
See also the iterative adjectival intensifiers in §6.3.3.2.

### 8.4.8 Distributive adverbial iteration

Numerals are iterated to indicate distributivity ('X at a time', ' X apiece', ' X each'). The human and inanimate prefixes occur only once, at the beginning. Except for ' 1 ' and ' 2 ', the numeral is L-toned in the second occurrence. Nonmonosyllabic numerals ending in $u$ (' 3 ', ' 10 ') usually syncopate the final syllable in the first occurrence, and in the case of ' 3 ' this entails a further consonantal reduction. For ' 1 ' we might have expected \#túr-turrù, pronounced [tút:ùrù], but the actual form is tú-túrú, looking more like a Cv- reduplication. Morphologically complex numerals iterate only the final element (244d).
a. né-tú-túrú ${ }^{\text {HL }}$ wô:-s-è:
person-one-one come-Pfv2-SbjFoc
'They came one by one.' (for the tones of the verb see §10.2.1.9)
b. né-tǎ:n-tà:ndù $\quad{ }^{\mathrm{L}} \mathrm{j}$ - $-m$

Hum-three-three kill.Pfv- 1 SgSbj
'I killed them (people) three at a time.'
c. pédú-mbò bú-léy-léy = lă:- $\varnothing$
sheep-AnPl An-two-two=it.is.not-3SgSbj
'The sheep are not two by two.'
d. [pé:-rnè]-túr-sàgà-sàgà ${ }^{\mathrm{L}} \mathrm{w}$-à:
[ten]-one-plus-plus come.Pfv-3PISbj
'They came eleven at a time.'

[^4]
## 9 Verbal derivation

### 9.1 Reversive verbs (-lí)

A reversive verb is derived from an input verb by adding suffix -lí, which can then take suffixal inflection where relevant. The sense of the reversive is to undo the action denoted by the input verb, restoring a prior state. Compare English un- in untie, unfold, etc. There is a limited inventory of reversives, so not all aspects of the morphophonology can be settled.

The input verbs that have reversives are bisyllabic. The presuffixal medial vowel is raised to $i$ or (if a preceding vowel is rounded) to $u$ if not already a high vowel (245b), see §3.4.2.2. A resulting sequence /ri-1/ is syncopated and assimilated (§3.4.5.1) to produce $1-1(245 \mathrm{c})$. There is one verb of shape Cvyí that combines with the reversive as Cvl-lí (245d). One stem of the shape Cvggv often simplifies to Cvyv before the reversive suffix (245e).

$$
\begin{equation*}
\text { input gloss } \quad \text { reversive } \quad \text { gloss } \tag{245}
\end{equation*}
$$

a. bisyllabic, input already ends in high vowel

| céndí | 'bury' | céndí-lí | 'disinter' |
| :--- | :--- | :--- | :--- |
| gòngú | 'fence in' | gòngù-lí | 'un-fence' |
| gùbú | 'hang (on hook) | gùbù-lí | 'take off (hook)' |
| kómbú | 'tie' | kómbù-lí | 'untie' |
| mèndí | 'fold' | méndìlí | 'unfold' |
| námbí | 'step on' | námbí-lí | 'remove foot from' |
| péndí | 'insert, slide in' | péndílí | 'remove inserted item' |
| tómbú | 'roll turban' | tómbú-lí | 'unroll turban' |
| tóngú | 'hobble' | tóngú-lí | 'unhobble' |
| tímbí | 'cover (with lid) | tímbílí | 'remove lid from' |
| tíndí | 'prop up' | tíndí-lí | 'remove a prop from' |

b. bisyllabic, input ends in a nonhigh vowel that is raised to high before -lí

| dàgá | 'lock' | dàgì-lí | 'unlock' |
| :--- | :--- | :--- | :--- |
| digé | 'tie (knot)' | dì̀ìlí | 'untie (knot)' |
| mìndé | 'roll up (mat)' | mìndi-lí | 'unroll' |
| mùndó | 'crumple' | mùndù-lí | 'uncrumple' |
| níndé | 'tangle' | níndílí | 'untangle' |
| pégé | 'drive in (nail)' | pégí-lí | 'remove (nail)' |
| tóndó | 'bend' | tóndú-lí | 'unbend' |

c. $/ \mathrm{rl} / \rightarrow 1 \mathrm{l}$, see also ( 247 b below)
jìrí 'immobilize' jìl-lí 'free (sth immobilized) to move'
d. $/ \mathrm{y} /$ assimilated
dǎy 'cover (object)' dàl-lí 'uncover (object)'
e. $\eta g$ simplifies to $\eta$
píngí 'shut (door)' píyílílín píngí-lí 'open (door)'

Array (246) illustrates the vocalism of the inflected forms that require a nonhigh vowel in the reversive suffix, here using the imperative. Verbs whose inputs end in a high vowel shift it to a in the imperative (246a). Verbs whose inputs end in a nonhigh vowel have the same final vowel in the underived imperative as they do in the reversive imperative (246b).

|  | underived |  | gloss | reversive |  | gloss |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bare | imperative |  |  |  |  |  | $\left.\begin{array}{lllll}\text { imperative }\end{array}\right]$

Mediopassive -í: follows the reversive (247).

$$
\begin{equation*}
\text { input gloss } \quad \text { reversive gloss } \tag{247}
\end{equation*}
$$

a. gònd-í: 'be caught in tree' gòndì-1-í: 'be un-caught, get free'
b. $/ \mathrm{rl} / \rightarrow \mathrm{ll}$, see also (245c above); note tone shift in 'remember'
tár-í: 'be affixed' tál-l-í: '(affixed item) come off'
ìré 'forget' íl-1-í: 'remember'

Suppletive sóngú-lí- is a rather general 'undo’ verb. It is reversive in form but there is no semantically related input. 'Take (sth) out, remove (sth)' is gò-ndú (§9.2.2), irregular causative of gǒ 'exit (v)'.

For the (infrequent) causative of a reversive, see (249) in the following section.

### 9.2 Deverbal causative verbs

### 9.2.1 Productive causative with suffix -m(í)

The productive causative derivative has suffix $-\mathrm{m}(\hat{1})$ in the bare stem, subject to optional apocope or syncope. It becomes $-\mathrm{mo}(-)$ in some inflections including the imperative, with suffixal 0 regardless of the ATR quality of the verb. This is consistent with the hypothesis that the causative morpheme originated as an separate verb. The suffix is added to the $\mathrm{A} / \mathrm{X}$-stem of the input verb.

Examples of input/causative relationships are in (248). Before the suffix, stem-final $\varepsilon$ becomes a- before the suffix ('drink', 'weep'). Before the suffix, mediopassive -í: is lowered to -e:- if the input verb is [+ATR], and to -ia- $\sim-e a-\sim-\varepsilon:-$ if the input verb is [-ATR] (248e). For /LH/-melodic input verbs, only -mí- is H-toned in the bare stem (248c).

```
input gloss causative gloss
bare imperative
```

a. monosyllabic, nonhigh vowel

| né | 'drink; eat' | ná-mí | ná-mó | 'give drink/food to (sb)' |
| :--- | :--- | :--- | :--- | :--- |
| yě | 'weep' | yà-mí | yà-mó | 'cause (sb) to weep' |
| jě | 'dance (v)' | jè-mí | jè-mó | 'cause (sb) to dance' |
| sé: | 'sneeze (v)' | sé:-mí | sé:-mó | 'cause (sb) to sneeze' |
| wǎ: | 'do farming' | wà:-mí | wà:-mó | 'make (sb) do farming' |

b. monosyllabic, high vowel

| nú | 'enter' | nú-mí | nú-mó | 'make (sb) enter' |
| :--- | :--- | :--- | :--- | :--- |
| ní: | 'sleep' | ní:-mí | ní:-mó | 'put (sb) to sleep' |

c. nonmonomosyllabic, final nonhigh vowel

| zùgó | 'know' | zùgà-mí | zùgà-mó | 'inform (sb)' |
| :--- | :--- | :--- | :--- | :--- |
| bàrá | 'help' | bàrà-mí | bàrà-mó | 'make (sb) help (sb)' |

d. nonmonomosyllabic, final high vowel

| tímbí | 'shut' | tímbí-mí | tímbí-mó | 'make (sb) shut (sth)' |
| :--- | :--- | :--- | :--- | :--- |
| órú | 'speak' | órú-mí | órú-mó | 'make (sb) speak' |

e. causative follows mediopassive
bàmb-í: 'carry on back' bàmb-è:-mí bàmb-è:-mó 'make (sb) carry (sth)'
ób-í: 'sit down’ ób-é:-mí ób-é:-mó 'have (sb) sit, seat (sb)'

The causative of a reversive is not common, but it can be elicited (249).
(249)

| káygá | píní-lá-m(í1)-tì-Ø |
| :--- | :--- |
| door | shut-Rev-Caus-Pfv1b-3SgSbj |
| 'He/She made me open the door.' |  |

A partial paradigm of zùgà-mí 'inform' is (250).
(250)

| a. with -mi(-) |  |
| :---: | :---: |
| zùgà-mí | bare stem |
| ${ }^{\text {L }}$ zùgà-mì- | simple perfective |
| zùgà-mí-tì- | perfective-1b |
| zùgà-mì só- | perfective-2 |
| zùgà-mí dè- | recent perfect |
| b. with A/S-stem -mo(-) |  |
| zùgà-mò-lí- | perfective negative |
| zúgà-mò-m-dò-Ø | imperfective ( 3 Sg subject) |
| zúgá-mó-ŋgò:-Ø | imperfective negative ( 3 Sg subject) |
| zùgà-mó | imperative |
| zùgà-mó-lì | prohibitive |

For a handful of verbs, the "same" derivational suffix -m(î) has potential-habitual passive sense (§9.3.1 below).

### 9.2.2 Minor causative suffix (-gí/ú)

The few examples of this suffix are in (251). For 'loose, slack' see §9.6.
(251) Causatives with -gí/ú

| input | gloss | causative |  | gloss |
| :--- | :--- | :--- | :--- | :--- |
|  |  | bare stem | imperfective |  |
| péndé | '(sth) break' | péndí-gí | péndì-gè-m- | 'break (sth)' |
| màrá | 'be lost' | màr-gí | már-gà-m- | 'cause to be lost' |
| pódó | '(sth) explode' | pódí-gí | pódì-gò-m- | 'detonate (sth)' |
| sé: | 'become slightly diluted' | sé:-gé | sé:- túrúgè-m- 'dilute slightly' |  |
| yòrś | 'become loose, slack' | yòr-gú | yór-gà-m- | 'loosen (sth)' |
| yùlć | 'wake up' | yùlù-gú | yúlù-gà-m- | 'awaken (sb)' |

See also the productive "transitive" suffix -rí which is typically paired with a suffixed mediopassive (§9.4.1), and the occasional -ndí/ú, -dí, and -lí transitives in §9.4.3-5 below.

### 9.3 Passives

### 9.3.1 Potential-habitual passive -mí-

A homophone of the causative suffix -mí- is found with a small, closed set of verbs in agentless potential-habitual passive sense. All of the derivatives indicate that the entity in question can be encountered, i.e. it is present at least here and there. yè-mí does not mean 'be visible'; it means that the entity can be occasionally encountered and seen.
(252) Passive
input gloss passive gloss

| a. yí | 'see' | yè-mí | 'be see-able' |
| :--- | :--- | :--- | :--- |
| b. témbí | 'encounter', | témb-íá-mí ~ témb-é:-mí | 'be findable' |
|  | bě: | 'get' | bèl-è:-mí |

The morphology and morphophonology of these passives is perplexing. In other Dogon languages, the corresponding M-passives add (pseudo-)causative *-m(V) directly to the input verb stem, with no intervening mediopassive suffix. The passives in (252b), in which $-\mathrm{m}(\hat{1})$ is added to the mediopassive suffix, are therefore anomalous within comparative Dogon. Even the $\grave{\varepsilon}$ in yè-mí 'be see-able' (252a) suggests a (pseudo-)mediopassive *y-દ̀:-, since the A/X-stem of yǐ 'see' is ya-, not ye- (§10.1.3.3). Avoidance of homophony with yà-mí 'cause to weep' might be alleged, but such homophony would not be a real issue since 'weep' and its causative are accompanied by cognate nominal yà-ŋgá 'weeping, tears'. The structural anomalies in (252a-b) raise the suspicion that TU may have borrowed 'be gettable' from *bele-mV or the like in neighboring Dogon languages (Jamsay bèrè-wé, Nanga bèré-mí, Tommo So bèlé-mé). If TU bě: 'get' (<*bèlé) had already lost its medial *l by then, a borrowing based on bisyllabic *bele-mV might be nativized as bèl-દ̀:-mí, the morphologically regular "causative" of mediopassive bèl-í: 'be gotten'. The thoroughly anomalous morphological pattern "verb-MPCaus" for potential-habitual passive (semantically hardly mediopassive, and certainly not causative) might then have spread to 'be see-able' and 'be find-able'. A variation on this hypothetical scenario is that bèl-غ̀:-mí 'be gettable' was derived internally within TU from mediopassive bèl-í: 'be gotten', and specifically from its imperfective paradigm, e.g. 3 Sg bél-è:-m-dò-Ø 'it is/will be gotten' (2015-02 @ 06:49).

### 9.3.2 Passive use of - ggó nominal

For nominals with imperfective inanimate singular participle -ngó see §4.1.1.4.2 and §4.2.3. When used as a predicate, with the 'it is' clitic or its negative counterpart, a form with -ngó functions like an imperfective (present or future) passive (253a-b).
(253)
a. غ̀dé: dórná-ngô: $=\varnothing$
cloth sell-Ipfv.Ppl.InanSg=it.is
'The cloth (fabric) is for sale.'
b. dórná-ygó= lă:- $\varnothing$
sell-Ipfv.Ppl.InanSg =it.is.not-3SgSbj
'It is not for sale.'

Other examples are jídé-ngô: = 'it is to be thrown (away)', ná- yg ô: $=\varnothing$ '(meal) is to be eaten/drunk', kúbó-ggô: $=\varnothing$ '(meat) is to be eaten', diáá-ggô: = Ø 'it is to be carried (on the head)'.

For perfective aspect, the participle of the perfective- 2 suffix is present. If the verb is /LH/-melodic the L-tone spreads to the end of the stem but not into the suffixes (254a-b).
a. dòrǹ̀-sú-ggô: $=\varnothing$
sell-Pfv2.Ppl-InanSg=it.is
'It has been sold.'
b. dòrǹ̀-sú-ygó= lă:- $\varnothing$
sell-Pfv2.Ppl-InanSg =it.is.not-3SgSbj
'It has not been sold.'

Another Pfv2 example is lábá-sú-ygô: = $\varnothing$ 'it was carved' in text 2012-05.

### 9.4 Mediopassive and Transitive

### 9.4.1 Alternation of mediopassive -í: and transitive -rí ~ -ru

A significant number of verb stems alternate between mediopassive and transitive (roughly causative) forms, both with derivational suffixes. The transitive form has suffix -rí (often -rú after a stem with rounded vowels). The mediopassive has suffix -í: . Typical semantic domains for these verbs are stance, wearing clothing, and carrying and holding. The mediopassive is intransitive (stance) or transitive (wearing clothes, carrying, holding). The transitive adds a causal or facilitating agent to the conceptual structure expressed by the mediopassive. Examples are in (255).
(255)

MP stative gloss
Tr gloss
a. stance

| íj-í: | ígà | 'stand up, stop' | ígí-rí | 'stop (sth)' |
| :--- | :--- | :--- | :--- | :--- |
| túnj-í: | túngà | 'kneel' | túngú-rú | 'cause to kneel' |
| tónd-í: | tóndà | 'bend over' | - |  |
| jènj-í: | jéngà | 'be tilted' | jèngì-rí | 'tilt (sth)' |

b. wearing clothes

| tób-í: | tóbà | 'roll on turban' | tóbí-rí | 'put turban on (sb)' |
| :--- | :--- | :--- | :--- | :--- |
| kób-í: | kóbà | 'put one's hat on' | kóbí-rí | 'put hat on (sb)' |

c. carrying/holding
bàmb-í: bámbà 'carry on back' bàmbì-rí 'put (sth) on (sb's) back'
d. other

| bànj-í: | bángà | self)' | bàngì-rí |  |
| :---: | :---: | :---: | :---: | :---: |
| dìmb-í: | bà | 'follow (sth)' | dìmbì-rí | follow |

There are also a number of verbs that have a suffixed transitive form opposed to an unsuffixed underived form that roughly corresponds semantically to the mediopassive in the previous examples. Many of these verbs are monosyllabic, so it would be phonologically difficult to add mediopassive -í: to them. Examples are in (256). The semantic domains are similar to those in (255) above. In (256a) and (256c) the form is bimoraic Cía rather than monomoraic Ciâ, following the bimoraic template of statives. Transitive dì-rí corresponds to two distinct input verbs ( $256 \mathrm{c}-\mathrm{d}$ ).

MP stative gloss $\operatorname{Tr}$ gloss
a. stance
bě bíà 'lie down' bì-rí 'put (sb) to sleep'
b. wearing clothes
táj-1́: ~ táy tágà 'put shoes on' tágí-rí 'put shoes on (sb)'
c. carrying/holding
dǐ dià 'carry on head' dì-rí 'put on (sb's) head'
d. other
dě - 'bathe' dì-rí 'bathe (sb)'

On the other hand, some underived lexical transitives have a marked mediopassive. From bé: 'get' is formed bèl-í: 'be gotten', preserving an original medial lateral (§3.4.5.2), cf. YD bèlé 'get' and other bisyllabic cognates.

Verbs with transitive -rí take the perfective-1b suffix -tì-, hence -r(í)-tì- Verbs with mediopassive -í: split into those that can only take perfective-1a -yà- (-í-yà-) and those that can also take perfective-1b -tì- (-í:-tì). Pure intransitive mediopassives like 'hide (oneself)', stance verbs, and adjectival inchoatives require perfective-1a -yà- (257a). Syntactically transitive verbs that have the mediopassive suffix ('hold', 'follow', etc.) can take either of the perfective-1 suffixes, with no obvious difference in meaning (257b).
a. bànj-íi-yà-m
'I hid (myself).'
ób-í:-yà-m
'I sat down.'
gò:-nd-í:-yà-m
'I became short(er).'
b. X dìmb-í:-yà-m
X dìmb-í:-tì-m
X bàmb-í:-tì-m
X bàmb-íi-yà-m
kóbó kób-í:-tì-m
kóbó kób-íi:-yà-m

```
'I followed X.'
                                " "
'I carried X (on the back).'
    " "
'I put a hat on.'
    " "
```


### 9.4.2 Mediopassive -í: versus unsuffixed transitive

The mediopassive suffix can also be added to some underived transitive verbs. Here it functions as an ordinary passive. For example, kán 'do, make' forms kán-í: 'be done' (hence 'happen') or 'be made'.

Old *Cvlv stems that have lost their medial *l elsewhere (§3.4.5.2) retain it before the mediopassive suffix. Thus bě: 'get' has mediopassive bèl-í: 'be gotten'.

Another phonologically unusual alternation is in (258).
a. kó
'cover (chicken) with upside-down basket'
b. kóyé
'(basket, calabash) be flipped over'

For the intransitive (258a) the "regular" form \#kó-í: would be phonologically problematic. Diphthongized \#kó-1́: or \#kw-í: would solve the syllabification problem but would be subminimal in size for a mediopassive derivative. Resyllabified kóyé is a compromise form, having the advantage that CvCv is a normal shape for verb stems.

### 9.4.3 Transitive -ndí/ú

A few underived verbs correspond to an irregular and lexicalized transitive form with -ndí. Most examples take the quasi-templatic form Cv:-ndí. The suffixal í alternates with ú in the presence of another rounded vowel, especially before perfective suffixes.

MP gloss \begin{tabular}{c}

bare | transitive |
| :---: |
|  | Imprt

\end{tabular}

gloss
bare Imprt
a. bisyllabic stem not elided (medial liquid)

| ír-í: | 'be afraid' | írá:-ndí | írá:-ndá | 'scare (sb)' |
| :--- | :--- | :--- | :--- | :--- |
| bùl-í: | 'put on pants' | bùlò-ndí | bùlò-ndá | 'put pants on (sb)' |
| ìĺ | 'ascend' | ìlà:-ndí | ìlà:-ndá | 'take (sth) up' |
| yòró | 'become soft' | yòrà-ndí | yòrà-ndá | 'soften (sth)' |

b. short vowel not lengthened
gǒ 'exit (v)' gò-ndú gò-ndó 'take out, remove'
c. short vowel lengthened
dǒ 'arrive' dò:-ndú dò:-ndá 'deliver'
d. medial ng elided

| tángí | 'be lit' | tá:-ndí | tá:-ndá | 'turn on (light)' |
| :--- | :--- | :--- | :--- | :--- |
| nóngú | 'catch fire' | nó:-ndú | nó:-ndá | 'light (fire)' |

e. medial g elided
súgó 'descend' sú:-ndú sú:-ndó 'take down'

Other verbs like ní:-ndí 'accompany (to the door)' may belong to this group but do not co-occur with an unsuffixed form.

### 9.4.4 Transitive -lí

There is one apparent example of this suffix, and the presuffixal stem also differs from that of the input.
a. intransitive
yàmá 'malfunction, be ruined'
b. transitive
yàngì-lí 'ruin (sth), cause to malfunction'

### 9.4.5 Transitive -dí

In (261), a transitive verb with -dí forms part of a word group with loosely related senses.
a. kágá-dí 'sear (e.g. head of slaughtered animal) to clean its surface'
b. kágá-mí 'char, cook to a crisp'
kágá '(meat) be charred, cooked to a crisp'
c. kágíl-1-í: 'be overcooked'

For a similar set see intransitive dùmó 'end, be finished' and transitive dùm-dí 'finish (sth)' in (33a) in §3.4.3.2. In this case the use of -dí instead of -rí is forced by the irregular syncope of the pre-suffixal vowel ( r cannot occur as second member of a consonant cluster).

### 9.5 Ambi-valent (labile) verbs without suffixal derivation

For verbs that have a morphological mediopassive with suffix -i:, it functions as the intransitive corresponding to the transitive, whether or not the latter is also suffixally marked. Thus bár(í)mí 'wound (sb)' but bár(í)m-í: '(sb) be wounded'.

For verbs of putting, a similar distinction is made by using the stative derivative as the basic resultative intransitive 'be put'. Thus tún 'put (sth, somewhere)' and túnà '(sth) be (put) somewhere', gǎn 'put/pour (sth) into (a container)' and gánà 'be (put) in'.

There remain some verbs that do not have a productive mediopassive or stative derivative but that allow the verb to occur in transitive as well as (passive) intransitive frames. The most common is 'do' (262a). Other transitives are occasionally attested in passive function in texts, such as the consumption verb in (262b).

|  | verb | gloss | reference |
| :--- | :--- | :--- | :--- |
| a. | kán | 'do' | productive |
| kán | 'be done' | 2015-01@ 03:54 |  |
| b. kúbó | 'eat (meat, peanuts, etc.)' | productive <br> kúbó | 'be eaten' |

Because object pronominals, especially third-person pronominals denoting inanimates, can be freely omitted, many transitives like 'eat' and 'hit' can occur in apparent "antipassive" function (i.e. with object deleted).

### 9.6 Deadjectival inchoative and factitive verbs

Most modifying adjectives (§4.5.1) have a corresponding cognate inchoative verb ('become ADJ'). The vocalism and lexical tones of the inchoative are subject to the general rules for verbs, which do not apply to the modifying adjective. The adjective is shown in its unsuffixed modifying form in the leftmost column in (263). In (263a), the inchoatives have no segmental derivational suffix. In (263b), the inchoative has mediopassive suffix -í: added directly to the stem. In (263c), the mediopassive suffix follows a buffer suffix -nd-. The two adjectival stems of extra-short shape Cv have suppletive inchoatives (263d). In (263e), there is no related modifying adjective.
(263) adjective inchoative gloss

| a. no segmental suffix <br> bisyllabic stem |  |  |
| :---: | :--- | :--- |
| bár" $\varepsilon$ : | bàrná | 'become red' |
| gàbě: | gàbá | 'become tall' |
| ìlé | íĺ | 'ripen' |
| jémé: | jèmé | 'become black' |


| kómbó ỳ̀rě: | kómbó <br> ỳ̀ŕ | 'become skinny, lean' 'become soft' |
| :---: | :---: | :---: |
| Cvy stem |  |  |
| mą̀e ${ }^{\text {n }}$ | mày ${ }^{\text {ní }}$ | 'dry out, become dry' cf. §10.1.3.10 |
| Cv stem |  |  |
| bá | bǎ | 'become full' |
| pž: | pé | 'age, get old' |
| b. mediopassive -í:- |  |  |
| célé: | cé:1-í: | 'become cold' |
| gómé: | gòm-í: | 'become rotten, rot' |
| nà:rná | ná:n-í: | 'become easy, cheap' |
| ómé: | óm-í: | 'become hot' |
|  | ór ${ }^{\text {n }}$ ¢-1́: | 'become smooth' |
| c. -nd-í: |  |  |
| démbé: | dèmbè-nd-í: | 'become massive' |
| bìné: | bìr"ì-nd-í: | 'become fat' |
| dúdé: | dùdò-nd-í: | 'become heavy' |
| dùmbě: | dùmbù-nd-í: | '(blade) become blunt' |
| と́dé: | と́dé-nd-í: | 'become good, improve' |
| ¢́lé: | ¢́lé-nd-í: | 'become sweet' |
| غ̀mbě: | ع́mé-nd-í: | 'become narrow' |
| $\varepsilon^{\text {r }}$ ¢ $\varepsilon$ : | £́r ${ }^{\mathrm{n}}$ ¢́-nd-í: | 'become lightweight' |
| gálé: | gàlà-nd-í: | 'become bitter' |
| g„ž: | gò:-nd-í: | 'become short' |
| már ${ }^{\text {né: }}$ | màrnà-nd-í: | 'become hard, solid' |
| mèndê: | mèndè-nd-í: | 'become slender' |
| mòdé: | mòdò-nd-í: | 'become nasty' |
| ग̀lě: | óló-nd-í: | 'become wet' |
| pá: ~ páć | pá:-nd-í: | 'become long' |
| pílé: | pílé-nd-í: | 'become white' |
| sègé | ségé-nd-í: | 'become small' |
| tó: | tó:-nd-í: | 'become deep' |
| wéré: | wèrè-nd-í: | 'become green' |
| contracted |  |  |
| غ̀mbě: | ع́mé-nd-í: | 'become narrow' ( $\mathrm{m} \sim \mathrm{mb}$ ) |
| nómé: | nóm-d-í: | 'become difficult' ( md < mnd) |
| d. suppletive from short Cv adjective |  |  |
| sع́ | dàgá | 'become good; be fine' |
| dé | bàr-í: égá-nd | 'become big, grow' |

e. -

> témb-í:

$$
\begin{aligned}
& \text { 'become wet' } \\
& \text { cf. } \\
& \text { cf. á:-nd-í: 'become small' }
\end{aligned}
$$

A special case is (264). The form in (264a) is a stative predicate in fixed 3 Sg subject form. Its parsing is nontransparent, but it could be either an 'it is' predicate á:ndà: = Ø (which assumes a noun-like stem á:ndà: 'a little, not much') or a 3 Sg subject stative negative á:-ndà:-Ø (assuming a stative verb á: 'be a little, not much'). The inchoative (264b) is likewise ambiguous; the mediopassive suffix is added to either a bisyllabic stem á:ndV or to a stem á: plus the -nd- buffer.
(264)
a. á:ndà: = Ø or á:-nda:-Ø 'it is little (not much)'
b. á:(-)nd-1́:
'become small' (synonym ségé-nd-í:)

No inchoative verb was elicited from sàmě: 'ugly' or from ǹdé 'empty'.
Most factitives ('X make Y ADJ') are morphologically causatives of the inchoative verbs. The productive causative suffix is featured in (265a-b).
inchoative gloss factitive gloss
a. causative -mí after unsuffixed inchoative
jèmé 'become black' jèmà-mí 'blacken'
b. regular causative -mí after suffixed inchoative

| óm-í: | 'get hot' | óm-éá-m(í) | 'heat (sth)' |
| :--- | :--- | :--- | :--- |
| ćlé-nd-í: | 'become sweet' | ćlé-nd-íá-m(í) | 'sweeten (sth)' |

c. lexical causative
bǎ '(sth) fill up' bà:-ndí 'fill (sth)'

The word family in (266) includes two distinct factitives with different senses that are not distinguished in either the modifying adjective or the inchoative.
(266)
a. modifying adjective 'soft (e.g. skin, earth); loose, slack (e.g. rope)'
yòrě: inanimate plural
yòr-gó inanimate singular
b. inchoative verb
yòró 'become soft; become loose, slack'
c. factitive verbs
yòrà-ndí 'soften (sth)'
yòr-gú 'loosen (sth), make (e.g. rope) slack'

The factitives in (266d) have derivational suffixes that are uncommon but otherwise attested. For -ndí see $\S 9.4 .3$, and for -gú see $\S 9.2 .2$.

### 9.7 Denominal verbs

There is no productive verbalizing morphology for nouns. However, there are many pairs of verbs with cognate nominals. Whether one is derived from the other is often indeterminate, as with English sing a song. However, in some cases the noun seems more basic semantically, so one could argue that the verb is denominal. See $\S 11.1 .2 .4$ for examples.

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

In indicative categories, the verb stem (which may include a derivational suffix, see the preceding chapter) is followed by an inflectional suffix marking aspect (perfective versus imperfective) and polarity (positive or negative). Most aspect-negation (AN) combinations are expressed by portmanteau suffixes. The AN suffix is followed by a pronominal-subject suffix. When the reference time shifts to the past, a past-time enclitic = bì- (or variant) follows the internal AN suffix and is itself then followed by the pronominal-subject suffix.

### 10.1.1 AN suffixes or chained auxiliary verbs?

The categories in (267) are expressed by elements that often appear to be suffixed to the main verb but can be separated from it under some conditions. This suggests a possible analysis as auxiliary verbs, diachronically and to some extent synchronically.

| (267) | dè- | recent perfect |
| :--- | :--- | :--- |
|  | téŕć- | experiential perfect |
|  | tì- | perfective-1b |

Separation from the open-class verb occurs in nonsubject relatives with pronominal subjects. In such clauses, a proclitic subject pronoun appears before the verb. The issue for speakers is whether "the verb" for this purpose is the open-class verb plus the inflectional morpheme, or just the inflectional morpheme in auxiliary status.

In a nonsubject relative involving lexical verb 'eat (meal)' plus recent perfect dè, the subject pronoun may precede the lexical verb (268a), or it may intervene between the substantive verb and the recent perfect morpheme. In (268a) one could argue that dè is suffixed to né or that the two are at least tightly chained. In (268b) dè looks more like an independent auxiliary verb. The fact that both orderings occur suggests that the situation is unstable.
a. zà mí jé dè kárnà ǹ
meal 1Sg eat.meal RecPrf Pfv.Ppl Def
'the meal that I have finished eating'
$\begin{array}{llllll}\text { b. } & \text { zà } & \text { né } & \text { mí } & \text { dè } & \text { kárnà } \\ \text { meal } & \text { eat.meal } & \text { 1Sg } & \text { RecPrf } & \text { Pfv.Ppl } & \text { Def } \\ {[=(a)]} & & & & & \end{array}$

A similar choice exists with experiential perfect téré-, which occurs in main clauses in the combination -téré-bù- or -téré-sò-, but takes the simple form téré before kárnà in relative clauses. In (269a) the subject proclitic precedes the open-class verb 'see', while in (269b) it intervenes between 'see' and the experiential perfect morpheme. As an /LH/-melodic verb, yǐ 'see' drops regularly to L-toned before téré. Interestingly, the same L-toned form occurs in (269b) where 'see' and the experiential perfect morpheme are separated.
a. gònsà: $r^{n} a^{L}$ mí yì téré kár${ }^{n}$ à ǹ elephant 1Sg see ExpPrf Pfv.Ppl Def 'the elephant that I once saw'


Perfective-1b tì- is normally omitted in perfective positive relative clauses, where the simple form with kár"à generalizes. However, in the infrequent case where tì- is preserved in a relative, it behaves like the two perfect morphemes just described. Compare (270a-b), where bùndó drops from $/ \mathrm{LH} /$ melody to all-L, with the main-clause perfective- 1 b bùndó-tì-.

b. ìnjè̀: bùndò mí tí kárnà ǹ
dog hit 1Sg Pfv1b Pfv.Ppl Def [=(a)]

Although the data are variable, they show that dè-, téré-, and tì- can be separable auxiliaries. The cases where they are not separated from the preceding substantive verb, i.e. the (a) sentences in (268-270) above, are compatible either with suffixation or with tight chaining.

The auxiliary analysis might extend to perfective-2 -sì-, but this morpheme is not attested in this split form (separated from the open-class verb) in relatives.

### 10.1.2 Overview of AN categories

Indicative categories can be organized into four subsystems as shown in (271).
a. perfective positive system
simple perfective
perfective-1a
perfective-1b
perfective-2
experiential perfect
recent perfect
b. imperfective positive system
imperfective
progressive
c. perfective negative system
perfective negative
experiential perfect negative
recent perfect negative
d. imperfective negative system imperfective negative progressive negative

Evidence for the non-obvious groupings comes from the morphosyntax of relative clauses. For example, the two positive perfect categories join with the perfectives in having kár ${ }^{n}$ à in relative clauses.

The perfective-1a and perfective- 1 b are associated with different sets of verbs and usually do not contrast on the same verb (with the same lexical sense).

External to the aspectually sensitive system just summarized are stative verbs, whether derived from aspectually-marked verbs (stative 'be seated' from active 'sit down') or lexical quasi-verbs ('be','have', 'want'). Statives do not distinguish aspect and have only a positive/negative polarity opposition at word level. However, statives have some morphological affinities to the imperfective aspect, again seen most clearly in verb-participles in relative clauses.

There is also a higher-level tense system of sorts. The reference time, ordinarily the moment of speaking, can be shifted into the past by adding a conjugatable past-time clitic to the relevant aspect-negation marker. This results in e.g. past imperfective ('used to eat') and past stative ('was sitting'). There is also a form with this clitic added to a verb without aspectnegation marking that competes to a limited extent with perfective positive verbs.

### 10.1.3 Verb stem shapes

Underived verbs have from one to three syllables. Derivational suffixes usually add one syllable each (chapter 9).

Each verb has a lexical tone melody, either /H/ or /LH/. For verbs, unlike other stemclasses, the lexical melody is almost always predictable if the stem begins with an obstruent (stop or fricative). An initial voiceless obstruent requires $/ \mathrm{H} /$ melody, while an initial voiced obstruent requires /LH/ melody. Stems beginning with vowels or with sonorants have a lexically arbitrary tone melody. The lexical melody is regularly overridden by grammatical tone overlays.

The bare stem occurs in nonfinal verbs in direct chains (\$15.1), for example in the 'be able to VP' construction (§15.1.4.1). The bare stem has no aspect-negation suffix and no pronominal-subject suffix, though it may have a derivational suffix. For many verbs, the bare stem can be taken as directly reflecting the lexical form, including vocalism and tone melody. However, some verbs of two or more syllables have a "bare stem" (as defined distributionally above) that ends in a high vowel, whereas several inflected forms have a final nonhigh vowel. In this case, the bare stem does reveal the lexical tone melody but it does not fully characterize the verb's final vocalism. Nevertheless, the bare stem as defined above is used in this grammar and in the lexicon as the citation form.

The following subsections describe types of verb based on syllabic shape, as well as irregular verbs. The sequence proceeds from monosyllabic to longer verbs.

### 10.1.3.1 Cv and Cv : verbs

There are a large number of Cv and Cv : stems with oral vowels. Nasalized vowels are rare in verbs, but $\varepsilon^{n}$ '(woman) marry (man)' and homonym 'become tight' can be cited.

### 10.1.3.1.1 Cv verbs

TU Cv verbs often correspond to Cv: verbs in other Dogon languages such as Jamsay. The stem vowel is usually nonhigh, but there are a handful of (somewhat problematic) Cu and Ci stems including nú 'enter' and yǐ 'see' (§10.1.3.2-4).

For the monomoraic Cv stems, the melodic distinction $/ \mathrm{H} /$ versus $/ \mathrm{LH} /$ is partially overt and partially neutralized. An overt distinction occurs in the perfective-2, where the H of /LH/ melody is realized on the suffix, hence Cv́-sò- for /H/ versus Cv̀-só- for /LH/. The melodic distinction is neutralized in suffixed categories that do not allow this tone shift, like perfectivelb -tì. For example, /LH/-melodic dǒ 'insult (v)' has perfective-2 dò-só- (which reveals the melody), but perfective-1b dó-tì. The transcription dǒ is therefore idealized.

Monomoraic Cv verbs are presented in (272), including the perfective-2 form.
(272) Inventory of Cv verb stems by tone class and vocalism
bare Pfv2 gloss comment/related form
a. /H/ melody

Cv́ with initial voiceless obstruent

| cé | cé-sò- | 'shout' | noun cé-gé |
| :---: | :---: | :---: | :---: |
| ká | ká-sò- | 'shave' |  |
| kó | kó-sò- | 'raise (a child)' |  |
| pé | p ¢́-sò- | 'get old' |  |
| sá | sá-sò- | 'reply' | (younger speakers) |
| sá | sá-sò- | 'knock down (stem)' |  |
| só | só-sò- | 'douse' |  |
| tá | tá-sò- | 'shoot' |  |
| tá | tá-sò- | 'avoid taboo' | noun tǎ: 'taboo' |
| té | té-sò- | 'sprout' |  |
| té | té-sò- | 'weave by hand' |  |
| tí | tí-sò- | 'send' |  |
| tó | tó-sò- | 'sow, plant' | noun tó-ŋgó |
| tó | tó-sò- | 'spit' | noun yò-ínjé |
| Cv́ with initial sonorant |  |  |  |
| $\varepsilon^{\text {n }}$ | $\varepsilon^{\text {n }}$-sò- | '(woman) marry (man)' |  |
| $\varepsilon^{\text {n }}$ | $\varepsilon^{\text {n }}$-sò- | 'become tight' |  |
| ná | ná-sò- | 'spend night' |  |
| nú | nú-sò- | 'enter' |  |
| „غ́ | né-sò- | 'eat, drink' |  |

b. /LH/ melody

CV̌ with initial voiced obstruent

| bǎ | bà-só- | 'fill' |
| :--- | :--- | :--- |
| bǎ | bà-só- | 'be enough; be worth' |
| bě | bè-só- | 'lie down' |
| dě | dè-só- | 'bathe' |
| dǒ | dò-só- | 'arrive, approach', |
| dǒ | dò-só- | 'insult' |
| dǒ | dò-só- | 'bump' |
| dǒ | dò-só- | 'suckle' |
| zǒ | zò-só- | 'be many, abound' |
| gǎ | gà-só- | 'cut (with sickle)' |
| gǒ | gò-só- | 'exit (v)' |
| jě | jè-só- | 'kill' |
| zદ̌ | zغ̀-só- | '(man) marry (woman)' |
| jě | jè-só- | 'dance' |
| jě | jè-só- | 'harvest (millet)' |


| jě | jè-só- | 'fart' | noun jì-ŋgé |
| :---: | :---: | :--- | :---: |
| dǐ | dì-só- | 'carry on head' |  |
| Cv̌ with | initial sonorant |  |  |
| nǒ | nò-só- | 'hear' |  |
| yě | yè-só- | 'weep' | noun yà-ngá |
| yǐ | yì-só- | 'see' |  |

The same verbs are rearranged in (273) to illustrate their vocalic stem-shapes: bare stem, the tonally variable $\mathrm{A} / \mathrm{X}$-stem (e.g. imperfective or perfective negative), and the 3 Sg perfective showing the $\mathrm{E} / \mathrm{I}$-stem.
(273) Vocalism of Cv verbs
bare $\quad \mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR] $\mathrm{C} \varepsilon$ stems
initial palatal

| je | ja- | ${ }^{\text {L }} \mathrm{j}$ ¢̀-Ø | 'kill' |
| :---: | :---: | :---: | :---: |
| né | ja- | ${ }^{\mathrm{L}} \mathrm{n} \varepsilon-\varnothing$ | 'eat, drink' |
| yě | ya- | ${ }^{\mathrm{L}} \mathrm{y}$ ¢-Ø | 'weep' |

other initial C (Cea- varies with Cia-/Cya-)

| $\varepsilon^{\text {n }}$ | $\varepsilon a^{n}-$ | ${ }^{\mathrm{L}} \mathrm{E}^{\mathrm{n}}$-Ø | '(woman) marry (man)' |
| :---: | :---: | :---: | :---: |
| $\varepsilon^{\text {n }}$ | غa ${ }^{\text {n }}$ | ${ }^{\text {L }} \mathrm{\varepsilon}^{\mathrm{n}}$-Ø | 'become tight' |
| pé | pęa- | ${ }^{\mathrm{L}} \mathrm{p}$ ¢̀-Ø | 'get old' |
| té | t¢a- | ${ }^{\text {L }}$ ¢̀̀-Ø | 'sprout' |
| t乏́ | tea- | ${ }^{\text {L }}$ tè-Ø | 'weave' |
| yě | yęa- | ${ }^{\text {L }}$ yè-Ø | 'weep' |
| z | zદ̨a- |  | 'marry (woman)' |

b. [-ATR] Co stems (Cona- varies with Cuna-/Cwa-)

| dǒ | doa- | ${ }^{\text {L }}$ dò̀-Ø | 'arrive, approach' |
| :---: | :---: | :---: | :---: |
| dǒ | dona- | ${ }^{\text {L }}$ dì̀-Ø | 'insult' |
| kó | koa- | ${ }^{\text {L }}$ konè-Ø | 'raise (a child)' |
| só | soa- | ${ }^{\text {L }}$ Sonč-Ø | 'douse' |
| tó | toa- | ${ }^{\text {L }}$ ¢ | 'sow, plant' |
| tó | toa- |  | 'spit' |
| nǒ | nọa- | Lnôè-Ø | 'hear' |

c. [+ATR] Ce stems

| bě | be- | ${ }^{\text {L }}$ bè-Ø | 'lie down' |
| :---: | :---: | :---: | :---: |
| cé | ce- | ${ }^{\text {L }}$ cè-Ø | 'shout' |
| dě | de- | ${ }^{\text {L }}$ dè-Ø | 'bathe' |
| jě | je- | ${ }^{\text {L }}$ jè-Ø | 'dance' |



The $\mathrm{A} / \mathrm{X}$-stem requires a shift from $\mathrm{C} \varepsilon$ to /Cea-/ realized as Cea- $\sim$ Cia- (273a), from C 0 to /Cona-/ realized as Coa ~ Cuna (273b), and from Ci to Cia- (273g). Here ea, oa, etc. are monomoraic short diphthongs. When the initial $C$ is palatal $\{\mathrm{c} j \mathrm{y}\}$, diphthongal ea/ia reduces to a (273a). One would expect wona- to likewise reduce to wa- but there are no relevant lexical items.

In the $\mathrm{E} / \mathrm{I}$-stem ( 3 Sg simple perfective), Co shifts to $\mathrm{Co} \varepsilon \sim \mathrm{Cu} \varepsilon$, Co to Coe $\sim$ Cue, and Ca to Cace. The Cu and Ci stems ( $273 \mathrm{f}-\mathrm{g}$ ) have affinities to the final-high-vowel class of verbs.

### 10.1.3.1.2 Cv: verbs

Cv : verbs derive from original bisyllabics that have lost a medial sonorant (usually a liquid, occasionally a nasal) between identical nonhigh vowels. There are some remaining traces of the old medial sonorant, for example medial 1 in agentive nominals (§3.4.5.2, §5.1.4.2) and in the quoted hortative (§10.6.4).

Bimoraic Cv : verbs are listed in (274) by tone-melody classes. The perfective-2 brings out the distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ melodies. The related forms and cognates in the righthand column confirm the original bisyllabicity.
(274) Tone classes of Cv : verb stems
bare Pfv2 gloss comment or cognate

| Cv́: <br> pith <br> pé: |  | pé:-sò- | 'strike (match)' |
| :---: | :--- | :--- | :--- |
| pé: | pé:-sò- | 'clap (hands)' | YD pélé |
|  |  | noun pél 'applause', Jamsay |  |
| sá: | sá:-sò- | 'coarsely grind' | Jamsay sárá |
| sá: | sá:-sò- | 'take off (garment)' |  |
| tá: | tá:-sò- | 'lay (egg)' | tálé: 'eggs', Jamsay verb tárá |
| sé: | sé:-sò- | 'sneeze' | with noun ìsě:, YD ísíyé |
| tó: | tó:-sò- | 'begin' | YD tóló |
| tó: | tó:-sò- | 'pound' | YD tóló |

Cv́: with initial sonorant or zero

| á: | á:-sò- | 'brew (beer)' | Jamsay árá |
| :--- | :--- | :--- | :--- |
| ć: | ह́:-sò- | 'dispossess' | YD ع́lé |
| ní: | ní:-sò- | 'sleep' | noun jìrè-[ní-ngí] ; YD nìy $\mathrm{né}$ |

b. /LH/ melody

Cv̌: with initial voiced obstruent

| bǎ: | bà:-só- | 'gather' | Jamsay bàrá |
| :--- | :--- | :--- | :--- |
| bě: | bè:-só- | 'get' | YD bèlé |
| zと̌: | zè:-só- | 'bring' | Jamsay jè:ré |
| zǒ: | zò:-só- | 'look for' | Nanga jòró |


| Cv̌: with initial sonorant or zero |  |  |  |
| :---: | :--- | :--- | :--- |
| lǎ: | là:-só- | 'give birth' | Jamsay nàrná |
| jǎ: | jà:-só- | 'take, pick up' | Jamsay yàyá |
| wǎ: | wà:-só- | 'do farm work' | Jamsay wàrá |
| wǒ: | wò:-só- | 'come' | Yorno So wèlé |

The vowel qualities of Cv verbs, including the $\mathrm{A} / \mathrm{X}$-stem and the $\mathrm{E} / \mathrm{I}$-stem, are shown in (275). Tones are omitted from the $\mathrm{A} / \mathrm{X}$-stem, since they are determined by the inflectional suffix independently of vocalism.
bare $\mathrm{A} / \mathrm{X}$-stem E/I-stem gloss
a. [-ATR] Ce: stems

| bě: | bea- | ${ }^{\text {L }} \mathrm{be}$ :-Ø | 'get' (§10.1.3.6) |
| :---: | :---: | :---: | :---: |
| $\varepsilon$ ¢́: | ea- | ع:-Ø | 'dispossess' |
| pé: | pea- | ре:-Ø | 'strike (match)' |
| té: | tea- | tع:-Ø | 'make large pile' |
| zě: | zea- | zع:-Ø | 'bring' |

b. [+ATR] Ce: stems
pé: pe:-
sé: se:-
pe:-Ø 'clap (hands)'
se:-Ø 'sneeze’
c. [-ATR] Co: stems
initial w
w̌̌: wa:-
woe-Ø 'come’
unrounded initial C
zǒ: zoa-
tó: toa-

| zos- $\varnothing$ | 'look for' |
| :--- | :--- |
| tos- | 'begin' |

d. [+ATR] Co: stems tó: to:-
toe-Ø 'pound'
e. Ca: stems

| bǎ: | ba:- | bas-Ø | 'gather' |
| :---: | :---: | :---: | :---: |
| lǎ: | la:- | lac-Ø | 'give birth' |
| nǎ: | na:- | лае-Ø | 'take, pick up' |
| sá: | sa:- | sae-Ø | 'take off (garment)' |
| sá: | sa:- | sae-Ø | 'coarsely grind' |
| tá: | ta:- | tar-Ø | 'lay (egg)' |
| wǎ: | wa:- | wae-Ø | 'do farm work' |

f. Cu: stems
(none)
g. Ci: stems
ní: ni:-
ni:-Ø
‘sleep'

In the $\mathrm{A} / \mathrm{X}$-stem, $\mathrm{C} \mathrm{\varepsilon}$ : becomes Cea- $\sim$ Cia-, and Co: becomes Coa- (difficult to distinguish from Coa-). In the case of w̌̌: 'come', the initial w "swallows" the 2 , producing wa:-, which is then homophonous with the $\mathrm{A} / \mathrm{X}$-stem of wǎ: 'do farm work'. The only Ci: stem, ní: 'sleep', does
not break into \#nia- in the $\mathrm{A} / \mathrm{X}$-stem. This suggests the possibility of a lexical representation níy rather than ní: .

In the $\mathrm{E} / \mathrm{I}$-stem of Cv : verbs, there are no surprises; the vowel qualities match those for Cv verbs.

Transcriptions recognize a phonological distinction between monomoraic Coe-, Cea-, Cą, etc., from Cv verbs (e.g. goe-) and bimoraic Coe-, Cea-, Cae-, etc., from Cv: verbs (e.g. toe). In careful pronunciation, an informant does make these distinctions. In allegro pronunciation, they are difficult to distinguish: Coe- and Cea- may desyllabify to Coe- and Cea-, and the timing distinction between Care- and Caع- is subtle in the best of cases.

Furthermore, desyllabified mid-height vowels tend to reduce to semivowels $\left\{\begin{array}{l}\mathrm{w} \\ \mathrm{y}\end{array}\right\}$ in allegro speech, obscuring underlying ATR values, thus sona- $\rightarrow$ [swa], doe- $\rightarrow$ [dwe], tea- $\rightarrow$ [tja].

### 10.1.3.2 nú 'enter'

This is the only Cu verb. Along with the Ci verbs described in the following subsections, nú represents the monomoraic version of final-high-vowel verbs (§10.1.3.14). The notable forms in the paradigm are the 3 Sg simple perfective and the imperative (276b).
(276) Paradigm of 'enter'
a. based on bare stem nú
${ }^{H L}[$ nú bèà-m-...] 'be able to'
nú-lé verbal noun
${ }^{\text {L nù- }} \quad$ simple perfective ( $1 \mathrm{Sg}{ }^{\mathrm{L}}$ nù-m, $3 \mathrm{Pl}{ }^{\mathrm{L}}$ nù-à:)
nú-yà- perfective-1b
nú-sò- perfective-2
nú dè- recent perfect
nú-téré-bì- experiential perfect
nù-lí- perfective negative
nû-m-dò-Ø imperfective 3 Sg
nú-ygò:-Ø imperfective negative 3 Sg
nú-lì imperative negative
nú-mó-ǹ hortative
b. forms with final $\mathrm{i} / \mathrm{y}$
${ }^{\text {L nư-ì }} \sim{ }^{\text {L }}$ nù-y $\quad$ simple perfective 3 Sg
nû́ imperative

In some Dogon languages, 'hear' and 'enter' differ only in tones and merge in some inflectional categories where lexical tones are overridden. In TU, 'hear' is nǒ, $\mathrm{A} / \mathrm{X}$-stem nōa-, 3 Sg simple perfective ${ }^{\mathrm{L}}$ nソِ $̀-\varnothing$, so there is always a segmental difference between 'hear' and 'enter'.

### 10.1.3.3 yǐ 'see'

This verb diverges in vocalism from the few other Ci stems. The $\mathrm{A} / \mathrm{X}$-stem ya- is what we would expect from \#yと̌ or \#yǒ rather than yǐ, and several cognates in other Dogon languages
 The usual TU perfective positive for this verb is perfective-2 yì-só-.

Paradigm of 'see'
a. based on bare stem yǐ
${ }^{H L}$ [yí bèà-m-...] 'be able to'
yí-lé verbal noun
Lyì-Ø simple perfective perfective-1b or 1a
yì-só- perfective-2
yí dè- recent perfect
yì-téré-bì- experiential perfect
b. based on $\mathrm{A} / \mathrm{X}$-stem ya-
yà-lí perfective negative
yâ-m-dò-Ø imperfective 3 Sg
yá-ygò:-Ø imperfective negative 3 Sg

- imperative
- imperative negative
yà-mó-ǹ hortative


### 10.1.3.4 Other Ci verbs (tí 'send', dǐ 'carry on head')

As expected from the voicing values of the initial stops, tí 'send' is $/ \mathrm{H} /-$ melodic and dǐ 'carry on head' is /LH/-melodic, the difference being most clearly audible in the perfective-2. Given the irregularity of 'see' (preceding subsection), tí and dǐ can be taken as regular for the shape Ci.
(278) Paradigms of 'send' and 'carry on head'
'send' 'carry on head' category
a. based on bare stem Cí

| HL [tí bèà-m-...] | ${ }^{\text {HL }}$ [dí bèà-m-...] | 'be able to' |
| :--- | :--- | :--- |
| tí | dí | bare stem |
| tí-lé | dí-lé | verbal noun |
| Ltì- | ${ }^{\text {Lì̀ }}$ | simple perfective |
| tí-tì- | dí-tì- | perfective-1b |


| tí-sò- | dì-só- | perfective-2 |
| :--- | :--- | :--- |
| tí dè- | dí dè- | recent perfect |
| tí-téré-bì- | dì-téré-bì- | experiential perfect |


| tià-lí- | dià-lí- | perfective negative |
| :---: | :---: | :---: |
| tiâ-m-dò-Ø | diâ-m-dò-Ø | imperfective 3Sg |
| tiá-ŋgò:-Ø | diá-ŋgò:-Ø | imperfective negative 3 Sg |
| tiá | diá | imperative |
| tiá-lì | diá-lì | imperative negative |
| tiá-mó-ǹ | dià-mó-ǹ | hortative |

A quoted imperative form dí-dè is attested at 2022-04 @ 01:36.
Cognates of 'carry on head' like YD dì-yé, Togo Kan dùw-î., Yorno So dùy- $\hat{\text { : }}$ : suggest that this verb was originally a suffixed mediopassive, but there is no trace of this in TU. Cognates of 'send' are usually monosyllabic (e.g. Jamsay tí:) but occasionally bisyllabic (e.g. Najamba tíyé).

### 10.1.3.5 Suppletive verb 'go' (yǎy/o-)

This verb has two basic stems. On is yǎy and variants, the other is o- (tone variable).
(279) Paradigm of 'go'
a. based on bare stem yǎy
${ }^{H L}$ [yây bèà-m-...] 'be able to'
yáy-lé verbal noun
Lyày-Ø simple perfective 3 Sg
Lyà- simple perfective ( $1 \mathrm{Sg}^{\mathrm{L}}$ yà-m)
yǎy-yà- ~ yé-yà- perfective-1a
yày-só- perfective-2
yǎy dè- recent perfect
yày-téré-bì- experiential perfect
b. based on suppletive $\mathrm{A} / \mathrm{X}$-stem o-
ò-lí- perfective negative
ô-m-dò-Ø imperfective
ó-ŋgò:-Ø imperfective negative
ó-lì imperative negative
c. irregular-da augment
yà-dá imperative
Lyà-dà: simple perfective 3 Pl
d. irregular hortative
ńbó-ǹ hortative

The perfective-1a is shown here, but perfective-1b occurs in the collocation íý́ yăy-tì- or kj̀ró yăy-tì-, both meaning '(go) play the board game'.
yǎy 'go' and zăy 'convey' (\$10.1.3.8) share paradigmatic irregularities. Imperative suffix -da is limited to these two verbs (yà-dá, zá-dà). yǎy has the same d increment in 3Pl perfective yá-dà: 'they went'. zǎy has irregular A/X-stem zo- parallel to irregular A/X-stem o- for 'go'. One could consider the possibility that o- as 'go' allostem is an ablauted (rather than suppletive) stem. Historically, however, o- may derive entirely or in part from an unrelated 'go' verb.

### 10.1.3.6 bě: 'get’

This is a simple transitive meaning 'get, obtain'. It is also used as the final verb in a direct verbchain in the sense 'be able to' (§15.1.4.1). The most common perfective positive forms are recent perfect bě: dè- and perfective-2 bè:-só-. The paradigm (280) is regular for Ce: verbs.
(280) Paradigm of bě: 'get'
a. based on bare stem bě:

| ${ }^{\text {LL }}[\mathrm{b} \hat{\text { el }}$ : bè̀̀-m-...] | 'be able to' |
| :---: | :---: |
| bé:-lé | verbal noun |
| ${ }^{\text {L }} \mathrm{b}$ è: | simple perfective |
| bě:-tì- | perfective-1b |
| bè:-só- | perfective-2 |
| bě: dè- | recent perfect |
| bè:-téř́-bì- | experiential perfect |

b. based on A/X-stem bea- (variants with bea- and bia-)
bèà-lí- perfective negative
béà-m-dò-Ø imperfective 3Sg
béá-ygò:-Ø imperfective negative 3 Sg
béá imperative
béá-lì imperative negative
bèà-mó-ǹ hortative

Surviving traces of an original bisyllabic form *bèlé include mediopassive bèl-í: ‘be gotten’. Cognates include YD bèlé and Jamsay bèré.

## 10．1．3．7 z ：̌：＇bring＇

Except as noted below，the paradigm is regular for／LH／－melodic Ce：stems，see（274－275）in §10．1．3．1．2．
（281）Paradigm of zě：＇bring＇（for zé－dè see comments below）
a．based on bare stem $z \check{\varepsilon}$ ：
${ }^{H L}[z \hat{\varepsilon}:$ bèà－m－．．．］＇be able to＇
zé：－lé verbal noun
${ }^{\mathrm{L}}$ zè：－$\quad$ simple perfective
zと̌：－tì－perfective－1b
zè：－só－perfective－2
zと̌：dè－recent perfect
zè：－téré－bì－experiential perfect
b．based on A／X－stem zea－（variants zea－，zia－）
zèà－lí－perfective negative
zéà－m－dò－Ø imperfective 3 Sg
zéá－ŋgò：－Ø imperfective negative 3 Sg
zéá imperative
zéá－lì imperative negative
zèà－mó－ǹ hortative

The common perfective－positive system form is perfective－1b zと̌：－tì－．
The nonpast anterior different－subject subordinator nè combines irregularly with＇bring＇as ${ }^{H L}$ Zé－dè nè（2022－04＠01：10）．Likewise，the same－subject subordinator gín combines with it as zé－dè gín（2015－01＠03：56，2015－06＠02：48）．The form zérè，possibly an archaic perfective，occurs in the somewhat opaque greeting formula ámbá ú zéř̀＇God brought you （back）！＇said to a returning traveler（§19．6）．

These irregularities are the last remaining indirect traces of an original two－verb compound， better preserved in Donno So．This was the combination of＇take，pick up＇，cf．TU ž̌＇（man） marry（woman）＇，plus＇come＇（TU wǒ：）．The＇convey＇verb described just below had a similar origin．

## 10．1．3．8 zǎy／zo－＇convey，take（sth sw）＇

This verb functions roughly as the causative of yǎy／o－＇go＇，and the two verbs share some unutual paradigmatic features．

The paradigm is（282）．
(282) Paradigm of zǎy/zo- 'convey'
a. based on bare stem zǎy
${ }^{\text {HL }}$ [zây bè̀à-m-...] 'be able to'
záy-lé verbal noun
${ }^{\mathrm{L}}$ zày- simple perfective
zǎy-tì- perfective-1b
zày-só perfective-2
zǎy dè- recent perfect
zày-téré-bì- experiential perfect
b. based on irregular A/X-stem zo-
zò-lí-
zô-m-dò-Ø
zó-ทgò:-Ø
zó-lì
zò-mó-ǹ
c. irregular -da augment
zá-dà imperative
${ }^{\mathrm{L}}$ zà-dà: $\quad$ simple perfective 3 Pl

Comparative data show that 'convey, take' had a two-verb composite origin combining 'take, pick up', cf. TU zž '(man) marry (woman)', plus 'go'. This was parallel to 'take, pick up' plus 'come' as the origin of 'bring' (preceding subsection). The bipartite structure in both cases is best preserved in Donno So.

### 10.1.3.9 Cvn ~ Cvni verb stems

The verbs tún 'put (sth, somewhere)' or 'don, put on (garment)', gǎn 'put/pour in', and kán 'do' have Cvn shapes, except in the simple perfective which ends in i (shifting to $u$ next to suffixal labials). Cvn is especially clear in the perfective negative, whose suffix takes the form -díinstead of -lí- for these verbs to avoid an nl cluster (§3.4.5.5). In the imperfective, /Cर̂n-m-/ is usually simplified to Cv́-m̀-, though for 'do' a variant kárnù-m- is attested.
a. 'put'

| Ltùnì- | simple perfective |
| :--- | :--- |
| tún-tì- | perfective-1b |
| tùn-dí- | perfective negative |
| tû-m-dò-Ø | imperfective $3 S g$ |
| tún-gò:-Ø | imperfective negative $3 S g$ |
| tún | imperative |

b. 'put in'

| L gàrnì̀ | simple perfective |
| :--- | :--- |
| gàn-tì- | perfective-1b |
| gàn-dí- | perfective negative |
| gâ-m-dò- | imperfective 3Sg |
| gán-gò:- | imperfective negative 3 Sg |
| găn | imperative |

c. ‘do’
${ }^{\mathrm{L}}$ kàrnì- $\quad$ simple perfective
kán-tì- perfective-1b
kàn-dí- perfective negative
kâ-m-dò-Ø imperfective $3 \mathrm{Sg} \quad$ variant kár"ù-m-dò-Ø
kán-gò:-Ø imperfective negative 3 Sg
kán imperative

The simple perfective paradigm is in (284). In the 3Sg the final vowel is clearly $i$ rather than $u$ in both paradigms. In questions it is lengthened and has rising tone, as in àndí tùnǐ:- $\varnothing$ 'where did he/she put it?'.
(284) 3 S

| 3 Sg | ${ }^{\text {L tùnì-ø }}$ | Lgàr ${ }^{\text {nì- }}$ - |  |
| :---: | :---: | :---: | :---: |
| 3 Pl | ${ }^{\text {L }}$ (ùn-à: | ${ }^{\text {L gàr }}$-à | ${ }^{\text {L }}$ kar ${ }^{\text {n }}$-à: |
| 1Sg | ${ }^{\text {L }}$ tùnù-m | ${ }^{\text {L }}$ gàr ${ }^{\text {nù-m }}$ | ${ }^{\text {k }}$ kàr ${ }^{\text {nù-m }}$ |
| 2Sg | ${ }^{\text {L }}$ tùnù-w ${ }^{\text {n }}$ | ${ }^{\text {L }}$ gàr ${ }^{\text {nù }}$ - $\mathrm{w}^{\text {n }}$ | ${ }^{\text {L }}$ kàr ${ }^{\text {nù }}$-w ${ }^{\text {n }}$ |
| $1 \mathrm{Pl} / 2 \mathrm{Pl}$ | ${ }^{\text {L }}$ tùnì- ${ }^{\text {n }}$ | ${ }^{\text {L }}$ gàr ${ }^{\text {nil- }} \mathrm{y}$ n | ${ }^{\text {L }}$ kàr ${ }^{\text {nie-y }}{ }^{\text {n }}$ |

Distantly related to kán 'do' is the high-frequency form kár"à in perfective positive relatives (§14.4.1).

### 10.1.3.10 Cvy ~Cvyi and Cv:y ~ Cv:yi stems

There are a number of verb stems that appear in the form Cvy or $\mathrm{Cv}: \mathrm{y}$, both word-finally and presuffixally, except that the simple perfective ends in i (Cvyi, Cv:yi). These verbs are listed in (285a-c).
a. Cर́y(î),/H/-melodic
áy(í) 'uproot' (Pfv-1b áy-tì-)
áy(í) 'become tired’ (Pfv-1a áy-yà-)
póy(í) 'ferment'
b. Cv̌y ~ Cz̀yí, /LH/-melodic
dăy/dàyí 'cover'
lăylàyí 'taste (v)'

```
gǒyn/gòyní 'wait for'
wăy/wàyí 'cause to overflow'
```

c. $\mathrm{Cv}: \mathrm{y}(\mathrm{i}), / \mathrm{H} /$-melodic
pé:y(î) 'sew'
The situation is similar to that with $\operatorname{Cvn}(\mathrm{i})$ verbs. However, it is much easier to distinguish Cvn from Cvni than it is to distinguish Cvy from Cvyi shapes, especially since medial and final syllables are in metrically weak positions that favor either partial reduction or full syncope of short high vowels. In the sample paradigm (286) for lǎy 'taste', one can argue that e.g. perfective negative lày-lí- is really làyì-lí- with weakly pronounced or fully syncopated medial vowel. The best evidence that bisyllabic layi- is structurally basic is that the final i in $3 \mathrm{Sg}-$ subject simple perfective ${ }^{L}$ lày(i)-Ø is prolonged in questions to accommodate the extra final H tone (§13.2.1.2). 'What did he/she taste?' is j̀jé làyǐ:-Ø.
(286) Paradigm of 'taste'

| HL $[$ lây bèà-m-...] | 'be able to' <br> verbal noun <br> láy-lé |
| :--- | :--- |
| Llàyì-Ø | simple perfective |
| lǎy-tì- | perfective-1b |
| lày-ś- | perfective-2 |
| lăy dè- | recent perfect |
| lày-tદ́ŕ́-bì- | experiential perfect |
| lày-lí- | perfective negative |
| lây-m-d̀̀-Ø | imperfective |
| láy-ngò:-Ø | imperfective negative 3Sg |
| láy | imperative |
| láy-lì | imperative negative |
| lày-mó-ǹ | hortative |

The irregular motion and transfer verbs yǎy/o- 'go' (§10.1.3.5) and zăy/zo- 'convey' (§10.1.3.8) have superficially similar Cay segmental shape in part of their paradigms, but unlike lăy/làyí 'taste' they behave like true monosyllabics. They do not have the extra final i in the 3 Sg simple perfective, even in questions: àndí 'yàý- $\varnothing$ 'where did he/she/it go?', àndí 'zàý-Ø 'where did he/she convey (it)?'.

A number of Cv verbs have an allomorph Cvy- before perfective-1a -yà-, as in gǒy-yày- $\varnothing$ 'he/she/it exited' from gǒ, see (302a) in §10.2.1.2. One could alternatively transcribe gǒ-yyày-Ø-. The verb nú 'enter' has 3 Sg simple perfective ${ }^{\text {L }}$ nù-y ( ${ }^{\text {L nư-ì) and imperative nụí }}$ (§10.1.3.2).
ní: 'sleep' might alternatively be represented as níy, but there is no compelling evidence for or against this (§10.1.3.1.2).

### 10.1.3.11 nCv- verb (ńdí 'give')

The only verb stem of this shape is ńdí 'give'. It is treated as bisyllabic, as seen by the tone sequence in e.g. 3 Sg imperfective ńdà-m-dò-Ø. The $\mathrm{A} / \mathrm{X}$-stem has a-vowel.
(287) Paradigm of 'give'
a. based on bare stem ńdí

| ńdí | bare stem |
| :--- | :--- |
| ńdí-lé | verbal noun |
| L̀̀dì- | simple perfective |
| ńdí-tì- | perfective-1b |
| ńdí-sò- | perfective-2 |
| ńdí dè- | recent perfect |
| ńdí-téré-bì- | experiential perfect |

b. based on A/X-stem nda-
ǹdà-lí- perfective negative
ńdà-m-dò-Ø imperfective 3 Sg
ńdá-ygò:-Ø imperfective negative 3 Sg
ńdá imperative
ńdà-lì imperative negative
ńdá-mó-ǹ hortative

### 10.1.3.12 Underived bisyllabic stems

The majority of underived verb stems are bisyllabic. CvCv is common, followed by CvCCv , then $\mathrm{Cv}: \mathrm{Cv}$, then $\mathrm{Cv}: \mathrm{CCv}$. The initial C position may be vacant. Medial CC clusters are mostly homorganic nasal-stop clusters $\{\mathrm{mb}$ nd $\mathrm{\eta g}\}$ which behave prosodically like simple consonants.

As with mono- and trisyllabic stems, there are two lexical melodic classes, /H/ and /LH/. Stems beginning with a voiceless obstruent are $/ \mathrm{H} /$, those beginning with a voiced obstruent are $/ \mathrm{LH} /$, and those beginning with sonorants or with no consonant can be either $/ \mathrm{H} / \mathrm{or} / \mathrm{LH} /$ (lexical choice). The melody is preserved in positive perfective forms, but it is partially or fully overridden in some other inflectional categories.

There are two main classes of verbs based on vocalism: final-nonhigh-vowel and final-high-vowel verbs. Bimoraic stems $(\mathrm{CvCv}, \mathrm{CvNCv})$ can belong to either category. Heavier stems are of the final-high-vowel type.

### 10.1.3.13 Bisyllabic final-nonhigh-vowel verbs

These verbs have a final nonhigh vowel, which may be $[-A T R]\{\varepsilon \rho\},[+A T R]\{\mathrm{e} o\}$, or low vowel a. The latter behaves as [-ATR]. [+ATR] verbs are in the minority. There are strict
harmonic restrictions on the pairing of first and final vowels in nonmonosyllabics. Stem shapes are CvCv and CvNCv with homorganic nasal-stop medially.
(288) Vowel sequences for final-nonhigh-vowel CvCv verbs
a. identical non-high vowels
$\mathrm{CeCe}, \mathrm{CeC} \mathrm{\varepsilon}, \mathrm{CaCa}, \mathrm{C} \mathrm{C} 0, \mathrm{CoCo}$
b. high vowel plus mid-height vowel agreeing in backness
$\mathrm{CiCe}, \mathrm{CiC} \mathrm{\varepsilon}, \mathrm{CuC}, \mathrm{CuCo}$

In the $\mathrm{A} / \mathrm{X}$-stem, which occurs in imperfective, perfective negative, and some other inflected forms, the [-ATR] stems shift the final vowel to a while the [+ATR] stems keep their final e or o. Shown in (289) are the bare stem as in perfective positives and in verb chains, the A/X-stem as in the imperfective and perfective negative, and the 3 Sg simple perfective featuring the $\mathrm{E} / \mathrm{I}-$ stem.
(289) Final-nonhigh-vowel verbs ( CvCv )
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss

[+ATR] CvNCv stems with homorganic nasal and voiced stop behave like [+ATR] CvCv stems (290). However, [-ATR] stems of CvNCv shape belong to the final-high-vowel type, see (292a) in the following subsection.
(290)

Final-nonhigh-vowel verbs (CvNCv)
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR] including CaNCa
(none)
b. [+ATR]

CeNCe and CoNCo émbé embe- Lèmbè-Ø 'be stronger than' tómbó tombo- ${ }^{\text {L tòmbè- } \varnothing ~ ' j u m p ' ~}$
CiNCe and CuNCo $\begin{array}{ll}\text { nìngé } & \text { ninge- } \\ \text { púngó } & \text { pungo- }\end{array}$
${ }^{\text {L }}$ nìngè- Ø 'cook (sauce)'
Lpùngè-Ø 'hit'

### 10.1.3.14 Bisyllabic final-high-vowel verbs

Final-high-vowel verbs include some bisyllabics, as well as all trisyllabics (which are covered in $\S 10.1 .3 .15$ below).

CvCv verbs of the final-high-vowel class are illustrated in (291). [+ATR] stems are rare. The final high vowel is basically $i$, but is heard as $u$ (or sometimes an indistinct intermediate vowel) when the first stem vowel is back rounded. The final vowel is always in the 3 Sg simple perfective ( $\mathrm{E} / \mathrm{I}$-stem), and if the verb has a final high vowel in the $\mathrm{A} / \mathrm{X}$-stem (e.g. imperative) this too is always i. Most [-ATR] stems with medial $r$ show final a in the A/X-stem (291a), while other [-ATR] stems keep the high short vowel (291b). This peculiarity of Cvri stems may have originated as a device to avoid rl clusters (after syncope) in the perfective negative (§10.2.3.1).
(291) Final-high-vowel verbs ( CvCi )
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR] with medial r , including Cari A/X-stem Cvra

| jèrí | jera- | ${ }^{\text {L }}$ jèrì-Ø | 'look' |
| :---: | :---: | :---: | :--- |
| sírí | sira- | ${ }^{\text {L }}$ sìrì-Ø | 'cook' |
| yàrí | yara- | ${ }^{\text {L }}$ yàrì-Ø | 'untie' |
| A/X-stem | Cvri |  |  |
| párí | pari- | L pàrì-Ø | 'ladle out (sauce)' |

b. [-ATR] with medial C other than r , including (?) CaCi

| dèlí | deli- | ${ }^{\text {L dèlì̀-Ø }}$ | 'put on (fire)' |
| :--- | :--- | :--- | :--- |
| óbú | obu- | ${ }^{\text {L}} \mathrm{y}$ bì-Ø | 'lay out' |

c. [+ATR] tórú toro- ${ }^{\text {L }}$ tòrì̀-Ø 'authorize'
d. high vowels only

| gùbú | gubu- | ${ }^{\text {L gùbì-Ø }}$ | 'hang up' |
| :--- | :--- | :--- | :--- |
| píjí | piyi- | ${ }^{\text {L pìnì-Ø }}$ | 'shut (door)' |
| nùyú | nuyu- | ${ }^{\text {L }}$ nùyì-Ø | 'sing' |

In (291d), the ATR value cannot be determined directly since all stem vowels are high even in the A/X-stem. For 'shut (door)', one can infer [-ATR] from the reversive pííi-lí 'open' which has final a in the A/X-stem (imperative píyí-lá 'open!').
[-ATR] CvNCv stems belong to the final-high-vowel type (292). [+ATR] CvNCv stems have a different vocalism, see (290b) in the preceding subsection.
(292) Final-high-vowel verbs (CvNCi)
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR] including CaNCi

| bèngí | bengi- | ${ }^{\text {L }}$ bèngì-Ø | 'preserve' |
| :---: | :---: | :---: | :---: |
| dàmbí | dambi- | ${ }^{\text {L }}$ dàmbì-Ø | 'push' |
| màndí | mandi- | ${ }^{\text {L }}$ màndì-Ø | 'laugh' |
| námbí | nambi- | Lnàmbì-Ø | 'step on' |
| nìndí | nindi- | ${ }^{\text {L }}$ nìndì-Ø | 'breathe' |
| óndú | ondu- | ${ }^{\text {L }}$ ¢̀ndì-Ø | 'build' |
| síjjí | sinji- | ${ }^{\text {L }}$ Sìnjì-Ø | 'stack up' |
| zòngú | zongu- | Lzz̀̀gì-Ø | 'treat (medically)' |

b. [+ATR]
(none attested)

All underived or derived $\mathrm{Cv}: \mathrm{Cv}$ and $\mathrm{Cv}: \mathrm{NCv}$ stems are of the final-high-vowel type (293). This is also the case with trisyllabics, showing that once a prosodic weight threshold has been exceeded a verb must take a final high vowel at least in the bare stem and related forms. The [-ATR] stems have final a in the A/X-stem, while the rare [+ATR] stems have o or e.
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR] including $\mathrm{Ca}: \mathrm{Ci}$

| Cv:Cv |  |  |  |
| :---: | :--- | :--- | :--- |
| pá:mí | pa:ma- | ${ }^{\text {L pà: mì-Ø }}$ | 'understand' |
| kó:lí | ko:la- | ${ }^{\text {L }}$ kò:lì-Ø | 'buy back' |
| só:rí | so:ra- | ${ }^{\text {L }}$ sò:rì-Ø | 'weave broadly' |
| Cv:NCv |  |  |  |
| mà:ndí | ma:nda- | ${ }^{\text {L }}$ mà:ndì-Ø | 'think' |
| mò:ndú | mэ:nda- | ${ }^{\text {L}}$ mò:ndì-Ø | 'assemble (them)' |
| nó:ndú | no:nda- | ${ }^{\text {L nò:ndì-Ø }}$ | 'ignite' |
|  |  |  |  |
| b. [+ATR] |  |  |  |
| sú:-ndú | su:-ndo- | ${ }^{\text {L }}$ sù:-ndì-Ø | 'take down' |

### 10.1.3.15 Trisyllabic stems

All trisyllabic stems are of the final-high-vowel type. The bare stem ends in (or u by rounding assimilation), and this form occurs before perfective positive suffixes and (always as i) in the simple perfective. Most such verbs are, or originated as, suffixal derivatives (e.g. CvCv-lí reversives, CvCv -rí transitives). In the $\mathrm{A} / \mathrm{X}$-stem, the [-ATR] stems have final a regardless of the final consonant (294a), while the [+ATR] stems have final e or o vowel (294b). Verbs of the shape Cvlli/u, whether or not transparently suffixal, are treated as trisyllabic (294c), which they likely originated as before the medial vowel was syncopated. Verbs whose bare stem contains only high vowels reveal their ATR-harmonic value in the $\mathrm{A} / \mathrm{X}$-stem.
(294) Final-high-vowel verbs (CvCvCi)
bare $\mathrm{A} / \mathrm{X}$-stem 3 Sg perfective gloss
a. [-ATR]

| cégílí | cegila- | L cègìlì-Ø | 'carve' |
| :--- | :--- | :--- | :--- |
| dàgì-lí | dagila- | ${ }^{\text {L dàgì-lì-Ø }}$ | 'unlock' |
| ségírí | segira- | ${ }^{\text {L }}$ sègìrì̀-Ø | 'encounter' |
| sóngútlú | songu-la- | ${ }^{\text {L }}$ sòngù-lì-Ø | 'undo, take apart' |
| ínjílí | injila- | ${ }^{\text {Lìjjìlì-Ø }}$ | 'get up' |

bare stem has only high vowels
bìdìgí bidiga- 'bìdìgì-Ø 'perform magic'
dìmbì-rí dimbi-ra- ${ }^{\text {L }}$ dìmbì-rì-Ø 'take along, cause to follow'
púpúlú pupula- ' pùpùlì-Ø 'rub lightly'
símbírí simbira- ${ }^{\text {L }}$ sìmbìrì- Ø 'flip over'

| b. [+ATR] |  |  |  |
| :---: | :---: | :---: | :---: |
| péndí-gí | pendi-ge- | ${ }^{\text {L }}$ pèndì-gì-Ø | 'break, snap' |
| pódígí | podugo- | ${ }^{\text {L pòdìgì-Ø }}$ | 'detonate' |
| bare stem has only high vowels |  |  |  |
| zìgìbí | zigibe- | ${ }^{\text {Lzìgìbì-Ø }}$ | 'shake' |
| c. Cvlli/u stems |  |  |  |
| [-ATR] |  |  |  |
| dàl-lí | dal-la- | ${ }^{\text {L }}$ dàl-lì-Ø | 'uncover' |
| [+ATR] |  |  |  |
| púllú | pullo- | ${ }^{\text {L }}$ pùllì-Ø | 'pick off ${ }^{\prime}$ |

### 10.2 Positive indicative AN categories

### 10.2.1 Perfective positive system (including perfect)

The simple perfective, which lacks a suffix, occurs mainly in defocalized contexts, i.e. following a more or less focal constituent. The simple perfective contrasts with suffixally marked perfectives (Pfv1a, Pfv1b, Pfv2), which occur in the absence of such a focal constituent. All verbs can take the perfective-2. Verbs broadly divide into two semantically based covert classes, some taking perfective-1a and others taking perfective- 1 b . The perfective positive of TU is strikingly similar to that of Jamsay, and quite unlike those of the western Dogon languages that are genetically subgrouped with TU (Najamba-Kindige, YD).

There is also a recent perfect and an experiential perfect, both involving auxiliary-like elements.

### 10.2.1.1 Simple perfective ( $\mathrm{E} / \mathrm{I}$-stem in 3 Sg )

The simple (or unsuffixed) perfective occurs mainlyu in two constructions in perfective positive contexts, with slightly different forms. One is a defocalized perfective that requires at least one preceding constituent or tightly phrased subordinated clause (§13.1). The other is in combination with dè 'if/when' (§16.1.1).

The simple perfective is the regular perfective positive form when there is a preceding focalized nonsubject constituent. In other words, the verb is part of the defocalized background and/or it is prosodically dependent on preceding elements. Here "focalization" is interpreted loosely, as almost any constituent preceding the verb can trigger verb defocalization, even when the context and free English translation do not flag any special focus. The (conjugated) simple perfective is not used when the subject is focalized. In this case, a related but unconjugated subject-focus form with final - $\grave{\text { : }}$ is required ( $\S 13.1 .1 .4$ ).

For verbs like 'abandon' and 'die' that end in a nonhigh vowel, the lexical vocalism is retained in the $1 \mathrm{st} / 2 \mathrm{nd}$ person forms of the simple perfective. The 3 Sg form fronts final $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ to $\{\varepsilon \mathrm{e}\}$ and final a to $\varepsilon$, but keeps nonfinal vowels intact. This is the $\mathbf{E} / \mathbf{I}-\mathbf{s t e m}$. The final-vowel
shift is audible with 'abandon' but not for 'die', which already ends in $\varepsilon$. For verbs that end in a high vowel, like 'build', the 3Sg form ends in i, but this is just the stem-final high vowel that also appears before 1st/2nd person suffixes. This $i$ is subject to a low-level assimilation to $u$ before $-\mathrm{w}^{\mathrm{n}}$. When a 3 Sg -subject simple perfective is followed by dè 'if', it does not shift into the E/I-stem, see (297) below.

The 3Pl form ends in -à:, arguably the contraction of a suffix /-a/ with one or other of the stems of the verb. Since the difference between E/I-stems and other stems of a given verb is expressed by the stem-final vowel, contraction with the suffixal vowel in the 3 Pl form makes it indeterminate which stem is involved. The verbs 'go' and 'take away, convey' share an augmented 3Pl form with -dà: instead of the usual -à:, see (299) below. The same two verbs share a similar d-extension in the imperative.

Paradigms of the defocalized simple perfective when not followed by dè 'if' are in (295).
Simple perfectives (defocalized)

| category | 'abandon' | 'die' | 'build' |
| :---: | :---: | :---: | :---: |
| 1Sg | ${ }^{\text {L }}$ dògò-m | ${ }^{\text {L }}$ tibè-m | ${ }^{\text {L }}$ ¢̀ndù-m |
| 1Pl | ${ }^{\text {L }}$ dògò- ${ }^{\text {n }}$ | ${ }^{\text {L }}$ tibè- $\mathrm{y}^{\mathrm{n}}$ | ${ }^{\text {Lòndì- }}{ }^{\text {n }}$ |
| 2Sg | ${ }^{\text {L }}$ dògò-w ${ }^{\text {n }}$ | ${ }^{\text {L }}$ tibè $-w^{\text {n }}$ | ${ }^{\text {L }}$ ¢ ${ }^{\text {dundù-w }}$ |
| 2Pl | ${ }^{\text {L }}$ dògò- $\mathrm{y}^{\text {n }}$ | ${ }^{\text {L }}$ itbè- $\mathrm{y}^{\text {n }}$ | ${ }^{\text {Lòndì- }}$ y ${ }^{\text {n }}$ |
| 3Sg/Inan | ${ }^{\text {L }}$ dògè-Ø | ${ }^{\text {L }}$ tibè-Ø | ${ }^{\text {L }}$ òndì-Ø |
| 3 Pl | ${ }^{\text {L }}$ dòg-à: | ${ }^{\text {L }}$ tib-à: | ${ }^{\text {L }}$ ¢̀nd-à: |

In a content (WH) interrogative clause and under some conditions in polar interrogatives, if no other overt question marker is present, a final H -tone is added to the defocalized simple perfective. It combines with a final L-toned syllable as a rising tone. A final short vowel is lengthened to accommodate the contoured tone (§3.6.4.1).

```
ǹjé Lòndǐ:-Ø
what build.Pfv-3SgSbj.Q
'What did he/she build?' (< 'òndì-Ø)
```

A second tonal form is used in isolation, and to a limited extent in a clause with preceding constituents (especially unfocalized setting adverbials and linking phrases like kú ní: 'then, at that point'). Here the simple perfective is allowed, though less common than suffixally marked perfectives. In these contexts, the simple perfective verb has \{HL\} overlay for all subject categories. The segmental form is as in (295) above. Thus dógè-Ø ‘he/she abandoned', dógò-m 'I abandoned', and so forth.

The third form of the simple perfective occurs before clause-final dè 'if' in conditional antecedents (297). A final H -tone is added; it appears on the pronominal-subject suffix for $1 \mathrm{st} / 2$ nd persons, and on dè ( $\rightarrow$ dé) in the third person forms.

| category | 'abandon' | 'die' | 'build' |
| :---: | :---: | :---: | :---: |
| 1Sg | ${ }^{\text {L }}$ dògò-ń dè | ${ }^{\text {L }}$ tibè̀-ḿ dè | ${ }^{\text {Lòndù-ḿ dè }}$ |
| 1P1 | ${ }^{\text {L }}$ dògò- ${ }^{\text {n }}$ dè | ${ }^{\text {L }}$ tìbè- ${ }^{\text {n }}$ dè | ${ }^{\text {Lòndì-ǵn }}$ dè |
| 2 Sg | ${ }^{\text {L }}$ dògò- $\hat{w}^{\text {n }}$ dè | ${ }^{\text {L }}$ tibè̀-w ${ }^{\text {n }}$ dè | ${ }^{\text {Lòndù-wn }}$ dè |
| 2P1 | ${ }^{\text {L }}$ dògò- ${ }^{\text {n }}$ dè | ${ }^{\text {L }}$ tibè-y ${ }^{\text {n }}$ dè | ${ }^{\text {Lòndì-ýn }}$ dè |
| 3Sg/Inan | ${ }^{\text {L }}$ dògò-Ø dé | ${ }^{\text {L }}$ tìbè-Ø dé | ${ }^{\text {Lòndì-Ø dé }}$ |
| 3 Pl | ${ }^{\text {L }}$ dòg-à: dé | ${ }^{\text {L }}$ tib-à: dé | ${ }^{\text {L }}$ \̀nd-à: dé |

In both the defocalized and conditional constructions, stem-final [+ATR] o optionally
 optionally pronounced ${ }^{\text {L }}$ bùndè- $\mathrm{y}^{\mathrm{n}}$, and intermediate pronunciations can be heard. This is unrelated to the systematic shift between lexical segmental form and the $\mathrm{E} / \mathrm{I}$-stem in the 3 Sg .

Forms of 1 Sg and $3 \mathrm{Sg} /$ Inan simple perfectives from monosyllabic stems are in (298). Some of the 3 Sg defocalized and 3 Pl present diphthongs are rare elsewhere in the language (§3.3.8). For Cv stems, some of the diphthongs are monomoraic, beginning with desyllabified nonhigh vowels $\{0 \mathrm{o}$ e a $\}$. For Cv : stems, the corresponding diphthongs are bimoraic, beginning with $\{0 \rho \varepsilon \mathrm{a}$ \} and ending with a distinct but tautosyllabic vowel. There are also two 3Sg forms ending in -y after a monomoraic Cu or Ci stem ( ${ }^{\mathrm{L}}$ nù-y, ${ }^{\mathrm{L}} \mathrm{y}$ ì-y); this is a further variant of the E/I-stem.

$$
\begin{equation*}
\text { gloss bare } 1 \mathrm{Sg} \text { defoc } \quad \text { 'if' } 1 \mathrm{Sg} \quad 3 \mathrm{Sg} \text { defoc } \quad \text { 'if' } 3 \mathrm{Sg} \quad 3 \mathrm{Pl} \tag{298}
\end{equation*}
$$

a. Cv

| 'enter' | nú | ${ }^{\text {L }}$ nù-m | ${ }^{\text {L }}$ nù-ḿ dè | ${ }^{\mathrm{L}} \text { nù-y }$ ~ Lnư-ì | ${ }^{\text {L nù-Ø dé }}$ | nư-à: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'see' | yǐ: | ${ }^{\text {L }}$ yìm | ${ }^{\text {L }}$ yì-ḿn dè | ${ }^{\text {L }}$ yì-y | ${ }^{\text {L }} \mathrm{yì}$-Ø dé | ${ }^{\text {L }}$ yilià |
| 'get old' | p | ${ }^{\text {L }} \mathrm{p}$ è-m | ${ }^{\text {L }} \mathrm{L}$ ¢̀-ḿn dè | ${ }^{\text {L }} \mathrm{L}$ ¢̀-Ø | ${ }^{\text {L }} \mathrm{L}$ ¢̀-Ø dé | ${ }^{\mathrm{L}} \mathrm{p}$ ¢ |

overtly distinct E/I-stem (defocalized 3 Sg)

| 'shout' | cé | ${ }^{\text {L }}$ cè-m | ${ }^{\text {L }}$ cè--ḿ dè | ${ }^{\text {L cieiè-Ø }}$ | ${ }^{\text {L }}$ cè-Ø dé |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 'exit (v)' | gǒ | ${ }^{\text {L }}$ gò-m | ${ }^{\text {L }}$ gò-ḿn dè | ${ }^{\text {L goè- }}$ - | ${ }^{\text {L }}$ gò-Ø dé |
| 'sow' | tó | ${ }^{\text {L }}$ ¢̀̇-m | ${ }^{\text {L }}$-̀̀-ḿ dè | ${ }^{\text {L }}$ ¢ ${ }_{\text {coè- }}$ | ${ }^{\text {L }}$ L̀̇-Ø dé |
| 'shave' | ká | ${ }^{\text {L }}$ Kà-m | ${ }^{\text {L }}$ kà-ḿ dè | ${ }^{\text {L }}$ ką̀ | ${ }^{\text {L }}$ kà-Ø |

b. Cv:

| 'bring' | zě: | ${ }^{L}$ zè:-m | ${ }^{L}{ }_{z e ̀}$ :-ḿd ${ }^{\text {dè }}$ | $\begin{aligned} & { }^{{ }^{L} \text { ziè- }} \\ & \sim^{\text {L }} \text { zè: } \end{aligned}$ | ${ }^{\mathrm{L}} \mathrm{z}$ : :-Ø dé | ${ }^{\text {Lzè- }}$ à |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| eeze’ | sé: | ${ }^{\text {L }}$ sè:-m | ${ }^{\text {L }}$ sè:-ḿ dè | ${ }^{\text {L }}$ sè:-- ${ }^{\text {d }}$ | ${ }^{\text {L }}$ sè:-- ${ }^{\text {de }}$ dé | ${ }^{\text {L }}$ sè-à: |
| 'sleep' | ní: | ${ }^{\text {L }}$ ì:-m | ${ }^{\text {L }}$ ìi--ḿ | ${ }^{\text {L nì:-- }}$ | ${ }_{\text {L }}^{\text {nì:- }}$ - ${ }^{\text {dé }}$ | ${ }^{\text {L }}$ nì |

overtly distinct E/I-stem (defocalized 3Sg)


In the 'if 3Sg' column, note that the special $\mathrm{E} / \mathrm{I}$-stem endings for the 3 Sg perfective are absent before dè 'if', whose own tone is raised to H . Before dè 'if', there is no clearly audible distinction between 3 Sg bà:- $\varnothing$ dé 'if he/she gathers' and 3 Pl b-à: dé 'if they gather'.

The CvC stems in (299) below must deal with how to pronounce the $1 \mathrm{st} / 2 \mathrm{nd}$ person sonorant suffixes following a stem-final consonant (whether or not the stem is analysed as lexically CvC - or as derived from / $\mathrm{CvCi}-/$ ). After Cvy-, the suffixal sonorant syllabifies, more clearly in the cases of $-y^{n}$ and $-w^{n}$ than in that of $-m$. For example, yày $-\hat{w}^{n}$ is heard as [jàjún ${ }^{n}$. Cvn- stems, however, require a brief high vowel before $-\mathrm{m}^{\prime},-\hat{w}^{\mathrm{n}}$, and $-\mathrm{y}^{\mathrm{n}}$. It is easiest to hear this in the 1 Sg forms shown for 'put' and 'put in' in (299b). In corresponding 1P1, 2Sg, and 2Pl forms (i.e. with a semivowel as suffix), one also hears a (homorganic) short high vowel, and therefore an $<\mathrm{LH}>$ tone on the final syllable, as in 2 Sg tùnù- $\mathrm{w}^{\mathrm{n}}$, phonetic [tùnù: ${ }^{\mathrm{n}}$ ], and in $1 \mathrm{Pl} / 2 \mathrm{Pl}$ tùn-ì̀n, phonetic [tùnì:n]. The analytical issue is whether underlying /túní-/ fails to delete the final short high vowel in this position, or whether underlying /tún-/ is supplied with a nonlexical epenthetic vowel, see §10.1.3.9. The forms in (299) are L-toned (defocalized), but there are no segmental changes in the conditional forms with dè.
(299) Simple perfective (defocalized), CvC - stems

| bare | 1 Sg | 3 Sg | 3 Pl |
| :--- | :--- | :--- | :--- |

a. Cvy- motion verbs (with -d- augment in 3Pl)

b. Cvy- and Cvn- (arguably from bisyllabic /CvCi-/)

| lăy (làyí) | ${ }^{\text {L }}$ ày(i)-m̀ | ${ }^{\text {L lày-б }}$ | ${ }^{\text {Llày-à: }}$ | 'taste' |
| :---: | :---: | :---: | :---: | :---: |
| tún (túnú) | ${ }^{\text {L }}$ tùnù-m | ${ }^{\text {L }}$ tùnì-Ø | ${ }^{\text {L }}$ tùn-à: | 'put' |
| gǎn (gàní) | ${ }^{\text {L }}$ gànù-m | ${ }^{\text {L }}$ gànì-Ø | ${ }^{\text {L }}$ gàn-à: | 'put in' |

More nonmonosyllabic stems are illustrated in (300).

Simple perfective (defocalized), nonmonosyllabic stems
bare $1 \mathrm{Sg} \quad 3 \mathrm{Sg} \quad 3 \mathrm{Pl} \quad$ gloss
a. bisyllabic, final nonhigh vowel

| kédé | ${ }^{\mathrm{L}}$ kèdè-m | ${ }^{\mathrm{L}}$ kèdè-Ø | ${ }^{\mathrm{L}}$ kèd-à: | 'cut' |
| :--- | :--- | :--- | :--- | :--- |
| tábá | ${ }^{\mathrm{L}}$ tàbà-m | ${ }^{\mathrm{L}}$ tàbغ̀-Ø | ${ }^{\mathrm{L}}$ tàb-à: | 'touch' |
| zòbó | ${ }^{\mathrm{L}}$ zòbò-m | ${ }^{\mathrm{L}}$ zòbè-Ø | ${ }^{\mathrm{L}}$ zòb-à: | 'run' |

b. bisyllabic, final high vowel

| dǔy | ${ }^{\text {L }}$ dùyù-m | ${ }^{\text {L }}$ dùyì-Ø | ${ }^{\text {L }}$ dùn-à: | 'put down' |
| :---: | :---: | :---: | :---: | :---: |
| gùbú | ${ }^{\text {L }}$ gùbù-m | ${ }^{\text {L }}$ gùbì-Ø | ${ }^{\text {L }}$ gùb-à: | 'hang' |
| jèrí | Ljèrù-m | ${ }^{\text {L }}$ jèrì-Ø | ${ }^{\text {L }}$ jèr-à: | 'look' |

c. trisyllabic, final nonhigh vowel
zìgìbí $\quad{ }^{\text {L }}$ zìgìbì-m $\quad{ }^{\text {L }}$ zìgìbì-Ø $\quad{ }^{\text {L }}$ zigìb-à: $\quad$ 'shake'

### 10.2.1.2 Perfective-1a (-yà-~-à:-), perfective-1b (-tì-)

Most verbs are associated with either perfective-1a -yà-~-à:- or perfective-1b-tì-. A few verbs occur with neither; in this case, the default perfective is the perfective-2 or a form with past clitic $=$ bì-. Both the perfective- 2 and the past can be used with any verb stem. A few verbs can occur with either perfective-1a or perfective- 1 b , usually with a valency or semantic distinction.

Perfective-1a is used with basic motion verbs ('go', 'come', 'enter', 'exit', arrive', 'pass by'), stance verbs ('sit down'), deadjectival inchoatives ('become big'), and and some other verbs of a nonkinetic nature ('spend the night', 'die', 'be finished'). Most are intransitive, but a handful ('forget') are syntactically transitive. Perfective-1b is used with most transitive verbs and with some active intransitives, including verbs of thinking, speaking, and bodily function. Some morphologically mediopassive but syntactically transitive verbs ('carry', 'hold') take the perfective-1b. Basic perception verbs ('see', 'hear') and a few other non-impact transitives ('understand') do not accept either of these perfectives, and require the perfective-2 or the past clitic

Ambi-valent (labile) verbs that can be either transitive and mediopassive are distinguishable in the perfective-1 but not elsewhere. For example, zògó 'shatter' can form perfective-1a [Y zòg-â:y-Ø] 'Y (e.g. glass, calabash) shattered' and perfective-1b [X Y zògó-tì-Ø] ' X (person) shattered Y '. In other inflectional categories, the two versions of 'shatter' are not indistinguishable morphologically.
yǎy/o- 'go' has perfective-1a yǎy-yà- 'went' in its basic sense. However, in the collocation íyé yǎy/o- 'play the board game', which no longer has a necessary motion component, it is optionally treated as active or transitive, resulting in perfective-1b íyé yǎy-tì- 'played the board game' as an alternative to perfective-1a íyé yǎy-yà-.

Sample paradigms are in (301).

| category | perfective-1a | perfect |
| :---: | :---: | :---: |
| 1Sg | -à:-m ~ -yà-m | -tì-m |
| 1 Pl | -à:-y ${ }^{\text {n }}$ - -yà-y ${ }^{\text {n }}$ | -tì- ${ }^{\text {n }}$ |
| 2 Sg | -à:-w ${ }^{\text {n }} \sim-y a ̀-w^{n}$ | -tì-w ${ }^{\text {n }}$ |
| 2 Pl | -à:-y ${ }^{\text {n }} \sim-y a ̀-y^{n}$ | -tì-y ${ }^{\text {n }}$ |
| 3Sg/Inan | -à:y-Ø ~ -yày-Ø | -tì-Ø |
| 3 Pl | -à:-dà: ~ -yà-dà: | -tì-yà |

The perfective-1a variant -à:- becomes -â:- when it contracts with a stem-final H-toned vowel in an /LH/-melodic mono- or bisyllabic stem, as in variant dô-â:- 'arrived' from dǒ and yàg-â:- 'fell’ from yàgá.

The suffixal allomorphs of the perfective-1a with various types of stem are illustrated in (302). There is some fluctuation in pronunciation with Cv stems, only a few of which take the perfective-1a. Cv̌-yà- shifts to Cv̌y-yà- when the stem is /LH/-melodic. This extra y occurs optionally in tá(y)-yà- from /H/-melodic tá '(trap) spring', but was never heard with nú 'enter'. The variant forms dô-â:- and go्n-â:- in (302a) could be analysed as contractions of the fuller forms shown next to them, or else as extensions of the -à:- allomorph. The latter is regular with (non-mediopassive) bisyllabics whose stems end in a nonhigh vowel (302b). In this combination, the suffix surfaces as -à:- with /H/-melodic stems and as -â:- with /LH/-melodic stems, after contracting with the stem-final short vowel. Allomorph -yà- is also found after bisyllabics ending in i (302b), and after mediopassive -í:- (302c). All known trisyllabics that take the perfective-1a are morphological mediopassives.
(302) Perfective-1a -yà-, -à:-
stem perfective-1a gloss
a. Cv-
/H/-melodic

| nú | nú-yà- <br> tá(y)-yà- | 'enter' <br> tá |
| :--- | :--- | :--- |
| $/$ 'trap) spring' |  |  |

b. Cv:-

| ní: | ní:-yà- | 'sleep' |
| :--- | :--- | :--- |
| pé: | pé:-yà- | '(rifle) discharge' |
| wǒ: | wǒ:-yà- | 'come' |


| c. Cvy-yǎy/o- | yǎy-yà- ~ yé-yà- | 'go' |
| :---: | :---: | :---: |
| d. bisyllabic |  |  |
| final nonhigh vowel, /LH/-melodic |  |  |
| yàgá | yàg-â:- | 'fall' |
| ìlé | ìl-â:- | 'ascend' |
| wàdá | wàd-â:- | 'be left over' |
| final nonhigh vowel, /H/-melodic |  |  |
| péndé | pénd-à:- | '(bone) break' |
| súgó | súg-à:- | 'descend' |
| pódó | pód-à:- | 'be bruised' |
| lábá | láb-à:- | 'go past' |
| tíbé | tíb-à:- | 'die' |
| final i |  |  |
| táygí | táygí-yà- | 'become' |
| e. mediopassive |  |  |
| cíll-í:- | cíll-í:-yà- | 'be resolved' |
| kábíl-í:- | kábíl-í:-yà- | 'be separated' |
| bár(í)m-í:- | bár(1́)m-í:-yà- | 'be wounded' |

It is possible that at least the -yà- allomorph of the perfective-1a is historically related to yǎy/o'go'. Prima facie evidence for this is that the 3 Sg form -yày- $\varnothing$ and especially the irregular 3 Pl form -yà-dà: have exact matches for the simple perfective of 'go' (§10.1.3.5). However, the perfective-1a is an old formation (cognates mainly in eastern Dogon languages including Jamsay and Ben Tey).

The pronominal-suffix paradigm of perfective- 1 b -tì- is in the right-hand column in (301) above. There are no special phonological interactions with the stem other than routine syncope of short high vowels after some sonorants. Monomoraic Cv̌ verbs have H-toned stem before the L-toned suffix, as in the recent perfect (but not the perfective-2 or the experiential perfect). Bimoraic C v̌: verbs show the full $<\mathrm{LH}>$-toned stem. A few examples are in (303).

| Perfective-1b -tì- |  |  |
| :---: | :---: | :---: |
| stem | perfective-1b | gloss |
| a. $\mathrm{Cv}, \mathrm{Cv}$ : |  |  |
| /H/-melodic Cv́ and Cv́: |  |  |
| ká | ká-tì | 'shave' |
| né | jé-tì- | 'eat, drink' |
| tí | tí-tì- | 'send' |
| tó: | tó:-tì- | 'pound' |



The most likely source of perfective-1b -tì- is the verb tí 'send' (§10.1.1, §10.1.3.4). Like the perfective-1a, however, the formation is old (cognates in e.g. Jamsay, Ben Tey, and Donno So).

H-toned tí can function as an auxiliary corresponding to the perfective- 1 b suffix in certain constructions. This occurs before same-subject subordinator gín in a construction that can be translated with 'before ...' (§15.2.3).

### 10.2.1.3 Perfective-2 (-sò-)

The perfective-2 (like past enclitic = bì-, see the following subsection) can occur with any verb. It is especially common with perception and mental transitives ('see', 'hear', 'understand') that do not occur in collocations with a cognate nominal object. These verbs do not allow either perfective-1a or perfective- 1 b and so require perfective- 2 or the past enclitic.

The basic form of the suffix is -sì-. Unlike perfective- $1 \mathrm{a} /-1 \mathrm{~b}$ and recent perfect suffixes, but like the experiential perfect, -sò- induces dropping of the tones of a preceding /LH/-melodic verb stem to L-toned, but the suffix itself becomes H-toned in the process. In other words, the
lexical $/ \mathrm{LH} /$ is realized over the verb plus suffix complex, with the H-tone appearing on the suffix. /H/-melodic verbs have their full H-toned form before the L-toned suffix. The perfective-2 is useful for determining the lexical tone melody of Cv stems.

Perfective-2 -sò- is etymologically identical to the quasi-verb ${ }^{\mathrm{L}}$ sò- 'have' (§10.1.1, §11.5.1). A cognate perfective-2 occurs in several (but not all) Dogon languages, e.g. Jamsay -sà-.

The paradigm is (304), with ny̌ 'hear' and tó: 'pound' representing /LH/- and /H/-melodic verbs, respectively. The 3 Pl subject form is $-s-\varepsilon$ :, not \#-son- $\varepsilon$ : .
(304) Perfective-2

| category | form | 'hear' | 'pound' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -s0-m | nò-só-m | tó:-sò-m |
| 1 Pl | -so-y ${ }^{\text {n }}$ | nò-só-y ${ }^{\text {n }}$ | tó:-sò-y ${ }^{\text {n }}$ |
| 2 Sg | $-\mathrm{s}-\mathrm{w}^{\text {n }}$ | nò-só-w ${ }^{\text {n }}$ | tó:-sò-w ${ }^{\text {n }}$ |
| 2 Pl | $-\mathrm{s} 0-\mathrm{y}^{\mathrm{n}}$ | nò-só-y ${ }^{\text {n }}$ | tó:-sò-y ${ }^{\text {n }}$ |
| 3Sg/Inan | -so-Ø | nò-só-Ø | tó:-sò-Ø |
| 3 Pl | -S- $\mathcal{\text { : }}$ | nò-s- $\hat{\text { en }}$ | tó:-s-è: |

Further examples, using the 3 Sg form, are in (305). For Cv and Cv : stems, extensive lists are given in (272) and (274) in §10.1.3.1.1-2 above.

```
verb 3Sg perfective-2 gloss
```

a. /H/-melodic stems

| síré | síré-sì-Ø | 'point at' |
| :--- | :--- | :--- |
| súgó | súgó-sò-Ø | 'descend' |
| tómbó | tómbó-sò-Ø | 'jump' |

b. /LH/-melodic stems

| ìbé | ìbè-só-Ø | 'catch' |
| :--- | :--- | :--- |
| gùló | gùlò-só-Ø | 'dig' |
| bàrá | bàrà-só-Ø | 'add' |
| zèbé | zèbè-só-Ø | curse' |
| nùyú | nùyù-só-Ø | 'sing' |
| zòygú | zòngù-só-Ø | 'treat' |

10.2.1.4 Past perfect (= bì-) as a basic past form for some verbs
= bì- is a conjugatable enclitic that is added to aspect/negation-marked verbs to shift the reference time from the moment of speaking to a past time, as in the past imperfective ('was
sweeping') or past stative ('was sitting', 'used to have'). See §10.5.1.1-6 for full coverage in this time-shifted function.

The simplest combination morphologically is the past perfect, which consists of the bare stem plus the conjugated enclitic ( $\S 10.5 .1 .3$ ). In addition to the past perfect sense ('had VPed'), this form is used as a basic past-time form ('VPed') for low-transitivity verbs that do not allow the perfective-1a or perfective-1b suffixes. Verbs of this type include yǐ 'see', nǒ 'hear', and jǐn 'say'.

For these verbs, the past perfect competes with perfective-2 -sà-, which has something of a present resultative or present perfect flavor ('has VPed', still relevant to the present) while = bì- can be used in clauses denoting events at any temporal distance from the present. For example, nó = bù-m 'I heard' can report something heard some time ago (e.g. yesterday), while perfective-2 nò-só-m might be used to report a piece of just-heard news, cf. English I have heard.

Past perfect as basic past

| category |  | 'say' |
| :---: | :---: | :---: |
| 1Sg | $=\mathrm{bu}$-m | ór(ú) $=$ bù-m |
| 1Pl | $=\mathrm{bì}-\mathrm{y}^{\mathrm{n}}$ | ór(ú) $=$ bì- $\mathrm{y}^{\text {n }}$ |
| 2Sg | $=$ bù-w ${ }^{\text {n }}$ | ór(ú) $=$ bù-w ${ }^{\text {n }}$ |
| 2P1 | $=b_{i ̀-y}{ }^{\text {n }}$ | ór(ú) $=$ bì- $\mathrm{y}^{\text {n }}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | $=\mathrm{bi}-\varnothing$ | ¢r $\mathrm{r}(\mathrm{u})=$ bì-Ø |
| 3 Pl | = b-à: | or $\mathrm{r}(\mathrm{u})=\mathrm{b}$-à: |

### 10.2.1.5 Experiential perfect 'have ever' (-t́́ř́-bì-, -tદ́ř́-sò-)

The experiential perfect ("ExpPrf") specifies that the event in question has occurred at least once in the lifetime of the subject. It generally occurs in connection with events that leave a permanent trace, such as a memory ('have you ever gone to Paris?'). It is common with yǐ 'see' and nǒ 'hear' as well as 'go'.

In positive clauses, one form of the experiential perfect is -téŕ́ $=$ bì-, including past clitic $=$ bì-, whose vowel assimilates (-bù-) to a following labial(ized) consonant $-\mathrm{w}^{\mathrm{n}}$ or -m . The other variant is -téré-sò-, with the perfective-2 suffix (and 'have' quasi-verb) -sò-./LH/-melodic verbs appear as all-L before the suffix, i.e., they spread their initial L-tone to the boundary. The paradigm of 'have ever seen', in two versions, is (307).
(307)

Experiential perfect ('have ever seen')

| category | suffixes | 'have ever seen' | 'have ever seen' |
| :---: | :---: | :---: | :---: |
| 1Sg | -téré $=$ bù -m / -sò-m | yì-téré $=$ bù-m | yì-téré-sò-m |
| 1 Pl | -téré $=$ bì- $\mathrm{y}^{\mathrm{n}} /-\mathrm{s}$ è - $\mathrm{y}^{\mathrm{n}}$ | yì-téré $=$ bì- ${ }^{\text {n }}$ | yì-téré-sè-y ${ }^{\text {n }}$ |
| 2 Sg | -téré $=$ bù $-\mathrm{w}^{\mathrm{n}} /-$ sò $-\mathrm{w}^{\mathrm{n}}$ | yì-tér $\varepsilon$ ́ $=$ bù-w ${ }^{\text {n }}$ | yì-téré-sò-w ${ }^{\text {n }}$ |
| 2 Pl | -téré $=$ bì- $\mathrm{y}^{\mathrm{n}} /-\mathrm{s}$ è- $\mathrm{y}^{\mathrm{n}}$ | yì-téré $=$ bì- ${ }^{\text {n }}$ | yì-téré-sè-y ${ }^{\text {n }}$ |
| 3Sg/Inan | -téré= bì-Ø / -sò-Ø | yì-tér $\varepsilon$ = bì-Ø | yì-téré-sò-Ø |
| 3 Pl | -téré = b-à: / -s-è: | yì-tér $\varepsilon$ = b-à: | yì-térદ́-s-દ̀: |

Forms of -téré-bì- from a sample of stems are in (308).
(308) Experiential perfect
verb ExpPrf gloss
a. /H/-melodic

| jé | né-téré-bì- | 'eat' |
| :--- | :--- | :--- |
| tó: | tó:-téré-bì- | 'pound' |
| kóbó | kóbó-téré-bì- | 'draw (water)' |
| péndí-gí | péndí-gí-téré-bì- | 'break' |

b. /LH/-melodic

| gǒ | gò-téré-bì- | 'exit (v)' |
| :--- | :--- | :--- |
| wǒ: | wò:-téŕ́-bì- | 'come' |
| yàgá | yàgà-téré-bì- | 'fall' |
| yǎy/o- | yày-tér $\varepsilon$-bì- | 'go' |
| mà:ndí | mà:ndì-téré-bì- | 'think' |
| zìgìbí | zìgìbì-téré-bì- | 'shake' |

Sentence examples are in (309).
(309)
a. gònsá:rin ${ }^{\text {na }} \quad$ yì-tér $\varepsilon$ = bù-m
elephant see-ExpPrf=Past-1SgSbj
'I have (once) seen an elephant.'
b. ú bàmàkó yày-téré = bù-w ${ }^{\mathrm{n}}$

2Sg B go-ExpPrf=Past-2SgSbj
'Have you-Sg ever been to Bamako?'

```
c. ú pédé: sémé-tér\varepsiloń= bù-w }\mp@subsup{}{}{n
    2Sg sheep slaughter-ExpPrf=Past-2SgSbj Q
    'Have you-Sg ever slaughtered a sheep?'
```

The negative is common ('have never VPed'). It is -tèrà-lí- with perfective negative -lí- but without past $=$ bì-, see $\S 10.2 .3 .3$.

An exchange including three experiential perfects (two positive, one negative) is in text 2015-03 @ 00:53 to 00:56. Of the two positives, one has = bì- and one has -sò-.

### 10.2.1.6 Recent perfect (dè-, d $\varepsilon{ }^{\mathrm{L}}$ Sò-)

Another option in the perfective system is recent perfect dè-. It specifies the (recent) completion of an activity. One typical context is 'I have (already) eaten' when declining an offer to join others at a meal. It can also specify the (recent) successful completion of an activity: 'I have finished doing the job'. It does not seem to be in common use with motion verbs like 'come' and 'go', which occur in the perfective-2 even in contexts that would seem to be compatible with the recent perfect ('have come/gone').

The paradigm of simple dغे- is (310).
(310) Recent perfect

| category | form | 'have eaten (a meal)' |
| :---: | :---: | :---: |
| 1 Sg | dè-m | $\mathrm{j} \varepsilon$ d dè-m |
| 1 Pl | $\mathrm{d} \grave{\mathrm{c}}-\mathrm{y}^{\mathrm{n}}$ | $\mathrm{j} \varepsilon \chi^{\text {dex }}$ - $\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | $\mathrm{d} \dot{\varepsilon}-\mathrm{w}^{\mathrm{n}}$ | né dè-w ${ }^{\text {n }}$ |
| 2 Pl | $\mathrm{d} \grave{\mathrm{k}}$ - ${ }^{\mathrm{n}}$ | $\mathrm{j} \varepsilon \mathrm{d}_{\text {dè }} \mathrm{y}^{\mathrm{n}}$ |
| 3Sg/Inan | dè-Ø | „ $\varepsilon$ dè-Ø |
| 3 Pl | d-à: | né d-à: |

A sample with various verbs is in (311). The /LH/-melodic verbs in this combination retain their stem-final lexical H-tone, unlike the case with the experiential perfect, where the same stems drop all H-tones before the suffix.
(311) Recent perfect
verb recent perfect gloss
a. /H/-melodic

л $\varepsilon$ né dè- 'eat'
tó: tó: dè- 'pound'

| kóbó | kóbó dè- | 'draw (water)' |
| :--- | :--- | :--- |
| péndí-gí | péndí-gí dè- | 'break' |

b. /LH/-melodic

| gǒ | gó dè- | 'exit (v)' |
| :--- | :--- | :--- |
| wǒ: | wǒ: dè- | 'come' |
| yàgá | yàgá dè- | 'fall' |
| yǎy/o- | yǎy dè- | 'go' |
| mà:ndí | mà:ndí dè- | 'think' |
| zìgìbí | zìgìbí dè- | 'shake' |

The completive sense is exemplified by (312a), the recent perfect sense by (312b).
(312)
a. úló óndú dè-m
house build RecPrf-1SgSbj
'I have (recently) finished building (a/the) house.'
b. zá jé dè-y ${ }^{n}$
meal eat.meal RecPrf-1PlSbj
'We have (already) eaten.'

A textual passage that gives a good example of the context for the recent perfect is 2015-01@ 06:15. Hare had been instructed by God to go get three difficult things (including a lion's tooth). At the end of the tale Hare returns into God's presence and states "I have now obtained (bě: dè$\mathrm{m})$ them."

The recent perfect morpheme can also function as an auxiliary verb (§10.1.1), followed either by ${ }^{\mathrm{L}}$ sò- 'have' (as perfective-2) or by perfective participle kár${ }^{n}$ à. It then behaves like an $/ \mathrm{LH} /-m e l o d i c ~ v e r b, ~ a b s t r a c t l y ~ d \check{\varepsilon}$, surfacing as either dé or dè. The combination dé ${ }^{\mathrm{L}}$ sò- occurs in (313), which resumes an already uttered clause with ńné ób-í: kár${ }^{\text {nà }}$ 'he (=hyena) sat down'.
(313) ób-í: dé ${ }^{\text {L }}$ sò-Ø
sit-MP RecPrf have-3SgSbj
'He (had just) sat down.' (2015-01 @ 02:24)

This is immediately followed by (314), illustrating dè kárnà. This is a subordinated differentsubject clause, setting up another event clause (not shown).

| ńné-gì | dágám $\rightarrow$ | ńné | sóbó | dè | kárà |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 3Sg-Acc | a.little | 3Sg | jab | RecPrf | Pfv.Ppl |
| 'It (=goat) had jabbed him (=hyena) a little.' | $(2015-01 @ 02: 24)$ |  |  |  |  |

Recent perfect negative dà-lí- is possible in completion-of-activity contexts (§10.2.3.4), but in most contexts the ordinary perfective negative is usual for all perfective/perfect negatives.

### 10.2.1.7 Reduplicated perfective (absent)

No Cv- reduplicated perfective is attested.

### 10.2.1.8 dìmbǐ-l-tì- $\varnothing$ 'it didn't follow'

The verb 'follow' is mediopassive in form: dìmb-í: . It has a transitive counterpart dìmbì-rí 'cause to follow' or 'take (someone) along'.

There is an idiosyncratic fixed expression dìmbǐ-l-tì-Ø 'it didn't follow', which has pragmatic senses like 'it is not relevant/connected' or 'it doesn't matter'. Since the sense is negative, the -l- must be related to perfective negative -lí-. However, -tì- is clearly the perfective-1b suffix, which is not compatible with negation. In form, -l-tì is the perfective positive of a reversive derivative, so it should mean 'it unfollowed'. This makes no sense (in the pre-digital age), so there is a mismatch between form and meaning.

Jamsay dìgè-lá-Ø has a similar sense. It too is morphologically irregular, with stative negative -lá- added to an otherwise nonstative verb.

### 10.2.1.9 Durative $\{H L\}$ overlay on non-imperfective verb stems

The $\{H L\}$ overlay on the verb stem is regular in the imperfective positive (§10.2.2.1) and in the stative positive derived from regular verbs (§10.4.1). No superscripted diacritics are used for this routine occurrence of the $\{\mathrm{HL}\}$ overlay. The overlay can, however, be overridden by the all-L tone of a defocalized verb.

Occasionally an $\{\mathrm{HL}\}$ overlay occurs on perfective positive or perfective negative verbs. In such contexts the transcription does signal the presence of the overlay with superscripted ${ }^{\mathrm{HL}}$. This tone pattern is attested with perfective-2 and the simple perfective (the latter without the shift to final E-vowel in 3 Sg ), but not with perfective-1a or -1 b .

The $\{\mathrm{HL}\}$ overlay is associated with distributive adverbial phrases like 'one by one' denoting event-type repetition with different but parallel individuals. More generally it is associated with durativity (prolongation or repetition).

In (315a), the 3Pl-subject perfective-2 is elsewhere wò:-s- $\hat{\varepsilon}$ : 'they have come'. In (315b) the 3 Pl -subject simple perfective is elsewhere ${ }^{\mathrm{L}} \mathrm{W}$-à: . ".Dur" occurs in interlinears.
$\begin{array}{ll}\text { a. né-tú-túrú } \\ \text { person-one-one } & \text {...HL wô:-s-è: } \\ \text { 'They came one by one.' }\end{array}$
b. né-tú-túrú ...HL w-â:
person-one-one come.Pfv.Dur-3P1Sbj
'They came one by one.'

Textual examples of $\{H L\}$ are (316a) with perfective negative and (316b) with simple perfective positive.
a. [gò
gín]
${ }^{\mathrm{HL}}$ dôâ-
kàn-dí-Ø
dè]
[exit(v) Ant.Past.SS] [arrive.Dur-PfvNeg do-PfvNeg-3SgSbj if]
'Each time when he came out, he would not perform (proper ablutions), and ...' (678) in text 2012-03
b. àrnà-ídá [kú ní:] ${ }^{H L}$ wô: gày rain-wind [Dem.InanSg Inst] come.Pfv.Dur Topic, àn à-ídá ńné wò: kárnà, rain-wind 3 Sg come Pfv.Ppl, 'A rain-storm was coming. When the rain-storm came, ...' (2015-01 @ 01:16)

Stative quasi-verb ${ }^{\text {L }}$ bù- does not routinely allow the durative $\{\mathrm{HL}\}$ overlay, but it does appear as ${ }^{H L}$ bû:- $\varnothing$ in a construction with ${ }^{\text {L }}{ }^{\mathrm{j}} \mathrm{n}$ - $\varnothing$ dé, described in §16.1.2.

The durative overlay also occurs in a stylistically marked parallelistic construction with paired $\{\mathrm{HL}\}$ verbs in the $\mathrm{A} / \mathrm{X}$-stem, denoting repetition of a back-and-forth process (§15.3). $\{\mathrm{HL}\}$ also occurs in a habitual negative construction (§15.2.1.4).

### 10.2.2 Imperfective positive system

### 10.2.2.1 Imperfective (-m-dò-, -m-nغ̀-)

This is a broad imperfective positive. It can specify a future time frame for an eventuality, or it can specify recurrent or habitual repetitions. Its range is circumscribed by progressive constructions which specify activities in progress ('I am working'), and by the stative ('I am standing' $=$ je suis debout ).

The pronominal paradigm is in (317). The verb stem and the imperfective -m- formative are stable throughout. The -m- is followed by a second imperfective formative whose most basic form is -dò-, to judge by the otherwise zero-suffixed 3 Sg . After 1st/2nd person prefixes, the $d$ is nasalized to $n$, and the vowel shifts forward to $\varepsilon$ before $-y^{n}$ and usually shifts upward to $u$ before -y and $-\mathrm{w}^{\mathrm{n}}$. The 3Pl form ends in a short vowel, unlike 3Pl forms in most other paradigms.

Imperfective paradigm

| category | form | 'goes out' |
| :---: | :---: | :---: |
| 1Sg | -m-nù-m | gô-m-nù-m |
| 1P1 | -m-nè-y ${ }^{\text {n }}$ | gô-m-nè-y ${ }^{\text {n }}$ |
| 2 Sg | -m-nù-w ${ }^{\text {n }}$ | gô-m-nù-wn |
| 2P1 | -m-nè-y ${ }^{\text {n }}$ | gô-m-nè-y ${ }^{\text {n }}$ |


| $3 \mathrm{Sg} /$ Inan | $-\mathrm{m}-\mathrm{dò-} \mathrm{\varnothing}$ | gô-m-d̀̀- $\varnothing$ |
| :--- | :--- | :--- |
| 3Pl | $-\mathrm{m}-\mathrm{d}-\bar{\varepsilon}$ | gô-m-d- |

The verb takes the $\mathrm{A} / \mathrm{X}$-stem, and has $\{\mathrm{HL}\}$ overlay, with only the first syllable or monosyllabic mora H -toned. The pronominal suffixes are atonal and acquire L-tone by spreading. Examples with stems ending in a nonhigh vowel are in (318).
(318) Imperfective (final-nonhigh-vowel class)
verb imperfective 3Sg gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :
á: â:-m-d̀̀-Ø 'brew (beer)'
dě dê-m-dò-Ø 'bathe'
dŏ dọâ-m-dò-Ø 'arrive' or 'insult'
ká kâ-m-dò-Ø 'shave'
né nâ-m-dò-Ø 'eat, drink'
b. CvCv
dògó dógà-m-dò-Ø 'abandon’
kóbó kóbà-m-dò-Ø 'draw (water)'
kédé kédè-m-dò-Ø 'cut'
yàgá yágà-m-dò-Ø 'fall
c. CvCCv
tómbó tómbò-m-dò-Ø 'jump’
gùndó gúndò-m-dò-Ø 'become sterile'

The form of imperfectives is similar with verbs that end in a high vowel (319).
(319) Imperfective (final-high-vowel class)
bare stem imperfective 3Sg gloss
a. $\mathrm{Ci}, \mathrm{Ci}$ :

| nú | nû-m-dò-Ø | 'enter' |
| :--- | :--- | :--- |
| tí | tî-m-d̀̀-Ø | 'send' |
| ní: | nîi:-m-dò-Ø | 'sleep' |

b. CvC

| lăy ~ làyí | lây-m-dò-Ø | 'taste' |
| :--- | :--- | :--- |
| gǎn | gán ù-m-dò-Ø | 'put in' |
| tún | túnù-m-dò-Ø | 'put' |

c. $\mathrm{CvCi} / \mathrm{u}$

| dèlí | délù-m-dò-Ø | 'set down' |
| :---: | :---: | :---: |
| gùbú | gúbù-m-dò-Ø | 'hang up' |
| óbú | 万́bù-m-dò-Ø | 'lay out' |
| final a |  |  |
| jèrí | jérà-m-dò-Ø | 'look' |

c. $\mathrm{CvCCi} / \mathrm{u}$
zòngú zóngù-m-dò-Ø 'treat (medically)'
óndú óndù-m-dò-Ø 'build'
d. Cv:Ci-

| pá:mú | pá:mà-m-dò-Ø | 'understand' |
| :--- | :--- | :--- |
| mà:ndí | má:ndà-m-dò-Ø | 'think' |

e. trisyllabic
zìgìbí zígìbè-m-dò-Ø 'shake'
péngílí péngìlè-m-dò-Ø 'winnow by shaking'

The $\{H L\}$ overlay applies to suffixed mediopassives as to other verbs: mí:l-è:-m-dò-Ø 'he/she returns' from mì:l-íi, and bánj-ià-m-dò-Ø 'he/she hides' from bànjj-í: . This is worth mentioning because mediopassives do have irregular tones in the imperfective negative.

Since the $\{\mathrm{HL}\}$ overlay is routine with imperfectives, no ${ }^{\mathrm{HL}}$ superscript is added in the transcription used here. When preceded by a focalized nonsubject constituent, the defocalized imperfective verb has its usual segmental form (including suffixes) but drops to all-L-toned, and an $L$ superscript is used in this case ( $\$ 13.1$ ). When preceded by a focalized subject NP, the special subject-focus form of the imperfective is required (§13.1.1.4.3).

The same -m after $\mathrm{A} / \mathrm{X}$-stem but without a pronominal suffix can function as an imperfective subordinator. In this case it is often followed by a particle bà that is unique to this construction. There are two versions of the construction. In one, the verb stem has lexical tones, e.g. /H/-melodic Cv́Cv́-m̀ (bà) versus /LH/-melodic Cv̀Cv́-m̀ (§15.2.1.2.2). The other has the same $\{\mathrm{HL}\}$ overlay seen in the main-clause verbs presented above, i.e. Cv́C $\mathrm{v}-\mathrm{m}$ (bà) for either /H/ or /LH/ melody (§15.2.1.2.1).

### 10.2.2.2 Reduplicated imperfective (absent)

No Cv- reduplicated imperfective forms are attested.

### 10.2.2.3 Progressive (-m ${ }^{\text {L }}$ sò-, - -m jâ:-, -m ${ }^{\text {Lbù-, }-\mathrm{m} \text { bí-m }=\text { bì- }) ~(~}$

There are three (present) progressive constructions. All consist of an unconjugated H-toned imperfective verb form with Ipfv suffix -m, followed by an auxiliary verb ('be', 'keep', or 'have').

The most common combination (for my assistant) is $-\mathrm{m}^{\mathrm{L}}$ Sò- including conjugated ${ }^{\mathrm{L}}$ sò'have'. The paradigm is (320). The 3 Pl form is ${ }^{\mathrm{L}} \mathrm{S} 0-\bar{\varepsilon}$ : with the same diphthong as 'have' (contrast -s- : for perfective-2). The construction has analogues in other Dogon languages, e.g. YD progressive -ḿn zò-
(320) Progressive -ḿ ${ }^{\mathrm{L}}$ sò-

| category | form | 'be going out' | 'be repairing' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -m ${ }^{\text {L }}$ Sò-m | gó-m ${ }^{\text {L }}$ Sò -m | céndé-m ${ }^{\text {L }}$ Sò-m |
| 1 Pl | $-\mathrm{m}^{\text {L }}$ Sò- $\mathrm{y}^{\text {n }}$ | gó-m ${ }^{\text {L }}$ Sò- $\mathrm{y}^{\text {n }}$ | céndé-m ${ }^{\text {L }}$ Sò- $\mathrm{y}^{\text {n }}$ |
| 2 Sg | $-\mathrm{m}^{\text {L }} \mathrm{So}-\mathrm{w}^{\mathrm{n}}$ | gó-m ${ }^{\text {L }}$ ¢ ${ }^{\text {- }} \mathrm{w}^{\text {n }}$ | céndé-m ${ }^{\text {L }}$ Sò- $\mathrm{w}^{\mathrm{n}}$ |
| 2 Pl | $-\mathrm{m}^{\text {L }}$ Sò- $\mathrm{y}^{\mathrm{n}}$ | gó-m ${ }^{\text {L }}$ sò- $\mathrm{y}^{\text {n }}$ | céndé-m ${ }^{\text {L }}$ Sò- $\mathrm{y}^{\text {n }}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | -m ${ }^{\text {L }}$ sò-Ø | gó-m ${ }^{\text {L }}$ Sò-Ø | céndé-m ${ }^{\text {L }}$ Sò-Ø |
| 3 Pl | -m ${ }^{\text {L }}$ So-è: | gó-m ${ }^{\text {L }}$ Son-è: | céndé-m ${ }^{\text {L }}$ So$-\grave{\text { e }}$ |

There are some twenty textual examples with 'have' as auxiliary. One is kár ${ }^{n}$ ú-m ${ }^{\text {L }}$ sò-m 'I am doing it' (2015-01 @ 00:59).

A second construction replaces ${ }^{\text {L }}$ sò- 'have' by jâ:- 'keep, hold onto'. This auxiliary is likely modifier from jíà, derived stative of jèl-í: hold’ (with mediopassive suffix, but transitive). The paradigm is (321).

| category | form | 'be going out' | 'be repairing' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -m jâ:-m | gó-m jâ:-m | céndé-m jâ:-m |
| 1P1 | -m jâ:-y ${ }^{\text {n }}$ | gó-m jâ:-y ${ }^{\text {n }}$ | céndé-m jâ:-y ${ }^{\text {n }}$ |
| 2 Sg | -m jâ:-wn | gó-m jâ:- $\mathrm{w}^{\text {n }}$ | céndé-m jâ:- $\mathrm{w}^{\mathrm{n}}$ |
| 2 Pl | -m jâ:-y ${ }^{\text {n }}$ | gó-m jâ:-y ${ }^{\text {n }}$ | céndé-m jâ:- ${ }^{\text {n }}$ |
| 3Sg/Inan | -m jâ:-Ø | gó-m jâ:-Ø | céndé-m jâ:-Ø |
| 3 Pl | -m j- - : | gó-m j- - | céndé-m j- $\hat{\text { e }}$ : |

There is one textual example, 2015-02 @ 01:45.
The last type has Lbù- 'be' as auxiliary. Compare YD progressive -m bò- and Najamba mbò bò-. The paradigm is (322).
(322) Progressive -m ${ }^{\text {L }}$ bù-

| category | form | 'be taking out' |
| :---: | :---: | :---: |
| 1Sg | -m ${ }^{\text {L }}$ bù-m | zó-m ${ }^{\text {L }}$ bù-m |
| 1 Pl | -m ${ }^{\text {L }}$ bì- ${ }^{\text {n }}$ | zó-m ${ }^{\text {L }}$ bì- ${ }^{\text {n }}$ |
| 2 Sg | -m ${ }^{\text {L }}$ bù-w ${ }^{\text {n }}$ | zó-m ${ }^{\text {L }}$ bù-w ${ }^{\text {n }}$ |
| 2 Pl | -m ${ }^{\text {L }}$ bì- ${ }^{\text {n }}$ | zó-m ${ }^{\text {L }}$ bì- ${ }^{\text {n }}$ |
| 3Sg/Inan | -m ${ }^{\text {L }}$ bù-Ø | zó-m ${ }^{\text {L }}$ bù-Ø |
| 3 Pl | -m ${ }^{\text {L }}$ - ${ }^{\text {c }}$ | zó-m ${ }^{\text {L }} \mathrm{b}-\mathrm{c}^{\text {\% }}$ |

There are about eight textual examples with 'be', for example 2015-01 @ 03:50.
In such auxiliary functions, what looks superficially like iteration of ${ }^{\text {L }}$ bù- can occur. This is actually the past progressive (§10.5.1.2). At least one = bù- is the past-time enclitic = bù-. The other $=$ bù- would then be either ${ }^{\text {L }}$ bù- 'be' or a copy of the past-time enclitic.

### 10.2.2.4 Future (absent)

There is no specifically future inflected form like those in Najamba and Toro Tegu. The (simple) imperfective is used in future as well as in general present-time contexts.

### 10.2.3 Negation of indicative verbs

### 10.2.3.1 Perfective negative (-lí- ~ -dí-)

-lí- negates the simple perfective, the perfective-1a and $-1 b$, and (with one minor exception) the perfective-2. -lí- is also part of the experiential perfect negative -tèrà-lí- (§10.2.3.3) and of the recent perfect negative dà-lí- (§10.2.3.4).

The paradigm is in (323). The vocalism is that of the A/X-stem. The basic form of the perfective negative suffix is -lí-. After n (tún 'put', gǎn 'put in’) it becomes -dí- (§3.4.5.5). It frequently apocopates to just H-toned $-1-\varnothing$ in the 3 Sg form. The vowel backs to $u$ before labial $1 \mathrm{Sg}-\mathrm{m}$ and labialized $2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}$ suffixes. The 3 Pl form is an irregular portmanteau.
(323) Paradigm of perfective negative

| category | PfvNeg form | 'descend' | 'put' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -lú-m | sùgò-lú-m | tùn-dú-m |
| 1P1 | $-1 i ́-y{ }^{\text {n }}$ | sùgò-lí-y ${ }^{\text {n }}$ | tùn-dí-y ${ }^{\text {n }}$ |
| 2 Sg | $-1 u ́-w^{\text {n }}$ | sùgò-lú-w ${ }^{\text {n }}$ | tùn-dú-w ${ }^{\text {n }}$ |
| 2 Pl | $-1 i ́-y^{\text {n }}$ | sùgò-lí-y ${ }^{\text {n }}$ | tùn-dí-y ${ }^{\text {n }}$ |


| $3 \mathrm{Sg} / \mathrm{Inan}$ | -́l-Ø $\sim-$ lí- Ø | sùgǒ-1-Ø $\sim$ sùgò-lí-Ø | tùn-dí-Ø |
| :--- | :--- | :--- | :--- |
| 3 Pl | -ndá | sùgò-ndá | tùn-dá |

The verb stem is tone-dropped in all cases, as in Jamsay, but unlike the case in YD or Najamba where at least some verbs are H-toned before the suffix. There is no segmental phonological interaction between -lí- and the verb stem.
(324) Perfective negative (final-nonhigh-vowel class)
verb
PfvNeg
gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :

| ká | kà-lí- | 'shave' |
| :--- | :--- | :--- |
| á: | à:-lí- | 'brew (beer)' |
| dě | dè-lí- | 'bathe' |
| dǒ | dò̀á-lí- | 'arrive' or 'insult' |
| gǒ | gò-lí- | 'exit (v)' |
| né | nà-lí- | 'eat, drink' |
| tó: | tò:-lí- | 'pound' |
| wǒ: | wà:-lí- | 'come' |

b. CvCv
dògá
kóbó kòbà-lí- 'draw (water)'
kédé kèdè-lí- 'cut'
yàgá yàgà-lí- 'fall'
c. CvCCv

| tómbó | tòmbò-lí- | 'jump' |
| :--- | :--- | :--- |
| gùndó | gùndò-lî- | 'become sterile' |

Array (325) gives examples involving verbs with final high vowel. In (325b), the medial $r$ triggers the $\mathrm{A} / \mathrm{X}$-stem even of a final-high-vowel verb to shift to final a (§10.1.3.14). The $\mathrm{A} / \mathrm{X}-$ stem is not limited to the perfective negative, but this peculiarity of Cvri stems may well have been motivated by avoidance of an rl cluster (after syncope) in the perfective negative.
perfective negative (final-high-vowel class)
verb
PfvNeg
gloss
a. $\mathrm{Ci}, \mathrm{Ci}$ :

| nú | nù-lí- | 'enter' |
| :--- | :--- | :--- |
| tí | tià-lí- | 'send' |


| yǐ | yà-lí- | 'see' |
| :--- | :--- | :--- |
| ní: | nì:-lí- | 'sleep' |

b. CvCi

| lǎy ~ làyí | lày-lí- | 'taste' |
| :--- | :--- | :--- |
| gùbú | gùbù-lí- | 'hang up' |
| óbú | òbù-lí- | 'lay out' |
| medial r |  |  |
| jèrí | jèrà-lí- | 'look' |

c. CvCCi
zòngú zòngù-lí- 'treat (medically)'
óndú òndù-lí- 'build'
d. $\mathrm{Cv}: \mathrm{Ci}$
pá:mú pà:mà-lí- 'understand'
mà:ndí mà:ndà-lí- 'think'
e. trisyllabic
zìgìbí zìgìbè-lí- 'shake'

Mediopassive suffix -í:- appears as [+ATR] -è:-lí or as [-ATR] -è:-lí- (~ -ià-lí- ~ -èà-lí-). Examples are dènd-è:-lí- 'did not approach' and bàmb-è:-lí- 'did not carry (infant) on back'. 3 Pl subject forms are dènd-è:-ndá and bàmb-è:-ndá.

### 10.2.3.2 Perfective-2 negative (yì-só-ndǒ-)

This combination is attested only with the verb yǐ 'see' and only in one specialized construction. It is based on só-ndǒ- 'not have' (§11.5.1). yì-só-ndǒ- with 2 Sg subject (yì-só-ndǒ-w ${ }^{\mathrm{n}}$ ) means literally 'have you not seen (that ...)', and functions as a rhetorical question. It is the negation of yì-só-w 'you have seen', which is likewise addressed to the listener during a narrative (201502 @ 07:52).
yì-só-ndǒ-w ${ }^{\mathrm{n}}$ combines with a preceding clause, which in positive contexts ends in either a bare stem (wàdá 'remain'), a form with chaining suffix (§15.1.4.3) (326a), a conditional antecedent clause with dè (326c), or a bare perfective without pronominal marking (326b). It can also combine with a perfective negative (wàdǎ-1 'not remain'). Textual examples (326a-c) all have 2 Sg subject.
a. [yàrá Lìn] wàd- $\varepsilon$ : yì-só-ndǒ-w ${ }^{\text {n }}$
[lion tooth] remain-Chain see-Pfv2-Neg-2SgSbj
'Do you not see that the lion's tooth remains?' (2015-01 @ 05:01)


With the exception of yì-só-ndǒ- $w^{n}$ in rhetorical questions, verbs that regularly take perfective2 -so- in positive clauses merge into the all-purpose perfective negative with -lí-. This is the case even with 'see' in normal contexts, as in yà-lú-m 'I didn't see', negation of yì-só-m 'I saw'. Outside of rhetorical questions, all textual examples of 'did not see' in the texts are of this type: 3Sg yà-lí-Ø 'he/she didn't see' 2015-01 @ 02:13, 3Pl yà-ndá 'they didn't see' 2015-01@ 06:06 and 2015-06@ 03:15.

### 10.2.3.3 Experiential perfect negative (-tèrà-lí-)

The experiential perfect (-téré-bì-) is negated as -tèrà-lí-, ending with the regular perfective negative suffix -lí-. Tone-dropping controlled by -lí- affects not only the experiential perfect suffix but also the preceding verb stem regardless of the latter's tone melody, unlike the case with the recent perfect negative described in the following subsection. This is the case with tone-dropped 'slaughter' in (327c), compare positive sémé-téré-bù-m 'I have (once) slaughtered’.

```
a. gònsá:rná yì-tèrà-lú-m
elephant see-ExpPrf-PfvNeg-1SgSbj
'I have never seen an elephant.'
```

b. bàmàkó yày-tèrà-ndá

B go-ExpPrf-PfvNeg.3PlSbj
'They have never gone to Bamako.'
c. pédé: sèmè-tèrà-lú-m
sheep slaughter-ExpPrf-PfNeg-1SgSbj
'I have never slaughtered a sheep.'

The experiential perfect negative denies that the eventuality has occurred at any time during the lifetime of the subject, and can be translated freely as 'have never VPed'.

### 10.2.3.4 Recent perfect negative (dà-lí-)

The recent perfect (dè-) is negated as dà-lí-, including the regular perfective negative suffix -lí-. The preceding verb stem is not tone-dropped, unlike the case with the experiential perfect negative. The negative form is mainly used in the sense 'have not (yet) finished VP-ing'.

| úló | óndú | dà-lú-m |
| :--- | :--- | :--- |
| house | build | RecPrf-PfvNeg-1SgSbj |

'I have not (yet) finished building the house.'

### 10.2.3.5 Imperfective negative (-ngò:-, -nù-, -nì-)

This form negates the positive imperfective, denying that the eventuality occurs or will occur in the contextually relevant time span (present to future).

The paradigm is (329). The 3Sg is -ygò:-, and the 3Pl is derived from this by what amounts to a vocalic mutation. The $1 \mathrm{st} / 2$ nd person forms simplify $\mathrm{\eta g}$ to g and shorten and raise the vowel, to $u$ before labial(ized) -m and $-\mathrm{w}^{\mathrm{n}}$ and to i before $\mathrm{y}^{\mathrm{n}}$.
(329) Paradigm of imperfective negative

| category | IpfvNeg | 'ascend' |
| :---: | :---: | :---: |
| 1Sg | -nù-m | ílá-nù-m |
| 1P1 | -yì-y | ílá-yì-y ${ }^{\text {n }}$ |
| 2 Sg | -yù-wn | ílá-nù-w ${ }^{\text {n }}$ |
| 2PL | -yì-y ${ }^{\text {n }}$ | ílá-yì-y ${ }^{\text {n }}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | -ŋgò:-Ø | ílá-ngò:-Ø |
| 3Pl | -ŋg-દ̀: | ílá-ng-è: |

The verb takes the $\mathrm{A} / \mathrm{X}$-stem. Except for mediopassives (see below), the stem has all-H tones, i.e. $\{H\}$ overlay instead of $\{H L\}$ as in the imperfective positive.

Stems with final nonhigh vowel are illustrated in (330).
(330) Imperfective negative (final-nonhigh-vowel class)
verb $\quad$ IpfvNeg 3Sg gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :

| ká | ká-ŋgò:-Ø | 'shave' |
| :--- | :--- | :--- |
| dě | dé-ŋgò:-Ø | 'bathe' |
| d | dóá-ggò:-Ø | 'arrive' or 'insult' |
| gǒ | gó-ŋgò:-Ø | 'exit (v)' |
| nદ́ | ná-ŋgò:-Ø | 'eat, drink' |

$C v$ :

| á: | á:-ŋgò:-Ø | 'brew (beer)' |
| :--- | :--- | :--- |
| tó: | tó:-ŋgò:-Ø | 'pound' |
| wǒ: | wá:-ŋgò:-Ø | 'come' |

b. CvCv
dògó dógá-ygò:-Ø 'abandon'
kóbó kóbá-ŋgò:-Ø 'draw (water)'
kédé kédé-ŋgò:-Ø 'cut'
yàgá yágá-ŋgò:-Ø 'fall
c. $\mathrm{CvCCv}-$
tómbó tómbó-ŋgò:-Ø 'jump'
gùndó gúndó-ŋgò:-Ø 'become sterile'

Stems with final high vowels are in (331).
(331) Imperfective negative (final-high-vowel class)
verb IpfvNeg 3Sg gloss
a. $\mathrm{Ci} / \mathrm{u}, \mathrm{Ci}$ :
nú
tí
yǐ
ní:
b. $\mathrm{CvCi} / \mathrm{u}$
lǎy ~ làyí láy-ŋggò:-Ø 'taste'
jèrí jérá-ŋgò:-Ø 'look’ gùbú gúbú-ygò:-Ø 'hang up'
óbú óbú-ygò:-Ø 'lay out'
c. $\mathrm{CvCCi} / \mathrm{u}$
zòngí zóngú-ŋgò:-Ø 'treat (medically)'
óndú óndú-ŋgò:-Ø 'build'
d. $\mathrm{Cv}: \mathrm{Ci} / \mathrm{u}$

| pá:m(ú) | pá:má-ŋgò:-Ø | 'understand' |
| :--- | :--- | :--- |
| mà:ndí | má:ndá-ŋgò:-Ø | 'think' |

e. trisyllabic
zìgìbí
zígíbé-ŋgò:-Ø 'shake’

Verbs with mediopassive suffix do not undergo the $\{\mathrm{H}\}$ overlay. This is odd since they fully undergo the $\{\mathrm{HL}\}$ melody in the imperfective positive. The imperfective negatives preserve the distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ lexical melodies. Here as elsewhere, the $\mathrm{A} / \mathrm{X}$-stem for mediopassives has [+ATR] -e:- or [-ATR] -ia-/-ea-/-ع:-.

> verb gloss

IpfvNeg (3Sg)
a. /H/ melody
tób-í:

> ‘wrap on turban'
tób-1́á-ngò:-Ø
b. /LH/ melody
mì:l-í: 'return' mì:1-é:-ngò:-Ø
bànj-í: 'hide (oneself)' bànj-íá-ŋgò:-Ø

The most likely cognate for TU - $\mathfrak{g}$ ò̀:- is Nanga imperfective negative -ŋò:-. However, one could also see in the nasal $\eta$ an assimilated vestige of the Ipfv morpheme -m- found in positive imperfectives. This would suggest an original segmentation *-m-gò:-, and would open the door for a comparison with e.g. Jamsay imperfective negative -gó- (and with the pan-Dogon verb gǒ 'exit').

It is possible that $3 \mathrm{Sg}-\mathrm{y}$ gò:-Ø and $3 \mathrm{Pl}-\mathrm{ng}-\varepsilon$ : are really $<\mathrm{LH}>$-toned -ngǒ:-Ø and $3 \mathrm{Pl}-\mathrm{ng}-$ と̌: . If so, they could be compared to the negative enclitics = lǎ- 'it is not' (§11.2.1.2) and stative negative $=$ ndǎ- (§10.4.2), which are usually heard with low pitch unless immediately followed by another morpheme. In each case, assuming an $<\mathrm{LH}>$ tone would account for the lengthening of the vowel in the 3 Sg form ( - ygò:- Ø, = lǎ:- , $=$ ndǎ:- ). However, while $=$ lǎ- and $=$ ndǎare heard with nonlow pitch in some combinations, this has not been observed to date with -ygò:-Ø.

### 10.2.3.6 Progressive negative (-m só-ndǒ:-, -m ỳgó-)

The progressive construction with $-\mathrm{m}{ }^{\mathrm{L}}$ sò- is negated as -m só-ndǒ(:)-. That is, ${ }^{\mathrm{L}}$ sò- 'have' is replaced by its regular negative form só-ndǒ:- 'not have' (333a). Likewise, the progressive construction with -m Lbù- is negated as -m ŋ̀gó- ( $3 \mathrm{Pl}-\mathrm{m}$ ŋ̀gw- $\hat{\varepsilon}$ :) where ${ }^{\mathrm{L}}$ bù- 'be.Loc' is replaced by ỳgó- 'not be.Loc (somewhere)'.
a. bírá: bírá-m só-ndǒ-m
work(n) work-Ipfv have-Neg-1SgSbj
'I am not working.'
b. bírá: bírá-m ỳgó-m
work(n) work-Ipfv not.be-1SgSbj
'I am not working.'

An example with só-ndǒ- is 2015-02 @ 07:40.

### 10.3 Pronominal paradigms for non-imperative verbs

### 10.3.1 Subject pronominal suffixes

The pronominal-subject suffixes are those in (334). They are exemplified in the paradigms of the various AN inflections given in previous sections. 1 Pl and 2 Pl are syncretic. For other pronoun forms, see §4.3.1.
(334) category suffix

| 1Sg | -m |
| :---: | :---: |
| 1 Pl | $-y^{\text {n }}$ |
| 2Sg | $-\mathrm{w}^{\text {n }}$ |
| 2 Pl | -y ${ }^{\text {n }}$ |
| 3Sg | -ø |
| 3 Pl | [see below] |

Except for 3Pl, these suffixes are quite stable with no allomorphy. However, the preceding AN suffix itself has allomorphy depending on the pronominal-subject category (imperfective, imperfective negative). In such cases, the 1st/2nd person suffixes have one allomorph, distinct from a third person form. Relatively low-level phonological assimilations involving AN and pronominal suffixes are summarized in $\S 10.3 .3$ below.

The endings for 3 Pl subject are summarized in (335), with 3 Sg and 1 Sg for comparison. The 3 Pl suffixes are generally vocalic and undergo vv-Contraction with the preceding vowel, though the phonology is often nontransparent. For the perfective positives including the pasttime enclitic (335a), the 3Pl ends in -à:, -à, or (with an augment) -dà: (i.e. -d-à:). In the perfective negative (335b), a portmanteau -ndá subsumes the inflectional category and the pronominal suffix. The imperfectives and statives, whether positive or negative ( $335 \mathrm{c}-\mathrm{d}$ ), all have $3 \mathrm{Pl}-\varepsilon$ or (contracted) $-\grave{\text { er }}$.

3 Pl suffixes on verbs
category

3Pl
3Sg
1Sg
a. perfective positives simple perfective recent perfect perfective-1a perfective-1b past-time enclitic
b. perfective negative
-ndá
(-lí)-Ø
(-lú)-m


### 10.3.2 3 Sg animacy distinctions absent

There is no Jamsay-style animacy distinction in 3 Sg pronominal-subject agreement.
10.3.3 Vowel-consonant interactions of AN and pronominal suffixes
$2 \mathrm{Sg}-\mathrm{w}^{\mathrm{n}}$ and to some extent $1 \mathrm{Sg}-\mathrm{m}$ favor u -vowels, while $1 \mathrm{Pl} / 2 \mathrm{Pl}-y^{\mathrm{n}}$ favors i-vowels (§3.4.6.3). This is evident in some pronominal-suffix paradigms, for example the perfective negative (-lú-wn, -lú-m, -lí-y ${ }^{\mathrm{n}}$ ).
10.3.4 Pronominal-subject suffixes are atonal

The pronominal-subject suffixes are generally atonal, getting their tone by spreading from the preceding syllable. However, the 3 Pl endings described above, with the exception of the 3 Pl perfective negative portmanteau -ndá, are L-toned.

### 10.4 Stative form of verbs

A stative stem, not marked for perfective/imperfective aspect, can be derived from a subset of verbs that also have regular aspect-marking paradigms. For example, all verbs denoting stances (sitting, etc.) have stative forms that denote positions ('be sitting, be seated'), while the active inflections (those including aspectual marking) denote acts of taking up positions ('sit down'). Statives can also be formed from transitive verbs of carrying and holding. This section covers
such derived stative forms. Be aware of ambiguities (stative or progressive) in English glosses, e.g. 'be sitting'. In this section the stative reading, not the progressive one, is relevant.

For defective stative quasi-verbs ('have', 'be', etc.) that do not correspond to active verbs, see Chapter 11.

### 10.4.1 Stative positive

The suffixal paradigm is (336). The $\{H L\}$ overlay applies when existential yé (see below) is absent. There is no reduplication.

| (336) category | Stative | 'be bent over, be curled up' |
| :--- | :--- | :--- |
| 1 Sg | -m | tóndà- m |
| 1 Pl | $-\mathrm{y}^{\mathrm{n}}$ | tóndà- $\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | $-\mathrm{w}^{\mathrm{n}}$ | tóndà- $\mathrm{w}^{\mathrm{n}}$ |
| 2 Pl | $-\mathrm{y}^{\mathrm{n}}$ | tóndà- $\mathrm{y}^{\mathrm{n}}$ |
|  |  | tóndà-Ø |
| 3 Sg | $-\varnothing$ | tónd- $\grave{\varepsilon}$ : |

In many cases, the corresponding active verb is morphologically a mediopassive, with suffix -í: (§9.4.1). In other cases, the corresponding active verb has both transitive and (suffixed) mediopassive forms, e.g. págí 'tie' and pág-í: 'be(come) tied', and the stative has the valency of the mediopassive. The mediopassive suffix is dropped in the stative. The stative stem is always bisyllabic (or in a few cases bimoraic diphthongal) and has $\{\mathrm{HL}\}$ overlay unless preceded by existential yé or a focalized constituent.

This vocalism is that of the A-stem rather than the more common A/X-stem. All statives end in a, whereas only some stems end in a in the $\mathrm{A} / \mathrm{X}$-stem. Examples are stative tóndà 'be bent over' < tónd-í:, stative sómà 'be carrying on both shoulders' < sóm-íi, and stative beâ 'be lying down' < bě. For the latter, compare A/X-stem be- in e.g. perfective negative bè-lí- 'did not lie down'. beâ, pronounced as a single diphthongal syllable, also exemplifies the diphthongal pattern for statives of Cv - stems.

A few idiosyncracies are worth noting. jèrí 'look at/watch' has a more or less suppletive stative jágà- 'be watching' (337a). ób-í: ‘sit down' has stative óbà- 'be seated' whose initial syllable shifts to [-ATR] (337b). óbà- is also the stative of ób-í: ‘(e.g. mat) be laid out', which may be a secondary formation historically. Some stems alternate ( n ) j before mediopassive -i:with (y)g in the stative before a (337b); see §3.4.5.4. Two stems that have medial 1 in aspectmarking forms lose it in the stative (337d).
gloss verb
stative
a. from unsegmentable $\mathrm{Cv}(\mathrm{C}) \mathrm{Cv}$ - stem

| 'look at/watch' | jèrí | jágà- |
| :--- | :--- | :--- |
| 'put in' | tún | túnà- |

b. from mediopassive $\mathrm{Cv}(\mathrm{C}) \mathrm{C}-\mathrm{i}$ :
phonologically regular

| 'carry on back' | bàmb-í: | bámbà |
| :--- | :--- | :--- |
| 'lie on belly' | dàb-í: | dábà- |

'lean against' dì-í: dídà-
'become hooked' gùb-í: gúbà-
'become tied'
'become laid out'
'shut (door)'
'carry on shoulders'
'become linked'
'be on (wall)'
'bend over, curl up' 'squat'
j/g alternation after nasal
'hide, become hidden'
'become tilted'
'mount, be put up on'
'kneel'
kómb-í: kómbà-
j/g alternation without nasal
'carry on a shoulder’
'stand' íj-í: ígà-
o/o alternation in penult
‘sit' ób-í: óbà- [homonym above]
$\varepsilon /$ alternation
'hold'
ób-í: óbà- [homonym below]
píg-í: píịà-
sóm-í: sómà-
sób-í: sóbà-
tár-í: tárà-
tónd-í: tóndà-
tón-í: tónà-
gòj-í: gógà-
jèl-í: jâ:-
bànji-í: bángà
jènj-í: jéngà-
nánj-í: náygà-
túnj-í: túygà-
ób-í: óbà- [homonym above]
jâ:- [in progressives]
c. diphthongal statives

| 'lie down' | bě | beâ- $(\sim$ bịâa |
| :--- | :--- | :--- |
| 'carry on head' | dǐ | diâa- $\quad[$ near-homonym in (d)] |

'(go to) sleep'
ní:
níà-
d. medial 1 in verb omitted in stative (§3.4.5.2)

| 'hold' | jèl-í: | jíà- |  |
| :--- | :--- | :--- | :--- |
| 'be put on (a stand)' | dèl-í: | dià- | [near-homonym in (c)] |

Existential yé is common but not obligatory with positive statives; see §11.2.2.1.1 for its syntax. Stative verbs have $\{\mathrm{L}\}$ overlay when preceded by yé, thus óbà-m versus yé ${ }^{\mathrm{L}} \mathrm{\jmath} \mathrm{bà}-\mathrm{m}$ 'I am sitting'.

Statives can be followed by the seemingly iterated sequences like $3 \mathrm{Sg}-\mathrm{m}=\mathrm{bì}-\mathrm{m}=\mathrm{bì}-\varnothing$ (and variants). Thus yé ${ }^{\text {Ltùnà }=\text { bì- } m=\text { bì- } \varnothing ~ ' h e / s h e / i t ~ w a s ~(p u t) ~ i n s i d e ', ~} 1 \mathrm{Sg}$ yé ${ }^{\text {L }}$ tùnà $=$ bì- $\mathrm{m}=$ bì-m. This is actually the past stative (§10.5.1.6).

### 10.4.2 Stative negative (= ndǎ-)

The derived stative is negated by adding a conjugated stative negative clitic = ndǎ- to the positive stem, which takes $\{\mathrm{H}\}$ overlay. The paradigm, showing the lexical rising tone, is (338). Existential yé does not occur in negative contexts.
(338) category Stative Neg 'not be bent over'

| 1 Sg | $=\mathrm{ndǎ}-\mathrm{m}$ | tóndá $=$ ndǎ-m |
| :---: | :---: | :---: |
| 1Pl | $=\mathrm{ndǎ}-\mathrm{y}^{\mathrm{n}}$ | tóndá $=$ ndǎ- $\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | $=\mathrm{ndǎ}-\mathrm{w}^{\text {n }}$ | tóndá $=$ ndǎ- $\mathrm{w}^{\mathrm{n}}$ |
| 2 Pl | $=\mathrm{ndǎ}-\mathrm{y}^{\mathrm{n}}$ | tóndá $=$ ndǎ- $\mathrm{y}^{\mathrm{n}}$ |
| 3 Sg | = ndă:-Ø | tóndá = ndǎ:-Ø |
| 3 Pl | = nd-ě: | tóndá $=$ nd- : |

The clitic is usually heard with low pitch, so a phonetically based transcription in texts would be with L-tone ( $1 \mathrm{Sg}=$ ndǎ-m, $3 \mathrm{Sg}=$ ndǎ:- $\varnothing$, etc.). However, the lexical rising tone becomes overt when the clitic is followed by a particle such as emphatic kóy, as in tóndá = ndǎ:-Ø kóy 'he/she sure isn't bent over (curled up)'. It can also be heard as = ndǎ:- when the past clitic is added (§10.5.1.6). The contour tone also explains the lengthened vowel in the 3 Sg form (§3.6.4.1). The tonal behavior is identical to that of = lǎ- 'it is not' (§11.2.1.2).

Examples are in (339). Note especially (339b), which is the only way to express '(door) be open'.
a. óbá = ndǎ-m
sit.Stat=StatNeg-1SgSbj
'I am not sitting.'
b. píyá= ndǎ:-Ø
be.shut.Stat=StatNeg-3SgSbj
'It (=door) is not shut (=is open).'

The nd/l alternation in stative negative $=$ ndǎ- versus = lǎ- 'it is not' is paralleled by the nd/l alternation in negative forms of lexical statives: só-ndǒ:- 'not have' (§11.5.1), mìbí-lǎ- 'not want' (§11.2.5.2).

### 10.5 Temporal clitics and particles

### 10.5.1 Past-time clitic ( $=$ bì- )

Past forms of regular aspect-negation inflections are created by adding a conjugated form of past clitic $=$ bì- to the verb, which in some inflectional categories itself ends in Ipfv -m. The clitic has both simple and apparently iterative variants. These is some ambiguity as to the morphemic composition of the iterative variants (past-time marker versus ${ }^{\text {L }}$ bù- 'be')

The paradigms are as follows. In elicitation, tonal variants like $=$ bí- $\mathrm{m}=$ bì- $\varnothing$ have been heard in the iterative combinations.

Paradigm of conjugated past clitic

| category | simple | iterative |  |
| :---: | :---: | :---: | :---: |
|  |  | more common | less common |
| 1Sg | $=\mathrm{bù}-\mathrm{m}$ | $=$ bù-m $=$ bù-m | $=\mathrm{bì}-\mathrm{m}=\mathrm{bì}-\mathrm{m}$ |
| 1Pl | $=\mathrm{bì}-\mathrm{y}^{\mathrm{n}}$ | $=\mathrm{bì}-\mathrm{m}=\mathrm{bì}-\mathrm{y}^{\text {n }}$ | $=\mathrm{bu}-\mathrm{m}=\mathrm{bì}-\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | $=b u ̀-w^{\text {n }}$ | $=\mathrm{bu}-\mathrm{m}=\mathrm{bu}-\mathrm{w}^{\mathrm{n}}$ | - |
| 2PL | $=\mathrm{bì}-\mathrm{y}^{\mathrm{n}}$ | $=\mathrm{bì}-\mathrm{m}=\mathrm{bì}-\mathrm{y}^{\mathrm{n}}$ | $=$ bù $-\mathrm{m}=$ bì $\mathrm{y} \mathrm{y}^{\mathrm{n}}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | = bì-Ø | $=\mathrm{bì}-\mathrm{m}=\mathrm{bì}-\varnothing$ | $=\mathrm{bù}-\mathrm{m}=\mathrm{bì}-\varnothing$ |
| 3 Pl | = b-à: | $=\mathrm{bi}-\mathrm{m}=\mathrm{b}-\mathrm{a}$ : | $=\mathrm{bù}-\mathrm{m}=\mathrm{b}-\mathrm{a}$ : |

To avoid clutter, the vocalic variants are not repeated in the subsections below.
The markup used here for the iterative forms is $=$ Past-Ipfv=Past- 3 SgSbj . However, an argument could be made that one of the $=$ bù- $/=$ bì- morphemes is really a variant of ${ }^{\text {L }}$ bù- 'be' as auxiliary. Indeed, the past-time version of yé 'bù- $\varnothing$ 'he/she/it is (present)' is yé bì-m= bì- $\varnothing$ 'he/she/it was (present)' or variant (§10.5.1.6). Furthermore, ${ }^{\text {L }}$ bù- 'be' is part of one of the progressive constructions, so it is reasonable to look for it in the past progressive. However, in other past-time categories (past imperfective, past perfect, etc.) there is no obvious reason why a 'be' auxiliary should be present, so The iterative combinations in (340) above, like $=b i ̀-m=b i ̀-\varnothing$, are therefore morphemically ambiguous. A reasonable hypothesis is that $=$ Past -$\mathrm{Ipfv}=\mathrm{Past}-3 \mathrm{SgSbj}$ is the right markup, but that this iterative form is not allowed when it is preceded by another -bu-/-bi- morpheme that would make the output sound like a three-part reduplication.

Addition of the past clitic to an aspect-negation category resets the temporal reference point from the moment of speaking into the past. However, completed past events are expressed in most contexts by the perfective aspect, with no past-time encltiics.

The known past-time categories are in (341).

$$
\begin{equation*}
\text { category } \quad \text { with past-time enclitic } \tag{341}
\end{equation*}
$$

positive
imperfective
progressive perfective experiential perfect recent perfect stative
negative imperfective Neg progressive Neg perfective Neg Exp Perfect Neg recent perfect Neg stative Neg
past imperfective ('used to VP, was about to VP', 'was going to VP' past progressive ('was VPing') past perfect ('had VPed') past experiential perfect ('had [ever] VP-ed') past recent perfect ('had just VPed') past stative
past imperfective negative ('did not use to VP', 'was not going to VP', etc.) past progressive negative ('was not VP-ing') past perfect negative ('had not VP'ed') past experiential perfect negative ('had never VP-ed') past recent perfect negative ('had not just VP-ed') past stative negative
10.5.1.1 Past imperfective (positive and negative)

The past imperfective can be used in past habitual ('used to VP') and future-in-past ('was going to VP') contexts. However, elicitation often produced past progressive rather than past imperfective forms. The elicitation context where past imperfectives were most reliably produced was consequent clauses in counterfactual conditionals ('would have VPed').

The positive paradigm is in the 'would have gone out' column of (342) and can be compared with the 'goes out' version in the central column. The verb takes imperfective suffix -m-, followed by the conjugated form of past clitic = bì-. The -nù-/-nè-/dò- formative in the regular imperfective positive is absent.

Past imperfective positive paradigm

| category | 'goes out' | 'used to go out' |  |
| :---: | :---: | :---: | :---: |
|  |  | simple | iterative |
| 1 Sg | gô-m-nù-m | $\mathrm{gô}-\mathrm{m}=\mathrm{bù}-\mathrm{m}$ | gô-m $=$ bù-m $=$ bù-m |
| 1 Pl | gô-m-nè-y ${ }^{\text {n }}$ | gô-m $=$ bì $-\mathrm{y}^{\text {n }}$ | gô-m $=$ bì $-\mathrm{m}=\mathrm{bì}-\mathrm{y}^{\text {n }}$ |
| 2 Sg | gô-m-nù-w ${ }^{\text {n }}$ | gô-m $=$ bù-w ${ }^{\text {n }}$ | gô-m $=$ bù $-\mathrm{m}=\mathrm{bù}-\mathrm{w}^{\text {n }}$ |
| 2 Pl | gô-m-nè-y ${ }^{\text {n }}$ | gô-m $=$ bì $-\mathrm{y}^{\text {n }}$ | gô-m $=$ bì- $\mathrm{m}=$ bì- $\mathrm{y}^{\text {n }}$ |
| 3Sg/Inan | gô-m-dò-Ø | gô-m = bì-Ø | gô-m $=$ bì $-\mathrm{m}=\mathrm{bì}-\varnothing$ |
| 3 Pl | gô-m-d-غ | gô-m $=$ b-à: | gô-m = bì-m = bà:-Ø |

An example with bisyllabic stem: kúbò-m = bù-m 'I used to eat meat'.
As noted in the following subsection, there are only slight phonological and semantic differences between the iterative version of the past imperfective in (342) and the past progressive with 'bù- 'be' auxiliary in (346) below. Unambiguous examples of the past imperfective include 2015-03 @ 00:49 (bé:-mò-m=bì-Ø), 2015-05 @ 00:32 (kóbà-m=b-à:), and 2022-03@00:14 (two).

The negative version is illustrated in (343). All recorded examples of the negation involve the iterative variant of the enclitic complex.
(343) tîn ${ }^{n}$ nàmá kúbó-ŋgǒ: $=$ bù $-\mathrm{m}=$ bù -m at.first meat eat.meat-Ipfv-IpfvNeg=Past-Ipfv=Past-1SgSbj
'Formerly I didn't use to eat meat.'

The negative paradigm is in the right column of (344). Corresponding to -yù-/-yì-/-ngò: in the 'does not ascend’ column, the past version has -ngǒ:- (</-m̀-ngò-/).
(344) Past imperfective negative paradigm (with 'ascend')

| category | 'does not ascend' | 'did not use to ascend' |
| :---: | :---: | :---: |
| 1 Sg | ílá-yù-m | ílà-ŋgǒ: = bù-m = bù-m |
| 1 Pl | ílá-yì-y ${ }^{\text {n }}$ | ílà-ngǒ: $=$ bù-m $=$ bì- ${ }^{\text {n }}$ |
| 2 Sg | f́lá-yù-w ${ }^{\text {n }}$ | ílà-ŋgǒ: $=$ bù $-\mathrm{m}=$ bù- $\mathrm{w}^{\text {n }}$ |
| 2PL | ílá-yì-y ${ }^{\text {n }}$ | ílà-ŋgǒ: = bù-m = bì-y ${ }^{\text {n }}$ |
| 3 Sg | ílá-ygò:-Ø | ílà-ıgǒ: = bì-m = bì-Ø |
| 3 Pl | ílá-yg-c̀: | ílà-ŋgǒ: $=$ bù $-\mathrm{m}=\mathrm{b}$-à: |

The existence of "iterative" forms like $:=$ bì-m = bì- $\varnothing$ in the past imperfective negative (344), and optionally in the past imperfective positive (342), creates problems in morphemic markup as noted elsewhere even if it is distinguished from the past progressive.

### 10.5.1.2 Past progressive (positive and negative)

Conjugated past clitic $=$ bì- is added to the ${ }^{\mathrm{L}}$ bù- or ${ }^{\mathrm{L}}$ sò- of the progressive (§10.2.2.3) after the augment -m-. When the auxiliary is ${ }^{\mathrm{L}}$ sò- 'have', the enclitics can have simple or iterative form (345).

Past progressive $-\mathrm{m}^{\mathrm{L}}$ sò- $\mathrm{m}=$ bì-

| category | 'is going out' | 'was going out' |  |
| :--- | :--- | :--- | :--- |
|  |  | simple | iterative |

In the progressive version with auxiliary ${ }^{\text {L }}$ bù- 'be', the past-time counterpart has just one additional enclitic = bì- (plus pronominal ending). There is no iterative variant with three bù- morphemes $(1 \mathrm{Sg} \#=$ bù-m $=$ bù- $\mathrm{m}=$ bù-m, etc. $)$.
(346) Past progressive -m bì- $\mathrm{m}=$ bì-

| category | 'is conveying' | 'was conveying' |
| :---: | :---: | :---: |
| 1 Sg | zó-m ${ }^{\text {L }}$ bù-m | zó-m $=$ bù-m $=$ bù-m |
| 1 Pl | zó-m ${ }^{\text {L }}$ bì-y ${ }^{\text {n }}$ | zó-m $=$ bù-m = bì̀-y ${ }^{\text {n }}$ |
| 2 Sg | zó-m ${ }^{\text {L }}$ bù-w ${ }^{\text {n }}$ | zó-m $=$ bù-m $=$ bù-w ${ }^{\text {n }}$ |
| 2 Pl | zó-m ${ }^{\text {L }}$ bì- ${ }^{\text {n }}$ | zó-m $=$ bì-m $=$ bì-y ${ }^{\text {n }}$ |
| 3Sg/Inan | zó-m ${ }^{\text {L }}$ bù-Ø | zó-m = bì-m = bì-Ø |
| 3 Pl | zó-m ${ }^{\text {L }} \mathrm{b}$ - : | zó-m $=$ bì-m $=$ b-à: |

An example is (347).

| [ándá | nàmá | zóá-m | bù- $\mathrm{m}=$ bù-m] |
| :--- | :--- | :--- | :--- |
| [the.bush | meat | look.for-Ipfv | be-Ipfv=Past-LogoSbj] |

'I was looking for meat (=animals) out in the bush.' (2015-01@ 01:30)

With ${ }^{\text {Lbù }}$ - 'be' auxiliary as in (347), the past progressive is virtually indistinguishable from the past imperfective variant with iterative auxiliary. The audible difference, if any, would be the tones of the verb stem, here zóá-m in the progressive versus záà-m in the imperfective. The semantic difference is also slight.

Morphemic parsing in past progressive $-\mathrm{m}^{\mathrm{L}}$ sò- $\mathrm{m}=$ bì- ,,$-\mathrm{m}^{\mathrm{L}}$ sò- $-\mathrm{m}=$ bì- $\mathrm{m}=$ bì- , , and $-\mathrm{m}=\mathrm{bì}-\mathrm{m}=$ bì- $\varnothing$ (or their variants) is especially tricky. ${ }^{\text {L }}$ bù- 'be' is one of the auxiliaries in the (nonpast) progressive, so it could reasonably be spotted as one of the bì- morphemes in = bì $-\mathrm{m}=$ bì- $\emptyset$. But which one? And how would this markup translate to the other past-time
paradigms, some of which allow the same "iterative" enclitic clusters and which are not based on nonpast inflectional categories that have 'be' as auxiliary?

For the progressive negative (-m só-ndǒ:-, -m ŋ̀gó-) see §10.2.3.6. Past progressive negative examples are in (348). As usual in past negatives, the iterative form of the enclitic is normal.
a. bírá: bírá-m só-ndǒ: $=$ bù-m = bù-m
work(n) work-Ipfv have-Neg=Past-Ipfv=Past-1SgSbj
'I was not working.'
b. bírá: bírá-m ỳgó- $\mathrm{m}=$ bù- $\mathrm{m}=$ bù-m
work(n) work-Ipfv not.be-Ipfv=Past-Ipfv=Past-1SgSbj
'I was not working.'

For additional detail on the morphology of past forms of 'have' and 'be' and their negations, see §10.5.1.6 below.

### 10.5.1.3 Past perfect (positive and negative)

Adding the past-time enclitic to the unsuffixed verb stem produces a past perfect ('had VPed'). This category is common in the antecedent clause of counterfactual conditionals (§16.4). It can also function much like a regular perfective verb ('VPed’) specifying past time, particularly with verbs like yǐ 'see' and nǒ 'hear' that do not allow the perfective-1a or -1b (\$10.2.1.4).

In the positive paradigm, simple past clitic $=$ bì- is added directly to the verb stem, with no overt perfective marking. This functions as the past-time equivalent for the various unmarked and suffixally marked perfectives (perfective-1a, $-1 \mathrm{~b}, 2$ ). Iterative forms of the enclitic were denied by the assistant. The corresponding negation is based on a syncopated version of perfective negative -lí-, plus the "iterative" form of the enclitic. All negative past-time forms show the "iterative" form.

Past perfect $=$ bì-

| category | 'had hit' | 'had not hit' |
| :---: | :---: | :---: |
| 1Sg | bùndó $=$ bù-m | bùndǒ-l $=$ bù-m $=$ bù-m |
| 1P1 | bùndó $=$ bì- $\mathrm{y}^{\text {n }}$ | bùndǒ-l $=$ bì-m $=$ bì- $\mathrm{y}^{\text {n }}$ |
| 2Sg | bùndó $=$ bù-w ${ }^{\text {n }}$ | bùndǒ-l $=$ bù-m $=$ bù-w ${ }^{\text {n }}$ |
| 2P1 | bùndó $=$ bì- ${ }^{\text {n }}$ | bùndǒ- $\mathrm{l}=$ bì- $\mathrm{m}=$ bì- $\mathrm{y}^{\text {n }}$ |
| 3Sg/Inan | bùndó = bì- $\emptyset$ | bùndǒ-l $=$ bì-m $=$ bì- $\varnothing$ |
| 3 Pl | bùndó $=$ b-à: | bùndǒ-1 = bì-m= b-à: |

The verb preceding = bì- must end in an H-tone. Monomoraic /LH/-toned verbs like gǒ 'exit' are H -toned: gó= bì- 'had gone/come out'.

### 10.5.1.4 Past experiential perfect

One of the experiential perfect forms, that in -tદ́ŕ́ $=$ bì-, already contains past $=$ bì- ( (10.2.1.5). To shift the temporal reference point to the past, the past-time enclitic is added in iterated rather than simple form (350a). The negative counterpart has the desyllabified form of perfective negative -lí- as in the past perfect negative (preceding subsection (350b).

$$
\begin{array}{ll}
\text { a. gə̀nsá:rá } & \text { yì-téŕ́ }=\text { bù-m }=\text { bù-m }  \tag{350}\\
\text { elephant } & \text { see-ExpPrf=Past-Ipfv=Past- } 1 \text { SgSbj } \\
\text { '(At that time) I had (once) seen an elephant.' }
\end{array}
$$

b. gònsá:rná yì-tèrǎ-l=bù-m=bù-m
elephant see-ExpPrf-PfvNeg=Past-Ipfv=Past- 1 SgSbj
'(At that time) I had never seen an elephant.'
The 3 Sg version of ( 350 b ) has tèrǎ-1 $=$ bì-m $=$ bì- $\varnothing$.
10.5.1.5 Past recent perfect (positive and negative)

It was difficult to elicit the past-time version of the recent perfect. On one occasion the assistant produced examples in which both recent perfect dè- and the past clitic were conjugated, flanking an invariant, unconjugated $=$ bu-m (351).
a. úló óndú dè-m=bú-m=bù-m
house build RecPrf- 1 Sg Sbj=Past-Ipfv=Past- 1 Sg Sbj
'I had (recently) finished building (a/the) house.'
b. zá jé dé- $y^{n}=b u ́-m=b i ̀-y^{n}$
meal eat.meal RecPrf-1PISbj=Past-Ipfv=Past-1PISbj
'We had (already) eaten.'

He later produced variants with dè- unconjugated, e.g. né d $\grave{\text { e }}=$ bú-m = bì-y ${ }^{\mathrm{n}}$ 'we had (already) eaten', and even variants with same-subject subordinator gín as in né dè gín bú-m= bì- $\mathrm{y}^{\mathrm{n}}$. The sequence $=$ bú- $\mathrm{m}=$ bì- points to the "iterative" past-time morpheme strings described in preceding subsections. Morphemic markup is correspondingly difficult.

The negative past recent perfect is illustrated in (352). It too is doubly conjugated, flanking invariant $=$ bú-m. It was difficult to elicit and may not be in common use, as opposed to the general past perfective negative.

$$
\begin{array}{lll}
\text { ?\# úló } & \text { óndú } & \text { dà-lù- }-\mathrm{m}=\text { bú }-\mathrm{m}=\text { bù- } \mathrm{m} \\
\text { house } & \text { build } & \text { RecPrf-PfvNeg- } 1 \mathrm{SgSbj}=\mathrm{be}-\mathrm{Ipfv}=\text { Past- } 1 \mathrm{SgSbj} \\
\text { 'I have not (yet) finished building the house.' }
\end{array}
$$

### 10.5.1.6 Past stative (positive and negative)

Statives derived from regular verbs are described in §10.4.1 (positive) and §10.4.2 (negative). In the past stative, the verb adds "imperfective" -m plus the past-time enclitics, either simple of "iterative." Positive examples are in (353).
gloss
stative
past stative
simple iterative
'be sitting' yé j̀bà- 3 Sg yé j̀bà-m = bì-Ø yé j̀bà-m = bì-m = bì- $\varnothing$
1 Sg yé òbà- $\mathrm{m}=$ bù- m yé j̀bà $-\mathrm{m}=$ bù- $\mathrm{m}=$ bù- m
$3 \mathrm{Pl})$ yé $̀ \mathrm{ba}-\mathrm{m}=\mathrm{b}-\mathrm{a}: \quad$ yé $\grave{\text { j̀bà }}-\mathrm{m}=$ bì- $\mathrm{m}=$ bà:- $\varnothing$

As usual in past-time negatives, the past stative negative is attested only with the iterative enclitic forms (354). In the 3 Pl , = ndă:- too can be conjugated ( $=$ nd-̌̌:).

| gloss | stative Neg |  | past stative Neg |
| :---: | :---: | :---: | :---: |
| 'not be sitting' | óbá = ndǎ:- | 3Sg | óbá $=$ ndă: $=$ bù-m = bì-Ø |
|  |  | 1Sg | óbá $=$ ndǎ: $=$ bù $-\mathrm{m}=$ bù-m |
|  |  | 3 Pl | óbá = ndǎ: = bù-m=b-à: |
|  |  |  | $\sim$ óbá $=$ ndě: $=$ bù-m $=$ b-à: |

Stative quasi-verbs are exemplified in (355). Since 'be.Loc' already has ${ }^{\text {L }}$ bù-, it combines with just the simple variant of the past-time enclitic, and assimilates in vocalism (355a). There is no iterative enclitic (\#bù-m = bì-m = bì- $\emptyset$ or the like). By contrast, 'have' allows both simple and iterative past-time enclitics (355b), and 'want' is attested only with the iterative form (355c).

| gloss | stative | past stative |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | simple | iterative |
| a. 'be.Loc' | yé Lbù- | 3Sg | yé bì-m= bì-ø | - |
|  |  | 1Sg | yé bù-m= bù-m | - |
|  |  | 3Pl | yé bì-m=b-à: | - |
| b. 'have' | yé ${ }^{\text {s }}$ ¢̀ - | 3Sg |  | yé ${ }^{\text {L }}$ Sò-m $=$ bì-m $=$ bì- $\varnothing$ |
|  |  | 1Sg | yé ${ }^{\text {L }}$ sò-m $=$ bù-m | yé ${ }^{\text {L }}$ sò-m $=$ bù-m $=$ bù-m |
|  |  | 3Pl | yé ${ }^{\text {L }}$ sò-m $=$ b-à: | yé ${ }^{\text {L }}$ ¢ ${ }^{\text {- }} \mathrm{m}=\mathrm{bì}-\mathrm{m}=\mathrm{b}-\mathrm{a}$ : |
| c. 'want' | m̀bá- <br> (3Pl m̀b- $\mathrm{\varepsilon}$ :) | 3 Sg | - | $\mathrm{mbá}=\mathrm{bì-m}=\mathrm{bì-}$ - |
|  |  | 1Sg | - | mbá $=$ bù $\mathrm{m}=\mathrm{bu}$-m |
|  |  | 3Pl | - | mbá $=$ bì-m $=\mathrm{b}-\mathrm{a}$ : |
|  |  |  |  | $\sim \mathrm{mb}$ - e : $=$ bì-m=b-à: |

Under negation, each of the quasi-verbs presents its regular negation, with the option of the full 3Pl inflected form. This is followed by the iterative form of the past-time enclitic (356).

|  | stative Neg |  | past stative Neg |
| :---: | :---: | :---: | :---: |
| a. 'not be' | ỳgó- <br> (3Pl ŋ̀gw-ê:) | $\begin{align*} & 3 \mathrm{Sg}  \tag{356}\\ & 1 \mathrm{Sg} \\ & 3 \mathrm{Pl} \\ & 3 \mathrm{Pl} \end{align*}$ |  |
| b. 'not have' | só-ndǒ(:)- <br> (3Pl só-nd-è:) | $\begin{aligned} & 3 \mathrm{Sg} \\ & 1 \mathrm{Sg} \\ & 3 \mathrm{Pl} \end{aligned}$ | $\begin{aligned} & \text { só-ndǒ: }=\text { bì-m }=\text { bì- } \varnothing \\ & \text { só-ndǒ: }=\text { bù-m }=\text { bù-m } \\ & \text { só-ndǒ: }=\text { bì-m }=\text { b-à: } \\ & \sim \text { só-ndè: }=\text { bì-m }=\text { b-à: } \end{aligned}$ |
| c. 'not want' | $\begin{aligned} & \text { m̀bílă:-Ø } \\ & \text { (3Pl m̀bíl-l-è:) } \end{aligned}$ | $\begin{aligned} & 3 \mathrm{Sg} \\ & 1 \mathrm{Sg} \\ & 3 \mathrm{Pl} \end{aligned}$ | $\begin{aligned} & \text { m̀bí-lă: }=\text { bì̀-m= bì-Ø } \\ & \text { mílă: }=\text { bù-m }=\text { bù-m } \\ & \text { m̀bílă: }=\text { bì-m }=\text { b-à: } \\ & \sim \text { m̀bílľ̌: }=\text { bì-m }=\text { b-à: } \end{aligned}$ |

The prosodically expressed 'it is' (identificational) nominal predicate is described in §11.2.1.1, e.g. noun sòmé: 'horse', identificational sòmê: = $\emptyset$ 'it's a horse'. Its past-time version adds "iterative" bì-m = bì- $\varnothing \sim$ bì-m=b-è: (singular) or bù-m=bà:-Ø ~bì-m=bà:-Ø (plural). It would be semantically reasonable to identify one of the enclitics as the auxiliary 'bù- 'be'.
(357)
a. sòmé: $\quad$ bì- $m=b i ̀-\varnothing ~(~ b i ̀-m=b-\varepsilon ̀:) ~$
horse be-Ipfv=Past-3SgSbj
'It was a horse.'
b. sòm-bó $\quad{ }^{\mathrm{L}}$ bù-m=bà:- $\varnothing(\sim$ bì-m $=$ bà:- $\varnothing)$
horse-AnPl be-Ipfv=Past-3PISbj
'They were horses.'

The 'it is not' (negative identificational) predicate is conjugated enclitic = lă- (3Sg = lă:- - 3 , 3 Pl $=$ là- $\varepsilon$ ) added to the noun (§11.2.1.2). The past-time counterpart adds the iterative form of the past-time enclitics to $=$ lă:-
a. $\quad$ sòmé: $=$ lǎ: $=$ bì-m = bì- $\varnothing$
(~ bì-m = b-غ̀:)
horse=not.be=Past-Ipfv=Past-3SgSbj
'It was not a horse.'
b. sòm-bó $=$ lǎ: $=$ bù-m = bà:- $-\varnothing \quad(\sim$ bì-m $=$ bà: $-\varnothing)$
horse-AnPl=not.be=Past-Ipfv=Past-3PlSbj
'They were not horses.'

The past-time form of a stative adjectival predicate is exemplified by $\varepsilon$ źù-m=bì-Ø 'it was

10.5.2 'Still', 'up to now', '(not) yet'

Expressions translatable as 'still' in the sense of 'up to and including now' are related to yǒ: 'today', namely yô: túmó and in some contexts yǒ: là.
(359)
a. [yô: túmó] bírá: bírá-m ${ }^{\text {L }}$ sò-m
[today still] work(n) work-Ipfv have- 1 SgSbj
'He still works.' or 'He is still working.'
b. [yô: túmó] ńné tòdă-l-Ø
[today still] 3Sg pay-PfvNeg-3SgSbj
'He/She still hasn't paid.'
c. [y̌̌: là] zímá-m ${ }^{\text {Lsò }} \mathrm{w}^{\mathrm{n}}$ mà
[today too] be.sick-Ipfv have-2SgSbj Q
'Are you still sick (today)?
'Not yet' is expressed with wàndá plus a negative predicate (360a). Elsewhere wàndá is the adjective 'other'. In the 'not yet' construction (360b) it can be replaced by nân 'now', which is optionally extended by adding là 'also, too' or kàndà là (cf. kàndá 'new').
a. wàndá dọà-ndá
not.yet arrive-PfvNeg.3PISbj
'They have not yet arrived (there).'

'I haven't eaten yet.'

### 10.6 Imperatives and hortatives

10.6.1 Imperatives and prohibitives
10.6.1.1 Imperative (unsuffixed A/X-stem, plural -n)

The imperative stem, which is used without further suffixation for singular addressee, is based on the $\mathrm{A} / \mathrm{X}$-stem.

For verbs ending lexically in a nonhigh vowel, all of which are mono- or bisyllabic, the imperative stem has $\{\mathbf{H}\}$ overlay, erasing the lexical distinction between $/ \mathrm{LH} /$ and $/ \mathrm{H} /$ melodies.
(361) Imperative (final-nonhigh-vowel class)
verb imperative gloss
a. monosyllabic

| $C V$ |  |  |
| :---: | :--- | :--- |
| ká | ká | 'shave' |
| dě | dé | 'bathe' |
| ď̌ | dọá | 'arrive' or 'insult' |
| né | ná | 'eat, drink' |
| $C v:$ |  |  |
| á: | á: | 'brew (beer)' |
| pé: | péá | 'strike (match)' |
| sá: | sá: | 'take off (garment)' |
| tó: | tó: | 'pound' |
| tó: | tóá | 'begin' |
| wǒ: | wá: | 'come' |

b. CvCv
dògó
kóbó
dógá
kédé
kóbá
yàgá
kédé
yágá

$$
\begin{aligned}
& \text { 'abandon' } \\
& \text { 'draw (water)' } \\
& \text { 'cut' } \\
& \text { 'fall' }
\end{aligned}
$$

c. CvCCv
tómbó tómbó 'jump'
nìngé níggé 'cook (sauce)'
irregular gò-ndú gò-ndó 'take out'

For verbs whose $\mathrm{A} / \mathrm{X}$-stem ends in a high vowel (rather than a), the imperative ends in i rather than $u$. Monosyllabics have H-toned imperatives. For nonmonosyllabics, the lexical tone contour appears. There is no merger of $/ \mathrm{LH} /-$ and $/ \mathrm{H} /-$ melodic CvCv - stems.
(362) Imperative (final-high-vowel class) bare imperative gloss
a. $\mathrm{Ci}, \mathrm{Ci}$ :

| nú | nưí | 'enter' |
| :--- | :--- | :--- |
| tí | tîá | 'send' |
| dǐ | díá | 'carry on head' |
| ní: | ní: | 'sleep' |

b. $\mathrm{CvCi}, \mathrm{nCi}$ stems

Cvy stem
lǎy ~ làyí lǎy 'taste', phonetic [lǎj]
finalí

| dèlí | dèlí | 'put up on' |
| :--- | :--- | :--- |
| gùbú | gùbí | 'hang up' |

óbú óbí 'lay out'
final á
jèrí jèrá 'look’
ńdí ńdá 'give’
c. $\mathrm{CvCCi} / \mathrm{u}$ stems

| zòngú | zòngí | 'treat (medically)' |
| :--- | :--- | :--- |
| óndú | óndí | 'build' |

d. $\mathrm{Cv}: \mathrm{Ci} / \mathrm{u}$ stems

| pá:mú | pá:má | 'understand' |
| :--- | :--- | :--- |
| nó:ndú | nó:ndá | 'ignite' |
| mà:ndí | mà:ndá | 'think' |

e. trisyllabic $\mathrm{CvCvCi} / \mathrm{u}$

| ódír(í) <br> mògùlú <br> zìgìbí | ódúrá <br> mògùlá <br> zìgìbé | 'ask' <br> 'wash (grain)' <br> 'shake' |
| :--- | :--- | :--- |
| jedl-í: | jèl-íá | 'guard, watch over' |

g. two noncentripetal motion/transfer verbs with irregular increment -da
yǎy/o- yà-dá 'go'
zǎy/zo- zá-dà 'take away, convey'

The plural-addressee suffix -ǹ is added to the simple imperative stem. For example, jèrá becomes jèrá-ǹ ‘look-2Pl!’ Allomorph -(ǹ)dè is used after n. tún becomes tún-ǹdè 'put-2Pl in!', pronounced [tûndè]. Other examples: kédé-ǹ ‘cut-2l!’, óbí-ǹ ‘lay out-2Pl!’, óndí-ǹ ‘build-2Pl!'

Valency is the same for imperatives as for indicative clauses. Accusative gì is optionally present on object NPs in both types of clause (§6.7). Reflexive objects of the type 'your head' also occur in both types of clause (§18.1.1).

### 10.6.1.2 Prohibitive (-lì ~ -dì, plural -ll sèndèn)

The prohibitive, or negative imperative, is expressed by suffix -lì for singular addressee. The suffix is added to the $\mathrm{A} / \mathrm{X}$-stem of the verb. For monomoraic Cv́ and Cv̌ stems, the stem tone is high. Nonmonosyllabics present their lexical tones. The 1 shifts to $d$ after stem-final nasal (§3.4.5.5) as in (364f).

Stems with final nonhigh vowel are illustrated in (363).
(363) Prohibitive (final-nonhigh-vowel class)
stem Prohibitive gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :
ká
dě
dǒ
nモ́
wǒ zě: zèá-lì 'bring'
b. CvCv

| dògó | dògá-lì | 'abandon' |
| :--- | :--- | :--- |
| kóbó | kóbá-lì | 'draw (water)' |

c. CvNCv

| tómbó | tómbó-lì | 'jump' |
| :--- | :--- | :--- |
| nìngé | nìngé-lì | 'cook (sauce)' |
| gò-ndó | gò-ndó-lì | 'take out' |

Verbs with final high vowel are illustrated in (364).
stem prohibitive gloss
a. $\mathrm{Ci}, \mathrm{Ci}$ :

| nú | nú-lì | 'enter' |
| :--- | :---: | :---: |
| tí | tiaà-lì | 'send' |
| ní: | ní:-lì | 'sleep' |

b. $\mathrm{CvCi} / \mathrm{u}$
lǎy ~ làyí
dèlí
jèrí

## óbú

c. $\mathrm{CvCCi} / \mathrm{u}$
zòngú óndú
d. $\mathrm{Cv}: \mathrm{Ci} / \mathrm{u}$
nó:ndú
mà:nd
nó:ndá-lì
mà:ndá-lì
e. trisyllabic $\mathrm{CvCvCi} / \mathrm{u}$
zìgìbí zìgìbé-lì
f. Cvn (with $1 \rightarrow$ d, §3.4.5.5)
kán kán-dì
'ignite'
'think'
'taste'
'put up on'
'look'
'lay out'

## 'treat (medically)'

'build'
'shake'
'do'

For nonsingular addressee, -lì is reduced to ${ }^{-1}$ (with L-tone) followed by sèndèn. Example: jèrâ1 sèndèn 'don't-2Pl look!' For typographic reasons a falling tone is written on the stem-final vowel since the accent diacritic does not work on "l."

### 10.6.2 Hortatives

### 10.6.2.1 Hortative (-mó, plural -mó-ǹ)

The hortative ('let's VP!') is expressed by a suffix -mó for singular addressee, or -mó-ǹ for nonsingular addressee. The form for nonsingular addressee is more common and is the normal response to elicitation cues; it is used in the lists below. The suffix -ǹ can be equated with imperative plural-addressee suffix -ǹ.
-mó follows the $\mathrm{A} / \mathrm{X}$-stem of the verb. /H/-melodic verbs appear with H-tone, while /LH/-melodic verbs become L-toned before the suffix. There is an irregular form for 'let's go', ńbó (plural ḿbó-ǹ) for expected \#ó-mó (§10.1.3.5).
(365) Hortative (final-nonhigh-vowel class)
verb hortative gloss
a. irregular
yăy/o- ḿbó-ǹ 'go'
b. $\mathrm{Cv}, \mathrm{Cv}$ :
dě dè-mó-ǹ 'bathe'
dǒ dọà-mó-ǹ 'arrive' or 'insult'
né já-mó-ǹ 'eat, drink'
wǒ: wà:-mó-ǹ 'come’
c. CvCv

| dògó | dògà-mó-ǹ | 'abandon' |
| :--- | :--- | :--- |
| kédé | kédé-mó-ǹ | 'cut' |
| zě: | zè̀á-mó-ǹ | 'bring' |

d. CvCCv
tómbó tómbó-mó-ǹ 'jump’
gò-ndó gò-ndò-mó-ǹ 'take out'

Verbs with final high vowel are in (366).
(366) Hortative (final-high-vowel class)
verb
hortative
gloss
a. $\mathrm{Ci}, \mathrm{Ci}:-$

| nú | nú-mó-ǹ | 'enter' |
| :--- | :--- | :--- |
| yǐ | yà-mó-ǹ | 'see' |
| dǐ | dià-mó-ǹ | 'carry on head' |
| ní: | ní:-mó-ǹ | 'sleep' |

b. $\mathrm{CvCi} / \mathrm{u}, \mathrm{nCi}$

| lǎy ~ làyí | lày-mó-ǹ | 'taste' |
| :--- | :--- | :--- |
| jèrí | jèrà-mó-ǹ | 'look' |
| óbú | óbú-mó-ǹ | 'lay out' |
| ńdí | ńdá-mó-ǹ | 'give' |

c. $\mathrm{CvCCi} / \mathrm{u}$
zòngú zòngù-mó-ǹ 'treat (medically)' óndú óndú-mó-ǹ 'build’
d. Cv:NCi-
mà:ndí mà:ndà-mó-ǹ 'think'
e. trisyllabic CvCvCi
zìgìbí zìgìbè-mó-ǹ 'shake'

### 10.6.2.2 Hortative negative (-mô-l, plural mô-1 sèndèn)

Morphologically, the hortative negative is the prohibitive of the hortative positive. Positive hortative -mó for singular add is negated as -mô-l. The irregular (positive) hortative ḿbó 'let's go!' is negated as ḿbó-mô-l 'let's not go!'. Other verbs add -mô-l to the same form of the stem used in the (positive) hortative.

For nonsingular addressee, hortative -mó-ǹ is negated as -mô-1 sèndèn.
A few examples of the positive and negative hortative, for nonsingular addressee, are in (367).
verb hortative hortative Neg gloss
a. irregular
yǎy/o- ḿbó-ǹ ńbó-mô-l sèndèn 'go'
b. regular, /H/ melody

| nú | nú-mó-ǹ | nú-mô-1 sèndèn | 'enter' |
| :--- | :--- | :--- | :--- |
| óndú | óndú-mó-ǹ | óndú-mô-l sèndèn | 'build' |
| tómbó | tómbó-mó-ǹ | tómbó-mô-l sèndèn | 'jump' |

c. regular, /L/melody
zòbó zòbà-mô-ǹ zòbà-mô-1 sèndèn 'run'
gò-ndó gò-ndò-mó-ǹ gò-ndò-mô-l sèndèn 'take out'
zìgìí zìgìbè-mó-ǹ zìgìbè-mô-1 sèndèn 'shake'
10.6.3 Quoted imperatives and hortatives
10.6.3.1 Quoted imperative (-y~-u)

The QuotImprt form of the verb is used in quoted imperatives ('tell them to come!', 'he says for you/me/him to come') and in imprecations, i.e. wishes, blessings, and curses ('may God VP!'). Imprecations are arguably a defective type of quoted imperative. The QuotImprt verb form is not conjugated and has no plural/singular distinction. A pronominal subject may precede it. Except in imprecations, the quoted imperative is followed by either quotative wa or interrogative ma, or less often by ${ }^{\mathrm{L}} \mathrm{jin}(\mathrm{i})$ 'said'.

The QuotImprt form preserves the lexical melody of the verb, except for 'bring' and 'convey' which present in HL-toned form. The QuotImprt ends in suffixed -y after monosyllabic stems, and mutates the final vowel to $u$ for longer stems that end in a Cv syllable. The choice of $u$ rather than $i$ is influenced by the consonant of the following wa or ma, and $i$ does occur (in imprecations) in the absence of such particles (2022-03@01:18). Mediopassive suffix -í: is not audibly changed but its imperative is arguably from /-í:-y/. Most Cv: verbs derive historically from * Cvlv (§3.4.5.2, and the original *l is preserved in the QuotImprt form Cvlú (368e).
(368) Quoted imperative (final-nonhigh-vowel class)
verb QuotImprt gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :, and NCv with high vowel unchanged

| nú | nú | 'enter' |
| :--- | :--- | :--- |
| dǐ | dǐ | 'carry on head' |
| tí | tí | 'send' |
| yǐ | yǐ | 'see' |
| ní: | ní: | 'sleep' |
| ńdí | ńdí | 'give' |

b. Cv with mid-height front vowel, becoming Ci
dě dǐ 'bathe'
jě jǐ 'dance (v)'
yદ̌ yǐ 'weep'

ј ј́ jí 'eat, drink’
c. Cv with low or mid-height back vowel, becoming $\mathrm{Cv}-\mathrm{y}$

| ká | ká-y | 'shave' |
| :--- | :--- | :--- |
| dǒ | dǒ-y | 'insult' |
| gǒ | gǒ-y | 'exit (v)' |
| t́́ | té-y | 'weave' |
| tó | tó-y | 'sow, plant' |

d. Cvy unchanged segmentally

| lǎy ~ làyí | lǎy | 'taste' |
| :--- | :--- | :--- |
| yǎy/o- | yǎy | 'go' |

irregularly HL-toned
zǎy/zo- zây [!] 'take away, convey'
e. Cv: with nonhigh vowel to Cvlu or Cvli

| á: | álú | 'brew (beer)' |
| :--- | :--- | :--- |
| bǎ: | bàlú | 'gather' |
| nǎ: | nàlú | 'take, pick up' |



For the nonmonosyllabics, the choice between final $u$ and i depends on what follows. Quotative wa requires $u$, while conjugated verb ${ }^{L} \mathrm{jìn}(i ̀)$ 'said' requires $i$.

A monomoraic quoted imperative dí 'carry on head' is extended as dí-dè in 2022-04 @ $01: 36$. Elsewhere d $\varepsilon$ is the recent perfect auxiliary but if it were the target of quoted imperative morphology we would expect \#dí dí. Therefore it is transcribed here as an extended variant of QuotImprt dí.
(369) [[kwǎ: ní:] dí-dè] ${ }^{\text {Lì̀nù- }}{ }^{n}{ }^{n}$ dè
[[neck Inst] carry.on.head.QuotImprt] say.Pfv-2SgSbj if
'when you-Sg tell (them) to put it up on their necks (=heads), ...'
(2022-04@01:36)

### 10.6.3.2 Quoted prohibitive (-lì)

This form is used in quoted prohibitives ('he says/said for me/you/her not to come') and in negative wishes and imprecations ('may God not VP!'). The form is identical to the mainclause singular-addressee prohibitive, but it is normally followed by quotative wà (370). It may be preceded by a preverbal subject pronoun.
(370) Third-person hortative negative
stem prohibitive quoted gloss
a. irregular
yǎy/o- ó-lì ó-lì (wà) 'go'
b. regular

| né | ná-lì | ná-lì (wà) | 'eat, drink' |
| :--- | :--- | :--- | :--- |
| tó: | tó:-lì | tó:-lì (wà) | 'pound' |
| wǒ: | wǎ:-lì | wǎ:-lì (wà) | 'come' |
| zह̌: | ziá-lì | ziá-lì (wà) | 'bring' |
| ńdí | ńdá-lì | ńdá-lì (wà) | 'give' |
| zòbó | zòbá-lì | zòbá-lì (wà) | 'run' |
| óndú | óndí-lì | óndílì (wà) | 'build' |
| zìgìbí | zigìbé-lì | zìgìbé-lì (wà) | 'shake' |

10.6.4 Quoted hortative (-ḿ) and hortative negative (-mó-lì)

When the clause quoted represents an original hortative ('let's go!') as opposed to an original imperative (or wish), the suffix -m is used. The combination of -m plus quotative particle wà could be confused with logophoric subject -m plus the same wà, but the logophoric subject suffix follows aspect-negation suffixes on the verb while the quoted hortative does not.

The quoted hortative (QuotHort) suffix is added to the $\mathrm{A} / \mathrm{X}$-stem. The suffix is H-toned. An/H/-melodic stem presents its lexical tone melody. An /LH/-melodic stem is realized with L-toned stem plus H-toned suffix. The stem phonology is therefore the same as for hortative -mó itself. This suggests that quoted hortative (QuotHort) -ḿn can be represented phonologically as /-mi/ or /-mu/, i.e. as morphologically the quoted imperative (see the above). This morphological analysis is supported by the (irregular) form for quoted 'let's go!', namely ńbú.
(371) gives representative forms of the original hortative and its quoted counterpart, the latter furnished with quotative particle wà in parentheses.
verb hortative QuotHort gloss
a. irregular
yǎy/o- ḿbó-ǹ ḿbú (wà) 'go'
b. regular, /H/ melody

| nú | nú-mó-ǹ | nú-ḿ (wà) | 'enter' |
| :--- | :--- | :--- | :--- |
| né | ná-mó-ǹ | ná-ḿ (wà) | 'eat, drink' |
| tó: | tó:-mó-ǹ | tó:-ḿn (wà) | 'pound' |
| óndú | óndú-mó-ǹ | óndú-ḿ (wà) | 'build' |
| tómbó | tómbó-mó-ǹ | tómbó-ḿ (wà) | 'jump' |

c. regular, /L/ melody

| yǐ | yà-mó-ǹ | yà-ḿn (wà) | 'see' |
| :--- | :--- | :--- | :--- |
| wǒ: | wà:-mó-ǹ | wà:-ḿn (wà) | 'come' |
| wǎ: | wà:-mó-ǹ | wà:-ḿ (wà) | 'do farm work' |
| zع̌: | zદ̀à-mó-ǹ | zèà-ḿ (wà) | 'bring' |
| gò-ndú | gò-ndò-mó-ǹ | gò-ndò-ḿ (wà) | 'take out' |
| zìgìbí | zìgìbè-mó-ǹ | zìgìbè-m (wà) | 'shake' |

An example is (372), cf. verb yàl-í: 'take a walk', main-clause hortative yàl-è:-mó 'let's take a walk!'. For the alternation of Cv : with $\mathrm{Cvl}(\mathrm{v})$, see $\S 3.4 .5 .2$.
(372) [kú dùgò] [á lèy] yà:-ḿ wà
[DemDef Purp] [Logo two] take.walk-QuotHort Quot
'(He said:) "let's go for a walk!" ' (2015-02 @ 01:49)

The negative counterpart is -mó-lì, reduced to -mô-l before quotative wà. The form is morphemically identical to the regular (unquoted) hortative negative for singular addressee. Samples of the original and quoted forms are in (373).
verb hortative Neg QuotHort Neg gloss
a. irregular
yǎy/o- ḿbó-mô-1 ńbó-mô-1 (wà) 'go'
b. regular, /H/ melody

| nú | nú-mô-1 | nú-mô-1 (wà) | 'enter' |
| :--- | :--- | :--- | :--- |
| óndú | óndú-mô-1 | óndú-mô-1 (wà) | 'build' |
| tómbó | tómbó-mô-1 | tómbó-mô-1 (wà) | 'jump' |

c. regular, /L/ melody

| gò-ndó | gò-ndò-mô-1 | gò-ndò-mô-1 (wà) | 'take out' |
| :--- | :--- | :--- | :--- |
| zìgìbí | zìgìbè-mô-1 | zìgìbè-mô-1 (wà) | 'shake' |

## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

The basic constituent order is SOV when subject and object are nonpronominal NPs. Setting adverbials like 'yesterday' can occur in any preverbal position. Adverbial phrases that are more tightly embedded into the event scenario occur close to the verb.

### 11.1.1 Subjects

### 11.1.1.1 Subjects in indicative main clauses

A subject is required in indicative clauses (but see $\S 11.1 .1 .4$ below on what constitutes a subject). Minimally, the subject is represented by a pronominal-subject suffix on the verb or other conjugatable predicate, but 3 Sg subject is the zero category. Nonpronominal subject NPs require 3 Pl or (zero) 3 Sg agreement on the verb. There is no pronominal agreement in verbs for nonpronominal object NPs.

Within a clause, the subject functions as antecedent for reflexive or reciprocal anaphors (374a-b).
a. [nùmǎ: á-gá] póró-tì-Ø
[hand 3Refl-Poss]
cut-Pfv1b-3SgSbj
' $\mathrm{He}_{\mathrm{x}} \mathrm{cut}$ (off) his $\mathrm{x}_{\mathrm{x}}$ hand.'
b. ùlé: [á tèmbò] púngó-tì-yà
children [3Refl Recip] hit-Pfv1b-3PISbj
'The children hit each other.'

### 11.1.1.2 Subjects in subordinated clauses

In some subordinated clauses, including (nonsubject) relatives and some factive and quotative clauses, pronominal subjects are not expressed as suffixes on the verb, rather as independent pronominals positioned as preverbal proclitics. 3Sg subject is then a nonzero proclitic instead of a zero verbal suffix.

In the main clause (375a), the subject is expressed by a suffix on the verb. In the relative clause (375b), it is expressed as a 3 Sg ńné as proclitic.
a. pédé: sémé-tì-Ø
sheep slaughter-Pfv1b-3SgSbj
'He/She slaughtered a sheep.'
b. [pèdè: ${ }^{\text {L ńné sémé kár}}{ }^{\mathrm{n} a ̀] ~ a ̀ n d i ́ ~}{ }^{\mathrm{L}}$ bù- $\varnothing$
[sheep 3Sg slaughter Pfv.Ppl] where? be.Loc-3SgSbj
'Where is the sheep that he/she slaughtered?'

In quoted clauses, subjects are generally set off from the remainder of the quoted material. A referential subject is normally clause-initial and is followed by its own quotative subject marker $\mathrm{wa} \rightarrow$ of variable tone ($\S 17.1 .3 .1$ ). The remainder of the quoted clause, i.e. the VP, is followed by its own quotative marker wà (§17.1.3.2).

Subjecthood is also relevant to switch-reference subordination, since same-subject and different-subject constructions are distinguished (§15.2).

### 11.1.1.3 Subjects and addressees of imperative and hortative verbs

With imperatives and hortatives, it is necessary to distinguish "subject" from "addressee." Both imperative and hortative ('let's go!') verbs have a plural suffix -ǹ that is not found with any indicative verb category. For hortatives, -ǹ specifically marks the number of the addressee, rather than the 1 Pl subject. The suffix is therefore absent from 'let's go!' addressed to a single interlocutor. By exrapolation, -ǹ likewise marks addressee rather than subject number with imperatives.

In quoted hortatives, where the form of the verb changes to a special quoted hortative form (§10.6.4), if the quotative subject phrase is overt it is limited to the relevant addressee category ( 2 Sg or 2 Pl ).
(376) ámádù [ú / bí wá $\rightarrow$ ] ḿbú wà

Amadou [2Sg/2Pl QuotSbj] go.QuotHort Quot
'Amadou said (to you-Sg / you-Pl), let's go!'

By extrapolation, the same quotative subject phrase in imperatives is taken to refer to the addressee rather than subject category, though subject and "addressee" converge in this case. (377) is an example, also showing the use of a special quoted imperative verb form (§10.6.3.1).

| (377) ámádù | $[$ ú $/$ bí | wá $\rightarrow]$ | yǎy | wà |
| :--- | :--- | :--- | :--- | :--- |
|  | Amadou | $[2 \mathrm{Sg} / 2 \mathrm{Pl}$ | QuotSbj $]$ | go.QuotImprt | Quot

TU lacks transpersonal reflexives of the sort found in Tomo Kan and Togo Kan (and Russian), so it is difficult to determine whether imperatives have covert, fully referential subjects (in addition to overtly marked addressees). The only reflexive forms that allow second person antecedents are those of the optional 'your head' type, which are not highly grammaticalized as pure reflexives (they can be interpreted as referring literally to the body part). For what it's worth, 'your head' object imperatives are elicitable, see (628) in §18.1.1.

Reciprocal objects are also possible (378).
(378) [bí tèmbò] púngó-ǹ
[2Pl Recip] hit.Imprt-Pl.Addr
'Hit-2P1 each other!'

Hortatives clearly have 1 Pl subjects, including but distinct from the second person addressee. In (379), the reciprocal object phrase is overtly 1 Pl , while the suffix -ǹ on the verb marks addressee plurality

| $[11$ | tèmbò $]$ | púygó-mó-ǹ |
| :--- | :--- | :--- |
| $[\mathbf{1 P I}$ | Recip $]$ | hit-Hort-Pl.Addr |

'Let's (me and you-Pl) hit each other!'
Imperatives (as well as hortatives) may also occur in same-subject (SS) multiclause constructions, which provides further evidence that imperatives have referential subjects.

| [yày | né] | wá: |
| :---: | :---: | :---: |
| [go | Ant.NonP.SS] | come.Imprt |
|  | me-2Sg (back)! |  |

However, more work is needed on "same-subject" constructions to verify that they require coindexation of referential subjects, as opposed to the absence of clearly disjoint subjects.

### 11.1.1.4 Subjects of lexicalized subject-verb combinations

In some of these combinations, the "subject" noun lacks the full set of normal subject properties. Such nouns have been called pseudo-subjects in connection with other Dogon languages (e.g. Togo Kan).

### 11.1.1.4. Weather and time transitions

The subject-verb collocations in (381) denote meteorological, seasonal, and time-of-day events. bá is not attested except in the expressions in (381a), all of which denote transitions, and in related adverbs, see (237c) in §8.4.6.1. The combinations in (381b) are also rather frozen. mirn ${ }^{\mathrm{n}}$ (variant mìné) elsewhere means 'swallow', and the other cases in (381b) show idiomatic specialization.

[^5]```
b. àr"á mìrń
'rain fall' (àrná 'rain')
gándá édé 'day break’ (gándá ‘place’, édé ‘become clean’)
dèndé dèrň́ \(\quad\) 'night fall’ (dènd 'night', dèrn \(\varepsilon\) 'spend mid-day’)
```

The subjects in (381a-b) are low in referentiality and have few opportunities to exhibit full subject properties. In the senses indicated they do not take definite or other determiners. They do not lend themselves to reflexive or reciprocal anaphora. However, it is possible to construct same-subject (SS) clause sequences in a few cases (382).
a. bà:-d́
rainy.weather [arrive Ant.Past.SS] go-Pfv1a-3SgSbj
'Rainy weather (wet season) came and went.'
b. àrná [mìrǹ̀ gín]
rain(n) [rain.fall Ant.Past.SS]
íj-í:-yày-Ø
'Rain fell and then stopped.'

### 11.1.1.4.2 Emotion

In 'be angry' (383a-b) it looks at first as though céndé 'liver/heart', i.e. the seat of the emotions, is the subject. However, the subject marked by verb suffixation is the human experiencer, e.g. 1 Sg in (383a), and an overt nonpronominal subject NP denoting the experiencer may precede 'liver/heart' (383b). This is quite different from the possessive construction of the type 'Amadou's liver/heart' which does in fact occur in some other emotional expressions, like 'be happy' in (383c-d). In both (383b) and (383d) 'Amadou' directly precedes 'liver/heart', but possessor-controlled tone-dropping occurs only in (383d).
a. céndé bàrn-â:-m
liver/heart become.red-Pfv1a-1SgSbj
'I became angry.'
b. ámádù céndé bàrn-â:y-Ø

Amadou liver/heart become.red-Pfv1a-3SgSbj
'Seydou became angry.'
c. [cénd $\varepsilon$ ǩ̌:] ह́lù-Ø (~ ह̂l-Ø)
[liver/heart 1SgPoss.InanSg] be.sweet-3SgSbj
'I am happy.'

[Amadou liver/heart] be.sweet- 3 SgSbj
'Amadou is happy.'

Nevertheless, in the 'be angry' examples it is presumably 'liver/heart' that 'turns red', calling for the verb bàrná, which means 'become red' and by extension 'be hot, blaze', cf. ùdù-bárná 'hot season'. (It can also mean 'beat [tomtoms]' and '[fruit] ripen'.) So the verb selection is based on 'liver/heart' as logical subject, but the morphosyntax treats the human experiencer as subject.

### 11.1.1.4.3 Bodily emissions

A similar situation occurs in the 'nosebleed' examples (384a-b). cìnè-téy $\varepsilon$ r' $\mathrm{n} \varepsilon$ (including cíné 'nose' as compound initial) denotes the blood itself, and the verb 'exit' only makes sense with this as logical subject. But the pronominal-subject suffix, and all other syntactic subject properties, are based on the human experiencer.
a. cìnè-téyér ${ }^{\mathrm{n}} \varepsilon$ ́
gó-m $\quad{ }^{\mathrm{L}}$ sò-m
nosebleed exit(v)-Ipfv have-1SgSbj
'I have a bloody nose.' (='My nose is bleeding.')
b. ámádù cìnè-ténér ${ }^{n}$ é gó-m Lò̀:-Ø

Amadou nosebleed exit(v)-Ipfv have-3SgSbj
'Amadou has a bloody nose.'

Similar examples for sweating and for frothing up are in (385). sògó elsewhere means 'well (n)'. té: yúbdá in (385b) shows no tone-dropping and so cannot be construed as possessorpossessum, which would be té: ${ }^{\downarrow}$ yùbdà.

|  | sògó <br> well(n) | $\begin{align*} & \text { gó-m }  \tag{385}\\ & \text { exit(v)-Ipfv } \end{align*}$ | $\begin{aligned} & \text { Lsì-m } \\ & \text { have-1SgSbj } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 'I am sweating.' |  |  |  |
| b. | té: | yúbdá | gǒy-yày-Ø |
|  | tea | froth | exit(v)-Pfv1a |
|  | 'The tea | foamed up.' |  |

### 11.1.1.4.4 Hunger and thirst

Nouns jǎ: 'hunger' and ìnjìr-gó 'thirst' occur in constructions of the form 'hunger/thirst has X ' with yé ${ }^{\mathrm{L}}$ sì- $\varnothing$, or alternatively 'hunger/thirst (has) killed $X$ ' with jé-tì-Ø. A pronoun precedes yé ${ }^{\mathrm{L}}$ sì-Ø or jé-tì-Ø. The pronoun cannot take accusative marking, suggesting that the experiencer is a (pseudo-)subject rather than an ordinary object. Examples with 'hunger' are in (386a-d); the 'thirst' examples are exactly parallel.
a. jǎ: mí yé ${ }^{\mathrm{L}}$ sò-Ø
hunger 1 Sg Exist have-3SgSbj
'I am hungry.'
b. ámádù jǎ: ńné yé ${ }^{\mathrm{L}}$ sò- $\varnothing$

A hunger 3 Sg Exist have-3SgSbj
'Amadou is hungry.'
c. jǎ: mí jé-tì-Ø
hunger $\quad 1 \mathrm{Sg}$ kill-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'I am (very) hungry.'
d. ámádù jǎ: ńné jź-tì-Ø

A hunger 3 Sg kill-Pfv $1 \mathrm{~b}-3 \mathrm{Sg}$ Sbj
'Amadou is (very) hungry.'

### 11.1.2 Simple transitives

### 11.1.2.1 Direct objects of simple transitives

Objects precede verbs. Objects, especially animate, can be marked by the optional accusative morpheme gì. The latter occurs at the end of the NP. Objects follow subject NPs, with exceptions when the subject is focalized.
(387)

| a. | sě:dù | í-gì |
| :--- | :--- | :--- |
|  | S tó:ní-tì- | 1Pl-Acc |
|  | 'Seydou pestered us.' |  |

b. sě:dù [pédé: gì] sémé-tì-Ø

S [sheep Acc] cut.throat.of-Pfv1b-3SgSbj
'Seydou slaughtered a/the sheep.'

The set of transitive verbs is typologically unremarkable and includes impact verbs ('hit', 'cut'), perception verbs ('see', 'hear'), and verbs of transfer and putting ('carry on head', 'put in'). Some of the transfer verbs are morphologically "mediopassive" (denoting the state of the holder/carrier) but at clause level they are transitive, Causatives of intransitive verbs behave syntactically like ordinary transitives (§11.1.3.4). Ditransitive 'give' takes an object (with optional accusative marking) denoting the recipient, and a second object (usually not accusative-marked) denoting the theme (§11.1.3.3).

### 11.1.2.2 kán ‘do’ in collocations

The verb kán 'do' is available to make nouns into aspectually marked predicates (as opposed to stative copular and identificational predicates). Some nouns that are attested in this construction are in (388a). (388b) is an expressive adverbial and (388c) is onomatopoeic; in both cases the stem can be prolonged at will.
a. dàbílú kán 'cast a spell'
àngé kán
jìré kámdá kán
zébégé kán
'become friends'
'blink (v)'
'hit off-center, graze (in shooting)'
b. jěw ${ }^{n} \rightarrow$ kán 'open eyes slightly'
c. sín $\rightarrow$ kán '(insect) hum, buzz'

### 11.1.2.3 Lexicalized verb-object combinations with low-referentiality objects

Some examples of high-frequency combinations of verb plus noncognate object or object-like adjunct are in (389). A homonym of dě is attested in the unrelated sense 'stub one's toe' with lǎ: 'foot' as object. úmbó is not otherwise attested.

```
ínjé dě 'bathe (oneself)' (ínjé 'water')
kỳmbó tá 'wage war' (kòmbó 'war', tá 'shoot')
cíné úmbó 'blow one's nose' (cíné 'nose')
zá n\varepsiloń 'eat (a meal)' (zá 'meal, food'; n\varepsiloń 'consume (eat/drink)')
èndílé ámbílí 'urinate' (èndílé 'urine')
```


### 11.1.2.4 Forms of cognate nominals associated with verbs

Many verbs can co-occur with a cognate nominal, usually as a pro forma direct object in the absence of a more specific object NP. Here the focus is on the phonological and morphological relationship of the nominal to the verb.

In (390), the nominal ends in a nonhigh short vowel and shows no sign of suffixation or vocalic mutation. The verb (in its bare form, shown here) is subject to constraints that apply to all verbs. Verbs that begin with an obstruent have their lexical tone determined by obstruent voicing. Heavy (three or more moras) verbs and some lighter ones end in a short high vowel in the bare stem. Trisyllabic verbs also raise the medial vowel to high. If the verb happens to have mediopassive suffix -í:-, this has no effect on the nominal. Whether the noun or the verb is more basic lexically, or older diachronically, is variable and in some cases indeterminate.
(390)
nominal + verb
bírígá bìrìgí 'do magic tricks'
bógóró bògùrú 'have a fight, squabble'
cèmné cémn-í: 'have fun, celebrate'
dàndá dàndí
dùló dùló
èré éré
gúnó gùné
jé jě
kògó kógó
nìngé nìngé
síbá síbí
tǎ: tá
wá:jé wà:jí
wá:dá wá:dí
yáwárá yàwùrú
záyrá zàyrí
zégé zèj-í:
zéngé zèngí
zòngó zòngú
zùlá zùló
gloss
'go hunting'
'(thunder) rumble (at a distance)'
'be rivals'
'commit a theft'
'(dance a) dance' compare (391d) below
'(rooster) crow'
'cook the sauce'
'give a description, give directions'
'avoid (a taboo)'
'(imam) give a sermon'
'take an oath'
'treat disrespectfully'
'poke fun at'
'have a fight'
'secondary grain spikes (of millet) develop'
'(doctor, healer) perform healing'
'make small harvest pile'

In (391), the nominal ends in one of the original inanimate singular suffixes, usually -gó ~-ngó (391a-b) even with [-ATR] verbs. This implies an original mutated or suffixal stem-final *(-)é which requires [+ATR] o in the -(y)gO suffix, cf. §5.1.4.3. Some verbs with [-ATR] mid-height stem vowels shift them to [+ATR] before -( $\mathfrak{y}$ )gó, while others do not. Instead of -(y)gó, the suffix takes assimilated (but still [+ATR]) form -gé ~-ŋgé after monomoraic stems with front vowels (391c-d); see also ní-ggé in (394d) below. yà-ŋgá (391e), is isolated in TU but may also reflect assimilation to a preceding monomoraic stem, compare Tiranige nà-ygó.
nominal + verb gloss
a. bón-gó bòní
dว̀n-gó dว̀r"́
èbù-gó ह́b $\varepsilon$ ́
èm-gó émé
kón-gó kónó
mó:ndú-gó mò:nd-í:
with ATR shift
òrú-gó órú
zóbú-gó zàbó

```
'issue a summons'
'make a sale'
'make a purchase'
'chat (v), converse'
'cough (v)'
'get together, assemble'
'speak'
'run, run a race'
```

with o/a (§3.3.7)
móndú-gó mànd-í: 'have a laugh’
bógúr-gó bàgìrí
'send (sb) to the market (to buy sth)'
góndú-gó gàndí
'(bird, mammal) dig up with paws'
b. bè:-ngó bè:-mí
tó-ŋgó tó
'tend livestock, herd livestock'
'slash earth to sow seeds'
c. cè-gé cé
‘shout (v)’
d. jé-ngé jě
'harvest (with knife)'
jì-ngé jě
'fart (v)'
e. yà-ngá yé 'weep loudly’
jé-ngé jě and jì-ngé jě in (391d) share the verb jě with jé jě ‘dance a dance’ in (390) above. The three verbs are noncognate homonyms.

In (392), the nominal ends in a long vowel that could reflect an old suffix or a morphophonological final-vowel mutation. The medial y in some nominals in (392b) may be a reduced version of the mediopassive suffix -í: in the verb.
nominal + verb gloss
a. bírá: bìré
góródá: gòròdí
gúlá: gùló
némbílá: némbílí
pídírá: pídí-rí
tòryá: tórú
tùmbá: túmbú
yímbírá: yìmbìrí
zègìrá: zè̀gìrí
b. kà:lyá: ká:l-í:
bè:lyá: bè:1-1́:
nò:rnyá: nó:r"-í:
pò:byá: pó:b-í:
tòryá: tórú
c. nùyǎ: nùyú
sùgǎ: súgó
d. tìně: tíné 'go get firewood'
à:lé: à:l-í: 'crawl on all fours'

In (393), the nominal ends in $u$ or in a sonorant. Since original short high vowels are often apocopated/syncopated after sonorants, the two sets are likely related diachronically.

$$
\begin{equation*}
\text { nominal }+ \text { verb } \quad \text { gloss } \tag{393}
\end{equation*}
$$

a. bàrú bàr-í:
wògú wògó
'hold a meeting'
'spend the first half of the day'
b. ím ímé
sán sár ${ }^{\text {ná }}$
sěy ${ }^{\mathrm{n}}$ sé: ${ }^{\text {n }}$
'stutter'
'pray'
yù-kún kúrº́o 'repound and rewinnow (grain residue)'
c. final 1 in nouns (§3.4.5.2)
pél pé:
kà-kǎl ká:
'clap, applaud'
tól tó:
'tell a lie'
'pound (grain, in mortar)'

For (393c), compare Jamsay kòrú kóró 'tell a lie' and pérù péré 'clap, applaud'.
Minor morphological patterns are presented in (394). In different ways they show a verb stem that is phonologically or morphologically reduced from the noun.

$$
\begin{equation*}
\text { nominal + verb } \quad \text { gloss } \tag{394}
\end{equation*}
$$

a. initial à:- (§4.1.7)
à:-béndú bèndí 'swim'
à:-jígùlù jìgìlí 'rotate, spin around'
b. ìsě: sé: 'sneeze (v)'
c. -né nominal (§4.2.5)
zèbì-né zèbé 'make a curse'
d. jìrè-[ní-ggé] ní: 'sleep, go to sleep'

### 11.1.2.5 Grammatical status of cognate nominal

In most actual examples the nominal in the cognate noun-verb combinations described above is nonreferential or very weakly referential. In these contexts, the nominal does not denote a specific event or entity. However, in some cases the cognate nominal can be referential and can therefore be determined and/or quantified.

| $[$ ssěy | ýi-lèy $]$ | sé: ${ }^{\text {n }}$-tì- |
| :--- | :--- | :--- |
| [tale | Inan-two $]$ | tell.tale-Pfv1b-3SgSbj |
| 'He/She told two tales.' |  |  |

11.1.3 Clauses with additional arguments and adjuncts

### 11.1.3.1 Syntax of expressive adverbials (EAs)

Expressive adverbials or EAs (88.4.7) may function as one-word adverbial phrases, with no additional morphemes, or they may be made predicative by the addition of an inflectable auxiliary verb. The auxiliaries relevant to EAs are those in (396). bě has a full set of positive and negative inflections.
a. ${ }^{\text {L }}$ bù-
stative positive ('be X')
b. ỳgó- stative negative ('not be X')
c. bě inchoative ('become $X$ ')

EAs differ syntactically from NPs and from adjectives, which are made predicative in other ways (§11.2.1.1-2, §11.4). EAs are closest syntactically to adverbial phrases, especially locational expressions, which use 'bù- 'be (somewhere), be present' and ỳgó- 'not be (somewhere), be absent'. Elsewhere bě means 'stay, remain (somewhere)', so it too is compatible with locationals, though the aspectual sense is different.

For examples of the adverbial and predicative functions see dém $\rightarrow$ 'straight' in §8.4.7.1.

### 11.1.3.2 Adverbial phrases with verbs of motion, being in, and putting

The examples in (397) illustrate spatial adverbial phrases combined with a verb of motion. An overt locative postposition is present in (397a-b). The postposition is omitted in (397c-e) where the destination is a common location ('house/home', 'the bush', 'village', etc.) or a place name. Directionality (allative, ablative) is expressed by verbs ('go', 'come', 'exit') in combination with a spatial expression such as a locative PP.

```
a. [[dámbá ky̌:] nè] yé-yà-dà:
    [[village 1SgPoss.InanSg] Loc] go-Pfv1a-3PISbj
    'They went to my village.'
b. [sògó nc̀] yé-yà-dà:
    [well(n) Loc] go-Pfv1a-3PISbj
    'They went to the well.'
c. úló yé-yà-dà:
    house go-Pfv1a-3PISbj
    'They went home.'
```

d. ándá yé-yà-dà:
the.bush go-Pfv1a-3P1Sbj
'They went out into the bush/out to the fields.'
e. bàmàkó yé-yà-dà:

B go-Pfv1a-3P1Sbj
'They went to Bamako (city).'

The same range of spatial expressions is used with stative 'be', 'be in', 'be on', etc. (§11.2.2.2, §11.2.3.1), and with verbs of transfer like 'convey' and 'put'.
a. úló yé ${ }^{\text {Ltùnà- } Ø}$
house Exist be.put.Stat-3SgSbj
'He/She/It is in the house/at home.'
b. [bòríyè nè] Lgàrnù-m
[sack Loc] put.in.Pfv- 1 SgSbj
'I put it in the sack.'

### 11.1.3.3 Ditransitives

'Give' takes two objects. The recipient, who is generally human, is optionally but frequently marked accusative. The theme (object given), normally nonhuman, rarely takes accusative marking. However, if the theme is referentially specific and is the only overt preverbal constituent, it sometimes gets the accusative marker (399c). In all of the examples of (399), the assistant spontaneously produced forms without accusative gì, but accepted the linguist's repeats with gì in the parenthesized positions.
a. s

| sě:dù | pédé: | $[m i ́$ |
| :--- | :--- | :--- |
| S | sheep | $[1 \mathrm{~S}$ |

'Seydou gave me a sheep.'

c. [[pédé: ǹ] gì] ńdí-tì-Ø
[[sheep Def] Acc] give-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'He/She gave the sheep-Sg.'
tágá ‘show’ and ságírí 'entrust’ have the same case frames.

b. [[bú:dù á-gá] mí-gì ságír gín] ${ }^{\text {L }}$ dògò-sò-Ø [[money 3Sg-Poss] 1Sg-Acc entrust Ant.Past.SS] leave-Pfv2-3SgSbj 'He entrusted his money to me.'

### 11.1.3.4 Valency of causatives

Causatives derived from intransitive verbs function as transitives. In (401), the causative of a motion verb takes a direct object with accusative marking.

| mí-gì | yé | ${ }^{\text {L nù-mì- }}$ |
| :--- | :--- | :--- |
| 1Sg-Acc | there.Def | enter-Caus.Pfv- 3 SgSbj |
| 'He/She |  |  |

'He/She took me in.' or 'He/She made/let me go in.'
In the less common case where the causative is based on a transitive verb, the resulting clause has two objects. This is most common when the causative is based on a verb of consumption (402). The linear order of the two objects is somewhat free, but the assistant's preference is to position the theme (i.e. the consumed entity) next to the verb unless the demoted subject NP is pronominal. In either case the demoted subject can be marked accusative.

| a. nà:-mbó | ínjé | ná-m-tì- $\varnothing$ |
| :--- | :--- | :--- |
| cow-AnPl | water | consume-Caus-Pfv1b-3SgSbj |

'He/She had/let the cows drink water.'
b. nàmá mí(-gì) kúbó-m(î)-tì-Ø
meat 1 Sg-(Acc) eat.meat-Caus-Pfv1b-3SgSbj
'He/She had me eat meat.'
c. [sě:dù gì] nàmá kúbó-m(í)-tì-Ø
$\left[\begin{array}{ll}\mathrm{S} & \text { Acc }] \text { meat eat.meat-Caus-Pfv1b-3SgSbj }\end{array}\right.$
'He/She had Seydou eat meat.'
A double-object construction can also result from morphologically transitivizing (§9.4.1) a verb of carrying or of putting on garments, since the underlying verb ('carry', 'put on/wear') is already transitive. In these cases the demoted subject, which is normally human, can be marked accusative (403).
a. [yá
gì] èdé
bàmbǐ-r-tì-m [woman Acc] child carry.on.back-Tr-Pfv2-1SgSbj 'I put the child on the woman's back (to be carried).'
b. [èd $\varepsilon$ gì] kóbó kóbí-r-tì-m
[child Acc] hat put.hat.on-Tr-Pfv2-1 SgSbj
'I put a hat on the child.'

### 11.1.4 Verb Phrase

A VP is a clause minus its subject and minus clause-level inflection. It includes the verb (or other predicate) and all non-subject arguments and adjuncts. The category is most relevant to same-subject VP-chains (§15.1).

## 11.2 ' Be ', 'become', 'have', and other statives and inchoatives

### 11.2.1 'It is' enclitics

The 'it is' enclitic, expressed by (calibrated, i.e. phonological) vocalic lengthening plus final L-tone, has identificational function. An entity whose existence (but not identity) is known and unexpresssed, or that is specified by an overt "subject" NP , is identified in this way. The enclitic can be added to personal or place names, singular or plural common nouns (denoting types of entities), more complex NPs, pronouns and demonstratives, and WH-interrogatives.

The 'it is' enclitic is not part of the focalization system (§13.1). It may have been an original component in a type of adjectival predicate that is expressed with $\{\mathrm{LHL}\}$ overlay (§11.4.1.2).

### 11.2.1.1 Positive 'it is' ( $:=\varnothing$ )

This enclitic occurs in conjugated form with an overt pronominal-subject suffix (see below). More often it appears with no conjugation, though it arguably includes the zero 3 Sg suffix - $\varnothing$ (corresponding to the pro-forma it in English who is it? and it's me). In this unconjugated (or 3 Sg -subject) form, the enclitic is realized as phonological lengthening of a word-final short vowel or sonorant, and by a final L-tone segment. Here such forms are transcribed with $=\varnothing$ after the modified noun stem. The vocalic lengthening and L-tone are distinct from the tonational dying-quail effect in NP conjunction, which can be prolonged at will.

The relationship between nouns stems and the 'it is' form is illustrated in (404). When $\vdots=\varnothing$ combines with nouns that end in an $<\mathrm{LH}>$ syllable, the result is a final bell-shaped $<$ LHL $>$ syllable, as in the last four examples in (404b).

```
noun (X) 'it's (an) X' gloss
```

a. final short vowel

```
L-toned final vowel, lengthening audible
        gùdù-kúlà gùdù-kúlà: = Ø 'it's (body) hair'
        pù:dù-pá:dù pù:dù-pá:dù: = \(\quad\) 'it's lungs'
```

| H-toned final vowel, lengthening and pitch drop audible |  |  |
| :--- | :--- | :--- |
| sòmé: | sòmê $=\varnothing$ | 'it's a horse' |
| yá | yâ: $=\varnothing$ | 'it's a woman' |
| árná | árnâ: $=\varnothing$ | 'it's a man' |
| nù-mbó | nù-mbô: $=\varnothing$ | 'it's people' |
| gùndú | gùndû: $=\varnothing$ | 'it's a calabash cover' |
| pédé: | pédê: $=\varnothing$ | 'it's a sheep' |

b. final long vowel
$H$-toned monosyllabic, pitch drop audible
bé: bê: = Ø 'it's a stick'
...L.H-toned nonmonosyllabic, pitch drop audible
cìná: cìnâ: $=\varnothing$ 'it's a bone'
sòyó: sòyô: = Ø 'it's a spinal cord'
...H.H-toned nonmonosyllabic, pitch drop audible

| írné: | ír${ }^{n} \mathrm{ê}:=\varnothing$ | 'it's a goat' |
| :--- | :--- | :--- |
| tálé: | tálê: $=\varnothing$ | 'it's eggs' |
| tólé: | tólê: $=\varnothing$ | 'it's a pig' |

LH-toned monosyllabic, pitch drop audible
nǎ: nầ: = Ø 'it's a cow'
lǎ: lầ: = Ø 'it's a foot'
final $<L H>$-toned syllable, pitch drop audible
tò-tǒ: $\quad$ tò-tồ: $=\varnothing \quad$ 'it's a hole (pit)'
ìnjě: ìnjễ: = Ø 'it's a dog'

Sentence examples are in (405).
(405)
a. ò-gú
ǹjê: = Ø
Prox-InanSg what?=it.is
'What is this?'
b. 乞̌-m
nầ: = Ø / ìnjě̌: = Ø / sòmê: = Ø
Prox-AnSg
cow $=$ it.is $/ \operatorname{dog}=$ it.is $/$ horse $=i t . i s$
'This is a cow / a dog / a horse.' (nǎ:, ìnjě:, sòmé:)

When the 'it is' clause adds dè 'if' to form a conditional antecedent, the lengthening and pitch drop are erased (406a-b). To indicate that an 'it is' construction is at hand, transcriptions still have $=\varnothing$ in these antecedents.
a. (g)àsègé
'animal'
(g)àsègê: = Ø 'It's an animal.'
$(\mathrm{g})$ àsègé $=\emptyset$ dè $\quad$ 'if it's an animal'
b. (g)àsègè-mbó 'animals'
(g)àsègè-mbô: = Ø
'It's animals.'
(g)àsègè-mbó = Ø dè 'if it's animals'

The clitic can be conjugated for $1 \mathrm{st} / 2$ nd person subject. There is no special 3 Pl conjugated form, and no need for it since the noun itself can be plural. The $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are atonal, i.e. they get their surface tones by spreading from the final tone of the stem.

| (407) | category | clitic | with 'blacksmith’ (zémbél\zémbé-mbò) |
| :---: | :---: | :---: | :---: |
|  | 1Sg | $=\mathrm{m}$ |  |
|  | 1P1 | $=y^{\text {n }}$ | zémbé-mbò = ${ }^{\text {n }}$ |
|  | 2Sg | $=\mathrm{w}^{\mathrm{n}}$ | zémbé $=$ w $^{\text {n }}$ |
|  | 2P1 | $=y^{\text {n }}$ | zémbé-mbò = ${ }^{\text {y }}$ |
|  | 3Sg | $\vdots=\varnothing$ | zémbê: $=\varnothing$ |
|  | 3P1 | $\vdots=\varnothing$ | zémbé-mbò: = $\varnothing$ |

There is no special inanimate form distinct from 3 Sg: ò-gú cínû: $=\varnothing$ 'this is a stone' (cínú).
The bell-shaped tone which occurs in some of the monosyllabic 'it is' examples given above is otherwise rare in TU. It is found in one set of adjectival predicates, where an \{LHL\} overlay is applied to bisyllabic or monosyllabic stems (§11.4.1.2). In spite of some differences in the tonal patterning of the two constructions, they may have a common origin. They also have similar pronominal-subject paradigms.

### 11.2.1.2 'It is not' (= lă-)

The negative counterpart of $\vdots=\varnothing$ 'it is' is $=$ lă- 'is not'. There is no phonological indication that $=$ lă- 'it is not' follows $=$ ': 'it is' to form a clitic sequence. In particular, there is no lengthening of a short stem-final vowel before $=$ lǎ- (408).

> a. ǒ-m nǎ: = lă:- $/$ ìnjě: = lǎ:- $/$ / sòmé: = lǎ:-Ø
> Prox-AnSg cow / dog / horse=it.is.not-3SgSbj
> 'This is not a cow / a dog / a horse.'
b. $z \varepsilon ́ m b \varepsilon ́=l a ̆-m$
blacksmith=it.is.not- 1 SgSbj
'I am not a blacksmith.'

The paradigm showing the underlying rising tone is (409). The vowel is lengthened in the 3 Sg form, which is justified phonologically by the contour tone (§3.6.4.1).

| 1Sg | $=1 \mathrm{l}$ - m | z ¢́mbé $=$ lǎ-m |
| :---: | :---: | :---: |
| 1Pl | $=1 a ̆-y^{\text {n }}$ | zémbé-mbó = lǎ- $\mathrm{y}^{\mathrm{n}}$ |
| 2 Sg | $=1{ }^{\text {a }}$ - $\mathrm{w}^{\mathrm{n}}$ | z ¢́mbé = lǎ-w ${ }^{\text {n }}$ |
| 2 Pl | $=1 a ̌-y^{n}$ | z ¢́mbé-mbó $=1 \mathrm{ž}-\mathrm{y}^{\mathrm{n}}$ |
| 3 Sg | $=$ lǎ:-Ø | zémbé = lǎ:-Ø |
| 3 Pl | $=1 \mathrm{a}-\varepsilon$ ~ $=1-\varepsilon$ : | zémbé-mbò = là-દ́ ( $\sim=1-\varepsilon ̌:)$ |

As with stative negative = ndǎ-, which has a similar paradigm (§10.4.2), = lǎ- is normally heard with low pitch, as in 3 Sg [là:] and 1 Sg [làm]. The underlying rising tone is manifested when an emphatic particle like kóy, or the past clitic = bì-, is added: zémbé= lǎ:- Ø kóy 'he sure isn't a blacksmith', zémbé = lǎ:-Ø = bì-m-bì-Ø 'he wasn't a blacksmith'.

A willy-nilly conditional antecedent of the type '(whether) it's an X or not' consists of a positive 'it is X ' clause followed by simple lǎ:- $\varnothing$ dè with the noun $X$ not repeated even as a pronoun (410a). In fact, lǎ:- $\varnothing$ dè in this function ('or not') can follow any positive clause (410bc), not just 'it is $X$ ' clauses. In (410d), lǎ:- $\varnothing$ dè is added to a bare verb stem, repeated from the fully inflected verb in the preceding positive clause. Here 1 hardens to $d$ after $n$, as in perfective negative kàn-dí- 'did not'.
a. [gàsèg $\varepsilon=\varnothing$ dè $] \quad[1$ ǎ:- $=\square$ dè $]$
[animal=it.is if] [it.is.not-3SgSbj if]
'whether it's an animal or it isn't' (2015-03@ 02:15)
b. [ámbá [[cíndámé: [í gé]] nغ̀] bàrà-Ø dé]
[God [[long.life [1P1 Poss]] Loc] add.Pfv-3SgSbj if] [lǎ:-Ø dè]
[it.is.not-3SgSbj if]
'whether God adds to our long life or not' (2022-03 @ 01:13)
c. [árná $\left.\begin{array}{lll}\text { èdé } & \text { lâ:-m-nù-ẁ }\end{array}\right] \quad\left[\begin{array}{lll}{[\text { ǎ:- }}\end{array}\right] \quad$ dè $]$
[man child bear-Ipfv-Ipfv-2SgSbj] [it.is.not-3SgSbj if], 'whether the man (=you) has begotten a child or not' (2022-04@ 00:36)
d. zòmó wá $\rightarrow$, [yà-ทgá á-gá] cé kárnù-m-dò-Ø dè, hare QuotSbj, [weeping(n) Logo-Poss] thing do-Ipfv-Ipfv-3SgSbj if, kán dǎ:-Ø dè, ... do it.is.not-3SgSbj if, ... '(said:) "Hare, whether my weeping does something or does not, ..." , (2015-01@ 03:45)

For 'if it is not $X$ ' in constructions meaning 'only $X$ ', see $\S$ 19.4.1.

### 11.2.2 Existential and locative quasi-verbs and particles

### 11.2.2.1 Existential particle (yé)

Existential particle yé is immediately preverbal. The particle (and its Dogon cognates) originated as an extension of demonstrative adverb yé 'there (definite)'. The latter still occurs in its original function in TU, but it has disappeared in that function in several other Dogon languages.

Existential yé occurs with lexical statives, derived statives, and motion verbs.

### 11.2.2.1.1 Existential yé with statives

Existential yé occurs with both derived statives (related to aspect-marking verbs such as 'sit') and with stative quasi-verbs like 'be (somewhere)' and 'have'.
yé occurs with stative locational predicates: yé 'bù- 'be (somewhere)', yé 'tùnà 'be in', yé Lgànnà '(water, grain) be in (container)', yé Lnàngà 'be up on (roof, tree)'. These predicates require yé as the default when no other locational expression is present, and yé optionally co-occurs with such expressions when they are present. With ${ }^{\text {L }}$ sò- 'have', yé is required with or without a locational expression (411b-c).
a. yé ${ }^{\text {L }}$ bù-m
Exist be-1SgSbj
'I am present (here).'
b. ìnjě: yé ${ }^{\mathrm{L}}$ sò-m
dog Exist have-1SgSbj
'I have a dog.'
c. bàmbá úló yé ${ }^{\mathrm{L}}$ sò-m
B house Exist have- 1 SgSbj
'I have a house in Bamba (town).'
yé is always H-toned. Lexical statives like ${ }^{\mathrm{L}}$ bù- and ${ }^{\mathrm{L}}$ sò- are L-toned after yé, suggesting obligatory verb defocalization.
yé in existential function (as opposed to demonstrative yé 'there') cannot occur in negative clauses, in relative clauses, or in positive main clauses that have a focalized nonverbal constituent (such as a WH-interrogative). \# means ungrammatical.
a. (\#yé) ̀̀gó-m
not.be.Loc-1 1 SgSbj
'I am not present.'
b. úló (\#yé) só-ndǒ-m

## house

 have-Neg-1 SgSbj'I don't have a house.'
c. ǎm úló (\#yé) ${ }^{L_{S}-\grave{~}}$
who? house
have-SbjFoc
'Who has a house?'
d. àndí úló (\#yé) ${ }^{\mathrm{L}}$ sò-w $\mathrm{w}^{\mathrm{n}}$
where? house have-2SgSbj
'Where do you-Sg have a house?'
e. [nè ${ }^{\text {L }}$ nă: (\#yé) só-m-é:] zúgà-m-nù-m
[person cow have-Ipfv-Ppl.AnSg] know-Ipfv-Ipfv-1SgSbj
'I know someone who has a cow.'

The existential particle follows object pronominals (413). It is not possible to determine relative order versus preverbal subject pronominals, since the existential particle does not occur in relative clauses.

| (413) | kú | yé | ${ }^{\text {Lsò-m }}$ |
| :--- | :--- | :--- | :--- |
|  | Inan | Exist | have-1SgSbj |
|  | 'I have it.' |  |  |

The existential particle occurs optionally with derived stative verbs such as óbà 'be seated', compare aspect-marking ób-í: ‘sit down’. Without existential yé, statives have $\{\mathrm{HL}\}$ overlay (414a). More specific locational expressions, including yé 'there (definite)' and ỳgá 'here', can replace or co-occur with existential yé. Both existential yé and the specific locationals trigger defocalization of the verb, manifested by tone-dropping. (414b) has two readings because of the two yé morphemes. In (414d), the specific locational (which can be yé 'there') precedes existential yé.
a. zàkí óbà-Ø

Z sit.Stat-3SgSbj
'Zaki is seated (=in sitting position)'.
b. zàk
yé L̀̀bà-Ø
Z Exist/there.Def sit.Stat-3SgSbj
'Zaki is seated (=in sitting position)'.
'Zaki is seated there (definite)'.
c. zàkí ǹgó ${ }^{\text {Lòbà-Ø }}$

Z here sit.Stat-3SgSbj
'Zaki is seated here'.

Except when yé has its demonstrative adverbial sense 'there (definite)', it does not occur with derived statives under negation, in relative clauses, or after a focalized non-verb constituent.

### 11.2.2.1.2 Existential yé with motion verbs

With any motion verb, yé can have its demonstrative sense 'there (definite)', denoting a nonproximate location previously introduced in the discourse. However, with 'enter' and 'exit' verbs it can also occur in a nondemonstrative sense. (415b) can replace (415a) with no clear difference in meaning. (415b) has yé plus the unsuffixed perfective, required under defocalization. When a specific locational expression is present, existential yé is optional. It is present in $(415 \mathrm{c})$, where the verb is defocalized, but absent in ( 415 d ), where the verb takes its full perfective form. In ( 415 c ) yé 'there (definite)' can co-occur with existential yé. 3 Sg simple perfective ${ }^{\text {L }}$ nù-y 'entered' ( $415 \mathrm{~b}-\mathrm{d}$ ) can also be pronounced ${ }^{\text {L }}$ nur-ì.
a. nú-yày-Ø
enter-Pfv1a-3SgSbj
'He/She entered.'
b. yé ${ }^{\text {L }}$ nù-y

Exist enter.Pfv-3SgSbj
'He/She entered.'
c. yé/ìgó yé ${ }^{\text {L} n u ̀-y ~}$
there.Def/here Exist enter.Pfv-3SgSbj
'He/She entered there (definite)/here.'
d. yé/ìgó nú-yày-Ø
there.Def/here enter-Pfv1a-3SgSbj
[=(c)]
11.2.2.2 Locational-existential 'be (somewhere)' (bù-, negative ̀̀gó-)

This stative quasi-verb is used to specify where the subject is. It is often accompanied by a specific locational expression ('I am in the house,' 'I am out in the bush'). Existential yé is optionally present when the location is overtly specified, and it is obligatory when no (other) location is specified. The L-toned form ${ }^{\text {L }}$ bù- suggests defocalization, implying that either existential yé or an overt locational expression is treated pro forma as focalized. When the
location is vague, the construction approaches a pure existential predication ' X exists, X is present (somewhere)'.

The paradigm is (416).
(416) 'Be (present)'
category form

| 1 Sg | ${ }^{\text {L }}$ bù-m |
| :---: | :---: |
| 1Pl | ${ }^{\text {L }}$ bù- $\mathrm{y}^{\mathrm{n}} \sim$ |
| 2 Sg | ${ }^{\text {L }}$ bù-w ${ }^{\text {n }}$ |
| 2 Pl | ${ }^{\text {L }}$ bù-y ${ }^{\text {n }} \sim$ |
| 3 Sg | ${ }^{\text {Lbù }}$-Ø |
| 3 Pl | ${ }^{\mathrm{L}} \mathrm{b}$-દ̀: |

Examples are in (417). The subject may be human, animate, or inanimate.

| a.$[$ dámbá kǒ: $]$ | nè $]$ | (yé) | ${ }^{\text {L }}$ bù-m |  |
| :--- | :--- | :--- | :--- | :--- |
|  | [[village | 1SgPoss.InanSg] | Loc $]$ | (Exist) |
| 'I be- 1 SgSbj |  |  |  |  |

b. ámádù

> yé

A Exist

> Lbǔ:-Ø
'Is Amadou there?'
$\begin{array}{llll}\text { c. } & \text { síkòrò } & \text { yé } & \text { Lbù-Ø } \\ \text { sugar } & \text { Exist } & \text { be.Loc-3SgSbj }\end{array}$
'There is some sugar.'
 (§10.5.1.6). The unsuffixed participle of ${ }^{\mathrm{L}}$ bù- in relatives is bú-m-દ́: or b-દ́: (§14.4.2.2).

Falling-toned ${ }^{\text {HL }}$ bû- does occur in constructions where it is not tightly phrased with an immediately preceding existential yé or locational expression. See $\S 16.1 .2$ for a construction with ${ }^{L} \mathrm{j}$ in- $Ø$ dé plus ${ }^{\mathrm{HL}}$ bû-. The forms of ${ }^{\mathrm{HL}}$ bû- in this independent position are in (418). Note the vocalic lengthening in the 3 Sg form.
(418) 'Be (present)' after ${ }^{\text {L }}$ jìn-Ø dé

| category | form |
| :---: | :---: |
| 1Sg | ${ }^{\text {HL }}$ bû-m |
| 1 Pl | ${ }^{\text {HL }}$ bû- $\mathrm{y}^{\text {n }}$ |
| 2Sg | ${ }^{\text {HL }}$ bû-w ${ }^{\text {n }}$ |
| 2 Pl | ${ }^{H L}$ bû- $\mathrm{y}^{\text {n }}$ |
| 3 Sg | ${ }^{\text {HL }}$ bû:-Ø |
| 3 Pl | ${ }^{H L}{ }^{\text {b }}$ - $\hat{\varepsilon}$ : |

The corresponding negative forms are in (419). They do not allow existential yé. They may therefore co-occur with a specific locational, or appear by themselves. In the latter case, there may be an understood location ('here', 'there'), or the sense may be 'not exist'.
(419) 'Not be (present), be absent'

| category | form |
| :---: | :---: |
| 1 Sg | ỳgó-m |
| 1 Pl | ỳgó-y ${ }^{\text {n }}$ |
| 2 Sg | ỳgó-w ${ }^{\text {n }}$ |
| 2 Pl | ŋ̀gó-y ${ }^{\text {n }}$ |
| 3 Sg | ỳgó-Ø |
| 3 Pl | ŋ̀gw- $\hat{\varepsilon}^{\text {a }}$ |

Examples are in (420).
(420)
a. [dámbá nè] ỳgó-m
[village Loc] not.be-1SgSbj
'I am not in the village.'
b. ámádù ỳgó-Ø

A not.be.Loc-3SgSbj
'Amadou is not present (here/there).'
c. síkı̀rò ỳgó-Ø
sugar not.be.Loc-3SgSbj
'There is no sugar.'

For past time, the form is ŋ̀gó = bù-m = bì- 'was not present, was absent' (§10.5.1.6).

More specific verbs are used in senses like 'be in (a container)' or 'be up on X'. See §11.2.3.1 just below.

### 11.2.3 Other stative locational and positional quasi-verbs

### 11.2.3.1 'Be in/on' (gánà-, túnà-, etc.)

Location with specific respect to a container, a well-defined enclosed space, a surface, or a landmark object, is normally expressed by a derived stative verb rather than by ${ }^{\mathrm{L}}$ bù-.

| a. ínjé | [èdù-gó | nદ̇] | y | ${ }^{\text {L }}$ gànà-Ø |
| :---: | :---: | :---: | :---: | :---: |
| water | [waterjar-InanSg | Loc] | Exist | be.put.in.Stat-3SgSbj |
| '(The) water is in the waterjar.' |  |  |  |  |

b. yó [bòr-íyé nè] yé ${ }^{\text {L gànà-Ø }}$
millet [sack Loc] Exist be.put.in.Stat-3SgSbj
'(The) millet (grain) is in the sack.'
c. èdù-gó [úló nè] yé ${ }^{\text {Lùnà-Ø }}$
waterjar-InanSg [house Loc] Exist be.put.Stat-3SgSbj
'The waterjar is in the house.'
d. pòl-gó [bèndé nè] yé ${ }^{\text {Lùnà-Ø }}$
knife-InanSg [shoulderbag Loc] Exist be.put.Stat-3SgSbj 'The knife is in the shoulderbag.'
e. [úló nè] túnà-Ø
[house Loc] be.put.Stat-3 SgSbj
'It's inside the house.'

The stative verbs in question are summarized in (422). The $\{H L\}$ overlay is heard in examples like (421e) above with an overt locational but no existential yé. After yé, the forms have L-tones (422a-d). The existential proclitic is required when in unfocalized positive main clauses when no other locational is overt.

The stative form has the sense (except for aspect) and valency of the mediopassive if there is one, rather than those of the transitive. However, morphophonologically the stative is closer to the transitive than to the mediopassive (MP).

| transi | gloss | MP | stative | gloss |
| :---: | :---: | :---: | :---: | :---: |
| dèlí | 'set' | dèl-í: | déà- | '(calabash, pot) be set' |
| dùyú | 'lay down' | dùn-í: | dúyà- | '(object) be laid down in' |
| gǎn | 'put in' | gàn-í: | gánà- | '(liquid, grain) be in (container)' |
|  |  |  | $\sim$ gár ${ }^{\text {nà- }}$ |  |


| nángí | 'put up on' | nánj-í: | ná ${ }^{\text {gà̀ }}$ | '(object) be up on' |
| :--- | :--- | :--- | :--- | :--- |
| tárá | 'affix (to wall)' | tár-í: | tárà- | 'be on (wall)' |
| tún | 'put in' | tún-í: | túnà- | '(object) be in' |

The most unusual stative in (422) is déà-. This is the "correct" stative of the unattested *dž:, which would be the regular reflex of *dèlé.

Negative stative forms are in (423), for 3 Sg subject. The form in (423a) is an irregular contraction, cf. túnà above. For $=$ ndǎ:-Ø see §10.4.2.
a. twá:-ndǎ:-Ø
'(object) not be in'
b. dúyá-ndǎ:-Ø 'not be laid down in'
gán-dǎ:-Ø '(liquid, grain) not be in (container)'
déá-ndǎ:-Ø '(calabash) not be sitting'
náygá-ndǎ:-Ø 'not be up on'
tárá-ndǎ:-Ø 'not be on (wall)'

### 11.2.3.2 Demonstrative-based 'be here/there’ (̀̀-ḿn-nè: = Ø etc.)

'Be here' and 'be there' can be expressed by combining an existential-locational predicate, i.e. ${ }^{\text {L }}$ bù- 'be (somewhere)' with a demonstrative adverb. However, these senses can alternatively be expressed using demonstrative-based predicate forms. For regular demonstratives, see §4.4.1.2.

The demonstrative predicates are mostly identical to the ordinary demonstratives, plus the 'it is' clitic. The animate singular forms have an ending -nè. Forms for third person subject are in (424). The lengthening in the 3 Sg form (with zero pronominal suffix) is part of the 'it is' construction.
demonstrative gloss 'be (here/there)'
a. inanimate

| ò-gú | 'this' | ò-gû: $=\varnothing$ |
| :--- | :--- | :--- |
| è-ý | 'these' | è- $\hat{y}=\varnothing$ |
| mà-gú | 'that (over there)' | mà-gû: $=\varnothing$ |
| mà-ýn | 'those (over there)' | mà- $\hat{y}^{n}=\varnothing$ |

b. animate

う̀-ḿ
'this'
ò-bó 'these'
mà-ḿ

$$
\begin{aligned}
& \text { ò-ḿ-nદ̀: = Ø } \\
& \text { ò-bô: }=\varnothing \\
& \text { mà-ḿ-n }:=\varnothing \\
& \text { mà-bô: }=\varnothing
\end{aligned}
$$

mà-bó
'that (over there)'
'those (over there)'
${ }^{\mathrm{L}} \mathrm{b}$ - $̀$ : 'be.Loc' is optionally added after the animate singular predicative form in -ḿnè (425a), or after the nonpredicative forms (i.e. without the 'it is' clitic) of the other forms. For animate plural, ${ }^{\mathrm{L}} \mathrm{b}-\mathrm{\varepsilon}$ : is replaced by ${ }^{\mathrm{L}}$ bù-mbò: ( 425 d ). ${ }^{\mathrm{L}} \mathrm{b}$-غ̀: and ${ }^{\mathrm{L}}$ bù-mbò: are obscurely related to participial b-é: and animate plural bú-m-bò (§14.4.2.2), and to subject-focus ${ }^{\mathrm{L}}$ b-è: (§13.1.1.4.3).
a.

| ìnjě: | ゝ̀-ḿn-nè |
| :--- | :--- |
| dog | be.here |

${ }^{\mathrm{L}} \mathrm{b}$ と̀:
dog be.here.AnSg be.Loc
'The dog is here.'
b. èdù-gó ò-gú ${ }^{\mathrm{L}} \mathrm{b}-\mathrm{e}$ :
waterjar-InanSg Prox-InanSg be.Loc-Ppl
'The waterjar is here.'
c. èdě:
è-ý
${ }^{\mathrm{L}} \mathrm{b}-\varepsilon ̀$ :
waterjar.Pl Prox-InanPl
be.Loc-Ppl
'The waterjars are here.'

| d. | $[$ ì̀njè:-mbó | ǹ $]$ | ò-bó |
| :--- | :--- | :--- | :--- |$\quad$ Lbù-mbò:.

'The dogs are here.'

In the absence of ${ }^{\mathrm{L}} \mathrm{b}-\grave{\varepsilon}$ : or ${ }^{\mathrm{L}}$ bù-mbò:, the predicative forms tend to be presentational in function (§4.4.3).

For 1st/2nd person subjects, the forms in -ḿnè and -bó take pronominal-subject suffixes: ذ̀-ḿn-nè-m 'I am here', ò-bó-ỳn 'we are here'.

For morphologically similar predicates for interrogative 'be where?', see §13.2.2.3.

### 11.2.3.3 'Resemble' (mùlú)

' X resemble Y ' is expressed with the stative predicate mùlú, which takes pronominal-subject suffixes (426a-b). The 3 Pl subject form is mùl- $\hat{\varepsilon}$ : . The "object" cannot be marked by accusative gì, showing that mùlú is not a transitive verb.
a. sě:dù mùlú-m
$\mathrm{S} \quad$ resemble- 1 SgSbj
'I resemble Seydou.'
b. mí mùl-̂̂:
$1 \mathrm{Sg} \quad$ resemble-3PlSbj
'They resemble me.'
c. ùlé: mí mùl- E :
children 1 Sg resemble-3P1Sbj
'The young people resemble me.'

The negative form is mùl $=$ lá- $(1 \mathrm{Sg}$ mùl $=$ lá $-\mathrm{m}, 3 \mathrm{Sg}$ mùl $=$ lá $-\varnothing, 3 \mathrm{Pl}$ mùl $=1-\hat{\varepsilon}:)$. It is based on a variant of $=$ lǎ- 'it is not' (§11.2.1.2).

The two or more referents who are compared may also be conjoined into a plural subject with no overt "object."
a. [ámádù.: sě:dù..] mùlú-Ø / mùl-ê:
[A.\& S.\&] resemble-3SgSbj / -3PISbj
'Amadou and Seydou resemble (each other).'
b. [ámádù .: sě:dù..] mùl-l-ê:
[A.\& S.\&] resemble-it.is.not-3PISbj
'Amadou and Seydou don't resemble (each other).'
The noun 'resemblance' is mù-mùlù-gó (§4.2.6).

### 11.2.4 'Become', 'happen', and 'remain' predicates

### 11.2.4.1 'Remain' (bě, wàdá)

bě and wàdá have regular, aspect-marking verb paradigms. bě means 'stay, remain (behind)'. That is, the subject will not go elsewhere during the relevant time interval.

```
[dámbá nè] běy-yà-m
    [village Loc] stay-Pfv1a-1SgSbj
    'I stayed in the village (while others traveled).'
```

With expressive adverbials (§11.1.3.1), bě has inchoative function ('become X').
bě has an accidental homonym 'lie down' due to a sound change. Cf. YD bìyé 'remain' versus bìyó 'lie down'.
wàdá means 'remain, be left (over)'.

```
zá wádá-ngò:-Ø
meal remain-IpfvNeg-3SgSbj
'There is nothing left of the meal.'
```


### 11.2.4.2 'Become, be transformed into’ (tángí)

tángí ' X become Y ' takes a NP complement that is not marked for accusative case.

```
àdě: táygí-yày-Ø
bird become-Pfv1a-3SgSbj
'He/She turned into a bird.'
```

tángí can also mean 'cross (road, river)', '(fire) be lit', and '(bride) be transferred (to husband's house)'. These senses all involve a change in location and/or state.

The transitive (causative) counterpart is tá:-ndí ' Z transform (X into Y)' (431).
àdě: $\quad$ ú
bird
'I will turn you-Sg into a bird.'
tá:-ndí can also mean 'take X across, cause X to go across', 'transfer (bride, to husband's house)', 'turn on (light)', and 'contaminate, infect'.

For deadjectival inchoative verbs (e.g., 'become red/small'), see $\S 9.6$. For bě 'become' with an expressive adverbial, see $\S 11.1 .3 .1$.

### 11.2.5 Mental and emotional statives

### 11.2.5.1 ‘Know’ (zùgó)

zùgó 'know (a fact)' or 'know, be acquainted with (someone)' is a regular verb with a full aspectual paradigm, rather than a defective stative as in some other Dogon languages. Thus perfective-1b zùgó-tì- 'knew, realized’, imperfective negative zúgá- $\mathfrak{g}$ gò:- 'does not know'.

### 11.2.5.2 'Want, like' (m̀má- or nàmá-, negative m̀bí-lǎ- or nàmà-lá-)

'Want, like' is expressed most often by a defective stative quasi-verb m̀bà- (compare Nanga m̀bá-, Tommo So ḿbé-). The negative counterpart 'not want' is mbí-lǎ-, containing a variant of the stative negative enclitic = ndǎ- (§10.4.2). The lexical rising tone is audible when the verb is followed by a particle. The rising tone in (432a) is not lexical; it is the clause-final H required by content interrogatives.
a. j̀jé
${ }^{\mathrm{L}}$ mbà-w ${ }^{\mathrm{n}}$
what? want-2SgSbj.Q
'What do you-Sg want?'
$\begin{array}{ll}\text { b. cì-kámá } & \text { m̀bí-lǎ-m } \\ \text { anything } & \text { want-StatNeg- } 1 \mathrm{SgSbj} \\ \text { 'I don't want anything.' }\end{array}$

The paradigms are in (433). As usual, negative -lǎ- is heard with low pitch except when followed by a clause-final particle.
(433)
'Want' and 'not want'

| category | 'want' | 'not want' |
| :---: | :---: | :---: |
| 1Sg | m̀má-m | m̀bí-lǎ-m |
| 1 Pl | m̀ ${ }^{\text {a }}$ - ${ }^{\text {n }}$ | m̀bí-lǎ-y ${ }^{\text {n }}$ |
| 2 Sg | m̀ ${ }^{\text {a }}$ - $\mathrm{w}^{\text {n }}$ | mbí-lǎ-w ${ }^{\text {n }}$ |
| 2 Pl | m̀bá-y ${ }^{\text {n }}$ | m̀bí-lǎ-y ${ }^{\text {n }}$ |
| 3 Sg | m̀bá-Ø | m̀bí-lǎ:-Ø |
| 3 Pl | m̀bá-غ̀ | m̀bí-l-ž: |

There is also another 'want' quasi-verb nàmá ( 3 Pl nàmá- $\varepsilon$ ). The negative form is nàmà-lá- with an H -toned version of the stative negative suffix.

These verbs may take NP objects: nàmá m̀bí = lǎ-m 'I don't want (any) meat'. They also take verbal noun complements along with others (§17.3.5).

### 11.3 Quotative verb

### 11.3.1 Conjugatable 'say' verbs (jǐn, órú, tágá)

The conjugatable 'say’ verb accompanying quoted material is jǐn, imperfective jínì-m-dò-. It gets limited competion from órú 'say, speak' and occasionally from tágá 'show'. órú does not require quoted material, since it also occurs in the collocation with cognate nominal òrú-gó órú 'speak, talk, do some talking'.

All three of these verbs allow perfective-lb -tì- (jǐn-tì-, ór-tì-, tágá-tì-).
The indirect object (the original addressee) is expressed with dative postposition bènè (§8.1.1), which also means 'chez, in the presence of' (§8.2.3).
jǐn is the likely etymological source of gín, the past-time same-subject 'and then' subordinator (§15.2.2.2).

The conjugatable 'say' verbs compete with unconjugated quotative particle wà (§17.1.3.2) and with an invariant form jà used with a preposed pronominal subject following the quotation (§17.1.3.3).

### 11.4 Adjectival predicates

### 11.4.1 Positive adjectival predicates

### 11.4.1.1 Final u (or apocopated zero)

One rather common adjectival predicate type has a final u on the adjective. After an unclustered medial nasal or y , the u is deleted (by apocope). The lexical tones are preserved.

This construction is not attested for all adjectives. The known examples are in (434). The modifying form shown next to the predicate is the unsuffixed form (inanimate plural or animate singular).

```
predicate modifying gloss
```

a. final $u$ audible

| /H/ melody |  |  |
| :---: | :---: | :---: |
| cé:lù | cé:lé: | 'cold, cool' |
| dúdù | dúdé: | 'heavy' |
| ع́dù | ¢́dé: | 'good' |
| ćlù $\sim \hat{\varepsilon} 1$ | ćlé: | 'sweet, delicious' |
| gálù | gálé: | 'bitter' |
| pílù | pílé: | 'white' |
| yágùrù | yágíré: | 'coarse, rough' |
| /LH/ and /L/+H melody |  |  |
| gàbú | gàbě: | 'tall' |
| mòdú | mòdé: | 'evil, nasty' |
| yòrú | yòrě: | 'soft' |

b. final $u$ apocopated

| /H/ melody |  |  |
| :---: | :--- | :--- |
| gôm | gómé: | 'rotten' |
| mân | márn'ź: | 'hard, solid' |
| nôm | nómé: | 'difficult' |
| ôm | ómé: | 'hot' |
| órnôn | órn'ńné: | 'smooth, sleek' |

Sample paradigms are in (435). $3 \mathrm{Pl}-\varepsilon$ : has parallels in various inflectional paradigms of verbs.
(435) category 'is sweet' 'is nasty' 'is difficult'

| 1 Sg | ćlù-m | mòdú-m | nómù-m |
| :---: | :---: | :---: | :---: |
| 1 Pl | ćlì-y ${ }^{\text {n }}$ | mòdí-y ${ }^{\text {n }}$ | nómì-y ${ }^{\text {n }}$ |
| 2 Sg | ćlù-w ${ }^{\text {n }}$ | mòdú-w ${ }^{\text {n }}$ | nómù- ${ }^{\text {n }}$ |
| 2 Pl | ćlì-y ${ }^{\text {n }}$ | mòdí-y ${ }^{\text {n }}$ | nómì-y ${ }^{\text {n }}$ |
| 3 Sg | દ́lù-Ø ~ ह̂l-Ø | mòdú-Ø | nôm-Ø |
| 3 Pl | દ́lù-દે: | mòd-દ́: | nóm-è: |

### 11.4.1.2 \{LHL\} overlay and final $\mathrm{i} \sim \mathrm{y}$

This predicate type has an \{LHL\} overlay applied to the full stem, whether monosyllabic or longer. Those forms that are based on $\mathrm{Cv}(\mathrm{C}) \mathrm{CE}$ : adjectives also raise the final E : vowel to i:, resulting in $C \hat{v}(C) C i ̂: ~(436 a)$. Those based on C(v)E: appear as CV̂y (436b). Cî: (436c) is probably of the same type, i.e. from /Ciy/.
(436) predicate modifying gloss
a. $\mathrm{Cv}(\mathrm{C}) \mathrm{Cî}:$
bìnî: bìné: 'fat, stout'
dèmbî: démbé: 'thick, massive'
èmbî: èmbě: 'narrow'
b. Cv̂y
gôy gwě: 'short'
wầy wà $\varepsilon$ 'wide, spacious'
c. Cî: (or C1̂y)
sî: sî̀: $\quad$ 'sharp (point, blade)'

With 1 Sg subject: bìnî: = m̀ I am fat', gǒy = ̀̀ 'I am short' (the final L-tone is realized on the clitic nasal).

Paradigms are in (437).

| category | 'be fat' | 'be short' |
| :---: | :---: | :---: |
| 1Sg | bìnî:-m | gǒy $=$ m̀ |
| 1P1 | bìnî:-y ${ }^{\text {n }}$ | gǒy $=$ y $^{\text {n }}$ |
| 2Sg | bínî:-w ${ }^{\text {n }}$ | g ¢у $=\grave{\mathrm{w}}^{\text {n }}$ |
| 2 Pl | bìnî:-y ${ }^{\text {n }}$ | g ¢у $=\mathrm{y}^{\mathrm{n}}$ |
| 3Sg | bìnî:-Ø | gว̂y-Ø |
| 3Pl | bìn- $\hat{\text { : }}$ | gó-è: |

The lengthening and tonal effect have some resemblance to combinations of noun stems with the 'it is' enclitic $\vdots=\varnothing$ (§11.2.1.1).

### 11.4.1.3 pá: ‘be long’

From pá: 'long' the predicative form remains H-toned, with no final high vowel or semivowel.

| predicate | modifying | gloss |
| :--- | :--- | :--- |
| pá: | pá: $\sim$ páé | 'long' |

The paradigm is (439).
(439) category 'is long'

| 1 Sg | pá:-m |
| :--- | :--- |
| 1 Pl | pá:-y |
| 2 Sg | pá:-w |
| 2 Pl | pá:-y |
|  |  |
| 3 Sg | pá:-Ø |
| 3 Pl | p-ǎ: |

11.4.1.4 Derived expressive adverbial plus ${ }^{\text {L }}$ bù- 'be'

The attested example of a construction with 'bù- 'be' is in (440). The modifying adjective takes a derived expressive adverbial (EA) form. ${ }^{\text {L }}$ bù- is regularly used to make EAs into stative predicates (§11.1.3.1).

```
predicate modifying gloss
```



### 11.4.1.5 Predicate with $\vdots=\varnothing$ 'it is' on modifying adjective

For a number of adjectives, no special stative predicative form was elicitable. Instead, the regular modifying form, including animacy and number marking, is used as a predicate with the identificational 'it is' clitic. A repetition of the noun (e.g., 'this mango is a red mango') frequently occurs, and although the repeated noun is not required it suggests that the predicative element is syntactically an NP rather than an adjective as such.

In (441), just one representative predicative form is shown, but forms for other animacynumber categories are also possible.
predicate modifying gloss
a. sample predicative form is inanimate singular

$$
\begin{array}{cll}
\text { (C)Cv adjective stem } & & \\
\text { sé-ŋgê: }=\varnothing & \text { ś́ } & \text { 'good' } \\
\text { d } \varepsilon \text { - } ŋ g \hat{\varepsilon}:=\emptyset & \text { d́ } \varepsilon & \text { 'big' } \\
\text { ǹdò-ŋgô: }=\varnothing & \text { ǹd } \varepsilon ́ & \text { 'empty', }
\end{array}
$$

other stems

| $\begin{aligned} & \text { bán-gô: = Ø } \\ & \text { dùmbù-gô: = } \end{aligned}$ | bár ${ }^{n} \varepsilon$ : <br> dùmbě: | ```'red; ripe (mango)' 'blunt (blade)'``` |
| :---: | :---: | :---: |
| jém-gô= | jémé: | 'black (dark)' |
| mà ${ }^{\mathrm{n}} \mathrm{-g} 0$ : $=\varnothing$ | mà ${ }^{\text {n }}$ | 'dry' |
| òl-gô: = Ø | ว̀lě: | 'wet; fresh (grass)' |
| pèy-gô: $=$ Ø | pě: | 'old' |
| púrúgú-gô: = Ø | púrúgé: | 'tan, off-white' |
| sàm-gô: = Ø | sàmě: | 'bad, ugly' |
| wér-gô: = Ø | wéré: | 'green' |

b. sample predicative form is inanimate plural (liquids)
sễ: = Ø
kùrễ: $=\varnothing \quad$ kùrě: 'undiluted (milk)'
c. sample predicative form is animate singular
ómô: = Ø ómó: 'living, alive'

This construction can be used with any adjective, including those that also have a specifically predicative form as described in preceding sections.

A sample paradigm is (442). The third person forms clearly involve the 'it is' clitic, which is manifested by lengthening and a final L-tone element.

| category | 'is old' |
| :---: | :---: |
| 1 Sg | p $\check{\text { ¢ }}$ :-m |
| 1 Pl | pèy-mbó-y ${ }^{\text {n }}$ |
| 2 Sg | pě:-w ${ }^{\text {n }}$ |
| 2 Pl | pèy-mbó-y ${ }^{\text {n }}$ |
| 3rd person |  |
| InanSg | $p \varepsilon ̀ y-g \hat{\text { a }}=$ = |
| InanPl, AnSg | р $\check{\sim}:=\varnothing$ |
| AnPl | pèy-mbô: = Ø |

11.4.2 Negative adjectival predicates (= lá)

The various adjectival predicates described in the preceding sections are negated as follows. Simple adjectival predicates add H -toned negative enclitic = lá- after tone-dropped stem (443a-c). Conjugated forms include $1 \mathrm{Sg}=$ lá -m and $3 \mathrm{Sg}=$ lá- $\varnothing$. The vowel of the enclitic is not lengthened since it is monotonal. Predicates based on deadjectival expressive adverbials (EAs) are negated by ỳgó- 'not be (somewhere)', as usual for negative predicates of EAs
(443d). Positive predicates with the 'it is' enclitic attached to N -Adj or to a noun-like "adjective" are negated by the = lǎ- 'it is not (NP)' (443e). This is the regular negation (e.g. $3 \mathrm{Sg}=$ lǎ:- ) for negative NP predicates (§11.2.1.2).
a. $\left[\begin{array}{cc}\text { cìn }^{\mathrm{L}} & \text { ò-gú }] \\ \text { dùdù }=\text { lá- } \varnothing \\ \hline\end{array}\right.$
[stone Prox-InanSg] heavy=StatNeg-3SgSbj
'That stone is not heavy.' (cf. dúdù-Ø, §11.4.1.1)
b. [sùngò ${ }^{\text {L }}$ ò-gú]
gòy = lá- $\varnothing$
[rope Prox-InanSg] short=StatNeg-3SgSbj
'That rope is not short.' (cf. gồy-Ø, §11.4.1.2)
c. [sùngò ${ }^{\text {L }}$ ò-gú] pà: = lá-Ø
[rope Prox-InanSg] long=StatNeg-3SgSbj
'That rope is not long.' (cf. pá:-Ø, §11.4.1.3)
d. [cìn ${ }^{\mathrm{L}}$ ò-gú] ér$^{\mathrm{n}} \dot{\varepsilon}-\mathrm{y} \rightarrow \quad$ ỳgó-Ø
[stone Prox-InanSg] lightweight-Adv not.be-3SgSbj
'That stone is not light(-weight).' (cf. $\varepsilon r^{n} \varepsilon$-y $\rightarrow$ bù-, §11.4.1.4)
e. [ùlò ${ }^{L}$ ò-gú] pèy-gó = lǎ:-Ø
[house Prox.InanSg] old-InanSg=it.is.not-3SgSbj
'That house is not an old one.' (cf. pèy-gô: = Ø, §11.4.1.5)

The paradigms are the usual ones for these negative endings.

### 11.5 Possessive predicates

### 11.5.1 'X have $Y$ ' ( ${ }^{\text {L }}$ sò- )

Lsò- 'have' forms predicates of possession, primarily in the sense of ownership. The subject is frequently topical within the larger discourse. In positive main clauses, ${ }^{\mathrm{L}}$ sò- requires existential yé (444a) unless there is a focalized constituent (444b).

| a. | [pédú-mbò | bú-tà:ndú] | yé |
| :--- | :--- | :--- | :--- | | L sò-m |
| :--- |
| [sheep-AnPl |
| 'I have three sheep.' |

b. ǎm pédé: ${ }^{\mathrm{L}} \mathrm{S}$-ò:
who? sheep have-SbjFoc
'Who has a sheep?'

Although ${ }^{\text {L }}$ sò- is normally heard as L-toned, it is arguably H-toned lexically, i.e. /só-/, but regularly defocalized and therefore subject to tone-dropping. In this analysis, existential yé
plays the role of focalized constituent when present. For tone-dropping on derived stative verbs after existential yé see §11.2.2.1.1).

The negative counterpart is só-ndǒ:-, including a variant of stative negative = ndǎ(§10.4.2). Existential yé is not allowed in negative clauses.
(445) sòmé: só-ndǒ-m
horse have-StatNeg-1SgSbj
'I don't have a horse.'

The positive and negative paradigms are in (446). yé is included in the positive but is not compatible with the negative.

| category | 'have' | 'do not have' |
| :---: | :---: | :---: |
| 1 Sg | yé ${ }^{\text {L }}$ sò-m | só-ndǒ-m |
| 1P1 | yé ${ }^{\text {L }}$ sò- $\mathrm{y}^{\text {n }}$ | só-ndǒ-y ${ }^{\text {n }}$ |
| 2 Sg | yé ${ }^{\text {L }}$ sò-w | só-ndǒ-w ${ }^{\text {n }}$ |
| 2 Pl | yé ${ }^{\text {L }}$ ¢ ${ }^{-} \mathrm{y}^{\text {n }}$ | só-ndǒ-y ${ }^{\text {n }}$ |
| 3Sg/Inan | yé ${ }^{\text {L }}$ ¢̀̀-Ø | só-ndǒ:-Ø |
| 3 Pl | ye ${ }^{\text {L }}$ Son-ż: | só-nd-è: |

In careful speech, the 3 Pl form of 'have' can be pronounced [sò̀̀].
For the past-time form ('had X', 'used to have X'), see $\S 10.5 .1 .6$. For 'have' in relative clauses, see §14.4.2.2.
${ }^{\mathrm{L}}$ sò- 'have' is presumably the etymological source of perfective-2 -sò- (§10.2.1.3). It also occurs more transparently as part of one of the progressive constructions, that with $-\mathrm{m}^{\mathrm{L}}$ sì(§10.2.2.3), which is negated as -ḿ só-ndǒ- (§10.2.3.6).

### 11.5.2 'Y belong to X ' predicates

In this construction, the subject (which may be topical in the larger discourse) denotes the possessed entity Y. The predicate identifies the owner X. The original construction was of the form "Y [X's thing]=it.is," with 'thing' (or, for animates, 'critter') in apposition to Y. For such possessive classifiers with pronominal possessors, see $\S 6.2 .1 .2$. Here as elsewhere, the 'it is' clitic is expressed by lengthening of a final short vowel and by a final L-tone (§11.2.1.1). In (447a), kǒ: becomes kỗ: = Ø with bell-shaped tone, and í-gé becomes í-gê: = Ø with lengthened final vowel.

$$
\begin{array}{lll}
\text { a. úló } & {[\text { ǎm }} & \text { kô: }]=\varnothing  \tag{447}\\
& \text { house } & {[\text { who? }}
\end{array}
$$

'The house is whose?' (= ' . . belongs to whom?'), cf. §13.2.2.1
b. úló í-gê: $=\varnothing$
house 1Pl-Poss]=it.is
'(The) house is ours.' or '(The) houses are ours.'
In (447b), '(the) house is ours' is identical in form to 'it's our house'. However, in the former sense the subject can be determined ('[that house over there] is ours') or topicalized ('as for that house, it's ours').

1 Sg forms are kồ: = ' it (inanimate) is mine' and wề: = ' 'it (animate) is mine'.
The negative counterpart replaces $\vdots=\varnothing$ ' it is' with $=$ lă- 'it is not', the regular negation of NP predicates (§11.2.1.2).

$$
\begin{array}{ll}
\text { nǎ: } \quad \text { ú-wó }=\text { lǎ:- }  \tag{448}\\
\text { cow } & \text { 2Sg-Poss.AnSg=it.is.not } \\
\text { (The) cow is not yours-Sg.' }
\end{array}
$$

1 Sg combinations are kš: = lă:- 'it (inanimate) is not mine' and wě: = lă:- 'it (animate) is not mine'.

### 11.6 Verb iteration

This section presents iterations of a single verb. For more complex iterative phrases involving two verbs, or a verb plus pronominal subject, see §15.3.1-2.

### 11.6.1 Iteration of inflected verb

A verb stem may be iterated (fully reduplicated) to express prolongation or repetition. The first repetition is the bare stem of the verb. The second repetition carries inflections and is subject to tonal changes, for example in the imperfective. The construction is structurally similar to that of verb chaining (§15.1.1). Forms of dàmbí 'push' and púngó 'hit' with 1 Sg subject are in (449).

| perfective-1b | glo | imperfective | gloss |
| :---: | :---: | :---: | :---: |
| a. dàmbí-tì-m dámbùm-nù-m | 'I pushed' <br> 'I push' | dàmbí-dàmbí-tì-m dàmbú-dámbù-m-nù-m | 'I pushed and pushed' <br> 'I push and push' |
| b. púngó-tì-m púngò-m-nù-m | 'I hit-Pfv' <br> 'I hit-Ipfv' | púygó-púygó-tì-m <br> púngó-púygò-m-nù-m | 'I hit and hit (past)' <br> 'I hit and hit (nonpast)' |

11.6.2 Iteration of uninflected verb as durative background

An uninflected verb may also be fully iterated to express prolongation or repetition. The first repetition has its regular bare-stem form; the second repetition drops to L-toned.

| (450) | verb | gloss | iteration | reference |
| :---: | :---: | :---: | :---: | :---: |
|  | lógúlí | 'extract, pick out' | lógúlí-lògùlì | 2015-01@03:40 |
|  | dàmbí | 'push' | dàmbí-dàmbì |  |
|  | bàdá | 'pull' | bàdá-bàdà |  |
|  | yàl-í: | 'take a walk' | [yàl-í:]-[yàl-ì:] | 2015-03@00:49 |

The iteration functions adverbially, as background. It is followed without pause by a different inflected verb.

## 12 Comparatives

### 12.1 Asymmetrical comparatives

In this type of comparative, two scalable propositions that differ in the reference of one constituent are compared, as in ' X eats more than Y (eats)'. The 'than Y ' phrase is expressed as Y dùgò, with what looks like the purposive postposition (§8.3) but in a different sense. The phrase with dùgò is followed, either immediately or after an intervening constituent, by a dedicated 'more' word or by a word that incorporates this sense (e.g. 'be better').

### 12.1.1 Verbal predicate with sìgá or ìré 'more'

The predicate is an ordinary inflected verb, e.g. perfective or imperfective. 'More' is expressed by sìgá in (451).
(451)
$\begin{array}{llllll}\text { a. } & {[[\mathrm{mí}} & \text { dùgò }] & \text { sìgá }] & \text { bírá: } & \text { bírà-m-dò-Ø } \\ & {[[1 \mathrm{Sg}} & \text { than }] & \text { more }] & \text { work(n) } & \text { work(v)-Ipfv-Ipfv-3SgSbj }\end{array}$
'He/She works more than I (do).'
b. [[ńné dùgò] sìgá] zá jâ-m-nù-m
[[3Sg than] more] meal eat-Ipfv-Ipfv-1SgSbj
'I eat more than he does.'
c. yù-wá: [[ú dùgò] sìgá] wâ:-m-nù-m
farming(n) [[2Sg than] more] cultivate-Ipfv-Ipfv-1SgSbj
'I do more farming than you-Sg (do).
ìré functions as its own predicate in the sense 'be better, be more' (see the following subsection). It can, however, take the place of sìgá in some of the preceding examples. For example, in (452) ìré is followed by the main predicate.
(452) [[mí dùgò] ìré] bírá: bírà-m-dò-Ø
[[1Sg than] more] work(n) work(v)-Ipfv-Ipfv-3SgSbj
'He/She works more than I (do).'
12.1.2 'Be better, be more' (ìr $\varepsilon$ )
ìré is a defective stative verb, like those described in $\S 11.2$.3. Its basic sense is 'be more' but in the absence of an explicit basis of comparison the contextual sense is often 'be better'. The
comparandum is again expressed as a PP [ X dùg̀̀]. A basis for comparison may take the form of a chained verb or other predicate following ìré (453b,f), whereupon ìré looks superficially like an invariable adverb. The past-time enclitic may be added (453e).
a. [ú dùgò ] ìré-m [2Sg than] be.more- 1 SgSbj 'I am better than you-Sg (are).'
b. [ú dùgò] ìré gàbú-m [2Sg than] be.more be.tall- 1 SgSbj 'I am taller than you-Sg (are).'
c. mánkòrò [kùrá: dùg̀̀] ìré-Ø mango [wild.grape than] be.more-3SgSbj 'Mangoes are better than wild grapes.'
d. yà-mbó [árná-mbò dùgò] ìré-Ø ỳgó zw-è: woman-AnPl [man-AnPl than] be.morehere abound.Pfv-3PlSbj 'There are more men than women here.'
e. tín ${ }^{\text {n }}$ [ú dùg̀̀ $] \quad$ ìr $\varepsilon=b u ̀-m=b u ̀-m$ before [2Sg than] be.more $=$ Past-Ipfv $=$ Past -1 SgSbj 'I was formerly better than you-Sg (are).'
f. yó [ú dùgò ] ìré yé ${ }^{\text {L }}$ sò-m millet $[2 \mathrm{Sg}$ than] be.more Exist have- 1 SgSbj 'I have more millet than you-Sg (are).'

### 12.1.3 'Best’ ( dé́:)

The adjective $\varepsilon$ édé: 'good' with appropriate animacy-number marking occurs in a kind of superlative construction (454a-b)

b. [ámádù. $\therefore$ hà:mí:dù.:] [[[yù-wà:]-wàlù]-mbò ${ }^{\text {L }}$ édú-mbò]
[A.\& H.\&] [[farmer]-AnPl good-AnPl]
'Amadou and Hamidou are the best farmers.'

### 12.1.4 'Be bigger' (ègá)

غ̀gá is a rather emphatic 'big' adjective, and is mainly used as a predicate in comparatives.
a. mótì [bàndìrá dùgò] ègá-Ø
$\mathrm{M} \quad[\mathrm{B}$ than] bigger-3SgSbj
'Mopti (city) is bigger than Bandiagara.'
b. [ú dùgò ] غ̀gà = lá-m
$[2 \mathrm{Sg}$ than] bigger $=\mathrm{Neg}-1 \mathrm{SgSbj}$
'I am not bigger than you-Sg (are).'
c. [ńné dùgò] غ̀gá-Ø
[ 3 Sg than] bigger- 3 SgSbj
'It was bigger than him.' (2015-02 @ 01:26)

### 12.2 Symmetrical comparatives

### 12.2.1 'Equal(ly)' (cáw-cáw)

The iterated adverb cáw-cáw 'equal(ly)' can be combined with ${ }^{\text {L }}$ bù- 'be' to form symmetrical comparative predicates. The domain of comparison may be added as an adjunct noun (456a). For 'same age' a lexical item 'agemate' is preferred (456b).
a. [í
í lèy] ígúr-gó cáw-cáw ${ }^{\text {Lbù }}$ - $Ø$
[1P1 two] height equal be-3SgSbj
'We two are (of) the same height.'
b. [í lèy] kàràgá
[1Pl two] agemate(s)
'We two are (of) the same age.'
12.2.2 bǎ 'be worth, be equal to'

This verb can be used in the imperfective (positive and negative) or in the perfective- 2 to indicate equality on some measure.
a. ámádù
ígúr-gó sě:dù
bâ-m-dò-Ø / bà-só-Ø
A height S be.worth-Ipfv-Ipfv-3SgSbj/-Pfv2-3SgSbj
'Amadou is equal to Seydou in height.'
b. ámádù mí-gì bá-ggò:-Ø

A 1Sg-Acc be.worth-IpfvNeg-3SgSbj
'Amadou is not equal (=as good as) me.'
bǎ ‘equal, be worth’ appears to be the same verb as bǎ 'be enough, suffice', versus bă: ‘gather'. bǎ 'equal, be worth' is part of a construction with participial complement (§17.3.11).

## 12.3 'A fortiori' (wè $\rightarrow$ )

This sense is expressed by combining wè $\rightarrow$ at the end of the clause including the first comparandum with 'word' as "possessum" of the second comparandum.
(458) [nǎ: túré:] só-ndǒ-m wè $\rightarrow$ [bú-pźl ${ }^{\text {Lòrù-gò }]}$
[cow one.An] have-Neg-1 SgSbj a.fortiori [An-ten word-InanSg] 'I don't have one cow, never mind ten of them.'

In local French, à plus forte raison dix, or else ne parlons pas de dix.

## 13 Focalization and interrogation

### 13.1 Focalization

Focalization occurs when a nonpredicative constituent is singled out for emphasis, against an otherwise presupposed or understood background. Typical examples are WH-interrogatives, and clauses that are (or could be) used to respond to such a question.

Focalization of a non-verb constituent is expressed as indicated in (459).
a. verb is defocalized

H -tones of verb stem are dropped to L;
a suffixally marked perfective- $1 \mathrm{a} / 1 \mathrm{~b}$ is replaced by the simple perfective
b. subject focus
the verb takes special subject-focus form without pronominal conjugation;
a pronominal subject is expressed by a preverbal pronoun;
nonpronominal subjects optionally shift to preverbal position;
nonpronominal subjects that do not shift to preverbal position are often but not always resumed by a preverbal subject pronoun
c. existential yé is omitted although its homonym yé 'there.Def' is allowed

A focalized constituent is not fronted.
Focalization is much clearer for subjects than for other constituents. Subject focus requires strong emphasis on the subject. Nonsubject "focus" is much more fluid. Most verbs (e.g. transitives) with preceding nonsubject constituents have "defocalized" verbs even in the absence of a strongly focalizing context. It would be possible to reinterpret "defocalization" as prosodic subordination to preceding words within a prosodic phrase.

Because a focalized constituent is not directly marked, no overt distinction can be made between focalization of an entire possessed NP and focalization of just the possessor, or between focalization of a PP and focalization of just the complement of the postposition. Likewise, if there is more than one non-subject constituent, there is no way to specify which of them is focalized.
"Focalization" of the truth of a statement ('I did see an elephant!') is handled by an unrelated system of clause-final emphatic particles (§19.5). There is no mechanism for focalizing a verb or VP, although any verb that is not defocalized is at least nominally focal.

Focalization of a constituent in a negative indicative clause is uncommon, but grammatical.
Accusative marking (postposition-like gì at the end of the NP) is most reliable when the object is pragmatically focal in context. However, accusative marking can also occur in contexts that do not seem to emphasize the object.

It is difficult to overtly focalize a constituent in a deontic clause (imperative, hortative). The verb itself is pragmatically focal in these categories. Subject focalization would make little sense, and deontically marked verbs lack subject-focus forms.

To make focalization of a nonsubject constituent unmistakable, it is necessary to add an element like té $\rightarrow$ 'specifically' (§8.4.3.2) to that constituent.

### 13.1.1.1 Focalized pronouns

If a pronoun is focalized, it occurs as a separate word. A focalized pronominal subject occurs in immediate preverbal position in ( $460 \mathrm{a}-\mathrm{d}$ ) and can be analysed as a proclitic although there is no overt distinction between "independent" and "proclitic" pronouns. The verb has an invariant subject-focus suffix instead of a pronominal-subject suffix agreeing with the subject.
a. mí ${ }^{\text {L }}$ wò:-s-ò:

1Sg come-Pfv2-SbjFoc
'It was I [focus] who came.'
c. mí-gì ú Lè̀ng-è:

1Sg-Acc 2Sg hit.Pfv-SbjFoc
'It was you-Sg [focus] who hit me.'
d. ú ${ }^{\text {Lò }}$-m-

2Sg go-Ipfv-SbjFoc
'It's you-Sg [focus] who (will) go.'
"Preverbal" position here is interpreted loosely to allow certain low-referentiality elements to be grouped with the inflected verb, following the subject pronoun. This includes unconjugated chained verbs (461a) and quantificational adverbs (461b).
a. bú [bírè ${ }^{\text {L }}$ bèà $\mathrm{m}-\mathrm{E}$ : $]$

3Pl [work(v) get-Ipfv-SbjFoc]
'It's they [focus] who (can) work.' (2015-05 @ 02:53)
b. bú:dù kú gá:rá ${ }^{\mathrm{L}}$ bèà-m-è
money Dem.InanSg a.lot get-Ipfv-SbjFoc
'That [focus] will get a lot of money.' (2015-03 @ 01:37)
c. ńné gá:rá ${ }^{\text {HL }}$ [lâ: bè̀à-m-è:]

DemDef.AnSg a.lot give.birth get-Ipfv-SbjFoc
'that one [focus] can bear lots (of young).' (2015-03 @ 01:42, emended)

Focalized pronominal objects often happen to be adjacent to the verb anyway, since the language has SOV order. However, no movement need be posited. Focalization of nonsubjects is expressed indirectly (and unreliably), chiefly by defocalizing the verb (462a). In (462b), the focalized pronominal is separated from the verb. Only the context indicates which of two preverbal nonsubject constituents is the focus.
(462)
a. mí-gì ${ }^{\text {Ling }}$ pùò-w ${ }^{n}$

1Sg-Acc hit.Pfv-2SgSbj
'It was me [focus] whom you-Sg hit.'
b. [ǩ̌: nè] zá ${ }^{\text {Lnà }}-\mathrm{m}-n \varepsilon ̀-\mathrm{y}^{n}$ [1SgPoss.InanSg Loc] meal eat-Ipfv-Ipfv-1P1Sbj 'It's at my (house) [focus] that we will eat.'

### 13.1.1.2 Focalized NPs

When a nonpronominal NP is the focalized subject, it has the same form as in other clauses. It may remain in its regular clause-initial position, in which case it is often resumed by a preverbal subject pronoun. Alternatively, the NP may shift into immediate preverbal position, without a resumptive pronoun.

These two options are most clearly observed in transitive clauses where a focalized nonpronominal subject NP co-occurs with other preverbal constituents. In (463a-c), the focalized subject is not moved, and is resumed by a preverbal pronoun.
(463)
a. pédé: [ámádù (gì)] ńné ${ }^{\mathrm{L}} \mathrm{y}(\mathrm{y})$ - $\mathrm{\varepsilon}$ :
sheep $\quad[\mathrm{A} \quad$ (Acc)] 3Sg see.Pfv-SbjFoc.Q
'It was a sheep [focus] that saw Amadou.'
b. sèédù mí-gì ńné Lpùng-è:
$\mathbf{S} \quad 1 \mathrm{Sg}$-Acc 3Sg hit.Pfv-SbjFoc
'It was Seydou [focus] who hit me.'
c. yâ: árná-mbò í Lnà-m-è:
again man-AnPl 1PI eat-Ipfv-SbjFoc
'Again it's we men [focus] who eat.' (2022-04 @ 02:00)

In (464), by contrast, the focalized subject has moved into preverbal position, crossing over the object.
(464)
a. $\grave{\text { end }}$ yá
${ }^{\mathrm{L}}$ kı̀-m-દ̀:
child woman raise-Ipfv-SbjFoc
'It's the woman [focus] who raises the child.' (2022-04 @ 00:44)


If the clause is intransitive, the focalized subject NP is often already adjacent to the verb. If a resumptive pronoun is present (465a), it is understood that the subject remains in clause-initial subject position. If there is no resumptive pronoun (465b), the subject has moved into preverbal position.
(465)
a. sèédù ńné ${ }^{\text {L }}$ yàg-દ̀:
S $\quad$ 3Sg fall.Pfv-SbjFoc
'It was Seydou [focus] who fell.'
b. sèédù Lyàg-દ̀:
[=(a)]

There is no special morphology or linear position for focalized nonsubject NPs, such as the objects in (466a-b).
a. ámádù
[pédé: (gì)]
${ }^{\text {L }}$ yǐ:-Ø
A [sheep (Acc)] see.Pfv-3SgSbj.Q
'It was a sheep [focus] that Amadou saw?'
b. ámádù
[à-ḿ (gì)]
Lyǐ:-Ø
A [who? (Acc)]
see.Pfv-3SgSbj.Q
'Who(m) did Amadou see?'

### 13.1.1.3 Focalized adverbs

Adverbs are readily focalized (467).
(467)
a. $\varepsilon y^{n}$
bírá:
${ }^{\text {L }}$ bìrà- $m-n$ ह̀- $y^{n}$
tomorrow work(n) work(v)-Ipfv-Ipfv-1PISbj
'It's tomorrow [focus] that we will work.'
b. ŋ̀ǵ
bírá:
${ }^{\text {L }}$ bìrà-m-nè- $\mathrm{y}^{\mathrm{n}}$
here
work(n)
work(v)-Ipfv-Ipfv-1PISbj
'It's here [focus] that we will work.'
c. ôy ${ }^{n} \quad{ }^{\text {L }}$ bìrà-m-nè̀- $\mathrm{y}^{\mathrm{n}}$
like.this work(v)-Ipfv-Ipfv-1PISbj
'(Like) this [focus] is how we will work.'
d. yéngì
yesterday work(v).Pfv-1PISbj
'It was yesterday [focus] that we worked.'

```
e. àndí tómbó ' Lùgò-wn
    where? jump descend.Pfv-2SgSbj
    'Where did you-Sg jump down?'
```

PPs in adverbial function (spatial, instrumental, etc.) can be focalized. Because the only overt marking of nonsubject focalization is indirect, there is no way to distinguish focalization of the entire PP from focalization of just the complement of the postposition.
$\begin{array}{lll}\text { a. } \begin{array}{ll}\text { [dámbá } & \text { nè } \\ \text { [village } & \text { Loc] }\end{array} & \begin{array}{l}\text { Ltòmbò-y } \\ \text { n } \\ \text { jump-1PISbj }\end{array}\end{array}$ 'It was at the village [focus] that we jumped.'


Even expressive adverbials can be focalized (469), though this is unusual.

| dém $\rightarrow$ | ${ }^{\text {L }}$ yày-m̀ |
| :--- | :--- |
| straight | go.Pfv- 1 SgSbj |

'It was straight [focus] that I went.'

### 13.1.1.4 Subject-focus verb forms

When the subject is focalized, the usual pronominal-subject suffixes on the verb are replaced by a special subject-focus ( $\mathbf{S b j F o c}$ ) suffix $\{-$ ह̀: -ò: -à: \}. Some negative predicates do not allow such suffixation directly, but they can be followed by ${ }^{\text {L }} \mathrm{b}$ - $\mathrm{\varepsilon}$ :, the subject-focus form of ${ }^{\text {L }}$ bù- 'be'.

The relationship between regular and subject-focus forms of verbs in various inflectional categories is summarized in (470). Further details and examples are given in the following subsections.

In the perfective positive, the subject-focus form is unrelated to the regular perfectives. In other categories, the subject-focus form is based on the same stem vocalism as the corresponding regular form. For example, the perfective negative, imperfective, and imperfective negative forms are based on the $\mathrm{A} / \mathrm{X}$-stem of the verb in the subject-focus as well as the regular form.

```
    regular SbjFoc category
a. -yà- ~ -â: -\grave{: perfective-1a}
    -tì- " perfective-1b
    -s\grave{- -s-oे: perfective-2}
    -t\varepsilońr\varepsiloń-bì- -tèr-غ̀: experiential perfect
```

| b. | -lí- |
| :--- | :--- | :--- | :--- |
| -tèrà-lí- |  |$\quad$| -l-દ̀: |
| :--- |
| -tèrà-l-è: |$\quad$| perfective negative |
| :--- |
| experiential perfect negative |

### 13.1.1.4.1 Subject-focus verbs in perfective and related forms

The $-\grave{\varepsilon}$ : suffix for perfective subject focus is unrelated in form to the marked perfective-1a, perfective-1b, and perfective-2 suffixes. It has a phonological resemblance to the simple perfective, specifically the $\mathrm{E} / \mathrm{I}$-stem used in the 3 Sg -subject simple perfective, but the suffix is always [-ATR] -غ̀: (not \#-è: or \#-ì:). This ending also absorbs mediopassive -í: . Representative forms are in (471). The stem tones are dropped to defocalize the verb.
verb perfective SbjFoc gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :

| nú | ${ }^{\mathrm{L}}$ nư- $\mathrm{c}_{\text {: }}$ | 'enter' |
| :---: | :---: | :---: |
| yǐ | ${ }^{\text {L }}$ yii-c̀: | 'see' |
| tí | ${ }_{\text {Ltincè }}$ | 'send' |
| jě | ${ }^{\mathrm{L}} \mathrm{j} \mathrm{i}$ - ${ }^{\text {\% }}$ | 'kill' |
| jě | ${ }^{\mathrm{L}} \mathrm{j} \mathrm{i}-\grave{\mathrm{c}}$ : | 'dance' |
| gǒ | ${ }^{\text {L }} \mathrm{go}-\mathrm{c}^{\text {e }}$ | 'exit (v)' |
| ká | ${ }^{\text {L }}$ ka ${ }_{\text {cèr }}$ | 'shave' |
| zž: | ${ }_{\text {Lilìè }}$ | 'bring' |
| wǒ: | L wò-દ̀: | 'come' |
| tó: | ${ }^{\text {L }}$ tò-è: | 'pound' |

b. CvC

| yǎy/o- | ${ }^{\text {L }}$ yà-દ̀: | 'go' |
| :---: | :---: | :---: |
| zăy/zo- | ${ }^{\text {Lzà-è: }}$ | 'take, convey' |
| lǎy ~ làyí | ${ }^{\text {Lààè: }}$ | 'taste' |
| tún | ${ }^{\text {L }}$ tùn-غ̀: | 'put' |

c. bisyllabic

| tábá | ${ }^{\text {L }}$ (àb-è: | 'touch' |
| :---: | :---: | :---: |
| púngó | ${ }^{\text {L }}$ pùng-غ̀: | 'hit, beat' |
| dògó | ${ }^{\text {L }}$ dòg-è: | 'abandon' |
| gùló | ${ }^{\text {L }}$ gùl-è: | 'dig' |
| óndú | ${ }^{\text {L }}$ ¢̀nd-દ̇: | 'build' |

d. trisyllabic
péndí-gí ${ }^{\text {L }}$ pèndì-g-è: 'break'
zìgìí ${ }^{\text {Lì̀igib- } \text { : }} \quad$ 'shake'
e. mediopassive
mì:líi: ${ }^{\text {L mì:l-è: }} \quad$ 'return'

The perfective-2 subject-focus form is -s-̀̀: after the tone-dropped verb. Examples are ${ }^{\mathrm{L}}$ wò:-s-ò: 'came', 'tìbè-s-ò: ‘died', and ${ }^{\text {L }}$ gùlò-s-ò̀: ‘dug'.
(472) cì-njé á ${ }^{\text {L}}$ sòbò-s-ò: mà
what Logo jab-Pfv2-SbjFoc Q
'(said:) "What has jabbed me?" ' (2015-01 @ 02:27)

The other category in the perfective positive system that has a subject-focus form is the experiential perfect. The ending changes from -téré-bì- to subject-focus -tèr-z̀: . The verb is tone-dropped if not already L-toned.
experiential perfect
regular
a. /LH/-melodic verbs

| yǐ | yìtéré-bì- | ${ }^{\text {L }}$ yìtè̀r-c̀: | 'see' |
| :---: | :---: | :---: | :---: |
| gùló | gùlò-ť́ré-bì- | ${ }^{\text {L }}$ gùlò-tı̀r-દ̀: | 'dig' |
| zìgìbí | zìgìbì-ť́ré-bì- | ${ }^{\text {L }}$ zìgììi-tèr-è: | 'shake' |

b. /H/-melodic verbs

| ká | ká-ṫ́ré-bì- | ${ }^{\text {L }}$ kà-tèr-દ̀: | 'shave' |
| :---: | :---: | :---: | :---: |
| púngó | púngó-téré-bì- | ${ }^{\text {L }}$ pùngò-tèr-è: | 'hit, beat' |

### 13.1.1.4.2 Subject-focus verbs in the perfective negative

In the perfective negative, both the regular and subject-focus forms show $\{\mathrm{L}\}$ overlay on the A/X-stem (474).

| verb | perfective negative <br> regular | SbjFoc | gloss |
| :--- | :--- | ---: | :--- |
|  |  |  |  |

a. /LH/-melodic verbs

| wǒ: | wà:-lí- | ${ }^{\text {L }}$ wà:-1-દ̀:. | 'come' |
| :--- | :--- | :--- | :--- |
| gùló | gùlò-lí- | ${ }^{\text {L }}$ gùlò-l- $\mathrm{c}:$. | 'dig' |

b. /H/-melodic verbs

| n | nù-lí- | ${ }^{\text {L }}$ nù-1-દ̀: | 'en |
| :---: | :---: | :---: | :---: |
| púngó | pùngò-lí- | ${ }^{\text {L }}$ pùngò-1-દ̇: | 'hit, beat' |

The experiential perfect negative has regular -tèrà-lí- (including the perfective negative suffix) and subject-focus form -tèrà-l-દ̀: .

$$
\begin{array}{ccc}
\text { verb } & \text { experiential perfect } & \text { gloss }  \tag{475}\\
\text { regular } & \text { SbjFoc } &
\end{array}
$$

a. /LH/-melodic verbs

| yǐ | yì-tèrà-lí- | Lyì-tèrà-l-c̀: | 'see' |
| :--- | :--- | :--- | :--- |
| gùló | gùlò-tèrà-lí- | ${ }^{\text {L }}$ gùlò-tèrà-l-દ̀: | 'dig' |
| zìgìbí | zìgìbì-tèrà-lí- | ${ }^{\text {L }}$ zìgìbì-tèrà-l-દ̇: | 'shake' |

b. /H/-melodic verbs

| ká | kà-tèrà-lí- | ${ }^{\text {L }}$ kà-tèrà-l-દ̀: | 'shave' |
| :--- | :--- | :--- | :--- |
| púngó | pùngò-tèrà-lí- | Lpùngò-tèrà-l-દ̀: | 'hit, beat' |

### 13.1.1.4.3 Subject-focus verbs in the imperfective and stative

In the imperfective, the subject-focus form is $-m-\grave{\varepsilon}$ :, i.e. $-\bar{\varepsilon}$ : added to the familiar imperfective suffix -m . The verb is tone-dropped, unlike the regular form.

$$
\begin{array}{lll}
\text { verb } & \text { imperfective } & \text { gloss } \\
& \text { regular }(3 \mathrm{Sg}) & \mathrm{SbjFoc} \tag{476}
\end{array}
$$

a. /LH/-melodic verbs

| yǐ | yâ-m-dò-Ø | ${ }^{\text {L }}$ yà-m-દ̀: | 'see' |
| :---: | :---: | :---: | :---: |
| wǒ: | wâ:-m-dò-Ø | ${ }^{\text {L wà:-m-c̀: }}$ | 'come' |
| zòbó | zóbà-m-dò-Ø | ${ }^{\text {z zàbà }}$-m-દ̀: | 'run' |
| zìgìbí | zígìbè-m-dò-Ø | ${ }^{\text {Lzigìgìès-m- }}$ : | 'shake (sth)' |

b. /H/-melodic verbs

| ká | kâ-m-dò-Ø | ${ }^{\text {L }}$ kà-m-z̀: | 'shave' |
| :---: | :---: | :---: | :---: |
| sémbí | sémbì-m-dò-Ø | ${ }^{\text {L }}$ sèmbì̀m- ${ }^{\text {cei }}$ | 'sweep' |
| púngó | púngò-m-dò-Ø | ${ }^{\text {L }}$ pùngò-m-غ̇: | 'hit, beat' |

The (periphrastic) progressive constructions, with auxiliary ${ }^{\text {L }}$ sò- 'have' or ${ }^{\text {L }}$ bù- 'be' added to a pronominally uninflected main verb with imperfective - m , keep the main verb unchanged and apply subject-focus suffixation and tone-dropping to the auxiliary. Thus sémbú-m ${ }^{\mathrm{L}}{ }^{\text {sjò }}$ 'is sweeping' has subject-focus form sémbú-m ${ }^{\mathrm{L}}$ S-ò:, and the alternative form sémbú-m ${ }^{\mathrm{L}}$ bù- 'is sweeping' has subject-focus form sémbú-m ${ }^{\text {L }} \mathrm{b}$-è: .

Stative stems derived from regular verbs have $\{\mathrm{HL}\}$ overlay, dropping to L-toned after existential yé. These stems end in a, e.g. óbà- 'be sitting (seated)'. The subject-focus counterpart is tone-dropped and lengthens the stem-final vowel as in ${ }^{\text {L }} \mathrm{j} b-\mathrm{a}: ~$.

Defective stative quasi-verbs are featured in (477).

| ${ }^{\text {L }}$ bù- | ${ }^{\text {L }} \mathrm{b}-\mathrm{e}$ : | 'be (somewhere)' |
| :---: | :---: | :---: |
| ${ }^{\text {L }}$ ¢ì- | ${ }^{\text {L }}$ S-ò: | 'have' |
| ${ }^{\text {L }}$ mbà - | ${ }^{\text {L }}$ mb-à | 'want |

13.1.1.4.4 Subject-focus verbs in the imperfective and stative negative

The imperfective negative does not add - $\varepsilon$ : to its own suffix -ngò: . Instead, -ygò: is followed by ' L - e :, the subject-focus form of ${ }^{\text {L }}$ bù- 'be (somewhere)'. The main verb has the same form, i.e. H-toned $A / X$-stem, as before pronominally inflected -ngò:- . For example, wá:-ŋgò:- $\emptyset$ 'he/she does/will not come' becomes subject-focus wá:-ngò: ${ }^{\text {b }} \mathrm{b}$ - : .

For all stative negative predicates, derived or underived, and for ǹgó- 'not be (somewhere)', ${ }^{\mathrm{L}} \mathrm{b}-\mathrm{\varepsilon}$ : is added to the pronominally unsuffixed (i.e. 3 Sg ) negative form:


### 13.1.1.4.5 Subject-focus forms of verb-verb compounds

In direct verb chains, or verb-verb compounds, the first verb is in segmentally invariant barestem form and the second verb has full inflections. There are, however, complex tonal interactions between the two (§15.1.2). These can carry over to the subject-focus forms for the various inflectional categories.

For example, in the perfective positive the first verb presents its lexical tones while the second takes tone-dropped simple perfective form, e.g. yàgá ${ }^{\text {L }}$ sùgè- $\varnothing$ 'he/she fell down' and tómbó 'sùgè-Ø 'he/she jumped down'. The subject-focus combinations follow the same tonal pattern (478a-c).
(478)
a. à-ḿ yàgá $\quad$ Lsùg-ě:
who? fall descend.Pfv-SbjFoc.Q
'Who jumped down?'
b. à-ḿ tómbó ${ }^{\mathrm{L}}$ sùg- - :
who? jump descend.Pfv-SbjFoc.Q
'Who jumped down?'
c. cǐn à-ḿ jìdé ${ }^{\mathrm{L}}$ sù:-nd-દ̌:
stone who? throw descend-Caus.Pfv-SbjFoc.Q
'Who threw the stone down?'

In the imperfective, $\{\mathrm{HL}\}$ is overlaid on the two-verb sequence. This too is respected in the subject-focus forms (479).
(479)
a. à-ḿ ${ }^{H L}$ [yágà bèà-m-č:]
who? [fall get-Ipfv-SbjFoc.Q]
'Who can fall?'
b. à-ḿ ${ }^{H L}$ [tómbò ${ }^{L} b$ bèà-m- : ]
who? [jump get-Ipfv-SbjFoc.Q]
'Who can jump?'

### 13.1.1.5 Existential yé absent in focalized clauses

In ordinary positive main clauses, existential particle yé is required with ${ }^{\mathrm{L}}$ sò- 'have' and, in the absence of another overt locational, with 'bù- 'be (somewhere)'. If a constituent is focalized, yé in this function is not allowed, although homonym yé 'there (definite)' referring to a location is allowed.

For example, yé is obligatory in (480a), but it is ungrammatical (\#) in (480b) where the subject is focalized. In (480c), the absence of yé indicates that something is focalized, and 'dog' is the only candidate.
a. ínjě: yé ${ }^{\mathrm{L}}$ sò-m
dog Exist have-1SgSbj
'I have a dog.'
b. ìnjě: mí (\#yé) ${ }^{\mathrm{L}} \mathrm{S}$-ò:
$\operatorname{dog} \quad 1 \mathrm{Sg}$ (\#Exist) have-SbjFoc
'It's $\underline{I}$ [focus] who have a dog.'
c. ì̀jjě: $\quad{ }^{L}$ sò-m
dog have-1 SgSbj
'It's a dog [focus] that I have.'

### 13.1.2 Subject focalization

Further examples with à-ḿ 'who?' (§13.2.2.1) as subject are in (481).
(481)
a. perfective
à-ḿ Lwò̀-દ̀: 'Who has come?'
mí ${ }^{\text {Lo }}$ wò̀:
à-ḿ ìnjě: ${ }^{\text {L }}$ pùng-દ̀:
à-ḿ ìnjǰ: ${ }^{\text {L }} \mathrm{j}$ - $̀$ :
à-ḿn ${ }^{\text {Lyà- }}$ :
à-ḿ ${ }^{\mathrm{L}} \mathrm{gw}-\grave{\text { en }}$
à-ḿn ${ }^{L}$ nù- :
'It is $\underline{I}$ [focus] who came.'
'Who hit the dog?'
'Who killed the dog?'
'Who went?'
'Who went out?'
'Who went in?'
b. experiential perfect
à-ḿ gònsár ${ }^{\text {ná }}{ }^{\text {L }}$ yì-tèr-è: 'Who has ever seen an elephant?'
c. perfective negative
à-ḿ ${ }^{\text {L }}$ wà:-l-è: 'Who did not come?'
à-ḿ ${ }^{L}$ nù-1-દ̀:
'Who has not gone in?'
d. imperfective

$$
\begin{array}{ll}
\text { à-ḿ }{ }^{\text {L } w a ̀:-m-e ̀: ~} & \text { 'Who will come?' } \\
\text { à-ḿ L } \text { tò:-m-غ̀: } & \text { 'Who will pound?' } \\
\text { à-ḿ }{ }^{\text {L }} \text { sèmbì-m-c̀: } & \text { 'Who will sweep?' } \\
\text { à-ḿ ' jnà-m-c̀: } & \text { 'Who will eat?' }
\end{array}
$$

e. progressive
à-ḿ sémbú-ḿ ${ }^{\mathrm{L}} \mathrm{S}-\mathrm{ò:} \mathrm{\quad 'Who} \mathrm{is} \mathrm{sweeping?'}$
à-ḿ bírá-ḿ ${ }^{\mathrm{L}}{ }_{\mathrm{S}-\mathrm{o}}$ :
'Who is working?'
à-ḿ zìgìbé-ḿ ${ }^{\mathrm{L}} \mathrm{S}$-ò:
'Who is shaking?'
f. imperfective negative
à-ḿ wá:-ŋgò: ${ }^{\text {L }} \mathrm{b}-\varepsilon ̀: \quad$ 'Who will not come?'
à-ḿn nàmá kúbó-ŋgò: ${ }^{\mathrm{L}} \mathrm{b}-\mathrm{\varepsilon}$ : 'Who does not eat meat?'
g. stative quasi-verb
à-m ${ }^{L} b-\varepsilon$ : $\quad$ 'Who is there?'
à-ḿ sòmé: ${ }^{L_{S}}$-ò:
'Who has a horse?'
h. stative quasi-verb negative
à-ḿ g̀gó b- :
à-ḿn sòmé: ${ }^{\text {L }}$ sò-ndǒ:
'Who is not there?'
'Who doesn't have a horse?'
à-ḿ sòmé: só-ndǒ: b-é: 'Who doesn't have a horse?'
i. lexical stative
à-ḿ nàmá ${ }^{L}$ m̀b-à: 'Who wants meat?'
j. lexical stative negative
à-ḿn nàmá m̀bí-lǎ: ${ }^{\text {Lb }} \mathrm{b}-\mathrm{c}: \quad$ 'Who doesn't want meat?

It is possible to have a defocalized verb, such as the simple perfective, with a preceding subject pronoun without actual subject focalization. In this case the verb has a pronominal-subject suffix (482).

```
(482) mí Lyày-m̀
    \(1 \mathrm{Sg} \quad\) go.Pfv-1SgSbj
    'I went.'
```


### 13.1.3 Focalization of possessor

A possessive NP (possessor plus possessum) can be focalized, just like any other NP (483a). To distinguish possessive NP focalization from just possessor focalization, recourse must be had to the particle té $\rightarrow$ 'specifically', which can occur either after the whole NP (483b) or, to mark the possessor, between possessor and possessum (483c). The assistant also volunteered (483d), where a postnominal 3 Sg pronominal possessive takes té $\rightarrow$.

|  | [sèédù | Lùlò] | yag |
| :---: | :---: | :---: | :---: |
|  | [S | house] | fall.Pfv-SbjFoc |
| 'It was Seydou's house [focus] that fell.' |  |  |  |

b. [sèédù Lùlò té $\rightarrow$ ] ${ }^{\text {Làg- }}$ :
[S house specifically] fall.Pfv-SbjFoc
'It was Seydou's house [focus] that fell.'
c. [sèédù té $\rightarrow$ L̀̀lò $]$ yàg- :
[S specifically house] fall.Pfv-SbjFoc
'It was specifically Seydou's [focus] house that fell.'
$\begin{array}{llll}\text { d. } & \text { [sèédù } & \text { Lùlò } & \text { kò-ń } \\ & \text { té } \rightarrow] & \text { Lyàg- } \text { : } \\ & \text { house } & \text { InanSg-3SgPoss } & \text { specifically] }\end{array}$ fall.Pfv-SbjFoc

### 13.1.4 Focalization of verb or VP

There is no simple mechanism for focalizing a verb or VP within the main focalization system. The question (484a) puts the spotlight on the current activity, but typical answers like (484b) and (484c) show no overt focalization.
(484)
a. ग̀jé ${ }^{\mathrm{L}}$ kà-m-nù-w ${ }^{\mathrm{n}}$
what? do-Ipfv-Ipfv-2SgSbj.Q
'What are you-Sg doing?'
$\begin{array}{lll}\text { b. gándá } & { }^{\mathrm{L}} \text { sèmbù-m } & { }^{\mathrm{L}} \text { bù-m } \\ \text { place } & \text { sweep-Ipfv } & { }^{\text {be- } 1 \mathrm{SgSbj}}\end{array}$
'I am sweeping.'
c. zóbá-m ${ }^{\text {Lbù }} \mathrm{m}-\mathrm{m}$
run-Ipfv be-1SgSbj
'I am running.'

The clause-final emphatic particles in $\S 19.5$ partially fill the gap, but they mainly deal with the truth level (and pragmatic consequences) of the entire proposition rather than just the verb or VP.

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives

Polar interrogation can be marked by clause-final particle mà or by raising the final tone of the last word.

### 13.2.1.1 Clause-final mà or mà $\rightarrow$

In yes/no interrogative clauses, a final mà may occur. However, some elicited examples have no overt interrogative morpheme. In addition, the ubiquitous clause-initial ésk̀̀ (French est-ce $q u e$ ) is now common in the speech of younger people.

b. wǒ: = bù- Ø mà come=Past-3SgSbj $\quad$ Q
'Did he/she come?'

A variant là is attested in the perfective negative.
a. wà:-lú-w ${ }^{n}$
là
come-PfvNeg-2SgSbj $\quad$ Q
'You-Sg didn't come?'
$\begin{array}{ll}\text { b. wà:-ndá } & \text { là } \\ \text { come-PfvNeg.3PiSbj } & \text { Q } \\ & \text { 'They didn't come?' }\end{array}$
mà may occur between two clauses representing a choice of mutually exclusive propositions. The two clauses can be run together prosodically as in (487a-b). Alternatively, the first clause can end in intonationally prolonged mà $\rightarrow$, followed by a prosodic break and then, perhaps as an afterthought, the second clause.

b. ná:, bàmbà-dúmbó [dènd-ì̀]-téŕ́-bì-y ${ }^{\mathrm{n}}$ mà
now, BD [approach-MP]-ExpPrf-Past-2PISbj Q
[dènd-ì:]-tèrà-lí-y ${ }^{\text {n }}$
[approach-MP]-ExpPrf-PfvNeg-2PISbj
'Now, have you-Pl ever gone (up) as far as Bamba-Doumbo? Or have you never gone that far?' (2015-03 @ 00:53)

Before clause-final quotative wà, the particle mà is prolonged as mà $\rightarrow$ (488). There are several textual examples of mà $\rightarrow$ wà including 2015-01 @ 00:24 \& 00:51.

| $[$ ú | wá $\rightarrow$ ] | [wò:-ś | mà $\rightarrow$ | wà $]$ |
| :--- | :--- | :--- | :--- | :--- |
| $[2 S g$ | QuotSbj] | $[$ come-Pfv2 | $\mathbf{Q}$ | Quot] |

'(Someone asked) whether you have come.'
13.2.1.2 Clause-final H -tone in polar and content interrogatives

Although the primary expression of polar interrogatives is with the particle mà $(\rightarrow)$ with no final pitch rise, as described above, an alternative is to omit the particle and express interrogative quality with a final H -tone. This strategy appears to occur in confirmation questions in response to a surprising statement by an interlocutor (A: ‘The chief has died.' B: 'What? He died?').

The extra final H-tone is consistently present in content (WH) interrogative clauses (§13.2.1.2), which have no clause-final particle.

The relationship between the form of the verb in the statement $A$ and that in the confirmation question is illustrated in (489), using confirmation polar interrogatives. The tones are preserved except for a final rise. If this results in a final short rising-toned Cy̌ syllable, the vowel is lengthened (Contour-Tone Mora-Addition, §3.6.4.1). Suffixally marked perfectives are allowed, although the assistant sometimes replaced perfective-1a (-yà- $\sim$-à:-) and always replaced perfective-1b (-tì-) with perfective-2 (-sì-) or the past-time enclitic ( = bì-).

| statement (A) | confirmation Q (B) | gloss |
| :---: | :---: | :---: |
| a. tíb-à:y-Ø | $\begin{aligned} & \text { tíb-à:ý-Ø } \\ & \text { tíbé-š̌:-Ø } \end{aligned}$ | 'He/She died.' |
| súg-à:y-Ø | $\begin{aligned} & \text { súgó-sy̌:-Ø } \\ & \text { súgó-bǐ:-Ø } \end{aligned}$ | 'He/She went down.' |
| b. nǎ: yé ${ }^{\text {L }}$ sò-Ø | nǎ: yé ${ }^{\text {L }}$ š̌:-Ø | 'He/She has a cow.' |
| c. yàgà-lí-Ø | yàgà-lí-Ø | 'He/She did not fall.' |
| d. tómbó-tì-Ø | tómbó = bǐ:-Ø | 'He/She jumped' |

This phonological effect provides evidence that verbs like lǎy/làyí 'taste' are structurally bisyllabic (§10.1.3.10).

In both polar and content interrogatives, the final H is indicated in interlinears by ".Q" (for "question"). For example, tíb-à:ý-Ø (489a) is marked up as "die-Pfv1b-3SgSbj.Q."

### 13.2.1.3 Negative rhetorical questions

A negative question can function pragmatically as a positive statement, similar to an English statement followed by a rhetorical tag question in negative form with terminal low pitch ('this is great, isn't it!'). (490), adapted from 2015-03 @ 01:59, there is no final tone rise, and existential yé is present although normally it would be disallowed under negation (§11.2.2.1).

| dògò-úló | àsègé | [nàpà ${ }^{\text {L }}$ | èdù- $\eta g o ́] ~$ | yé |
| :--- | :--- | :--- | :--- | :--- | | ${ }^{\mathrm{L}}$ sò-ndǒ:-Ø |
| :--- |
| Dogon-house |
| animal |
| 'In Dogon country don't animals have a good value!' |

See also the comments on yì-só-ndǒ- in §10.2.3.2).

### 13.2.2 Content (WH) interrogatives

Clauses with content interrogatives (syntactically NPs, adverbs, or adjectives as the case may be) usually end in a syllable with rising intonation. The preference is to place the interrogative word or phrase in immediate preverbal position.

The clause-final verb in a content interrogative clause is defocalized (e.g. simple perfective), but it gets a final interrogative H -tone. Since most defocalized verbs are L-toned, the usual effect is that the final syllable appears as $<\mathrm{LH}>$-toned. Lengthening of final short Cř syllables is regular in these examples (§3.6.4.1). In interlinears, ". Q " (for question) is added.
(491)
a. àndí ${ }^{\text {L }}$ yàgě:-Ø
where? fall.Pfv-3SgSbj.Q
'Where did he/she fall?'
b. àndí ${ }^{\mathrm{L}}$ yàgà- $\mathrm{w}^{\mathrm{n}}$
where? fall.Pfv-2SgSbj.Q
'Where did he/she fall?'
c. j̀jé ${ }^{\text {L }}$ kà-m-nè- ýn $^{n}$
what? do-Ipfv-Ipfv-1PlSbj.Q
'What will we do?'
d. à-ḿ
who? come.Pfv-SbjFoc.Q
'Who came?'

### 13.2.2.1 'Who?' (à-ḿ)

'Who?' is à-ḿ. Morphologically it is identical to the animate singular 'which?' interrogative (§13.2.2.7). It is an NP and may be followed by the optional accusative particle gì or by a postposition (492b,d). It may be a possessor (492e); for ' X belongs to who(m)?' see $\S 11.5 .2$.
a. yéngì à-ń ${ }^{\mathrm{L}}$ wò-ž:
yesterday who? come.Pfv-SbjFoc.Q
'Who came yesterday?'
b. ébé [à-ḿn (gì)] ${ }^{\mathrm{L}} \mathrm{y}$ ì̀-wn ${ }^{\mathrm{n}}$
market [who? (Acc)] see.Pfv-2SgSbj.Q
'Who did you-Sg see in the market?'
c. [ámádì gì] à-ḿ ${ }^{\mathrm{L}} \mathrm{ji}$ i- :
[A Acc] who? kill.Pfv-SbjFoc.Q
'Who killed Amadou?'
$\begin{array}{lllll}\text { d. } & {[\text { à-ḿ }} & \text { ní: }] & \text { bírá: } & \text { bírá-m } \\ & {[\text { who? }} & \text { Inst }] & \text { work(n.) } & \text { work-Ipfv } \text { w }^{\text {n }} \\ & & \text { be- } 2 S g S b j . Q ~\end{array}$
'With who(m) are you-Sg working?'

```
e. ò-gú [à-ḿm Lùlǒ:]=\varnothing
    Prox-InanSg [who? house]=it.is.Q
    'Whose house is this?'
```

'Be who?' can be expressed by the animate singular predicative form à-ḿ-nè also used in the sense 'be where?' (§13.2.2.3). Alternatively, à-ń can combine with the 'it is' clitic as à- $\hat{\mathrm{m}}:=\varnothing$ (the clitic lengthens the nasal and adds a final L-tone).
a. ú $\quad$ à-ḿn-nè $]-$ wwn $^{n}$
2Sg [be.who?]-2SgSbj.Q
'Who are you-Sg?'
$\begin{array}{lll}\text { b. } & \text { mà- }-\mathrm{m} & \text { à- } \hat{\mathrm{m}}:=\varnothing \\ & \text { Dist-AnSg } & \text { who?=it.is } \\ & \text { 'Who is that?' } & \end{array}$

To make plurality explicit, à-ḿ can be conjoined with itself, i.e. 'who and who?'; for conjunction of NPs (dying-quail effect, i.e. prolongation and final low pitch target) see §7.1.1.
(494)
à-ḿ $\therefore$ à-ḿ $\therefore \quad$ wòé-Ø
who?.\& who?.\& come.Pfv-3SgSbj.Q
'Who and who came?' ('Who all came?')
pronouned [àḿm̄̀̀ $(\rightarrow)$ àńm̄mà $(\rightarrow) \ldots$. ..]

### 13.2.2.2 'What?' (ìnjé ~ j̀jé ~ cì-njé), 'with what?', 'why?'

'What?' is ìnjé ~ j̀jé or its extension cì-njé, contracted from cì ìnjé 'what thing?', cf. cé 'thing' and cì-kámá '(not) anything’ (§4.1.2).

```
a. cì-njé \(\quad{ }^{\mathrm{L}} \mathrm{z}\) :̀̀:- wn \(^{\mathrm{n}}\)
what? bring.Pfv-2SgSbj.Q
'What did you-Sg bring?'
```


d. ò-gú
ìnjê: = Ø
Prox-InanSg
what?=it.is. 3 SgSbj
'With (=by means of) what?' is the regular instrumental PP of 'what?'
[cìnjé ní:] yù-wá: Lwà:-m-nù-w ${ }^{n}$
[what? Inst] millet-farming(n) do.farming-Ipfv-Ipfv-2SgSbj.Q
'What do you farm millet with?'
'Why?' is ìnjé dùgò, with the purposive postposition (§8.3).
(497) [ìnjé dùgò] ${ }^{\mathrm{L}}$ wò:--w ${ }^{\mathrm{n}}$
[what? Purp] come.Pfv-2SgSbj.Q
'Why did you-Sg come?'

### 13.2.2.3 'Where?' (àndí, ǎ-m-nè-, à-bô:)

The simple 'where?' adverb is àndí. 'Where is/are X?' can be expressed by adding Lbù- 'be' (498b).
(498)
a. àndí ${ }^{\text {Lò̀m-nù-w }}{ }^{n}$
where? go-Ipfv-Ipfv-2SgSbj.Q
'Where are you-Sg going?
b. í àndí ${ }^{\mathrm{L}}$ bù-ýn

1Pl where? be-1PlSbj.Q
'Where are we?'
c. [nǎ: ǹ] àndí ${ }^{L}$ dògò- $\hat{W}^{n}$
[cow Def] where? leave.Pfv-2SgSbj.Q
'Where did you-Sg leave the cow?'
àndí can also function as a modifying adjective, replacing à-gú and variants 'which?' (§13.2.2.7). In (499), àndí is adjectival, and controls tone-dropping on the noun 'village'.

| àmbà ${ }^{\text {L }}$ | andi] | ${ }^{\text {L }}$ ò-m-nù-w ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| [village | where?] | go-Ipfv-Ipfv-2SgSbj |
| 'Which village are you-Sg going to?' |  |  |

In addition to adverbial àndí, there is a set of conjugatable 'be where?' forms. These are similar in morphological structure to demonstrative-based predicates (§11.2.3.2). The final vowel is lengthened in the unmarked 3 Sg-subject combination by the 'it is' construction. The forms are
also identical to 'which?' adjectives (§13.2.2.7), except for animate singular -nè and the lengthening. Arguably the core sense of these predicates is 'be which (one)?' rather than 'be where?'.
(500) 'Be where?' predicates
a. inanimate

| $S g$ | à-gû: $=\varnothing$ |
| :--- | :--- |
| Pl | à- $\hat{y}:=\varnothing$ |

b. animate

| Sg | à-ḿ-nè:-Ø |
| :--- | :--- |
| Pl | à-bô: $=\varnothing$ |

The final falling tones in the forms shown in (500) are often overridden by the final pitch rise typical of content questions (501).
(501)
a. [ú ${ }^{\text {Hábá }} \quad$ ǎ-m-nč: $=\emptyset$
[2Sg father] be.where?.AnSg=it.is. Q
'Where is your-Sg father?'
b. ú ǎ-m-n $=\hat{w}^{n}$

2 Sg be.where?. $\mathrm{AnSg}=$ it.is. $2 \mathrm{SgSbj} . \mathrm{Q}$
‘Where are you-Sg?’
c. [ú Hángé-mbò $]$ à-bô: $=\varnothing$
[2Sg friend-AnPl] be.where?.AnPl=it.is.3PlSbj
'Where are your-Sg friends?'
d. bí à-bô= $y^{n}$

2 Pl be.where?.AnPl
'Where are you-Pl?

### 13.2.2.4 'When?’ (à:ráá)

'When?’ is à: $\mathrm{r}^{\text {ná. }}$
(502)
a. à:rná ${ }^{\text {L}}$ wà:-m-nù- $\hat{w}^{n}$
when? come-Ipfv-Ipfv-2SgSbj.Q
'When will you-Sg come?'
b. à:rná
when?
'When (is it)?'

### 13.2.2.5 'How?' (áy")

As simple adverb, the form is áy ${ }^{\mathrm{n}}$.
(503)
$\begin{array}{ll}\text { áy }{ }^{n} & \quad{ }^{\text {Lillà-m-d-̌̌: }} \\ \text { how? } & \text { ascend-Ipfv-Ipfv-3PISbj.Q } \\ \text { 'How will they climb?' }\end{array}$
'How' is often expanded with the 'do' verb, i.e. as '(by) doing how?'
(504) [áy ${ }^{n}$ kán gín] ${ }^{\text {Lìll-ǎ: / }}$ Lill-ě: / ìlè-ḿ [how? do Ant.Past.SS] ascend.Pfv-3PISbj.Q/-3SgSbj.Q/1SgSbj.Q
'How did they / he-or-she / I climb?'

An iterative variant áy ${ }^{\mathrm{n}}$-Ráy ${ }^{\mathrm{n}}$ with glottal stop is also in use (e.g. 2015-03 @ 00:03).

### 13.2.2.6 'How much/many?' (àngá)

The usual sense of àngá is 'how many?', since currency is expressed as a countable noun, unlike the English mass noun money. Like 'all' quantifiers, àngá is somewhat adverb-like, but is still treated as part of the NP. For example, although accusative gì is not very common with àggá, when it does occur it follows àngá (505b).

| a. | pédú-mbò àngá |  |
| :--- | :--- | :--- | :--- |
| sheep-AnPl | and <br> how.many? | Lèbò- wn $^{n}$ <br> buy.Pfv-2SgSbj.Q |
|  | 'How many sheep did you buy? |  |

b. [ú
[2Sg uncle-AnPl how.many? (Acc)]
see.Pfv-2SgSbj.Q
'How many of your uncles did you see?'
c. [[dámbá àngá] nè] Lyày-w ${ }^{n}$
[[village how.many?] Loc] go.Pfv-2SgSbj.Q
'You went to how many villages?'
d. nà:-mbó àggá Ltib-ǎ:
cow-AnPl how.many? die.Pfv-3PISbj.Q
'How many cows died?'

It is also possible to treat àngá morphosyntactically like a numeral. This is expressed by adding an animacy-number classifier of the sort used elsewhere by numerals from ' 2 ' to ' 10 ' (§4.6.1.2). Thus pédú-mbò bú-àngá 'how many sheep?' with animate classifier bú-, and úló yíàngá 'how many houses' and síkòrò yí-à ggá 'how much sugar?' with inanimate classifier yí-.

Questions about the unit price of items for sale use the distributive iteration àggá-àngá 'how many (currency units) each?'.

For ordinal àngà-né 'how many-eth?' see §4.6.2.2.

### 13.2.2.7 'Which?’ (à-gú, à-ḿ)

à-gú (inanimate) and à-ḿ (animate) are the main 'which?' forms. The animacy-number suffixes are the same as those in demonstratives (§4.4.1.2). The forms are also identical or similar to predicative 'be where?' forms (§13.2.2.3), except that animate singular -nè is absent and final vowels and y are short. Animate singular à-ḿ is also the 'who?' interrogative (§13.2.2.1).
(506) 'Which?' adjectives
a. inanimate

| Sg | à-gú |
| :--- | :--- |
| Pl | à-ý |

b. animate

| Sg | à-ḿ |
| :--- | :--- |
| Pl | à-bó |

These forms are adjectives, so they control tone-dropping on a preceding noun within the same NP: ùlò ${ }^{L}$ à-gú 'which house?' (< úló), pèdè: ${ }^{\text {L }}$ à-ḿ 'which sheep?' (< pédé:). In (507a) the 'which X?' phrase is complement of a postposition. In (507b) 'which?' is made predicative with the 'it is' enclitic.
a. [[mòtò: ${ }^{\text {L }}$ à-gú]
ní:] ${ }^{\text {Lò̀ }}-\mathrm{m}-n u ̀-$ w $^{n}$
[[motorcycle which?-InanSg] Inst] go-Ipfv-Ipfv-2SgSbj.Q
'You are going with which motorcycle?'
b. [úló ú-wó] à-gû: $=\varnothing$
[house 2Sg-Poss] which?-InanSg=it.is.3SgSbj
'Your-Sg house is which (one)?'

There appears to be some functional overlap between ‘where?' and ‘which?' interrogatives. For example, (507b) could easily be rephrased with a 'where?' interrogative. See also comments on this in §13.2.2.3.

### 13.2.3 Embedded interrogatives

### 13.2.3.1 Embedded polar interrogative

In frames like '(not) know that/whether ...', an embedded polar interrogative has the same final mà $\rightarrow$ as in main-clause interrogatives. There is usually no distinction between factive 'know that. ' (where the current speaker also knows the content for a fact) and dubitative 'know whether ...'
a. [bà-ń tíb-à:y-Ø mà $\rightarrow$ zúgó-ŋgò:-Ø
[father-3SgPoss die-Pfv1a-3SgSbj Q] know-IpfvNeg-3SgSbj
'He doesn't know that/whether her father is dead.'
b. [[á 'bá] wò:-só-Ø mà $\rightarrow$ zúgó-ŋgò:--Ø [[Logo father] come-Pfv2-3SgSbj Q] know-IpfvNeg-3SgSbj
'He doesn't know that/whether his (own) father has come.'
c. [ìgó Lbù-m mà $\rightarrow$ zúgó-ngò:- $\varnothing$
[here be.Loc-1SgSbj Q] know-IpfvNeg-3SgSbj
'He/She doesn't know that I am here.'

### 13.2.3.2 Embedded content (WH) interrogative

An embedded content interrogative can either present the WH word ('who?', 'what?', 'how?', etc.), or it can replace the WH word with a semantically light noun ('person', 'thing', 'manner', etc.) as part of a relative construction.

The relativization strategy is illustrated in (509).
(509)
a. [gàndà bú bú-ygó]
[place 3Pl be.Loc-Ppl.InanSg]
yà-lú-m / zúgá-yù-m
see-PfvNeg-1SgSbj / know-IpfvNeg-1SgSbj
'I haven't seen / I don't know (the place) where they are.'
b. wàgàdì ńné wá:-ygó
time 3 Sg come-Ipfv.Ppl.InanSg
'(I don't know) when he/she will come.'
The WH-word strategy is illustrated in (510). All of these examples can occur in a frame like 'I don't know ...'.
relative $\quad \mathrm{Q} \quad$ translation

| [à-ḿ | L wò̀̀-Ø | mà $\rightarrow$ ] | '... who came' |
| :---: | :---: | :---: | :---: |
| b. [zà ${ }^{\text {L }}$ njé | Lnà-m-nù-m | mà $\rightarrow$ ] | '... what meal I will eat' |
| c. [cì-njé | ${ }^{\text {L }}$ yà-m-nè-y ${ }^{\text {n }}$ | mà $\rightarrow$ ] | '... what we will see' |
| d. [ây ${ }^{\mathrm{n}}$ kàn-né | Lìlà-m-dò-Ø | mà $\rightarrow$ ] | '... how he/she goes up' |
| e. [àngá | ${ }^{\text {L }}$ ¢̀bè-Ø | mà $\rightarrow$ ] | '... how much he/she paid' |
| f. [ìnjé kàn-lé | L yày-Ø | mà $\rightarrow$ ] | '... why he/she went' |

## 14 Relativization

### 14.1 Basics of relative constructions

Their key structural features of TU relative constructions are these:

- the head NP is seemingly bifurcated into an internal head consisting maximally of Poss-N-Adj-Num, and a coda or tail following the verb-participle that includes determiners and non-numeral quantifiers;
- the internal head NP is subject to tone-dropping;
- there is no relative pronoun or other relative morpheme as such;
- the verb takes participial form; the participial ending is marked for animacy/number agreeing with the head NP (not the subject);
- in nonsubject relatives (e.g. object relatives), if the subject is a pronoun it is expressed by a pronominal proclitic to the verb, but if the subject is nonpronominal there is no resumptive third person proclitic;
- some internal head nouns may be doubled in the form of a synonymous postposed noun following the relative construction;
- when the complement of a simple postposition is relativized on, the postposition is deleted.

As in other Dogon languages, "internally-headed" relatives are really just complete NPs (DPs) of the form Poss-N-Adj-Num-Rel-Det-'all' or the like. The relative clause induces tonedropping on the word(s) to its left, except for the possessor (if present). Then the Poss-N-AdjNum sequence slides into the relative clause, occupying the linear position of the coindexed NP within the relative.

### 14.2 Head NP

The head NP is (seemingly) bifurcated. The internal head is maximally Poss-N-Adj-Num, and the N -Adj-Num string is subject to tone-dropping. The remaining late-NP elements, including determiners and non-numeral quantifiers, follow the verb-participle.
dén-gó '(a certain) day' is reduced to dèn ${ }^{\mathrm{L}}$ as head.

### 14.2.1 Tone-dropping of head NP in relative clause

The basic tonosyntactic formulae for unpossessed internal heads are these: $\mathrm{N}^{\mathrm{L}},[\mathrm{N} \mathrm{Adj}]^{\mathrm{L}},\left[\mathrm{N}^{\mathrm{L}}\right.$ Num], and [ $\left[\mathrm{N}\right.$ Adj] $\left.{ }^{\mathrm{L}} \mathrm{Num}\right]$.

The examples in (511) show tone-dropping on the internal head NP. In (511a) the noun úló 'house' is tone-dropped to ùlò ${ }^{L}$. In (511b), ùlò ${ }^{L}$ d $\varepsilon$ - gg ǵ 'big house' is tone-dropped as a whole
to [ùlò dè-ngè] ${ }^{\mathrm{L}}$. Technically, one could alternatively mark this up as ùlò ${ }^{\mathrm{L}}$ dè- $\eta \mathrm{g} \grave{\varepsilon}^{\mathrm{L}}$ on the (doubtful) theory that 'house' is tone-dropped by the adjective, so that only the adjective is actually tone-dropped by the relative construction.

When a numeral including its obligatory classifying prefix is added, the numeral resists tone-dropping (at least in my data), but it does not protect the noun from tone-dropping. This is therefore a rare case of tone-dropping at a distance.

In (511a-e), the words that are tone-dropped by the relative clause are bolded.

| a. [ùlò ${ }^{\text {L }}$ | yàgà-sú-ygó] | àndí | ${ }^{\text {L }}$ bǔ:-Ø |
| :---: | :---: | :---: | :---: |
| [house | fall-Pfv2.Ppl-InanSg] | where? | be.Loc-3SgSbj.Q |

'Where is the house that fell?' (<úló)
b. [[ùlò dè-ngè $]^{\mathrm{L}}$ yàgà-sú-ŋgó] àndí ${ }^{\mathrm{L}} \mathrm{bǔ:}:-\varnothing$ [[house big-InanSg] fall-Pfv2.Ppl-InanSg] where? be.Loc-3SgSbj.Q 'Where is the big house that fell?' (< ùlò ${ }^{\text {L }}$ d $\varepsilon$ - $\left.ŋ g \varepsilon ́\right)$
c. [yà-mbò ${ }^{\text {L }}$ né-kúlé / né-tà:ndú] yàgà kárnà-mbò ǹ]
[woman-AnPl Hum-six / Hum-three] fall Pfv.Ppl-AnPl Def] à-bô: = Ø
be.where?.3PlSbj
'Where are the six/three women who fell?' (< yà-mbó né-kúlé/né-tà:ndú)
d. [[ùlò dè ${ }^{\mathrm{L}}$ yí-kùlè / yí-tà:ndú] yàgà kárnà ǹ $]$
[[house big] Inan-six / Inan-three] fall Pfv.Ppl Def]
àndí $\quad$ Lbǔ:-Ø
where? be.Loc-3SgSbj.Q
'Where are the six/three big houses that fell?' (<ùlò ${ }^{\text {L }}$ dé yí-kùlè/yí-tà:ndú)
e. [[nà:-mbò ${ }^{\text {L }}$ bú-kùlè / bú-tà:ndú] yàgà kár${ }^{n}$ à-mbò ǹ $]$
[[cow-AnPl An-six/An-three] fall Pfv.Ppl-AnPl Def]
àndí $\quad{ }^{\mathrm{L}} \mathrm{b}-\varepsilon ̌$ :
where? be.Loc-3PISbj.Q
'Where are the six/three cows that fell?' (< nà:-mbó bú-kùlè/bú-tà:ndú)

Examples where the internal head also includes a prenominal possessor are in (512). Here the noun is tone-dropped, but this could be attributed either to the preceding possessor or to an immediately following modifier, whether the adjective in $(512 b, e)$ or the relative clause in ( $512 \mathrm{a}, \mathrm{c}-\mathrm{d}$ ). In such cases superscripted ${ }^{\mathrm{L}}$ is placed on both sides of the affected target. (512e) shows the two possible linear orders of the Adj-Num segment.
a. [ámádù
Lùlò ${ }^{\text {L }}$
yàgà kárnà ǹ $]$ àndí
${ }^{\text {L }}$ bù-Ø
[A house fall Pfv.Ppl Def] where be.Loc-3SgSbj
'Where is Amadou's house that fell?' (< ámádù Lùlò)


```
            [A [house big-InanSg] fall Pfv.Ppl Def]
            àndí }\mp@subsup{}{}{\mathrm{ Lbù-Ø}
                            where? be.Loc-3SgSbj
                            'Where is Amadou's big house that fell?' (< ámádù '[ùlò dè-\g\grave{c}])
c. [ámádù \({ }^{\text {Lùlò }}{ }^{\text {L }}\) yí-kùlè yàgà kárnà ǹ à àndí \({ }^{\text {Lbù }}\) -
                            [A house Inan-six fall Pfv.Ppl Def] where be.Loc-3SgSbj
    'Where are Amadou's six houses that fell?'(< ámádù 'ùlò yí-kùlè)
<
    d. [ámádù '[ûlè: né-kùlè }\mp@subsup{}{}{\textrm{L}}\mathrm{ yàgà kárnà ǹ ǹ]
    [A [children Hum-six] fall Pfv.Ppl Def]
    àndí }\quad\textrm{L}b-\varepsiloň
    where be.Loc-3PISbj.Q
    'Where are Amadou's six children who fell?' (ámádù Lùlè: né-kúlé)
```



```
    [A [house Inan-six big] fall Pfv.Ppl Def]
or: }\mp@subsup{}{}{\textrm{L}}[\begin{array}{llll}{l}&{0}&{d}&{\mathrm{ d}}\end{array}\mp@subsup{]}{}{\textrm{L}}\quad\mathrm{ yí-kùlè
        [house big] Inan-six
    àndí 
    where be.Loc-3SgSbj
    'Where are Amadou's six big houses that fell?'
    (< ámádù 'ùlò yí-kùlè d\varepsiloń, or ámádù 'ùlò d\varepsiloń yí-kùlè)
```


### 14.2.2 Restrictions on the head of a relative clause

The head NP may not be a pronoun; 'we who are here' is expressed appositionally as 'we [the people who are here]'. It may not be a determiner or other postparticipial coda element, and it may not be an expressive adverbial.

The head may be a subject, object, possessor, adverb, or postpositional complement (e.g. dative, spatial, instrumental) in the relative clause proper. The entire NP containing the relative may be definite or indefinite (the definite marker or a demonstrative may follow the participle).

### 14.2.3 Conjoined NP as head

When a conjoined NP functions as relative head, the tonational marking of conjunction conflicts with the tone-dropping controlled by the relative clause. To judge by (513), the conjoined NP functions as a tonosyntactic island $\subset \ldots \supset$, unaffected by its function as relative head. It retains its lexical tones and tonational features (dying-quail $\therefore$ on the final conjunct).

| [Cár ${ }^{\text {ná-mbò }} \rightarrow$ | yà-mbó $\therefore \supset$ |  |  |
| :---: | :---: | :---: | :---: |
| [сman-AnPl.\& | woman-AnPl.\&つ |  |  |
| zégé | zèjì | kár ${ }^{\text {nà-mbò }}$ | ǹ] |
| fight(n) | fight(v) | Pfv.Ppl-AnPl | Def |
| pùrǎ: J | né-tì-yà |  |  |
| fine(n) | eat-Pfv1 |  |  |

'[the men and the women who squabbled] were punished.'

Where logically possible, such combinations can be expressed as conjunctions of two entire NPs ('the men who went and the women who went' as opposed to '[the men and women] who went').

### 14.2.4 Headless relative

Most relative constructions that denote individual people, animals, or things have at least a semantically light head (e.g. 'person', 'thing'). However, headless relatives are possible. The most common ones are adverbial relatives with covert head 'time' or 'place' (or more abstractly 'situation'). See especially the clauses with perfective kár ${ }^{\text {nà }}$ (§15.2.2.5) and imperfective - $\mathfrak{y}$ gó (§15.2.2.7.1).

### 14.2.5 Head noun doubled after relative clause

At least for certain basic nouns like 'place', 'time' ('day'), 'way, manner', and 'person', the relevant noun may occur after the verb-participle, either in addition to or instead of an overt occurrence as internal head. This extra head noun is a kind of resuming element that places the relativized NP more squarely in the larger clause, without however producing a prosodically divided correlative construction. Head-noun doubling also occurs in Jamsay and some other Dogon languages.

Examples with gándá 'place' in post-participial L-toned form ${ }^{\text {L }}$ gàndà are in (514). There is an implied second occurrence of 'place' as internal head.


In (514) above the doubled noun is phrased prosodically with the relative clause. Superficially similar examples like ( $515 \mathrm{a}-\mathrm{b}$ ) below are true correlative constructions in which the relative NP , including its internal head, functions to introduce a discourse referent. It is then resumed by its double, with definite marking, at the beginning of the following clause.

```
a. [gàndà \({ }^{\mathrm{L}}\) mí yàgà kár \({ }^{n}\) à ǹ ],
[place 1 Sg fall Pfv.Ppl Def],
[gándá ǹ] ỳgó=lǎ:-Ø
[place Def] here=it.is.not
'The place where I fell, the (=that) place is not here.'
```

b. [dèn ${ }^{\mathrm{L}}$ mí wò: kárnà $]$
[day 1 Sg come Pfv.Ppl]
[dén-gó ì] sèll-ìà-lí bì-m=bì-m
day-InanSg Def] be.healthy-MP-PfvNeg be-Ipfv=Past-1SgSbj
'The day when I came, the (=that) day I was sick.'

In textual example (516), something like the doubling in (514) is observed. The context suggests the sense 'this person, one who can claim/say "I can convey/cause it," does not exist'. The implied participle of a 'say' verb is covert, making the mark-up difficult at first, but the doubled ${ }^{\text {Lnè }}$ 'person' immediately after the quoted segment "I can convey/cause it," tonedropped and without a determiner, behaves like the doubled ${ }^{L}$ gàndà in (514).

| [ $\left[\right.$ nè ${ }^{\text {L }}$ | ò-mı] | ${ }^{\text {HL }}$ [zây | bèà-m-nù-m] | ${ }_{\text {L }}$ nè $]$ |
| :---: | :---: | :---: | :---: | :---: |
| [ [person | Prox-AnSg] | [convey | get-Ipfv-Ipfv-LogoSbj] | person] |
| ற̀gó-Ø |  |  |  |  |
| not.be.Loc-3SgSbj |  |  |  |  |
| 'There is no person who can convey (=cause) it.' (2022-03 @ 00:55) |  |  |  |  |

### 14.3 Preparticipial subject pronoun in non-subject relative

Participles in relative clauses do not have suffixal pronominal-subject agreement like that of main clauses. The participle agrees in nominal features (animacy, number) with the head noun, which may or may not be the subject of the relative clause proper. In nonsubject relatives, if the subject is pronominal (as in 'the meat that $\mathbf{I} / \mathbf{y o u} /$ they ate'), it is expressed by an independent pronoun proclitic to the verb-participle. If the subject of such a relative is expressed by a nonpronominal NP ('the meat that Seydou ate'), no resumptive proclitic third person pronoun appears.

The forms taken by the subject proclitics are the regular independent forms (517), repeated from (85) in §4.3.1. The inanimate third-person pronouns, parenthesized in (517), do not occur in nonsubject relatives except in demonstrative function. Instead, the animate pronouns ńné (singular) and bú (plural) are generalized to inanimates.
(517) Proclitic subject pronominals in nonsubject relatives

| 1 Sg | mí |
| :--- | :--- |
| 1 Pl | í |
| 2 Sg | ú |
| 2 Pl | bí |
|  |  |
| 3 AnSg | ńné |
| 3 AnPl | bú |
| InanSg | (kú) |
| InanPl | (yí) |
|  |  |
| Logo/3Refl | á |

The fact that the subject pronoun can intervene between verb stems and certain suffix-like inflectional morphemes (notably marked perfectives such as the recent perfect and experiential perfect) is evidence that these inflectional morphemes still have some characteristics of chained verbs as opposed to suffixes (§10.1.1).

In (518), 3Pl bú is such a pre-participial proclitic subject pronoun. Many other examples of such pronouns occur in nonsubject relatives in the subsections below.
$\begin{array}{lllll}\text { (518) } & \text { gàrá-gàrà } & \text { bú } & \text { dógá-m- } \varepsilon \text { : } & \text { ǹ } \\ \text { Rdp-a.little } & \text { 3Pl } & \text { leave-Ipfv-Ppl } & \text { Def }\end{array}$
'what they will leave aside little by little' (2022-04@ 02:22)

### 14.4 Verbal participle in relative clause

The verb forms used in relative clauses are participial. That is, they have suffixal agreement with the animacy-number value of the head NP (which may or not be the subject). The four main indicative categories have the participial forms in (519). For the perfective positive, the forms are not derived by suffixation to the primary verb, rather they make use of an auxiliary kárnà (a form of kán 'do'). In the imperfective negative, the conjugated stative quasi-verb 'be' (bù-) is added to the imperfective negative verb. The animacy/number suffixes and endings are familiar from nominal and adjectival morphology, but inanimate singular -(y)gO does not occur after kár${ }^{\mathrm{n}} \mathrm{à}$ in the perfective positive.
(519) a. perfective positive

| kár$^{\mathrm{nà}}$ | AnSg, InanSg, InanPl |
| :--- | :--- |
| kár$^{\mathrm{n} a ̀-m b o ̀ ~}$ | AnPl |

b. imperfective positive

```
-m-\varepsiloń: AnSg, InanPl
-m-bò AnPl
-\etagó InanSg
```

c. perfective negative

| $-1-\varepsilon ́:$ | AnSg, InanP1 |
| :--- | :--- |
| $-1($ ú $)$-mbó | AnPl |
| $-1-\mathrm{gó}$ | InanSg |

d. imperfective negative
-ŋgò: b-દ́: ~ bú-m- $\varepsilon$ : ~ bí-m- $\varepsilon$ :
AnSg , InanPl
-ngò: bú-m-bò
AnPl
-ŋgò: bú-ygó
InanSg

The marked inflectional categories (progressive, experiential perfect, etc.) are largely consistent with and based on these core participial types. Fuller details are given in the next several sections below.

### 14.4.1 Perfective positive system participles (kár ${ }^{\text {nà }}$ )

This construction probably developed from a verb-chain including a form of kán 'do'. There is a suffix for animate plural but none for inanimate singular. A verb with L-initial melody spreads its L-tone to the end of the stem before kár${ }^{\mathrm{n}}$ à (§3.6.4.2), while an /H/-melodic stem remains H toned.

The basic participial forms are those in (520).
(520) kárnà

AnSg, InanSg, InanPl
kár${ }^{n}$ à-mbò

AnPl

Subject perfective positive relatives are in (521).

| a. $\left.\begin{array}{lll}\text { mòmbò: } & \text { Lú } & \text { gù }\end{array}\right]$ | támbú | kárnà | ǹ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| scorpion | $\left[\begin{array}{ll}2 \mathrm{Sg} & \mathrm{Acc}]\end{array} \mathrm{kick}\right.$ | Pfv.Ppl | Def |
| 'the scorpion that stung you-Sg' |  |  |  |

b. mòmbò:-mbò ${ }^{L}$ mí-gì támbú kárnà-mbò ǹ scorpion-AnPl 1Sg-Acc kick Pfv.Ppl-AnPl Def 'the scorpions that stung me'
c. cin $^{\mathrm{L}}$ bàgà kár ${ }^{n a ̀ ~ n ̀ ~}$
stone fall Pfv.Ppl Def
'the stone that fell off'

Nonsubject perfective positive relatives are in (522). In (522a-b) the subject is a preverbal proclitic pronominal.

| a. ìnjè: $: ~$ ú | púngó | kárnà | ǹ |  |
| :--- | :--- | :--- | :--- | :--- |
| dog | 2Sg | beat | Pfv.Ppl | Def |
|  | 'the dog that you-Sg hit' |  |  |  |

b. [gàndà ${ }^{\mathrm{L}}$ mí yàgà kárnà] wàgá
[place 1 Sg fall Pfv.Ppl] far
'The place where I fell is far away.'
c. ámádù ìnjè: ${ }^{\text {L }}$ púngó kár${ }^{\text {nà }}$ ǹ

A dog hit Pfv.Ppl Def
'the dog that Amadou hit'

The full set of perfective positive system categories is displayed in (523). The marked perfectives, including the perfective-like use of past $=$ bì- $\varnothing$, are merged into the basic perfective relative-clause forms. However, the recent perfect and experiential perfect morphemes may precede kárnà.
category
suffix(es)/auxiliaries
in Rel clause in main clause $(3 \mathrm{Sg})$

| perfective-1a (marked) | -yày/-à:y kár${ }^{n}$ à | -yày-Ø ~ -à:y-Ø |
| :--- | :--- | :--- |
| perfective-1b (marked) | tí kár$^{n}$ à | -tì-Ø |
| perfective (unmarked) | kár$^{n}$ à | $"$ |
| past (as basic perfective) | $"$ | $=$ bì-Ø |
| recent perfect | dè kárnà | dè-Ø |
| experiential perfect | téré kárnà | téré-bù-Ø, téré-sò-Ø |

In main clauses, some verbs take the perfective-1a and others take the perfective- 1 b when not defocalized. Those that take perfective-1a have two options in relatives. One is to keep the perfective-1a suffix on the verb before kárnà. There are six examples of -yày/-à:y kárnà in the texts: 2015-01 @ 02:36 \& 04:53 \& 05:20 (two) \& 06:06 \& 06:35. However, the relevant verbs can also occur in bare stem form before kárnà, as in yày kár ${ }^{n}$ à 'who went' (2015-01@ 00:42) and wò: kárnà 'who came' (2015-01@ 01:20) among many other textual examples.

There are no examples in the texts of kár ${ }^{\text {na }}$ following perfective- 1 b -tì-. It is possible to elicit perfective-1b relatives in the form ... VERB tí kárnà, parallel to ... VERB tí gín (§15.2.3). However, in practice the verbs that take perfective-1b -tì- in main clauses drop it in relatives and appear in bare-stem form before kár ${ }^{n}$ à.

There is no need to equate bare stems like púngó 'hit' in púngó kárnà (522a,c) with the simple perfective of main clauses. The distinctive E/I-stem in the 3 Sg subject form does not
occur in relatives. Since focalization and defocalization do not apply inside subordinated clauses, it is best not to force main-clause categories like "simple perfective" onto relatives.

Recent perfect dè kárnà occurs at 2015-01@ 02:24.
The perfective-2 (-sò-) has directly suffixed participial forms without kár${ }^{\text {nà }}$.
(524)

| form | category | textual example |
| :--- | :--- | :--- |
|  |  |  |
| -sí-mé | AnSg, InanPl | $2015-05$ @ 03:39 |
| -sú-mbò | AnPl | $2015-05$ @ 03:38 |
| -sú-ŋgó | InanSg | $2015-05$ @ 03:54 |

14.4.2 Positive imperfective-system and stative participles

### 14.4.2.1 Regular imperfective participles (-m- $\varepsilon:$, -ŋgó)

Subject imperfective positive relatives are in (525). -m- is an imperfective morpheme, and the verb stem has the $\mathrm{A} / \mathrm{X}$-stem vocalism as in the conjugatable main-clause imperfective. Animate plural -m-bò is from /-m-mbò/ and could alternatively be hyphenated as - $\varnothing$-mbò. Inanimate singular -ngó is not derivable from /-m-gó/ which does not elsewhere assimilate (e.g. nèm-gó 'salt'), so it has portmanteau status synchronically. However, diachronically it may have this origin; compare -l-gó in corresponding perfective negative participles (following section). For -ngó in instrument nominals and similar derivatives, see §4.2.3 and §5.1.4.3.

$$
\begin{array}{ll}
-\mathrm{m}-\varepsilon ́: & \text { AnSg, InanPl }  \tag{525}\\
\text {-m-bò } & \text { AnPl } \\
\text {-ygó } & \text { InanSg }
\end{array}
$$

Subject imperfective relatives are in (526).
 'the person who is coming tomorrow'
b. nù-mbò ${ }^{\text {L }}$ wá:-m-bò
person-AnPl come-Ipfv-Ppl-AnPl
'people who come'
c. cìn ${ }^{\mathrm{L}}$ bágá- g gó
stone fall.off-Ipfv.Ppl.InanSg
'a stone that is falling (off)'
d. $\operatorname{cìn}^{\mathrm{L}}$ bágá-m- :
stone fall.off-Ipfv-Ppl.InanPl
'stones that are falling (off)'
e. [nì yàgà-m- $\grave{\varepsilon}$ : $]^{\mathrm{L}}$ ńné
[person fall-Ipfv-Ppl.AnSg] DemDef.AnSg
'that person who is falling'
f. yà ${ }^{L}$ mí zígíbé-m- $̇$ : ̀̀
woman 1 Sg shake-Ipfv-Ppl.AnSg Def 'the woman who is shaking me'

Nonsubject imperfective relatives are in (527).
a. nà: ${ }^{\text {L }}$
dórná-m- ${ }^{\text {n : }}$
ǹ
cow 2Sg sell-Ipfv-Ppl.AnSg Def
'the cow that you- Sg will sell'

| b. nà:-mbò ${ }^{\text {L }}$ | ú | dór ná-m-bò | ǹ |
| :--- | :--- | :--- | :--- |
|  | cow-AnPl | 2Sg | sell-Ipfv-Ppl.AnPl | Def


'the place where we sleep'

Progressive participles are just the participles of the relevant auxiliary ('have' or 'be'), see below.

### 14.4.2.2 Stative participles (-m- $\varepsilon:$, -ngó, b- $\varepsilon$ :, b-ó:)

In main clauses, -m - occurs with imperfectives but not statives. However, participles of derived statives and some lexical statives have the same participial endings as imperfective participles: animate singular and inanimate plural -m- $\varepsilon$ :, animate plural -m-bò, inanimate singular -ygó. For the derived statives, the A-stem (final a) of the verb distinguishes stative participles from imperfective participles. In addition, statives that are derived from mediopassive active verbs lack the mediopassive suffix -í, in participles as well as in main clauses. For example, 'sit (down)' as active (aspect-marking) verb is ób-í:, with imperfective participle ób-é:-m- $\varepsilon$ : ‘who will sit' (with A/X-stem mediopassive -é:-). The main-clause stative is óbà- 'be seated', with the stative participles in (528).

[^6]```
b. gàndà m}\mp@subsup{}{}{L}\mathrm{ mí óbá-ngó
    place 1Sg sit.Stat-Ppl.InanSg
    'the place where I am sitting'
```

Lexical stative quasi-verbs ('be', 'have', 'want') have the singular participles in (529). The key morpheme -m- is obligatory in the animate singular for 'have' and 'want', but only optional for 'be'.

| category | in relative clause |  |  | main clause ( 3 Sg ) |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{AnSg} / \mathrm{InanPl}$ | InanSg | AnPl |  |
| 'be' | b-દ́: | bú-ngó | b-ó: | ${ }^{\text {Lbù- }}$ - |
|  | $\sim$ bú-m-と́: |  | ~ bú-m-bò |  |
| 'have' | só-m-é: | só-ggó | só-m-bò | (yé) ${ }^{\text {L }}$ sì-Ø |
| 'want' | m̀ má-m-દ́: | m̀bá-ygó | m̀bá-m-bò | m̀bá-Ø |
|  | $\sim$ ǹmá bí-m-દ́: | $\sim$ m̀̀á bú-ģó |  |  |

The monosyllabic 'be' participles b-é: and b-ó: are probably archaisms, cf. Najamba subject participles bé: and bó:, respectively. Animate singular b-દ́: occurs in 2022-04@ 01:39. Animate plural b-ó: is attested in 2015-06 @ 00:42 (two). Treated as possessum (and therefore tonedropped), ${ }^{\mathrm{L}} \mathrm{b}$-ò: is part of plural gentilics from place names and topographic nouns (§5.1.7). ${ }^{\mathrm{L}} \mathrm{b}$ $\grave{\jmath}$ : is also attested once in a not-well-understood construction with a preceding perfective-2 participle: 2015-06 @ 03:19. Also of possible relevance are à-bó 'which ones?' (animate plural) (506b) in §13.2.2.7 and à-bô: = $\emptyset$ 'where are they?' (animate plural), (500b) in §13.2.2.3.
'Be' and 'have' are also competing auxiliaries for the progressive construction. Progressive participles are based on the 'be' and 'have' participles shown above added to the usual progressive verb forms.

Stative (and adjectival) negative = lá can combine with 'bù- 'be' to form a composite participle: ゝ̀bà = lá b-દ́: '(one) who is not seated'.

### 14.4.2.3 Agentives (final ě:) as imperfective participles

In habitual or general contexts, the assistant preferred to (re-)phrase imperfective subject relatives as agentives. For transitive verbs, the agentive usually takes a compound initial (§5.1.4.2), but in participle-like function simple intransitives are possible. In (530a), 'childrenbiter' functions as a modifying adjective for 'dog', accounting for the latter's L-tones. (530b) is phrased as 'my [meal-cooker woman]', with 'my' possessing the woman rather than the meals. The agentives in ( $530 \mathrm{c}-\mathrm{d}$ ) do not denote occupations or persistent characteristics and they are not attested except in imperfective relative-clause function.
a. $\quad$ ìnjè: ${ }^{\text {L }}$
ùlè̀:-cèrě:]
m̀bíl-ǎ-y ${ }^{n}$
[dog children-bite.Agent] want-StatNeg-1PISbj 'We don't want a dog who bites children (children-biter).'
b. [lyà ${ }^{\text {L }}$ zà-sìrě:] wě:] yǎy-yày-Ø [[woman meal-cook.Agent] 1SgPoss.AnSg] go-Pfv1a-3SgSbj 'The woman who cooks my meals (my meal-cooker) has gone.' (zá)
c. jì wòlě: ǹ
person come.Agent Def
'(a/the) person who comes/will come'
d. [nì ${ }^{\mathrm{L}}$ mòndù-màndě:] ódírá-ıgó
[person laughter-laugh.Agent] inquire-Nom
'asking (who is) the person laughing' (2015-02 @ 01:06)
e. nè ${ }^{\text {L }}$ yí-bàrì yàyě: ǹ
person over.there.Def go.Agent Def
'someone who goes over there' (2015-06 @ 00:28)

### 14.4.3 Participles of negative perfective-system verbs (-1-غ̌:)

The participial forms are in (531).
(531) AnSg, InanPl -1-દ́:
$\mathrm{AnPl} \quad-1$-mbó
InanSg -l-gó
The participles are based on perfective negative -lí-, and like it they require the $\mathrm{A} / \mathrm{X}$-stem of the verb with $\{\mathrm{L}\}$ overlay.

Subject relatives are in (532).
a

ǹ] sèll-ìà-lí-Ø
be.healthy-MP-PfvNeg-3SgSbj
'The person who didn't come is sick.'
b. [nù-mbò ${ }^{\text {L }}$
wà:-1-Ø-mbó
ǹ]
[person-AnPl
come-PfvNeg-Ppl-AnPl
Def]
sèll-ì̀-ndá
be.healthy-MP-PfvNeg.3PISbj
'The people who didn't come are sick.'

| c.ùlò ${ }^{\text {L }}$ yàgà-l-gó ǹ] <br> [house fall-PfvNeg-Ppl-InanSg] Def] | à-gû: $=\varnothing$ |
| :--- | :--- | :--- | :--- |
| 'Which? $=$ it.is |  |

Nonsubject relatives are in (533).
(533)

| a. pèdè: ${ }^{\text {L }}$ sheep | m | dò | ǹ |
| :---: | :---: | :---: | :---: |
|  | 1 Sg | sell-PfvNeg-Ppl.AnSg | Def |
| 'the sheep that I didn't sell' |  |  |  |


| b. lè:gò ${ }^{\text {L }} \quad$ bírá: | í | bìrà-l-gó | ǹ |  |
| :--- | :--- | :--- | :--- | :--- |
| day | work(n) | 1 Pl | work-PfvNeg-Ppl.InanSg | Def |
|  | 'the day when we didn't work' |  |  |  |

The various perfective negative system -1-દ́: and -1-gó participles are in (534).
relative clause AnSg /InanPl $\quad$ InanSg

| perfective negative | $-1-\varepsilon ́:$ | -l-gó | -lí- |
| :--- | :--- | :--- | :--- |
| recent perfect negative | dà-l-દ́: | dà-l-gó | dà-lí- |
| experiential perfect negative | -tèrà-l-દ́: | -tèrà-l-gó | -tèrà-lí- |

### 14.4.4 Imperfective and stative negative participles (-ygò: b-દ́:)

The participial endings are in (535). In this category, participial forms of ${ }^{\mathrm{L}}$ bù- are added to -ygò:, cf. 3Sg imperfective negative -ygò:-Ø in the regular paradigm. The verb has the $\mathrm{A} / \mathrm{X}$-stem as in the regular paradigm.

| AnSg, InanPl | -ŋgò: b-દ́: ~ bú-m- $\varepsilon:$ |
| :--- | :--- |
| AnPl | -ŋgò: bú-m-bò |
| InanSg | -ngò: bú-ngó |

Subject relatives are in (536).

c. [zàmdìlè ${ }^{\mathrm{L}}$ áy-ygò: b-é:] ${ }^{\mathrm{L}}$ mbà $-\mathrm{y}^{\mathrm{n}}$ [donkey be.tired-IpfvNeg be-Ppl.AnSg] want-1PlSbj 'We want a donkey who doesn't get tired.'
d. [cìn ${ }^{\mathrm{L}}$ zógá-ŋgò: bú-ggó] ${ }^{\mathrm{L}} \mathrm{m}_{\mathrm{m} b a ̀-y^{\mathrm{n}}}$ [stone shatter-IpfvNeg be-Ppl.InanSg] want-1PlSbj 'We want a rock that doesn't break.'

Nonsubject relatives are in (537).
a. pède: ${ }^{\text {L mí dór}}$ nó-ŋgò: b-é: ǹ
sheep 1 Sg see-IpfvNeg be-Ppl.AnSg Def
'the sheep that I won't sell'
b.

| lè:gò ${ }^{\text {L }}$ | ú | wá:-ygò: | bú-ygó |
| :--- | :--- | :--- | :--- |
| day | 2Sg | come-IpfvNeg | be-Ppl.InanSg |
| '(a/the) day when you-Sg don't come' |  |  |  |

c. $\operatorname{kìn}^{\mathrm{L}}$ ú dór${ }^{\text {nó-ŋgò: }}$ b- $\varepsilon$ :
stone 2 Sg sell-IpfvNeg be-Ppl.InanPl
'(a/the) stone that you-Sg won't sell'

The same participial forms of ${ }^{\mathrm{L}}$ bù- 'be' are used after stative negative $=$ ndǎ- (§10.4.2).
(538)
a. nì̀
ígá = ndǎ:
b-દ́:
person stand.Stat=StatNeg
be-Ppl.AnSg 'a person who isn't standing'

| b. nù-mbò ${ }^{\text {L }}$ | ígá $=$ ndǎ: | bú-m-bò |
| :--- | :--- | :--- |
|  | person-AnPl | stand.Stat=StatNeg |$\quad$ be-Ipfv.Ppl-AnPl

The full set of imperfective and stative negative categories is in (539). Only the b- $\varepsilon$ : form of the participle is shown. In all cases it varies with bú-m- $\varepsilon$ : .
category
suffix(es)
in Rel clause in main clause $(3 \mathrm{Sg})$

| imperfective negative | -ngò: b-દ: | -ygò:-Ø |
| :---: | :---: | :---: |
| progressive negative | -m gò: b-દ́: | -m gò-Ø |
| stative negative | $=\mathrm{ndǎ}: \mathrm{b}-\varepsilon$ : | = ndǎ:-Ø |
| 'not be' | ỳgó $\mathrm{b}-\varepsilon$ : | ทgó-Ø |
| 'not have' | só-ndǒ: b-é: | só-ndǒ-Ø |
| 'not want' | m̀bílǎ: b- | m̀bí-lǎ-ด |

### 14.4.5 Participle of past-time clitic = bì-

In its perfective-like uncompounded form, e.g. yí= bì-m 'I saw' (§10.2.1.4), the past-time category is neutralized with other perfective positive forms into relative clauses with kárnà (§14.4.1). However, when past-time = bì- is added to a verb form marked for its own aspectnegation category ( $\S 10.5 .1$ ), it can be participialized in that combination. An example is the past progressive relative clause (540).
$\begin{array}{llllll}\text { (540) } & \mathrm{tin}^{\mathrm{n}} \rightarrow & \text { nàmá } & \text { jì }{ }^{\mathrm{L}} & \text { kúbó-m } & \text { só-m }=\mathrm{b}-\varepsilon ́: \\ & \text { at.first } & \text { meat } & \text { person } & \text { eat.meat-Ipfv } & \text { have-Ipfv=Past-Ppl.AnSg } \\ & \text { 'a person who was eating (= used to eat) meat' } & \end{array}$

The participial forms are in (541). Of note is the g in past-time enclitic =bú-gó, as opposed to the $\mathfrak{g}$ in simple bú-ŋgó, inanimate singular participle of bú- 'be'.

| AnSg, InanPl | $=\mathrm{b}-\varepsilon ́:$ |
| :--- | :--- |
| AnPl | $=$ bú-)mbò |
| InanSg | $=$ bú-gó |

Examples of the past-time combinations are in (542).
glos
AnSg/InanPl AnPl
InanSg


### 14.5 Relative clause involving verb- or VP-chain

Direct chains, where noninitial verbs appear in bare form without an overt subordinator, are fairly restricted in TU (chapter 17). Where they do occur, they can be freely relativized, as with yàgà súgó 'fall (and) go down' in (543a-b). The final verb is the one that is participialized. In (543a) the perfective participial kárnà was also originally a chained verb ('do'). In nonsubject relatives with pronominal subjects, the pronominal subject proclitic may appear either before the verb-chain or between the two verbs, but it cannot appear immediately before kárnà (543c). For more examples involving pronominal proclitics in verb chains, see (553-554) in §15.1.3.

[^7]b. jì ${ }^{\mathrm{L}}$ yàgà súgó-m- $\varepsilon$ : ǹ
person fall descend-Ipfv.Ppl-AnSg Def
'(a/the) person who will fall down' (yàgá)
c. lè:gò ${ }^{L}$ ú yàgà súgó kárnà ǹ
day 2 Sg fall descend Pfv.Ppl Def
or: ... yàgà ú súgó ..
... fall 2 Sg descend ...
'the day (when) you-Sg fell down'
[but not \#... yàgà súgó ú kárnà ... ]

### 14.6 Late-NP elements in the post-participial coda

### 14.6.1 Determiners (demonstrative and definite)

Many of the relative clauses presented in this chapter show definite ǹ following the participle. Since this morpheme is not a tonosyntactic controller, its presence or absence has no effect on the form of the participle (544a). If instead of definite ǹ we have a true demonstrative that controls tone-dropping, examples like ( $544 \mathrm{~b}-\mathrm{c}$ ) are produced. In (544b), the participle is tonedropped by the demonstrative. The head noun 'house' is separately tone-dropped as relative head, not as part of the domain targeted by the demonstrative. This is shown by (544c), where a non-tone-dropped constituent ('sheep') intervenes between the tone-dropped head noun and the separately tone-dropped participle.
a. ùlò ${ }^{\text {L }}$
ú
house 2 Sg
yá-ggó
(ǹ)
see-Ipfv.Ppl.InanSg (Def)
'(a/the) house that you-Sg see'

'this house that you-Sg see'

14.6.2 Non-numeral quantifiers ('each', 'all')
pú $\rightarrow$ 'all' may follow the verb-participle in a relative. In this case, pú $\rightarrow$ is preceded by a demonstrative (identical in form to a third-person pronoun), and the demonstrative tone-drops the participle ( $545 \mathrm{a}-\mathrm{b}$ ). Compare (190a-b) in §6.6.1. pú $\rightarrow$ may also occur by itself at the end of the internal head, with no tonosyntactic effects (545c).
a. ùlò ${ }^{\mathrm{L}}$ ú yà-m- $\mathrm{c}^{\mathrm{L}}$ [yí pú $\rightarrow$ ]
house 2Sg see-Ipfv-Ppl.InanPl [DemDef.InanPl all] 'all the houses that you-Sg see'
$\begin{array}{llllll}\mathrm{b} & \text { ùlè: }^{\text {L }} & \text { ú } & \text { yà-m-bò }^{\text {L }} & {[\text { bú }} & \text { pú } \rightarrow] \\ & \text { house } & 2 S g & \text { see-Ipfv-Ppl.InanPl } & \text { [DemDef.AnPl } & \text { all] }\end{array}$ 'all the children that you-Sg see'
 'all the houses that you-Sg (will) see'

No relative could be elicited with the rather restricted distributive quantifier kámá 'each'

### 14.7 Grammatical relation of relativized-on NP

This section presents further examples of relatives, grouped by the syntactic function of the head inside the relative clause proper.

### 14.7.1 Subject relative clause

As with all relatives, the head NP (maximally Poss-N-Adj-Num) is internal to the relative clause and is tone-dropped. The distinctive feature of subject relatives is that there can be no proclitic subject pronoun. Instead, the participle's animacy/number agreement with the NP functioning both as head NP and relative-internal subject is sufficient. There is no difference in participial forms between subject and nonsubject relatives of the sort found in Najamba.

In addition to examples scattered in the sections above, some further examples are in (546). (546d-e) illustrate the alternative linear orders for subjects and setting adverbials ('tomorrow', 'yesterday'). The subject head is bolded.

| a. | [nì ${ }^{\mathrm{L}}$ | yàgà | kárnà | ǹ] | tíb-à:y-Ø |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [person | fall | Pfv.Ppl | Def] | die-Pfv1a-3SgSbj |  |

'The man who fell has died.'
b. [yă ${ }^{\text {L }}$ nàmá zàndì kárnà ǹ $]$ à-ḿ-nè:-Ø
[woman meat cook Pfv.Ppl Def] be.where?-3SgSbj
'Where is the woman who cooked the meat?'
c. [yà ${ }^{\mathrm{L}}$ yó: tó: kárnà ǹ $]$ à-ḿ-nè:-Ø [woman millet pound Pfv.Ppl Def] be.where?-3SgSbj 'Where is the woman who pounded the millet?'
d. yà ${ }^{\mathrm{L}} \quad$ ह́y ${ }^{\mathrm{n}} \quad$ wá:-m-é: ì woman tomorrow come-Ipfv-Ppl.AnSg Def 'the woman who is coming tomorrow'
e. yéngì yà ${ }^{\mathrm{L}}$ wò: kár ${ }^{\text {nà }}$ ǹ yesterday woman come Pfv.Ppl Def 'the woman who came yesterday'

### 14.7.2 Object relative clause

The clause-internal object is tone-dropped in its role as the head NP. If the subject is pronominal, the subject appears as a preverbal pronoun rather than as a suffix on the verb. The verb takes the participial form relevant to the inflectional category, and the participle agrees with the object (as head) in animacy and number. (547c) shows that subject-object linear order is retained in object relatives when the subject is a nonpronominal NP.

| a. | $\left[\right.$ pèdè: ${ }^{\text {L }}$ | mí | ćbé | kár$^{n}$ à $]$ | yì-só-m |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[$ sheep | 1 Sg | buy | Pfv.Ppl] | see-Pfv2- 1 SgSbj |

b. [ìnjè: ú púygó kárnà ǹ ${ }^{\text {n }}$ à à-ḿnè:-Ø
[dog 2Sg beat Pfv.Ppl Def] be.where?
'Where is the dog that you- Sg beat-Past?'
c. ùlé: pèdù-mbò ${ }^{L}$ zz̀: kárnà-mbò ǹ
children sheep-AnPl bring Pfv.Ppl-AnPl Def
'the sheep- Pl that the children brought'
d. [nàmà ${ }^{\mathrm{L}}$ ú $\quad$ kùbò-l-gó $\quad$ ǹ]
[meat $2 \mathrm{Sg} \quad$ eat.meat-PfvNeg-Ppl.InanSg Def]
à-gû: = Ø
be.where?
'Where is the meat that you-Sg didn't eat?'
e. pèdè: ${ }^{L}$ í sémá-m- $\varepsilon$ : ì
sheep 1Pl slaughter-Ipfv-Ppl.AnSg Def
'the sheep-Sg that we will slaughter'

The assistant denied that accusative marking on an object head NP is possible. For example, accusative gì (never more than optional anyway) is not allowed on 'sheep' or 'dog' in (547a-b). This is further evidence that the (partial) clause-internal head NP inside the relative originates outside it as part of the larger NP.

### 14.7.3 Possessor relative clause

The possessor NP is relativized on in (548a-b). As with other head NPs, the possessor is tonedropped. The possessum, nă: (548a) or úló (548b), takes its regular unpossessed tonal form. In other words, the possessor as relative head loses its tonosyntactic control over the possessum.

| a. | [ $\mathrm{i}^{\text {L }}$ | nǎ: | tíbé | kárnà | ǹ] | ǎm̀: $=\varnothing$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [person | cow | die | Pfv.Ppl | Def] | who?=it.s |
|  | 'Who is the person whose cow died?' |  |  |  |  |  |



### 14.7.4 Relativization on the complement of a postposition

If the relativized NP functions as complement of a simple postposition within the relative clause, the postposition is deleted. In (549a), for example, 'to (a/the) woman' has a dative postposition. Corresponding relative clauses with 'woman' as head NP lose the postposition (549b). A similar pair of main clause and relative clause ( $549 \mathrm{c}-\mathrm{d}$ ) shows that the instrumental postposition is omitted in the relative.
a. ò-gú [yá bènè] jírī̀-m-nù-m

Dist-InanSg [woman Dat] say-Ipfv-Ipfv-1SgSbj
'I will say that to (a/the) woman.'
b. ò-gú yà ${ }^{\text {L }}$ ú jíní-m-é: ỳ

Dist-InanSg woman 2 Sg say-Ipfv-AnSg Def
'the woman to whom you will say that'
[can also be ordered: yà̀ ò̀-gú...]
c. [ś́y-gó nì:] tìmǎ: déngè-m-nù-m
[ax-InanSg Inst] wood chop-Ipfv-Ipfv-1SgSbj
'I will chop the wood with an ax.'
d. [sèy-gò ${ }^{\mathrm{L}}$ tìmǎ: ú déngé-ygó ǹ ${ }^{\text {à }}$ gû: $=\varnothing$
[ax-InanSg wood 2Sg chop-Ipfv.Ppl.InanSg Def] be.where?.InanSg 'Where is the ax with which you-Sg will chop the wood?'

The omission of the postposition makes sense as a consequence of the importation of the internal head from the leftmost words in the original higher NP.

Spatial, temporal, and manner adverbial clauses of the form 'the time when/place where/way ...' are just special cases of the basic relative construction. See §15.4.1-2 for spatial and manner adverbial clauses, and $\S 15.2 .1 .1$ for temporal adverbial clauses.

## 15 Verb (VP) chaining and adverbial clauses

A distinction is made between direct chains, where nonfinal verbs are effectively compounded with a final inflected verb without an overt subordinator, and looser combinations where an overtly subordinated clause or VP is attached to another clause or VP.

### 15.1 Direct chains (without chaining morpheme)

### 15.1.1 Basics of direct chains

Direct chains are not especially productive in TU but they occur in some combinations involving co-events, i.e. two aspects of the same event. The nonfinal verb is in bare-stem form segmentally but undergoes tonal processes. The inflection on the final verb has scope over the whole chain.

One fairly common combination is an intransitive action verb plus a motion verb that indicates directionality. Examples are yàgà súgó 'fall down' and tómbó súgó 'jump down', with yàgá 'fall' or tómbó 'jump' followed by motion verb súgó 'descend'. Combinations like these are conceptualized as single events rather than as successions of two events. The second verb carries the inflections, perfective positive in (550a) and perfective negative in (550b). The tonal patterns are described in the following subsection.
a. yàgà / tómbó súg-à:y-Ø
fall / jump descend-Pfv1a-3SgSbj
'He/She fell/jumped down.'
b. yàgá / tómbó sùgò-lú-m
fall / jump descend-PfvNeg-1SgSbj
'I didn't fall/jump down.'
The combination may also be a transitive action verb followed by a transitive (e.g. causative) verb of transfer, as in lígé sú:-ndú 'wrestle (sb) down' with sú:-ndú 'cause to descend', 2015-02 @ 03:10.

The motion verb may precede the open-ended verb if the two events are tightly sequenced in that order. An example is yày tágá 'go and say (sing)', 2015-02 @ 02:57.

### 15.1.2 Tonal interactions between adjacent directly chained verbs

Verbs have lexical /H/ or /LH/ melody. /H/-melodic verbs like tómbó 'jump' remain H-toned in all combinations with the following verb. /LH/-melodic verbs like yàgá 'fall' keep their lexical tone when the second verb begins with L-tone (551a), but spread the initial L-tone to
the end of the stem when the second verb begins with H-tone (551b), see L-Tone Spreading (§3.6.4.2). The second verb has its regular tones as though the first verb were not present. In the imperfective (positive), the $\{\mathrm{HL}\}$ overlay that occurs on simple stems, as in súgò-m-d̀̀-Ø 'he/she/it descends', is spread over the two-verb complex, with just the first syllable of the first verb H-toned (551c).

$$
\begin{equation*}
\text { 'fall' + 'descend' } \quad \text { 'jump' + 'descend' category } \tag{551}
\end{equation*}
$$

a. with yàgá before L-tone
 yàgá sùgò-lí-Ø
tómbó sùgò-lí-Ø perfective negative
b. with yàgà before H -tone
yàgà súg-à:y-ด
yàgà súgó-sò-Ø
yàgà súgó-ygò:-Ø
yàgà súgó
yàgà súgô-1
tómbó súg-à:y- $\varnothing$
tómbó súgó-sò-Ø
tómbó súgó-ygò:-
tómbó súgó
tómbó súgô-1
perfective-1a
perfective-2 imperfective negative imperative prohibitive
c. $\{\mathrm{HL}\}$ overlay over the two-verb string
${ }^{H L}$ [yágà sùgò-m-dò-Ø] $\quad{ }^{H L}[t o ́ m b o ̀ ~ s u ̀ g o ̀-m-d o ̀-Ø] ~ i m p e r f e c t i v e ~$

Monomoraic Cv verbs do not allow contour tones as first verb in such chains. Therefore gǒ 'exit (v)' appears as gó before L-tone and as gò before H-tone.

Further illustrations are given in the 'be able to VP' construction (§15.1.4.1 below). That is the most common direct-chain combination.

### 15.1.3 Syntax of direct chains

Typically the two (or more) verbs in a direct chain have a unified argument structure. For example, 'fall', 'jump', and 'descend' in the preceding examples are all intransitive. An example of a transitive counterpart is 'throw down', expressed as 'throw' plus 'cause to descend, take down' (552).

```
č̌n jìdé 'Lù:-ndù-m
    stone throw descend-Caus.Pfv-1SgSbj
```

'I threw the stone down.'

The two verbs in a direct chain are normally directly adjacent, allowing us to view them as verbal analogues to nominal compounds. Most other Dogon languages that have compoundlike direct chains allow the two verbs to be separated only by pronominal-subject proclitics, which occur in nonsubject relative clauses (§14.3). In TU, the proclitic (bolded in interlinears)
can either intervene between the two verbs, or precede the two-verb sequence (§14.5). (553a) and (553b) are synonymous.

| a. | [gàndà | mí | yàgà | súgó-ŋgó] |
| :--- | :--- | :--- | :--- | :--- | wàgá 'The place where I will fall down is far away.'


| b. | [gàndà | yàgá | mí | súgó-ŋgó] |
| :--- | :--- | :--- | :--- | :--- |
| $[$ place | fall | $\mathbf{1 S g}$ | descend-Ipfv.Ppl.Inan] | wàgá |
| $[=(\mathrm{a})]$ |  |  |  |  |

The two ordering possibilities are also possible for the 'be able to VP' construction (554a-b).

| a. $\left[\mathrm{ci}^{\mathrm{L}}\right.$ | mí | kán | béá-ŋgó] | à: ndà = lá |
| :---: | :---: | :---: | :---: | :---: |
| [thing | 1Sg | do | get-Ipfv.Ppl.Inan] | a.little=it.is.not |
| 'What | do | ign |  |  |


| b.$\left[\mathrm{ci}^{\mathrm{L}}\right.$ kán mí béá- yg ó $]$ | à:ndà=lá |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $[$ thing | do | $\mathbf{1 S g}$ | get-Ipfv.Ppl.Inan $]$ | a.little=it.is.not |
| $[=(\mathrm{a})]$ |  |  |  |  |

15.1.4 Direct chains including bě: 'get'
15.1.4.1 'Be able to, can VP' with bě: 'get' as final verb in chain

The verb b̌̌: 'get, obtain' is directly chained (cf. §15.1.1-3 above) to a preceding open-ended VP in the most common 'can VP' construction. The tones of the nonfinal verb follow the rules described above for the different inflectional categories of the final verb. Nonfinal verbs in the following examples are yàgá and súgó, whose lexical melodies are overt in (555a-b). They share $\{\mathrm{HL}\}$ overlay in $(555 \mathrm{c})$, and yàgá undergoes L-Tone Spreading in (555d). In forms like these, the $\mathrm{A} / \mathrm{X}$-stem is transcribed bea- (of variable tone) to facilitate identification of the stem, but it can be pronounced [bea] or even [bia].
a. yàgá / súgó $\quad{ }^{\mathrm{L}}$ bè:- $/{ }^{\mathrm{L}}$ bè-à:
fall / descend get.Pfv-3SgSbj / -3PlSbj
'He-or-she / They could (=were able to) fall/go down.'
b. yàgá / súgó bèà-lí-Ø
fall / descend get-PfvNeg-3SgSbj
'He/She couldn't fall/go down.'
c. ${ }^{H L}$ [yágà / súgò bèà-m-dò-Ø]
fall / descend get-Ipfv-Ipfv-3SgSbj
'He/She can fall/go down.'

$$
\begin{array}{ll}
\text { d. } & \text { yàgà / súgó } \quad \text { béá-ygò:--Ø } \\
& \text { fall / descend } \\
& \text { 'He/She cannot fall/go down.' }
\end{array}
$$

The first verb in these examples is syntactically a complete VP and can be expanded accordingly, for example by adding an object. The bracketing in (556) is morphosyntactic since 'need ( n )' is a complement of 'follow', but the two verbs fuse prosodically into a compoundlike structure. The tonal bracketing would include ${ }^{\text {HL }}$ [dímb-ì: bèà-m-nù-wn]. Elsewhere the bare stem of 'follow' is dìmb-í: .

```
(556) [[há:jì ú-wó] dímb-ì:] bèà-m-nù-w }\mp@subsup{}{}{n
    [[need(n) 2Sg-Poss] follow-MP] get-Ipfv-Ipfv-2SgSbj
    'You-Sg can follow your needs.'
```

Textual examples of the 'can VP' construction are 2015-02 @ 01:49 (two), 2015-03 @ 01:01 (two) \& 01:42, 2015-05 @ 03:54, 2015-06 @ 00:37, and 2022-03 @ 00:55.

### 15.1.4.2 'Have a chance to' with bě: 'get' as nonfinal verb

In a less common construction with meaning similar to the 'be able to VP' examples just described above, bě: 'get' precedes rather than follows the other verb to form direct chain. There are three textual examples involving negation.
a. wàndá, tǎ: bě: sèmà-ndá
other, hyena get cut.throat.of-Pfv.3PISbj
'In any event, they didn't have a chance to cut hyena's throat.
(2015-02 @ 03:46)
b. nòmbó wàndá [zòmó gì] bě: jà-lí-Ø wà
water.god other [hare Acc] get consume-PfvNeg-3SgSbj Quot 'The water god did not have a chance to drink (the blood of) hare.'
(2015-02 @ 06:45)
c. wágádú gàrá $\rightarrow$ bě: yàl-é:-yù-wn
time a.certain get stroll-MP-IpfNeg-2SgSbj
'Sometimes you-Sg don't have a chance to walk around.' (2022-03 @ 00:21)

The contexts suggest the sense '(not) have a chance (=opportunity) to VP' or '(not) be in a position to VP ' as opposed to simple 'be able to VP '. In other words, the context involves an external situation rather than the subject's capabilities.

There is one positive textual example (558). The context permits either a literal 'got (and ate)' interpretation or a 'managed to (get and) eat' interpretation.
$\left.\begin{array}{lllll}\text { (558) } & {[\text { bèlè }} & \text { ćlć- } \varepsilon l] & \text { bž: } & \text { jè-Ø }\end{array}\right]$ dé
'(when) hare managed to get and eat some sweet grass, ...'(2015-01@ 00:42)

### 15.1.4.3 Chained verb with final -EE

Addition of final -EE (that is, -દ́: or -é:) is another way for a verb to be chained to a following inflectable verb. It appears to be especially associated with certain following elements and with duration over time. It appears to require that the two verbs have the same subject. It is much less common in texts than gín, which however requires chronological sequencing while -EE does not. The interlinear gloss is ".Chain".
/LH/-melodic verbs undergo L-Tone Spreading before H-toned ending (-é:, -é:). /H/-melodic verbs remain H-toned.

The textual examples are in (559a-d). (559a) illustrates a construction with jà 'said' or, as here, nonverbal 'did thus'. (559b) is a construction with 'get tired' that describes excessive activity (§15.2.2.4). In (559c), 'feed (cause to eat)' and 'tie' are closely chained. In (559d), 'give' is subordinated to a higher hortative ('let's VP!') clause, though this can more easily be expressed by a same-subject anterior subordinator (né). In (559e), ób-é: from mediopassive óbí: 'sit' seems to fuse the mediopassive suffix with the -EE suffix.

b. [gànd-é: á áy-yày kárnà] yà-ndá
[paw(v)-Chain 3Refl get.tired-Pfv1a Pfv.Ppl] see-PfvNeg.3PlSbj 'They were digging (deeply) with their paws to the point of exhaustion, but they didn't see (=find it).' (2015-01 @ 06:06)
c. úló gàsègè ${ }^{L}$ ná-m-દ́: kómbú-ngó kôn kú house animal eat-Caus-Chain tie-Ipfv.Ppl.InanSg DemDef Dem.InanSg 'that animal that is fed and tied up at the house' (2015-03@ 01:33)
d. [pégé
[put.layer [ùlé: bí-gé-mbò] sá: kóá-mó-ǹ [children 2Pl-Poss-AnPl] stone.grind eat.millet-Hort-Pl.Addr 'Let's lay three layers (=basketfuls, of millet grain) each and give them (to them) to stone-grind (and cook) it and feed it to your-Pl children.'
(2022-04@01:44)

```
e. ób-é: [zá ná-mó-ǹ]
    sit-Chain [meal eat-Hort-Pl.Addr]
    'Let's sit down and eat!'
```

Additional elicited examples are súg-é: from súgó ‘descend’ and kúb-é: from kúbó 'eat (meat)’.
For a different version of the 'until X got tired' construction, see §15.2.2.4.
For -EE before yì-só-ndǒ- see §10.2.3.2.

### 15.2 Temporal adverbial clauses with overt chaining or subordinating morpheme

Loose chains, as opposed to the compound-like direct chains just described, have some overt subordinating element on the nonfinal verb(s). The two verbs may be separated by other constituents, and may be set off prosodically (indicated by a comma).

### 15.2.1 Adverbial clauses expressing temporal simultaneity or overlap

### 15.2.1.1 Temporal relative clause ('[at] the time when ...')

A regular relative clause with a temporal noun as tone-dropped head can function as a temporal adverbial clause, with no overt postposition. (560) illustrates with a perfective relative.
(560) sě:dù wàgàdù ${ }^{\mathrm{L}} /$ lè:gò $^{\mathrm{L}} /$ àrnà-gùdù $^{\mathrm{L}}$ ńné wò: kárnà S time / day / year 3Sg come Pfv.Ppl 'at the time/on the day/in the year when Seydou came'

This construction with overt head noun ('time', etc.) is evidently the source of the very common headless construction with kár"à (different-subject, anterior, past) described in §15.2.2.5

The imperfective version of (560) above is (561).

'at the time/on the day/in the year when Seydou comes/will come'

Here too, the overt head can be omitted, resulting in a different-subject imperfective temporal clause (§15.2.2.7).

### 15.2.1.2 Imperfective subordinator -m with A/X-stem

The constructions described in §15.2.1.2.1 and §15.2.1.2.2 below are essentially identical except for their respective tonal options.

### 15.2.1.2.1 Imperfective -m (bà) with $\{\mathrm{HL}\}$ overlay

The imperfective suffix -m, without pronominal-subject conjugation, can be used as a samesubject imperfective background-clause subordinator, basically 'while VP-ing'. The verb has the same $\{\mathrm{HL}\}$ tone overlay and $\mathrm{A} / \mathrm{X}$-stem vocalism as in the regular imperfective positive (§10.2.2.1), thus zóbà-m in (562a) parallel to zóbà-m-dò-Ø 'he/she runs'. Since $\{\mathrm{HL}\}$ is regular for imperfective positives, the transcription omits the ${ }^{\mathrm{HL}}$ superscript to avoid clutter. The construction with this tone overlay is distinct from a version with -m suffix following a verb with lexical tones and vocalism (see the following subsection).
a. [zób(ú)-gó zóbà-m] [nùyá: nùyù-m= bì-Ø]
[run-InanSg run(v)-Ipfv] [song sing-Ipfv=Past-3SgSbj]
'He was singing as he ran.'
b. ùlé: [zób(ú)-gó zóbà-m] [nùyá: nùyù-m=b-à:]
children [run-InanSg run(v)-Ipfv] [song sing-Ipfv=Past-3P1Sbj]
'The children were singing as they ran.'

Further examples showing the form of the verb in the inflected 3 Sg imperfective and in the subordinated imperfective are in (563).

| verb | gloss | 3SgIpfv | subordinat |
| :---: | :--- | :--- | :--- |
| a. /H/ melody <br> tódó <br> óndú | 'pay' | 'build' | tódà-m-dò-Ø <br> óndù-m-dò-Ø |
| b. /LH/ melody <br> zìgìbé | 'shake' | tódà-m |  |
| óndù-m |  |  |  |

A particle bà is optionally added immediately after the verb with -m, except when the latter is tightly phrased with a following clause. bà is glossed "Ipfv.Sub" since it is specific to this construction.


Other examples with bà include 2015-02 @ 03:38 \& 06:23. With the locational-existential quasi-verb, ... Lbù-m bà is in 2015-02 @ 07:24.

Such phrases with just a pronominal subject and \{HL\}-toned verb with -m , but without bà, can be repeated two or three times within a single prosodic phrase. This is a colorful narrative device to emphasize prolongation of an activity (§15.3.2).

### 15.2.1.2.2 Imperfective -m (bà) with lexical melody

This is another same-subject imperfective subordinated clause. It has a verb with the "same" imperfective -m suffix as in the construction described above, and with the same $\mathrm{A} / \mathrm{X}$-stem vocalism, but with lexical tones. It is optionally followed by the particle bà when it is prosodically separated from the following clause. However, it often occurs in a tight combination with the following clause and in this case it omits bà.

Examples of the verb forms are in the rightmost column in (565), with $3 \mathrm{Sg} \operatorname{Ipfv}$ verbs also shown for comparison. Observe that $/ \mathrm{LH} /$-melodic verbs retain their lexical tone pattern in the subordinated imperfective but not in the 3Sg imperfective (565b). Likewise, /H/-melodic stems fail to show an $\{\mathrm{HL}\}$ overlay (565a).

$$
\begin{array}{llll}
\text { verb } & \text { gloss } & \text { 3Sg Ipfv } & \text { subordinated Ipfv } \tag{565}
\end{array}
$$

a. /H/ melody

| tómbó | 'jump' | tómbò-m-dò-Ø | tómbó-m |
| :--- | :--- | :--- | :--- |
| tódó | 'pay' | tódà-m-dò-Ø | tódá-m |
| ór | 'speak' | órà-m-dò-Ø | órá-m |

b. /LH/ melody

| jě | 'dance (v)' | jé-m-dò-Ø | jě-m |
| :--- | :--- | :--- | :--- |
| wǒ: | 'come' | wâ:-m-dò-Ø | wǎ:-m |
| zž: | 'bring' | zéà-m-dò-Ø | zèá-m |
| zìgìbé | 'shake' | zígìbè-m-dò-Ø | zìgìbé-m |
| gòmbú | 'spread out' | gómbù-m-dò-Ø | gòmbú-m |
| gò-ndú | 'take out' | gó-ndò-m-dò-Ø | gò-ndó-m |
| gòròdí | 'snore' | góròdà-m-dò-Ø | gòròdá-m |

c. irregular

| yǎy/o- | 'go' | ô-m-dò-Ø | ó-m |
| :--- | :--- | :--- | :--- |
| zǎy/zo- | 'convey' | zô-m-dò-Ø | zó-m |

The construction can also occur with stative verbs (A-stem), followed by -m as subordinator. Examples are in the rightmost column of (566), shown alongside the stative construction including existential particle yé (§11.2.2.1).
verb gloss stative subordinated Ipfv
a. /H/ melody
ób-í: 'sit' yé L̀̀bà-Ø óbá-m
tónd-í: 'bend over' yé ${ }^{\text {L tòndà- } \varnothing ~ t o ́ n d a ́-m ~}$
b. /LH/ melody
bě 'lie down' yé Lbẹà-Ø beá-m
This imperfective subordinator is regular in combination with a following time-of-day verb (e.g. 'spend the day' or 'spend the night', in the sense 'do all day' or 'do all night').
(567)
a. [jé
jě-m]
${ }^{\mathrm{L}} \mathrm{n}$-à:
[dance(n) dance-Ipfv] spend.night.Pfv-3PISbj
'They danced all night.'
b. [nùná: nùnú-m] ${ }^{\text {Lnàà-m }}$
[song sing-Ipfv] spend.night.Pfv-1SgSbj
'I spent the night singing.'
c. [tól tó:-m] ${ }^{\mathrm{L}} \mathrm{d} \mathrm{c}_{\mathrm{r}} \mathrm{r}^{\mathrm{n}} \mathrm{E}-\mathrm{y}^{\mathrm{n}}$
[pounding(n) pound-Ipfv] spend.day.Pfv-1PISbj
'We pounded (grain in mortars) all day.'
d. bè̀:-mé-m dèrnè-ḿn dè
tend-Caus-Ipfv spend.day.Pfv- $1 \mathrm{SgSbj} \quad$ if
'(if) I tend herds all day.' (2015-03 @ 00:35)

### 15.2.1.3 'Since ...' clauses (perfective relatives with kárnà)

'Since ...' clauses are expressed as (usually headless) perfective adverbial relative clauses, with 'time' as implied head NP (568a). Even 'since X' with a nominal X is expressed with this construction, using the verb gǒ 'exit (v), leave' (568b).
a. [[ìgó mí wò: kárnà nè]
[[here 1 Sg come Pfv.Ppl] Loc]
[zá jà-lú-m]
[meal eat.meal-PfvNeg-1 1 SgSbj ]
'Since (the time when) I came here, I haven't eaten.'
b. [[yéngì gò kárà̀] nغ̀]
[[yesterday exit(v) Pfv.Ppl] Loc]
[ínjé dé-lú-m]
[water bathe-PfvNeg-1SgSbj]
'I haven't bathed since yesterday.'
15.2.1.4 kàn-dí- ‘did not do’ after $\{\mathrm{HL}\}$-overlaid perfective negative

By itself kàn-dí- is the perfective negative of kán 'do'. It also occurs in a construction with a preceding verb with perfective negative -1 after an $\{\mathrm{HL}\}$-overlaid stem. kàn-dí- takes pronominal-subject suffixes but the first verb does not. The $\{\mathrm{HL}\}$ overlay is associated with durative recurrence of an event type over time (indicated in interlinears by ".Dur"). The construction expresses habitual negation.
a. ${ }^{H L}$ wâ:-1
kàn-dí-Ø
come.Dur-PfvNeg do-PfvNeg-3SgSbj
'He/She/It regularly doesn't come (fails to come).'
b. HL wâ:-1 kàn-dú-w ${ }^{\text {n }}$
come.Dur-PfvNeg do-PfvNeg-2SgSbj
'You-Sg regularly don't come.'
c. ${ }^{H L}$ wâ:-1 kàn-dá
come.Dur-PfvNeg do-PfvNeg.3PlSbj
'They regularly don't come.'

See also ${ }^{\mathrm{HL}}$ dôâ-1 kàn-dí-Ø and ${ }^{\mathrm{HL}}$ lábà-l kàn-dí-Ø in (679) in the dictated text 2012-03.
For other constructions where a "durative" $\{\mathrm{HL}\}$ overlay on a perfective verb indicates recurrence or prolongation, see $\S 15.3$ and $\S 10.2 .1 .9$.

### 15.2.2 Adverbial clauses expressing a chronological sequence

### 15.2.2.1 Chains including mò:nd-í: 'assemble' ('do together')

Some other Dogon languages such as Jamsay combine the 'assemble [intr], come together' verb with the other verb as a direct chain. This is not the case in TB, where mediopassive mò:nd-í: 'gather together, assemble' occurs in loose chains with gín (past) or né (nonpast). As construed in TU, the gathering together is an event that precedes the other event or activity.

```
a. nù-mbź
[mò:nd-ì:
gín]
person-AnPl [assemble-MP Ant.Past.SS]
úló óndú-m }\mp@subsup{}{\textrm{S}}{\textrm{L}
house build-Ipfv have-3PISbj
'The people got together and are building a house.'
```

b. nù-mbó [mò:nd-ì: nદ́]
person-AnPl [assemble-MP Ant.NonP.SS]
úló óndú-m-d-è
house build-Ipfv-Ipfv-3PISbj
'The people will get together and build a house.'

The following sections discuss the major chaining constructions involving sequenced events.

### 15.2.2.2 Clauses with gín 'after’ (same subject, anterior, past time)

gín 'after, when' indicates a chronological sequence vis-a-vis the following clause, though sometimes the two are tightly sequenced co-events. The entire sequence has been completed. gín occurs in same-subject ("SS") sequences, though there are occasional textual examples with different subjects (e.g. 2022-03 @ 00:26). Translations can be of the type 'having come, they ate' or more freely 'they came and (then) ate'. gín is related to the 'say' verb (\$11.3.1). Taken somewhat literally, the construction could be glossed literally as "saying (recognizing) that S1, (then) S2."

The verb in the clause with gín is the bare stem, without aspect-negation or pronominalsubject suffixes. Two or more such gín clauses may occur together, followed by a full main clause whose verb includes regular conjugation. Nonpronominal subjects, objects, and other complements shared by the gín clause and the final main clause occur once, before the gín verb. If the verb of the main clause has no additional complements of its own, it may be tightly phrased prosodically with the gín clause, which allows it to take defocalized simple perfective form (571a).

Before gín, an /LH/-melodic verb spreads its L-tone to the end of the stem (§3.6.4.2), while $/ \mathrm{H} /$-melodic verbs remain high-toned. Inflectional morphemes that behave like chained auxiliary verbs may intervene between the primary verb and the subordinator. This is the case with recent perfect dè in (571e). In addition, corresponding to L-toned perfective-1b -tì-, there is an H-toned variant tí that behaves like an auxiliary verb (cf. tí 'send'), and this can occur between the main verb and gín (571f).

c. ámádù [sùngó ǹ $]$ bàdà gín] púllútì-Ø

Amadou [rope Def] pull Ant.Past.SS] snap-Pfv1b-3SgSbj
'Amadou pulled the rope and snapped it.'
d. [zòbò gín] [yé ${ }^{\text {Lnù-y] }}$
[run Ant.Past.SS] [there.Def enter.Pfv-3SgSbj]
'He/She ran in.' (i.e. ran and entered)

```
e. [zá 
```

gín]
Ant.Past.SS]
${ }^{\text {L }}$ ya-dà:
go.Pfv-3PlSbj
'They ate and (then) went.'

```
f. zá zè: tí gín, yǎy-yày-Ø meal bring Pfv1b Ant.Past.SS, go-Pfv1a-3SgSbj ' \(\mathrm{He} /\) She brought the meal and then went.'
```

There are dozens of examples of gín in the texts. Just the excerpt (572) has three consecutive gín clauses, followed by a single clause with a fully inflected verb ('went').

```
(572) [[zégé gà] kán gín]
    [[fight(n) Top] be.done Ant.Past.SS]
    [[gònč: á-gá] bà: gín],
    [[gear.InanPl 3Refl-Poss] gather Ant.Past.SS]
    [cìnè-gómò z\varepsiloń-d\varepsiloǹ gín]
    [snot bring Ant.Past.SS]
    [kú ní:] Lyày-Ø
    [Dem.InanSg Inst] go.Pfv-3SgSbj
    'There was a quarrel. He (=hare) collected his baggage and went. He brought the snot
    and then went.'(2015-02 @ 03:54-03:56)
```

The first gín clause in (572), which refers to a quarrel between hare and a snake, also illustrates flexibility in the same-subject requirement. There is some ambiguity as to whether kán here is passive '(quarrel) was done' (i.e. broke out) or active 'did', which could be construed as having 'hare' as subject.
gín can be added to a perfective-1b verb, but in this case the perfective-1b suffix -tì- takes independent form tí. See §15.2.3 for this construction, which can often be translated as a 'before ...' clause.

It is possible to combine gín with a negative verb. This requires addition of kán 'do' between the open-ended perfective negative verb and gín. The open-ended verb has perfective negative but not pronominal-subject suffixation, and in some cases has durative $\{\mathrm{HL}\}$ overlay. See ${ }^{\mathrm{HL}}$ dôâ-l kán gín ‘having not (yet) arrived’ in 2015-01 @ 02:42 and ${ }^{\mathrm{HL}}$ yâ-l kán gín 2015-01 @ 05:41, and bàngìrǎ-l kán gín 2015-02 @ 00:39.

For ${ }^{\mathrm{L}} \mathrm{jìn}$ dé see §16.1.2.

### 15.2.2.3 Clauses with né (same subject, anterior, future time)

The subordinated clause with né has the same subject as the following clause. The two clauses are chronologically sequenced, as is the case with gín clauses. However, with né the time frame for the entire sequence is future or generalized present, i.e. not perfective (completed).

The verb in the first clause may be marked for recent perfect, especially in the sense 'have finished VP-ing' (573a), or it may be unmarked for aspect. If it is unmarked for aspect,
/H/-melodic verbs remain H-toned (573b) while /LH/-melodic verbs undergo L-Tone Spreading (§3.6.4.2) to become all-L-toned (573c). The following main clause may be indicative (573a,c) or a deontic modal such as an imperative (573b).
(573)
$\begin{array}{llll}\text { a. } & {[\text { zá }} & \text { jé } & \text { dè } \\ & \text { [meal } & \text { eat } & \operatorname{RecPrf} \\ & \text { 'I will finish eating and (then }\end{array}$
n ́]
ô-m-nù-m
[meal eat RecPrf Ant.NonP.SS]
go-Ipfv-1SgSbj
'I will finish eating and (then) go.'
b. $\left[\begin{array}{ll}n \varepsilon ́ ~ n \varepsilon ́] ~ y a ̀-d a ́ ~\end{array}\right.$
[eat Ant.NonP.SS] go-Imprt
'Eat and go!'
c. $\varepsilon^{\mathrm{y}}{ }^{\mathrm{n}} \quad$ [wò: n ]
tomorrow [come Ant.NonP.SS]
[zá jé né]
[meal eat Ant.NonP.SS]
ô-m-dò-Ø
go-Ipfv-Ipfv-3SgSbj
'Tomorrow he/she will come and eat and (then) go (away).

When the second clause consists of just a verb, if it is phrased prosodically with the first clause without a pause, it may take defocalized form (simple perfective or a tone-dropped imperfective), as though preceded by other more focal constituents within its clause. (574a) and (574b) differ only as to whether the final imperfective verb is defocalized (tone-dropped). (574a) points to a prosodic reset, while (574b) must be pronounced as an uninterrupted prosodic phrase. In practice, the distinction is subtle and transcriptions from texts should not be relied on.


The only known irregularity is the combination for zž: 'bring', zé-dè né, which has a special enlargement of the stem and ends with L-toned nè. The latter is clearly a same-subject subordinator in (575).
(575)


If the first clause is negative, it is expressed by an unconjugated negative verb followed by kán 'do' and né (576).
(576)

|  | nă-1 |  | kán | nह́] |
| :---: | :---: | :---: | :---: | :---: |
| neal | eat.meal-PerfNeg |  | do | Ant.NonP.SS |
| àsègé | [úló | bàrì | bè | béá-ygò:- |
| animal | [house | Loc.Dit | rem | get-IpfvNeg-3SgSbj |
| 'If they aren't eating meals, animals cannot stay (for long) at the house.(2015-06@ 02:17) |  |  |  |  |

If the second clause is negative, the scope of its negation does not extend to the first clause (577).
$\left.\begin{array}{llll}\text { a. } & {[\text { bàmàḱ́ }} & \text { yày } & \text { né }\end{array}\right] \quad$ wá:-yù-m
b. [yày
wá:-lì
[go Ant.NonP.SS] come-Proh
'Having gone, don't come back!'

### 15.2.2.4 'Worked until got tired' = 'worked for a very long time'

As in other Dogon languages, an emphatic way to emphasize the duration of an activity is to add a loosely chained final verb '(until) get tired'. Actual fatigue may or may not have occurred. Often the nonfinal verb is followed by same-subject subordinator gín, which suggests preceding activity.
a. [òdùbǎ:
yày gín]
[road go Ant.Past.SS] get.tired-Pfv1a-3PlSbj
áy-yà-dà:
'They walked (and walked) until they got tired.'
b. [zá né gín] áy-yà-y ${ }^{n}$
[meal eat Ant.Past.SS] get.tired-Pfv1a-1PISbj
'We ate (and ate) until we got tired.' (=until we were stuffed)

It is also possible to use a chaining suffix -EE instead of gín, implying that the activity and becoming weary overlap in time. See (559b) in §15.1.4.3.

### 15.2.2.5 Clauses with kár"à (different subject, anterior, past)

In this construction, the two events are chronologically sequenced (and normally have some relationship within the narrated situation). The entire sequence is completed (perfective), as
with gín. However, the two clauses now have different subjects. kárnà, the perfective participle of of kán 'do' which also occurs in perfective relative clauses (§14.4.1), is the crucial linking element. As with perfective relatives, an /LH/-melodic verb before kár ${ }^{n}$ à undergoes L-Tone Spreading (§3.6.4.2). In (579a-b), the verb of the first clause is marked for recent perfect. Since the first clause is syntactically a nonsubject relative clause, a pronominal subject is positioned between the main verb and the recent perfect morpheme.

b. [zá jé bú dè kárà a $\left[m i ́ ~{ }^{\text {Ly }}\right.$ yày-m̀ $]$ [meal eat 3Pl RecPrf Pfv.Ppl] [1Sg go.Pfv-1SgSbj] 'When they had finished eating, I went.'
c. [ùdù-gó ńné pílé kárnà $] \quad\left[1\right.$ í ${ }^{\mathrm{L}}$ nù- $\left.\mathrm{y}^{\mathrm{n}}\right]$ [sun-InanSg 3 Sg sun.set $\operatorname{Pfv.Ppl]~[1P1~enter.Pfv-1P1Sbj]~}$
'After the sun had set, we went in.'
d. [ámádù [sùngó ǹ] ńné bàdà kárnà ]
[Amadou [rope Def] 3Sg pull Pfv.Ppl]
[[nǎ: ǹ] yǎy-yày-Ø]
[[cow Def] go-Pfv1a-3SgSbj
'When Amadou had pulled the cord, the cow got away.'
e. [zá ǹ] ńné zè: kárnà, yé ${ }^{\text {n }}$ nè-m
[meal Def] 3Sg bring Pfv.Ppl, there.Def eat.meal.Pfv-1SgSbj
'After he brought the meal, I ate there.'

This construction undoubtedly originated as a headless perfective relative that had a covert head with a sense like 'time' or 'situation'. This could even be defended as a synchronic analysis. The imperfective counterpart is -ygó ( $\$ 15.2 .2 .7$ below).

In narrative, this construction can be used with 3Refl á as the subject proclitic, instead of 3 Sg ńné or 3 Pl bú. In this case á is an indexing or tracking device, as a specific referent is followed through several clauses. This topic-tracking function is distinct from the other functions of á, namely reflexive and logophoric. There are many textual examples including (580a-b). Only the bolded words are relevant.

| a. | $[$ á | síjjì | sínj-íá-m] | yày | á | témbí |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | kárnà

'He went and found them stacking themselves up, ...'(2015-01@ 05:11)
b. [gòně: á-gá] á bà: kárnà
[gear.InanPl 3Refl-Poss] 3Refl gather Pfv.Ppl
'He collected his baggage, ...' (2015-01 @ 01:10)
c. [ìn ${ }^{\mathrm{L}}$ zànjy̌̌: ǹ̀, [dùgó á bè kárnà]
[goat alpha.male Def], [below 3Refl stay Pfv.Ppl]
'The alpha billygoat, it was at the bottom.' (2015-01 @ 02:13)

In (581), a switch from 3Sg ńné to 3Refl á signals a reversion from the referent ('cow') of a minor interlude back to the main protagonist ('hare').
(581) [bàd-é: ńné nà] wàndá gò-lí-Ø gà, [pull-Chain.SS 3Ssg said] not.yet exit(v)-PfvNeg-3SgSbj Emph, [gǒ-1 ńné kárà a [á dènd-ì: kárnà] [exit-PfvNeg 3Sg Pfv.Ppl] [3Refl approach-MP Pfv.Ppl] 'Pull as it might, it (=cow) could not get (its horns) out. He (=hare) came closer.' (2015-01 @ 04:56)

A similar switch occurs in 2015-01 @ 06:04 to 06:06.
In (582), á as subject (coindexed with 'hare') and ńné-gì as object occur in the same kár"à clause.

| zòmó | ńné-gì | á | bòn | kán'à |
| :--- | :--- | :--- | :--- | :--- |
| hare | 3Sg-Acc | 3Refl | call | Pfv.Ppl |
| 'Hare called out to him.' | $(2015-02 @$ | 02:25) |  |  |

### 15.2.2.6 Clauses with nè (different subject, anterior, future time)

In the most common construction with clause-final L-toned nè, the verb has $\{\mathrm{H}\}$ overlay. The subjects of the two clauses are not coindexed. The event denoted by the nè clause must precede that denoted by the following main clause. The overall time frame is in the future or in generalized nonpast time. The subject is obligatorily represented by a proclitic pronoun, even when it resumes a nonpronominal subject (583a).
a. [ámádù ńné $\left.{ }^{H} w o ́: ~ n e ̀\right] ~\left[z a ́ ~{ }^{L}\right.$ nà-m-nè-y" $]$
[A 3Sg come Ant.NonP.DS] [meal consume-Ipfv-Ipfv-1PISbj] 'After Amadou comes, we will eat.'
b. [bírá: bú bìrè ${ }^{\mathrm{H}} \mathrm{d} \varepsilon \quad \mathrm{n}$ è] 0 ô-m-nè-y $\mathrm{y}^{\mathrm{n}}$
[work(n) 3Pl work(v) RecPrf Ant.NonP.DS] go-Ipfv-Ipfv-1PISbj
'After they finish doing the work, we'll go.'

```
c. [bírá: mí Hbíré nè]
    [work(n) 1Sg work(v) Ant.NonP.DS
    ùlé: joâ-m-d-\varepsiloǹ
    children eat-Ipfv-Ipfv-3PlSbj
    'When I have done work (and been paid), the children will eat.'
```

Additional examples showing the form are these: ńné ${ }^{H}$ dógó nè 'after he/she leaves (abandons)'
 Hyí nè ‘after he/she sees’ (< yǐ), zá ńné Hné nè ‘after he/she eats (a meal)’ (<né), bú:dù mí 'bé: nè 'after I get some money' (<bě:).

When nè is added to a subject-focus construction, the $\{\mathrm{H}\}$ overlay and the subject pronominal are omitted (584). The verb takes its usual L-toned subject-focus form, which for perfective-2 is -s-ò: (§13.1.1.4.1).

| né | á-gì | ${ }^{\text {Lày-mì-s-ò: }}$ |  |
| :--- | :--- | :--- | :--- |
| person | Logo-Acc | become.tired-Caus-Pfv2-SbjFoc |  |$\quad$ nè $]$ Ant.NonP.DS $]$

'(Everybody) says (thinks) that someone (else) [focus] has made them suffer, we are in that (situation).' (2022-03 @ 00:47)

It is also possible to add nè to a morphologically perfective verb, with its regular tones.

| [[Lyá | ǹ] | bènè] |  | ùlé: |  | dògó-tì | nè |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [[[woman | Def] | chez] |  | childre |  | leave-Pfv1b |  | nt.NonP.DS |
| [ú gày] | [[há:jì |  | ú-wó |  | nè] | ô-m-nù-w ${ }^{\text {n }}$ |  |  |
| [2Sg Top] | [ [need( |  | 2 Sg - | Poss] | Loc] | go-Ipfv-Ip | gS |  |

'(You) having left the children with the woman, you for your part (will) go on your own business.' (2022-04@ 00:48)

The assistant did not accept nè in past time contexts ('after he/she finished doing the work, we went'). Instead, nè was replaced by a clause with participial kárnà, as in (586).
(586) yéngì [bírá: ńné bìré dè kárnà]
yesterday [work(n) $3 \mathrm{Sg} \quad \operatorname{work}(\mathrm{v}) \quad$ RecPrf Pfv.Ppl]
[zá $\quad{ }^{\text {L }}{ }^{\text {jè }}-\mathrm{y}^{\mathrm{n}}$ ]
[meal consume.Pfv-1P1Sbj]
'Yesterday when he/she finished doing the work, we ate.'

### 15.2.2.7 Clauses with -ngó (different-subject, imperfective)

These are temporal clauses that make use of -ygó, the inanimate singular imperfective participial suffix. There is a covert temporal noun ('time', 'day', or the like) functioning as head noun (§15.2.1.1). Two versions are described below.

### 15.2.2.7.1 With simple -ygó

Here the verb of the temporal clause is a simple imperfective participle with -ngó. The covert head is 'time' or the like. Textual examples are in (587).
a. ńné ó-ngó,

3Sg go-Ipfv.Ppl.InanSg,
[ándá ${ }^{\text {L nàmà-mbò pú } \rightarrow \text { ] mò:nd-ì: gín], ... }}$
[the.bush meat-AnPl all] assemble-MP Ant.Past.SS], ...
'While he (=hare) was going, all the wild animals of the bush got together, (...)'
(2015-01 @ 05:06)
b. [[gándá ǹ ] nè] [zò: né] gó-ndó-ngó [[place Def] Loc] [look.for Ant.NonP.SS] exit-Caus-Ipfv.Ppl.InanSg 'as he went out looking (for it) in the place, ...' (2015-01 @ 05:44)

### 15.2.2.7.2 With -ygó ní(:)

In this construction, -ngó is followed by ní(:), which is tentatively identified here as instrumental (or comitative) ní: (§8.1.2). In future time contexts, this construction competes with the nè construction described above. Unlike nè, this construction is viable in both future (588a) and past (588b) time frames.

| a. | [bírá: | bú | bírá-ygó | ní:] |
| :--- | :--- | :--- | :--- | :--- |
| [work(n) | 3Pl | work(v)-Ipfv.Ppl.InanSg | Inst] $]$ | on-nc̀-y ${ }^{\text {n }}$ |
| go-Ipfv-Ipfv-1PlSbj |  |  |  |  |
| 'When they have work, we (will) go.' |  |  |  |  |

b. [bírá: bú bírá-ygó ní:] yǎy-yà-y ${ }^{n}$ [work(n) 3Pl work(v)-Ipfv.Ppl.InanSg Inst] go-Pfv1a-1PlSbj 'When they worked, we went.'
c. [mí úló nù-lé wá:-ngó ní:]
[1Sg house enter-Purp come-Ipfv.Ppl.InanSg Inst]
[kángá píngílá]
[door open-Tr.Imprt]
'When I come to enter the house, open-2Sg the door!'

```
d. [tǎ: wò: gín] ńné jérá-ngó ní: [hyena come Ant.Past.SS] 3Sg look.at-Ipfv.Ppl.InanSg Inst 'When hyena came and looked, (he saw ...)' (2015-01 @ 01:20)
```


### 15.2.3 'Before ...' clauses (tí gín, tì né)

'Before...' clauses are loosely chained clauses using tí as a kind of perfective auxiliary verb, cf. perfective-1b suffix -tì- and distantly related verb tí 'send', specifying that the event in question was completed before the following event. The forms are $\mathrm{t}^{\mathrm{L}} \mathrm{n}$ ह́ for nonpast time frames (589a) and tí gín for past time frames (589b). These constructions are possible when the clauses have the same subject.

b. [bírá: bìré tí gín]
[work(n) work(v) Pfv Ant.Past.SS]
[zá ${ }^{\text {L }}$ nè- y n]
[meal eat.Pfv-1PlSbj]
'We worked before we ate.'

Textual examples of tí gín are 2015-01 @ 04:00, 2015-02@ 01:02, and 2015-05@ 02:35 (two) \& 02:43.

When the subjects are different, the later event is expressed as an imperfective adverbial clause. For example, in (590a-b) the first clause is literally something like "with my father being about to come."

```
a. [[mí Há] wá:-ygó ní,
    [[1Sg father] come-Ipfv.Ppl.InanSg Inst,
    [bírá: bìré-tì-m]
    [work(n) work(v)-Pfv1b-1SgSbj]
    'I worked (and finished) before my father came.'
```

    b. [[mí Há] wá:-ngó ní,
    [[1Sg father] come-Ipfv.Ppl.InanSg Inst,
    [bírá: bírà-m-nù-m]
    [work(n) work(v)-Ipfv-Ipfv-1SgSbj]
    'I will work before my father comes.'
    
### 15.3 Iterative constructions including verbs

### 15.3.1 Paired $\{\ldots \mathrm{HL}\}$-overlaid verbs for back-and-forth durativity

In this construction, two verbs that combine to express an event and its reversal are juxtaposed, both with overlaid $\{\mathrm{HL}\}$ tone on the stem or (for mediopassives) on the mediopassive suffix. The overlay is indicated by ${ }^{\mathrm{HL}}$ or ${ }^{\cdots \mathrm{HL}}$ superscript. Neither verb has inflectional or pronominalsubject suffixes. This is a stylistically marked indicator of continuous repetition of a back-andforth event type in narrative contexts where the protagonist has already been established. (591ab) are the two textual examples, and (591c-e) were produced in follow-up elicitation. ${ }^{H L} y a ̂-1$ 'did not see' includes the perfective negative suffix and has negative force (if the textual passage has been correctly understood). However, 'come' (591b) has an -1 extension not expressing negation, since the point in that passage appears to be that the going-coming cycle is repeated. 'Go' (591b) along with 'enter' and 'exit(v)' (591d) have a Cvy shape adapted from the 3Sg simple perfective. 'Look at' (591a), 'ascend' (591c), and 'get up' (591e) show the vocalism of the $\mathrm{A} / \mathrm{X}$-stem, as in the imperative.
now Top, look.at-MP.Dur see-PfvNeg.Dur do Ant.Past.SS, ...
"Now, having looked continuously without seeing it, ...' (2015-01 @ 05:41)
 [go.Dur come.Dur] [go.Dur come.Dur] [go.Dur come.Dur] '(constant) going and coming, going and coming, going and coming.' (2022-03 @ 00:43)
c. $\begin{array}{llll} & { }^{\mathrm{HL}} \text { súgò } & \left.{ }^{\mathrm{HL}} \text { ílà }\right] & { }^{\mathrm{HL}} \text { súgò }\end{array}{ }^{\mathrm{HL}}$ ílà $]$ [descend.Dur ascend.Dur] [descend.Dur ascend.Dur] 'going down and up, down and up'
d. [ ${ }^{\mathrm{HL}}$ nûy ${ }^{\mathrm{HL}}$ gôy] $\quad$ [ ${ }^{\mathrm{HL}}$ nûy ${ }^{\mathrm{HL}}$ gôy]
[enter.Dur exit(v).Dur] [enter.Dur exit(v).Dur] 'going in and out, in and out'
e. [ ${ }^{\mathrm{HL}}$ bê: ${ }^{\text {HL}}$ ínjil̀à $] \quad$ [ ${ }^{\mathrm{HL}}$ bê: ${ }^{\text {HL}}$ ínjil̀à $]$
[lie.down.Dur get.up.Dur] [lie.down.Dur get.up.Dur] 'lying down and getting up, lying down and getting up'

Only a small number of these parallelistic combinations could be elicited, and the order of verbs within each is fixed. The assistant denied that e.g. 'eat and drink', for example, can be plugged into this construction.

For other constructions where $\{\mathrm{HL}\}$ overlay on a perfective or bare verb is associated with durative recurrence, see $\S 10.2 .1 .9$ and $\S 15.2 .1 .4$.

### 15.3.2 Repeated pronominal subject plus bare imperfective

In (592), the verb 'chop' is introduced in a regular progressive clause. This is followed by a single prosodic phrase containing iterations of a preverbal pronominal subject and an $\{\mathrm{HL}\}$-overlaid verb with Ipfv -m but no pronominal-subject suffix. This is a variation on the (noniterative) imperfective subordinated clause described in §15.2.1.2.1.
(592) [ògó ${ }^{\text {L }}$ mìdù-gò] déngé-m ${ }^{\mathrm{L}} \mathrm{S}$ 人àè:,
[Hogon karité-InanSg] chop-Ipfv have-3PISbj,
[[ว̀gó ${ }^{\mathrm{L}}$ mìdùgò $]$ bú ${ }^{\mathrm{HL}}$ déngè- m ] [bú ${ }^{\mathrm{HL}}$ déngè-m] [bú ${ }^{\mathrm{HL}}$ déngè̀-m],
[[Hogon karité.tree] 3PISbj cut-Ipfv] (iterations)
'They were chopping (down) the Hogon's karité tree. They were chopping and chopping and chopping the Hogon's karité tree.' (2015-02 @ 01:58)

### 15.4 Spatial and manner adverbials

### 15.4.1 Spatial adverbial clause ('where ...')

Spatial adverbial clauses are relative clauses with gándá 'place, country' as head, with \{L\} overlay. Such a clause can function as an argument NP (593a), or it can be part of an adverbial PP (593b).
a. [gàndà ${ }^{\mathrm{L}}$ mí yàgà kárnà ǹ ] wàgá [place 1 Sg fall Pfv.Ppl Def] distant 'The place where I fell is far away.'


### 15.4.2 Manner adverbial clause ('how ...')

dǎy 'manner, way' occurs readily as the head of manner relative clauses.
(594) bírá: dày ${ }^{\mathrm{nL}}$ mí bírá-ggó
work(n) manner 1 Sg work(v)-Ipfv.Ppl.InanSg
'(in) the way that I work'

An alternative correlative-like phrasing is in (595). Here the relative clause 'the work that he/she does' is followed by instrumental postposition ni: and is resumed in the next clause by the very common kú ní:, literally 'with that'.

'The work that he/she does, I work by (=in) that (way).'

### 15.4.3 'From X, until Y' (time points)

### 15.4.3.1 'From X ' (gò gín) and 'until Y' (wò: dòy, yà dòy)

To express a time interval bookended by specific points X and Y , whether these points are directly named as time expressions (e.g. 'yesterday') or defined by specific events ('they were born'), the starting point is phrased as [X gò gín], literally "having exited X ," or a similar subordinated clause based on gǒ 'exit (v)' or tó: 'begin'. The end point is often phrased as either [Y wò: dòy], which is preferred with reference to past time intervals, or [Y yà dòy], which is preferred with reference to future or generalized time intervals. These phrases are based on wǒ: 'come', yǎy 'go' (with the final y irregularly clipped), and dǒ 'arrive' (specifically, a truncated version of perfective-1a dǒy-yà-). The construction is flexible and verbs specific to the events described can be substituted for 'exit (v)' and 'arrive', e.g. 'descend' in (596c).


| b. [nân | tò:-ḿ | dè] | [éy ${ }^{\text {n }}$ |  | dòy] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [now | begin.Pfv-1 SgSbj | if] | [tomorrow | go | arrive] |
| bírá: | bírà-m-nù-m |  |  |  |  |
| work(n.) | work-Ipfv-Ipfv-1 | SgSbj |  |  |  |
| 'I will wo | ork starting now unti | il tomor | row.' |  |  |
| c. [ódógón | gò gín] |  | [dèndò:dú | wò: | súgè--才] |
| [morning | exit(v) Ant.Pa | st.SS] | [evening | come | descend.Pfv-3SgSbj] |
| bírá: | bírá-m | ${ }^{\text {L }}$ sò-y ${ }^{\text {n }}$ |  |  |  |
| work(n) | work(v)-Ipfv | have- | PlSbj |  |  |
| From mo | orning to evening, w | we are w | orking.' |  |  |

### 15.4.3.2 'All the way since/until X' (bà $\rightarrow$ )

The particle bà $\rightarrow$ is subject to tonational prolongation. X is a nominal or adverb. X can denote a starting point, in which case the sense is 'ever since X ', or an endpoint, in which case the sense is '(all the way) until X '.
(597) a. yéngì bà $\rightarrow$ '(ever) since yesterday’
b. yy $^{\text {n bà }} \rightarrow \quad$ '(all the way) until tomorrow'

## 16 Conditional constructions

In classic conditionals, the eventuality denoted by the antecedent ('if' clause) is a sufficient condition for the eventuality denoted by the consequent. Typically the antecedent takes place before the consequent, and the relationship is more or less causal. However, antecedent clauses may drift from (causal) 'if' to a more purely temporal 'when, after'.

### 16.1 Hypothetical conditional with dè 'if/when'

### 16.1.1 Simple dè 'if' after conjugated verb

In this construction, the antecedent eventuality is possible but not necessarily presupposed. If it is presupposed the free translation has 'when'; if it is genuinely contingent, the free translation has 'if'. Both antecedent and consequent are normally in the future, or else denote recurrent events that may overlap the present.

When the antecedent denotes a single temporally bounded event, it is expressed in one of the perfective inflections (positive or negative). The verb is perfective-1b in (598a), perfective1a in (598b), simple perfective in (598c), and perfective negative in (598d). The consequent is normally imperfective (598a-c), but can also be an imperative (598d) or hortative. The 'if' morpheme is clause-final dè subject to raising to dé under some conditions.

```
a. ú púygó-tì-Ø dè,
    2Sg hit-Pfv1b-3SgSbj if,
    mí ńné lál-c̀:-m-dò
    1Sg 3Sg chase.away-MP-Ipfv-Ipfv
    'If he/she hits you-Sg, I'll send him/her away.'
```

b. ú bàmàḱ́ yǎy-yà-w $\mathrm{w}^{\mathrm{n}}$ dè, ú yá-yù-m
2Sg B go-Pfv1a-2SgSbj if, 2Sg see-IpfvNeg-1 1 SgSbj
'If you-Sg go to Bamako, I won't see you.'
c. દ́bé ${ }^{\text {L }}$ yày- wn $^{\mathrm{n}}$ dè, bòr-íyé ${ }^{\mathrm{L} z e ̀ ̀ a ̀ ~}$
market go.Pfv-2SgSbj if, sack bring.Imprt 'If you-Sg go to the market, bring (back) a sack (of millet)!.'
d. ú
sèll-èà-lú-w ${ }^{\text {n }}$
dè,
2 Sg be.healthy-MP-PfvNeg-2SgSbj if,
ú zóngò-m-nù-m
2Sg treat-Ipfv-1SgSbj
'If you-Sg get sick, I will treat you.'
["not be healthy" = 'get sick']

'If it rains, I won't go to the bush (=the fields).'

Simple perfective verbs have special tonal and in some cases truncated segmental forms (loss of 3 Sg final y ). Simple perfective stems are L-toned (defocalized), but a final $1 \mathrm{st} / 2 \mathrm{nd}$ person pronominal suffix is raised to H-tone before dè, as in ${ }^{\mathrm{L}}$ yày- $\mathrm{w}^{\mathrm{n}}$ dè (598c). 3 Sg and 3 Pl simple perfectives remain L-toned but raise the following particle to dé, and the 3 Sg does not front its final vowel (i.e. there is no $\mathrm{E} / \mathrm{I}$-stem). See (297) in $\S 10.2 .1 .1$ for sample paradigms.
dè becomes H-toned dé before là 'also, too'; see dé là in 2015-03@ 01:42 \& 01:46; 2015$06 @$ 00:58.

### 16.1.2 ${ }^{\text {L }}$ jìn-Ø dé plus ${ }^{\text {HL }}$ bû-

This construction is attested in a text. ${ }^{\text {L }} \mathrm{jìn}$ - is the simple perfective of jinn 'say' (§11.3.1), here in the abstract sense 'do like this'. There is some similarity in function with the much more common same-subject past anterior subordinator gín (§15.2.2.2), which is probably etymologically related. ${ }^{\text {Lìnn}}$ - $Ø$ dé follows a verb denoting a manner of action. This verb is iterated for prolongation and/or repetition. It is followed by a falling-toned form ${ }^{\mathrm{HL}}$ bû- of the locational-existential quasi-verb ${ }^{\text {L }}$ bù-, an instance of the durative $\{\mathrm{HL}\}$ overlay associated with multiple iterations extended over time (§10.2.1.9). For the paradigm of ${ }^{\text {HL }}$ bû- see $\S 11.2 .2 .2$. The practical function of ${ }^{H L}$ bû- here is to indicate that the prolonged action is interrupted periodically (i.e. the action is intermittent).

| pèrèkéré | dágám-dágám | w | ${ }^{\text {Ljìn-Ø }}$ dé] | ${ }^{\text {HL }}$ bû:-Ø |
| :---: | :---: | :---: | :---: | :---: |
| [dove | Rdp-a.little | Rdp-paw.lightly | say.Pfv-3SgSbj if] | be.Dur-3SgSbj |

'The dove was lightly scratching (the ground) off and on with its feet.'
(2015-01@05:47)

### 16.2 Alternative 'if' particles

### 16.2.1 'Even if ...' (dùgò)

Elsewhere dùgò is the purposive-causal postposition ('for' or 'because of'), see §8.3. It can also occur in purposive clauses (§17.4.3). In the 'even if' construction, dùgò follows the antecedent, which takes the form of a complete main clause. Most elicited examples of 'even if' were of this type.

| a. | [àrná | mìnnà-lí-Ø] | dùg̀̀, |
| :--- | :--- | :--- | :--- |$\quad$| tôâ-m-nù-m |
| :--- |
| $[$ rain(n) |
| rain.fall-PfvNeg-3SgSbj] |
| 'Even if it hasn't rained, I'll plant (seeds).' |

b. [ú wà:-lú-w ${ }^{n}$ ] dùgò, mí ándá ô-m-nù-m
[2Sg come-PfvNeg-2SgSbj] Purp, 1 Sg the.bush go-Ipfv-Ipfv-1 SgSbj 'Even if you-Sg don't come, I'm going to the bush (=the fields).'

### 16.2.2 'As soon as ...' (tán)

tán 'only' (< Fulfulde) can replace the usual dè 'if' to indicate that the consequent event will take place immediately on the completion of the antecedent event.
(601)

'As soon as we arrive there, we will eat.'
b. [àrnà-ínjé yí-tà:ndú] dơ-â:y-Ø tán]
[year Inan-three] arrive-Pfv1a-3SgSbj only]
'as soon as three years have elapsed' (2015-05@ 03:01)
tán is specialized to occur in this construction and is not otherwise attested. The simple 'only' particle in TU, as in 'only I (will go)', is sǎy (§19.4.1).

Many languages in the area use an 'only' particle clause-finally in the 'as soon as' construction. Some Bozo languages use their own 'only' particle for this purpose. Other languages have borrowed Fulfulde tan either just in the 'as soon as' construction (several Dogon languages) or as a more general 'only' particle (montane Songhay).

### 16.3 Willy-nilly and disjunctive antecedents ('whether $X$ or $Y$...')

In this construction, the truth of the consequent is unrelated to that of either segment of the complex antecedent. The mutually exclusive antecedent segments are expressed as two main clauses, both ending in the dying-quail effect (§3.7.3) that also occurs with NP conjunctions. This effect is indicated by $\therefore$ and consists of prolongation and final low-pitch target. The two antecedent clauses are often positive and negative versions of the same proposition, except that shared subjects and other constituents are not repeated.

```
a. [àrná mìr
    [rain(n) rain.fall-Pfv2-3SgSbj]
    mìrnà-lí-Ø :
    rain.fall-PfvNeg-3SgSbj
    ô-m-nù-m
    go-Ipfv-Ipfv-1SgSbj
    'Whether it rains or it doesn't rain, I am going.'
```

b. [zǎ: né-sò-m. $\therefore$ ]
[meal eat-Pfv2-1SgSbj]
nà-lú-m. $:$
eat-PfvNeg-1 1 SgSbj
ô-m-nù-m
go-Ipfv-Ipfv-1 SgSbj
'Whether I have eaten (a meal) or I have not eaten, I am going.'

Taking the connection with conjunction literally, this can be parsed as "[it has rained] and [it has not rained], I am going."

The assistant rejected the use of a final 'all' quantifier at the end of the complex antecedent.

### 16.4 Counterfactual conditional

In a counterfactual conditional, the time frame is the past, the antecedent eventuality did not occur, and it is claimed that had that eventuality occurred, the consequent event would also have occurred. The relationship is normally causal. The TU construction also allows dubitative low-probability future antecents ('if it were to happen that ...').

The predicate of the antecedent clause contains the past clitic in any of its combinations, plus dè 'if'. The predicate of the consequent clause is past imperfective. Either clause, or both, may be negative.

$$
\begin{align*}
& \text { a. ôy }{ }^{n} \text { zúgà- } \mathrm{m}=\text { bú-m=bù-m dè, }  \tag{603}\\
& \text { like.that know-Ipfv=Aug }=\text { Past- } 1 \mathrm{Sg} \text { Sbj if, } \\
& \text { wá:-ngò: = bú-m=bù-m } \\
& \text { come-IpfvNeg=Aug=Past- } 1 \mathrm{SgSbj} \\
& \text { 'If I had known (it was) like that, I would not have come' }
\end{align*}
$$

$\begin{array}{lllll}\text { b. mí } & \text { púygó=bì-Ø } & \text { dè, } & \text { ńné } & \text { jâ-m = bù-m } \\ \text { 1Sg } & \text { beat=Past-3SgSbj } & \text { if, } & 3 \text { SgO } & \text { kill-Ipfv=Past-1SgSbj }\end{array}$
'If he had hit me, I would have killed him.'

Textual examples (604a-b) are closely spaced in the same text. (604a) qualifies as counterfactual since the bracelet had just been tried on hare's hand and it did not fit well. This may also be the case in (604b) but it is not explicit in the text that the bracelet was also tried on the neck and didn't fit.

| a. | $[[$ mènd-ìyè | ò-gú $]$ | $[[$ nùmǎ: | á-gá $]$ | nè $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[[b r a c e l e t ~$ | Prox- $\operatorname{InanSg}]$ | $[$ [hand | 3Refl-Poss $]$ | Loc $]$ |

nú=bì-Ø dè] [dàgá=bù-Ø wà $\rightarrow$ dè]
enter $=$ Past-3SgSbj if] [become.good=Past-3SgSbj Quot Emph]
'If this bracelet had gone onto (=fit on) his hand, it would have been nice.'
(2015-02 at 06:31)
b. gó=bì- Ø dè, exit(v)=Past-3SgSbj if, [kwǎ: nغ̀] $\varepsilon$ dù = bì-m=bì-Ø wà [neck Loc] good=Past-Ipfv=Pst-3SgSbj Quot 'If it (bracelet) were to come off (the hand), it would look good on the neck.'

## 17 Complement and purposive clauses

### 17.1 Quotative complements

There are several diagnostics to identify quoted material. Most obviously, the inflected 'say' verb jìní may occur, usually at the end of the quotation in the simple perfective form ${ }^{\text {L }} \mathrm{jin}$ - $\varnothing$ 'he/she said' (605a). More often, an uninflected quotative particle wà occurs, and this particle may be repeated several times in a multi-clause quotation ( $605 \mathrm{~b}-\mathrm{d}$ ). A prolonged variant wa $\rightarrow$ of variable tone is also common after the subject, or in some cases the addressee, of the quoted sentences at the beginning of the quotation ( 605 c ). This quotative subject is often a pronoun, and this replaces subject agreement on the verb. The verb of a quoted indicative sentence therefore marks clause-level inflection (aspect and polarity) but lacks a pronominal-subject suffix. Finally, any referent coindexed with a third-person author of the quotation (whether of speech or of thought) is represented by a logophoric pronoun, corresponding to a 1 Sg or 1 Pl pronoun in the original utterance. Logophorics do not distinguish number; there is no difference between a quoted 1 Sg and a quoted 1 Pl . The logophoric takes the form -m (pseudo- 1 Sg , $\S 18.3 .1)$ suffixed to the verb when it functions as subject of the quoted clause ( $605 \mathrm{a}-\mathrm{b}$ ). Otherwise it takes the form á, a third-person anaphoric pronoun also used in reflexives (§18.3.2), and it occurs in the relevant preverbal position (605d).

A come-Ipfv-Ipfv-LogoSbj
'Amadou ${ }_{x}$ says/said that he ${ }_{x}$ will come.'
a. ámádù

A come-Ipfv-Ipfv-LogoSbj
'Amadou ${ }_{x}$ said he ${ }_{x}$ will come.'
b. ámádù
wâ:-m-nù-m
wà Quot
c. ámádù [ú wá $\rightarrow$ ] [ńné-gì púygó = bù] wà

A [2Sg QuotSbj] [3Sg-Acc hit=Past] Quot
'Amadou ${ }_{x}$ says/said that you-Sg hit himy $/$ her $_{\mathrm{y}}$.'
d. ámádù [ú wá $\rightarrow$ ] [á-gì púygó = bù] wà

A [2Sg QuotSbj] [Logo-Acc hit=Past] Quot
'Amadou ${ }_{x}$ says/said that you-Sg hit him $_{x}$.'

### 17.1.1 Direct versus indirect in quotative complements

The aspect-negation category of an original indicative utterance is preserved in quoted speech. For imperatives and hortatives, some morphological substitutions are made. Other than the quotative particles, there is no 'that' complementizer.

Any first person pronouns in the original utterance are replaced by logophorics in the quotation ('He ${ }_{\mathrm{x}}$ said that he $\mathrm{e}_{\mathrm{x}} \ldots$ '. comes out as "He said Logo ..."). Logophoricity is expressed by a combination of the logophoric pronoun á and the logophoric-subject suffix -m on the verb (identical in form to 1 Sg subject in indicatives). For more on logophorics see $\S 18.3$.

Second person pronouns in the original utterance are replaced by (nonlogophoric) third person pronouns or sometimes by animate proximate demonstratives ('this', 'these'). This can be described as pseudo-third-person pronominalization. There are many examples of replacement by 3 Sg or 3 Pl pronouns in the texts, for example 2015-01@00:51 \& 01:05 \& 03:32 \& 03:36 \& 05:17. Animate proximate demonstratives occur in this function in 2015-01 @ 04:20 \& 04:28 and 2015-02 @ 00:47.

### 17.1.2 'Say that ...' with inflectable 'say' verb

For the forms of 'say' verbs see $\S 11.3 .1$. These verbs are possible, but generally omitted, when the unconjugated quotative particle wà is possible, i.e. in reports of actual past speech (or thought) by third parties ('he said', etc.). However, in imperfective, imperative, and negative contexts wà is not viable and a 'say' verb follows the quotation.

| ع́y |  |  |
| :--- | :--- | :--- |
| n | ô-m-nù-m | jìn-dí-Ø |
| tomorrow | go-Ipfv-Ipfv-LogoSbj | say-PfvNeg-3SgSbj |
| 'He didn't say that he will go tomorrow.' |  |  |

The 'say' verb may take a NP complement denoting an unspecified quotation as an object.
a. ìnjé ${ }^{\text {Ljìnǐ:-Ø }}$
what? say.Pfv-3SgSbj.Q
'What did he/she say?'
b. cì-kámá jìn-dí-Ø
anything say-PfvNeg-3SgSbj
'He/She didn't say anything.'

### 17.1.3 Quotative clitics

### 17.1.3.1 Quotative subject clitic wa $\rightarrow$

This clitic appears after subjects of a quoted clause, or in some cases after quoted vocatives. (There is no sharp distinction between "subject" and "addressee" of deontic modals.) The tone of wa $\rightarrow$ is spread from the preceding tone.
wa $\rightarrow$ is usually combined with an independent pronoun. However, it can directly follow a nonpronominal NP, especially in quoted vocatives. wa $\rightarrow$ follows a demonstrative 'this one' in 2015-01 @ 02:31, and ‘God’ (as vocative) in 2015-01 @ 03:00.

The usual pronominal-subject marking on the verb, as in main clauses, is blocked when a clause-initial quotative subject is present (the verb takes the zero form, elsewhere marking 3 Sg subject). If the subject of an indicative clause is logophoric, a quotative-subject phrase is optional, since the verb has -m (pseudo-1Sg) suffix for logophoric subject (608c). Where it does occur, the logophoric quotative subject form is á wá $\rightarrow$ (2015-01 @ 06:12), optionally contracting to á $\rightarrow$ (2015-02 @ 01:49).

| a. | $\left[\begin{array}{ll}1 & \text { wá } \rightarrow\end{array}\right]$ | gùnù-mbó | wà |
| :--- | :--- | :--- | :--- |
| $\left[\begin{array}{ll}1 \mathrm{Pl} & \text { QuotSbj }\end{array}\right]$ | thief-AnP1 | Quot |  |
|  |  |  |  |
|  | $\left(\mathrm{He}_{\mathrm{x}}\right)$ says we are thieves.' |  |  |

$\begin{array}{lllll}\text { b. } & {\left[\begin{array}{ll}{[\text { ú }} & \text { wá } \rightarrow]\end{array}\right.} & {[\text { á-gì }} & \text { zúgà-m-dò } & \text { wà }] \\ & {[2 S g} & \text { QuotSbj] } & {[\text { Logo-Acc }} & \text { know-Ipfv-Ipfv }\end{array}$
'( $\mathrm{He}_{\mathrm{x}}$ ) says that you know him ${ }_{\mathrm{x}}$.'
c. (á wá $\rightarrow$ ) zímà-m-nù-m wà
(Logo QuotSbj) be.sick-Ipfv-Ipfv-LogoSbj Quot ' $\left(\mathrm{He}_{\mathrm{x}}\right)$ says that he $\mathrm{e}_{\mathrm{x}}$ is sick.'
d. [ámádù (wà $\rightarrow$ )] wò-lú wà
[A (QuotSbj)] come-QuotImprt Quot
'He/She told Amadou to come.'

### 17.1.3.2 Clause-final quotative clitic wà

A quoted clause representing an actual reported speech event is most often followed by quotative clitic wà rather than by a conjugated 'say' verb. It is L-toned even after an H-tone, and it is not prolonged intonationally.


| b. ámádù | $($ á | wá $\rightarrow$ ) | wâ:-m-nù-m | wà |
| :--- | :--- | :--- | :--- | :--- |
| Amadou | (Logo | QuotSbj) | come-Ipfv-Ipfv-LogoSbj | Quot |
|  | 'Amadou |  |  |  |
|  | said that he ${ }_{x}$ is coming.' |  |  |  |

In (609b), the quoted logophoric subject á wá $\rightarrow$ can be omitted since the verb is already marked for logophoric subject. However, its presence does pre-empty any ambiguity between logophoric -m and $1 \mathrm{Sg}-\mathrm{m}$.

Clause-final wà is usually omitted when an overt, conjugated 'say' verb is present. It is also not used in negative, future, interrogative, or deontic frames. It is not normally used when the quoted speaker is the current speaker ('I said ...').
wà is also used in quoted fragments, for example to express surprise at what an interlocutor has said, or to sollicit confirmation ("Tomorrow?" did you say?).

When the quoted material ends in a clause-final emphatic (§19.5), wà is positioned between the verb and the emphatic.

| a. àrná$\begin{equation*} \operatorname{rain}(\mathrm{n}) \tag{610} \end{equation*}$ | mìr ${ }^{\text {n }}$ - -1 ì-Ø | wà | kóy |
| :---: | :---: | :---: | :---: |
|  | rain.fall-Pfv1b-3SgSbj | Quot | Emph |
| He) | sure did rain.' |  |  |

$\begin{array}{lllll}\text { b. gùnù-mbó } & \text { yé } & \text { Lb- } \mathrm{c}: & \text { wà } & \text { dè } \\ \text { thief-AnPl } & \text { Exist } & \text { be.Loc-3PISbj } & \text { Quot } & \text { Emph } \\ & \text { '(He) said (warned), there are thieves (there)!' } & \end{array}$

### 17.1.3.3 Post-quotation pronoun plus nà 'said' or 'did thus'

Simple combinations like ńné nà 'he/she said', bú nà 'they said', and ú nà can follow quoted material, generally after a prosodic break. The pronoun is independent in form, as with pronominal subjects of nonsubject relatives.

```
(611) [hô: \({ }^{\text {n }}\) mà \(\rightarrow\) ] ńné nà é \(\rightarrow\) wà
    \(\left[\begin{array}{ll}{[\text { true }} & \mathrm{Q}] \\ 3 S g & \text { said yes } \text { Quot }\end{array}\right.\)
    ‘(Cow:) "is that so?" It (=calf) said, "yes!" ' (2015-01 @ 04:26)
```

If the quoted speaker is expressed as a nonpronominal NP, it must be resumed by 3 Sg ńné or 3 Pl bú before nà.
nà does not always refer to speech. It can also be combined with a preceding verb denoting an activity, as in (581) in §15.2.2.4. nà is also attested in a complement of 'be afraid that ...', see (628a) in §17.3.7.

### 17.1.4 Jussive complement (reported imperative or hortative)

### 17.1.4.1 Quoted imperative and prohibitive

A quoted imperative normally has two parts. First, the subject-addressee of the imperative verb is followed by subject quotative particle wa $\rightarrow$, which is variably prolonged. It is also used even when the command is conveyed by someone else ('Your father says for you to go see him').

This subject-addressee phrase is followed by the main part of the quoted imperative, which in turn is followed by the unprolonged quotative particle wà. The original imperative verb is converted into the QuotImprt ending in -y or $-\mathrm{u}(\S 10.6 .3 .1$ ). There is no marking of addressee plurality.

b. [ámádù wà $\rightarrow$ ] [yǎy-Ø wà]
[Amadou QuotSbj] [go-QuotImprt Quot]
'He/She said for Amadou to come.'
c. [ùlé: wá $\rightarrow$ ] [wò-lú wà]
[children QuotSbj] [come-QuotImprt Quot]
'He/She said for the children to come.'

The quoted imperative construction also occurs in wishes of the 'May God ...!' variety (§19.6).
(613) is a quoted prohibitive. The same quotative-subject phrase occurs at the beginning. The verb has the same prohibitive form as in unquoted prohibitives. Before wà the usual prohibitive suffix -lì assimilates to -lù, or the vowel is elided so the L-toned lateral is followed directly by wà.

| $\left[\begin{array}{lll}\mathrm{mí} & \text { wá } \rightarrow] & \text { [wǎ:-lù }\end{array}\right.$ | wà $]$ |  |  |
| :--- | :--- | :--- | :--- |
| $[1 \mathrm{Sg}$ | QuotSbj] | [come-Proh | Quot $]$ |
|  | $\mathrm{He} /$ She told me not to come.' |  |  |

### 17.1.4.2 Quoted hortative

The addressee $(2 \mathrm{Sg}$ or 2 Pl$)$ is treated as the "subject" in the quotative-subject phrase, suggesting that it is really a quoted vocative. The singular-addressee hortative -mó is converted into the quoted hortative form -mú, whose ú is usually elided before wà. Irregular ḿbó 'let's- 2 Sg go!' likewise becomes ḿbú, which is too short to allow elision of the $u(614 a)$. The plural-addressee hortative takes its regular form with -mó-ǹ (614c).
a. ńbú wà
go.QuotHort Quot
'He/She said, let's go!' (< ḿbó)
b. nân (ú wá $\rightarrow$ ) zá já-m(ú) wà
now (2Sg QuotSbj) meal eat-QuotHort Quot
'He said, let's eat now!' (ná-mó)
c. nân (bí wá $\rightarrow$ ) zá ná-mó-ǹ wà
now (2Pl QuotSbj) meal eat-Hort-Pl.Addr Quot 'He said, let's eat now!' (ná-mó-ǹ)

In the quoted hortative negative, the verb has the same hortative negative form as in main clauses (§10.6.4).

### 17.2 Factive (propositional) complements

### 17.2.1 'Know that ...' complement clause

There is some variation in the data, likely due to the fact that 'I know' and the like can be parenthetical (unless negated or questioned).

In what appears to be the basic factive clause type, the subject is expressed preverbally as a proclitic subject pronoun or as a full NP. In perfective contexts, the verb takes perfective- 2 form. The only suffixal conjugation of the verb is 3 Pl perfective- $2-s-\varepsilon \sim-s-\varepsilon ̀$ (short-voweled form). All other pronominal categories take the uninflected form -só ~-sò.
(615)
$\begin{array}{lll}\text { a. ámádù } \quad[\mathrm{mí} & \text { wò:-só }] \\ & \text { Amadou } \quad[1 \mathrm{Sg} \quad \text { come-Pfv2] } \\ & \text { 'Amadou knows that I have come.' }\end{array}$
zúgà-m-dò-Ø
know-Ipfv-Ipfv-3SgSbj
$\begin{array}{lll}\text { b. } \begin{array}{ll}\text { [ùlé: } & \text { wò:-s- } \varepsilon \text { ] } \\ \text { [children } & \text { come-Pfv2-3PlSbj] }\end{array} & \text { zúgà-m-nù-m } \\ \text { 'I know-Ipfv-Ipfv-1SgSbj } \\ & \text { knat the children have come.' }\end{array}$

In the imperfective positive, imperfective negative, and perfective negative, the verb has its full conjugated form (e.g. 1 Sg or 2 Pl subject suffix).

### 17.2.2 'See (find, hear) that ...'

### 17.2.2.1 Direct-perception type (relative-clause complement)

In this construction, the subject of the complement optionally also appears as the direct object of 'say', with accusative marking (616a). The complement clause proper takes the form of an
imperfective adverbial clause (§15.2.1.2.1). Pronominal subjects take proclitic form. In (616b), the nonpronominal subject 'children' is resumed by a proclitic 3 Pl subject pronoun.
a. j [dance(n) 2Sg dance(v)-Ipfv] 2Sg-Acc

$$
\begin{align*}
& \text { yí= bì- } \varnothing  \tag{616}\\
& \text { see=Past-3SgSbj }
\end{align*}
$$

'He/She saw you (as you were) dancing.'
b. [ùlé: jé bú $\left.{ }^{\text {HL }} \mathrm{jê}-\mathrm{m}\right] \quad$ yí= bì- $\varnothing$ [children dance(s) 3Pl dance(v)-Ipfv] see=Past-3SgSbj
'He/She saw the children dancing.'

### 17.2.2.2 Recognition (inference, hearsay) construction

Since it is difficult in elicitation to distinguish 'see that' from the other 'see' construction (§17.2.2.1), where the 'see' expression could be taken as parenthetical, examples were elicited with negative clauses. The data are somewhat messy. In (617a), the complement of 'see' has regular conjugated perfective negative form. However, (617b-c) show preposed 1 Sg pronominal subject pronominal, similar to the factive construction with 'know' (§17.2.1).
(617)
a. yàgà-ndá yí= bì-m
fall-PfvNeg.3PISbj see=Past- 1 Sg Sbj
'I saw that they hadn't fallen.'
b. [mí yàgà-lí] yí= bì- $\varnothing$
$[1 \mathrm{Sg}$ fall-PfvNeg] see=Past-3SgSbj
'He/She saw that I had not fallen.'
c. [mí pédé: sèmà-lí] yí= bì- $\emptyset$
[1Sg sheep slaughter-PfvNeg] see=Past-3SgSbj
'He saw that I had not slaughtered the sheep-Sg.'

### 17.3 Complements with verbal noun or with -ngó

These are nominal complements that construe the subordinated eventuality as a conceptual entity, with no commitment to its having been realized. The main verbal noun formations are suffixes -lé and final-vowel mutation to $u$ (§4.2.2.1-2), but other nominals with similar meanings can substitute for them depending on the verb.

An alternative complement type is with inanimate imperfective participial -ngó, which is future-oriented and hypothetical and has the form of a relative clause.

### 17.3.1 Structure of verbal noun and -ygó complements

We can lump together complements that have the productive verbal noun in -lé with other similar deverbal nominal complements that can denote the event type abstractly. The cognate nominal zób(ú)-gó in (618a) is roughly equivalent to the verbal noun in (618b). In (618c) the verbal noun incorporates the cognate nominal as compound initial.
a. zóbú-gó
m̀bá-Ø
running(n)-InanSg want-3SgSbj
'He/She wants to run', 'He/She likes running.'
b. zóbú-lé m̀bá-Ø
run-VblN want-3SgSbj
[=(a)]
c. [zòbù-gò]-[zóbú-lé]
[running-InanSg]-[run-VblN]
m̀bá-Ø
'He wants to do some running.'
want-3SgSbj

Verbal nouns and similar nominal complements are described in the following subsections (beginning with §17.3.2) for 'prevent', 'dare', 'want', 'begin', and 'cease', in some cases alongside other complenent options. In some cases ('dare', 'begin', and 'cease') the logical subject of the main verb is coindexed with the (unexpressed) subject of the nominal complement. With 'prevent' the logical object of the main verb is coindexed with the subject of the nominal complement. 'Want' allows either same- or different-subject complements.

Whether a verbal noun or another nominal, the nominal is not determined or quantified in such complements when the concept is abstractive. Occasionally a verbal noun has an overt possessor. This happens with 'want', especially when the subject of the complement is not coindexed with the subject of 'want'. See 'wants my going to Bamako', (624) in §17.3.5. The nominal readily takes its usual nonsubject complements such as object NPs and adverbials, as in 'wants to go to Bamako', (622b) in §17.3.5 and 'stop drinking beer', (630a) in §17.3.10.
-ggó complements function like subjunctives in other languages. However, its the structure is that of a relative clause, since -ngó is the inanimate singular imperfective participle (§14.4.2.1). If the subject of the -ŋgó clause is distinct from that of the main clause, which can be the case with 'want', 'consent', and 'be afraid to', the -ngó clause can show a pronominal subject proclitic to the verb-participle. An example is 'they want me to work here', (625a) in §17.3.5.

### 17.3.2 'Prevent from’ (gà:ndí) plus verbal noun

Initial attempts to elicit ' X prevented Y from VP-ing' produced circumlocutions like that in (619a). The real 'prevent' construction is seen in (619b), with verb gà:ndí taking a verbal noun complement including a possessor representing the complement's logical subject.

b. àrná [yéngì wó:-lé kǒ:] ${ }^{\text {Lgà:ndì- }}$
rain(n) [yesterday come-VbIN 1SgPoss.InanSg] prevent.Pfv-3SgSbj 'The rain prevented me from coming yesterday.'

### 17.3.3 'Dare to' (dàrá) plus verbal noun or -ngó complement

'Dare to VP', contextually also 'have the nerve/effrontery to VP', is expressed by dàrá, cf. Jamsay dà:rá and YD dàdú. The subject of the complement is coindexed with that of the main clause. The complement may be a verbal noun (620a) or a -ygó complement (620b).
a. [ìgó wó:-lé] dárá-ŋgò:-Ø
[here come-VbIN] dare-IpfvNeg-3SgSbj
'He doesn't dare come here.'

| b. [mí-gì | dọá-ngó] | dárà-m-nù-w ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| [1Sg-Acc | insult-Ipfv.Ppl.InanSg] | dare-Ipfv-Ipfv-2SgSbj |
| ou-Sg | insult me? |  |

### 17.3.4 'Consent to’ (àb-í:) plus -ngó complement

The transitive verb àbá 'receipt, accept, take possession of (sth given)' can be used with a complement in the sense 'consent'. In this context it usually takes the mediopassive form àb-í: . Since the complement generally denotes a possible future event, the complement is with -ngó. In (621a), the subject of the complement is coindexed with that of the main clause. In (621b), the subjects are not coindexed and an overt subject pronoun appears in the complement.
(621)

| a. ámbúrú | [ǹgó | wá:-ygó $]$ |
| :--- | :--- | :--- |
| chief | $[$ here | come-Ipfv.Ppl.InanSg] $]$ |
| àb-í-só-m |  | wà |
| accept-MP-Pfv2-LogoSbj | Quot |  |

'The chief said he agreed (consented) to come here.'

| [úló | mí | óndú-ygó] | àb-è:-lí-Ø |
| :---: | :---: | :---: | :---: |
| [house | 1Sg | build-Ipfv.Ppl.InanSg] | accept-MP-PfvNeg-3SgSbj |
| 'He did |  | refused) my buildin | house. |

### 17.3.5 'Want to’ (m̀̀bá or nàmá) plus verbal noun, -ngó, or subordinator

The two stative 'want' quasi-verbs (§11.2.5.2) can take verbal-noun complements. When the two clauses have coindexed subjects, no subject marking appears in the complement ( $622 \mathrm{a}-\mathrm{b}$ ).
(622)
a. [tól tó:-lé]
m̀bá-દ̀
[pounding pound-VbIN]
want-Pfv1b-3PlSbj
'They want to pound (grain in mortar).'
b. [bàmàḱ́
yáy-lé]
nàmá-Ø
[B go-VbIN] want-3SgSbj
'He/She wants to go to Bamako.'

A same-subject anterior nonpast subordinator né (§15.2.2.3) can also occur in this context (623).
(623) [ìgó bírá: bìr̀̀ né] m̀bá-è [here work(n) work(v) Ant.NonP.SS] want-3PlSbj
'They want to work here.'

If the complement has a noncoindexed subject, the latter appears as a possessor on the verbal noun (624).

| [mí | ${ }^{\text {H}}{ }_{\text {bá }}$ | [bàmàkó | yáy-lé | kǒ:] | m̀bá-Ø |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $[15 \mathrm{Sg}$ | father] | [B | go-VblN | 1SgPoss.InanSg] | want-3SgSbj |
| 'My father wants me to go to Bamako.' <br> (lit. "wants my going to Bamako") |  |  |  |  |  |

A -ngó complement is another option, with a proclitic subject pronominal (625a). A differentsubject subordinator nè (§15.2.2.6) with a proclitic subject is also possible (625b).

$\begin{array}{lllll}\text { b. } & \left.\begin{array}{llll}{[\text { ìgó }} & \text { mí } & \text { Hbíŕ } & \text { nè }\end{array}\right] & \text { m̀bá-Ø } \\ \text { 'here } & \text { 1Sg } & \text { work(v) } & \text { Ant.NonP.DS] } & \text { want- } 3 \mathrm{SgSbj} \\ & \text { 'He/She wants } & \text { me to work here.' } & \end{array}$

### 17.3.6 'Forget to’ (ìré) with -乌gó complement

ìré 'forget' occurs in a number of constructions. In 'forget to VP' with coindexed subject, the complement takes -ngó. This is of course distinct from a factive complement ('forget that/whether...', §17.2).
a. [wá:-ŋgó] ìr-â:y-Ø
[come-Ipfv.Ppl.InanSg] forget-Pfv1a-3SgSbj
'He/She forgot to come.'
b. [émné ébá-ŋgó] ìr-â:-dà:
[milk go-Ipfv.Ppl.InanSg] forget-Pfv1a-3P1Sbj
'They forgot to buy milk.'
c. $\varepsilon$ ह́y ${ }^{\mathrm{n}}$ wá:-ŋgó
tomorrow come-Ipfv.Ppl.InanSg
írá-lì
'Don't-2Sg forget to come tomorrow!'

### 17.3.7 'Be afraid to/that' (ír-í:) plus -ygó complement

The complement of mediopassive ír-í: 'be afraid' in the sense 'be afraid [to VP]', with subjects co-indexed, has -ygó. There is no further subject marking in the complement (627a).

| (627) | [ท̀gó | wá:-ŋgó] | ír-í:-yày-Ø |
| :---: | :---: | :---: | :---: |
|  | [here | come-Ipfv.Ppl.InanSg] | fear-MP-Pfv $1 \mathrm{a}-3 \mathrm{SgSbj}$ |

' $\mathrm{He} /$ She is afraid to come here.'

In the sense 'be afraid [that ...]', with subjects not necessarily coindexed, the complement is extended by a minimal additional clause with nà (628a). Elsewhere jà occurs (with a proclitic subject pronominal) in the sense 'said' or 'did thus' (§17.1.3.3). This hypothetical complement is distinct from the factive complement in (628b), which takes the form of a regular main clause.

| a. | [[ńné-gì | púygó-ŋgó] | mí jà | ír-í:-yày-Ø |
| :---: | :---: | :---: | :---: | :---: |
|  | [[3Sg-Acc | hit-Ipfv.Ppl.InanSg] | 1 Sg said] | fear-MP-Pfv1a-3SgSbj |
|  | ' $\mathrm{He}_{\mathrm{x}}$ is afraid that I may hit him $\mathrm{x}_{\mathrm{x}}$.' |  |  |  |
|  | [[Èdé | wě:] | bárím-í:-yày |  |
|  | [[child | 1SgPoss.AnSg] | wound-MP- | v1a-3SgSbj] |
|  | ír-í:-yà-m |  |  |  |
|  | fear-MP-Pfv1a-1SgSbj |  |  |  |
|  | 'I'm afraid | (=worried) that my child | has been hur |  |

### 17.3.8 'Begin' (tó:) plus verbal noun

The verb 'begin' is tó: . In the perfective positive, the usual form is tó:-tì- (perfective-1b) in intransitive clauses (as in 'the movie has begun') as well as transitive ones (as in 'I began the work').

With a VP as complement, the complement verb takes verbal-noun form with suffix -lé, see §4.2.2.1. The subjects of the two clauses are coindexed.
a. [tól tó:-lé] tó:-ty-à:
[pounding pound-VblN] begin-Pfv1b-3PISbj 'They started pounding (grain in mortar).'

| b. | [yà-ngá | yí-lé $]$ |
| :--- | :--- | :--- | | toá:-lì |
| :--- |
|  |
|  |
|  |
|  |
|  |
| 'Don't-2Sg start to weep!' |

Textual example: 2015-03 @ 00:20.

### 17.3.9 'Finish’ (dùmó, dùm-dí, dè)

The verb 'finish, end' is intransitive dùmó (as in 'the movie is over') or transitive dùm-dí with an NP object (as in 'I finished the work'). With a VP complement, as in 'I have finished eating', these verbs are pre-empted by the recent past construction with the main verb plus dè- (§10.2.1.6).

### 17.3.10 'Cease’ (dògó) plus verbal noun

'Cease VP-ing', especially in the sense of definitively abandoning an activity or behavior, is expressed by dògó ‘leave, abandon’. The complement is in verbal-noun form.
a. [kòndó
[beer consume-VblN]
dògó-tì-m
'I have stopped drinking beer.'
abandon-Pfv1b-1SgSbj
$\begin{array}{llll}\text { b. } & \text { [ùlé: } & \text { púngú-lé] } & \text { dógá-ǹ } \\ \text { [children } & \text { hit-VbIN] }] & \text { abandon.Ipfv-Pl.Addr } \\ & \text { 'Stop-2Pl beating children!' }\end{array}$

### 17.3.11 'Be worth' (bă) with -ygó complement

bǎ 'be worth, be equal to' can be a simple transitive in comparatives (§12.2.2). It can also take an -ygó complement. The subject of bǎ in the main clause is an impersonal 3 Sg . The assistant translates as il vaut la peine de (...). It may also be rendered in context as 'it would be a good idea to (...)'.

| a. $\left.\begin{array}{ll}\text { [bàmàkó } & \text { ó-ygó }\end{array}\right]$ | bà-só-Ø |  |
| :--- | :--- | :--- |
| $[\mathrm{B}$ | go-Ipfv.Ppl.InanSg $]$ | be.worth-Pfv2-3SgSbj |
| 'It's worth going to Bamako.' |  |  |

b. [[pèdè: ${ }^{\text {L }}$ ò-ḿ]
dóná-ŋgó]
bà-lí-Ø
[[sheep Prox-AnSg] sell-Ipfv.Ppl.InanSg] be.worth-PfvNeg-3SgSbj
'It isn't worth selling this sheep.'
c. [mí-gì búndó-ŋgó] bà-lí-Ø
[1Sg-Acc hit-Ipfv.Ppl.InanSg] be.worth-PfvNeg-3SgSbj
'It isn't worth hitting me.'

### 17.3.12 'Help' (bàrá) with -ygó complement

Simple transitive bàrá 'add, increase' is also common in the sense 'help, assist (someone, in an undertaking)'. The recipient of the assistance is the direct object of bàrá in the main clause.

| a. [úló | óndú-ทgó] | mí-gì | bárá |
| :---: | :---: | :---: | :---: |
| [house | build-Ipfv.Ppl.InanSg] | 1Sg-Acc | help.Imprt |
| '(Please | p me build a house!' |  |  |



### 17.4 Purposive, causal, and locative clauses

### 17.4.1 Purposive clause with -lé after tone-dropped verb stem

In this construction, the verb of the purposive clause has $\{\mathrm{L}\}$ overlay. The stem-final vowel raises to $\mathrm{i} / \mathrm{u}$ subject to later syncope. The stem is followed by suffix -lé. If the consonantal environment permits, the stem-final /i/ is syncopated.

This is distinct tonally from the regular verbal noun with -lé, which has $\{H\}$ overlay on the stem (§4.2.2.1).

This purposive construction is readily elicited with a motion verb in the main clause. The subjects of the two clauses are normally coindexed, so the purposive clause does not have its own dedicated subject. Other non-verb constituents such as object NPs have their regular form.
a. [yó
tò:-lé]
wò:-ś́-Ø
[millet pound-Purp] come-Pfv2-3SgSbj
'He/She has come in order to pound (the) millet.' (< tó:)
b. [[pèdè: ${ }^{\text {L }}$ 乞̆m] èb-lé] wò̀:-só-Ø [[sheep Prox.AnSg] buy-Purp] come-Pfv2-3SgSbj 'He/She has come in order to buy this sheep.' (< $\varepsilon$ bé)
c. [zá jì-lé] wò:-s-ê:
[meal consume-Purp] come-Pfv2-3PiSbj
'They have come in order to eat.' (< $\mathrm{n} \varepsilon$ )
d. [kònd́́
nì-lé]
wò:-só-m
[millet.beer consume-Purp] come-Pfv2-1SgSbj
'I have come in order to drink beer.' (< né)
e. [èm-gó èm-lé] wò:-s-र̂:
[chat-InanSg chat(v)-Purp] come-Pfv2-3P1Sbj
'They have come in order to chat.' (< émé)
f. mă: [zá jì̀-é] ô-m-nù-m
there [meal eat-Purp] go-Ipfv-Ipfv- 1 SgSbj
'I go over there to eat. ' (< $\mathrm{\jmath} \varepsilon$ )
Textual examples: 2015-01 @ 04:00 repeated @ 04:06, both with nì-lé 'to eat'.

### 17.4.2 Purposive clauses with -ygó

The inanimate singular imperfective participle with -ggó is part of various adverbial relative clauses, including temporal ones ('at the time when ...', §15.2.1.1), and various complement clauses described earlier in this chapter. When followed by a motion verb like 'come' or 'go', a clause with -ygó may function pragmatically as specifying purpose as well as temporal relationship.
a
$\left[\begin{array}{lll}\text { nìmdé } & \text { bà: } & \text { né] } \\ \text { [garbage } & \text { gather } & \text { Ant.NonP.SS] } \\ \text { zó-ngó } & & \text { wò:-s- } \hat{\varepsilon} \text { : } \\ \text { convey-Ipfv.Ppl.InanSg } & & \text { come-Pfv2-3PlSbj }\end{array}\right.$
'They came and gathered and took away the trash.'
or: 'They came in order to gather and take away the trash.'
b. [bú:dù zò: né]
[money look.for
Ant.NonP.SS]
wò:-só-Ø
come-Pfv2-3SgSbj
go-Ipfv.Ppl.InanSg
'He/She came in order to seek money in order to go (traveling).'

### 17.4.3 Clauses with purposive postposition dùgò 'for'

The participial clause with -ygó may be followed by the purposive postposition dùgò.
(635)

17.4.4 Purpose, intention, or attempt expressed with 'say’ verb

An intention can always be expressed by a thought quotation, and this can blur into purpose. The passage 2015-05 @ 02:11 is literally "saying [you-Pl water-drinking], cutting out a dam, they gave (it) to you" is difficult to parse completely but the first segment describes the intended result (you-Pl have enough water to drink).

This is also the best way to express 'try to VP'. For example, in (683) in text 2012-06, on encountering a snake the narrator 'said I will pick up a stick', expressing intention and implying an effort.

### 17.4.5 Causal ('because') clause (dùg̀̀)

The purposive postposition dùgò can also have causal ('because') functions. With clausal complements, the verb may be a main-clause imperfective (636a), an imperfective subordinated clause (636b), or a headless perfective relative (636c).

| a. [[àrná | mírnà-m-dò-Ø] | dùgò] | ${ }^{\text {L }}$ nù-m |
| :---: | :---: | :---: | :---: |
| [ [rain(n) | rain.fall-Ipfv-Ipfv-3SgSbj] | because] | enter.Pfv-1SgSbj |
| 'I went in | ause it was raining |  |  |

b. [[ùlé: yà-ggá bú ${ }^{\text {HL }}$ yâ-m] dùg̀̀]
[[children weeping 3Pl weep-Ipfv] because]
nù-m
enter.Pfv-1SgSbj
'I went in because the children were weeping.'
c. [[ú bòn kánà dù dùgò ${ }^{\text {L }}$ nù-m
[[2Sg call Pfv.Ppl] because] enter.Pfv-1SgSbj
'I went in because you-Sg (had) called.'

## 18 Anaphora

### 18.1 Reflexive

The overt reflexives presented below compete with mediopassive verbs (§9.4.1). An example of the latter is bànji-í:-yà-m 'I was hidden' or 'I hid (myself)'.

### 18.1.1 Reflexive object with kú-gó 'head'

Reflexive objects of the form 'my/your/his/her head' were elicited from an assistant. For third person, the 3 Reflexive possessor form á-gá is used ( 637 c ), see $\S 18.1 .3$ below.

|  | [kú-gó | kǒ:] | ${ }^{\text {L }}$ bùndò-m |
| :---: | :---: | :---: | :---: |
|  | [head-InanSg | 1SgPoss.InanSg] | hit.Pfv-1SgSbj |
|  | 'I hit myself.' |  |  |
|  | [kú-gó | í-gé] | ${ }^{\text {L }}$ bùndè- ${ }^{\text {n }}$ |
|  | [head-InanSg | 1Pl-Poss] | hit.Pfv-1PlSbj |
|  | 'We hit ourselves.' |  |  |
| c. | [kú-gó | á-gá] | ${ }^{\text {L }}$ bùndè-Ø |
|  | [head-InanSg | 3Refl-Poss] | hit.Pfv-3SgSbj |
|  | 'He/She hit himself/herself.' |  |  |
|  | [kú-gó | ú-wó] | búndó |
|  | [head-InanSg | 2Sg-Poss] | hit.Imprt |
|  | 'Hit yourself!' |  |  |

The assistant interprets such examples as literally referring to the body part whenever a physical action is involved. He prefers mediopassive forms of transitive verbs for reflexive function, e.g. púng-í:-yà-m 'I was hit' or 'I hit myself.' However, he did allow 'head' reflexives in nonphysical abstract contexts (638).

| (638) | $[$ kú-gó | ú-wó $]$ | zúgá |
| :--- | :--- | :--- | :--- |
|  | $[$ head-InanSg | 2Sg-Poss $]$ | know.Imprt |
|  | 'Know thyself!' |  |  |

No clear examples of 'head' reflexives occur in the texts. However, a collocation of gǒ 'exit (v)' with possessed 'head' occurs in the sense 'survive, escape (danger), save one's scalp' in @ 03:46.

### 18.1.2 Reflexive PP complement

The same construction with 'head' can be used as a postpositional complement. Examples are difficult to elicit but (639a-b) seem to work.
a. bú:dù [[kú-gó kǒ:] bènc̀] ${ }^{\text {Litì-m }}$
money [[head-InanSg 1SgPoss] Dat] send.Pfv-1SgSbj
'I sent money to myself.'
b. bú:dù
[ [kú-gó
$\begin{array}{ll}\text { á-gá] } & \text { bè } \\ \text { 3Refl-Poss] } & \text { D }\end{array}$
bènè ] ${ }^{\text {Ltì- }}$ Ø
money [[head-InanSg 3Refl-Poss] Dat] send.Pfv-3SgSbj
'He sent money to himself.'

### 18.1.3 3Reflexive possessor (á-gá)

Third person reflexive possessor is expressed by á-gá (§6.2.1.2) postposed to alienably possessed nouns. Singular and plural are not distinguished in Logo/3Refl pronouns (640b,d). If the possessed noun is animate plural, the form is á-gá-mbò ( 640 c ), but no other animacynumber distinctions are made. The antecedent is normally the clausemate subject. (640a) shows nonreflexive 3 Sg possessor since it is not coindexed to the subject.
a. [pédé: wè-ń]
zě:-tù-m
[sheep Poss.AnSg-3SgPoss] bring-Pfv1b-1SgSbj
'I brought his/her sheep-Sg.'
b. [pédé: á-gá]
[sheep 3Refl-Poss]
zě:-tì-Ø
'He brought his (own) sheep-Sg.'
c. [pédú-mbò á-gá-mbò] zě:-tì-Ø
[sheep-AnPl 3Refl-Poss-AnPl] bring-Pfv1b-3SgSbj
'He ${ }_{x}$ brought his ${ }_{x}$ (own) sheep-Pl.'
d. ùlé: [pédé: á-gá] zž:-tì-yà
children [sheep 3Refl-Poss] bring-Pfv1b-3PISbj
'The children brought their (own) sheep-Sg.'

With an inalienably possessed noun (641), the third person reflexive pronominal is preposed in the form á (§6.2.2.2).
(641)
a. [á ${ }^{\text {Hbá }] ~ y i ̀-s o ́-\varnothing ~}$
[3Refl father] see-Pfv2-3SgSbj
'He has seen his (own) father.'
b. ùlé: [á Há] yì-s-
children [3Refl father] see-Pfv2-3PlSbj
'The children have seen their (own) father.'

### 18.1.4 No antecedent-reflexive relation between coordinands

There is no anaphoric possessor form in combinations of the type [ X and [ X 's Z ]]. If X is a third person referent, the regular nonanaphoric third person pronominal possessor forms are used. In (642), therefore, it is indeterminate whether the 'his' in 'his father' is coindexed with Amadou.
(642) [ámádù.: bà-ní.:] yǎy-yà-dà:
[A.\& father-3SgPoss.\&] go-Pfv1a-3PISbj
'Amadou ${ }_{\mathrm{x}}$ and his $_{\mathrm{x}}$ (own) / his-or-hery father have gone.'
18.1.5 Indexing (topic-tracking) 3 Refl á in clauses with kár${ }^{\text {nà }}$

In narrative, many clauses are expressed as adverbial clauses with participial kárnà, especially at subject-switch points ( $\$ 15.2 .2 .5$ ). Since this is structurally a relative clause, its subject is expressed as a preverbal proclitic pronoun, even when a fuller NP is overt. In the frequent case where the subject is a third-person referent, there is a choice between 3 Sg f́né and 3Refl á. The latter can be used to connect the current referent with an important topical referent in the larger narrative. See §15.2.2.5 for discussion and examples.

### 18.2 Obviation

### 18.2.1 zú 'counterpart' as obviative

A possessed form of zú 'counterpart, peer, neighbor', plural zú-mbò, can function in narratives about two individuals as a way to switch from one of them as topic/subject to the other. For example, (643) could follow a description of the first individual's statement or action.

| (643) | zǔ-n | kú | zùgó | dè-Ø |
| :--- | :--- | :--- | :--- | :--- |
| counterpart-3SgPoss | Dem.InanSg | know | RecPrf-3SgSbj |  |

Plural 'his/her counterparts' is zǔ-n-bò, since 3 Sg possessor -ń must be added directly to the noun stem. Compare mí ${ }^{\dagger}$ zú-mbò 'my counterparts'.

### 18.3 Logophoric pronouns

### 18.3.1 Logophoric subject (-m)

When the logophoric is subject of its clause, it is expressed not (only) by an optional clauseinitial logophoric quotative-subject phrase. It is reliably expressed by the suffix -m on the quoted verb or other predicate, which otherwise lack pronominal-subject suffixation. This -m is identical in form (including all details of allomorphy) to the 1 Sg suffix -m used in nonquotative indicative clauses, and it can be analysed as a pseudo- 1 Sg suffix. However, in logophoric function it can have a plural as well as singular antecedent. Note the multiple free translations of (644a-b). A clause-initial third-person logophoric pronoun can be added as a topic (644b) or in a quotative-subject phrase, provided that the referent is neither the current speaker nor current addressee (644b).
a. ú-g̀̀
pùngò-lú-m
wà
2Sg-Acc beat-PfvNeg-LogoSbj Quot
'They ${ }_{x}$ say/said that they ${ }_{x}$ didn't hit you-Sg.'
'He/she ${ }_{x}$ says/said that he/she ${ }_{x}$ didn't hit you-Sg.'

| . (á | gà | yé | Lwà:-m-nù-m |  |
| :---: | :---: | :---: | :---: | :---: |
| (Logo | Topic) | Exist | come-Ipfv-Ipfv-LogoSbj | Quot |
| 'They ${ }_{x}$ say/said that, as for them, they ${ }_{x}$ are/were coming.' |  |  |  |  |
| He/she ${ }_{x}$ says/said that, as for him/her ${ }_{\text {x }}$, he/she ${ }_{\text {x }}$ is/was com |  |  |  |  |

The logophoric subject marked by -m may correspond to the current addressee. In this case, if there is an optional clause-initial subject pronoun, it is in the applicable second-person form, e.g. 2 Pl in (645b), not the Logo/3Refl pronoun. The clause may also have same-subject marking when subordinated to a clause with second-person subject (645a-b).

| a. | [wâ:-m-nù-m | jìnì | gín $]$ |
| :--- | :--- | :--- | :--- |$\quad$ wà:-lú-w ${ }^{\text {n }}$

b. [bí wâ:-m-nù-m jìnì gín] wà:-lí-y ${ }^{\mathrm{n}}$
[2Pl come-Ipfv-Ipfv-LogoSbj say Ant.Past.SS] come-PfvNeg-2PISbj
'You-Pl said that you were coming, (but) you-Pl didn't come.'

'You went into herding goats, you said.'(2015-03@00:23)

The quoted person(s) may even be (or include) the current speaker. Again, the quoted clause has invariant -m suffix. An optional clause-initial subject pronoun, and the subject of any samesubject main clause, is 1 Sg or 1 Pl as applicable.
a. wâ:-m-nù-m
jìn-dí-m
come-Ipfv-LogoSbj
say-PfvNeg-1 SgSbj
'I didn't say that I would come.'
$\begin{array}{lll}\text { b. (í) } & \text { wâ:-m-nù-m } & \text { jìn-dí-y }{ }^{\text {n }} \\ \text { (1Pl) } \quad \text { come-Ipfv-LogoSbj } & \text { say-PfvNeg-1PISbj } \\ & \text { 'We didn't say that we would come.' } & \end{array}$

### 18.3.2 Nonsuffixal logophoric (á)

Except for the verbal suffix -m described above, the logophoric pronoun is á, and it must refer to a third person (not the current speaker or addressee).

The difference between logophoric and nonlogophoric third person pronouns is brought out in the jussive examples ( $647 \mathrm{a}-\mathrm{c}$ ). In $(647 \mathrm{a}-\mathrm{b})$, the recipient of the money is not coindexed with the quoted speaker, and regular 3 Sg and 3 Pl pronouns, respectively, express the recipient (in accusative case). In (647c), the recipient is coindexed with the quoted speaker or speakers. There is no singular-plural distinction in this case.

| a. ńné-gì | bú:dù | ńdí | wà |
| :--- | :--- | :--- | :--- |
| 3Sg-Acc | money | give.QuotImprt | Quot |

'(He) says to give money to her.'
b. bú-gì bú:dù ńdí wà 3Pl-Acc money give.QuotImprt Quot
'(He) says to give money to them.'
c. á-gì bú:dù ńdí wà

Logo-Acc money give.QuotImprt Quot
'( $\mathrm{He}_{\mathrm{x}}$ ) says to give money to him(self) $)_{\mathrm{x}}$.'
or: '(They ${ }_{\mathrm{x}}$ ) say to give money to them(selves) $)_{\mathrm{x}}$.'

Logophoric á can be the object as in (647c) above, with optional accusative marking. It can also be topic, possessor, or postpositional complement (648a-c).
(648)
a. $\quad$ á $\rightarrow$
ǵgò bê-m-nù-m
wà
Logo.QuotSbj over.there stay-Ipfv-Ipfv-LogoSbj Quot
'He ${ }_{\mathrm{x}}$ says that as for $\mathrm{him}_{\mathrm{x}}$, he $\mathrm{e}_{\mathrm{x}}$ will stay over there.'
$\begin{array}{lll}\text { b. } \begin{array}{lll}{[\text { á }} & \text { Há } & \text { wǎ:-1-Ø }\end{array} & \text { wà } \\ & {[\text { Logo }} & \text { father }]\end{array} \begin{array}{cc}\text { come-PfvNeg-3SgSbj } & \text { Quot }\end{array}$
' $\left(\mathrm{He}_{\mathrm{x}}\right)$ says that his $\mathrm{s}_{\mathrm{x}}$ father has not come.'
c. [mí wá $\rightarrow$ ] zá [á bènè] nè wà
[1Sg QuotSbj] meal [Logo chez] eat.Pfv Quot '( $\mathrm{He}_{\mathrm{x}}$ ) says that I ate at his $\mathrm{s}_{\mathrm{x}}$ place (chez lui).'

Textual examples of logophoric á overwhelmingly involve third person quoted speakers, like 'he' in (649a) and in the preceding examples. The assistant rejected logophoric á outright in self-quotations, so in (649b) the object is marked 1 Sg rather than logophoric even though coindexed with the quoted speaker. He did use logophoric á with a second-person quoted speaker, but only as object ( $649 \mathrm{c}-\mathrm{d}$ ). He did not extend this use of á to possessors or to postpositional complements. Therefore 'your father' is nonlogophoric in (649d-f), and 'with you' is nonlogophoric in (649e). In other words, second person seems to be intermediate between third and first persons in allowing logophoric forms. However, the use of á even as object with current-addressee reference has not been corroborated by texts or verified with other speakers and should be considered unproven.
a

| a. | [ìnjé | dùg̀̀ $]$ | $[1 ́$ | wá $\rightarrow$ ] |
| :--- | :--- | :--- | :--- | ---: |
|  | $[$ what? | Purp] | $[1 \mathrm{PlSbj}$ | QuotSbj] |
| á-gì | ${ }^{\text {Lpùngò }}$ | mà $\rightarrow$ | wà |  |
|  | Logo-Acc | hit.Pfv | Q | Quot |

'Why did (he $\mathrm{he}_{\mathrm{x}}$ say that we hit hime ?'
b. [[ú wá $\rightarrow]$ mí púygó $=$ bì $] \quad{ }^{\text {Lìn }}$ n-dì-m
[[2Sg QuotSbj] 1Sg hit=Past] say-PfvNeg-1SgSbj
'I didn't say that you-Sg hit me.'
c. [ìnjé dùgò] [[í wá $\rightarrow$ ]
[what? Purp] [[1Pl QuotSbj]
á-gì púygò] ${ }^{\text {Lìn }}$ 文- $w^{n}$ mà
Logo-Acc hit.Pfv] say.Pfv-2SgSbj Q
'Why did you-Sg say that we hit you-Sg?'
d. [ìnjé dùgò] [[ú ${ }^{H}$ bá $]$ wá $\rightarrow$ ]
[what? Purp] [[2Sg father] QuotSbj]
á-gì ${ }^{\text {Lè̀ngò }] ~}{ }^{\text {Lìnnù-w }}{ }^{n}$ mà
Logo-Acc hit.Pfv] say.Pfv-2SgSbj Q
'Why did you-Sg say that your father hit you?'



For the indexing or topic-tracking function of á in subordinated clauses with kárnà, see §15.2.2.5.

### 18.3.3 Logophorics in stacked quotations

In (650a) there is just one quotation, with Amadou as author. The verb in the quoted clause has the usual logophoric subject suffix -m. In (650b), Amadou is quoted as quoting a threat by Seydou against Amadou. The quoted material attributed to Amadou is indented, and that attributed to Seydou is doubly indented. The sense is 'A said [S said [S will kill A]]'. The verb 'kill' is in logophoric-subject form by virtue of coindexation of the subject with 'Seydou', the closest quotative antecedent. But the object of 'kill' is also logophoric in form, as accusative á gì, by coindexation with the highest quotative antecedent (Amadou). My assistant did not allow the higher antecedent to bind the logophoric subject suffix in the presence of the lower antecedent. Therefore in (650c) the subject of 'die' is regular 3Sg, not logophoric. If the logophoric subject suffix is used, the subject of 'die' is understood to be the doctor (650d).

[^8]b. ámádù

Amadou
[sě:dù wà $\rightarrow$ ]
[Seydou QuotSbj
[á-gì jâ-m-nù-m]
[Logo-Acc kill-Ipfv-Ipfv-LogoSbj]
Ljìn-Ø]
say.Pfv-3SgSbj]
wà
Quot
'Amadou ${ }_{x}$ said that Seydou said that he ${ }_{\mathrm{y}}$ would kill him ${ }_{\mathrm{x}}$.'
c. ámádù

Amadou
[dògòtóró wá $\rightarrow$ ]
[doctor $\quad$ QuotSbj]
tíbà-m-dò-Ø die-Ipfv-Ipfv-3SgSbj
Ljìn-Ø]
say.Pfv-3SgSbj]
wà
Quot
'Amadou ${ }_{x}$ said that the doctor said that he ${ }_{x}$ would die.'
d. ámádù

Amadou
[dògòtóró wá $\rightarrow$ ]
[doctor QuotSbj]
tíbà-m-nù-m die-Ipfv-Ipfv-LogoSbj
Ljìn-Ø]
say.Pfv-3SgSbj]
wà
Quot
'Amadou said that the doctory said that he ${ }_{\mathrm{y}}$ would die.'

### 18.3.4 Same-subject relative clauses

When a nonsubject relative has the same third-person subject as the associated main clause, some Dogon languages require that the subject be marked by a 3Reflexive pronoun. This is not true in TU , where the regular 3 Sg or 3 Pl subject pronoun occurs in this case. An example is (651).
(651) [pèdè: ${ }^{\text {L ńné }}$ ह́bé kár${ }^{\mathrm{n}} \mathrm{a}$ ǹ] yì-só-Ø
[sheep 3Sg buy Pfv.Ppl.AnSg Def] see-Pfv2-3SgSbj
'He ${ }_{x}$ saw (or: found) the sheep-Sg that he ${ }_{x}$ had bought.'

### 18.4 Reciprocal

### 18.4.1 Simple reciprocals (tèmbò)

Reciprocals require a referentially nonsingular subject that is at least raggedly coindexed with a direct object, a postpositional complement, or the possessor of a nonsubject NP within the same clause. The reciprocal morpheme is tèmbò, probably derived from an original plural noun meaning 'companions' or the like (cf. Jamsay tồ:-m, Najamba tòmbó). tèmbò is preceded by a pronoun in (652a-b). For third person, the pronoun takes the 3Reflexive form á (652b).
(652)

| a. í | tèmbò | púngó-tì-y ${ }^{\text {n }}$ |
| :--- | :--- | :--- | :--- |
|  | $1 \mathrm{Pl} \quad$ Recip | beat-Pfv1b-1PlSbj |
|  | 'We hit each other.' |  |

b. ùlé: [zèj-ì: gíní]
children [fight(v)-MP Ant.Past.SS]
[á tèmbò púngó-tì-yà
[3Refl Recip hit-Pfv1b-3P1Sbj
'The children squabbled and hit each other.'
c. [dógò-mbò $\therefore$ púlá-mbò $\therefore$ ]
[Dogon-AnPl.\& Fulbe-AnPl.\&]
[á tèmbò pá:má-ŋg-è:]
[3Refl Recip understand-IpfvNeg-3P1Sbj]
'Dogon and Fulbe do not understand each other (=do not get along).'

### 18.4.2 'Together' (kàbù)

As an alternative to, or in combination with, the verb mò:nd-í: 'assemble, get together' (§15.2.2.1), adverbial 'together' can be expressed by a pronominal plus kàbù. The latter has variants kà-bú and kà pú $\rightarrow$ which suggest that pú $\rightarrow$ 'all' is involved, perhaps due to accidental phonological similarity. For human and animate third persons the 3 Refl form á kàbù (or variant) is required even if the referent is also expressed as an NP (653c).
a. [í
kàbù] nú-mó-ǹ
[1P1 together] enter-Hort-Pl.Addr
'Let's go in together!'
$\begin{array}{lll}\text { b. } & \begin{array}{ll}{[\text { á }} & \text { kàbù] }\end{array} & \text { nú-yà-dà: } \\ & {[3 R e f l} & \text { together] }\end{array}$ enter-Pfv1a-3PISbj
'They went in together.'
c. ùlé: [á kàbù] nú-yà-dà:
children [3Refl together] enter-Pfv1a-3PISbj
'The children went in together.'
d. [í kàbù] [bìrà: ${ }^{\text {L }}$ mó:ndú-gó] bìrà-mó-ǹ
[1Pl together] [work(n) collective-InanSg] work(v)-Hort-Pl.Addr
'Let's do collective (=group) work together!'

The 2 Pl form is bí kàbù 'you together'.
For inanimates the only form elicited was yí-kà pú $\rightarrow$, unambiguously containing pú $\rightarrow$ 'all'.

## 19 Grammatical pragmatics

### 19.1 Topic

19.1.1 Topic (kònì, gày $\sim$ gà $\sim$ kày $\sim$ kà ~ ngà $)$

The particles kònì and gày $\sim$ gà $\sim$ kày $\sim$ kà $\sim$ ggà are interchangeable as topic morphemes. kònì is said to be favored by old persons, while younger speakers have switched to the regionally widespread gày and variants.

### 19.1.1.1 Topic (kònì ~ kòn)

This topic particle is rare in the textual corpus but is said to be favored by older speakers.

| a. [mí | kònì] | wá:-yù-m |
| :---: | :---: | :---: |
| [1Sg | Top] | come-IpfvNeg-1 SgSbj |
| 'As for | , I'm n | ming.' |

b. wǒ:-yà-wn $\quad$ dè, [bàlàgá kòn] Lìjjìlù- wn $^{n}$ dè
come-Pfv1a-2SgSbj if, [next.day Top] get.up.Pfv-2SgSbj if
'.. you come back. The next day, when you get up ...' (2015-03 @ 01:04)
See also the discussion of demonstrative kôn in §4.4.1.2.

### 19.1.1.2 Topic (gày $\sim$ gà $\sim$ kày $\sim$ kà $\sim$ ggà

There are many examples of the basic topic morpheme in the texts. When the topical constituent is a discourse referent (e.g. human or animal), it may be difficult to determine whether it is preclausal or clause-initial (as subject), as in (655a). There is a similar issue with quotative subjects (§17.1.3.1). In (655b), 'cow' is logically the possessor of 'excrement', but the fact that 'cow' is topicalized breaks up the usually tight possessor-possessum phrasing, so 'excrement' has its lexical tones with no sign of the possessor-controlled $\{\mathrm{L}\}$ overlay. In (655c) there are three occurrences of the topic morpheme. In (655e) the topical phrase marks a switch from one referent to another. There is a tonal distinction between Logo/3Refl topic variant á gà 'as for him/her/it' in (655a) and possessive á-gá 'his/her/its (possession)'.
a. [á gà] wá:-yù-m wà
[Logo Top] come-IpfvNeg-LogoSbj Quot
'He/she ${ }_{x}$ says/said: as for him/her ${ }_{x}$, he/she ${ }_{x}$ would/will not come.'
b. [nǎ: gà] [sùgǎ: ǹ ] jídé-ng-è:
[cow Top] [excrement Def] throw-IpfvNeg-3PiSbj 'As for cows, they (=people) do not discard the dung.' (2015-03 @ 02:12) (previous discourse had talked about animals in general)

firstly manner [1Pl Top] world [[1Pl chez] Top], jébdé [[í yì kárnà $] \quad$ gà $]$ a.little [[1Pl see Pfv.Ppl] Top]
$\left[\begin{array}{ll}11 & \text { bènc̀ }] \quad \text { દ́lù-m=bì- } \\ & \end{array}\right.$
[1Pl chez] be.sweet-Ipfv=Past-3SgSbj
'The way the world (was) among us in the past, what we saw (=experienced) was fairly pleasant.' (2022-03 @ 00:11)
d. [ày-né gà] kálê: $=\varnothing$
[fatigue Top] limit=it.is
'The suffering is at its maximum.' (2022-03@ 00:57)
e. [[lyá ǹ $]$ bènè] ùlé: dògó-tì nè]
[[[woman Def] chez] children leave-Pfv1b Ant.NonP.DS] [ú gày] [[há:jì ú-wó] nè] ô-m-nù-wn [2Sg Top] [[need(n) 2Sg-Poss] Loc] go-Ipfv-Ipfv-2SgSbj '(The man) having left the children with the woman, you (=the man) for your part (will) go on your own business.' (2022-04 @ 00:48)
gà and variants have special affinities to certain word types. Especially common are temporal setting adverbs. For ná: gày 'now, nowadays’ see the following subsection.
gà and variants are also common with discourse-definite demonstratives, as in kú gà and kón gà, the latter typical of the speech of older persons. For kú gà see e.g. 2015-03 @ 01:51. For kón gà see 2015-01 @ 02:52.

Topic phrases are often set off prosodically and can be considered preclausal, like English as for $X$. However, an NP with gà(y) can also function as a clause-internal NP, for example as subject. It can even occasionally be case-marked as accusative in object function (656).

| (656) | [mí-gì | kày] | cì-kámá | ${ }^{\text {L }}$ ¢ ${ }^{\text {dà-1-Ø }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | [1Sg-Acc | Top] | thing-any | give-PfvNeg-3SgSbj |
|  | 'Me [topic | he didn | ive anythin |  |

gà can also occur clause-finally. This is arguably a different morpheme functioning as a mild emphatic (§19.5.3).

### 19.1.2 'Now' as topic (ná: gày)

Pre-sentential ná: gày, consisting of ná: 'now' and topic particle gày, is common in texts. It is something of a paragraph opener, though not as strictly reserved for narrative shifts as English unstressed clause-initial now. A good narrative-internal textual example of ná: gày is 2015-01 (a) 05:41.

This topical 'now' is distinct from the ordinary temporal adverb nân 'now' (as in 'we are going to eat now'), see §8.4.6.1. Topical nân gày is also attested, in the literal sense 'at this time' in conversation as in 2015-02 @ 00:06, or in the broader sense 'as for nowadays' as opposed to 'in the past' as in 2015-05 @ 00:32.

### 19.1.3 'Too, also' (là)

This enclitic-like particle occurs at the end of phrases, but not clauses except as noted below. là can follow a pronoun (657b), a noun, a noun-like adverb (657a), or an NP. It can also follow a PP, or an NP or pronouns in object function with accusative gì (657c).
a.

| $[\varepsilon ́ y$ |  |  |
| :--- | :--- | :--- |
| n | là $]$ | ò-gú |
| [tomorrow | too $]$ | Prox-InanSg |

${ }^{L}$ nà-m-nè- $y^{n}$
'Tomorrow too/again I will eat this.'
b. [mí Hángé] bàmàkó L̂ô-m-dò-Ø,
[1Sg friend] Bamako go-Ipfv-3SgSbj
$\left[\begin{array}{ll}\text { mí } & \text { là }] ~ \text { Lò-m-nù-m }\end{array}\right.$
[1Sg too] go-Ipfv-Ipfv- 1 Sg Sbj
'My friend is going to Bamako, and I'm going (there) too!'
$\begin{array}{llllll}\text { c. ńné-gì } & \text { ǹdì-w } & \text { dè, } & \text { [mí-gì } & \text { là }] & \text { ńdá } \\ \text { 3Sg-Acc } & \text { give.Pfv-2SgSbj } & \text { if, } & \text { [1Sg-Acc } & \text { too }] & \text { give.Imprt }\end{array}$ 'If you give (some) to him/her, give (some) to me too!'
là occurs in a wide range of contexts. In classic 'also, too' sense attached to an NP, it indicates that an event or state previously described for one referent is replicated for another referent, as in ( $657 \mathrm{~b}-\mathrm{c}$ ) above. Textual examples of this type: 2015-02 @ 08:00.
là can have the sense 'again', involving repetition of an event rather than the introduction of a new discourse referent. In this sense it can be added to a temporal adverb. It is part of yâ: là 'again' (§19.3.1). yǒ: là 'today too' can also mean '(once) again', 2015-01 @ 01:53 \& 05:58, 2015-02 @ 00:06.
kú là 'that (definite) too' is a common phrase. The kú resumes the prior situation, but kú là usually sets the stage for the next event, in which case it can be freely translated 'at that point, ...' or simply as 'then ...'. Textual examples of kú là are 2015-02 @ 03:54 \& 05:48 \& 05:55 \& 06:49; 2015-06 @ 00:19 \& 00:58 \& 01:49 \& 03:19; and 2022-04 @ 01:28 \& 01:44.
là can have the pragmatic sense 'furthermore, moreover'. Here, although là is phrased with a particular NP, it is really the entire proposition that is paralleled by the preceding propositions.

For example, at 2015-03 @ 01:55 ('furthermore animals have a value') là is attached to 'animal(s)', but this is already the topic of preceding discourse, so what is added is the comment that they are valuable. Other possible examples: 2015-05 @ 01:04 \& 02:53; 2015-06@ 00:19.

In some cases là functions like a topicalizer. Thus í là ‘we for our part' in 2015-05@ 01:44; nwǎ: là 'this year (specifically)' 2015-05 @ 02:11; mí là 'as for me (personally)' 2015-06 @ 00:33; bè:-mé, [á $\rightarrow$ là] 'a herder, as for him' 2015-06 @ 01:25. In this type of example, là can occur in a negative clause, unlike English too (in the same sense), as in 2015-05@01:04 where 'pail' and then 'canister' are introduced in contrast with 'waterjar'.

The one situation where là can occur clause-finally is in conditional antecedent clauses. The usual clause-final 'if' particle dè combines with là as dé là. This rather fused combination is attested in 2015-03 @ 01:42 \& 01:46; and 2015-06@ 00:58. The basic sense appears to be 'if moreover', sometimes verging on 'even if'.

### 19.1.4 '(one-)self’ (yà ggì, yángí)

This enclitic-like particle can follow a pronoun or noun. The tone spreads from the left: mí yáygí 'I myself', ámádù yàngì 'Amadou himself'. The combination yàngù pú $\rightarrow$ 'all of them' (§6.6.1) is well attested. The only textual example of the particle without pú $\rightarrow$ is a somewhat broken passage in 2015-02@ 05:50.

### 19.1.5 Resumption of topic by nàndìré: and related forms

Nouns based on the stem nàndìré: 'entity, thing/critter' can resume an already stated preclausal topical NP. It can be inanimate or animate. The paradigm is (658).

| nàndùr-gó | InanSg |
| :--- | :--- |
| nàndìré: | $\mathrm{AnSg}, \mathrm{InanPl}$ |
| nàndùr-mbó | AnPl |

nàndùr-gó occurs in 2015-06 @ 01:08, 01:18, and 02:44, each time picking up the referent of a preceding topical phrase. For other functions of this noun, see §6.6.3.

### 19.2 Preclausal discourse markers

### 19.2.1 'Well, ...' (hàyà)

Preclausally, hàyà ~ hà: is a hesitation or stalling expression similar to 'well, ...' This is a regionally widespread form.

With H-tones, háyá kòy means 'okay; all right'. It is used for example as a positive response to a request or imperative. This too is a regional form. The relationship to emphatic kóy is obscure.
19.2.2 Preverbal emphatic particle (péy $\rightarrow$ 'not at all')

The emphatic element péy $\rightarrow$ '(not) at all' or 'nothing at all' occurs in various positions, ranging from clause-initial to pre-VP to preverbal. It can be thought of as a specialized expressive adverbial. It combines with a following negative clause.
(659)
$\begin{array}{llll}\text { a. ámádù } & \text { p } \varepsilon \text { y } \rightarrow & \text { mí-gì } & { }^{\text {L }} \mathrm{n} \text { dà-l- } \varnothing \\ \text { Amadou } & \text { at.all } & \text { 1Sg-Acc } & \text { give-PfvNeg-3SgSbj }\end{array}$
'Amadou didn't give me a damn thing.'
[alternative orders: ámádù mí-gì péy $\rightarrow{ }^{\text {Lndà }} 1-\varnothing$, péy $\rightarrow$ ámádù mí-gì ${ }^{\text {Lindà-1-Ø] }}$
b. yéngì pźy $\rightarrow$ zá ${ }^{\text {Lnà }}$ lù-m
yesterday at.all meal eat-PfvNeg-1SgSbj
'Yesterday I didn't eat a thing.'
[also yéngì zá péy $\rightarrow$ 'nà-lù-m, péy $\rightarrow$ yéngì zá ${ }^{\text {Lnà-lù-m] }}$
c. pźy $\rightarrow$ bàrà-lí-Ø
at.all help-PfvNeg-3SgSbj
'He/She didn't help me at all.'
For nàndùr-gó, which can have partially overlapping functions, see §6.6.3.

### 19.2.3 'But ...'

### 19.2.3.1 mè: and kà: 'but'

Other than the inevitable mè: (< French mais), the regionally widespread kà: 'but' is in use. In both cases, the particle may be positioned clause-initially, or the speaker can plan ahead and add the particle at the end of the preceding clause. The latter seems to be preferred when the entire sequence is uttered smoothly.

$$
\begin{array}{llll}
\text { wš: = bì-Ø } & \text { mè: / kà:, } & \text { zá } & \text { jǎ-l-Ø }  \tag{660}\\
\text { come=Past-3SgSbj } & \text { but / but, } & \text { meal } & \text { eat.meal-PfvNeg-3SgSbj } \\
\text { 'He/She came but did not eat.' } & &
\end{array}
$$

### 19.2.3.2 nà $\rightarrow$ 'whereas'

This particle has mild adversative force. It is uttered at the end of one clause in anticipation of the following clause.
(661)

> a. [èlù-ygò ${ }^{L}$ ò-gú] yé gô-m-dò-Ø nà $\rightarrow$ [sweetness-InanSg Prox-InanSg] there.Def exit-Ipfv-Ipfv-3SgSbj whereas [[gàndà ${ }^{\text {L }}$ wàndá] nè] gó-ggò:-Ø ${ }^{\text {Liǹn- }}$ [[place other] Loc] exit(v)-IpfvNeg-3SgSbj say.Pfv-3SgSbj '(said:) "This deliciousness comes from there, whereas it doesn't come from any other place." ' (2015-01 @ 04:46)
 [[farming 1Pl-Poss] Def] do.farming-Ipfv spend.day.Pfv-3PlSbj whereas] [gùdó-gùdó [á-gá ǹ] ńgò ${ }^{\text {L }}$ wà:-m-d-غ̀ [sometimes [3Refl-Poss Def] here come-Ipfv-Ipfv-3PISbj] 'They have spent the day working our field, but sometimes they come here (later) to their own (field).' (2022-04 @ 00:18-22)

YD clause-final adversative nà $\rightarrow$ 'rather' and Jamsay clause-final nà: 'though' are likely related. The orthographic distinction between nà $\rightarrow$ and nà: may be artificial.

### 19.2.4 'Lo, ...' (zàgà)

This particle is used in narrative to highlight a following clause that describes a surprising or climactic event. This too is a widespread regional form (often jákà or jágà in other languages).
zàgà occurs repeatedly in the animal tale 2015-02 @ 04:44, 04:50, 05:44, 07:16, and 07:52.

### 19.3 Pragmatic adverbs or equivalents

### 19.3.1 'Again' (yâ:), 'not again’

'Again', asserting the repetition of an event, can be expressed directly by the adverbial particle yâ:, often combined with là 'too'. yâ: là occurs at 2015-01 @ 03:58 and 2015-03 @ 01:14. Simple yâ: ‘again' or 'moreover' occurs in 2015-05 @ 01:44; 2015-06 @ 02:23 (two); 2022-04 @ 01:57 \& 02:00.
'VP again' can alternatively be expressed with a same-subject anterior subordinated form (gín for past time frame, né for future or other nonpast) of the verb píndé 'go/come back, return'.

| a. | [píndé | gín] | zèj-íi-yà-dà: <br> fight(v)-Pfv1a-3PISbj |  |
| :---: | :---: | :---: | :---: | :---: |
|  | [go.back | Ant.Past.SS] |  |  |
| 'They fought again.' |  |  |  |  |
|  | [pìndè | né] | [zèj-é:-1 | sèndèn] |
|  | [go.back | and.NonP.SS] | [fight(v)-Prohib | Pl.Addr] |
|  | 'Don't-2 | ht again!' |  |  |

## 19.4 'Only' particles

### 19.4.1 'Only' (sǎy, túrú/tùrù)

There are two 'only' particles, sǎy and túrú/tùrù. The former is a locally widespread form also found in Jamsay. túrú is probably a variant of the numeral túré:, túrú-gó ' 1 ' (§4.6.1.1).

As generally in Dogon languages, 'only' particles are phrased with NPs (including pronouns and adverbs) rather than with entire VPs or clauses. The pragmatic effect of predicative 'only' is in most cases easily expressed by adding the 'only' particle to a cognate nominal or other conventional object noun. In this case tùrù is L-toned.

| [jìrè-[ní-ngé] | tùrù / sǎy] | nî:-m-dò |
| :--- | :--- | :--- |
| [sleep(n) | only] | sleep(v)-Ipfv-3SgSbj |

'He just sleeps.'

```

With nouns that denote specific individuals, H-toned túrú requires a pronominal proclitic, such as Logo/3Refl á for third persons. Examples are mí túrú 'I alone’, ú túrú ‘you-Sg alone’, á túrú 'he/she/it alone', and with resumptive pronominal ámádù [á túrú] 'Amadou alone'. The H-tone and the obligatory "possessor" resemble the patterns with kin terms.

Another way to express 'only' is with a negated main clause plus an 'if it is not ...' clause specifying the exception.
\[
\begin{array}{llll}
{[\text { zì̀é }=\text { lă:- } \varnothing} & \text { dè }] & \text { bírá: } & \text { bírá-ǹ̀-y }  \tag{664}\\
{[\text { rainy.season=it.is.not-3SgSbj }} & \text { if] } & \text { work(n) } & \text { work-IpfvNeg-1PISbj } \\
\text { 'We don't work unless it's the rainy season.' } & \\
(=\text { 'We only work in the rainy season.') } & &
\end{array}
\]

A textual passage illustrating this 'only' construction is 2015-02 @ 03:21 to 03:28.

\subsection*{19.5 Phrase-final emphatics}

These emphatic particles are arguably postclausal. In particular, when they are included in quoted clauses, quotative particle wà occurs after the verb (i.e. after the VP) but before the particle; see (610a-b) in §17.1.3.2.

\subsection*{19.5.1 Clause-final kóy ‘sure’ (firm agreement or answer)}

The regionally widespread clause-final particle kóy emphasizes the truth of the proposition, confirming what the interlocutor has said or answering a polar interrogative with a reply that is more or less expected by the interlocutor. English adverbial sure captures the pragmatic nuance.
(665)

A: [bí gèrnè \(]\) àrná mìrń \(\dot{\varepsilon}=\) bì- \(\varnothing\) [2Pl chez] rain(n) rain.fall=Past-3SgSbj
B: é \(\rightarrow\) mìrn \(\varepsilon=\) bì-Ø kóy
yes, rain.fall=Past- \(3 \mathrm{SgSbj} \quad\) Emph
A: 'Did it rain over by you-Pl?'
B: 'Yes, it sure did (rain)!'
Textual examples: 2015-02 @ 04:08; and 2022-04 @ 02:00 \& 02:12.
For háyá kòy ‘okay; all right’ see §19.2.1.

\subsection*{19.5.2 Clause-final dè (admonitive)}

This clause-final emphatic is used in warnings (cf. English clause-final low-pitched now) and in statements that may surprise or contradict what the addressee says or is thought to believe.
(666) [gùnù-mbó ní:] hákílè kán dè [thief-AnPl with] attention do.Imprt Emph
'Watch out-2Sg for thieves now!'

Examples just from text 2015-01 are at 01:17 \& 01:38 \& 02:49 \& 03:14 \& 03:48 \& 03:54 \& 06:23 \& 06:31.

This particle is not to be confused with dè 'if' although both are clause-final. Prosodically, emphatic dè has a distinctive mid pitch level, while dè 'if' and its contextual variant dé have ordinary low or high tone.

\subsection*{19.5.3 Clause-final gà (mild emphatic)}
gà is elsewhere the topic marker ('as for X'), see §19.1.1.2. The particle can also occur clausefinally, apparently as a mild emphatic. Like other such particles it can follow quotative wà, which is otherwise clause-final.
\begin{tabular}{llllll} 
hà: & [yǒ: & gà \(]\) & dàg-â:y-Ø & wà & gà \\
oh, & [today & Top] & be.well.made-Pfv1a-3SgSbj & Quot & Emph \\
'(said:) "Oh, today has sure turned out well." ' & \((2015-01 @\) & \(01: 26)\) &
\end{tabular}

Other examples of clause-final gà(y) are 2015-01 @ 03:00, 05:56, 05:58, 06:39, and 2015-02 @ 02:15.

\subsection*{19.5.4 Clause- or phrase-final pós}

This clause- or phrase-final emphatic, pronounced as an interjection, means 'completely, totally, utterly'. Textual attestations are 2015-02 @ 01:58 \& 08:06.

\subsection*{19.5.5 Clause-final lì}

A clause-final particle lì occurs in one textual passage. The sense is unclear. The assistant indicates that it reflects the speaker's idiosyncratic style.


\subsection*{19.6 Greetings}

The noun 'greeting, salutation' is pǒ: . The transitive verb 'greet ( sb )' is pórú. The two occur in the collocation pǒ: pórú 'say/give a greeting'.

The basic time-of-day greetings are in (669). The 'good morning' and 'good evening' greetings contain an element mò \({ }^{\mathrm{n}} \sim\) môy \(^{\mathrm{n}}\) that is not recorded elsewhere. ná: is presumably related to ná 'spend the night (somewhere)'; neighboring Jamsay has ná: with long vowel. dèr \({ }^{n} \grave{\varepsilon}\) is similarly related to dèr \({ }^{n} \varepsilon\) 'spend the mid-day'. Both greetings are therefore retrospective, roughly 'Did you pass the night well?' and 'Did you pass the mid-day well?' In the middle of the day, a non-time-specific 'hello!' expression is used. The reply is in all cases \(\hat{o} \rightarrow\), with unbounded intonational prolongation.
\begin{tabular}{|c|c|c|}
\hline A: & ná: mòy \({ }^{\text {n }}\) & 'good morning!' (to one or more people) \\
\hline B: & \(\widehat{\text { on }}\) & [reply] \\
\hline A: & pǒ \(\rightarrow\) ỳ & 'hello!' (e.g. during the day) \\
\hline B: & \(\hat{o} \rightarrow\) & [reply] \\
\hline A: & dèr \({ }^{\text {n }}\) ¢ mô \({ }^{\text {n }}\) & 'good evening!' \\
\hline B: & \(\widehat{\text { on }}\) & [reply] \\
\hline
\end{tabular}

In complete greeting sequences some additional elements may occur. They tend to be borrowed from Jamsay. A greeting sequence occurs at the beginning of text 2015-01.

Some location- (rather than time-) specific greetings are in (670). Those in (670a) have some variant of the term 'greet' or 'greeting' preceded by the noun denoting the location. 'Field' as a regular noun is wòl-gó, plural wòlě:, so in this case there is an unexplained change in its form in the greeting. The cases in (670b) are of the form 'you and X ', where \(\therefore\) (dyingquail tonation) applies to both conjuncts.
a. ǒl pò:
ع́bé pǒ \(\rightarrow\) ỳ
'Hello in the field!'
tìbà: pǒ: 'Condolences!' ("death greeting!")
b. ú. \(\therefore\) bírá \(\therefore \quad\) 'Hello at work!'
ú \(\therefore\) ày-né \(\therefore\) 'Hello with fatigue!'

The formulaic greetings in (671) show irregular variants of verbs. In (671a), dènd-í: 'arrive' takes an irregular imperative form that does not distinguish singular from plural addressee. In (671b), the verb zž: 'bring' (§10.1.3.7) or perhaps its perfective-1b zě:-tì-Ø has a special form with medial rhotic.
(671) a. úló dènd-é: 'Approach the house!' (welcoming one or more visitors) zám dènd-é: 'Arrive (there) in peace!' (to a departing traveler)
b. ámbá ú zérè 'God brought you (back)!' (to a returning traveler)

Some additional formulae are in (672). They are imprecations including quoted imperative verbs (§17.1.4.1).
\(\begin{array}{llllll}\text { a. ámbá } & \text { bá-gò-nè } & \text { jìré } & \text { ú } & \text { tá:r-Ø } & \text { wà } \\ \text { God } & \text { next.year } & \text { eye } & 2 \mathrm{Sg} & \text { show.QuotImprt } & \text { Quot }\end{array}\) 'May God show next year to (your) eyes!' (said on major holidays)
b. ámbá [[òdùbà: \({ }^{\text {L }} \quad\) sé-ŋgé] nغ̀] ńné tún-Ø wà God [[road good-InanSg] Loc] 3Sg put.QuotImprt Quot 'bon voyage!' (may God put him/her on the good road!)'
c. ámbá sé-ŋgé [ú bènè] kán-Ø wà

God good-InanSg [2Sg Dat] do-QuotImprt Quot
'May God do good for you-Sg!'
d. ámbá [ú bènè] cé:l-é:-m-Ø wà

God [2Sg Dat] become.cool-MP-Caus-QuotImprt Quot
'May God cool (things) for you-Sg!'
e. ámbá [sàm-gó ǹ jà: tí-Ø wà

God [bad-InanSg Def] take send-QuotImprt Quot
'May God send away the evil!'

Formal Arabic greetings connected with Islam are also in use.

\section*{Texts}

Texts 2012-01 to -06 are brief and were taken by dictation from a single speaker (Oumar Guindo) at an early stage in fieldwork. These dictated texts are organized into numbered segments as in the grammar. The 2015 and 2022 texts were recorded in Mali. Those that have been transcribed, translated, and annotates are presented below. The 2015 and 2022 texts are divided into segments labeled by the starting time (minutes and seconds) in the relevant recording. The recordings are to be archived in Deep Blue Data (University of Michigan Libraries).

The inventory of 2015 and 2022 recordings, including some not yet transcribed (other people are welcome to transcribe them!) follows:

2015 texts, recorded by Heath in Mori (on market day), August 2015
\(\mathrm{A}=\) Mamoudou Guindo, \(\mathrm{B}=\) Oumar Guindo
2015-01 tale, hyena \& hare 1
2015-02 tale, hyena \& hare 2
2015-03 herding
2015-04 farming (not transcribed, duration 04:34)
2015-05 water
2015-06 exodus

2022 texts, recorded by Djiguiba in Sevare, December 2022
B = Oumar Guindo
\(\mathrm{A}=\) Ali Guindo (2022-01, -02 , and -04 )
A = Yatiguem Guindo (female) (2022-03)
2022-01 tale of child, sheep, and woman (not transcribed, duration 06:06)
2022-02 tale of hyena and goat with blacksmith (not transcribed, duration 05:19)
2022-03 wartime hardship
2022-04 men and women in the fields

The 2015 and 2022 recordings suffer from technical problems. When a digital microphone failed out in the bush in 2015, Heath had to resort to laptop recordings in .mov format, later converted to .wav for archiving. The recordings were clear enough to be transcribed. Project manager Djiguiba had similar problems in 2022 and had to record with a smartphone in .aac format. These recordings were later converted to .wav for analysis and archiving. An additional problem is that some of the male speakers tended to mumble. Fortunately, Oumar Guindo was present for the transcription and translation. He had participated in the recordings, knew the other speakers well, and was able to understand and repeat what they had said.

\section*{Text 2012-01 Cows (dictated)}

'The cows have gone to pasture. At dusk, they come (back) to the pen (made with thorn branches). They (=people) tie the calves. They bring (a calf) to the mother's side, and tie (it) by the neck to her front leg, and they draw the milk.' [né same-subject subordinator, §15.2.2.3]

\section*{Text 2012-02 Cotton (dictated)}
(674)
yà-pè:-mbó mó:ndú-gó mò:nd-í:-yà-dà: dè,
woman-old-AnPl meeting-InanSg assemble-MP-Pfv1a-3P1Sbj if, cèmdé pédà-m-d-è, cotton gin(v)-Ipfv-Ipfv-3PlSbj, cèmdé pédé d-à: dé, cotton \(\operatorname{gin}(v) \quad\) RecPrf-3PlSbj if, pàndé pándù-m-d-è, thick.thread make.thick.thread-Ipfv-Ipfv-3P1Sbj,
'When the old women have gotten together together, they gin the cotton. When they have finished ginning the cotton, they make the thick thread (warp).'
[recent perfect, §10.2.1.6]
(675)
pàndé pándí d-à: dé,
thick.thread make.thick.thread RecPrf-3P1Sbj if,
[bé: nè] tómbò-m-d-è,
[stick Loc] roll.up-Ipfv-Ipfv-3PlSbj,
[bé: nè] tómbù d-à: dé,
[stick Loc] roll.up RecPrf-3PlSbj if,
[èdè:-tě: gì] ńdà-m-d-è,
[cloth-weave.Agent Acc] give-Ipfv-Ipfv-3PlSbj,
'When they have finished making the thick thread, they roll it up on a stick. When they have rolled it up on the stick, they give it to a weaver.'
[cf. verb té 'weave (fabric)']
(676) દ̀dě: t t̨â-m-dò-Ø,
cloth weave-Ipfv-Ipfv-3SgSbj,
غ̀dě: tモ́ dè-Ø dé,
cloth weave RecPrf-3SgSbj if,
غ̀dě dórná-ŋgô: \(=\varnothing\)
cloth sell-Ipfv.Ppl.InanSg=it.is. 3 SgSbj
'He will weave it. When he has finished weaving the cloth, the cloth is for sale.'
[dórná-ŋgô: = Ø, §9.3.2]

\section*{Text 2012-03 Hare and Hyena I (dictated; interrupted and imcomplete)}

'Hare and hyena. (Hare said) "let's go hunting.",
[conjoined NPs, §7.1.1; quoted hortative, §10.6.4; quotative wà, §17.1.3.2]
\begin{tabular}{lllll} 
dàndá & yày & gín, & & \\
hunt(n) & go & \begin{tabular}{l} 
Ant.Past.SS,
\end{tabular} & \\
tǎ: & [sàlgí & ìbè-ḿ] & wà, & \\
hyena & [ablution & take-QuotHort] & Quot, & \\
zòmó & á \(\rightarrow\) & [sàlgí & íbé-yù-m & wà], \\
hare & Logo.QuotSbj & [ablution & take-IpfvNeg-LogoSbj & Quot], \\
tǎ: & [íbè-m-nù-m & & wà], & \\
hyena & [take-Ipfv-Ipfv-LogoSbj & Quot],
\end{tabular}
'They went hunting, then hyena said: "let's do our ablutions." Hare said "I won't do ablutions". Hyena said "I will do (them).",
[a prayer was needed to cross the water, so proper ablutions (washing hands and feet) had to be performed; gín same-subject subordinator, §15.2.2.2; á \(\rightarrow\) contracted from logophoric quotative subject á wá \(\rightarrow\), §17.1.3.1]
\begin{tabular}{lllll}
{\(\left[\begin{array}{lll}\text { ínjé } & \text { nè }] & \text { tómbó }\end{array}\right.\)} & gín] & nû̀̀-Ø, \\
{\(\left[\begin{array}{lll}{[\text { water }} & \text { Loc }] & \text { jump }\end{array}\right.\)} & Ant.Past.SS] & enter.Pfv-3SgSbj,
\end{tabular}
[gò gín] [ \({ }^{\mathrm{HL}}\) dôâ-l kàn-dí-Ø \(]\)
[exit(v) Ant.Past.SS] [arrive.Dur-PfvNeg do-PfvNeg-3SgSbj if] [ \({ }^{\text {HL lábà-1 kàn-dí-Ø], }}\) [pass.Dur-PfvNeg do-PfvNeg-3SgSbj],
'(Hyena) jumped into the water (of a pond). Each time when he came out, he would not perform (proper ablutions), and he would fail to go across.'
[instead of carefully performing normal ablutions, Hyena kept plunging into the water and then was unable to cross the water to pursue the hunt; durative \{HL\} overlay, §10.2.1.9; \{HL\}-overlaid perfective negative plus kàn-dí-, §15.2.1.4]
(680) ná: kày,
now Topic,
[[cìndé: nè] ób-í: gín] [bàrú bàrà gín]
[[shade Loc] sit-MP Ant.Past.SS] [meeting hold.meeting Ant.Past.SS]
ع́y \({ }^{\mathrm{n}}\) ségírá-m wà tomorrow meet-QuotHort Quot
'Now they (animals) sat down in the shade and held a meeting. They said, "let's meet tomorrow." ' [tale stopped here, incomplete]

\section*{Text 2012-04 My trip (dictated)}
```

(681) [[dámbá ky̌:] nè] gò gín]
[[village 1SgPoss.InanSg] Loc] exit(v) Ant.Past.SS]
[[[dàmbà }\mp@subsup{}{}{L}\mathrm{ wàndá] 'òdùbà:] nè ] ó-m ' L
[[[village other] road] Loc] go-Ipfv have-1SgSbj,
[dámbá nè] sé:w ' dò-m,
[village Loc] wellbeing arrive.Pfv-1SgSbj,
nù-mbó sé:W Ltèmbù-m,
person-AnPl wellbeing find.Pfv-1SgSbj,
[[ùlò-sùgó wě:] Lbàyà] sé:w Ltèmbù-m
[[house-descend 1SgPoss.InanPl] owner] wellbeing find.Pfv-1SgSbj
'I left my village and was going on the road to another village. I arrived safely. I found the people there in good health. I found my host in good health.'
[ky̌: and wě: $1 S g$ possessor following the possessum, §6.2.1.2; -m ${ }^{\mathrm{L}}$ sò- progressive construction, $\S 10.2 .2 .3 ;{ }^{\mathrm{L}}$ dò-m and ${ }^{\mathrm{L}}$ tèmbù-m tone-dropped simple perfectives (defocalized), §10.2.1.1, §13.1; 'bàyà 'owner', §5.1.2.2]

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\section*{Text 2012-05 Wooden spoon (dictated)}
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(682) [cìlá ${ }^{\text {L }}$ kù:wè:rù] lábá-sú- g gô: $=\varnothing$
[ironwood spoon] carve-Pfv2.Ppl-InanSg
[ [nè ${ }^{L}$ [hákílé wě:] yì-sí-mé]
[[person [mind 1SgPoss.InanPl] see-Pfv2-Ipfv-Ppl.AnSg]
ńdà-m-nù-m] jìnì gín] ${ }^{\text {Lzè:-m }}$
give-Ipfv-Ipfv-LogoSbj] say Ant.Past.SS] bring.Pfv-1SgSbj
'A spoon of Prosopis (ironwood) was carved. I brought it, saying (=intending) I will give it to someone whom my mind has seen (=whom I like).'
[passive -ngô: = Ø, §9.3.2; relative clause with 'person' as internal head, §14.1]

```

\section*{Text 2012-06 Snakebit (dictated)}

'As I was going along in the village at night, a snake swelled up at me. I intended (=tried) to pick up a stick, (but) it bit me. I went home and applied a remedy (powder). Nothing else happened to me, it healed there.'
[ \({ }^{\text {HL }} \hat{\mathrm{O}}-\mathrm{m}\) imperfective adverbial clause, \(\S 15.2 .1 .2 .1\); kár\({ }^{\mathrm{n}}\) à perfective positive participle in adverbial clause, §15.2.2.5; lPl equivalent: [bé: \({ }^{\text {nna:-m-nè-y }}{ }^{\mathrm{n}}\) ] í jìn kárnà]

\section*{Text 2015-01 Tales (duration 06:54)}
(after the greetings, one tale begins at 00:32, another at 02:52)
greeting sequence 00:05 to 00:12
```

(00:05) B: mà:mùdí bí sé:W }->\quad\mathrm{ Lbì-y }\mp@subsup{}{}{n
M 2Pl wellbeing be-2PlSbj
A: sé:W-> bì-y }\mp@subsup{}{}{n
wellbeing be-1PlSbj
B: í-gé-mbò Sé:w }\quad\mathrm{ Lb-è:
1Pl-Poss-AnPl wellbeing be-3PlSbj
A: bá:sù ỳgó-Ø
trouble not.be.Loc-3SgSbj
B: tà:ré
okay
A: sé:w }->\quad\mp@subsup{}{}{\mathrm{ L}
wellbeing be-2PlSbj
B: sé:w }->\quad\mathrm{ Lbì-yn
wellbeing be-1PlSbj
(00:10) A: [dámbá í-gé] sé:w }->\quad\mathrm{ Lbù-Ø
[village 1Pl-Poss] wellbeing be-3SgSbj
B: tà:ré
okay
A: bá:sù ỳgó-Ø
trouble not.be.Loc-3SgSbj
(00:12) B: kórójú sé:w }->\quad\mathrm{ Lbù-Ø
household wellbeing be-3SgSbj
A: bá:sù ỳgó-Ø
trouble not.be.Loc-3SgSbj
B: yà:wúr
greeting

```
(00:16) B: jìndó
Guindo
A : í kàbù
1Pl together
\(B\) : séw-séw \(\quad{ }^{\text {L }}\) bù- \(y^{n} \quad{ }^{\text {L }}\) bù- \(\mathrm{y}^{n}\)
fine-fine be-1PlSbj be-1PlSbj
tǎ: \(\therefore\), cé-mbò àsègè-mbó sěy \({ }^{\mathrm{n}}\)-sěy \({ }^{\mathrm{n}} \quad\) zè:--só-ỳ \({ }^{\mathrm{n}}\)
hyena.\&, thing-AnPl animal-AnPl Rdp-tale bring-Pfv2-1P1Sbj
B: ‘Guindo (name).'
A: 'We are together.'
B: 'We are in good health. Hyena, we've brought (=started) tales of the critters, the animals.'
[kàbù 'together', §18.4.2; cé 'thing' with AnPl suffix = 'critter']
(00:24) A: sěy \({ }^{n}\) z \(\hat{\varepsilon}-1 \quad\) mà \(\rightarrow\) wà,
tale bring-QuotImprt Q Quot,
[mí sǎy] émó-ygó = lă:-Ø
[1Sg only] speak-Ipfv.Ppl.InanSg=it.is.not-3SgSbj.Q
B: é
yes
A: d'accord
okay
A: 'Should I not bring the tale there (=tell it)? Is it now I alone who will tell it, right?'
B: 'Yes.'
A: 'All right.'
[zé-lù quoted imperative of 'bring', §10.6.3.1]
(00:32) A: tǎ \(\therefore\), zòmó \(\therefore\), donc [[á lèy] wò: gín] hyena.\&, hare.\&, so [[3Refl two] come Ant.Past.SS]
[gòně: bà: gín] ándá yày-s-ê:, [gear.InanPl gather Ant.Past.SS] the.bush go-Pfv2-3PlSbj,
A: 'Hyena and hare. The two of them came, collected their baggage, and went out into the bush.'
(00:42) A ándá bú yày kárnà, the.bush 3Pl go Pfv.Ppl,
zòmó á \(\rightarrow\), [bèlè \({ }^{L}\) ह́lé- \(\left.\varepsilon l\right]\) bě: jè-Ø dé, hare 3Refl.Indep, [grass Rdp-sweet] get eat.Pfv-3SgSbj if, [[tǎ: \({ }^{\text {L dùgò }] ~ n e ̀] ~ w o ̀:-Ø ~ d e ́, ~}\) [[hyena base] Loc] come.Pfv-3SgSbj if,
A: 'After they went out to the bush, hare managed to get and eat some sweet grass, and came up next to hyena.'
[kárinà, §15.2.2.5; bě: plus a second verb, §15.1.4.2]
\begin{tabular}{|c|c|c|c|c|}
\hline A: donc & [jì-ngé & દ́lé-ćlć] & \multirow[t]{2}{*}{\begin{tabular}{l}
jê-m-d̀̀-Ø, \\
fart-Ipfv-Ipfv-3SgSbj,
\end{tabular}} & \\
\hline so & [fart-Sg & Rdp-sweet] & & \\
\hline ńné & \({ }^{\mathrm{HL}} \mathrm{j}\) ê-m & bà, & & \\
\hline 3 AnSg & fart-Ipfv & Ipfv.Sub, & & \\
\hline [tàngà & àndí] & bě:-bè: & sò-Ø & mà \(\rightarrow\) \\
\hline [around & where?] & Rdp-get & Ipfv have-3SgSbj & Q \\
\hline
\end{tabular}

A: 'So, he (=hare) was farting sweet farts. He was about to fart. (Hyena:) "From whereabouts are you fetching (that food)?",
[HL \(\mathrm{j} \hat{\mathrm{ê}}-\mathrm{m}\) bà, §15.2.1.2.1 ; 'get' + 'come' \(=\) 'fetch'; progressive \(-\mathrm{m}{ }^{\text {L }}\) sì-, §10.2.2.3]
(00:59)


A: ' (Hare:) "It's next to the river. I go there and eat. That's how I am doing it." , [existential yé, §11.2.2.1]
(01:05) A: [kú ní:] jì-ngé jé-m \({ }^{\text {L }}\) sò-m ńné nà,
[Dem.InanSg Inst] fart-Sg fart-Ipfv have-LogoSbj 3Sg said,
\(\left[\begin{array}{llll}\text { nné } & \text { wá } \rightarrow \text { ] }\end{array}\right]\) ní:] kán-í:-yày-ø dè \(]\)
[3Sg QuotSbj] [[Dem.InanSg Inst] do-MP-Pfv1a-3SgSbj if]
á-gì [[gándá ǹ] nè] yé zây wà,
Logo-Acc [[place Def] Loc] there.Def convey.QuotImprt Quot,

A: 'He (=hare) was farting like that. (Hyena:) "Hey you, if that's how it is, take me to the place there.",
[nà 'said', §17.1.3.3; zây irregular quoted imperative, §10.6.3.1]
(01:10)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{A:} & á-gá] & á & bà: & kár \({ }^{\text {nà }}\), \\
\hline & 3Refl-Poss] & 3Refl & gather & Pfv.Ppl, \\
\hline yé & [kú & ní:] & \({ }^{\text {L }}\) yày & \\
\hline there.Def & [Dem.InanSg & Inst] & go.P & \(1 \mathrm{a}-3 \mathrm{SgSb}\) \\
\hline yé & bèlé ná-m & ńné & \({ }^{\mathrm{HL}}\) Sิิ-m & bà \\
\hline there.Def & grass eat-Ipfv & 3Sg & have-Ip &  \\
\hline
\end{tabular}

A: 'He (=hyena) collected his baggage, then he went there in that way. He was eating grass.'
[3Refl á in topic-tracking function, §15.2.2.5]


A: 'A rain-storm was coming. When the rain-storm came, the goats ran.'
[\{HL\} overlay, §10.2.1.9; íné: 'goat', plural í:n-b̀̀]

[[[hyena hole-Sg] Loc.Dist] go.Pfv-3PlSbj,
[[tǎ: wò: gín] ńné jérá-ngó ní:]
[[hyena come Ant.Past.SS] 3Sg look.at-Ipfv.Ppl.InanSg Inst]
í:n-bò [kòmbù-gó ǹ n nè] bǎ \({ }^{\text {L }}\) gàr \({ }^{n}\) - c :,
goat-AnPl [hole-Sg Def] fill fill be.put.in.Stat-3PlSbj,
A: 'They went over into the hyena's lair. When hyena came and looked, (he saw) the goats had filled the lair.'
[bàrì, displaced locative, §8.2.2.2 ; -ngó ní:, §15.2.2.7.2]
(01:26) A: hà:, [í:n-bò ǹ] á yì kárnà,
oh, [goat-AnPl Def] LogoSbj see Pfv.Ppl,
hà: [yy̌: gà] dàg-â:y-Ø wà gà,
oh, [today Top] be.well.made-Pfv1a-3SgSbj Quot Emph,
A: '(Hyena:) "Oh! I have seen the goats. Oh, today has sure turned out well.",
[clause-final gà, §19.5.3]
(01:30)


A: '(Hyena:) "I was looking for meat out in the bush (unsuccessfully). Now I have found meat (here) at home.",
[= bù-m = bù-m past progressive §10.5.1.2; the order úló nàmá ... is preferred]
(01:32)


A: '(Hyena:) "Mine (=my situation) has turned out well." Hyena left there, he ran.'
(01:37) A: donc, [cíló: yílèy bà:] 'yày-Ø dè, so, [kilometer Inan-two until] go.Pfv1a-3SgSbj if,
[nùyǎ: ní:] wâ:-m-dò-ø wà, [song Inst] come-Ipfv-Ipfv-3SgSbj Quot,
A: 'So, when he had gone two kilometers, he came singing.'
(01:41) A: [hyena sings in Tommo So language, transcription approximate] ènéy méyè kùrù méngéré nà í méyè kùrù méngéré ó:lè jàmbà: kùrù méngéré bó:lè jàmbà: kùrù méngéré jénné yá:yà: kùrù méngéré
A: [meaning unknown to TU assistant]
(01:50) A: [kú ní:] wò: gín,
[Dem.InanSg Inst] come Ant.Past.SS,
[órú sú:-ndí gín]
[say descend-Caus Ant.Past.SS]
lǒy jèrì-Ø dé pú \(\rightarrow\)
look.down look.at.Pfv-3SgSbj if all
A: 'With that he (=hyena) came, he ceased speaking (=singing). He looked down.' ['descend' can mean 'stop (speaking/singing)']
(01:53) A: á, yèlé-yèlè jó \(\rightarrow\) jê:y wà [hyena speaks in Tommo So] ah! Rdp-come fill get Quot
[yy̌: là] ô-m-dò-Ø, yǎy-yǎy wâ:-m-dò-Ø dè, [today too] go-Ipfv-Ipfv-3SgSbj, Rdp-go come-Ipfv-Ipfv-3SgSbj if,
A: '(Hyena, in Tommo So:) "Ah, they (=goats) keep coming and fill up (the place)!" Today (=that same day) he goes. He kept going and coming (back).'
[Tebul equivalent, see 02:08 below]
(01:57) A: [hyena sings in Tommo So language, transcription approximate] ènéy méyè kùrù métgéré
nà í méyè kùrù méngéré
ó:lè jàmbà: kùrù méngéré
bó:lè jàmbà: kùrù méngéré
jénné yá:yà: kùrù méngéré wà
A: [meaning unknown to TU assistant]
(02:06)


A: 'He spoke (=sang) thus. One (goat) jumped away from the herd. (Hyena, in Tommo So:) "they (=goats) keep coming and fill up (the place)!",
(02:08)


A: '(Hyena, in Tommo So, then in TU:) "They (=goats) keep coming and fill up (the place)!" he was saying.'
(02:11)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & : [ \([\) tú-t & & tú-túrú] & bú & gô-m] \\
\hline & [ [Rdp & & Rdp-one & 3 AnPl & exit-Ipfv \\
\hline \multirow[t]{2}{*}{} & [yǎy & gò & gín] & [dùmò & gín], \\
\hline & [go & & (v) Ant.P & [finish & Ant. \\
\hline
\end{tabular}

A: 'One by one they (=goats) were leaving. (They) went away and were finished (=none left).'
(02:13) A: [ìn \({ }^{\mathrm{L}}\) zànjě: sày] \({ }^{\mathrm{L}}\) wàdè-Ø, \(\quad\left[\mathrm{in}^{\mathrm{L}} \quad\right.\) zà \(\mathrm{j} j \check{\text { č: }} \quad\) ǹ \(]\), [goat alpha.male only] remain.Pfv- 3 SgSbj , [goat alpha.male Def], [dùgó á bè kárnà]
[below 3Refl stay Pfv.Ppl]
[cílá ǹ sày] cèý \(\rightarrow{ }^{\text {L }} \mathrm{b}-\mathrm{\varepsilon}\) :, \(\quad\) yà-lí- \(\varnothing\),
[horn Def only] wee be-3PlSbj, see-PfvNeg-3SgSbj,
A: 'Only the alpha (=biggest) billygoat remained. The alpha billygoat, it was at the bottom, its horns were tiny (not extended upward). He (=hyena) didn't see (it = goat).'
[íné: 'goat' reduced to ì \({ }^{\text {L }}\) before adjective; expressive adverbial cغ̀ý \(\rightarrow\) made predicative with subject-focus form of bù-, §13.1.1.4.3]
(02:19)
\begin{tabular}{|c|c|c|c|c|}
\hline [y & á-gá] & síndé & yày & \multirow[t]{3}{*}{} \\
\hline [weeping(n)-snort(n) & 3Refl-Poss] & snort(v) & go & \\
\hline ób-í: kárnà, & [ [¢ì \({ }^{\text {L }}\) zà & & & \\
\hline
\end{tabular}

3Sg sit-MP Pfv.Ppl, [[[goat alpha.male Def] horn Def] Loc] precisely,
A: 'He (=hyena) went (away) sniffling (=sobbing). When he sat down, right on the horns of the alpha male billygoat, ...'
[té \(\rightarrow\), §8.4.3.2]
(02:24)
\begin{tabular}{lllllll} 
A: ób-í: & dé & L sỳ- \(\varnothing\), & & & \\
sit-MP & RecPrf & have-3SgSbj, & & & \\
ńné-gì & dágám \(\rightarrow\) & ńné & śbó & dè & kárnà, \\
3Sg-Acc & a.little & 3Sg & jab & RecPrf & Pfv.Ppl,
\end{tabular}

A: 'He had just sat down. It (=goat) had jabbed him a little.'
[dágám \(\rightarrow\), §8.4.2.4]


A: '(Hyena) said "what has jabbed me?" Then he (=hyena) was pawing the ground (=feeling with his paws). The horns were tiny, they came out.'
[perfective-2 subject-focus -s-ò:, §13.1.1.4.1; gàndú-m = gàndú-m bà as in the following segment, §15.2.1.2.2]
A: [ò-gú
wá \(\rightarrow\) ] [íné: go-â:y-Ø
wà]
[Prox-InanSg QuotSbj] [goat exit-Pfv1a-3SgSb Quot]
[ńné gàndú-m bà]
[3Sg paw(v)-Ipfv Ipfv.Sub]
[in \({ }^{\mathrm{L}}\) zànjě̌:] [kú ní:] \({ }^{\text {L}}\) gọ̀̀-Ø], [goat alpha.male] [Dem.InanSg Inst] exit.Pfv-3SgSbj],

A: '(Hyena:) "this one, the goat has come out!" As he (=hyena) was pawing, the alpha male billygoat came out then.'
(02:36)


A: 'When the alpha male billygoat had come out, the hyena was running and the goat was running (=hyena was chasing goat).'
[lit. "[hyena's running] [goat's running]" with nominals]
(02:39) A: á, [ìn \({ }^{\mathrm{L}}\) zà̀jǰ̌:], wàndá [tǎ: dìmb-ì: gín]
ah, [goat alpha.male], not.yet [hyena follow-MP Ant.Past.SS]
doà-lí-Ø gà, arrive-PfvNeg-3SgSbj Emph,
A: 'Ah, the alpha male goat, hyena followed (=chased) it but didn't arrive (=catch up to it) yet.'
(02:42) A: [tǎ: [ìn \({ }^{\mathrm{L}}\) zànǰ̌̌:] dìmb-ì: gín]
[hyena [goat alpha.male] follow-MP Ant.Past.SS] [ \({ }^{\mathrm{HL}}{ }_{\text {doââ- }}\) kán gín], [[ìin \({ }^{\mathrm{L}}\) zànjě:] [arrive-PfvNeg do Ant.Past.SS], [[goat alpha.male] pé: gín] [kú ní:] \({ }^{\text {Làbè̀- }}\), spring(v) Ant.Past.SS] [Dem.InanSg Inst] pass.Pfv-3SgSbj,
A: 'When the hyena had chased the alpha male goat and had not arrived (=caught up), the alpha male goat sprang and got away.'
[gín with perfective negative verb and kán, §15.2.2.2]


A: 'It happened like that. Yes.'
B: 'If there is another one, bring (=tell) another tale.'
[yé \({ }^{\mathrm{L}}\) sò-Ø 'it has' used here like yé \({ }^{\mathrm{L}} \mathrm{bù-Ø}\) 'it is'; B's turn here is murmured in low voice, transcription abbreviated and approximate]
(02:52) A: d'accord, wálà:, kú nú ní:] ńné kán-í: kárnà, okay, well, Dem.InanSg [Dem.InanSg Inst] 3Sg do-MP Pfv.Ppl, [kón gà] ná: súg-à:y-Ø lì, [DemDef Top] now descend-Pfv1a-3SgSbj ??,
A: 'All right. Well, that (tale) having been done, (the tale of) that one (=hyena) has ended now.'
[kón gà, §19.1.1.2, topic form of demonstrative kôn, §4.4.1.2; sense of clause-final lì is obscure]
(02:56)
A: [zòmó \(\begin{array}{llll}\text { á } & \text { yày } & \left.\text { kár}{ }^{n a ̀}\right]\end{array}\) [hare 3Refl go.Pfv Pfv.Ppl] [gònč: á-gá] bà: gín, [gear.InanPl 3Refl-Poss] gather Ant.Past.SS, [ámbá bènè] á yày kár \({ }^{\text {nà }, ~}\) [God chez] 3Refl go Pfv.Ppl,

A: 'The hare went and collected his baggage. He went into God's presence.'
(03:00)


A: 'He (=hare) said, "God, I have no intelligence. Help (me) with my intelligence!' [quoted imperative, §10.6.3.1, §17.1.4.1; 'help' = 'add']
(03:02)
A: ámbá dàgà-só-Ø
wà, bon
God be.well.made-Pfv2-3SgSbj Quot, well
[kú ní:] bé-à:y-Ø dè,
[Dem.InanSg Inst] remain-Pfv1a-3SgSbj if,
[ńné wá \(\rightarrow\) ] yày dé, [3Sg QuotSbj] go.Pfv if,

A: 'God said, "that's fine." Well, when that (=situation) stayed like that, when he (=hare) had gone, ...'
(03:08) A: kògòdé \({ }^{\mathrm{L}}\) cìnè-gòmò, [nà: \({ }^{\text {L }}\) wàlé] \({ }^{\mathrm{L}}\) èmnè, viper snot, [cow pet] milk, [kú yày né]
[Dem.InanSg go Ant.NonP.SS]
[zé-dè né] wǒ-1 wà,
[bring Ant.NonP.SS] come-QuotImprt Quot,
A: '(God) said, "Go and fetch some viper's snot and some milk of a pet cow!", ['viper snot' and 'milk of pet cow' are conjoined, but pronounced separately as in a list (which continues in the following segment; zé-dè nદ́, §10.1.3.7]
 [elephant tooth one-InanSg Def] ah! be.well.made-Pfv1a-3SgSbj Quot, [[gòně: á-gá] bà: gín] [[gear.InanPl 3Refl-Poss] gather Ant.Past.SS] yé [kú ní:] goè̀-Ø, there.Def [Dem.InanSg Inst] exit(v).Pfv-3SgSbj
A: '(God:) "... (and) one elephant's tooth." (Hare) said, "Ah, all right." He (=hare) collected his baggage and then went away from there.'
[later in the tale 'elephant's tooth' is replaced by 'lion's tooth']
(03:19) A: [ándá yày gín] ńné lǒy jèrì kárnà, [the.bush go Ant.Past.SS] 3Sg look.down look.at Pfv.Ppl, [nòndó wùlé: là: gín] yé \({ }^{\text {Lbù- }}\) ], [snake children give.birth Ant.Past.SS] Exist be.Loc-3SgSbj,
A: 'He (=hare) went out into the bush and looked down. A snake was there, having given birth to its young.'
(03:23)


A: 'The snake having giving birth and being there, he (=hare) saw (it).'
(03:27)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [nòndó & \({ }^{\text {L wùlè] }}\) & gǒ: & kúbó & d-à: \\
\hline [snake & children] & fire & be.munched & RecPrf-3P1Sbj \\
\hline donc & [nòndó & yà-ıgá & \({ }^{\text {L }}\) ¢̀̀̀-Ø. & \\
\hline so & [snake & weeping(n) & begin.Pfv-3 & \\
\hline
\end{tabular}

A: 'The baby snakes were munched (=burned to a crisp) in the fire. So then, the snake began to weep.'
[kúbó 'munch, eat by crunching', here in passive sense, §9.5]


A: 'When the snake had begun to weep, he (=hare) approached there. He (=hare) said, "you there, what's the matter?",
[kárnà in different-subject clause combinations, §15.2.2.5; subject-focus \({ }^{\text {L }}\) kàn-è̀, §13.1.1.4.1]
(03:34) A: [wùlé: á-gá-mbò] gǒ: kúbó d-à:]
[children Logo-Poss-AnPl] fire be.munched RecPrf-3P1Sbj]
[kú yà-ngá yá-m \({ }^{\mathrm{L}}\) sò-m] wà,
[Dem.InanSg weeping(n) weep-Ipfv have-LogoSbj] Quot,
A: '(Snake) said, "my children were burned to a crisp by the fire, I am weeping (for) that." ,
(03:36)
\begin{tabular}{lllll} 
A: \begin{tabular}{llll}
{\([\) ńné } & wá \(\rightarrow]\) & ól-í: & wà, \\
& {\([3 S g\)} & QuotSbj] & stop.crying-MP
\end{tabular} & Quot, & \\
{\(\left[\begin{array}{llll}\text { dúgó } & \text { kò-ń }] & \text { nè }] & \text { dènd-ì:-ด }\end{array}\right.\)} & dé, \\
{\([[\) base } & InanSg-3SgPoss \(]\) & Loc \(]\) & approach-MP-3SgSbj & if
\end{tabular}

A: '(Hare) said, "you, stop crying!" He (=hare) approached that one (=snake).'
(03:40)
\begin{tabular}{|c|c|c|}
\hline A: [[jìrè-nòmgó & ǹ] nè], & \\
\hline [ [face & Def] Loc], & \\
\hline dágám & púpúl-દ́:-m & \({ }^{\text {jij̀n-Ø }}\) ( dé, \\
\hline a.little & rub.lightly-MP-QuotHort & say.Pfv-3SgSbj if, \\
\hline [cìnc̀-gómò & ǹ] lógúlí-lògùlì & gó-ndò-m-dò-Ø, \\
\hline [snot & Def] Rdp-extract & exit-Caus-Ipfv-Ipfv-3SgSbj, \\
\hline
\end{tabular}

A: 'He (=hare) decided to light rubbed around on the face (of the snake). He was picking out snot.'
[púpúl-ধ́:-m may be a quoted hortative (§10.6.4) but parsing uncertain; iterated lógúlílògùlì, §11.6.2]
(03:45) A: zòmó wá \(\rightarrow\), [yà-ŋgá á-gá] cé kárnù-m-dò-Ø dè, hare QuotSbj, [weeping(n) Logo-Poss] thing do-Ipfv-Ipfv-3SgSbj if, kán dǎ:-Ø dè, do it.is.not-3SgSbj if,
A: '(Snake:) "Hare, whether my weeping does something or does not, ...",
[nòndó 'snake' on the recording is here emended to zòmó 'hare'; kán dǎ:-Ø dè, §11.2.1.2]
\begin{tabular}{|c|c|c|c|c|c|}
\hline [[ci & á-gá] & nı̀], & ùmǎ: tún & gò-ndú & a \\
\hline [ [snot Log & Logo-Poss] & Loc], & and put & exit-Caus.Quot.Imprt & Qu \\
\hline [sábì-dè̀ & [hákilé & gá & ǹ] & lú-Ø & wa, \\
\hline ecaus & [min & Logo- & Def] & N & Quot \\
\hline
\end{tabular}

A: '(Snake:) "... Take (your) hand away from my snot, because my mind hasn't seen (=agreed with) it.",
(03:50) A: [[cíné á-gá] nè] nùmǎ: zéá-m \({ }^{\text {Lbù̀-Ø }}\) dé, [[nose Logo-Poss] Loc] nose bring-Ipfv be- 3 SgSbj if, [cìnè-gómò bě: dè] yì-só-ndǒ-wn, [snot get.Pfv-3SgSbj if] see-Pfv2-Neg-2SgSbj,
A: '(Snake:) "If you are bringing (your) hand onto my nose, have you not gotten some snot?",
[negative rhetorical question, §13.2.1.3; yì-só-ndǒ-wn, §10.2.3.2]
(03:54) A: wàndá [á lèy] dàgà-lí- \(\varnothing\), not.yet [3Refl two] be.well.made-PfvNeg-3SgSbj, [[zégé gà] kán gín] [[fight(n) Top] be.done Ant.Past.SS]
A: 'The two of them were not agreed. There was a quarrel.'
(03:56) A: [[gònč: á-gá] bà: gín],
[[gear.InanPl 3Refl-Poss] gather Ant.Past.SS],
 [snot bring Ant.Past.SS] [Dem.InanSg Inst] go.Pfv-3SgSbj,
A: 'He (=hare) collected his baggage and went. He brought the snot and then went.' [zź-dè, §10.1.3.7]
(03:58)
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: [yâ: & là] & kú & á & yày & kárnà, \\
\hline [again & too] & Dem.InanSg & 3Refl & go & Pfv.Ppl, \\
\hline [ńné & \multicolumn{2}{|l|}{ó-ggó} & \multicolumn{2}{|c|}{ní]} & \\
\hline [3Sg & \multicolumn{2}{|r|}{go-Ipfv.Ppl.InanSg} & \multicolumn{2}{|c|}{Inst]} & \\
\hline
\end{tabular}

A: 'Again, he (=hare) set off then. As he was going, ...'
[-ŋgó ní: , §15.2.2.7.2]
(04:00)


A: 'A pet cow, after bearing a child (=calf), having left the calf (behind) it went (to pasture) eating grass.'
['pet cow' is a favorite cow that is kept at the house instead of with the herd; purposive clause, §17.4.1, repeated in the next segment]
(04:06) A: bèlé jì-lé ńné yày kárnà, nèmé yé \({ }^{\mathrm{L}}\) sò- , , grass eat-Purp 3 Sg go Pfv.Ppl, salt Exist have-3SgSbj, [[z̀dé ǹ gì] nèmé [kú ní:] dégà-mì-Ø, [[child Def] Acc] salt [Dem.InanSg Inst] lick-Caus.Pfv-3SgSbj,
A: 'When it had gone to eat grass, it had some salt. It let the calf lick the salt then.'
(04:11)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{A: [ e d ¢́} & ǹ] & nèmé & ńné & làyì & árnà, \\
\hline & Def] & salt & 3 Sg & taste(v) & Pfv.Ppl \\
\hline [ńné & bènè] & \multicolumn{2}{|l|}{غ̀ù-ŋgó} & \multicolumn{2}{|r|}{lóg-à:y-Ø,} \\
\hline [3Sg & Dat] & & ness- & & be.excessiv \\
\hline
\end{tabular}

A: 'When the calf tasted the salt, it was extremely delicious for it (=calf).'
[abstractive èlù-ngó, §4.2.6, cf. દ́lú-ngó 'sweet.InanSg' as modifying adjective]
(04:14)
A: [kú
ní:] ńné \({ }^{\text {HL}}\) bû-m bà,
[Dem.InanSg Inst] 3Sg be-Ipfv Ipfv.Sub,
[nàrá ǹ] [kú ní:] wè:-Ø,
[mother Def] [Dem.InanSg Inst] come.Pfv-3SgSbj,

A: 'While it (=calf) was being (thus), the mother (cow) came.'
(04:17) A: á [[tìmǎ: \({ }^{\text {L }}\) dùmbò \(]\) n c̀ \(]\) óbà- \(\varnothing\),
3Refl [[tree rear] Loc] sit.Stat-3SgSbj,
[nàrná ǹ] ńné wò: kárnà,
[mother Def] 3Sg come Pfv.Ppl,
A: 'It (=calf) was sitting (=lying) under a tree. When the mother came, ...'
[< dúmbó 'rear, bottom, base']

[[child Def] 3Refl reply Pfv.Pfv] [thing Prox-AnSg] QuotSbj, [[č̀ \({ }^{\text {L }}\) élú-ygó túrù-gò] wà] [[thing sweet-InanSg one-InanSg] Quot]
A: 'The calf spoke up: "hey you, (it's) a delicious thing." '
[animate 'this thing', i.e., 'this critter', here replaces vocative 'you' in the original utterance, §17.1.1]
\begin{tabular}{|c|c|c|c|c|}
\hline A: [[ćs & ǹ] & غ̀lù-ŋ̧ǵ & lóg-à:y-Ø & wà] \\
\hline [[thing & Def] & sweetness-InanSg & be.excessive-Pfv1a-3SgSbj & Quot] \\
\hline á & & \(=\) bù-m & & \\
\hline Logo & & Past-LogoSbj & & \\
\hline
\end{tabular}

A: '(Calf:) "The thing is extremely delicious. I had licked (it).'
[parsing of dèg \(\varepsilon\) = bù-m unclear]
(04:26) A: [hô: \({ }^{\text {n }}\) mà \(\rightarrow\) ] ńné jà é \(\rightarrow\) wà,
\(\left[\begin{array}{ll}\text { true } & \mathrm{Q}] ~ 3 S g \text { said yes Quot, }\end{array}\right.\)
zòmó [dòr-ì: gín] [kú ní:] gò̀-Ø,
hare [recoil-MP Ant.Past.SS] [Dem.InanSg Inst] exit.Pfv-3SgSbj,
A: '(Mother:) "Is that so?" It (=calf) said, "Yes!" Hare stepped back away (from them).'
[nà as post-subject quotative, §17.1.3.3]
(04:28) A: [ò-ḿ mà \(\rightarrow\) ńné nà é \(\rightarrow\) wà
[Prox-AnSg have-SbjFoc Q] 3Sg said yes Quot,
ńné-gì dágám sǎy [kú ní:] \({ }^{\text {Là lày-mì-Ø, }}\)
3Sg-Acc a.little only [Dem.InanSg Inst] taste-Caus.Pfv-3SgSbj,
A: " "This one [focus] (=you) have it?" It (=calf) said, "Yes!" It (=mother) let it (=calf) taste (it) just a little then.'
[Ls-̀̀:, subject focus construction, §13.1.1.4.3]
(04:32) B: [nùmǎ: ǹ] ńné bèygìl-ì: gó-ŋgó ní:
[hand Def] 3Sg put.next.to-MP-Ant.SS exit-Ipfv.Ppl.InanSg Inst
A : ńné làyì kárnà, èlù-ŋgó lóg-à:y-Ø,
3 Sg taste(v) Pfv.Ppl, sweetness-InanSg be.excessive-Pfv1a-3SgSbj,
B: 'When (hare's) hand came up next to (it) and pulled back.'
A: 'When it (=calf) tasted it, it was extremely delicious.'
[-ŋgó ní: different-subject imperfective subordinator, §15.2.2.7.2]


A: 'It being extremely delicious, he (=hare) thought, "a baobab tree is standing there."
(04:40)
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: [ı̀rà: \({ }^{\text {L }}\) & kú & gì] & ńné & dàgà & kárnà, \\
\hline [baobab & Dem.InanSg & Acc] & 3 Sg & knock.off & Pfv.Ppl, \\
\hline yày & témbí & gín, & & & \\
\hline go & encounter & Ant.Past. & & & \\
\hline [ว̀rǎ: & ńné témbí & kár \({ }^{\text {r }}\) & & súg-à:y-Ø & \\
\hline [baobab & 3 Sg encou & nter Pfv. & Ppl] & descend-Pfv & \(\mathrm{a}-3 \mathrm{SgSbj}\) \\
\hline
\end{tabular}

A: 'He (=hare) knocked off that baobab (fruit) and went to find it. When he found the baobab (fruit), it had fallen (onto the ground).'


A: '(Hare:) "An (entire) slab of salt will come out of the baobab (tree)," he said.' [kángá 'door (as physical object)', hence 'slab (of salt)']


A: '(Hare:) "This deliciousness comes from there, whereas it doesn't come from any other place.",
[nà \(\rightarrow\), §19.2.3.2]
(04:48) A: [ə̀rǎ: ǹ gì] tín \(\rightarrow\) [gò gín] ńné témbí kárnà, [baobab Def Acc] firstly [exit(v) Ant.Past.SS] 3Sg encounter Pfv.Ppl, [kílá ǹ] [dágám sǎy \(\rightarrow\) ] ýgò nừi-Ø, [horn Def] [a.little only] over.there enter.Pfv-3SgSbj, [lè:-nモ́ gò̀-Ø], [two-Ord exit.Pfv-3SgSbj],
A: 'It (=cow) went out and encountered (=gored) the baobab (tree) a first time. The horn went in and came out a second (time).'
[tin \({ }^{\text {n }} \rightarrow\) 'firstly', §8.4.6.2; ordinal \(\left.-\mathrm{n} \varepsilon, ~ § 4.6 .2 .2\right]\)
(04:53)


A: 'It (=horn) got stuck (in the tree), it pulled (hard) and got out. A third time it (=cow) encountered (the tree) and (its horn) went in. They went all the way in.'
[perfective-la before kán"à, §14.4.1]
(04:56)
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: [b & ńné & nà] & wàndá & gò-lí-Ø & gà, \\
\hline [pull-Chain.SS & 3Ssg & said] & not.yet & exit(v)-PfvNeg-3SgSbj & Emph, \\
\hline ǒ-1 & né & kár \({ }^{\text {nà }}\) ] & [á & nd-ì: & kárnà \\
\hline exit-PfvNeg & 3Sg & Pfv.Ppl & & proach-M & Pfy.P \\
\hline
\end{tabular}

A: 'Pull as it might, it (=cow) could not get (its horns) out. He (=hare) came closer.' [bàd-દ́:, §15.1.4.3; switch from ńné to á, (581) in §15.2.2.5]
\begin{tabular}{|c|c|c|c|c|}
\hline A: [[Émné & á-gá] & ع́mé & dè & gin] \\
\hline [[milk(n) & 3Refl-Poss] & \(\operatorname{milk}(\mathrm{v})\) & RecPrf & Ant.Past.SS] \\
\hline [[gònč: & á-gá] & & gín] & L yày-Ø, \\
\hline [ [gear.InanP1 & 3Refl-Poss] & gather & Ant.Past.SS] & go.Pfv-3SgSbj \\
\hline
\end{tabular}

A: 'He (=hare) drew his milk, collected his baggage, and went away.'
(05:01) A: [ná: kày] [yàrá \({ }^{\text {Lìn] wàd-é: yì-só-ndǒ-w }}{ }^{\mathrm{n}}\), [now Top] [lion tooth] remain-Ipfv.SS see-Pfv2-Neg-2SgSbj, [yàrá \({ }^{\text {Lìn] }}\) nì:[lion tooth] Inst-
A: 'At this point, do you not see that the lion's tooth remains (to be gotten)? With the lion's tooth-'
[-દ́: imperfective subordinator with yì-só-ndǒ-, §10.2.3.2]
(05:04) A: [[gòně: á-gá] bà: gín]
[[gear.InanPl 3Refl-Poss] gather Ant.Past.SS]
[kú ní:] Lyày-Ø, [Dem.InanSg Inst] go.Pfv- 3 SgSbj ,
A: 'He (=hare) collected his baggage and went.'
(05:06)
A: ńné
3 Sg go-Ipfv.Ppl.InanSg,
[ándá \({ }^{\text {L nàmà-mbò pú } \rightarrow \text { ] mò:nd-ì: gín], }}\)
[the.bush meat-AnPl all] assemble-MP Ant.Past.SS],
[á sínjì sínj-íá-m \({ }^{L} S-\varepsilon ̀:\), [3Refl \(\operatorname{stack}(n) \quad \operatorname{stack}(v)-M P-I p f v \quad\) have-3P1Sbj,

A: 'While he (=hare) was going, all the wild animals of the bush got together. They were stacking themselves up (one on top of another).'
[i.e. the animals are having fun piling on each other]
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: [á sínjì & sínj-íá-m] & yày & á & témbí & kár \({ }^{\text {nà }}\) \\
\hline [3Refl stack & stack(v)-MP-Ipfv] & go & 3Refl & encounter & Pfv.Ppl, \\
\hline àngúngúrú & dùgó Lù & & & & \\
\hline tortoise & below be.p & .in. & -3Sg & & \\
\hline
\end{tabular}

A: 'He (=hare) went and found them stacking themselves up. The giant tortoise was on the bottom.'
[the first á refers to the stackers and is semantically reflexive, the second á refers to hare as a topic-tracking device, §15.2.2.5; sínj-ía-m imperfective subordinated clause (§15.2.1.2.2); túnà stative 'be put (in)', §10.4.1]
(05:14)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{A: àngúngúrú tortoise} & [kú & ní:] & \[
\text { Lbònì- } \varnothing \text {, }
\] & & & \\
\hline & [Dem.InanSg & Inst] & call.Pfv-3SgSbj, & [3Sg & call & Pfv.Ppl] \\
\hline wó: ńné & nà, & & & & & \\
\hline yes? 3Sg & said, & & & & & \\
\hline
\end{tabular}

A: 'He (=hare) called out to the tortoise. When he called out, it (=tortoise) said, "yes?",
[wó: is a response to a vocative]
(05:17)


A: " "Your (=tortoise's) mother-in-law has died, they said, (but) you are (having fun) piling on?"
[3Sg possessor -ní ~ -ń with kin term, §6.2.2.2; original addressee expressed as 3Sg pronominal, §17.1.1]
(05:20)
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{A: àngúngúrú [pàngá ní:] dùgó,} \\
\hline tortoise & [force & Inst] & below, & \\
\hline Indé & gín] & ńné & gǒy-yày & kárià, \\
\hline [lift & Ant.Past.SS] & 3 Sg & exit(v)-Pfv1a & Pfv.Ppl, \\
\hline [yàgà g & gín] & bú & súg-à:y & kárnà, \\
\hline [fall A & Ant.Past.SS] & 3 Pl & descend-Pfv1a & Pfv.Pp \\
\hline
\end{tabular}

A: 'The tortoise forcefully lifted (them) up and got out. They (=animals) fell down.'
(05:25)


A: 'One of the lion's teeth fell out over there.'
[possessor phrased with possessive classifier, §6.2.1.1; bàgá \(\rightarrow\) bàgà when chained to following H-initial verb, §15.1.2]
(05:26)


B: '(You) said, one tooth fell out?'
A: 'After the one tooth had fallen out, ...'


A: 'He (=hare) picked up the tooth. He went to the base of a (tall) Andropogon grass and buried it (=tooth) to hide it.'
[transitive bàngì-rí 'hide (sth, sb)', cf. mediopassive intransitive bànj-1: ‘hide oneself', §9.4.1]
(05:32)
\begin{tabular}{lll} 
B: \begin{tabular}{ll}
{\([\) bě: } & \({ }^{\text {L }}\) dùgò \(]\) \\
{\([S c l e r o c a r y a ~\)} & under \(]\)
\end{tabular} & Lò
\end{tabular}

A: dè-dě:
Andropogon
B: [dè-dě: \({ }^{\mathrm{L}}\) dùgò] nè Andropogon
A: é \(\rightarrow\)
B: 'Under a Sclerocarya tree?'
A: ‘Andropogon.'
B: 'Under an Andropogon grass.'
A: 'Yes.'
[B initially misheard dè-dě: as bě:]
(05:34) A: pèrèkéré, [wàgá \({ }^{\text {HL}}\) bû-m], kú yé \({ }^{\text {jàgà- }}\) -
dove, [distant be.Loc-Ipfv], Dem.InanSg Exist watch.Stat-3SgSbj
\(B:\left[\begin{array}{llll}c \varepsilon ́ & \text { ǹ }] \text { [cílá ǹ gì] jágà-Ø wà }\end{array}\right.\)
[thing Def] [horn Def Acc] watch.Stat-3SgSbj Quot
A: 'A dove was watching that from a distance.'
B: '(Did you say) the thing (=dove) was watching the horn?'
[jágà- 'be watching', stative (\$10.4.1), cf. transitive jèrí 'look at']
(05:39)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [dày \({ }^{\text {nL }}\) & ńné & ná:-ŋgó] & yé & \({ }^{\text {Ljàgà-Ø }}\) \\
\hline [manner & 3 Sg & pick.up-Ipfv.Ppl.InanSg] & Exist & watch.Stat-3SgSbj, \\
\hline [dày \({ }^{\text {nL }}\) & ńné & báygírá-ygó] & yé & \({ }^{\text {L }}\) jàgà-Ø \\
\hline [manne & 3 S & hide-Tr-Ipfv.Ppl. & Ex & ch S \\
\hline
\end{tabular}

A: 'It was watching him (=hare) picking (it) up, it was watching him hiding (it).' ['manner' relative, §15.4.2]


A: 'Now, having looked continuously without seeing it, the lion said, "one of my teeth got out.",
[ \(\cdots{ }^{\text {HL }}\) jèr- \(\hat{\varepsilon}:{ }^{\text {HL }}\) yâ-l, §15.3.1]
(05:44) A: [[ôy \({ }^{\mathrm{n}}\) gày] yày-ḿ dé] cíll-íá-ŋgò:-Ø wà, [[like.that Top] go.Pfv-Logo if] be.resolved-MP-IpfvNeg-3SgSbj Quot, [[gándá ì] nè] [zò: né] gó-ndó-ŋgó, [[place Def] Loc] [look.for Ant.NonP.SS] exit-Caus-Ipfv.Ppl.InanSg,
A: '(Lion:) "If I go (around) like that, it won't be all right." As he (=lion) went out looking (for it) in the place, ...",
[gó-ndó-ŋgó, \(\S 15.2 .2 .7 .1\), but intransitive gó-ŋgó would be appropriate here]
(05:47)
\begin{tabular}{|c|c|c|c|c|c|}
\hline A : gàndú-m & ńné & \({ }^{H L}\) Sô-m & bà, & [pèrèkéré & \multirow[b]{3}{*}{\({ }^{H L}\) bû:-Ø,} \\
\hline paw(v)-Ipfv & 3 Sg & have-Ipfv & Ipfv.Sub, & [dove & \\
\hline dágám-dágám & & ú-wégádú & Ljìn-Ø & dé] & \\
\hline Rdp-a.little & & aw.lightly & say.Pfv-3S & Sbj if] & be-3SgSbj \\
\hline
\end{tabular}

A: 'While he (=lion) was digging (deeply) into the ground with his paws, the dove was lightly scratching (the ground) intermittently with its feet.'
[jìn-Ø dé \({ }^{\text {HL }}\) bû-, §16.1.2]
(05:50) A: dèjí-bòrò-dèjí, dèjí-bòrò-dèjí, dèjí-bòrò-dèjí-bòrò-dèjí-bòrò-dèjí, (dove's call)
[kú ní:] \({ }^{\text {Lìn }}\) jé \({ }^{H L}\) bû:-Ø,
[Dem.InanSg Inst] say.Pfv-3SgSbj if be-3SgSbj,
A: '(dove's call). It was saying (=calling) that way intermittently.'
(05:56) A: zòmó kú nó dè-Ø dé \({ }^{\text {HL bû- }}\), [ńné wá \(\rightarrow\) ]
hare Dem.InanSg hear RecPrf-3SgSbj if be-3SgSbj, [3Sg QuotSbj]
[yóngó dògú wà gày]
[noise leave.QuotImprt Quot Emph]
A: 'Hare had been hearing that. He said, "hey you (=dove), stop the noise!",
A: [gándù-m-dò-Ø
dé] [gàndú
wà gà]
[paw(v)-Ipfv-Ipfv-3SgSbj
if] [paw(v).QuotImprt Quot Emph]
[[yǒ: là] \({ }^{\mathrm{L}}\) sà-Ø dé] \({ }^{\text {HL }}\) bû-Ø,
[[today too] reply.Pfv-3SgSbj if] be-3SgSbj,

A: '(Hare to dove:) "If you are digging (with your feet), dig!" ' Again it (=dove) was replying.'
(06:00) A: dèjí-bòrò-dèjí, dèjí-bòrò-dèjí-bòrò-dèjí-bòrò-dèjí,
(dove's call)
bú pá:má-ŋg-è̀:,
3Pl understand-IpfvNeg-3PISbj,
B bú pá:má-ng-è:
3Pl understand-IpfvNeg-3PlSbj
A: '(dove's call). They (=animals) didn't understand (it).'
B: ‘They didn't understand (it).'
(06:04) A: á
órá-m \({ }^{\text {Lsì- }}\) - ,

3Refl Dem.InansSg speak-Ipfv have-3SgSbj,
à: [[kú ní:] ńné kání kárnà]
ah [[Dem.InanSg Inst] 3Sg do Pfv.Ppl]
A: 'It (=dove) was speaking (=calling) that. Ah, as it (=dove) did like that, ...'
(06:06)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{A: [gànd-દ́: [paw(v)-Chain}} & \multirow[t]{2}{*}{\begin{tabular}{l}
á \\
3Refl
\end{tabular}} & \multicolumn{2}{|l|}{áy-yày} & \multicolumn{2}{|l|}{kárà ]} & \multicolumn{2}{|l|}{-ndá,} \\
\hline & & & & get.ti & Pfv & Pfv.P & Ppl] & e-P & \\
\hline & [dùl-ì: & \multicolumn{2}{|l|}{gín]} & [ǐn & á-gá] & & á & & kárnà, \\
\hline & [turn-MP & & SS] & [tooth & 3Re & & 3Refl & pick.up & Pfv.Ppl \\
\hline
\end{tabular}

A: ‘They were digging (deeply) with their paws to the point of exhaustion, but they didn't see (=find it) (=tooth). Turning around (to look), he (=hare) picked up his tooth.'
[gànd-દ́: , §15.1.4.3; 'until being tired' \(=\) 'for a very long time', §15.2.2.4]
(06:09) A: ná: yí-tà:ndú cíb-à:y yì-só-ndǒ-wn \({ }^{\text {n }}\), now Inan-three be.complete-Pfv1a see-have-Neg-2SgSbj, [[gònč: á-gá] bà: gín] [[gear.InanPl 3Refl-Poss] gather Ant.Past.SS] [kú ní:] Lyày- \(\varnothing\), [Dem.Inan Inst] go.Pfv-3SgSbj,
A: 'Now, do you not see that the three (tasks) had been completed?' He (=hare) collected his baggage and went.'
(06:12) A: [ámbá bènغ̀] á yày kárà, [God chez] 3Refl go Pfv.Ppl, [[á wá \(\rightarrow\) [ná: kày], wǒ:-yà-m] Ljìnì-Ø, [[Logo QuotSbj] [now Top], come-Pfv1a-LogoSbj] say.Pfv-3SgSbj,
A: 'He (=hare) having gone into God's presence. He said, "I have come (back) now." ’ [quoted sentence with logophoric subject]
(06:15) A: [á-gì cì ńné tórú kárnà ǹ ], [Logo-Acc thing 3 Sg instruct Pfv.Ppl Acc], [bě: dè-m], wǒ:-yà-m wà, [obtain RecPrf-LogoSbj], come-Pfv1a-LogoSbj Quot,
A: 'He (=hare) said, "what you-Sg instructed me (to get), I have gotten (it). I have come (back)."
[cì < cé 'thing', §3.4.3.3; 3Sg ńné for original addressee, §17.1.1]
(06:19)
A: à-ŷ:= \(\varnothing\)
where-InanPl=it.is. 3 SgSbj
mà \(\rightarrow \quad{ }_{\text {Linn- }}\) -, Q say.Pfv-3SgSbj,
[nà: gín] [kú ní] \({ }^{\text {Ltàgè }-\varnothing, ~}\)
[pick.up Ant.Past.SS] [Dem.InanSg Inst] show.Pfv-3SgSbj,

A: ‘(God) said, "where are they?' He (=Hare) picked (them) up and then showed (them).'
['where are they (inanimate)?' with animacy-number marking, §13.2.2.3]
(06:21) A: ńné tágá kárnà, [ńné wá \(\rightarrow\) ] [ \({ }^{\text {Lyà̀y- } \emptyset} \quad\) dé]
3 Sg show Pfv.Ppl, [3Sg QuotSbj] [go.Pfv-3SgSbj if]
ìgó tón-í:-Ø wà, ńné tón-í: kárnà, here squat-MP-QuotImprt Quot, 3Sg squat-MP Pfv.Ppl,
A: ‘When he had showed (them), (God) said, "(hey) you, go and squat over here!" He squatted (there).'
(06:24) A: [tyà: \({ }^{\text {L }}\) sémmé] ní:, ńné-gì á kó kárnà ǹ, [basket worn.out] Inst, 3Sg-Acc 3Refl cover Pfv.Ppl Def, cǐn á jà: kárnà,
stone 3Refl pick.up Pfv.Ppl,
A: ‘He (=God) covered him (=hare) with a worn-out basket. He (=God) picked up a rock.'
[tyǎ: 'mid-sized basket coarsely woven from strips of tree branches'; kó 'cover (sth) with an inverted open container (calabash, basket)']
(06:28)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [ńné & [[dàrnà-bándá & ǹ] & nè] & bódá-ıgó] \\
\hline \({ }^{[3 S g}\) & [[crown & Def] & Loc] & crush-Ipfv.Ppl.InanSg] \\
\hline [[kú & dùgò & & gò-s̀̀ & \\
\hline [[Den & anSg Purp] & & exit(1) & \(2-3 \mathrm{SgSbj}\) \\
\hline
\end{tabular}

A: 'He (=God) intended to crush his (=hare's) head (with the rock).' [gǒ 'exit(v)’ here implies intent]


B: 'To crush his head with the rock?'
A: 'He (=God) covered (him) to crush his head.'
(06:32) A: zòmó kú á zùgò kánà, hare Dem.InanSg 3Refl know Pfv.Ppl,
[zòbò gín] gọ-â:y-Ø quoi, [run Ant.Past.SS] exit-Pfv1a-3SgSbj Ø,
A: 'Hare knew (=realized) that and ran away.'
[possessed zú 'counterpart, peer' for topic switch (obviation) between two similar protagonists, §18.2.1]
(06:35)


A: 'When he had gone away, have you not seen that God Almighty watched?' [J̀g̀̀-ná: ǹ is an epithet of God]
(06:37)
\(\begin{array}{lllll}\text { A: } & {[\text { zàndì }} & \text { gín }] & \text { [tyà:L } & \text { sémmé } \\ & \text { [do.on.purpose } & \text { Ant.Past.SS] } & \text { [basket } & \text { worn.out }\end{array}\) Def] \(]\)

A: 'He (=God) deliberately crushed the worn-out basket (with the rock).'
(06:39) A: [á wá \(\rightarrow\) ] [twâ:-ndǎ: \(=\) bù-m \(=\) bù-m wà]
[Logo QuotSbj] [be.put.in.Stat-StatNeg=Past-Ipfv=Past-LogoSbj Quot] [kú ní:] [tètè:ygó ńné bà-só gà] [Dem.Inan Inst] [intelligence 3 Sg be.full-Pfv2 Emph],
A: 'He (hare) said, "I was not inside (=under the basket).' (God:) "Then you (=hare) have enough intelligence.",
[< twâ:-ndà:-Ø 'it is not (put) inside', contraction of túnà-ndà:-Ø ; past stative negative, §10.5.1.6]


A: '(God:) "So then, go around (anywhere)! Now, hare, whenever you go around (in the bush), that's it!" "
[-ngó adverbial clause, with participle tone-dropped by the following demonstrative, §14.6.1; kú wà from kû: \(=\varnothing\) 'it's that' (identificational), reduced before wà]

\section*{Text 2015-02 Tale hyena and hare II (duration 08:25)}
(00:06) A: y̌̌: là, nân gày, tǎ:.: zòmó \(:\), today too, now Topic, hyena.\& hare.\&, [yǒ: là] kú zéà-m-nù-m, [today too] DemDef bring-Ipfv-Ipfv-1SgSbj, A: 'Again, now, hyena and hare, I will bring (the tale of) that today too.' [NP conjunction, §7.1.1]
(00:17) A: tǎ: \(:\) zòmó. \({ }^{\text {, } \text {, [á lèy] yày gín, }}\) hyena.\& hare.\&, [3Refl two] go Ant.Past.SS, á yày kán"à, 3Refl go do,
[gòně: á-gá] bà: gín,
[gear.InanPl 3Refl-Poss] gather Ant.Past.SS,
ándá bú yày kárnà,
the.bush 3Pl go do,
A: 'Hyena and hare. The two of them went. They went. They gathered up their gear and went out into the bush.'
(00:28)


A: 'They were out in the bush. They found that some lion cubs were there.'
B: 'Lion cubs.'
A: 'Yes.'
(00:32) A: [yàrà-wùlé: bú \({ }^{\text {HL}}\) bû-m] yày témbí gín,
[lion-children 3Pl be-Ipfv] go encounter Ant.Past.SS,
yàrà-wùlé: nà: gín,
lion-children take Ant.Past.SS,
[á lèy] [bèndé nè] tún gín,
[3Refl two] [shoulderbag Loc] put.in Ant.Past.SS,
[céndé né] jèl-ià-ḿ wà,
[hide.away Ant.NonP.SS] hold-MP-QuotHort Quot,
A: 'When they had gone and found that the lion cubs were there, they took the lion cubs. The two of them put (the cubs) in their shoulderbags. (They said:) "let's keep them hidden away."
[quoted hortative, §10.6.4]


A: 'They had them, having hidden them away. Things were not going well. Hare had his (lion cub) unconcealed. As for hyena, he had his (cub) hidden away. Hyena's (cub) died.'
[dàgǎ-l-Ø nné \({ }^{\text {HL }}\) bû-m (unclear on tape due to noise, transcription approximate)]
(00:47)


A: 'After it (=cub) died, at that point the lion came. It said "it was you (two) [focus] who touched my lion cubs; nobody else touched them; you (two) (touched) my cubs."
[0̀-bó 'these' for original 2Pl addressee, §17.1.1]
(00:53) A: á:, [wùlé: wè-ń-bò] tàbà-lú-m wà
ah, [children Poss.An-3SgPoss-AnPl] touch-PfvNeg-LogoSbj Quot,
[[kú ní:] jìn gín]
[[DemDef Inst] say Ant.Past.SS]
[tǎ: wé] tíb-à:y-Ø wà,
[hyena Poss.AnSg] die-Pfv1a-3SgSbj Quot,
zòmó móndú-gó [kú ní:] \({ }^{\text {L màndì-Ø quoi, }}\)
hare laughter [DemDef Inst] laugh(v).Pfv-3SgSbj \(\varnothing\),
A: '(They) said: "ah, we didn't touch your children!" Then, having said (that), (hare)
said: "hyena's (cub) has died." At that point hare laughed.'
[móndú-gó màndí with o/a alternation, §3.3.7; French clause-final quoi]
(00:58) A: zòmó, ńné màndì kárnà, ... hare, 3 Sg laugh(v).Pfv Pfv.Ppl, ...
\(B\) : zòmó màndì kárà
hare laugh(v).Pfv Pfv.Ppl
A ê:, zòmó ńné màndì kán"à,
yes, hare 3 Sg laugh(v).Pfv Pfv.Ppl,
A: 'Hare, when he laughed, ...
B: 'Hare laughed?'
A: 'Yes. When hare laughed, ...'
(01:02)
\begin{tabular}{|c|c|c|c|c|}
\hline A: á-gì & \multicolumn{3}{|l|}{mándì-m-d-è} & \\
\hline Logo-Acc & \multicolumn{3}{|l|}{laugh(v)-Ipfv-Ipfv-3PlSbj} & \\
\hline [wùlé: & á-gá-mbò ] & jè & tí & gín, \\
\hline [children á-gì & \[
\begin{aligned}
& \text { Logo-Poss-AnPI] } \\
& \text { lóg-à:y-Ø }
\end{aligned}
\] & kill & \begin{tabular}{l}
Pfv1b \\
jìn
\end{tabular} & Ant.Past.SS, gín \\
\hline Logo-Acc & be.excessive-Pfv & -3SgSbj & say & Ant.Past \\
\hline [[mòndù-m & àndě: \(\quad\) ì] & à-ḿ & mà \(\rightarrow\) ] & nne \\
\hline [[laughter & ugh.Agent Def] & who? & Q] & 3 Sg \\
\hline
\end{tabular}

A: '(Lion) said: "they are laughing at me. They killed my cubs, it's too much for me. Who is the one laughing?",
[tí gín, §15.2.3]
(01:06) A: zòmó, wî:, dúgúrú nné-gì jź-tì-Ø wà, hare, oh!, grief 3 Sg-Acc kill-Pfv1b-3SgSbj Quot,
[nì mòndù-màndě:] ódírá-ngó
[person laughter-laugh.Agent] inquire-Nom
bà:-só-Ø mà \(\rightarrow\) wà,
be.worth-Pfv2-3SgSbj Q Quot,
A: 'Hare said: "Oh, grief is killing you (=lion). Would it be worth asking (who is) the person laughing?",
(01:12) A: ìní jèrú \({ }^{\text {Lìn }}\) - \(\varnothing\),
tooth look.at.Imprt say.Pfv-3SgSbj,
[[tă: wè] jèrí] \({ }^{\text {L }} \mathrm{jin}\) - \(\varnothing, ~\)
[[hyena Poss.InanPl] look.at.Imprt] say.Pfv-3SgSbj
nné-gì tă: \({ }^{\text {L }}\) dìmbà- \(\emptyset \quad{ }^{\text {Ljinn, }}\)
3Sg-Acc hyena follow.Stat-3SgSbj say
A: '(Hare) said, "look at (my) teeth! Look at hyena's (teeth)! Hyena is following you!'
[i.e. hare suggests that he cannot laugh because of his large front teeth, while hyena can, so hyena has been laughing at lion; wè as default possessum, §6.2.4]
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{5}{*}{(01:16)} & \multirow[t]{6}{*}{A:} & [tă: & dày \({ }^{\text {nL }}\) & ńné & bú-ygó] \\
\hline & & [hyena & manne & \multirow[t]{2}{*}{\[
\begin{gathered}
3 \mathrm{Sg} \\
\text { mà }
\end{gathered}
\]} & be-Ipfv. \\
\hline & & yá-pgò: & & & wà, \\
\hline & & see-Ipfy & eg-3SgS & Q & Quo \\
\hline & & àmá:n & dày & ńné & bú-ygó, \\
\hline & & so-and- & ma & 3 Sg & be-Ipfv. \\
\hline
\end{tabular}

A: '(Hare to lion:) "Don’t you-Sg see how hyena is? How so-and-so is?", [i.e., hare points out that hyena's mouth is capable of laughter]


A: ‘(Hare to lion:) "(Is it) hyena? It's him," he said. "It isn't me, mind you! It's fine.' [tầ: = Ø 'it's hyena', tone simplified from \(<L H L>\) to \(<L H>\) before mà \(\rightarrow\); quotative wà inserted between predicate and following emphatic particle dè, §17.1.3.2]
(01:21) A: tă: ýgò gì gèn,
hyena over.there catch Ant.Past.SS,
[áy-mí gín] ńné kán kárnà, [be.tired-Caus Ant.Past.SS] 3Sg do Pfv.Ppl, [gònč: bà: gín] ó-ń bú \(\quad\) Lsò-m \(=b\)-à:, [gear.InanPl gather Ant.Past.SS] go-Ipfv 3Pl have-Ipfv=Past-3P1Sbj
A: 'Hyena (went and) caught him (=hare) over there, and shook him up. They picked up (their) gear and were going.'
(01:26) A: bú-gì ńné bòn kárnà, wó \(\rightarrow\) wà,
3Pl-Acc 3 Sg call(v) Pfv.Ppl, yes? Quot,
[zòmó wá \(\rightarrow\) ] bà,
[hare QuotSbj] ??,
nân dày nL ńné bú-ggó ôy \({ }^{\text {nL }}\),
now manner 3Sg be-Ipfv.Ppl.Inan like.that,
\(\left[\begin{array}{ll}{\left[c^{L}\right.} & \text { ò-ḿ }] \text { dày }{ }^{n L} \text { ńné bù-ygò }{ }^{\text {L }} \text { ò-gú, }\end{array}\right.\)
[thing Prox-AnSg] manner 3 Sg be.Loc-Ppl.Inan Prox-Inan,
[ńné dùg̀̀] ègá-Ø,
[3Sg than] be.bigger-3SgSbj.
A: 'He (=lion) called them. (They) said, "Yes?" Now the manner (=fact) of his (=hyena's) being present like that, this way that this critter (=hyena) was present (there), it was bigger than him (=hare).'
[manner relative clause, §15.4.2; post-participial demonstrative ò-gú agrees with the head 'manner' but tone-drops bú-ŋgó ; غ̀gá 'bigger', §12.1.4]
(01:35) A: [á lèy] dímbú-gó ná: áy \({ }^{\mathrm{n}}\)-ày \({ }^{\mathrm{n}}\) bà [Logo two] follow-Nom now how?-how? ?? [á lèy] dímb-ìà-m-d-è mà \(\rightarrow\) wà, [Logo two] follow-MP-Ipfv-Ipfv-3P1Sbj Q Quot, [hákílé á-gá] kú kární-mó-m \({ }^{\mathrm{L}} \mathrm{S}-\mathrm{o}: ~\) wà, [intelligence Logo-Poss] DemDef do-Caus-Ipfv have-SbjFoc Quot, A: '(Hare was thinking:) "How do the two of us hang out together? Will the two of us hang out? That [focus] is what is making (=causing) my cleverness.", [á lèy, §6.4.1]
(01:38)


A: '(Hare thinking:) "It's nothing other than (the fact that) (my) cleverness [focus] is causing it. This one (=hyena) is bigger than me, (but) my cleverness is greater, than his (is).",
(01:45)
\begin{tabular}{|c|c|c|c|}
\hline A: nár \({ }^{\text {ná }}\) & órá-m & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{aligned}
& \mathrm{j}-\hat{\varepsilon}: \\
& \text { keep-3P1Sbj }
\end{aligned}
\]}} \\
\hline truth & speak-Ipfv & & \\
\hline [gàndà \({ }^{\text {L }}\) & kú & ǹ] & dùgò, \\
\hline [place & DemDef & Def] & than, \\
\hline [á & lèy] & yá:-n & \\
\hline [3Refl & two] & stro & .Ppl. \\
\hline
\end{tabular}

A: 'If they were speaking the truth, he (=hare) was the most clever. As the two of them were taking a walk, ...'
[ \(\mathrm{j}-\hat{\varepsilon}\) :, 3Pl form of \(\mathrm{j} \hat{\mathrm{a}}:-\mathrm{auxiliary}\) in one of the progressive constructions, §10.2.2.3; yá:-ygó participle of yàl-í: 'take a walk']
(01:49) \(\mathrm{A}: \mathrm{a} \rightarrow\) ńné-gì, [òrú-gó nè] \({ }^{\mathrm{HL}}\) [tûn bèà-m-nù-m], Logo.QuotSbj 3Sg-Acc, [talk(n) Loc] put.in get-Ipfv-Ipfv-LogoSbj, \({ }^{\text {HL }}\) [gó-ndù bèà-m-nù-m], take.out get-Ipfv-Ipfv-LogoSbj,
[kú dùgò] [á lèy] yà:-ḿ wà, [DemDef Purp] [Logo two] take.walk-QuotHort Quot, A: '(Hare thought:) "I can put (hyena) in a predicament, and I can extricate (him)." He therefore said (to hyena), "let's the two of us go for a walk!", [òrú-gó 'talk (n) ', hence 'problem, matter (to discuss), issue (to resolve) '; \{HL\} overlay for imperfective verb chain (twice), §15.1.2; quoted hortative, §10.6.4]
(01:55) A: [á lèy pú \(\rightarrow\) ] há:jú dágá-m wà, [Logo two all] need(n) become.good-Ipfv have-SbjFoc Quot, [kú gò kày] súg-à:y-Ø, [DemDef Poss.InanSg Top] descend-Pfv1a-3SgSbj,
A: '(Hare to hyena:) "(for) both of us, (our) needs [focus] will be served well." That one's (matter) has gone down (=is finished).'
[gò apparently \(=\) kò, inanimate default possessum, §6.2.4]
(01:58) A: [kú \({ }^{\text {Lkùndùgò }] ~ n e ̀, ~[n a ̂ n ~ k a ̀] ~ y a ̀ y ~ g i ́ n, ~}\)
[DemDef behind] Loc, [now Top] go Ant.Past.SS,
mìdù-gó, [ògó \({ }^{\mathrm{L}}\) mìdù-gò] déngé-m \({ }^{\mathrm{L}} \mathrm{So}\) - \(\mathrm{\varepsilon}\) :,
karité-InanSg, [Hogon karité-InanSg] chop-Ipfv have-3PlSbj,
[[j̀gó \({ }^{\text {L }}\) mìdù-gò] bú \({ }^{\mathrm{HL}}\) déngè- m ] [bú \({ }^{\mathrm{HL}}\) déygè- m ] [bú \({ }^{\mathrm{HL}}\) déngè- \(m\) ], [[Hogon karité-InanSg] 3PlSbj cut-Ipfv] (iterations),
[nân gà] [yày gín] [dèngè gín] pós, [now Top] [go Ant.Past.SS] [chop Ant.Past.SS completely,
A: 'After that (story), now they (hare and hyena) went along. A karité tree. They were chopping (down) the Hogon's karite tree. They were chopping and chopping and chopping the Hogon's karité tree. Now they went and chopped it all the way (down).'
[shea tree (local French karité), Vitellaria paradoxa; the oil from its fruit pits is the source of shea-butter (beurre de karité); bú \({ }^{\mathrm{HL}}\) déngè-m, §15.3.2]


A: 'Hare was chopping, then the karité tree came down. The secret was discovered. Now, the Hogon went. When he becomes aware of it, he will certainly give hare a hard time.'
[déngè-m bà, §15.2.1.2.1; と̌l tentatively glossed 'secret' but related to ع́lé: 'sweet'; go-â:y-Ø = gǒy-yày-Ø]
(02:21)
A: [ná: gà] dày \({ }^{\text {nLL }}\) kán-gó,
[now Top] manner do.Ipfv-Ppl.InanSg,
[kú \({ }^{\text {L dàlìrì }] ~[o ̀ d u ̀ b a ̀:-[o ́-ŋ g o ́] ~ k a ̀] ~}\)
[DemDef ruse] [road-[go-Ipfv.Ppl.InanSg] Top]
zơá:-m
\({ }^{\text {L }}\) sò- \(\varnothing\),
look.for-Ipfv-3SgSbj have-3SgSbj,

A: 'Now, he (=Hogon) was looking for a manner of action, a clever ruse for that (problem), a course to follow (to catch hare).'
(02:25)
\begin{tabular}{|c|c|c|c|}
\hline A: [kú & ní:] & běy-yày-Ø & dè, \\
\hline [DemDef & Inst] & stay-Pfv1a-3SgSbj & if, \\
\hline [zòmó & ńné-gì & á bòn & kár \({ }^{\text {nà }}\) \\
\hline [hare & \(3 \mathrm{Sg}-\mathrm{Acc}\) & 3Refl call & Pfv.Ppl] \\
\hline [wó & ńné & nà], & \\
\hline [yes? & 3 Sg & say], & \\
\hline
\end{tabular}

A: 'Having stayed like that (=in that situation), hare called out to him (=Hogon).
"Yes? (=what is it?)," he said." ,
[ńné and á in kárnà clause, §15.2.2.5]
(02:29)
\(\left.\begin{array}{lllllll}\text { A: ńné } \therefore & \text { á } \therefore, & \text { nùyǎ: } & \text { cègìlí-m } & \text { dè, } & \\ & \text { 3Sg.\& } & \text { Logo.\&, } & \text { song } & \text { carve.out-LogoSbj } & \text { if, } & \\ & {[[\text { j̀gó }} & \text { kò }] & \text { nè }] & \text { yǒ: } & \text { pǒ: } & \text { ḿbú }\end{array}\right]\) wà,

A: '(Hare:) "you and me, let's compose a song and go give greetings at the Hogon's place today!"
[ńné. á \(\therefore\) conjunction, §7.1.1; the hortative in 'let's go!’ has scope over the subordinated clause with 'carve out (wood)' = 'compose (song)'; irregular quoted hortative ḿbú wà, §10.6.4]
[song] béyèr \({ }^{\mathrm{n}}\) È-bèyú yé \(\rightarrow\) mí bèyèrn \({ }^{\mathrm{n}}\),
cut.around \(\quad ~ 1 \mathrm{Sg}\) cut.around,
[j̀gó \({ }^{\text {L}}\) mìndù-gò] mí bènèrñ̀ yé \(\rightarrow\) mí bèyèr \({ }^{n}\) ̀, [Hogon karité-InanSg] 1Sg cut.around \(\varnothing \quad 1 \mathrm{Sg}\) cut.around, [ògó Lbòròkà], pó \(\rightarrow \quad\) wè \(\rightarrow\) wà
[Hogon rear.end] wide.open \(\varnothing\) Quot
A: 'Hare ran fast (singing:)
[song] It was I who chopped around (the trunk).
I chopped around the Hogon's karité tree. The Hogon's rear end is wide open.
[ógù-ógù, iteration converts adjective to adverb; 'karité tree' is elsewhere mìdù-gó without n ; yé \(\rightarrow\) and \(\mathrm{wè} \rightarrow\) appear to be connecting syllables in the song]

A: hà: \({ }^{\text {L }}\) nùndi- \(\varnothing\)
Ø listen.Pfv-3SgSbj
[song] béyèr \({ }^{n}\) è-bèyú yé \(\rightarrow\) mí bèyèr \({ }^{n}\) è, cut.around \(\quad\) - 1 Sg cut.around,
 [Hogon karité-InanSg] 1Sg cut.around Ø \(\quad 1 \mathrm{Sg}\) cut.around, [j̀gó bòròkà], pó \(\rightarrow\) wè \(\rightarrow\) wà [Hogon rear.end] wide.open \(\varnothing\) Quot
A: 'He (=hyena) listened.'
[song] It was I who chopped around (the trunk).
I chopped around the Hogon's karité tree.
The Hogon's rear end is wide open.
(02:49) A: [kú ní:] ńné jà, [DemDef Inst] 3Sg say, tǎ: kú á nùndì kárnà, hyena DemDef 3ReflSbj listen Pfv.Ppl, [zòmó wá \(\rightarrow\) ] [nùnà: \({ }^{\text {L }}\) ò-gú], [hare QuotSbj] [song Prox-InanSg], [tǎ: wá \(\rightarrow\) á nùŋ \({ }^{H_{j}} \mathbf{l}\) n nè wà [hyena QuotSbj] LogoSbj sing sing Ant.NonP.DS Quot [ńné wá \(\rightarrow\) ] wàndá cégíl wà dè, [3Sg QuotSbj] other carve.out.QuotImprt Quot Emph,
A: 'He (=hare) said that. Hyena listened to that. (Hyena) said: "Hare, that song, now that hyena (=I) has sung, (now) you compose another (song).'
\(\left.\begin{array}{lllll}\text { A: } & {\left[\begin{array}{lll}\text { zòmó } & {[k u ́} & \text { wá } \rightarrow]\end{array}\right.} & \text { dàgà-só-Ø } & \text { wà }\end{array}\right]\)\begin{tabular}{llll}
{\([\) hare } & {\([\) DemDef } & QuotSbj] & become.good-Pfv2-3SgSbj
\end{tabular} Quot]

A: 'Hare said: "That's okay. You follow (=keep singing) it. I will get another (song).' [á \(\rightarrow\) for á wá \(\rightarrow\), §17.1.3.1]
(02:57) A: yé \(\rightarrow\) [[úló nè] yày tágá gín] Ø [[house Loc] go say Ant.Past.SS
[song] béyèr \({ }^{n}\) è-bèyú yé \(\rightarrow\) mí bèyèrn \({ }^{n}\), cut.around \(\quad \square \quad 1 \mathrm{Sg}\) cut.around,
 [Hogon karité-InanSg] 1Sg cut.around \(\varnothing \quad 1 \mathrm{Sg}\) cut.around, [ògó \({ }^{\text {L }}\) bòròkà], pó \(\rightarrow \quad\) wè \(\rightarrow\) wà [Hogon rear.end] wide.open \(\varnothing\) Quot
A: 'He (=hyena) went to the (Hogon's) house and said (=sang):
[song] It was I who chopped around (the trunk). I chopped around the Hogon's karite tree. The Hogon's rear end is wide open.
(03:05) A: [kú ní:] ńné jà,
[DemDef Inst] 3Sg say,
ògó [[gùndò-mbó á-gá-mbò] wà \(\rightarrow\) ]
Hogon [[slave-AnPl 3Refl-Poss-AnPl] QuotSbj]
ìbí Ljìn-Ø,
catch.QuotImprt say.Pfv-3SgSbj
[mìdù-gó á-gá] ńné \({ }^{\text {L dèng-è: gà, }}\)
[karité-InanSg Logo-Poss] 3Sg chop.down.Pfv-SbjFoc Emph, ??,
(unintelligible, 2 syllables),
A: 'He (=hare) said that. The Hogon told his slaves: "Catch him! It was he [focus] who chopped down my karité tree.",
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: [tǎ: gi] & gì] ìbè & gín, & & & \\
\hline [hyena A & Acc] catch & Ant.Past.SS, & & & \\
\hline [ \(\mathfrak{y g}\) ¢̀ & lígé & sú:-ndú & gín] & [kómbú & gín], \\
\hline [over.there & e wrestle & descend-Caus & Ant.Past.SS] & [tie & Ant.Past.SS], \\
\hline [ná: & gà] & sémá-\gó & & wà, & \\
\hline [now & Top] & slaughter-Ipfv.Pp & Ppl.InanSg & Quot, & \\
\hline
\end{tabular}

A: ‘They caught him, wrestled him down there, and tied him up. (Hogon) said, "Now (it's time) to slaughter (=cut his throat).",
[sémá-ygó here is apparently an inanimate singular imperfective positive participle, as in '(the time) when (sb) will slaughter (sb/sth)', but cf. sémá- \(\mathrm{g} g \mathrm{o}:=\emptyset\) 'he won't slaughter' at 03:21 below]
(03:14) A: zòmó [ógù-ógù zògò gín] [ándá á yày kánà],
hare [fast-fast run Ant.Past.SS] [the.bush 3ReflSbj go Pfv.Ppl],
[mì:1-ì: gín] [á wò: kárnà ],
[go.back-MP Ant.Past.SS] [3ReflSbj come Pfv.Ppl],
nárná \({ }^{\text {Ljìn-Ø dè, }}\)
truth say.Pfv-3SgSbj Emph,
[ògó gì] á bòn kárnà,
[Hogon Acc] 3ReflSbj call Pfv.Ppl,
A: 'Hare went, running hard, and went out to the bush. He came back again. "It's true," he said. He called out to the Hogon.'


A: '(Hare, to Hogon:) "hyena, the two of us (=he and I) go around together, I know hyena."
[accusative tǎ: gì, here and in the following segment, appears to be a preclausal topic]
(03:21)


A: "Hyena, if it's not a blind man and a fingerless man, an able-bodied (=normal) man shouldn't cut his throat,'
[i.e. only a blind man and a fingerless man can slaughter him; 'fingerless', i.e. having lost segments of fingers due to leprosy; yòndó \(\therefore\), dùmbě:( \(\therefore\) ), §7.1.1]

A : yòndó \(\therefore\) dùmbě: \(\therefore\) blind.\& fingerless.\&
B: lǎ:
dè
it.is.not if
A: \(\hat{\mathrm{e}} \rightarrow\) yes
\(\mathrm{B}:\left[\mathrm{nì}{ }^{\mathrm{L}}\right.\) ndé] sémá-ŋgò:-Ø
[person sound] slaughter-IpfvNeg-3SgSbj
A: [nì \({ }^{\mathrm{L}}\) ndé] sémá-ŋgò:-Ø,
[person sound] slaughter-IpfvNeg-3SgSbj,
B: 'A blind man and a fingerless man?'
A: '(Yes,) a blind man and a fingerless man.'
B: 'If is isn't.'
A: 'Yes.'
B: 'An able-bodied man won't cut his throat.'
A: 'An able-bodied man won't cut his throat.'
[B makes sure he understands the situation]
(03:32)


A: 'When the fingerless man wrestles him and holds him down, then it's the blind man [focus] who will cut his throat.'
[imperfective subject focus, §13.1.1.4.3]
(03:35)
\begin{tabular}{|c|c|c|c|c|}
\hline \(B\) : dùmbě: & [1̇̀dì & né] & ńné & jâ:-m \\
\hline fingerless & [wrestle & Ant.NonP.DS] & & hold-Ipfv \\
\hline yòndó & ńné & \({ }^{\text {L }}\) sèmà-m-દ̀: & & \\
\hline blind & 3 Sg & slaughter-Ipf & fv-SbjFoc & \\
\hline
\end{tabular}
\(\mathrm{A}:\) é \(\rightarrow\), [yòndó n\(]\) \({ }^{\mathrm{L}}\) sèmà-m- \(\mathrm{E}:\), pá:m-sò-w \({ }^{\mathrm{n}}\)
yes, [blind Def] slaughter-Ipfv-SbjFoc, understand-Pfv2-2SgSbj.Q
B: 'When the fingerless man wrestles him and holds him down, then it's the blind man [focus] who will cut his throat.'
A: 'Yes, it's the blind man [focus] who will cut his throat. Have you understood?'


A: '(Hogon) said: "Yes, all right." After he said "all right," at that point he got up. The fingerless man ... (unintelligible); the blind man was looking (=fumbling around for) a knife, and hyena broke away and escaped.'
B: ‘Wow!'
[clause beginning dùmbě: is unclear on tape]
A: wàndá,
other, hyena get cut.throat.of-PfvNeg.3PISbj,
tǎ: [kú-gó kò-ń] go-â:y-Ø,
hyena [head-InanSg InanSg-3SgPoss] exit(v)-Pfv1a-3SgSbj,

A: 'In any event, they didn't have a chance to cut hyena's throat. Hyena escaped with his head.'
[bž: 'get' in the 'have a chance to VP' construction, here preceding the other chained verb, §15.1.4.2]
(03:48)


A: ‘Then, when he (=hyena) had gone, hyena (said:). "Hare is clever. He puts someone in a predicament and gets him/her out.",
[òrú-gó 'talk(n)', hence 'issue', 'problem', etc.]
(03:54) A: [ńné wá \(\rightarrow\) ] kú [bírá: kò-ń] wà, [3Sg QuotSbj] DemDef [work(n) InanSg-3SgPoss] Quot, pá:m-sò-w \({ }^{\mathrm{n}}\) dè, understand-Pfv2-2SgSbj Emph,
\(\left[\begin{array}{llll}k u ́ & \text { là }] & {[k u ́} & \text { ní:] }{ }^{\text {Lkàn-ì:-Ø }} \text { wà }\end{array}\right.\)
[DemDef too] [DemDef Inst] do-MP.Pfv-3SgSbj Quot
A: '(Hyena:) "(As for) him (=hare), that is his work (=what he does)." If you understood. (Hyena:) "That too (=hare's work), it was done like that."
(04:01)


A: 'Now, if (that story) stays like that, if we move on (to another story), as for tales, there are some left (to tell). As for tales, they don't end.'
[lit. "if it is not [the end doesn't stay(=exist)]"]
(04:08) A: ê:, [sěy \({ }^{\mathrm{n}}\) dày \({ }^{\mathrm{nL}}\) ńné dùmò béá-ŋgó] ỳ gó
yes, [tale manner 3 Sg end(v) be.able-Ipfv.Ppl.Inan] is.not
sěy \({ }^{n}\) zúgà-m-nù-w \({ }^{n}\) dè,
tale know-Ipfv-Ipfv-2SgSbj if,
kú ŋ́gò go-â:y-Ø dè

DemDef over.there exit(v)-Pfv1a-3SgSbj if,
wàndá yé \({ }^{\text {Lbù-Ø kóy, }}\)
other Exist be.Loc-3SgSbj Emph,
wàndá bê-m-dò-Ø já:tì,
other remain-Ipfv-Ipfv-3SgSbj Emph,
A: 'Yes. In no way can tales finish (=be exhausted), if you know tales. If those move on from there (=what I have already narrated), there sure is another (story), there is definitely another.'
[lit. "a way that tales can be finished does not exist"]
\begin{tabular}{|c|c|c|c|c|}
\hline A: éwà, & [[àndà-[nàmá-mbò] & pú \(\rightarrow\) ] & mò:nd-ì: & gín] \\
\hline well, & [[the.bush-[meat-AnPl] & all] & assemble-MP & Ant.Past.SS] \\
\hline [súr \({ }^{\text {nó }}\) & \({ }^{\text {L cex̀gìl-à: }}\) & dé], & & \\
\hline [ear & cut.off.Pfv-3PlSbj & if], & & \\
\hline [nân & gà] [bǒn-gó & kó-ḿ] & & wà, \\
\hline [now & Top] [tomtom-InanSg & cover. & th.hide-QuotHort & t] Quot, \\
\hline
\end{tabular}

A: 'Well, all the wild animals gathered together. They said, "let's cut off some ears and put a hide (=animal skin) on a tomtom.",
[kó 'cover (e.g. tomtom frame, calabash) with animal hide']
(04:21)
\begin{tabular}{lll} 
B: & súr \({ }^{\text {nó }}\) & cégíl \\
& ear & cut.off
\end{tabular}\(\quad\) né, \(\ldots\) Ant.NonP.DS, ...
\(\mathrm{B}: \ldots\) bǒn-gó kó-ḿ] wà, ... tomtom-InanSg cover.with.hide-QuotHort] Quot
A: ònhô: \({ }^{\mathrm{n}}\), [[súr \({ }^{\mathrm{n} o ́ ~ s a ̀ y] ~ c e ́ g i ́ l ~ g o ̀-n ~ n e ́], ~}\) uh-huh, [[ear only] cut.off exit-Caus Ant.NonP.DS], [bǒn-gó kó-ḿ] wà, [tomtom-InanSg cover.with.hide-QuotHort] Quot
B: 'They said "let's cut off some ears ...
A: 'Yes.'
B: ' \(\ldots\) and put a hide on a tomtom.'
A: 'Uh-huh. They said: "Let's cut off only ears, and put a hide on a tomtom.", [B seeks clarification; gò-n syncopated from gò-ndú 'remove, take out']
(04:26)
A: á
dàgà-só-Ø
ah!, become.good-Pfv2-3SgSbj
wà,
bú \({ }^{\text {L }}\) bù-m=b-à:, \(\quad\) súr\({ }^{n}\) º cégíl-cégíl-cégíl kán yín, 3Pl be.Loc-Ipfv=Past-3PlSbj, ear cut.off-(iterations) do Ant.Past.SS, [nân gà] bǒn-gó [kú ní:] kó-s-è:,
[now Top] tomtom-InanSg [DemDef Inst] cover.with.hide-Pfv2-3P1Sbj,

A: '(They said:) "Ah, all right." They were there, cutting and cutting ears off, then they covered the tomtom with hide like that.'
[ y ín nasalized from gín]
\begin{tabular}{llllll} 
A: & bǒn-gó & bú & kó & & kárnà, \\
tomtom-InanSg & 3Pl & cover.with.hide & Pfv.Ppl,
\end{tabular}

A: 'When they had covered the tomtom with hide, they smeared some (sticky) tree sap (from karité tree) on the spot (wh.ere they had covered the tomtom), and they left it.'
(04:40)


A: [kú ní:] dògò-s-ê., [gàndà túrù-gò n nè, [DemDef Inst] leave-Pfv2-3PiSbj, [place one] Loc, ýgò [[gàndà kú] nè] mòn-gó tárá-s-è: over.there [[place DemDef] Loc] sap-InanSg affix-Pfv2-3PISbj [ú ýgò ób-í:-yà-w \({ }^{\text {n }}\) dè] [2Sg over.there sit-MP-Pfv1a-2SgSbj if] [dúmbó ú-wó] kú ǵgò cé kán-gó, [rear(n) 2Sg-Poss] DemDef over.there thing do-Ipfv.Ppl.InanSg
B: 'On the spot?'
A: 'They left it (there) like that, in one spot. They smeared some (sticky) tree sap on the spot. If you-Sg sat there, in such a way that your rear end would do something.' [the sticky sap would pull off some skin when whoever sat on it tried to get up]

B: ŋ́gò tár-è:-m-dò-Ø
over.there affix-MP-Ipfv-Ipfv-3SgSbj
A: á \(\rightarrow\) zàgà, ándá yǎy-yà-dà: dè,
ah! lo!, the.bush go-Pfv1a-3PISbj if,
mòn-gó [mù: \({ }^{\text {LL }}\) kú] go-â:y-Ø dè,
sap-InanSg [cut(n) DemDef] exit(v)-Pfv1a-3SgSbj if,
zòmó, kú [bǒn-gó ǹ] zàgà bárná-m \({ }^{\text {Lsò- }}\),
hare, DemDef [tomtom-InanSg Def] lo! beat-Ipfv have-3SgSbj,
B: 'It (=your rear end) would be glued there.'
A: 'Lo! When they had gone (away) into the bush, if the sap (caused) that cut (=wound) to open up (on someone), lo! Hare would be beating the tomtom (as a signal).'
[zàgà, §19.2.4]


A: 'Lo! They (=hares) were not aware (of the animal's meeting). They (went on) doing like that. One day, they (=animals) came, smeared the sap, and went away.'
(05:00)


A: 'They (=hares) were beating (the tomtom). The wild animals hurried to come.'
(05:03)


A: 'When someone (sitting on the sap) said "I will get up" (=tried to get up), they (=animals) came and cut off his rear end.'
[wò: gín 'having come' inserted between transitive verb póró and its object]
(05:06)
\(\left.\begin{array}{llllll}\text { A: } & {[\text { yǒ: }} & \text { gà }] & \text { [nùmǎ: } & \text { nと̀ }] & \text { nú-yày-Ø }\end{array}\right]\) wà
\(B\) : [yǒ: gà] [nùmǎ: nè] nú-yày-Ø
[today Top] [hand Loc] enter-Pfvla-3SgSbj
A: [yy̌: gà] [nùmǎ: nè] nú-yày-Ø
[today Top] [hand Loc] enter-Pfv1a-3SgSbj
A: 'On that day, he (=hare) was trapped (=could not escape). Now (they cut) him ...'
B: 'On that day, he was trapped.'
A: 'On that day, he was trapped.'
["enter in hand" = 'be boxed in, trapped, unable to escape', said of a hunted animal, a thief, etc.]
(05:10) A: [ńné-gì dà:n né] já-ngó, [3Sg-Acc prepare Ant.NonP.DS] kill-Ipfv.Ppl.InanSg, áywà, [ńné wá \(\rightarrow\) ] ò-gú, well, [3Sg QuotSbj] Prox-InanSg, [[sé: cé kán-í:-yày-Ø] jìnì gín] [[fat(n) thing make-MP-Pfv2-3SgSbj] say Ant.Past.SS] bǒn-gó bánná-m \({ }^{\text {L }}\) So-è: tomtom-InanSg beat-Ipfv have-3PISbj,
A: 'They got ready to kill him. They said, "hey, some fat has formed (in his body)." They were beating the tomtom.'
[dà:n né syncopated from dà:ndì né]
(05:16)


A: 'At that point he became infested (with maggots). They said, "he isn't in it over there." They asked, "can he do anything in that situation?" They said, "they won't kill him today."
[twá:-ndà:-, negative of yé 'tùnà 'be in', (423a) in §11.2.3.1]
(05:21)


A: " "Well, if it happened like that (=in that case), if they kill this one (=hare) now uselessly, it won't be good," (they) said.'
B: 'Yes, it won't be good.'


A: '(They) said, "they'll dig a burrow. They'll dig on this way and that, they have left many exit points (from the burrow). They did like that."
[měm \(\rightarrow\), §8.4.2.1]
(05:32)


A: 'Fire, now. They were setting fires at the ends of the burrow. They set fire (to them), and they left (them).'
(05:36) A : ùndúndùlè: bà: gín, watermelon.Pl gather Ant.Past.SS,
[[gǒ: nè] Lgàn-à: dé],
[[fire Loc] put.on.Pfv-3PlSbj if],
[dóy-dà:-dóy \({ }^{\text {Lpòd-à: dé] wálà: }}\)
[(sound) burst.Pfv-3P1Sbj if] voilà,
A: 'They gathered watermelons and put them on the fire, they made them (=watermelons) burst, doy-da-doy! (sound). Voilà!'


A: 'Today something has been gotten. Hey, brother hare, they have fat (=are plump).'
B: 'They were talking (about) that (stuff) that that burst?'
A: 'Yes, they were talking (about) what had burst.'
[dé: jòmó is the Tommo So pronunciation]
(05:44) A: hé! [dé: jòmó] sé: yé \({ }^{\mathrm{L}} \mathrm{S}\) - \(\mathrm{\varepsilon}\) :, hey! [brother hare] fat(n) Exist have-3PlSbj
zàgà á \(\rightarrow\) [bènǎ: bàrì] yé \({ }^{\text {tùnà, }}\) lo! Logo.QuotSbj [interior Loc.Dist] Exist be.in.Stat, háyà, ǵgò gó-ygò:-Ø, well, over there exit(v)-IpfvNeg-3SgSbj [ǵg̀̀ \({ }^{\text {Lgò- } Ø ~ d e ́] ~ t i ̀ b a ̌: ~}\) [over.there exit(v).Pfv-3SgSbj if] death
A: ‘Hey, brother hare, they have fat (=are plump). Lo! I am inside." Well, he won't come out over there. If he comes out over there, it's death.'
(05:48)


A: 'Hare gathered up his things, and then he came out. Yes.'
(05:50) B: ná:, [dèbé Lè̀nggùrgò] nغ̀, [cé dùgà-íý́, yàngì],
now, [lake shore] Loc, [thing necklace, (it)self],
ع̌:-bàrì [zòmó kò]
over.here [hare Poss.InanSg]
yé \({ }^{\text {Lbù-Ø }}\) jìn-dá mà \(\rightarrow\)
Exist be.Loc-3SgSbj say-PfvNeg.3PlSbj Q
B: 'Now, on the shore of the pond, a necklace. Didn't they say that hare's (necklace) was around here?'
[ \(B\) is suggesting another tale to \(A\), but \(A\) 's version it will turn out to involve a bracelet; jéngúrgó 'shore (of pond or lake)'; kò as default possessum, §6.2.4]
(05:55)
\[
\begin{aligned}
& \text { A: é } \rightarrow \text {, [kú ní:] ńné kár"-í:-yày-Ø kárà, } \\
& \text { yes, [DemDef Inst] 3Sg do-MP-Pfv1a-3SgSbj Pfv.Ppl, } \\
& \text { [nân gà] donc [kú là], } \\
& \text { [now Top] so [DemDef too], } \\
& \text { ýgò [kú ní:] dóg-à: wà, é } \rightarrow \\
& \text { over.there [DemDef Inst] leave.Pfv-3PISbj Quot, yes }
\end{aligned}
\]

A: Yes. After it happened like that, then, at that point, they left it over there like that. Yes.'
(06:00)


B: 'Now, when hare wore a necklace on the shore of the water, ...'
A: 'He wore a necklace, you said?' All right.'
(06:08) A: zòmó \(:\), tǎ: \(: \therefore\) [[dèbé \({ }^{\text {Ljè̀ggùrgò] nè] yà-dà: dé, }}\) hare.\&, hyena.\&, [[lake shore] Loc] go.Pfv1a-3PlSbj if, donc, [á lèy], so, [3Refl two],
 [[water sweet-sweet] consume be.sated.Pfv-3P1Sbj if] yé bê-m-d-è, there.Def lie.down-Ipfv-Ipfv-3PISbj,
A: 'Hare and hyena. They went to the lake shore. So, the two of them drank their fill of sweet water, and they were going to lie down (to sleep) there.'
['hare and hyena', \$7.1.1; yà-dà: contracted from yǎy-yà-dà:]
(06:17)
\begin{tabular}{|c|c|c|}
\hline A: [kú & ní] bú & \({ }^{\text {L }}\) bù-m \(=\) b-à:, \\
\hline [DemDef & Inst] 3Pl & be.Loc-Ipfv=Past-3P1Sbj, \\
\hline mènd-1́yé & bàrnà & gín, \\
\hline bracelet & blaze(v) & Ant.Past.SS, \\
\hline mènd-íyé & è-fèdù-ngó & lóg-à:y-Ø, \\
\hline bracelet & Rdp-good-Inan & be.extreme-Pfv1a-3SgSbj \\
\hline yé & \({ }^{\text {L }}\) dùnà-m = bì- , & \\
\hline Exist & be.put.Stat-Ipfv=Past & -3SgSbj, \\
\hline
\end{tabular}

A: 'They were there like that. A bracelet that was shiny, a bracelet that was very beautiful, was there (on the shore).'
[we learn later that the golden bracelet was really an avatar of the Dogon water god Nombo ~ Nommo]


A: 'As it was lying (there), hare saw that bracelet like that. (Hare:) "how is it? This thing is beautiful."
[<ò-gú gà(y) ; édù, §11.4.1.1]
(06:29)


A: 'He (=hare) (tried to) put it on his hand. It only entered (=fit on) his hand a little.' [the bracelet was a little bit too small for him to get it over his hand onto his wrist; 'a little' scopes over 'does not enter']
(06:31)


A: 'If this bracelet had gone onto (=fit on) his hand, it would have been nice.'
[counterfactual conditional ( \(\$ 16.4\) ) with both verbs in past-time form; the first dè is conditional 'if', the second dè is the emphatic particle, which follows the quotative particle, as in 06:23 above]
(06:33) A: [[nùmǎ: á-gá] nè] [nà: gín]
[[hand 3Refl-Poss] Loc] [take Ant.Past.SS
[kú ní:] Ltùn- \(\varnothing\),
[DemDef Inst] put.Pfv-3SgSbj,
A: 'He took (it) and (tried to) put it on his hand like that.'
[tûn-Ø from túnì- \(\varnothing\); 'on the hand' is logically connected with 'put' rather than the intervening 'take']


A: 'After he (tried to) put it (on his hand), (he said:) "this bracelet, today this is beautiful. If it were to come off the hand, it would really nice on the neck.",
[i.e. as a necklace]
(06:39)
A: \(\quad\) gó = bì- \(\varnothing\)
dè ]
[exit(v)=Past-3SgSbj
if]
[kwǎ: nè] \(\varepsilon\) ćù = bì-m= bì-Ø wà
[neck Loc] good=Past-Ipfv=Pst-3SgSbj Quot

A: '(Hare) said: "If it were to come off (the hand), it would look good on the neck.",
(06:40) A: [kú ní:] jìn gín,
[DemDef Inst] say Ant.Past.SS,
ńné gò-ndù kárnà,
3Sg exit(v)-Caus Pfv.Ppl,
mènd-íyé [gìdè gín] \({ }^{\text {Lgò-ndì- }}\) ],
bracelet [throw Ant.Past.SS] exit(v)-Caus.Pfv-3SgSbj,
A: 'Saying (=thinking) that, he took it off. He threw the bracelet away (into the water).'
[evidently the bracelet was also too small to be a necklace]
(06:45)
\begin{tabular}{lllllll} 
A: & nòmbó & wàndá & [zòmón & gì \(]\) & bě: nà-lí-Ø & wà, \\
& water.god & other & {\([\) hare } & Acc] & get & consume-PfvNeg-3SgSbj
\end{tabular} Quot,

A: 'The water god did not have a chance to drink hare. If he sends (=shows) his rear end, there's no talking (about that).'
[nòmbó as the major Dogon god (associated with rainbows) is offered blood sacrifices in animist rites;' 'consume’ ('eat' or 'drink') here means '(god) drink the blood of (victim)'; other Dogon languages have different words for 'drink' and 'eat and use 'drink' in this context; bě: in 'have a chance to VP' construction, §15.1.4.2; tí 'send']
(06:49) A: \(\hat{\mathrm{e}} \rightarrow\), [kú ní:] \({ }^{\mathrm{L}}\) kàn-ì:-Ø wà [kú là], yes, [DemDef Inst] do-MP.Pfv-3SgSbj Quot [DemDef too]
é \(\rightarrow\), [ná: kày], ýg̀̀ gǒy-yà- \(\mathrm{y}^{\mathrm{n}}\) dè, yes, [now Top], over.there exit(v)-Pfv1a-1PlSbj if, [gàndà \({ }^{\text {L }}\) kú] [kú ní:] bê-m-dò-Ø, [place DemDef] [DemDef Inst] stay-Ipfv-Ipfv-3SgSbj, sěy \({ }^{\mathrm{n}} \quad\) bél-c̀:-m-dò- \(\varnothing\), tale get-MP-Ipfv-Ipfv-3SgSbj,
A: 'Yes. It happened like that, that too. Now, if we have left there (=that story), that place (=tale) will stay like that. (More) tales will be gotten (=found).'
[mediopassive bèl-í: 'be gotten']
(07:01) A: é \(\rightarrow\)
yes
B: ná:, [sěy \({ }^{\mathrm{n}}\) túrú-gó] tùnù- w \(^{\mathrm{n}}\) dè]
now, [tale one-InanSg] put.Pfv-2SgSbj if]
ná: cé ká-ggó
now thing do-Ipfv.Ppl.InanSg
A: 'Yes.'
B: 'Now, if you put (=tell) a tale, we'll do something.'
(07:06) A: d'accord, ná: ǵgò gǒy-yày-Ø dè,
all.right, now over.there exit(v)-Pfv1a-3SgSbj if,
[nân gày], àngúngúrú \(\therefore\), sújé: : \(:\), wálà:, [now Top] tortoise.\&, francolin.\&, voilà,
A: ‘Okay, if it (=conversation) has left there (=that story), now, tortoise and francolin. There (you have it).'
['tortoise and francolin', §7.1.1; the huge terrestrial tortoise, Centrochelys sulcata (ex genera Testudo and Geochelone); partridge-like wild bird (Francolinus sp.)]
(07:16) A: donc, àggúngúrú yí-bàrì, sújé: yí-bàrì,
so, tortoise over.there.Def, francolin over.there.Def,
wòl-gó tún-s-è:, àngúygúrú yé wò:-Ø dé,
field put-Pfv2-3PISbj, tortoise there.Def come.Pfv-3SgSbj if,
zàgà yámá tébá-m \({ }^{\text {Lsì- }}\),
lo! damage(n) inflict-Ipfv have-3SgSbj,
A: 'So, tortoise was (over) there, francolin was (over) there. They (=tortoise and francolin) put (=cleared) a field (for cultivation). When tortoise came there (=to the field), lo, he was causing damage.'
(07:22)
\begin{tabular}{|c|c|c|c|}
\hline B: [[wòl-gó & ǹ] & nè] & sújé:, \\
\hline [[field & Def] & Loc] & francolin, \\
\hline [wágádú & pú \(\rightarrow\) ] & yámá & tébà-m-dò-Ø, \\
\hline [time & all] & damage(n) & inflict-Ipfv-Ipfv-3SgSbj, \\
\hline
\end{tabular}

B: 'In the field francolin (too) was always causing damage.'
(07:24)
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: yámá & ńné & \multicolumn{4}{|l|}{tébá-m bà,} \\
\hline dama & 3 Sg & \multicolumn{4}{|l|}{inflect-Ipfv Ipfv.Sub,} \\
\hline [kú & ní:] & ńné & \({ }^{\text {HL }}\) bû-m & bà, & \\
\hline [DemDef & Inst] & 3 Sg & be-Ipfv & Ipfv.Sub, & \\
\hline [kú & ní:] & cé & kár \({ }^{\text {nì-m-d }}\) & & wà, \\
\hline [DemDef & Inst] & thing & do-Ipfv-Ip & -3PlSbj & Quot \\
\hline
\end{tabular}

A: 'He was inflecting damage. He was being like that. They were doing the thing like that.'
(07:28)
\begin{tabular}{lllccc} 
A: & {\([\) kú } & ní: \(]\) & ńné & \({ }^{\text {HL bû-m }}\) & [yǒ: \\
{\([\) DemDef } & Inst \(]\) & \(3 S g\) & be-Ipfv & [today & Top \(],\) \\
támbárá, & kúnó & gín & dògò-s-ê: & wà, \\
trap, & set & Ant.Past-SS & leave-Pfv2-3P1Sbj & Quot,
\end{tabular}

A: 'He was like like on this day. They set a trap and left it.'
(07:32)
\begin{tabular}{|c|c|c|c|c|}
\hline A: támbárá trap & \[
\begin{aligned}
& \text { bú } \\
& 3 \mathrm{Pl}
\end{aligned}
\] & \begin{tabular}{l}
kúnó \\
set
\end{tabular} & \begin{tabular}{l}
dògò \\
leave
\end{tabular} & \begin{tabular}{l}
kárnà, \\
Pfv.Ppl,
\end{tabular} \\
\hline sújé: & yé & wò: & gín & dèb-â:y-Ø \\
\hline francolin & there.Def & come & Ant.Past.SS & be.caught-Pfv1a-3SgSbj \\
\hline B: [támbárá & nè] & sújé: & dèb-â:y-Ø & \\
\hline [trap & Loc] & francolin & be.caught & fv1a-3SgSbj \\
\hline A: sújé: & dèb-â: & & & \\
\hline francolin & be.cau & ht-Pfv1a-3 & SgSbj & \\
\hline
\end{tabular}

A: 'After they set the trap and left it, francolin came there and was caught (in the trap).'
B: 'Francolin was caught in the trap?'
A: 'Francolin was caught.'
(07:37) A: háyà
well
B: góndú-gó
\({ }^{\text {L }}\) gàndì-Ø pawing(n)-InanSg
paw(v).Pfv-3SgSbj
A : góndú-gó
pawing(n)-InanSg
L gàndì-Ø,
paw(v).Pfv-3SgSbj,
A: 'All right.'
B: 'He (=francolin) (had) pawed up (the planted millet grains)?'
A: 'He pawed (it) up.'
[the bird had been digging up millet grains where they had been planted in the field; a/o alternation, §3.3.7]
(07:38)
\begin{tabular}{llll} 
A: ńné & dèb-â:y-Ø & kárnà, & í:yò, \\
\(3 S g\) & be.caught-Pfv1a-3SgSbj & Pfv.Ppl, & yes, \\
né & dèrn \(\varepsilon \quad{ }^{\text {L }}\) tò-sò, & & \\
person & crops & sow-Pfv2-3SgSbj, &
\end{tabular}

A: 'He was caught. Yes. A person had planted crops (there).'
(07:40) A : ú dèr\({ }^{\mathrm{n}} \varepsilon\) gàndì né,
2 Sg crops paw(v) Ant.NonP.DS,
[bèrǎ: ú-wó] bà:-ndì né,
[belly 2Sg-Poss] fill-Caus Ant.NonP.DS,
yámá tébà-m-nù-ẁ \({ }^{n}\),
damage(n) inflict-Ipfv-Ipfv-2SgSbj,
jé yángí-lá-m só-ndǒ-w \({ }^{n}\),
person be.ruined-Caus-Ipfv have-Neg-2SgSbj.Q,
A: '(If) you are pawing up the crops, and filling your belly, you'll inflict damage. Aren't you hurting the person?'
(07:44) A: [kú ní:] ńné kán-í:-yày-Ø kárnà, [DemDef Inst] 3Sge do-MP-Pfv1a-3SgSbj Pfv.Ppl, ńné-gì sémé gín, jà: gín, 3Sg-Acc slaughter Ant.Past-SS, take Ant.Past-SS,
A: 'After it happened like that, he (=person) cut his (=francolin's) throat, took (him), ....'
(07:48) A: [cé nè] tún gín, [thing Loc] put Ant.Past-SS, [bármá nè] tún gín, bú zàndá-m bà, [pot Loc] put Ant.Past-SS, 3Pl cook.in.pot-Ipfv Ipfv.Sub,
A: 'And he (=person) put him (=francolin) in a thing. He put him in a pot. They (=people) were cooking him.'


A: 'Lo, as for tortoise, you-Sg have seen that he was fast. He said, "is he (=francolin) better(-tasting)? I'll (raise my head and) look down into (the pot). He tossed one of his children into (the pot).'
['you have seen' addressed to the listener, §10.2.3.2]
(07:57)
A: èd \(\varepsilon \quad\) y
yé
wàd-â:y-Ø
child there.Def
remain-Pfv1a-3SgSbj,
B: yé wàd-â:y-Ø,
there.Def remain-Pfv1a-3SgSbj,
\(\begin{array}{llll}\text { A: lè̀:-nє́ } & { }^{\text {L }} \text { wàdè- } \varnothing, & \text { yé } & \text { Lwàdè- } \varnothing, \\ \text { two-Ordinal } & \text { remain.Pfv-3SgSbj, } & \text { there.Def } & \text { remain.Pfv-3SgSbj, }\end{array}\)

A: 'A child was still there.'
B: 'He was still there.'
A: 'The second one remained. He stayed there.'
[tortoise threw one of his young into the pot but the second one remained]
(08:00)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [á \(\rightarrow\) & là] & [yé & yày & gín] \\
\hline [3Refl & too] & [there.Def & go & Ant.Past.SS] \\
\hline [yé & & wàd-â:y- & & \\
\hline [there.Def & & remain- & gSbj & \\
\hline
\end{tabular}

A: 'He too (=tortoise), having gone there, he remained there.'
(08:02)
A:
wàd-â:y-Ø
kárnà,
3Sg remain-Pfv1a-3SgSbh Pfv.Ppl, lábá-m,
hyena pass-Ipfv,
kú [kú ní:] \({ }^{\text {Lit̀mbìlì̀-Ø, }}\)
DemDef [DemDef Inst] cover-Rev.Pfv-3SgSbj

A: 'As he remained there, hyena was passing by. He uncovered that (pot).'


A: 'By pure luck, hyena gorged himself on the meat(s). He licked the (inside of) the pot, to the extent that holes were made in it.'
['meat' is plural here since there were different kinds of meat in the pot]
(08:12) A: hâ: [kú ní:] kàn-ì:-Ø wà ah!, [DemDef Inst] do-MP.Pfv-3SgSbj Quot
\(\hat{\mathrm{e}} \rightarrow\) [ná: gà] cíll-í:-yày-Ø wà yes, [now Top] be.finished-MP-Pfv1a-3SgSbj Quot
A: 'Ah, it happened like that. Yes, now it's finished.'

\section*{Text 2015-03 Herding (duration 02:39)}
(00:03)
\begin{tabular}{|c|c|}
\hline A: wálà:, & bè:-ngó \\
\hline there!, & herding(n)-InanS \\
\hline B: áy \({ }^{\text {n }}\) - \({ }^{\text {áy }}{ }^{\text {n }}\) & \({ }_{\text {Ltoǹ-à: }}\) \\
\hline Rdp-how & begin.Pfv-3P1Sbj \\
\hline
\end{tabular}

A: 'There! Herding.'
B: 'How did they begin?'
(00:10)
A: bè:-ŋgó,
[zàmdílé: bènè] \({ }^{\text {Ltō-à: }}\)
herding(n)-InanSg, [donkey Dat] begin.Pfv-3P1Sbj
\(B\) : [zàmdílé: bènè] tín \(\rightarrow\) bè:-ŋgó \({ }^{\text {Ltò̀-à: }}\)
[donkey Dat] firstly herding(n)-InanSg begin.Pfv-3P1Sbj

A: 'Herding. They began with donkey(s).'
B: 'They began at first with donkey(s).'
(00:15) A: [zàmdílé: bènè] tîn \(\rightarrow\) tó: gín,
[donkey Dat] firstly begin Ant.Past.SS,
[[zàmdílé: Lbè:-ŋgò ] nè] gò gín,
[[donkey herding(n)-InanSg] Loc] exit(v) Ant.Past.SS,
A: 'Having begun at first with donkey(s), when they were done with donkey herding, ...'
(00:20) A: [í:n-bò \({ }^{\text {L }}\) bè:-mì-lè] \({ }^{\text {L }}\) tò:-m [goat-AnPl tend-Caus-VblN] begin.Pfv-1Sg,
B : [zàmdílè Lbè:-mì-lè] gò gín], [donkey tend.herd-VblN] exit(v) Ant.Past.SS],
A: 'I began with herding goats.'
B: 'After being done with herding donkey(s), ...'
[bè:-mí 'tend (herd), take (herd) to pasture', morphologically a causative; 'begin' plus verbal noun complement, §17.3.8]
(00:23)

(00:25) A: [[í:n-bò bè̀:-ygò] nè] nú gín, [[goat-AnPl herding(n)-InanSg] Loc] enter Ant.Past.SS, í:n-bò \({ }^{\text {L }}\) bè:-ŋgò \(\quad\) zǎ: \({ }^{\text {L }} \quad{ }^{\text {Lbè̀:-mò-m }} \quad{ }^{\text {Lbù-m }}\) goat-AnPl herding(n)-InanSg, Dianga tend-Caus-Ipfv be-1SgSbj
A: 'I went into herding goats. Herding goats. I am tending herds in Dianga (village).' [progressive used in present habitual context]
 Dianga, [Dianga village] tend-Caus-Ipfv be-LogoSbj Quot
A: ză: \({ }^{\text {n }}\) dámbá \({ }^{\text {Lbè̀:-mò-m }}\) 'bù -m, Diange village tend-Caus-Ipfv be- 1 SgSbj ,
B: 'Dianga (village). You are tending herds in Dianga village, you said.'
A: 'I am tending herds in Dianga village.'
['Dianga village', appositional]
(00:32)

A: yà-ḿ
dè,
go.Pfv-1SgSbj
if,

B: 'You are tending herds out in the bush not far from Dianga village?'
A: 'When I go (out), ...'
(00:35) A: pèdùmòtóó yà-ḿ dè, néngó yà-ḿ dè, tèndèkóngó yà-ḿ dè, P go-1Sg if, N go-1Sg if, T go-1Sg if, màgàrá yà-ḿ dè, bè̀-mé-m dènè̀-ḿ dè, M go-1Sg if, tend-Caus-Ipfv spend.day.Pfv-1SgSbj if, A: '... I go to Pedumoto, Nengo, Tendekongo, (and) Magara. I tend herds all day.' [names of four pasturing areas; bè:-mé-m, §15.2.1.2.2]
(00:46) A: [[[àlây sárnà] \({ }^{\text {Lòlù] nè] wò:-ḿn dè, }}\) [[[A S] house] Loc] come.Pfv- 1 SgSbj if, yé \({ }^{\text {Ltùnù-m-nù-m, }}\) there.Def put.in-Ipfv-Ipfv-1SgSbj,
A: 'Then I come to Allay Sana's house and I put (the animals) in there.'
(00:49)
B:
と̌:-gà
pú \(\rightarrow\) ]-
M, [around.here
all]-
màgàrá [ह̌:-gà pú \(\rightarrow\) [yàl-í:]-yàl-ì:
M [around.here all] [Rdp]-stroll-MP
[と̌:-gà pú \(\rightarrow\) ] bé:-mò-m = bì- \(\varnothing\)
[around.here all] tend-Caus-Ipfv=Past-3SgSbj

B: 'It was (=you were) going all over Magara (a pasture) tending (the herd)?'
(00:53) A bé:-mò-m= bì-y \({ }^{n}\), \({ }^{n} h \hat{\imath}^{n}\) tend-Caus-Ipfv=Past-1P1Sbj, uh.huh,
B : ná:, bàmbà-dúmbó [dènd-ì:]-téré-bì-Ø, mà now, BD [approach-MP]-ExpPrf-Past-3SgSbj Q [dènd-ì:]-tèrà-lí-Ø [approach-MP]-ExpPrf-PfvNeg-3SgSbj
A: 'We tend (it). Uh-huh.'
B: 'Now, did it ever go (up) as far as Bamba-Doumbo? Or has it never gone that far? [double polar interrogative; Bamba-Doumbo is a high hilly area; experiential perfect, §10.2.1.5]
(00:56) A: bàmbà-dúmbó yày-téré-sò-m, [yǒ: túrú] yáy-ŋgò:-Ø
BD go-ExpPrf-have-1SgSbj, [today one] go-IpfvNeg-3SgSbj
mais, lè:gó-lè:gò ô-m-nù-m
but, Rdp-day go-Ipfv-Ipfv-1SgSbj
A: '(Yes) I have gone to Bamba-Doumbo. On a given day one doesn't go, but I go (there) once in a while.'
["day-day" meaning 'occasionally']
(01:01) B: [yǒ: túrú gà] yày béá-yù-w \({ }^{\mathrm{n}}\) mais, [today one Top] go get-IpfvNeg-2SgSbj but, [lè:gó-lè:gò ygà] bàmbà-dúmbó \({ }^{H L}\) [yây bèà-m-nù-w \({ }^{n}\) ], [Rdp-day Top] BD go get-Ipfv-Ipfv-2SgSbj,
B: 'On a given day you can't go, but once in a while you can go to Bamba-Doumbo.' ['get' = 'be able to', §15.1.4.1]
(01:04) \(\mathrm{A}: \mathrm{j}^{\mathrm{n}}\) hôn , [y̌̌: màgàrá yày gín] [bè:-mì gín], un.huh, [today \(M\) go Ant.Past.SS] [tend-Caus Ant.Past.SS], wǒ:-yà-w \({ }^{n}\) dè, [bàlàgá kòn] Lìnjìlù-w n \(^{n}\) dè, come-Pfv1a-2SgSbj if, [next.day Top] get.up.Pfv-2SgSbj if,
A: 'Yeah. On a given day, after going to Magara tending the herd, you come (back). The next day, when you get up ...'
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & [tèndè & & bàrì] & ô-m-nù-w \({ }^{\text {n }}\) \\
\hline & [T & & Loc.Dist] & go-Ipfv-Ipfv-2 \\
\hline B: & yǒ: & ygà] & màgàrá & yǎy-yà-w \({ }^{\text {n }}\) \\
\hline & [today & Top] & M & go-Pfv1a-2SgSbj \\
\hline
\end{tabular}

A: '... and you-Sg go over to Tendekongo (another pasture).'
B: 'On a given day, after you have gone to Magara, ...'
\begin{tabular}{llll} 
B: ná: & {\([\) yâ: } & là \(]\) & ह́y \({ }^{\mathrm{n}}\), \\
& now & [again & too \(]\)
\end{tabular}\(\quad\) tomorrow,

A : wálà
voilà!
B: ' \(\ldots\) then again, the next day, ...'
A: 'That's right!'
\((01: 15) \quad \mathrm{B}:\) tèndèkóngó mà \(\rightarrow\), bàmbà-dúmbó mà \(\rightarrow\), T or, BD or,
A: wálà
voilà!
B: 'Tenekongo, or Bamba-Doumbo, ...'
A: 'That's right!'
(01:18) B: pèdùmòtó: mà \(\rightarrow\), átàgà mà \(\rightarrow\), P of, A or,
\(\mathrm{A}: \grave{\jmath}^{\mathrm{n}} \mathrm{h} \hat{\mathrm{n}}^{\mathrm{n}} \rightarrow\) uh.huh
B: 'Or Pedoumato, or Ataka.'
A: 'Uh-huh!'
(01:20) B: zà: [kú ní:] ô-m=bì-y \({ }^{n}\)
so [Dem.InanSg Inst] go-Ipfv=Past-2PlSbj
A. wálà, [kú ní:] lè:-gó ô-m-nò-wn, right, [Dem.InanSg Inst] day-InanSg go-Ipfv-Ipfv-2SgSbj,
B: 'So you-Pl used to go (around) like that.'
A: 'That's right. You-Sg go on a given day.'
\((01: 23) \mathrm{A}\) : [gàsègè-mbó ú-wó-mbò] dày \({ }^{\mathrm{nL}}\) bú síná-وgó, [animal-AnPl 2Sg-Poss-AnPl] manner 3Pl be.sated-Ipfv.Ppl.InanSg,
dày \({ }^{\mathrm{nL}}\) bú céndé-ŋgó,
manner 3Pl be.well.made-Ipfv.Ppl.InanSg,
[kú dùgò \(] \quad{ }^{\text {Lkà }}\) kn-nò- \(\mathrm{w}^{\mathrm{n}}\),
[Dem.InanSg Purp] do-Ipfv-Ipfv-2SgSbj,
A: 'The way your-Sg animals are well-fed, the way they turn out well. That's why you-Sg do it.'
(01:28)


B: 'When your-Sg animals have eaten well, now what do you-Sg do?'
(01:29) A: ná: wàndá gày, sín-à:-dà: dè, now other Top, be.sated-Pfv1a-3PlSbj if, gàsègé sín-à:-dà: dè, animal be.sated-Pfv1a-3PISbj if,
A: 'Now furthermore, when they have eaten well, when the animals have eaten well, ..’
(01:33) A: úló gàs \(\grave{g}\) é \(^{\mathrm{L}}\) ná-m-દ́: kómbú-ygó kôn kú, house animal eat-Caus-Chain tie-Ipfv.Ppl.InanSg DemDef Dem.InanSg, [gàs̀̀gé cénd-í: gín] sín-à:y-Ø dè, [animal be.well.made-MP Ant.Past.SS] be.sated-Pfv1a-3SgSbj if,
A: 'That animal that is fed and tied up at the house, if the animal has turned out well and is well-fed, ...'
[a favorite livestock animal (cow, sheep, or goat) can be tied up and fed at the house rather than going to pasture with the others; ná-m-£́:, §15.1.4.3]
A: jérà-m-nò-w \({ }^{\text {n }}\)
dè, bú:dù kú
gá:rá \({ }^{\text {L }} \mathrm{b}\) è̀-m- \(\grave{\text { è }}\),
look.at-Ipfv-Ipfv-2SgSbj if, money Dem.InanSg a.lot get-Ipfv-SbjFoc,
sémà-m-nò-w \({ }^{\mathrm{n}}\) dè, sé: ńné gá:rá \({ }^{\mathrm{L}} \mathrm{s}\)-ò:,
slaughter-Ipfv-Ipfv-2SgSbj if, fat(n) DemDef.AnSg a.lot have-SbjFoc,

A: ‘If you-Sg look at (=watch over) (it), that [focus] will get a lot of money. If you slaughter (it) (yourself), that one [focus] will have lots of fat.'
[gá:rá, §8.4.2.2; ńné as animate singular definite demonstrative 'that', §4.4.1.2; \({ }^{\mathrm{L}}\) s-ò:,, subject focus, §13.1.1.4.3]


A: 'Also, when it bears young, that one [focus] can bear lots (of young).' [dé là, §16.1.1; emend to \({ }^{\text {HL }}\) [lâ: bè̀̀-m-è:] without the first -m ; \{HL\} overlay for imperfective verb chain, §15.1.2]


A: 'Also, when it poops, its poop is abundant.'
[manure is valued for fertilizer; 'excrement' in collective sense has inanimate plural agreement here]
\begin{tabular}{cllll} 
B: & lúbé: & kú & gá:rá & béà-m-nù-w \(w^{n}\) \\
& manure & Dem.InanSg & a.lot & get-Ipfv-Ipfv-2SgSbj \\
A: lúbé: & kú & gá:rá & béà-m-nù-w \({ }^{\text {n }}\) \\
& manure & Dem.InanSg & a.lot & get-Ipfv-Ipfv-2SgSbj
\end{tabular}

B: 'You-Sg get a lot of manure.'
A: 'You-Sg get a lot of manure.'
(01:51) B: kú gà, [àsègè-mbó ǹ], dêm sín-ê:,
Dem.InanSg Top, [animal-AnPl Def], good.form be.sated-Ipfv], gòdù-gó bú \(\varepsilon\) dù, body-InanSg 3Pl be.good,
B: 'That way, the animals, having eaten well, their bodies are in good shape.' [singular 'body' in collective sense; bú is not possessor in form]
\begin{tabular}{lllll} 
B: \(\left.\begin{array}{lllll}{[\text { nân }} & \text { gày }\end{array}\right]\) & \multicolumn{2}{c}{ lúbé: } & & \\
{\(\left[\begin{array}{llll}\text { now } & \text { Top }\end{array}\right]\)} & \multicolumn{2}{c}{ manure } & & kwà \\
{\(\left[\begin{array}{llll}\text { kú } & & \text { gá:rá }\end{array}\right.\)} & lúbé: & Lbèl-c̀:-m-dò-Ø & manure & get-MP-Ipfv-Ipfv-3SgSbj
\end{tabular}\(]\)

A: dògò-úló, [gàsègé là] nápà yé \({ }^{\text {L }}\) sò-Ø
Dogon-house, [animal too] benefit Exist have-3SgSbj
B: 'Now a lot of manure can be gotten.'
A: 'Furthermore in Dogon country (=for the Dogon) animals have a value.' [ 'animal' without AnPl suffix in collective sense; clause-final French quoi]
(01:59)


B: 'In Dogon country don't animals have a good value?!'
A: 'They have a value (=are valuable). There is profit in animals.'
(02:03)
\(B\) : [tìnè \({ }^{\text {L }}\) èdù-ŋggó sǎy \(\rightarrow\) ] yé \({ }^{\text {Ltùnà-Ø }}\)
[profit(n) good-InanSg only] Exist be.put.Stat-3SgSbj
A: yé Ltùnà-Ø, gàsègé záwdù: \(=\varnothing\),
Exist be.put.Stat-3SgSbj, animal livestock=it.is,

B: 'There's nothing but profit in it.'
A: 'It (=profit) is in it. Animals are livestock (as someone's capital).'
(02:07) A: nǎ: gàbí \(\rightarrow\), ír\({ }^{n}\) é: gàbí \(\rightarrow\) pédé: gàbí \(\rightarrow\), cow for.example, goat for.example, sheep for.example, [sùgǎ: kò-ń] nápà: \(=\varnothing\),
[excrement InanSg-3SgPoss] benefit=it.is,
A: 'Cows, goats, and sheep are included. Their dung is valuable.'
(02:12)
A: [gùtù-gó
kò-ń]
jídé-ŋg-દ̀:, throw-IpfvNeg-3P1Sbj
[nàmá kò-ń]
InanSg-3SgPoss]
[meat InanSg-3SgPoss]
jídé-ŋg-દ̀:,
throw-IpfvNeg-3PlSbj,

A: 'They (=people) don't discard their (=animals') hides. They don't discard their meat.'
A : [gàsègé= \(=\varnothing\)
dè] [lǎ:-Ø
dè] ǹgó-Ø
[animal=it.is if] [it.is.not-3SgSbj
if] not.be.Loc-3SgSbj
\(B\) : [nǎ: gà] [sùgǎ: ǹ] jídé-ŋg-غ̀:, [cow Top] [excrement Def] throw-IpfvNeg-3PlSbj
A: \({ }^{\mathrm{n}} \mathrm{h}\) on \(^{\mathrm{n}}\)
uh.huh

A: 'It isn't the case that (=don't say that) "whether it's an animal (or) it isn't",
B: 'As for cows, they (=people) do not discard the dung, ...'
A: 'Uh-huh.'
[i.e. animals are valuable in many ways; [ X dè] [lǎ:-Ø dè] has the form of a willy-nilly antecedent ("whether it's \(X\) (or) whether it's not \(X\) "), and its negation indicates that it does matter that something is a (livestock) animal]
(02:19)
\(B\) : [gùdù-gó
ǹ j jídé-ŋg-è:
[skin-InanSg Def] throw-IpfvNeg-3P1Sbj

A: [nàmá ǹ] jídé-ŋg-è:
[meat Def throw-IpfvNeg-3P1Sbj
\(B\) : [nàmá ǹ] jídé-ŋg-è:
[meat Def throw-IpfvNeg-3P1Sbj
B: ' \(\ldots\). they don't discard the hides, ...'
A (anticipating): ‘(And) they don't discard the meat.'
B: '... (and) they don't discard the meat.'
\begin{tabular}{|c|c|c|c|}
\hline A: [è-ý & gà] & [á & tà:ndú] \\
\hline [Prox-InanPl & Top] & [3ReflSg & three] \\
\hline B: è-ý & gà & pú \(\rightarrow\), & \\
\hline Prox-InanPl & Top & all, & \\
\hline [gòdù-gó & nè] & yé & \({ }^{\text {L }}\) wàdà-m-dò-Ø \\
\hline [body-InanSg & Loc] & there.Def & remain-Ipfv-Ipfv-3SgSbj \\
\hline
\end{tabular}

A: 'These (things), the three of them.'
B: 'All those (things), it remains there in a body.'
[i.e. they sustain and fortify a person's body; yé here might be construed as existential]
(02:23) A: pú \(\rightarrow\) sê:=Ø, [kú [dógó bènè] sê:=Ø, all good.InanPl=it.is, [Dem.InanSg [Dogon Dat] good.InanPl=it.is, [cìl \({ }^{\text {L }}\) dù-lá bú-ggó pú \(\rightarrow\) ] ̀̀gó-Ø, [thing good=StatNeg be-Ipfv.Ppl.InanSg all] not.be.Loc-3SgSbj, A: 'They're all good. Those are good for Dogon (people). There is nothing at all (about animals) that isn't good.'
[ŝ̂: = Ø, §11.4.1.5]
(02:28) \(\mathrm{A}:\) kú [gàsègé bènè] ỳgó-Ø
Dem.Inan [animal Dat] not.be.Loc-3SgSbj
\begin{tabular}{lllll} 
B: [ná: & kà] & [yù-wá: & ḱ́-ǹ] & zéá \\
{\([\) now } & Top] & {\([\) farming(n) } & Poss.InanSg-3SgPoss] & bring.Imprt
\end{tabular}

A: 'There is none of that (=anything bad) in connection with animals.'
B: 'Now (please) bring (=begin talking) of farming.'
(02:30) A: á:-kòy d'accord okay all.right
A: 'All right.'

\section*{Text 2015-05 Water (duration 04:10)}
(00:05) A: dû:, dày \({ }^{n L}\) bú: jìn kár \({ }^{n}\) à ǹ dè, below, manner 3 Pl say do Def if, ínjé í-gé ò-gú, water 1Pl-Poss Prox-Sg,
\(B\) : ínjé í-gé ò-gú, water 1Pl-Poss Prox-Sg,
A: ínjé í-gé ò-gú,
water 1Pl-Poss Prox-Sg,
B : [ìnjè \({ }^{\mathrm{L}}\) wàndá] ỳgó
[water other] not.be
A: ínjé péy ìgó= bì- \(\mathrm{m}=\) bì- \(\varnothing\), ì \(1 j\) è̀-sélú,
water at.all not.be=be-Ipfv=Past-3SgSbj, water-drought,
A: 'Down below, if it's how they (=old people) told it, this water of ours.
B: 'This water of ours.'
A: 'This water of ours.'
B: 'There's no other water.'
A: 'There was no other water at all. Lack of water.'
[kán'à 'do' as perfective positive verb-participle, §14.4.1]
(00:15) A: ódógón yà-ẃ \({ }^{\mathrm{n}}\) dè, morning go.Pfv-2SgSbj if ú óbà-m dè, bà-dè-ŋgó, 2 Sg sit-Ipfv if, daytime ínjé [là túrú] bè:- wa \(^{n}\) dè kú, water [time one] get-2SgSbj if DemDef,
B: ínjé bà-dè-ŋgó
water daytime
[là túrú-gó]bè:-w \({ }^{\text {n }}\) dè kú mà \(\rightarrow\)
[time one-InanSg] get-2SgSbj if DemDef Q
A: [là túrú-gó]
[time one-InanSg]
A: 'If you-Sg went in the morning, you sit (=wait your turn) all day, you got water just once (a day).'
B: 'You got water just once all day long?'
A: 'Just once ...'

B: ... bél-c̀:-m-dò-Ø,
... get-MP-Pass-Ipfv-3SgSbj,
gàrà-mbó [ỳgó gò nદ́] pó \(\rightarrow\) díbè, certain-Pl [here exit Ant.NonP.SS] until Dibe, àntógó
Antogo
A : wálà
voilà
\(B:\) ह̌:-gà \(\quad\left[\mathrm{tin}^{\text {n }} \rightarrow\right.\) gày \(]\) ínjé \(\mathfrak{y} g o ́=b i ̀-m=b i ̀-Ø, ~\) around.here [first Top] water not.be \(=\) be- \(\mathrm{Ipfv}=\mathrm{Past}-3 \mathrm{SgSbj}\),
A: ínjé \(\quad\) ỳgó \(=\) bì \(-\mathrm{m}=\) bì- \(\varnothing\), water not.be \(=\) be-Ipfv \(=\) Past -3 SgSbj ,
B: '... it was gotten. Some people would go from here all the way to Dibe (pond), (or) Antogo (pond).'
A: 'There (you have it).'
B: 'There used to be no water around here in the old days?'
A: 'There used to be no water.'
[Dibe is a year-round water spring on the high plateau on the way to Kasa. Antogo is a pond in the plains beyond Bamba],
(00:32)


B: '(But) nowadays we have gotten water.'
A: '(But) nowadays we have gotten (it). There didn't use to be (enough) water. They would take turns (=wait in line to) draw water (at the spring).
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{A: ínjé \({ }^{\text {water }}\)} & [dìné & \multicolumn{2}{|l|}{ní:]} \\
\hline & [turn & Inst] & \\
\hline B: înjé & [dìné & ní:] & kóbà-m = b-à: \\
\hline water & [turn & Inst] & draw.water-Ipfv=Past-3P1Sbj \\
\hline A: mí & tî: \({ }^{\text {n }}\) & \multicolumn{2}{|c|}{\({ }^{\text {y }}\) yà-è:} \\
\hline 1 Sg & first & & fv-Sbj.Foc \\
\hline B: ú & tî: \({ }^{\text {n }}\) & & \\
\hline 2 Sg & first & & fv-Sbj.Foc \\
\hline
\end{tabular}

A : mí kòbà-lí-m dè, 1 Sg draw.water-PfvNeg-1SgSbj if
ú béá-yù-w \({ }^{\text {n }}\)
\(2 \mathrm{Sg} \quad\) get-IpfvNeg-2SgSbj
A: 'Water by turns.'
B: 'They would draw water by turns.'
A: '(Suppose) it's \(\underline{I}\) [focus] who have gone first.'
B: 'It's you-Sg [focus] who have gone first.'
A: 'If I haven't drawn water (yet), you-Sg don't get (any).'
\((00: 44)\) A: ú tí: \({ }^{\text {n }}\) yà-è: dè,
2 Sg first go.Pfv-Sbj.Foc if,
[ú kòbà-lú-w \({ }^{\mathrm{n}}\) dè] mí-gì táy-gò:- \(\varnothing\), [2Sg draw.water-PfvNeg-2SgSbj if] 1Sg-Acc cross-IpfvNeg-3SgSbj, bèà-lú-w \({ }^{\mathrm{n}}\) kóbá-yù-m, get-PfvNeg-2SgSbj draw.water-IpfvNeg-1SgSbj,
A: 'If it's you [focus] who has gone first, if you haven't drawn water (yet), it doesn't get to me. (If) you haven't gotten (yours), I don't draw water.'
[syncopated from táygí-ŋgò:-]
(00:49)
\begin{tabular}{|c|c|c|c|c|}
\hline B: [nân & gà] & [[kú & \({ }^{\text {L }}\) bènà:] & nè], \\
\hline [now & Top] & [[DemDef & interior] & Loc], \\
\hline [nân & gà] & ínjé & kàlé & só-ndǒ:-Ø, \\
\hline [now & Top] & water & limit & have-Neg-3SgSbj, \\
\hline [gàndà & pú \(\rightarrow\) ] & óndó & bǐ: \({ }^{\text {n }}\)-bà \({ }^{\text {n }} \rightarrow\) & \({ }^{\mathrm{L}} \mathrm{b}-\mathrm{c}_{\text {: }}\), \\
\hline [country & all] & garden & plenty & be-3PlSbj, \\
\hline
\end{tabular}

B: 'Nowadays, inside (=concerning) it (=water), the water has no limit (=is abundant), there are (vegetable) gardens aplenty in the whole country.'
[só-ndǒ: = bù-Ø trimmed from só-ndǒ: = bù-mbi-Ø, §10.5.1.6]
(00:54) A: nân, ínjé sám-à:y-Ø, óndó sám-à:y-Ø, now, water abound-Pfv1a-3SgSbj, garden abound-Pfv1a-3SgSbj,
díbè, zǎ: \({ }^{\mathrm{n}} \therefore\) díbè \(\therefore\),
Dibe, Dianga Dibe,
dày \({ }^{\mathrm{nL}} \quad\) kání-sú-ygó pú \(\rightarrow\), kìló: yí-kèdè
manner be.done-Pfv2.Ppl-InanSg all, kilometer Inan-four
B: kìló: yí-kèdè
kilometer Inan-four
A: yí-nǔm, gô-m-dò-Ø
Inan-five, exit-Ipfv-Ipfv-3SgSbj
A: 'Nowadays, water is abundant, and (vegetable) gardens are abundant. Dibe (spring), (from) Dibe (to) Dianga, the distance is four kilometers.'
B: 'Four kilometers.'
A: '(Four or) five, it comes out (=amounts to that).'
[zǎ:' \({ }^{\text {n }}\) 'Dianga and ...', pronounced [zầ:'] with dying-quail effect]
(01:04) A: nân àndú \({ }^{\text {L }}\) bù- \(\hat{w}^{n}\), kìló: yí-kèdè, yí-nǔm,
now where? be.Loc-2SgSbj.Q, kilometer Inan-four, Inan-five, bê-m-dò-Ø,
stay-Ipfv-Ipfv-3SgSbj,
[èdù-gó = lǎ: dè], [[sô: là] ỳgó-Ø]
[waterjar=it.is.not if] [[pail too] not.be.Loc-3SgSbj]
\(\mathrm{B}: ~[\) sô: là \(]\) ỳgó- \(\varnothing\), [[bìtón là] ỳ \({ }^{\text {yó- }}\) ]
[[pail too] not.be.Loc-3SgSbj], [[canister too] not.be]
A: [bìtón là] j̀gó-Ø]
[[canister too] not.be.Loc-3SgSbj]
A: 'Where are you-Sg now? Four or five kilometers, it will stay (=amounts to that). There were no pails too (to transport water), (nothing) other than (earthenware) waterjars.'
B: 'There were no pails too, there were no canisters either.'
A: 'There were no canisters either.'
[yày here may be related to the 'go' verb but is invariant in form (unconjugated) and functions as a postverbal particle; French seau, bidon; là 'too' in topic function under negation, §19.1.3]
A: \begin{tabular}{ll} 
[dàrnà-bándá & ní:], \\
& {\([\) top.of.head } \\
Inst],
\end{tabular}
\begin{tabular}{lll} 
[yé & yày & né \(]\)
\end{tabular}\(\quad\)\begin{tabular}{l} 
diâ-â-m \(=\) b-à: \\
[there.Def \\
go \\
Ant.NonP.SS] \\
carry.on.head.Stat-Ipfv=Past-3PISbj
\end{tabular}
\(B\) : èdù-gó bú zéà-m-d-è,
waterjar-InanSg 3Pl bring-Ipfv-Ipfv-3PISbj,
[zòg-â:y-Ø dè] áy \({ }^{\mathrm{n}}\) \({ }^{\mathrm{L}}\) kà-m-d-è \(\quad\) mà \(\rightarrow\)
[shatter-Pfv1a-3SgSbj if] how? do-Ipfv-Ipfv-3PISbj Q
A: 'They would go there and carry (jars full of water) on their head (back to the village).'
B: '(When) they would bring a waterjar, if it broke, what would they do?'
[diâ stative (\$10.4.1) of dí 'carry on head']


A: 'You will take out (=fetch) another waterjar of yours where you (can) take one out, and bring it. (If) you have no water in your house, it's not inhabitable for you.'
B: 'It is not inhabitable for you. No.'
(01:23) A: ǎy [kú ní:] kóbà-m=b-à:, nân, no [DemDef Inst] draw.water-Ipfv=Past-3PISbj, now, àlhámdùllà:y, ínjé \({ }^{\text {Lbèl-ì:- }}\), ínjé yòrò-só- \(\varnothing\), praise.God, water get-MP.Pfv-3SgSbj, water abound-Pfv2, dàgá, témbé \({ }^{\text {L }}\) nàngà \(-\mathrm{m}=\) bì- \(\varnothing\), Daga, above be.put.up.on-Ipfv=Past-3SgSbj, nân, dùgó \({ }^{\text {L }}\) sùg-à:y- now below descend.Pfv1a-3SgSbj
A: 'No. They used to (go and) draw water like that. Nowadays, praise God, water has been gotten. Water has become plentiful. Daga (village) used to be on top. Now, it (=village) has moved down below.
[Douga village, formerly on the high plateau above the cliffs, relocated to a position at the base of the cliffs in the Bamba cluster; yòry 'become soft; become loose, slack', here 'become easy to get']
        water have-Neg-3PISbj
B: ínjé só-nd-દ̀:
    water have-Neg-3P1Sbj
A: ínjé só-nd-è:,
    water have-Neg-3P1Sbj,
    èndèlgó: \(\therefore\), pédùmà \(\therefore\), ínjé só-nd-غ̀:,
    Endelgo, Pedouma, water have-Neg-3PISbj,
    bú súgò-yà-dà:,
    3Pl descend-Pfv1a-3PISbj,

A: 'They don't have any water (in their former location on top).
B: ‘They don't have any water.'
A: ‘They don’t have any water. Endelgo and Pedouma (villages), they don't have any water. They moved down.'
[-yà-dà: 3Pl perfective-1a, §10.2.1.2]
(01:44)


A: 'As God would have it, we got water. We for our part, this is where we have stayed.'
[ǒ: from ò-gú]
(01:49) A: ínjé dè -
water if -
B: [ínjé bě: dè-y \(\left.{ }^{\mathrm{n}}\right]\) [kú dùgò] wàd-â:-y \({ }^{\mathrm{n}}\)
[water get RecPrf-1PlSbj] [DemDef Purp] stay-Pfv1a-1PlSbj
A: wàd-â:-yn
stay-Pfv1a-1PISbj
B: [ínjé bž: dè-yn]
[water get RecPrf-1PlSbj]
[súgó né] j̀jjé kâ-m-nè-yn
[descend Ant.NonP.SS] what? do-Ipfv-Ipfv-1PISbj
A: 'If it's water-''
B: 'We got water, for that reason we stayed (above).'
A: 'We stayed.'
B: 'We got water, what would we do after going down?'
[B's question is rhetorical]
(01:54) A: òhô \(\rightarrow\), ínjé dímbà-y \({ }^{\mathrm{n}}\), ínjé bèl-í: dè- \(\varnothing\), Uh-huh, water follow.Stat-1PlSbj, water get-MP RecPrf-3SgSbj, [í gà] súgó-yì-y \({ }^{\mathrm{n}}\), [1Pl Top] descend-IpfvNeg-1PlSbj,
nân, zǎ: \({ }^{\text {n }}\) [dámbá yí-lèy],
here, Dianga, [village Inan-two],
èndègàndú, yé Lbàr-ì:-Ø dé,
Endekandou, Exist be.added-MP.Pfv-3SgSbj if
dámbá yí-tà:ndú,
village Inan-three,
A: 'Uh-huh. We went out after water, water was gotten. As for us, we won't go down. Now, Dianga is two villages. If Endekandou is added (=counted), it's three villages.'
(02:05)
\begin{tabular}{|c|c|c|}
\hline A: tàgá & túrú-gó, ínjé & nâ-m-nè-y \({ }^{\text {n }}\) \\
\hline pond & one-Inan, water & drink-Ipfv-Ipfv-1P1Sbj, \\
\hline ínjé & dúmá-ทgò:-Ø, & ínjé bě: dè-y \({ }^{\text {n }}\) \\
\hline water & finish-IpfvNeg-3SgSbj, & water get RecPrf-1PlSbj \\
\hline ínjé & dúmá-ทgò:-Ø, & àlhámdùlìllà:y - \\
\hline water & finish-IpfvNeg-3SgSbj, & praise.God- \\
\hline
\end{tabular}

A: 'We drink from the same pond. The water doesn't end (=run out). We got water and the water doesn't end, praise God.'
(02:11)


B: 'This year, by God's doing, for you-Pl water-drinking, by God the place cut out a dam (in the rocks) and gave (it) to you-Pl.'
[-ní verbal noun with ; bàrà:3ú from French barrage 'dam']


B: 'The dam now, (when) it (=water) has been blocked, the water now, does it not flow into the water for (vegetable) gardens, flow into gardens?'
A: 'Flows into gardens.'
[gǎn 'put/pour into (container)' or as here intransitive 'be put/poured into', hence 'flow into']
(02:20)


B: 'After it flows into the gardens, now is the benefit (that) it's we [focus] who eat? Or is it the people who did the cutting out [focus] who will see (=receive) it?
[defocalized imperfective subject-focus -m-è: (twice), §13.1.1.4.3; the heavy focalized NP 'the people who did the cutting out' is resumed as a 3Pl pronoun]
(02:23)
A: nápà
í-gê: = Ø,
gándá
í-gê: = Ø,
benefit \(1 \mathrm{Pl}-\mathrm{Poss}=\) it.s,
place 1Pl-Poss=it.s,
í-gì sàr-à:, nápà í-gê: = Ø 1 Pl -Acc repay.Pfv-3P1Sbj, benefit \(1 \mathrm{Pl}-\mathrm{Poss}=\mathrm{it} . \mathrm{s}\)
\(B\) : gándá
nè, bú yá-ygó
pú \(\rightarrow\) place Loc, 3Pl see-Ipfv.Ppl.Inan all \(\left[\right.\) túy \({ }^{\mathrm{n}} \rightarrow\) bèdè gín] Lyà-dà: [pile.up bury Ant.Past.SS] go-Pfv.3P1Sbj

A: 'The benefit is ours. The country is ours. They compensated us (for the work). The benefit is ours.'
B: 'The land now, they piled up and left everything that they had been seeing (=getting) and went away?'
[yá-ŋgó imperfective participle; 'bury' in sense 'leave behind'; 'yà-dà: 3Pl simple perfective of ' \(g o\) ']
(02:29) A: [yé túy \({ }^{\mathrm{n}}\) bèdè gín] \({ }^{\text {L yà-dà:, bú gày, }}\) [there.Def pile.up bury Ant.Past.SS] go-Pfv1a.3PlSbj, 3Pl Topic, [í bènc̀] bú dògò kárà ǹ gày, [1P1 chez] 3Pl leave Pfv.Ppl Def Topic í-gé zò-ndá, 1 ígé gàrà-ndá, 1Pl-Poss take.away-PfvNeg.3PlSbj, 1Pl-Poss reduce-PfvNeg.3PlSbj,
A: 'They piled it (=gear, tools) up there and left it, and they went away. As for what they left with us, they didn't take ours away or reduce (=take anything away from) ours.'
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{A:} & í-gì & wò: & gín & & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{témb-à:, encounter.Pfv-3PlSbj,}} \\
\hline & 1Pl-Acc & come & \multicolumn{2}{|l|}{Ant.Past.SS} & & & \\
\hline & [á-gá & [1́ & bènc̀] & dògò & tí gín] & gín] & Lyà-dà:, \\
\hline & [3Refl-Poss & s [1P1 & chez] & leave & Pfv1b Ant & Ant.Past.SS & go-Pfv1a.3PlSbj, \\
\hline B: & \([p u ́ \rightarrow\) & [á-gá & & ǹ] & [1́-gé & nè] & \\
\hline & [all & [3Refl-P & oss & Def] & [1Pl-Poss & s Loc] & \\
\hline & dògò & tí & gín] & & yà-dà:, & & \\
\hline & leave P & Pfv1b & Ant.Pa & ast.SS] & go-Pfv1a. & 1a.3PlSbj, & \\
\hline
\end{tabular}

A: 'They came and encountered us. When they had left theirs (=tools) with us, they went away.'
B: 'When they had left all of theirs with us, they went away.'
(02:43)


B: '(Since) they had left theirs (=tools) and went away, now (after) what has been done, there is water that has no limit. As for the water, now it is fine.'
A: 'It is fine.'
(02:47)


B: 'As for it, it has turned out well.'
A: 'Is it not that? It's no other thing (than that). It's they [focus] who have (the means), it's they [focus] who are capable (of heavy excavating).'
/kú = lă:-Ø can be taken as a rhetorical question, or (equivalently) as a truncation of kú=lă:-Ø dè 'if it isn't that', i.e. 'otherwise', see @ 03:06 below]
(02:53)


A: 'It's they [focus] who can work. It's also they [focus] who are involved in that.'
B: ‘Talking about if something (bad) happens, if the water isn’t stopped (by the dam), will the work (party) come (back) a second time?'
[\{HL\} overlay for imperfective verb chain, §15.1.2]
\begin{tabular}{|c|c|c|c|c|}
\hline [̂̂y \({ }^{\text {n }}\) & éndé-m & \({ }^{\mathrm{HL}}\) Sô-m] & [àr"à-ínjé & \multirow[t]{8}{*}{\begin{tabular}{l}
yí-tà:ndú], Inan-three], \\
tán], \\
only], \\
Imprt-Pl.Addr,
\end{tabular}} \\
\hline [like.that & fix-Ipfv 3P1 & have-Ipfv.Ppl] & [yea & \\
\hline éndé-m & bú & dè] & & \\
\hline [fix-Ipfv & 3Pl ha & -Ipfv if] & & \\
\hline [[àrnà-ínjé & yí-tà:ndú] & do̧-â:y-Ø & & \\
\hline [[year & Inan-three] & arrive-Pfv1a & SgSbj & \\
\hline [gánd & í-gê]: = \(\quad\), & bí-gé & jèl-íá-ǹ, & \\
\hline [place & 2 Pl -Poss]=it.is & 2Pl-Poss & guard-MP. & \\
\hline
\end{tabular}

B: 'When they will be repairing it like that (is in) three years. If it's (=if we're talking about) when they will be repairing it, (it will be) as soon as three years have elapsed. It's your-Pl place, guard it well!'
[plural-addressee form of imperative, §10.6.1.1]
(03:06) A: kú=lǎ:-Ø dè, [bú là] [kú ní:] \({ }^{\text {Lb } b-\varepsilon ̀:, ~}\) DemDef=it.is.not-3SgSbj if, [3Pl too] [DemDef Inst] be-3PlSbj,
[dógó là] ú jàgà-ŋgò \({ }^{\mathrm{L}}\) ò-gú, [Dogon too] 2Sg watch.Stat-Ipfv.Ppl.InanSg Prox-Sg, [yé:bé kò-ń] á:ndà:=Ø, [neglect(n) InanSg-3SgPoss] small=it.is, [kèndè \({ }^{\mathrm{L}}\) mày \({ }^{\mathrm{n}}\)-gó ǹ \(]\) ègá, [liver/heart dry Def] be.big(ger),
A: 'Indeed ("if not that"). They too are like that. When you look at the (local) Dogon too, their negligence is small (=they are rarely lackadaisical at work). The dryness of (their) hearts (=earnestness) is great.'
[jágà 'be watching (stative)'; á:ndà: = Ø 'be small', cf. negative à:ndà= lá 'not be small', takes relative-clause form as postnominal modifier]
(03:17)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [[kú & ǹ] & & dùgò] & tú:zùrù, \\
\hline [[DemDef & Def] & & Purp] & always, \\
\hline bòr \({ }^{\text {ń }}\) & í & gá:rá & \({ }^{\text {L }}\) wò & \\
\hline fatigue & 1 Pl & a.lot & beco & customed \\
\hline
\end{tabular}

A: 'For that reason, always, we [focus] are very accustomed to fatigue (=hard work).' [French toujours]

[[DemDef Def] Purp] [now Top] [time all]
[nân ní: nè] ínjé yé \({ }^{\text {Lbù }}\) bu,
[now Inst Loc] water Exist be.Loc-3SgSbj,
[kú gà ná:],
[DemDef Topic now],
[ìnjè \({ }^{\text {L è-ý gà ná:] }}\)
[water Prox-InanPl Topic now]
[ć́ kán-ì:-yày-Ø dè]
[thing do-MP-Pfv1a-3SgSbj if]
í-gì bâ-m-dò-Ø,
1Pl-Acc suffice-Ipfv-Ipfv-3SgSbj,
[[dáná í-gé] nè] yé \({ }^{\text {Lòbà }}\) Ø
[[top.of.head 1Pl-Poss] Loc] Exist sit.Stat-3SgSbj
B: 'For that reason, now, there is water as of now at all times. As for that, this water now, if something happens (=in a crisis), it's enough for us, (so) it seems to us ("sits on our head").’
['water' has inanimate plural agreement]
(03:28) A: mhm \(\rightarrow\), ínjé cèndè-páy ná: dùm-â:y-Ø mhm, water fear(n) now finish-Pfv1a-3SgSbj
B: ínjé ná: dàg-â:y-Ø water now become.good-Pfv1a-3SgSbj
A: [ínjé
kò
kà]
dùm-â:y-Ø, [water Poss Top] finish-Pfv1a-3SgSbj,

A: 'Mhm. Fear about water has ended.'
B: 'Water has become good now.'
A: 'Water's (problem) has ended (=been resolved).'
[k̀̀, default possessum, §6.2.4]
\begin{tabular}{|c|c|c|c|}
\hline A: înjé & [hál yèré] & [ínjé & kà], \\
\hline water & [until come] & [water & Top], \\
\hline ínjé & í-gì & bâ-m-dò-Ø & \\
\hline water & 1 Pl -Acc & suffice-Ipfv- & pfv-3SgSbj \\
\hline [ínjé & kò gà] & ná: & m-â:y-Ø \\
\hline [water & Poss Top] & now & ish-Pfv1a-3SgSbj \\
\hline
\end{tabular}

A: 'Water, it has come to the point that even the water, the water is sufficient for us. As for the water (problem), it is finished now.'
[hál yèré 'as of now', perhaps borrowed (Jamsay hâl 'until', yèré 'come')]


B: 'Inside Endekandou (village), (and) all the Daga people who went down (=resettled on the plains), all of them were (previously) on top (=living on the high plateau). Because of hardship with water, they all fled and moved down.'
[can be rephrased as 'people of Endekandou and (people of) Daga'; dàgá shortened from dà:gá (village name), likely under regional influence (French Daga); \({ }^{\text {L }} \mathrm{b}\)-ò: 'people of', §5.1.7; yàngù pú \(\rightarrow\) emphatic 'all' after a pronoun', §6.6.1]


B: 'When you-Sg go (on foot) with a waterjar, and you draw water (there) and are coming (back), suppose you stub your toe (on a rock) and it (=waterjar) comes down (off your head). Now yours (=waterjar) is not in (=is absent).'
(03:49)


A: wálà:
voilà
B: 'Now, in that (water), now, as for the water that has come, now as for its (water?). The water, they (=villagers) went down (=relocated below), (then) water [focus] appeared (on top).'
A: 'There (you have it)!'
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{B:} & [1́ & gà] & ná & & \\
\hline & [1P1 & Top] & no & & \\
\hline & [ínjé & gà] & ná:, & [1́ & bènè] \\
\hline & [water & Top] & now & [1P1 & chez] \\
\hline
\end{tabular}
A: í súgó bèà-lí-yn, bú súgó-yà-dà:, 1Pl descend get-PfvNeg-1PlSbj, 3Pl descend-Pfv1a-3PlSbj,
B: ná:, ò-gú kû:= , now, Prox-InanSg DemDef=it.is, [kú gà] dàg-â:y-Ø [DemDef Top] be.finished-Pfv1a-3SgSbj
A: [kú ní:] cì \({ }^{\text {L }}\) kán-í:-sú-ggó
[DemDef Inst] thing do-MP-Pfv2-Ppf.InanSg
B: 'As for us now, as for water now, among us.'
A: 'We couldn't go down, (but) they went down.'
B: 'Now, this is it. As for that (subject), it's finished.'
A: 'What is done (regarding water) is like that.'

\section*{Text 2015-06 Exodus (duration 04:10)}
(00:06)


A: 'We are in Dogon country. If we leave Dogon country, we say "the bush, we're going to the bush." The bush, they don't go (away) for anything else.'

B : [dògò-úló
[Dogon-house
[ándá
[the.bush
[[ándá ǹ] yí-bàrì = Ø mà \(\rightarrow\) ] [[ándá ǹ] ỳgô: = Ø]
[[the.bush Def] over.there.Def=it.is Q] [[the.bush Def] here=it.is]

B: 'Do we say (=intend) "Dogon country" or do we say "the bush"? The bush there (far away)? Or the bush here (=nearby)?'
[B seeks clarification, since ándá 'the bush, outback' can mean any location outside of the village: the millet fields nearby, the wilderness farther away, or distant cities; therefore 'go out to the bush' blurs into 'go on a trip, travel' or even 'move out (for good)']
(00:19)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [ándá & ǹ] & \multicolumn{3}{|l|}{dè,} \\
\hline [the.bush & Def] & Emph, & & \\
\hline [kú & là] & [dày \({ }^{\text {nL }}\) & jín-gó] & \\
\hline [DemDef & too] & [manner & say-Ipfv.Ppl.InanSg] & \\
\hline [ódír-lé & [ú & là] [nár \({ }^{\text {nà }}\) & ú-wó] & \({ }^{\mathrm{L}}\) Sò- \(\mathrm{w}^{\mathrm{n}}\) ], \\
\hline [ask-VblN & \([2 \mathrm{Sg}\) & too] [truth & 2Sg-Poss.InanSg] & have-2SgSbj] \\
\hline
\end{tabular}

A: 'The bush. That too, the way it is said, you are also right to ask.'
(00:23)
\begin{tabular}{|c|c|c|c|c|}
\hline A: òrú-gó k & kóró & yé & \multicolumn{2}{|l|}{\({ }^{\text {L }}\) ¢ò-Ø} \\
\hline talk(n) m & meaning & Exist & have-3SgSbj & \\
\hline [yí-bàrì & & & jín-gó & ǹ] \\
\hline \multicolumn{2}{|l|}{[over.there.Def} & ush & say-Ipfv.Ppl.InanSg & Def] \\
\hline [ci \({ }^{\text {L }}\) & wàndá] & & & \\
\hline [thing & other]=it & not, & & \\
\hline
\end{tabular}

A: 'The words have meaning. What (they) call "the bush" there, it is nothing else.'
(00:28) A: ú nân, [[úló ú-wó] nè] \({ }^{\text {L } b u ̀-w ~}{ }^{n}\) dè, 2Sg now, [[house 2Sg-Poss.InanSg] Loc] be.Loc-2SgSbj if,
[nè \({ }^{\mathrm{L}}\) yí-bàrì yàyě: ǹ],
[person over.there.Def go.Agent Def, ándá yày-Ø jî-m-nù-w \({ }^{n}\), the.bush go.Pfv-3SgSbj say-Ipfv-Ipfv-2SgSbj,
A: 'You-Sg now, if you are in your own house (=country), (if there is) someone who goes over there, you-Sg will say "he has gone to the bush.",
[yàyě: agentive as imperfective participle, §14.4.2.3]
\begin{tabular}{|c|c|c|c|}
\hline A: [ ár \(^{\text {ná }}\) & ú-wó] & & Sò- \({ }^{\text {n }}\), \\
\hline [truth & 2 Sg - & s.InanSg] have & have-2SgSbj \\
\hline B: [mí & là] & [kú d & dùgò] \\
\hline [1Sg & too] & [DemDef P & Purp] \\
\hline [ándá & ǹ] & [yí-bàrì & mà \\
\hline [the.bush & Def] & [over.there.Def & Def Q] \\
\hline [ándá & ǹ] & [č:-bàrì & mà \(\rightarrow\) ] \\
\hline [the.bush & Def] & [around.here & re Q\(]\) \\
\hline
\end{tabular}

A: 'You-Sg are right (to ask).'
B: 'As for me too, for that reason, "the bush" means there (far away), or around here?' [B is trying to get A to specify what general location A had meant by 'the bush' at the beginning; discourse-definite yí-bàrì versus proximal ع̌:-bàrì, §4.4.2.1]
(00:37)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [ándá & ǹ], & ú d & dògò-úló & \({ }^{\text {L }}\) bù-w \({ }^{\text {n }}\) dè, \\
\hline [the.bush & Def], & 2 Sg D & Dogon-house & be.Loc-2SgSbj if, \\
\hline [úló & ú-wó] & & ỳgó & dè, \\
\hline [house & 2Sg-Pos & oss.InanSg] & g] here & if, \\
\hline [[ú & \(\left.{ }^{\mathrm{H}} \mathrm{bá}\right]\) & Lùlò] & j̀gó & dè, \\
\hline [[2SgPoss & father] & house] & e] here & if, \\
\hline yí-bàrì & & ándá & \({ }^{\mathrm{HL}}{ }_{\text {[jîn }}\) & bèà-m-nù-w \({ }^{\text {n }}\) ], \\
\hline over.there. & & he.bush & say & get-Ipfv-Ipfv-2SgSbj, \\
\hline
\end{tabular}

A: 'The bush. If you are in Dogon country, if your house is here, if your father's house is here, you can call there "the bush".,
[\{HL\} overlay for imperfective verb chain, §15.1.2]
(00:42)
\begin{tabular}{lllll} 
A: yí-bàrì & b-ó: & ǹ & là, \\
over.there.Def & be-Ppl.Pl & Def \\
too, \\
bú & yé & b-ó: & ǹ, & \\
3 Pl & Exist & be.Ppl.Pl & Def,
\end{tabular}

A: 'Those who are there, they who are there, they too can call this area "the bush.", [b-ó: ǹ 'who are' (plural), cf. singular b- \(\varepsilon\) : ǹ, §14.4.2.2; i.e. 'the bush' is any zone away from one's home territory]
(00:46)
\begin{tabular}{|c|c|c|c|c|}
\hline A: [kú [DemDef & \begin{tabular}{l}
ní:] \\
Inst]
\end{tabular} & \begin{tabular}{ll} 
ci \(^{\text {L }}\) & bú-ŋg \\
thing & be-Ip
\end{tabular} & v.Ppl.InanSg & \\
\hline \begin{tabular}{l}
B: [kú \\
[DemDef gàndà \({ }^{\text {L }}\) place
\end{tabular} & \begin{tabular}{l}
gày], \\
Top], ú 2 Sg
\end{tabular} & \begin{tabular}{ll}
{\([\) [kú } & gà \(]\) \\
{\(\left[\begin{array}{ll}\text { DemDef } & \text { Top }] \\
\text { bú-ŋgó }\end{array}\right.\)} \\
be-Ppl.InanSg
\end{tabular} & \begin{tabular}{l}
ná:, [ándá \\
now, [the.bush \\
ǹ, \\
Def,
\end{tabular} & \[
\begin{aligned}
& \text { gày, } \\
& \text { Top], }
\end{aligned}
\] \\
\hline A: wálà: voilà & & & & \\
\hline \[
\begin{aligned}
& \text { B: ú-wó } \\
& 2 \text { Sg-Poss }
\end{aligned}
\] & \(q u o i\) & & & \\
\hline A: òhô \({ }^{\mathrm{n}} \rightarrow\) uh-huh! & & & & \\
\hline
\end{tabular}

A: 'That's the way it is.'
B: 'That, that now, as for "the bush," the place where you-Sg are, ...
A: 'Voilà!'
B: ‘... it's yours.'
A: 'Uh-huh!'
[lit. "[the thing that is] is like that"]
(00:52)


B: 'Now, going on the way to the bush, now, if you run into an invisible one (=magician), or sorcerors, and you strike and kill (them), it's no good.'
[i.e., nobody in the villages will know that you did it; púygó jě- is a direct chain (§15.1.1); dùgù-mbó 'sorcerors' from singular dùjě:, §3.4.5.4]
(00:58) A: \(\hat{e} \rightarrow\)
yes
B: [nân gà] [kú là]
[now Top] [DemDef too]
A: wálà: kû: = Ø, wálà: [kú dùgò],
voilà DemDef=it.is, voilà [DemDef Purp].
[ú yé yày gín] [wǒ:-yà-w \({ }^{\text {n }}\) dé là], [2Sg there.Def go Ant.Past.SS] [come-Pfv1a-2SgSbj if too],
[ú wá \(\rightarrow\) ] gòně: màrǎ-1-Ø
[2Sg QuotSbj] gear.InanPl be.lost-PfvNeg-3SgSbj
séw \(\rightarrow\) Lò̀:-w \({ }^{\text {n }} \rightarrow\),
wellbeing come.Pfv-2SgSbj Q ,
bú jín-gó ǹ, [gándá ì] ò-gú kû: = Ø,
3P1 say-Ipfv.Ppl.InanSg Def, [place Def] Prox-InanSg DemDef=it.is,
\(\widehat{e} \rightarrow\)
yes
A: 'Yes.
B: 'Now, that too.'
A: 'There (you have it), that's it. There (you have it). Because of that, even if you go there and come back, and your baggage hasn't been lost, and you have come (back) in good health? What they say, in (that) place, this is it. Yes.'
[dè 'if' \(\rightarrow\) dé before là]
(01:08) B: gòně: màrǎ-l-Ø ú séw \(\rightarrow\) Lwò:-w \({ }^{\mathrm{n}} \rightarrow\), gear.InanPl be.lost-PfvNeg-3SgSbj 2 Sg wellbeing come.Pfv-2SgSbj Q , [kú ǹ gày], ú ě:
[DemDef Def Top], 2Sg around.here [gàndà-dàmbà \({ }^{\mathrm{L}}\) nàndùr-gó ǹ gà] \(\check{\text { : }}\)-gà, [place-village entity-InanSg Def Top] around.here,
A: ò \({ }^{\mathrm{n}} \mathrm{hô} \rightarrow\)
uh-huh
B: 'The baggage hasn't been lost, and you have come (back) in good health? Concerning that, concerning that village (of residence), it's around here.'
A: 'Uh-huh!'
[nàndùr-gó resuming a preceding topical phrase, §19.1.5]
\begin{tabular}{|c|c|c|c|c|}
\hline B: [nân & gà \(]\) & [ú & là] & \\
\hline [now & Top] & [2Sg & too] & \\
\hline [[né & kò] & nè] & & yày-só-w \({ }^{\text {n }}\), \\
\hline [[person & Poss & Loc] & & go-Pfv2-2SgSbj, \\
\hline
\end{tabular}

A: wálà:
voilà
B: 'Now, you too, you have gone to a person's (house).'
A: 'There (you have it).'
(01:14) B: [[né kò] nè] yày-só-w \(\mathrm{w}^{\mathrm{n}}\) dè gày, [[person Poss.InanSg] Loc] go-Pfv2-2SgSbj if Topic, [[né kò] ǹ gà], ú-wó= lă:-Ø quoi, [[person Poss.InanSg] Def Top], 2Sg-Poss.InanSg=it.is.not-3SgSbj \(\varnothing\),
A: ònhô \(\rightarrow\)
uh-huh
B: 'When you have gone to a person's (house), as for the person's house, it isn't yours.'
A: 'Uh-huh!'
(01:18)


A: wálà:, ó (-g) kû: = Ø,
voilà, Prox-InanSg DemDef=it.is,
ándá [[kóŕ kò-ń] nì:] ó(-g) kû: = Ø,
the.bush [[meaning InanSg-3SgPoss] Inst] Prox-InanSg DemDef-it.is
B: 'About the person's (house), their word for it, this is it.'
A: 'There (you have it), this is it. "The bush," with its meaning, this is it.' [nàndùr-ǵ, §19.1.5]
(01:22) A: [ándá ǹ], [[òrù \({ }^{\text {L }}\) wàndá] bàrì] twá:-ndà:-Ø, [the.bush Def], [[talk(n) other] Loc.Dist] be.in-StatNeg-3SgSbj, [[gàndà ò-gú] dùgò] órà-m-d-غ̀, [[place Prox-InanSg] Purp] speak-Ipfv-Ipfv-3PISbj,
A: ‘The bush, it isn't in any other talk (=it has no other meaning). They speak about this place.'
[òrù \({ }^{\text {L }}\) wàndá variant of òrù-gò \({ }^{L}\) wàndá]
\begin{tabular}{|c|c|}
\hline B: ná: & [yù-wà:]-[wàl-mbó .:] \\
\hline now & [millet-farming]-[cultivate.Agent-AnPl.\&] \\
\hline [[àsègè-n & [ ]-[[bè:-m]-bó \(\therefore\) ], \\
\hline [[animal & PPI]-[tend-Caus.Agent-AnPl.\&], \\
\hline zégé & ây \({ }^{\text {n }}\) ( \({ }^{\text {kàn }} \mathrm{l}\) ì-m-d-ž: \\
\hline fight(n) & how? do-Ipfv-Ipfv-3P1Sbj.Q \\
\hline
\end{tabular}

A: [yù-wà:]-[wàlé: :.]
[millet-farming]-cultivate.Agent.\& animal-[tend-Caus.Agent].\&, bè:-mé, \(\quad[a ́ \rightarrow \quad\) là \(][i ́ i n-b o ̀ ~ a ́-g a ́] ~ \quad ~ L d i ̀ m b a ̀, ~, ~\) tend-Caus.Agent, [3Refl too] [goat-AnPl 3Refl-Poss] follow.Stat-3SgSbj,
B: 'Now, millet farmers and animal herders, how do they fight?'
A: 'A millet farmer and an animal herder. A herder, he follows his goats.'
[kàr"ì-m-d-ž: with final interrogative intonation; (g)àsègé 'livestock animal']
\begin{tabular}{llllll} 
A: & bè:-m-bó & [bírá: & bú-gó & ǹ \(]\) & kû: \(=\varnothing\), \\
tend-Caus.Agent-AnPl & [work(n) & 3Pl-Poss & Def] & DemDef=it.is, \\
& yù-wá: & bàyà & là, & [yù-wà: \({ }^{\text {L }}\) & kú]
\end{tabular}

A: 'Herders, their work is that. A millet farmer, for his part, that millet farming, in his work, that's it.'
\begin{tabular}{|c|c|c|c|c|c|}
\hline A: mè: & dógó-mbò, & dày \({ }^{\mathrm{nL}}\) & & jin & kár \({ }^{\text {nà }}\) \\
\hline but & Dogon-AnPl, & manner & 3 Pl & say & Pfv.Ppl, \\
\hline gàsègé, & [zà \({ }^{\text {L }}\) & wádà] & & \({ }^{\text {Ljìn-à }}\) & \\
\hline animal, & [meal & rema & & say. & 1 Sbj \\
\hline
\end{tabular}

A: 'But Dogon (farmers), the way they have said, a (livestock) animal, they call (it) an extra (=occasional) meal.'
[i.e. the staple for Dogon is millet grain, supplemented by meat; zà \({ }^{L}\) wádà, cf. Jamsay nàà wájà 'leftover food']
\((01: 44) \quad B\) : àsègé [àsú \(\rightarrow\) là] [zà \({ }^{\mathrm{L}}\) wádà] \({ }^{\mathrm{L}}\) jìn-à:,
animal [always too] [meal remaining] say.Pfv-3PlSbj,
mè: [zà \({ }^{\mathrm{L}}\) wádà sày] = lǎ:-Ø,
but [meal remaining only]=it.is.not-3SgSbj,
àsègé bé-ŋgò:-Ø
animal remain-IpfvNeg-3SgSbj
A: wálà:
voilà
B: 'They call an animal an extra (=occasional) meal. But it isn't just an extra meal. There aren't any animals left.'
A: 'There (you have it).'
\begin{tabular}{|c|c|c|c|c|c|}
\hline B: [zà \({ }^{\text {L }}\) & wádà & say] & àsègé & bê-m-d-è & à \(\rightarrow\) \\
\hline [meal & remaining & only] & animal & remain-Ipfv-Ipfv-3PlSbj & Q \\
\hline
\end{tabular}

A: gàsègé [zà̀ wádà ǹ \({ }^{\text {n }}\), [kú là] [bú là] animal [meal remaining Def], [DemDef too] [3Pl too] gàndà \({ }^{L}\) órá-m só-ngó ǹ, place speak-Ipfv have-Ppl.InanSg Def,
B: 'Extra meals only. Are there any (livestock) animals left?'
A: 'An animal, the extra meal. Then, where they (Dogon) too are saying that.'
```

A: [nân gà] [cic }\mp@subsup{}{}{L}\mathrm{ wàndá]=lǎ:-Ø
[now Top] [thing other]=it.is.not-3SgSbj
[òrú-gó, jín-gó ǹ] ' L}dìmb-\varepsiloǹ:
[talk(n), say-Ipfv.Ppl.InanSg Def] follow.Stat-3PlSbj

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A: 'Now, it's nothing else, they follow the words that (people) say.'
[without the pause: òrù-gò \({ }^{\mathrm{L}}\) jín-gó ì]


A: 'If you grasp it in low voice (and retain it), it's the truth. It's the place where one picks out the truth.'
['at the bottom', referring to low-pitched confidential talk from elders]
(02:02)
\begin{tabular}{lcllll} 
A: ìyò & nân, & jǎ: & {\([\) ú } & j-દ̀: \(]\) & tęâ-m-dò-Ø, \\
yes & now, & hunger & {\([2 S g\)} & kill-SbjFoc \(]\) & sprout-Ipfv-Ipfv-3SgSbj, \\
úló & zá & ú & bá- \(\mathfrak{y}\) gò:-Ø, & \\
house & meal & \(2 S g\) & suffice-IpfvNeg- \(3 S g S b j\),
\end{tabular}

A: 'Yes, now. (Suppose) you are famished. At home, meals don't satisfy you.'
['be hungry', §11.1.1.4.4; tęâ-m-dò- is connected by the assistant to té 'sprout (v)', not t \(\varepsilon\) 'weave’ in this construction which is always imperfective, with \(\mathrm{j} \varepsilon\) ‘kill’ preceded by a pronoun]
(02:07)


A: 'Ah, when you get some money, will you buy the millet grain, or will you put (=spend) it on the animal?'
['tù-m-nù- \(\mathrm{w}^{\mathrm{n}}\) is not audible on the recording and is a completion suggested by the assistant]
\begin{tabular}{|c|c|c|c|c|}
\hline B: [zá & ǹ] & [bèrǎ: & & \\
\hline [meal & Def] & [belly & De & \\
\hline
\end{tabular}

A: ònhô \(\rightarrow\),
uh-huh,
\(\left[\begin{array}{llll}{[z a ̀ ~} \\ & \text { wádà }] ~[[k o ́ r o ́ ~ n i ̀ ~\end{array}\right] \quad\) kù-ń] \(=\varnothing\),
[meal remaining] [[meaning InanSg-3SgPoss] Inst] DemDef=it.is, [gàndà \({ }^{\text {L }}\) kú ì],
[place DemDef.InanSg Def],
[gàndà \({ }^{\mathrm{L}}\) ǵgò yì gín] órá-m \({ }^{\mathrm{L}} \mathrm{S}-\mathrm{\varepsilon}:\) :,
[place over.there see Ant.Past.SS] speak-Ipfv have-3PISbj,
B: 'A (grain-based) meal, (filling) the belly first.'
A: 'Uh-huh. An extra meal, by its meaning, that's it. That place (=discourse), they have seen that place and they are speaking (about it).'
(02:17)


A: ò \({ }^{\mathrm{n}} \mathrm{hô} \rightarrow\)
uh-huh
A: 'At first, at the beginning, what they (=Dogon) have caught (noticed) and are saying, from the beginning.'
B: 'If they aren't eating meals, animals cannot stay (for long) at the house.'
[nă-1 kán né, §15.2.2.3]


A: wálà:
voilà
B: 'In addition, if you (abandon) livestock, if you abandon it, and (=a child) goes out, while you are there (at your house), and he goes to the bush (=fields), he will do a lot of damage.'
A: 'There (you have it)!’
[scenario involves a young person taking a livestock animal who is not being fed at the house out to the cultivated fields to graze on the crop plants]
(02:28)


A: 'Because of that (situation), the extra meal is that. Following what you-Sg have begun at first, what you are saying, that's it'
(02:32)


A: 'The meaning of the words (is), if you have accumulated (=raised) livestock, if you don't cook (grain-based) meals, accumulation of animals isn't possible for you. If you buy meals, you'll eat.'
[kán-gò:- here (and @ 02:55 below) is imperfective negative of kán in the sense 'be possible for \(X\) ', with ú 'you' as object; variants with accusative ú-gì and/or with mediopassive kán-í:-ŋgò:-Ø were accepted by the assistant]


A: 'When the belly is sated (=full), then you will put livestock (there). Concerning that place (=discourse), the "extra meal" that (people) talk about, that's it, they say. Yes.'
[tû-m- for túnù-m-]
(02:44)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{B:} & kú & [àsègé & gày] & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
nàndùr-gó \\
entity-InanSg
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{ll}
{\([\) àsú \(\rightarrow\)} & là] \\
[always & too]
\end{tabular}}} \\
\hline & DemDef & [animal & Top] & & & & \\
\hline & [nù-mbó & là] & [dé-mbò & ǹ & là] & órú \(=\mathrm{b}\) & \\
\hline & [person-An & Pl too] & [big-AnPl & Def & too] & speak & -3PiSbj, \\
\hline & m̀h \(\hat{m} \rightarrow\) m -hm! & & & & & & \\
\hline
\end{tabular}

B: 'As for livestock, the people, the big (=old) ones, had always talked about that.'
[nàndùr-gó, §19.1.5; smooth phrasing would be nù-mbò \({ }^{\text {L }}\) dé-mbò là, cf. @ 03:04 below]
(02:48)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{} & & wádà] & \multirow[t]{2}{*}{} & \multirow[t]{2}{*}{\begin{tabular}{l}
mè:, \\
but,
\end{tabular}} \\
\hline & remaining] [meal & \[
\begin{aligned}
& \text { remaining] } \quad \text { say-Ipfv-Ipfv-3PISbj } \\
& \text { pú } \rightarrow \text {, } \\
& \text { anSg } \quad \text { all, },
\end{aligned}
\] & & \\
\hline & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{kán-í:-sú-ngó do-MP-Pfv2-Ppf.InanSg}} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { pú } \rightarrow \text {, } \\
& \text { all, }
\end{aligned}
\]} & \multirow[t]{4}{*}{but,

- \({ }^{\text {n }}\),
fv2-2SgSb} \\
\hline & & & & \\
\hline & yày gín] & & \multirow[b]{2}{*}{come-Pfv2-2SgS} & \\
\hline [market & go Ant.Past.SS] & 3 Sg bring & & \\
\hline
\end{tabular}

B: 'They call the extra meal "(the) extra meal," but any way it is done, you will go to the market and come and bring it (=animal).'
[jî-m-d-દ̀ contracted from jínì-m-d-è ; irregular zé-dè, §10.1.3.7]
(02:53)
B : [ébé yày gín]
[market go Ant.Past.SS]
dày \({ }^{\text {nL ú }}\) zè:-sú-ŋgó pú \(\rightarrow\), manner 2 Sg bring-Pfv2.Ppl-InanSg all, [ùlò \({ }^{\text {L }}\) yó ỳgó: \(=\varnothing\) dé gày] [house millet not.be.Ppl=it.is if Top] ńné-gì ú zè:-sú-ŋgó pú \(\rightarrow\) 3Sg-Acc 2Sg bring-Prv2-Ppl.InanSg all
B: 'The way (=if) you-Sg go to the market and you bring (an animal), if it's a house where there is no millet, (if) you bring (it)-,
(02:55)
A: wálà:,
zé:-lé
ú kán-gò:-Ø, voilà, bring-VblN 2 Sg be.done-IpfvNeg-3SgSbj
háyà, ó \((-\mathrm{g}) \quad\) kû: \(=\varnothing\)
well, Prox-InanSg DemDef=it.is

A: 'There (you have it)! Bringing it is impossible for you. Well, this is it.'
(02:57)


A: wálà:
voilà
\(\mathrm{B}:\) dày \({ }^{\mathrm{nL}}\) ú kán-sú-ŋgó pú \(\rightarrow\), manner 2 Sg do-Pfv2.Ppl-InanSg all, dùmó [solution kò-ń] béà-m-nù-wn, later [solution InanSg-3SgPoss] get-Ipfv-Ipfv-2SgSbj,
A: \(\grave{\mathrm{m} h} \hat{\mathrm{~m}} \rightarrow\)
M-hm!
B: 'But if you have just eaten a (grain-based) meal first, as for that (animal), afterwards to some extent, ...'
A: 'There (you have it)!'
B: '..., (considering) the way (=what) you have done, afterwards you will get its solution (=a way to do it, i.e. eat meat).'
A: 'M-hm!'
[French solution]
(03:04)
\begin{tabular}{|c|c|c|c|}
\hline B: [nù-mbò \({ }^{\text {L }}\) & dé-mbò & \(\mathrm{ti}^{\text {n }} \rightarrow\) & ga] \\
\hline [person-AnPl & big-AnPl & first & Top] \\
\hline [kú & ní:] & & \\
\hline [DemDef & Inst] & .Pfv-3 & \\
\hline
\end{tabular}
\(\mathrm{A}:\) ggàndà \(^{\mathrm{L}}\) kú \({ }^{\text {ñ }}\) ] dè, -
[place DemDef Def] if, -
B : nân [ùlè: \({ }^{\text {L }}\) gàrà-mbó ǹ]
now [children certain-AnPl Def]

3 Pl [ear Def] a.lot have-3PlSbj Ø
A : wálà:
voilà
B: 'As for the old people in the past, they spoke like that.'
A: 'If it's (=speaking of) that place (=subject), \(\qquad\)
B: 'Nowadays, certain young people, they don't pay attention (to old people).'
A: 'There (you have it)!'
[gàrà-mbó, §6.3.2; elsewhere gǎy \(\rightarrow{ }^{\mathrm{L}}\) sò- means 'have a lot', but in combination with 'ear' it means 'disregard, not listen']
(03:08)


B: 'For that reason, sometimes it's they [focus] who are mixing (things) up.'
A: 'Yes.'
B: 'That's it.'
[dén-gó '(specific) day', synonym lè:-gó]
(03:11)


A: 'On that basis, they have said they would reject (what the old people say), but it won't be rejected.'
B: 'There's no way to reject (it), they say.'


A: ‘They (=young people) haven't seen this situation that (old people) spoke about. Yes.'
(03:19)


B: 'Because of that (the animals) came. If you come like that (with) livestock and you gather (=accumulate) it (at your house), unless you have a small child (to take care of them), that will go to ruin, won't it?'
['b-ò: after perfective-2 participle, §14.4.2.2; = lă:-Ø is a n'est-ce pas? tag question] (the remainder of this text, about one minute, has not been transcribed)

\section*{Text 2022-03 Wartime hardship (duration 01:24)}

Yatiguem Guindo (female) ("A"), with Oumar Guindo ("B") and Ali Guindo ("C")
(00:01)
\begin{tabular}{|c|c|c|c|c|c|}
\hline ân & gày] & [[]zé-gé & ǹ] kò] & órú-gó & ǹ \\
\hline [now & Top] & [[[fight-InanSg & Def] Poss] & talk-InanS & g Def] \\
\hline án-Ráy & [nân & gày] mà \(\rightarrow\) & rú-gó & dày \({ }^{\text {nL }}\) & bú-ygó \\
\hline how? & [now & Top] Q & talk-InanSg & manner & be-Ppl.InanS \\
\hline
\end{tabular}

B: 'Now, how is the matter of the conflict?'
[possessive with kò ; B's turn overlaps with C's]
(00:06)
\(C\) : [àdúná dày \({ }^{n L}\) bú-ŋgó],
\(\left[\right.\) tín \(^{\text {n }} \rightarrow\) dày \({ }^{\mathrm{nL}}\) bú-ngó]
[world manner be-Ppl.InanSg] [firstly manner be-Ppl.InanSg]
[nân dày \({ }^{\text {nL }}\) bú-ngó]
[now manner be-Ppl.InanSg]

C: 'How the world (=life) is. How it was in the past (and) how it is now.'
(00:08)
\begin{tabular}{llll} 
B: & [àdúná dày \({ }^{n L}\) & bú-ngó], \\
[world manner & be-Ppl.InanSg] \\
nân & dày \({ }^{n L}\) & í & témbé- \\
now & manner & 1 Pl & find-
\end{tabular}
[tín \({ }^{\text {n }} \rightarrow\) dày \({ }^{\mathrm{nL}} \quad\) bú-ygó \(]\),
[firstly manner be-Ppl.InanSg],
now manner 1 Pl find-
B: 'How the world is. How it was in the past, and the way we have encountered-'
[B repeats, overlapping with C]
\((00: 11) \quad \mathrm{A}: \mathrm{tin}^{\mathrm{n}} \rightarrow\) dày \({ }^{\mathrm{nL}} \quad[1 ́ \quad\) gà \(]\) àdúná [[líll bènè] gà],
firstly manner [1Pl Top] world [[1Pl chez] Top],
jébdé [[í yì kárnà] gà] [í bènè] élù-m=bì-Ø,
a.little [[1Pl see Pfv.Ppl] Top] [1Pl chez] be.sweet-Ipfv=Past-3SgSbj,

A: 'The way the world (was) among us in the past, what we saw (=experienced) was fairly pleasant.'
[can be rephrased with jébdé directly preceding élù-m = bì-Ø]
(00:14)
A: [[[í \({ }^{\text {Lè̀lù-ŋgg̀̀ }]}\)
nì:] \(\left.\quad \hat{o}-\mathrm{m}=\mathrm{bì̀}^{\mathrm{y}} \mathrm{y}^{\mathrm{n}}\right]\)
[[[1P1 happiness-InanSg]
Inst]
go-Ipfv=Past-1PlSbj
[[[1́ \({ }^{\text {L }}\) と̀lù-ŋgò]
nì:] wâ:-m = bì- \({ }^{n}\),
[[[1Pl happiness-InanSg]
Inst] come-Ipfv=Past-IP1Sbj,

A: 'We used to go (around) at our pleasure and come (back) at our pleasure.'
[past imperfective, §10.5.1.1]
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (00:17) & A: pá \(\rightarrow\) wide.open yé there.Def yà-mbó woman-AnP & ع́b \(\varepsilon\) market \({ }^{L}\) yà:-m = go-Ipfv= [í [1Pl & \begin{tabular}{l}
sándú-m \\
transact-Ipfv ì- \({ }^{\text {n }}\), \\
ast-1PISbj, \\
sǎy] wâ:- \\
only] come
\end{tabular} & \begin{tabular}{l}
[[ébé [[market
\[
=\mathrm{b} \mathrm{l}-\mathrm{y}^{\mathrm{n}}
\] \\
Ipfv=Past-
\end{tabular} & \({ }^{\text {Lòdùbà:] }}\) road] & \begin{tabular}{l}
nè] \\
Loc]
\end{tabular} \\
\hline
\end{tabular}

A: 'We used to go freely on the road to the market there to buy and sell, (and) we women would come back alone.'
 today [[DemDef place Def] Loc], even [[courtyard interior] Loc] [wágádú gàrá \(\rightarrow\) bě: yàl-é:-yù-wn], [time a.certain get stroll-MP-IpfvNeg-2SgSbj],
A: 'Nowadays, in that zone, even inside the courtyard, sometimes you-Sg don't have a chance to walk around.'
(00:26)


A: ‘Even going (around) is difficult (=dangerous) among us. When hardship came to us, ...'
(00:30) A: [[[dàmbà \({ }^{L}\) tín \(\rightarrow\) í bú-ngó] nغ̀] zòbò gín]
[[[village firstly 1 Pl be.Loc-Ppl.InanSg] Loc] run Ant.Past.SS]
[[dàmbà \({ }^{\text {L }}\) lè̀:-n \(] \quad\) nè \(] \quad{ }^{\mathrm{L}}\) wò̀:-y \({ }^{\text {n, }}\) [[village two-Ord] Loc] come.Pfv-1PISbj,
A: 'Having fled from the original village where we were, we came to a second village.'
(00:33) A: [[lè:-n乇́ nદ̀] í bòrà-lí] [zòbò gín] [[two-Ord Loc] 1Pl be.fine-PfvNeg] [run Ant.Past.SS] ză: \({ }^{\text {n }}\) tàngì- \({ }^{\text {n }}\), Dianga cross.Pfv-1PlSbj,
A: 'When things didn't go well for us in the second one, we fled and went over to Dianga (village).'
[perfective negative as background clause, 1Pl is object of impersonal-subject transitive bòr'́]
(00:36) A: [zǎ: \({ }^{\text {n }}\) í bòrà-lí]
[Dianga 1Pl be.fine-PfvNeg]
[[dàmbà \({ }^{L}\) kèdè-né] nè] wò: gín] óbà-y \({ }^{n}\),
[[village four-Ord] Loc] come Ant.Past.SS] sit.Stat-1P1Sbj,
A: 'When things didn't go well for us in Dianga, we came and are staying in the fourth village.'
(00:39)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{A} & [nóm-gó & & gà & & [désé & kà] & kálê: \(=\varnothing\), \\
\hline & [difficulty & nSg & & & [fatigue & Top] & limit=it.is, \\
\hline & [[kú & \({ }^{\text {Lbèr }}\) & & nè] & [nân & gày], & \\
\hline & [[DemDef & inter & & Loc] & [now & Top], & \\
\hline
\end{tabular}

A: 'The hardship is extreme. In that, now, ...'
(00:43) A: [ \({ }^{\mathrm{HL}}\) yây \({ }^{\mathrm{HL}}\) wô-1] [yây wô-1] [yây wô-1]
[go.Dur come.Dur] (repetitions)
[kú pú \(\rightarrow\) là], jé pú \(\rightarrow\),
[DemDef all too], person all,
A: '(Constant) going and coming, going and coming, going and coming. All that too, everyone...'
[ \({ }^{\mathrm{HL}}\) yây \({ }^{\mathrm{HL}}\) wô-1, §15.3.1]
(00:47)
\(\begin{array}{llll}\text { A: } & {\left[\begin{array}{lll}\text { né } & \text { á-gì } & \text { Lày-mì-s-ò: }\end{array}\right.} & \text { nè }] \\ & {[\text { person }} & \text { Logo-Acc } & \text { become.tired-Caus-Pfv2-SbjFoc }\end{array}\) Ant.NonP.DS \(]\)

A: '(Everybody) says (thinks) that someone (else) [focus] has made them suffer, we are in that (situation).'
[subject-focus with nè, §15.2.2.6]
(00:50) A: mais [ámbá ògò-ná:n] kàsà:rà \({ }^{\text {L }}\) zè:-sú-ŋgó,
but [God Lord] scourge bring-Pfv2.Ppl-InanSg,
[ámbá \({ }^{\text {Lzày-Ø dé] [lǎ:-Ø }}\) de [God convey.Pfv-3SgSbj if] [it.is.not-3SgSbj if],
A: 'But (actually) the scourge that God Almighty has brought, whether or not God conveyed (=caused) (it), ...'
\begin{tabular}{|c|c|c|c|c|}
\hline A: [nè \({ }^{\text {L }}\) & ò-mı] & HL [zây & bèà-m-nù-m] & Lnè \\
\hline [person & Prox-AnSg] & [convey & get-Ipfv-Ipfv-LogoSbj] & person] \\
\hline ỳgó-Ø, & & & & \\
\hline not.be.L & \(-3 \mathrm{SgSbj}\) & & & \\
\hline
\end{tabular}

A: 'There is no person who can (say) "I will convey (=cause) it.",
['person' as head of (partially covert) relative doubled after participle, §14.2.5; \{HL\} overlay for imperfective verb chain (twice), §15.1.2]

A: 'May God Almighty relieve the scourge among us. The suffering is at its maximum. We are really suffering.'


A: 'Suffering has gone and come among us. The young people have scattered every which way. All of our people have scattered.'


A: 'You-Sg (get up) and leave village one, you leave (village) two, you leave (village) three. Village four.'
[the forms here for 'one' and 'two' are those for the counting recitation (\$4.6.1.2), not the usual modifying numerals]


A: 'The count (enumeration) is complete. Whether God adds to our long life or not (=as long as we live), the count is complete.'
[i.e. we are staying here for good no matter what; bàrà-Ø dé 3 Sg simple perfective plus dè 'if', §10.2.1.1]
(01:18)
\begin{tabular}{|c|c|c|c|}
\hline A: [ámbá & [1́ & bènè] & yòr-gí] \\
\hline [God & [1Pl & chez] & slack-Caus.QuotImprt] \\
\hline [ámbá & bá:s & [1́ & bènè] pógí] \\
\hline [God & trouble & [1P1 & chez] ward.off.QuotImprt] \\
\hline
\end{tabular}

A: 'May God relieve (it) among us. May God ward off trouble.'
[quoted imperative in imprecations, §10.6.3.1]

\section*{Text 2022-04 Men and women in the fields (duration 02:38)}

Ali Guindo ("A"), accompanied by Oumar Guindo ("B")
(00:02) A: yá toujours, [ár \({ }^{\text {ná }} \quad{ }^{\mathrm{L}}\) cìbdè: \(]=\varnothing\)
woman always, [man mate]=it.is,
áywá yá [árná ní:] jâ-m-dò-Ø wà,
well woman [man Inst] eat-Ipfv-Ipfv-3SgSbj Quot,
A: 'A woman (=wife) is always a man's mate. Well, it is said that the woman should eat with the man.'
\((00: 08)\) A: [árná [yá gì] zé dè gín] wò-w \({ }^{n}\) dè, [man [woman Acc] wed RecPrf Ant.Past.SS] come.Pfv-2SgSbj if, [yá bí-lèy] èré tá:-ndǎ:-Ø,
[woman 2Pl-two] rivalry be.put-StatNeg-3 SgSbj ,
bí-lèy yà-lòl-gó tá:-ndǎ:-Ø,
2Pl-two hostility be.put-StatNeg-3SgSbj,
A: 'When a man (=you) has married a woman and you come, there is no rivalry among you and the woman.'
[2Pl bí is understood as including the preceding 'woman'; tá:-nd-à: for twá:-nd-à: , lòl-gó elsewhere means 'labor pains']
\((00: 15)\)


A: 'What you-Sg have said for the woman's side to carry out, that's what the woman carries out.'
[< tà:ndá 'side']
\((00: 18)\) A: [yày gín] [í kàbú] wǎ: wà:-ýn \({ }^{n}\) dè, [go Ant.Past.SS] [1Pl together] farming(n) do.farming.Pfv-1PlSbj if,

[[farming 1Pl-Poss] Def] do.farming-Ipfv spend.day.Pfv-3PlSbj whereas]
A: 'When we go and work the field together, they (=women) have spent the day working our field, ...
[wǎ:-m \({ }^{\text {L }}\) dèr \({ }^{\mathrm{n}}\)-à: , §15.2.1.2.2; nà \(\rightarrow\), §19.2.3.2]
(00:22) A: [gùdó-gùdó [á-gá ǹ] ýgò Lwà:-m-d-è]
[sometimes [3Refl-Poss Def] here come-Ipfv-Ipfv-3PlSbj]
\(B\) : [á-gá ǹ] ýgò \({ }^{\text {L }}\) wà:-m-d-è
[3Refl-Poss Def] here come-Ipfv-Ipfv-3P1Sbj
A: 'But sometimes they come here (later) to their own (field).'
B: 'They come here to their own (field).'
(00:24) A: wálà:, bon, [í-gé là] [zá í-gé ñ] léré-ŋg-દ̀:
voilà, well, [1Pl-Poss too] [meal 1Pl-Poss Def] fail-IpfvNeg-3PISbj
[sòlé: í-gé ǹ là] léré-ng-è:,
[cream 1Pl-Poss Def too] fail-IpfvNeg-3PISbj,
A: 'Right. Well, (as for) our (meal) as well, they do not miss (=fail to cook and bring) our meal. They do not miss our cream of millet.'
(00:29) A: [bírá: í-gé ǹ là pú \(\rightarrow\) ] bú \({ }^{\text {Lbìrà-m- } ̀ \text { : }}\), [work(n) 1Pl-Poss Def too all] 3Pl work-Ipfv-SbjFoc, [á-gá ǹ là] [3Refl-Poss Def too]
[[kú \({ }^{\text {L }}\) bèrnà: \(]\) nè] ǵgò \({ }^{\mathrm{L}}\) wà:-m-d-è, [[DemDef interior] Loc] here come-Ipfv-Ipfv-3PISbj,
A: 'It's they [focus] who do all of our work. As for their own, in between (on the side of) that they come here.'
[imperfective subject focus, §13.1.1.4.3]
A: cì-njê: = Ø,
[àrnà-[bòr-gó]
dágám ìré]
what?=it.is, [man-[addition-InanSg] a.little be.more]
[ùlé: měm \(\rightarrow\) ] \({ }^{\mathrm{L}} \mathrm{So-} \mathrm{\varepsilon}\) : ,
[children many] have-3PISbj,

A: 'What (=why) is that? The extra (amount of crops) from (the) man is a little more, they (=women) have lots of children [focus].'
[since a man may have two or more wives, each woman works her own small field to get crops to feed them, in addition to what she gets from the husband's field; focus on 'many children' so existential yé is absent]
(00:36)


A: 'A man-. The children follow women [focus]. (It doesn't matter) whether the man (=you) has begotten a child or not, the child follows (=is dependent on) the woman [focus].'
[ < dìmb-í: 'follow', here as stative dímbà 'be following']
\begin{tabular}{|c|c|c|}
\hline èdé
child & \begin{tabular}{l}
yá \\
woman
\end{tabular} & \({ }^{\mathrm{L}} \mathrm{k}\) 文-m-દ̀:, raise-Ipfv-SbjFoc, \\
\hline [àr \({ }^{\text {na }}{ }^{\text {L }}\) & ú, & 万j-1í-yày-Ø \\
\hline an & 2Sg, & get.hot-MP-Pfv1a-3SgSbj \\
\hline
\end{tabular}

A: 'It's the woman [focus] who raises (i.e. feeds) the child. The man, you- If it (=situation) gets hot, ...'
(00:48) A: [[llyá ǹ bènc̀] ùlé: dògó-tì nè \(]\) [[[woman Def] chez] children leave-Pfv1b Ant.NonP.DS] [ú gày] [[há:jì ú-wó] nè] ô-m-nù-w \({ }^{\text {n }}\) [2Sg Top] [[need(n) 2Sg-Poss] Loc] go-Ipfv-Ipfv-2SgSbj
A: '(The man) having left the children with the woman, you (=the man) for your part (will) go on your own business.'
[rapidly spoken, transcription approximate]
(00:51)


A: [yá gà] [ùlé: á-gá] dógá-ygò:-Ø
[woman Top] [children 3Refl-Poss] leave-IpfvNeg-3SgSbj
B: [yá gà] [ùlé: á-gá] dógá-ngò:-Ø
[woman Top] [children 3Refl-Poss] leave-IpfvNeg-3SgSbj
B: 'You (will) go anywhere you think of.'
A: 'The woman for her part won't leave the children.'
B: 'The woman for her part won't leave the children.'
(00:53)
A: [kú
ǹ] dùgò] [bírá:
bú-gó
ǹ], [DemDef Def] Purp] [work(n) 3Pl-Poss Def], [[í-gé \(\begin{array}{ll}\text { ǹ }] ~ d u ̀ g \grave{~}] ~ \text { z̀gá kán-sú-ngó ǹ }]\end{array}\) [[1Pl-Poss Def] than] be.bigger do-Pfv2-3SgSbj Def] ǒ: \(\quad\) kû \(=\varnothing\)
Prox-InanSg DemDef= it.is

A: 'For that (reason), their (=women's) work is bigger than ours. This is why.'
[ǒ: from ò-gú 'this (inanimate singular)']
(00:57) A: áywà yá yày gín jé-ngé dọ-à:y-Ø dè, well woman go Ant.Past.SS harvest-InanSg arrive-Pfv1a-3SgSbj if, tílày, [zà-gùmbá: \({ }^{\mathrm{L}}\) kùl] yé \({ }^{\mathrm{L}}\) bì-m \(=\) bì- , certainly, [meal-bowl share(n)] Exist be-Ipfv=Past-3SgSbj, yé \({ }^{\text {Lbù- } \varnothing \text {, }}\) Exist be.Loc-3SgSbj,
A: 'All right, the woman, when the harvest has arrived, certainly there was a share of (the food in) the meal bowl (for her). It's there.'
(01:03) A: [zá dì gín] ándá yǎy-yà-w \({ }^{\mathrm{n}}\) dè, [meal carry.on.head Ant.Past.S] the.bush go-Pfv1a-2SgSbj if, jé-ŋgé jé-m dèrn-à: dè, harvest-InanSg harvest(v)-Ipfv spend.day.Pfv-3P1Sbj if,
A: 'When you-Sg have carried the meal out to the bush (=the fields), when they have spent the day harvesting (millet), ...'
(01:06) A: yù-pàgá págí-s-è: dè, millet-bundle tie-Pfv2-3P1Sbj if, [[tyǎ: ú-wó] nè] tû-m-d-غ̀, [[basket 2Sg-Poss] Loc] put.in-Ipfv-Ipfv-3P1Sbj
A: 'When they have tied the millet grain heads into bundles, they (will) put them into your basket.'
(01:10) A: [kú úló zé-dè né] wâ:-m-nù-w \({ }^{n}\)
[DemDef house bring Ant.NonP.SS] come-Ipfv-Ipfv-2SgSbj
[kú ní:] [kú \({ }^{\mathrm{HL}}\) sô-m] [yày gín]
[DemDef Inst] [DemDef have-Ipfv] [go Ant.Past.SS]
jé-ŋgé dùm-â:y-Ø dè,
havest(n)-InanSg finish-Pfv1a-3SgSbj if,
A: 'You-Sg will come and bring that to the house. It goes on like that until the harvest is completed.'
[zé-dè < zě: 'bring', §10.1.3.7]
(01:15) A: bon [nân kày] yò-dí don-â:y-Ø dè,
well [now Topc] millet-carry.on.head arrive-Pfv1a-3SgSbj if,
[yó ǹ] dì-ýn dè,
[millet Def] carry.on.head.Pfv-1PlSbj if,
A: 'Well, when the time to carry millet has arrived, when we have carried the millet (to the village), ...'
(01:24)
\begin{tabular}{lllll} 
A: yù-dúgá, & sćllí-sú-ygó, & [lyá & ǹ & wà \(\rightarrow]\) \\
millet-load(n), & maximize-Pfv2.Ppl-InanSg, & [[woman & Def & QuotSbj]
\end{tabular}

A: 'You (will) tell the woman to carry off as much of a load of millet as she can carry (on her head).'
\begin{tabular}{|c|c|c|}
\hline \(B\) : dày \({ }^{\text {nL }}\) & ńné & émbé-ggó \\
\hline manner & 3 Sg & be.capable-Ipfv.Ppl.InanSg \\
\hline A: dày \({ }^{\text {nL }}\) & ńné & émbé-ygó \\
\hline mann & 3 Sg & be.capable-Ipfv.Ppl.InanSg \\
\hline
\end{tabular}

B: 'Whatever she is capable of (carrying).'
A: 'Whatever she is capable of (carrying).'
(01:28) A: áywà ná: jèrì í kán kánà,
well now look.at 1 Pl do Pfv.Ppl,
[kú là] bú jèrì kárnà
[DemDef too] 3Pl look.at Pfv.Ppl, [yà-mbó pú \(\rightarrow\) ] pàngá cèw=lá-Ø, [woman-AnPl all] strength be.equal=StatNeg-3SgSbj,
A: 'Well, now, (from) what we have observed, and that which they (=other men) have observed, no women are equal (to men) in strength.'
[negation scopes over 'all' that is part of the subject, §6.6.3]
(01:33) A: gàrá \(\rightarrow\) [ú túrú] [yà-mbó léy] \({ }^{\mathrm{L}}\) sò-wn ,
sometimes [2Sg one] [woman-AnPl two] have-2SgSbj,
gàrá \(\rightarrow\) [yà-mbó tà:ndú] \({ }^{\text {Lsò--wn }}\), sometimes [woman-AnPl three] have- 2 Sg Sbj,
A: 'Sometimes you-Sg alone have two wives [focus], sometimes you have three wives.'
(01:36) A: [bú pú \(\rightarrow\) pàngá cèw = lá- -
[3Pl all] strength be.equal \(=\) StatNeg- 3 SgSbj ,
[[kwǎ: ní:] dí-dè] jìnù-w \({ }^{\mathrm{n}}\) dè,
[[neck Inst] carry.on.head.QuotImprt] say.Pfv-2SgSbj if,
A: 'All of them together don't equal (you) in strength. When you-Sg tell (them) to put it up on their necks (=heads), ...'
[QuotImprt dí extended as dí-dè, §10.6.3.1]
(01:39) A: [gàrá \(\rightarrow\) dè] yà \({ }^{\text {L }}\) pàngá só-ndǒ: b- : [sometimes if] woman strength have-Neg be-Ppl.AnSg [yù-wá: nè] [[bírá: ǹ ] nè] [millet-farming(n) Loc] [[work(n) Def] Loc pàngá ńné gá:rá só-m-é:, strength 3 Sg a.lot have-Ipfv-Ppl.AnSg,
A: 'Sometimes (there's) a woman who lacks strength (for carrying loads), (but) who has a lot of strength in farming, in (farm) work.'
\begin{tabular}{cll} 
A: mais & {\([\) dúgá } & ǹ \(]\)
\end{tabular}\(\quad\) émbé-ygò:- Ø

B: kâ-m-dò-Ø
be.done-Ipfv-Ipfv-3SgSbj
A: 'But she can't handle loads.'
B: 'It can happen.'
(01:44) A: [kú là] zàmbâ: = Ø quoi, [yǒ: ní:],
[DemDef too] betrayal=it.is \(\quad\), [today Inst],
tyà:-pègé yí-tà:n-tà:n-tà:ndú, [pégé ńd-é:] basket-layer Inan-Rdp-Rdp-three, [put.layer give-Chain] [ùlé: bí-gé-mbò] sá: ko्रá-mó-ǹ, [children 2Pl-Poss-AnPl] stone.grind eat.millet-Hort-Pl.Addr,
A: 'That is an injustice. Nowadays, let's lay three layers (=basketfuls) each and give them (to them) to stone-grind (and cook) it and feed it to your-Pl children.'
['three each', distributive iteration, §8.4.8; ńd-é:, §15.1.4.3; idiomatic collocation with sá: 'coarsely stone-grind (millet)’ and kó 'eat (ground millet with water)', here meaning 'eat' in general]
(01:53) A: yí
Làb-à:
dé,
DemDef.InanPl
receive.Pfv-3P1Sbj
if, [[gwǎ: á-gá] nè] \({ }^{\text {Lgà }} \mathrm{g}-\mathrm{m}-\mathrm{d}-\varepsilon\), [[granary 3Refl-Poss] Loc] put.in-Ipfv-Ipfv-3P1Sbj,
A: 'When they have received those (basketfuls), they put (them) in their granaries.'
(01:57)


A: 'When they have gotten their (shares), they put (them) in here. Later we [focus] will eat those (together).'
(02:00)
\begin{tabular}{|c|c|c|c|c|}
\hline B: ár \({ }^{\mathrm{n}}\) á-m man- & \[
\begin{array}{ll}
\text { bí } \\
2 \mathrm{Pl}
\end{array}
\] & \[
\begin{aligned}
& \text { Ľnà-m-غ̀:, } \\
& \text { eat-Ipfv-SbjFoc, }
\end{aligned}
\] & & \\
\hline \begin{tabular}{l}
\(\mathrm{A}: ~ e ́ \rightarrow\), \\
yes, \\
yâ: \\
again
\end{tabular} & \begin{tabular}{l}
ùlé: \\
children \\
ár \({ }^{\text {ná-mbò }}\) \\
man-AnPl
\end{tabular} & \[
\begin{aligned}
& \text { kò-ń } \\
& \text { InanSg-3SgPoss } \\
& \quad \text { yí } \\
& \quad \text { DemDef.InanP1 }
\end{aligned}
\] & \[
\begin{aligned}
& \text { bón-gó } \\
& \text { name-InanSg } \\
& \text { Lyà-mà-m-d. } \\
& \text { eat-Caus-Ipf }
\end{aligned}
\] & \begin{tabular}{l}
kóy, \\
Emph, \\
Ipfv-3P1Sbj
\end{tabular} \\
\hline
\end{tabular}

B: 'You-Pl men [focus] will eat.'
A: 'Yes, it's (in) the name of the children, (but) again they will give that (millet) to the men to eat.'
\begin{tabular}{llll} 
A: & sòlé: & í-gì & pádá \\
cream.of.millet & 1Pl-Acc & ńdí, \\
& re.grind & give, \\
zá & í-gì & dùmbú & \\
meal & 1Pl-Acc & cook.ground.millet & give,
\end{tabular}

A: '(And they) re-grind (millet grain) and give it to us, (and they) cook a meal and give it to us.'
(02:08)


A: 'They and we are (living) together like that. We likewise take from the granary and give (some) to them.'
(02:12)
\begin{tabular}{cll} 
A: \begin{tabular}{ll} 
édú-ŋgó & háybá-ǹ \\
good-InanSg & conserve.Imprt-Pl.Addr
\end{tabular} & kóy, \\
Emph, \\
ع́dú-ŋgó & háybá-ǹ & kóy, \\
good-InanSg & conserve.Imprt-Pl.Addr & Emph,
\end{tabular}

A: ‘Conserve-1Pl it (=millet) well! Conserve it well!’
[plural-addressee imperative]
(02:15)


A: 'When this (millet) runs out, we don't have any more of that to be gotten.'
[grain (and liquids) are treated as inanimate plural in agreement, §4.1.1.4.1]
(02:18)
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A: áywà yà-mbó,
well woman-AnPl,
Édú-\etagó [úló gì] ńné cénd-í: nè,
good-InanSg [house Acc] 3Sg do.well-MP Ant.NonP.DS,
nàmá búmbó-ǹ,
stone.grind re.grind.Imprt-Pl.Addr.

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A: 'Well, (you) women, when the house (=the family) is well taken care of, (you-Pl) stone-grind and re-grind (the millet)!'
['grind (and) re-grind' here in the synecdochic extended sense 'cook (millet)']
(02:22) A: hál [yày né]
until [go Ant.NonP.SS]

[crop Def] [[[2Sg give-Ipfv.Ppl.InanSg] interior] Loc]
gàrá-gàrà bú dógá-m-é: ǹ,
Rdp-a.little 3Pl leave-Ipfv-Ppl Def,
A: 'Until later on, what they will leave aside little by little of the harvested grain stock which you-Sg give (them),'
[dèrn' 'harvested crop', here definite-marked and in apposition to the headless relative]
(02:25) A: [y̌̌: túrù] bá-nà-dè nòmdó tô:-m-d-è, [today one] one.day main.meal pound-Ipfv-Ipfv-3PISbj, áywà, [úló kà] yá kô= Ø, well, [house Top] woman Poss.InanSg=it.is,
A: 'On a given day they (=women) will cook a main meal (lunch or supper) [bá-nà-dè 'some day (in the future)', §8.4.6.1; nòmdó tó: 'cook a main meal' with tó: 'pound (grain)' in synecdochic extended sense; possessive predicate, §11.5.2]
(02:30) A: â:, ôy \({ }^{\text {n }} \quad\left[k u ́ \quad\right.\) ní:] \({ }^{\text {Lbù̀ }}\) -
ah, thus [DemDef Inst] be-3SgSbj

B: dàgà-só-Ø
be.well.done-Pfv2-3SgSb
A: 'Ah, that's how it is.'
B: 'That's fine.'

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\section*{Abbreviations and symbols}
\begin{tabular}{|c|c|}
\hline Abbrevia & \\
\hline 3Refl & third-person reflexive \\
\hline Acc & accusative \\
\hline Adj & adjective \\
\hline Addr & addressee \\
\hline An & animate \\
\hline AN & aspect-negation suffix or category \\
\hline AnPl & animate plural \\
\hline AnSg & animate singular \\
\hline ATR & advanced tongue root (vowel feature) \\
\hline C & consonant, especially in formulae like CvCv \\
\hline Caus & causative \\
\hline Char & characteristic nominal derivational suffix (§4.2.1) \\
\hline Dat & dative \\
\hline Def & definite \\
\hline Dem & demonstrative \\
\hline DemDef & discourse-definite demonstrative \\
\hline Det & determiner (demonstrative or definite) \\
\hline Dist & distant \\
\hline DS & different-subject (subordinator) \\
\hline Dur & durative (§10.2.1.9) \\
\hline E & e or \(\varepsilon\), in \(-(\mathrm{y}) \mathrm{gE}\) suffix, EE stem-final \\
\hline EA & expressive adverbial (§11.1.3.1) \\
\hline Emph & emphatic (clause-final particle) \\
\hline ExpPrf & experiential perfect \\
\hline Foc & focus \\
\hline Fut & future \\
\hline H & high (tone) \\
\hline Hort & hortative \\
\hline Hum & human (numeral classifier) \\
\hline Imprt & imperative \\
\hline Inan & inanimate \\
\hline InanPl & inanimate plural \\
\hline InanSg & inanimate singular \\
\hline Inch & inchoative ('become' with adjective) \\
\hline Inst & instrumental \\
\hline L & a) low (tone) \\
\hline & b) any sonorant (in e.g. CvL) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Logo & logophoric \\
\hline MP & mediopassive \\
\hline N & a) noun (in e.g. ' N -Adj") \\
\hline & b) any nasal consonant (in e.g. CvN ) \\
\hline (n) & noun, parenthesized in glosses like 'work (n)' \\
\hline Neg & negative \\
\hline Nom & nominalization \\
\hline NP & noun phrase \\
\hline Num & numeral \\
\hline O & a) object (in e.g. "SOV') \\
\hline & b) o or \(\rho\), in -mbO and -(y)gO suffixes \\
\hline Pass & passive \\
\hline Pfv & perfective \\
\hline Pl & plural \\
\hline Poss & possessor \\
\hline PP & postpositional phrase \\
\hline Prf & perfect (in "experiential perfect" and "recent perfect") \\
\hline Prsntv & presentative ('here's X!') \\
\hline Prog & progressive \\
\hline Proh & prohibitive (negative imperative) \\
\hline Pron & pronoun \\
\hline Prox & proximate (demonstrative) \\
\hline Purp & purposive \\
\hline Q & question \\
\hline Quot & quotative, quoted \\
\hline QuotHort & quoted hortative \\
\hline QuotImprt & quoted imperative \\
\hline QuotSbj & quotative subject \\
\hline Rdp & reduplication \\
\hline Recip & reciprocal \\
\hline RecPrf & recent perfect \\
\hline Refl & reflexive (in 3Refl) \\
\hline Rel & relative clause; relative verb form \\
\hline Rev & reversive \\
\hline S & subject (in e.g. 'SOV") \\
\hline Sbj & subject \\
\hline SbjFoc & subject-focus form of verb (§13.1.1.4) \\
\hline Sg & singular \\
\hline SS & same-subject (subordinator) \\
\hline Stat & stative \\
\hline Top & topic \\
\hline Tr & transitive derivational suffix, §9.4.1 \\
\hline TU & Tebul Ure language \\
\hline V & verb (in e.g. "SOV") \\
\hline
\end{tabular}
a) vowel (in e.g. CvCv )
b) verb, parenthesized in glosses like 'work (v)'

Yanda Dom language

\section*{Symbols}
\begin{tabular}{|c|c|}
\hline * & reconstructed \\
\hline \# & ungrammatical, unattested \\
\hline á, à, â, ǎ, â & tones on vowels (or syllables), §3.6 \\
\hline \(\overline{\mathrm{x}}\), x , \(\mathrm{x}, \mathrm{x}\) & tone overlays on stem in compounds, Chapter 5 \\
\hline \(\therefore\) & dying-quail effect (prolongation \(\rightarrow\) plus L-tone target), §3.7.3, §7.1.1 \\
\hline /.../ & a) lexical tone melody (§3.6.1), e.g. /LH/ or /H/ \\
\hline & b) underlying or lexical representation \\
\hline \(\{\ldots\}\) & a) tone overlay, e.g. \(\{\mathrm{HL}\},\{\mathrm{H}\}\), or \(\{\mathrm{L}\}\) \\
\hline & b) enclosing any set, e.g. \{u a i\} \\
\hline [...] & a) phonetic (IPA) representation, e.g. [bǔ:] \\
\hline & b) syntactic or prosodic/tonosyntactic phrase \\
\hline [...] \({ }^{\text {L }}\) & \(\{\mathrm{L}\}\) tone overlay controlled by an element to the right \\
\hline \({ }^{\text {L }}\) [...] & \(\{\mathrm{L}\}\) tone overlay controlled by an element (possessor) to the left \\
\hline \(\subset \ldots . \supset\) & tonosyntactic island \\
\hline \(\rightarrow\) & (prolongation of final vowel or sonorant) \\
\hline \(=\) & clitic boundary \\
\hline
\end{tabular}

\section*{Index}

\section*{1. selected morphemes}
notes:
in suffixes, " \(v\) " is a variable vowel
nonsegmental \(-\varnothing\) and \(\therefore\) are placed at the beginning beginning
\(\mathrm{O}=\{0 \quad 0\}, \mathrm{E}=\{\mathrm{e} \varepsilon\}\)
glottal \(?\) disregarded in alphabetization
nasal diacritic in \(\left\{w^{n} y^{n} r^{n}\right\}\) disregarded in alphabetization
alphabetization: \(\mathrm{E}<\mathrm{e}<\varepsilon, \quad \mathrm{O}<\mathrm{o}<0, \mathrm{n}<\mathrm{n}<\mathrm{y}\)
atonal morphemes are not tone-marked
lexical stems (nouns, verbs, etc.) are shown with lexical tones
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b) third-person reflexive pronoun, \(\S 18.1\)
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b) 'be where?' (ǎ-m-nદ̀, à-bô:, etc.), §13.2.2.3
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                            participle after imperfective/stative negative verbs, §14.4.4
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bo, bo:
-bó
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    da- A/X-stem of recent perfect dè- (negative dà-lí-), §10.2.3.4
    -dà: a) irregular 3Pl subject perfective allomorph with 'go' and 'convey'
                'yà-dà: 'they went', §10.1.3.5
                Lzà-dà: 'they conveyed', §10.1.3.8
            b) 3Pl subject allomorph in perfective-1a -yà-dà:, §10.2.1.2
    -dá: variant of -dágá in tòmbò-dá: 'north', §8.4.6.3
    daga
dàgá 'become good, be fine', (263d) in §9.6
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[X L'dàn'à] nè 'on X', §8.2.6
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d\varepsilon
d\grave{-}}\quad\mathrm{ recent perfect, § 10.2.1.6
d\varepsiloń ~ dè as auxiliary, (313-314) in §10.2.1.6
dé
-dè
-m-d\grave{-}-Ø
3Pl imperfective positive, §10.2.2.1
dèrn'\varepsilon}\quad 'spend (mid-)day'
dènd\varepsiloń dèrn'\varepsilon 'night fall', §11.1.1.4.1
di
dǐ 'carry on head', §10.1.3.4
-dí a) rare transitive suffix allomorph (kágá-dí, dùm-dí-), §9.4.5
b) perfective negative variant after n (e.g. kàn-dí-), §10.2.3.1
-dì prohibitive variant after n (e.g. kán-dì),
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stative dímbà, §9.4.1
dìmbǐ-l-ì̀-Ø, §10.2.1.8
d0
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b) 'insult (v)', with cognate nominal: dơá dǒ
-m-d\grave{-Ø }\quad3\mathrm{ Sg imperfective positive, §10.2.2.1}
dògó
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dùgó 'area under' or 'bottom', §8.4.6.3, §8.2.7.1 (cf. dúmbó)
[ X L}dùgò] nè 'under X' or 'next to X'
dùg\grave{ purposive postposition 'for; because of; about', §8.3}
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e, e:
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-ea-
EE (e: or \varepsilon:)
EE
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-\varepsilonа-
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gà topic ('as for'), §19.1.1.2, variant of gày
gà clause-final mildly emphatic particle
-gà in demonstrative adverbs
\varepsiloň:-gà 'around here', §4.4.2.1
á-gá third-person reflexive or logophoric possessor, §18.1.3
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gara:, ga:ra
gàrá: 'a certain one', §6.3.2
gàrá}->\quad\mathrm{ 'sometimes',§6.3.2

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    gá:rá 'a lot, greatly', §8.4.2.2
    gàrá-gàrà 'little by little', §8.4.2.4
gǎn 'put/pour in', §10.1.3.9
stative yé 'gànà-,yé L}\mp@subsup{}{}{\mathrm{ gàrnà-, §11.2.3.1}
gándá
gày ~ gà
-gé cé-gé '(a) shout', (72) in §4.1.1.4.3
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gì
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minor causative suffix (péndí-gí, màr-gí), §9.2.2
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-1́:
-ia-
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'more', §12.1.1
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with -ngó complement, §17.3.7
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1l-1-1́: 'remember', (247b) in §9.1
ìjjé 'what?',§13.2.2.2

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ìré 'forget'
'forget (to do)', §17.3.6

1́yé
jâ:
-jě:
jébdé
jéngúr(ú)gó
jě
jと̀l-1́
jǐn
jire
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[^0]:    'cock of musket'
    'something new and fashionable'
    'chili pepper'

[^1]:    a. ìnjè ${ }^{\mathrm{L}}$ já-m-é:
    water consume-Ipfv-Ppl.InanP1
    'drinking water'

[^2]:    a. [pédú-mbò pú $\rightarrow$ ] sémá-lì
    [sheep-AnPl all] slaughter-Proh
    'Don't slaughter all the sheep!'

[^3]:    a. bírá: měm $\rightarrow$ bìré-tì-Ø
    work(n) a.lot work(v)-Pfv1b-3SgSbj
    'He/She worked a lot.'

[^4]:    e. àngá-àygá
    dónà-m-nù-w ${ }^{\text {n }}$
    how.many?-how.many? sell-Ipfv-Ipfv-2SgSbj
    'For how much each do you sell (them)?'

[^5]:    a. bá ď̌ (~ bà:-dó: dǒ) 'rainy weather arrive' (June)
    bá gǒ (~ bà:-gó: gŏ) 'rainy weather go out' (October)
    bá dèrń $\quad$ 'night fall'

[^6]:    a. $\mathrm{jì}^{\mathrm{L}}$ óbá-m- $\varepsilon$ :
    person sit.Stat-Ipfv-Ppl.AnSg
    'a person who is sitting'

[^7]:    a. jì ${ }^{\mathrm{L}}$ yàgà súgó kárnà ǹ person fall descend Pfv.Ppl Def '(a/the) person who fell down' (yàgá)

[^8]:    a. ámádù $\quad a \rightarrow \quad$ [sě:dù gì] jâ-m-nù-m

    Amadou Logo.QuotSbj [Seydou Acc] kill-Ipfv-Ipfv-LogoSbj
    ${ }^{\text {L }}$ jììi-Ø
    say.Pfv-3SgSbj
    'Amadou said that he would kill Seydou.'

