# A Grammar of Tebul Ure (Dogon, Mali) 

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red comments to oneself (e.g. data to be elicited, section to be rewritten)
orange temporary cross-refs to examples in other sections
dk yellow Jamsay forms in sample index, to be replaced by new index

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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 20-25 languages. The languages are spoken is 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 generally considered to be a division of Niger-Congo, but much remains to be done to establish this firmly, much less determine the position of Dogon within the macrofamily.

### 1.2 Tebul Ure language

Within the larger Dogon family, TU has lexical and grammatical affinities to Yanda Dom, Najamba-Kindige, Tiranige, Dogulu, and probably Mombo and Ampari. It may be that these constitute a large "western" division of Dogon, perhaps along with Bunoge (about which little is currently known).

### 1.3 Environment

Traditionally, TU was spoken natively only in a closely spaced set of villages on a relatively flat shelf at the summit of the cliffs above the Jamsay-speaking villages of Bamba. Sandy plains stretch out to the south and east, but the plains also cut into the plateau in the form of a 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

This language (abbreviation TU) is spoken in several closely spaced villages on a flat shelf at the edge of the plateau, overlooking a narrow extension of the sandy plains below. There are also a few TU-speaking villages at the base of the cliffs and slopes where the sandy plains begin. The TB-speaking villages are those in (1).
name TU name N lat.//W long.

| Bedié | bédé |  |
| :---: | :---: | :---: |
| cluster consisting of ... |  |  |
| Bedié Na | bèdè-déngé | 14 41.35//03 06.91 |
| Didimgo | bèdè-dídìm(gò) | 14 41.77//03 06.92 |
| Tabade | bèdè-tàbàdé: | 14 41.50//03 06.99 |
| Bende | béndé | 14 40.29//03 06.62 |
| Dianga | 3ă: ${ }^{\text {n }}$ | 14 40.89//03 06.14 |
| Endekandou | èndègàndú | 14 40.57//03 05.74 |
| Endelgo (abandoned) | èndèlgó | 14 40.78//03 05.97 |
| Mande | màndé | 14 41.41//03 06.45 |
| Pedouma | pédúmá | 14 40.98//03 06.13 |
| Tombogo | tómbógó | 14 40.97//03 06.55 |

b. villages at 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 | sàrnàbòndú | $1440.90 / / 0303.91$ |
| Tene | (bàmbà-)tèndé | $1441.18 / / 0303.74$ |
| Yreban | ùlò-bán | $1440 / / 0306$ |

As elsewhere in Dogon country, the trend has been for villages on the edge of the 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 (bàmâ) includes several Jamsay-speaking villages as well as the TU-speaking villages in (1b).

Dianga has two nearly adjacent sections, jàクà ná: and jànà ségé, but they have a single chief.

### 1.5 People

The dominant surname throughout TU-speaking country is Guindo.
The main productive activities are farming and light herding. Millet (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 for bone healing.

Neighboring languages are other Dogon languages along with Fulfulde. Jamsay is the main language of the Bamba market, and of a a vast area in the plains stretching through Madougou and on to Koro. Yanda Dom 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 this language was noted in Calame-Griaule's Dogon dialect survey (1956:67), and in the SIL Dogon languages survey (Hochstetler et al. 2004). Calame-Griaule gave Jamsay and Toro So names for the language but no endonym. The SIL report calls the language "Oru yille."

Roger Blench visited the Tebul Ure area in 2005 as part of his campaign to identify and publicize the endangered languages of the region. His website (see References cited) has pages on the languages that he surveyed. The TU page 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 Tebul Ure in linguistics project, I was either done or well along with grammatical and lexical study of several other Dogon languages, and had developed a Dogon-specific 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. An informant 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.

### 1.6.3 Acknowledgements

The fieldwork on TgK is being 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 current grant (referenced above) is for the second phase. Completion of the overall project, i.e. detailed documentation of some 20-25 Dogon languages, will require a third funding phase.

My collaborators in the collective project have been Abbie Hantgan, Laura McPherson, Kirill Prokhorov, Steve Moran, Brian Cansler, Vadim Dyachkov, Jenia Gutova, and the late Stefan Elders. Our primary Malian assistant (and my Jamsay informant) is Minkailou Djiguiba.

## 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 $N C$ clusters like $m b$ 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 $w^{n}$ and $y^{n}$ mostly syllable-finally. Both $s$ and $z$ occur in native vocabulary.

The usual Dogon 7-vowel qualities occur: short $\left\{\begin{array}{lllllll}i & e & \varepsilon & a & o & o & u\end{array}\right\}$ and their long counterparts. Phonemic nasalization is possible for long vowels. -ATR $\{\varepsilon \rho\}$ and + ATR $\{e o\}$ are usually, but not always, incompatible within stems.

### 2.1.2 Prosody

TT has a normal Dogon tone system, not the pitch-accent-like system found in Donno So and Dogul Dom. Every stem (excluding expressive adverbials) has a lexical H-tone, either on one syllable or spread over two or more.
lexical tone patterns
metrical structure (strong and weak positions)
tonosyntax (overriding lexical tones or adding to them)
intonation

### 2.1.3 Key phonological rules

Nasalization-spreading
Consonantal rules (consonant clusters, metathesis, etc.)
Syncope and apocope of high vowels

### 2.2 Inflectable verbs

main derivations (Reversive, Causative, Mediopassive)
inflectional categories (tense-aspect, polarity, modals)

### 2.3 Noun phrase (NP)

linear and tonal relationships of nouns, modifying adjectives, numerals, non-numeral quantifiers, determiners, and possessors (summary)
morphosyntax of possessed NPS

### 2.4 Case-marking and PPs

Marking of direct and indirect objects (NPs and pronouns)
Accusative morpheme present?
Postpositions
Prepositions (?)

### 2.5 Main clauses and constituent order

structure of a normal main clause with a few examples
SOV order, usually verb-final (exception: Toro Tegu SOVX)
obligatory clause-initial subject position?
temporal adverbs ('yesterday') usually before or after subject NP?
pronominal-subject expressed by suffix on inflected verb, by prefix on inflected verb, or by clause-initial pronoun?

### 2.6 Nominalized clauses and constituent order

verbal-noun (and any similar nominals) as complements
expression of direct object and subject of verbal noun

### 2.7 Relative clauses

head NP (tone-dropping, Relative marker ?)
determiners and non-numeral quantifiers separated from core NP and numeral, displaced to post-participial position
verb replaced by participle (agreement in nominal features with head NP?)

### 2.8 Interclausal syntax

most important clause and VP combinations
direct verb chaining (no special morpheme)
looser VP chains with chaining (subordinating) morpheme
same-subject and different-subject subordinators?
factive and other complement clauses

## 3 Phonology

### 3.1 Internal phonological structure of stems and words

### 3.1.1 Syllables

Basic syllable shapes are $C v, C v$; , and $C v L$ and occasionally $C v: L$ with a final sonorant $L$. In word-initial syllables, the C position may be vacant.

Monosyllabic stems distinguish $C v$ from $C v$ : See $\S 10.1 .3 .1$ for lists of $C_{V}$ and $C v$ : verbs.

### 3.2 Consonants

The regular consonants of TU are shown in (xx1) without parentheses. Marginal phonemes are enclosed in parentheses, very marginal ones in double parentheses
(xx1) Consonants

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| labial | $p$ | $b$ | $m$ | $(f)$ | $((v))$ |  | $W$ | $W^{n}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| alveolar | $t$ | $d$ | $n$ | $S$ | $Z$ | $l$ | $r$ | $r^{n}$ |
| alveopalatal | $c$ | $j$ | $n$ | $((\breve{S})$ | $((Z))$ |  | $y$ | $y^{n}$ |
| velar | $k$ | $g$ | $\eta$ |  |  |  |  |  |
| laryngeal |  |  |  |  |  |  |  |  |

$$
c \text { is IPA }\left[\mathrm{t} \int\right], j \text { is }\left[\mathrm{d}_{3}\right], \check{s} \text { is }[\mathrm{S}], y \text { is }[j] .
$$

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 $(c, j)$

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. 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 (xx1).
(xx1)
a. sálikì
kì-kìndé
'ablutions'
'ghost'
kílé- 'weave (leather strips)'
kèré 'flute'
kédé 'cut'
bárkè 'blessing'
kédé 'four'
kélbá 'African egplant'
kèté 'runty'
kèrèmbú '(mouth) bit'
b. cíné 'nose'
cé- 'shout'
céndèy 'a little'
cénd-í: 'turn out well'
cèrgó 'stem'
$c \varepsilon$ 'thing'
céndí 'bury’
cèmdé 'cotton'
cìndè 'shadow'
c. Kíllí~ cíllí 'resolve (problem)'
kílá~ cílá 'horn'
$k \grave{l} l-g a ́ \sim ~ c \grave{\varepsilon} l-g$ ' 'crack, crevice’

Examples of $g$ versus $j$ before front vowels are in (xx2).
(xx2)
a. gìré 'eyes’
gàngíl- 'rub (eyes)'
gíndílá 'mane'
ligìdú 'cooked leaves’
dégé 'statuette'
zìgé- 'take in hand'
gèr-í: 'divide, share'
$-g e,-\eta g e \quad$ (frozen inanimate Sg suffixes)
$\begin{array}{ll}\text { b. jìná: } & \text { 'soil, earth' } \\ \text { bàrà:jí } & \text { 'divine reward' }\end{array}$

```
    -jé characteristic derivational suffix (Pl -jì-mbó)
jě- 'dance' or 'fart'
```

c. jìgìlí- 'spin, rotate (sth)'

Some word-families have instructive alternations (xx3). Preservation of velars before $i$ is common in a metrically weak medial syllable in trisyllabic stems, as in transitive derivatives of the form $C v C v-r i ́-$ and animate plurals of the shape $C v C v-m b O$. In this weak position the distinction between $i$ and $u$ is blurry, which might explain why palatalization does not occur.

```
(xx3)
```

a. jènj-í:-
jéngà 'be tilted (stative)'
jèngì-rí- 'tilt (sth)'
b. tájí- 'put on (one's shoe)'
tágí-rí- 'put on (sb else's shoe)'
táy 'shoe(s)'
c. íjj-í:-

Ígí-rí- 'stop (sb)'
d. tígí-rí- 'call out (names of ancestors)'
tigá (cognate nominal of tígí-rí-)
g. zégé 'fight (n.)' (perhaps originally with -gé suffix)
zèjí- 'fight (v.)'
e. bòjě: 'slave-snatcher' (sg)
bògù-mbó (plural)
g. dùgé ~ dùjě: 'sorceror'
dùgù-mbó (plural)
dùgó 'cast (spells)'

See also the $\mathrm{Sg} / \mathrm{Pl}$ medial $n j \sim \eta$ alternations ('chicken', 'griot/healer') in (xx1) in §4.1.1.1.
3.2.2 Voiced velar stop $g$ and $g$-Spirantization $(g \rightarrow \gamma)$

Spirantization of $g$ to $[\gamma]$ between $\{a \Delta\}$ vowels is not systematic.

### 3.2.3 Back nasals $(\eta, n)$

$\eta$ and $\eta$ are distinguishable before $i$ and other front vowels. Examples of ni are tó:ní- 'pester' and (sǎn) sápí- ‘adorn oneself, dress up’. Examples of yi are màmí- 'raise (herd of livestock)' and pípí- ‘shut (door)’.

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

$p$ is common especially stem-initially: pâ: 'long', pélú 'ten', pég'é 'attach (blade to shaft)'.
f occurs in a few loanwords: márfá 'rifle' (ultimately < Arabic), fürù-fürú 'fritters'.
The 'all' quantifier, also regionally widespread, is pronounced $p u ́ \rightarrow$.

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

$h$ occurs stem-initially in a few loanwords (it is a common consonant in Fulfulde): hólà:rù 'trust (n.)', hàrâm 'a Muslim holy day', háccé ‘sin', háté- 'forbid'.

A phonetic glottal stop can appear at the beginning of otherwise vowel-initial words. I have noticed it especially in 2 Sg possessor ú-wò, which can be heard as [?(ú)ẁ̀] after a vowel. No initial $C v$ - 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.

### 3.2.6 Sibilants $(S, \check{S}, Z, Z \check{Z})$

$s$ is a regular phoneme in TU. Examples: sá:- 'take off (garment)', ságú 'pounded millet', $s \varepsilon r^{n} \dot{\varepsilon}$ - 'drain', sógó 'pick-hoe'. In verbal suffixes $s$ optionally and inconsistently weakens to $z$.
$z$ is also a regular phoneme. Examples: zé- '(man) marry (woman)', zégé zèjíl- 'have a fight', zègìrá zègǐr- 'incite', zùgó- 'know'.
$\check{z}$ (IPA [3]) occurs in the ubiquitous 'gendarme' loanword zándárámá.

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

$r^{n}$ is common intervocalically. In some cases it still alternates with $n$. Examples: ár $r^{n a ́ a ~ ' m a n ', ~}$ sír ${ }^{n}$ é- 'spit (in a jet)', gò:-bòr ${ }^{n}$ 万́ 'ember'.
$W^{n}$ and $y^{n}$ occur very commonly in pronominal-subject suffixes on predicates (2Sg - $W^{n}$, $\left.1 \mathrm{P} / 2 \mathrm{Pl}-y^{n}\right) . w^{n}$ is otherwise unattested ( ${ }^{*} \mathrm{~m}$ does not lenite). I have recorded $y^{n}$ in $\delta^{n}{ }^{n}$ - 'spin (thread)', gכ̌y $y^{n-}$ 'wait for', àn-táy 'hand span', $\varepsilon^{n} y^{n}$ 'tomorrow', déy ${ }^{n} \rightarrow$ 'apart', áy ${ }^{n}$ 'how?', and intervocalically or finally under the influence of a preceding nasal syllable as in míy ${ }^{n} \varepsilon$ 'grind into powder’ and sómذ̀y 'spices’.

None of these nasalized sonorants occurs word-initially.

### 3.2.8 Consonant clusters

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

### 3.2.8.1 Word- and morpheme-initial $C C$ clusters

Initial $N C$ including $N N$ clusters are uncommon; I can cite ńdì- 'give', ńdde 'metal, iron', niné ( 3 Sg pronoun), m̀bá- 'want', and m̀bù-gź 'mouth'.
ínje 'water' was heard with and without the initial $i$, as was íggíli'get up'.

### 3.2.8.2 Medial geminated $C C$ clusters

A search through the working lexicon produced the cases in (xx1).

| (xx1) $b b$ | - |  |
| :---: | :---: | :---: |
| cc | háccè | 'sin (n)' (< Fulfulde) |
| $d d$ | péddè | 'sheep' (plural pédù-mbò) |
| ff | - |  |
| $g g$ | og-gó | 'rapid' |
|  | óggò: | 'umbilical cord' |
|  | péggè: | 'hitching posts (plural)' |
|  | díggó ( dígúģ) | 'joint' |
|  | zòg-gó | 'shard' ( pl zògè:) |
| hh | - |  |
| jj | ijj-í:- | 'stop, stand' |
|  | zòjj-íi- | 'be sprained' |
|  | pójj-íi- | 'brush against' |
|  | ррйj-1í- | 'die en masse' |
|  | ġjj-íi- | 'carry on shoulder' |
|  | tòjjé | 'grandchild' |


| $k k$ | - |  |
| :---: | :---: | :---: |
| 11 | mill-í:- | 'go back' |
|  | cill-í:- | 'fly (away)' |
|  | cîllí- | 'resolve (problem)' |
|  | tállí- | 're-open (wound)' |
|  | àr ${ }_{\text {àà-[dúl-lé] }}$ | 'thunder' |
|  | séll-í:- | 'be healthy' (< Fulfulde) |
|  | tîllây | 'sure to happen' (< Fulfulde) |
|  | gállú | 'big city' ( $<$ Fulfulde) |
|  | bàl-lè:gó | 'deadline' (lè:gó ‘day') |
| mm | sémmé | 'rags, tatters' |
| $n n$ | jínná:jè | 'djinn, devil' (< Fulfulde) |
|  | ìn-nàmá | 'gums' ('tooth-flesh") |
| nn | - |  |
| пワ | - |  |
| $p p$ | - |  |
| $r$ | - |  |
| $r^{n} r^{n}$ | - |  |
| SS | - |  |
| $t t$ | séttâ:n | 'devil (satan)' (< Fulfulde) |
| WW | - |  |
| $W^{n} W^{n}$ | - |  |
| yy | bě-yyà- | 'lay down' |
|  | (and other si | rfective-1a forms) |
| $y^{n} y^{n}$ | - |  |
| $z Z$ | - |  |

Disregarding known loanwords, and clusters arising at morpheme boundaries, the following comments are germane.
$g g$ may be limited to cases where an original inanimate Sg suffix $-g o \sim-g o$ 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 díggó( $\sim$ dígúgó).
$j j$ occurs in original $*_{j y}$ or $*_{\text {gy clusters involving either mediopassive derivational suffix }}$ *-yv- (cf. TU -í:-) on verbs or *-(i)ye 'child' as compound final of nouns. For example, compare gə̀jj-1í:- 'carry on shoulder' with Toro Tegu gògìyó (imperative) and Nanga gògíyí-, and compare tòjjé 'grandchild' with Nanga tèsí-yê.

11 is the most popular medial geminate. Some examples are loanwords or involve boundary clusters. Some remaining cases (mill-í:-, cíll-í:-) may reflect post-syncope *ly clusters involving mediopassive *-yv-. For example, compare cíll-í:- 'fly (away)' with Yanda Dom kîlíyé-.

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

Homorganic nasal plus voiced stop clusters are fairly common intervocalically within stems. One example each is given in (xx1).

| (xx1) | $m b$ | kùmbó | 'great-great-grandparent' |
| :---: | :--- | :--- | :--- |
|  | $n d$ | ùndó | 'younger same-sex sibling' |
|  | $n j$ | zònjé | 'idol, fetish' |
|  | $\eta g$ | bóngó | 'spots on body' |

Similar clusters with voiceless stop occur stem-medially only in (probable) loanwords and frozen compounds. I can cite zóntè 'fever' (< Fulfulde), bàntóndó-mbś 'young men and women, (the) youth', àlmúncil 'imam's respondent' (< Arabic), málé: ŋkkè 'angel' (< Arabic), bùgká:Tná 'reed flute', yónkù 'vital spirit', and tánkà 'a colonial coin'. Inflectional suffixes like perfective-1b-ti-can follow various stem-final consonants after syncope.
ns occurs in ánsárá 'white person', cf. Jamsay ànisáátá-n. Underlying /ns/ may also be present in cases where a nasalized vowel is followed by $s$, as in àndà $s$ :a ${ }^{n} S$ ' '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 (ómgó 'udder'), ng (kón-gó- ‘cough[n.]’), $\lg$ (sàlgó ‘diarrhoea'), $\operatorname{rg}$ (cèrgó ‘stem'), tàygó ‘dancing ground’. I have no examples of $w g, w^{n} g$, or $y^{n} g$.
$m n$ occurs in $\varepsilon$ émné 'milk' and cèmné 'fun'. TU is the only Dogon language with $m n$ in 'milk', but geminated mm in Bankan Tey $\varepsilon$ ह́mmè ${ }^{n}$ points to an original cluster.
lt is found in bèltíyá: 'harvest pile', probably an original compound.
yr occurs in Fulfulde loan wáyrí- 'be a fairly long time'.

### 3.2.8.4 Medial triple $C C C$ clusters

I know of no medial triple $C C C$ clusters, though they could occur in Fulfulde loanwords.

### 3.2.8.5 Final $C C$ clusters

I know of no word-final clusters.

### 3.3 Vowels

The inventory is (xx1). Oral vowels are much more common than nasalized vowels. Nasalized vowels are normally long, but see §3.3.2 for discussion.
(xx1) short oral long oral nasalized (long)

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

I occasionally use E to represent the set $\{\varepsilon e\}$ and O to represent the set $\{o o\}$.

### 3.3.1 Short and (oral) long vowels

$C v$ and $C v$ : monosyllabic stems are distinguished. For verbs see $\S 10 . x x x$.
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: lùgă: ‘apiary', tině: 'firewood', tìyǎ: ‘basket (from branch strips)', jìnă: ‘loam', kàlé: 'neighborhoods’ (Sg kàl-ĝ), gàbě: 'tall’ (inanimate gàbù-g $\mathfrak{\jmath}$ ). 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:tư 'pre-dawn prayer' (< Arabic via Fulfulde).

### 3.3.2 Nasalized vowels

Nasalized vowels are fairly uncommon. Examples are in (xx1).
(xx1) u: ${ }^{n}$ mŭ:n ${ }^{n}$ 'cut (wound)'
$o:^{n} \quad-$
$0^{n} \quad p \check{l}^{n} \quad$ 'fonio (cultivated grain)'
a: ${ }^{n} \quad g w a:{ }^{n}$ 'chest (body)'

```
\varepsilon:}\mp@subsup{}{}{n
e:}\mp@subsup{}{}{n}\quad
in
```


### 3.3.3 Initial vowels

Stems may begin with a vowel, i.e. with a vacant initial $C$ position. Some examples are in (xx1).

| $(\mathrm{xx} 1)$ | $u$ | údú | 'air' |
| :--- | :--- | :--- | :--- |
|  | $o$ | ób-í: | 'sit' |
|  | $o$ | $\hat{o} m$ | 'hot' |
| $a$ | àr $n a ́$ | 'rain' |  |
| $\varepsilon$ | émné | 'milk' |  |
| $e$ | èré | 'rivalry' |  |
| $i$ | íjj-í:- | 'stop, stand' |  |

Since $C v$ : is an allowable initial syllable, so is $v$ : with the $C$ position vacant, though examples are rare: á:- 'brew (beer)'. $\varepsilon$ : 'this way',

### 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 $\{e o\}$, the -ATR vowels are $\{\varepsilon \rho\}$. Most bisyllabic and longer stems respect ATR harmony. An exception is zòmó 'hare’ (plural zòmó-mbò. Nasal consonants are likely catalysts for ATR-disharmony within stems.

To some extent, ATR harmony extends to suffixes. In nominal and adjectival morphology, inanimate singular $-g O(\S 4.1 .1 .4)$ and animate plural $-m b O(\S 4.1 .1 .1)$ harmonize with stem vowels ("O" represents an alternation of $o$ with $\supset$ ). 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 órú-gó ór- ‘speak, talk’ and zóbú-gó zう̀bó- ‘run (a race)'. In addtiion, agentive nominals (final vowel shifts to é:) do not respect harmony.

Within a stem, high vowels $\{i u\}$ may co-occur with either +ATR or -ATR vowels. Verbal E-stem forms ( 3 Sg simple perfective in defocalized contexts) have final $\varepsilon$ rather than $e$ after an $a$-vowel, as in bà̀ 'gathered' and $b a ̀ r r^{n} \dot{\varepsilon}$ 'beat (tomtom)'. However, in nouns there is no prohibition on combining $a$ with an + ATR vowel, as seen in àdé 'bird'.

### 3.3.6 Vocalism of verb-stem alternations

Although not lexically basic, the A/O-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).
( $\mathrm{x} x 1$ ) stem AN category (examples)
bare stem perfective (except 3 Sg ), perfective- 1 b and -2 , past perfect
E/I-stem perfective ( 3 Sg only)
A/O-stem imperfective, perfective negative, imperfective negative, imperative, etc. A-stem stative

### 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/ $\rightarrow N_{v r}{ }^{n} v, / N v w v / ~ \rightarrow$ $N_{V W^{n} V}$, and $/ \mathrm{Nvyv} / \rightarrow N_{V y^{n}}{ }^{n}$. That is, sonorants $\{\mathrm{w} y \mathrm{r}\}$ shift to their nasalized counterparts $\left\{W^{n} y^{n} r^{m}\right\}$ when they are preceded by a nasal syllable (nasalized vowel or syllable like $\left.n v\right)$. This process is most conspicuous in languages like Jamsay, which has $-I V$ and $-W V$ verbal derivational suffixes, which appear with nasalized consonant 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 $-l i ́,-m i ́,-g i ́$, and $-n d u ́$, whose consonants and consonant clusters are not candidates for nasalization. Furthermore, the mediopassive derivational suffix is vocalic -i: (versus $-y v$ 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-1a variant) has an eligible sonorant and can follow a vowel.

I can cite no relevant example with 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: $r^{n a}$ '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. There are also some cases like màrar 'get lost' where spreading has not occurred (this stem likely reconstructs as *mbàrá)

Backward Nasalization-Spreading of the type $/ \mathrm{yvNv} / \rightarrow y^{n} V N_{V}$ or $/ \mathrm{wvNv} / \rightarrow w^{n} V N_{V}$, is absent as a synchronic process in TU. A possible vestige is nă: 'take' if from an immediate prototype *yàná (from still earlier *yàngá) via *ynàná, cf. Jamsay yàná (Pergué dialect yè̀ggé) Togo Kan $\not$ ฉà $\eta$ ă). However, yǎ 'woman' (simplified from *yà-nú) is unnasalized (contrast Jamsay $n \check{\varepsilon}-n$, Toro Tegu $y^{n a ̀-}-r^{n} u ́$.

### 3.4.1.2 Consonantal metathesis in suffixal derivatives of verbs

Metathesis as such has not been observed.

### 3.4.2 Vocalism of suffixally derived verbs

### 3.4.2.1 Suffixal Vowel-Spreading

Derivational suffixes on verbs, usually -Cv, often have underspecified vowels that acquire their quality by spreading of features from the left. Or they may be specified for height but not ATR. These processes usually reflect general constraints on the shape of multisyllabic verb stems (allowable vowel sequences).
e.g. taba-wv > taba-wa
what if only stem vowel is high \{i u\}?

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

stem-final vowel of nonmonosyllabic verb stem shifts to high before suffix?
reflects metrically weak position
often leads to syncope
e.g. tama-lv $>\operatorname{tam}(i / u)$-la
3.4.3 Other vocalic rules sensitive to syllabic or metrical structure

Any tendency for first vowel in CvNCv to lengthen to Cv:NCv, as in Nanga?

### 3.4.3.1 Epenthesis

I have not observed epenthesis processes in TU.

### 3.4.3.2 Syncope

Short high vowels $\{i u\}$ are subject to syncope, often optional, in metrically weak medial positions when flanked by single consonants, as especially in suffixed forms like $\mathrm{CvCi} / u-\mathrm{CV}$. The clearest cases are those where syncope triggers additional consonant cluster adjustments, as in gìrí- 'immobilize (sth)' and its reversive gìl-lí- 'allow (immobilized object) to move again', see (xx1e) in (§9.1) and /rl/ $\rightarrow 11$ (§3.4.xxx).

### 3.4.4 Apocope

Word-final short high vowels can be deleted under conditions similar to those for wordinternal syncope.

### 3.4.5 Local consonant sequence rules

### 3.4.5.1 $/ \mathrm{rl} / \rightarrow 11$

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

### 3.4.5.2 Intervocalic $l$-Deletion

Original ${ }^{*}$ Cvlv (and perhaps $*$ Cvrv) stems generally appear as $C V$ : . See (xxla-b) in §10.1.3.1 for $C v$ : verbs of this type. In many cases there is no synchronic evidence for a medial $l$ in underlying (=lexical) representations. However, there are some archaic alternations that reflect the shift.

Most examples are agentive compound finals, like -bà-lé: 'collector' from bǎ:- 'gather'. The agentive normally just changes the stem-final vowel to é: The known cases of -lé: are in (xx2) in §5.1.4.
*bèlé 'get' appears as $b \varepsilon$ :- or bec- in the absence of a derivational suffix. However, it has an archaic mediopassive is bèl-í: 'be gotten'.

Recognizing underlying /Cvlv/ in all these cases and positing an intervocalic l-deletion rule probably would not capture the synchronic dynamics. Since the alternations are archaic and affect relatively few stems, one could reasonably speak of CVl- allomorphs of the stems in question, required by certain suffixes.

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

tautosyllabic vowel sequences may occur in perfective verbs that end in diphthong-like /oel, $/ o \varepsilon \ell_{\sim}, \mid a \varepsilon /$ etc., arguably a stem-final vowel plus an $-\varepsilon \sim$-e perfective morpheme.
vowel sequences that arise in compounds may remain separately articulated (hiatus) or may contract into a long vowel.
vowel sequences may also arise in initial $C v$ - reduplications of verb stems that begin in a vowel. This seem to be always pronounced with hiatus

### 3.4.6.1 Hiatus between adjacent vowels in reduplications

Separate articulation of two vowels that come together at a boundary, e.g. in compounds and/or in initial reduplications. May involve a phonetic glottal stop as separator.

### 3.4.6.2 $V v$-Contraction

Cases where two vowels come together at a boundary and contract to a long or sometimes short vowel (indicate all relevant morphological contexts, with exx. or cross-refs to sections).

Perfectives ending in an e-vowel are difficult to model. They sometimes look like suffixation of $-e \sim-\varepsilon$ to the stem, especially when a trace of the stem-final vowel is audible. When the stem-final vowel is absent, one could either think of them as suffixation as before (with VV-Contraction), or as an ablaut-like stem change. These perfectives behave quite unlike other clearly suffixal inflections.

### 3.4.7 Local vowel-consonant interactions

## Delete and add subsections below as needed.

### 3.4.7.1 Vowel-Semivowel Assimilation

examples:
/i/ > u before any labial (or just before /w/)
/u/ > i before alveopalatal (or just /y/)

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

occurs syllable-finally; may apply for ex. to verb stems ending with pronominal-subject (or participial) suffix -y or $-W$.

### 3.5 Cliticization

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

The 'it is' clitic is manifested as a final L-tone and vowel lengthening added to the NP: péddè $=:$ 'it's a sheep' (péddè), tólê: $=:$ 'it's a pig' (tólé). For $1 \mathrm{st} / 2 \mathrm{nd}$ person subjects (topics) this is replaced by a regular pronominal-subject suffix (§11.2.1.1). The negative counterpart is $=$ là-, which is also conjugatable, e.g. $3 \mathrm{Sg}=$ là:- $\varnothing$ (§11.2.1.2).

The stative negative morpheme ( $=$ ndà-, $3 \mathrm{Sg}=n d a ̀:-\varnothing$ ) 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 $=b i \grave{\text { - }}$ 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 patterns

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

TU, like many (but not all) Dogon languages, requires that each noun (including spatiotemporal "adverbs"), verb, adjective, numeral, or demonstrative have an H-tone element
in its basic form (before grammatical tone overlays). For example, $C v C V$ may be $C \bar{v} C \bar{v}$, $C v ́ C$ v̀, or $C$ v̀ $C$ v́, but not \# $C \hat{v} C$ v̀.

One could argue, however, whether this constraint applies to lexical representations or to a later stage. Specifically, one could argue whether $C \hat{V} C \hat{V}$ in some or all cases might be analysed as $\{\mathrm{L}\}$-toned $/ \mathrm{Cy} \mathrm{C} \grave{\mathrm{V}} /$, which is then supplied with a final H -tone to satisfy a higherlevel constraint.
expressive adverbials can be $\{L\}$-toned in some but not all languages that otherwise require a H-tone in each stem. Expressive adverbials are not subject to tone-dropping.

### 3.6.1.2 Lexical tones of verbs

Verbs of all syllabic shapes are lexically $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$. For Cv - verbs, the distinction is partially suppressed, since a complex $<\mathrm{LH}>$ tone cannot be expressed audibly on a single mora. However, a lexical distinction between $C v^{-}$- and $C \grave{v}$ - is manifested in the perfective-2 ( $C \hat{V}$-sò- versus $C \grave{V}$-só-) and in the experiential perfect ( $C$ v́-téré-bì- versus $C \grave{V}$-téré-bì-). Verbs of two or more moras ( $C V v^{-}, C v C V$-, etc.) audibly distinguish $\{\mathrm{H}\}$ from $\{\mathrm{LH}\}$ across a wider range of inflections, including positive perfectives, e.g perfective-1b $C$ v́:-tì- versus $C$ v̌:-tì-.
$\{\mathrm{H}\}$ lexical contour is obligatory for stems beginning with voiceless obstruents. $\{\mathrm{LH}\}$ contour is obligatory for stems beginning with voiced obstruents. Stems that begin with a sonorant, or with no consonant, divide into $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ classes; the tone contour of each such stem must be learned.

For $\{\mathrm{LH}\}$ verbs, the tone break is at the right edge, e.g. LLH for trisyllabic stems, LH for bisyllabics (including $C \grave{v} C C v^{-}$and $C \grave{v}: C v^{-}$as well as $C \hat{v} C \bar{v}$-), and $<\mathrm{LH}>$ for bimoraic monosyllabics ( $C \check{v}:-)$. These tone patterns are heard before the basic perfective positive forms (except perfective-2). Because trisyllabics are LLH rather than LHH (as in some Dogon languages), syncope of $C v C v C v-$ to $C v C C v$ - creates no tonal anomalies in TU of the type found in e.g. Yanda Dom (where $C \dot{v} C \hat{v} C \hat{v}-$ can syncopate to $C \check{v} C C \hat{v}$, tonally distinct from inherited $C \hat{v} C C \hat{v}-)$.
$z \varepsilon ̌:-$ 'bring' has a tonally irregular quoted hortative $z \varepsilon ́-l u ̀ ~ f o r ~ e x p e c t e d ~ r e g u l a r ~ \# z \grave{\varepsilon}-l u ́ . ~ I t s$ 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 $\{\mathbf{H L}\}$ contour that may have once been more consistent for these two verbs. Cognates of these two verbs in other Dogon languages (e.g. Toro Tegu) show similar tonal (and other) irregularities.

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

### 3.6.1.3 Lexical tone patterns for unsegmentable noun stems

Lexical tones of uncompounded nouns are $\{H\},\{H L\},\{L H\},\{L\}+H$, and $\{L H L\}$. The difference between $\{\mathrm{LH}\}$ and $\{\mathrm{L}\}+\mathrm{H}$ is observable in stems that have a syllabic suffix (inanimate singular or animate plural), where the H -tone is carried by the suffix with $\{\mathrm{L}\}+\mathrm{H}$ stems but remains on the stem-final in $\{\mathrm{LH}\}$ stems. One can argue that $\{\mathrm{L}\}+\mathrm{H}$ stems are really $\{\mathrm{L}\}$-toned but get a default H -tone on the word-final syllable.

Examples are in (xx1).
(xx1)
Sg
Pl
gloss
a. $\{\mathrm{H}\}$ lexical tone contour

| zú | zú-mbò | 'neighbor' |
| :--- | :--- | :--- |
| dógó | dógó-mbò | 'Dogon' |
| dégé |  | 'statuette, idol', |
| tólé | tól-mbò | 'pig' |
| tálé |  | 'egg' |
| árná | árná-mbò | 'man' |
| púlá | púlá-mbò | 'Fulbe (person)' |
| bón-gó | bón-é: | 'name' |
| zémbé | zémbé-mbò | 'blacksmith' |
| cégéré |  | 'saddle' |
| ámbírí | ámbírí-mbò | 'chief' |
| wágádú |  | 'time' |

b. $\{\mathrm{HL}\}$ lexical tone contour
bisyllabic

| péddè | pédù-mbò | 'sheep' |
| :---: | :---: | :---: |
| dí:nè |  | 'religion' |
| H.L.L |  |  |
| púdùrò |  | 'twilight' |
| tógòrò | tógòrò-mbò | 'namesake' |
| lá:sàrà |  | '4PM prayer' |
| hólà:rù |  | 'trust' |
| dúwà:gù |  | 'blessing' |

HHL

| kórósèl |  | 'first rains' |
| :--- | :--- | :--- |
| málé:クŋkè | málé:クjkè-mbò | 'angel' |
| jínná:jè | jínná:jì-mbò | 'djinn, genie' |


| c. $\{\mathrm{LH}\}$ lexical tone contour |  |  |
| :---: | :---: | :---: |
| gว̀b-ŋgó | gàbé: | 'trigger' |
| òmlé: | òmlú-mbò | 'parent-in-law' |
| bǒn-gò | bòné: | 'tomtom' |
| àngé | àngé-mbò | 'friend' |
| غ̀njé | غ̀ทú-mbj̀ | 'chicken' |
| mò:sú | mò:sú-mbò | 'Mossi (person)' |
| L.H.H |  |  |
| làsúgó |  | 'mask' |
| gìngírú |  | 'flute' |
| àdúnó |  | 'world' |
| L.L.H.H |  |  |
| dògòtórò | dògòtórò-mbò | 'doctor' |
| $\{\mathrm{LH}\}$ or $\{\mathrm{L}\}+\mathrm{H}$ (indeterminate) |  |  |
| <LH> |  |  |
| tǎ: |  | 'taboo' |
| gǒ: |  | 'fire' |
| L.H |  |  |
| dàbíl |  | 'magical solution' |
| L.L.H |  |  |
| màtàrá:S |  | 'madrasa (Islamic school)' |
| L.L.L.H |  |  |
| mòtìàtóm |  | 'balm' (< mentholated or similar) |
| $\{\mathrm{H}\}$ or $\{\mathrm{L}\}+\mathrm{H}$ |  |  |
| jé |  | 'dance(n.)' |
| d. $\{\mathrm{LHL}\}$ lexical tone contour |  |  |
| $<H L>L$ |  |  |
| sǎ:gà |  | 'alms' |
| L. $<H L>$ |  |  |
| àlmâ:m | àlmâ:m-bう | 'imam' |
| àtêm |  | 'traditions' |
| L.H.L |  |  |
| àljénè |  | 'heaven' |
| làsá:sù |  | 'modern rifle' |
| sàlá:tù |  | 'pre-dawn prayer' |
| gùrá:nà |  | 'koranic school' |
| zàmdílè | zàmdíl-mbò | 'donkey' |

L.L. $<H L>$
yàgùrûm
e. $\{\mathrm{L}\}+\mathrm{H}$
$L+H$
yă yà-mbó
nă: nà-mbá
L. $L+H$
àdé
j̀ǵ
gùndó ìnjě: ìnjè-mbó
zònjě:
L.L. $L+H$ às $\grave{g}$ ǵ às $\varepsilon$ g̀g̀̀-mbś 'animal'
L.L.L.L $+H$


### 3.6.1.4 Lexical tone patterns for adjectives and numerals

Tone contours usually about the same as for nouns, but there are not many monosyllabic or trisyllabic stems.

### 3.6.1.5 Tone contours or H-tone accent?

Given the constraint against stem-wide lexical $\{L\}$ contour, one is tempted to think in terms of a H-toned accent, with one syllable or mora marked for accent (with low-level rules then specifying the final output).

For non-verb words there is no obvious way to avoid having to specify that a L-tone precedes and/or follows. If the moras (or syllables) are represented as $x$ 's, and x́ is accented, the only possibilities for bimoraic CvCv stems with one accent are $x$ x́x and xx́. To account for the three outputs, $\{H\},\{H L\}$, and $\{L H\}$, we would have to add another unaceented type $x x$. If the latter is realized as $\{H\}$, we can get the correct outputs, but how would anyone learn it?

For verbs, in languages where the two basic patterns are $\{H\}$ and $\{L H\}$, an accentual analysis could work. For example, we could equate $\{H\}$ with $H$-tone accent, and $\{L H\}$ with the absence thereof. Or we could equate $\{L H\}$ with $L$-tone accent, and $\{H\}$ with the absence thereof. Either way, we would need rules to account for the remaining surface tones not directly equated with the accent.

### 3.6.1.6 Possible lexically $\{\mathrm{L}\}$-toned stems

The constraint on $\{L\}$ might be shifted from the lexicon to the surface. For example, we might take some $\{L H\}$ stems to be $\{L\}$, with the $H$-tone later surfacing to satisfy an output constraint. Evidence in favor of this possibility comes from Jamsay nouns where the H-tone
 without the suffix.

### 3.6.1.7 Tone-Component location for bitonal noun stems

For bi- and tritonal noun stems, where are the tone breaks in $C_{v} C v, C v: C v, C_{V C C v}$, $C v C v C$, etc. Before the last syllable (even if heavy) as in Cv̀Cv́: and Cv̀CŕC? Before the last mora as in CѝCv̌: and Cv̀Cv̌C? Or before the last vocalic mora as in Cv̀Cv̌: and Cv̀Cv́C? In any of these cases, as long as tone-break location is predictable, we could adopt an autosegmental model in which the tone contour and the segmental representation are ontologically separate.

Or is the choice lexically variable? In that case, the autosegmental model will not work cleanly, since we would have to stipulate which syllables/moras the tone elements are associated with.

### 3.6.1.8 Tone-Component location for tritonal noun stems

Similar to the preceding, paying attention to syllabic structure especially of final syllable. Nouns usually prefer LLH rather than LHH, even in languages that have LHH as the \{LH\} contour for verbs.

### 3.6.2 Grammatical tone patterns

Subsections below discuss how the morphology and syntax change the lexical tone contours of stems. Distinguish stem-wide tone overlays (which erase the underlying lexical tone contour) from partial modifications.

### 3.6.2.1 Grammatical tones for verb stems

The lexical tone contour of a verb stem, usually $\{H\}$ or $\{L H\}$, is audible in the bare stem (used in chaining) and in the positive perfective forms.

Tone-dropping to $\{L\}$ may occur before the perfective negative and/or the imperfective negative. The imperative and/or the positive imperfective may raise some or all $\{L H\}$ toned verbs to $\{H\}$, in addition to any segmental changes.

The simple perfective, and possibly other inflected forms, may drop to $\{L\}$ after other constituents, especially a focalized constituent. Tone-dropping here is an expression of defocalization of the verb.

In compound agentives, e.g. 'millet-farmer' or 'gazelle-hunter', the verb as compound final may have an overlaid $\{H\}$ or $\{L H\}$ contour in addition to any segmental changes.

Relative-clause forms of verbs, whether or not participial in suffixal morphology, involve additional tone-contour changes.

If the system is complex (as in Najamba and Yanda), a tabular summary would help.

### 3.6.2.2 Grammatical tones for noun stems

NPs are the site of the most systematic tonosyntactic processes, and nouns are the primary targets. Brief discussion here, full discussion in Chapter 6.

A noun is tone-dropped to $\{L\}$ by a following adjective or demonstrative (in some languages also a definite suffix or an 'each' quantifier), or when it functions as head of a relative.

A noun is subject to a tone contour controlled by a preceding possessor. The contour may be $\{L\},\{H L\}$, or (especially for prosodically light stems) $\{H\}$, rarely $\{L H\}$ (for some kin terms). For conflicts between right-to-left and left-to-right contours, see Chapter 6.

Nouns are common compound initials and finals. There are several compound types defined by tone contours. Usually one involves tone-dropping the initial to $\{L\}$ and keeping the regular tones on the final; another usually mimics possessor-possessed constructions. See Chapter 5 for details.

### 3.6.2.3 Grammatical tones for adjectives and numerals

Adjectives and numerals are subject to tone-dropping controlled by a following demonstrative (in some languages also a definite morpheme), or when the NP they are in is the head NP of a relative.

When a NP consisting of N-Adj or N-Num has a preceding possessor, the possessorcontrolled tone contour affects the noun and may also extend to the adjective or numeral.

Check both N-Adj and N-Num in combination with both alienable and inalienable possessors (which may differ tonosyntactically).

### 3.6.3 Tonal morphophonology

### 3.6.3.1 Autosegmental tone association (verbs)

For non-verb stem-classes such as nouns, the existence of $\{H\},\{H L\},\{L H\}$, and $\{L H L\}$ stems leaves us with little choice but to recognize these as separate contour types, rather than adopting an accentual model.

To the extent that the location of tone breaks is predictable (as opposed to lexically specified), we can isolate the contours from the segmental level, so that e.g. bàlă: could be represented as bala: combined with an $\{L H\}$ autosegment.

For verbs, an autosegmental analysis may be attractive. This is because the same model can work for a verb and (some of?) its suffixal derivatives. For example, a CìCv́verb stem might have a $C \grave{v} C \grave{v}-C \dot{v}$ derivative, if the language prefers tone breaks near the right edge. If we analyse the stem as $C v C v$ plus $\{L H\}$, we first add the $-C v$ suffix to the stem, then we associate $\{L H\}$ to the trisyllabic result to get $C \hat{v} C \hat{v}-C \bar{v}$. This analysis is less compelling for languages with tone breaks near the left edge.

### 3.6.3.2 Phonology of $\{\mathrm{HL}\}$ tone contour

summary of data presented in other sections as to how the $\{H L\}$ contour is expressed in various word classes and morphological contexts, for example HLL or HHL on trisyllabics.

Consider:
\{HL\} as lexical contour for nouns, adjectives, numerals.
\{HL\} as possessed-noun contour.
any $\{H L\}$ contours in verbal morphology.
$\{H L\}$ on adjective or numeral as compound final in bahuvrihi compounds ('Blackbeard', 'three-head[ed]').
special tone contours in iterated (fully reduplicated) verbs, e.g. $\{H L\}-\{L\}-\{L\} \ldots$ iterations of verbs to emphasize prolongation of an activity (such as motion) in a story.

The different contexts may involve different ways of applying the $H$ and $L$ components, e.g. HLL versus HHL.

### 3.6.3.3 Tonal changes in decimal numerals

If there are unusual tonal changes in numerals in decimal terms ('20' to ' 90 '), which begin with 'ten' and add a numeral ' 2 ' to ' 9 ' (often with phonological mutations), they can be briefly described here.

### 3.6.3.4 Atonal-Morpheme Tone-Spreading

Suffixes (with shapes like -C and -Cv) and clitics (including some postverbal subordinating particles like 'if') may be atonal (no intrinsic tone) and acquire tone by spreading from the final tone element of the preceding word.

Give a list of such morphemes.

### 3.6.4 Low-level tone rules

### 3.6.4.1 Rising-Tone (or: Contour-Tone) Mora-Addition

Word-final /CV̌ with rising tone may require lengthening of the vowel (i.e. addition of one mora) to permit the contour tone to be articulated.

In some languages, this lengthening also applies to word-final /C $\hat{V}$ with falling tone, i.e. it applies to all final-syllable contour tones

### 3.6.4.2 Contour-Tone Stretching

A contour tone ( $\langle H L\rangle$ or $\langle L H\rangle$ ) that occurs on a Cv:L syllable ( $L=$ a sonorant) is usually realized with the tone break at the L (i.e. as close as possible to the right edge of the syllable), even when an atonal -L suffix is added to Cv:- or CV:-

This involves shifting the tone break slightly to the right, e.g. /C $\hat{v}:-x />/ C \hat{v}:-\bar{x} /($ AtonalMorpheme Tone-Spreading) > CV́:-㐅̀ (Contour-Tone Stretching)

### 3.6.4.3 Final-Tone Resyllabification

If a word-final syllable with contour tone $<L H\rangle$ or $\langle H L>$ is followed by a clitic that has $=C_{V}$ shape, the contour tone may divide into an initial tone element that remains on the word-final syllable, and a second tone element that is realized on the clitic (or merges with the clitic's tone if the two tones are identical).

Jamsay examples: $\hat{\varepsilon} m$ 'milk', with clitic $\varepsilon$ Ém $=1$ : 'it is milk', nغ̌-n 'woman', with clitic nغ̀$n=\hat{1}$ : 'it is a woman'.

### 3.6.4.4 Rightward H-Spreading

A high tone may spread to the right within a word, perhaps across a morpheme boundary, e.g. $C \hat{v} C \grave{v} C \grave{v}>C \hat{v} C \hat{v} C \grave{v}$ and $C \hat{v} C \grave{v} C>C \hat{v} C \hat{v} C$.

In some languages (Nanga) we also get $C \hat{V} C \hat{V}>C \hat{v} C \hat{v}$, with falling tone on the final short vowel.

### 3.6.4.5 Stranded-Tone Re-Linking

If the vowel to which a tone was attached has disappeared due to Syncope or Apocope, the tone is usually reattached to the preceding (or, less often, following) syllable. Thus $C \stackrel{v}{\mathrm{~V}} \mathrm{~V} C \stackrel{\rightharpoonup}{\mathrm{v}}>C \stackrel{v}{\mathrm{~V}} C C \grave{v}$.

### 3.6.4.6 Final $<\mathrm{LH}>$-to-H Flattening

Nonmonosyllabic nouns and adjectives that end in a $C \check{V}$ : syllable level the contour tone to H when phrased with a following word, for example a postposition or numeral. Thus nùmǎ: 'hand', nùmá: nè 'in (the) hand', nùmá: ní: 'with (the) hand, by hand', nùmá: yí-llèy 'two hands'.

### 3.7 Intonation contours

### 3.7.1 Phrase and clause-final terminal contours $(\uparrow \downarrow \rightarrow)$

Phrases and clauses may have a marked terminal intonation, mainly on the final syllable. Typically the final pitch is higher than usual ( $\uparrow$ ) for nonfinal phrases/clauses in pairs or series, and the final phrase/clause in the series ends with a marked pitch drop ( $\downarrow$ ). The final syllable may also be prolonged $(\rightarrow)$, with or without a marked pitch rise or fall.

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

This typically applies to expressive adverbials (other than reduplications), and perhaps to a few other forms in each language.
$J a m s a y$ expressive adverbials include dem $\rightarrow$ 'straight (trajectory)' and dey ${ }^{n} \rightarrow$ 'apart, separate'. fú $\rightarrow$ 'all' is not an expressive adverbial syntactically but it has similar intonation.

The prolongation usually affects the final segment (vowel in $C v \rightarrow$, sonorant consonant in $C v C \rightarrow)$. If the prolongation is realized on a nonfinal vowel, put the symbol after the vowel: $d e \rightarrow m$.

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

The symbol $\therefore$ is used to indicate dying-quail intonation, which is expressed as prolongation along with a slow fall in pitch (distinct from simple falling tone).

In Jamsay this is the way to conjoin two NPs ( $X \therefore$ Y $\therefore$ meaning ' $X$ and $Y$ '). When the underlying phonological tone is (already) low, languages differ as to whether the pitch falls or is steady-state low as the final segment is prolonged.

## 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). Inanimates denoting readily counted entities divide into those that distinguish singular from plural, and those that use 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 plurality of úló 'house' can be expressed by a modifying adjective (xx1a-b). Nouns denoting masses (sand, salt, water, honey, ashes) are most often treated as plural in such concord (xx1c), suggesting that for inanimates the singular category is marked.
(xx1)
a. ù̀ò ${ }^{\mathrm{L}}$ jém-g̀̀
house ${ }^{\mathrm{L}} \quad$ black-InanSg
'a black house'
b. ùlò ${ }^{\mathrm{L}} \quad j \varepsilon ́ m e ̀: ~$
house ${ }^{\mathrm{L}}$ black.InanPl
'black houses'
c. $\quad$ sò $1 m \grave{\mathrm{~L}}^{\mathrm{L}} \quad j \varepsilon ́ m e ̀:$
sand $^{\mathrm{L}} \quad$ black.InanPl
'black sand'

### 4.1.1.1 Animate nouns with plural -mbò ~ -mbò

For animate nouns (humans and most fauna), the singular is unmarked and the plural has Animate Plural (AnPl) suffix -mbò ~ -mbò, the vowel depending on the ATR-harmonic class of the stem. A stem-final vowel in the singular may be shortened before the suffix, and this short vowel may be raised, usually to $u$, which can then be syncopated (after an unclustered sonorant). The tone of $-m b o \grave{\sim} \sim-m b \grave{j}$ is usually low, but it is raised to H -tone after a $\{\mathrm{L}\}+\mathrm{H}$ toned noun.
(xx1)
Sg
Pl
gloss
a. no change in stem-final vowel

| àsè̀gé | àsègè-mbó | 'animal' |
| :---: | :---: | :---: |
| ว̆วัคว̀¢ |  | 'camel' |
| nă: | nà:-mbó | 'cow' |

b. stem-final vowel shortened but not raised
ìnjě: ìnjè-mbś 'dog'
c. stem-final vowel shortened and raised, but not syncopated

| raised to i |  |  |
| :---: | :---: | :---: |
| ir <br> è: | ír ${ }^{n}$ ì-mbò | 'goat' |
| raised to u |  |  |
| péddè | pédù-mbò | 'sheep' |
| àdé | àdù-mbó | 'bird' |

d. already short stem-final vowel raised, but not syncopated àbé àbù-mbó 'orphan'
e. stem-final short vowel syncopated after unclustered liquid

| tólé | tól-mbò | 'pig' |
| :---: | :---: | :---: |
| zàmdílè | zàmdî-mbò | 'donkey' |
| غ̀dè-làlé | غ̀dè--[là-mbó] | idw |

after unclustered nasal

| sòmé | sòm-bó | 'horse’ |
| :--- | :--- | :--- |
| yà-kúmè | yà-kúm-bò | 'unmarried woman' |

after nj reduced to unclustered nasal

| घ̀njé | غ̀ yú-mbò | 'chicken' |
| :--- | :--- | :--- |
| zònjě: | zòmù̀-mbó | 'griot' or 'healer' |

after mb that merges with suffixal mb
bòmbé: bòm-bó 'Bombo (person)'

For $j / g$ and $c / k$ alternations, see $\S 3.2 .1$.

### 4.1.1.2 Inanimate nouns with no morphological number distinction

Many countable inanimate nouns fail to distinguish singular from plural within nominal morphology itself. In the lexicon, if no plural is given for a noun, it means that my assistant gave the unsuffixed form even in plural contexts. Some examples are in (xx1).
(xx1) stem gloss
cégéré 'saddle’

At the level of NP, such nouns can be marked as singular or plural by modifiers (adjectives, demonstratives, pronominal possessives). That is, the number category is merely covert for such nouns. Singular/plural oppositions at NP level are illustrated for 'saddle' in (xx2).
(xx2)
a. č̀gè $\check{c}^{\mathrm{L}} \quad$ ògú $/$ yí
saddle $^{\mathrm{L}} \quad$ DemSg / DemPl
'that saddle' / 'those saddles'
b. $c \grave{\varepsilon} g \grave{\varepsilon} r{ }^{\mathrm{L}} \quad s \hat{\varepsilon}-\eta g \grave{\varepsilon} / s \varepsilon$
saddle ${ }^{\mathrm{L}}$ good-InanSg / good
'(a) good saddle' / 'good saddles’
c. cégéré ${ }^{\mathrm{L}} \quad k \tilde{o}: / w \tilde{\text { an: }}$
saddle $^{\mathrm{L}} \quad$ 1SgPoss.InanSg / 1SgPoss.InanPl
'my saddle' / 'my saddles'

### 4.1.1.3 Inanimates with final-vowel mutations

Some inanimate nouns express plurality by final vowel mutations, involving front/back shifts (keeping ATR values intact), sometimes accompanied by vowel-length shifts.
(xx1) Sg Pl gloss
exx from lex
plurals with e:

### 4.1.1.4 Nouns with final $-g O \sim-g o$

Quite a few inanimate nouns have Inanimate $\mathrm{Sg}-g o \sim-g o$ (schematically $-g O$ ), opposed to an unsuffixed plural with a final-vowel mutation to $e$ : or $\varepsilon$ : (schematically $E$ :). The singular/plural opposition makes segmentation of $-g O$ transparent in the cases listed in (xx1).
(xx1) $-g O$ after vowel or nonnasal sonorant

Sg $\quad$ Pl $\quad$ gloss $\quad$ related form
a. singular $\ldots u-g O$, plural $\ldots E$ :
$+A T R$
kóbú-gó kóbé: 'shell’ etc.
úndú-gó úndé: 'calabash’ ùndù-zòg-gó ‘shard'
órú-gó ór-é: 'language’ ór ór-tì- ‘speak’
èdù-gó èdé: 'waterjar'
bùdù-gó bùdé: 'hole (puncture)'
-ATR
tádú-gó tádé: 'straw basket'
móndú-gó móndé: 'association'
mixed ATR
dòn-gó dòné: 'sale' dòr ${ }^{n}$ ó- 'sell'
b. singular $\ldots C-g O$ (after syncope), plural $\ldots E$ :
$+A T R$
pól-gó pólé: 'knife'
bón-gó bóné: 'name'
bǒn-gò bòné: 'tomtom' bòn-íy 'tapstick'"
mòn-gó mòné: 'sticky sap (from karité tree)'
tín-gò tínè: 'mortar (for pounding)'
kólólém-gó kólólémé: 'bell'
ùndúndùl-gò ùndúndùlè: 'watermelon'
-ATR
kàl-gó kàlé: 'neighborhood'
kèl-gó kèlé: 'ditch, crevice'

$$
\text { cém-gó } \quad c \varepsilon ́ m e ́: \quad \text { 'spike, pointed object' }
$$

```
nìm-[[pú-púdú]-gò]
    nìm-[pú-púdè:]'pod shell (of cow-pea)'
zòg-gó zògé: 'shard'
```

Some nouns ending in - $g O$ have no marked singular/plural distinction as nouns, but belong to word-families that also include stems without $-g O$. In such cases the suffix is at least vaguely segmentable on the noun (xx2).

| (xx2)noun | gloss | related form |
| :--- | :--- | :--- |
|  | èm-gó | 'conversation' |
| kón-gómé- 'converse' (verb) | 'cough(n.)' | kónó- 'cough' (verb) |
| kú-gó | 'head' | kù:--wóló 'headache' |
| móndú-gó | 'laughter' | màndí- 'laugh' (verb) |
| nindù-gó | 'breath' | nìndí- 'breathe' |
| órú-gó | 'language' | ór- 'speak' |
| sògúr-gó | 'gunshot' | sógúr-í: '(rifle) go off' |
| zìm-gó | 'pain' | zìmé- 'hurt, be painful' |

## ígúl-gó 'height'

There are also some nouns ending in $-g O$ for which no suffixless counterpart is known. 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 (xx3a), but so far not in others ( $\mathrm{x} x 3 \mathrm{~b}$ ), there is comparative evidence that $-g O$ was originally segmentable.
(xx3) noun gloss sample cognate
a. evidence for (original) segmentation

| àndùngó | 'gap in teeth' | Yanda Dom àndòl |
| :--- | :--- | :--- |
| cèlgó | 'crack (gap)' | Yanda Dom cèl |
| cérgó | 'side, end' | Yanda Dom cédú |
| cèrgó | 'stem' | Yanda Dom kàdù |
| dùgó | 'foundation' | Yanda Dom dù |
| dùrúngó | 'hooked pole' | Tommo So dùrú |


| émbúgó | 'drop-trap' | Yanda Dom èmbù |
| :---: | :---: | :---: |
| gว̀ngó | 'courtyard' | Yorno So gònó |
| gòngó | 'thorn fence' | Jamsay sì-sè: ${ }^{\text {g }}$ ǧn |
| gùdùgó | 'skin' | Tommo-so gùdú |
| gìrè-nòmgó | 'face' | Yanda Dom gìdè-nòm |
| gúndúgó | 'stick' | " |
| ìnjìrgó | 'thirst' | Yanda Dom ingìni: |
| kóbúgó | 'apiary' | Yanda Dom kòbù |
| kòmbùgó | 'cave' | Yanda Dom kòm |
| kóngúlúngó | 'trigger guard' | Yanda Dom kónol |
| kúdúgó | 'handle, shaft' | Yanda Dom kúzá |
| kúndúgó | '(unsplit) log' | Yanda Dom kúnú |
| kúndú-gó | 'back (body)' | Tiranige kùngù |
| lólgó | 'labor pains' | Yanda Dom làlú-ŋ òbò |
| mìnìyámgó | 'fishhook' | Yanda Dom mìr ${ }^{\text {nàm }}$ |
| nòmbù̀gó | 'cavity' | Yanda Dom nòmù |
| nùmà:-kúmbúgó | 'fist; handful' | Yanda Dom nùmà-kúmbò |
| péggó | 'hitching post' | Yanda Dom pégù |
| pòl-gàngó | 'fighting knife' | Yanda Dom pòl-gàn |
| pógúrúgó | 'belt' | Togo Kan pógùrù |
| sàlgó | 'diarrhoea' | Yanda Dom sàlìyèn |
| sògó | 'sweat(n.)' | Tommo So sǒ: |
| tódúgó | 'hernia' | Yanda Dom tózú |
| túngúrgó | 'stool' | Tommo So túngúrú |
| ùlò-mbùgó | 'doorway' | Ben Tey ùrò-mǒ: (mǒ: 'mouth') |
| wárgó | 'ceiling beam' | Togo Kan wà:rú |
| yà-lòlgó | 'co-wife' | Yanda Dom yè-làl |
| yù-dúndúlúgó | 'millet bundle' | Jamsay nù:-dúnúr"úm |
| wòlgó | 'field' | Togo Kan wòrú |
| wòlùgó | 'tendon' | Yanda Dom wèl |
| zómgó | 'private field' | Yanda Dom zǒm |

b. no clear evidence known

| éndúgó | 'threshold' |
| :--- | :--- |
| kúndúgó | 'back (body)' Jamsay gǔn (?) |
| ládúgó | 'roof' |
| lè:gó | 'day' |
| ómgó | 'post-partum seclusion' |
| ómgó | 'plain millet cakes' |
| ómgó | 'udder' |

```
cèlgó 'ditch'
díníngó 'stump'
```

ùdù-gó 'sun’ matches Najamba ùjú-nggó (with a class suffix), and synchronic segmentation is supported by ùdù-pílé-ŋggó 'sunset; west'. It and has possible cognates without the $-g O$ (e.g. Ben Tey ùsú) but Yanda Dom izzùgè suggests that the fusion of stem and suffix is older than in the other cases, since Yanda Dom does not usually preserve traces of *-gO.
àsògo 'splinter-like chaff' superficially looks like another example, but in this case the comparative analysis goes the other way (Yanda Dom àsògò, Jamsay cèm-sògó, etc.).

The synchronic relationship between Inanimate $\mathrm{Sg}-g O$ and Instrument nominal suffix - $\eta g \sigma$ ( $\S 4 . \mathrm{xxx}$ ) is unclear.

## Basic affixal morphology of nouns

Suffixal categories (absent or vestigial in some languages): human/nonhuman or animate/inanimate; singular/plural distinction usual for the human or animate category, in some languages also for nonhuman or inanimate category.

More complex systems with two or three nonhuman or inanimate classes (especially Najamba).

Najamba -( $\eta$ )go, -( $\eta$ )ge singular inanimate suffixes may correspond to frozen syllables (no longer segmentable) in other languages (e.g. Mombo): try 'sun', 'grain'.

Any Cv or Cv: nouns? List, please.

### 4.1.1.5 Nouns with final -ŋgó

- $\eta g \sigma$ is used to derive instrument nominals from verbs, following $\{\mathrm{LH}\}$-toned stem with final $u$ (subject to syncope), see $\S 4 . x x x$. For some such nominals it is specifically singular, opposed to an unsuffixed plural with stem-final é:

For deverbal instrument nominals with suffix - $\eta g \delta$ (in the singular), see $\S 4.2 .3$. There is another deverbal nominalizer - $\eta g \sigma$, with different stem vocalism, that can be used as a passive in predicative form with 'it is' or 'it is not' clitic (§9.3.2).

Some other nouns with final $\eta g \sigma$ (segmentable or not) that have been gleaned from the lexicon are in ( xx 1 ).
(xx1) noun gloss comment/related form
a. related verb exists
twá:-ngó 'beginning' tó:- 'begin'
phrase tò-ŋgó tó- 'slash (earth, with pick-hoe, to plant seeds)', cf. tǒ: 'seedstock', tòndì-gìré ‘(a) slash in earth'
b. no related verb

| tíníngó | 'mortar' | tìn-íyé 'pestle' |
| :--- | :--- | :--- |
| kóngúlúngó | 'trigger-guard' | Yanda Dom kónùl |

tíníngó 'mortar (for pounding with pestle)' is not synchronically deverbal. Segmentation of the suffix is suggested by tìn-íyé 'pestle' (originally 'mortar-child'), but no semantically associated verb is known. Najamba has tún-gó 'mortar', plural túni:. The situation is complicated by the fact that TU tíníngó also means 'ladder', perhaps from an originally distinct etymon, cf. Jamsay and Toro Tegu tìrú 'ladder'. Traditional ladders and mortars are both carved out of single blocks of wood, so secondary convergence may have been favored by a mix of semantic and phonological similarity.

### 4.1.1.6 Animate nouns with final $-j e ́,-n j \varepsilon ́$

Three animate nouns have unusual singular-plural alternations (xx1). A francolin is a partridge-like wild bird.

| $(\mathrm{xx} 1)$ | gloss | singular | plural |
| :--- | :--- | :--- | :--- |
|  | 'chicken' | غ̀njé | èクú-mbò |
|  | 'francolin' | sújijè: | súgúà-mbò |
|  | 'sorceror' | dùjé: | dùgù-mbó |

Animate plural -mbò is unmistakable, but one can also argue for a singular suffix $-j \varepsilon(:)$ especially for 'francolin'. However, $\grave{\varepsilon} n j \dot{\varepsilon}$ is a good match for underived 'chicken' noun stems in other Dogon languages, e.g. Ben Tey $\grave{\varepsilon} n j \hat{\varepsilon}-m$ (with animate singular suffix). 'Sorceror' is an agentive (§4.2.4) whose final é: in the singular has palatalized $* \mathrm{~g}$, cf. verb and cognate nominal dùgó dùgó- 'cast spells, perform black majic'. Cognates of 'francolin' generally derive from simple *súgù, and the jj of sújjè: is geminated, so here a better case can be made for an original suffix (possibly diminutive) in the TT singular form.

There are only a few examples of these suffixal forms on noun stems, which may belong to the same etymological categories as $-g o$ and $-\eta g o$. They arguably diverged due to idiosyncratic assimilations to vowels in preceding syllables.

The cases involving -ngé in (xx1) are collocations of cognate noun and verb, where the noun has an apparent suffix -ŋgé. The two verbs are homophonous (cf. also jé $j e \check{-}$ - ‘dance, do a dance').
a. jé-ngé jě- 'do the millet harvest'
b. jī-ŋgé jě- 'fart, let out a fart'

Cf. Yanda Dom $j \dot{\varepsilon} l$ jèlé ‘do the millet harvest’ and jìp jé- ‘let out a fart'. Najamba has gî: ǧ̌y 'do the millet harvest' and gìỳ̀-ngó gì ${ }^{n}$ ' ' let out a fart'.

A similar case involving -gé on the nominal is in (xx2). I know of no cognates in other Dogon languages.
(xx2) cé-gé cé- 'yell, give out a shout'

Whether this is the same ending in zégé 'fight(n)', cf. verb zèjij- ‘fight', is unclear.
For $-\eta g I ́ I$ I can cite only -ní-ngí in jìrè-[ní-ngí] 'sleep(n.)', which occurs in collocation with verb ní:- 'sleep', as in jìrè-[ní-ngí] ní:-yà-y 'he/she slept'.

For - $\eta g \varepsilon ́$ we have $n \varepsilon ́-\eta g \varepsilon ́$ 'food', cf. $n \varepsilon ́-$ ' 'eat, drink'.
-ge and - $\eta g e$ occur as markers of one inanimate class of nouns in Najamba, distinct from another inanimate class marked by -go and - ggo. This makes me hesitate to declare that TU nge, $-g e$, etc., are recent mutations of $-\eta g o$ and $-g o$. However, I can find no direct connection between the TU stems in question and Najamba nouns of the $-(\mathrm{\eta})$ ge- class.

The alternation of geminated and simple $d$ in péddè 'sheep', plural pédù-mbò suggests that the singular might derive from *péd-gè, cf. Nanga pèrgé.

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

High-frequency TU nouns whose cognates are often irregular in Dogon languages are given in ( xx 1 ). 'Woman' (xx1a) and 'man' (xx1b) are regular. 'Child' (xx1c) and 'person' have (synchronically) suppletive plurals. 'Thing' has no overtly marked plural form.
(xx1) Sg Pl gloss
a. yă yà-mbó 'woman'
b. ár ${ }^{n a ́ a}$ ár ${ }^{n}$ á-mbò 'man'
c. ùdé ùlé:(-mbò) 'child'
d. ně nù-mbó 'person'
e. ć

For 'person', ně is the independent form, and ně- occurs as a kind of human classifier with numerals ' 2 ' to ' 10 '. However, it is usually heard as nì before an adjective, as in nì démè 'noble, freeborn person'.

For compounds involving 'man' and 'woman', see §5.xxx. For compounds involving ‘child’, see §5.xxx.

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

àmâ:n (perhaps segmentable as à-mâ: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!",
dámbá 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 $C_{V}$-reduplication in nouns

The languages often have nouns with apparent initial reduplication Cv- (animal names, etc.). The vowel may be fixed (Ci-, perhaps Cu-before a back rounded vowel) or it may be a copy of the initial vowel of the stem.

Typical glosses: 'grasshopper' (generic), 'beetle/bug' (generic), 'hyena', 'hawk (kite)', perhaps 'scorpion'.

List all examples, organizing them by tone contours.

### 4.1.5 Final reduplications in nouns

Perhaps an occasional noun with an apparent final partial reduplicative segment. Usually the pattern is clear only when there are two or more exx. with similar reduplicative form in the language.

Nanga begiri-be: 'stone partridge' and korəŋ-ko: 'louse'.
Nanga petz-pey 'grasshopper sp. (Oedaleus)' and senerne-sey" 'grasshopper sp. (Kraussella)'.

### 4.1.6 Nouns with full-stem iteration

Many nouns have (frozen) iterative (=full reduplicative) form, e.g. gadu-gadu or pikiripikiri, with segments that do not occur in simple (non-iterated) form.

List all examples, organized by tone pattern.
Separately, give all examples of iterations with vowel changes, e.g. piki-paka or threepart piki-paka-piki.

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

For àmâ:n (à-mâ:n) see §4.1.3 above.
Give a list of nouns beginning in a- or an- ~ ay- that may represent an archaic morpheme (animal and insect names, implements, etc.).

This (native Dogon) pattern may have been fortuitously amplified by Arabic loans, based on a) nouns with Arabic Definite prefix al-, whose /I/ assimilates to following coronals, and b) nouns with initial a, e.g ansa:ra or variant 'white person, European' and ama:na 'promise, vow')

### 4.2 Derived nominals

### 4.2.1 Characteristic derivative ( $-j \dot{e}$ )

This derivative may be used as a noun or modifying adjective. The input is a noun denoting some attribute, such as a distinctive body part or a medical condition. The input noun drops its tones. It is usually uncompounded (xx1a) but may be a compound (xxlb). -jé does not harmonize with the ATR value of the stem. The (animate) plural form is $-j i \mathrm{i}-\mathrm{mb}$ ó.
(xx1) noun gloss Characteristic gloss
a. input noun uncompounded

| bèrá: | 'belly' | bèrà:-jé | 'pregnant' |
| :--- | :--- | :--- | :--- |
| tóm | 'hump' | ț̀m-jé | 'hunchback' |


| sé: | 'fat(n.)' | sè̀:-jé | 'plump (animal)' |
| :--- | :--- | :--- | :--- |
| pàngá | 'power' | pàygà̀jé | 'strong, powerful' |
| dòrś | 'disease' | dòrı̀jé | 'sick person, patient' |
| némé | 'leprosy' | nèmè-jé | 'leper' |
| wàllá | 'laziness' | wàllà-jé | 'lazy person' |

b. input noun compounded
bèyà:-kúlà 'beard' bèyà:-kùlà-jé 'bearded man'

### 4.2.2 Verbal nouns (-lé, -í)

The fully productive verbal noun suffix is $-l e ́$, after $\{\mathrm{H}\}$-toned stem. It is used after regular inflectable verb stems. For the tones, note yáy-lé 'going' ( yây) and zóbú-lé ‘running' (zòbó-), the latter normally with a cognate nominal as $\{\mathrm{L}\}$-toned compound initial: [zòb-gòl-[zóbú-lé] (§5.1.3). Further examples are given in the paradigms in chapter 10 . This form with $\{\mathrm{H}\}$-toned stem is distinct from the purposive-clause verb form with -lé following an $\{\mathrm{L}\}$-toned stem (§17.6.1).

The verbal noun in -lé often competes with another one in suffix -í. The suffixal vowel is subject to Apocope after unclustered sonorants. Examples are zób-í 'running’ and yáy- $\varnothing$ 'going' (/yáy-í). The -í verbal noun is not fully productive; I was unable to elicit it with monosyllabic $C v$ or $C v$ : verbs.

For verbal nouns added to adjectival predicates, as in 'good to eat', see §6.3.3.3.

### 4.2.3 Deverbal instrument nominals ( $\mathrm{Sg}-\eta g o ́, \mathrm{Pl}$ stem-final é:)

Instrument nominals are produced by adding suffix -ngó to a $\{\mathrm{LH}\}$-toned form of the verb stem with final ù. The corresponding plural, if elicitable, has stem-final é., and this plural form is probably phonologically basic (the +ATR é: could account for the consistently +ATR $-\eta g o ̀)$. -ATR vowels in nonfinal syllables of the stem are not harmonized with the suffixal vowels.
(xx1) Instrument Nominals (-ngoò, é:)
Sg $\quad$ Pl gloss $\quad$ related form
a. implements

| g̀̀bú-ŋgó | gə̀bé: | 'trigger' | gı̀bó- 'pull (trigger) |
| :---: | :---: | :---: | :---: |
| sògú-ŋgó | - | 'button' | sógź 'button (up)' |

```
(~ s\check{:-\etagg)}
pà:dú-\etagó - '(cotton-)card` pá:dह́- 'card (cotton)'
```

b. location

$z \varepsilon ̀ b u ̀-g \overline{~(p l ~ z e ̀ b e ́:) ~ ' f a n(n) ' ~ p r o b a b l y ~ b e l o n g s ~ h e r e ~ i n ~ s p i t e ~ o f ~ t h e ~ d i f f e r e n t ~ s u f f i x a l ~ a l l o m o r p h . ~}$ The verb is zùbó 'fan (sth, sb)'.

These (inanimate) deverbal instrument nominals are morphologically similar to (animate) deverbal agentives, which have stem-final $e ́ \sim \check{e}$ : in the singular, and stem-final ì followed by Animate Pl -mbó. However, the suffixed forms differ tonally in the two cases: instrument gj̀bú-ngó 'trigger' with LH-L tones versus (plural) agentive ìnjè-[kj̀bù-mbó] 'water-carriers' with LL-H tones (disregarding the compound initial).

Many instrument nominals have an additional compound initial; see §5.1.5.
For a distinct -ŋgó added to the A/O-stem, see §4.1.1.5.

### 4.2.4 Uncompounded agentives

Agentives clearly related to a corresponding verb, but without compound initials, are in (xx1).
(xx1) agentive gloss verb gloss

| dùgé ~ dùjě: | 'sorceror' | dùgó- | 'cast spells' |
| :--- | :--- | :--- | :--- |
| gùné | 'thief' | gùnè- | 'steal' |

Plurals: dùgù-mbó, gùnù-mbó.
'Hunter' is uncompounded dàndá, plural dàndá-mbò. dàndá is also the noun 'hunting, (a/the) hunt'.

The agentive form of a verb is $\{\mathrm{LH}\}$-toned, with the final vowel usually mutating to +ATR $e^{\sim} \sim e \check{c}$ in the singular. Vowels in preceding syllables in the verb stem are unaffected; in particular, -ATR vowels do not harmonize with the +ATR final vowel. Before Animate Pl -mbó, the é ~è: mutates to $\grave{u}$, and this $\grave{u}$ is subject to syncope after an unclustered sonorant. 'Herder' has irregular -ATR final vowel $\check{\varepsilon}$ : in the singular, but the plural has -mbó.

This deverbal agentive is morphologically the animate counterpart of instrument nominals with final - $\eta g^{\prime}$ ó in the singular (§4.xxx). For instrument nominals, é: appears in the (otherwise unsuffixed) plural. However, the two differ in the tones of the suffixed forms, since an unsyncopated stem-final $u$ is H-toned before - $\eta g o ́$ but L-toned before Animate Pl -mbó.

Agentives are normally compounded, the initial being either a cognate nominal or a noun denoting a prototypical object. Examples are in §5.1.xxx. Simple intransitive agentives can also be produced, functioning as alternatives to imperfective positive participles (§14.xxx).

### 4.2.5 Nominalizing suffix -né

This suffix is attested in a few cognate nominals (xx1).

| (xx1) | 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 Yanda Dom and Najamba. Probable exact matches are TU ày-né with Yanda Dom ònìn 'fatigue', and TU zèbì-né with Yanda Dom zèbú-n. There are no exact correspondences with Najamba forms, but 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 (often with -ngo suffix or variant), adding an initial $C v$ - reduplication, and overlaying $\{\mathrm{LH}\}$ tones on the whole, with the final syllable H -toned.


These abstractives can be used in conjunction with predicates containing the verb log $\boldsymbol{g}^{\text {'be }}$ extreme', especially in perfective-1a form. An example in $\grave{\varepsilon}-1 \varepsilon$ èdù-ngó lóg-à:-y 'he/she/it was extremely beautiful'.

### 4.3 Pronouns

### 4.3.1 Basic personal pronouns

Key forms of personal pronouns are in (xx1).
(xx1) Personal Pronouns

|  |  | subject |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | indep. | accusative | preverbal | suffixed |
| 1 Sg | mí | mí-gì | mí | $-m$ |
| 1 Pl | í | í-gì | í | $-y^{n}$ |
|  |  |  |  |  |
| 2 Sg | ú | ú-gì | ú | $-W^{n}$ |
| 2 Pl | bí | bí-gì | bí | $-y^{n}$ |
|  |  |  |  |  |
| 3 AnSg | ńné | ńné-gì | ńné | $-\varnothing$ |
| 3 AnPl | bú | bú-gì | bú | $[$ varies by AN category] |
| InanSg | kú | kú-gì | ńné | $-\varnothing$ |
| InanPl | yí | yí-gì | ńné | $-\varnothing$ |
|  |  |  |  |  |
| Logo/3Refl á | á-gì | á | $-m$ |  |

Accusative -gì is often omitted. 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.
kú and yí are generally confined to strongly discourse-definite contexts, and I usually gloss them as discourse-definite ("DiscDef"). In weakly discourse-definite contexts, kú and yí are usually just omitted.

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 $\S 18.3 .1$ for discussion and examples.

### 4.3.2 Personal pronouns as possessors

Pronominal possessors are preposed with kin terms (ú ${ }^{\mathrm{L}}$ bà 'your father') and postposed for other nouns (úló ú-ẁ̀ 'your-Sg house'). For 3 Sg possessor there is a suffix $-n$ for kin terms (bà-й 'his/her father'). Most of the postposed forms 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 given in (xx2) in §6.2.1.2. The preposed forms are identical to the independent pronouns in $\S 4.3 .1$ above.

### 4.3.3 Personal pronouns as complements of postpositions

Accusative forms are given in the preceding section. Accusative gì can be considered to be a postposition since it is added at the end of a NP. There is no dative postposition other than the accusative.

Most other postpositions that can occur with the full set of pronominals are of the type 'at [the side of X]', e.g. 'at [my side]'. The pronoun therefore takes possessive form. However, the instrumental-comitative postposition ní: 'with, in the presence of (someone)' does take pronominal complements: mí ní: ‘with me’ (§8.1.2).

### 4.4 Determiners

### 4.4.1 Definite and demonstrative morphemes

### 4.4.1.1 Definite morpheme ( $\grave{n}$ )

Definite $\grave{n}$ is exemplified in (xx1). It is a weak discourse-definite element. It follows other NP subconstituents, except the 'all' quantifier. It has no morphological similarity to any demonstrative. It has no tonal effect on the preceding word(s). Since it is nonsyllabic, it cliticizes phonetically to the preceding syllable; however, I write it as a separate word.

| (xx1) úló ì | 'the house' |
| :--- | :--- |
| nǎ: ì | 'the cow' |
| nà:-mbó ì | 'the cows' |
| nà: bíné: ì | 'the big cow' |
| úló yí-tà:ndú ì | 'the three houses' |
| ùlò mà-gú ì | 'that house' |
| úló kǒ: ì | 'my house' |
| úló ì pú $\rightarrow$ | 'all the houses' |

In the absence of $\grave{n}$, a noun can (but need not) be interpreted as indefinite.

### 4.4.1.2 'This/that' (deictic 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.

Inanimate demonstratives are in (xx1). $\grave{o}-\sim \grave{e}-$ is proximate, mà- is distal. -gú is Inanimate Sg and is probably related etymologically to discourse-definite kú. Likewise, $-\hat{y}$ is Inanimate Pl and is probably related to discourse-definite yí.
(xx1)
a. ò ogú
'this'
è-ý 'these'
b. mà-gú~ mà-w 'that (over there)'
mà-ýn $\quad$ 'those (over there)'
c. kú 'that (definite)'
yí 'those (definite)'

Animate demonstratives are in (xx2). ̀- is proximate, and again mà- is distal. -ḿ is Animate Sg , and -bó is Animate Pl. -bó is probably related to bú. The definite forms ńné and bú are identical to the corresponding third person personal pronouns.
(xx1)
a. $\grave{j}-\bar{m}$
'this'
ò-bó 'these'
$\begin{array}{ll}\text { b. mà-ń } & \begin{array}{l}\text { 'that (over there)' } \\ \text { mà-b́ }\end{array} \\ \text { 'those (over there)' }\end{array}$
'Which?' interrogative adjectives, and related interrogative content words, have similar morphology (§13.2.8).

### 4.4.1.3 Prenominal discourse-definite $k u$ ' 'that (same)'

In form, kú is an inanimate pronoun ('it') that is most often used to resume a discoursedefinite situation or entity. As a (pseudo-)possessor preceding a $\{\mathrm{L}\}$-toned noun, it marks the referent as strongly discourse-definite 'that same X '. An example is kú ${ }^{\mathrm{L}}$ gàndà 'that (same)
place'. My assistant, however, rejected the combination of kú with a human noun in discourse-definite sense (\#kú nè 'that same person').

He did accept a combination with a real possessor. A preposed possessor keeps its regular tones, rather than being tone-dropped by kú (xx1a). Likewise, when a possessed noun is sandwiched between (pseudo-)possessor kú and a real pronominal possessor, the noun is not tone-dropped (xxlb). In other words, in the presence of a real possessor the pseudo-possessor kúloses its tonosyntactic control powers.
(xx1) a. [kú ámádú ${ }^{\text {Lù ùlò] } \quad \text { èdù }=1 a ́-\varnothing ~}$ [InanP Amadou ${ }^{\text {L house] }}$ good=not.be-3SgSbj
'That house of Amadou's is no good.'
b. [kú úló ú-wò] èdù =lá- $\varnothing$
[InanP house 2SgPoss-InanSg] good=not.be-3SgSbj
'That house of yours is no good.'

### 4.4.2 Demonstrative adverbs

### 4.4.2.1 Locative adverbs

The demonstrative adverbs in (xx1) are morphologically simple. Those in (xx2), with locative postposition bàrì, presupposes a spatial shift (cf. English over here, over there) as usual for this postposition. The phrases in (xx1c) include gándá 'place', tone-dropped like an adjectivally modified noun.
(xx1) form gloss

|  | 'here' |
| :---: | :---: |
| Ø$g$ ¢̀ ~ úngò | 'over there' |
| mà-ŋgá | 'over there' (deictic) |
| mă: | 'over there' (deictic) |
| yé | 'there' (discourse-definite) |
| b. $\begin{aligned} & \text { ह́:-bàrì } \\ & \text { yé-bărì~ yí-bàrì } \end{aligned}$ | 'over here, around here' <br> 'there' (discourse-definite) |
| c. gàndà ${ }^{\mathrm{L}}$ ŋ̀gó gàndà ${ }^{\mathrm{L}}$ mà- $\eta g a ́$ gàndà ${ }^{\mathrm{L}}$ mǎ: | 'around here' <br> 'around (over) there' <br> 'around there (discourse-definite)' |

A textual passage that contrasts $\varepsilon$ é-bàrì and yí-bàrì as nonspecific near and distant locations is T2015-06 at (00:33).

### 4.4.2.2 Emphatic and Approximative modifiers of adverbs

For emphatic 'right here' I recorded $\grave{\eta} g o ́ ~ t e ́ \rightarrow ~ ' e x a c t l y ~ h e r e ' . ~$

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

The regular predicate forms (§11.2.3.2) of deictic demonstratives (§4.4.1.2) can be used as presentatives.
(xx1)
a. [èdù-gó
ì $\quad \grave{o}$-gû: $=\varnothing$
[waterjar-InanSg Def] Prox-InanSg=it.is
'Here's the waterjar.'
b. Lèdé:
[waterjar.Pl
ǹ]
Def]
$m a ̀-\hat{y}=\varnothing$
Dist-InanPl=it.is
'There are the waterjars.'

Alternatively, the demonstrative may function as the focus of the clause, with the verb in defocalized form (§13.1.1.3)
$\begin{array}{llll}\text { (xx2) } & \text { mà-ḿ } & \text { ńné / sé:dù } & \text { wà:-m- } \mathrm{\varepsilon}: \\ & \text { Dist-AnSg } & \text { 3SgSbj / Seydou } & \text { come-Ipfv-Prog-DFoc } \\ & \text { 'There he / Seydou comes!' } & \end{array}$

### 4.5 Adjectives

This section discusses modifying (i.e. attributive) adjectives that occur within NPs. For adjectival predicates, see §11.xxx. For inchoative and factitive (causative) verbs related to adjectives, see $\S 9 . x x x$.

### 4.5.1 Adjectival morphology

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 (xx1). $O$ represents $\left\{\begin{array}{l}0\end{array}\right\}$ and $E$ represents $\{e \varepsilon\}$, depending on the ATR harmonic class of the stem.
(xx1) category suffix
a. Inanimate $\mathrm{Sg} \quad-g O,-\eta g O,-\eta g E$
b. Inanimate Pl (none)

Animate Sg
c. Animate $\mathrm{Pl} \quad-m b O$

Although the categorially composite category in (xxlb) is listed as unmarked morphologically, it usually ends in a long $E$ : (i.e. e: or $\varepsilon$ :) which probably reflects contraction of an original class marker ${ }^{*}$-y $\varepsilon$. The contraction itself is old, since it has close parallels in Najamba.

The adjectives in (xx2a) belong to this typical TU adjectival type. Those in (xx2b) are of the same type, but are attested only with inanimates, or only with animates, for good semantic reasons. The long $E$ : in the unsuffixed forms strongly suggest inclusion in this productive adjective type. The same is true of ( $\mathrm{x} \times 2 \mathrm{c}$ ) since 'undiluted' is applied to nouns denoting liquids, which are treated as inanimate plural, so only that form is attested.

Animate $\mathrm{Pl}-\mathrm{mbO}$ reduces to $-b O$ after a nasal. Since both $-\eta g O$ and $-g O$ are well-attested allomorphs of the Inanimate Sg suffix, when we get $-g O$ after a nasal we cannot determine which underlying allomorph is involved. Clusters written $n b, n g$, and $m g$ can be pronounced [nmb], [nŋg], and [mŋg], respectively, in careful speech. The vowels of $-m b O$ and $-(\eta) g O$ appear as $o$ when they correspond to $e$ : in the unsuffixed form, otherwise they appear as $\Omega$.

| (xx2) |  | InanSg | InanP1 | AnSg | AnPl | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | a. | bán-gò | bár ${ }^{n} \dot{\varepsilon}$ : <br> [~ bánè:] | bár ${ }^{n} \grave{\varepsilon}$ : | bán-bò | 'red; ripe (mango)' |
|  |  | cé:Iù-gò | cé:lè: | cé:lè: | cé:lù-mbò | 'cold, cool' |
|  |  | dúdù-ŋgò | dúdè: | dúdè: | dúdù-mbj̀ | 'heavy' |
|  |  | દ́dù-ŋgò | Édè: | $\varepsilon$ ह́dè: | Édù-mbò | 'good' |
|  |  | ع́l-ŋ̆g̀ | દ́lè: | ćlè: | દ́l-mbò | 'sweet, delicious' |
|  |  | Én-gò | $\varepsilon^{\prime} r^{n} \dot{\varepsilon}$ : | $\varepsilon r^{\prime}{ }^{n} \dot{\varepsilon}$ : | Én-bò | 'lightweight; thin (wall)' |
|  |  | gàbù-gó | gàbě: | gàbě: | gàbù-mbó | 'tall' |


| góm－gò | gómè： | gómè： | góm－bò | ＇rotten＇ |
| :---: | :---: | :---: | :---: | :---: |
| jém－gò | jémè： | jémè： | $j \dot{m} m-b \grave{ }$ | ＇black（dark）＇ |
| mán－gò | már ${ }^{\text {nè }}$ ： | már ${ }^{n} \dot{\varepsilon}$ ： | mán－bò | ＇hard，solid＇ |
| mèndú－pgò | mèndé： | mèndé： | mèndú－mbò | ＇slender＇ |
| nóm－gò | nómè： | nómè： | nóm－bò | ＇difficult＇ |
| วl－g ¢ $^{\prime}$ | jıľ： | ¢ 1 ¢̌： | jol－mbs | ＇wet＇ |
| 万́m－gò | 万́mè： | 万́mè： | óm－bう̀ | ＇hot＇ |
| 万́mう－ngò | 万́mう： | 万́mò： | 万́mうे－mbう | ＇living，alive＇ |
|  | ór ${ }^{\text {nónè：}}$ | ór ${ }^{\text {nónè：}}$ |  | ＇smooth，sleek＇ |
| pá：－ıgò | $p a ̂: \sim p a ́ c ̀ ~$ | pâ：～páè | pá：－mbj̀ | ＇long＇ |
| píl－gò | píle： | pílè： | píl－mbò | ＇white＇ |
| sàm－gá | sàmě： | sàmě： | sàm－bó | ＇bad，ugly＇ |
| yágúr－gò | yágírè： | yágírè： | yágúr－mbò | ＇coarse，rough＇ |
| $s s$－ $\lg \dot{\varepsilon}$ | $s \varepsilon ์$ | $s \varepsilon ์$ | sé－mbj̀ | ＇good＇ |
| － | － | biné： | $\begin{aligned} & b i ̀ n i ́-m b \grave{j} \\ & (\sim \text { bĭn-bj̀) } \end{aligned}$ | ＇fat，stout＇ |
| － | － | mòdě： | mòdú－mbò | ＇evil，nasty＇ |
| démbù－gò | démbè： | － | － | ＇thick，massive＇ |
| dùmbù－gó | dùmbě： | － | － | ＇blunt（blade）＇ |
| èmbù̀－gó | غ̀mbě： | － | － | ＇narrow＇ |
| gál－ıgò | gálè： | － | － | ＇bitter＇ |
| púrúgú－gò | púrúgè： | － | － | ＇tan，off－white＇ |
| sí：－ng ${ }^{\text {jo }}$ | síyè： | － | － | ＇sharp（point，blade）＇ |
| wér－gò | Wérè： | － | － | ＇green，fresh（vegetation）＇ |
| yว̀r－gó | yòrě： | － | － | ＇soft＇ |
| － | kùrě： | － | － | ＇undiluted（milk）${ }^{\text {a }}$ |

For＇living，alive＇，an informant tended to replace animate plural ómう̀－mbò with a quasi－ reduplicative form $\begin{aligned} & m o ̀-o ́ m(b) \grave{~}\end{aligned}$

The adjectives in（xx3a）also belong to this general type，but unlike the $C v C E:-$ and longer stems in（ xx 2 ）above they have $C_{V E}$ ：in the unsuffixed form，becoming $C_{V y \text {－before a }}$ suffix．The phonological alternations here are similar to those in verbal morpheme in the 3 Sg form of the simple perfective（ $\S 10 . \mathrm{xxx}$ ）and in Defocus forms of verbs in connection with subject focalization（§13．xxx）．In gذ̀̀ž：the first vowel is briefly articulated or desyllabified， approaching［gwě：］．In wà $\begin{gathered}\text { and } m a ̀ \varepsilon^{n} \\ \text { there is no comparable desyllabification of the first }\end{gathered}$ vowel．＇Long＇（xx3b）lengthens the $a$－vowel in the unsuffixed form．pě：＇old＇can be analysd as $p \grave{\varepsilon}-\bar{\varepsilon}$ ；by analogy，but I do not hear a separate burst for the second vowel．The two
adjectives in (xx3c) have a $C V$ - stem throughout. Of the defective adjectives in (xx3d), wà and $s \check{\varepsilon}$ : belong with (xx3a), ìdé with (xx3c).
(xx3) InanSg InanPl AnSg AnPl gloss

| a. $\begin{aligned} & g \check{y} y-g \grave{~} \\ & p \varepsilon ̀ y-g o ́ \end{aligned}$ | $\begin{aligned} & g \text { g̀̀ž: } \\ & \text { pě: } \end{aligned}$ | $\begin{aligned} & g \grave{\lambda} \dot{\varepsilon}: \\ & p \varepsilon ̌: \end{aligned}$ | $\begin{aligned} & g \check{y ̌ y-m b \grave{~}} \\ & p \varepsilon ̀ y-m b \grave{~} \\ & (\sim p \dot{\varepsilon}:-m b \hat{\jmath}) \end{aligned}$ | 'short' 'old' |
| :---: | :---: | :---: | :---: | :---: |
| mà ${ }^{n}$-gó | $m a ̀ \varepsilon^{n}$ | $m a ̀ \varepsilon^{n}$ | mày ${ }^{n}$-bó | 'dry' |
| b. pá:-ŋgò | pá: | pá: | pá:-mbò | 'long' |
| c. $d \dot{\varepsilon}-\eta \mathrm{g} \dot{\varepsilon}$ | $d \varepsilon$ | $d \varepsilon$ | dé-mbò | 'big' |
| $s \mathcal{E}-\eta \mathrm{g}$ ¢̀ | SÉ | sÉ | $s \varepsilon$-mbj̀ | 'good' |
| d. wǎy-gò | wàદ์ | - | - | 'wide, spacious' |
| - | sě: | - | - | 'diluted (milk)' |
| ǹdò-ŋgǵ | ǹd $\varepsilon$ ' | - | - | 'empty'' |

There are also some adjectives that do not distinguish number for inanimates, i.e. they do not use Inanimate $\mathrm{Sg}-(\eta) g O$ suffix. Those that can also be used with animate nouns do take Animate $\mathrm{Pl}-m b O$ ( xx 4 a ). This is similar to the situation with nouns, where some inanimates have only a single, unsuffixed form used both as singular and plural. The adjectives in (xx3b) probably belong here, but have defective paradigms. In (xx3c), 'deep' appears to have generalized the original Inanimate St form. 'Blue' (xx3d) is a regionally widespread loanword but has been nativized rather better in TU than in most other languages (note the long $\grave{\varepsilon}$ :), though speakers refrain from adding an Inanimate Sg suffix.

|  | InanSg | InanPl | AnSg | AnPl |
| :--- | :--- | :--- | :--- | :--- | gloss



The forms in (xx5) function more or less like adjectival modifiers but have invariant form. 'Yellow' is really the word for '(bright yellow) flour from pods of néré tree (Parkia biglobosa), which is the exemplar for yellowness throughout the zone.
a. yòl-púr ${ }^{n} \grave{\jmath}$
'yellow'
b. sògòló 'spotted'

Many adjectives have a corresponding abstractive nominal denoting the relevant scale, e.g. 'length' or 'redness'. The nominal is based on the inanimate singular form of the adjective, plus initial reduplication and an $\{\mathrm{LH}\}$ tone overlay. See $\S 4.2 .6$ for the data.

### 4.6 Numerals

### 4.6.1 Cardinal numerals

### 4.6.1.1 'One' (túrè:, túr-gò) and 'other' (wàndă)

Forms for 'one' are in (xx1). The animate/inanimate distinction and the long $\varepsilon$ : are typical of adjectives. However, the noun X is not tone-dropped as one would expect before a true adjective: nǎ: túrè: ‘one cow’, úló túr(ú)-g̀̀ ‘one house’.
(xx1) a. modifying a noun (X)

$$
\begin{array}{ll}
X \text { túrè: } & \text { 'one X (animate)' } \\
\text { X túr(u))-g̀̀ } & \text { 'one X (inanimate)' }
\end{array}
$$

b. in counting sequence ( ${ }^{\prime} 1,2,3, \ldots$ ), 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).
'Other' as in 'another/the other (sheep/house)' is wàndá (invariant for animacy and number). The noun is tone-dropped: nà: ${ }^{\text {L }}$ wàndá 'an-/the other cow', ùlò ${ }^{\mathrm{L}}$ wàndá 'an-/the other house', [ùlò wàndà ${ }^{\mathrm{L}}$ yí 'the other houses'.

### 4.6.1.2 ' 2 ' to ' 10 '

The numerals from ' 2 ' to ' 10 ' are shown in ( xx 1 ) in their postnominal forms. They are preceded by classifying prefixes (similar to those in Yanda Dom). For human reference, either the specifically human form (based on ně 'person') or the more general animate form may be used. Nonhuman animals use only the animate form.

The prefixes are H - or $<\mathrm{LH}>$-toned. Numeral stems are of two tonal types. One type is $\{\mathrm{LH}\}$ or $\{\mathrm{LHL}\}$ and is tonally stable (' 3 ', ' 5 ', ' $8-9$ '). The other appears as $\{H\}$-toned after jě- and as $\{\mathrm{L}\}$-toned after bú- and yí- (' 2 ', ' 4 ', ' 6 ', ' 7 ', ' 10 '). ' 2 ' and ' 5 ' geminate their initial sonorant after animate and inanimate (but not human) prefixes.

| (xx1) | gloss | human | animate | inanimate |
| :---: | :---: | :---: | :---: | :---: |
|  | '2' | jě-léy | bú-llèy | yí-llèy |
|  | '3' | ně-tà:ndú | bú-tà:ndú | yí-tà:ndú |
|  | '4' | ně-kédé | bú-kèdè | yí-kèdè |
|  | '5' | ně-nǔm | bú-nnǔm | yí-nnǔm |
|  | '6' | ně-kúlé | bú-kùlè | yí-kùlè |
|  | '7' | ně-só | bú-sò | yí-sò |
|  | '8' | ně-[gà-gárà] | bú-[gà-gárà] | yí-[gà-gárà] |
|  | '9' | ně-[gà-gárà]-bà | bú-[gà-gárà]-bà | yí-[gà-gárà]-bà |
|  | '10' | ně-pélú | bú-pèlù | yí-pèlù |

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-mbś ně-léy 'two women'. nù-mbó 'people' is grammatical before a human numeral, but it is normally omitted: ně-léy 'two people'.

In counting sequences, there is no preceding noun and no classifying prefix, which allows us to glimpse 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 $\{\mathrm{H}\}$-toned in the counting sequence. This suggests that they have lexical /H/ melodies.
(xx2) numeral in counting sequence

| '1' | tī:-rú |
| :--- | :--- |
| '2' | lé:-rú |
| '3' | tà:ndú |
| '4' | kédé |


| '5' | nǔm |
| :--- | :--- |
| '6' | kúlé |
| '7' | só |
| '8' | gà-gárà |
| '9' | [gà-gárà]-bà |
| $' 10$, | pélú |

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

Numerals denoting decimal multiples up to ' 70 ' are in (xx1). 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 $p \varepsilon$-, pe:-, or $p \varepsilon g a$-. Historically, the reduction to $p \varepsilon$ - in ' 30 ' probably reflects syncope and ${ }^{\mathrm{rtt}}>t$. The reduction to $p \varepsilon$ :-, presumably from *pega-, occurs before velars but not before coronals. The ' 10 ' element is L-toned (pègà-, p $\grave{\varepsilon}:-$ ) before single-digit numerals that begin with a H -tone, but it ends with a H -tone (pé-, pègá-) before a L -tone.
(xx1) gloss form

| '20' | pègà̀léy |
| :---: | :---: |
| '30' | pé-tà:ndú |
| '40' | $p \varepsilon$ è:-k $d \underline{\varepsilon}$ |
| '50' | pègá-nǔm |
| '60' | pè:-kúlé |
| '70' | pègà-só |

Like the single-digit terms ' 2 ' to ' 10 ', decimal multiple terms follow nouns (or nounadjective combination) that takes their regular plural form: yà-mbś 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 otherwise L or $<\mathrm{HL}>$ ('20', '40', ' 60 '), which is (again) arguably intonational.
(xx2) gloss with single-digit increment X
'10' pé:-nè $X$ sàgà
'20' pègà-léy $X$ sàgà

```
`30' p\varepsiloń-tà:ndú X sàgà
'40' pè:-k\varepsilońdé X sàgà
'50' pègá-nǔm X sàgà
`60' pè:-kúlé X sàgà
`70' pègà-só X sàgà
```

The single-digit numeral, X in ( xx 2 ), is invariant and does not agree with the referent in animacy, but ně- 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 (xx3). ' 1 ' has no animacy suffixes. ' 3 ' has a slightly contracted form. ' 5 ' usually contracts the decimal term, so that $-m$ appears to be a suffix (or clitic) on the noun.

| (xx3) | numeral | regular form | after decimal-multiple term |
| :---: | :---: | :---: | :---: |
|  | '1' | túr-È:, túrù-gò | túr(ú) sàgà |
|  | ' 2 ' | léy | léy sàgà |
|  | '3' | tà:ndú | tă:n sàgà |
|  | '4' | kédé | kédé sàgà |
|  | '5' | nǔm | -m sàgà (less often: nǔm sàgà) |
|  | '6' | kúlé | kúlé sàgà |
|  | ${ }^{7} 7$ | só | só sàgà |
|  | '8' | gà-gárà | gà-gárà sàgà |
|  | '9' | [gà-gárà]-bà | [gà-gárà]-bà sàgà |

The reduced $-m$ in 'five' triggers further constractions in the preceding numeral. ' 15 ' is just
 alerts a listener to the otherwise inaudible presence of $-m$. 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. ' 90 ' is expressed as ' 80 ' plus ' 10 ' (with inanimate prefix yí-in unmarked contexts, as in counting sequences).
(xx4) '80' sùngó ( or dògò-sùngó)
'90' sùngó yí-pélù
' 80 ' is the notorious "Dogon hundred" lexical item. It is more noun-like than the lower decimal-multiple 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 '[cow 80] [cow 1]' (xx5). When the single digit is ' 2 ' to ' 9 ', it takes the relevant classifying prefix. There is no sàgà. sùngó takes the form súngô: in such combinations.
(xx5)
$\begin{array}{llll}\text { a. [nà:-mbó } & \text { sùngô:] } & \text { [nă: } & \text { túrè: }] \\ {[\text { cow- } \mathrm{AnPl}} & 80] & {[\text { cow }} & \text { one. } \mathrm{AnSg}] \\ \text { ' } 81 \text { cows' } & & & \end{array}$
$\begin{array}{lll}\text { b. } \begin{array}{ll}\text { [ìnjè-mbó } & \text { sùngô:] } \\ \text { [dog-AnPl } & 80]\end{array} & \begin{array}{l}\text { bú-nǔm } \\ \text { ' } 85 \text { dogs' }\end{array} & \end{array}$

As noted above, sùngó yí-pélù '90' is already composite ('80 10'). When it modifies a core NP , the ' 10 ' portion shows animacy concord (xx6a). 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 (xx6b).
a. [nà:-mbó sùngô:] bú-pélú
[cow-AnPl 80] AnPl-10
'90 cows'
b. [nà:-mbś súngô:] [(nà:-mbó) pé:-nè túr sàgà]
[cow-AnPl 80] [(cow-AnPl) $10 \quad 1 \quad$ plus]
'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 ', ...) and their composites

The stems in (xx1) are somewhat noun-like morphosyntactically.
(xx1) gloss form
a. 'hundred' té:mdèrè (<Fulfulde)
b. 'thousand' mùdó
c. 'million' mílyón $(<$ 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 (xx2a-b). 'Thousand' is followed by the bare numeral ( x 22 c ).
(xx2)

```
a. nà:-mbś [té:mdèr\grave{\varepsilonे yí-lèy] pègá-nǔm}
    cow-AnPl [hundred Inan-2] 10-5
    `250 cows'
b. nà:-mbó [mílyón yí-nǔm]
    cow-AnPl [million Inan-5]
    `5,000,000 cows`
c. nà:-mbó [mùdó tà:ndú] [t\varepsiloń:mdèr\varepsiloǹ yí-nǔm]
    cow-AnPl [thousand 3] [hundred Inan-5]
    `3,500 cows'
```

Since not many people have a hundred of anything, 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 circulation. This form is unusual in that túrú ' 1 ' is treated as an adjective, so it controls tone-dropping 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 yíità: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 ' $2,000,000$ FCFA'.

### 4.6.2 Ordinal adjectives

### 4.6.2.1 'First' (tí:rû) and 'last' (dùmdô)

Ordinal 'first' is tírú, and 'last, final' is dùmd'́. Both are adjectives and control tonedropping on the noun.
$(\mathrm{xx} 1) \quad$ a. $c \grave{\varepsilon}^{\mathrm{L}} / \operatorname{dàmbà~}^{\mathrm{L}} \quad$ tí:rú
thing ${ }^{\mathrm{L}}$ / village ${ }^{\mathrm{L}}$ first
'the first thing / village'
b. c文 ${ }^{\mathrm{L}} /$ dàmbà $^{\mathrm{L}}$ dùmdó
thing ${ }^{\mathrm{L}}$ / village ${ }^{\mathrm{L}} \quad$ last
'the last thing / village'

For adverbial 'firstly, at first' see §8.4.6.2

### 4.6.2.2 Other ordinals (suffix -n $\varepsilon$ )

The ordinal suffix for numerals higher than ' 1 ' is $-n \varepsilon$, after $\{\mathrm{L}\}$-toned stem. There are only slight segmental irregularities based on the cardinal forms (syncope of second syllable in ' 3 rd' and ' 10 th', monophthongization in ' 2 nd').
(xx1) form
gloss
a. single-digit numeral

| lè:-n的~nè:-r ${ }^{n} \dot{\varepsilon}$ | 'second' |
| :---: | :---: |
| tà:n-nह́ | 'third' |
| $k \varepsilon ̇ d e ̀-n \varepsilon ́$ | 'fourth' |
| nùm-nย์ | 'fifth' |
| kùlò-nÉ | 'sixth' |
| sò-né | 'seventh' |
| gàgàrà-né | 'eighth' |
| gàgàrà-bà-né | 'ninth' |
| $p \grave{\varepsilon}$ ¢-nє́ | 'tenth' |

b. decimal
pègà-lè:-né
'twentieth'
c. decimal plus single-digit numeral pé:nè tùrù sàgà-né 'eleventh' pé:nغ̀ lèy sàgà-né 'twelfth'
d. hundred
tè:mdèrè-né 'hundredth'
e. hundred plus '1-99' numeral (two levels)
té:mdèrè pègà-lè:-nÉ 'hundred and twentieth'
f. interrogative
àngà-né 'how many-eth?' (Fr quantième)

Tone-dropping controlled by the suffx does not extend to the decimal term in (xx1c), or to 'hundred' in (xx1e). However, it does apply to the combination of the single-digit term plus sàgà in (xxlc).

### 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 distinguished by the word-classes of the initial and final, and by tone-contour. 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) [ $\mathrm{n} v-\mathrm{VblN}$ ], with diacritics to mark tones (x́ all high tone, $\hat{x}=$ falling HL contour, $\check{x}=$ rising LH contour, $\dot{x}=$ all-low tone, $\bar{x}=$ regular lexical tone). Example: [ $\mathrm{n} \bar{n}$ ] is a noun-noun compound whose initial is dropped to $\{\mathrm{L}\}$ tone contour and whose final has its lexical tones.

### 5.1 Nominal compounds

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

Both the initial and the final are nouns with their regular tones (no special tonal change in compound).

Not a common compound type. Found in Jamsay with 'X-owner' compounds.

### 5.1.2 Compounds of type [ǹ n̄]

Initial is a noun (perhaps occasionally an adverb) that is tone-dropped, final is a noun with its regular tones. Common. Final is usually the head.

May compete with possessor-type compounds (see below), but if so this type is more typical of the fully lexicalized compounds.

### 5.1.3 Compounds with final verbal noun, type [ǹ v-VblN]

In this combination, the $\{\mathrm{L}\}$-toned initial either denotes a characteristic object or is a cognate nominal. The final is a verbal noun or cognate nominal and has its usual tones

$$
\begin{array}{lll}
\text { a. } & \text { [zòb-gòl-[zśb-íl] } & \text { nôm }  \tag{xx1}\\
& \text { [run-InanSg]-[run-VblN] } & \text { be.difficult } \\
& \text { 'Running a race is hard.' } &
\end{array}
$$

b. [zòb-gò]-[zóbí-lé] nôm

$$
\begin{aligned}
& \text { [run-InanSg]-[run-VblN] be.difficult } \\
& {[=\text { (a)] }}
\end{aligned}
$$

### 5.1.4 Agentive compounds of type [ǹ $\check{\text { ř }}$ or [ǹ $\hat{v}$ ]

This is a special case of [ǹ $\bar{n}]$ compound. The initial is the $\{L\}$-toned form of a noun denoting a prototypical object, or a cognate nominal. The compound initial may be slightly reduced in form: the final vowel may be raised to high and perhaps syncopated, an old Inanimate suffix like $-g o$ is often omitted from the compound. The compound final a $\{\mathrm{LH}\}-$ toned deverbal agentive with the stem-final vowel mutating to é;, regardless of ATR class of the stem (the penult vowel quality is not affected). The vowel is reduced and raised before animate plural -mbO, see later in this section.

One informant (out of two who were checked) fluctuates between $\{\mathrm{LH}\}$ and $\{\mathrm{HL}\}$ tones for the final in some cases (wà:-wálè alongside wà:-wàlé 'farmer', for example). The data given below show the predominant $\{\mathrm{LH}\}$ melody on the final.
(xx1) Compound deverbal agentives
noun plus verb agentive gloss
a. initial is cognate nominal

| zóbúlú-gó zòbó- 'run' | zòbù-zàbé: | '(fast) runner' |
| :---: | :---: | :---: |
| dòn-gó dòr ${ }^{\text {noz- ' }}$ do a sale ${ }^{\text {¢ }}$ | dòn-dòné: | 'seller' |
| èbuí-gó Ébé- 'do a buy' | èbì̇̇̇bé: | 'buyer' |
| sán sár ${ }^{\text {náas - }}$ 'pray ${ }^{\text {a }}$ | sàn-sàr ${ }^{\text {néb }}$ : -sàné | 'Muslim' |
| ím ímé- 'stutter' | ìm-ìmé ~ -ìmě: | 'stutterer' |

b. initial is noncognate noun
ínjé kóbó- 'draw water' ìnjò-k̀̀bé: $\quad$ 'water-carrier'
kórn's màdáa- 'toss cowry’ kj̀rnj̀-màdé: 'cowry-tosser'
(also sèbé màdé, agentive sèbè-màdé:)
úló óndú- ‘build house’ ùlò-òndé: 'house-builder'

Most $C v$ :- verbs with nonhigh vowels derive from *Cvlv- etyma. The old bisyllabic form is preserved in the agentive compound final -C文-lě:. Synchronically, however, -lě: functions as a kind of filler syllable, cf. -lú with the same verbs in the quoted hortative (§10.6.3.1).
 *1 (xx2a), and I know of no Cv:- stem with nonhigh vowel that does not have the -lv
extensions. The only high-voweled $C_{v}$ :- stem in TU is ni:- 'sleep', which does not show the extension. Instead, it has an agentive of the shape -Cë: (xx2b).
(xx2) noun plus verb agentive gloss
a. -C $\grave{V}$-lé from original $* \mathrm{Cvlv}$ - verb
final is $\{H L\}$-toned

| kà-kǎl ká: 'tell a lie' | [kà-kàl]-[ká-lè:] | 'liar' |
| :--- | :--- | :--- |
| wă: wă:- 'do farm work' | wà:-[wá-lè:] | 'farmer' |
| yù-wă: wă:- 'farm millet' | [yù-wà:]-[wá-lè:] | '(millet) farmer' |

final is $\{L H\}$-toned
èdé lă:- 'bear child' $\quad$ edèe-[là-lé:] 'child-bearing woman'
yă lă:-m- 'have (=help) [yà-mbò]-[làl-é:] 'midwife'
women bear'
nìmdé bă:- 'gather trash' nìmdè-[bà-lé:] 'trash collector'
kòndó á:- 'brew beer' kòndj̀-[à-lé:] 'beer brewer'
tól tó:- 'pound (grain)' tòl-[tò-lé:] 'pounder (of grain)'
yó tó:- 'pound millet' yù-[tò-lé:] 'millet pounder'
b. $-C \bar{v}$-lé from original $* \mathrm{Cvyv}-\mathrm{verb}$
from original *Cvpv- verb
gòně: nă:- 'pick up gear’ gòn-[nà̀-lé:] 'gear picker-upper'
c. -Cě: from Cí:-
jìrè-[ní-ngí] ní:- 'sleep' [jìrè-[nì-ngì]]-ně: 'sleeper' pélú pé:- 'applaud' pèl-[pě:] 'applauder'
$C_{r}$ - verbs with short vowels do not have bisyllabic etyma. Their agentive compound finals have various shapes depending on vowel quality. The only $C u-$ verb (núl 'go in') does not have an agentive form in regular use. The other vowel qualities are represented (xx3). The type with -Cwě: (xx3b) reflects the neutralization of $/-C o(y) e ́ / ~ a n d ~ /-C o(y) e ́ /$, structurally parallel to -Càyé ( xx 3 c ) but desyllabifying the initial $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ to W . In slow pronunciations, an informant actually distinguishes them as -Còé and -Còé, and we will see (just below) that a different resyllabification in the plural also brings out the ATR distinction.
noun plus verb
agentive
gloss
a. -Cě. from $C \varepsilon$-, $C e-, C i-$
kj̀nd́́ né- 'drink beer' kòndj̀-ně: 'beer drinker' jé jě- ‘dance' jè-jě: 'dancer'

> yó dǐ- 'carry millet' yò-dě: 'millet carrier'
b. -Cwě: from Co-, Codoá dǒ- 'insult' doà-dwě: 'insulter' yó tó- 'sow millet' yò-twě: 'millet planter' tó-пgó tó- 'sow millet' [tò-ngò]-twě: 'millet planter' モ́mné dǒ- 'suckle milk’ غ̀mnè-dwě: 'nurseling (infant who suckles)'
c -Càyě: from Ca-
kú-gó ká- 'shave head’ kù-kàyé: 'one who shaves heads'

The final ě: in an agentive mutates to a high vowel $\{i u\}$ before Animate $\mathrm{Pl}-m b o$. Monosyllabic -Cě:- becomes -Cì-mbó (xx4c), while all nonmonosyllabic agentives have $u$, which is syncopated after an unclustered medial sonorant. Nevertheless, -mbó is always +ATR, harmonizing with the underlying ě: rather than with preceding stem vowels, as seen in 'buyers' and 'water carriers' with -ATR penults (xx4a). Singular agentives of type -Cwě: recover their underlying $s$ or $o(\mathrm{xx} 4 \mathrm{~b})$.
(xx4) singular agentive plural agentive gloss
a. from bisyllabic final syncopating (medial unclustered sonorant)

| wà:-wálè | wà:-[wál-mbò] | 'farmer(s)' |
| :--- | :--- | :--- |
| [kà-kàl]-[ká-lè:] | [kà-kàl]-[ká-l-mbò] | 'liar' |
| kù-kàyé | kù-[kày-mbó] | 'one who shaves heads' |
| nonsyncopating |  |  |
| èbì-Ébè | èbì-[żbù-mbó] | 'buyer(s)' |
| ìnjè-kj̀bé | ìnjè-[kj̀bù-mbó] | 'water carrier(s)' |
| zòbù-zòbé | zòbù-[zòbù-mbó] | '(fast) runner(s)' |
| yùlùgù-bùmbé | yùlùgù-[bùmbù-mbó]'fortune-teller who reads fox tracks' |  |

b. from -Cwě:
yò-twě: yò-[tòy-mbó] 'millet planter(s)'
غ̀mnè-dwě: $\quad$ èmnè-[dòy-mbó] 'nurseling(s)'
c. from -Cě:

| kj̀nḋ̀-ně: | kj̀ndj̀-[nì-mbó] | 'beer drinker(s)' |
| :--- | :--- | :--- |
| jè-jě: | jè-[jì-mbó] | 'dancer' |

Plurals with unsyncopated stem-final u after a cluster or an obstruent are [zòbù-gò]-[zòbùmbó] '(fast) runners', ìnjè-[kj̀bù-mbó] 'water-carriers', and kòr̀̀-[màdù-mbó] 'cowry-
tossers'. Plurals with syncopated stem-final /u/ after an unclustered sonorant are sàn-[sàn-bó] 'Muslims', ìm-[ìm-bó] ‘stutterers', and èdè-[làl-mbó] ‘midwives’.

### 5.1.5 Compound deverbal instrument or locative nominals of type [ǹ v̌-ŋgó]

Instrument nominals without compound initials are covered in §4.2.3. The verb stem appears in $\{\mathrm{LH}\}$-toned form with final é: in the plural (not always elicitable), becoming $u$ with suffix - $\eta g o ́$ in the singular. There is no ATR harmony between these final and suffixal vowels on the one hand and any stem vowels in preceding syllables.

Most compounds of this type denotes instrument. 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.
(xx1) Compound deverbal instrument nominals
noun plus verb instrument gloss
a. initial is noncognate noun

| nonsyncopating |  |  |
| :---: | :---: | :---: |
| İn bùbó- 'brush teeth' | ìn-[bùbú-пgó] | 'toothbrush, chewstick' |
| ér ${ }^{n}$ é tégírí' 'strain s. ash' | èr ${ }^{n}$ Ė-[tèggùrú-ทgó] | 'soda-ash filtering pot' |
| kángá dàgáa- 'lock door' | kàngà-[dàgú-ทgó] | 'door lock(n.)' |
| lă: gàgá- 'rub foot' | cìn là:-[gàgú-пgó] | 'stone (pumice) to rub scaly skin on the feet' |
| syncopating after unclustered medial sonorant |  |  |
| gǒ: zìyÉ- 'scoop embers' | gò:-[zǐy-пgó] | 'shard to carry embers' |
| $C v$-extended as Cřy- |  |  |
| ínjé dǐ- 'bathe' | ìnjè-[dǐy-ngó] | 'outhouse for bathing' |
| àdé tá- 'shoot bird' | màrnà àdì-[tǎy-ทgó | 'slingshot' (plastic bird-shooter) |
| kòró yǎy- 'play b. game' | , kòrò-[yǎy-пgó] | 'board game' |
| $C v$ :- extended as $C$ v̀-lúgǒ: pé:- 'strike fire' | $g o ̀:-[p e ̀-l u ́-\eta g g o ́] ~$ | 'flint lighter' |
| b. initial is cognate nominal sùgǎ: súgó- 'defecate' | sùgà:-[sùgú-ทgó] | 'area for defecating' |

'Flint lighter' is based on the original form of the verb pé:-, namely *pélé- (several Dogon cognates $p \varepsilon ́ r \varepsilon ́-$ or $p \dot{\varepsilon} 1 \varepsilon$-). See the comments on agentives of Cv :- verbs in $\S 5.1 .4$ just above.

The compound type described in this section, with $\{\mathrm{LH}\}$-toned final, differs from another with $\{\mathrm{H}\}$-toned final and the same -ŋgó suffix, see just below.

### 5.1.6 Initial-headed nominals of type [ǹ v́-ŋgó]

This type superficially resembles the one described in the preceding section. However, this time the final (with suffix $-\eta g \sigma^{\circ}$ ) is $\{\mathrm{H}\}$-toned. Semantically, the initial often denotes the logical head (rather than a prototypical object), so the final functions like an adjectival modifier.

Typical examples of this type are in (xx1a). Those in (xx1a) denote spatial configurations (fork or intersection in road) or times of day, but there is very little difference between e.g. 'rising sun' and 'sunrise' or between 'forking road' and 'fork in road'. 'Poisoned' in (xx1c) has an additional morpheme -sú-.
(xx1) compound gloss verb
a. ordinary

| kòrrò-[gáy-ngó] | 'sickle' | gǎ- 'cut w. sickle' |
| :--- | :--- | :--- |
| ìnjè-[ná-ngó] | 'water to drink' | né- 'eat, drink' |
| tàbà-[síndé-ŋgó] | 'snuff tobacco' | síndé- 'sniff (tobacco)' |

b. positions
òdùbà:--[zágíl-é:-ŋggó]‘fork, intersection' zàgíl-í:- ‘(road) fork or form intersection'
ùdù-[tùmbú-ŋgó] 'sunrise' túmbú- '(sun) rise
ùdù-[pìlí-ngó] 'sunset' pílé- '(sun) set'
c. -sú-ŋggó

Wàrà ná-m-sú-ŋgó 'poisoned spear’ ná-mí- 'cause to drink (i.e. apply liquid poison')
àr ${ }^{n}$ à-[1́lá-ygó] 'time of year when rains taper off'
̀̀bàm-nàygó ("sit-stay.up") 'night of 27th Ramadan'
̀̀bàm-[này-gó] ("sit-stay.up")

### 5.1.7 Possessive-type compounds [ $\overline{\mathrm{n}} \mathrm{n}]$, [ $\overline{\mathrm{n}} \hat{\mathrm{n}}]$, [ $\overline{\mathrm{n}}$ ń], and/or $[\overline{\mathrm{n}} \mathrm{n}]$

This compound type may have the same tone contours as possessor-possessed combinations. Typically the initial has its regular tones, while the final has the tone contour of a possessed noun, i.e. $\{H L\}$ or all-low depending on the language.

In lexical elicitation, this pattern may appear the first time the informant utters the compound. Sometimes the informant will later repeat it with the [in $\bar{n}]$ pattern, which is typical of more lexicalized compounds.

It is possible that "possessive-type compound" and "possessor-possessed" are not always distinguishable. In the compound, aside from the fact that the "possessor" is usually fixed, it may be that (tono-)syntactic behavior is different from that of the true possessives. Try adding an adjective, or a "true" possessor. Same forms and tones as with possessorpossessed plus an adjective or a second possessor?

### 5.1.8 Compounds with $\eta \eta \eta$ 'child' (and $\eta \eta \eta ~ ' f r u i t ')$

sàgàrà-íyél\-úlè 'able-bodied man'
gárí:bù, gàrì:bù-èdé 'beggar child'

Compounds whose final is the term for 'child'.
In some languages, 'child' also used for 'fruit of $X$ ' and similar terms, where $X$ is a tree or other plant sp., and for 'small item associated with $X$ ', where $X$ is a (relatively large) implement. Other languages have a distinct term for 'fruit'.

Flora-fauna (esp. bird) terms may include frozen 'child' ending.

### 5.1.9 Compounds with 'man' (árnâ) and 'woman' (yă)

'Boy' and 'girl' terms are in (xx1). They are superficially similar but at least etymologically they are built up differently. ár"á-yغ̀ 'boy' consists of 'man' plus a compound final originally meaning 'child' (§5.xxx), while 'girl' consists of 'child' plus 'woman/female'. That is, $-y \grave{\varepsilon}$ in 'boy' and $-y \varepsilon ́$ in 'girl' are etymologically unrelated. However, the plurals of both 'boy' and 'girl' are (irregularly) related to the suppletive plural ùlé:(-mbò) 'children'. The -mbformative is related to Animate $\mathrm{Pl}-\mathrm{mbo} \sim-m b o$.

| (xx1) | Sg | Pl | gloss |
| :--- | :--- | :--- | :--- |
|  | ár ná-yè | ár ná-mb-ùlè | 'boy' |
|  | èdá-yé | ùlà:-mb-ílé | 'girl' |

Mention adjectives 'male' and 'female' (e.g. after animal terms).
'woman' noun often has irregular forms as a compound initial (try 'young adult woman', 'old woman', 'woman who has just given birth', 'new bride'). This may be distinct from the form used in less lexicalized combinations like 'pretty woman' and 'three women'.
comment on 'man' in similar combinations, even if regular.
Are 'boy' and 'girl' frozen compounds? Give sg and pl for them.

### 5.1.10 Compounds with bàyá 'owner' ‘

The final and head is based on the noun bàyá 'owner, master', plural bàyá-mbò. The compound initial is treated as possessor. so 'owner' drops tones.
(xx1)
a. úló bàyà-mbò
house owner-AnPl
'the house owner'
b. ándá bà̀à
start with 'homeowner', 'owner of shop', etc.
may also apply to 'master (of slave)'. Give uncompounded form as in 'I do not have a master'.

May also compete with Characteristic derivative (Chapter 4). E.g. e.g. 'hunchback' = 'owner of hump'.
5.1.11 Gentilic compounds with ${ }^{\text {L }}$ nè 'person', plural ${ }^{\mathrm{L}} b \grave{\text { : }}$

Village names can be followed by ${ }^{\mathrm{L}}$ nè, possessed form of $n e \check{c}$ 'person', to form a gentilic 'resident of X' or 'person originally from X'. Compare English New Yorker, Floridian, American, etc. Thus ză: ${ }^{n}$ (~ 弓ă:') 'Dianga', ză: ${ }^{n}$ L $\eta$ è 'person of/from Dianga'. The plural is ${ }^{\mathrm{L}}$ bò:, perhaps derived from the possessed form of nù-mbó 'people'.

These forms can also be used in combinations like 'top person/people' and 'bottom person/people', e.g. defined by living on the high plateau above the cliffs versus living on the sandy plains that stretch out from the base of the cliffs. témbém ${ }^{\mathrm{L}} b \grave{j}$ : 'top people', dùgó ${ }^{\mathrm{L}} b \grave{j}$ : 'bottom people'.

### 5.1.12 Loose and tight compounds with $\eta \eta g$ ('authentic', 'entire')

A term (e.g. ná;; dé:), perhaps transparently related to a term for 'mother', may be used as a compound final (or adjective?) in the sense 'authentic (not false) $X$ ', 'principal, main $X$ ' (e.g. for the main village of a cluster of villages), or 'entire $X$ (e.g. tree)', especially with terms like 'mango' where the unmarked referent is a fruit. 'Authentic' is especially relevant to species that resemble a less useful or prototypical second species ('jujube', 'indigo'). 'Authentic' or 'primary, main' may also apply to the main neighborhood of a dispersed village cluster.

Also indicate the term for 'false (i.e. nonprototypical) X', e.g. 'false jujube' or 'false wild-grape'. A few cases of this should turn up in the flora-fauna terminology. Typical expressions are of the type 'hyena's jujube', 'squirrel's peanut', 'herder's (wild) grape' on the one hand, and 'hibiscus' slave' on the other.

### 5.1.13 Natural-species compounds ( $X-m / n a:-X$ )

A few flora-fauna terms (for fauna, mostly grasshoppers and other insects but also one or two herbs or grasses) may have a structure X-ma:-X or X-na:-X, with a linking element separating two iterations of an element $X$ (which may or may not be identifiable with a regular lexical stem).

If this pattern is absent, say so.

### 5.1.14 Instrumental relative compounds ('oil for rubbing')

```
ínjé 'water'
    ìnjè ná-ygò 'drinking water'
    ìnjè dé-ngò 'bathing water'
nùnó 'oil'
    nùnò ná-ygò 'cooking oil'
    nùnò párè:-ngò 'rubbing oil'
```

5.1.15 Other phrasal compounds
any other complex, phrase-like compounds
e.g. 'it sold its mother to buy a tail' (for male whydah birds in breeding plumage)
5.1.16 Unclassified nominal compounds
any that do not fit into the above categories

### 5.2 Adjectival compounds

5.2.1 Bahuvrihi ("Blackbeard") compounds [ñ â] or [̄̄ nûm]

Correspond to English compounds with -ed, like 'big-bellied' or 'two-headed'. Final is either an adjective or a numeral. The whole compound describes a person or other entity that is characterized by the modified or quantified noun.

Often bahuvrihi compounds have an initial with its lexical tones, and a final with $\{H L\}$ contour overlaid. This is tonally different from a noun-adjective combination with the same lexical items ('big belly', 'two heads').

### 5.2.1.1 With adjectival compound final [ $\overline{\mathrm{n}} \mathrm{a}]$

A simple noun-adjective combination is expressed as $\mathrm{N}^{\mathrm{L}}$ Adj, e.g. kú-gó 'head’ plus jém-gò 'black' (inanimate singular) combine as kù-gò ${ }^{\text {L }}$ jém-gò '(a) black head'. Here 'black' agrees in intrinsic features (animacy, number) with 'head'. The corresponding bahuvrihi, functioning as an adjective modifying 'cow' (nă:), is (xx1). The compound initial 'head' takes its regular morphological and tonal form. The adjective is tone-dropped. 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: ${ }^{\text {L }}$ jémè '(a) black cow'.
(xx1) nà: ${ }^{\text {L }} \quad[k u ́-g o ́]-{ }^{\text {L }}$ jèmè
cow $^{\mathrm{L}}$ [head-InanSg]- ${ }^{\text {Lblack }}$
'a black-headed cow’

Further examples are in ( $\mathrm{x} x 2$ ), when the overall referent is animate singular.

| (xx2) | bahuvrihi | gloss | regular noun-adjective |
| :--- | :--- | :--- | :--- | gloss.

### 5.2.1.2 With numeral compound final [n̄ nûm]

Basic numerals ' 2 ' to ' 10 ' in TT begin with an animacy classifier (§4.6.1.2). For inanimates, the numerals are mostly already L-toned after the classifier yí-, exceptions being yítà:ndú ' 3 ', yí-nnǔm ' 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 $\{\mathrm{L}\}$. 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.
(xx2) bahuvrihi gloss regular noun-adjective gloss
a. numeral already L-toned

| [kú-gó]-[yí-llèy] | 'two-headed' | kú-ǵ yíllè̀y | 'two heads' |
| :--- | :--- | :--- | :--- |
| lă:-[yí-kùlè] | 'six-footed' | lă: yí-kùlè | 'six feet' |

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

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

c. numeral ' 1 '
jì̀̀̀ ${ }^{\text {L }}$ túrúú jirè̀L túr-gò 'one-eyed' 'one head'
Compare nà: ${ }^{\mathrm{L}}$ jìrè ${ }^{\mathrm{L}}$-túrú 'one-eyed cow' with nà: ${ }^{\mathrm{L}}$ túrè: 'one cow' and jìrè ${ }^{\mathrm{L}}$ túr-gò 'one eye'. nà: ${ }^{\text {L }}$ jìrè ${ }^{\text {L }}$-túrú 'one-eyed cow' can be pluralized: nà: ${ }^{\text {L }}$ jìrè ${ }^{\text {L }}$-túrú-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 (xx1), with the (head) noun in position zero.

| $(\mathrm{xx} 1)$ | -1 | preposed possessor, OR preposed demonstrative $(k u \hat{l})$ |
| :--- | :--- | :--- |
| 0 | (head) noun |  |
| +1 | modifying adjective |  |
| $+2,+3$ | possessor pronoun and/or cardinal numeral (in either order) |  |
| +4 | demonstrative pronoun |  |
| +5 | definite morpheme |  |
| +6 | universal quantifier ('all') |  |

Examples illustrating all pairwise orderings of adjacent elements are in (xx2).
(xx2)
type
x. $k$
ír $^{n}{ }^{\prime}-m b \grave{~}$
[def-n]
Def
goat-AnPl
'those (same) goats'
$\begin{array}{ll}\mathrm{x} . \text { á:mádú }^{\mathrm{L}} \mathrm{I}_{\mathrm{r}}^{\mathrm{n}} \mathrm{i} \text {-mbò } & \text { [poss-n] } \\ \mathrm{A} & { }^{\mathrm{L}} \text { goat- } \mathrm{AnPl}\end{array}$
'Amadou's goats'
$\begin{array}{lrl}\mathrm{x} . & \text { ìr }{ }^{n} \mathrm{en}^{\mathrm{L}} & \text { jémè: } \\ \text { goat }{ }^{\mathrm{L}} & \text { black } & \text { [n-a }] \\ & \text { 'a black goat' } & \end{array}$


```
goat }\mp@subsup{}{}{L}\mathrm{ black-AnPl 1SgPoss.AnPl-AnPl
'my black goats'
```



[goat-AnPl AnPl-five] ${ }^{\text {L }}$ Prox-AnPl
'these five goats'

| x. ìr ${ }^{n i}-m b \grave{j}^{L}$ <br> goat-AnPl ${ }^{\mathrm{L}}$ |  | j-bs | $p \underline{u} \rightarrow$ | [n-dem-'all'] |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Prox-AnPl | all |  |
| 'all these goats' |  |  |  |  |


| x. gàndà ${ }^{L}$ <br> place ${ }^{\text {L }}$ | kú | ǹ | [n-dem-def] |
| :---: | :---: | :---: | :---: |
|  | DiscDef | Def |  |
| 'that (sa |  |  |  |

For optional inversion of adjectives and numerals under certain conditions, see §6.4.2.
'each' (distributive quantifier) usually combines with a simple noun (or noun plus adjective): 'each person', 'each big house'. If it occurs later in the NP, it usually means 'each of ...', as in 'each of the three women'

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

NPs without an overt noun. Which of the following are possible? Anything unusual about the form?

```
adjective ('a red one')
numeral ('three')
demonstrative ('this', 'that')
each'
'all'
```

Give examples in sentences.

Independent Plural (bé) may be identical to a $3 P l$ (or 2Pl) pronoun, so the issue may be moot.

### 6.1.3 Bifurcation of relative-clause head NP

If the head $N P$ is clause-internal, the late-NP elements usually appear after the verb, perhaps well-separated from the internal part of the NP. This might perhaps be modeled syntactically by having a Rel node between the NumP and the determiner node, but this would require fairly strange deletions.

Internal portion usually Poss plus NumP, i.e. maximally Poss N-Adj-Num.
Postverbal part usually Dem-Plural-'all'/'each'
Can numerals sometimes appear after the verb?
If postnominal pronominal possessors present, where do they occur?
Cross-ref to fuller discussion, with examples, in chapter on Relativization

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

Leaving possessors 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 control tone-dropping on preceding words within the NP. Numerals and 'all' do not interact tonosynactically with other words, except that numerals are targeted by a controller (a demonstrative) to their right. Representative outputs are given formulaically in ( $\mathrm{x} x 1$ ), with superscripted ${ }^{\mathrm{L}}$ on the right edge indicating that the word or word-sequence in question has dropped all tones to $\{\mathrm{L}\}$ under the control of the following word. Words without ${ }^{\mathrm{L}}$ are tonally independent, i.e. show their lexical tones. The final word is always tonally free.
(xx1) N
$\mathrm{N}^{\mathrm{L}}$ Adj
[ $\mathrm{NA}_{\mathrm{Adj}}{ }^{\mathrm{L}}$ Adj
N Num
$\mathrm{N}^{\mathrm{L}}$ Adj Num
$\mathrm{N}^{\mathrm{L}}$ Dem
[ N Adj] ${ }^{\mathrm{L}}$ 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 occur in the relevant sections below. In (xx2) we see that adjectives and demonstratives control tone-dropping on preceding words. The noun is the usual target, but an adjective is also tone-dropped before another adjective ( $\mathrm{x} x 2 \mathrm{~b}$ ) or before a demonstrative (xx2d). 'Sheep' is $\{\mathrm{H}\}$-toned pédé lexically'.
(xx2)
a. pèddè ${ }^{\mathrm{L}}$ bìné:
sheep ${ }^{\mathrm{L}} \quad$ big.AnSg
'a big sheep'
b. [pèddè bìnè:] ${ }^{\mathrm{L}}$ jémè:
[sheep big] black
'a big black sheep'
c. pèddè ò-ń
sheep ${ }^{\mathrm{L}} \quad$ Prox-AnSg
'this sheep'
d. [pèddè bìnè:] $]^{\mathrm{j}}$-ńm
[sheep big] ${ }^{\mathrm{L}} \quad$ Prox-AnSg
'this big sheep'

Numerals and 'all' do not control tone-dropping on preceding words. A numeral is itself tonedropped (along with preceding words) when followed by a demonstrative (xx3c). 'All' cannot be followed by a demonstrative.

| a. | pédù-mbò | bú-tà:ndú |
| :--- | :--- | :--- |
|  | sheep-AnPl | AnPl-three |
|  | 'three sheep' |  |

b. pédù-mbò pú $\rightarrow$
sheep-AnPl all
'all (the) sheep'


## 'these three sheep'

If Adj-Num Inversion occurs in the language, does the N-Num-Adj order result in [N.L Num.L Adj]?

If there is an 'each' quantifier, does it control tone-dropping? What about ' $N$ Dem each' ?

### 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 the 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 not fully transparent.

Inalienable possession: kin terms and a few similar relationship terms ('friend'), which may differ in form from other possessed NPs (alienable).

When the possessor is nonpronominal, it precedes the possessed NP in both alienable and inalienable possession. Usually no Possessive morpheme (cf. English 'of') between possessor and possessed, but Jamsay alienables do have such a morpheme (possessor mà possessed).

When the possessor is pronominal, there may be differences between inalienable and alienable. Sometimes pronominal possessors are postnominal for alienable, but prenominal for inalienable possession. Or all pronominal possessors may be post- or prenominal, but differ in form.
are possessors ever controlloed tonosyntactically by other elements? Try the following:
a) 'your wicked uncle' (i.e. an inalienable with an adjective and with a preposed pronominal possessor that is otherwise H-toned). In several languages a pronominal inalienable possessor is in the domain controlled by an adjective or other postnominal controller, resulting in [PronPoss.L N.L Adj]
b) 'Seydou's wicked uncle'; only Jamsay is known to include a nonpronominal inalienable possessor in the domain controlled by a postnominal controller, resulting in [Seydou.L uncle. L bad.
c) 'your/Seydou's big house'; no cases known where a preposed alienable possessor is in the domain controlled by a postnominal controller
d) various postnominal pronominal possessors (including at least one $H$-tone element) followed by a demonstrative or relative operator. Here the domain of tone-dropping may include just the appositional or classifying element X like 'thing' in e.g. [house [my thing]], or it may be coextensive with the pronominal possessor (especially when 'my thing' is a fused, unsegmentable form), or it may extend farther left to the possessed noun (or its expansion). I.e. the options are [N [Pron X.L]], [N PronPoss.L], and [N.L PronPoss.L].

### 6.2.1 Alienable possession

### 6.2.1.1 Nonpronominal NP as preposed alienable possessor

A preposed possessor NP of an alienable noun (animal, house, etc.) controls tone-dropping to $\{\mathrm{L}\}$ 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 (xx1), the lexical form of the possessed noun is shown in parentheses.
(xxl)
a. á:mádù
${ }^{\mathrm{L}} p e ̀ d d e ̀$
A
${ }^{\mathrm{L}}$ sheep
'Amadou's sheep-Sg' (péddè)
b. [mí ${ }^{\mathrm{L}}$ bà $] \quad{ }^{\mathrm{L}} \mathrm{i} n j \grave{\varepsilon}$ :
[1SgPoss ${ }^{\mathrm{L}}$ father] ${ }^{\mathrm{L}} \mathbf{d o g}$
'my father's dog' (injě:)
c. $\left[n \grave{\varepsilon}^{\mathrm{L}} \quad \grave{j}-m ́\right] \quad{ }^{\mathrm{L}} \mathrm{u} 1 \nmid o ̀$
[person ${ }^{\mathrm{L}}$ Prox-AnSg] ${ }^{\text {Lh}}$ house
'this person's house' (úló)

### 6.2.1.2 Pronominal alienable possessors

A pronominal possessor for an alienable (i.e. anything but a kin term) is postposed, following any modifying adjective or numeral but preceding a demonstrative.
(xx1)
a. ùlò ${ }^{\mathrm{L}}$
bìné:
$W \varepsilon ̌:$
house $^{\mathrm{L}} \quad$ fat.InanPl $\quad$ 1SgPoss.InanPl
＇my big houses＇


The pronominal originally functioned as possessor of a light noun specified for animacy and number（＇critter＇，＇critters＇，＇thing＇，＇things＇）in apposition to the possessed NP．These light nouns have long since evolved into possessive classifiers．The internal segmentation of the pronoun－classifier combination is now rather opaque．Inanimate plural and animate singular are identical for all pronominal possessors．A K／W distinction between Inanimate $\operatorname{Sg}(k-$ 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 $-m b O$ on the possessor：pédù－mbò wě：－mb̀̀＇my sheep－ Pl ＇．The -mbO is redundant and is sometimes omitted from the possessor；see ín－bò á－gá＇his goats＇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．xxx below．） The paradigms are in（ $\mathrm{x} x 2$ ）．

| （xx2） | category | InanSg | InanP1 | AnSg | AnPl |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Sg | kǒ： | Wě： | Wě： | Wě：－mbò |
|  | 1 Pl | í－gè | Í－gè | Í－gè | í－gè－mbò |
|  | 2 Sg | ú－wò | ú－wò | ú－wò | ú－wò－mbò |
|  | 2 Pl | $b i ́-g \dot{\varepsilon}$ | $b i ́-g e ̀$ | $b i ́-g e ̀$ | $b i ́-g e ̀-m b \grave{~}$ |
|  | 3 AnSg | kò－ń | Wغ̀－и́ | Wè－ń | wè－ń－bう̀ |
|  | 3 AnPl | bú－gò | bú－gò | bú－gò | bú－gj̀－mbj̀ |
|  | InanSg | kò－ń | Wغ̇－и́ | Wغ̀－и́ | $w \grave{\varepsilon}-1$ 亿́－mbゝ̀ |
|  | InanPl | $W \grave{\varepsilon}-\underline{1}$ | Wغ̀－ń | Wغ̀－ń | Wغ̀－ń－mb̀̀ |
|  | Logo／3R | á－gá | á－gá | á－gá | á－gá－mbò |

The third person $-n$ is expanded as $-n i ́$ (subject to lengthening and further tonal changes) in the 'it is' form with final L-tone ([úló kò-nî:] $=\varnothing$ 'it is his/her house') and in conjunctions with final dying-quail intonation (úló kò-ní.: ‘his/her house and ...').

The $\mathrm{K} / \mathrm{W}$ distinction in the 1 Sg and 3 Sg goes back to a distinction still made in some Dogon languages between *ko 'thing' and *ys 'things; critter; critters' (cf. yí- Inanimate Pl prefix with numerals), though some other data suggest an alternative reconstruction ${ }^{*}$ k 'things'. In forms with pronominal prefixes, it appears that the K and W forms have merged into one or the other of $-w \grave{\partial},-g \varepsilon ̀$, and $-g \dot{\partial}$, with the vowel adopting the back/front value of the prefixal vowel.

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

The $\{\mathrm{L}\}$ overlay controlled by a preposed nonpronominal possessor on a possessed noun ('Amadou's house') extends over a following modifying adjective as in 'Amadou's big house' (xxla). There is no clear indication that tone-dropping extends over a numeral following the noun. Most numerals have a H-toned classifying prefix and an already $\{\mathrm{L}\}$ toned stem. The prefix is not tone-dropped due to a possessor. This does not necessarily mean that the numeral stem is not tone-dropped. In most cases it is difficult to tell whether the possessor tone-drops the numeral, since most numeral stems are already $\{\mathrm{L}\}$-toned. However, if the optional animate plural -mbO is added to the numeral, the lexical tone is clearly audible, as in tà:ndú-mbò 'three' in (xx1b-c).
(xx1)

|  | ámàdù | ${ }^{\text {L }}$ /ùlò | $d \grave{\varepsilon}-\mathrm{g} g \grave{\varepsilon}]$ |
| :---: | :---: | :---: | :---: |
|  | A | ${ }^{\text {L }}$ [house | big-InanSg] |
|  | 'Amadou's big house' (úló, dé-ngq) |  |  |
|  | ámàdù | ${ }^{\text {L }}$ ùlè: | ně-tà:ndú-mbò |
|  |  |  | nĕ-tà:ndù |
|  | A | ${ }^{\text {L }}$ children | Human-six(-AnPl) |
|  | 'Amadou's six children' (ùlé:) |  |  |

c. ámàdù L[ùlè: mòdù-mbò] ně-tà:ndú-mbò ně-tà:ndù
A ${ }^{\text {L }}$ [children nasty-AnPl] Human-three(-AnPl)
‘Amadou's three nasty children' (mòdú-mbゝ̀)

In the combination Poss-N-Dem, only the noun is tone-dropped. The tone-dropping could be attributed to either the possessor or the demonstrative (or both), so the formula is Poss- ${ }^{\mathrm{L}} \mathrm{N}^{\mathrm{L}}$ Dem.

```
(xx2) ámàdù ' Lùlò }\mp@subsup{}{}{\textrm{L}}\quadmà-ý
    A Lhouse }\mp@subsup{}{}{\textrm{L}}\quad\mathrm{ Dist-InanPl
    'those houses of Amadou' (deictic)
```

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

| [ìr ${ }^{n}$ ìmbò | $w \underline{:} \cdot-m b \grave{j}]^{\text {L }}$ | mà-bó |
| :---: | :---: | :---: |
| [goat-AnPl | 1 SgPoss -An | Dist-AnPl |
| those goats of mine' (deictic) (wě:-mbj) |  |  |

### 6.2.2 Inalienable possession

### 6.2.2.1 Nonpronominal NP as preposed alienable possessor

Nonpronominal NP possessors are preposed, for inalienable as well as alienable nouns: á:mádú bà 'Amadou's father', parallel to á:mádú pèddè 'Amadou's sheep'. The possessed noun is tone-dropped in both cases.

However, if the nonpronominal possessor of a kin term is animate (i.e. human) singular, it is often resumed by a suffixed 3 Sg possessor form of the kin term: á:mádú bǎ-n 'Amadou's father', literally "Amadou father-his." Therefore the pure, unsuffixed, \{L\}-toned possessed noun is most reliably observed when the possessor is plural, as in ùlé: bà 'the father of the children', and its plural ùlé: bà-mbj̀ 'the fathers of the children'.

### 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 - $\boldsymbol{n}$ added directly to a $\{\mathrm{L}\}$-toned 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 (xx1).
(xx1) Preposed pronominal possessors with inalienable nouns
category form example with 'father'

| 1 Sg | mí |  |
| :---: | :---: | :---: |
| 1Pl | í | $i^{\text {L }}$ bà |
| 2Sg | ú | $u^{\text {L }}$ bà |
| 2P1 | bí | $b i{ }^{\text {L }}$ bà |
| 3 Sg | -ń~ -ní | $b a ̀$-í $\sim$ bà $-n i ́$ |
| 3Pl | bú | $b u{ }^{\text {L }}$ bà |

Logo/3Refl á á bà

3Sg -ń ~ -ní precedes Animate Pl $-m b O$, the only suffix that it co-occurs with: bà-ń-bò 'his/her fathers'.

All nonpronominal possessors control the usual $\{\mathrm{L}\}$ overlay on the possessum. Preposed pronominal possessors control $\{\mathrm{H}\},\{\mathrm{HL}\}$, or (apparent) $\{\mathrm{L}\}$ overlay on the possessum. The choice correlates with prosodic weight of the possessum. Monomoraic kin terms become ${ }^{\text {L }} \mathrm{C} \grave{v}$. Most bisyllabics become $\{\mathrm{H}\}$-toned. The only trisyllabic ('namesake'), and one of two vngv stems (with nonhomorganic ng) ('husband'), have $\{\mathrm{HL}\}$ with the H -tone limited to the initial syllable. In (xx2), X stands for any nonpronominal NP possessor ('Amadou', 'my father', etc.).
(xx2)
noun gloss
X's_
my $\qquad$ your-Sg_
a. $C_{v}$ possessed noun

| $b a ́$ | 'father' | $X^{\mathrm{L}} b a ̀$ | $m i ́$ |  |
| :--- | :--- | :--- | :--- | :--- |
| L $b a ̀ ~$ | $u^{\mathrm{L}} b a ̀$ |  |  |  |
| sá | '(man's) sister' | $X^{\mathrm{L}}$ sà | $m i{ }^{\mathrm{L}}$ sà | $u^{\mathrm{L}}$ sà |

b. $C v C v$ possessed noun

| nàr ${ }^{n a ́}$ | 'mother' | $X$ nàr $r^{n a ̀}$ | mí $^{\mathrm{H}}$ nár ${ }^{n a ́}$ | ú ${ }^{\mathrm{H}}$ nár ${ }^{n a ́}$ |
| :--- | :--- | :--- | :--- | :--- |
| lèdú | 'uncle $(\mathrm{MoBr})$ | $X$ lèdù | mí ${ }^{\mathrm{H}}$ lédù | ú ${ }^{\mathrm{H}}$ lédú |

c. heavy possessed noun (trimoraic)

| zè̀gé 'great-grandparent' |  | $X$ zèngè |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $X$ tòjjè | $m i{ }^{\text {HL }}$ tójjè | $u^{\text {HL }}$ tójjè |
| (plural tògù-mbó) |  |  |  |  |
| tógòrı | 'namesake' | $X$ tògə̀rı | mí ${ }^{\text {HL }}$ tógòrı̀ | $u^{\text {HL }}$ tóg ${ }^{\text {gr }}$ ¢ |

d. composite possessed noun $b a^{\mathrm{L}} d \varepsilon$ 'father's elder brother' $X^{\mathrm{L}}[b a ̀ ~ d \grave{\varepsilon}] \quad m i ́{ }^{\mathrm{HL}}[b a ́ d \grave{\varepsilon}]$ ú $^{\mathrm{HL}}[b a ́ d e ̀]$

The apparent L-tone on monomoraic kin terms may really be a downstepped H-tone. This is suggested by singular/plural alternations like mí ${ }^{\mathrm{L}}$ Sà 'my sister' and mí sá-mbò 'my sisters'. If this analysis is adopted, we should transcribe the singular as $m i ́ \downarrow{ }^{\downarrow}$ Sá.

### 6.2.2.3 Kin terms and similar relationship terms

Kin terms and certain other relationship terms treated as inalienable are listed in (xx1). The 1 Sg form is paralleled by the other categories with preposed possessors, while the suffixed 3 Sg presents some irregularities.
(xx1) gloss noun after NP $1 \mathrm{Sg} \quad 3 \mathrm{Sg}$
a. NP possessor not resumed by 3 Sg suffix

| 'father' | bá | $X^{\mathrm{L}} b a ̀$ |  | bà-ń |
| :---: | :---: | :---: | :---: | :---: |
| '(man's) sister' | sá | $X^{\mathrm{L}}$ Sà | $m i ́ n ~ L a ̀ ~$ | sà-ń |
| 'mother' | $n a ̀ r{ }^{n}$ á | $X^{\text {L }}$ nàr ${ }^{n}$ à | mí ${ }^{\mathrm{H}}$ nár ${ }^{\text {áa }}$ | nà-и́ |
| 'uncle' (MoBr) | lèdú | $X{ }^{\mathrm{L}}$ lèdù | mí ${ }^{\mathrm{H}}$ lédú | lèdì-ń |
| 'grandmother' | tèré | $X{ }^{\text {L }}$ tèrè | mí ${ }^{\mathrm{H}}$ téré | tèrè-и́ |
| '(woman's) brother' | Sàr ${ }^{\text {ná }}$ | $X^{\text {L }}$ Sàr ${ }^{n}$ à | mí ${ }^{\mathrm{H}}$ Sárráa | $s a ̀ r^{n}{ }_{\text {à-ń }}$ |
| 'same-sex elder sib' | dèré | $X^{\text {L }}$ dèrè | mí ${ }^{\mathrm{H}}$ déré | dèrè-ń |
| 'same-sex younger sib' | ǹdó | $X{ }^{\text {L }}$ rodò | mí ${ }^{\text {H}}$ ńdó | ǹdò-ń |
| 'husband' | òngó | $X^{\text {L }}$ ¢̀ngò | mí ${ }^{\text {HL}}$ óngò | òngò-ń |

b. NP possessor resumed by $3 \mathrm{Sg}-n ́$

| 'neighbor' | zú | $X^{\text {L }}$ Zù-ń |  | zù-ń |
| :---: | :---: | :---: | :---: | :---: |
| 'cross-cousin' | té: | $X^{\mathrm{L}}$ tè:-ńn | mí ${ }^{\mathrm{H}}$ té: | tè:-ń |
| 'sib-in-law' | gá: | $X^{\mathrm{L}} g$ à:-ń | mí ${ }^{\text {H }}$ gá: | gà:-ń |
| 'paternal grandfather' | pàpá | $X{ }^{\text {L }}$ pàpà-ń | mí ${ }^{\text {H }}$ pápá | pàpà-и́ |
| 'great grandfather' | zèngé |  | mí ${ }^{\text {H }}$ zéngé | zèngè-ń |
| 'grandchild' | tòjjé | $X^{\text {L }}$ tòjjè-ńn | mí ${ }^{\text {H }}$ tójjé | tòjjè-ń |
| 'parent-in-law' | òmlé: | $X^{\text {L }}$ òmlè:-ń | mí H ómlé: | òmlè:-ń |
| 'namesake' | tógòrò | $X^{\text {L }}$ tògòrò-ń | mí ${ }^{\text {HL tógòr }}$ ¢ | tògòrò-ń |
| 'friend' | àngé | $X^{\text {L }}$ àngè̀-ń | mí ${ }^{\text {Hángé }}$ | àngè-ń |
| 'great great grandfather' | kùmbó | $X{ }^{\text {L }}$ kùmbò-ń | mí ${ }^{\text {H }}$ kúmbó | kùmbò-ń |

```
'nephew/nice' (SiCh) sà-íyé X sà-ń yè mí sá-ìyè sà-ń yè
'co-wife' yà-lòwé X yà-lòwè-ń
'Mo's y. sister' nà sě: X nà sè: mí nár'á sègè
```

Animate plural -mbo $\sim-m b o$ can be added. This suffix follows the 3 Sg suffix.

$$
\begin{array}{lll}
\text { a. } & \text { mí } & \text { lédú-mbò }  \tag{xx2}\\
& \text { 1SgPoss } & \text { uncle-AnPl } \\
& \text { 'my (maternal) uncles' }
\end{array}
$$

b. lèdǐ-n-bò
uncle-3SgPoss-AnPl
'his/her uncles'

Treated as alienable, even in kinship contexts, are $\grave{\varepsilon} d \varepsilon ́$ 'child' and yă 'woman, wife',

Present a full list of kin terms plus any other relationship terms like 'friend' that constitute a special set of "inalienable" nouns. Give both unpossessed and possessed forms, which should differ in tones. A few may also differ segmentally (final vowel shifts, or a human Sg or Pl suffix occurs only in one of the forms).

List "kinship" terms that are not grammatically inalienable: perhaps 'child', 'wife' (= 'woman'), 'agemate', 'friend', 'co-wife', 'stepmother (= mother's co-wife)'.

### 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, and if the possessor is a preposed pronoun, otherwise H-toned, the possessor is included in the target domain of the adjective. Contrast (xx1a) with unmodified $m i ́{ }^{\mathrm{HL}}$ lédù 'my maternal uncle'. A nonpronominal possessor like 'Amadou' in (xx1a) is not tonedropped, and in such combinations the noun could be analysed as being tone-dropped by either or both the possessor and the adjective.
(xx1) a. [mì lèdù $]^{\mathrm{L}}$ mòdé: ì
$[1 S g P o s s ~ u n c l e] ~^{\mathrm{L}}$ nasty Def
'my nasty uncle'

```
b. ámàdù }\mp@subsup{}{}{\textrm{L}}lèdù̀ ' mòd\varepsiloń: \grave{̀
    A Luncle }\mp@subsup{}{}{L}\mathrm{ nasty Def
    'Amadou's nasty uncle'
```

Given that inalienable possessors have very limited control powers, confined to the noun at best, they certainly do not control tones on other postnominal modifiers. The numeral is (xx2a) is therefore tonally unaffected by the possessor. In (xx2b), we see that the special tone overlay controlled by pronominal possessors takes precedence over tone-dropping induced by the demonstrative. In (xx2c), the tonosyntax is subtle but it appears that the demonstrative tone-drops the immediately preceding numeral, which is outside of the domain targeted by the possessor

| a. | mí | lédù-mbò | ně-tà:ndù |
| :--- | :--- | :--- | :--- |
|  | ámàdù | lèdù-mbò | " |
|  | 1SgPoss / A | uncle-AnP1 | Human-three |
|  | 'my/Amadou's three uncles' |  |  |

b. mí ${ }^{\text {HL }}$ lédù mà m ń

1SgPoss ${ }^{\text {HL }}$ uncle Dist-AnPl
'that uncle of mine' (deictic)
$\begin{array}{llll}\text { c. ámàdù } & { }^{\mathrm{L}} \text { lèdù-mbò }{ }^{\mathrm{L}} & \text { jě-kùlè }{ }^{\mathrm{L}} & \text { mà-bó } \\ \text { A } & { }^{\mathrm{L}} \mathrm{uncle-AnPl}^{\mathrm{L}} & \text { Human-six }^{\mathrm{L}} & \text { Dist-AnPl } \\ & \text { 'those six uncles of Amadou's' (deictic) } & \end{array}$

The unusual suffixed 3 Sg inalienable possessor -ń~-ní is always added to the noun directly, and it may be followed by modifiers (often with final definite $\grave{n}$ ). In (xx3a), the adjective controls tone-dropping on the possessed noun, elsewhere lèdù-n. There is no tonal interaction between the possessed noun and the numeral in (xx3c).

| a. | lèdù-n ${ }^{\text {L }}$ | mò ${ }^{\text {cé: }}$ | ì |
| :---: | :---: | :---: | :---: |
|  | uncle-3 | nasty | Def |
|  | 'his/her nasty uncle' (lèdù-ń) |  |  |

b. lèdù-n ${ }^{\mathrm{L}}$ mà-ń
uncle-3SgPoss ${ }^{\text {L }}$ Dist-AnSg
'that uncle of his/hers' (lèdù-ń)
c. lèdú-mbò-ń ně-kúlé
uncle-AnPl-3SgPoss Human-six

## 'his/her six uncles'

### 6.2.3 Recursive possession

usually straightforward

```
'Seydou's dog's head' e.g. [[S dog.(H)L] head.(H)L]
    'my dog's head' e.g. [[1SgPoss dog.(H)L] head.(H)L]
    or [dog 1SgPoss] head.(H)L]
```

```
'Seydou's father's uncle' e.g. [S father.(H)L] uncle.(H)L]
'my father's uncle' e.g.[1SgPoss father.(H)L] uncle.(H)L]
    or [fath
```


### 6.2.4 Absent possessum

If the possessum is not expressed, a possessive classifier is sufficient. With pronominal possessors, the regular postnominal alienable possessor forms are used. Thus péddè wě: 'my sheep-Sg', with 1 Sg possessor in animate singular form, can be simplified to $w \varepsilon ̌$ : 'mine'. Forms of this type can also be used for (unspoken) kin categories, e.g. 'mine' meaning 'my sister'.

When the possessum is overt, a nonpronominal possessor is simply preposed, with no possessive morpheme. When the possessum is omitted, a classifier takes its place.
(xx1)
singular plural

| animate | $X w \grave{\varepsilon}$ | $w \grave{\varepsilon}-m b \grave{\jmath}$ |
| :--- | :--- | :--- |
| inanimate | $X k \grave{\jmath}$ | $X w \dot{\varepsilon}$ |

An example is ( $\mathrm{x} x 2$ ). The preceding discourse had been about teeth.
(xx2) [[tă: $W \grave{\varepsilon}]$ jèrí] jìn- $\varnothing$
[[hyena Poss.InanPl] look.at.Imprt] say.Pfv-3SgSbj
'He said, "look at hyena's (=teeth)!' (2015-02 01:12)

### 6.3 Core NP (noun plus adjective)

### 6.3.1 Noun plus regular adjective

The order is noun-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 Sg and Inanimate Pl is covert. The noun is tone-dropped before the adjective. Besides úló, the nouns used here are úndú-gó (plural úndé:) 'calabash' and ír ${ }^{n}$ è: (plural îr $\left.{ }^{n i}-m b j ̀ \sim ~ i ́ n-b j\right) ~ ' g o a t ' . ~$
(xx1)
a. ùlò
$d \dot{\varepsilon}-\eta g \varepsilon \dot{\varepsilon}$
'big house'
ùlò ${ }^{\mathrm{L}} \quad d \hat{\varepsilon}$
'big houses'
b. ùndù-gó ${ }^{\mathrm{L}}$ sé- $\mathrm{\eta} g \dot{\varepsilon}$
'good calabash'
ùndè: ${ }^{\mathrm{L}} \quad s \varepsilon ́$
'good calabashes'
c. ìr ${ }^{n}$ è: kàndá 'new goat'
ìn-bj̀ ${ }^{\text {L }}$ kàndà-mbó 'new goats'
$\begin{array}{ccc}\text { d. } \begin{array}{c}\text { ùlò } \\ \text { " } \\ \text { " }\end{array} & \text { kàndá } & \text { 'new house' }\end{array}$

The end of the noun is optionally reduced before the adjective. This reduction can take the form of omitting an Inanimate Sg or Animate Pl suffix (in ${ }^{\text {L }}$ kàndà-mbひ), or reducing e.g. final long $e$ : to a short high vowel as though before a suffix (ùndùu ${ }^{\mathrm{L}} s \hat{\varepsilon}$ ).

### 6.3.2 Adjective gàrá: 'certain (ones)'

gàrá: is used, often in two parallel phrases, to divide a group into subsets (or individuals), or to divide a mass into portions. The most common form is Animate Pl gàrà-mbó (xx1a). Inanimate Pl gàrá: can be used with masses ('water', 'sugar') that are treated grammatically as plurals in TU (xx1b). Singular (animate or inanimate) gàrá: occurs in nè ${ }^{\mathrm{L}}$ gàrá: 'a certain person' and dàmbà ${ }^{L}$ gàrá: 'a certain village' (note the tone-dropped noun). gàrá: can also be used as an adverb 'sometimes' (by extension 'maybe'), presumably reduced from a nounadjective phrase with a noun like 'time' (xx1c).
(xx1)

certain-AnPl Exist be-3P1Sbj
'Some (people) have left, some (others) are (still) around.'
b. gàrá: yàm-â:-y, gàrá: síyÉ-Ẁ bù- $\varnothing$
some be.ruined-Pfv1a-3SgSbj, some good-xxx be-3SgSbj
'Some (of it) is spoiled, some (the rest of it) is good.
c. gàrá: ìgó bírà-m-nغ̀-y ${ }^{n}$, gàrá: má: bírà-m-nغ̀-y ${ }^{n}$
some here work-Ipfv-1P1Sbj,some there work-Ipfv-1P1Sbj
'Sometimes we work here, sometimes (=at other times) we work over there.'

### 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 keeps its lexical tones and the noun and nonfinal adjectives are tone-dropped.
(xx1)
a. [ùlò
$d \grave{\varepsilon}-\eta g \grave{\varepsilon}]^{\mathrm{L}} \quad$ píl-gò
[house big-InanSg] ${ }^{\text {L }} \quad$ white-InanSg
'(a) big white house' (úló, $d \varepsilon$ - $\eta g \varepsilon$ )
b. [nà:(-mbò) bìn-bòj] jém-b̀̀
$[\operatorname{cow}(-A n P l) \quad \text { fat-AnPl }]^{\mathrm{L}} \quad$ black-AnPl
'big (=fat) black cows' (nǎ:; nà:-mbó, bǐn-bつ̀)

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

### 6.3.3.2 Adjectival intensifiers

Brief reference here; full coverage in Chapter 8 under expressive adverbials.

### 6.3.3.3 'Good to eat'

A verbal noun may be added to an adjectival predicate (xx1).

| (xx1) | $[k a ̀: ~$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | L | j-ḿ $]$ | kúbú-lé | $\hat{\varepsilon} l=\varnothing$ |
|  | [grasshopper ${ }^{\mathrm{L}}$ | Prox-AnSg] | eat.meat-VblN | sweet $=\mathrm{it}$. is |
|  | 'This grasshopper (species) is good to eat.' |  |  |  |

### 6.4 N(-Adj) plus numeral

### 6.4.1 Ordinary numerals

A core NP (noun, or noun plus one or more adjectives) may combine with a following numeral. Numerals from ' 2 ' to ' 10 ' have a special set of prefixes to agree with the animacy (human, animate, inanimate) of the core NP (§4.7.1.2). The Human prefix is identical to ně 'person', and is optional after a plural-marked noun (xx1a). The Animate and Inanimate prefixes are used more systematically ( $\mathrm{x} 1 \mathrm{lb}-\mathrm{c}$ ). There is no tonal interaction between the numeral and the preceding core NP. Plural noun nù-mbś 'people' is omitted in favor of the Human prefix (xx1d).
(xx1)
a. yà-mbś (ně-)nǔm
woman-AnPl (Hum-)five
‘five women'
b. č̌n yí-nǔm
stone InanPl-five
‘five stones’
c. nà:(-mbj̀) bǐn-bj̀ bú-nǔm
$\operatorname{cow}(-\mathrm{AnPl}) \quad$ fat-AnPl AnPl-five
'five fat cows'
d. ně-nŭm

Hum-five
'five people’

When a NumP is itself in a tone-dropping position (as when followed by a demonstrative), tone-dropping applies simultaneously to the numeral and to the core NP.
with following demonstrative (and Definite morpheme?), or as head of relative, the core NP and the numeral are (simultaneously, and independently) tone-dropped.
when NP is head of relative clause, numeral remains with head NP inside the clause rather than being shifted to post-participial position.
some languages allow numerals to have a "relay" function, allowing a post-NumP pronominal possessor to control $\{L\}$ tones on the other words in the NumP. In this case, either the numeral itself appears with $\{L H\}$ contour, analysable as a continuation of the broader $\{L\}$ contour plus an extra final H-tone, or it appears with its lexical tones.

### 6.4.2 Adjective-Numeral Inversion

In the presence of a determiner, possessor, or relative operator (i.e. as head of a relaive clause), an adjective and a numeral are optionally inverted. In the absence of such a reference-restricting element, (xxla) has fixed N-Adj-Num order. When a demonstrative is added, either N -Adj-Num-Dem (xx1b) or N-Num-Adj-Dem (xx1c) is possible.
(xx1)
a. ùlò
$d \varepsilon ́$
yínǔm
house $^{\mathrm{L}}$ big.InanPl InanPl-five
'five big houses'
b. [ùlò
$d \grave{\varepsilon}$
yìnùm ${ }^{\text {L }}$
yí
[house big.InanPl
InanPl-five] $^{\text {L }}$
DemDef.InanP1
'those five big houses'
c. [ùlò
yìnùm
$d \grave{\varepsilon}]^{\mathrm{L}}$
yí
[house InanPl-five
big.InanPl] ${ }^{\text {L }}$
DemDef.InanP1
[= (b)]

The variant ordering of adjective and numeral in (xx1b-c) suggests that in the presence of a reference restrictor, a numeral is treated syntactically (at least for linearization purposes) as an adjective. It was noted above that in N -Adj-Adj combinations, there is no fixed order of the two adjectives (exept when a N -Adj phrase is lexicalized). When a second adjective is added to ( $\mathrm{xx} 1 \mathrm{~b}-\mathrm{c}$ ), all six possible orders of the adjectives and the numeral are possible ( $\mathrm{x} x 2$ ). The noun and all three following modifiers are tone-dropped.
(xx2)

| a. | [ùlò $\quad$ bìnè: | yì-nùm | pìlè:] ${ }^{\mathrm{L}} \quad$ yí |  |
| :--- | :--- | :--- | :--- | :--- |
|  | [house | fat.InanPl | InanPl-five | white.InanPI] ${ }^{\mathrm{L}}$ DemDef.InanPl |
|  | 'those five big white houses' |  |  |  |

b. ùlò bìnè: pil̀è: yìnùm yí
c. ùlò pìlè: yì-nùm bìnè: yí
d. ùlò pìlè bìnè: yì-nùm yí
e. ùlò yì-nùm pillè: bìnè: yí
f. ùlò yì-nùm bìnè: pìlè: yí

### 6.5 NP with determiner

### 6.5.1 Prenominal ko 'the (afore-mentioned)'

(Add tone, variably H or L)
ko (ku) before a noun is discourse-definite ('that [same] ...')
Is there a tonal distinction (on the following noun) between true Nonhuman or Inanimate possessor ko 'its' and this demonstrative-like ko?

Can this (originally possessor) element now co-occur with an authentic possessor (NP or pronoun)? If so and if both are prenominal, in which order?

There is potentially a bracketing issue, since a NP-initial ko could have scope over either the immediately following possessor, or over the entire possessed NP. It may be possible to have double ko marking
definite ko plus possessor:
[ko [Seydou X.(H)L] 'that X of Seydou's
[ko [ko X.(H)L]] 'that $X$ of it(s)' (inner ko is possessor)
recursive possession with two definite ko's
[ko [[ko X(H)L] Y.(H)L]] 'that (same) Y of that (same) X'

### 6.5.2 Postnominal demonstratives

A postnominal demonstrative pronoun (for the forms, see §4.4.1.2) follows a core NP, a NumP, or a possessed NP. In (xx1), it follows a core NP, i.e. a noun (xxla) or a N-Adj combination (xx1b). The demonstrative controls tone-dropping on at least the final word of the core NP. In (xxlb) we cannot determine whether the adjective or the demonstrative controls tone-dropping on the noun. The forms without the demonstrative are given in parentheses.
$(\mathrm{xx} 1)$ a. ùlò ${ }^{\mathrm{L}} \quad$ yí
house $^{\mathrm{L}} \quad$ DemDef.InanP1
'those houses' (úlơ)
b. $[u ̀ l o ̀ ~ d \grave{\varepsilon}]^{\mathrm{L}} \quad y i ́$
[house big.InanPl] ${ }^{\mathrm{L}}$ DemDef.InanPl
'those big houses' ( $\left.\grave{u} 1 \grave{o}^{\mathrm{L}} d \hat{\varepsilon}\right)$

In ( $\mathrm{x} x 2$ ), the demonstrative follows a NumP. Both the core NP (or at least its final word) and the numeral are tone-dropped under the control of the demonstrative.
(xx2)
a. [ùlò yìnùm] ${ }^{\mathrm{L}} \quad$ yí
[house InanPl-five] ${ }^{\mathrm{L}} \quad$ DemDef.InanPl
'those five houses' (úló yí-nǔm)
b. [ùlò bìnè: yìnùm] ${ }^{\mathrm{L}}$ yí
[house fat.InanPl InanPl-five] ${ }^{\mathrm{L}} \quad$ DemDef.InanP1
'those five big houses' (ùlò bìné: yí-nǔm)

See §6.4.2 above for optional reordering of the adjective and numeral in examples like (xx2b).

In (xx3), the demonstrative follows a possessed NP. In this combination, the demonstrative does not control tones on preceding words. Instead, the demonstrative is itself tone-dropped, e.g. kù for kú. This happens whether the possessor is pre- or postposed to the core NP.
a. úló
$k o \check{:}$
${ }^{\mathrm{L}}$ kù
house $\quad 1$ SgPoss.InanSg ${ }^{\mathrm{L}}$ DemDef.InanSg
'that house of mine'
b. [mí
${ }^{\mathrm{H}}$ bá ${ }^{\mathrm{L}}{ }^{\text {ùlò }}$
${ }^{\mathrm{L}}$ kù
[1SgPoss ${ }^{H}$ father] ${ }^{\mathrm{L}}$ house ${ }^{\mathrm{L}}$ DemDef.InanSg
'that house of my father's'
c. ùlò bìné: Wと̌: ${ }^{\mathrm{L}}$ yì
house ${ }^{\mathrm{L}}$ fat.InanPl 1 SgPoss.InanP1 ${ }^{\mathrm{L}}$ DemDef.InanP1
'those big houses of mine'
d. nà:-mbó bú-tà:ndú wě:-mbò ${ }^{\mathrm{L}}$ bù:
cow-AnPl AnPl-three 1 SgPoss.AnPl-AnPl ${ }^{\text {L }}$ DemDef.AnPl
'those three cows of mine'

For demonstratives following the verbal participle in a relative clause, see §14.xxx.

When a NP functioing as head of a relative clause contains a demonstrative ('this dog that you see'), after bifurcation the demonstrative is separated from the head NP within the clause, and appears (along with other late-NP elements) after the verbal participle. See chapter 14 on relativization.

### 6.5.3 Postnominal definite morpheme (ì)

Definite ì may follow a simple noun (xxla), a N-Adj core NP (xxlb), a NumP (xxlc), a possessed NP (xx1d-e), or a demonstrative (xx1f). ì has a single invariant form, not agreeing with the NP in animacy or number. It has no effect on the tones of preceding words.

| a. úló | ì |
| :--- | :--- | :--- |
| house | Def |
| 'the house', 'the houses' |  |


| b.ùlò$\quad$ bǐn-g̀̀ | ì |
| :--- | :--- | :--- |
| house $^{\mathrm{L}}$ | fat-InanSg |
| 'the big house' | Def |

c. úló yí-tà:ndú ì
house InanPl-three Def
'the three houses'
d. mí ${ }^{\mathrm{H}} b a ́ \quad$ ì

1SgPoss ${ }^{H}$ father Def 'my father (definite)'
e. nă: $\quad$ ह̌̌: $\grave{~}$
cow 1SgPoss.AnSg Def
'my cow (definite)'
f. nà: ńné ì
cow DemDef.AnSg Def
'that cow (definite)'

For ì after a participle in a relative clause, see §14.xxx.

Head NPs of relative clauses are bifurcated. Definite morphemes, like demonstratives and other late-NP elements, occur after the verb(-participle), perhaps some distance from the clause-internal part of the head NP; see §14.6.

### 6.6 Universal and distributive quantifiers

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

The common universal quantifier ('all') is $p u ́ \rightarrow$, a regional form (also in Fulfulde and many Dogon languages). The preceding word is normally tone-dropped, but it may be that this is really an intonational effect, lowering the pitch of the preceding word in order to emphasize $p u ́ \rightarrow$. In (xx1a), for example, 'millet' is separated from $p u ́ \rightarrow$ by a modifier and is not tonedropped. In (xxlb), 'birds' is tone-dropped (or pitch-lowered) directly before $p u ́ \rightarrow$.
(xx1)
a. [yó á-gá pú $\rightarrow$ ] dòrñ́-tì- $\varnothing$
[millet 3Refl-Poss all] sell-Pfv1b-3SgSbj
'He has sold all his millet.'
b. [àdù-mbò ${ }^{\mathrm{L}} \quad$ pú $\rightarrow$ ]íll-í:-yà-dà
[bird-AnP1 ${ }^{\mathrm{L}}$ all] fly-MP-Pfv1a-3P1Sbj
'All the birds flew away.' (àdù-mbó)
$p u ́ \rightarrow$ can optionally be treated morphologically like a nonsingular numeral, with a numeral classifying prefix (xx2a-b). Following H-toned yí- or bú-, pú $\rightarrow$ is pronounced with somewhat lowered pitch, similar to downstep on tonal systems.
a. ùlò ${ }^{\mathrm{L}} \quad$ yí-pú $\rightarrow$
house ${ }^{\mathrm{L}} \quad$ Inan-all
'all the houses that you-Sg see' (úló)
b. ùlè: ${ }^{\text {L }} \quad$ bú-pú $\rightarrow$
child $^{\mathrm{L}} \quad$ An-all
'all the children that you-Sg see' (úlé:)

With simple pronouns, we get combinations like bú pú $\rightarrow$ 'all of them', and í pú $\rightarrow$ 'all of us'. Because of the exaggerated pitch and prolongation of $p u ́ \rightarrow$, the pronoun has lower pitch, but it does not drop to L-tone. For emphasis, the pronominal combinations can be elaborated by adding yàngù, as in bú yàngù pú $\rightarrow$ 'all of them'.

### 6.6.2 'Each' (kámâ)

Distributive 'each' and universal 'all, every' are not consistently distinguished. In (xx1a), the first version has just the singular noun 'child' plus $p u ́ \rightarrow$ 'all, every'. In this combination, the usual pitch-lowering of the preceding word does not apply, possibly because 'each child' is less emphatic than 'all the children'. The alternative, explicitly distributive version has $\{L\}-$ toned 'child' followed by kámá 'each' plus pú $\rightarrow$.
 [ह̀ $\mathrm{\varepsilon} \grave{\varepsilon}^{\mathrm{L}}$ kámá " ] " " " [child ${ }^{\mathrm{L}}$ ) each all] hundred two-two ${ }^{\text {L }}$ give.Pfv-3PISbj 'They gave 200 (riyals, i.e. 1000 CFA) to each child.'
jì kámá $\quad($ pú $\rightarrow$ ) 'each person'

Some Dogon languages have no specifically distributive
there is not always a sharp semantic distinction between 'each' (distributive) and 'all' (universal)
the 'each' quantifier is most often directly combined with a core NP (noun plus any adjectives).
tone-dropping effect on final word in core NP?
partitive construction 'each of us', 'each of those three sheep'

### 6.6.3 Interaction of quantifiers with negation

Negation normally scopes over a university quantifier in nonsubject function (xx1a). However, this is flipped when the universal quantifier is part of the subject (xx1b). My assistant gave unrelated 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 (xx1c).
(xx1) a. [pédú-mbò pú $\rightarrow$ ] sémalè
[sheep-AnPl all] slaughter-Proh
'Don't slaughter all the sheep!'
b. [úlé: pú $\rightarrow$ ] wà:-ndá [children all] come-PfvNeg.3P1Sbj
'None of the children came.'
b. [pèddè ${ }^{\mathrm{L}}$ túrè: là] sémá-lì
[sheep ${ }^{\mathrm{L}}$ one too] slaughter-Proh
'Don't slaughter even one (=any) sheep!'

The inanimate noun nàndùr-ǵ (plural nàndùré:) can function as a positive 'really, completely, absolutely' or as a negative '(not) at all' adverb. In (xx1a) it looks like a direct object (theme) but its adverbial nature is clearer in (xx1b).
(xx2)
a. nàndùr-gó mí ǹdǎ-l- $\varnothing$
at all-InanSg $1 \mathrm{Sg} \quad$ give-PfvNeg-3SgSbj
'He/She didn't give me anything.'
b. nàndùr-gó mí yí $=$ bì- $\varnothing$
really-InanSg $\quad 1 \mathrm{Sg} \quad$ see $=$ Past- 3 SgSbj
'He/She really saw me.'

For interjection-like péy as an 'at all' negative emphatic, see §19.2.2.

### 6.7 Accusative (gi)

Accusative gì can be added to NPs in object function. It is optional, even with pronouns, and is absent in most elicited utterances. It 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.
(xx1)

| a. | [injè̀-mbó $\quad$ pú $\rightarrow$ | $(g i ̀)]$ | $y i ́=b u ̀-m$ |
| :--- | :--- | :--- | :--- |
|  | $[$ dog-AnPl all | $(\mathrm{Acc})]$ | see $=$ Past- 1 SgSbj |
|  | 'I saw the dogs.' |  |  |

b. [mí
(gi)]
$y_{i}=b i ̀-\varnothing$
$[1 \mathrm{Sg} \quad$ (Acc) $] \quad$ see $=$ Past- 3 SgSbj
'He/She saw me.'
c. [ìnjě: ì (gì)] búndó
[dog Def (Acc)] hit.Imprt
'Hit-2Sg the dog!'
d. [ìnjě:-mbó pú $\rightarrow \quad$ (gì)] búndó
[dog-AnPl all (Acc)] hit.Imprt
'Hit-2Sg all the dogs!'

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction (' X and Y ')

NP conjunction (not applicable to clauses) is expressed prosodically, by lengthening the word-final vowel (or sonorant) of each conjunct and dropping the pitch. This is indicated in transcriptions by adding $\therefore$ ("dying quail" intonation) to the otherwise normally transcribed form. The gloss in interlinears is ".\&". 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 (xx1e).
(xx1)
a. ú: mí.:
2Sg.\& 1Sg.\&
'you-Sg and me'
(phonetic [úūù mî])
b. yà-mbó.: ár $r^{n}$ á-mbò.:
woman-AnPl.\& man-AnPl.\&
'women and men'
(phonetic [jàmbśòárnàmbò̀̀])
c. yă.: ár ${ }^{n a ̀: ~}$
woman.\& man.\&
'a woman and a man'
(phonetic [jàááárnàà])
d. yž.: $\quad \varepsilon y^{n} .:$
today.\& tomorrow.\&
'today and tomorrow' (y̌̌:; ह́y')
(phonetic [jòóóż̄"j" ${ }^{\text {n }}$ )
e. yà-mbó.: ár ${ }^{n}$ á-mbò.: ùlé: :
woman-AnPl.\& man-AnPl.\& children.\&
'women and men and children'
(phonetic [jàmbójárnàmbòòùléè])

### 7.1.1.1 Ordering of coordinands

The order of conjuncts is not fixed. For 'you and I' my assistant prefers the order $1 \mathrm{Sg}, 2 \mathrm{Sg}$ (mí: ú.:) 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, my assistant did not apply the usual tonedropping to the possessed nouns (xx1b). 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 possessed nouns (xx1a).
(xx1)
a. [pédù-mbò.: îr ${ }^{n} u ̀-m b \grave{.} .:$ wě:-mbò] yǎy-yà-dà
[sheep-AnPl.\& goat-AnPl.\& 1SgPoss-AnPl] go-Pfv1a-3PlSbj
'My sheep and goats have gone.'
b. [ámádú ¢pédù-mbò.: ír"ù-mbò.:つ] yăy-yà-dà
[Amadou $\subset$ sheep-AnPl.\& goat-AnPl.\&כ] go-Pfv1a-3PISbj
'Amadou's sheep and goats have gone.'
Similarly, when a conjoined NP functions as relative-clause head, it is not subject to tonedropping. See §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]').

### 7.1.2 "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 ( $\mathrm{mà} \rightarrow$ ) with pronouns but not with other NPs.

The examples in (xx1) are constructed in such a way that the disjunction is clearly among NPs rather than clauses.
(xx1)
a. [lè:gé pú $\rightarrow$ ][pédé mà] [íné: mà] sèmà-m-nj̀-m [day all] [sheep or] [goat or] slaughter-Ipfv-Ipfv-1SgSbj 'Every day I slaughter (either) a sheep or a goat.'
b. [mín mà $\rightarrow$ ] [ $\left.\begin{array}{lll}u & m a ̀ \rightarrow\end{array}\right] \varepsilon y^{n}$ mă: $\grave{o}-m-d \grave{j}-\varnothing$
$[1 \mathrm{Sg}$ or] [2Sg or] tomorrow there go-Ipfv-Ipfv-3SgSbj
'You-Sg or I will (i.e. should) go there tomorrow.'
c. [pédé-mbò bú-tà:ndù mà] [bú-kèdè mà] ह̀bà-m-ǹ̀-m̀ [sheep-AnPl An-three or] [An-four or] buy-Ipfv-Ipfv- 1 Sg Sbj '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. It is usually not repeated after the second clause.
(xx1) [ह́y ${ }^{n}$ wá:-m̀̀-nò-w $W^{n} \quad$ mà $\rightarrow$ ] [úló bè-m-nj̀- $W^{n \dagger}$ ]
[tomorrow come-Ipfv-Ipfv-2SgSbjor] [house stay-Ipfv-Ipfv-2SgSbj
'Will you come tomorrow, or will you stay at home?'

## 8 Postpositions and adverbials

The morphologically simple postpositions are instrumental-comitative ni: and locative nè $\sim$ $r^{n} \dot{e}$ and bàrı̀̀ One could add accusative $g_{i}(\S 6.7)$ 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)', dúyà '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 $r^{n}$ è̀ nángà 'be (put) on a mat'.

### 8.1 Dative and instrumental

### 8.1.1 Dative absent

There is no dedicated dative postposition. Ditransitive 'give' and 'show' treat the recipient as a direct object, with optional accusative $g i ̀$ (xxlab).
(xx1)

| a.$[$ [màngòró túr-gò $]$ $[$ séydù gì $]$ | ńdá |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $[$ mango | one-InanSg $]$ | $[\mathrm{S}$ | Acc $]$ | give.Imprt |

'Give-2Sg Seydou one mango!'
b. [úló kǒ:] [mí bà (gì)] tàgà-m
[house $1 \mathrm{SgPoss} . I n a n S g]$ [1SgPoss father Acc] show.Pfv- 1 SgSbj
'I showed my house to my father.'
Wiith verbs of speaking, the indirect object (i.e. addressee or conversational partner) is expressed with bènè 'chez' (§8.2.4).

### 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 (xx1).
(xx1)
a. 「bé:
[stick
ní:]
ìnjě:
dog
púngó-tì-m
beat-Pfv1b-1SgSbj
'I beat the dog with a stick.'
b. [pólgó ní:] nàmá kédé-tì-m
[knife with] meat cut-Pfv1b-1SgSbj
'I cut (sliced) the meat with a knife.'
c. [[àmàdú ${ }^{\text {L }}$ pòlgò] nì:] nàmá kédé-tì-m
[[A ${ }^{\text {L }}$ knife] with] meat cut-Pfv1b-1SgSbj
'I cut (sliced) the meat with Amadou's knife.'

An alternative is to replace the instrumental postposition with a subordinated verb nà:-gín, literally 'take (and then ...).

With human (including pronominal) complements, ni: means 'with, in the presence of'.
(xx2)
a. [mí ní:] bèrú: bù̀- $\varnothing$
[1Sg with] near be-3SgSbj
'He/She is near/beside me.'

'He/She is with us.'

The phrase 'by force' is pàngá ní:

### 8.2 Locational postpositions

### 8.2.1 Locative, allative, and ablative functions

As with other languages of the zone, directionality ('to' or 'from' as opposed to 'in, at') is expressed by verbs rather than by postpositions.

### 8.2.2 Simple and complex PPs

There are a few simple postpositions. Complex postpositions are generally of the form 'in/at [the X of Y ]' or a slight reduction thereof, cf. English in front/back of and beside. These complex postpositions generally end in locative nè.

### 8.2.3 Basic locative postpositions

### 8.2.3.1 Locative $\left(n \grave{e} \sim r^{n} \grave{e}\right)$

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. My assistant sometimes pronounces it as $r^{n}$ è.

| (xx1) | noun | locative |
| :--- | :--- | :--- | gloss.

With nouns denoting locations, like 'village' and 'outback', the locative postposition may be omitted, especially with a verb of stance or motion or with the 'be' quasi-verb.

An informant rejected the locative postposition with temporal NPs like 'at night' and 'in/during the rainy season' (xx2a).
(xx2)

| a. | dèndé | bírá: | bírà-nù-m |
| :--- | :--- | :--- | :--- |
|  | night | work(n.) | work-IpfvNeg-1 SgSbj |

b. zìné [nù-mbś pú $\rightarrow$ ] ándà ò-m-d-غ̀
rainy.season [person-AnPl all] field go-Ipfv-Ipfv-3PISbj
'In/During the rainy season, everyone goes to the fields.'

### 8.2.3.2 Displaced locative (bàr~ bàrı̀)

This postposition is similar in meaning to nè. It adds an extra nuance, namely displacement from the current deictic center. Compare English over as in over in Boston, spoken from a nearby city.
(xx1)

b. [dámbá nè / bàr] ó-yù-m
[village in / in] be-IpfvNeg-1SgSbj
'I am not going to the village.'

### 8.2.3.3 Locative postpositions with place names

Since place names are intrinsically locative, adding a postposition is usually unnecessary. In (xxla), no postposition appears, but bàr occurs in (xx1b). The data were elicited in Sevare. bàr appears to be used when the location is displaced from the place of the speech event.
a. Sèwà:ré
bù- $\varnothing$

Sevare be-3SgSbj
'He/She is in Sevare (city).'
$\begin{array}{lccl}\text { b. ìnjě: } & \text { [mó:tù } & \text { bàr] } & \text { bù- } \varnothing \\ \text { dog } & \text { [Mopti } & \text { in] } & \text { be- } 3 \mathrm{SgSbj} \\ & \text { 'The dog it in Mopti (city).' } & \end{array}$

### 8.2.4 'Chez' (bènè~ bìṅ̀~ bèr $\left.{ }^{n} \dot{\varepsilon}\right)$

This postposition could possibly be interpreted as containing locative nè. However, bì has no independent meaning, and an assistant rejected \#[X bì bàr]. The sense is usually 'chez X', i.e. 'at the house of X ' (xxla) or 'in the presence of X '. A slight extension of 'in the presence of $X^{\prime}$ is the use of binè to denote the interlocutor with a verb of speaking ( $\mathrm{x} \times 1 \mathrm{~b}$ ).
(xx1)
a. [ú bènè] já-m sò-m
[2Sg chez] eat-Ipfv have- 1 SgSbj
'I am eating at your house.'
b. ǹjé [ú bènè] òrì:- $\varnothing^{\dagger}$
what? [2Sg chez] say.Pfv-3SgSbj
'What did he/she say to you-Sg?'

The 3 Sg form is ńné bènè 'chez him/her'.

### 8.2.5 'Inside X ' or 'between X and $\mathrm{Y}^{\prime}\left(\left[X(Y)^{\mathrm{L}}\right.\right.$ bènà: ì̀] nè)

This complex postposition is literally 'in the interior of X '. It is based on the possessed form of bènǎ: 'interior' (compare bèrǎ: 'belly'), followed by definite $\grave{n}$ (not always audible) and locative postposition nè. The landmark is most often a structure (such as a house) or a container.

| (xx1) | [úló | kǒ:] | ${ }^{\text {L }}$ benà: | ì] | nè |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [house | 1SgPoss.InanSg] | ${ }^{\text {L }}$ interior | Def] | Loc |
|  | 'inside | y house' |  |  |  |

To indicate displacement from the current deictic center, bàr may be substituted for nè.
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.

```
(xx2) ùloò L
    house}\mp@subsup{}{}{\textrm{L}}\mathrm{ -interior be.put.in.Stat-1 SgSbj
    'I am inside the house.'
```

'Between X and Y ' is phrased as 'inside X and Y ', using the same ${ }^{\mathrm{L}}$ bènà: ǹ] nè sequence but this time with the complement (landmark) a nonsingular NP, for example a plural pronoun (xx3a) or a conjoined NP (xx3b).
(xx3)

| a. cǐn | [[bènă: | Í-gè $]$ | nè] | dùnà- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| stone | $[[$ interior | 1PlPoss-InanSg] | Loc] | be.put.Stat-3SgSbj |
| 'The stone is (lying) between us' |  |  |  |  |

b. [[[dúmósán.: sèwárá.:] L bènà:] nè] yé tùnà $\left[\begin{array}{lll}{[D . \&} & \text { S.\& }\end{array}\right.$ interior $]$ Loc] Exist be.in.Stat-3SgSbj
'It (a village) is between Douentza and Sevare'
8.2.6 'On (the head of) $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{HL}}$ kú-gò $]$ nè $)$

This complex postposition seems to have a fairly literal sense, with a human landmark.

| (xx1) | cǐn | [[kú-gó | kǒ:] |
| :---: | :---: | :---: | :---: |
|  | stone | [[head-Inan | 1SgPoss.InanSg] |
|  | Éllí-gín | ${ }^{\text {L }}$ Sùgè̀- $\varnothing$ |  |
|  | fall-and.SS | ${ }^{\text {L }}$ go.down | Pfv-3SgSbj |

'A stone fell on my head.'

The 3 Sg form is kú-gó kò-ń nè ‘on his/her head’. With nonpronominal NP: [ámádú ${ }^{\mathrm{L}} k u ̀$ g̀gò] nè ‘on Amadou'. Variants with bàr are elicitable ([ámádú ${ }^{\text {L }} k u ̀$-g̀̀] bàr) are elicitable.

### 8.2.7 'On X' ([ $X^{\mathrm{L}}$ dànà $]$ nè $)$

'On X ' where X denotes a surface is often expressed by the simple locative: ládúgó nè 'on the roof', nìngé nè 'on the mat'. An alternative construction is [ $X^{\mathrm{L}}$ dànà] nè, used especially when X is a horizontally extended surface, such as a tabletop or a laid-out mat.
(xx1)

| a. | [[nìngé | L dànà $] \quad$ nè $]$ | dùní |
| :--- | :--- | :--- | :--- |
|  | $[[$ mat | L$f l a t . t o p] ~ L o c] ~$ | put.down.Imprt |
|  | 'Put-2Sg it down on the mat!' |  |  |

b. [dàná kǒ:] nè
[flat.top 1 SgPoss.InanSg] Loc 'on (the top of) my head'

The noun dáná, and the compound dànà-bándá, mean specifically 'crown of head', in contrast to the more inclusive kú-gá ‘head’. A hat is worn [kú-gó kǒ:] nè 'on my head’, but a basket carried on my head, or (figuratively) a financial burden that I bear, is [dáná kǒ:] nè 'on the crown of my head'.

### 8.2.8 'Next to X ; under $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ dùgò $]$ nè $)$, 'next to $\mathrm{X}^{\prime}$ ([ $X^{\mathrm{L}}$ àrà $\left.] n e ̀\right)$

also àrá (àrá ky̌: nè 'next to me', ámádù árà nè)
sounds like X dúgò nè
The noun dùgó means primarily ‘area under or below' (e.g. a mat), or 'base, shoulder' (e.g. of a mountain). The related compound postposition $\left[X^{\mathrm{L}} d u ̀ g o ̀ d ~ n e ̀ ~ c a n ~ t h e r e f o r e ~ m e a n ~ ' u n d e r ~ X, ~\right.$ below X'. However, it can also mean 'next to $X$ ', where $X$ is a person or animal. With a landmark like 'tree', there is no clear difference between 'next to' and 'under'.
(xx1)
a. [dùgó
$k o ̌:]$ nè
[side 1 SgPoss.InanSg] Loc
'next to me, near me'
b. [dùgó í-gè] nè
[side 1PlPoss-InanSg] Loc 'next to us'
c. [ámádú L dùgò] nè
[Amadou ${ }^{\mathrm{L}}$ side] Loc
'beside Amadou'
d. cǐn [[nìngé ${ }^{\mathrm{L}}$ dùgò] nè] tùnà- $\varnothing$
stone [[mat ${ }^{\mathrm{L}}$ under] Loc] be.put.Stat-3SgSbj
'The stone is under the mat'

Variants with bàr(i) instead of nè are elicitable. The adverb is dùgó nè 'to the side' or 'underneath'.
'For 'next to X , beside X ' there is another alternative based noun àrá 'area to the side, proximity': [ámádú Làrà] nè 'next to Amadou', [àrá kǒ:] nè 'beside me', [nìngé ${ }^{\mathrm{L}}$ àrà] nè 'next to the mat'.

### 8.2.9 'In front of' ([ $X^{\mathrm{L}}$ jìrè̀ $]$ nè $)$

This complex postposition is based on possessed forms of jíré 'front'.
(xx1)
a. [jíré
$k j$-ń]
nè
[front InanSg-3SgPoss] Loc
in front of him'
b. [jíré kǒ:] nè
[front 1SgPoss.InanSg] Loc
'in front of me'
c. [ámádú L jìrè] nè
[A ${ }^{\text {L front }}$ Loc
'in front of Amadou'

Variants with bàr(i) instead of nè are elicitable. The adverb is jíré nè 'to the side'.

### 8.2.10 'Behind/after $\mathrm{X}^{\prime}$ ([X ${ }^{\mathrm{L}}$ kùndù-gò $]$ nè $)$

This complex postposition is based on possessed forms of the noun kúndú-gó 'back'.
(xx1)

| a. [kúndú-gó <br> [back-InanSg <br> 'behind him' | $\begin{aligned} & \text { kò-ń] } \\ & \text { InanSg-3SgPoss] } \end{aligned}$ | nè <br> Loc |
| :---: | :---: | :---: |
| b. [kúndú-gó [back-InanSg 'behind me' | ```kǒ:] 1SgPoss.InanSg]``` | nè <br> Loc |

c. [ámádú ${ }^{\mathrm{L}}$ kùndù-gò] nè
[Amadou ${ }^{\text {Lb back-InanSg] Loc }}$
'behind Amadou'

This can also be used in the temporal sense 'after X', as in [láyà ${ }^{\mathrm{L}}$ kùndù-gò] nè 'after the Feast of the Ram'. However, in this sense there are also competing subordinating constructions such as 'when the Feast of the Ram has taken place'.

The noun kúndú-gó by itself can be used adverbially 'in the rear'.

### 8.2.11 'Over X'

Adverbial 'overhead, up above (in the sky)' can be expressed by any of the nouns témbé, dár ${ }^{n}$ á, or óngó (the latter meaning 'sky'), all of which can be directly followed by bù- 'be' or other predicate. 'On top' in the sense of 'on the (high) plateau' above the cliffs, as opposed to the plains that begin at the base of the cliffs, is témbé.
'Above/over me', for example referring to a bird or an airplane, also involves témbé.

| $(\mathrm{xx} 1)$ | àdé | $[m i ́$ | ní: $]$ | dém $\rightarrow$ | témbé |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | bird | $[1 \mathrm{Sg}$ | with $]$ | straight $\varnothing$ | above |
| be-3SgSbj |  |  |  |  |  |

'The bird is directly above/over me.'

### 8.2.12 'From X to $\mathrm{Y}^{\prime}(p o ́ \rightarrow$, bǎ $\rightarrow)$

Trajectories with starting and ending points can be described using verbs like 'go out, leave' and 'arrive' (or 'come' or 'go'). In (xxla), the 'go out' 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 $p o$ ' $\rightarrow$ 'all the way to, until' (xxlb) or the retrospective $b \check{a} \rightarrow$ 'since' (xx1c). pó $\rightarrow$ is common in both spatial and temporal contexts, while $b a \check{ } \rightarrow$ is essentially temporal.
(xx1)
a. [bàndàrá gò-gín] [lǎ: ní:] sèwárá wò:-m
[Bandiagara go.out-then] [foot Inst] Sevare come.Pfv-1SgSbj
'I walked on foot from Bandiagara to Sevare.'
b. pó $\rightarrow$ bàndàrá yày-m
all.the.way Bandiagara go.Pfv-1SgSbj
'I went as far as Bandiagara.'
c. [[ódógón bă $\rightarrow$ bírá: bírá-m̀̀]
[[early.morning since] work(n) work(v)-Ipfv]
[nán dò-m]
[now arrive.Pfv-1SgSbj]
'I have been working from early morning to now.'

### 8.3 Purposive dùgò 'for'

This postposition creates PPs that denote the goal of an activity.
(xx1)
a. [ìdé dùgò] $w$-à:
[honey Purp] come.Pfv-3P1Sbj
'They came for the honey.'
b. [bírá: dùg̀̀] wò̀̀- $\varnothing$
[work(n.) Purp] come.Pfv-3SgSbj
'He came for the work.'

For [ìnjé dùg̀̀] 'why?' (for what?) see §13.2.3. For $X$ dùg̀̀ 'than $X$ ' in comparatives, see Chapter 12 passim.
dùgə̀ can also be used in a retrospective sense, denoting the cause of a subsequent eventuality ( $\mathrm{x} x 2 \mathrm{a}$ ). It also appears in the phrase 'for God', in connection with a gift or service provided charitably without compensation (xx2b).
(xx2)
a. [àr $n$ ná dùgò] zòb-à
[rain Purp] run.Pfv-3PISbj
'They fled because of the rain.'
b. [ámbà dùgòj zá mí ìdì- $\varnothing$ [God Purp] meal 1 SgO give.Pfv- 3 SgSbj
'He/She gave me food for (= in the name of) God.'

### 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity ('like $\mathrm{X}^{\prime}$ ) construction with postposition mi:

Adverbial phrases specifying similarity to a landmark (reference object) often involve instrumental-comitative postposition ni: 'with' (§8.1.2), either alone (xx1a) or, more clearly, as part of a larger phrase such as a headless relative with 'be' (xx1b).
(xx1)
a. [mí
ní:]
g̀gó- $\varnothing$
[1Sg with] not.be-3SgSbj
'He/She isn't like me.'
b. [[ńné bú-ngò̀] nì:] bù-m
$[[3 \mathrm{SgSbj}$ be-Ipfv.Ppl] with] be-1SgSbj
'I am like (the way) he/she is.'

My assistant prefers to include the basis for comparison, which changes the syntax (xx2).
(xx2)
a. Lyà-mbó
${ }^{\text {L }}$ òdùbà:] ò-m-dò
[woman-AnPl ${ }^{\text {L }}$ road] go-Ipfv-3SgSbj
'He walks like a woman.'
[lit. "he goes (with) women's road (gait)"]
b. [[yà-mbś òré: órà-ngò] nì:]
[[woman-AnPl word.Pl speak-Ipfv.Ppl.InanSg] with]
万́rà-m-d̀̀
speak-Ipfv-3SgSbj
'He talks like a woman.'
[lit. "he speaks with (the way) women speak words"]
'Like this/that, thus' is kú ní: with inanimate pronoun kú, or a simple adverb $\widehat{y} y^{n}$. These forms can resume fuller phrases (xx3).
(xx3) [mí
bù-ggòך
$\widehat{\jmath} y^{n}$
bù- $\varnothing$
[1SgSbj be-Ipfv.Ppl.InanSg] thus be-3SgSbj
'He is like me.'
[lit. "(the way) I am, thus he is."]

### 8.4.2 Extent (měm $\rightarrow$ or gǎy $\rightarrow$ 'a lot, greatly', kéndè ${ }^{n} \rightarrow$ or dágám $\rightarrow$ 'a little')

Expressive adverbials are měm $\rightarrow$ or gǎy $\rightarrow$ 'a lot, greatly' and kéndèyn $\rightarrow$ or dágám $\rightarrow$ 'a little, slightly'. Though adverbial syntactically, they can occur in sentences where 'a lot' or 'a little' translate as objects or other arguments, as with 'give' in (xx1c-d). They do not interact tonally with nouns.
(xx1)
a. bírá:
měm $\rightarrow /$ gǎy $\rightarrow$
bìré-tì- $\varnothing$
work(n) a.lot work(v)-Pfv1b-3SgSbj
'He/She worked a lot.'
b. bírá: $\quad k \varepsilon ́ n d \varepsilon ̀ y^{n} \rightarrow \quad$ bìré-tì- $\varnothing$
work(n) a.lot
work(v)-Pfv1b-3SgSbj
'He/She worked a little.
c. měm $\rightarrow \quad$ mí $(-g i ̀) \quad$ índì-tì- $\varnothing$
a.lot $\quad 1 \mathrm{Sg}(-A c c) \quad$ give-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$
'He/She gave me a lot.'


### 8.4.3 Specificity

The usual way of talking about exactness of a number or amount is to use the verb 'arrive, reach' in the sense 'amount to, add up to' (xx1).
(xx1) [pèdù-mbò ${ }^{\mathrm{L}}$ ú sò-mbò]
[sheep-AnP1 ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ have-Ppl.AnPl]
pègá-nǔm dò-S-દ́ $\quad$ mà $\rightarrow \quad d o ̣ a ̀-n d a ́ ~$
ten-five arrive-Pfv2-3P1Sbj or arrive-PfvNeg.3P1Sbj
'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 a NP, especially a pronoun, in the sense 'precisely X (not anybody else)', ' X in person'. There are no tonosyntactic interactions. In (xx1), 'chief' is resumed by a coindexed third person pronoun, but ámbírú pá $\rightarrow$ without the pronoun is also possible.

```
(xx1) ámbírú ńmé pá-> wá:-m̀-d\grave{ }
    chief 3SgSbj specifically come-Ipfv-3SgSbj
    'The chief is coming in person.'
```


### 8.4.4 Evaluation

### 8.4.4.1 'Well' and 'badly'

 delicious'. 'Bad' is sàmé. There are no morphological adverbs corresponding to these adjectives. Instead, the adjectives are added to a NP in the clause, perhaps a pro forma cognate nominal.

| (xx1) | [birrà: ${ }^{\text {L }}$ | sé-ggé/ sàm-gó] | ${ }^{\text {L }}$ bìrà $-m-d \grave{ }$ |
| :---: | :---: | :---: | :---: |
|  | [work(n) ${ }^{\text {L }}$ | good-InanSg / bad-InanSg] | ${ }^{\text {L }}$ work(v)-Ipfv-3SgSbj |

The verb dàgá means 'turn out well, be well made', among other senses.

### 8.4.5 Manner adverbs

For 'like this' and 'like X ', see §8.4.1. For manner adverbial relative clauses see §15.3.2.
For adverb-like predicative forms of adjectives, see §11.4.1.2. Aside from this, is no morphological process to derive adverbs from other stem classes.

### 8.4.6 Spatiotemporal adverbials

### 8.4.6.1 Temporal adverbs

Some of the major temporal adverbs are in (xx1). The major weekly market for the Tebul villages is Bamba, which is on Saturdays, based on the European seven-day week. The important Tommo So markets on the plateau (Kassa, Mori) are on the traditional five-day rotation, as is the minor market in Yanda.
(xx1)

## a. yǒ: <br> yâ:, yâ: là <br> yéngì <br> yé dèmbè tà:ndú <br> nân, ná: <br> nân gày, ná: gày <br> àsú $\rightarrow$, àsú $\rightarrow$ là <br> dùmó

b. $\varepsilon^{\prime} y^{n}$

غ̀n mé dèr ${ }^{n} \dot{\varepsilon}$
dèr ${ }^{n} \dot{\varepsilon}$ gín dèr ${ }^{n} \dot{\varepsilon}$
dèr $r^{n} \dot{\varepsilon}$ gín dèr $r^{n}$ غ̀ bàlàgà
[dèr ${ }^{n} \dot{\varepsilon}$ gín dèr $\left.r^{n} \dot{\varepsilon}\right]$ dèmbè tà:n-n
[dèr ${ }^{n} \grave{\varepsilon}$ gín dèr $\left.{ }^{n} \grave{\varepsilon}\right]$ dèmbè kèdè-nモ́

## zúgò

c. $j e ̂ l$
nwǎ:
bágònè
'today'
'again'
'yesterday'
'day before yesterday'
'now'
'now' (topical, see §19.1.xxx)
'always’
'later, afterwards'
'tomorrow; in the future'
'day after tomorrow'
'second day after tomorrow' (third from
today)
'third day after tomorrow' (fourth from
today)
'fourth day after tomorrow' (fifth from today)
'fifth day after tomorrow' (sixth from tomorrow)
'week'
'last year'
'next year'
'this year'

### 8.4.6.2 'First' $\left(t t^{\prime n} \rightarrow\right)$

$t 1^{n} \rightarrow$ means 'formerly, in the past'.
$(\mathrm{xx} 1) \quad t i^{n} \rightarrow \quad$ nù-mbò lábá kár${ }^{n}$ à-mbò
first person-AnPl pass Pfv.Ppl-AnPl
'the people who passed on long ago'

### 8.4.6.3 Spatial adverbs

The following are the main spatial adverbs.
(xx1)
a. témbé
'above, top, summit'
dùgó 'below, bottom, down'
b. tèyè-dágá
ùdù-[túmbú-gó]
dù-dágá
-ùdà 'south'
'east'
'west' (< 'sunset')
tòmbò-dá: 'north'
$\begin{array}{ll}\text { c. kúndú-gó } & \text { 'in the rear' } \\ \text { gíré } & \text { 'forward; in front' }\end{array}$

Aside from 'sunset' = 'west', we see -dágá ~ -dá: in the cardinal direction terms in (xxlb).
'East' and 'north' include terms for Dogon ethnicities (Tengou, Tommo).
gíré 'forward' (xx1c) is tonally distinct from gìré 'eye(s)'.

### 8.4.7 Expressive adverbials (EAs)

For the syntax of EAs, see $\S 11.1 .3 .1$ below. Examples illustrating the syntax are also in §8.4.7.1 just below.

### 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 (xx1a). Predicative forms are exemplified in (xx2b-d.
$(\mathrm{xx} 1)$ a. dém $\rightarrow$ Lyà-dà
straight $\quad{ }^{\mathrm{L}}$ go.Pfv-3P1Sbj
'They went straight (to the destination).'
b. bé: dém $\rightarrow$ bù- $\varnothing$
stick straight be-3SgSbj
'The stick is straight.'
c. dém $\rightarrow$ ìgó- $\varnothing$
straight not.be-3SgSbj
'It (stick, road) is not straight.'
d. dém $\rightarrow$ bé-ı̀̀-dò- $\varnothing$
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 (xx1a), two (xx1b), or three syllables (xx1c). The characteristic phonological feature is intonational prolongation of the final segment (vowel or sonorant).
(xx1)
a
$p a ́ \rightarrow$
'(door) wide open, gaping'
$k \hat{a}^{n} \rightarrow \quad$ '(mouth, hole) wide open, gaping'
$k e^{n} \rightarrow \quad$ '(mouth) slightly open'
$s \varepsilon^{n} \rightarrow \quad$ 'looking straight at, staring at'
kăy ${ }^{n} \rightarrow \quad$ '(eyes) wide open, bulging'
céw $\rightarrow \quad$ 'motionless'
dém ${ }^{n} \rightarrow \quad$ 'straight' or 'straight up, towering'
$j \check{\varepsilon} W^{n} \rightarrow \sim j \varepsilon \check{y} y^{n} \rightarrow \quad$ '(eyes) slightly open’
b. pàyǎ $W^{n} \rightarrow \quad$ 'bright point of light in the distance (star, fire)'
cè: ${ }^{n} l i \rightarrow \quad$ '(door) ajar, open a crack'
c. gògùlí $\rightarrow$ '(door) rickety, poorly encased'

The shape CvC with final stop and no prolongation is uncommon. The examples in (xx2), which are followed by the verbs ijjj-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.
(xx2) jík '(stop) still, dead in one's tracks' kák '(die) abruptly, drop dead'

Other EAs are have iterative or reduplicated 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 (xx3a) involve full iteration. Those in (xx3b) 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, it repeats the first. The examples in (xx3c) show multiple final -Cv reduplication, the number of repetitions being somewhat flexible. Iterations and reduplications are partially iconic since these EAs denote sequences of repeated subevents, repetitive sensory patterns, and the like.
(xx3) a. iterative

| ném-ném | '(rain) drizzle lightly' |
| :--- | :--- |
| pírú-pírú | '(e.g. wounded bird) flop around' (verb pírígíy) |
| sì:dé-sì:dé | 'striped' (cf. sì:lì-gó 'a stripe') |
| tágàlà-tágàlà | 'blotched, having large spots' |
| têW $W^{n}$-tê $W^{n}$ | 'spotted, having many small spots' |

b. iterative plus shift to $a$
bírìgù-bárùgù 'bric-à-brac, junk, miscellaneous items'
díbù-dàbù-díbù 'groping (in the dark)'
jìgí-jàgú 'swaying (like elephant, cow, fat woman)'
yùgú-yàgú 'chubby, puffy'
pìré-pàrá 'stumbling along'
c. multiple final -Cv reduplication
wèdédé(dé) 'well-lit (place)'
yègérédédé 'well-lit (place)'
pàdádádá 'directed light (shining on one's face)'

### 8.4.8 Reduplicated (iterated) adverbials

### 8.4.8.1 Distributive adverbial iteration

Numerals are iterated to indicate distributivity (' X as a time', ' X apiece'). The human and inanimate prefixes occur only once, at the beginning. Except for ' 1 ', the numeral is $\{\mathrm{L}\}$-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-tùrù, pronounced [tút:ùnù], but the actual form is tú-túrú, looking more like a $C v$ - reduplication. Morphologically complex numerals iterate only the final element (xx1d).
(xx1)
a. Jě-tú-túrú
$w \hat{0}:-S-\varepsilon$.
person-one-one come-Pfv2-DFoc
'They came one by one [focus].'
b. ně-tǎ:n-tà:ndù
$j \grave{\varepsilon}-m$
person-three-three
kill.Pfv-1SgSbj
'I killed them (people) three at a time.'
c. pédù-mbò bú-lèy-lèy=là:
sheep-AnPl An-two-two=it.is.not
'The sheep are not two by two.'
d. [pé:-rnè $\bar{n}$-túr-sàgà-sàgà
w-à:
[ten]-one-plus-plus
come.Pfv-3PlSbj
'They came eleven at a time.'
$\begin{array}{ll}\text { e. àngá-àngá } & \text { dónà-m-nù- } \hat{W}^{n} \\ & \text { how.many?-how.many? }\end{array}$
'For how much each do you sell (them)?'

## 9 Verbal derivation

### 9.1 Reversive verbs (-lí-)

A reversive verb is derived from an input verb by adding suffix -lí- The sense is to undo the action denoted by the input verb, restoring a prior state. Compare English un- in untie, unfold, etc.

The input verbs that have reversives are overwhelmingly bisyllabic. The presuffixal medial vowel is raised to $i$ or (if a preceding vowel is rounded) to $u$ if not already a high vowel (xx1b). Mediopassive -í: follows the reversive (xx1c). Aside from minor lexical irregularities, /Cvri-lí/ ends up as Cvl-lí after syncope and /rl/ $\rightarrow l l(\mathrm{xx} 1 \mathrm{e})$.
(xx1) input gloss reversive gloss
a. bisyllabic, input already ends in high vowel

| tímbí- píní- | 'cover (with lid)' 'shut (door)' | $\begin{aligned} & \text { tímbí-lí- } \\ & \text { píní-lí- } \end{aligned}$ | 'remove lid from' 'open (door)' |
| :---: | :---: | :---: | :---: |
| gòngú- | 'fence in' | gòngù-lí- | 'un-fence' |
| kómbú- | 'tie' | kómbú-lí- | 'untie' |
| tómbú- | 'roll turban' | tómbú-lí- | 'unroll turban' |
| céndí- | 'bury' | céndí-lí- | 'disinter' |
| péndí- | 'insert, slide in' | péndí-lí- | 'remove inserted item' |
| tóngú- | 'hobble' | tóngú-lí- | 'unhobble' |
| námbí- | 'step on' | námbí-lí- | 'remove foot from' |
| mèndí- | 'fold' | mèndì-lí- | 'unfold' |
| tíndí- | 'prop up' | tíndí-lí- | 'remove a prop from' |
| gùbú- | 'hang (on hook)' | gùbù-1í- | 'take off (hook)' |

b. bisyllabic, input ends in mid or low vowel

| tóndó- | 'bend' | tóndú-lí- | 'unbend' |
| :--- | :--- | :--- | :--- |
| dàgá- | 'lock' | dàgì-lí- | 'unlock' |
| diggé- | 'tie (knot)' | digìl-lí- | 'untie (knot)' |
| mìndé- | 'weave (rope)' | mìndì-lí- | 'unweave (rope)' |
| mùndó- | 'crumple' | mùndù-lí- | 'uncrumple' |
| pégé- | 'drive in (nail)' | pégí-lí- | 'remove (nail)' |
| níndé- | 'tangle' | níndílí- | 'untangle' |
| mìndé- | 'roll up (mat)' | mìndi-lí- | 'bounce back' |

c. mediopassive suffix follows reversive, see also (e) and (f) gə̀nd-í:- 'be caught in tree' gòndì-l-í:- 'be un-caught'
d. /yí/ dropped
dà:yí- 'cover (object)' dà:-lí- 'uncover (object)'
e. $/ \mathrm{rl} / \rightarrow 11$, see also (f)
gìrí- 'immobilize' gìl-lí- 'allow to move'
tár-í:- 'be affixed’ tál-l-í:- '(affixed item) come off'
f. irregular
íré- 'forget' îl-l-í:- 'remember'
g. suppletive
(various) sóngú-lí- 'unbraid, undo, untie', etc.
(various) gò-ndú- 'take out, remove'

Suppletive sóngú-lí- is a rather general 'undo' verb. It is reversive in form but there is no semantically related input. 'Take (sth) out' is $g o ̀-n d u ́, ~ i r r e g u l a r ~ c a u s a t i v e ~ o f ~ g o ̌ ~ ' g o ~ o u t ' . ~ . ~$

### 9.2 Deverbal causative verbs

### 9.2.1 Productive causative with suffix -mí

The productive causative derivative has suffix $-m i ́$, which often reduced to $-m$. The defocalized perfective ends in $-m e ̀$, and the imperative is $-m o$, showing that the suffix is + ATR. Examples of input/causative relationships are in (xx1). Stem-final $/ \varepsilon /$ becomes a before the suffix. Mediopassive -i:- becomes $-\varepsilon$ :- or -e:- depending on the ATR harmonic status of the stem. $\{\mathrm{LH}\}$ lexical melody is reapplied to the entire causative stem, with only -mí-H-toned. However, the suffixal /i/ is often syncopated, in which case e.g. zùgà-míis heard as.[zùgǎm].
(xx1) input gloss causative gloss
a. monosyllabic, nonhigh vowel
nє́ 'drink; eat meal' ná-mí 'give drink/food to (sb)'
$y \varepsilon ̌ ~ ' w e e p ' ~ y a ̀-m i ́ ~ ' c a u s e ~(s b) ~ t o ~ w e e p ' ~$
$j e ̌$ 'dance' jè-mí 'cause (sb) to dance'
sé: 'sneeze' sé:-mí 'cause (sb) to sneeze'

```
wă: 'do farm work' wà:-mí 'make (sb) do farm work'
```

b. monoayllabic, high vowel

| nú | 'enter' | nú-mí | 'make $(\mathrm{sb})$ enter' |
| :--- | :--- | :--- | :--- |
| ní: | 'sleep' | ní:-mí | 'put $(\mathrm{sb})$ to sleep' |

c. nonmonomosyllabic, final nonhigh vowel

| zùgó | 'know' | zùgà-mí | 'inform $(\mathrm{sb})$ ' |
| :--- | :--- | :--- | :--- |
| bàrá | 'help' | bàrà-mí | 'make $(\mathrm{sb})$ help $(\mathrm{sb})$ ' |

d. nonmonomosyllabic, final high vowel

| tímbí | 'shut' | tímbí-mí | 'make (sb) shut (sth)' |
| :--- | :--- | :--- | :--- |
| órú | 'speak' | órú-mí | 'make (sb) speak' |

e. causative follows mediopassive

```
bàmb-í:- 'carry on back' bàmb-\varepsiloǹ:-mí 'make (sb) carry (sth)'
ób-í: 'sit down' ób-é:-mí 'have sit, seat'
```

example of conjugation (inflectable aspect-negation stems) of a regular causative verb

### 9.2.2 Minor causative suffixes ( $-g V-$ )

Causatives with minor derivational suffixes are listed in (xx1). See also "transitive" -rí in §9.3.
(xx1) Causatives with Other Suffixes
input gloss causative gloss
a. -gí
péndé '(sth) break' péndí-gí 'break (sth)'
yùlé 'wake up' yùlù-gú 'awaken (sb)'
màrá 'be lost' màrì-gí 'cause (sth) to be lost'
b. -ndú~ -ndí
$g o \check{~ ' g o ~ o u t ' ~} \quad$ gò-ndú $\quad$ 'take (sth) out'

| ilé | 'go up' | ìlà:-ndí | 'take (sth) up' |
| :--- | :--- | :--- | :--- |
| súgó <br> tángí | 'go down' | sú:-ndú | 'take (sth) down' |
| c. -lí |  |  |  |
| yàmá | 'malfunction' (sth)' | tá:-ndú | 'transform (sth) into (sth)' |

### 9.3 Passives

### 9.3.1 Passive suffix -mí-

A homophone of the causative suffix -mí- is found with a handful of verbs in agentless passive sense.
(xx1) Passive

| input | gloss | passive | gloss |
| :---: | :--- | :--- | :--- |
| a. | $y i ́$ | 'see' | $y \varepsilon ̀$-mí |$\quad$ 'be seen (see-able)'

### 9.3.2 Passive use of -пgó nominal

For nominalizations in -ŋgó see $\S 4.1 .1 .5$ and $\S 4.2 .3$. When used as a predicate, with the 'it is' or 'it is not' clitic, a form with -ngó functions like an imperfective (present or future) passive (xxla-b). For perfective aspect, the perfective-2 suffix is added and if the verb is lexically $\{\mathrm{LH}\}$ the L-tone spreads to the end of the stem but not into the suffixes (xx1c-d).
(xx1)
a. $\quad \grave{\varepsilon} d \varepsilon ́$
dóná-ทgô = :
cloth sell-Nom=it.is
'The cloth (fabric) is for sale.'
b. dóná-ทgó = là:
sell-Nom=it.is.not
'It is not for sale.'
c. dònう̀-sú-ŋgô=:
sell-Pfv2-Nom=it.is
'It has been sold.'
d. dı̀nò-sú-ngó= là:
sell-Pfv2-Nom=it.is.not
'It has not been sold.

Other examples are gídé- $\eta g \hat{o}=$ : 'it is to be thrown (away)', ná- $\eta g \hat{o}=:$ '(meal) is to be eaten/drunk', kúbó-ŋggô=: '(meat) is to be eaten', díyá-ŋggô=: 'it is to be carried (on the head)'. For the perfective version, see also lábá-sú-ŋggô= : 'it was carved'.

### 9.4 Mediopassive and Transitive

### 9.4.1 Alternation of mediopassive -1́:- and transitive -rv-

A number of verb stems alternate between mediopassive and transitive (roughly causative) forms, both with derivational suffixes. The transitive form has suffix -rí (-rú after a stem with rounded vowels). The mediopassive has suffix -í: (shifting to $-\varepsilon$ : or -é: in some aspectnegation inflections depending on the ATR category of the stem). The most common semantic domains are stance, wearing clothing, and carrying and holding. The mediopassive is intransitive or transitive depending on the stem and semantic domain. The transitive adds an object to the array already present in the mediopassive. Examples are in (xx1)
MP gloss $\operatorname{Tr}$ gloss
a. stance

| íjj-í: | 'stand up, stop' | ígí-rí | 'stop (sth)' |
| :--- | :--- | :--- | :--- |
| túnj-í: | 'kneel' | túngúi-rú | 'cause to kneel' |
| tónd-í: | 'squat' | tóndó | 'cause to squat' |
| jènj-í: | 'be tilted' | jèngì-rí | 'tilt (sth)' |

b. wearing clothes
tób-í: 'roll on turban' tóbí-rí 'put turban on (sb)'
kób-í: 'put one's hat on' kóbí-rí 'put hat on (sb)'
c. carrying/holding
bàmb-í:- 'carry on back' bàmbì-rí 'put on (sb's) back'
d. other

| bànj-í: | 'hide (oneself)' | bàngì-rí | 'hide (sb, sth)' |
| :--- | :--- | :--- | :--- |
| dìmb-í: | 'follow (sth)' | dìmbìrí | 'cause to follow' |

There are also a number of verbs that have the suffixed transitive form opposed to an unsuffixed simplex form that 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 (xx2). The semantic domains are similar to those in (xx1) above
(xx1) MP gloss Tr gloss
a. stance
bě 'lie down' bì-rí 'put (sb) to sleep'
b. wearing clothes
tájí~ táy 'put one's shoes on’ tágí-rí 'put shoes on (sb)'
c. carrying/holding
dǐ '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 $b \hat{\varepsilon}$ : 'get' we have bèl-í: 'be gotten', preserving an original medial lateral (cf. Yanda Dom bèlé 'get').

### 9.4.2 Mediopassive -í:- versus unsuffixed transitive

The mediopassive suffix can also be added to ordinary 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 $* 1$ elsewhere retain it before the mediopassive suffix. Thus bě:- 'get' has mediopassive bèl-í:- 'be gotten'.

### 9.4.3 Transitive -ndv

(xx1) MP gloss Tr gloss
a. motion

| dǒ | 'arrive' | dò:-ndú | 'deliver' |
| :---: | :--- | :--- | :--- |
| ír-í: | 'be afraid' | írá:-ndí | 'scare (sb)' |
| medial $g$ |  |  |  |
| súgó <br> medial ng | 'go down' | sú:-ndú | 'take down' |
| tángí | 'be lit' | tá:-ndú | 'turn on (light)' |
| nóng-í: <br> no input stem <br> (none) | 'catch fire' | nǒ:-ndú | 'light (fire)' |

### 9.5 Ambi-valent verbs without suffixal derivation

Give a few exx. from the lexicon (if any are found) where a verb is used, without suffixal modification, both transitively and intransitively.

Two types based on semantics.

```
1. antipassive (unergative) type, with understood or vague direct object omitted
'they ate'
'it's your turn to break (in pool)'
```

2. passive (unaccusative) type, with agent omitted (theme becomes subject):
cf. English 'it reads well'
'it broke'

### 9.6 Deadjectival inchoative and factitive verbs

Most adjectives (§4.5.1) have a corresponding cognate inchoative verb ('become ADJ'). Those in (xxla) have no segmental derivational suffix. The stem-final vowel is predictable in most cases from the nonfinal vowel(s). In (xxlb) the inchoative is morphologically a mediopassive with suffix -í: added directly to the stem. In (xx1c), the mediopassive suffix follows a buffer suffix -nd-. A few stems, chiefly those of extra-short shape $C v$, either have no inchoative or have a suppletive inchoative (xx1d).
(xx1) adjective inchoative gloss
a．no segmental suffix
bisyllabic stem

| bár ${ }^{n} \mathcal{E}$ ： | $b a ̀ r{ }^{n}$ á | ＇become red＇ |
| :---: | :---: | :---: |
| gàbě： | gàbá | ＇become tall＇ |
| ìE์ | îlé | ＇ripen＇ |
| jémè： | jèmé | ＇become black＇ |
| kómbò | kómbó | ＇become skinny，lean＇ |
| yòrě： | yòró | ＇become soft＇ |
| Cvy stem |  |  |
| mà ${ }^{n}$ | mǎy ${ }^{n}$ | ＇dry out，become dry＇ |
| Cvstem |  |  |
| bá | $b a ̆$ | ＇become full＇ |
| $p \varepsilon$ ： | $p \varepsilon$ | ＇age，get old＇ |

b．mediopassive－1́：－

| cé：lè： | cé：1－1́： | ＇become cold＇ |
| :---: | :---: | :---: |
| gכ́mè： | gòm－í： | ＇become rotten，rot＇ |
| nà： ráa $^{\text {n }}$ | ná：n－í： | ＇become easy，cheap＇ |
| 万́mè： | 万́m－í： | ＇become hot＇ |
| ór ${ }^{\text {nónè }}$ | ór $r^{n}$ ¢́n－1́： | ＇become smooth＇ |

c．$-n d-1$ ：
démbè：dèmbè－nd－í：＇become massive＇
bìné：bìr ${ }^{n}$ ì－nd－í：$\quad$＇become fat＇
dúdè：dùdう̀－nd－í：＇become heavy＇
dùmbě：dùmbù－nd－í：＇（blade）become blunt＇
ह́d $\dot{\varepsilon}$ ．$\quad \varepsilon d \varepsilon ́-n d-i ́: \quad ~ ' b e c o m e ~ g o o d, ~ i m p r o v e ' ~$
ع́lè：ह́lé－nd－í：＇become sweet＇
غ̀mbě：$\varepsilon$ ह́mé－nd－í：＇become narrow＇
$\bar{\varepsilon} r^{n} \dot{\varepsilon}: \quad \quad$ ह́r $r^{n} \dot{\varepsilon}-n d-1 ́: \quad$＇become lightweight＇
gálè：gàlà－nd－í：＇become bitter＇
gə̀ě：gò：－nd－í：＇become short＇
már ${ }^{n} \grave{\varepsilon}: \quad$ már ${ }^{n}$ á－nd－í：＇become hard，solid＇
mèndé：mèndè－nd－í：＇become slender＇
mòdě：mòd̀̀－nd－í：＇become nasty＇
òľ̌：$\quad$ óló－nd－í：＇become wet＇ cf．témb－í：＇become wet＇
pá：pá：－nd－í：＇become long＇
pílè：pílé－nd－í：＇become white＇
sègé $\quad s \varepsilon ́ g \varepsilon ́-n d-1 ́: \quad$＇become small＇

|  |  | cf．á：－nd－íí＇become small＇ |
| :---: | :---: | :---: |
| sègé | ségé－nd－í： | ＇become small＇ |
| tó： | tó：－nd－í： | ＇become deep＇ |
| Wérè： | Wèrè－nd－í： | ＇become green＇ |
| contracted |  |  |
| غ̀mbě： | Émé－nd－íi： | ＇become narrow＇（ $m<m b$ ） |
| nómè： | nóm－d－í： | ＇become difficult＇（ $m d<m n d$ ） |

d．suppletive from short $C v$ adjective

| $s \varepsilon ́$ | dàgá | ＇become good，improve＇ |
| :--- | :--- | :--- |
| $d \varepsilon$ | bàr－í：$\dot{\varepsilon} g$ á－nd－í： | ＇become big，grow＇ |

No inchoative was elicited from sàmě：＇ugly＇or from ǹdé＇empty＇．
Factitives（＇X make Y ADJ＇）are morphologically causatives of the inchoative verbs．
（xx1）
inchoative factitive
gloss
a．no segmental suffix
bisyllabic stem
bǎ bà：－ndí＇fill’

## 9．7 Denominal verbs

Verbs that arguably derive from，and in any case are related to，underived nouns．Glean from dictionary．Try the following（based on Nanga）：

| （xxl） | noun | gloss | verb | gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | $\eta \eta \eta$ | ＇load＇ | Пワワ－ | ＇load（e．g．cart）＇ |
|  | $\eta \eta \eta$ | ＇family name＇ | Пワワ－ | ＇（griot）chant the ancestry of（sb）＇ |
|  | ワワワ | ＇forest＇ | Пทワ－ | ＇（zone）become dense（e．g．after rains）＇ |
|  | ワワワ | （a）share＇ | Пワワ－ | ＇share，divide up＇ |
|  | ワワワ | （greeting） | ワワワ－ | ＇greet＇ |
|  | ทワワ | ＇filth＇ | ワワワ－ | ＇soil，make dirty＇ |
|  | ワワワ | ＇injury＇ | ワワワ－ | ＇injure，wound（someone）＇ |

### 9.8 Obscure verb-verb relationships

Listed any residual alternations that do not fit into preceding section, with or without comment.


## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

The normal structure of indicative (i.e. not imperative or hortative) verbs is

```
stem-AN-Subj or stem-AN
```

The stem is immediately followed by an aspect-negation (AN) suffix, the major divisions being perfective/imperfective crosscut by positive/negative. Categories are summarized in §10.1.2.

In most Dogon languages, the AN suffix is directly followed (except in relative clauses and some other subordinated clauses) by a pronominal-subject suffix. The 3Sg suffix is regularly zero. Some languages have reduced suffixal marking of pronominal subject (e.g. just Sg vs. Pl, or 3Pl versus everything else). A few languages have no pronominal-subject suffixes, instead clause-initial independent pronouns, perhaps along with postverbal 3rd person clitics. The structure of pronominal-suffix paradigms is summarized in §10.3.

In several languages the AN suffix may be directly followed by a past clitic (e.g. =bs-). The main pronominal-subject marking is on the past clitic, but there may also be some marking (e.g. for 3Pl) on the AN suffix. In other languages, the past morpheme is postposed to the entire inflected verb (Jamsay), or it is absent (Togo Kan).

### 10.1.1 AN suffixes or chained auxiliary verbs?

The categories in (xx1) 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.

| $(\mathrm{xx} 1)$ | $d \grave{\varepsilon}-$ | recent perfect |
| :--- | :--- | :--- |
|  | $t \varepsilon ́ r \dot{\varepsilon}-$ | experiential perfect |
|  | $t \grave{-}$ | perfective-1b |

The situation arises in nonsubject relatives with a pronominal subject. In such clauses, a proclitic subject pronoun appears before the verb. The issue is whether "the verb" for this purpose is the substantive verb plus the inflectional morpheme, or just the inflectional morpheme. For example, in a nonsubject relative involving recent perfect $d \dot{\varepsilon}$, the subject
pronoun may precede the substantive verb 'eat meal' in ( $x \times 2 a$ ), or it may intervene between the substantive verb and the recent perfect morpheme. In (xx2a) one can argue that $d \grave{\varepsilon}$ is suffixed to $n \varepsilon$ or that the two are at least tightly chained. In (xx2b) dè looks more like an independent word, i.e. an auxiliary verb. The fact that both orderings occur suggests that the situation is unstable.
(xx2)
a. $z a ̀{ }^{L}$ mí né
$d \grave{\varepsilon}^{\mathrm{L}} \quad$ kár ${ }^{n a ̀ ~ \grave{~}}$
meal ${ }^{\mathrm{L}}$ 1SgSbjeat.meal RecPrf ${ }^{\mathrm{L}}$ Pfv.Ppl Def
'the meal that I have finished eating'
$\begin{array}{llllll}\text { b. } & z \text { à }^{\mathrm{L}} & j \dot{\varepsilon} & \text { mí } & d \grave{\varepsilon}^{\mathrm{L}} & \text { kár }^{n} \text { à } \\ \text { meal }^{\mathrm{L}} & \text { eat.meal } & \text { 1SgSbj } & \operatorname{RecPrf}^{\mathrm{L}} & \text { Pfv.Ppl } & \text { Def } \\ & {[=(\mathrm{a})]} & & & & \\ \end{array}$

A similar choice exists with experiential perfect téré, which occurs in main clauses in the combination -téré-bù- or -téré-sò-, but takes the form tદ̀rદ̀ before kár ${ }^{n a ̀}$ in relative clauses.
a. gònsà: $r^{n} \grave{a}^{\mathrm{L}} \quad m i ́ \quad ~ y i i^{\mathrm{L}} \quad$ tèr $\grave{\varepsilon}^{\mathrm{L}} \quad$ kár ${ }^{n}$ à ì
elephant ${ }^{\mathrm{L}} \quad \mathbf{1 S g S b j}$ see ${ }^{\mathrm{L}} \quad$ ExpPrf ${ }^{\mathrm{L}}$ Pfv.Ppl Def
'the elephant that I once saw'
b. gònsà: $: r^{n a ̀ a ̀ ~} \quad$ yì ${ }^{\mathrm{L}} \quad$ mí $\quad$ tèr $\grave{\varepsilon}^{\mathrm{L}} \quad$ kár ${ }^{n a ̀} \quad \grave{n}$
elephant ${ }^{\text {L }}$ see $^{\text {L }} \quad \mathbf{1 S g S b j}$ ExpPrf ${ }^{\text {L }}$ Pfv.Ppl Def [= (a)]

Perfective-1b tì- is normally omitted in relative clauses, where the simple form with kár ${ }^{n}$ à generalizes. However, in the infrequent case where ti- is preserved in a relative, it behaves like the two perfect morphemes just described.

| a. $\quad i n j \dot{\varepsilon}:{ }^{\text {L }}$ $\operatorname{dog}^{\mathrm{L}}$ |  | mí | bùndò ${ }^{\text {L }}$ | $t i^{\text {L }}$ | kár ${ }^{\text {à }}$ | ı̀ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1SgSbj | hit ${ }^{\text {L }}$ | Pfv1b ${ }^{\text {L }}$ | Pfv.Ppl | Def |
| 'the dog that I hit-Past' |  |  |  |  |  |  |

b. ìnjè: ${ }^{\mathrm{L}}$ bùndò ${ }^{\mathrm{L}} \quad$ mí $i^{\mathrm{L}} \quad$ kár ${ }^{n a ̀} \quad \grave{n}$
$\operatorname{dog}^{\mathrm{L}} \quad$ hit $^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad$ Pfv1b ${ }^{\mathrm{L}} \quad$ Pfv.Ppl Def [= (a)]

Although the data are inconclusive, there is at least some evidence that $d \grave{\varepsilon}$-, téré, and $t i$ - are separable auxiliaries. The cases where they are not separated from the preceding substantive
verb, i.e. the (a) sentences in ( $\mathrm{x} x 2-4$ ) above, are compatible either with suffixation or with tight chaining.

The auxiliary analysis might extend to perfective-2 -sj-, but it is not attested in this form in relatives.

### 10.1.2 Overview of AN categories

Indicative categories can be organized into four subsystems as shown in (xx1).
a. perfective positive system
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 kárnà in relative clauses.

External to the aspect-negation system just summarized are stative verbs, whether derived from regular verbs ('be sitting') or lexical quasi-verbs ('be','have', 'want'), which have only a positive/negative polarity opposition. However, statives have some affinities to the imperfective aspect, again seen most clearly in the form of relative clauses.

There is also a tense system of sorts. The aspect-negation and stative categories are implicitly connected to the time of speaking. The deictic center can be shifted to the past by
adding a conjugatable past clitic to the relevant aspect-negation marker, resulting 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 aspect-negation 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). Derived verbs (except perhaps causatives) are often treated for inflectional and phonological-constraint purposes like underived verbs.

The bare stem (or: chaining form) is used in nonfinal position in direct verb chains (§15.1). This can often be taken as the lexical form of the verb (and used as citation form), in the sense that the various $A N$ stems can be predicted from it. However, in some languages, some or all bare stems must end in a high vowel, which can disguise the stems ATR-harmonic value. In this case, another form (e.g. imperative or simple perfective) might be used as citation form, but often these have their own inadequacies (neutralization of lexical tone contour, final-vowel neutralization). So for some languages, the citation form is a combination of the bare stem ( $=$ chaining form) and the imperative, e.g. Toro Tegu wùřyl|wùrìyó 'bend over'.

Sections below describe verb-stem shapes, beginning with monosyllabics.

### 10.1.3.1 Regular $C v$ and $C v$ : verb stems

There are a large number of $C_{V}$ - and $C_{V}$ :- stems with oral vowels. Nasalized vowels are rare in verbs, but I can cite $\varepsilon^{n}$ - '(woman) marry (man)' and homonym 'become tight'. $C_{V}$ - is the regular TU reflex of original ${ }^{*} \mathrm{Cv}(:)$ - stems. $C \mathrm{~V}$ :- verbs are original bisyllabics that have contracted after the loss of a medial consonant (frequently a liquid) between identical nonhigh vowels. Some of them still have bisyllabic features, notably in the A/O-stem. Especially for $C_{V}$-, the stem vowel is usually non-high, but there are a few (somewhat problematic) Cu - and Ci-stems.

Parallel to the distinction between $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ verbs stems of two or more syllables, there is a binary tonal distinction among monosyllabic stems. However, the distinction is partially submerged for $C v$ - stems, because a number of perfective inflections have generalized the H-toned form $C$ v́. This is over and above the more general suppression of lexical stem tones in some other inflectional categories, which affects verbs of all shapes. To determine the lexical tone contour of a Cv - verb, we can observe the tones in the form with perfective-2 -sò-. If we get $C \hat{v}$-sì-, we have a lexically $\{\mathrm{H}\}$-toned verb $C$ v́. If we get $C \grave{v}$-ś́-, we have a lexically $\{\mathrm{LH}\}$-toned verb, whose citation form is $C \check{V}$ - even though the H-tone
element in the $\{\mathrm{LH}\}$ contour is only realized on a suffixal syllable. $C \hat{v}$ - and $C \check{v}$ - are neutralized to $C v^{-}$in perfective-1b $C v^{-}-t i-$ and recent perfect $C \hat{v} d \grave{\varepsilon}$-, so these inflections are not diagnostic for lexical tones of $C v$-stems. For example, dǒ- 'insult' has perfective-2 dò-só(which reveals the lexical $\{\mathrm{LH}\}$ contour), but perfective-1b dó-tì- and recent perfect dó dè-.
( xx 1 ) organizes monosyllabic verb stems by tone classes. The perfective- 2 indicates which are $\{\mathrm{H}\}$-toned and which are $\{\mathrm{LH}\}$-toned, based on the perfective- 2 . As with nonmonosyllabic verbs, monosyllabic stems beginning with voiceless obstruents are $\{H\}$ toned, those beginning with voiced obstruents are $\{\mathrm{LH}\}$-toned, and those beginning with a sonorant or with no consonant can be either (lexical choice).
(xx1) Tone classes of $C V$ - and $C V$ :- verb stems
stem Pfv2 gloss comment
a. $\{\mathrm{H}\}$-toned

CV́-with initial voiceless obstruent

| cé- | cé-sò- | 'shout' | with noun cé-gé |
| :---: | :---: | :---: | :---: |
| ká- | ká-sò- | 'shave' |  |
| kó- | kó-sò- | 'raise (a child) |  |
| $p \varepsilon$ - | pé-Ṡ̀- | 'get old' |  |
| sá- | sá-sò- | 'reply' | (younger speakers) |
| sá- | sá-sò- | 'knock down |  |
| só- | Só-sò- | 'douse' |  |
| tá- | tá-sò | 'shoot' |  |
| tá- | tá-sò | 'avoid taboo' | noun tă: |
| $t \varepsilon ́-$ | té-sj- | 'sprout' |  |
| $t \varepsilon$ - | $t \varepsilon$-sjo | 'weaver' |  |
| tí- | tí-sj̀- | 'send' |  |
| tó- | tó-sjo | 'sow, plant' | with noun tò-ŋgó |
| tó- | tó-sjo | 'spit' | with noun yò-ínjé |

$C \hat{v}$-with initial sonorant or zero
$\varepsilon^{n}{ }^{n} \quad \varepsilon^{n}$-sò- $\quad$ '(woman) marry (man)'
$\varepsilon^{n}-\quad \varepsilon^{n}-$-sjे- 'become tight'
ná- ná-sò- 'spend night'
nú- nú-sò- 'go in'
$n \varepsilon$ - $n \varepsilon$-sò- 'eat, drink'
$C$ v́:- with initial voiceless obstruent
$p \varepsilon$ :- pé:-sj̀- 'strike (match)' Yanda Dom pélé-
pé:- pé:-sò- 'clap (hands)' with noun pélú 'applause', Jamsay péré-
sá:- sá:-sò- 'coarsely grind’ Jamsay sárá-

```
sá:- sá:-s\grave{- 'take off (garment)'}
tá:- tá:-s\grave{- 'lay (egg)' tálé 'egg', Jamsay verb tárá-}
sé:- sé:-sò- 'sneeze' with noun ìsé, Yanda Dom ísíyé-
tó:- tó:-sò- 'begin' Yanda Dom tóló-
tó:- tó:-s\grave{- 'pound' Yanda Dom tóló-}
\(C\) v́:- with initial sonorant or zero
\begin{tabular}{llll} 
á:- & á:-sò- & 'brew (beer)' & Jamsay árá- \\
ह́:- & ह́:-sò- & 'dispossess' & Yanda Dom \(\mathfrak{\varepsilon} 1 \varepsilon ́-~\) \\
ní:- & ní:-sò- & 'sleep' & with noun jìrè-[ní-ŋgí]; Yanda Dom \\
& & & nìy né-
\end{tabular}
```

b. $\{\mathrm{LH}\}$-toned
$C \check{v}$-with initial voiced obstruent
bǎ- bà-só- 'fill'
bǎ- bà-só- 'be enough'
bě- bè-só- 'lie down'
dě- dè-só- 'bathe'
$d \check{-} \quad$ dò-só- 'arrive, approach'
$d \check{o}-\quad$ 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- 'go out'
$j \varepsilon ̌-\quad j \grave{\varepsilon}$-só- 'kill'
$z \varepsilon$ - $\quad z \dot{\varepsilon}$-sò- '(man) marry (woman)'
$j e ̌-\quad j e ̀-s o ́-\quad$ 'dance' with noun jé
$j e ̌-\quad j e ̀-s o ́-\quad ' h a r v e s t ~(m i l l e t) ' ~ w i t h ~ n o u n ~ j e ́-\eta g e ́ ~$
$j e ̌-\quad j e ̀-s o ́-\quad$ 'fart' with noun jì-ŋgé
dǐ- dì-só- 'carry on head'
$C \check{v}$ - with initial sonorant or zero
nǒ- nò-só- 'hear'
yě- yè-só- 'weep' with noun yàygá
yǐ- yì-só- 'see'
$C \check{v}:-$ with initial voiced obstruent

| bă:- | bà:-só- | 'gather' | Jamsay bàrá |
| :---: | :---: | :---: | :---: |
| bă:- | bà:-só- | 'be worth' | Jamsay bă: |
| $b \varepsilon ̌:-$ | $b$ be:-só- | 'get' | Yanda Dom bèlé |
| ż̌:- | $z \grave{\text { è-Só- }}$ | 'bring' | Jamsay jè:ré |
| zǒ:- | zò:-só- | 'look for' | Nanga jòró |


| lă:- | là:-só- | 'give birth' | Jamsay nàr"á |
| :--- | :--- | :--- | :--- |
| nă:- | nà:-só- | 'take, pick up' | Jamsay yàná |
| wă:- | wà:-só- | 'do farm work' | Jamsay wàrá |
| wŏ:- | wò:-só- | 'come' | Yorno So wèlé- |

$C v$ :- stems (except ní:- 'sleep') have a variant form $C_{v}$ - $/ v$ - in agentive compound finals (§5.1.4), and in the quoted hortative ( $\S 10 . \mathrm{xxx}$ ). Historically, the extended variant reflects the original bisyllabic * $C_{v} / v$ - form of most of these verbs.

The vowel quality of $C V$-verbs, including the $\mathrm{A} / \mathrm{O}$-stem and the $\mathrm{E} / \mathrm{I}$-stem, are shown in (xx2). Here, however, tones are removed, since they are often determined by the inflectional suffix independently of vocalsim.
(xx2) Vocalism of $C v$-verb sems
basic $\mathrm{A} / \mathrm{O}$-stem E/I-stem gloss
a. -ATR $C \varepsilon$-stems
initial palatal

| $j \varepsilon$ - | ja- | $j{ }^{\text {c }}$ - | 'kill' |
| :---: | :---: | :---: | :---: |
| лe- | na- | je- | 'eat, drink' |
| ye- | ya- | $y \varepsilon$ - | 'weep' |
| other initial C |  |  |  |
| $\varepsilon^{n}-$ | ea- | $\grave{\varepsilon}^{n}{ }^{-}$ | '(woman) marry (man)' |
| $\varepsilon^{n}-$ | ea- | $\grave{\varepsilon}^{n}$ - | 'become tight' |
| $p \varepsilon$ - | pea- | $p \varepsilon$ - | 'get old' |
| $t \varepsilon$ - | tea- | $t \varepsilon$ - | 'sprout' |
| $t \varepsilon$ - | tea- | $t \varepsilon$ - | 'weave' |
| $z \mathcal{E}$ | zea- | $z \mathcal{E}$ - | 'weep' |

b. -ATR Có- stems

| do- | doa- | dos- | 'arrive, approach' |
| :---: | :---: | :---: | :---: |
| do- | doa- | doc- | 'insult' |
| ko- | koa- | kog- | 'raise (a child)' |
| so- | soa- | SOE- | 'douse' |
| to- | toa- | tog- | 'sow, plant' |
| to- | toa- | tos- | 'spit' |
| no- | noa- | no¢- | 'hear' |

c. +ATR Ce-stems

| $b e-$ | $b e-$ | $b e-$ | 'lie down' |
| :--- | :--- | :--- | :--- |
| $c e-$ | $c \grave{-}$ | $c e-$ | 'shout' |
| $d e-$ | $d e-$ | $d e-$ | 'bathe' |
| $j e-$ | $j e-$ | $j e-$ | 'dance' |
| $j e-$ | $j e-$ | $j e-$ | 'harvest' |
| $j e-$ | $j e-$ | $j e-$ | 'fart' |

d. +ATR Co-stems

| do- | do- | doe- | 'bump' |
| :--- | :--- | :--- | :--- |
| do- | do- | doo- | 'suckle' |
| go- | go- | goe- | 'go out' |

e. $C a$ - stems

| ga- | ga- | gas- | 'cut (with sickle) |
| :---: | :---: | :---: | :---: |
| ka- | ka- | kas- | 'shave' |
| na- | na- | ną- | 'spend night' |
| sa- | sa- | sac- | 'reply' |
| ta- | ta- | tag- | 'shoot' |
| ta- | ta- | tas- | 'avoid taboo' |

f. Cu -stems
$n u-\quad n u-\quad$ nui- 'go in'
g. $C i$ - stems
initial palatal

| yi- | ya- | yi- | 'see' |
| :---: | :---: | :---: | :--- |
| other initial $C$ |  |  |  |
| di- | dia- | di- | 'carry on head' |
| ti- tia- | ti- | 'send' |  |

The A/O-stem requires a shift from $C \varepsilon$ - to $C e a-(x x 2 a)$ from $C o-$ to $C o a$ - (xx2b), and from $C i$ to $C i a-(\mathrm{xx} 2 \mathrm{~g})$. Observe that $C \varepsilon$ - but not $C o$ - shifts to a + ATR value; these pronunciations are clear in careful speech. The diphthongal forms Cea- and Cia- simplify to Ca- after a palatoalveolar (including y). Presumably Coa- would similarly simplify to Ca- after w, but there are no relevant examples. There is no vocalic change in the $\mathrm{A} / \mathrm{O}$-stems for Ce -, $\mathrm{Co}-\mathrm{Ca}-$, or Cu -

In the E/I-stem, $C o$-shifts to $C \vartheta \varepsilon$-, $C o$ - to $C o e-, C a$ - to $C a \varepsilon$-, and $C u$ - to nuri-. This reflects the structural distinction between final-nonhigh-vowel and final-high-vowel verb stems. There is no change in the vocalism of $C \varepsilon$-, $C e$-, or $C i$-, i.e. stems with a front vowel, but this
may disguise an underlying difference between /Cęe-/ and /Cee-/ for the final-nonhigh-vowel verbs and /Ciii-/ for Ci -.

The vocalism of $C v:-$ verbs is illustrated in (xx3). There are no $C u:$ :-stems.
(xx3) Vocalism of $C v:-$ verb sems
basic A/O-stem E/I-stem gloss
a. -ATR $C \varepsilon$ :-stems

| $b \varepsilon:-$ | bea- | $b \varepsilon:-$ | 'get' (but see $\S 10 . \mathrm{xxx}$ below) |
| :--- | :--- | :--- | :--- |
| $\varepsilon:-$ | ea- | $\varepsilon:-$ | 'dispossess' |
| $p \varepsilon$ :- | pea- | $p \varepsilon:-$ | 'strike (match)' |
| $t \varepsilon:-$ | tea- | $t \varepsilon:-$ | 'make large pile' |
| $z \varepsilon:-$ | zea- | $z \varepsilon:-$ | 'bring' |

b. +ATR Ce:- stems

$$
\begin{array}{cccl}
\text { pé:- } & \text { pe:- } & \text { pe:- } & \text { 'clap (hands)' } \\
\text { sé:- } & \text { se:- } & \text { se:- } & \text { 'sneeze' }
\end{array}
$$

c. -ATR Co:- stems
initial $w$
wo:- wa:- wos- 'come'
unrounded initial $C$

| $z 0:-$ | $z o a-$ | $z o E_{-}$ | 'look for' |
| :--- | :--- | :--- | :--- |
| to:- | toa- | $t \mathcal{E}-$ | 'begin' |

d. +ATR Co:- stems
to:- to:- toe- 'pound'
e. Ca:- stems

| ba:- | ba:- | bas- | 'gather' |
| :--- | :--- | :--- | :--- |
| la:- | la:- | las- | 'give birth' |
| ma:- | na:- | nas- | 'take, pick up' |
| sa:- | sa:- | sas- | 'take off (garment)' |
| sa:- | sa:- | sas- | 'coarsely grind' |
| ta:- | ta:- | tas- | 'lay (egg)' |
| wa:- | wa:- | wae- | 'do farm work' |

f. Ci:- stems (or Ciy- ?, see discussion below)
ni:- ni:- ni:-
‘sleep’

In the A/O-stem, $C \varepsilon$ :- becomes $C e a-$, and $C a:$ - becomes $C a \varepsilon$-, following the vowel-quality patterns seen with $C V$ - counterparts. Co:- becomes Coa- (difficult to distinguish from Coa-) but in the case of wo:- 'come', the initial $W^{W}$ "swallows" the $\Omega$, producing wa:-. This is homophonous with the A/O-stem of wǎ:- 'do farm work'. The only Ci:- stem, ní:- 'sleep', does not break into \#nia- in the A/O-stem. This suggests the possibility of a lexical representation níy- rather than ní:-.

In the $\mathrm{E} / \mathrm{I}$-stem of $C V:-$ verbs, there are no surprises; the vowel qualities match those for $C$ v-verbs.

My transcriptions recognize a phonological distinction between monomoraic Coe-, Cea-, $C a \varepsilon$-, etc., from $C v$ - verbs (e.g. goe-) and bimoraic Coe-, Cea-, $C a \varepsilon$-, etc., from $C v$ :- 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 $C e a-$, and the timing distinction between $C a \varepsilon$ - and $C a \varepsilon$ - is subtle in the best of cases.

Furthermore, desyllabified mid-height vowels tend to reduce to semivowels $\left\{\begin{array}{ll}W & y\end{array}\right\}$ in allegro speech, obscuring underlying ATR values, thus sona- $>$ [swa], doe- $>$ [dwe], tea- $>$ [tja].

### 10.1.3.2 nú- 'go in'

This is the only Cu -verb. The paradigm is unremarkable except for the imperative form nwí.
(xx1) Paradigm of 'go in'

| nú | bare stem |
| :--- | :--- |
| nú-lé | verbal noun |
| núi- | simple perfective |
| nú-yà- | perfective-1b |
| nú-sò- | perfective-2 |
| nú dغ̀- | recent perfect |
| nú-téré-bì- | experiential perfect |
| nù-lí- | perfective negative |
| nú-ǹ-dò- | imperfective |
| nú--!gò:- | imperfective negative |
| nú̃ | imperative |
| nú-lì | imperative negative |
| nú-mó-ì | hortative |

In some Dogon languages, 'hear' and 'go in' differ only in tones and merge in some inflectional categories where lexical tones are overridden. In TU, 'hear' is n久̌-, A/O-stem nwa-, so there is always a segmental difference between 'hear' and 'go in'.

### 10.1.3.3 y̌̆- 'see’

This verb diverges in vocalism from the few other Ci - stems. The A/O-stem ya- is what we would expect from \#y $\check{\varepsilon}-$ or \#yǒ- rather than yǐ, and several cognates in other Dogon languages have a -ATR vowel, e.g. Jamsay $\check{\varepsilon}$ :- (Pergue dialect y $\check{\varepsilon}:-$ ), Najamba yé-, Yanda Dom and Toro Tegu wó-.
(xx1) Paradigm of 'see’

| yí | bare stem |
| :---: | :---: |
| yílé | verbal noun |
| yì:- | simple perfective |
| - | perfective-1b or 1a |
| yì-só- | perfective-2 |
| yí dè- | recent perfect |
| yìtéré-bì- | experiential perfect |
| yà-lí | perfective negative |
| yá-mìdò- | imperfective |
| yá-ygò:- | imperfective negative |
| - | imperative |
| - | imperative negative |
| yà-mó-ǹ | hortative |

10.1.3.4 Other $C i$ - verbs ( $t i$ ' 'send', $d i$ '- 'carry on head')

Given the irregularity of 'see', we can think of $t i$ ' 'send' and dǐ- 'carry on head' as regular for the shape $C i$-. As expected from the voicing values of the initial stops, $t i-$ is $\{\mathrm{H}\}$-toned and $d i^{-}$ is $\{\mathrm{LH}\}$-toned, the difference being audible in the perfective- 2 .
(xx1) Paradigms of 'send' and 'carry on head'

| 'send' | 'carry on head' |  |
| :--- | :--- | ---: |
| tí- | dí |  |


| tílé | dí-lé | verbal noun |
| :---: | :---: | :---: |
| ti:- | di:- | simple perfective |
| tí-tì | dí-tì | perfective-1b |
| tí-Sò- | dì-Só- | perfective-2 |
| tí dè- | dí dè- | recent perfect |
| títéré-bì | dì-téré-bì | experiential perfect |
| tìyà-lí- | dìyà-lí- | perfective negative |
| tíyà-m-dò- | díyà-m-dò- | imperfective |
| tíyá-ıgò:- | tíyá-ngò:- | imperfective negative |
| tiá | diá | imperative |
| tiá-lì | dịá-lì | imperative negative |
| tiáá-mó-rì | dinà-mó-ì | hortative |

Several cognates of 'carry on head' are bisyllabic, including a Mediopassive suffix (Yanda Dom dì-yé-, Togo Kan dùw-î:-, Yorno so dùy- $\hat{\varepsilon}$ :-). This probably accounts (historically) for the second syllable in A/O-stem diya. Cognates of 'send' are variably monosyllabic (e.g. Jamsay tí:-) or bisyllabic (e.g. Najamba tíyé-).

### 10.1.3.5 'Be worm-eaten' (koá-)

The subject is usually 'wood' or stored dry crops (peanuts, cow-peas) that have become infested with insects. This is the only verb I know of with this diphthongal shape. The vowel is short. The perfective-1a is kór-(y)à-. The perfective negative is ko à-lí-. The imperfective positive is koá-m̀-dò-. The perfective subject-focus form is kóá-è:

### 10.1.3.6 Suppletive verb 'go' (yăy-, yà-dá, o-)

This verb has two basic stems. On is yǎ(y)-, the other is $o$ - (lexical tone indeterminate). 'go' and its transitive counterpart zǎy- 'convey' share a number of paradigmatic features. Imperative suffix $-d a$ is limited to these two verbs, but the tone contour diverges in the two cases (yà-dá, zá-dà). 'Go' also has a -d- increment in 3Pl perfective yá-d-à: 'they went'. zǎyis ablauted to $z o$ - in the inflections where $o$ - is the stem used for 'go', raising the possibility that $o$ - as 'go' allostem is an ablauted (rather than suppletive) stem. Historically, however, $o$ may derive from an unrelated 'go' verb, cf. Toro Tegu bò- 'go (to)', Dogulu bòlé- 'go'.
(xx1) Paradigm of 'go'
yây bare stem

| yáy-lé | verbal noun |
| :--- | :--- |
| yày- | simple perfective (3Pl yà-d-à:) |
| yǎ-yyà- ~ yé-yà- | perfective-1a |
| yày-só- | perfective-2 |
| yǎy dè- | recent perfect |
| yày-téré-bì- | experiential perfect |
| ò-lí- | perfective negative |
| ó-m̀-dò- | imperfective |
| ó-пgò:- | imperfective negative |
| yà-dá | imperative |
| ó-lì | imperative negative |
| ńbó-ǹ [!] | hortative |

### 10.1.3.7 bě: 'get'

This is a simple transitive meaning 'get, obtain'. It is also used as the final verb in a chain in the sense 'be able to'. The common perfective-positive system form is recent perfect $b \check{\varepsilon}$ :-d $d$ The perfective negative is bèà-lí. The imperfective positive is béà-m-dj̀. The imperfective negative is béá-ŋgò-. The paradigm is therefore synchronically regular.

Cognates like Yanda Dom bèlé and Jamsay bèré preserve the older bisyllabic form. A medial $l$ is preserved in mediopassive $b \grave{\varepsilon} l-1$ : 'be gotten'.

### 10.1.3.8 Mostly regular verb $z \hat{\varepsilon}$ : 'bring'

This verb is synchronically regular for the most part, showing the same stem-alternations as other Ce: stems, see (xx3a) in §10.1.3.1. However, the anterior subordinated forms are pasttime zé-dè gín and future-time zé-dè né, with a -dè element that likely points back to a composite proto-form.
(xx1) Paradigm of $z \hat{\varepsilon}$ :- 'bring'

| z $\hat{\varepsilon}$. | bare stem |
| :---: | :---: |
| zé:-lé | verbal noun |
| zè:- | simple perfective ( 3 Sg ) |
| $z \bar{\varepsilon}$ :-tì | perfective-1b |
| Zè:-Só | perfective-2 |
| $z \check{\varepsilon}$ : $d \grave{\varepsilon}$ - | recent perfect |
| zè:-téré-bì- | experiential perfect |


| zèà-lí- | perfective negative |
| :--- | :--- |
| zéà-m̀-dò- | imperfective |
| zéá- $\eta g o ̀:-$ | imperfective negative |
| zéá | imperative |
| zéá-lì | imperative negative |
| zèà-mó-ǹ | hortative |

The common perfective-positive system form is perfective- $1 \mathrm{~b} z \check{\varepsilon}$ :- $t i-$.
In some other Dogon languages this verb, like 'take away' (next section), shows signs of having originated as a two-verb chain.

### 10.1.3.9 Irregular verb zǎy- 'take away (convey)'

This verb functions roughly as the causative of yǎy- 'go', and the two verbs share some unutual paradigmatic features. In some other Dogon languages, 'take away, convey' is a more or less frozen chain including a 'take' verb and 'go'.

The paradigm is ( $\mathrm{x} x 1$ ).
(xx1) Paradigm of zǎy- 'take away, convey'

| zây | bare stem |
| :---: | :---: |
| záy-lé | verbal noun |
| zày- | simple perfective ( 3 Pl zà-d-à:) |
| zǎy-tì | perfective-1b |
| zày-só | perfective-2 |
| zǎy dè- | recent perfect |
| zày-téré-bì- | experiential perfect |
| zò-lí- | perfective negative |
| zó-m̀-dò- | imperfective |
| zó-ŋgò:- | imperfective negative |
| zá-dà | imperative |
| zó-lì | imperative negative |
| zò-mó-ı̀ | hortative |

### 10.1.3.10 $C v C$-verb stems

There are a number of verb stems that often appear in the form $C v C$-, whether word-finally or presuffixally. Since $C_{2}$ is always a sonorant, and since there is no opposition between $C v C$ -
and $C v C i$ - for a given sonorant $C_{2}$, I am inclined to analyse these stems as $C v C i$-, with frequent syncope/apocope of the final short high vowel (§3.xxx). The full form CvCi - is elicitable, except when $C_{2}$ is $y$. Given the weak metrical position of the second syllable, the distinction between $C v y i$ - and $C v y$-would be difficult to hear in any case.

The sample paradigm in (xx1) is that of làyí- (or lǎy-) 'taste'
(xx1) Paradigm of 'taste'

| lây | bare stem |
| :--- | :--- |
| láy-lé | verbal noun |
| lày- | simple perfective |
| lày-tì- | perfective-1b |
| lày-só- | perfective-2 |
| lày dè- | recent perfect |
| lày-téré-bì- | experiential perfect |
| lày-lí- | perfective negative |
| lây-m-dò- | imperfective |
| láy-!gò:- | imperfective negative |
| láy | imperative |
| láy-lì | imperative negative |
| lày-mó-ŋ̀ | hortative |

Certain inflected forms of yǎy- 'go' (§10.1.xxx) and zǎy- 'take away, convey' (§10.1.xxx) have Cay-segmental shape. Some $C_{V}$ - verbs have an allomorph $C_{V y}$ - in certain perfectivesystem inflections, see §10.xxx.
ní:- 'sleep' might alternatively be represented as níy-, which might account for the absence of a-vowels in its A/O-stem niy- (§10.xxx above).

Overall, a case can be made that $C v y$ - is a valid lexical shape for verbs, but it is not a clearcut call.

### 10.1.3.11 nCv-verb (ndí- 'give’)

The only verb stem of this shape is ńdí- 'give'. It is treated as bisyllabic, as seen by the tone contour in e.g. imperfective ńdà-m-dò-.
(xx1) Paradigm of 'give'

| ńdí | bare stem |
| :--- | :--- |
| ńdí-lé | verbal noun |


| ǹdì- | simple perfective |
| :--- | :--- |
| ńdí-tì- | perfective-1b |
| ńdí-sò- | perfective-2 |
| ńdí dè- | recent perfect |
| ńdí-téré-bì- | experiential perfect |
| ǹdà-lí- | perfective negative |
| ńdà-m-dò- | imperfective |
| ńdá-ทgò:- | imperfective negative |
| ńdá | imperative |
| ńdà-lì | imperative negative |
| ńdá-mó-ı̀̀ | hortative |

### 10.1.3.12 Underived bisyllabic stems

The majority of underived verb stems are bisyllabic. $C v C v$ - is common, followed by $C v C C v$-, then $C v: C v$-, then $C v: C C v$-. The initial C position may be vacant. Medial CC clusters are mostly homorganic nasal-stop clusters $\{m b n d \eta g\}$.

As with mono- and trisyllabic stems, there are two lexical tone classes, $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$. 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 (lexical choice). Lexical tones are preserved in positive perfective forms, but are partially or fully overridden in some other inflectional categories. A few examples illustrating the syllabic shapes and tone classes are in (xx1).
(xx1) Syllabic Shapes and Lexical Tones of Bisyllabic Verbs

```
stem gloss
```

a. $\{\mathrm{H}\}$-toned with initial voiceless obstruent
$\mathrm{CvCV}-$

| kóbó- | 'draw water' |
| :---: | :--- |
| tábá- | 'touch' |
| CvCCV- |  |
| tómbó- | 'jump' |
| sémbí- | 'sweep' |
| $C v: C v-$ |  |
| pá:mí- | 'understand' |
| sá:mí- | 'reply' (older speakers) |
| $C v: C C v-$ |  |


| $\eta \eta \eta$ | ＇xxx |
| :--- | :--- |
| $\eta \eta \eta$ | ＇xxx |

b．$\{\mathrm{LH}\}$－toned with initial voiced obstruent
$\mathrm{CvCv}-$

| zòbó－ | ＇run＇ |
| :---: | :---: |
| bàr ${ }^{\text {ná－}}$ | ＇beat（tomtom）＇ |
| $\mathrm{CvCCv}-$ |  |
| zòngí－ | ＇treat（medically）＇ |
| dàmbí－ | ＇push＇ |
| $C \mathrm{v}: \mathrm{CV}^{-}$ |  |
| ททワ | ＇xxx |
| $C \mathrm{v}: \mathrm{CCV}^{\text {－}}$ |  |
| mà：ndí－ | ＇think＇ |
| $\eta ワ ワ$ | ＇xxx |

c．$\{\mathrm{H}\}$－or $\{\mathrm{LH}\}$－toned with initial sonorant or no consonant
$C v C v-,\{\mathrm{H}\}$－toned
ع́bé－＇buy＇
万́bú－＇lay out＇
クワワ＇xxx
$\eta \eta \eta \quad$＇xxx
$C v C v-,\{\mathrm{LH}\}$－toned
àbá－＇accept＇
ìré－＇forget＇
ìlé－＇go up＇
ibé－＇catch＇
ùró－＇skin and butcher＇
lùgó－＇rinse（mouth）＇
nùpú－＇sing＇
yàgá－＇fall＇
$\eta \eta \eta \quad$＇xxx
$C v C C v=,\{\mathrm{H}\}$－toned
námbí－＇step on＇
óndí－＇build＇
ククワ＇xxx
$C v C C v-,\{\mathrm{LH}\}$－toned
màndí－＇laugh＇with noun móndú－gó
nìndí－＇breathe＇with noun nìndì－gó
nìngé－＇cook（sauce）＇with noun nìngé ‘sauce’

| ワワワ | ＇xxx |
| :---: | :---: |
| $C v: C v-,\{\mathrm{H}\}$－toned |  |
| ทワワ | ＇xxx |
| $\eta ワ ワ$ | ＇xxx |
| $C v: C v-,\{\mathrm{LH}\}$－toned |  |
| ワワワ | ＇ xxx |
| ททワ | ＇ xxx |
| $C \mathrm{v}: C C \mathrm{v}-,\{\mathrm{H}\}$－toned |  |
| $\eta ワ ワ$ | ＇ xxx |
| ทワワ | ＇xxx |
| $C v: C C v-,\{\mathrm{LH}\}$－toned |  |
| nó：ndú－ | ＇ignite＇ |
| $\eta \eta \square$ | ＇xxx |

Regarding vocalism，bisyllabic verbs can be divided into two major categories．In one，the final vowel is nonhigh $\left\{\begin{array}{l}e \\ \varepsilon\end{array}\right.$ a $\left.\rho o\right\}$ and is tightly constrained by the penult vowel．In the other，the final vowel is high（basically $i$ ，but easily shifting to $u$ to assimilate to nearby segments），regardless of the penult vowel quality．In all underived bisyllabic verbs，the final vowel is short，but the penult vowel may be long．

In the final－nonhigh－vowel class，the possible lexical vowel sequences for CvCv verbs are those in（xx2）．

```
mixed ATR
bèr n'\varepsilon- 'become giddy'
zògó- 'shatter'
dògó- 'abandon'
zòbó- 'run'
-ATR
kóbó- 'draw (water)'
\varepsilońb\varepsiloń- 'buy'
s\varepsilońmé- 'slaughter'
+ATR
kédé- 'cut' semamnum
```

（xx2）Vowel sequences for final－nonhigh－vowel $C v C v$－verbs
a．identical non－high vowels
$\mathrm{CeCe}, \mathrm{C} \mathrm{\varepsilon C} \mathrm{\varepsilon}, \mathrm{CaCa}, \mathrm{CoCo}, \mathrm{CoCo}$
b. +ATR followed by -ATR mid-height vowel
$\mathrm{CeCz}, \mathrm{CoCo}$
c. high vowel plus mid-height vowel agreeing in backness
$\mathrm{CiCe}, \mathrm{CiC} \mathrm{\varepsilon}, \mathrm{CuCo}, \mathrm{CuCo}$

The lexical vocalism changes in the $\mathrm{A} / \mathrm{O}$-stem for verbs of this major class that do not already end in $\{a o\}$. Examples of the various vowel patterns are given in (xx3).
(xx3) Final-nonhigh-vowel verbs
basic A/O-stem gloss
a. identical non-high vowels

| $\mathrm{CaCa}-$ |  |  |
| :---: | :---: | :---: |
| +ATR CeCe- and CoCo- |  |  |
| kédé- | kede- | 'cut' |
| pógó- | pogo- | 'thresh' |
| -ATR CeCe-and CoCs- |  |  |
| Ébé- | eba- | 'buy' |
| kóbó- | koba- | 'draw water' |

b. +ATR then -ATR mid-height vowel

| bèr ${ }^{n} \dot{\varepsilon}-$ | berr $^{n} a_{-}$ | 'become giddy' |
| :--- | :--- | :--- |
| dòr $r^{n}{ }^{\prime}-$ | dor $^{n} a^{\prime}$ | 'sell' |

c. high vowel plus mid-height vowel

CiCe- and CuCo-with final + ATR vowel

| síré- | sire- | 'point at' |
| :--- | :--- | :--- |
| súgó- | sugo- | 'go down' |

CiCE- and CuCs- with final -ATR vowel
ilé- ila- 'go up'
gùnó- gupa- 'steal'
Fuller lists of the two types of $C \varepsilon C \varepsilon$ - and $C o C s$ - stems are in (xx4).
(xx4) basic A/O-stem gloss
a. $\mathrm{CeC} \mathrm{\varepsilon}$ - and CoCo -
$C e C \varepsilon$ -

| bèr ${ }^{n}{ }^{\text {c }}$ | ber ${ }^{n}$ a- | 'become giddy' |
| :---: | :---: | :---: |
| CoCo- |  |  |
| dògó- | doga- | 'abandon' |
| dòr ${ }^{\text {nó- }}$ | dor ${ }^{\text {a }}$ - | 'sell' |
| zògó- | zoga- | 'shatter' |

b. CoCo- and $C \varepsilon C \varepsilon$ -
$C \varepsilon C \varepsilon$ -

| ع́bé- | cba- | 'buy' |
| :--- | :--- | :--- |
| sémé- | scma- | 'slaughter' |

CoCo-
kóbó- koba- 'draw water'
$C v C C v-, C v: C v-$, and $C v: C C v$ - verbs favor the final-high-vowel pattern, see below. However, those vowel sequences illustrated above that end in a +ATR vowel are allowed for these heavier verbs (xx5).
basic A/O-stem gloss
a. vowel sequence e...e

| émbé- | embe- | 'be stronger than' |
| :--- | :--- | :--- |
| $\eta$ | $\eta$ | $'$ |

b. vowel sequence $i \ldots$...e

| pídé- | pide- | 'spit in jet' |
| :--- | :--- | :--- |
| $\eta$ | $\eta$ | $‘$ |

c. vowel sequence $o \ldots o$

| tómbó- | tombo- | 'jump' |
| :--- | :--- | :--- |
| $\eta$ | $\eta$ | $‘$ |

d. vowel sequence $u \ldots o$
púngó- pungo- 'hit' $\eta \quad \eta$

This brings us to the final-high-vowel class. Here the penult can be of any vowel quality, but the final vowel is $i$ (always so in the imperative), often shifting to $u$ in the presence of a rounded vowel or a labial(ized) consonant. Some $C v C v$ stems of these types are in (xx6).
basic A/O-stem gloss
a. penult is -ATR

| śbú- | sbu- | 'lay out' |
| :--- | :--- | :--- |
| jèrí- | jera- | 'look' |

b. penult is + ATR
tórí- toro
'authorize'
c. penult is $a$

| gàní- [gǎn] | gan(i)- | 'put (in)' |
| :--- | :--- | :--- |
| yàrí- | yara- | 'untie' |

d. penult is a high vowel

| gùbú- | gubu- | 'hang up' |
| :--- | :--- | :--- |
| sírí- | sira- | 'cook' |

For some such stems, the A/O-stem shifts the final vowel to $\{\mathrm{a} o\}$. Others keep the vocalism unchanged. Lists of stems of the two types are in (xx7).
(xx6) basic A/O-stem gloss
a. A/O-stem does not change vocalism penult has back rounded vowel
gùbú- gubu- 'hang up'
dùnú-[dǔy] duøu- 'put down'
śbú- sbu- 'lay out'
túní-[tún] tun(i)- 'put (in)'
penult has $i$ (traces of CvCCvshape)
píní- pini- 'shut (door)' (imperative píngì)
b. A/O-stem shifts to $\{\mathrm{a} o\}$
penult has front or low vowel
gàyí-[gǎj] gaya-
'bend over backwards'
jèrí- jera- 'look'
sírí- sira- 'cook'

| tórí- | toro- | 'authorize' |
| :--- | :--- | :--- |
| yàrí- | yara- | 'untie' |

For heavier bisyllabic stems ( $C v C C v-, C v: C v-, C v: C C v-)$, the balance shifts more decisively in favor of the final-high-vowel class. Unless the penult has +ATR $\{e o\}$, the verb stem is of the final-high-vowel class. In the A/O-stem, the shift of final vowel to $\{a \sigma\}$ occurs in stems with a long vowel, but a long -ATR penult vowel does not then shift to +ATR. Examples are in (xx8).

```
(xx8) basic A/O-stem gloss
a. penult is -ATR
CvCCv
    s\varepsilońmbí- sembi- 'sweep'
    yèmbí- yembi- 'pick out'
    zò\etagí- zongi- 'treat (medically)'
    sómbú- sombu- 'congratulate'
Cv:Cv
Cv:CCv
    nó:ndú- no:nda- 'ignite'
b. penult is a
CvCCv
dàmbí- dambi- 'push'
\(C \mathrm{v}: \mathrm{Cv}\)
\begin{tabular}{lll} 
pá:mú- & pa:ma- & 'understand' \\
mà:ndí- & ma:nda- & 'think'
\end{tabular}
c. penult is high vowel \(\{i u\}\)
tímbí- timbi- 'cover (with lid)'
```

17
1

Fulfulde and French loans
try 'bring', 'take away, convey' if not monosyllabic
10.1.3.13 Øワף 'xxx' [one such section for each irregular bisyllabic stem]
(sections can be added, one for each irregular stem, showing representative AN forms)
try 'bring', 'take away, convey' if not monosyllabic

### 10.1.3.14 Trisyllabic stems

All known trisyllabic stems end in a short high vowel.
(xx2) Trisyllabics with final high vowel

```
stem gloss
```

a. initial nonhigh vowel (eii, etc.)
b. initial high vowel (iii, etc.)

If there is are CiCiCi and/or CuCuCu/i stems in (xx2b), they should divide into + ATR and $-A T R$ in any $A N$ forms (or the imperative) that require a final nonhigh vowel. If so, give lists here of stems with CiCiCe, CiCiCe, CuCuCo , and CuCuCs in these inflected forms. Each such stems should have a citation form showing both stems.

Briefly indicate conditions under which trisyllabic $C v C v C v$ syncopates a medial high vowel or apocopates a final high vowel, with cross-refs to Chapter 3.

Except perhaps for causatives, trisyllabic derivatives from bisyllabic verbs should obey the same constraints as for lexical trisyllabics (which in many cases originated as suffixed derivatives).

Quadrisyllabic verbs are probably all suffixal derivatives, and presumably follow the rules for trisyllabics, with the medial vowel doubled.

### 10.2 Positive indicative AN categories

### 10.2.1 Perfective positive system (including perfect)

[modify as appropriate for the language]
The categories in this system are the simple perfective (with no syllabic AN suffix), the suffixally marked perfective-1a, perfective-1b, and perfective-2 (or: Resultative), the recent perfect, and the experiential perfect. The two perfect categories are included in this system on the basis of morphology, notably in using the same perfective negative suffix.

### 10.2.1.1 (Simple) perfective ( $\mathrm{E} / \mathrm{I}$-stem in 3 Sg )

The simple (or unsuffixed) perfective is used in three constructions, with slightly different forms.

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. Here "focalization" should be interpreted loosely, as almost any constituent preceding the verb can trigger verb defocalization, even when the free translation would not suggest any special focus. The (conjugated) simple perfective is not used when the subject is focalized. In this case, a special unconjugated subject-focus form with final $-\grave{\varepsilon}$; is required (§13.1.1.3).

Sample paradigms are in (xx1). For verbs like 'abandon' and 'die' that end in a non-high vowel, the lexical vowel quality is kept in the 1 st/2nd person forms. The 3 Sg form shifts final $\{o o\}$ to $\{\varepsilon e\}$, but keeps nonfinal vowels intact. I call this the E-stem. 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 3 Sg form ends in $i$, which is probably the same stem underlying the $1 \mathrm{st} / 2$ nd person forms ( $i$ or $u$ before the suffix). In other words, for these verbs the $\mathbf{I}$-stem is not confined to the 3 Sg .

The 3Pl form ends in -à:, arguably the contraction of a suffix $/-\mathrm{a} /$ 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 3Pl form makes it difficult to determine which stem is involved. The verbs 'go' (included here) and 'take away, convey' have a special 3Pl perfective form with a $-d$ - extension (absent from the rest of the paradigm), followed by -à:; see (xx5) below.

Paradigms of the defocalized simple perfective are in (xx1). In the absence of a preceding constituent, these forms are not used. Instead, one of the suffixally marked perfectives is used.
(xx1) Simple perfectives (defocalized)

| category | 'abandon' | 'die' | 'build' |
| :---: | :---: | :---: | :---: |
| 1 Sg | dう̀gò-m | tibè $-m$ | òndù-m |
| 1 Pl | djogò-y ${ }^{n}$ | tible $-y^{n}$ | òndì- $y^{n}$ |
| 2 Sg | djgò- $W^{n}$ | tìbè- $W^{n}$ | òndù-W ${ }^{n}$ |
| 2 Pl | dj̀gò-y ${ }^{n}$ | tìbè- $y^{n}$ | òndì- ${ }^{n}$ |
| 3Sg/Inan | $d \grave{g}$ g̀- $\varnothing$ | tìbè- $\varnothing$ | ı̀ndì- $\varnothing$ |
| 3 Pl | dog-à: | tiob-à: | ònd-à: |

When used with content (WH) interrogatives, if no other overt question marker is present, the defocalized simple perfective can appear with a final rising pitch (arguably rising tone), and a final short vowel is lengthened to accommodate the contoured tone:

```
(xx2) \grave{jjé \grave{ndǐ:-\varnothing}}0=0,
    what build.Pfv-3SgSbj
    'What did he/she build?'
```

A different tonal form is used in isolation, and to a limited extent in a clause with preceding constituents (especially unfocalized setting adverbials). Here the simple perfective is allowed, though less common that suffixally marked perfectives. In these contexts, the verb is $\{\mathrm{HL}\}$-toned for all subject categories. The segmental form is as in (xx1) above. Thus dógè- $\varnothing$ 'he/she abandoned', dógj̀-m ‘I abandoned', and so forth.

The third form of the simple perfective occurs in combination with with dè 'if' in conditional antecedents (xx3). The 1st/2nd person forms are now $\{\mathrm{LH}\}$-toned, with the H tone on the final syllable (or final monosyllabic mora). The third person forms are L-toned, but transfer a H-tone to the 'if' particle. The vocalism of the 3 Sg form is now that of the bare stem, not the E-stem as in (xx1) above. The vocalic change is overt with 3Sg dj̀gò- $\varnothing$ dé 'if he/she abandons', contrast $d \grave{g} \varepsilon \grave{c}-\varnothing$ above. In addition,
(xx3) Simple perfectives (with dè 'if')

| category | 'abandon' | 'die' | 'build' |
| :---: | :---: | :---: | :---: |
| 1Sg | dògóm dè | tibé-m dè | òndú-m dè |
| 1P1 | dògó- $y^{n}$ dè | tibé-y ${ }^{n}$ dè | òndí- $y^{n}$ dè |
| 2Sg | djogó-w ${ }^{n}$ dè | tibé-W ${ }^{n}$ dè | $\grave{̀ ̀ n d u ́ l u} W^{n}$ dè |
| 2 Pl | dògó- $y^{n}$ dè | $t i b e ́-y^{n} d e ̀$ |  |
| 3Sg/Inan | dj̀gò- $\varnothing$ dé | tibè̇- $\varnothing$ dé | òndì- $\varnothing$ dé |
| 3 Pl | dòg-à: dé | tib-à: dé | ònd-à: dé |

In both the defocalized and conditional constructions, stem-final +ATR optionally assimilate in frontness to a following $1 \mathrm{Pl} / 2 \mathrm{Pl}$ suffix $-y^{n}$. For example, bùndò- $y^{n}$ 'we hit' is optionally pronounced bùndè- $y^{n}$, and intermediate pronunciations can be heard. This is unrelated to the systematic shift between lexical segmental form and the E-stem in the 3Sg.

Forms of 1 Sg and $3 \mathrm{Sg} /$ Inan simple perfectives from monosyllabic stems are in ( xx 4 ). The 3Sg defocalized forms that show overt E-stems provides diphthongs that do not occur elsewhere in the language, including some due to devocalization of $o$ and $\rho$. Another new fact
that can be gleaned is that the $-y$ suffix with 'enter' and 'see' (Cv verbs of the final-highvowel class) disappears before dè.
$\begin{array}{llllll}(\mathrm{x} 4) & \text { gloss } \quad \text { bare } 1 \mathrm{Sg} \text { Defoc } & 1 \mathrm{Sg} \mathrm{w} d \grave{e} & 3 \mathrm{Sg} \text { Defoc } & 3 \mathrm{Sg} \mathrm{w} \text { dè } & 3 \mathrm{Pl}\end{array}$
a. $C V$

| 'enter' | nú | $n u ̀-m$ | nù-ńn dè | $\begin{aligned} & n u ̀-y \\ & \sim n W-i ̀ l \end{aligned}$ | nù- $\varnothing$ dé | $n W-a ̀:$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'see' | y̌̌: | $y i ̀ m$ | yì-ḿn dè | $y i-y$ | $y \grave{-}$ ¢ $\varnothing$ dé | $y(y)$-à |
| 'get old' | $p \varepsilon$ | $p \grave{\varepsilon}-m$ | $p$ è-lí dè | $p \grave{\varepsilon}-\varnothing$ | $p$ è- $\varnothing$ dé | pe-à: |
| shout' | cé | cè-m | cè-ḿ́de | cè- $\varnothing$ | cè- $\varnothing$ | ce-à |

overtly distinct E-stem (defocalized 3 Sg)

| 'exit' | gǒ | gò-m | gò-mídè | goè- $\varnothing$ | $g o ̀-\varnothing d e ́$ | go-à: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'sow' | tó | tò-m | tò-ńm dè | toc̀̀- $\varnothing$ | $t \grave{-} \varnothing$ dé |  |

'shave' ká kà-m kà-mí dè kà̀̀- $\varnothing$ kà- $\varnothing$ dé k-à:
([kà̀ $\left.{ }^{\text {en }}\right)$
b. $C V$ :

| 'bring' | $z e e_{\text {é }}$ | zè̀̀̀:-m | zę̀è:-ń dè | zę̀è:- $\varnothing$ | $z e ̨$ è: $-\varnothing$ dé | zè-à: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'sneeze' | sé: | sè:-m | sè̀:-ń dè | sè:- $\varnothing$ | sè: - $\varnothing$ dé | sè-à: | 'sleep' ní: nì:-m nì:-ṇ̄ dè nì:- $\varnothing \quad n i ̀:-\varnothing$ dé nì-à. overtly distinct E-stem (defocalized 3 Sg )


| 'come' | wǒ: | wò:-m | wò:-ıń dè |  | wò:- $\varnothing$ dé | wò-à: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'pound' | to: | tò:-m | tò:-ıń dè | tò̀: $-\varnothing$ | tò: $-\varnothing$ dé | tò-à: |
| 'gather' | bă: | bà:-m | bà:-ṇ́ dè | bà̇- $\varnothing$ | bà:- $\varnothing$ dé | b-à: |
|  |  |  |  | [bàè] |  |  |

With dè 'if', I could hear no distinction between 3 Sg bà:- $\varnothing$ dé 'if he/she gathers' and $3 \mathrm{Pl} b$-à: $d e ́$ 'if they gather'. In the $a \varepsilon$ diphthong, neither vowel is desyllabified or lengthened.

The (clear and possible) CvC - stems in (xx3) must deal with how to pronounce the 1st/2nd 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 $C v y$-, the sonorant syllabifies, more clearly in the cases of $-y^{n}$ and $-w^{n}$ than in that of $-m$. For example, yày- $-\tilde{w}^{n}$ is heard as [jàjún]. Cvn- stems, however, require a brief high vowel before $-m^{\prime \prime},-\tilde{w}^{n}$, and $-y^{n}$. It is easiest to hear this in the 1 Sg forms shown for 'put' and 'put in' in (xx3b). In corresponding 1Pl, 2 Sg , and 2Pl forms (i.e. with a semivowel as suffix), I also hear a (homorganic) short high vowel, and therefore a $<\mathrm{LH}>$ tone on the final syllable, as in 2 Sg tùnù- $W^{n}$, phonetic [tùnù: ${ }^{n}$ ], and in $1 \mathrm{Pl} / 2 \mathrm{Pl}$ tùn- $\grave{y} \grave{y}^{n}$, phonetic [tùnì: ${ }^{\mathrm{n}}$ ]. 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.xxx. The forms in (xx5) are $\{\mathrm{L}\}$-toned (defocalized), but there are no segmental changes in the conditional forms with dè.
(xx5) Simple perfective (defocalized), $C v C$-stems

| stem | 1 Sg | 3 Sg | 3 Pl | gloss |
| :--- | :--- | :--- | :--- | :--- |

a. Cvy-motion verbs (with $-d$ - augment in 3 Pl )

$$
\begin{array}{lllll}
\text { yăy-/o- } & \text { yày }(i)-m & \text { yày- } \varnothing & \text { yà- }- \text {-à: } & \text { 'go' } \\
\text { zăy-/zo- } & \text { zày(i)-m } & \text { zày- } \varnothing & \text { zà- } d \text {-à: } & \text { 'take, convey' }
\end{array}
$$

b. Cvy-and Cvn- (arguably from bisyllabic /CvCi-/)

| lǎy-(làyí-) | lày (ì)-m | lày- $\varnothing$ | lày-à | 'taste' |
| :--- | :--- | :--- | :--- | :--- |
| tún-(túnnui-) | tùnù-m | tùn- $\varnothing$ | tùn-à: | 'put' |
| găn-(gàní-) | gànù-m | gàn- $\varnothing$ | gàn-à: | 'put in' |

More nonmonosyllabic stems are illustrated in (xx6).
(xx6) Simple perfective (defocalized), nonmonosyllabic stems
stem $1 \mathrm{Sg} \quad 3 \mathrm{Sg} \quad 3 \mathrm{Pl} \quad$ gloss
a. bisyllabic, final nonhigh vowel

| kédé- | kèdè-m | kèdè̀- $\varnothing$ | kèd-à: | 'cut' |
| :--- | :--- | :--- | :--- | :--- |
| tábá- | tàbà-m | tàbè- $\varnothing$ | tàb-à: | 'touch |
| zòbó- | zj̀bò- $m$ | zj̀bè- $\varnothing$ | zj̀b-à: | 'run' |

b. bisyllabic, final high vowel

| dǔy- | dùyı̀-m | dùỳ̀- $\varnothing$ | dùp-à: | 'put down' |
| :--- | :--- | :--- | :--- | :--- |
| gùbú- | gùbù-m | gùbì- $\varnothing$ | gùb-à: | 'hang' |
| jèrí- | jèrù-m | jèrì- | jèr-à: | 'look' |

c. trisyllabic, final nonhigh vowel
zìgìí- zìgììi-m zigibì- $\varnothing \quad$ zigib-à: 'shake'
10.2.1.2 Perfective-1a (-yà-~ -à:-), perfective-1b (-tì-)

Most verbs have a characteristic suffixed perfective, either perfective-1a -yà- ~ -à:- or perfective-1b -ti-. A few verbs occur with neither; in this case, the default perfective is the
perfective-2 or a form with past clitic $=b i$-. Both the perfective- 2 and the past can be used with any verb stem.

Perfective-1a is used with basic motion verbs ('go', 'come', 'go in', 'go out', 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 have 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]‘Y (e.g. glass, calabash) shattered’ and perfective-1b [X Y zògó-tì$\varnothing]^{\prime} \mathrm{X}$ (person) shattered Y '. In other inflectional categories, the two are not distinguished morphologically.
yǎy- 'go' has perfective-1a yăy-yà- 'went' in its basic sense. However, in the collocation Íyé yăy- 'play the board game', which no longer has a clear motion component, it is optionally treated as active or transitive and we get perfective-1b íyé yăy-ti- 'played the board game' as an alternative to perfective-1a íý yăy-yà-.

The paradigms are in (xx1). The perfective-1a variant -à:- becomes -â:- when it contracts with a stem-final H-toned vowel in an $\{\mathrm{LH}\}$-toned bisyllabic stem.
(xx1) category perfective-1a perfective-1b

| 1Sg | -à:-m~ -yà-m | -tìm |
| :---: | :---: | :---: |
| 1P1 | -à:- $y^{n} \sim-y a ̀-y^{n}$ | $-t i-y^{n}$ |
| 2Sg | -à̀:- $W^{n} \sim-y$ à̀-W ${ }^{n}$ | $-t i-W^{n}$ |
| 2Pl | -a : $-y^{n} \sim-y \grave{a}-y^{n}$ | $-t i-y^{n}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | -à:-y~ -yà-y | -ti- $\varnothing$ |
| 3 Pl | -yà-d-à: | -tì-yà |

The suffixal allomorphs of the perfective-1a with various types of stem are illustrated in ( xx 2 ). There is some fluctuation in pronunciation with $C_{V}$ - stems, only a few of which take the perfective-1a. $C_{v-y a ̀-~ s h i f t s ~ t o ~} C v$-yyà- when the stem is $\{\mathrm{LH}\}$-toned, allowing the complex tone to be fully articulated on the stem. This extra $y$ occurs optionally in tá-(y)yà- from \{ H$\}$-toned tá- '(trap) spring', but was never heard with núl-'go in'. The variant forms $d w$-â:- (for /do-â:/) and $g w$-â:- (for /go-â:/) in (xx2a) 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 (xx2b), where it surfaces as -à:- with $\{\mathrm{H}\}$-toned stems and as -â:- with $\{\mathrm{LH}\}$-toned stems, after contracting with the stem-final short vowel. Allomorph -yà- is also found after bisyllabics ending in $i(\mathrm{xx} 2 \mathrm{~b})$, and after Mediopassive $-1:-(\mathrm{xx} 2 \mathrm{c})$. All trisyllabics known to me that take the perfective-1a are morphological mediopassives.
(xx2) Perfective-1a -yà-, -à:-
stem perfective-1a gloss
a. $C \mathrm{~V}-$
\{H\}-toned

| nú- | nú-yà- | 'go in' |
| :--- | :--- | :--- |
| tá- | tá-(y)yà- | '(trap) spring' |
| $\{L H\}$-toned |  |  |
| $d o ̌-$ | $d o ̌-y y a ̀-~ d w-a ̂:-~$ | 'arrive' |
| gǒ- | gǒ-yyà̀- $\sim g W$-â:- | 'go out' |
| bě- | bě-yyà- | 'lie down' or 'stay, remain' |
| bă- | bă-yyà- | 'be enough' |

b. $C \mathrm{~V}:-$
,
pé:-
wǒ:-
ní:-yà-
pé:-yà-
wǒ:-yà-
sleep
'(rifle) discharge'
'come'
c. $C V y-$
yǎy-/o- yăy-yà-~yé-yà- 'go'
d. bisyllabic
final nonhigh vowel, $\{L H\}$-toned

| yàgá- | yàg-â:- | 'fall' |
| :---: | :---: | :--- |
| ilé- | il-â:- | 'go up' |
| wàdá- | wàd-â:- | 'be left over' |
| final nonhigh | vowel, $\{H\}$-toned |  |
| péndé- | pénd-à:- | '(bone) break' |
| pódó- | pód-à:- | 'be bruised' |
| lábá- | láb-à:- | 'go past' |
| tíbé- | tíb-à:- | 'die' |

final $i$
tángí- tángí-yà- 'become; cross'
e. mediopassive

| cíll-í:- | cíll-í:-yà- | 'be resolved' |
| :--- | :--- | :--- |
| kábí1-í:- | kábîl-í:-yà- | 'be separated' |
| bàrm-í:- | bàrm-í:-yà- | 'be wounded' |

It is possible that at least the -yà- allomorph of the perfective-1a is historically related to yǎy'go'. Prima facie evidence for this is that the 3 Sg form -yà-y and the 3 Pl form -yà-dà are exact matches for the simple perfective of 'go' (§10.xxx). However, the perfective-1a is a fairly old formation (cognates in Jamsay and Ben Tey, for example).

The pronominal-suffix paradigm of perfective-1b -ti- is in (xx1) above. There are no special phonological interactions with the stem. $C$ ř- monosyllabics have H -toned stems, as in the recent perfect (but not the perfective-2 or the experiential perfect). A few examples are in (xx3).
(xx3) Perfective-1b -ti-
stem perfective-1b gloss
a. $C \mathrm{~V}=, C \mathrm{~V}:-$

| ká- | ká-tì- | 'shave' |
| :--- | :--- | :--- |
| tí- | tí-tì- | 'send' |
| $j e ̌-$ | $j e ́-t i ̀-~$ | 'dance' |
| $j \varepsilon ̌-$ | $j \varepsilon ́-t i ̀-$ | 'kill' |
| jé- | né-tì- | 'eat, drink' |
| tó:- | tó:-tì- | 'pound' |

b. Cvy-

| zăy-/zo- | zăy-tì- | 'take, convey' |
| :--- | :--- | :--- |
| lăy- | lăy-tì- | 'taste' |
| tún- | tún-tì- | 'put' |

c. bisyllabic

| Kédé- | kédé-tì- | 'cut' |
| :--- | :--- | :--- |
| tábá- | tábá-tì- | 'touch' |
| sémbí- | sémbí-tì- | 'sweep' |
| óndú- | óndú-tì- | 'build' |

d. trisyllabic péndí-gí- péndí-gí-tì- 'break'
zìgìbí- zìgìbí-tì- 'shake'

The most likely source of perfective-1b -ti- is the verb ti- 'send'. Like the perfective-1a, however, the formation is fairly old (cognates in Jamsay and Ben Tey).

### 10.2.1.3 Perfective-2 (-sj̀-)

The perfective-2 (like past enclitic $=b i ̀$-, see the following section) can be used with any verb. It is most 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- 1 a or perfective- 1 b and so require perfective- 2 or the past enclitic.

The basic form of the suffix is -sì. Unlike perfective-1a/-1b and recent perfect suffixes, but like the experiential perfect, -sì- induces dropping of the tones of a preceding $\{\mathrm{LH}\}$-toned verb stem to $\{\mathrm{L}\}$, 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 -toned component appearing on the suffix. Lexically $\{\mathrm{H}\}$-toned verbs have their full $\{\mathrm{H}\}$-toned form before the suffix. Since these generalizations apply even to $C V$ - stems, the perfective- 2 is useful for determining the lexical tone of $C V$-stems.

The synchronic relationship between the perfective-2 and the quasi-verb sò- 'have' is difficult to determine. The perfective-2 is probably ancient within Dogon, and counterparts occur in several (but not all) Dogon languages, e.g. Jamsay -sà-.

The paradigm is (xx1), with ň̌- 'hear' and tó:- 'pound' representing lexically $\{\mathrm{LH}\}$ - and $\{\mathrm{H}\}$-toned verbs, respectively. The 3 Pl subject form is $-s-\hat{\varepsilon}$., not \#-sol- $\hat{\varepsilon}$. .
(xx1) Perfective-2

| category | form | 'hear' | 'pound' |
| :---: | :---: | :---: | :---: |
| 1Sg | -só-m | nj̀-só-m | tó:-sò-m |
| 1Pl | -ssó-y ${ }^{n}$ | $n \grave{-s o ́-~} y^{n}$ | tó:-sì- $\mathrm{y}^{n}$ |
| 2Sg | -ssó-W ${ }^{n}$ | $n \grave{-s}{ }^{\text {a }}$ - $W^{n}$ | tó:-sì-W $W^{\text {n }}$ |
| 2P1 | -só-W ${ }^{n}$ | $n \grave{-s o ́-W ~} W^{n}$ | tó:-s文-y ${ }^{n}$ |
| 3Sg/Inan | -só- $\varnothing$ | nò-só- $\varnothing$ | tó:-sì- $\varnothing$ |
| 3Pl | $-s-\hat{\varepsilon}$ : | $n \grave{j}-\frac{1}{\varepsilon}$ : | tó:-s-è: |

Further examples, using the 3 Sg form, are in (xx2). For $C v$ - and $C v$ :- stems, an extensive list is given in (xx1) in §10.1.3.1.
(xx1) verb perfective-2 gloss
a. $\{\mathrm{H}\}$-toned stems

| síré- | síré-sò- | 'point at' |
| :--- | :--- | :--- |
| súgó- | súgó-sò- | 'go down' |
| tómbó- | tómbó-sj̀- | 'jump' |

b. $\{\mathrm{LH}\}$-toned stems

| ìbé- | ib̀̀̀-só- | 'catch' |
| :--- | :--- | :--- |
| gùló- | gùlò-só- | 'dig' |
| bàrá- | bàrà-só- | 'add' |
| zèbé- | zèbè-só | curse' |
| nùnú- | nùŋù-só- | 'sing' |
| zòngú- | zòngù-só- | 'treat' |

10.2.1.4 Past perfect ( = bì-) as a basic past form for some verbs
$=b i ̀$ - 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.

The simplest combination morphologically is the past perfect, which consists of the bare stem plus the conjugated enclitic (§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 such as 'see' and 'hear' that do not allow the perfective-1a or perfective-1b suffixes. 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 $=b i ̀$ - 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.
(xx1) Past

| category |  | 'say' |
| :---: | :---: | :---: |
| 1 Sg | $=b u ̀ ̀ m$ | ór $($ ú $)=b u ̀$-m |
| 1P1 | $=b i ̀-y^{n}$ | ór $\left(u u^{\prime}\right)=b i ̀-y^{n}$ |
| 2 Sg | $=b u ̀-W^{n}$ | ór $\left(u u^{\prime}\right)=b u ̀-w^{n}$ |
| 2 Pl | $=b i ̀-y^{n}$ | ór $\left(u u^{\prime}\right)=b i \grave{l}-y^{n}$ |


| $3 \mathrm{Sg} /$ Inan | $=b \grave{i}-\varnothing$ |  |
| :--- | :--- | :--- |
| 3 O 1 |  | ór $(u ́)=b \grave{i}-\varnothing$ |
| 3 -à: |  | ór $(u$ ú $)=b-a ̀:$ |

### 10.2.1.5 Experiential perfect 'have ever’ (-térદ́-bì-, -tદ́rદ́-sذ̀-)

The experiential perfect 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 'see' and 'hear' as well as 'go'.

In positive clauses, one form of the experiential perfect is -téré=bì, including past clitic $=$ bì-, whose vowel assimilates (-bù-) to a following labial(ized) consonant $-W^{n}$ or $-m$. $\{\mathrm{LH}\}-$ toned verbs drop to $\{\mathrm{L}\}$ before the suffix. The other variant is -téré-s̀̀-, with the perfective-2 suffix (and 'have' quasi-verb) -sì. The paradigm is (xx1).
(xx1) Experiential perfect

| category | form | 'have ever seen' | 'have ever seen' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -téré $=$ bù-m / -sò-m | yì-téré $=$ bù $-m$ | yìtéré-sò-m |
| 1P1 | -téré $=b \grave{-}-y^{n} /-s \grave{\varepsilon}-y^{n}$ | yì-téré $=$ bì- $y^{n}$ | yì-téré-sè- $y^{n}$ |
| 2 Sg | -téré $=$ bù- $W^{n} /-$-sò- $W^{n}$ |  | yìtéré-sò- $W^{n}$ |
| 2 Pl | -téré $=$ bì- $y^{n} /--s \dot{\varepsilon}-y^{n}$ | $y i ̀$-téré $=$ bì- $y^{n}$ | yì-téré-sè-y ${ }^{n}$ |
| 3Sg/Inan | -téré $=$ bì- $\varnothing$ /-sò- $\varnothing$ | yìtéré $=$ bì- $\varnothing$ | yì-téré-sò- $\varnothing$ |
| 3 Pl | -téré $=b-a ̀: /-s-\varepsilon ̇:$ | $y$ ìtéré $=$ b-à: | yìtéré-s-غ̇: |

Forms of -téré-bì- from a sample of stems are in (xx2).
(xx2) Experiential perfect
verb ExpPrf gloss
a. $\{\mathrm{H}\}$-toned

| jń- | né-téré-bì- | 'eat' |
| :--- | :--- | :--- |
| tó:- | tó:-téré-bì- | 'pound' |
| kóbó- | kóbó-téré-bì- | 'draw (water)' |
| péndí-gí | péndí-gí-téré-bì- 'break' |  |

b. $\{\mathrm{LH}\}$-toned

| gǒ- | gò-téré-bì- | 'go out' |
| :--- | :--- | :--- |
| Wǒ:- | wò:-téré-bì- | 'come' |
| yǎy-/o- | yàgà-téré-bì- | 'fall' |
| yàgá- | yày-téré-bì- | 'go' |
| mà:ndí- | mà:ndì-téré-bì- | 'think' |
| zìgìbí- | zìgìbì-téré-bì- | 'shake' |

Sentence examples are in (xx3).
(xx3)
a. gònsá: $r^{n a ́ ~ y i ̀-t e ́ r e ́=b u ̀-m ~}$
elephant see-ExpPrf=Past-1SgSbj
'I have (once) seen an elephant.'
b. ú bàmàḱ́ yày-téré $=b u ̀-W^{n}$
$2 \mathrm{SgSbj} \quad \mathrm{B} \quad$ go-ExpPrf=Past-2SgSbj
'Have you-Sg ever been to Bamako?'
c. ú pédé sémé-téré=bù-W ${ }^{n}$

2 SgSbj sheep slaughter-ExcPf=Past-2SgSbj
'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 $=b i ̀-$, see $\S 10.2 .3 .2$.

### 10.2.1.6 Recent perfect (dغ̀-)

Another option in the perfective system is recent perfect $d \grave{\varepsilon}$-. This category 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'.

The paradigm is ( $\mathrm{x} x 1$ ).
(xx1) Recent perfect

| category | form | 'eat (meal)' |
| :--- | :--- | :--- |
| 1 Sg | $d \grave{\varepsilon}-m$ | $j \varepsilon ́ d \grave{\varepsilon}-m$ |
| 1 Pl | $d \grave{\varepsilon}-$ | $j \varepsilon \dot{\varepsilon} d \grave{\varepsilon}-y^{n}$ |
| 2 Sg | $d \grave{\varepsilon}-$ | $j \varepsilon \dot{\varepsilon} d \grave{\varepsilon}-W^{n}$ |


| 2P1 | $d \grave{\varepsilon}-$ | $j \varepsilon ́ d e ̀-y^{n}$ |
| :--- | :--- | :--- |
|  |  |  |
| 3Sg/Inan | $d \grave{c}-\varnothing$ | $j \varepsilon ́ d e ̀-\varnothing$ |
| 3P1 | $d-\grave{a}$ | $j \varepsilon ́ \varepsilon d-a ̀: ~$ |

A sample of verbs is in (xx2). Note that the $\{\mathrm{LH}\}$-toned verbs in this inflection have a stemfinal H-tone, unlike the case with the experiential perfect, where $\{\mathrm{LH}\}$-toned stems drop all tones before the suffix.
(xx2) Recent perfect
verb recent perfect gloss
a. $\{\mathrm{H}\}$-toned

| né- | né $d \grave{\varepsilon}$ - | 'eat' |
| :--- | :--- | :--- |
| tó:- | tó: $d \grave{\varepsilon}-$ | 'pound' |
| kóbó- | kóbó dè- | 'draw (water)' |
| péndí-gí | péndí-gí dè- | 'break' |

b. $\{\mathrm{LH}\}$-toned
gǒ- gó dغ̀- 'go out'
wŏ:- wŏ: $d \grave{\varepsilon}$ - 'come'
yăy-/o- yàgá dè- 'fall’
yàgá- yǎy dè- 'go'
mà:ndí- mà:ndí dè- 'think’
zigibí- zigibí dè- 'shake’

The completive sense is exemplified by ( xx 2 a ), the recent perfect sense by ( $\mathrm{x} \times 2 \mathrm{~b}$ ).
(xx2)
a. úló
óndú dè-m
house build RecPrf-1SgSbj
'I have (recently) finished building (a/the) house.'
b. za
nغ́ $\quad d \grave{\varepsilon}-y^{n}$
meal eat.meal RecPrf-1P1Sbj
'We have (already) eaten.'

Recent perfect negative dà-lí- is possible in completion-of-activity contexts like (xx2a), see §10.2.3.3, but in contexts like (xx2b) the regular perfective negative is normal.

### 10.2.1.7 Reduplicated perfective (absent)

No reduplicated perfective is attested.

### 10.2.2 Imperfective positive system

10.2.2.1 Imperfective (-mì-dò, -m̀̀-nغ̀, -m̀-n $)$

This is a broad imperfective. 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 are used to specify an activity in progress ('I am working'), and by the stative ('I am standing').

The pronominal paradigm is in (xx1). The verb stem and the imperfective $-\grave{m}$ - formative are stable throughout. The -m- is followed by a second formative whose most basic form is $-d$, to judge by the otherwise unsuffixed 3 Sg . After 1 st/2nd person prefixes, the $d$ is nasalized to $n$, and the vowel shifts forward to $\varepsilon$ before $-y^{n}$ and upward to $u$ before $-\eta$ and $-w^{n}$. The 3 Pl form ends in a short vowel, unlike 3 Pl forms in most other paradigms. All suffixes are L-toned.
(xx1) Imperfective paradigm

| category | form | 'goes out' |
| :---: | :---: | :---: |
| 1Sg | -m̀-nù-m | gó-m̀-nù-m |
| 1P1 | $-\grave{m}-n \grave{\varepsilon}-y^{n}$ | $g o ́-m \grave{m}-n \grave{\varepsilon}-y^{n}$ |
| 2 Sg | -m̀-nù- $W^{n}$ | gó-m̀-nù-W ${ }^{n}$ |
| 2 Pl | $-\grave{m}-n \grave{\varepsilon}-y^{n}$ | $g o ́-m \grave{m}-n \grave{\varepsilon}-y^{n}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | $-\grave{m}-d \grave{j}-\varnothing$ | $g o ́-m$-do - $\varnothing$ |
| 3 Pl | $-\grave{m}-d-\frac{\varepsilon}{c}$ | gó-m̀-d-غे |

The verb takes the A/O-stem, and has $\{\mathrm{HL}\}$ tone contour, with only the first syllable H -toned. For monosyllabics, the $C_{V}$ - or $C V$ :- stem combines with the suffixal -m̀- to form a <HL>toned syllable. Examples with stems ending in a nonhigh vowel are in (xx2).
(xx2) Imperfective (final-nonhigh-vowel class)
verb imperfective gloss
a. $C \mathrm{~V}$-, $C \mathrm{~V}:-$

| ká- | ká-mò-dò- | 'shave' |
| :---: | :---: | :---: |
| á:- | á:-ın-dò- | 'brew (beer)' |
| dě- | dé-mìdjo | 'bathe' |
| dǒ- | dơá-m̀-dò- | 'arrive' or 'insult' |
| ПÉ- | ná-m̀-dò- | 'eat, drink' |

b. $\mathrm{CvCV}^{-}$

| dògó- | dógà-m-dò- | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kóbà-m-dò- | 'draw (water)' |
| kédé- | kédè- $m-d \grave{-}$ | 'cut' |
| yàgá- | yágà- $m-d \grave{-}$ | 'fall |

c. $C v C C v-$
tómbó- tómbò-m-dj̀- 'jump'
gùndó- gúndò-m-dò 'become sterile'

The form is similar with verbs that end in a high vowel (xx3).
(xx3) Imperfective (final-high-vowel class)
bare stem imperfective gloss
a. Ci -, $\mathrm{Ci}:-$

| $n u ́-$ | $n u ́-m ̀-d \grave{m}-$ | 'go in' |
| :--- | :--- | :--- |
| $t i ́-$ | $t i ́-m i-d \grave{-}$ | 'send' |
| $n i ́:$ | $n i ́:-m \grave{m}-d \grave{-}$ | 'sleep' |

b. $\mathrm{CvCi}-$

| lǎy- | lây-m-dò- | 'taste' |
| :--- | :--- | :--- |
| jèrí- | jérà-m-dò- | 'look' |
| gùbú- | gúbù-m-dò- | 'hang up' |
| óbú- | óbù-m-dò- | 'lay out' |

c. $\mathrm{CvCCi}-$

| zòngí- | zóngì-m-dò- | 'treat (medically)' |
| :--- | :--- | :--- |
| óndú- | óndù-m-dò- | 'build' |

d. $\mathrm{CV}_{\mathrm{V}}: \mathrm{Ci}^{-}$

```
pá:mú- pá:mà-m-dò- 'understand'
mà:ndí- má:ndà-m-dò- 'think'
```

e. trisyllabic

| zìgìbí- | zígìbè-m-dò- | 'shake' |
| :--- | :--- | :--- |
| péngíl- | péngìlè-m-dò- | 'xxx |

10.2.2.2 Reduplicated imperfective (absent)

No reduplicated imperfective forms are attested.

### 10.2.2.3 Progressive (-ń sò-, -ḿn jâ:-, -m̀ bù-)

There are three (present) progressive constructions. All consist of an unconjugated imperfective verb form with suffix $-m$, followed by an auxiliary verb ('be', 'keep', or 'have').

The most common combination (for my assistant) is -mín sò including conjugated sò'have'. The paradigm is (xx1). The 3Pl form is sò- $-\mathbf{\varepsilon}$ : with the same diphthong as 'have' (contrast $-s-\dot{\varepsilon}$ : for perfective-2). The construction has analogues in other Dogon languages, e.g. Yanda Dom Progressive -ḿn zò-.
(xx1) Progressive -ḿn sj̀

| category | form | 'be going out' | 'be repairing' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -ḿn sò-m | gó-ḿn sò-m | céndé-m sò-m |
| 1 Pl | -ḿs sò- $y^{n}$ | gó-ḿn sò-y ${ }^{n}$ | céndé-m sò- $y^{n}$ |
| 2 Sg | -ḿs sò- $W^{n}$ | gó-ḿn Sò-W ${ }^{n}$ | céndé-m sò- $W^{n}$ |
| 2 Pl | -ḿs sò-y ${ }^{n}$ | gó-ḿn sò- $y^{n}$ | céndé-m sò-y ${ }^{n}$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | -ḿn sò- $\varnothing$ | gó-ḿn sò- $\varnothing$ | céndé-m sò- $\varnothing$ |
| 3 Pl | -ḿn sò-è: | gó-ḿn sò- ${ }^{\text {c }}$ : | céndé-m sồlè: |

A second construction replaces sò- 'have' by jâ:- 'keep, hold onto'. The paradigm is (xx2).
( $x x 2$ ) category form 'be going out' 'be repairing'

| 1 Sg | -ḿ jâ:-m | gó-ḿ jâ:-m | céndé-m jâ:-m |
| :---: | :---: | :---: | :---: |
| 1 Pl | -ḿ jâ:-y ${ }^{n}$ | gó-ḿn jâ:- $y^{n}$ | céndé-m jâ:-y ${ }^{n}$ |


| 2 Sg | $-m$ jo $j \hat{a}:-W^{n}$ | gó-ḿn jâ:- $W^{n}$ | céndé-m jâ:- $W^{n}$ |
| :---: | :---: | :---: | :---: |
| 2 Pl | -ḿn jâ:- $y^{n}$ | gó-ḿn jâ:-y ${ }^{n}$ | céndé-m jâ:- $y^{n}$ |
| 3Sg/Inan | -ḿ jâ:- $\varnothing$ | gó-ḿ jâ:- $\varnothing$ | céndé-m jâ:- $\varnothing$ |
| 3 Pl | -ḿ j-c. | gó-ḿ j-E. | céndé-m j-̂.E. |

The last type has bù- 'be' as auxiliary. Compare Yanda Dom Progressive -ḿ bò- and Najamba mbò bò-. The paradigm is (xx3).
(xx1) Progressive -ń́ bù-

| category | form | 'be taking out' |
| :---: | :---: | :---: |
| 1 Sg | -ḿn bù-m | $z o ́-m ́ n ~ b u ̀-m ~$ |
| 1 Pl | -ḿn bì- ${ }^{n}$ |  |
| 2 Sg | -ḿ bù̀-W ${ }^{n}$ | $z o ́-m ́ n ~ b u ̀-W^{n}$ |
| 2 Pl | -ḿn bì- $y^{n}$ |  |
| 3Sg/Inan | -ḿn bù- $\varnothing$ | $z o ́-m ́ n ~ b u ̀-\varnothing ~$ |
| 3 Pl | -ń $b-{ }_{\text {c }}$ : | zó-п́ $b-\varepsilon$ : |

### 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-)

This category negates the simple perfective, perfective-1a and -1 b , and perfective-2, which are not distinguished in the negative. It is also part of the experiential perfect negative -tèrà-lí( $\S 10.2 .3 .2$ ) and of the recent perfect negative dà-lí- (§ 10.2.3.3).

The paradigm is in (xx3). The basic form of the perfective negative suffix is -lí. After $n$, it becomes - $d$ í- It frequently apocopates to just H -toned -1 in the 3 Sg form. The vowel backs to $u$ before labial(ized) $-m$ and $-W^{n}$ suffixes. The 3 Pl form is quite irregular and best considered a portmanteau.
(xx3) Paradigm of perfective negative

| category | PfvNeg form | 'go down' | 'put' |
| :---: | :---: | :---: | :---: |
| 1 Sg | -lú-m | sùgò-lú-m | tùn-dú-m |
| 1P1 | $-1 i ́-y^{n}$ | sùgò-lí-y ${ }^{n}$ | tùn-dí- ${ }^{n}$ |
| 2 Sg | $-1 u ́-W^{n}$ | sùgò-lú-W ${ }^{n}$ | tùn-dú-W ${ }^{n}$ |
| 2 Pl | $-1 i ́-y^{n}$ | sùgò-lí-y ${ }^{n}$ | tùn-dí- ${ }^{n}$ |
| 3Sg/Inan | -1- $\varnothing \sim-1 i-\varnothing$ | sùgǒ-1- $\varnothing \sim$ sùgò-lí- $\varnothing$ | tùn-dí- $\varnothing$ |
| 3 Pl | -ndá | sùgò-ndá | tùn-dá |

The verb stem is tone-dropped in all cases, as in e.g. Jamsay, but unlike the case in Yanda Dom or Najamba where at least some verbs are $\{\mathrm{H}\}$-toned before the suffix. There is no phonological interaction between -li- and the verb stem. The vocalism is that of the A/O-stem.
(xx2) Perfective negative (final-nonhigh-vowel class)
verb perfective Neg gloss
a. $C v-, C V:^{-}-$

| ká- | kà-lí- | 'shave' |
| :--- | :--- | :--- |
| á:- | à:-lí- | 'brew (beer)' |
| dě- | dè-lí- | 'bathe' |
| dǒ- | dò̀-lí- | 'arrive' or 'insult' |
| gǒ- | gò-lí- | 'go out' |
| nÉ- | jà-lí- | 'eat, drink' |
| tó:- | tò:-lí- | 'pound' |
| wǒ:- | wà:-lí- | 'come' |

b. $\mathrm{CvCV}^{-}$

| dògó- | dògà-lí- | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kj̀bà-lí- | 'draw (water)' |
| kédé- | kèdè-lí- | 'cut' |
| yàgá- | yàgà-lí- | 'fall' |

c. $\mathrm{CvCCv}-$

| tómbó- | tòmbò-lí- | 'jump' |
| :--- | :--- | :--- |
| gùndó- | gùndò-l̂̂- | 'become sterile' |

(xx3) gives examples involving verbs with final high vowel.
(xx3) perfective negative (final-high-vowel class)
verb perfective Neg gloss
a. $C i$-, $C i:-$

| nú- | nù-lí- | 'go in' |
| :--- | :--- | :--- |
| tí- | tìyà-lí- | 'send' |
| yǐ- | yà-lí- | 'see' |
| ní: | nì:-lí- | 'sleep' |

b. $\mathrm{CvCi}-$
lǎy- lày-lí- 'taste'
jèríl jèrà-lí- 'look'
gùbú- gùbù-lí- 'hang up'
óbú- jbù-lí- 'lay out'
c. $\mathrm{CvCCl}-$
zòngí- zòngù-lí- 'treat (medically)'
óndú- òndù-lí- 'build'
d. $C \mathrm{~V}: \mathrm{Ci}-$

| pá:mú- | pà:mà-lí- | 'understand' |
| :--- | :--- | :--- |
| mà:ndí- | mà:ndà-lí- | 'think' |

e. trisyllabic

| zìgìbí- | zìgìbè-lí- | 'shake' |
| :--- | :--- | :--- |
| $\eta \eta \eta$ | $\eta \eta \eta-$ | 'xxx |

### 10.2.3.2 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, unlike the case with the recent perfect negative. This is seen with tone-dropped 'slaughter' in (xx1c), compare positive sémé-téré-bù-m 'I have (once) slaughtered’.
(xx1) 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-excPf-PfvNeg.3P1Sbj
'They have never gone to Bamako.'
c. pédé sèmè-tèrà-lú-m
sheep slaughter-ExpPrf-PfvNeg-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'.

### 10.2.3.3 Recent perfect negative (dà-lí-)

The recent perfect ( $d \grave{\varepsilon}$-) is negated as dà-lí-, including the regular perfective negative suffix -lí-. The 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'.

| (xx1) úló | óndú | dà-1ú-m |  |
| :--- | :--- | :--- | :--- |
|  | house | build | RecPrf-PfvNeg-1SgSbj |
|  | 'I have not (yet) finished building the house.' |  |  |

### 10.2.3.4 Imperfective negative (-ŋgò:--, -ŋù-, -クì-)

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 ( xx 3 ). The 3 Sg points to a basic suffixal form $-\eta g o ̀:-$, and the 3 Pl is derived from this essentially by a vocalic mutation. The 1st/2nd person forms simplify $\eta g$ to $\eta$ and shorten and raise the vowel, to $u$ before labial(ized) $-m$ and $-W^{n}$ and to $i$ before $y^{n}$. The most likely cognate for TU -ngò:- is Nanga imperfective negative -ŋò:-.
(xx3) Paradigm of imperfective negative

| category | IpfvNeg | 'go up' |
| :--- | :--- | :--- |
| 1 Sg | -ŋù̀-m | ílá-ŋ̣̆̀-m |


| 1P1 | $-\eta i-y^{n}$ | îlá-ŋì-y ${ }^{n}$ |
| :---: | :---: | :---: |
| 2 Sg | $-\eta u ̀-W^{n}$ | ílá-ŋù-W ${ }^{n}$ |
| 2PL | $-\eta \mathrm{l}-y^{n}$ | ílá-ŋì-y ${ }^{n}$ |
| 3Sg/Inan | -ngò:- $\varnothing$ | ílá-ngò:- $\varnothing$ |
| 3 Pl | $-\eta g-\varepsilon$ : | îlá-ŋg-غ̀: |

The verb takes the A/O-stem with $\{\mathrm{H}\}$ tone contour before the L-toned suffix. Stems with final nonhigh vowel are illustrated in (xx2).
(xx2) Imperfective negative (final-nonhigh-vowel class)
verb IpfvNeg gloss
a. $C \mathrm{~V}$-, $C \mathrm{~V}:-$
ká- ká-ngò:- 'shave'
á:- á:-クgò:- 'brew (beer)'
dě- dé-ŋgò:- 'bathe'
dǒ- doá-пgò:- 'arrive’ or 'insult'
gǒ- gó-ŋgò:- 'go out'
né- クá-ŋgò:- 'eat, drink'
tó:- tó:-ŋgò:- 'pound'
wǒ:- wá:-ŋgò:- 'come'
b. $\mathrm{CvCV}^{-}$

| dògó- | dógá-ngò:- | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kóbá-ngò:- | 'draw (water)' |
| kédé- | kédé-ngò:- | 'cut' |
| yàgá- | yágá-ngò:- | 'fall |

c. $\mathrm{CvCCl}_{\mathrm{v}}-$
tómbó- tómbó-пgò:- 'jump'
gùndó- gúndó-ŋggò:- 'become sterile'

Stems with final high vowels are in (xx3).
(xx3) Imperfective negative (final-high-vowel class)
verb
IpfvNeg
gloss
a. $C i-, C i:-$

| nú- | nú-ngò:- | 'go in' |
| :--- | :--- | :--- |
| tí- | tíyá-ngò:- | 'send' |
| yǐ- | yá-ngò:- | 'see' |
| ní: | ní:-ngò:- | 'sleep' |

b. $\mathrm{CvCi}-$

| lǎy- | láy-ŋgò:- | 'taste' |
| :--- | :--- | :--- |
| jèrí- | jérá-ngò:- | 'look' |
| gùbú- | gúbú-ngò:- | 'hang up' |
| óbú- | óbú-ŋgò:-- | 'lay out' |

c. $\mathrm{CvCCi}-$

$$
\begin{array}{lll}
\text { zòngí- } & \text { zóngú-ngò:- } & \text { 'treat (medically)' } \\
\text { óndú- } & \text { óndú-ŋggò:- } & \text { 'build' }
\end{array}
$$

d. $\mathrm{Cv}: \mathrm{Ci}^{-}$
pá:mú- pá:má-ŋgò:- 'understand' mà:ndí- má:ndá-ngò:- 'think'
e. trisyllabic

| zìgìbí- | zígíbé-ŋgò:- | 'shake' |
| :--- | :--- | :--- |
| ทŋŋ | ททŋ- | 'xxx |

### 10.2.3.5 Progressive negative (-ń só-ndò:-, -m̀-gò-)

The Progressive construction with -ń sò- is negated as -ń só-nd̀(: $\cdot$ ). That is, sò- 'have' is replaced by its regular negative form só-ndò:- 'not have' (xxla). Likewise, the Progressive
 replaced by a variant of ŋ̀gó- 'not be' (somewhere)'. An original combination like *-ḿ ŋ̀gówould have surfaced phonetically as *-ń ${ }^{\downarrow}$ gó- with a downstepped high that could later be reinterpreted as L-tone.
(xx1)
a. bírá:
bírá-m
só-ndò-m
work(n.) work-Ipfv have-Neg-1SgSbj
'I am not working.'
b. bírá: bírà-m̀n-gò-m
work(n.) work-Ipfv-not.be-1 SgSbj
'I am not working.'

### 10.3 Pronominal paradigms for non-imperative verbs

### 10.3.1 Subject pronominal suffixes

The pronominal-subject suffixes are those in (xx1). They are exemplified in the paradigms of the various AN inflections given in previous sections. For other pronoun forms, see $\S 4$.xxx.
(xx1) category suffix

| 1 Sg | $-m$ |
| :--- | :--- |
| 1 Pl | $-y^{n}$ |
|  |  |
| 2 Sg | $-W^{n}$ |
| 2 Pl | $-y^{n}$ |
|  |  |
| 3 Sg | $-\varnothing$ |
| 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 $1 \mathrm{st} / 2$ nd 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.
list of all 3Pl subject allomorphs in the various AN categories
10.3.2 Nonhuman (or inanimate) versus 3 Sg subject
any difference in pronominal-subject suffixes?
perhaps just in imperfective positive (or Progressive), where some languages use pronominal clitics human/animate ẁ̀ and nonhuman/inanimate k̀̀?
10.3.3 Vowel-consonant interactions of AN and pronominal suffixes

If $1 S g-m, 2 S g-w$, and $1 P l-y$ suffixes are present, there may be some phonological interactions with preceding high vowels, e.g. $/ i-\mathrm{m} />\mathrm{u}-\mathrm{m}, / \mathrm{i}-\mathrm{w} />u-w$ (heard as [u:]), and /u$y />i-y$ (heard as [i:]). Also, underived or derived $u$-w and i-y may monophthongize to [u:] and [i:] respectively. Give cross-refs to relevant sections in Chapter 3.

### 10.3.4 Tones of subject pronominal suffixes

Are the pronominal-subject suffixes atonal, simply getting their tones by spreading from the preceding morpheme?

This is often the case, but there may be some instances where e.g. 1 Sg and 2 Sg suffixes have different tones in the same AN category.

### 10.4 Stative form of verbs (reduplicated and unreduplicated)

A stative stem, not marked for perfective/imperfective aspect, can be derived from many verbs that also have regular 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. 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 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 (xx1). The $\{H L\}$ tone contour occurs when Existential yé (see below) is absent. There is no reduplication.
(xx2) category Stative 'be squattng'

| 1 Sg | $-m$ | tóndà- $m$ |
| :--- | :--- | :--- |
| 1 Pl | $-y^{n}$ | tóndà $-y^{n}$ |
| 2 Sg | $-W^{n}$ | tóndà- $W^{n}$ |
| 2 Pl | $-y^{n}$ | tóndà $-y^{n}$ |


| 3 Sg | $-\varnothing$ | tóndà- $\varnothing$ |
| :--- | :--- | :--- |
| 3 Pl | $-\grave{\varepsilon}:$ | tónd- $:$ |

In some cases, the corresponding active verb is morphologically a mediopassive, with suffix -í:- (§9.xxx). In other cases, the corresponding active verb has 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, has $\{\mathrm{HL}\}$ tone contour, and ends in $a$.

This vocalism is that of the A-stem of active inflections. The A/O-stem is not indicated since there are no cases with final $o$, even with stems that have $o$-vocalism: tóndà- 'be curled up', sómà- 'be carrying on both shoulders'. The presence of the Mediopassive suffix in the active inflections makes a direct comparison with statives impossible for those verbs. There are also various minor irregularities in stative forms that have no parallels in A/O-stems of active verbs of similar shape. bě- 'lie down', which does not have a Mediopassive suffix, has A/O-stem be- (bè-lí- 'did not lie down') but stative bé-yà- 'is lying down'.
(xx2) gloss verb Stative
a. from unsegmentable $C v(C) C v$ - stem
[none]
b. from Mediopassive $C v(C) C v-y v-(-y v$ - omitted in stative)

| 'carry on back' | bàmb-í:- | bámbà- |
| :---: | :---: | :---: |
| 'lie on belly' | dàb-í:- | dábà- |
| 'lean against' | did-í:- | dídà- |
| 'become hooked' | gùb-í:- | gúbà- |
| 'become tied' | kómb-í:- | kómbà- |
| 'become laid out' | ób-í:- | óbà-[homonym below] |
| 'shut (door)' | pín-í:- | pínà- |
| 'carry on shoulders' | sóm-í:- | sómà- |
| 'become linked' | sób-í:- | sóbà- |
| 'be on (wall)' | tár-í:- | tárà- |
| 'squat, curl up' | tónd-í:- | tóndà- |
| $j / g$ alternation after nasal |  |  |
| 'kneel' | túnj-í:- | túngà- |
| 'become tilted' | jènj-í:- | jéngà- |
| 'mount, be put up on | nánj-í:- | nángà- |
| jj/g alternation after vowel |  |  |
| 'stand' | íjj-í:- | ígà- |

'carry on a shoulder' gòjjj-í:- gógà-
zégé zèjí- (zèjí-tì-) ' zégé zèjí- (zèjí-tì-) 'have a fight'
have a fight'

| o/s alternation in penult |  |  |
| :--- | :--- | :--- |
| 'sit' | ób-í:- | 万́bà [homonym above] |
| 'xxx | $\eta \eta \eta$ | $\eta \eta \eta$ |
| 'xxx | $\eta \eta \eta$ | $\eta \eta \eta$ |

c -yà added to unsuffixed monosyllabic stem

| 'lie down' | bě- | bé-yà- |
| :--- | :--- | :--- |
| 'carry on head' | dǐ- | dí-yà- [homonym in (d)] |
| '(go to) sleep', | ní:- | ní-yà- |
| 'xxx | $\eta \eta \eta$ | $\eta \eta \eta$ |

d. $-l(v)$-replaced by -yà in stative
'hold’ jè-l-í:- jí-yà-
'be put on (a stand)' dè-l-í:- dí-yà- [homonym in (c)]

Existential yé is common but not obligatory with positive statives; see §11.xxx for its syntax.


For past statives ('was sitting' etc.) see c10.5.1.6.
10.4.2 Stative negative ( = ndà-)

The derived stative is negated by adding a conjugated stative negative clitic = ndà- to the positive stem, which takes $\{H\}$-toned form. The paradigm is (xx1). Existential yé does not occur in negative contexts.
(xx1) category Stative Neg 'not be squattng'

| 1 Sg | $=n d a ̀-m$ |  | tóndá $=n d a ̀-m$ |
| :--- | :--- | ---: | :--- |
| 1 Pl |  | $=n d a ̀-y^{n}$ |  |
| tóndá $=n d a ̀-y^{n}$ |  |  |  |
| 2 Sg |  | $=n d a ̀-W^{n}$ |  |
| 2 Pl |  | tóndá $=n d \grave{a}-W^{n}$ |  |
|  |  | $n d a ̀-y^{n}$ |  |
| tóndá $=n d a ̀-y^{n}$ |  |  |  |
| 3 Sg |  |  |  |
| 3 Pl |  | $=n d a ̀:-\varnothing$ |  |
|  |  | tóndá $=n d a ̀:-\varnothing$ |  |
|  |  | tóndá $=n d-\grave{\varepsilon}:$ |  |

Although the clitic is usually heard with low pitch, it is phonologically $<\mathrm{LH}>$-toned. The rising tone can be heard when it is followed by a particle like emphatic kǒy, as in tóndá = ndă:- $\varnothing$ kǒy 'he/she sure isn't squatting'. It can also be heard, in the long-voweled form $=n d a \check{:}-$-, when the past clitic is added (§10.5.1.6).

Examples are in (xx2). Note especially (xx2b), which is the only way to express '(door) be open'.
(xx2) a. óbá=ndà-m
sit.Stat=StatNeg-1SgSbj
'I am not sitting.'
b. píná=ndà:- $\varnothing$
be.shut.Stat=StatNeg-3SgSbj
'It (door) is not shut (=is open).'
= ndà:- may be compared to =là:- 'it is not' with NPs (§11.2.1.2), and to lexically specialized negative endings with defective stative quasi-verbs: só-ndò:- 'not have', mobí-là:'not want'.

### 10.5 Temporal clitics and particles

### 10.5.1 Past clitic ( = bì-)

Past forms of regular aspect-negation inflections are created by adding a conjugated form of past clitic $=b i-1$ to the verb, with an intervening augment. Depending on the particular category, the augment may consist of just imperfective $-m$, or it may be a fuller augment $=b u ̀-m$ - that could be analysed as an encliticized bù- 'be' plus the imperfective augment $-m$. Since the morphology of the full augment is not fully transparent, I will gloss =bù-m-as just "Aug[ment]."

The paradigms are as follows (augment tones are subject to change in different aspectnegation categories). =bù-m- optionally assimilates to $=b \grave{i}-m$ - before a clitic with i-vowel, and intermediate articulations with front rounded vowel are also heard.
(xx1) Paradigm of conjugated past clitic

| category | Ipfv augment | full augment |
| :--- | :--- | :--- |
| 1 Sg | $-m=b \grave{̀}-m$ | $=b \grave{̀}-m=b \grave{̀}-m$ |
| 1 Pl | $-m=b \grave{-}-y^{n}$ | $=b \grave{u}-m=b \grave{~}-y^{n} \sim=b \grave{-}-m=b \grave{-}-y^{n}$ |


| 2 Sg | $-m=b u ̀-W^{n}$ | $=b u ̀-m=b u ̀-W^{n}$ |
| :--- | :--- | :--- |
| 2 PL | $-m=b \grave{-}-y^{n}$ | $=b u ̀-m=b i \grave{-}-y^{n} \sim=b \grave{\imath}-m=b \grave{-}-y^{n}$ |
| $3 \mathrm{Sg} /$ Inan | $-m=b \grave{-}-\varnothing$ | $=b u ̀-m=b i ̀-\varnothing \sim=b \grave{-}-m=b i ̀-\varnothing$ |
| 3 Pl | $-m=b-a ̀:$ | $=b u ̀-m=b-a ̀:$ |

Addition of the past clitic to an aspect-negation category resets the temporal reference point from the moment of speaking into the past. The known past-time categories are in (xx2).

```
(xx2) category with past morpheme
    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 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 (xx1) 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 $=b \grave{i}-$. The $-n \grave{-} /-n \grave{\varepsilon}-/ d \grave{\jmath}$ - formative in the regular imperfective positive is absent.
(xx1) Past imperfective positive paradigm
category form 'goes out' 'would have gone out'

| 1Sg | $-m=b u ̀-m$ | gó-m̀-nう̀-m | $g o ́-m$ = bù-m |
| :---: | :---: | :---: | :---: |
| 1 Pl |  | $g o ́-m$-nè- $y^{n}$ | $g o ́-m=b i ̀-y^{n}$ |
| 2 Sg | $-m=b u ̀-W^{n}$ | gó-m̀-nうे- $W^{n}$ | $g o ́-m$ ¢ $=b u ̀-W^{n}$ |
| 2 Pl | $-m^{\prime \prime}=b \grave{i}-y^{n}$ | $g o ́-m$-nغ̀- $y^{n}$ | $g o ́-m=b i \grave{l} y^{n}$ |
| 3Sg/Inan | $-m$ m $=$ bì $\varnothing$ | gó-m̀-dò- $\varnothing$ | $g o ́-m$ m $=$ bì- $\varnothing$ |
| 3 Pl | $-m=b-a ̀:$ | gó-m̀- $d-\grave{\varepsilon}$ | $g o ́-m$ ¢ $=b-a ̀:$ |

The negative version is illustrated in (xx3).
(xx2) $\quad t_{i}^{\prime \prime} \rightarrow \quad$ nàmá $\quad$ kúbò- $m-g o ̀:=b u ́-m=b u ̀-m$
at.first meat eat.meat-Ipfv-IpfvNeg=Aug=Past-1SgSbj
'Formerly I didn't use to eat meat.'

The negative paradigm is in the right column of (xx4). Corresponding to $-\eta u ̀-/-\eta i-/-\eta g o ̀:$ in the 'doesn't go up' column, the past version has -m-gò- (</-m̀-ŋgò-/)
(xx4) Past imperfective negative paradigm
categ. PastIpfvNeg 'doesn't 'didn't use to go up'
go up'

$$
\begin{aligned}
& 1 \mathrm{Sg} \quad-m-g o ̀:=b u ̀-m=b u ̀-m \quad \text { ílá-pù- } m \text { ílà- } m-g o ̀:=b u ̀-m=b u ̀-m \\
& 1 \mathrm{Pl} \quad-m-g o ̀:=b u ̀-m=b i ̀-y^{n} \quad \text { ílá- } \quad \text { ì̀- } y^{n} \quad \text { ílà- } m-g o ̀:=b u ̀-m=b i ̀-y^{n} \\
& 2 \mathrm{Sg} \quad-m \text {-gò: }=b u ̀-m=b u ̀-W^{n} \text { ílá- } \eta u ̀-W^{n} \quad \text { ílà- } m \text {-gò: }=b u ̀-m=b u ̀-W^{n} \\
& \text { 2PL } \quad-m-g o ̀:=b u ̀-m=b i ̀-y^{n} \quad \text { ílá- } \quad \text { ì̀ } y^{n} \quad \text { ílà- } m-g o ̀:=b u ̀-m=b i ̀-y^{n} \\
& 3 \mathrm{Sg} \quad-m-g o ̀:=b u ̀-m=b i ̀-\varnothing \quad \text { ílá- } \eta g o ̀:-\varnothing \text { ílà- } m-g o ̀:=b u ̀-m=b i ̀-\varnothing \\
& 3 \mathrm{Pl} \quad \text {--m-gò: }=b u ̀-m=b-a ̀: \quad \text { ílá-ng-è: } \quad \text { ílà-m-gò: }=b u ̀-m=b-a ̀:
\end{aligned}
$$

### 10.5.1.2 Past Progressive (positive and negative)

Conjugated past clitic $=b \grave{i}$ - is added to the bù- or $s \grave{\jmath}$ - of the progressive (§10.2.2.3) after the augment -m-.
(xx1) Past Progressive $-n \bar{n}$ sò- $m=b i ̀-$
category form 'is going out' 'was going out'

| 1 Sg | $-m \dot{n}$ sò $-m=b u ̀-m$ | $g o ́-m ́ n ~ s o ̀-m ~$ | $g o ́-m \bar{n}$ sò-m $=$ bù-m |
| :---: | :---: | :---: | :---: |
| 1P1 | $-m$ ńn sò-m $=$ bì $-y^{n}$ | gó-ḿn sò-y ${ }^{n}$ | $g o ́-m ́ n ~ s \grave{o}-\mathrm{m}=b \grave{\grave{l}}$ - $y^{n}$ |
| 2 Sg | $-m \dot{n}$ sj̀ $-m=b u ̀-W^{n}$ | gó-ḿn sò-w ${ }^{n}$ | $g o ́-m ́ n ~ s \grave{j}-\mathrm{m}=\mathrm{bù}-W^{n}$ |
| 2 Pl | $-m \bar{n}$ s $\grave{o}-m=b i ̀-y^{n}$ | $g o$-ḿn sò-y ${ }^{n}$ |  |
| 3Sg/Inan | -ḿn sò-m = bì $\varnothing$ Ø | gó-ḿn sò- $\varnothing$ | $g o ́-m$ m sj̀ $\mathrm{m}=$ bì $\varnothing$ |
| 3 Pl | -ńn sò-m $=b-a ̀:$ | gó-ḿn $s-\varepsilon$ : | gó-ḿn sò-m = b-à: |

(xx2) Past Progressive $-m$ ń bù- $m=b i ̀-$
category regular 'is taking out' 'was taking out'

| 1 Sg | $-m \dot{m}$ bù $-m=b u ̀-m$ | zó-ḿ bù-m | $z o ́-m ́ n ~ b u ̀-m=b u ̀-m$ |
| :---: | :---: | :---: | :---: |
| 1 Pl | $-m \dot{m}$ bù $-m=b i ̀-y^{n}$ |  |  |
| 2 Sg | $-m \dot{m}$ bù $-m=b u ̀-W^{n}$ | $z o ́-m ́ n ~ b u ̀-W^{n}$ | $z o ́-m ́ n ~ b u ̀-m=b u ̀-W^{n}$ |
| 2 Pl | $-m$ míl $-m=b i ̀-y^{n}$ |  | $z o ́-m ́ n ~ b u ̀-m=b i ̀-y^{n}$ |
| 3Sg/Inan | $-m \dot{m}$ bù $-m=b i ̀-\varnothing$ | $z o ́-m ́ n ~ b u ̀-\varnothing ~$ | $z o ́-m$ min bù-m=bì- $\varnothing$ |
| 3 Pl | -ḿm bù-m=b-à: | $z o ́-n ́ n b-\varepsilon ̇: ~$ | $z o ́-m ́ n ~ b u ̀-m=b-a ̀: ~$ |

In elicitation, there appeared to be much interchange between past imperfective with $-m=b i$ and past progressive with with $b \grave{u}-m=b i ̀-$. An example of the form of the past progressive in a context where one might expect the past imperfective is (xx3).
$\begin{array}{lllll}(\mathrm{xx} 3) & t 1^{n} \rightarrow & \text { nàmá } & \text { kúbò-m } & \text { bù-m=bù-m } \\ & \text { at.first meat } & \text { eat.meat-Ipfv } & \text { be-Ipfv=Past-1SgSbj } \\ & \text { 'Formerly I used to eat meat.' } & \end{array}$

For the progressive negative (-п́n só-ndò:-, -m̀ gó-) see §10.2.3.5. Past progressive negative examples are in (xx4). The full augment $=b u ̀-m$ - is used before the conjugated past $=b i ̀-$
(xx4)
a. bírá:
bírá-m
só-ndò: = bù-m = bù-m
work(n.) work-Ipfv have-Neg=Aug=Past-1SgSbj
'I was not working.'
b. bírá: bírá-ì̀ $\quad g o ́-m=b u ̀-m=b u ̀-m$ work(n.) work-Ipfv not.be-Aug=Aug=Past-1SgSbj 'I was not working.'

For additional detail on the morphology of past forms of 'have' and 'be' and their negations, see $\S 10.5 .1 .6$.

| sémbí-ḿ | bí-m-bì- $\varnothing$ | 'he/she was sweeping' (progressive) |
| :--- | :--- | :--- |
| sémbí-ḿ | bí-m-b-à: | 'they were sweeping' (progressive) |

### 10.5.1.3 Past or past Perfect (positive and negative)

The past form of the perfective functions as past perfect ('had VPed') and is used 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 'see' and 'hear' that do not allow the perfective-1a or $-1 b$ (§10.xxx).

In the positive form, past clitic =bì- is added directly to the verb stem, with no overt perfective marking. This corresponds functionally to the various unmarked and suffixally marked perfectives (perfective-1a, -1b, 2). The corresponding negation is based on a syncopated version of perfective negative -lí-, plus the augment $=b u ́-m$ - in H -toned form.
$(x x 1) \quad$ Past Perfect $=b i ̀-$

| category | 'had hit' | 'had not hit' |
| :---: | :---: | :---: |
| 1 Sg | bùndó = bù-m | bùndǒ- $1=b u$ ú-m $=$ bù- $m$ |
| 1P1 | bùndó $=$ bì- $y^{n}$ | bùndǒ- $1=b$ ú-m $=$ bì $-y^{n}$ |
| 2 Sg | bùndó $=b u ̀{ }^{-} W^{n}$ | bùndǒ- $1=b u ́ 1$-m $=$ bù- $W^{n}$ |
| 2 Pl | bùndó= bì - $y^{n}$ | bùndǒ- $1=b u ́-m=b i ̀-y^{n}$ |
| 3Sg/Inan | bùndó= bì- $\varnothing$ | bùndǒ- $1=b$ ú- $m=b i ̀-\varnothing$ |
| 3 Pl | bùndó=b-à: | bùndǒ- $1=b u ́-m=b-a ̀:$ |

The verb preceding =bì- must end in an H-tone. /LH/-toned monosyllabics 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 -téré $=b i ̀$-, already contains past $=b i ̀$ (§10.2.1.5). Nevertheless, an explicitly past version of the experiential perfect can be construction by using the augment $=b u ́-m=(H-t o n e d)$. The corresponding negative has the morphology of the past perfect negative $(-1=b u ́-m=b i ̀-\varnothing)$.
(xx1)
a. gònsá: $r^{n a ́} \quad$ yì-téré $=b u ́-m=b u ̀-m$
elephant see-ExpPrf-PfvNeg=Aug=Past-1SgSbj
'(At that time) I had never seen an elephant.'
b. gònsá: $r^{n a ́} \quad$ yì-tèrě- $1=b u ́-m=b u ̀-m$
elephant see-ExpPrf-PfvNeg=Aug=Past-1SgSbj
'(At that time) I had never seen an elephant.'

### 10.5.1.5 Past recent perfect (positive and negative)

An informant preferred a version with both recent perfect $d \grave{\varepsilon}$ - and past clitic $=b i ̀$ - conjugated.
(xx1)
a. úló
óndú $\quad d e ̀-m=b u ́-m=b u ̀-m$
house build RecPrf-1SgSbj=Aug=Past-1SgSbj
'I had (recently) finished building (a/the) house.'
b. za
$\begin{array}{lll}\text { zá } & n \dot{\varepsilon} & d \dot{\varepsilon}-y^{n}=b u ́-m=b i-y^{n} \\ \text { meal } & \text { eat.meal } & \text { RecPrf-1P1Sbj=Aug=Past-1P1Sbj }\end{array}$
'We had (already) eaten.'

There were also variants with $d \grave{\varepsilon}$ - unconjugated, e.g. $n \varepsilon \quad d \grave{\varepsilon}=b u ́-m=b \grave{i}-y^{n}$ 'we had (already) eaten'.

A negative example is ( $\mathrm{x} x 2$ ). It too is doubly conjugated.
(xx2) úló óndú dà-lù-m=bú-m=bù-m
house build RecPrf-PfvNeg-1SgSbj=be-Ipfv=Past-1SgSbj
'I have not (yet) finished building the house.'

### 10.5.1.6 Past Stative (positive and negative)

| óbà-m-bì- $\varnothing$ |
| :--- |
| óbà-m-b-à: | | 'he/she was sitting' |
| :--- |
| 'they were sitting' |


| tín $\rightarrow$ úló yé |
| :--- |
| úló yé sò-m-b-à: |
| 'they had a house' |

èdé bì-m-bì-m

ùlé: bí-m-b-à: | 'I was a child' |
| :--- |
| 'they were children' |

Statives derived from regular verbs are described in §10.4.1 (positive) and §10.4.2 (negative).
(xx1) gloss regular Stative past Stative
positive
'be sitting' yé jbà- $\quad$ yé j̀bà-m=bì- $\varnothing(3 \mathrm{Sg})$
yé j̀bà $-m=b i ̀-m(1 \mathrm{Sg})$
yé ó jbà-m=b-à: (3Pl)
negative 'not be sitting' óbá $=n d a ̆: \quad$ óbá $=n d a ̆:=b u ̀-m=b i ̀-\varnothing(3 S g)$
śbá=ndă: $=b u ̀ ̀-m=b u ̀-m(1 S g)$
óbá $=n d \check{a}:=b u ̀-m=b-a ̀:(3 \mathrm{Pl})$
$o ́ b a ́=n d \check{c}:=b u ̀-m=b-a ̀:(3 \mathrm{Pl})$

In the combination $=b u ̀-m=b i ̀-\varnothing$ ( $3 S g$ negative ), the penult vowel may assimilate in frontness to the ultimate, hence $=b i ̀-m=b i ̀-\varnothing$.

Stative quasi-verbs are exemplified in (xx2). Some of these are rather bulky, and the conjugated past clitic is subject to reduction. For example, só-ndò: = bù- $m=b i ̀-\varnothing$ 'he/she didn't use to have' can appear as só-ndò: $=b u ̀-\varnothing$.

| (xx2) | gloss | regular 3 Sg | past |
| :---: | :---: | :---: | :---: |
| positive |  |  |  |
| 'be (somewhere)' |  | , yé bù- $\varnothing$ | yé bù̀-m=bì- $\varnothing(3 \mathrm{Sg})$ |
|  |  |  | yé bù-m=bù-m $(1 \mathrm{Sg})$ |
|  |  |  | yé bù-m=b-à: $(3 \mathrm{Pl})$ |
|  | 'have' | yé sò- $\varnothing$ | yé sò-m=bì- $\varnothing(3 \mathrm{Sg})$ |
|  |  |  | yé sò-m=bù-m $(1 \mathrm{Sg})$ |
|  |  |  | yé sj̀-m=b-à: $(3 \mathrm{Pl})$ |
|  | 'want' | m̀bá- $\varnothing$ | $m b a ́=b u ̀-m=b i ̀-\varnothing(3 \mathrm{Sg})$ |
|  |  | $(3 \mathrm{Pl} \grave{m} b-\hat{\varepsilon}$ : $)$ | $m b a ́=b u ̀-m=b u ̀-m(1 \mathrm{Sg})$ |
|  |  |  | $m b a ́=b u ̀ ̀ m=b-a ̀:(3 \mathrm{Pl})$ |
|  |  |  | $m b-\hat{\varepsilon}:=b u ̀-m=b-a ̀:(3 \mathrm{Pl})$ |

negative

| 'not be' | $\begin{gathered} \grave{\eta} g o ́-\varnothing \\ (3 \mathrm{Pl} \grave{\eta} g W-\hat{\varepsilon} \cdot) \end{gathered}$ |  |
| :---: | :---: | :---: |
| 'not have' | $\begin{gathered} s \text { só-nd̀̀:- } \varnothing \\ \text { (3P1 só-nd-غ̀:) } \end{gathered}$ |  |
| 'not want' | $\begin{gathered} \text { m̀bílà:- } \varnothing \\ \text { (3P1 m̀ } \bar{m} 1-1-\grave{\varepsilon} .) \end{gathered}$ | $\begin{aligned} \text { mbílà: } & =b i ̀-m=b i ̀-\varnothing(3 \mathrm{Sg}) \\ \text { mbbí-là: } & =b u ̀-m=b u ̀-m(1 \mathrm{Sg}) \\ \text { m} b i ́-l a ̀: ~ & =b u ̀-m=b-a ̀:(3 \mathrm{Pl}) \\ \text { m̀bí-lè: } & =b u ̀-m=b-a ̀:(3 \mathrm{Pl}) \end{aligned}$ |

The conjugated past clitic $=b i ̀$ is preceded in all of these stative forms by anconjugated augment, either $-m$ - (most of the positive forms) or $=b u ̀-m$ - (all of the negative forms, plus positive 'want'). In 'not be sitting', 'not have', and 'not want', the past form for $1 \mathrm{st} / 2 \mathrm{nd}$ persons, exemplified here by 1 Sg , is clearly based on the 3 Sg positive form; note the long $\dot{j}$ :
and à: in the third syllable of $\check{b} b a ́=n d a ̀:=b \grave{u}-m=b u ̀-m$ 'I was not sitting' and in the second syllables of só-ndò: $=$ bù- $m=b u ̀-m ~ ' I ~ d i d n ' t ~ h a v e ' ~ a n d ~ m ̀ ̀ b i ́-l a ̀: ~=~ b u ̀-m=b u ̀-m ~ ' I ~ d i d n ' t ~ w a n t ' . ~$. In the forms involving the full augment $=b u-m$ - ('want' and all the negative forms), 3P1 subject is indexed optionally on the verb as well as obligatorily in the final conjugated past clitic. This indexing is seen in the $\varepsilon$ : vowels in the third syllable of $\sigma b a ́=n d \grave{\varepsilon}:=b u ̀-m=b-a ̀:$ 'they were not sitting' and in the second syllables of $s$ ó-ndè: $=b u ̀-m=b-a ̀:$ 'they didn't have'. Variants without this 3Pl indexing were also observed. An informant rejected similar indexing in 'was sitting', 'was (somewhere)', and 'had', which have the short augment $-m$ - rather than the full $=b u$ - $m$ - augment.

### 10.5.2 'Still', 'up to now', '(not) yet'

Expressions translatable as 'still' in the sense of 'up to and including now' are based on yǒ: 'today', namely yǒ: j̀tùmò and in some contexts yǒ: là.
(xx1)
a. [yǒ: j̀tùmò] bírá: bírá-ḿ sò-m [today still] work(n.) work-Ipfv have-1SgSbj 'He still works.' or 'He is still working.'

'He/She still hasn't paid.'
c. [yǒ: là] zímá-ḿn sò-w ${ }^{n}$ mà
[today also] be.sick-Ipfv have- 2 SgSbj Q
'Are you still sick (today)?
'Not yet' is expressed with nân 'now' plus a negative predicate.

| (xx2) nân | zá | nà-lú-m |  |
| :--- | :--- | :--- | :--- |
|  | now | meal | eat.meal-PfvNeg-1SgSbj |
|  | 'I haven't eaten yet.' |  |  |

### 10.6 Imperatives and hortatives

### 10.6.1 Imperatives and Prohibitives

### 10.6.1.1 Imperative (unsuffixed A/O-stem, plural -n)

The imperative stem, which is used without further suffixation for singular addressee, is based on the A/O-stem.

For verbs ending lexically in a nonhigh vowel, the imperative stem becomes $\{\mathbf{H}\}$-toned, erasing the lexical distinction between $\{\mathrm{LH}\}$ and $\{\mathrm{H}\}$ stems.
(xx1) Imperative (final-nonhigh-vowel class)
verb imperative gloss
a. monosyllabic
$C_{V}$ -

| ká- | ká | 'shave' |
| :---: | :--- | :--- |
| dě- | dé | 'bathe' |
| dǒ- | dớ | '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. $\mathrm{CvCV}^{-}$

| dògó- | dógá | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kóbá | 'draw (water)' |
| kédé- | kédé | 'cut' |
| yàgá- | yágá | 'fall' |

c. $\mathrm{CvCCv}-$
tómbó- tómbó 'jump'
nìngé- níngé 'cook (sauce)'
irregular
gòndó- gòndó 'take out'

For verbs whose lexical form ends in a high vowel, the imperative ends in $i$ rather than $u$, except for stems that shift to an $a$-final form in A/O-stem. Monosyllabics have H-toned imperatives. For nonmonosyllabics, the lexical tone contour appears. There is no merger of $\{\mathrm{LH}\}$ and $\{\mathrm{H}\} \mathrm{CvCr}^{\text {- stems. }}$
(xx2) Imperative (final-high-vowel class)
verb imperative gloss
a. $C i, C i$ :

| nú- | $n w i ́$ | 'go in' |
| :--- | :--- | :--- |
| tí- | tíyá | 'send' |
| dǐ- | díyá | 'carry on head' |
| ní: | ní: | 'sleep' |

b. $\mathrm{CvCl}^{-}, \mathrm{nCi}-$
final í

| làyí- | làyí | 'taste', phonetic [lǎj] |
| :---: | :--- | :--- |
| gùbú- | gùbí | 'hang up' |
| óbú- | óbí | 'lay out' |
| final á |  |  |
| jèrí- | jèrá | 'look' |
| ńdí- | ńdá | 'give' |

c. $\mathrm{CvCCl}-$

| zòngí- | zòngí | 'treat (medically)' |
| :--- | :--- | :--- |
| óndú- | óndí | 'build' |

d. $C \mathrm{~V}: \mathrm{Ci}-$

| pá:mú- | pá:má | 'understand' |
| :--- | :--- | :--- |
| ná:ndú- | nó:ndá | 'ignite' |
| mà:ndí- | mà:ndá | 'think' |

e. trisyllabic $\mathrm{CvCvCi}-$

| ódír | ódúrá | 'ask' |
| :--- | :--- | :--- |
| mògúl | mògùlá | 'wash (grain)' |
| zig̀ìbí- | ziggìbé | 'shake' |

f. mediopassive

$$
j \grave{k} 1-1 \text { í: } \quad j \grave{l} 1-y-a ́ \quad \text { 'guard, watch over' }
$$

g. noncentripetal motion verbs with irregular increment $-d a$

| yây | yà-dá | 'go' |
| :--- | :--- | :--- |
| zây | zá-dà | 'take away, convey |

The plural-addressee suffix $-n$ ì is added to the simple imperative stem. For example, jèrá becomes jèrá-ì 'look-2Pl!'. Allomorph -(ì)dè is used after n. tún becomes tún-ǹ̀dè 'put-2P1 in!', pronounced [tûndè]. Other examples: kédé-ǹ ‘cut-2l!’, śbí-ǹ ‘lay out-2Pl!’, óndí-ǹ ‘build2P1!'.

Transitivity 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, plural -1 sèndèn)

The prohibitive, or negative imperative, is expressed by suffix -li for singular addressee. The suffix is added to the A/O-stem of the verb. For monosyllabics, the stem tone is high. Nonmonosyllabics show their lexical tones.

Stems with final nonhigh vowel are illustrated in (xx1).
(xx1) Prohibitive (final-nonhigh-vowel class)
stem Prohibitive gloss
a. $C v-, C v:-$

| ká- | ká-lì | 'shave' |
| :--- | :--- | :--- |
| dě- | dé-lì | 'bathe' |
| dǒ- | dơá-lì | 'arrive' or 'insult' |
| né- | ná-lì | 'eat, drink' |

b. $\mathrm{CVCV}^{-}$

| dògó- | dògá-lì | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kóbá-lì | 'draw (water)' |

c. $C v C C v-$
tómbó- tómbó-lì 'jump'
nìngé- nìngé-lì 'cook (sauce)'
gòndó- gòndó-lì 'take out'
d. $C v: C v-$

| $\eta \eta \eta$ | $\eta \eta \eta-$ | 'xxx |
| :--- | :--- | :--- |
| $\eta \eta \eta$ | $\eta \eta \eta-$ | 'xxx |

e. trisyllabic
$\eta \eta \eta \quad \eta \eta \eta-\quad$ 'xxx

Verbs with final high vowel are illustrated in (xx2).
(xx2) Prohibitive (final-high-vowel class)
stem Prohibitive gloss
a. $C i, C i$ :

| nú- | nú-lì | 'go in' |
| :--- | :--- | :--- |
| tí- | tíyá-lì | 'send' |
| ní: | ní:lì | 'sleep' |

b. $C v C i$

| làyí- | làyí-lì | 'taste', phonetic [lǎj] |
| :--- | :--- | :--- |
| jèrí- | jèrá-lì | 'look' |
| óbú- | óbí-lì | 'lay out' |

c. $\mathrm{CvCCl}-$

| zòngí- | zòngí-lì | 'treat (medically)' |
| :--- | :--- | :--- |
| óndú- | óndí-lì | 'build' |

d. $C \mathrm{~V}: \mathrm{Ci}^{-}$

| nó:ndú- | nó:ndá-lì | 'ignite' |
| :--- | :--- | :--- |
| mà:ndí- | mà:ndá-lì | 'think' |

e. trisyllabic $\mathrm{CvCvCi}-$

| zìgìbí- | zỉgìbé-lì | 'shake' |
| :--- | :--- | :--- |
| $\eta \eta \eta$ | пทŋ- | 'xxx |

For nonsingular addressee, -li is reduced to $\because 1$ (with L-tone) plus sèndèn. Example: jèrâal 1 sèndèn. For typographic reasons I write a falling tone on the stem-final vowel since the accent does not work on "l."
relationship of Prohibitive suffix to e.g. Stative negative?
syntax: same as imperative?

### 10.6.2 Hortatives

### 10.6.2.1 Hortative (-mó, plural -mó-ì)

The hortative ('let's VP!') is expressed by a suffix -mó for singular addressee, or -mó-ı̀ for nonsingular addressee. The form for nonsingular addressee is more common and is the normal response to elicitation cues; I will use it in the lists below. The suffix -n can be equated with imperative Plural suffix -ǹ.
-mó follows the A/O-stem of the verb. $\{\mathrm{H}\}$-toned verbs appear with $\{\mathrm{H}\}$-tone, while lexically $\{\mathrm{LH}\}$-toned verbs are $\{\mathrm{L}\}$-toned before the suffix. There is an irregular form for 'let's go', ńbó (plural ḿbó-ǹ) for expected \#ó-mó.
(xx1) Hortative (final-nonhigh-vowel class)
verb hortative gloss
a. irregular
yăy-lo- ńbó-ì 'go'
b. $C v-, C v:-$

| dě- | dè-mó-ǹ | 'bathe' |
| :--- | :--- | :--- |
| dǒ- | dòà-mó-ǹ | 'arrive' or 'insult' |
| nદ́- | ná-mó-ǹ | 'eat, drink' |
| wǒ:- | wà:-mó-ǹ | 'come' |

b. $\mathrm{CVCV}^{-}$

| dògó- | dògà-mó-ì | 'abandon' |
| :--- | :--- | :--- |
| kédé- | kédé-mó-ì | 'cut' |
| zě:- | zìyà-mó-ì | 'bring' |

c. $\mathrm{CvCCv}-$
$\begin{array}{lll}\text { tómbó- } & \text { tómbó-mó-ǹ } & \text { 'jump' } \\ \text { gòndó- } & \text { gòndò-mó-ǹ } & \text { 'take out' }\end{array}$
d. $C V: C_{V-}$

| $\eta \eta \eta$ | $\eta \eta \eta-$ | 'xxx |
| :--- | :--- | :--- |
| $\eta \eta \eta$ | $\eta \eta \eta-$ | 'ххх |

e．trisyllabic
ククロ クロクー＇xxx

Verbs with final high vowel are in（xx2）．
（xx2）Hortative（final－high－vowel class）
verb hortative gloss
a．Ci－，Ci：－

| nú－ | nú－mó－ì | ＇go in＇ |
| :--- | :--- | :--- |
| yí－ | yà－mó－ǹ | ＇see＇ |
| dǐ－ | dìyà－mó－ì | ＇carry on head＇ |
| ní： | ní－mó－ì | ＇sleep＇ |

b． CvCi － $\mathrm{nCl}-$

| làyí－ | lày－mó－r̀̀ | ＇taste＇ |
| :--- | :--- | :--- |
| jèrí－ | jèrà－mó－ì | ＇look＇ |
| $́ b u ́-~$ | óbú－mó－ìn | ＇lay out＇ |
| ńdí－ | ńdá－mó－ì | ＇give＇ |

c． $\mathrm{CvCCl}^{-}$

| zòngí－ | zòngù－mó－ì | ＇treat（medically）＇ |
| :--- | :--- | :--- |
| óndú－ | óndú－mó－ì | ＇build＇ |

d． $\mathrm{Cv}: \mathrm{Ci}^{-}$
mà：ndí－mà：ndà－mó－ǹ＇think＇
e．trisyllabic $\mathrm{CvCvCi}-$
zìgìí－zìgìè－mó－r̀̀＇shake＇

10．6．2．2 Hortative negative（－m̂̂－l，plural m̂̂－l sèndèn）
A hortative negative is produced by replacing（positive）－mó with hortative negative $-m \hat{\jmath}-1$ for singular addressee，and by replacing（positive）－mó－ǹ with－m̂̂－l sèndèn for nonsingular addressee．The irregular（positive）hortative ńnboó ‘let’s go！’ becomes ńbó－mô－l＇let’s not go！＇．Other verbs add－mô－l to the same form of the stem used in the（positive）hortative．

Morphologically, the hortative negative is the prohibitive of the hortative positive. A few examples of the positive and negative hortative are in (xx1).
(xx1) verb hortative hortative Neg gloss
a. irregular

$$
\text { yǎy-/o- ḿbó-ì } \quad \text { ńbó-mô-1 'go’ }
$$

b. regular, $\{\mathrm{H}\}$-toned

| nú- | nú-mó-ǹ | nú-mô-1 | 'go in' |
| :--- | :--- | :--- | :--- |
| óndú- | óndú-mó-ǹ | óndú-mô-1 | 'build' |
| tómbó- | tómbó-mó-ì | tómbó-mô-1 | 'jump' |

add a CìCv́ stem
c. regular, $\{\mathrm{L}\}$-toned
gòndó- gòndò-mó-ǹ gòndò-m̂-1 'take out'
zìgìbí- zìgìbè-mó-ì zìgìbè-mô-1 'shake'

### 10.6.3 Quoted imperatives and hortatives

### 10.6.3.1 Quoted imperative (-y~-lû)

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 VERB you!'). Imprecations are arguably a defective type of quoted imperatives. The QuotImprt form is not conjugated and therefore has no plural/singular distinction. A pronominal subject may precede it.

The data in (xx1) reveal some morphophonemic complexity. The most unusual detail is the $-l u$ suffix that shows up with $C v:-$ verbs (xx1e). Most of these verbs derive from * $C v / v$ bisyllabics, so -lú reflects the original second syllable (compare agentive compound finals of the form -C v -lé for the same stems, §5.1.4).

The remaining forms in ( $\mathrm{x} \times 1$ ) can be understood at least historically if we think of a suffix $*$-y that fused in many cases with a stem-final vowel as $*$ i. The occurrence of final $u$ rather than $i$ in nonmonosyllabic stems reflects the frequent shift from $/ \mathrm{i} /$ to $u$ in a weak metrical position in the presence of a labial(ized) consonant. This is because the quoted imperative form is invariably followed by either Quotative wa or interrogative ma.

Monomoraic forms (nú, dí, etc.) are H-toned. Forms of two or more moras show the lexical tone of the stem. There is no point in segregating final-nonhigh-vowel from final-highvowel stems for this inflectional category, so the data are presented in a single array in (xx1).
(xx1) Quoted imperative (final-nonhigh-vowel class)
verb QuotImprt gloss
a. $C_{V}$-, $C_{V} v^{-}$, and $N C V$ - with high vowel unchanged

| nú- | $n u ́$ | 'go in' |
| :--- | :--- | :--- |
| $d i ̌-$ | $d i ́$ | 'carry on head' |
| tí- | tí | 'send' |
| yǐ- | yí | 'see' |
| ní: | ní: | 'sleep' |
| ńdí- | ńdí | 'give' |

b. $C v$ - with mid-height front vowel becomes $C i$

| $d e \check{-}$ | $d i ́$ | 'bathe' |
| :--- | :--- | :--- |
| $j e ́-$ | $j i ́$ | 'dance' |
| $y \varepsilon ̌-$ | $y i ́$ | 'weep' |
| $n \varepsilon ́-$ | $j i ́$ | 'eat, drink' |

c. $C_{V}$ - with low or mid-height back vowel becomes $C v-y$

| ká- | $k a ́-y$ | 'shave' |
| :--- | :--- | :--- |
| $d \check{o}-$ | $d \check{o}-y$ | 'insult' |
| gó- | $g o \check{o}-y$ | 'go out' |
| $t \varepsilon$ ć- | $t \varepsilon ́-y$ | 'weave' |
| $t o-$ | $t o ́-y$ | 'sow, plant' |

d. Cvy-unchanged

| lǎy- | lǎy | 'taste', phonetic [lǎj] |
| :--- | :--- | :--- |
| yǎy-/o- | yǎy | 'go' |

irregularly $\{H L\}$-toned
zăy-/zo- zây [!] 'take away, convey'
e. $C v:$ :- with nonhigh vowel to $C v-l u$ or $C v-l i$
á:-
bǎ:-
á-lú
nă:- jà̀-lú
'brew (beer)'
'gather'
tó:- tó-lú
'take, pick up'
'pound'

| wă:- | wà-lú | 'do farm work' |
| :--- | :--- | :--- |
| wŏ:- | wò-lú | 'come' |

irregularly $\{H L\}$-toned

$$
z \varepsilon ̌:-\quad z \varepsilon ́-l u ̀ ~[!] \quad \text { 'bring' }
$$

f. $C v C v$-becomes $C v C u$ or $C v C i$

| dògó- | dògú | 'abandon' |
| :--- | :--- | :--- |
| kóbó- | kóbú | 'draw (water)' |
| kédé- | kédú | 'cut' |
| yàgá- | yàgú | 'fall' |
| jèrí- | jèrú | 'look' |
| óbú- | óbú | 'lay out' |

c. CvCCv - becomes CvCCu or CvCCi

| tómbó- | tómbú | 'jump' |
| :--- | :--- | :--- |
| nìngé- | nìngí | 'cook (sauce)' |
| zòngí- | zòngú | 'treat (medically)' |
| óndú- | óndí | 'build' |
| gòndó- | gòndú | 'take out' |

d. $C_{v}: C v$-becomes $C v: C u$ or $C v: C i$

| pá:mú- | pá:mú | 'understand' |
| :--- | :--- | :--- |
| mà:ndí- | mà:ndú | 'think' |

e. trisyllabic
zìgìbí- zigibú 'shake'
f. mediopassive
dìmb-í: dìmb-í 'follow'

For the nonmonosyllabics, the choice between final $u$ and $i$ depends on what follows. Quotative wa requires $u$, while conjugated verb jìn(i) 'said' requires $i$.

### 10.6.3.2 Quoted prohibitive (-li)

This form is used in quoted prohibitives ('he says for me/you/her not to come') and in negative wishes and imprecations ('may God not VP!'). The form is identical to the mainclause prohibitive, but it is normally followed by Quotative wà (xx1). It may be preceded by a preverbal subject pronoun.
(xx1) Third-person hortative negative
stem prohibitive quoted gloss
a. irregular

$$
\begin{array}{llll}
\text { yăy-/o- } & \text { ó-lì } & \text { ólì (wà) } & \text { 'go' }
\end{array}
$$

b. regular

| $n \varepsilon$ - | ná-lì | ná-lì (wà) | 'eat, drink' |
| :---: | :---: | :---: | :---: |
| tó:- | tó:-lì | tó:-lì (wà) | 'pound' |
| wŏ:- | wă:-lì | wă:-lì (wà) | 'come' |
| zغ̌:- | ziyá-lì | zìyá-lì (wà) | 'bring' |
| ńdí- | ñdá-lì | ńdá-lì (wà) | 'give' |
| zòbó- | zòbá-lì | zòbá-lì (wà) | 'run' |
| óndú- | óndí-lì | óndí-lì (wà) | 'build' |
| zigibí- | zi̇gibé-lì | zìgibé-lì (wà) | 'shake' |

syntax same as for positive forms?
examples:
'may he/she not go out!'
'may they not dig!'
'may she not eat her mango!'
10.6.4 Quoted hortative ( $-m \dot{m}$ ) and hortative negative ( $-m \bar{c}-1 i)$

When the clause quoted represents an original hortative ('let's go!') as opposed to an original imperative (or wish), the suffix -mín is used. The combination of -ḿ 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 quotative hortative does not.

The quoted hortative (QuotHort) suffix is added to the A/O-stem. The suffix is H-toned. A $\{\mathrm{H}\}$-toned stem has its lexical tones. A $\{\mathrm{LH}\}$-toned stem is realized with $\{\mathrm{L}\}$-toned stem plus H-toned suffix. The stem phonology is therefore the same as for hortative -mó itself. This suggests that quoted hortative (QuotHort) -mí can be represented phonologically as /-mi/ or /$\mathrm{mu} /$, i.e. as morphologically the quoted hortative (see the preceding section). This morphological analysis is supported by the (irregular) form for quoted 'let's go!', namely ńbú.
(xx1) gives representative forms of the original hortative and its quoted counterpart, the latter furnished with quotative particle wà.
(xx1) verb hortative QuotHort gloss
a. irregular
yǎy-lo- ḿbó-ì ḿbú (wà) 'go'
b. regular, $\{\mathrm{H}\}$-toned

| nú- | nú-mó-ǹ | nú-ḿ (wà) | 'go in' |
| :--- | :--- | :--- | :--- |
| né- | ná-mó-ǹ | ná-ńn (wà) | 'eat, drink' |
| tó:- | tó:-mó-ì | tó:-ńn (wà) | 'pound' |
| óndú- | óndú-mó-ǹ | óndú-ń (wà) | 'build' |
| tómbó- | tómbó-mó-ì | tómbó-ḿn (wà) | 'jump' |

c. regular, $\{\mathrm{L}\}$-toned

| yǐ- | yà-mó-ǹ | yà-ḿm (wà) | 'see' |
| :---: | :---: | :---: | :---: |
| wǒ:- | wà:-mó-r̀ | wà:-ḿn (wà) | 'come' |
| wǎ:- | wà:-mó-r̀ | wà:-ḿn (wà) | 'do farm work' |
| $z \varepsilon ̌:-$ | zèyà-mó-ı̀ | zèyà-ḿn (wà) | 'bring' |
| gòndó- | gòndò-mó-r̀ | gòndò-ḿn (wà) | 'take out' |
| zigìibí- | zìgìbè-mó-r̀ | zìgì ${ }^{\text {èm }}$ (Wà) | 'shake' |

The negative counterpart is $-m o ́-l i$, , reduced to $-m \hat{\jmath}-1$ before quotative wà. The form is morphemically identical to the original form of the hortative negative. Samples of the original and quoted forms are in (xx2).
(xx2) verb hortative Neg QuotHort Neg gloss
a. irregular
yǎy-/o- ńbó-mô-1 ńbó-mô-1 (wà) 'go'
b. regular, $\{\mathrm{H}\}$-toned
nú- nú-mô-1 nú-mô-1 (wà) 'go in'
óndú- óndú-mô-1 óndú-mô-1 (wà) 'build’
tómbó- tómbó-mô-1 tómbó-mô-1 (wà) 'jump'
c. regular, $\{\mathrm{L}\}$-toned
gò-ndó- gò-ndò-m̂-1 gò-ndò-mô-l (wà) 'take out'
zigìbí- zìgìbè-mô-1 zìgìbè-mô-1 (wà) 'shake'

## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

The basic constituent order is SOV where 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). Minimally, the subject is represented by a pronominal-subject suffix on the verb or other predicate, but 3 Sg subject is generally unmarked. Nonpronominal subject NPs require 3 Sg or 3 Pl agreement on the verb. There is no pronominal agreement for nonpronominal object NPs.

Within a clause, the subject functions as antecedent for any reflexive or reciprocal anaphors.
(xx1) a. [nùmǎ: á-gá] póró-tì- $\varnothing$
[hand 3Refl-Poss]
cut-Pfv1b-3SgSbj
'He ${ }_{x}$ cut his ${ }_{x}$ hand.'
b. ùlé: [á tèmbò] púngoó-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 preverbal proclitic pronominals. In the main clause (xx1a), the subject is expressed by a suffix on the verb. In the relative clause ( xx 1 b ), it is expressed as a 3 Sg pronoun ńné.
a. péddè sémé-tì- $\varnothing$
sheep slaughter-Pfv1b-3SgSbj
' $\mathrm{He} /$ She slaughtered a sheep.'
b. [pèddè̀ ${ }^{\mathrm{L}}$ ńné sémé kárnà] àndí bù- $\varnothing$
[sheep ${ }^{\text {L }}$ 3SgSbj slaughter Pfv.Ppl] where? be-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 wa $\rightarrow$ (§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 -ì that is not found with any indicative verb category. For hortatives, -ǹ specifically marks the plurality of the addressee, rather than the (always 1 Pl ) subject. The suffix is therefore absent from 'let's go!' addressed to a single interlocutor. By extension, I assume that -ì̀ 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 present it is limited to the relevant addressee category ( 2 Sg or 2 Pl ).

| (xx1) | ámádù | $[$ ú $/$ bí | wá $\rightarrow]$ | ńnbú | wà |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Amadou | $[2 \mathrm{Sg} / 2 \mathrm{Pl}$ | QuotS $]$ | go.QuotHort | Quot |
|  | 'Amadou said (to you-Sg / you-Pl), let's go!' |  |  |  |  |

By extension, I take the same quotative subject phrase in imperatives to refer to the addressee rather than subject category, though the two arguably converge in this case. (xx2) is an example, also showing the use of a special third-person (i.e. indirect) imperative verb form (§10.6.3.1).

| (xx2) | ámádù | $[u ́ / b i ́$ | wá $\rightarrow]$ | yǎy | wà |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Amadou | $[2 \mathrm{Sg} / 2 \mathrm{Pl}$ | QuotS $]$ | go.QuotHort | Quot |
|  | 'Amadou said (to you-Sg / you-Pl), go!' |  |  |  |  |

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 '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 (xx2) in §18.1.1.

Reciprocal objects are also possible (xx3).
(xx3) [bí tèmbj̀] púngó-ì
[2PlPoss Recip] hit.Imprt-Pl.Addr
'Hit-2Pl each other!’

Hortatives clearly have 1Pl subjects, including but distinct from the second person addressee. In ( xx 4 ), the reciprocal object phrase is overtly 1 Pl , while the suffix -ì on the verb marks addressee plurality
(xx4) [í tèmb̀̀ $]$ púngoó-mó-ǹ
[1PIPoss 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.

| (xx5) | [yày $\quad$ né | wá: |
| :--- | :--- | :--- | :--- |
|  | [go $\quad$ and.Nonpast.SS] | come.Imprt |
|  | 'Go and come-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

The subject-verb collocations in (xx1) denote meteorological, seasonal, and time-of-day events. bá is not attested except in the expressions in (xx1a), all of which denote transitions. The combinations in (xx1b) are also rather frozen. $\operatorname{mir}^{n}{ }^{n}$ (variant mìn $\varepsilon$ ) elsewhere means 'swallow', and the other cases in (xxlb) show idiomatic specialization.
(xx1) a. bá dŏ- (~ bà:-dó: dŏ-) 'rainy weather arrive’ (June)
bá gǒ-(~ bà:-gó: gǒ-) $\quad$ 'rainy weather go out' (October)

```
b. àrná mìrn'\varepsiloń 'rain fall' (àr ná 'rain')
gándá \varepsilońd\varepsiloń 'day break’(gándá 'place', \varepsilońd\varepsiloń ‘become clean')
dèndé dèrré 'night fall'(dèndé 'night', dèrr'é 'spend mid-day')
```

The subjects in (xx1a-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 (xx2).

```
a. bà:-dó: [dò gín] yǎy-yà-y
    rainy.weather [arrive and.Past.SS] go-Pfv1a-3SgSbj
    'Rainy weather (wet season) came and went.'
```

| b. àr ${ }^{n}$ á | $\left[\mathrm{mirr}^{n}{ }^{\text {® }}\right.$ | gín] | íjj-í:-yà-y |
| :---: | :---: | :---: | :---: |
| rain(n) | [rain.fall | and.Past.SS] | stand-MP-Pfv1a-3SgSbj |
| Rain | and then | pped.' |  |

'Be angry' (xx3a-b) looks at first as though '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 (xx3a), and an overt nonpronominal subject NP denoting the experiencer may precede 'liver/heart' (xx3b). 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 (xx3c-d).
(xx3)

$$
\begin{array}{ll}
\text { a. } & c \varepsilon ́ n d \varepsilon ́ \quad b a ̀ r \\
n \\
\text { n-â:-m } \\
\text { liver/heart become.red-Pfv1a-1SgSbj } \\
\text { 'I became angry.' }
\end{array}
$$

| b. ámádù | céndé | $b a ̀ r{ }^{n}-a \hat{:}$ :-y |
| :---: | :---: | :---: |
| Amadou | liver/heart | become.red-Pfv1a-3SgSbj |

'Seydou became angry.'

d. [ámádù $\left.{ }^{\text {L }} c \varepsilon ̀ n d e ̀\right] ~ e ́ l u ̀-\varnothing ~$
'Amadou is happy.'

Nevertheless, in the 'be angry' examples it presumably is 'liver/heart' that 'turns red', calling for the verb bàrná, which means'become red' and by extension 'be hot, blaze' (as well as 'beat [tomtoms]' and '[fruit] ripen'), cf. ùdù-bár'à 'hot season'. So the verb selection is based on 'liver/heart' as logical subject, but the morphosyntax treats the human experiencer as subject.

A similar situation occurs in the 'nosebleed' examples (xx4a-b). cìnè-ténér' $\quad$ '́ (including cíné 'nose' as compound initial) denotes the blood itself, and the verb 'go out' 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.
(xx4)

$$
\begin{array}{llll}
\text { a. } & \text { cìnè-ténér } & \text { né } & \text { gó-mìr }
\end{array} \quad \text { sò-m }
$$

b. ámádù cìnè-ténérn ${ }^{n}$ ǵ gó-m̀ sò:- $\varnothing$

Amadou nosebleed go.out-Ipfv have-3SgSbj
'Amadou is having a bloody nose.'

### 11.1.2 Simple transitives

### 11.1.2.1 Direct objects of simple transitives

There is a fairly well-defined transitive clause type with a subject and a direct object. Order normally SOV (except perhaps for pronominal subjects).
does the language have an Accusative morpheme (§6.7)?
impact verbs ('hit', 'cut') should be simple [Subj Obj V]
perception verbs ('see', 'hear') likewise
verbs of holding/carrying likewise, but they also have a "middle" voice element expressed in some languages by the Mediopassive suffix, i.e. 'I carry [the baby] (on myself)'. The "middle" element is disregarded by the clause-level syntax.

The distinction between transitive and intransitive is complicated by the existence of many verbs that have a cognate nominal as (apparent) object (\$11.1.5.1) or other lowreferentiality objects. These normally do not get Accusative marking (in lgs where such a morpheme exists).
11.1.2.2 $\eta \eta \eta$ 'do' with onomatopoeias and loanwords

The verb $\eta \eta \eta$ 'do' can combine with onomatopoiec forms and other low-referentiality nounlike elements. In effect, 'do' allows such elements to become predicates.
examples, e.g. with imitations of animal vocalizations

Dogon languages differ as to whether 'do $X$ ' is the productive way to nativize borrowed stems with verb-like meaning from Fulfulde, Bambara, French, etc.. Some languages have many such combinations, other languages generally allow borrowed verbs to be directly conjugated.
examples involving borrowed verbs, and brief discussion of how productive the pattern is.
11.1.2.3 Lexicalized verb-object combinations with low-referentiality objects

Some examples of high-frequency combinations of verb and noncognate object or object-like adjunct are in (xx1). dě- and úmbó- are not otherwise attested.

| (xx1) ínjé dě- | 'bathe (oneself)' (ínjé ‘water') |
| :--- | :--- |
| kòmbó tá- | 'wage war' (kòmbó ‘war', tá- 'shoot') |
| cíné úmbó- | 'blow one's nose' (cíné ‘nose') |
| zá nč- | 'eat (a meal)' ( $n$ č- also 'drink') |

### 11.1.2.4 Forms of cognate nominals associated with verbs

lexicalized cognate nominal, sharing phonological material with the verb
verbs without a lexicalized cognate nominal can simply use their verbal noun
give all known exx. from the lexicon that occur together in phrases. Since verb stems are subject to tighter restrictions on phonological form, organize by the form (syllabic shape, tone) of the noun
(xxl) noun verb gloss of combination
a. monosyllabic
b. bisyllabic, noun $\{H\}$
c. bisyllabic, noun $\{L H\}$
d. bisyllabic, noun $\{H L\}$
e. bisyllabic, noun $\{L H L\}$
f. trisyllabic, noun $\{L H\}$
g. trisyllabic, noun $\{H L\}$
h. trisyllabic, noun $\{L H L\}$
separate table and discussion for cases where
a) there is a change in vocalism from verb to nominal, e.g. e versus $E$ or o versus $O$
b) the nominal is only partially cognate to the verb (i.e. is a compound, one element of which is cognate; or the verb is based on a modifying adjective)
representative glosses
'build a shed (shelter)'
'avoid, respect (a taboo)'
'give out a whistle’
'tie a knot'
'work, do a job'
'harvest millet, do the millet harvest'
'spend the mid-day'
'roll turban (on head)'
'think a thought'
(a) death occur'
'make a heap'
'be rivals, have a rivalry'
'dance'
'fart, let out a fart'
'defecate, take a shit'
'speak'
'give a reprimand'
'go search for firewood'
'write, do some writing'
'treat (medically), provide care to'
'sing, perform a song'
'compete, be in a race'
'do the second round of weeding'
'double up, have two'
'give a description'
'chew cud'
'(dog) bark'
'(lion, hyena, elephant) roar'
'(plant stem) split into two'
'be stronger (than)'
'divide into halves'
'sneeze'
'speak'
'belch, emit a belch'
'vomit'
'cook a dish including cottonseed'
'gain, make a profit'
'foam, be frothy'
'foam up'
'poke fun at'
'stutter'
'study, go to school'
'pray, perform the Muslim prayer'
'jump, take a jump'
'make a profit'
'preach a sermon'
'spend a half-day (morning)'
'swear an oath' (<Fulfulde)
'tell a story'
'make a payment'
'weep'
'count (recite numbers)'
'be deceptive, trick'
'make an insult'
'forge (tools)'
'stand/ stop in a position'
'clear one's throat'
'ask a question'
'cook (dish with cow-peas, or millet mixed with roselle leaves)'
'yawn, make a yawn'
'let out a groan'
'urinate'
'spit, emit a spit'
'make noise'

```
'lay egg'
'(woman) emit cry of joy'
'have fun, stage festivities'
'converse, chat'
'utter a formal greeting'
'take animals to pasture'
'do wage labor (by the day)'
'take cows out at night'
'(beggar) sing koranic verses'
'fight, engage in a fight'
'dream a dream'
'snore; (lion) roar'
'have a discussion'
'request, beg'
'make loud noises'
'(animal) bellow'
'formally counsel (a young person)'
'perfume with incense'
'have a rest'
may have vocalic change:
'sow (seeds); sow the seedstock'
'run'
'curse, utter a curse'
'fall down, take a fall'
'pay dues, make a contribution'
'cover oneself with blanket'
'laugh, let out a laugh'
'make an addition (top-off)'
'take a walk'
'crawl, drag oneself'
'hold on one's back'
'do (manual) farm work (in field)'
'(sth unseen) make a noise'
may have partial cognate relationship:
'perform black magic'
'sleep'
```

'provide assistance to'
'scold'
'take a step'
'emit some slobber, drool'
'build a conical roof'
'clap, applaud'
'draw a line (with the hand)'
'cook $\eta \eta \eta$ (lit. "white meal," a millet dish)
'hunt, go on a hunt'
'perform an individual prayer'
'hiccup'
'give out a shout'
irregular cases?
'be afraid'
'stand, be in a position'
'cook sauce'
'lie, tell a lie’

### 11.1.2.5 Grammatical status of cognate nominal

usually be pro forma, as in 'dance (='do) some dancing'
however, some cognate nominals can be somewhat referential (denoting a bounded unit of activity), and therefore can be quantified over or adjectivally modified.
examples
'I danced three dances.'
'They dances a nice dance,'
try with more difficult cases: 'hiccup', 'laugh', 'snore', 'rest'
11.1.3 Clauses with additional arguments and adjuncts

### 11.1.3.1 Syntax of expressive adverbials (EAs)

Expressive adverbials (EAs), see §8.4.7, 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 (xx1). bě- has a full set of positive and negative inflections.
( xx 1 ) a. bù̀- stative positive ('be X ')
b. ŋ̀gó- stative negative ('not be X')
c. bě- inchoative ('become X')

EAs therefore differ syntactically from NPs and from adjectives, which are made predicative in other ways ( $\S \mathrm{xxx}, \S \mathrm{xxx}$ ). EAs are closest syntactically to adverbial phrases, especially locational expressions, which use bù- 'be (somewhere), be present' and $\grave{\eta} g o ́-$ '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 below.
11.1.3.2 Adverbial phrases with verbs of motion, being in, and putting

Motion verbs are intransitive, with an optional locational $A d v P$ as an adjunct. The AdvP may be overtly adverbial (e.g. with a locative postposition), but it may also take the (surface) form of a NP, such as a place name.
examples:
'They went to my village.'
'They went home.'
'They went to Bamako.'
'They came back from the well.'
There may be one or more verbs (perhaps defective stative quasi-verbs) with senses like 'be (put) in(side)' or 'be (put) on' (cross-ref to relevant section of Chapter 10 or 11). Although the specific locative relationship is baked into the verb's sense, the complement may again be an $A d v P$, with the same qualifications as noted above for motion verbs. The default is the basic locational-existential quasi-verb 'be (somewhere)'.
examples
'The people are.in(side) the house.' [with a specialized stative]
'The tea kettle is.on the burner.' [with another specialized stative]
'I am in Douentza.' [with locational-existenctial]

Verbs of putting take a direct object and a locational AdvP. They can be modeled semantically, roughly, as [X CAUSE [Y BE [IN/ON Z]]].
examples
'I put the mangoes under the waterjar.'
'I put the sugar in the box.'

### 11.1.3.3 Ditransitives

'Give' takes two objects. The recipient, who is generally human, is optionally marked accusative. The theme (object given), normally nonhuman, is much less likely to take accusative marking. However, if the theme is referentially specific and is the only overt preverbal constituent, it sometimes gets the accusative marker (xx1c). In all of the examples of ( xx 1 ), my assistant spontaneously produced forms without accusative -gì, but accepted my repeats with -gì in the parenthesized positions.
(xx1) a. sé:dù péddè mí(-gì) ǹdì- $\varnothing$
S sheep $1 \mathrm{Sg}(-\mathrm{Acc})$ give.Pfv-3SgSbj
'Seydou gave me a sheep.'
b. [péddè wě:] ně(-gì) ǹdì-m
[sheep 1SgPoss.AnSg] person(-Acc) give.Pfv-1 1 SgSbj
'I gave my sheep-Sg to someone.'
c. [[péddè ì $]$ gì] ńdì-tì- $\varnothing$
[[sheep Def] Acc] give-Pfv1b-3SgSbj
'He/She gave a sheep.'
tágá 'show' and ságírí 'entrust' have the same case frames.
case frames for 'give', 'show', 'say' ('give' and 'show' may alternate between two distinct case frames, in one of which the recipient is treated as direct object, the other using dative forms)

### 11.1.3.4 Valency of causatives

case-frame for causative from intransitive base: 'cause to come', 'cause to go in' (= 'take in'). Should be similar to a simple transitive.
case-frame for causative from transitive base: 'X cause Y to VERB Z'. Often both Y and Z are marked as direct objects (e.g. with Accusative morpheme, or using pronoun-object clitics).
try with full NPs, pronouns, and one full NP and one pronoun

### 11.1.4 Verb Phrase

The category VP (i.e. a clause stripped of its subject and of clause-level inflectional categories) is relevant to certain types of chains, notably direct chains (with no linking morpheme) and explicitly same-subject subordinated clauses. The nonfinal VP (minimally just a verb, but sometimes including non-subject complements) is chained to the final verb (direct chains), or is more loosely preposed to or inserted into the final clause (same-subject subordinated clause).

For details and examples, see Chapter 15.

## 11.2 ' Be ', 'become', 'have', and other statives and inchoatives

### 11.2.1 'It is' clitics

The 'it is' clitic has identificational function. An entity whose existence (but not identity) is known is identified in this way. The clitic can be added to personal or place names, common nouns (denoting types of entities), more complex NPs, pronouns and demonstratives, and WH-interrogatives.

The same clitic is often used to focalize a constituent; see Chapter 13.
Usually there are different constructions for making predicates out of adjectives (\$11.4) and out of expressive adverbials (\$8.4.7, §11.1.3.1)

### 11.2.1.1 Positive 'it is' $(:=\varnothing)$

The clitic is realized as lengthening of a word-final vowel (if not already long) and by a final L-tone element. Either the lengthening or the final pitch drop (or both) is audible on nearly all NPs. However, it is inaudible after a few nouns like 'goat' that already end lexically in a long, L-toned vowel. The relationship between simple nouns stems and the 'it is' form is illustrated in ( xx 1 ).

```
noun (X) 'it's (an) X' gloss
```

a. final short vowel

L-toned final vowel, lengthening audible

| péddè | péddè: $=\varnothing$ | 'it's a sheep' |
| :--- | :--- | :--- |
| gùdù-kúlà | gùdù-kúlà: $=\varnothing$ | 'it's (body) hair' |
| pùdù-pá:dù | pùdù-pá:dù: $=\varnothing$ | 'it's lungs' |
| H-toned final vowel, lengthening | and pitch drop audible |  |
| sòmé | sòmê: $=\varnothing$ | 'it's a horse' |
| tólé | tólê: $=\varnothing$ | 'it's a pig' |
| tálé | tál̂ê: $=\varnothing$ | 'it's an egg' |
| yă | yă: $=\varnothing$ | 'it's a woman' |
| árná | árrâ: $=\varnothing$ | 'it's a man' |
| nù-mbś | nù-mbô: $=\varnothing$ | 'it's people' |
| gùndú | gùndû: $=\varnothing$ | 'it's a calabash cover' |

b. final long vowel

H-toned final vowel, pitch drop audible

| nă: | nă: $=\varnothing$ | 'it's a cow' |
| :--- | :--- | :--- |
| s̀̀pó: | sذ̀ŷ̂: $=\varnothing$ | 'it's a spinal cord' |

LH-toned final vowel, pitch drop audible (final $<L H L>$ tone)
lă: $\quad$ lă: $=\varnothing \quad$ 'it's a foot'
tò-tǒ: $\quad$ tò-tô: $=\varnothing \quad$ 'it's a hole (pit)'
ìnjě: injě: $=\varnothing \quad$ 'it's a dog'
cìnă: cìnă: $=\varnothing \quad$ 'it's a bone'
L-toned final vowel, no audible change
ír"è:
$i r^{n} \stackrel{e}{e}:=\varnothing$
'it's a goat'

Examples are in (xx2).
(xx2)
a. ò-gú
$\grave{n j} \hat{e}:=\varnothing$
Prox--InanSg what?=it.is
'What is this?'

$$
\begin{aligned}
& \text { b. } \check{0}-\mathrm{m} \quad n \hat{a}:=\varnothing / \text { ìn } j \check{:}:=\varnothing / \text { sòmê: }=\varnothing \\
& \text { Prox-AnSg cow=it.is / dog=it.is / horse=it.is } \\
& \text { 'This is a cow / a dog / a horse.' (nǎ:; ìnjě:, sòmé) }
\end{aligned}
$$

The clitic may be conjugated for 1 st/2nd person subject. There is no special 3 Pl conjugated form, but since the NP itself is usually marked for plurality there is no $3 \mathrm{Sg} / 3 \mathrm{Pl}$ ambiguity. 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.
(xx1) category clitic with 'blacksmith(s)'

| 1Sg | $=m$ | zémbé= $\quad$ ¢ |
| :---: | :---: | :---: |
| 1 Pl | $=y^{n}$ | $z \varepsilon ́ m b \varepsilon$-mbj $=\grave{y}^{n}$ |
| 2Sg | $=W^{n}$ | zémbé $=$ Wr $^{n}$ |
| 2Pl | $=y^{n}$ | $z \varepsilon ́ m b \varepsilon$-mbj $=\grave{y}^{n}$ |
| 3Sg | $\stackrel{\text { : }}{ }$ | zémbè: $=\varnothing$ |
| 3 Pl | $\stackrel{\text { : }}{ }$ | zÉmbé-mbò: $=\varnothing$ |

There is no special inanimate form distinct from 3Sg: ò-gú cínû: $=\varnothing$ 'this is a stone' $($ cínû $)$.
tones: clitic may be atonal, getting its tones from the final tone of the preceding stem. Or it may be L-toned, but subject to tone-spreading. Discuss, with cross-refs to Chapter 3, e.g. Final-Tone Resyllabification 33.7.4.3.
in Nanga, most such clitic forms are atonal, but 3Sg and Inanimate clitics are low-toned in some combinations (after 3rd person pronoun, interrogative 'what?' etc., and demonstrative pronoun) even if they end in a high vowel.
examples
expression of 'it's me/you!' (clitic is $3 S g$, or 1 Sg/2Sg agreeing with pronoun?)
if a special Inanimate-subject form of the clitic is in use, is it also used in identificational predicates like 'it's (=that's) it!' or 'it's them?'

### 11.2.1.2 'It is not' $(=$ là- $)$

The negative counterpart of $=$ ' 'it is' is $=l a ̀$ 'it is not'. There is no phonological indication that $=$ là is added to $=\vdots$ to form a clitic sequence. In particular, there is no lengthening of a short stem-final vowel before $=l a ̀(\mathrm{xx} 1)$.
(xx1) a. ŏ-m nă: =là:- $\varnothing /$ ìnjž: $=l a ̀:-\varnothing /$ sòmé $=$ là: $-\varnothing$
Prox-AnSg cow / dog / horse=it.is.not-3SgSbj
'This is 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 is (xx2).
(xx1) category clitic with 'blacksmith(s)'

| 1Sg | $=l a ̀ m$ | $z \varepsilon ́ m b \varepsilon ́=l a ̀ m$ |
| :---: | :---: | :---: |
| 1P1 | $=l a ̀-y^{n}$ | $z \varepsilon ́ m b \varepsilon$-mbś $=1$ à $-y^{n}$ |
| 2 Sg | $=1$ à $-W^{n}$ | zémbé $=1$ à $-W^{n}$ |
| 2 Pl | $=l a ̀-y^{n}$ | $z \varepsilon ́ m b \varepsilon ́-m b s=1 a ̀-y^{n}$ |
| 3 Sg | $=1 \mathrm{à}:-\varnothing$ | zémbé $=1 \mathrm{a}:-\varnothing$ |
| 3Pl | $=l a ̀-\bar{\varepsilon}$ |  |

As with stative negative $=n d \grave{a}-$, which has a similar paradigm (§10.4.2), $=$ là- is normally heard with low pitch, but the underlying phonological rising tone is manifested when an emphatic particle (kŏy) or the past clitic $=b i ̀$ - is added: $\quad$ źmbé $=l$ ă:- $\varnothing$ kǒy 'he sure isn't a blacksmith', $z \varepsilon ́ m b \varepsilon ́=l a ̆:-\varnothing=b i ̀-m-b i ̀-\varnothing$ 'he wasn't a blacksmith'.

### 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 cognates in the other languages) probably originated as a 'there (definite)' adverb. It is used with statives (derived statives from regular verbs, or defective stative quasi-verbs).
yé is very common with bù- 'be' and other predicates of location ('be in', 'be up on', etc.). These predicates can take a specific locational expression, but require yé as the default when no such expression is present. With sò- 'have', yé is required whether or not a locational expression is present ( $\mathrm{x} \times 1 \mathrm{~b}-\mathrm{c}$ ). yé is optional with derived statives such as 'be sitting' (xx1d).
(xx1)
a. yé bù-m

Exist be-1 SgSbj
'I am present (here).'
b. ìnjě: yé sò-m
dog Exist have-1SgSbj
'I have a dog.'
c. bàmbá úló yé sò-m

B house Exist have-1SgSbj
'I have a house in Douentza (town).'
d.

|  | óbà- $\varnothing$ |
| :--- | :--- |
| yé | ı̀bà- $\varnothing$ |
| Exist | sit.Stat- 3 SgSbj |
| 'He/She is sitting (seated).' |  |

yé is always H-toned. A following stative with initial H-tone drops to \{L\} after yé. Note óbà- $^{\text {a }}$ versus yé jbà- in (xx1d).
yé cannot occur in negative clauses, in relative clauses, or in positive main clauses that have a focalized nonverbal constituent (such as a WH-interrogative).
(xx2)

not.be-1SgSbj
'I am not present.'
b. úló (\#yê) só-ndj̀-m
house have-Neg-1SgSbj
'I don't have a house.'
c. ǎm úló (\#yé) $S$-ò:
who? house have-DFoc
'Who has a house?'
d. àndí úló (\#yé) sò-W ${ }^{n}$
where? house have-2SgSbj
'Where do you-Sg have a house?'

'I know someone who has a cow.'

The Existential particle follows object pronominals (xx3). It is not possible to determine relative order versus preverbal subject pronominals, since the Existential particle does not occur in relative clauses.

| (xx3) | kú | yé | sò-m |
| :--- | :--- | :--- | :--- |
|  | Inan <br> 'I have it.' | Exist | have- 1 SgSbj |

### 11.2.2.2 Locational-existential 'be (somewhere)' (bù-, negative $\grave{\text { g̀gó-) }}$

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'). In the absene of such a locational, the default locational is Existential yé, which in many contexts is understood to be equivalent to 'here' or 'there'. When the location is vague, the construction approaches a pure existential predication ' X exists, X is present (somewhere)'.

The paradigm is ( $\mathrm{x} \times 1$ ).
(xx1) 'Be (present)'
category form

| 1 Sg | $b u ̀-m$ |
| :--- | :--- |
| 1 Pl | $b u ̀-y^{n}$ |
| 2 Sg | $b u ̀-W^{n}$ |
| 2 Pl | $b u ̀-y^{n}$ |
|  |  |
| 3 Sg | $b u ̀-\varnothing$ |
| 3 Pl | $b-\varepsilon$. |

Examples are in (xx2). The subject may be human, animate, or inanimate.
(xx2) a. [[dámbá kǒ:] nè] bù-m
[[village 1 SgPoss.InanSg] in] be-1SgSbj
'I am in my village.'
b. á:màdù yé bù- $\varnothing \uparrow$

A Exist be-3SgSbj
'Is Amadou there?'
c. sik̀̀r̀̀ yé bù- $\varnothing$
sugar Exist be-3SgSbj
'There is some sugar.'

For past time, bù- is replaced by a conjugated form of bù-m=bì- 'was' (§10.5.1.6). The participial form of bù- in relatives is bù-m-غ̀: (§14.4.2).

The corresponding negative forms are in (xx3). They do not allow Existential yé. They may therefore occur with a specific locational, or by themselves. In the latter case, there may be an understood location ('here', 'there'), or the sense may be 'not exist'.
(xx3) 'Not be (present), be absent'
category form

| 1Sg | ض̀gó-m |
| :---: | :---: |
| 1Pl | ض̀gó- $y^{n}$ |
| 2Sg | j̀gó- $W^{n}$ |
| 2P1 | ض̀gó- $y^{n}$ |
| 3Sg | ض̀gó- $\varnothing$ |
| 3 Pl | j̀ ${ }_{W}$ - $\hat{\varepsilon}$ : |

Examples are in (xx4).
(xx4)

a. | [dámbá $\quad$ nè $]$ | ग̀gó-m |
| :--- | :--- | :--- |
| [village in] | not.be- 1 SgSbj |
| 'I am not in the village.' |  |

b. á:màdù ì goó- $\varnothing$

A not.be-3SgSbj
'Amadou is not present (here/there).'
c. sîkòr̀̀ ìgó- $\varnothing$
sugar not.be-3SgSbj
'There is no sugar.'

For past time, the form is $\grave{\eta} g o ́=b u ̀-m=b i ̀-~ ' w a s ~ n o t ~(s o m e w h e r e) ', ~ § 10.5 .1 .6 . ~$
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 bù-.
a. ínjé [èdù-gó
nè] yé gànà- $\varnothing$
water [waterjar-InanSg in] Exist be.put.in.Stat-3SgSbj '(The) water is in the waterjar.'
b. yó [bòríyé nè] yé gànà- $\varnothing$
millet [sack in] Exist be.put.in.Stat-3SgSbj
'(The) millet (grain) is in the sack.'
c. èdù-gó [úló nè] yé tùnà- $\varnothing$
waterjar-InanSg [house in] Exist be.put.Stat-3SgSbj
'The waterjar is in the house.'
d. pól-gó [bèndé nè] yé tùnà- $\varnothing$
knife-InanSg [shoulderbag in] Exist be.put.Stat-3SgSbj
'The knife is in the shoulderbag.'
e. [úlò nè] túnà- $\varnothing$
[house Loc] be.put.Stat-3SgSbj
'It's inside the house.'

The stative verbs in question are summarized in (xx2). The $\{H L\}$ tone overlay is heard in examples like (xx1e) with an overt locational but no existential yé. After yé, the forms have L-tones (xxla-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.
(xx2) transitive gloss mediopassive stative gloss

| túnú- | 'put in' | tún-íi:- | túnà- | '(object) be in' |
| :--- | :--- | :--- | :--- | :--- |
| gàní- | 'put in' | gàn-í:- | gánà- | '(liquid, grain) be in (container)' |
| dù̀yú- | 'lay down' | dù̀-íi:- | dúyà | '(object) be laid down in' |
| nángí- | 'put up on' | nánj-í:- | nángà̀- | '(object) be up on' |
| dèlí- | 'set' | dèl-í:- | dè̀̀- | '(calabash) be sitting' |
| tárá- | 'affix (on wall)' tár-íi- | tárà- | 'be on (wall)' |  |

Negative stative forms are in (xx3), for 3 Sg subject. The form in (xx3a) is an irregular contraction, cf. túnà above. For $=n d a ̀:-\varnothing$ see §10.4.2.
a. twã:-ndà:- $\varnothing$
'(object) not be in'
b. dúpá-ndà:- $\varnothing$
'not be laid down in'
gán-dà:- $\varnothing$
déá-ndà:- $\varnothing$
nángá-ndà:- $\varnothing \quad$ 'not be up on'
tárá-ndà:- $\varnothing \quad$ 'not be on (wall)'

### 11.2.3.2 Demonstrative-based 'be here/there' (ŏ-m-n $\grave{\varepsilon}$ etc.)

'Be here' and 'be there' can be expressed by combining an existential-locational predicate, i.e. bù̀- '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. However, the animate singular forms have an ending -nè. Forms for third person subject are in (xx1).
(xx1) demonstrative gloss 'be (here/there)'
a. inanimate

| $\grave{o}-g y^{\prime}$ | 'this' | $\grave{o}-g \hat{u}:=\varnothing$ |
| :--- | :--- | :--- |
| $\grave{e}-\hat{y}$ | 'these' | $\grave{i}-\hat{y}=\varnothing$ |


| mà-gú | 'that (over there)' | mà-g $\hat{u}:=\varnothing$ |
| :--- | :--- | :--- |
| mà-y ${ }^{n}$ | 'those (over there)' | mà- $\hat{y}^{n}=\varnothing$ |

b. animate

う-п́
う̀-bó
mà-ń
mà-bó 'those (over there)' mà-bô: $=\varnothing$
$b \check{\varepsilon}$ : is optionally added after the animate Sg predicative form in $-n \bar{n}-n \grave{\varepsilon}(x \times 2 a)$, or after the nonpredicative forms (i.e. without the 'it is' clitic) of the other forms. For animate plural, bě: is replaced by bù-mby̌: (xx2d).
(xx2)
a. ìnjě: $\quad \check{o}-m-n \grave{\varepsilon}$
$b \varepsilon ̌:$
dog be.here.AnSg be
'The dog is here'
$\begin{array}{lll}\text { b. èdù-gó } & \grave{o} \text {-gú } & b \varepsilon ̌: \\ & \text { waterjar-InanSg } & \text { Prox-InanSg }\end{array}$
'The waterjar is here.'
c. èdé: è-ý bě:
waterjar.Pl Prox-InanPl be
'The waterjars are here.'
$\begin{array}{llll}\text { d. } & \text { [ìnjè:-mbó } & \text { ì] } & \text { ò-bó }\end{array} \quad$ bù-mb̌̌:
'The dogs are here.'

In the absence of $b \check{\varepsilon}$ : or bù-mb̌̌:; the predicative forms tend to be presentational in function (§4.4.3).

For 1st/2nd person subjects, the forms in $-m$-nè and -bś take pronominal-subject suffixes: $\grave{\jmath-m}-n \varepsilon ̀-m$ 'I am here', ò-bó- $\grave{y}^{n}$ 'we are here’.

For morphologically similar predicates for interrogative 'be where?', see §13.2.4.

### 11.2.3.3 'Resemble' (mùl-̂̂.)

' X resemble Y ' is expressed with ' $[\mathrm{X}$ and Y$]$ ' or similar plural NP as subject, and mùlú or mùl- $\hat{\varepsilon}$ : as predicate. That $-\hat{\varepsilon}$ : is segmentable is shown by the negation mùl-l- $\hat{\varepsilon}$ : ( xx 1 b ). The
additional -1 - is related to other negative morphemes with 1 or $n d$, such as stative negative $=n d a ̀-$ and perfective negative $-l i ́-$. The $-\hat{\varepsilon}$ : is somewhat obscure but may be an original nominal ending.
(xx1) a. [ámádù.: sé:dù.:] mùlú / mùl-ê:
'Amadou and Seydou resemble (each other).'
b. [ámádù.: sé:dù.:] mùl-l-ह̂.
'Amadou and Seydou don't resemble (each other).'

Noun 'resemblance' is mù-mùlù-gó.

### 11.2.4 'Become', 'happen', and 'remain' predicates

### 11.2.4.1 'Remain' (bě-, wàdá-)

bě- and wàdá- have regular verb paradigms. bě- means 'stay, remain (behind)', i.e. not going anywhere else during the relevant time interval.
(xx1) [dámbá nè] bě-yyà-m
[village in] stay-Pfv1a-1SgSbj
'I stayed in the village (while others traveled).'
bě- has an accidental homonym 'lie down' due to a secondary phonological convergence. Cf. Yanda Dom bìyé- 'remain’, bìyó- ‘lie down'.
wàdá- means 'remain, be left (over)'.
(xx2)
zá wádá-ngò:- Ø
meal remain-IpfvNeg-3SgSbj
'There is nothing left of the meal.'
láyà yéngì bè-m-bì
'the feast of the ram took place yesterday'
yéngì lá: bè-m-bì
'it wasn't yesterday'
'holiday take place'
expressive adverbials

### 11.2.4.2 'Become, be transformed into' (tángí-)

tángí- ' X become Y ' takes a NP complement that is not marked for case.
(xx1) àdé táğgí-yà-y
bird become-Pfv $1 a-3 S g S b j$
' $\mathrm{He} /$ 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:-ndúli- 'Z transform (X into Y)'.

| (xx2) | àdé | ú | tá:-ndà-m-nù- $m$ |
| :--- | :--- | :--- | :--- |
|  | bird | 2SgO | become-Caus-Ipfv- 1 SgSbj |
|  | 'I will turn you-Sg into a bird.' |  |  |

tá:-ndú- 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 ('become red/small'), see §9.6. For bě- 'become' with an expressive adverbial, see §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-ŋgò̀:- 'does not know'.

### 11.2.5.2 'Want, like' (m̀bá- or nàmá-, negative tìbí-là or nàmà-lá)

'Want, like' is expressed most often by a defective stative quasi-verb m̀̀bà- (compare Nanga m̀bá-, Tommo So túbé-). The negative counterpart 'not want' is $\grave{m} b i ́ l l a ̀$, containing a variant of the stative negative suffix.
(xx1)
a. ǹjé ${ }^{\mathrm{L}} m b a ̀-W^{n} \uparrow$
what? $\quad{ }^{\mathrm{L}}$ want- 2 Sg Sbj
'What do you-Sg want?'
b. [cì kámá] m̀̀bí-là-m
[anything] want-StatNeg-1SgSbj
'I don't want anything.'

The paradigms are in (xx2).
(xx2) 'Want' and 'not want'

| category | 'want' | 'not want' |
| :---: | :---: | :---: |
| 1Sg | m̀̀bá-m | m̀ mílà 1 -m |
| 1Pl | m̀̀ ${ }^{\text {ajá- } y^{n}}$ | m̀ m bílà-y ${ }^{n}$ |
| 2 Sg | m̀̀áá-W ${ }^{n}$ |  |
| 2Pl | m̀ ${ }^{\text {a }}$ á- $y^{n}$ | mìbílà ${ }^{\text {y }}{ }^{n}$ |
| 3 Sg | m̀ má- $\varnothing$ |  |
| 3Pl | m̀̀ ${ }^{\text {má-̇̇ }}$ |  |

There is also another 'want' quasi-verb nàmá ( 3 Pl nàmá- $\varepsilon$ ), negative nàmà-lá with stative negative suffix.

These verbs may take NP objects: nàmá ì̀ $b i ́=l a ̀-m$ 'I don't want (any) meat'. They also take verbal noun complements, on which see §17.xxx.

### 11.3 Quotative verb

### 11.3.1 Conjugatable ‘say’ verbs (ǧ̌n ~ jǐn, órú, tágá)

The most common conjugatable 'say' verb accompanying quoted material is gǐn $\sim j$ jin, imperfective gínì-m-dj̀. However, it gets some competion from órú ‘say, speak’ and from tágá 'say'. órú does not require quoted material, since it also occurs in the collocation with cognate nominal órú-gó órú ‘speak, talk, do some talking'.

All three 'say' verbs allow perfective-1b -tì (gǐn-tì-, orr-tì, tágá-tit).
The indirect object (the original addressee) is expressed with postposition bènè (§8.xxx).
gǐn $\sim j \check{n} n$ is presumably related historically to gín, the past-time same-subject 'and then' subordinator (§15.xxx).

The conjugatable 'say' verbs compete with unconjugated quotative particle wà, and with a special form fà used with a preposed pronominal subject following the quotation (§17.xxx).

### 11.4 Adjectival predicates

### 11.4.1 Positive adjectival predicates

### 11.4.1.1 Final $u$ (or apocopated zero)

One rather common adjectival predicate 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. Those that I know of are in (xx1). The modifying form shown next to the predicate is the unsuffixed form (Inanimate Pl or Animate Sg ).
(xx1) predicate modifying gloss
a. final $u$ audible

| \{HL\} melody |  |  |
| :---: | :---: | :---: |
| cé:lù | cé:lè: | 'cold, cool' |
| dúdù | dúdè: | 'heavy' |
| Édù | Édè: | 'good' |
| élù | દ́lè: | 'sweet, delicious' |
| gálù | gálè: | 'bitter' |
| pílù | pílè: | 'white' |
| yágùrù | yágírè: | 'coarse, rough' |
| \{LH\} melody |  |  |
| gàbú | $g a ̀ b e ̌: ~$ | 'tall' |
| mòdú | $m \grave{d e ̌: ~}$ | 'evil, nasty' |
| yòrú | yòrě: | 'soft' |

b. final $u$ apocopated
\{HL\} melody
gôm gómè: 'rotten'
mân már ${ }^{n} \dot{\varepsilon}: \quad$ 'hard, solid'
nôm nómè: 'difficult'
ôm ómè: 'hot'
ór $r^{n}$ ôn ór ${ }^{n}$ óǹ̀: 'smooth, sleek'

Sample paradigms are in (xx2). 3Pl $-\varepsilon$ : has parallels in various inflectional paradigms of verbs. The 3 Pl predicative form is homophonous with the $\varepsilon$--final form of modifying adjectives when its syllable is L-toned, but when it is H -toned it is usually distinct tonally from the modifying form (mə̀d-દ́: 'they are nasty', mə̀dě: 'nasty').
( $\mathrm{x} x 1$ ) category 'is heavy' 'is nasty' 'is difficult'

| 1 Sg | Élù-m | mòdú-m | nómù-m |
| :--- | :--- | :--- | :--- |
| 1 Pl | Élì-y | mòdí-y | nómì-y |
| 2 Sg | Élù-W $W^{n}$ | mòdú-W $W^{n}$ | nómù- $W^{n}$ |
| 2 Pl | Élì-y | mòdí-y $^{n}$ | nómì-y |

### 11.4.1.2 $\{\mathrm{LH}(\mathrm{L})\}$ tone contour and final $i \sim y$

This type has an overlaid $\{\mathrm{LHL}\}$ tone contour. Those forms that are based on $\operatorname{Cv}(C) C E$ : adjectives also raise the final $E$ : vowel to $i$ :, resulting in $C \dot{v}(C) C \hat{1}:(\mathrm{xx} 1 \mathrm{a})$. Those based on $C(V) E$ : appear as $C V y(\mathrm{xx} 1 \mathrm{~b}) . C i:(\mathrm{xxlc})$ is probably of the same type, i.e. from /Ciy/. predicate modifying gloss
a. $C v(C) C \hat{1}$ :

| bìnî: | bìné: | 'fat, stout' |
| :--- | :--- | :--- |
| dèmbî:: | démbè: | 'thick, massive' |
| غ̀mbî: | غ̀mbě: | 'narrow' |

b. $C \tilde{V} y$
gวิy
wăy
c. Cî: ( or Ciny)
sî: Síyè: 'sharp (point, blade)'

With 1 Sg subject: bìnî: = $\grave{m}$ I am fat', gǒy $=\grave{m}$ 'I am short' (the $<$ LHL $>$ tone is spread out with the final $L$ on the clitic nasal).

Paradigms are in (xx2).
( $x x 2$ ) category 'is fat' 'is short'

| 1 Sg | bìnî:-m | $g \check{y} y=\grave{m}$ |
| :--- | :--- | :--- |
| 1 Pl | bìnî:- $-y^{n}$ | $g \check{y} y=\grave{y}^{n}$ |
| 2 Sg | bínî:- $W^{n}$ | $g \check{y} y=\grave{W}^{n}$ |
| 2 Pl | bìnî:- $-y^{n}$ | $g \check{y} y=\grave{y}^{n}$ |
| 3 Sg | bìnî:- $\varnothing$ | $g$ ghy $-\varnothing$ |
| 3 Pl | bìn- $\hat{\varepsilon}:$ | $g \check{-}-\bar{\varepsilon}:$ |

### 11.4.1.3 pá: 'be long'

From pá: 'long' the predicative form is $<\mathrm{LH}>$-toned, with no final high vowel or semivowel.
(xx1) predicate modifying gloss
pá: pá: 'long'

The paradigm is ( xx 2 ).
(xx2) category 'is long'

| 1 Sg | pá: $-m$ |
| :--- | :--- |
| 1 Pl | pá: $-y^{n}$ |
| 2 Sg | pá: $-W^{n}$ |
| 2 Pl | pá: $: y^{n}$ |
|  | pá:- $\varnothing$ |
| 3 Sg | p-ă: |

11.4.1.4 Derived expressive adverbial plus bù- 'be'

The attested example of a construction with bù- 'be' is in (xx1). The adjective takes a derived expressive adverbial (EA) form. bù- is regularly used to make EAs predicative (§xxx).
(xx1) predicate modifying gloss
$\varepsilon ́ r^{n} \dot{\varepsilon}-y \rightarrow b u ̀-\quad$ ér ${ }^{n} \bar{\varepsilon}: \quad$ 'lightweight; thin (wall)'

### 11.4.1.5 Copular predicate based on modifying adjective

For a number of adjectives, no specifically predicative form was elicitable. Instead, the regular modifying form, including animacy and number marking, is used as a predicate with the 'it is' clitic. A repetition of the noun ('this mango is a red mango') frequently occurs, and although the repeated noun is not required it suggests that the predicative element is syntactically a NP rather than an adjective as such.

In ( xx 1 ), just one representative predicative form is given (Inanimate Sg if possible), but other forms (i.e. for the various animacy and number categories) are also possible.

> predicate modifying gloss
a. sample predicative form is Inanimate Sg

| (C)Cvadjective stem |  |  |
| :---: | :---: | :---: |
| $s \hat{\varepsilon}-\eta g \dot{\varepsilon}$ : $=\varnothing$ | $s \varepsilon ์$ | 'good' |
| $d \varepsilon$ - $n g$ g̀: $=\varnothing$ | $d \varepsilon ์$ | 'big' |
| $\grave{n} d \grave{\jmath}-\eta g \hat{\mathrm{t}}:=\varnothing$ | $\grave{\text { ̀̀dé }}$ | 'empty" |
| other stems |  |  |
| bán-gò: $=\varnothing$ | bár ${ }^{n} \grave{\varepsilon}$ : | 'red; ripe (mango)' |
| dùmbù-gô: $=\varnothing$ | dùmbě: | 'blunt (blade)' |
| $j \varepsilon ́ m-g \grave{y}=\varnothing$ | jémè: | 'black (dark)' |
| mà ${ }^{n}-g \hat{0}:=\varnothing$ | mà ${ }^{n}$ | 'dry' |
| $\grave{l-g \hat{0}}:=\varnothing$ | òľ: | 'wet; fresh (grass)' |
| $p \varepsilon \hat{\varepsilon}^{\prime}-g \hat{0}:=\varnothing$ | pé: | 'old' |
| púrúgúlígò: $=\varnothing$ | púrúgè: | 'tan, off-white' |
| sàm-ĝ̀: $=\varnothing$ | sàmě: | 'bad, ugly' |
| wér-ğ̀: $=\varnothing$ | WÉrè: | 'green' |

b. sample predicative form is Inanimate Pl (liquids)

```
\(s e ̂:=\varnothing \quad\) sě: \(\quad\) 'diluted (milk)'
kùrě: \(=\varnothing \quad\) kùrě: \(\quad\) 'undiluted (milk)'
```

c. sample predicative form is Animate Sg
óm̂̂: $=\varnothing \quad$ 万́m̀̀: '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 ( $\mathrm{x} x 2$ ). The third person forms clearly involve the 'it is' clitic, which is manifested by lengthening and a final L-tone element.
( xx 1 ) category 'is old'

| 1 Sg | $p \check{\varepsilon}:-m$ |
| :--- | :--- |
| 1 Pl | $p \dot{\varepsilon} y-m b \overline{-}-y^{n}$ |
| 2 Sg | $p \check{\varepsilon}:-W^{n}$ |
| 2 Pl | $p \varepsilon \grave{y}-m b \overline{-}-y^{n}$ |


| 3rd person |  |
| :--- | :--- |
| InanSg | $p \dot{\varepsilon} y-g \hat{0}:=\varnothing$ |
| InanPl, AnSg | $p \tilde{\varepsilon}:=\varnothing$ |
| AnPl | $p \varepsilon ̀ y-m b \hat{\imath}:=\varnothing$ |

Does focalization of a constituent (so that the predicate is defocalized) affect the choice of adjectival predicate construction?
examples:
'This house is big/small/red/black.'
'The rope is short/long.'
'The men are fat/slender/heavy/lightweight/good/bad.'
'The meal is good/bad/sweet/bitter/sour.'
'I am/you are/we are/... fat.'
'Who is fat?', 'How is it good?', 'When is it good?' [focalized]

### 11.4.2 Negative adjectival and stative predicates $(=1 \hat{a})$

The various adjectival predicates described in the preceding sections are negated as follows. Simple adjectival predicates add a conjugated form of Stative negative =lá- (xx1a-c). Predicates based on deadjectival expressive adverbials (EAs) are negated by ŋ̀gó- 'not be (somewhere)', as usual for negative predicates of EAs (xx1d). Predicates based on (N-)Adj core NPs are negated by =là:- 'it is not', as usual with NP predicates.
(xx1)

$$
\begin{array}{llll}
\text { a. } & {\left[\text { cìn }^{\mathrm{L}}\right.} & \text { ò-gú } & \\
& {\left[\text { stone }^{\mathrm{L}}\right.} & \text { Prox-InanSg] } & \text { dùdù }=\text { lá- } \varnothing \\
& \text { heavy }=\operatorname{StatNeg}-3 \mathrm{Sg}
\end{array}
$$

b.

| [sùngò ${ }^{\text {L }}$ | ò-gú $]$ | gòy=lá- $\varnothing$ |
| :--- | :--- | :--- |
| $\left[\right.$ rope $^{\text {L }}$ | Prox-InanSg] | short=StatNeg-3Sg |

'That rope is not short.' (cf. $g \check{\jmath y} y-\varnothing, \S 11.4 .1 .2)$
c. [sùngò ${ }^{\mathrm{L}} \quad$ ò-gú] $\quad$ pà: $=1 a ́-\varnothing$
[rope ${ }^{\text {L }}$ Prox-InanSg] long=StatNeg-3Sg
'That rope is not long.' (cf. pá:- $\varnothing, \S 11.4 .1 .3)$
d. $\left[c i ̀ n{ }^{\mathrm{L}} \quad \grave{\text { - }}\right.$-gú $] \quad$ ह́r ${ }^{n} \dot{\varepsilon}-y \rightarrow \quad \grave{\eta} g o ́-\varnothing$
[stone ${ }^{\mathrm{L}}$ Prox-InanSg] lightweight-Adv not.be-3SgSbj
'That stone is not light(-weight).' (cf. $\varepsilon r^{n}{ }^{n} \dot{y}$ bù-, §11.4.1.4)

'That house is not old.' (cf. pغ̀y-ĝ̀: $=\varnothing, \S 11.4 .1 .5$ )

The paradigms are the usual ones for these negative endings.

### 11.5 Possessive predicates

### 11.5.1 'X have Y' (sò-)

s̀̀- 'have' forms predicates of possession, primarily in the sense of ownership. The subject is frequently topical within the larger discourse. In positive main clauses, sò requires Existential yé (xxla) unless there is a focalized constituent ( $\mathrm{x} \times 1 \mathrm{~b}$ ).
(xx1)
a. [pédú-mbò bú-tà:ndú] yé sò-m
[sheep-AnPl AnPl-three] Exist have-1SgSbj
'I have three sheep.'
b. ăm pédé sò- $\varnothing$
who? sheep have- 3 Sg Sbj
'Who has a sheep?'

There is an issue as to whether sò- is lexically L-toned, or is really /só-/ but subject to tonedropping. Indeed, tone-dropping does occur on derived stative verbs after Existential yé (§10.xxx), and tone-dropping can occur in verbs following focalized constituents (§xxx).

The negative counterpart is só-ndò:-, including a variant of Stative negative =ndà:(§10.xxx). Existential yé is not allowed in negative clauses.
( xx 2 ) sòmé só-ndذ̀-m
'I don't have a horse.'

The positive and negative paradigms are in (xx3). yé is included in the positive.

| (xx3) | category | 'have' | 'do not have' |
| :---: | :---: | :---: | :---: |
|  | 1 Sg | yé sò-m | só-ndò-m |
|  | 1 Pl | yé $s \grave{-} y^{n}$ | só-ndò- $y^{n}$ |
|  | 2 Sg | yé sò-w | só-ndう̀-W ${ }^{n}$ |
|  | 2 Pl | yé sò- $y^{n}$ | só-ndò- $y^{n}$ |
|  | 3Sg/Inan | yé sò- $\varnothing$ | só-ndò:- $\varnothing$ |
|  | 3 Pl | yé so-è: | só-nd-غ̇: |

In careful speech, the 3 Pl form of 'have' can be pronounced [șֻ̀̀̀].
For the past-time form ('had X', 'used to have X '), see §10.5.1.6.
For 'have' in relative clauses, see §14.xxx.
sj̀- 'have' is presumably related at least historically to perfective-2 -sò- (§10.2.1.3). It also occurs more transparently as part of one of the progressive constructions, that with -m sò- (§10.2.2.3), which is negated as -ḿn só-ndò-(§10.2.3.5).

### 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, see $\S 6 . x x x$. Here as elsewhere, the 'it is' clitic is expressed by lengthening of a final short vowel and by a final L-tone (§11.xxx). In (xxla), ky̌: becomes $k \check{\jmath}:=\varnothing$ with bell-shaped tone, and 1 $-g \varepsilon ̀$ becomes 1 $-g \grave{\varepsilon}=:$ with lengthened final vowel.
(xx1)
a. úló $\quad[a ̆ m \quad k \check{l}:]=\varnothing$
house [who? Poss.InanSg]=it.is
'The house is whose?' (‘...belongs to whom?'), cf. §13.2.2
b. úló 1 í $g \grave{\varepsilon}=$ :
house $\quad 1 \mathrm{Pl}-\mathrm{Poss}]=$ it.is
'(The) house is ours.'
'(The) houses are ours.'

In the simple example (xx1b), '(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 $k \check{0}:=\varnothing^{\prime}$ 'it (inanimate) is mine' and $w \check{\varepsilon}:=\varnothing$ 'it (animate) is mine'.
As expected, the negative counterpart adds =là- 'it is not', which occurs generally with negative NP predicates (§11.xxx). The -gغ̀ or -wò possessive morpheme is H-toned before $=$ là:- as in (xx2). 1 Sg combinations are kǒ: = là:- $\varnothing$ ‘it (inanimate) is not mine’ and wě: = là:$\varnothing$ 'it (animate) is not mine'.

| $(\mathrm{xx} 2)$ | nă: | $[$ ú | wó $]=l a ̀:-\varnothing$ |
| :--- | :--- | :--- | :--- |
|  | cow | $[2 \mathrm{SgSbj}$ | Poss.An $]=$ it.is.not |
|  | '(The) cow is not yours-Sg.' |  |  |

### 11.6 Verb iteration

11.6.1 Uninflected iteration of type $\left[\mathrm{v}_{1}-\mathrm{v}_{1}\left(-\mathrm{v}_{1} \ldots\right)\right]$

If no such iterations have been observed (after transcribing a fair amount of narrative), indicate this here.

Some Dogon languages have a narrative construction where a verb stem is iterated two or more times. The iteration functions as a clause-like background durative segment, counterpoised to a following foregrounded event predication.

The iteration may be inflected or uninflected (bare stems iterated), and if uninflected may have unusual superimposed tone contours.

Jamsay:
a) a simple pattern $\bar{V}-\bar{V}$ (one iteration, both stems have lexical tone, final verb inflected (unless followed by another chained verb);
b) a pattern $\bar{V}-\grave{V}-\bar{V}$ (two iterations, medial stems drops tones, final verb inflected (unless followed by another chained verb);
c) a pattern $\hat{v}-\grave{v}-\hat{v}$, i.e. with $\{H L\}$ tone overlaid on first occurrence, then $\{L\}$-toned forms of the verb, none of the stems with suffixal inflection
type (c) is also observed in Nanga.
if the $\hat{V}-\grave{V}-\grave{V}$ is observed, how is the $\{H L\}$ contour on the first occurrence realized when the stem is trisyllabic? HLL or HHL? Cross-ref. to §3.7.3.2.
cross-ref to backgrounded durative and imperfective clauses that involve an overt subordinating morpheme (\$15.2 or a subsection thereof).

## 12 Comparatives

### 12.1 Asymmetrical comparatives

12.1.1 Verbal predicate with sìgà 'more' and dùg̀̀ 'than'

The predicate is an ordinary inflected verb, e.g. perfective or imperfective. The comparandum is expressed as the PP [X dùg̀̀], elsewhere a purposive PP (§8.3). The PP is followed by the adverb sìgà 'more'.
mí dùgò sìgà bírá: bírà-m-dò
'he works more than I (do)'
nné dùgò sìgà zá já-m̀-nù-m
'I eat more than he does.'
yù-wá: [ú dùgò] sìgà wá: wâ:-m-nù-m
I cultivate more fields that you-Sg (do).

### 12.1.2 'Be better, be more' (iré)

ìré is a defective stative verb, cf. §11. 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 ( $\mathrm{x} \times 1 \mathrm{~b}, \mathrm{f}$ ), whereupon ìr $\varepsilon$ looks superficially like an invariable adverb. Past clitic forms may be added (xx1e).
(xx1)
$\begin{array}{lll}\text { a. } & {\left[\begin{array}{lll}u ́ & \text { ù̀gò }\end{array}\right.} & \text { ìré-m } \\ & {[2 \mathrm{Sg}} & \text { Purp }]\end{array}$ be.more- 1 SgSbj$]$
b. [ú dùgò] ìré gàbú-m $[2 \mathrm{Sg} \quad$ Purp] be.more be.tall- 1 SgSbj 'I am taller than you-Sg (are).'
c. mánkòrò [kùrá: dùgò] ìré- $\varnothing$
mango [wild.grape Purp] be.more-3SgSbj
'Mangoes are better than wild grapes.'
d. yà-mbó [árná-mbò dùgò] ìré- $\varnothing$ ŋ̀gó $z W-\varepsilon ̀:$ woman-AnPl [man-AnPl Purp] be.ore here abound.Pfv-3PlSbj 'There are more men than women here.'
e. $t i^{n} \rightarrow \quad[u ́ \quad$ ù̀gò $] \quad$ ìr $\varepsilon$-bù- $m=b u ̀-m$ before [2Sg Purp] be.more-be-Ipfv=Past-1SgSbj 'I was formerly better than you-Sg (are).'
f. yó [ú dùgò] ìré yé sò-m millet [2Sg Purp] be.more Exist have- 1 SgSbj 'I have more millet than you-Sg (are).'

### 12.1.3 'Best' ( $\varepsilon$ dè:)

The adjective $\varepsilon$ édè: 'good' (and other animacy/number forms thereof) can be used in a kind of superlative construction (xxla-b)
(xx1)
a. [bèrná: í-gè nè] [yò-wà:-wàlè. ${ }^{\mathrm{L}}$ ह́dè:] ámàdu
[among 1Pl-Poss Loc] [farmer ${ }^{\mathrm{L}}$ good.AnSg] A
'Amadou is the best farmer among us.'
b. [ámàdù: hà:mí:dù:] [[yò-wà:-wàhù]-mbò ${ }^{\text {L }}$ ह́dù-mbò]
[A.\& H.\&] [[farmer]-AnPl ${ }^{\mathrm{L}}$ good-AnPl]
'Amadou and Hamidou are the best farmers.'

### 12.1.4 'Be bigger' (ègá)

ègá is a rather emphatic 'big' adjective, and is mainly used as a predicate in comparatives.
(xx1)
a. mótì
M [B than] bigger
'Mopti (city) is bigger than Bandiagara.'
b. [ú
dùgò]
ègà = lá-m
$[2 \mathrm{Sg}$
than]
bigger $=$ Neg-1SgSbj
'I am not bigger than you-Sg (are).'

### 12.2 Symmetrical comparatives

### 12.2.1 'Equal(ly)' (cáw-cáw)

The iterated adverb cáw-cáw 'equal(ly)' can be combined with bù- to form symmetrical comparative predicates. The domain of comparison may be added as an adjunct noun (xx1a). For 'same age' a lexical item 'agemate' is preferred (xxlb).
(xx1)
a. [í lèy] ígúr-gó cáw-cáw bù- $\varnothing$
[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. ámàdù | ígúrur-gó | sé:dù | bá:-m̀̀-dò- $\varnothing /$ bà:-só- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| A | height | S | be.worth-Ipfv-Ipfv-3SgSbj/-Pfv2-3SgSbj |

'Amadou is equal to Seydou in height.'
b. ámàdù mí-gì bá:-ŋgò:- $\varnothing$

A 1Sg-Acc be.worth-IpfvNeg-3SgSbj
'Amadou is not equal (=as good as) me.'

My assistant sometimes distinguishes bă: 'equal, be worth' from bă 'be enough, suffice' by vowel length, but sometimes merges them as bǎ. The latter occurs, for example, in mí-gì bà-só- $\varnothing$ 'it's enough for me' (i.e. 'I'm full [after eating]').

## 12.3 'A fortiori' (ŋワク)

' $X$, a fortiori $Y$ '
(local French: 'X, a plus forte raison $Y$ ')
may be sákkò ~ sánkò etc. (regional form shared with e.g. Fulfulde)
or may be of the type represented by wề $\rightarrow y$ (Yorno So), yé.: (Jamsay)
examples:
'I don't have money to buy a goat, much less (buy) a cow.'
'I don't have anything for myself to eat, never mind (anything) to give you.'
some languages like to include a 'talk, speak' verb:
'I dont have money to buy a goat, much less talk of (buying) a cow'

## 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.

In TU, subject NP focalization is clearly marked by a special form of the verb. Focalization of nonsubject NPs and adverbs is less reliably marked by the use of the simple perfective (instead of a suffixally marked perfective), and/or by the omission of Existential yé. Focalized constituents are not moved.

### 13.1.1 Basic syntax of focalization

13.1.1.1 Which constituents can and cannot be focalized?

NPs including pronouns and noun-like adverbs are readily 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.xxx). There is no mechanism for focalizing a verb or VP.
what constituents can be focalized?
NP (including pronoun)
noun-like adverb (e.g. 'yesterday')
entire PP, or just the NP complement of a postposition (?)
what constituents cannot be focalized using the primary focalization construction? (What construction is used to emphasize them?)
verb (?)
try: 'I didn't sell [focus] a goat, I bought a goat.'
VP, clause (?)
[truth can be emphasized using Emphatic particles, Chap. 19]
expressive adverbial (?)
[always highlighted, so outside the syntactic focalization system]
13.1.1.2 Linear position and form of focalized constituent

A focalized constituent, such as a WH-interrogative, remains in its regular position within the clause. SOV order is maintained with focalized 'who?' as object (xx1a) or subject (xx1b).
a. ámàdù ăm ${ }^{\mathrm{L}}$ yì- $\varnothing$
A who? ${ }^{\mathrm{L}}$ see.Pfv-3SgSbj
'Who(m) did Amadou see?'
b. ăm ámàdù ${ }^{\mathrm{L}} y(y)-\varepsilon$ :
who? A ${ }^{\mathrm{L}}$ see.Pfv-SFoc
'Who saw Amadou?'
is the focalized constituent fronted to clause-initial position?
try direct objects and PPs in the presence of a nonzero clause-initial subject NP
'It was me/It was Seydou [focus] that the women saw in the market.'
'It was to you [focus] that I gave the money.'

Is there some morphological marking on the focalized constituent?
e.g. Focus particle after focalized $N P$

Focus particle usually just a special use of the 'it is' clitic

### 13.1.1.3 Form of verb following a focalized constituent

When the subject is focalized, the usual pronominal-subject suffixes on the verb are replaced by a special Defocus (DFoc) suffix \{-£̀: -̀̀: -à: $\}$. I interpret this to mark the defocalization of the (backgrounded) predicate. Some negative predicates do not allow such suffixation directly, but can be followed by $b-\grave{\varepsilon}$; the Defocus form of bù- 'be'.

The relationship between regular and Defocus forms of verbs in various inflectional categories is summarized in ( $\mathrm{x} x 1$ ). Except in the perfective positive, which is unrelated to the regular marked perfectives, the Defocus 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 A/O-stem of the verb in the Defocus as well as regular form.
(xx1) regular Defocus category
a. -yà-~ -â:
$-\varepsilon$ :
perfective-1a
-ti- "
perfective-1b

| $\begin{aligned} & \text {-sì- } \\ & \text {-téré-bì- } \end{aligned}$ | $-S-\grave{o}$ <br> $-t \grave{\varepsilon} r-\varepsilon$. | perfective-2 <br> experiential perfect |
| :---: | :---: | :---: |
| b. - $11-$ -tèrà-lí- | $-1-\dot{\varepsilon}$ <br> $-t \varepsilon ̀ r a ̀-1-\varepsilon ̇$ : | perfective negative experiential perfect negative |
| c. -ǹ-dò- | $\begin{aligned} & \text {-m-è: } \\ & \text {-ḿ } s-\grave{o}: \end{aligned}$ | imperfective <br> Progressive |
| d. -ŋgò:- | -ngò: $b-$ - $^{\text {: }}$ | imperfective negative |
| e. ...à- <br> bù- <br> sì- <br> m̀bà- | ...-à. <br> $b-\varepsilon$ : <br> $s$-ò: <br> m̀b-à: | derived Stative <br> 'be (somewhere)' <br> 'have' <br> 'want' |
| f. =ndà:- <br> 门̀gó- <br> só-ndò:- <br> m̀bí-là:- | $=n d a ̀: b-\varepsilon ̀:$ <br> ŋ̀gó $b-\varepsilon$ : <br> só-ndò: $b-\varepsilon$ : <br> m̀bí-là: bè: | negative of derived Stative <br> 'not be (somewhere)' <br> 'not have' <br> 'not want' |

The $-\grave{\varepsilon}$ : suffix for perfective Defocus is clearly unrelated to the marked perfective-1a, -1 b , and -2 suffixes. It has a phonological resemblance to the simple perfective, but the suffix is always $-\dot{\varepsilon}$ : (not \#-è: or \#-ì:). Representative forms are in (xx2). The stem is dropped to $\{\mathbf{L}\}$ tone contour.
(xx2) verb perfective Defocus gloss
a. $C_{V-}, C v:-$

| nú- | $n u ̀-\grave{\varepsilon}$ : | 'go in' |
| :---: | :---: | :---: |
| yǐ- | yì-̇. | 'see' |
| tí- | $t i ̀$ ¢ | 'send' |
| $j{ }^{\text {jer- }}$ | $j \grave{l}$ - : | 'kill' |
| jě- | $j i$-̇: | 'dance' |
| $g \check{o ̌-}$ |  | 'go out' |
| ká- | kà-غ̇: | 'shave' |
| $z \varepsilon ̌:-$ | zìz: | 'bring' |
| wǒ:- | Wò-ı̀: | 'come' |
| tó:- | $t o ̀-\bar{\varepsilon}$ : | 'pound' |

b. $C v C$ -

| yǎy-/o- | yà-غ̀: | 'go' |
| :---: | :---: | :---: |
| zǎy-/zo- | $z a ̀-\varepsilon$ : | 'take, convey' |
| lǎy- | là-̇̀: | 'taste' |
| tún- | tùn-Ė: | 'put' |

c. bisyllabic

| tábá- | tàb- ${ }^{\text {c }}$ | 'touch' |
| :---: | :---: | :---: |
| púngó- | pùng-غ̇: | 'hit, beat' |
| dògó- | dòg-غ.: | 'abandon' |
| gùló- | gùl-Ė: | 'dig' |
| óndú- | ı̀nd- ${ }^{\text {c }}$ : | 'build' |

d. trisyllabic

| péndí-gí- | pèndì $g-\varepsilon ̀:$ | 'break' |
| :--- | :--- | :--- |
| zìgìbí- | zìgìb-.$:$ | 'shake' |

The perfective-2 defocus form is $-s-\bar{\varepsilon}$ : after $\{\mathrm{HL}\}$-toned verb stem. Examples are $w \hat{0}:-S-\bar{\varepsilon}$ : 'came', tíbè-S-غ̀: ‘died’, and gúlò-s-غ̀: ‘dug'.

The other category in the perfective positive system that has a Defocus form is the experiential perfect, which changes from -téré-bì- to $\{\mathrm{L}\}$-toned -tèr- $\grave{\varepsilon}$ : A $\{\mathrm{LH}\}$-toned verb that drops all of its tones before -téré-bì shifts to $\{\mathbf{H}\}$ before $-t \varepsilon ̀ r-\grave{\varepsilon}$.: There is no change in $\{\mathrm{H}\}$-toned verbs.
(xx2)

> | verb | experiential perfect |  |
| :---: | :---: | :---: |
| regular | Defocus |  |

gloss
a. $\{\mathrm{LH}\}$-toned verbs

| yǐ- | yìtéré-bì | yí-tèr-è: | 'see' |
| :---: | :---: | :---: | :---: |
| gùló- | gùlò-téré-bì | gúló-tèr-Ė: | 'dig' |
| ziòibí- | zìgìioltéré-bì- | zígíbí-tèr-દ̀: | 'shake' |

b. $\{\mathrm{H}\}$-toned verbs

| ká- | ká-téré-bì | ká-tèr-غ̇: | 'shave' |
| :---: | :---: | :---: | :---: |
| púngó- | púngó-tÉré-bì | púngó-ṫ̀r-દ̀: | 'hit, beat' |

In the perfective negative, both the regular and Defocus forms have $\{\mathbf{L}\}$-toned $\mathbf{A} / \mathbf{O}$-stems (xx3).
(xx3) verb perfective negative gloss

$$
\text { regular } \quad \text { Defocus }
$$

a. $\{\mathrm{LH}\}$-toned verbs

| wǒ:- | wà:-lí- | wà:-l-è:. | 'come' |
| :--- | :--- | :--- | :--- |
| gùló- | gùlò-lí- | gùlò-l- $:$. | 'dig' |

b. $\{\mathrm{H}\}$-toned verbs

| nú- | nù-lí- | nù-l-è: | 'go in' |
| :--- | :--- | :--- | :--- |
| púngó- | pùngò-lí- | pùngò̀-l-è: | 'hit, beat' |

For example, $\{\mathrm{H}\}$-toned nú- 'go in' forms regular nù-lí- $\varnothing$ 'he/she did not go in' and Defocus form nù-l-غ̀:, while w̌̌:- 'come' has regular wà:-lí- $\varnothing$ 'he/she did not come' and Defocus form wà:-1-દ̀:

The experiential perfect negative has regular -tèrà-lí- (including the perfective negative suffix) and Defocus form -tèrà- $1-\dot{\varepsilon}$ :. Whereas the stem is tone-dropped before -tèrà- 11 -, it is raised to $\{\mathrm{H}\}$ before $-t \grave{r} r a ̀-1-\varepsilon \grave{\varepsilon}$ : ( xx 4 ), just as it is before $-t \grave{\varepsilon} r-\bar{\varepsilon}$ : in ( xx 2 ) above.
(xx4) verb
experiential perfect
gloss
regular Defocus
a. $\{\mathrm{LH}\}$-toned verbs
yǐ- yì-tèrà-lí- yí-tદ̀rà-l-દ̀: 'see'
gùló- gùlò-tèrà-lí- gúló-tèrà-l-غ̀: 'dig’
zìgìbí- zìgìbì-tèrà-lí- zígíbí-tèrà-l-è: 'shake'
b. $\{\mathrm{H}\}$-toned verbs

| ká- | kà-tèrà-lí- | ká-tèrà-l-è: | 'shave' |
| :--- | :--- | :--- | :--- |
| púngó- | pùŋgò-tèrà-lí- | púضgó-tèr-غ̀: | 'hit, beat' |

In the imperfective, the Defocus form is $-m-\dot{\varepsilon}$ :, i.e. $-\dot{\varepsilon}$ : added to the familiar imperfective suffix $-m$. The Defocus form drops stem tones to $\{\mathbf{L}\}$, unlike the regular form, which has \{HL\} contour

| $(\mathrm{xx} 5)$ | imperfective |  | gloss |
| :---: | :---: | :---: | :---: |
|  | regular $(3 S g) \quad$ Defocus |  |  |

a. $\{\mathrm{LH}\}$-toned verbs

| yǐ- | yá-m̀-dò- $\varnothing$ | yà-m-غ̀: | 'see' |
| :---: | :---: | :---: | :---: |
| Wǒ:- | wá:-ı̀̀-dj̀- $\varnothing$ | wà:-m-è: | 'come' |
| zòbó- | zóbà-m-dj̀- $\varnothing$ | zòbà-m-غ̇: | 'run |

zìgìbí- zígìbè-m-d̀̀- $\varnothing \quad$ zìgìbè-m-غ̀: 'shake'
b. $\{\mathrm{H}\}$-toned verbs

| ká- | ká-m̀-dò- $\varnothing$ | kà-m- ${ }^{\text {a }}$ | 'shave' |
| :---: | :---: | :---: | :---: |
| sémbí- | sémbì-m̀̀-dì- $\varnothing$ | sèmbì-m-غ̇: | 'sweep' |
| púngó- | púngò-mò-dò- $\varnothing$ | pùngò-m-Ė: | 'hit, beat' |

The periphrastic Progressive constructions, with sò- 'have' or bù- 'be' added to a pronominally uninflected imperfective main verb with -m, keep the main verb unchanged and add the Defocus ending to the auxiliary. Thus sémbú-ń sj̀- 'is sweeping' has Defocus form sémbú-m s-ò., and the alternative form sémbú-ı́n bù- 'is sweeping' has Defocus form sémbú$m b-\varepsilon$.:

The imperfective negative does not add $-\varepsilon$ : to its own suffix -ngò:-. Instead, -ŋgò: is followed by $b-\varepsilon$ :. The verb has the same form, i.e. $\{\mathrm{H}\}$-toned A/O-stem, as before inflected $\eta g o ̀:-$. For example, wá:-ŋgò:- $\varnothing ‘$ 'he/she does/will not go' becomes Defocus wá:-ŋgò: b-ध̀:.

Stative stems derived from regular verbs have $\{\mathrm{HL}\}$ contour (dropping to $\{\mathrm{L}\}$ after Existential yé) and end in a, e.g. óbà- 'be sitting (seated)'. The Defocus counterpart is $\{\mathrm{L}\}$ toned and lengthens the stem-final vowel: $\grave{\jmath b}$-à:: As for defective stative quasi-verbs, bù- 'be (somewhere)' becomes $b-\varepsilon$ :, sj̀- 'have' becomes $s$ - $\grave{\text { o }}$, and $\grave{m} b a ̀--~ w a n t ' ~ b e c o m e s ~ \grave{m} b-a ̀: . ~$

| $b u ̀-$ | $b-\varepsilon .:$ | 'be (somewhere)' |
| :--- | :--- | :--- |
| $s \grave{\partial}-$ | $s$-̀̀: | 'have' |
| ìbà- | ìb-à: | 'want' |

For all stative negative predicates, derived or underived, and for $\grave{\eta} g o ́-~ ' n o t ~ b e ~(s o m e w h e r e) ', ~$ $b-\varepsilon ̀$ : is added to the pronominally unsuffixed (i.e. 3 Sg ) negative form: б́bá=ndà: $b-\varepsilon$ : ' is not sitting (defocalized)', só-ndò: b-غ̀: 'does not have (defocalized)', ŋ̀gó b-غ̀: 'is not (somewhere) (defocalized)'.

### 13.1.1.4 Existential yéabsent in focalized clauses

Existential particle yé, which is required with positive 'be (somewhere)', 'have', and other statives under some syntactic conditions, does not occur in clauses with a focalized nonpredicate constituent. (Likewise it is absent from relative clauses.) For example, yé is obligatory in (xx1a), but absent in (xx1b) where the subject is focalized. In (xx1c), the absence of yé indicates that something is focalized, and 'dog' the only candidate.
( xx 1 ) a. ínjě: yé sj̀-m
dog Exist have-1SgSbj
'I have a dog.'

```
b. ìnj\varepsiloň: mí sò:
    dog 1Sg have.DFoc
    'It's I [focus] who have a dog.'
c. ìnjě. Sò-m
    dog have-1SgSbj
    'It's a dog [focus] that I have?'
```


### 13.1.2 Subject focalization

Subject focalization is clearly signaled by the grammar. If the subject is pronominal, it must appear as an independent pronoun before the verb. The latter does not agree with the focused subject NP; instead, it has a fixed participial form ending in $-\dot{\varepsilon}$ : (or other long vowel) as described in §13.1.3.

If there is also at least one other nonpredicative constituent, a focalized subject NP (or pronoun) tends to occur in immediate preverbal position, though elicited examples sometimes keep the subject in clause-initial position. A focalized subject can even follow an object pronoun. (xxlab) show the two ordering possibilities in a transitive clause with focalized subject.
(xx1)
a. ú-gì à-ḿn bùnd-è:
2Sg-Acc who? hit.Pfv-DFoc
'Who [focus] hit-Past you-Sg?'
b. à-ń ú-gì bùnd-è:
who? 2Sg-Acc hit.Pfv-DFoc [ $=(\mathrm{a})]$
ǎm wò-દ̀: 'Who has come?'
mí wò-દ̀: 'It is $\underline{I}$ [focus] who came.'
ǎm ìnjě: púng-દ̀: 'who hit the dog?'
ǎm ìnjě: j-è: 'Who killed the dog?'
ǎm yà-દ̀: 'Who went?'
ǎm gw-è: 'Who went out?'
ǎm nw-è: 'Who went in?'
ǎm gònsárná yíttèr-è: 'Who has ever seen an elephant?'
ǎm wà:-1-દ̀: 'Who did not come?'
ǎm nù-1-દ̀: 'Who has not gone in?'
ǎm wà:-m-è: 'Who will come?'
ǎm tò:-m-દ̀: 'Who will pound?'
ǎm sèmbì-m-દ̀: 'Who will sweep?'
ǎm nà-m-દ̀: 'Who will eat?'
ǎm sémbú-ḿ sò: 'Who is sweeping?'
ǎm bírá-ḿsò: 'Who is working?'
ǎm zìgìbé-ḿ sò: ‘Who is shaking?’
ǎm wá:-ŋgò: 'Who will not come?'
ǎm nàmá kúbó-ŋgò: bè: 'Who does not eat meat?'
ǎm bè: 'Who is there?'
ǎm ŋ̀gó bè: 'Who is not there?'
ǎm jé bèyà-m-è: 'Who can eat?'
ǎm nàmá mèb-à: 'Who wants meat?'
ǎm nàmá mìbí-là: b-è: 'Who doesn't want meat?

| ǎm sòmé | sò: 'Who has a horse?' |
| :--- | :--- |
| ǎm sòmé | só-ndò: b-દ̀: 'Who doesn't have a horse?' |

Summarize features (mostly already briefly mentioned above) position and any morphological marking of focalized subject
form of verb

## several examples

'It is we [focus] who will sweep.'

### 13.1.3 Object focalization

Unlike subject focalization, object focalization is not reliably indicated by the grammar. Since objects follow subjects anyway, a shift of the focalized object NP to preverbal position would usually not be noticed. The verb is $\{\mathrm{L}\}$-toned, and suffixally marked perfectives are replaced by the simple perfective, but these forms are common after most nonpredicative constituents, without requiring any strong focus, so no clearcut verb defocalization is present. A textual corpora might find some asymmetries (focused, unfocused) in the use of accusative gì, but no correlation turned up in elicited material. There is no clear indication in ( xx 1 ) whether 'sheep' is focused or not.

| (xx1) | pédé | (gì) | sèmà-m-nù- $-m$ |
| :--- | :--- | :--- | :--- |
|  | sheep $\quad$ (Acc) | slaughter-Ipfv-Ipfv-1SgSbj |  |
|  | 'I will slaughter a sheep.' [no focus] |  |  |
|  | 'It's a sheep [focus] that I will slaughter.' |  |  |

### 13.1.4 Focalization of PP or other adverb

is entire PP (or just the NP complement) focalized?
position of focalized adverb or $P P$
form of verb
examples (including spatial, dative, and instrumental)
'It's to the fields [focus] that I am going.'
'It was with this [focus] that I worked.'
'It's to you-Sg [focus] that I said (it).'

### 13.1.5 Focalization of postpositional complement

Can the NP complement of a postposition be focalized (without focalizing the whole PP)? [usually not, so PP focalization is used even when the postposition is part of the understood background]
example
'I didn't put it [in the house], I put it [in the granary] [focus]'

### 13.1.6 Focalization of verb or VP

[usually the focalization system does not allow for verb or VP focalization, except to the extent that the verb is somewhat focal in sentences with no NP singled out for focus]
if there is a more overt verb or VP focus construction of some kind, discuss it here

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives

### 13.2.1.1 Clause-final mà

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 very common in the speech of younger people.

| (xx1) | ú | $\varepsilon y^{n}$ | wá:-m̀̀-nò-w ${ }^{n}$ | mà |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 Sg | tomorrow | come-Ipfv-Ipfv-2SgSbj | Q |
|  |  | -Sg com | orrow? |  |

mà may occur between two clauses representing a choice of mutually exclusive propositions. In cases like (xx2), I hear no prosodic grouping specifically with either the preceding or following verb.

| (xx2) | ú | wã:-m̀̀-nj̀-w ${ }^{n}$ | mà | wá:-yù-w ${ }^{n}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 S | come-Ipfv-Ipfv-2SgSbj | Q/or | come-IpfvNeg-2SgSbj |
|  |  | Sg coming or aren't youn |  |  |

### 13.2.1.2 Clause-final pitch modification

Polar (and content) interrogatives can alternatively have a final pitch change. When the predicate ends in an L-toned syllable, as is the case with most perfective and imperfective positive verbs, the interrogative form has rising pitch (xx1a). If the relevant vowel is short, it is lengthened to accomodate the contour tone ( $\mathrm{x} \times 1 \mathrm{~b}$ ). If the final syllable is already H-toned, as in some negative predicates, it is lengthened with no additional pitch modulation (xx1c). The pitch/tone change may be accompanied by morphological changes in perfective positive clauses. My assistant frequently shifted perfective-1a to either perfective-2 (-sì) or past perfect ( $=b i$-) before applying the pitch/tone change (xx1a). He always made this change to $-s \grave{j}$ - or $=b i$ - when the declarative form was perfective- $2-t i-(\mathrm{xx} 1 \mathrm{~d})$.
(xx1) declarative polar interrogative gloss
a. tíb-à:-y tíb-à:-ý $\rightarrow \quad$ 'He/She died.' tíbé-sǒ:- $\varnothing$ súg-à:-y súgó $=$ sŏ:- $\varnothing \quad$ 'He/She went down' súgó $=b \check{i}:-\varnothing$
b. nă: yé s̀̀- $\varnothing$ nă: yé sǒ:- $\varnothing \quad$ 'He/She has a cow'
c. yàgà-lí- $\varnothing$ yàgà-lí:- $\varnothing \quad$ 'He/She did not fall.'
d. tómbó-tì- $\varnothing$ tómbó=bǐi- $\varnothing \quad$ 'He/She jumped'

The interrogative pitch/tone rise can also occur with content (WH) interrogatives. However, in this case a perfective positive verb is usually the unsuffixed defocalized form (xx2).

```
(xx2 àndí yàgě:-\varnothing
    where? fall.Pfv.Defoc-3SgSbj
'Where did he/she fall?'
```


### 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, represented by ${ }^{\dagger}$.

The preference is to place the interrogative word or phrase in immediate preverbal position.

### 13.2.2.1 'Who?' (à-ńń)

'Who?' is à-ḿ. Morphologically it is identical to the animate singular 'which?' interrogative (§13.2.8). It is a NP and may be followed by accusative gì (always optional) or by a postposition ( $\mathrm{xx} 1 \mathrm{~b}, \mathrm{~d}$ ). It may be a possessor ( xx 1 e ); for ' X belongs to who(m)?' see §11.5.2.
(xx1)
a. yéngì $\quad$ à-ńn $\quad$ ẁ̀ $\varepsilon$ - $\varnothing$
yesterday who? come.Pfv-3SgSbj
'Who came yesterday?'
b. Ébé [à-ńn (gì)] yì-Ẃ
market [who? (Acc)] see.Pfv-2SgSbj
'Who did you-Sg see in the market?'
c. [àmàdí gì] à-ḿ jè̀-- $\varnothing$
[A Acc] who? kill.Pfv-3SgSbj
'Who killed Amadou?'
d. [à-ńn nì:] bírá: bìrà-m bù- $W^{n}$
[who? Inst] work(n.) work-Ipfv be-2SgSbj
'With who(m) are you-Sg working?'
$\begin{array}{lll}\text { e. } & \text { ò-gú } & {[\text { à-m }} \\ & \text { úlò }]=\varnothing \\ & \text { Prox-InanSg } & {[\text { who? }} \\ & \text { 'Whose house is this? } & \\ & \text { house }]=\text { it.is }\end{array}$

Predicative 'be who?' can be expressed by the animate singular predicative form $\grave{a}-m$ - $-n \grave{\varepsilon}$ also used in the sense 'be where?' (§13.2.4). Alternatively, à-mí can combine with the 'it is' clitic as $\grave{a}-\hat{m}:=\varnothing$ (the clitic lengthens the nasal and adds a final L-tone).
(xx2)
a. ú
$\grave{a}-n \underline{n}-n \grave{\varepsilon}-W^{n}$
2Sg be.who-2SgSbj
'Who are you-Sg?'
b. mà-ńn à-m̂: $=\varnothing$
Dist-AnSg who?=it.is
'Who is that?'

To make plurality explicit, à-ḿ can be conjoined with itself, i.e. 'who and who?'; for conjunction of NPs (prolongation and final L-tone) see §7.1.1.

```
(xx3) à-m̂: à- \(\hat{m}: \quad\) ẁ̀̀ \(-\varnothing^{\dagger}\)
    who?.\& who?-\& come.Pfv-3SgSbj
```

    'Who and who came?' ('Who all came?')
    13.2.3 'What?' (ìnjé~ c-ìnjè), 'with what?', 'why?'
'What?' is ìnjé or its extension c-ìnjé, probably from cè ìnjé 'what thing?' (cé 'thing' §4.1.2).
(xxl)
a. c-ìnjé $z \grave{e}$ - $W^{n t}$
what? bring.Pfv-2Sg
'What did you-Sg bring?'
b. c-ìnjé ú $s$-ò:
what? $\quad 2 \mathrm{SgO}$ have-DFoc
'What has (= is the matter with) you-Sg?'
c. c-ìnjé [[dúgò ú-wò] nè] bàg-غ̀: ${ }^{\uparrow}$
what? [[beside 2Sg-Poss.InanSg] Loc] fall.out.Pfv-DFoc 'What fell on you?'
$\begin{array}{lll}\text { d. } & \text { ò-gú } & \text { ìnjê: }=\varnothing \\ & \text { Prox-InanSg } & \text { what? }=\mathrm{it} . i s \\ & \text { 'What is that?' }\end{array}$
'With (by means of) what?' is the regular instrumental PP of 'what?'
(xx2) [cìnjé nì:] yù-wá: wà:-m-nj̀-wnt
[what? Inst] millet-farming(n.) do.farming-Ipfv-Ipfv-2SgSbj
'What do you farm millet with?'
'Why?' is ìnjé dùgゝ̀, with the purposive postposition (§8.3)
(xx3) [ìnjé dùgòj] wò:- $W^{n t}$
[what? Purp] come.Pfv-2SgSbj
'Why did you-Sg come?'

### 13.2.4 'Where?' (àndí, ǎ-m-nغ̀:, à-bذ̀:)

The simple 'where?' adverb is àndí. 'Where is/are X?' can be expressed by adding bù- 'be' (xx1b).
(xx1)
a. àndí $\quad \grave{o}-m-n \grave{\jmath}-W^{n \uparrow}$
where? go-Ipfv-Ipfv-2SgSbj
'Where are you-Sg going?
b. ílú àndí bù- $y^{n}$
$1 \mathrm{Pl} / 2 \mathrm{Sg}$ where? be-1PlSbj
'Where are we / you-Sg?'
c. [nă: ì̀ àndí dògò-W ${ }^{n t}$
[cow Def] where? leave.Pfv- 2 Sg ? bj
'Where did you-Sg leave the cow?'
àndí can also function as a modifying adjective, similar to à-gú and variants 'which?' (§13.2.8). In ( xx 2 ), àndí is adjectival, and controls tone-dropping on the noun 'village'.
(xx2) [dàmbà ${ }^{\text {L }}$ àndí] ò-m-nj̀- $W^{n t}$
[village ${ }^{\mathrm{L}}$ 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). They are also identical to 'which?' adjectives ( $\$ 13.2 .8$ ), except that animate singular -nè is present and final vowels and $y$ are long. Arguably the core sense of these predicates is 'be which (one)?' rather than 'be where?'.
(xx3) 'Be where?' predicates
a. inanimate

| Sg | $\grave{a}-g \hat{u}:=\varnothing$ |
| :--- | :--- |
| P1 | $\grave{a}-\hat{y}:=\varnothing$ |

b. animate

| Sg | $\grave{a}-n \mathfrak{n}-n \grave{\varepsilon}$ |
| :--- | :--- |
| Pl | $\grave{a}-b \hat{\jmath}:=\varnothing$ |

Examples are in (xx4). The final falling tones in the forms shown in (xx3) are often overridden by the final pitch rise typical of questions.
a. [û
[2SgPoss father] be.where?.Sg-3SgSbj
'Where is your-Sg father?'
b. $u$
$\check{a}-m-n \grave{\varepsilon}-W^{n t}$
2 SgSbj be.where?.Sg-2SgSbj
'Where are you-Sg?'
c. [ú ángè-mbò] à-b̂: $=\varnothing^{\dagger}$
[2SgPoss friend-AnPl] be.where?.Pl
'Where are your-Sg friends?'
d. bí à bó- $y^{n t}$

2Pl be.where?.Pl
'Where are you-Pl?

### 13.2.5 'When?' (à: $r^{n}$ á)

'When?' is à: $r^{n a ́}$.
(xx1) a. à: $r^{n a ́}$ wà:-m-nò-w $W^{n \downarrow}$
when? come-Ipfv-Ipfv-2SgSbj
'When will you-Sg come?'
b. à: $r^{n a ́}$
when?
'When (is it)?'

### 13.2.6 'How?' (áy ${ }^{\text {' }}$ )

As simple adverb, the form is $a^{\prime} y^{n}$.
$\begin{array}{lll}(\mathrm{xx} 1) & \text { á }^{n}{ }^{n} & \text { ìlà-m- } d-\grave{\varepsilon}:{ }^{\uparrow} \\ & \text { how? } & \text { go.up-Ipfv-Ipfv-3P1Sbj } \\ & \text { 'How will they climb?' }\end{array}$
'How will they climb?'
'How' is often expanded with the 'do' verb, i.e. as '(by) doing how?'

| $(\mathrm{xx} 2)$ | [áy ${ }^{n}$ | kàn-gìn] | úl-à: / îl-è: / ílغ̀-m |
| ---: | :--- | :--- | :--- |
|  | $[$ how? | do-and.SS] | go.up-3P1Sbj / -3SgSbj / 1 SgSbj |

'How did they / he / I climb?'

### 13.2.7 'How much/many?' (àngâ)

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 $g_{i}$ is not very common with àngá, when it does occur it folles àngá (xx1b).
(xx1)
a. pédú-mbò àngá èbò-W ${ }^{n}$
sheep-AnPl how.many? buy.Pfv- 2 SgSbj
'How many sheep did you buy?'
b. [ú lédú-mbò àngá (gì)] yì-W ${ }^{n t}$
[2SgPoss uncle-AnPl how.many? (Acc)] see.Pfv-2SgSbj
'How many of your uncles did you see?'
c. [[dámbà àngá] nè] yày-W $W^{n t}$
[[village how.many?] Loc] go.Pfv-2SgSbj
'You went to how many villages?'
d. nà:-mbó àggá tib-à:
cow-AnPl how.many die.Pfv-3PISbj
'How many cows died?'

Questions about the unit price of items for sale use the distributive iteration àmgá-àngá 'how many (currency units) each?'.

For ordinal àngà-né 'how many-eth?' see §4.7.2.2.

### 13.2.8 'Which?' (à̀-gú, à-ḿ)

$\grave{a}$-gú (inanimate) and $\grave{a}-\underline{m}$ (animate) are the main 'which?' forms. The morphology is closely related to that of demonstratives, e.g. proximate $\grave{o}$-gú (inanimate) and $\grave{j}-m$ (animate) 'this' (§4.4.1.2). The forms are also identical or similar to predicative 'be where?' forms (§13.2.4), except that animate singular -nè is absent and final vowels and $y$ are short. Animate $\grave{a}-n \bar{n}$ is also the 'who?' interrogative (§13.2.2.1).
(xx3) ‘Which?’ adjectives
a. inanimate

Sg
à-gú
b. animate

| Sg | à-ń |
| :--- | :--- |
| Pl | à-bó |

$\grave{a}-g u ́$ and are adjectives, and control tone-dropping on a preceding noun within the same NP: ùlò à-gú ‘which house?' (úlô), pèddè â-m ‘which sheep?' (péddè).
(xx1)
a. [[mòtò: à-gú] nì:] ò-m-nò- $W^{n t}$
[[motorcycle which?-InanSg] Inst] go-Ipfv-Ipfv-2SgSbj
'You are going with which motorcycle?'
b. [úló ù-ẁ̀ $\quad$ à-ĝ̂: $=\varnothing$
[house 2Sg-Poss] which?-InanSg=it.is
'Your-Sg house is which (one)?'

There appears to be some functional overlap between 'where?' and 'which?' interrogatives. (xxlb), for example, could easily be rephased with a 'where?' interrogative. See also comments on this in §13.2.4.

### 13.2.9 Embedded interrogatives

[bà-ń tíb-à:y mà $\rightarrow$ ] zúgò-ygò:
'He doesn't know that her father is dead.'
[[á bà] wò:-ś mà $\rightarrow$ ] zúgò-ggò:
'He doesn't know that his (own) father has come.'
[ǹgó bù-m mà $\rightarrow$ ] zúgò-ngò:
'He doesn't know that I am here.'
from content interrogatives
with spatiotemporal noun and relative clause

> [gàndà bú bú-ygò ] yà-lú-m / zúgò-nù-m
> 'I haven't seen / I don't know the place where they are.'
[wàgàdìńné wà:-ygò] '... when he/she will come'
with content (WH) interrogative

```
[à-ḿ wò\varepsiloǹ- }\varnothing\mathrm{ mà }->\mathrm{ ] '... who came'
[zà njjé nà-m-nò-m` mà }->\mathrm{ ] ' '.. what meal I will eat'
[c-ìnjé yà-m-n\varepsiloǹ-ýn\uparrow mà->] '... what we will see'
[âyn kàn-n\varepsiloń ìlà-m-dò mà }->\mathrm{ ] 'how he/she goes up'
[àygá ह́bè mà->] 'how much he paid'
[ìnjé kàn-lé yày mà->] 'why he/she went'
```


## 14 Relativization

### 14.1 Basics of relative clauses

Relative clauses in TU are referentially restrictive. Their key typological features are these:

- the head NP is seemingly bifurcated into an internal head consisting maximally of Poss-N-Adj-Num, and a coda or tail that follows the verb-participle including 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, with no subject agreement; the participle is suffixed 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 subject pronoun immediately proclitic to the verb; if the subject is nonpronominal there is no resumptive third person clitic;
- there is no head-doubling in the form of a postposed noun synonymous to the internal head.

As in other Dogon languages, "internally-headed" relatives are really just complete NPs (DPs if you will) of the form Poss-N-Adj-Num-Rel-Det-'all' or the like. The relative clause induces tone-dropping on the preceding word(s), after which the Poss-N-Adj-Num 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 bifurcated. The internal head is maximally Poss-[N-Adj-Num, and is subject to tone-dropping. The remaining late-NP elements, including determiners and non-numeral quantifiers, follow the verb-participle.

### 14.2.1 Tone-dropping on final word(s) of head NP in relative clause

The examples in (xx1) show tone-dropping on the internal head NP. In (xx1a) the noun úló 'house' is tone-dropped to $\grave{u} \nmid o^{\mathrm{L}}$. In ( xx 1 b ), the final word in $u \grave{\grave{l}} \grave{o}^{\mathrm{L}} d \dot{\varepsilon}-\eta g \varepsilon \varepsilon^{\prime}$ 'big house' is tonedropped to [ $[u ̀ l o ̀ ~ d \grave{\varepsilon}-\eta g \grave{\varepsilon}]^{\mathrm{L}}$. In (xx1c), both words in yà-mbó nǐ-kúlée 'six women' are tone-
dropped. In (xx1d), ùlò ${ }^{\mathrm{L}}$ dé yí-kùlè ‘six big houses' is tone-dropped to [ùlò dè yí-kùlè] ${ }^{\mathrm{L}}$, with the classifying prefix spared.
(xx1)
a. [ùlò ${ }^{\mathrm{L}}$ yàgà-Sú-ngó] àndí bù- $\varnothing$
[house ${ }^{\mathrm{L}}$ fall-Pfv2.Ppl-InanSg] where? be-3SgSbj
'Where is the house that fell?' (úló)
b. [[ùlò dè-ŋgè $]^{\mathrm{L}}$ yàgà-sú-ŋgó àndí bù- $\varnothing$
[[house big-InanSg] fall-Pfv2.Ppl-InanSg] where? be-3SgSbj
'Where is the big house that fell?' ( $u ̀ 1 \grave{o}^{\mathrm{L}} d \dot{\varepsilon}-\eta g \varepsilon$ )
c. [yà-mbò jì-kùlè] ${ }^{\mathrm{L}}$ bàgà ${ }^{\mathrm{L}}$ kár ${ }^{n}$ à-mbò ì $]$
[woman-AnPl person-six] ${ }^{\mathrm{L}}$ fall.off ${ }^{\mathrm{L}}$ Pfv.Ppl-AnP1 Def]
à bó:
where? be.Pl
'Where are the six women who fell off?' (yà-mbó nǐ-kúlé)
d. [[ùlò dè yí-kùlè] ${ }^{\mathrm{L}}$ yàgà kárnà]
[[house big Inan-six] fall PerfPpl.InanSg]
àndí bù- $\varnothing$
where? be-3SgSbj
'Where is the big house that fell?' (ùlò ${ }^{\mathrm{L}}$ dé yí-kùlè)

The basic tonosyntactic formulae for the internal head NPs in the preceding examples are these: $N^{L}$ (xxla), $\left[\mathrm{N}^{2 d j}\right]^{\mathrm{L}}$ (xx1b), $[\mathrm{N} \mathrm{Num}]^{\mathrm{L}}$ (xx1c), and [N Adj Num $]^{\mathrm{L}}$ (xx1d), allowing for preservation of the H-tone on a numeral classifying prefix. The weakest link in this analysis is the numeral. With the most common classifying prefixes, numeral stems are already $\{\mathrm{L}\}$ toned, as in yí-kùlè 'six (inanimate)', so any further tone-dropping would not be audible. Only human forms with classifier $n \check{-} \sim \sim$ ně- allow $\{\mathrm{H}\}$-toned numerals. In examples like (xx1c), my informant includes the numeral in the tone-dropping domain in smooth, allegro speech, but in slowed-down "elicitation-ese" the H-toned of the numeral may appear.

Examples with a preposed possessor are in (xx2). 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 ( $\mathrm{xx} 2 \mathrm{~b}, \mathrm{e}$ ) or the relative clause in ( $\mathrm{x} x 2 \mathrm{a}, \mathrm{c}-\mathrm{d}$ ). In such cases I put the superscripted ${ }^{L}$ on both sides of the affected target. (xx2e) shows the two possible linear orders of the Adj-Num segment.

[^0]b. [ámàdù ${ }^{\mathrm{L}}[u ̀ l o ̀ o ~ d \grave{\varepsilon}-\eta g \grave{\varepsilon}]^{\mathrm{L}}$ yàgà ${ }^{\mathrm{L}}$ kárnà ì $\left.{ }^{n}\right]$
[A ${ }^{\text {L }}[\text { house } \quad \text { big-InanSg }]^{\mathrm{L}}$ fall ${ }^{\mathrm{L}} \quad$ Pfv.Ppl Def]
àndí bù- $\varnothing$
where? be-3SgSbj
'Where is Seydou's big house that fell?' (ámàdù̀ ${ }^{\mathrm{L}}$ [ùlò dè- $\eta g \grave{\varepsilon}$ )
c. [ámàdù ${ }^{\mathrm{L}}$ ùlò ${ }^{\mathrm{L}}$ yí-kùlè yàgà ${ }^{\mathrm{L}}$ kárnà ì ${ }^{n}$ àndí bù- $\varnothing$
[A ${ }^{\text {L }}$ house ${ }^{\mathrm{L}}$ Inan-six fall ${ }^{\mathrm{L}}$ Pfv.Ppl Def] where be-3SgSbj 'Where are Amadou's six houses that fell?' (ámàdù ${ }^{\mathrm{L}}$ ùlò yí-kùlè)
d. [ámàdù ${ }^{\mathrm{L}}$ [ùlè: ${ }^{\mathrm{L}}$ nè̀-kùlè ${ }^{\mathrm{L}}$ yàgà ${ }^{\mathrm{L}}$ kárnà ì $\left.{ }^{n}\right]$
[A ${ }^{\mathrm{L}}\left[\text { children }^{\mathrm{L}} \text { Hum-six }\right]^{\mathrm{L}}$ fall ${ }^{\mathrm{L}} \quad$ Pfv.Ppl Def]
àndí $\quad b-\varepsilon$ :
where be-3PISbj
‘Where are Amadou's six children who fell?’ (ámàdù ${ }^{\text {'ùlè̀: }}$ ně-kúlé)
e. [ámàdù ${ }^{\mathrm{L}}$ [ùlò yí-kùlè dè $\mathrm{J}^{\mathrm{L}}$ yàgàa ${ }^{\mathrm{L}}$ kárnà ì ${ }^{\text {ǹ }}$

or: dì yí-kùlè
big Inan-six
àndí bù- $\varnothing$
where be-3SgSbj
'Where are Amadou's six big houses that fell?'
(ámàdù ${ }^{\mathrm{L}}$ ùlò yí-kùlè dé, or ámàdù ${ }^{\mathrm{L}}$ ùlò dह́ 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, or postpositional complement (e.g. dative, spatial, instrumental) in the relative clause proper. The entire NP containing the relative may be definite or indefinite (definite and demonstrative markers may follow the participle).

### 14.2.3 Conjoined NP as head

When a conjoined NP functions as relative head, the intonational marking of conjunction conflicts with the tone-dropping controlled by the relative clause. To judge by (xx3), the conjoined NP functions as a tonosyntactic island $\subset \ldots \supset$, retaining its lexical tones and intonational features (dying-quail.$:$ on the final conjunct).

```
(xx3) [cárnà-mbj̀-> yà-mbó.:`
    [cman-AnPl.& woman-AnPl.&ว
    zégé zéic}\mp@subsup{}{}{L
    fight(n) fight(v) L Pfv.Ppl-AnPl Def
    pùră: n\varepsiloń-tì-yà
    fine(n) eat-Pfv1b-3PlSbj
    '[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 clause

not very common, since semantically light 'thing', 'person', 'critter', 'place', etc. are commonly overt as relative heads
but examples do occur where the head NP, either a semantically vague element like 'place/situation' or an unspecified or obvious NP, is omitted
for headless relatives as adverbial clauses, see §15.5.3.

### 14.2.5 Head noun doubled after relative clause

At least for basic nouns like 'place', 'time' ('day'), and 'way, manner', the relevant noun may be repeated after the entire NP containing the relative clause. Essentially this extra head noun resumes the NP and places it more squarely in the larger clause. The construction occurs in Jamsay and some other Dogon languages and Jamsay influence may be involved here.

My TU examples involve adverbial relatives where the doubling was not present in the utterances initially proposed by my informant, but where he accepted doubled versions that I proposed. The doubled head noun is shown as optional, in parentheses, in (xx1a-b). In (xx1a)
both the relative-containing NP and the doubled head noun are marked as definite, further pointing to a resumptive relationship.
(xx1)

```
a. [gàndà \({ }^{\mathrm{L}}\) mí yàgà \({ }^{\mathrm{L}}\) kár\(^{n a ̀ ~ i ̀ ~} ̀\) ] (gándá ì)
    [place \({ }^{\mathrm{L}} 1 \mathrm{SgSbj}\) fall \({ }^{\mathrm{L}} \quad\) Pfv.Ppl Def] (place Def)
    !̀gó=là:
    here=it.is.not
    'The place where I fell is not here.'
```

b [dèn ${ }^{\mathrm{L}}$ mí wò: ${ }^{\mathrm{L}}$ kár${ }^{n}$ à $]$ (dén-gó ì)
[day ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad$ come $^{\mathrm{L}} \quad$ Pfv.Ppl] (day-InanSg Def)
sèll-ìyà-lí $\quad$ bì- $m=b i ̀-m$
be.healthy-MP-PfvNeg be-Ipfv=Past-1 SgSbj
'The day when I came, I was sick.'

### 14.3 Preparticipial subject pronoun in non-subject relative

In nonsubject relatives, the subject is not coindexed with the participial (which agrees only with a distinct head NP). If the subject is pronominal, the pronoun appears in the form of an independent pronoun proclitic to the participle. If the subject is already expressed by a full NP, no resumptive proclitic third person pronoun is used.

The forms are those in (xx1). See also (xx1) in §4.3.1. The inanimate third-person pronouns do not seem to be used in this construction; they are replaced by generalizing third animate singular ńnéto inanimates (singular and plural).
(xx1) 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 | $(k u$ û |
| InanPl | $(y i ́)$ |
|  |  |
| Logo/3Refl | á |

The linear position of the subject pronoun is useful as a test for some other syntactic issues. In particular, 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) suggests that these inflectional morphemes still have some characteristics of chained verbs, see $\S 10.1 .1$.

There are many examples of proclitic subject pronouns in the nonsubject relatives presented in the sections below.

### 14.4 Verbal participle in relative clause

The verb forms used in relative clauses are clearly participial, insofar as they show suffixal agreement with the animacy/number value of the head NP (not the subject). The four main indicative categories have the participial forms in (xx1). For the perfective positive, the forms are not based on the primary verb, rather on a kind of auxiliary kár nà (originally '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 -( $\eta$ ) $g O$ is not used after kár ${ }^{n}$ à in the perfective positive.
(xx1) a. perfective positive

| kár $^{n} a ̀ ~$ | Animate Sg, Inanimate Sg and Pl |
| :--- | :--- |
| kár $^{n}$ à-mbò | Animate Pl |

b. imperfective positive
$-m-\varepsilon$ :
$-\grave{m}-b o ̀$
-ŋ̀gò
c. perfective negative
$-1-\varepsilon ̌$ :
-l(ù)-mbó
-l-gó
d. imperfective negative( xx 1 )
$-\grave{\eta} g o ̀: ~ b-\grave{\varepsilon}:(\sim b u ̀-m-\grave{\varepsilon}$ : $\quad$ Animate Sg , Inanimate Pl
-ìgò: bù-m-bò Animate Pl
-ŋ̀gò: bù-ŋgò $\quad$ Inanimate Sg

The marked inflectional categories (progressive, experiential perfect, etc.) are largely based on these core participial types. Fuller details are given in the next several sections below.

### 14.4.1 Perfective positive system participles (kárnà)

The participial forms for the basic perfective positive are in (xx1). This construction probably developed from a verb-chain including a form of kán- 'do'. There is a suffix for animate plural but none for inanimates. A lexically /LH/-toned verb before kár ${ }^{n}$ à spreads its L-tone to the end of the stem, while a $/ \mathrm{H} /$-toned stem remains H -toned.

The basic participial forms are those in (xx1). There is no suffixally marked inanimate singular form.
(xx1) kár ${ }^{n a ̀} \quad$ Animate Sg , Inanimate Sg and Pl

Subject perfective positive relatives are in (xx2).
(xx2)
a. mòmbò: ${ }^{\text {L }}$-gù támbú kárnà ì
scorpion $^{\text {L }}$ 2Sg-Acc kick Pfv.Ppl Def
'the scorpion that stung you-Sg'
b. mòmbò:-mbò ${ }^{\mathrm{L}}$ mí-gì támbú kár${ }^{n a ̀}-m b \grave{~ i ̀ ~}$
scorpion-AnP1 ${ }^{\text {L }}$ 1Sg-Acc kick Pfv.Ppl-AnPl Def
'the scorpions that stung me'
$\begin{array}{llll}\text { c. } & \text { cìn }^{\mathrm{L}} & \text { bàgà }^{\mathrm{L}} & \text { kár }^{n} \text { à } \\ \text { stone }^{\mathrm{L}} & \text { fall }^{\mathrm{L}} & \text { Pfv.Ppl } & \text { Def }\end{array}$
'the stone that fell off'

Nonsubject perfective positive relatives are in (xx3).
(xx3)

| a. ìnjè: ${ }^{\text {L }}$ $\operatorname{dog}^{\mathrm{L}}$ |  | ú | púpgó | kár ${ }^{\text {àà }}$ | ì |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 SgSbj | beat | Pfv.Ppl | Def |
| 'the dog that you-Sg hit' |  |  |  |  |  |



| c. ámádù | ìnjè. $: ~$ | púngó | kár $^{n} a ̀$ | ì |
| :--- | :--- | :--- | :--- | :--- |
| A | $\operatorname{dog}^{\mathrm{L}}$ | hit | Pfv.Ppl | Def |

'the dog that Amadou hit'

The full set of perfective positive system categories is displayed in (xx4). The marked perfectives, including the perfective-like use of past $=b i-\varnothing$, are merged into the basic perfective relative-clause forms. However, the recent perfect and experiential perfect morphemes may occur before kárnà.

| (xx4) | category | suffix(es) |  |
| :---: | :---: | :---: | :---: |
|  |  | in Rel clause | in main clause ( 3 Sg ) |
|  | perfective | kár ${ }^{n}$ à | ( $\mathrm{E} / \mathrm{I}$-stem in 3Sg) |
|  | perfective-1a | " | -yà-~ -à:- |
|  | perfective-1b | " | ti- $\varnothing$ |
|  | past | " | $=b i ̀ \varnothing$ |
|  | recent perfect | $d \dot{\varepsilon}^{\mathrm{L}}$ kár ${ }^{\text {nà }}$ | $d \grave{\varepsilon}-$ |
|  | experiential perfect | téré kár ${ }^{n}$ à | téré-bù-, téré-sò- |

The perfective-2 (-sj̀) does have its own participial forms.

| $(\mathrm{xx} 5)$ | $-s i ́-m e ̀ ~$ | Animate Sg, Inanimate Pl |
| ---: | :--- | :--- |
|  | $-s u ́ u-m \grave{m}-b o ̀$ | Animate Pl |
|  | $-s u ́ u-\eta g o ̀ ~$ | Inanimate Sg |

Infrequently, a variant of perfective-1b -tì- can occur in a relative, resulting in -tí kár ${ }^{n}$ à (note the H -tone). This is related to the use of H -toned tí as a kind of medial verb in three-verb chains.

### 14.4.2 Positive imperfective-system and stative participles

### 14.4.2.1 Regular imperfective and stative participles (-m-દ̀:, -ŋgò)

Subject imperfective positive relatives are in (xx1). -m- is an imperfective morpheme, and the verb stem has the $\mathrm{A} / \mathrm{O}$-stem vocalism as in the conjugatable main-clause imperfective.
 Inanimate $\mathrm{Sg}-\eta$-ŋgó could be derived from /-ḿnggó/ by deletion of the first of two nasals, or it could be segmented as $-\eta$ - $g o ́$ with $-\eta$ - functioning as an assimilated surface form (or a
specialized allomorph) of imperfective -m-. Compare -l-gò in corresponding perfective negative participles (following section).

| $(\mathrm{xx} 1)$ | $-m-\grave{\varepsilon}:$ | Animate Sg, Inanimate Pl |
| :--- | :--- | :--- |
|  | $-\grave{m}-b \grave{o}$ | Animate Pl |
|  | $-\check{\eta} g o ́$ | Inanimate Sg |

Subject imperfective relatives are in (xx2).
(xx2)
$\begin{array}{llll}\text { a. } \begin{array}{lll}\varepsilon^{n} & \text { ni }^{\mathrm{L}} & \text { wá:-m- } \grave{\varepsilon}: \\ \text { tomorrow } & \text { person }\end{array} \text { come-Ipfv-Ppl.AnSg } & \text { Def }\end{array}$
'the person who is coming tomorrow'

c. cìn $^{\mathrm{L}}$ bágá-ngó
stone $^{\mathrm{L}} \quad$ fall.off-Ipfv.Ppl.InanSg
'a stone that is falling (off)'
d. cìn $^{\mathrm{L}}$ bágà-m-è:
stone $^{\mathrm{L}} \quad$ fall.off-Ipfv-Ppl.InanPl
'stones that are falling (off)'

'that person who is falling'


Nonsubject imperfective relatives are in ( $\mathrm{x} \times 3$ ).
(xx3)
a. nà: ${ }^{\mathrm{L}} \quad$ ú
dór ${ }^{n}$ á-m- $-\dot{\varepsilon}$ :
ì
cow $^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ sell-Ipfv-Ppl.AnSg Def
'the cow that you-Sg will sell'
b. nà:-mbò ú ú dór ${ }^{\text {ná- }}$-m-bò ì
cow-AnPl ${ }^{\text {L }} \quad 2 \mathrm{SgSbj}$ sell-Ipfv-Ppl.AnPl Def
'the cows that you-Sg will sell'

```
c. gàndà \(^{\mathrm{L}}\) í ní:-ngò
place \({ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad\) sleep-Ipfv.Ppl.InanSg
'the place where we sleep'
```

Statives have the same participial endings as imperfectives, but are normally distinguished by vocalism (final a) and/or by the absence of mediopassive suffixes. Compare stative (xx4a) with its imperfective counterpart ób-è:-m-è: 'who will sit' (with mediopassive -è:-).
(xx4)
a. $n i{ }^{\mathrm{L}}$ óbà-m-غ̀:
person ${ }^{\text {L }}$ sit.Stat-Ipfv-Ppl.AnSg
'a person who is sitting'
b. gàndà ${ }^{\mathrm{L}}$ mí ${ }^{\text {ábà- }} \mathrm{g} g o ̀$
place ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ sit.Stat-Ipfv.Ppl.InanSg
'the place where I am sitting'

The full set of imperfective positive system categories is shown in (xx5). -m- $\grave{\varepsilon}$ : and $-\grave{\eta} g \grave{o}$ participles are illustrated.

| (xx5) | category | suffix(es) |  |
| :---: | :---: | :---: | :---: |
|  |  | in Rel clause | in main clause ( 3 Sg ) |
|  | imperfective |  | -m̀-dò- $\varnothing$ |
|  | Progressive | -ḿn sò-m-غ̀:, -ḿn sj̀-ngò | -ńm sò-, -m̀ bù- |
|  | Stative | -m-غ̇:, -ngò | (A-stem, no suffix) |
|  | 'be' | $b u ̀-m-\varepsilon ̇:, ~ b u ̀-\eta g o ̀ ~$ | bù- |
|  | 'have' | sj̀-m-غ̀:, sò-刀gò | (yé) sò- |
|  | 'want' |  | m̀bá- $\varnothing$ |

### 14.4.2.2 Agentives used as imperfective participles (final é:)

In habitual or general contexts, my assistant preferred to (re-)phrase imperfective subject relatives as agentives. The agentive takes a compound initial wherever appropriate (§5.xxx), but in participle-like function simple intransitives are possible. In (xx3a), 'children-biter' functions as a modifying adjective for 'dog', accounting for the latter's $\{\mathrm{L}\}$ tone contour.
(xx3b) is phrased as 'my [meal-cooker woman]', with 'my' possessing the woman rather than the meals.
(xx3)
$\begin{array}{lll}\text { a. } & \text { [ìnjè. }: & \text { ùlè:-cèré: }]\end{array} \quad$ m̀bí-là- $y^{n}$.
b. [[yà ${ }^{\mathrm{L}}$ zà-Sìré] wê:] yǎy-yà-y
[[woman ${ }^{\mathrm{L}}$ meal-cook.Agent] 1SgPoss.AnSg] go-Pfv1a-3SgSbj
'The woman who cooks my meals (my meal-cooker) has gone.' (zá)
c. nè̀ ${ }^{\mathrm{L}}$ wòlé: ǹ
person ${ }^{\text {L }}$ come.Agent Def
'(a/the) person who comes/will come'

### 14.4.3 Participles of negative perfective-system verbs (-l-غ̌:)

The participial forms are in (xx1).
(xx1) Animate $\mathrm{Sg} \quad-1-\varepsilon$ : $\quad$ (same as Inanimate Pl )
Animate $\mathrm{Pl} \quad-l(u$ ù)-mbó
Inanimate $\mathrm{Sg} \quad$-l-gó
Inanimate $\mathrm{Pl} \quad-1-\varepsilon$ と. $\quad$ (same as Animate Sg )

The participles are based on perfective negative -lí-, and like it requires the $\{\mathrm{L}\}$-toned $\mathrm{A} / \mathrm{O}$ stem of the verb.

Subject relatives are in (xx2).
(xx2)
a. $\left[n i^{\mathrm{L}}\right.$
wà:-1-દ̌:
ì] sèll-ìyà-lí- $\varnothing$
[person ${ }^{\text {L }}$ come-PfvNeg-Ppl Def] be.healthy-MP-PfvNeg-3SgSbj
'The person who didn't come is sick.'
b. $\quad\left[n u ̀-m b \grave{j}^{\mathrm{L}}\right.$
wà:-1-Ø-mbó
ì]
[person-AnP1 ${ }^{\text {L }}$
come-PfvNeg-Ppl-AnPl
Def]
sèll-ìyà-ndá
be.healthy-MP-PfvNeg.3PlSbj
'The people who didn't come are sick.'
c. [ùlò ${ }^{\mathrm{L}}$ yàgà-l-gó ì $]$ àgú:

```
[house }\mp@subsup{}{}{\textrm{L}}\mathrm{ fall-PfvNeg-Ppl-InanSg] Def] which?=it.is
```

'Which (=where) is the house that didn't fall?'

Nonsubject relatives are in (xx3).
(xx3)
a. $p \grave{\varepsilon} d \grave{\varepsilon}$
mí
$d \grave{̀ n} r^{n} \grave{-l-\varepsilon ̌: ~}$
$\grave{̀}$
sheep $^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad$ sell-PfvNeg-Ppl.AnSg Def
'the sheep that I didn't sell'
$\begin{array}{llllll}\text { b. } & \text { lè:gò }{ }^{\mathrm{L}} & \text { bírá: } & \text { Í } & \text { bìrà-l-gó } & \text { ì } \\ \text { day }^{\mathrm{L}} & \text { work(n.) } & \text { 1PlSbj } & \text { work-PfvNeg-Ppl.InanSg } & \text { Def } \\ & \text { 'the day when we didn't work' } & \end{array}$

The full set of perfective negative system categories is given in (xx4). -l-غ̌: and $-1-g o$ are the featured participles.
(xx4) category
suffix(es)
relative clause
$\mathrm{AnSg} / \mathrm{InanPl}$ InanSg main clause
perfective negative $\quad-1-\varepsilon ̌: \quad$-l-gó $\quad-1 i ́-$
recent perfect negative dà-l-દ̌: dà-l-gó dà-lí-
experiential perfect $\mathrm{Neg} \quad-t$ èrà-l-દ̌: $\quad$-tદ̀rà-l-gó $\quad-t$ t̀rà-lí-

### 14.4.4 Imperfective and stative negative participles (-ngò: $b-\varepsilon$ : $)$

The participial endings are in (xx1). In this category, participial forms of bù- are added to $-\eta g o \partial:$; cf. 3 Sg imperfective negative $-\eta g o ̀:-\varnothing$ in the regular paradigm. The verb has the $\mathrm{A} / \mathrm{O}$-stem as in the regular paradigm.
( xx 1 ) Animate $\mathrm{Sg} \quad-\grave{\eta} g o ̀: \quad b-\bar{\varepsilon}: \sim b u ̀-m-\grave{\varepsilon}:$
Animate Pl -ŋ̀gò: bù-m-bò
Inanimate $\mathrm{Sg} \quad$-ìgò: bù-ngò
Inanimate $\mathrm{Pl} \quad-\grave{\eta} g o ̀: \quad b-\grave{\varepsilon}: \sim b u ̀-m-\varepsilon$ :

Subject relatives are in (xx2).
(xx2)
a. $\quad\left[n i^{\mathrm{L}}\right.$
bírá:
bírà-ŋgò:
$b-\grave{\varepsilon}: / b \grave{u}-m-\grave{\varepsilon}:]$
[person ${ }^{\text {L }}$ work(n.) work-IpfvNeg be-Ppl.AnSg]
m̀ $b i ́-l a ̀-y^{n}$
want-StatNeg-1P1Sbj
'We don't want a person who doesn't work.'
b. [nù-mbj̀ ${ }^{\mathrm{L}}$
[person-AnPl ${ }^{\text {L }}$
bírá: bírà-pgò̀: bù-m-bò]
work(n.) work-IpfvNeg be-Ppl-AnPl]
m̀ ${ }^{1}-l a ̀-y^{n}$
want-StatNeg-1PISbj
'We don’t want people who don't work.'

d. [cìn ${ }^{\mathrm{L}}$ zógà̀-ŋgò: bù-ggò $\quad$ m̀̀bà-y ${ }^{n}$
[stone ${ }^{\mathrm{L}}$ shatter-IpfvNeg be-Ppl-InanSg] want-1PlSbj
'We want a rock that doesn't break.'

Nonsubject relatives are in (xx3).
(xx3)
a. $p \dot{\varepsilon} d \grave{\varepsilon}^{\mathrm{L}} \quad m i ́ \quad d o r^{n}{ }^{n}-\eta g o ̀:$
$b-\grave{\varepsilon}: \quad \grave{n}$
sheep ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ see-IpfvNeg be-Ppl.AnSg Def
'the sheep that I won't sell'

c. kìn $^{\mathrm{L}} \quad$ ú dór ${ }^{n} \grave{\jmath}-\eta g o ̀: \quad b-\grave{\varepsilon}$ :
stone ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ sell-IpfvNeg be-Ppl.InanPl
'(a/the) stone that you-Sg won't sell'

The same participial forms of bù- 'be' are used after Stative negative =ndà: (§10.4.2).
(xx4)
a. $n i^{L}$
ígà = ndà:
$b-\grave{\varepsilon}$ :
person ${ }^{\text {L }}$ stand.Stat=StatNeg
be-Ppl.AnSg
'a person who isn't standing'
$\begin{array}{llll}\text { b. } & \text { nù- }-m b j^{\mathrm{L}} & \text { ígà }=n d \grave{a}: & \text { bù-m-bò } \\ & \text { person-AnPl }\end{array}$

## 'people who aren't standing'

The full set of imperfective and stative negative categories is in (xx5). Only the Animate $\mathrm{Sg} /$ Inanimate Pl participle is shown. In all cases $b-\grave{\varepsilon}$ : varies with bù-m- $\grave{\varepsilon}$ :

| (xx5) | category | suffix(es) |  |
| :---: | :---: | :---: | :---: |
|  |  | in Rel clause | in main clause ( 3 Sg ) |
|  | imperfective negative | -Пgò: $b-\varepsilon$ : | -пgò:- $\varnothing$ |
|  | Progressive negative | -m gò: $b-\frac{\varepsilon}{\text { : }}$ : | -m̀ gò- $\varnothing$ |
|  | Stative negative | $=n d a ̀: ~ b-\varepsilon$ : | $=n d a ̀:-\varnothing$ |
|  | 'not be' | ŋ̀gó $b-\frac{1}{\text { : }}$ | ngó- $\varnothing$ |
|  | 'not have' | sò-ndo b-Ė: | sò-ndう̀- $\varnothing$ |
|  | 'not want' | m̀bí-là $b-\varepsilon$ : | m̀bí-là- $\varnothing$ |

### 14.4.5 Participle of past clitic $=b i ̀-$

In its perfective-like uncompounded form, e.g. yí=bì-m 'I saw' (§10.2.1.4), the past category is neutralized with other perfective positive forms into relative clauses with kár ${ }^{n} a ̀ ~(§ 14.4 .1)$. However, when $=b i ̀-$ is added to a verb form marked for its own aspect-negation category (§10.5.1), it can be participialized in that combination. An example is the past progressive relative clause (xx1).

```
(xx1) tîn m nàmá nì }\mp@subsup{}{}{\textrm{L}}\quad\mathrm{ kúbò-m sò-m =b-غ̀:
    at.first meat person }\mp@subsup{}{}{L}\mathrm{ eat.meat-Ipfv have-Ipfv=Past-Ppl.AnSg
    'a person who was eating (= used to eat) meat'
```

The participial forms are in (xx2).

```
(xx2) Animate Sg =b-\grave{\varepsilon}
    Animate Pl = }\quad=\mathrm{ -mbò
    Inanimate Sg =bù-\etagò
    Inanimate Pl =b-\varepsilon}\mathrm{ :
```


### 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 (xx1a-b). The final verb is the one that is participialized. In (xxla) 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 both chained verbs or between them, but it cannot appear immediately before perfective participial kár $n a ̀ a ̀(x x 1 c)$. For more examples involving pronominal proclitics in verb chains, see (xx2-3) in §15.1.
a. $j$
$n i^{\mathrm{L}}$ yàgà

| súgó | Kár $^{n a ̀}$ | ì |
| :--- | :--- | :--- |
| go.down | Pfv.Ppl | Def |

person ${ }^{\mathrm{L}}$ fall go.down
'(a/the) person who fell down' (yàgâ)
b.

| $n i{ }^{\mathrm{L}}$ | yàgà | súgó-m- $\mathrm{\varepsilon}$ : | ì |
| :--- | :--- | :--- | :--- |
| person $^{\mathrm{L}}$ | fall | go.down-Ipfv.Ppl-AnSg | Def | '(a/the) person who will fall down' (yàgá)


| c. lè̀:gò day $^{\mathrm{L}}$ | $\begin{aligned} & u \\ & 2 \mathrm{SgSbj}^{2} \end{aligned}$ | $\begin{aligned} & \text { yàgà } \\ & \text { fall } \end{aligned}$ | súgó <br> go.down | $\begin{aligned} & \text { kár }_{n} \\ & \text { Pfv.Ppl } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| or: | yàgà | ú | súgó | $\ldots$ |
|  | fall | 2 SgSbj | go.down |  |
| 'the day (when) you-Sg fell down' |  |  |  |  |

### 14.6 Late-NP elements that follow the verb (or verbal participle)

### 14.6.1 Determiners (demonstrative and definite)

Many of the relative clauses presented in this chapter show definite $\grave{n}$ following the participle. Since this morpheme is not a tonosyntactic controller, its presence or absence has no effect on the form of the participle ( x 1 a ). If instead of a definite we have a true demonstrative that controls tone-dropping, we get examples like ( $x \times 1 b-c$ ). In ( $x \times 1 b$ ), the participle and its proclitic subject pronoun are tone-dropped by the demonstrative. In this example one could even imagine including the head noun 'house' in the target domain. However, this is incorrect; 'house' is tone-dropped as relative head, not as part of the domain controlled by the demonstrative. This is shown by (xx1c), where a non-tone-dropped constituent ('sheep') intervenes between the tone-dropped head noun and the tone-dropped participle.
(xx1)
a. ùlò
ú yá-ggò
(ì)
house $^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ see-Ipfv.Ppl.InanSg
(Def)
'(a/the) house that you-Sg see'
b. ùlò ${ }^{\mathrm{L}} \quad[\grave{u} \quad y a ̀-\eta g o ̀ j]^{\mathrm{L}} \quad \grave{o}-g u ́$
house $^{\mathrm{L}} \quad[2 \mathrm{SgSbj} \quad \text { see-Ipfv.Ppl.InanSg] }]^{\mathrm{L}} \quad$ Prox-InanSg
'this house that you-Sg see'
$\mathrm{c} . \quad \grave{\varepsilon} d \grave{\varepsilon}^{\mathrm{L}}$ pédé zìyà-m-غ̀: ${ }^{\mathrm{L}}$ mà-ḿn
child sheep bring-Ipfv-Ppl.AnSg Dist-AnSg
'that child (over there) who is bringing a sheep'

### 14.6.2 Non-numeral quantifiers ('each', 'all')

$p u ́ \rightarrow$ 'all' appears to control tone-dropping on the participle and even on the preceding proclitic. As usual with the emphatically pronounced $p u ́ \rightarrow$, it is difficult to distinguish true tonosyntactic control from intonational pitch dissimilation.
(xx1)
a. ùlò
$y a ̀-m-\grave{\varepsilon} \cdot]^{\mathrm{L}}$
yí-pú $\rightarrow$
house $^{\mathrm{L}} \quad\left[2 \mathrm{SgSbj}\right.$ see-Ipfv-Ppl.InanPl] ${ }^{\mathrm{L}} \quad$ Inan-all
'all the houses that you- Sg see'
b ùlè: ${ }^{\mathrm{L}}$ [ù yà-m-bòj ${ }^{\mathrm{L}} \quad$ bú-pú $\rightarrow$
house $^{\mathrm{L}} \quad\left[2 \mathrm{SgSbj}\right.$ see-Ipfv-Ppl.InanPl] ${ }^{\mathrm{L}} \quad$ An-all
'all the children that you- Sg see'

I was not able to elicit a relative with the rather restricted distributive quantifier kámá 'each'

### 14.7 Grammatical relation of relativized-on NP

### 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 participles animacy/number agreement with the NP functioning simultaneously as head NP and 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 (xx1). (xx1d-e) illustrate the alternative linear orders for subjects and setting adverbials ('tomorrow', 'yesterday')
(xx1)
a. $\quad\left[n i^{\mathrm{L}}\right.$
yàgà ${ }^{\mathrm{L}}$ kár ${ }^{n a ̀}$
ǹ] tíb-à:-y
[person $^{\mathrm{L}}$ fall ${ }^{\mathrm{L}}$ Pfv.Ppl Def] die-Pfv1a-3SgSbj
'The man who fell has died.'
b. [yà ${ }^{\mathrm{L}}$ nàmá $z a ̀ ̀ n d i ̀ ~^{\mathrm{L}}$ kár$^{n a ̀ a ̀ ~ i ̀] ~ a ́ m n e ̀: ~}$
[woman meat cook Pfv.Ppl Def] where?
'Where is the woman who cooked the meat?'
c. [yà ${ }^{\mathrm{L}}$ yó: tò: ${ }^{\mathrm{L}}$ kár ${ }^{n a ̀ ~ \grave{a ̀}] ~ a ́ m n e ̀: ~}$
[woman ${ }^{\mathrm{L}}$ millet pound ${ }^{\mathrm{L}}$ Pfv.Ppl Def] where?
'Where is the woman who pounded the millet?'
d. $y a^{\mathrm{L}} \quad$ ह́y ${ }^{n} \quad$ wá:-m-è: $\grave{~}$
woman ${ }^{\text {L }}$ tomorrow come-Ipfv-Ppl.AnSg Def 'the woman who is coming tomorrow'
e. yéngì yà ${ }^{\mathrm{L}}$ wò kár nà ì yesterday woman ${ }^{\mathrm{L}}$ come Pfv.Ppl Def 'the woman who came yesterday'

### 14.7.2 Object relative clause

The clause-internal object is tone-dropped in its capacity as the head NP. If the subject is pronominal, it appears as a preverbal subject pronoun rather than as a suffix on the verb. The verb takes the participial form relevant to the AN category. (xx1c) shows that subject-object linear order is retained in object relatives
(xx1)
$\begin{array}{llll}\text { a. } & {\left[p e ̀ d d e ̀{ }^{\mathrm{L}}\right.} & \text { mí } & \text { घ̀bè } \\ \left.\text { kár }^{n} \text { à }\right] \\ \text { sheep }^{\mathrm{L}} & 1 \mathrm{SgPoss} & \text { buy }\end{array}$
yì-Só-m
[sheep ${ }^{\mathrm{L}}$ 1SgPoss buy Pfv.Ppl] see-Pfv2-1SgSbj
'I found a/the sheep that I (had) bought.'

d. [nàmà ú kùbò-l-gó ì ]
[meat ${ }^{\mathrm{L}}$ 2SgSbj eat.meat-PfvNeg-Ppl.InanSg Def]
àgú:
be.where?Inan
'Where is the meat that you-Sg didn't eat?'
e. pèddè í sémá-m-غ̀: ì
sheep 1P1Sbj slaughter-Ipfv-Ppl.AnSg Def
'the sheep-Sg that we will slaughter'

An informant denied that accusative marking on an object head NP is possible. For example, accusative $g i ̀$ (never more than optional anyway) is not allowed on 'sheep' or 'dog' in (xxlab). 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 (xx1a-b). As with other head NPs, the possessor is tonedropped. The possessed noun takes its regular unpossessed form.

> a. [nì nă: tìbè kárnà ì $\left.{ }^{\mathrm{L}}\right] \quad$ ăm̀̀: $=\varnothing$
> [person ${ }^{\text {L }}$ cow die Pfv.Ppl Def] who?=it.s
> 'Who is the person whose cow died?'
b. [yà ${ }^{\mathrm{L}}$ úló yàgà kárnà ì] ăm̀: $=\varnothing$
[woman ${ }^{\text {L }}$ house fall Pfv.Ppl Def] who?=it.s
'Who is the woman whose house fell?'
14.7.4 Relativization on the complement of a postposition

If the relativized NP functions as complement of a postposition within the relative clause, the postposition is deleted. In (xxla), for example, 'to (a/the) woman' has a dative postposition. Corresponding relative clauses with 'woman' as head NP lost the postposition (xxlb). A similar pair of main clause and relative clause (xx1c-d) shows that the instrumental postposition is omitted in the relative.
a. ò-gú
[yá b
bèr $\left.r^{n} \grave{e}\right]$
$j i ́ r n \grave{n}$-m-nù-m
Dist-InanSg [woman Dat] say-Ipfv-Ipfv-1SgSbj
'I will say that to (a/the) woman.'

Dist-InanSg woman ${ }^{\mathrm{L}}$ 2SgSbj say-Ipfv-AnSg Def
'the woman to whom you will say that'
[can also be ordered: yà ${ }^{\text {L }} \grave{o}$-gú...]
c. [séy-ǵ́ nì:] tìmă: déngè-m-nù-m
[ax-InanSg Inst] wood chop-Ipfv-Ipfv-1 SgSbj
'I will chop the wood with an ax.'
d. [sèy-gjे ${ }^{\mathrm{L}}$ tìmă: ú déngè-ŋgò
ì] à-gú:
[ax ${ }^{\mathrm{L}}$ wood 2 SgSbj
chop-Ipfv.Ppl.InanSg Def] where?-InanSg
'Where is the ax with which you-Sg will chop the wood?'

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 §15.3.1-2 for spatial and manner adverbial clauses, and §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 a 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 rather restricted in TU but occur in some combinations involving co-events, i.e. two aspects of the same event. The nonfinal verb is in bare-stem form. 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. Because of the tight linking of the two verbs, in perfective positive contexts the final verb can occur either in a marked perfective form (xx1a) or in the simple perfective ( $x \times 1 b$ ).
(xx1)
a. yàgà / tómbó
súg-à:-y
fall / jump
go.down-Pfv1a-3SgSbj
'He/She fell/jumped down.'
b. yàgál tómbó sùgè- $\varnothing$
fall / jump go.down.Pfv-3SgSbj
[= (a)] (simple perfective)
c. yàgál tómbó sùgò-lú-m fall / jump go.down-PfvNeg-1SgSbj
'I didn't fall/jump down.'
d. yàgà / tómbó súgò-ŋクù-W ${ }^{n}$
fall / jump go.down-IpfvNeg-2SgSbj
'You-Sg will not fall/jump down.'

```
e. yágà / tómbò sùgò-m-nù-m
    fall / jump go.down-Ipfv-Ipfv-1SgSbj
    'I will fall/jump down.' (súgò-m-nù-m)
```

15.1.2 Tonal interactions between adjacent directly chained verbs

Several tonal interactions are illustrated in (xx1a-e) above. The nonfinal verb has its normal $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ melody when the final verb begins with an L-tone, as in the perfective negative ( xx 1 c ). This can also happen in the simple perfective (positive) when the final verb loses its H-tone (by defocalization) (xx1b).

Except in the imperfective positive, when the final verb begins with an H-tone, the H of /LH/-melody nonfinal verbs like yàgá 'fall' disappears (most likely by amalgamation with the following H-tone), while /H/-melody nonfinal verbs like tómbó 'jump' keep their lexical melody. The most unexpected tonal pattern is that of the imperfective positive, where the \{HL\} overlay typical of single imperfective verbs is spread over the two-verb sequence, so the nonfinal verb is HL-toned and the final verb is L-toned (xx1e).

Monosyllabic verbs with lexical / $\mathrm{H} /$ and $/ \mathrm{LH} /$ melodies are illustrated, as nonfinal verbs chained to 'get' (= 'can') in (xx1) below. They are subject to the same tonal processes as bisyllabic verbs, but monomoraic ( $C V$ verbs do not allow overt contour tones in these combinations, so they must appear as either $C \hat{v}$ or $C \hat{v}$.
(xx1) 'can exit' (/LH/) 'can shoot' (/H/) category
a. both tonal types appear with H-tone

| gó bè:- | tá bè:- | perfective (positive) |
| :---: | :---: | :---: |
| gó bèà-lí- | tá bè̀à-lí- | perfective negative |
| $\begin{gathered} g o ́</ g \hat{o} /, t a ́</ t a ̂ / \\ g o ́ b a ̀ ̀ m-m b \grave{d}- \end{gathered}$ | tá bè̀̀-m-dò- | imperfective (positive) |

b. $C$ V̀ versus $C$ V́
$g \grave{o}</ \mathrm{g}$ / / with final H-tone amalgamated with H-tone of final verb gò béá-ngò:- tá béá-ngò:- imperfective negative

Superficially, gǒ and tá have identical tones in the combinations in (xx1a), because /gǒ/ flattens to $g o \delta$ in two of the combinations.

### 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' (xx2).
(xx2) cǐn gìdé sù:-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, based on elicitation with my assistant, the proclitic can either intervene between the two verbs, or precede the two-verb sequence (§14.5). Therefore (xx3a) and (xx3b) are synonymous.
(xx3)
a. [gàndà mí yàgà súgó-pgó] wàgá
[place 1 SgSbj fall descend-Ipfv.Ppl.Inan] distant
'The place where I will fall down is far away.'

| b. [gàndà | yàgá | mí | súgó-刀gól | wàgá |
| :---: | :---: | :---: | :---: | :---: |
| [place | fall | 1 SgSbj | descend-Ipfv.Ppl.Inan] | distant |
| [= (a)] |  |  |  |  |

The two ordering possibilities are also possible for the 'can VP' construction (xx4a-b).
(xx4)
a. $\quad\left[c i^{\mathrm{L}}\right.$ mí
kán béá-ngó]
à:ndà=lá
[thing ${ }^{\mathrm{L}} 1 \mathrm{SgSbj}$ do get-Ipfv.Ppl.Inan] a.little=it.is.not 'What I can do is not insignificant.'
$\begin{array}{lllll}\text { b. } \begin{array}{llll}{\left[c \mathrm{c}^{\mathrm{L}}\right.} & \text { kán } & \text { mí } & \text { béá- } \eta g o ́ l \\ {\left[\text { thing }^{\mathrm{L}}\right.} & \text { do } & 1 \mathrm{SgSbj} & \text { get-Ipfv.Ppl.Inan }]\end{array} & \text { à:ndà=lá } \\ {[=(\mathrm{a})]} & & & & \end{array}$

### 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 bě: 'get, obtain' is directly chained (§15.xxx) 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 are yàgá and súgó, whose lexical melodies are overt in (xx1a-b). They merge as $\{H L\}$ in ( xx 1 c ), and yàgá amalgamates its final H -tone with that of 'get' in (xx1d).
(xx1)
a. yàgá/ súgó bè: $-\varnothing /$ bè-à:
fall / descend get.Pfv-3SgSbj / -3P1Sbj
'He-or-she / They could (=were able to) fall/go down.'
b. yàgál súgó bèà-lí- $\varnothing$
fall / go.down get-IpfvNeg-3SgSbj
'He/She couldn't fall/go down.'
c. yágàl súgò bè̀̀-m-dò- $\varnothing$
fall / descend get-Ipfv-Ipfv-3SgSbj
'He/She can fall/go down.'
d. yàgà/ súgó béà-ngò:- $\varnothing$
fall / descend get-IpfvNeg-3SgSbj
'He/She cannot fall/go down.'
hà:jú wò dímb-ì: bìyà-m-nù-w ${ }^{\text {n }}$
15.1.4.2 'Have a chance to' with bè $\varepsilon$ 'get' as nonfinal verb

A textual example has tă: bèz sèmà̀-ndá 'they didn't have a chance to slaughter (sémê) hyena (tă:). See T2015-02 at 03:46 for mark-up. Here bě: is the nonfinal verb, subject only to tonal modifications. The following main verb is conjugated. This construction is less common than the one with final conjugated $b \check{c}:-$.

The context for this example suggests the translation 'have a chance (opportunity) to VP' or '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.

### 15.2 Temporal adverbial clauses with overt chaining or subordinating morpheme

Loose chains, as opposed to the 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

Subsections in this section may be deleted, combined, split, or rearranged (and reorganized) to suit a particular language.

Indicate in each case (except the relative-clause type) whether the construction requires same subjects in the main and adverbial clauses. How is different subject expressed ('while he was working, we ate')?

If relevant, cross-refs to durative complements of 'see' and 'find' (§17.2.2.), and uninflected verb-stem iterations in narrative (§11.6.1).
15.2.1.1 Noun-headed 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 further postposition.

| (xx1) | sé:dù | wàgàdù / lè:-gò / àrnà-gùdù | (ńné) | wò: | kánà |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | S | time $^{\mathrm{L}} /$ day $^{\mathrm{L}} /$ year $^{\mathrm{L}}$ | $(3 \mathrm{SgSbj})$ | come | Pfv.Ppl |

'at the time/on the day/in the year when Seydou came'

### 15.2.1.2 Imperfective subordinator -m

The imperfective suffix -m, without pronominal-subject conjugation, can be used as a samesubject imperfective background-clause subordinator, basically 'while VP-ing'.

$$
\left.\begin{array}{llll}
\text { a. } & \text { [zób-gó } & \text { zóbà-m] } & \text { [nùyá: }  \tag{xx1}\\
& \text { nùỳ̀̀-m }=\text { bì- } \varnothing]
\end{array}\right]
$$

$\begin{array}{lll}\text { b. ùlé: } & \text { [zób-gó } & \text { zóbà-m] } \\ \text { children }\end{array} \begin{array}{lll}{[r u n-I n a n S g ~} & \text { run(v)-Ipfv] }\end{array} \begin{array}{lll}{[\text { nùná: }} & \text { nùyù-m }=b \text {-à:] } \\ {[\text { song }} & \text { sing-Ipfv=Past-3PISbj] }\end{array}$
'The children were singing as they ran.'
alternative PP construction:
[zób-gó nì] [yé nùy- $\varnothing$ ]
'He/She ran in.'
[zób-gó nì] [yé nù-m]
'I ran in.'
same-subject requirement?
examples:
[combine with neighboring subsections if not formally distinct]

### 15.2.1.3 Imperfective - $m$ on activity verb plus time-of-day verb

Imperfective subordinator $-m$ is common as a durative complement of verbs like 'spend the night' and 'spend the (mid-)day'. Only the final verb is conjugated for pronominal subject. The two "clauses" are treated prosodically as a unit, and if the final verb is perfective it often appears in the simple perfective, as in defocalized position within a clause. The sense is 'spend the day/night VP-ing' or 'VP all night/day', i.e. where the nonfinal VP denotes an activity that was coextensive with the time interval.
(xx1)
$\begin{array}{lll}\text { a. } & \text { [jé } & j e ́-m] \\ & \text { [dance(n) } & \text { dance-Ipfv] }\end{array}$
${ }^{\mathrm{L}}{ }_{n-a ̀ ̀}$
'They danced all night.'
b. [nùná: nùnó-m] ${ }^{\mathrm{L}}$ nà-m
[song sing-Ipfv] ${ }^{\mathrm{L}}$ spend.night.Pfv-1SgSbj
'I spent the night singing.'
c. $\left[\right.$ tól tó:-m] ${ }^{\mathrm{L}} d \grave{\varepsilon} r^{n} \dot{\varepsilon}-y$
[pounding pound-Ipfv] ${ }^{\mathrm{L}}$ spend.day.Pfv-1PISbj
'We pounded (grain in mortars) all day.'

### 15.2.1.4 'Since ...‘ clauses (perfective relatives)

‘Since ...‘ clauses are expressed as (usually headless) perfective adverbial relative clauses, with 'time' as implied head NP (xx1a). Even 'since X ' with a NP X is expressed with the same construction, using the verb gǒ- 'go out, leave' (xx1b).

$\left[\begin{array}{lll}\text { here } & 1 S g S b j & \text { come }\end{array}{ }^{\text {L }}\right.$ Pfv.Ppl] Loc]
[zá nà-lú-m]
[meal eat.meal-PfvNeg-1SgSbj]
'Since (the time when) I came here, I haven't eaten.'
b. [[yéngì gò ${ }^{\mathrm{L}}$ kár"à̀] nè]
[[yesterday go.out ${ }^{\mathrm{L}}$ Pfv.Ppl] Loc]
[ínjé dè-lú-m]
[water bathe-PfvNeg-1SgSbj]
'I haven't bathed since yesterday.'
15.2.2 Adverbial clauses expressing a chronological sequence

### 15.2.2.1 Chains including mò:nd-íi ‘assemble' ('do together')

Some other Dogon languages such as Jamsay combine the 'assemble [intr], come togehter' verb with the other verb as a direct chain. This is not the case in TB, where mediopassive m̀̀:nd-íí '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.
(xx1)
a. nù-mbó
[mò:nd-ì:
gín]
person-AnPl [assemble-MP and.Past.SS]
úló óndù-m-s-è:
house build-Ipfv-xxx-3PISbj
'The people got together and built a house.'

| b. | nù-mbá | $[m \grave{̀ n d}-\mathrm{i}:$ | $n \varepsilon \overline{]}$ |
| :--- | :--- | :--- | :--- |
|  | person-AnP1 | [assemble-MP | and.Nonpast.SS] |


| úló | óndù-m- $d-\varepsilon$ : |
| :--- | :---: |
| house | build-Ipfv-Ipfv-3P1Sbj |
| 'The people will get together and build a house.' |  |

The following sections discuss the major chaining constructions involving sequenced events.

```
[í kàbú] bìrà: móndú-gó bìrà-môn
```

15.2.2.2 Clauses with gín 'and then' (same subject, anterior, past time)
gín 'after, when' indicates a chronological sequence vis-a-vis the following clause, though sometimes the two are tightly sequences co-events. The entire sequence has been completed. gín occurs only in same-subject clause sequences. The pronominal-subject category is not marked suffixally on the verb with gín, but is marked on the verb of the following main clause. Nonpronominal subjects, objects, and other complements shared by both verbs occur once, before the gín verb. If the verb of the main clause has no additional complements of its own, it often appears in simple perfective form and it may be tightly phrased with the gín clause.

Before gín, a verb with lexical/LH/ melody spreads its L-tone to the end of the stem. In effect, the H -tone is amalgamated with the prior H -tone of the subordinator. / $\mathrm{H} /$-melody verbs remain high-toned. Other than this tone change, the subordinated verb normally occurs in bare-stem form, without inflectional suffixes. However, inflectional morphemes that behave like chained auxiliary verbs may occur between the primary verb and the subordinator. This is the case with recent perfect $d \grave{\varepsilon}$ in (xxle). In addition, corresponding to L-toned perfective$1 \mathrm{~b}-t i$ - is a H -toned variant $t^{\prime}$ that behaves like an auxiliary verb, and this can occur between the main verb and gín (xx1f).
(xx1) a. [yày gín] wò:-m
[go after] come.Pfv-1SgSbj
'I went and came (back).'

| b. àdé | [cill-í: | gín] | yǎy-yà-y |
| :---: | :---: | :---: | :---: |
| bird | [fly-MP | after] | go-Pfv1a-3SgSbj |

'The bird flew away.' (i.e. took off and went)

d. [zゝ̀bう̀
gín]
[yé
nùy- $\varnothing]$
[run after] [there.Def go.in.Pfv-3SgSbj
'He/She ran in.' (i.e. ran and entered)
e. [zá jé dè gín] ${ }^{\mathrm{L}}$ ya-dà
[meal eat RecPrf after] ${ }^{\mathrm{L}}$ go.Pfv-3P1Sbj
'They ate and (then) went.'
f. zá zè: tí gín, yǎy-yà-y
meal bring Pfvlb after, go-Pfv1a-3SgSbj
' $\mathrm{He} /$ She brought the meal and then went.'

More examples are (xx2a-b) in §18.3.1 ("You-Sg said that...") and (xx1b) in §18.4.1 ("The children squabbled..."). There are also some examples in the texts.
gín is related to the 'say' verb (§xxx). Taken somewhat literally, we can gloss the construction as "saying (recognizing) that S1, S2."

### 15.2.2.3 Clauses with $n \varepsilon \in r^{n} \varepsilon^{\prime}$ and then' (same subject, anterior, future time)

In the examples in (xx1), the subordinated clause with $n \varepsilon$ has the same subject as the following clause. The two clauses are chronologically sequenced as with gín clauses, but with $n \varepsilon \sim r^{n} \dot{\varepsilon}$ 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' (xxla), or it may be unmarked for aspect. If it is unmarked for aspect, it is tone-dropped ( $\mathrm{x} \times 1 \mathrm{~b}-\mathrm{c}$ ). The following main clause may be indicative ( $x$ x1a-b) or imperative ( $x$ x/c). When the second clause consists of just a verb, if it is phrased prosodically with the first clause (i.e. without a pause) it may drop tones as though preceded by other constituents within its clause (xxlb).
(xx1)
a. [zá $\left.\quad n \varepsilon ́ \quad d \dot{\varepsilon}^{\mathrm{L}} \quad n \varepsilon ́\right]$
ó-m-nù-m
[meal eat $\operatorname{RecPrf}^{\mathrm{L}}$ and.NonpastSS]
go-Ipfv-1SgSbj
'I will finish eating and (then) go.'

## b.

[ $\mathrm{go}^{\mathrm{L}}$ and.NonpastSS]
${ }^{\mathrm{L}}$ wà:-ı̀̀-nù-m
'I will go and come (back).'
${ }^{\text {L }}$ go-Ipfv-1SgSbj
'I will go and come (back).'
c. $\left[n \grave{\varepsilon}^{\mathrm{L}} \quad n \varepsilon ́\right]$ yà-dá
[eat ${ }^{\mathrm{L}}$ and.NonpastSS] go-Imprt
'Eat and go!'
d. [yày $\left.{ }^{\mathrm{L}} \quad n \varepsilon ́\right]$ wâ:-m-nù-m
[ $\mathrm{go}^{\mathrm{L}}$ and.SS] come-Ipfv-Ipfv-1 SgSbj
'I will go and come (back).'

tomorrow [come ${ }^{\mathrm{L}}$ and.SS] [meal eat ${ }^{\mathrm{L}}$ and.SS] go-Ipfv-3SgSbj
'Tomorrow he/she will come and eat and (then) go (away).

If the second clause is negative, the scope of its negation does not extend to the first clause.
(xx2)
$\begin{array}{llll}\text { a. [bàmàkó } & {\text { yà }{ }^{\mathrm{L}}}^{\mathrm{L}} & \text { né }] & \text { wá:-ŋù-m } \\ {[\mathrm{B}} & \mathrm{go}^{\mathrm{L}} & \text { and.SS] } & \text { come-IpfvNeg-1SgSbj }\end{array}$
'I will go to Bamako, and I won't come back.'
$\begin{array}{lll}\text { b. } & {\left[y a ̀ y^{\mathrm{L}}\right.} & n \varepsilon ́]\end{array} \quad$ wá:-lì
'Don't go and come back!'
15.2.2.4 Clauses with -à: dé 'after' (same subject, anterior, future time)

This construction competes with the clause type with $n \dot{\varepsilon} \sim r^{n} \dot{\varepsilon}$ described in the preceding section (§15.2.2.2). Both constructions appear to be limited to clause sequences denoting future or generalized present events. Both also require that the subordinated and main clauses have coindexed subjects.
-à: dé is especially common with the recent perfect ( $d \hat{\varepsilon}$ ) in the sense 'have (just) finished VPing'. The recent perfect form is therefore $d$-à: dé following a chained verb denoting the event type. There are several examples of this in Text 2 ("Cotton"). (xx1) in that text also includes mó:ndú-ǵ mò:ndì-y-à: dé 'after getting together', showing that -à: dé does not only occur in the recent perfect form.
dé in -à: dé is presumably related to conditional de 'if' (§16.1). However, the textual examples of -à: dé involve simple event sequences with no special emphasis on contingency. The construction is therefore similar to what I have called "pseudo-conditional" constructions in some other Dogon languages.

### 15.2.2.5 '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.
a.

| [òdùbá: | yày $y^{\mathrm{L}}$ | gín] | áy-yà-dà |
| :--- | :--- | :--- | :--- |
| [road | $\mathrm{go}^{\mathrm{L}}$ | and.Past.SS] | get.tired-Pfv1a-3PISbj |
| 'They walked (and walked) until they got tired.' |  |  |  |



### 15.2.2.6 Clauses with kár ${ }^{n}$ 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. kár"à, a form of kán- 'do' also used in perfective relative clauses (§14.xxx), is the crucial linking element. As with perfective relatives, a lexically /LH/-toned verb before kár ${ }^{n}$ à spreads its L-tone to the end of the stem. In (xxla-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.
(xx1) a. [[ह̀dé ì̀ $]$ né ńné dè kárnà $]$
[child Def] eat 3 SgSbj RecPrf after]
[mí ${ }^{\text {L }}$ yày-m̀]
[1SgSbj ${ }^{\mathrm{L}} \mathrm{go}$.Pfv- 1 SgSbj ]
'When the child had finished eating, I went.'
b. [zá né bú dè kárnà à [mí ${ }^{\mathrm{L}}$ yày-m̀̀]
[meal eat 3PlSbjRecPrf after] [1SgSbj ${ }^{\mathrm{L}}$ go.Pfv- 1 SgSbj$]$
'When they had finished eating, I went.'
c. [ùdù-gó ńné pílé káriàa] [í nù-yn]
[sun-InanSg 3 SgSbj sun.set after] [1PlSbj go.in.Pfv-1PISbj]
'After the sun had set, we went in.'
d. [ámádù [sùnggó ì] ńné bàdà ${ }^{\mathrm{L}}$ kárª̀ à]
[Amadou [rope Def] $3 \mathrm{SgSbj}^{\text {pull }}{ }^{\mathrm{L}}$ after]
[[nă: ì] yăy-yà-y]
[[cow Def] go-Pfv1a-3SgSbj
'When Amadou had pulled the cord, the cow got away.'
e. [zá ǹ̀ ńné zè: kárnà, yé nè-m
[meal Def] 3 SgSbj bring after, there.Def eat.meal.Pfv- 1 SgSbj
'After he brought the meal, I ate.'

### 15.2.2.7 Clauses with $n \grave{\varepsilon}$ (different-subject, anterior, future time)

In this construction, the verb is $\{\mathrm{HL}\}$-toned, reduced to $\{\mathrm{H}\}$-tone for monosyllabics, and it is followed by L-toned $n \grave{\varepsilon}$. 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. The subject is obligatorily represented by a proclitic pronoun, even when it resumes a nonpronominal subject (xx1a).
a. [ámàdù ńné wó: ǹ̀] [zá nà̀m-nغ̀-ýn]
[A 3 SgSbj come after.DS] [meal consume-Ipfv-Ipfv-1PISbj]
'After Amadou comes, we will eat.'
$\begin{array}{llllll}\text { b. } & \text { [bírá: } & \text { bú } & \text { bìr } \grave{\varepsilon} & d \grave{\varepsilon} & n \grave{\varepsilon}] \\ \text { [work(n) } & \text { 3PISbj work(v) } & \text { RecPrf } & \text { after.DS] } & \text { óm-nè- } y^{n} \\ \text { go-Ipfv-Ipfv-1PISbj }\end{array}$
'After he/she finishes doing the work, we'll go.'

Additional examples showing the form: и́né dóg̀̀ nè 'after he/she leaves (abandons)' (dゝेg), ńné bírè nè 'after he/she works' (bìré), ńné nú nè ‘after he/she enters', ńné yí nè 'after he/she sees', zá íné $\eta \varepsilon ́ ~ n \varepsilon ̀ ~ ' a f t e r ~ h e / s h e ~ e a t s ~(a ~ m e a l) ', ~ b u ́: ~ ' d u ̀ ~ m i ́ ~ b e ́: ~ n e ̀ ~ ' a f t e r ~ I ~ g e t ~ s o m e ~ m o n e y ' ~$ (bě.).

My assistant did not accept nè in past time contexts ('after he/she finished doing the work, we went'). Instead, nè was replaced by a headless perfective relative clause with participial kár"à, as in (xx2).


### 15.2.2.8 Clauses with -ŋggó nì (different-subject, anterior)

In this construction, the subordinated verb has suffix -ŋgó, followed by nì, possibly a variant of instrumental postposition nì: (§8.1.2). In future time contexts, this construction competes with the $n \grave{\varepsilon}$ construction described above. Unlike $n \grave{\varepsilon}$, this construction can be used in both future (xx1a) and past (xx1b) time frames.
(xx1) a. [bírá: bú bírá-ŋ̧gó nì] ó-m-nè-yn
[work(n) 3PlSbj work(v)-xx Loc] go-Ipfv-Ipfv-1PlSbj
'After he/she finishes doing the work, we'll go.'

'After he/she finished doing the work, we went.'

### 15.2.3 Chronological reversal ('before ...‘ clauses)

'Before...' clauses are loosely chained clauses using tí as a kind of auxiliary verb specifying that the event in question was completed before the following event. The forms are $t i^{L} n \varepsilon$ for nonpast time frames and tí gín for past time frames. These forms are regular when the clauses have the same subject (xx1a-b).
(xx1)
$\left.\begin{array}{lllll}\text { a. } & {[b i ́ r a ́: ~} & \text { bìr } & t^{\text {L }} & n \varepsilon ́] \\ & {[\text { work(n) }} & \text { work(v) } & \text { Perf }^{\text {L }} & \text { and.Nonpast.S }\end{array}\right]$

When the subjects are different, the later event is construed as an imperfective adverbial clause. For example, in (xxla-b) the first clause is literally something like "with my father being about to come."
(xx1)

|  | [/mí | ${ }^{\text {H}}$ bá $]$ | wá:-ıg ò | ni, |
| :---: | :---: | :---: | :---: | :---: |
|  | [ [1SgPoss | ${ }^{\text {father] }}$ | come-IpfvPpl.InanSg | Inst, |
|  | [biriá: | bìré-itim] |  |  |
|  | [work(n) | work(v)-Pfv1b-1SgSbj] |  |  |
|  | 'I worked (and finished) before my father came.' |  |  |  |

b. [[mí ${ }^{\mathrm{H}}$ bá] wá:-ngò nì,
[[1SgPoss ${ }^{H}$ father] come-IpfvPpl.InanSg Inst,
[bírá: bírà-m-nù-m]
[work(n) work(v)-Ipfv-Ipfv-1SgSbj]
'I will work before my father comes.'

### 15.3 Spatial and manner adverbials

### 15.3.1 Spatial adverbial clause ('where ...')

Spatial adverbial clauses are relatives with gándá 'place, country' as head, hence in $\{\mathrm{L}\}$-toned form. Such a clause can function as a NP argument (xxla), or it can be adverbial (xxlb).
(xx1)
a. [gàndà ${ }^{\mathrm{L}}$ mí yàgà ${ }^{\mathrm{L}}$ kár ${ }^{n} a ̀$ ì] wàgá [place ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ fall ${ }^{\mathrm{L}} \quad$ Pfv.Ppl Def] distant 'The place where I fell is far away.'
b. [[gàndà ${ }^{\mathrm{L}}$ mí yàgà ${ }^{\mathrm{L}}$ kár$^{n}{ }^{n}$ à $\quad$ ] nè] wàgá [[place ${ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ fall ${ }^{\mathrm{L}}$ Pfv.Ppl Def] Loc] distant 'I'm going to the place where I fell.'

### 15.3.2 Manner adverbial clause ('how ...')

A relative clause with $\eta \eta \eta$ 'manner' as head NP may function as a NP (xxl.a).
With $\eta \eta \eta$ 'like' this can become a manner adverbial clause (xxl.b).
[bìrà íné bìrà-ŋgó ǹ né] mí kùnì: bíràmnam
'I will work like he works'
nné zòbà-mò- ŋgò ôy ${ }^{n}$ dágá- ŋgò 'if he drives like that it's no good'
examples
'I work (like) the (same) way he/she works.'
'The way he drives, we can reach Bamako in one day.'

### 15.3.3 'From X, until (or: all the way to) Y'

A somewhat specialized construction translatable as an 'until' phrase is based on the uninflected form $d \check{y} y$, related to the perfective-1a of $d \check{o}$ 'arrive (somewhere other than here' (abstracted from perfective-1a forms like ď̌-yyà-y 'he/she arrived'). It is tightly chained with a preceding ẁ̀ (reduced from wǒ:- 'come') when the terminal point is in the past, and with a preceding yà (reduced from yây 'go', §10.1.3.5) when the terminal point is in the future.

The 'until' phrase may be paired with a preceding 'since' or 'starting from' phrase specifying the temporal point of departure. This may be a subordinated clause containing gǒ'go out' in the sense 'begin(ning) with', or a clause with a verb like tó:- 'begin'.
(xx1)

'I was working from last year until yesterday.'
b. [nân tò:-ńn dé] [Éy $y^{n}$ yà $\left.{ }^{\mathrm{L}} d \check{y} y\right]$
[now begin-xxx xxx] [tomorrow go $^{\text {L }}$ arrive]
bírá: bírà-m-nò-m
work(n.) work-Ipfv-Ipfv-1 SgSbj
'I will work starting now until tomorrow.'
nné-gì bú là: kárnà, mò-mòdù-gó, kúnì $\rightarrow$ tíbè
'from the time he was born he is evil, until he dies'

## 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 $d e$ ' if '

In this construction, the antecedent eventuality is possible but uncertain. Both antecedent and consequent are normally in the future, or else denote recurrent events that may overlap the present.

When the antecedent denotes a bounded event, it is normally expressed in one of the perfective inflections (positive or negative). We see the perfective-1b in (xx1a), the perfective-1a in (xx1b), the simple perfective in (xx1c), and the perfective negative in (xx1d). The consequent is normally imperfective (xx1a-c), but can also be an imperative ( $x$ x1d) or hortative. The 'if' morpheme is clause-final $d e$, which acquires its tone by spreading from the preceding word.
(xx1)

b. ú bàmàḱ yǎy-yà-W $W^{n}$ dè, ú yá-ŋù̀m

2 SgSbj B go-Pfv1a-2SgSbj if, 2 SgO see-IpfvNeg-1SgSbj
'If you-Sg go to Bamako, I won't see you.'
c. Ébé ${ }^{\mathrm{L}}$ yày- $\hat{W}^{n}$ dé, bòríyé ${ }^{\mathrm{L}}$ zìyà
market $\quad{ }^{\mathrm{L}}$ go.Pfv- $2 \mathrm{SgSbj} \quad$ if, sack $\quad{ }^{\mathrm{L}}$ bring.Imprt 'If you-Sg go to the market, bring (back) a sack (of millet)!.'
d. ú $\quad$ èll-èyà-lú-W ${ }^{n}$ dé,

2 SgSbj be.healthy-MP-PfvNeg-2SgSbj if,
ú zóngò-m-nù-m
2SgO treat-Ipfv-1 SgSbj
'If you-Sg get sick, I will treat you.'
["not be healthy" = 'get sick']


### 16.2 Alternative 'if' particles

### 16.2.1 ‘Even if ...‘ (dùg̀̀)

Elsewhere dùgò is the purposive-causal postposition ('for' or 'because of'), see §8.3. It can also be used 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.
(xx1)

b. [ú wà:-lú-w ${ }^{\mathrm{n}}$ ] dùgò, mí ándá ó-m̀-nù-m
[2Sg come-PfvNeg-2SgSbj] Purp, 1 Sg the.bush go-Ipfv-Ipfv-1SgSbj 'Even if you-Sg don't come, I'm going to the bush (=the fields).'

An alternative construction is (xx2). Here the final verb of the antecedent is intonationally prolonged $(\rightarrow)$.
(xx2) a. [àrná mírnà-m sò- $\varnothing \rightarrow$ ], ándá ó-m̀-nù-m [rain(n) rain.fall-Ipfv have-3SgSbj], the.bush go-Ipfv-Ipfv-1SgSbj 'Even if it's raining, 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.
(xx1) [ńg
dw-â:-y ${ }^{n}$
tán] [zá ná-m̀-nè-y ${ }^{n}$ ]
tán is specialized to occur in this construction. The simple 'only' particle, as in 'only I (will go)', is sày (§19.xxx).

### 16.3 Willy-nilly and disjunctive antecedents ('whether X or Y ...')

In this construction, the truth of the consequent is unrelated to the truth of either segment of the complex antecedent. The two mutually exclusive antecedent segments, usually positive and negative respectively, are expressed as main clauses plus the dying-quail intonational ending also used with NP conjunctions.
(xx1) [àrná mìrǹ̀̀-só- $\varnothing \therefore$ ] [mìrnà-lí- $\varnothing \therefore$ ] ó-m̀-nù-m
[rain(n) rain.fall-Pfv2-3SgSbj] [rain.fall-PfvNeg-3SgSbj go-Ipfv-Ipfv-1 SgSbj
'Whether it rains or it doesn't rain, 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."

My 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 predicate of the antecedent clause contains the past clitic in any of its combinations, plus $d e$ 'if'. The predicate of the consequent clause is past imperfective. Either clause, or both, may be negative.
(xx1)

$$
\begin{array}{lll}
\text { a. } & \hat{o} y^{n} \quad \text { zúgà- } m=b u ́-m=b u ̀ ̀-m & \text { dè, } \\
\text { like.that } \quad \text { know-Ipfv=Aug=Past- } 1 \mathrm{SgSbj} & \text { if, } \\
\text { wă:- } \eta g \grave{o}:=b u ́-m=b u ̀-m \\
\text { come-IpfvNeg=Aug=Past- } 1 \mathrm{SgSbj} \\
& \text { 'If I had known (it was) like that, I would not have come' }
\end{array}
$$

$\begin{array}{lllll}\text { b. mí } & \text { púngó }=\text { bì- } \varnothing & \text { dè, ńné } & \text { já-ı̀̀ }=b u ̀-m \\ & 1 \mathrm{SgO} & \text { beat=Past-3Sgs } & \text { if, } & 3 \mathrm{SgO}\end{array}$ kill-Ipfv=Past- 1 SgSbj
'If he had hit me, I would have killed him.'

A textual example is T2015-02 at 06:31.

## 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 (xx1a). More often, an uninflected quotative particle wà occurs, and this particle may be repeated several times in a multi-clause quotation ( $\mathrm{x} \times 1 \mathrm{~b}-\mathrm{d}$ ). A prolonged variant wà $\rightarrow$ is also common after an independent pronoun representing the subject of the quoted sentences (xx1c). There is no verbal agreement with such overt clause-initial quotative subjects. Finally, any referent coindexed with a thirdperson author of the quotation (whether of speech or of thought) is represented by a logophoric pronoun. The logophoric takes the form $-m$ (pseudo-1Sg, §18.2) suffixed to the verb when it functions as subject of the quoted clause (xx1a-b). Otherwise it takes the form á, a third-person anaphoric pronoun also used in reflexives (§18.2), as in (xx1d).
(xx1)
a. ámádù
wâ:-m-nù-m
$j i ̀ n i ́=b i ̀-\varnothing$
A come-Ipfv-Ipfv-LogoS
say $=$ Past- 3 SgSbj
'Amadou ${ }_{x}$ said he $\mathrm{he}_{\mathrm{x}}$ will come.'
b. ámádù wâ:-m-nù-m wà
A come-Ipfv-Ipfv-LogoS Quot
'Amadou ${ }_{x}$ said/says he will come.'
c. ámàdù [ú wà $\rightarrow$ ] [ńné-gì púngó=bù] wà
A [2Sg QuotS] [3Sg-Acc hit=Past] Quot
'Amadoux says that you hit him/hery.'
d. ámàdù [ú wà $\rightarrow$ ] [á-gì púngó=bù] wà
A [2Sg QuotS] [3LogoSg-Acc hit=Past] Quot
'Amadoux says that you hit hime.'

### 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 (' $\mathrm{He}_{\mathrm{x}}$ said that $\mathrm{he}_{\mathrm{x}} \ldots$... 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).

### 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 wa is possible, i.e. in positive reports of past speech by third parties ('he said', etc.). However, in imperfective, imperative, and negative contexts the 'say' verb follows the quotation.

| (xx1) | éy | ó-m̀-nù-ḿn | gìn-dí- $\varnothing$ |
| :--- | :--- | :--- | :--- |
|  | tomorrow | go-Ipfv-Ipfv-LogoS | say-PfvNeg-3SgSbj |
|  | 'He didn't say that he will go tomorrow.' |  |  |

The 'say' verb may take a NP complement subsuming an unspecified quotation.
(xx2)
a. ìnjé
jìní- $\varnothing$
what? say.Pfv-3SgSbj
'What did he/she say?'
b. cì-kámá jìn-dí- $\varnothing$
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 independent pronouns functioning as subjects of a quoted clause. The usual pronominal-subject marking on the verb, as in main clauses, is blocked when such a clause-initial quotative subject is present (the verb takes the zero form, elsewhere marking 3 Sg subject). Logophoric subject marking is redundant and optional, since there is a verbal suffix $-m$ (pseudo-1Sg) for logophoric subject (xx1c). Nonpronominal subjects do not normally get the clitic wa $\rightarrow$ (except when they function as quoted vocatives), and if they are plural they trigger 3 Pl subject agreement on the verb ( xx 1 d ).
(xx1)
a.
[í
wá $\rightarrow$ ] gùnù̀-mbó
wà
[1Pl QuotS] thief-AnPl Quot
' $\left(\mathrm{He}_{\mathrm{x}}\right)$ says we are thieves.'
b. [ú wá $\rightarrow$ ] á-gì zúgà-m-dò wà
[2Sg QuotS] 3LogoSg-Acc know-Ipfv-Ipfv Quot ' $\left(\mathrm{He}_{\mathrm{x}}\right)$ says that you know him $_{\mathrm{x}}$.'
c. (á wá $\rightarrow$ zímà-m-nù-m wà
(LogoSg QuotS) be.sick-Ipfv-Ipfv-LogoS Quot
'( $\mathrm{He}_{x}$ ) says that he ${ }_{x}$ is sick.'
d. [ûlé: (wá $\rightarrow$ )] á-gì zúgà-m-d-è wà
[children (QuotS)]3LogoSg-Acc know-Ipfv-Ipfv-3PlSbj Quot ' $\left(\mathrm{He}_{\mathrm{x}}\right)$ says that the children know him ${ }_{\mathrm{x}}$.'
e. [ínè: wà $\rightarrow$ ] yǎy-yà-y wà
[goat QuotS] go-Pfv1a-3SgSbj Quot
'He/She said that the goat has gone.'

The tone of wa $\rightarrow$ is spread from the left. It is H-toned in (xx1a-d) after a H-tone, but L-toned in (xx1e) after a L-tone.

Logophoric á wá $\rightarrow$ frequently contracts to $\bar{a} \rightarrow$.

### 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 a H-tone, and it is not prolonged intonationally.
(xx1)
a. [ámádù (wà $\rightarrow$ )] sùgò-lú- $\varnothing$ wà
[Amadou (QuotS)] go.down-PfvNeg-3SgSbj Quot
'He/She said that Amadou didn't come down.'
(usually pronounced [sùgǒlwà])
$\begin{array}{lllll}\text { b. ámádù (á } & \text { wá } \rightarrow \text { ) } & \text { wá:-m̀̀-nù-ḿn } & \text { wà } \\ & \text { Amadou (LogoSg } & \text { QuotS) } & \text { come-Ipfv-Ipfv-LogoS } & \text { Quot }\end{array}$
'Amadou ${ }_{x}$ said that he ${ }_{x}$ is coming.'

In (xx1b), the quoted logophoric subject á wá $\rightarrow$ is usually omitted since the verb is already marked for logophoric subject.

Clause-final wà is omitted when an overt, conjugated 'say' verb is present. It is also not used in negative, future, interrogative, or deontic frames ('He didn't say ...'). 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, wà is positioned between the verb and the emphatic.
(xx2)

| a. | àr ${ }^{n}$ á | mìr $r^{n} \dot{\varepsilon}-t i ̀-\varnothing$ | Wà | kòy |
| :--- | :--- | :--- | :--- | :--- |
|  | rain(n) | rain.fall-Pfv1b-3SgSbj | Quot | Emph |
|  | '(He) said, it sure did rain.' |  |  |  |

b. gùnù-mbó yé b-غ̀: wà dè
thief-AnPl Exist be-3PlSbj Quot Emph '(He) said (warned), there are thieves (there)!'

### 17.1.3.3 Post-quotation pronoun plus nà

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.

### 17.1.4 Jussive complement (reported imperative or hortative)

### 17.1.4.1 Quoted imperative

A quoted imperative normally has two parts. First, the subject of the imperative verb (arguably, the original addressee) is followed by subject quotative particle wà $\rightarrow$, which is consistently prolonged intonationally. This could be analysed as a quoted vocative, but it is somewhat pro forma since the original command usually did not follow an overt vocative. 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, followed by the unprolonged quotative particle wà. The original imperative verb is converted
into a third person hortative verb form with a suffix like -lú (see §10.6.3.1 for the morphology). There is no marking of addressee plurality.
(xx1)
a.

| $[m i ́$ | wá $\rightarrow]$ | [wò-lú |
| :--- | :--- | :--- |
| $[1 \mathrm{Sg}$ | QuotS] | [come- |

wà]
[1Sg QuotS] [come-QuotHort Quot]
'He/She told me to come.'
b. [ámádú wà $\rightarrow$ [yǎy- $\varnothing$ wà]
[Amadou QuotS] [go-QuotHort Quot]
'He/She said for Amadou to come.'
$\begin{array}{llll}\text { c. } & {[\text { ùlé: }} & \text { wá } \rightarrow] & \text { [wò-lú } \\ {[\text { children }} & \text { QuotS] } & \text { [come-QuotHort } & \text { wà } \\ & \text { Quot] } \\ & \text { 'He/She said for the children to come.' } & \end{array}$
(xx2) is a quoted prohibitive. The same quotative subject phrase occurs at the beginning. The verb has prohibitive form. Before wà the usual prohibitive suffix -lì becomes -lù, and its vowel is frequently elided, with L-toned lateral followed directly by wà.
(xx2) [mí wá $\rightarrow$ [wă:-lù wà]
[1Sg QuotS] [come-Prohib Quot]
'He/She told me not to come.

### 17.1.4.2 Quoted hortative

The addressee ( 2 Sg or 2 Pl ) is treated as the "subject" in the quotative-subject phrase, suggesting that it is really a quotative addressee (or a quoted vocative). The singularaddressee hortative -mó is converted into the quoted hortative form -mú, whose $u$ í is usually elided before wà. Irregular ńnbó 'let's-2Sg go!' likewise becomes ńnbú, which is too short to allow elision of the $u$ (xx1a). The plural-addressee hortative takes its regular form with -mó-ì (xx1c).
(xx1)
a. ńbú
wà
go.QuotHort Quot
‘He/She said, let’s go!’ (< ńbó)
b. nân (ú wá $\rightarrow$ zá fá-m(ú) wà
now (2Sg QuotS) meal eat-QuotHort Quot
'He said, let's eat now!' (ná-mó)

| c. | nân | $(b i ́$ | wá $\rightarrow)$ | zá | ná-mó-ì |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$ wà

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 my 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 (proclitic subject pronoun or full NP), in perfective contexts the verb takes perfective- 2 form $-s-\bar{\sigma}$ or $-s-\grave{\text {, }}$, and the only suffixal conjugation of the verb is $3 \mathrm{Pl}-s-\varepsilon$ or $-s-\grave{\varepsilon}$ (shortvoweled form). All other pronominal categories take the uninflected form -s-б or $-s-$.
(xx1)

| a. ámádù | $[\mathrm{mí}$ | wò:-ś́ | zúgà-m-dò- $\varnothing$ |
| :--- | :--- | :--- | :--- |
|  | Amadou | $[1 \mathrm{SgSbj}$ | come-Pfv2] |
|  | 'Amadou knows that I have come.' |  |  |
|  | know-Ipfv-Ipfv-3SgSbj |  |  |

b. [ùlé: wj̀:-s-é] zúgà-m-nù-m [children come-Pfv2-3PISbj] know-Ipfv-Ipfv-1SgSbj 'I know that the children has come.'

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 (xx1a). The complement clause proper takes the form of an imperfective adverbial clause. Pronominal subjects take proclitic form. In (xx1b), the nonpronominal subject 'children' is resumed by a proclitic 3 Pl subject pronoun.
a.
[dance(n) 2 2SgSbj dance(v)-Ipfv] 2Sg-Acc $\quad$ see=Past-3SgSbj
'He/She saw you (as you were) dancing.'
b. [ùlé: jé bú jé-m̀] $\quad$ yí $=b i ̀-\varnothing$
[children dance(s) 3PISbj 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, I elicited examples with negative clauses. Again, the data are somewhat messy. In (xx1a), the complement of 'see' has regular conjugated perfective negative form. However, in (xxlb-c) we have a preposed 1 Sg pronominal subject, similar to the factive construction with 'know'.
a. yàgà-ndá
$y i ́=b i ̀ m$
fall-PfvNeg.3PISbj
see=Past- 1 SgSbj
'I saw that they hadn't fallen.'
$\begin{array}{lll}\text { b. } & {\left[\begin{array}{ll}\text { mín } & \text { yàgà-líl }\end{array}\right.} & \text { yí= bì- } \varnothing \\ & \begin{array}{ll}1 \mathrm{SgSbj} & \text { fall-PfvNeg }]\end{array} & \text { see }=\text { Past- } 3 \mathrm{SgSbj} \\ & \text { 'He/She saw that I had not fallen.' }\end{array}$
c. $[m i ́ ~ p e ́ d d e ̀ ~ s e ̀ m a ̀-l i ́] ~ y i ́=b i ̀-\varnothing ~$
[1Sg sheep slaughter-PfvNeg] see=Past-3SgSbj
'He saw that I had not slaughtered the sheep-Sg.'

### 17.3 Verbal noun (and other nominal) complements

Verbal noun complements generally construe the subordinated eventuality as an entity, with no commitment to its having been realized. The verbal noun is not determined or quantified over in any of my examples. Other nominals related to verbs, such as lexicalized cognate nominals (xx1a), may also be used instead of the actual verbal noun with -lé (xxlb), though the specific senses may be slightly different. Cognate nominals also co-occur with verbal nouns for many verbs (xx1b).
(xx1)
a. zóbú-gó
m̀bá- $\varnothing$
running-InanSg want-3SgSbj
'He/She wants to run', 'He/She likes running.'
b. [zóbú-gó zóbú-lé] ìbá- $\varnothing$
[running-InanSg run-VblN] want-3 SgSbj
'He wants to run (do some running).'

These nominal complements contrast most directly with those in -ygó, which are explicitly future-oriented and hypothetical.

### 17.3.1 Structure of verbal noun complements

The verbal noun can take its usual nonsubject complements such as object NPs and adverbials. In constructions where the two clauses have coindexed subjects, there is no additional subject marking in the verbal noun complement per se. In those where the subjects are not coindexed, the subject of the complement appears as a possessor of the verbal noun. Examples occur in the sections below on specific main-clause verbs.

### 17.3.2 'Prevent' (gá:ndî) plus verbal noun

Initial attempts to elicit 'X prevented Y from VP-ing' produced circumlocutions like that in (xxla). The real 'prevent' construction is seen in (xxlb), with verb gá:ndí taking a verbal noun complement including a possessor representing the complement's subject.
(xx1)

a. àrná [yéngì wó:-lé kǒ:] gà:ndì- $\varnothing$
rain(n) [yesterday come-VblN 1SgPoss.InanSg] prevent.Pfv-3SgSbj
'The rain prevented me from coming yesterday.'

### 17.3.3 'Dare' (dàráá plus verbal noun or -ŋggó complement

'Dare to VP', contextually also 'have the nerve/effrontery to VP', is expressed by dàrá, cf. Jamsay dà:rá and Yanda Dom dàdú. The subject of the complement is coindexed with that of the main clause. The complement may be a verbal noun (xx1a) or a -ngó complement (xx1b).

$$
\begin{array}{lll}
\text { a. } & \text { [ŋ̀gó } & \text { wó:-lé }  \tag{xxl}\\
& {[\text { here }} & \text { come-VblN] }]
\end{array} \quad \begin{aligned}
& \text { dàrá-ŋggò:- } \varnothing \\
& \\
& \\
& \text { 'He doesn't dare come here.' }
\end{aligned}
$$

b. [mí-gì dọá-ngó] dárà-m-nù- $W^{n}$
[1Sg-Acc insult-xxx] dare-Ipfv-Ipfv-2SgSbj
'You-Sg dare to insult me?'

### 17.3.4 'Consent' (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 àbí: Since the complement generally denotes a possible future event, the complement is with ngó. In (xx1a), the subject of the complement is coindexed with that of the main clause. In (xx1b), the subjects are not coindexed and an overt subject pronoun appears in the complement.
(xx1)
a. ámbúrú [ìgǵ wá:-ŋggó] àb-ì:-só-m wà
chief [here come-xxx] accept-MP-Pfv2-LogoS Quot
'The chief said he agreed (consented) to come here.'
b. [úló mí óndú-ŋggó] àb-è:-lí- $\varnothing$
[house 1SgSbj build-xxx] accept-MP-PfvNeg-3SgSbj
'He didn't consent to (=refused) my building a house.

## 

The two 'want' quasi-verbs (§11.2.5.xxx) can take verbal noun complements. When the two clauses have coindexed subjects, no subject marking appears in the verbal noun complement (xxla-b). If the complement has a noncoindexed subject, it appears as a possessor on the verbal noun (xx1c).
(xx1)
a. [tól
tó:-lé]
m̀bá-
[pounding pound-VblN] begin-Pfv1b-3PlSbj
'They want to pound (grain in mortar).'
b. [bàmàḱ́ yáy-lé] nàmá- $\varnothing$
[B go-VblN] want-3SgSbj
'He/She wants to go to Bamako.'

Alternatively, the - $\eta g o ́$ complement for a different-subject combination (xx2a) or a samesubject néclause (xx2b) can be used.
(xx2)
a. [ǹgó bírá: mí bírá-ngó] m̀ má-è
[here work(n) 1 SgSbj work(v)-xxx] want-3PlSbj
'They want me to work here.'

17.3.6 'Forget' (ìré) with -ngó complement

In the construction 'forget to VP' with coindexed subject, the complement takes -ngó. This is of course distinct from a factive complement ('forget that...').
(xx1)
a.
[wã:-ngó] ìr-â:-y
[come-xxx] forget-Pfv1a-3SgSbj
'He/She forgot to come.'
b. โémné
ह́bá-ngó]
ìr-â:-dà
[B
go-xxx]
forget-Pfv1a-3P1Sbj
'They forgot to buy milk.'
c. $\varepsilon y^{n}$
wá:-ŋgó
írá-lì

```
tomorrow come-xxx forget-Prohib
```

'Don't-2Sg forget to come tomorrow!'

### 17.3.7 'Be afraid to/that' (ír-í) plus -ngó complement

The complement of 'be afraid' is with -ŋgó. If the subjects are coindexed there is no further subject marking in the complement (xx1a). If the subjects are not coindexed, the complement is extended by a minimal additional clause with nà: (xx1b). This future-oriented construction is distinct from the propositional complement in (xxlc), which takes the form of a regular main clause.
a. [ク̀ǵ́ wá:-ngó] îr-í:-yà-y
[here come-xxx] fear-MP-Pfv1a-3SgSbj
'He/She is afraid to come here.'
b. [[ñ́né-gì púngó-ŋgó] mí nà:] ír-í:-yà-y
[[3Sg-Acc hit-xxx] 1 SgSbj take] fear-MP-Pfv1a-3SgSbj
' $\mathrm{He}_{\mathrm{x}}$ is afraid that I may hit him $_{\mathrm{x}}$.'
c. [[èd dé wě:] bárm-í:-yà-y]
[[child 1SgPoss.AnSg] be.wounded-MP-Pfv1a-3SgSbj]
ír-í:-yà-m
fear-MP-Pfv1a-1SgSbj
'I'm afraid (=worried) that my child has been hurt.'

### 17.3.8 'Begin' (ts') plus verbal noun

The verb 'begin' is tó: In the perfective, the regular form is tó:-ti- (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 the verbal noun form with suffix -lé, see §4.2.2. The subjects of the two clauses are of course coindexed.
(xx1)

$$
\begin{array}{llll}
\text { a. } & \text { [tól } & \text { tó:-lé] } & \text { tó:-ty-à: } \\
& \text { [pounding } & \text { pound-VblN] } & \text { begin-Pfv1b-3PISbj } \\
& \text { 'They started pounding (grain in mortar).' }
\end{array}
$$

b. [yà-ŋggá yí-lé] twá:-lì

```
[weeping(n) weep-VblN] begin-Prohib
```

'Don't-2Sg start to weep!'

### 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 a NP object (as in 'I finished the work'). With a VP complement these verbs are pre-empted by the recent past construction with $d \grave{\varepsilon}(\S 10 . \mathrm{xxx})$.
17.3.10 'Cease' (dŋ̀g人) 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. [kj̀ndó
ní-lé] dògó-tì-m
[beer consume-VblN] leave-Pfv1b-1SgSbj
'I have stopped drinking beer.'
b. [ùlé: púngú-lé] dógà-n
[children hit-VblN] leave.Ipfv-Pl.Addr 'Stop-2Pl beating children!'
17.3.11 'Be worth' (bă:) with -ŋggó complement
bǎ: 'be worth, be equal to' can be a simple transitive in comparatives (§12.2.2). It can also take an -ŋgoo complement. The subject of bǎ: in the main clause is an impersonal 3 Sg . My assistant translates as il vaut la peine de (...). It may also be rendered in context as 'it would be a good idea to (...)'.
(xx1)
a. [bàmàkó ó-ŋgó] bà:-só- $\varnothing$
[B go-xxx] be.worth-Pfv2-3SgSbj
'It's worth going to Bamako.'
b. [[pèddè ${ }^{\mathrm{L}}$ ò-ḿ] dóná-ngó] bà:-lí- $\varnothing$
[[sheep ${ }^{\text {L }}$ Prox-AnSg] sell-xxx] be.worth-PfvNeg-3SgSbj
'It isn't worth selling this sheep.'
c. [mí-gì búndó-ŋgó] bà:-lí- $\varnothing$
[1Sg-Acc hit-xxx]be.worth-PfvNeg-3SgSbj
'It isn't worth hitting me.'

As noted in §12.2.2, bǎ: 'be worth' is not reliably distinguished from bǎ 'be enough' in my assistant's speech.

### 17.3.12 'Help' (bàrâ) with -クgó complement

Simple transitive bàrá 'add, increase' is also common in the sense 'help, assist ( sb , in an undertaking)'. The recipient of the add is the direct object of bàrá in the main clause.
(xx1)
a. [úló
óndú-ŋgó̄
mí-gì
${ }^{\mathrm{L}}$ bàrà
[house build-xxx] 1Sg-Acc ${ }^{\text {Lhelp.Imprt }}$
'(Please) help me build a house!'
b. [[bé: $\left.d i{ }^{\mathrm{L}} \quad n \varepsilon ́\right]$ wá:-ทgó]
[[wood carry.on.head ${ }^{\mathrm{L}}$ and.Nonpast.SS] come-xxx]
mí-gì bàrá=bì- $\varnothing$
1 Sg -Acc help=Past-3SgSbj
'He helped me to carry the wood (and come) here.'

### 17.4 Purposive, causal, and locative clauses

### 17.4.1 Purposive clause with -lé after $\{\mathrm{L}\}$-toned verb

In this construction, the verb of the purposive clause takes $\{\mathrm{L}\}$-toned form. The stem-final vowel shifts to /i/ where phonologically possible. The stem is followed by suffix -lé. If the consonantal environment permits, the stem-final /i/ is syncopated.

This is distinct tonally from the verbal noun with -lé following a $\{\mathrm{H}\}$-toned stem (§4.2.2).
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.
(xx1)
a. Lyó
tò:-lé]
wò:-só- $\varnothing$
[millet pound-Purp come-Pfv2-3SgSbj
'She has come in order to pound (the) millet.' (tó:)

> b. [[pèddè̀ ${ }^{\mathrm{L}}$ ゝ̌m] $\begin{aligned} & \text { èb-lé] wò:-só- } \varnothing 1\end{aligned}$
> [[sheep ${ }^{\mathrm{L}}$ Prox.AnSg] buy-Purp] come-Pfv2-3SgSbj
> ' $\mathrm{He} /$ She has come in order to buy this sheep.' ( $\varepsilon$ bé)
> c. [zá nì-lé] wò:-s-र̂:
> [meal consume-Purp] come-Pfv2-3P1Sbj
> 'They have come in order to eat.' ( $n \bar{\varepsilon}$ )
> d. [kòndó nì-lé] wò:-só-m
> [millet.beer consume-Purp] come-Pfv2-1SgSbj
> 'I have come in order to drink beer.' ( $n \hat{\varepsilon}$ )
> e. [èm-gó èm-lé] wò:-s-र̂:
> [chat-InanSg chat(v)-Purp] come-Pfv2-3P1Sbj
> 'They have come in order to chat.' (émé)
> xx 'I will go there to eat.'
> 'I am working so that my children will eat.'

### 17.4.2 Purposive clauses with - $\eta g o$

xx
'They came to gather and take away the trash.'
[nìmdé bà: nć] zó-ygó wò:-s-ŝ:
'He came to seek money to go (away).'
[bú:dù zò: né] ó-ŋgó wò:-só- $\varnothing$
'let's sit down to eat'
[ób-é: ǹ] zá já-môn
17.4.3 Clauses with Purposive postposition dùgò ‘for’

The participial clause with -ygó may be followed by the purposive postposition dùgò.
(xx1) [[[ámbírí bènè] óré: órá-pgó] dùgò]
[[[cchief chez] words.InanPl speak-Ipfv.Ppl.InanSg] Purp]
ẁ̀:-y
come.Pfv-1PlSbj
'We have come to speak with the chief.'
17.4.4 Causal ('because') clause (dùgò)

The purposive postposition dùgò also has causal ('because') functions. With clausal complements, the verb may be a main-clause imperfective (xx1a), an imperfective subordinated clause (xx1b), or a headless perfective relative (xx1c).
(xx1)
a. [[àrnáa mírnà-m-dò- $\varnothing] ~ d u ̀ g \grave{d] ~ n u ̀-m ~}$
[[rain(n) rain.fall-Ipfv-Ipfv-3SgSbj] because] go.in.Pfv-1SgSbj
'I went in because it was raining.'
b. [[ùlé: yàngá bú yá-m̀̀] dùg̀̀]
[[children weeping 3PISbj weep-Ipfv] because]
nù-m
go.in.Pfv-1SgSbj
c. [[ú bòn kárnà dùgò] nù-m
[[2SgSbjcall Pfv.Ppl] because] go.in.Pfv- 1 SgSbj
'I went in because you-Sg (had) called.'

## 18 Anaphora

### 18.1 Reflexive

The overt reflexives presented below compete with mediopassive verbs, e.g. sém-íi:-yà-m 'I was cut' or 'I cut myself'.

### 18.1.1 Reflexive object with kúgó 'head'

Reflexive objects of the form 'my/your/his/her head' were elicited from one informant. For third person, the 3Reflexive possessor form á-gá is used (xx1c), see §18.1.3 below.
(xx1)
$\begin{array}{lll}\text { a. } & \text { [kúgó } & \text { kǒ:] } \\ \text { [head } & \text { bùndò-m } \\ \text { 'I hit myself.' } & \end{array}$
b. [kúgá í-gè] bùndè-y ${ }^{n}$
[head 1Pl-Poss.InanSg] hit.Pfv-1PlSbj
'We hit ourselves.'
c. [kúgó á-gá] bùndè- $\varnothing$
[head 3Refl-Poss.InanSg] hit.Pfv-3SgSbj
'He/She hit himself/herself.'
d. [kúgó ú-wò] búndó
[head 2Sg-Poss.InanSg] hit.Imprt
'Hit yourself!'

My primary 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. púpg-í:-yà-m 'I was hit' or 'I hit myself.' However, he did allow 'head' reflexives in abstract contexts (xx2).

| (xx2) | [kúgó | ú-ẁ̀ | zúgá |
| :---: | :---: | :---: | :---: |
|  | [head | 2 Sg -P | know.Imprt |
|  | 'Know thyself!' |  |  |

### 18.1.2 Reflexive PP complement

The same construction with 'head' can be used as a postpositional complement. Examples are difficult to elicit but (xx 1a-b) seem to work
(xx1) a. bú:dù [[kúgá kǒ:] bèr n̄̀̀] tì-m
money [[head 1SgPoss.InanSg]Dat] send.Pfv-1SgSbj
'I sent money to myself.'
b. bư:dù [[kúgá á-gá] bèr $\left.{ }^{n} \dot{\varepsilon}\right]$ tì- $\varnothing$
money [[head 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 possessors are not distinguished in this category ( $\mathrm{xx} 1 \mathrm{~b}, \mathrm{~d}$ ), which also extends to logophorics. If the possessed noun is animate plural, the form is $d$ (xx1c). The antecedent is normally the clausemate subject. (xx1a) shows nonreflexive 3 Sg possessor since it is not coindexed to the subject.
(xx1)

|  | [pédé <br> [sheep | wè-ń $]$ <br> Poss.AnS | -3SgPoss] | $z \varepsilon ̌$ :-tù-m <br> bring-Pfv1b-1SgSbj |
| :---: | :---: | :---: | :---: | :---: |
| 'I brought his/her sheep-Sg.' |  |  |  |  |
|  | [péddè <br> [sheep | á-gá <br> 3Refl-Po | s.AnSg] | $z \check{c}:-t i=\varnothing$ <br> bring-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$ |
| 'He brought his (own) sheep-Sg.' |  |  |  |  |
|  | [pédú-mbò <br> [sheep-AnPl |  | bj <br> oss.AnPl] | $z \varepsilon ̌:-t i=-\varnothing$ <br> bring-Pfv $1 \mathrm{~b}-3 \mathrm{SgSbj}$ |
| 'He brought his (own) sheep-Pl.' |  |  |  |  |
| d. | ùlé:-mbò <br> child-AnPl | [péddè <br> [sheep | á-gá] <br> 3Refl-Pos | $\begin{array}{ll}  & z \varepsilon ̌:-t i ̀-y a ̀ ~ \\ \text { s.AnSg] } & \text { bring-Pfv } 1 \mathrm{~b}-3 \mathrm{PlSbj} \end{array}$ |
| 'The children brought their (own) sheep-Sg.' |  |  |  |  |

With an inalienably possessed noun, the 3 Reflexive form is preposed $\mathfrak{a}(\$ 6.2 .2 .2)$.
a. [á
${ }^{\text {L }}$ bà]
yì-ś́- $\varnothing$
[3ReflP ${ }^{\mathrm{L}}$ father] see-Pfv2-3SgSbj
'He has seen his (own) father.'
b. ùlé:
[á ${ }^{\text {L }}$ bà $]$
$y \grave{\text { ìs-é }}$
children [3ReflP ${ }^{\mathrm{L}}$ father] see-Pfv2-3P1Sbj
'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 Y ]. If X is a third person referent, the regular nonanaphoric third person pronominal possessor forms are used. In ( xx 1 ), therefore, it is indeterminate whether the 'his' in 'his father' is coindexed with Amadou

```
(xx1) [ámàdù.: bà-ní::] yá-yà-dà
    [A.& father-3SgPoss.&] go-Pfv1a-3PlSbj
```

'Amadou ${ }_{x}$ and his $_{x / y}$ father have gone.'

### 18.2 Emphatic pronouns

No special series of pronouns similar to English emphatic myself (as in I did it myself) was observed. Instead, combinations of independent pronouns with sày 'only', and simple focalization constructions, were produced.

### 18.3 Logophoric and indexing pronouns

### 18.3.1 Logophoric subject (-m)

When the logophoric is subject of its clause, it is expressed not by a clause-initial logophoric pronoun, rather by the suffix $-m$ on the verb or other predicate. This is identical in form (including all details of allomorphy) to the 1 Sg suffix $-m$ used in nonquotative contexts. However, in this logophoric function it is can have a plural as well as singular antecedent, and for any pronominal person in the current speech setting. Note the multiple free translations of (xx1a-b). A clause-initial third-person logophoric pronoun can be added, provided that the referent is neither the current speaker nor current addressee (xx1b).
(xx1)
a. [ú gì] pùngò-lú-m wà
$[2 \mathrm{Sg} \quad$ Acc] beat-PfvNeg-LogoS say
'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.'
b. (á gà) yé ${ }^{\mathrm{L}}$ Wà:-m-nù-m wà
(Logo Topic) Exist ${ }^{\mathrm{L}}$ come-Ipfv-LogoS say
'They ${ }_{x}$ say/said that, as for them, they $y_{x}$ are/were coming.'
'He/she ${ }_{x}$ says/said that, as for him/her ${ }_{x}$, he/she ${ }_{x}$ is/was coming.'

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 2 Sg or 2 Pl form.
(xx2)
a. [Wá:-ı̀̀-nù-ḿ jìnì gín] wà:-lú-W ${ }^{n}$
[come-Ipfv-LogoS say after] come-PfvNeg-2SgSbj
'You-Sg said that you were coming, (but) you didn't come.'
b. [bí wá:-m̀̀-nù-ḿn jìnì gín] wà:-lí-y ${ }^{n}$
[2P1Sbj come-Ipfv-LogoS say after] come-PfvNeg-2P1Sbj
'You-Pl said that you were coming, (but) you didn't come.'

The quoted person(s) may also be (or include) the current speaker. Again, the quoted clause has invariant $-m$ suffix. The optional clause-initial subject pronoun is for 1 Sg or 1 Pl as applicable.
(xx3)
$\begin{array}{lll}\text { a. wá:-ı̀̀-nù-ńn } & \text { jìn-dí-m } \\ \text { come-Ipfv-LogoS } & \text { say-PfvNeg-1 } \mathrm{SgSbj} \\ & \text { 'I didn't say that I would come.' }\end{array}$
b. (í)
(1P1Sbj) come-Ipfv-LogoS
jìn-dí- $y^{n}$
'We didn't say that we would come.'

### 18.3.2 Nonsubject logophoric (á)

In nonsubject position, the logophoric pronoun is á. The difference between logophoric and nonlogophoric third person pronouns is brought out in the jussive examples (xxla-c). In (xxla-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 (xx1c), the recipient is coindexed with the quoted speaker or speakers. There is no singular-plural distinction in this case.
(xx1)
a. [ñ́né
gì bú:dù ñ́dí
wà
[3Sg Acc] money give.Hort Quot '(He) says to give money to her.'
b. [bú gì] bú:dù ńdí wà [3Sg Acc] money give.Hort Quot '(He) says to give money to them.'
c. [á gì] bû:dù ńdí wà
[Logo Acc] money give.Hort Quot
' $\mathrm{He}_{\mathrm{x}}$ ) says to give money to him(self) $\mathrm{x}_{\mathrm{x}}$.' or: '( They $_{\mathrm{x}}$ ) say to give money to them(selves) $)_{\mathrm{x}}$.'

Logophoric á can be the object as in (xx1c) above, with optional accusative marking. It can also be topic, possessor, or postpositional complement (xx2a-c).
(xx2)
a. [á
gà] f́gò bé-m-nù-ń
wà
[Logo Topic] over.there stay-Ipfv-Ipfv-LogoS Quot
${ }^{\prime} \mathrm{He}_{\mathrm{x}}$ says that as for him $_{\mathrm{x}}$, he $\mathrm{he}_{\mathrm{x}}$ will stay there.

c. [mí wà $\rightarrow$ ] zá [á bènè] nè wà
[1Sg QuotS meal [3Logo chez] eat.Pfv Quot '( $\mathrm{He}_{\mathrm{x}}$ ) says that I ate at his place (chez lui).'

Textual examples of logophoric á overwhelmingly involve third person quoted speakers, like 'he' in (xx3a) and in the preceding examples. My informant rejected logophoric á in selfquotations, so in (xx3b) 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 (xx3c-d). He did not extend this use of á to possessors or to postpositional complements. Therefore 'your father' is nonlogophoric in (xx3d-f), and 'with you' is nonlogophoric in (xx3e). In other words, second person is intermediate between third and first persons in allowing logophoric forms.
（xx3）

＇Why did（hex）say that we hit hime ${ }^{\text {？}}$＇
b．［［úu wá $\rightarrow$ mí púngó＝bì］jìn－dì－ń
［［2Sg QuotS］ 1 SgO hit＝Past］say－PfvNeg－1SgSbj
＇I didn＇t say that you－Sg hit me．＇
c．［ìnjé dùg̀̀］［［í wá $\rightarrow$ ］
［what？Purp］［［1Pl QuotS］

［Logo Acc］hit．Pfv］say．Pfv－2SgSbj Q
＇Why did you－Sg say that we hit you－Sg？＇
d．［injjé dùg̀̀］［［ú ${ }^{\mathrm{L}}$ bà ］wà $\rightarrow$ ］
［what？Purp］［［2SgPoss ${ }^{\text {L }}$ father］ QuotS］
［á gì］púngò jìnù－̀̀ ${ }^{n}$ mà
［Logo Acc］hit．Pfv］say．Pfv－2SgSbj Q
＇Why did you－Sg say that your father hit you？＇
e．［ìnjé dùgò］［［ú ${ }^{\mathrm{L}}$ bà ］wà $\rightarrow$ ］óré：
［what？Purp］［［2SgPoss ${ }^{\mathrm{L}}$ father］QuotS］
［úl ní：］j̀rì jìnù－⿰亻弋 ${ }^{n}$ mà
［2Sg with］speak．Pfv］say．Pfv－2SgSbj Q
＇Why did you－Sg say that your father spoke with you？＇
f．［ìnjé dùgò］［［［［ú ${ }^{\mathrm{L}}$ bà］gì］
［what？Purp］［［［2SgPoss ${ }^{\mathrm{L}}$ father］Acc］
púngò－m］jìnù－刘 ${ }^{n}$ mà
hit．Pfv－LogoS］say．Pfv－2SgSbj Q
＇Why did you－Sg say that you hit your father？＇

### 18.3.3 Logophorics in stacked quotations

In ( xx 1 ) there is just one quotation, with Amadou as author. The verb in the quoted clause has the usual logophoric subject suffix -m. In (xx1b), 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 (xx1c) 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 (xx1d).
(xx1) a. ámádù $\quad a \rightarrow \quad$ [sé:dù gī] já-m̀-nù-ḿ
Amadou Logo.QuotS [Seydou Acc] kill-Ipfv-Ipfv-LogoS
jìnì- $\varnothing$
say.Pfv-3SgSbj
'Amadou said that he would kill Seydou.'
b. ámádù

Amadou
[sé:dù wà $\rightarrow$ ]
[Seydou QuotS
[[áa $\quad$ gì] $\quad j a ́-m \grave{n}-n u ̀-m \bar{m}]$
[[Logo Acc] kill-Ipfv-Ipfv-LogoS]
jìn- $\varnothing]$
say.Pfv-3SgSbj]
wà
Quot
'Amadoux said that Seydouy said that he ${ }_{y}$ would kill him $_{x}$.'
c. ámádù

Amadou
[dògòtóró wá $\rightarrow$ ]
[doctor QuotS]
tíbà-m-dj̀- $\varnothing$
die-Ipfv-Ipfv-3SgSbj
jìn- $\varnothing]$
say.Pfv-3SgSbj]
wà
Quot
'Amadou ${ }_{x}$ said that the doctor said that he $e_{x}$ would die.'
d. ámádù

Amadou
[dòg̀̀tórś wá $\rightarrow$ ]
[doctor QuotS]
tíbà-m-nù-ḿ
die-Ipfv-Ipfv-LogoS
jìn- $\varnothing]$
say.Pfv-3SgSbj]
wà
Quot
'Amadou said that the doctory said that hey 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 the case in TU, where the regular 3Sg or 3Pl subject pronoun is used in this case. An example is ( x 1 1).

' $\mathrm{He}_{\mathrm{x}}$ saw (or: found) the sheep-Sg that he $\mathrm{e}_{\mathrm{x}}$ had bought.'

### 18.4 Reciprocal

### 18.4.1 Simple reciprocals (tèmbj̀)

Reciprocals require a referentially nonsingular subject that is raggedly coindexed with a direct object, a postpositional complement, or the possessor of a nonsubject NP within the same clause. The Reciprocal morpheme is tèmbj̀, probably derived from an original plural noun meaning 'companions' or the like (cf. Jamsay toj̀-m, Najamba tòmbo). tèmbj̀ is preceded by a pronoun in (xx1a-b). For third person, the pronoun takes the 3Reflexive form á (xx1b).
(xx1) a. í tèmbò púngó-tì-y $y^{n}$
1PISbj each.other beat-Pfv1b-1PISbj
'We hit each other.'
b. ùlé: [zèjì ${ }^{\mathrm{L}} \quad$ gíní]
children $\quad\left[\right.$ fight $(v)^{\mathrm{L}} \quad$ after]
[á tèmbò púngó-tì-yà
[3Refl each.other beat-Pfv1b-3PISbj
'The children squabbled and hit each other.'
c. [dógó-mbò: púlá-mbò:]
[Dogon-AnPl.\& Fulbe-AnPl.\&]
[á tèmbò pá:má-ng-è:]
[3Refl each.other understand-Ipfv-3P1Sbj]
'Dogon and Fulbe do not understand each other (=do not get along).'

### 18.4.2 'Together’ (kàbü)

As an alternative to a construction with the verb mò:nd-í: 'assemble, get together', one can express adverbial 'together' with an inalienably possessed form of kàbù, which has $\{\mathrm{L}\}$ tones.
(xx1)
a. $[i$
kàbù]
nú-mó-ì
[1PIPoss together] go.in-Hort-Pl.Addr
'Let's go in together!'
b. [á kàbù] nú-yà-dà
[3ReflP together] go.in-Pfv1a-3PISbj
'They went in together.'
á kàbù is used for human and animate third persons. For inanimates the form elicited was yí$k a ̀ ~ p u ́ \rightarrow$, containing $p u ́ \rightarrow$ 'all’. The 2 Pl form is bí kàbù ‘you together'.

## 19 Grammatical pragmatics

### 19.1 Topic

19.1.1 Topic (kònì, gày~gà~kày~kà)

The particles kònì and gày $\sim$ gà $\sim$ kày $\sim$ kà are interchangeable as Topic morphemes. The topicalized constituent is preposed to the clause and may be set off prosodically. kònì is said to be used by old persons, while younger speakers have switched to the regionally widespread gày and variants.
(xx1)
a. [mí kònì] wá:-ŋù̀-m
[1Sg Topic] come-IpfvNeg-1SgSbj
'As for me, I'm not coming.'
b. [á gà] wá:-ŋù-m wà
[Logo Topic] come-IpfvNeg-LogoS say
'He/she ${ }_{x}$ says/said: as for him/her ${ }_{x}$, he/she ${ }_{x}$ would/will not come.'

Topic phrases are often set off prosodically and can be considered preclausal, like English as for $X$. However, a topic phrase can occasionally be case-marked as accusative, suggesting that it can function as a constituent within the clause.

| (xx2) | [mí-gì | kày] | cìkámá | ${ }^{\text {L }}$ ǹdà-1- $\varnothing$ |
| :---: | :---: | :---: | :---: | :---: |
|  | [1Sg-Acc | Top] | thing-any | ${ }^{\text {L }}$ give-PfvNeg-3SgSbj |
|  | 'Me[topic | e didn | ve anythin |  |

### 19.1.2 'Now' as topic (ná:)

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. 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.

### 19.1.3 'Also' and 'even' (là)

This particle occurs phrase-finally, after a NP or adverbial. It is not attested after a verb or other predicate, but it can be added to a cognate nominal or other paired nominal to express the intended sense. The basic function is unemphatic 'also' but it is also used emphatically in the sense 'even'.
(xx1)
a.
$\begin{array}{lll}{\left[\varepsilon ́ y^{n}\right.} & \text { là }] & \text { ògú } \\ \text { [tomorrow } & \text { too] } & \text { Prox-InanSg }\end{array}$
${ }^{\mathrm{L}}$ nà $-m-n \grave{\varepsilon}-y^{n}$
'Tomorrow too I will eat this.'
b. [mí ${ }^{\mathrm{HL}}$ ángè $]$ bàmàḱ́ ${ }^{\mathrm{L}} \grave{j}-\grave{m}-d \grave{j}$,
[1SgPoss ${ }^{H L}$ friend] Bamako ${ }^{\mathrm{L}}$ go-Ipfv- 3 SgSbj
[mí là] ${ }^{\text {L }}$ ò-m-nù-ḿ
[1Sg also] go-Ipfv-Ipfv-1SgSbj
'My friend is going to Bamako, and I'm going (there) too!'
c. ńneé-gì ndì-Ẃ dè [mí-gì là] ńdá

3 Sg -Acc give.Pfv-2SgSbj if, [1Sg-Acc also] give.Imprt
'If you give (some) to him/her, give (some) to me too!'

### 19.2 Preclausal discourse markers

### 19.2.1 ‘Well, ...' (hàyà)

Preclausally, hàyà ~hà: is a hesitation expression similar to 'well, ...' This is a regionally widespread form.

With H-tones, háyá kòy means 'OK, all right'. It is used for example as a positive response to a request or imperative.

### 19.2.2 Preverbal emphatic particle (p $\quad$ y $\rightarrow$ '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.
(xx1)
a. ámádù $\quad p \varepsilon ́ y \rightarrow \quad m i ́-g i ̀ ~{ }^{\mathrm{L}}$ rìdà $-\mathrm{l}-\varnothing$
Amadou at.all 1 Sg-Acc ${ }^{\mathrm{L}}$ give-PfvNeg-3SgSbj
'Amadou didn't give me a damn thing.'

b. yéngì $\quad p \varepsilon ́ y \rightarrow$ zá ${ }^{\mathrm{L}}$ дà-lù-m yesterday at.all meal eat-PfvNeg- 1 SgSbj
'Yesterday I didn't eat a thing.'
[also yéngì zá péy $\rightarrow{ }^{\mathrm{L}}$ nà-lù-m, péy $\rightarrow$ yéngì zá ${ }^{\mathrm{L}}$ nà-lù-m]
c. pźy $\rightarrow$ bàrà-lí- $\varnothing$
at.all help-PfvNeg-3SgSbj
' $\mathrm{He} /$ She didn't help me at all.'

For nàndùr-gó, which has partially overlapping functions, see §6.6.3.

### 19.2.3 'But ...' (mè:, kà̀:)

'But' is either mè: (< French mais) or the regionally widespread kà:. In both cases, the particle may be grouped prosodically either clause-initially or at the end of the preceding clause. The latter seems to be preferred when the entire sequence is uttered fluently.
(xx1) $\quad w o ̌:=b i ̀-\varnothing \quad m e ̀: / k a ̀: ; ~ z a ́ ~ n a ̆-l-\varnothing ~$
come=Past-3SgSbjbut / but, meal eat.meal-PfvNeg-3SgSbj
'He/She came but did not eat.'

### 19.2.4 'Lo, ...‘ (zákà)

This particle is used in narrative to highlight a following clause denoting a surprising or climactic event. This too is a widespread regional form (pronounced jákà or jágà in some other languages).

### 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:, most often combined with là 'too' (yâ: là).
'VP again’ can be expressed with a same-subject anterior subordinated form (gín for past time frame, né for future) of the verb píndé 'go/come back, return'.
'They fought again.'
$\left.\begin{array}{llll}\text { b. } & \text { [pìndè } & \text { né] } & \text { [zèjé-l }\end{array}\right]$ sèndèn]

## 19.4 'Only' particles

### 19.4.1 'Only' (sày, tùrù)

There are two 'only' particles, sày and tùrù. The former is a locally widespread form also found in Jamsay. tùrù is probably a variant of the numeral ' 1 ' (túrè.; tứr-gj̀), see §4.6.1.1. As generally in Dogon languages, 'only' particles are phrased with NPs (including pronouns and adverbs) rather than with predicates. 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, as in (xx1).

| (xx1) | jìrè-níngé | tùrù $/$ sày | nî:-m-dı̀ |
| :--- | :--- | :--- | :--- |
|  | sleep(n) | only | sleep(v)-Ipfv-3SgSbj |
|  | 'He just sleeps.' |  |  |

Another way to express 'only' is with a negated main clause plus an 'if it is not ...' clause specifying the exception.

```
(xx1)
    [zìné=là:-\varnothing dè] bírá: bírá-\etayì- }\mp@subsup{y}{}{n
    [rainy.season=it.is.not-3SgSbj if] work(n) work-IpfvNeg-1PISbj
    'We don't work unless it's the rainy season.'
    (= 'We only work in the rainy season.')
```


### 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) while the particle follows; see (xx2) in §17.1.3.1.

### 19.5.1 Clause-final kòy 'sure' (firm agreement or answer)

The regionally widespread clause-final particle kòy emphasizes the truth of the proposition, confirming what the interlocutor has said or answering a polar interrogative with an answer more or less expected by the interlocutor. English adverbial sure captures the pragmatic nuance.
(xx1)

| A: [bí | gènè] |  |  |
| :---: | :---: | :---: | :---: |
| [2P1 | chez] | rain(n) | rain.fall=Past-3SgSbj |

$\mathrm{B}: \quad e \rightarrow, \quad m i ̀ n \varepsilon ́=b i ̀-\varnothing$
kòy yes, rain.fall=Past- $3 \mathrm{SgSbj} \quad$ Emph
A: 'Did it rain over by you-Pl?'
B: 'Yes, it sure did (rain)!'

### 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.

| (xx1) | [gùnù-mbó | ní:] | hákílè | kán | dè |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[$ thief-AnPl | with] | attention | do.Imprt | Emph |
|  | 'Watch out-2Sg for thieves now!' |  |  |  |  |

### 19.6 Greetings

The noun 'greeting, salutation' is pǒ: . The transitive verb 'greet (sb)' is pór. The two occur in the collocation pǒ: pór 'say/give a greeting'.

The basic time-of-day greetings are in (xx1). The 'good morning' and 'good evening' greetings contain an element mò $y^{n} \sim m \hat{o}^{n}$ that is not recorded elsewhere. ná: is presumably related to $n$ á 'spend the night (somewhere)', and $d_{e} r^{n} \dot{\varepsilon}$ is similarly related to dèr ${ }^{n} \dot{\varepsilon}$ '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 $\hat{o} \rightarrow$, often with considerable intonational prolongation.
(xx1) A: ná: mòy ${ }^{n}$ 'good morning!’ (to one or more people)
$\mathrm{B}: \hat{o} \rightarrow \quad$ [reply]

A: $p \check{o} \rightarrow \dot{y} \quad$ 'hello!' (e.g. during the day)
$\mathrm{B}: \hat{o} \rightarrow \quad$ reply]

A: dèr ${ }^{n e}$ è môy ${ }^{n} \quad$ 'good evening!'
$\mathrm{B}: \hat{o} \rightarrow \quad$ [reply]

In complete greeting sequences some additional elements may occur. Those I have heard are borrowed from Jamsay.

Some location- (rather than time-) specific greetings are in (xx2). Those in (xx2a) 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 wòlé:, so in this case there is an unexplained change in its form in the greeting. The cases in ( $\mathrm{x} 2 \mathrm{2b}$ ) are of the form 'you and X ', where $:$ : (dying-quail intonation) applies to both conjuncts.
(xx2)
a. ǒl pò:
'hello in the field!'
$\varepsilon ́ b \varepsilon ́ p o ̌ \rightarrow \grave{y} \quad$ 'hello in the market!'
tibà: pǒ: 'condolences!' ("death greeting!")
b. ú.: bírá.: 'hello at work!'
ú.: ày-né: ‘hello with fatigue!'

Some additional greetings are in (xx3).
(xx3)
a. úló dènd-é: 'approach the house!' (welcome to a visitor)
ámbá ú zérè 'God brought you (back)!' (to a returning traveler)
zám dènd-é: 'arrive (there) in peace!' (to a departing traveler)
b. ámbá bá-gò-né gìré tá:rè

God next.year eye show
'May God show next year to (your) eyes!' (said on major holidays)

Formal Arabic greetings connected with Islam are also in use.

## 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. Texts 2015-01 to -06 are more substantial two-speaker texts from a recording session conducted on market day in nearby Mori in August 2015. Some of the 2015 texts are presented here, others await transcription. In the 2015 texts, $\mathrm{A}=$ Mamoudou Guindo, B = Oumar Guindo. The 2012 texts are organized into numbered segments as in the grammar. Each 2015 text is divided into segments labeled by the starting time (minutes and seconds) in the relevant recording.

## Text 2012-01 Cows


'The cows go 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), and they draw the milk.'

## Text 2012-02 Cotton

| (xx1) | yà-p wom | bó <br> old-AnP | mó:ndú-ǵ meeting-InanSg | mò:ndì-y-à: <br> assemble-MP-xxx |
| :---: | :---: | :---: | :---: | :---: |
|  | cèmdé | pédà- |  |  |
|  | cotton | $\mathrm{gin}(\mathrm{v})$ | pfv-Ipfv-3PlSbj, |  |
|  | cèmdé | pédé | $d \text {-à: }$ dé, |  |
|  | cotton | $\operatorname{gin}(\mathrm{v})$ | RecPrf-3PISbj if, |  |
|  | pàndé |  | dù̀m-dè, |  |

thick.thread make.thick.thread-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).'

| (xx2) | pàndé | pàndù | $d$-à: |
| :---: | :---: | :---: | :---: |
| thick.thread | make.thick.thread | RecPrf-3P1Sbj if, |  |

'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.'

```
(xx3) غ̀dé téyà-m-dò,
    cloth weave-Ipfv-3SgSbj,
èdह́ té dè- \(\varnothing \quad d e ̀\),
cloth weave RecPrf-3SgSbj if,
غ̀dé dóná-ŋggô=:
cloth sell-Nom=it.is
```

'He will weave it. When he has finished weaving the cloth, the cloth is for sale.'
animals: zòmó-mbò, ámbárá-mbò tá:-mbò, céyúmbó, óy-mbò, tólù-mbò, ómó:mbò, cé:

## Text 2012-03 Hare and Hyena

[this version incomplete]
(xx1) zòmô-: tă:-:
hare-\& hyena-\&
[ándá dàndá mábú] wá,
[field hunt go.QuotHort] Quot,
Hare and hyena. (Hare said) "let's go hunting."
(xx2) dàndá yày-gín,
hunt(n) go-and.DS,

| tǎ: | [sàlgí | ibè̀-m] | wà, |  |
| :--- | :--- | :--- | :--- | :--- |
| hyena | [ablution | take-QuotHort] |  | Quot, |

'They went hunting, then hyena said: "let's do our ablutions (for prayer)." Hare said he would not do ablutions. Hyena said he would do (them).'
[ínjé nè] tómbó-gín nwì,
[water Loc] jump-then go.in.Pfv-3SgSbj,
gò-gín [dwǎ-1 kàn-dí-Ø dé]
go.out-then [arrive-PfvNeg do-PfvNeg-3SgSbj if]
[lábà-1 kàn-dì- Ø],
[pass-PfvNeg do-PfvNeg-3SgSbj],
(Fulfulde: búrà:y fánkà:y wà)
'(Hyena) jumped into the water (of a pond). When he came out, if it wasn't not enough, it wasn't not too much.'
[Hyena didn't carefully perform ablutions on his hands, feet, and face as usual in Muslim prayer. Instead, he jumped in the water so his entire body was wet.]
(xx4) ná: kày,
now Topic,
[[cìndé: nè] óbí-y-gín] [bàrí bàrà-gín]
[[shade Loc] sit-MP-then] [meeting hold.meeting-then]
Éy ${ }^{n}$ ségírá-m wà,
tomorrow meet-Hort Quot,
'Now they (animals) sat down in the shade and held a meeting.'

## Text 2012-04 My trip


[[ùlò-sùgó Wě:] bànà] sé:W tèmbù-m
[[house-go.down 1SgPoss] owner] in.health find.Pfv- 1 SgSbj
'I left my village and went on the road to another village. I arrived safely. I found the people there in good health. I found my host in good health.

## Text 2012-05 Wooden spoon

| [kilá kù:wè:rù] lábá-Sú-ngô=: <br> [prosopis spoon] carve-Pfv2-Pass |  |  |
| :---: | :---: | :---: |
| [ ${ }^{\text {ne }}$ | [hákílé | $w \check{:}$ :] yì-Sí-m-غ̀:] |
| [[person | [mind | $1 \mathrm{SgPoss} . \mathrm{AnSg}]$ see-Pfv2-Ipfv-Ppl.AnSg] |
| ńdà-m-nù-m] |  | jìnì-gín] zè:-m |
| give-Ipfv-Ipfv- | LogoS] | say-then] bring.Pfv-1 SgSbj |
| 'A spoon of prosopis (wood) was carved. I b someone whom my mind sees (=whom I like).' |  |  |

## Text 2012-06 Snakebit


'As I was going along in the village, a snake hissed at me. I intended to pick up a stick, (but) it bit me. I went home and applied a remedy (powder). Nothing else happened to me, it healed right there.'
[1Pl equivalent: [bé: nà:-m-nè- $\left.y^{n}\right]$ í jìn kár ${ }^{n}$ à]

## Text 2015-01 Tales (duration 06:54)

(Only the initial greeting sequence has been transcribed to date)

```
(00:05) B: mà:mùdí bí séó bì-yn
    \(\mathrm{M} \quad 2 \mathrm{Pl}\) wellbeing be-2PlSbj
    A: séó bì-y \({ }^{n}\)
    wellbeing be-1PlSbj
    \(\mathrm{B}: ~ \grave{\text { ìgè-mbj̀ }} \quad\) séó \(\quad b-\varepsilon\) :
    1Pl-Poss-AnPl wellbeing be-3P1Sbj
    A: bá:sù ìgó- \(\varnothing\)
    trouble not.be-3SgSbj
    B: tà:ré
    okay
    A: séó bì-y \({ }^{n}\)
    wellbeing be-1P1Sbj
    B : séó bì-y \({ }^{n}\)
    wellbeing be-1P1Sbj
(00:10) A: [dámbá í-gè] séó bù- \(\varnothing\)
    [village 1Pl-Poss.InanSg] wellbeing be-3SgSbj
    B : tà:ré
        okay
    A: bá:sù ì góó- \(\varnothing\)
    trouble not.be-3SgSbj
\begin{tabular}{lll}
\(\mathrm{B}:\) & kórójù & séó
\end{tabular}\(\quad\) bù- \(\varnothing\) family \(\quad\) wellbeing \(\quad\) be-3SgSbj
A: bá:sù ŋ̀gó- \(\varnothing\)
        trouble not.be-3SgSbj
B: yà:wúr
greeting
```


## Text 2015-02 Tales (duration 08:25)


[today too] DiscDef bring-Ipfv-Ipfv-1SgSbj,
A: 'Today, now, hyena and hare, I will bring (the tale of) that today.
[NP conjunction, §7.1.1]
(00:17)


A: 'Hyena and hare. The two of them went. They went. They gathered up their gear and went to the field.'
[
(00:28)

| $\begin{aligned} \text { A: ándà } & b u ́ \\ \text { field } & 3 \text { PlSbj }\end{aligned}$ | $\begin{aligned} & b u ̀-m=b-a ̀: \\ & \text { be-Ipfv=Past-3P1Sbj, } \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| [yàrà-ùlé;, [lion-children, | bú <br> 3PlSbj | $\begin{aligned} & b u ́-\grave{m}] \\ & \text { be-Ipfv] } \end{aligned}$ | témb-à: <br> encounter.Pfv-3P1Sbj | wà, <br> Quot, |
| B : yàrà-ùlé: |  |  |  |  |
| lion-children |  |  |  |  |
| A: ê: |  |  |  |  |
| yes |  |  |  |  |

A: 'They were in the field(s). They found that some lion cubs were there.'
B: 'Lion cubs.'
A: 'Yes.'
[
(00:32) A: [yàrà-wùlé: bú bú-m̀] yày témbí gín,
[lion-children 3P1Sbj be-Ipfv] go encounter Ant.Past.SS,
yàrà-wùlé: jà: gín,
lion-children take Ant.Past.SS,
[á lèy] [bèndé nè] tún gín,
[3Refl two] [shoulderbag Loc] put.in Ant.Past.SS,
[cèndè né] jèl-iyà-ḿn wà,
[hide.away Ant.Fut.SS] hold-MP-Hort 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.",
[jèl-iyà-ḿ wà, quoted form of hortative jèl-iyà-mó]
(00:39)


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-1-Ø nné bú-m̀̀ (unclear on tape due to noise)
(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."
[
(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]
[[DiscDef Inst] say Ant.Past.SS]
[tă: wé] tíb-à:-y wà,
[hyena Poss.AnSg] die-Pfv1a-3SgSbj Quot,
zòmó móndú-gó [kú ní:] mándì- $\varnothing ~ q u o i, ~$
hare laughter [DiscDef Inst] laugh(v).Pfv-3SgSbj Emph,
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.'
[French clause-final quoi]
(00:58) A: zòmó, ńné màndì kárnà, ...
hare, $\quad 3 \mathrm{SgSbj}$ laugh(v).Pfv Pfv.Ppl,...
$\mathrm{B}:$ zòmó màndì kár${ }^{n a ̀}$
hare laugh(v).Pfv Pfv.Ppl
A ê:, zòmó ńné màndì kár$n a ̀$,
yes, hare 3 SgSbj laugh(v).Pfv Pfv.Ppl,
A: 'Hare, when he laughed, ...
B: 'Hare laughed?'
A: 'Yes. When hare laughed, ...'
[
(01:02)

| A: á-gì | mándì-m-d-¢ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Logo-Acc | laugh(v)-Ipfv-Ipfv-3P1Sbj |  |  |  |
| [wùlé: | á-gá-mb̀j] | $j \grave{\varepsilon}$ | tí | gín, |
| [children | Logo-Poss-AnPl] | kill | Pfv1b | Ant.Past.SS, |
| á-gì | $10 ¢ g$-à:-y |  | jìn | gín |
| Logo-Acc | be.excessive-Pfv1 | 3 SgSbj | say | Ant.Past.SS, |
| [[mòndù-m | àndé ì] | à-ḿ | $m a ̀ m$ | nné |
| [[laughter- | augh.Agent Def] | who? | Q] | 3 Sg |

A: 'lion said: "they are laughing at me. They killed my cubs, it's too much for me. Who is the one laughing?",
[
(01:06) A: zòmó, wî:, dúgúrú nné-gì jě-tì- $\varnothing \quad$ wà,
hare, oh!, grief 3Sg-Acc kill-Pfv1b-3SgSbj Quot,
[nè ${ }^{\mathrm{L}}$ mòndù-màndé] ódírá-ŋgó
[person ${ }^{\mathrm{L}}$ laughter-laugh.Agent] inquire-Nom
bà:-só- $\varnothing \quad$ 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 one laughing?",
[
(01:12) A: ìní jèrú jìn- $\varnothing$,

| tooth | look.at.Imprt | say.Pfv-3SgSbj, |  |
| :---: | :---: | :---: | :---: |
| [ [tǎ: | wè] | jèrí] | jìn- $\varnothing$, |
| [[hyena | Poss.InanPl] | look.at.Imprt] | say.Pfv-3SgSbj |
| nné-gì | tă: | dìmbà- $\varnothing$ | gìn, |
| 3Sg-Acc | hyena | follow.Stat-3SgSbj | say |

A: '(Hare) said, 'look at (our) 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]
(01:16) A: [tǎ: dày ${ }^{n \mathrm{~L}}$ ńné bú-ŋggò]
[hyena manner ${ }^{\mathrm{L}} \quad 3 \mathrm{SgSbj}$ be-Ppl]
yá-ŋgò: $\quad$ mà $\rightarrow \quad$ wà,
see-IpfvNeg-3SgSbj Q Quot,
àmâ:n dày ${ }^{n \mathrm{~L}}$ ńné bú-ŋgò,
so-and-so manner ${ }^{\mathrm{L}} 3 \mathrm{SgSbj}$ be-Ppl
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]
(01:17) A: [tǎ: mà $\rightarrow$ ] [ńné: $=\varnothing$ nà] [á=lá wà dè],
$\left[\begin{array}{ll}h y y e n a & \mathrm{Q}] \quad[3 \mathrm{Sg}=\mathrm{it} .1 \mathrm{~s} \text { say] [Logo=it.is.not Quot Emph], }\end{array}\right.$
dàgà-só-Ø wà,
become.good-Pfv2-3SgSbj Quot,
A: '(Hare to lion:) "(Is it) hyena?" he said. "It isn't me, mind you! It's fine.'
[tă: $=\varnothing$ 'it's hyena', tone simplified from $<$ LHL $>$ to $<\mathrm{LH}>$ before mà $\rightarrow$; quotative wà inserted between predicate and following emphatic particle, §17.1.3.2]
(01:21)

| A: tă: | Ǿgò | ìbè | gín, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| hyena | over.th | catch | Ant.Past. |  |  |
| [ày-mì |  | gín] | ńné | kán | kár ${ }^{n}$ à, |
| [be.tired | -Caus | Ant.Past.SS] | 3 SgSbj | do | Pfv.Ppl, |
| [gòné | bà: | gín] | $o$ óm | bú | $s o ́-$-ı̀ $=b$-à:, |
| [gear | gather | Ant.Past.SS] | go-Ipfv | 3PlSbj | have-Ipfv=Past-3PlSbj |

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 kár ${ }^{n a ̀}, \quad$ wó $\rightarrow$ wà,
3Pl-Acc 3 SgSbj call(v) Pfv.Ppl, yes? Quot,
[zòmó wá $\rightarrow$ ] bà:;


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) waspresent (there), it was bigger than him (=hare).'
[post-participial demonstrative $\grave{o}$-gú modified the head 'manner']
(01:35)


A: '(Hare was thinking:) "How do the two of us hang out (as friends) together? My cleverness, that [focus] is what is making (=causing) it.",
[
(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) A: nár ${ }^{n a ́ a ~ o ́ r a ́-m ~ j-\hat{e}: ~ d e ̀, ~}$
truth speak-Ipfv keep-3PISbj if,
[gàndà kú ì dùgò,

| [place | DiscDef | Def] than, |
| :--- | :--- | :--- |
| [á | lèy] | yá:-ŋgò, |
| [3Refl | two] | stroll-Ppl, |

A: 'If they were speaking the truth, he (=hare) was the most clever. They were taking a walk.'
[-j- $\hat{\varepsilon}$ :, 3Pl form of -jâ:- auxiliary in one of the progressive constructions, §10.2.2.3]
(01:49) A: a ńné-gì, órú-gó nè, tûn bèà-m-nù-m,
Logo.QuotS 3Sg-Acc, talk(n) Loc, put.in get-Ipfv-Ipfv-LogoSbj,
góndè bèà-m-nù-m,
take.out get-Ipfv-Ipfv-LogoSbj,
[kú dùgò] [á lèy] yá:-m̀ wà,
[DiscDef Purp] [Logo two] take.walk-Hort say,
A: '(Hare thought:) I can put (hyena) in a predicament, and I can extricate (him). He said (to hyena), "Let's go for a walk!",
[órú-gó 'talk(n)', hence 'problem, matter (to discuss), issue (to resolve)']
(01:55) A: [á lèy pú $\rightarrow$ ] há:jú dágá-ńn wà, [Logo two all] need(n) become.good-Ipfv have-SFoc Quot, [kú gò kày] súg-à:-y,
[DiscDef Poss.InanSg Topic] descend-Pfv1a-3SgSbj,
A: '(Hare to hyena:) "(for) both of us, (our) needs [focus] will be served well." That (matter) has gone down (=is finished).'
[


A: 'After that (story), now they (hare and hyena) went along. A karité tree. They were chopping (down) the Hogon's karité tree. They were chopping and chopping and chopping the Hogon's karite tree. Now they went and chopped it all the way (down).'
[tree is Vitellaria paradoxa; the oil from its fruit pits is the source of shea-butter]
(02:11) $\mathrm{A}:$ [zòmó ńné déngè-m bà]


A: 'Hare was chopping, then the karite tree came down. The secret was discovered. Now, the Hogon went. If he were to have become aware of it, he would certainly give hare a hard time.'
[
(02:21)


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) A: [kú ní:] bě-yyà-y dè,
[DiscDef Inst] stay-Pfv1a-3SgSbj if,
[zòmó ńné-gì á bǒn nè
[hare 3Sg-Acc 3Refl call xxx]
wó ńné jà,
yes? $\quad 3 \mathrm{Sg}$ say,
A: 'Having stayed like that (=in that situation), hare called out to him (=Hogon). "Yes?," he said." ,
(02:29) A: ńné.: á.:, nùnă: cègìlí-m dè,
3Sg.\& Logo.\&, song carve.out-LogoSbj if,
[[j̀gó kò] nè] yǒ: pǒ: ḿbú wà,
[[Hogon Poss.Inan] Loc] today greeting go.QuotHort Quot
A: '(Hare:) "you and me, let's compose a song and go give greetings at the Hogon's place today!"
[the hortative in 'let's go!' has scope over the subordinated clause with 'carve out (wood)' = 'compose (song)'; irregular quoted hortative ńbú wà, §10.6.4]
(02:33)
$\begin{array}{crl}\text { A: zòmó } & \text { ógù-ógù } & \text { pú } \rightarrow, \\ & \text { hare } & \text { fast-fast }\end{array}$
[song] bénèr ${ }^{n}$ è-bènú yé $\rightarrow \quad$ mí bènèr ${ }^{n}$ è, cut.around $\quad \varnothing \quad 1 \mathrm{Sg} \quad$ cut.around, [j̀gó ${ }^{\mathrm{L}}$ mìndùgò] mí bènèrr ${ }^{n}$ घ̀ yé $\rightarrow \quad$ mí bènèr ${ }^{n} \grave{\varepsilon}$, [Hogon ${ }^{\mathrm{L}}$ karite.tree] 1 Sg cut.around 1 Sg cut.around, [j̀gó $\quad$ Lbòrj̀kà], $\quad$ pó $\rightarrow \quad$ wè $\rightarrow \quad$ wà [Hogon ${ }^{\text {L rear.end] wide.open } ~} \varnothing \quad$ Quot
A: 'Hare ran fast (singing:)
[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.
[ógù-ógù, iteration converts adjective to adverb]
(02:41) A: hà: núndi- $\varnothing$

$$
\varnothing \quad \text { listen.Pfv-3SgSbj }
$$

[song] bénèr ${ }^{n} \dot{\varepsilon}$-bèŋú yé $\rightarrow \quad$ mí bènèr ${ }^{n} \dot{\varepsilon}$,
cut.around $\quad \varnothing \quad 1 \mathrm{Sg} \quad$ cut.around,
[j̀gó ${ }^{\mathrm{L}}$ mìndùgò] mí bènèr ${ }^{n} \dot{\varepsilon} \quad$ yé $\rightarrow \quad$ mí $\quad$ bènèr $r^{n} \grave{\varepsilon}$,
[Hogon ${ }^{\mathrm{L}}$ karite.tree] 1 Sg cut.around 1 Sg cut.around,
[j̀gó bòròkà], pó $\rightarrow \quad$ wè $\rightarrow \quad$ 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 karite tree.
The Hogon's rear end is wide open.
(02:49) A: [kú ní:] ñné jà,
[DiscDef Inst] 3Sg say,
tǎ: kú nú nùndì kár ${ }^{n a ̀}$,
hyena DiscDef 3ReflSbj listen Pfv.Ppl,
[zòmó wá $\rightarrow$ [nù̀à: ${ }^{\text {L }}$ ò-gú],
[hare QuotS] [song ${ }^{\text {L }}$ Prox-InanSg],
[tă: wá $\rightarrow$ á nùn jěl nè wà
[hyena QuotS] LogoSbj sing try Ant.Fut.DS Quot
[ńné wà $\rightarrow$ ] wàndá cégìl wà dè
[3Sg QuotS] other carve.out.QuotImprt Quot Emph,

A: 'At that point, hyena listened to that. (Hyena) said: "Hare, that song, hyena (=I) have learned to sing (=memorized), (now) you compose another (song).'
[
(02:54)

| A: zòmó | $[k u ́ n$ | wà $\rightarrow]$ | dàgà-só- $\varnothing$ | wà, |
| :--- | :--- | :--- | :--- | :--- |
|  | hare | $[$ DiscDef | QuotS $]$ | become.good-Pfv2-3SgSbj | Quot,

A: 'Hare said: "That's okay. You follow (=keep singing) it. I will get another (song).'
[
(02:57)
$\mathrm{A}: ~ y e ́ \rightarrow$ [[úlò nè] yày tágá gín]
$\varnothing \quad$ [[house Loc] go say Ant.Past.SS
[song] bénèr ${ }^{n} \grave{\varepsilon}$-bènú $\quad$ yé $\rightarrow \quad$ mí bènèr ${ }^{n} \grave{\varepsilon}$, cut.around $\quad \varnothing \quad 1 \mathrm{Sg} \quad$ cut.around, [j̀ǵ́ ${ }^{\mathrm{L}}$ mìndùgò] mí bènèr ${ }^{n} \dot{\varepsilon} \quad$ yé $\rightarrow \quad$ mí bènèr ${ }^{n} \grave{\varepsilon}$, [Hogon ${ }^{\mathrm{L}}$ karite.tree] 1 Sg cut.around 1 Sg cut.around, [j̀ǵ 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 nà,
[DiscDef Inst] 3SgSbj say,
ògó [[gùndj̀-mbó á-gá-mbò] wà $\rightarrow$ ]
Hogon [[slave-AnPl 3Refl-Poss-AnPl] QuotS]
ìbí jìn- $\varnothing$,
catch.QuotImprt say.Pfv-3SgSbj
[mìdùgó á-gá] ńné dèng-è: gà,
[karité.tree Logo-Poss] 3 SgSbj chop.down.Pfv-SFoc Emph,
$X X X$,
(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.",
[
(03:10)

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [hyena | Acc] catch | Ant.Past.SS, |  |  |  |
| [ g g̀ | ligé | sú:-ndú | gín] | [kómbú | gín], |
| [over.there | wrestle | descend-Caus | Ant.Past.SS] | [tie | Ant.Past.SS], |
| [ná: | gà] | sémà-ngò |  | wà, |  |
| [now | Topic] | slaughter-Ipfv.P | Ppl.InanSg | Quot, |  |

A: 'They caught him, wrestled him down there, and tied him up. (Hogon) said, "Now (it's time) to slaughter (=cut his throat).'
[sémà-ŋggò here is apparently an inanimate singular imperfective positive participle, as in '(the time) when (sb) will slaughter (sb/sth)', but cf. sémà-ngò:- $\varnothing$ 'he won't slaughter' at 03:21 below]
(03:14) A: zòmś [ơgù-ógù zògò gín] [ánđá á yày kárnà̀,
hare [fast-fast run Ant.Past.SS] [field 3ReflSbj go Pfv.Ppl],
[mì:l-ì: gín] [á wò: kárnà],
[go.back-MP Ant.Past.SS] [3ReflSbj come Pfv.Ppl],
nár"á jìn- $\varnothing$ dè,
truth say.Pfv-3SgSbj Emph,
[j̀gá gì] á bòn kárnà,
[Hogon Acc] 3ReflSbj call Pfv.Ppl,
A: 'Hare went, running hard, and came back to the field. "It's true," he said. He called out to the Hogon.'
[
(03:18) A: [tã: gì̀, [á lèy] yă:-ní bù-m,
[hyena Acc], [Logo two] take.walk-Ipfv be-LogoSbj,
[tă: gì] zúgà-m-nù-m wà,
[hyena Acc] know-Ipfv-Ipfv-LogoSbj Quot,
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: [tã: gì], [ńné wà $\rightarrow$ ], yòndó:.:
[hyena Acc], [3Sg QuotS], blind.\&,
dùmbé: = là: dè kú,
fingerless(.\&)=it.is.not if DiscDef,
[ $\left.n i^{\mathrm{L}} \quad n d \varepsilon ́\right]$ tă: sémà- $\eta g o ̀:-\varnothing \quad$ wà,
[person ${ }^{\mathrm{L}}$ sound] hyena slaughter-IpfvNeg-3SgSbj Quot,

A: "Hyena, a sound (=normal) man shouldn't cut his throat, only a blind man and a fingerless man (should cut his throat).' ['fingerless', in the past chiefly due to leprosy]
(03:28)
B: yòndó: :
dùmbé: : :
blind.\& fingerless.\&

A: yòndó.: dùmbé: :
blind.\& fingerless.\&
B: là: dè
it.is.not if
A: $\hat{e} \rightarrow$
yes
$\mathrm{B}:\left[n i^{\mathrm{L}} \quad n d \varepsilon ́\right] \quad$ sémà- $\eta g o ̀:-\varnothing$
[person ${ }^{\text {L }}$ sound] slaughter-IpfvNeg-3SgSbj
$\mathrm{A}:\left[n i{ }^{\mathrm{L}}\right.$ ndé] sémà- $\eta g o ̀:-\varnothing$,
[person ${ }^{\mathrm{L}}$ sound] slaughter-IpfvNeg-3SgSbj,
B: 'A blind man and a fingerless man?'
A: '(Yes,) a blind man and a fingerless man.'
B: 'Otherwise (not).'
A: 'Yes.'
B: 'A sound man won't cut his throat.'
A: 'A sound man won't cut his throat.'
[ B makes sure he understands the situation]
(03:32) A: dùmbé: [lèdì né] ńné já:-ı̀̀ dè,
fingerless [wrestle Ant.Fut.DS] 3SgSbj hold-Ipfv if,
[nân gà] yòndó ńné sémà-m-غ̀:
[now Topic] blind 3 SgSbj slaughter-Ipfv-SFoc
A: 'When the fingerless man wrestles him and holds him down, then it's the blind man [focus] who will cut his throat.'
[
(03:35)


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?' [
(03:38) A: é $\rightarrow$ [kú kà] dàgà-só- Ø wà, yes, [DiscDef Topic] become.good-Pfv2-3SgSbj Quot, dàgà-só- $\varnothing$ jìnì gín,
become.good-Pfv2-3SgSbj say Ant.Past.SS,
kú ggílí gín,
DiscDef get.up Ant.Past.SS
dùmbé: $\quad x_{x x}$,
fingerless (unintelligible, a few words),
yòndó pòlgó zoá:-m ńné só-m̀ bà
blind knife look.for-Ipfv 3 SgSbj have-Ipfv xxx,
tă: [púrkútú jìn gín] Éll-í:-yà-y,
hyena [suddenly say Ant.Past.SS] escape-MP-Pfv1a-3SgSbj
B: о́p!
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 dùmbé: is unclear on tape]
(03:46) A: wàndá, tǎ: bè $\varepsilon$ sèmà-ndá,
other, hyena get slaughter-Pfv.3P1Sbj,
tǎ: [kúgó kò-ń] go-â:-y,
hyena [head 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.'
[bè̀ variant of bě: 'get' in the 'have a chance to VP' construction, here preceding the other chained verb, §15.1.4.2]
(03:48) A: kú á yày kárnà,
DiscDef 3ReflSbj go Pfv.Ppl,
tǎ:; [zòmó wà $\rightarrow$ ] té $\rightarrow$ dè,
hyena, [hare QuotS] clever Emph,
[né gì] [órúúgó nèך,
[person Acc] [talk(n) Loc]
túnù-m-dò- $\varnothing$ gó-ndò-m-dò- $\varnothing$ wà,
put.in-Ipfv-Ipfv-3SgSbj exit-Caus-Ipfv-Ipfv-3SgSbj Quot,

A: 'Then, when he (=hyena) had gone, hyena (said:). "Hare is clever. He puts someone in a predicament and gets him/her out." ,
[órú-gó 'talk(n)', hence 'issue', 'problem', etc.]
(03:54)

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A: [ńné wà->] kú [bírá: kj̀-ń] wà,
[3Sg QuotS] DiscDef [work(n) Inan-3SgPoss] Quot,
pá:m-s\grave{-}\mp@subsup{W}{}{n}\mathrm{ dè,}
understand-Pfv2-2SgSbj Emph,
[kú là] [kú ní:] kán-i:-\varnothing wà
[DiscDef too] [DiscDef Inst] do-MP.Pfv-3SgSbj Quot
```

A: '(Hyena:) "(As for) him (=hare), that is his work (=what he does)." Did you undersand? (Hyena:) "That too (=hare's work), it was done like that."
[
(04:01)

| A: [ná: | kày], | [kú | ní:] | bé-à:-y |  | dèj |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [now | Topic], | [DiscDef | Inst] | stay-Pfy | -3SgSbj | if] |
| Ǿgò | $g o ̌-y a ̀-y^{n}$ |  | dè, |  |  |  |
| over.there | exit(v)-Pfv1a-3SgSbj |  |  | if, |  |  |
| [sěy ${ }^{n}$ | gà] | $b e ́-m ̀-d \grave{-} \varnothing$ |  | wà, |  |  |
| [lore | Topic] | remain-Ipfv-Ipfv-3SgSbj |  |  | Quot, |  |
| [sěy ${ }^{\text {n }}$ | gà] | [dùmo ${ }^{\text {L }}$ | béà-ŋ | $=1 \mathrm{a}$ : |  | dè $],$ |
| [lore | Topic] | [ $\operatorname{end}(\mathrm{n})^{\text {L }}$ | stay-Ip | $\mathrm{Neg}=\mathrm{it}$. |  | if], |

A: 'Now, if (that story) stays like that, if we move on (to another story), as for lore, there's some left (to tell). As for lore, it doesn't end.'
[lit. "if it is not [the end doesn't stay(=exist)]"]
(04:08) A: ê:, [sěy ${ }^{n}$ dày ${ }^{n}$ ńné dùmò béá-クgó] ウ̀gó yes, [lore manner ${ }^{\mathrm{L}} 3 \mathrm{SgSbj}$ end $(\mathrm{n})^{\mathrm{L}}$ remain-Ipfv.Ppl.Inan] is.not
sěy ${ }^{n}$ zúgà-m-nù-W ${ }^{n}$ dè,
lore know-Ipfv-Ipfv-2SgSbj if,
kú $ŋ g o ̀ ~ g o-a ̂:-y ~ d e ̀, ~$
DiscDef over.there exit(v)-Pfv1a-3SgSbj if,
wàndá yé bù- $\varnothing$ kòy,
other Exist be-3SgSbj Emph,
wàndá bé-m̀-dò- $\varnothing$ já:tì,
other remain-Ipfv-Ipfv-3SgSbj Emph,
A: 'Yes. In no way does lore have an end, if you know lore. If that (lore) moves on from there (=what I have already narrated), there sure is another (story), there is definitely another.'
[lit. "[a way that lore is an end that exists] does not exist"]
(04:16) A: éwà, [[àndà-[nàmá-mbò] pú $\rightarrow$ ] mò:nd-ì: gín]
well, [[the.bush-[meat-AnPl] all] assemble-MP Ant.Past.SS]
[súr ${ }^{n}$ ó cègìlà: dè],
[ear cut.off if],
[nân gà [bŏn-gò kó-ḿn] wà,
[now Topic] [tomtom cover.with.hide-QuotHort] Quot,
A: 'Well, all the wild animals gathered together. They said, "let's cut off an ear and put a hide skin on a tomtom." '
[
(04:21)
B: súr ${ }^{n}$ ó cègìl né, $\ldots$
ear cut.off Ant.Fut.DS, ...
A: $\hat{e} \rightarrow$
yes

B: ... bǒn-gò kó-ḿ] wà,
... tomtom cover.with.hide-QuotHort] Quot
A: ònhô:n, [[súrinóo sày] cégíl gò-n néj,
uh-huh, [[ear only] cut.off exit-Caus Ant.Fut.DS],
[bǒn-gò kó-ḿ] wà,
[tomtom cover.with.hide-QuotHort] Quot
B: 'They said "let's cut off an ear ...
A: 'Yes.'
B: '.. and put a hide skin on a tomtom.'
A: 'Uh-huh. They said: "Let's cut off only an ear, and put a hide skin on a tomtom.",
[B seeks clarification; gò-n< gò-ndó 'remove, take out']
(04:26)


A: '(They said:) "Ah, all right." They were there, cutting and cutting ears off, then they covered the tomtom with hide like that.'
[ nín $<$ gín]
(04:33) A: bǒn-gò bú kò kár ${ }^{n a}$,
tomtom 3PlSbj cover.with.hide Pfv.Ppl,

| [gándá | ì] | nè, |  | [mòn-gó, tárá, |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [place | Def] | Loc, |  | [sap, | affix, |
| tárá | gín] |  | [dòg̀̀ | gín], |  |
| affix | Ant.Past.SS] | [leave | Ant.Past.SS], |  |  |

A: 'When they had covered the tomtom with hide, they smeared some (sticky) tree sap (from karite tree) on the spot (wh.ere they had covered the tomtom), and they left it.'
[
(04:40)

| B: | $[g a ́ n d a ́ a ~$ ǹ] <br> $[p l a c e$ Def] | Loc |
| :--- | :--- | :--- |

A: [kú ní:] dògò-s-ê., [gàndà túrù-gò] nè,
[DiscDef Inst] leave-Pfv2-3P1Sbj, [place one] Loc,
Ǿgò [[gàndà kú] nè] mòn-gó tárá-s-è:
over.there [[place DiscDef] Loc] sap affix-Pfv2-3P1Sbj
[ú ந́gò ób-í:-yà-wn dè]
[2Sg over.there sit-MP-Pfv1a-2SgSbj if]
[dúmbó ù-wò] kú ńgò cé kán-gò,
[rear(n) 2Sg-Poss.InanSg] DiscDef 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: Ǿgò
tár- $\grave{:}:-m-d \grave{\jmath}-\varnothing$
over.there affix-MP-Ipfv-Ipfv-3SgSbj
$\mathrm{A}:$ á $\rightarrow$ zàgà, ándá yǎy-yà-d-à: dè,
ah! lo!, the.bush go-Pfv1a-Pfv1a-3PlSbj if,
mòn-gó [mù: ${ }^{n}$ kú] go-â:-y dè,
sap $\quad[\operatorname{cut}(n) \quad \operatorname{Disc} D e f] \quad \operatorname{exit}(v)-P f v 1 a-3 S g S b j \quad i f$,
zòmó, kú [bǒn-gò ì̀ zàgà bárná-m sò- $\varnothing$,
hare, DiscDef [tomtom Def] lo! beat-Impv 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) a cut (=wound) to open up (on someone), lo! Hare would beat the tomtom (as a signal).'
[
(04;50) A: zàgà, bú sǒ: bèa-ndá,


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: [bu
bár ${ }^{n a ́}-m \quad b u$
bú $\quad$ sò- $m=b-a ̀:]$
3P1 beat-Ipfv 3P1Sbj have-Ipfv=Past-3P1Sbj
àndà-[nàmá-mb̀̀] [wù $\rightarrow$ jìnì gín]
the.bush-[meat-AnPl] [suddenly say Ant.Past.SS]
bú wâ:-ŋgò,
3P1Sbj come-Ipfv.Ppl.InanSg,

A: 'They (=hares) were beating (the tomtom). The animals hurried to come.'
[
(05:03) A: á Ǿgìlà-m-nù-ḿn ńné jǐn-gò hôw!
Logo get.up-Ipfv-Ipfv-LogoSbj 3SgSbj say-Ipfv.Ppl.InanSg get.up [dúmbó [wò: gín] póró d-à:],
[rear(n) [come Ant.Past.SS] cut.off RecPrf-3P1Sbj],
A: 'When someone (sitting on the sap) tried to get up, they (=animals) came and cut off his rear end.'
['ǵgìà-m-nù̀-ń with final rising tone audible before ńné; wò: gín 'having come' inserted between transitive verb póró- and its object; póró- $d$-à: variant of 3 Pl perfective-1b póró-tì-yà]

| A: | [yǎ: | gà] | [nùmá: | nè] | nú-yà-y | wà |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | [today | Topic] | [hand | Loc] | enter-Pfv1a-3SgSbj | Quot |

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-ŋgò,
[3Sg-Acc prepare Ant.Fut.DS] kill-Nom,
áywà, [ńné wá $\rightarrow$ ] ò-gú,
well, [3Sg QuotS] Prox-InanSg,
[[sé: cé kán-í:-yà-y] jìnì gín]
[[fat(n) thing make-MP-Pfv2-3SgSbj] say Ant.Past.SS]
bǒn-gò bár ${ }^{n a ́ a ́-m ~ S D-\varepsilon ̀:, ~}$
tomtom beat-Ipfv have-3PISbj,

A: 'They got ready to kill him. They said, "some fat has formed (in his body)." They were beating the tomtom.'
[dà:n né shortened from dà:ndì né]
(05:16)


A: 'At that point he became insect-infested. They said, "he isn't in it." They said,
"They won't kill him today."
[twá:-ndà:-, negative of yé tùnà ‘be in’, (xx3a) in §11.2.3.1]
(05:21)


A: 'Well, if it happened like that (=in that case), if they kill this one (=hare) now, it won't be good.'
B: 'Yes, it won't be good.'
[
(05:28)

| A: bùrá burrow | gúlù $\mathrm{M}-m-d-\varepsilon ̀$ <br> dig-Ipfv-Ip | pfv-3PiSbj | wà, <br> Quot, |  |
| :---: | :---: | :---: | :---: | :---: |
| bùrá | tángá-tángá | gùlò | gín, |  |
| burrow | side-side | dig | Ant.Past.SS, |  |
| pùdé | mém $\rightarrow$ | dơg-a |  | wà, |
| exit.point | a.lot | leave | Pfv-3PISbj | Quot, |
| [kú | ní:] | cé | ńn-s-è: |  |
| [DiscDef | Inst] th | thing | -Pfv2-3PISbj |  |

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."
[
(05:32) A: gǒ:; [nân gà],
fire, [now Topic],
[bùrá ì ǹ ${ }^{\text {L }}$ cìnè $\left.n\right]$ nè] gŏ: nó:ndà-m-d-è,
[burrow Def] ${ }^{\text {L }}$ nose Def] Loc] fire ignite-Ipfv-Ipfv-3PISbj,
[gõ: nó:ndí gín] [bú dògò kárnàa,
[fire ignite Ant.Past.SS] [3PISbj leave Pfv.Ppl],
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,
[[gö: nè] gán-à: dè],
[[fire Loc] put.on.Pfv-3PISbj if],
[dóy-dà:-dóy pód-à: dè] wálà:,
[(sound) burst.Pfv-3PISbj if] voilà,
A: 'They gathered watermelons and put them on the fire, they made them (=watermelons) burst, doy-da-doy! (sound). Voilà!'
[
(05:40)



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.'
[
(05:44) A: hé! [dé: jòmó] sé: yé $s$-è,
hey! [brother hare] fat(n) Exist have-3PlSbj
zàgà á-gá [bèná: bàrì] yé tùnà,
lo! 3Sg-Poss [interior in] Exist be.in.Stat,
háyà, f́gò gó-pgò:- $\varnothing$,
well, over there exit(v)-IpfvNeg-3SgSbj
[ $\mathrm{g} g \grave{~ g}$ gò- $\varnothing ~ d e ́] ~ t i b a ̆: ~$
[over.there exit(v).Pfv-3SgSbj if] death
A: 'Hey, brother hare, they have fat (=are plump). Lo! He (himself) is inside. Well, he won't come out over there. If he comes out over there, it's death. Hare gathered up his things.'
[bènă: ‘interior’]
(05:48)

| A: zòmś hare | [gòné <br> [gear | $\begin{aligned} & \text { á-gá] } \\ & \text { 3Refl-Poss } \end{aligned}$ |  | bà: gather | gín, <br> Ant.Past.SS, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [kú | là | [kú | ní:] | $g o ̀-\varnothing$ |  | wà, |
| [DiscDef | too] | [DiscDef | Inst] | exit(v) | ).Pfv-3SgSbj | Quot, |
| A: $e^{\prime} \rightarrow$, |  |  |  |  |  |  |
| yes |  |  |  |  |  |  |

A: 'Hare gathered up his things, and then he came out. Yes.'
[
(05:50) B: ná:, [dèbé ${ }^{\text {L }}$ jèngùrgò $]$ né, [cé dùgà-1́yè, yá-ngì],
now, [lake Ledge] Loc, [thing necklace, xxx]
[ह̌: bàrì] [zòmó kò]
[there Loc] [hare Poss.InanSg]
yé bù- $\varnothing$ jìn-dá mà $\rightarrow$
Exist be-3SgSbj say-PfvNeg.3PISbj Q

B: 'Now, on the shore of the pond, a necklace. Didn't they say that hare's (necklace) was there?'
[ B is suggesting another tale to A , but A 's version it will turn out to involve a bracelet; jéngúrgò ‘shore (of pond or lake)']
(05:55)

| A: $e^{\prime} \rightarrow$, | [kú | ní:] | ńné | kár ${ }^{n}-1$ í-yà̀-y | Kár ${ }^{n}$ à, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| yes, | [DiscDef | Inst] | 3 SgSbj | do-MP-Pfv1a-3SgSbj | Pfv.Ppl, |  |
| [nân | gà] | donc | [kú | là], |  |  |
| [now | Topic] | so | [DiscDe | ef too], |  |  |
| Ǿgò | [kú |  | ní:] | dóg-à: | wa |  |
| over.t | here [Dis | cDef | Inst] | leave.Pfv-3P1Sbj | Quot, | yes |

A: Yes. After it happened like that, now that too, 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: :, [[dèbé Ljèngùrgò] nè] yà-d-à: dé, hare.\&, hyena.\&, [[lake ${ }^{\text {L }}$ shore] Loc] go-Pfv-3P1Sbj if, donc, [á lèy],
so, [3Refl two],
[[ìnjè ${ }^{\mathrm{L}}$ ह́lغ̀̀̀̀̀l̀̀] $\quad$ né sìn-à: dé]
[[water ${ }^{\mathrm{L}}$ sweet-sweet] consume be.sated.Pfv-3P1Sbj if]
yé bé-m̀- $d-\varepsilon$,
there.DiscDef lie.down-Ipfv-Ipfv-3P1Sbj
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.'
[
(06:17) A: [kú ní:] bú bù-m=b-à:;
[DiscDef Inst] 3PlSbj be-Ipfv=Past-3PlSbj,

| mèndíyè | $b a ̀ r r^{n}$ à | gín, |
| :---: | :---: | :---: |
| bracelet | turn.red | Ant.Past.SS, |
| mèndíyè | غ̀-१¢̀dù-ŋgó | lóg-à:-y, |
| bracelet | Rdp-good-Inan | be.extreme-Pfv1a-3SgSbj |
| yé | dùnà-m̀ = bì- $\varnothing$, |  |
| Exist | be.put.Stat-Ipfv= | t-3SgSbj, |

A: 'They were there like that. A bracelet that had become red, 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]
(06:23)


A: 'As it was lying (there), hare saw that bracelet like that. (Hare:) "how is it? This thing is beautiful. "
[/ò-gú gày/ pronounced [ógàj]]
(06:29) A: [nùmá: nè] ńné tún kárnà,
[hand Loc] 3 SgSbj put Pfv.Ppl,
[dágám $\rightarrow$ sày] [[nùmá: á-gá] nè] nú-ngò:- $\varnothing$ wà,
[a.little only] [[hand 3Refl-Poss] Loc] enter-IpfvNeg-3SgSbj Quot,
A: 'He (=hare) (tried to) put it on his hand. It didn't quite go onto (=fit on) his hand.'
[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 the bracelet had gone onto his hand, it would have been nice.'
[counterfactual conditional with both verbs in past-time form; the first dè is conditional ' if ', the second dè is probably the emphatic particle, as in 06:23 above]
(06:33)

| A: [[nùmá: | á-gá] | nè] | [nà: | gín] |
| :---: | :---: | :---: | :---: | :---: |
| [[hand | 3Refl-Poss] | Loc] | [take | Ant.Past.SS |
| [kú | ní:] | tûn- $\varnothing$, |  |  |
| [DiscDef | Inst] | put.Pfv-3 |  |  |

A: 'He took (it) and (tried to) put it on his hand like that.'
[tûn- $\varnothing</$ túnì- $\varnothing$ /; 'on the hand' is logically connected with 'put' rather than the intervening 'take']
(06:34) A: ńné tún kárnà $\rightarrow$,
3 SgSbj put Pfv.Ppl,
[[mèndìỳ̀ ${ }^{\mathrm{L}} \quad \delta(-g)$ gày] [yǒ: té-tè]
[[bracelet ${ }^{\mathrm{L}}$ Prox-InanSg Topic] [today exactly]
ह́dù-ng̀̀ $\quad\left[\begin{array}{c} \\ (-g) \\ \text { gà } y]\end{array}\right.$
good-InanSg [Prox-InanSg Topic]
[[nùmá: nè] gò né]
[[hand Loc] exit(v) Ant.Fut.DS]
[kwá: nè] gà:rà ह́dù bì-m=bì- $\varnothing \quad$ wà,
[neck Loc] more good be-Ipfv=Past-3SgSbj] Quot,
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 be better on the neck.",
[
(06:39)

| A: gó |  |  | de |
| :---: | :---: | :---: | :---: |
| exit(v) | t-3S |  |  |
| [kwá | nè] | Édù |  |
| [neck | Loc] | good |  |

A: '(Hare) said: "If it were to come off (the hand), it would be good on the neck.", [
(06:40) A: [kú ní:] jìn gín,
[DiscDef Inst] say Ant.Past.SS,
ńné gò-ndù kárnà,
3SgSbj exit(v)-Caus Pfv.Ppl,
mèndíyè [gìdè gín] gòndì- $\varnothing$,
bracelet [throw Ant.Past.SS] exit(v)-Caus-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) A: nòmbś wàndá [zòmś gì] bèz nà-lí- $\varnothing$ Wà,

| water.god | her [hare | Acc] |  | um-Pfvog 3SgSbj |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| bó | $t i-\varnothing$ | dé] | ú-gó | ́́ gó-пgò: | wà |
| [rear.end | send.Pfv-3SgSbj | if] | talk(n) | ) exit(v)-IpfvNeg-3SgSbj | 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).'
[nə̀mbó 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 use 'drink' rather than 'eat' in this context; bè $\varepsilon$ in 'have a chance to VP' construction, §15.1.4.2]
(06:49) A: $\hat{e} \rightarrow$, [kú ní:] kán-ì:- $\varnothing$ wà [kú là], yes, [DiscDef Inst] do-MP.Pfv-3SgSbj Quot [DiscDef too]
é $\rightarrow$ [ná: kày], ந́gò gǒ-yyà-yn dè,
yes, [now Topic], over.there exit(v)-Pfv1a-1P1Sbj if, [gàndà ${ }^{\mathrm{L}}$ kú] [kú] ní:] bé-m̀-dò- $\varnothing$,
[place ${ }^{\mathrm{L}}$ DiscDef] [DiscDef Inst] stay-Ipfv-Ipfv-3SgSbj,
$s e ̌ y^{n} \quad b \varepsilon ́ l-\varepsilon ̀:-m-d \grave{\jmath}-\varnothing$,
lore get-MP-Ipfv-Ipfv-3SgSbj,
A: 'Yes. It happened like that, that too. Now, if we have left there (=that story), that place (=story) will stay like that. (More) lore will be gotten (=found).'
[mediopassive bèl-í:- 'be gotten']
(07:01)
A: é $\rightarrow$
yes
B: ná:; [sěy ${ }^{n}$ túr-gò] túnú- $W^{n}$ dè]
now, [lore one-InanSg] put.Imprt if]
ná: cé ká-ŋgò,
now thing do-xxx,
A: 'Yes.'
B: 'Now, if you put (=tell) a (piece of) lore, we'll do something.'
[
(07:06) A: d'accord, ná: ğgò gǒ-yyà-y dè, all.right, now over.there exit(v)-Pfv1a-3SgSbj if, [nân gày], àngúngúrú.:, sújjè:.:, wálà:, [now Topic] turtle.\&, francolin.\&, voilà,
A: 'Okay, if it (=conversation) has left there (=that story), now, turtle. There (you have it).'
[the huge terrestrial turtle, Geochelone sulcata, kept in some villages as a house pet; Francolinus spp., partridge-like wild birds]
(07:16) A: donc, àngúngúrú yí-bàrì, sújjè: yí-bàrì, so, turtle there.DiscDef, francolin there, wòl-gó tún-s-è:, àngúngúrú yé wò:- $\varnothing ~ d e ́, ~$ field put-Pfv2-3PlSbj, turtle there.DiscDef come.Pfv-3SgSbj if, zàgà yámá tébà-m sò- $\varnothing$, lo! damage(n) inflict-Ipfv have-3SgSbj,
A: 'So, turtle was there, francolin was there. They (=turtle and francolin) put (=cleared) a field (for cultivation). When turtle went there (=to the field), lo, he was causing damage.'
[
(07:22)

|  | B: [/Wòl-gó | ì $]$ | nè] | sújjè., |
| :---: | :---: | :---: | :---: | :---: |

[[field Def] Loc] francolin, [wágátú pú $\rightarrow$ y yámá tébà-m-dò, [time all] damage(n) inflict-Ipfv-Ipfv-3SgSbj,
B: 'In the field francolin (too) was always causing damage.'
(07:24)


A: 'He was inflecting damage. He was being like that. They were doing the thing like that.'
[
(07:28) A: [kú ní:] ńné bù-m [yǒ: gày],
[DiscDef Inst] 3SgSbj be-Ipfv [today Topic],
támbárá, kúnó gín dògò-s-Ê: wà,
trap, set Ant.Past-SS leave-Pfv2-3P1Sbj Quot,
francolin there.DiscDef come Ant.Past.SS be.caught-Pfv2-3SgSbj
A: 'He was like like on this day. They set a trap and left it.
[
(07:32)

[trap Loc] francolin be.caught-Pfv1a-3SgSbj

A: sújjè: dèb-â:-y
francolin be.caught-Pfv1a-3SgSbj
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: gó-ndú-gó gándè
exit-Caus-Nom paw(v).Pfv-3SgSbj
A: gó-ndú-gó gándè
exit-Caus-Nom paw(v).Pfv-3SgSbj
A: 'All right.'
B: 'He (=francolin) was pawing up (the planted millet grains)?'
A: 'He was pawing (it) up.'
[the bird had been digging up millet grains where they had been sowed in the field]
(07:38)

| A : ñ́né | dèb-â:-y |  | kár ${ }^{n}$ à, | í:yò, |
| :---: | :---: | :---: | :---: | :---: |
| 3 SgSbj | be.cau | Pfv1a-3SgSbj | Pfv.Ppl, | yes, |
| ně | $d \grave{\varepsilon} r^{n} \dot{\varepsilon}$ | tò-sì, |  |  |
| person | crops | sow-Pfv2-3S |  |  |

A: 'He was caught. Yes. A person had planted crops (there).'
[
(07:40)

| A: ú | $d \dot{\varepsilon} r^{n} \dot{\varepsilon}$ | gàndì | né, |  |
| :--- | :---: | :--- | :--- | :--- |
| 2SgSbj | crops | paw | Ant.Fut.DS, |  |
| [bèrá: | ú-wó] | bà:-ndì | né, |  |
| [belly | 2Sg-Poss.InanSg] | fill-Caus | Ant.Fut.DS |  |
| yámá | tébà-m-nù- $\grave{W}^{n}$, |  |  |  |
| damage(n) | inflict-Ipfv-Ipfv-2SgSbj, |  |  |  |
| ně | yàngì-lá-m | só-ndò- $\hat{W}^{n}$, |  |  |
| person | be.ruined-Caus-Ipfv | have-Neg-2SgSbj, |  |  |

A: '(If) you are pawing up the crops, and filling your belly, you'll inflict damage. Won't you be hurting the person?'
[
(07:44) A: [kú ní:] ńné kán-í:-yà-y kárnà,
$\left[\begin{array}{llll}\text { DiscDef } & \text { Inst] } & 3 S g S b j e & \text { do-MP-Pfv1a-3SgSbj } \\ \text { nfv.Ppl, } \\ \text { ńné-gì } & \text { sémé } & \text { gín, } & \text { jà: } \\ \text { 3Sg-Acc } & \text { slaughter } & \text { Ant.Past-SS, } & \text { take }\end{array}\right.$ Ant.Past-SS,

A: 'It happened like that. He (=person) cut his (=francolin's) throat, took (him), and put (him) in something.
[
(07:48) A: [ḉ nè] tún gín,
[thing Loc] put Ant.Past-SS,
[bármá nè] tún gín, bú zàndá-m bà, [pot Loc] put Ant.Past-SS, 3P1Sbj cook.in.pot-Ipfv xxx,
A: 'He (=person) put him (=francolin) in something. He put him in a pot. They (=people) were cooking him.'
[
(07:52) A: zàgà [àygúngúrú gày] ógù yì-só-W ${ }^{n}$ gà,
lo! [turtle Topic] fast see-Pfv2-2SgSbj Emph,
[ńné ìré- $\varnothing \quad$ mà $\rightarrow$ ] jìn gín,
$[3 \mathrm{SgSbj}$ be.better-3SgSbj Q] say Ant.Past.SS,
lǒy jèrà-m-nú-m jìn gín,
peer.over look-Ipfv-Ipfv-LogoSbj say Ant.Past.SS,
[z̀dé túrè: á-gá]
[child one.AnSg 3Refl-Poss]
sùlăm gìdé tûn- $\varnothing$,
throwing.down throw put.Pfv-3SgSbj,
A: 'Lo, as for turtle, you-Sg have seen that he was fast. He said, "is he (=francolin) better(-tasting)? I'll (raise my head and) look into (the pot). He tossed one of his children into (the pot).'
[
(07:57)


A: 'A child remained there.'
B: 'He remained there.'
A: 'The second one remained. He stayed there.
(08:00) [á $\rightarrow$ là] [yé yày gín]
[3Refl too] [there.DiscDef go Ant.Past.SS]
[yé wàd-â:-y],
[there.DiscDef remain-Pfv1a-3SgSbj,
A: 'He too (=turtle), having gone there, he remained there.'
[
(08:02)

| A: ńné | wàd-ầ:-y | kár ${ }^{\text {nà }}$, |
| :---: | :---: | :---: |
| 3 SgSbj | remain-Pfv1a-3SgSbh | Pfv.Ppl, |
| tă: | lábà-m, |  |
| hyena | pass-Ipfv, |  |
| kú | [kú ní:] | tímbì-li- $\varnothing$, |
| DiscDef | [DiscDef Inst] | cover-Rev.Pfv-3SgSbj |

A: 'As he remained there, hyena was passing by. He uncovered that (pot).' [
(08:06) A: tă: téndègìn,
hyena by.luck,
[nàmà̀ yí] kúbó síné gín,
[meat ${ }^{L}$ DiscDef.InanPl] eat.meat be.sated Ant.Past.SS,
[[bármá ì $\quad$ ńné dégà-m bà]
[[pot Def] 3SgSbj lick-Ipfv xxx]
bármá pás ló-yà̀-y,
pot totally! be.punctured-Pfv1a-3SgSbj
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:\} kán-ì:- $\varnothing$ wà
ah!, [DiscDef Inst] do-MP.Pfv-3SgSbj Quot
$\hat{e} \rightarrow$, [ná: gà $]$ cíll-í:-yà-y wà
yes, [now Topic] be.finished-MP-Pfv1a-3SgSbj Quot
A: 'Ah, it happened like that. Yes, now it's finished.'
[

## Text 2015-05 Water (duration 04:10)

(00:05) A: dû:; dày ${ }^{n \mathrm{~L}}$ bú: jìn kár ${ }^{n}$ à ì dè, below, manner $^{\mathrm{L}} 3 \mathrm{PISbj}$ say do Def if,
ínjé ígé ó-gù,
water 1PlPoss Prox-Sg,
B : ínjé ígé ò-gù,
water 1PlPoss Prox-Sg s,
A: ínjé ígé ò-gù,
water 1PlPoss Prox-Sg,
B: ìnjè wàndá pgò
water other not.be
B: ínjè péy j̀̀gó=bì-m=bì- , ìnjè sêl,
water at.all not.be=be-Ipfv=Past-3SgSbj, water a.little,
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. Just a little water.'
[kár"à 'do' as perfective positive verb-participle, §14.4.1]
(00:15) A: ótògón yà:--Ẃn dè,
morning go.Pfv-2SgSbj if
ú óbà-m dè, bà: dèngó,
2 SgSbj sit-Ipfv if, since daytime
ìnjè [là túrúl bèyó-w $W^{n}$ dé kù,
water [time one] get-2SgSbj if DiscDef.Sg,
B: ínjé bà: dèngó
water since daytime
[là túrú kò] bèyó-w $W^{n}$ dé kù mà,
[time one xxx] get-2SgSbj if xxx Q
A: [là túrú kò]
[time one xxx]
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.'
[

Antogo
A: wálà
voilà
$\mathrm{B}:[\varepsilon ́: \quad$ gà $] \quad\left[t i i^{n}\right.$ gày $]$ ínjé ì̀gó $=b i ̀-m=b i ̀-\varnothing$,
[around.here Topic] [first Topic] water not.be=be-Ipfv=Past-3SgSbj,
A: ínjé $\quad \grave{j} g o ́=b i ̀-m=b i ̀-\varnothing$,
water not.be=be-Ipfv=Past-3SgSbj,
B: ' $\ldots$. get. 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 there 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; é-gà,
(00:32)


A: [nân gày] bèlícy dè,
[now Topic] get.Pfv-1PlSbj xxx,
ínjé ìgó nè bú-m-b-à:,
water not.be be-Ipfv=Past-3PISbj,
ínjé diné-dìné kóbà-m=b-à;,
water turn-turn draw.water-Ipfv=Past-3PISbj,
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).
[
(00:39) A: ínjé [diné ní:]
water [turn Inst]
B: ínjé [dìné ní:] kóbà- $m=b$-à:,
water [turn Inst] draw.water-Ipfv=Past-3PlSbj
A: mí tí: $\quad$ yà
1 Sg first go-Pfv.Defoc
B: ú tí: ${ }^{n}$ yà-è:
2Sg first go-Pfv.Defoc
A: [mí kòbà-lí-m dè]

| $[1 \mathrm{Sg}$ | draw.water-PfvNeg-1SgSbj |
| :--- | :--- |
| $\left[\begin{array}{ll}\text { ú }\end{array}\right]$ |  |
| $[2 \mathrm{Sg}$ | béyá-ŋù-w] |
| 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 don't get (any).'
[
(00:44) A: ú tí: ${ }^{n}$ yà-દ̀: dè,
2Sg first go-Pfv.Defoc if, [ú kj̀bà-lú-W ${ }^{n}$ dè] mí-gì tángò, [2Sg draw.water-PfvNeg-2SgSbj if] $1 \mathrm{Sg}-A c c$ inaccessible, bèyà-lú-W $W^{n}$ kóbá-ŋù- $\eta$, get-PfvNeg-2SgSbj draw.water-IpfvNeg-1SgSbj,
A: 'If it's you [focus] who has gone first, if you haven't drawn water (yet), there's none for me. If you haven't gotten (yours), I don't draw water.'
[tángò, unconjugated predicate (archaic) 'inaccessible (to sb)’, negated as tángò-là]
(00:49)

> B: [nân gà] [[kú ${ }^{\text {HL }}$ bénà:] nè],
> [now Topic] [[Nonh ${ }^{\text {HL }}$ interior] Loc],
> [nân gà] ínjé kàlé só-ndò:-Ø,
> [now Topic] water limit have-Neg-3SgSbj,
> [gàndà pú $\rightarrow$ ] óndò bǐ: ${ }^{n}$-bà $\rightarrow^{n} \quad b \dot{\varepsilon}-\varnothing$,
> [country all] garden plenty be-3PlSbj,

X: 'Nowadays, inside (=concerning) it (=water), the water has no limit (=is abundant), there are plenty of (vegetable) gardens in the whole country.'
[só-ndò: $=b u ̀-\varnothing$ trimmed from só-ndò: $=b u ̀-m b i-\varnothing, ~ § 10.5 .1 .6]$
(00:54) A: nân, ínjé sám-à:-y, óndò sám-à:-y, díbè, ză: ${ }^{n} .:$ díbè.:,
now, water abound-Pfv1a-3SgSbj, garden abundant, Dibe,
Dianga Dibe,
dày ${ }^{n \mathrm{~L}}$ kánì súngó pú:, kìló: yí-kèdè
manner $^{\mathrm{L}}$ xxx xxx all, kilometer Inan-four
B: kìló: $\quad y i ́-k e ̀ d \grave{\varepsilon}$
kilometer Inan-four
A: yí-nǔm, gó-ì- $d \grave{j}-\varnothing$
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).'
 with bell-shaped pitch]


X: 'Where are you-Sg now? Four or five kilometers, it will stay (=amounts to that). There were no pails, (nothing) other than (earthenware) waterjars.'
[yày here may be related to the 'go' verb but is invariant in form (unconjugated) and functions as a postverbal particle]
(01:13) A: [dànà-bándá ní:],
[top.of.head Inst],
[yé yày né] díyà-m=b-à:
[there.DiscDef go Ant.Fut.SS] carry.on.ead-Ipfv=Past-3PlSbj
B : èdùgó bú zéyà-m dè,
waterjar 3 PlSbj bring-Ipfv if,
[zòg-á:-ỳ dè] áy ${ }^{n}$ kà-m-dè mà $\rightarrow$
[shatter-Pfv1a-3SgSbj if] how? do-Ipfv-Ipfv.3PlSbj Q
A: 'They would go there and carry (jars full of water) on their head (back to the village).'
B: 'If they were bringing a waterjar, if it broke, what would they do?'
[
(01:17)

| A: yâ:llà by.God | $\left[\int e ̀ d \grave{u}^{\mathrm{L}}\right.$ <br> [[waterjar ${ }^{\text {L }}$ | wàndá] other] | $\begin{aligned} & \text { kàn } \\ & \text { do } \end{aligned}$ | $n \varepsilon]$ <br> Ant.Fut.SS] |
| :---: | :---: | :---: | :---: | :---: |
| [/ú | gò-ndó-ngò] |  | gò-ndù | $n \varepsilon ์]$ |
| [ [2SgSbj | exit-Caus-Ipfv.P | 1.Inan | exit-Caus | Ant.Fut.S] |
| zéà-m-nù |  |  |  |  |

bring-Ipfv-Ipfv-2SgSbj

| ínjé | só-ndò- $W^{n}$ | [lúló | ú-wò $]$ | nè] |
| :--- | :---: | :--- | :--- | :--- |
| water | have-Neg-2SgSbj | [lllouse | 2Sg-Poss $]$ | Loc $]$ |

A: 'You will take out (=fetch) another waterjar where you (can) take one out, and bring it. (If) you have no water in your house, it's uninhabitable for you.'
B: 'It is uninhabitable for you. No.'
[
(01:23) A: àyí [kú ní:] kóbà-m=b-à:; nân, no [DiscDef Inst] draw.water-Ipfv=Past-3P1Sbj, now, àlhámdùllà:y, ínjé bél-ì:- Ø, ínjé yòrò-só- $\varnothing$, praise.God, water get-MP.Pfv-3SgSbj, water abound-Pfv2, dàgá, témbé nàngà- $m=b i ̀-\varnothing$,
Daga, above be.put.up.on-Ipfv=Past-3SgSbj,
nân, dùgó sù̀g-à:-y
now below descend.Pfv1a-3SgSbj
$X X X$
ууу
X: '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.]
(01:36)


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 3P1 perfective-1a, §10.2.1.2]
(01:44)


A: 'God made good fortune (for us). We got water. We for our part, this is where we have stayed.'
$\mathrm{B}:$ [ínjé bě:-dè-y] [kú dùgò] wàd-â:-y
[water get-Pfv2-1PlSbj] [DiscDef Purp] stay-Pfv1a-1PlSbj
A: wàd-â:-y
stay-Pfv1a-1P1Sbj
$\mathrm{B}:[i ́ n j e ́ ~ b \varepsilon ̌:-d \grave{e}-y] \quad$ [sùgò né] ǹ̀jé ká-m̀n-nè-y
[water get-Pfv2-1PlSbj] [descend Ant.Fut.SS] what? do-Ipfv-Ipfv-1PlSbj
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, ínjé bèl-í: dè- Ø,
Uh-huh, water follow.Stat-1PlSbj, water get-MP RecPrf-3SgSbj,
[í gà] súgó-ŋŋì-y,
[1P1 Topic] descend-IpfvNeg-1P1Sbj,
nân, ză:n, [dámbá yí-llèy],
here, Dianga, [village Inan-two],
èndègàndú, yé bà:r-í:-Ø dè,
Endekandou, Exist be.added-MP.Pfv-3SgSbj if
dámbá yí-tà:ndù,
village Inan-four,
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 Endegandou is added (=counted), it's three villages.'
(02:05)

```
A: tàgá túrú-kj, ínjé ná-m̀̀-nè-y,
pond one-Inan, water drink-Ipfv-Ipfv-1P1Sbj,
ínjé dùmá-\etagò, ínjè bě:-d\grave{c}-y ínjé dùmá-\etagò,
water finish-Ipfv.Inan, water get-Pfv2-1P1Sbj water finish-Ipfv.Inan,
àlhámdùlillà:y -
praise.God-
```

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.'

| B: [nùwá: | là] | [ámbà | kán | gín] |
| :--- | :--- | :--- | :--- | :--- |
| [this.year | too] | $[$ God | do | Ant.Past] |

yâ::là bí ìnjè-ní jìnì gín], byGod 2Pl water-drink.VblN say Ant.Past.SS
yâ:llà [gándá bàrà:zú kédé gín] bí ńdì-s-è:, by.God [place dam cut Ant.Past.SS] 2PlObj give-Pfv2-3PlSbj
B: ‘This year, by God's doing, for you-Pl drinking water, by God the place cut out a dam (in the rocks) and gave (it) to you-Pl.'
[bàrà:zú < French barrage 'dam']
(02:15)

| B: bàrà:zú <br> dam | ná:; now, | $\begin{aligned} & \text { [1̌jj-íi:-yà-y } \\ & \text { [stop-MP-Pfv1a } \end{aligned}$ | SgSbj | $\begin{aligned} & \text { digg̀̀ } \\ & \text { tie] } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [ínjé | ná:] | ı̀ndj-ínjé | găn-gò |  | là:, |
| [water | xxx] | garden-water | put.in- | fv.Ppl.Inan | xxx |
| óndó | găn-gò |  |  |  |  |
| garden | put.in-Ip | .Ppl.Inan |  |  |  |
| A: óndó | găn-gò |  |  |  |  |
| garden | put.in-Ipf | Ppl.Inan |  |  |  |

B: 'The dam now, (when) it (=water) has been blocked, the water now, it puts (=provides) water for (vegetable) gardens. Gardens are planted.'
[
(02:20)

| B: [óndó [garden | gàn put.in | né] <br> Ant.Fut.SS] |  | mà $\rightarrow$ ] |
| :---: | :---: | :---: | :---: | :---: |
| [ná: | nàfá | í | nà-m-è: |  |
| now | benefit | 1 Pl | eat-Ipfv-Defoc | Q |
| [nù-mbò | kédé |  | kàr ${ }^{n}$ à-mbò] |  |
| [person-Pl | cut |  | Pfv.Ppl-Pl] |  |
| bú | yà-m-è: |  | mà $\rightarrow$ |  |

3P1 see-Ipfv-Defoc Q
B: 'After the gardens are put, 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?
[subject focalization with defocalized imperfective -m-è: ; the heavy focalized NP 'the people who did the cutting out' is resumed as a 3 Pl pronoun]
(02:23)

| A: nàfá | $\underline{1}-\mathrm{g} \dot{\varepsilon}=$; |  | gándá | íg g ¢ $=$;, |
| :---: | :---: | :---: | :---: | :---: |
| benefit | 1P1-Poss.InanSg, |  | place | 1Pl-Poss.InanSg, |
| í-gì | sàr-à:, |  | nàfá | $\underline{1}-\mathrm{g} \grave{\varepsilon}=$ : |
| 1P1-Acc | pay.Pfv-3P1Sbj, |  |  |  |
| B: gándá | $n \dot{\text { ¢ , }}$ | bú | yá-ŋggò | $p u ́ \rightarrow$ |
| place | now, | 3 Pl | see-Ipfv. | all |
| túy ${ }^{n} \rightarrow$ | bèdè | gín |  |  |
| pile.up | bury |  | ast.SS | v.3P1Sbj |

A: 'The benefit is ours. The country is ours. They paid 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-ŋgò is an imperfective participle; 'bury' in sense 'leave behind'; yà-d-à: reduced from yǎy-yà-d-à: 'they went']
(02:29) A: yé túy bèdè gín yà-dà, bú gày,
there pile.up bury Ant.Past.SS go-Pfv.3PlSbj, 3Pl Topic,
[í bèr ${ }^{n}$ è] bú dògò kár${ }^{n a}$ à ì gà gà
[1Pl chez] 3P1Sbj leave Pfv.Ppl Def Topic
í-gè zò-ndá, í-gè gàrà-ndá,
1Pl-Poss take.away-PfvNeg.3PlSbj, 1Pl-Poss reduce-PfvNeg.3P1Sbj,
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.'
[
(02:35)


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)


| $\mathrm{A}:$ | séò | bù- $\varnothing$ |
| :--- | :--- | :--- |
|  | fine | be- 3 SgSbj |

B: '(Since) they had left theirs (=tools) and went away, now (after) what has been done, there is water without 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).'
[I take $k u ́=l a ̀:-\varnothing$ as a rhetorical question, or (equivalently) as a truncation of $k u ́=l a ̀:-\varnothing$ dè 'if it isn't that', i.e. 'otherwise', see 03:06 below]
(02:53)


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work(n) second(adv) come-Ipfv-Ipfv-3P1Sbj
```

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) again?'
(03:01) A: [ôy ${ }^{n}$ céndé-m bú só-m̀] [àr ${ }^{n}$ à-ínjé yí-tà:ndù̀],
[like.that fix-Ipfv 3PlSbj have-Ipfv.Ppl] [year Inan-three],
[céndé-m bú só-ì̀ dè]
[fix-Ipfv 3PlSbj have-Ipfv if]
[[àr ${ }^{n}$ à-ínjé yí-tà:ndù] dw-â:-y tàn],
[[year Inan-three] arrive-Pfv1a-3SgSbj only],
[gándá bí-gè]=: bí-gè gèl-yâ-n,
[place 2Pl-Poss]=it.is, 2Pl-Poss guard-MP.Imprt-PlAddr
A: '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.'
[
(03:06)


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 (hardness) of (their) hearts (=seriousness) is great.'
[á:ndà =: 'be small', negative à:ndà =lá 'not be small', takes relative-clause form as modifier]
(03:17)


A: 'For that reason, always, we are more accustomed to fatigue (=hard work).'
[French toujours]
(03:20) B: [kú-n dùgò] [nân gà] [wágádù pú $\rightarrow$ ]

| [DiscDef | Purp] [now | [now | Topic] | [time | all] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [nân | nìnè] ínjé | yé | $b u ̀-\varnothing$, |  |  |
| [now | xxx] water | Exist | be-3SgSbj, |  |  |
| [kú | gà | ná:], |  |  |  |
| [DiscDef | Topic | now], |  |  |  |
| [inje ${ }^{\text {L }}$ | è-ý | $g a ̀$ | na |  |  |
| [water ${ }^{\text {L }}$ | Prox-Pl | Topic |  |  |  |
| [cé | kán-ì:-yà-y |  | de |  |  |
| [thing | do-MP-Pfv1a-3 | 3 SgSbj | if] |  |  |
| í-gì | bá-m̀-dò- |  |  |  |  |
| 1Pl-Acc | suffice-Ip | fv-Ipfv- | $-3 \mathrm{SgSb}$ |  |  |
| [[dáná | í-gè] | $n \grave{\varepsilon}]$ | yé | 万́bà- $\varnothing$ |  |
| [[top.of.he | ead 1Pl-Poss] | Loc] | Exis | sit.Sta |  |

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").'
[French toujours]
(03:28) A: mhm $\rightarrow$, [ínjé cèndè-páy] ná: dùm-â:-y
mhm, [water fear(n)] now finish-Pfv1a-3SgSbj
B: ínjé ná: dàg-â:-y
water now become.good-Pfv1a-3SgSbj
A: [ínjé kó kà] dùm-â:-y,
[water Poss Topic] finish-Pfv1a-3SgSbj,
A: 'Mhm. Fear about water has ended.'
B: 'Water has become good now.'
A: 'Water's (problem) has ended.'
[
(03:35)


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')]
(03:38)
B: [[[Èndègàndú
kú
ì] ${ }^{\mathrm{HL}}$ bénà:] nغ̀]

| [[[Ende | andou | DiscDef | Def | ${ }^{\mathrm{HL}}$ inside | Loc |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [[dàgá | ${ }^{\text {L }}$ bj̀ $]$ | súgó-sú-ı | bó | ì] | [bú yàngù | $p u ́ \rightarrow$ ] |
| [[Daga | ${ }^{\text {L }}$ people] | ] descend-P | fv2.P | AnPl Def | [3P1 all | all] |
| [bú | $p u ́ \rightarrow]$ | témbé | bì-m | $b-a ̀:$, |  |  |
| [3P1 | all] | above | be-Ip | $\mathrm{v}=$ Past -3 P |  |  |
| [ínjé | ì] | [[àyné | ì] | dùgò], |  |  |
| [water | Def] | [[fatigue | Def] | Purp], |  |  |
| $p u ́ \rightarrow$ | [zògò | gín] |  | sùg-à: |  |  |
| all | [run | Ant.Past.S |  | descend.Pf | -3PlSbj |  |

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 difficulty with water, they all fled and went 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); yàngù pú $\rightarrow$ 'all' after a pronoun', §6.6.1]

```
B: [[èdùgó ní:] yày n\varepsiloń]
    [[waterjar Inst] go Ant.Fut.SS]
[ínjé kj̀bj̀ n\varepsiloń] wá:-m̀-nù-wn,
[water draw.water Ant.Fut.SS]] come-Ipfv-Ipfv-2SgSbj,
[[lá: ú w\grave{] dè,}
[[foot 2Sg Poss] stub.toe.Pfv-3SgSbj,
\varepsilońl-í:: sùgò-\varnothing dé]
escape-MP descend.Pfv-3SgSbj if]
ná: [ú wò] twá:-ndà:-\varnothing,
now [2Sg Poss] be.put.in-StatNeg-3SgSbj,
```

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 inside (=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)!'
[
(03:54)
B: [í gà] ná:,
[1Pl Topic] now,
[ínjé gà] ná:, [í bènè]
[water Topic] now [1Pl chez]
A: í súgó bèà-lí-y ${ }^{n}$, bú súgò-yà-d-à:,
1 Pl descend get-PfvNeg-1P1Sbj, 3Pl descend-Pfv1a-Pfv1a-3P1Sbj,
B: ná:, ò-gú $k \hat{u}:=\varnothing$,
now, Prox-InanSg DiscDef=it.is,
[kú gà] dàg-â:-y
[DiscDef Topic] be.finished-Pfv1a-3SgSbj
A: [kú ní:] cì ${ }^{\text {L }}$ kán-í:-sú-ngò
[DiscDef Inst] thing ${ }^{\text {L }}$ 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, that's it. As for that (subject), it's finished.'
A: 'What is done (regarding water) is like that.'

## Text 2015-06 Exodus (duration 04:10)



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.'
[
(00:16)
$\left.j i ̀-m-n \varepsilon ̌-y^{n} \quad m a ́ \rightarrow\right]$
[Dogon-house
say-Ipfv-Ipfv-1PlSbj.Q
Q]
[ándá
$j i ̀-m-n \varepsilon ̌-y^{n}$ má $\rightarrow$ ]
[the.bush
say-Ipfv-Ipfv-1PISbj.Q
Q]
[[ándá ì] yí-bàrì $=\varnothing \quad$ mà $\rightarrow$ ] [[ándá ì] ìgĝ: $=\varnothing$ ]
[[the.bush Def] there.DiscDef=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]
(00:19) A: [ándá ì d̀ dè,
[the.bush Def] Emph,
[kú là] [dày ${ }^{n \mathrm{~L}}$ jín-gó]
[DiscDef too] [manner ${ }^{\mathrm{L}}$ say-Ipfv.Ppl.InanSg]
[ódír-lé [ú là] [nárnà ú-wò] sò-wn],
[ask-VblN [2Sg too] [truth 2Sg-Poss.InanSg] have-2SgSbj]
A: 'The bush. That too, the way it is said, you too are right to ask.
[
(00:23)


A: 'The words have meaning. What (they) call "the bush" there, it is nothing else.'
[
(00:28) A: ú nân, [[úló ú-ẁ̀] nè] bù̀-W ${ }^{n}$ dè, 2 Sg now, [[house 2Sg-Poss.InanSg] Loc] be-2SgSbj if,
[nè ${ }^{\mathrm{L}}$ yíbàrì yàyé: ì̀],
[person ${ }^{\mathrm{L}}$ there.DiscDef Acc Def,
ándá yày- $\varnothing \quad j i ́-m ̀-n u ̀-W^{n}$,
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 there, you-Sg say "he has gone to the bush.",
[

| A: [nár ${ }^{n a}$ <br> [truth |  | 2Sg-Poss.InanSg] have-2SgSbj |  |
| :---: | :---: | :---: | :---: |
| B: [mí | là] | [kú dù̀g̀] |  |
| [15g | too] | [DiscDef | Purp] |
| [ándá | ì] | [yí-bàrì | mà $\rightarrow$ ] |
| [the.bush | Def] | [there.DiscDef | f Q] |
| [ándá | ì] | [É:-bàrì | $m a ̀ \rightarrow$ ] |
| [the.bush | Def] | [around.here | Q] |

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]
(00:37)


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".'
[
(00:42)


A: 'Those who are there, they who are there, they too can call this area "the bush."" [bô: ̀̀ 'who are' (Pl), Sg bê: ̀̀̀); i.e. 'the bush' is any zone away from one's home territory]


| gàndà | ú | bú-ŋggò | ǹ, |
| :--- | :--- | :--- | :--- |
| place | 2SgSbj | be-Ppl.InanSg | Def, |

A: wálà:
voilà
B : ú-wò quoi
2Sg-Poss
A: òhô ${ }^{\mathrm{n}} \rightarrow$
uh-huh!
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: ná: [ándá òdùbă: ó-m̀ dè] [nân kà], now [the.bush path go-Ipfv if] [now Topic],
ú-wj̀ dibí nú-m-è: mà $\rightarrow$,
2Sg-Poss.InanSg, disappearance enter-Ipfv-Ppl.AnSg or,
dùgù-mbó mà $\rightarrow$ sègùrú-w ${ }^{n}$ dè,
sorceror-AnPl or encounter.Pfv-2SgSbj if,
púngó jé-W $W^{n}$ dè $p \hat{u} \rightarrow, \quad x X x$
hit kill.Pfv-2SgSbj if worthless, (unintelligible)
A: ò ${ }^{\mathrm{n}} \mathrm{hô} \rightarrow$
uh-huh!
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; púngó jě- is a direct chain; dùgù-mbó 'sorcerors' (Sg dùjé:]
(00:58) A: $\hat{e} \rightarrow$
yes
B: [nân gà] [kú là]
[now Topic] [DiscDef too]



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]


B: 'The baggage hasn't been lost, and you have come (back) in good health? Concerning that, concerning your real village (of residence), it's around here.'
A: 'Uh-huh!'
[inanimate plural nàndùré:]
(01:12)

| B: [nân | $g a ̀]$ | [ú | là] |  |
| :---: | :---: | :---: | :---: | :---: |
| [now | Topic] | [2Sg | too] |  |
| [Lně | kó] | nè] |  | yày-só-W ${ }^{n}$, |
| [[person | Poss.InanSg] | Loc] |  | go-Pfv2-2SgSbj, |

A: wálà:
voilà
B: 'Now, you too, you have gone to a person's (house).'
A: 'There (you have it).'
(01:14)


A: $\grave{o}^{n} h \hat{o} \rightarrow$
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)


B: 'About the person's (house), what (they) really say, that's it.'
A: 'There (you have it), that's it. "The bush," with its meaning, that's it.'
[
(01:22) A: [ándá ì̀], [[òrù ${ }^{\mathrm{L}}$ wàndá] bàr] twá:-ndà:- $\varnothing$,
[the.bush Def], [[talk(n) ${ }^{\mathrm{L}}$ other] Loc] be.in-StatNeg-3SgSbj,
[[gàndà ò-gú] dùg̀̀] órà̀-m- $d-\varepsilon$,
[[place Prox-InanSg] Purp] speak-Ipfv-Ipfv-3P1Sbj
A: 'The bush, it isn't in any other talk (=it has no other meaning). They speak about this place.'
[òrù ${ }^{\mathrm{L}}$ wàndá variant of òrù-go ${ }^{\mathrm{L}}$ wàndá

> B: ná: [yù-wà:]-[wàl-mbó.:]
now [millet-farming]-[cultivate.Agent-AnPl.\&]
[[àsغ̀gè-mbò]-[bè:m-bó::], zégé ây ${ }^{n}$ kàr ${ }^{n} \grave{\imath}-m-d-\varepsilon ̌$ :
[[animal-AnPl]-[tend.Agent-AnPl.\&], fight(n) how? do-Ipfv-Ipfv-3P1Sbj.Q
A: [yù-wà:]-[wàlé:.:]
[millet-farming]-cultivate.Agent.\& animal-tend.Agent.\&,
bè:mé: [á $\rightarrow$ là] [ín-bj̀ á-gá] dìmbà,
animal-tend.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 ${ }^{n} \grave{i}-m-d-\varepsilon ̌:$ : with final interrogative intonation; àsègé ~ gàsègé 'livestock animal']
(01:34)
A: bè:m-bó [bírá: bù-gò ì] kû: = Ø,
tend.Agent-AnPl [work(n) 3Pl-Poss.InanSg Def] DiscDef=it.is,

| yù-wá: | bànà | là, | [yù-wà: | kú] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| millet-farming | owner | too, | [millet-farming | DiscDef.InanSg] |
| [[bírá: | kj̀-ń] |  | $n e ̀] ~$ | $k u ̂:=\varnothing$, |
| $[[$ work(n) | Poss.InanSg-3SgPoss] | Loc] | DiscDef=it.is, |  |

A: 'Herders, their work is that. A millet farmer, for his part, that millet farming, in his work, that's it.'
[
(01:39) A: mè: dógò-mbj̀, dày nL bú jìn kárnà,
but Dogon-AnPl, manner ${ }^{\mathrm{L}}$ 3PlSbj say Pfv.Ppl,
gàsغ̀gé, [zà ${ }^{\mathrm{L}} \quad$ wádà] jìn-à:
animal, $\quad\left[\right.$ meal $^{\mathrm{L}}$ remaining] say.Pfv-3P1Sbj
A: 'But Dogon (farmers), the way they have said, a (livestock) animal, they call (it) an extra meal.'
[i.e. the staple for Dogon is millet grain, supplemented by meat]
(01:44)


B: 'They call an animal an extra meal. But it isn't just an extra meal. There aren't any animals left.'
A: 'There (you have it).'
[

[meal ${ }^{\mathrm{L}}$ remaining only] animal remain-Ipfv-Ipfv-3P1Sbj Q
$\mathrm{A}:$ gàsègé [zà ${ }^{\mathrm{L}}$ wádà ì̀], [kú là] [bú là]
animal [meal remaining Def], [DiscDef too] [3P1 too]
gàndà ${ }^{\mathrm{L}}$ órá-m só-ŋ́gò ì,
place ${ }^{\mathrm{L}}$ speak-Ipfv have-Ppl.InanSg Def,
B: 'Extra meals only. Are there any (livestock) animals left?'
A: 'An animal, the extra meal. Ehere they (Dogon) too are saying that [
(01:53) A: [nân gà] [cì wàndá]=là: [órú-gó,

```
[now Topic] [thing other]=it.is.not [talk(n),
jǏn-gò \grave{̀] dìmb-\varepsilonे:}
[say-Ipfv.Ppl.InanSg Def] follow.Stat-3PlSbj
```

A: 'Now, they follow the words that (people) say, it's nothing else.'
[without the pause: òrù-gò ${ }^{\mathrm{L}}$ jǐn-gò ǹ]


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)

| A: ìyò | nân, | jǎ: | [ú | $j \grave{\varepsilon} \cdot]$ | téà-m-dò- $\varnothing$, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| yes | now, | hunger | [2SgObj | afflict] | sprout-Ipfv-Ipfv-3SgSbj, |
| úló | zá | ú | bá-ทgò:- $\varnothing$, |  |  |
| house | meal | 2 Sg | suffice-Ipfv | Neg-3Sg | Sbj, |

A: 'Yes, now. (Suppose) you are famished. At home, meals don't satisfy you.'
(02:07)


A: 'Ah, when you get some money, will you buy the millet grain, or will you put (=spend) it on the animal?'
[téà-m-dò- is connected by my assistant to té- 'sprout(v)', not té- 'weave' in this construction always imperfective, with jě: (perhaps originally 'take') obligatorily preceded by a pronoun]

[^1][gàndà ${ }^{\mathrm{L}}$ úngò yì gín] órá-m $s-\varepsilon$ : , [place ${ }^{\mathrm{L}}$ over.there see Ant.Past.SS] speak-Ipfv have-3PlSbj,
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 speak (about it).'
[
(02:17)

| A: $\quad t i^{\prime \prime} \rightarrow$ | [[tó:-lè | ì] | nè], |  |
| :---: | :---: | :---: | :---: | :---: |
| first | [ [begin-VblN | Def] | Loc], |  |
| [îbè | gín] | órá-m |  | só-ŋggò |
| [catch | Ant.Past.SS] | speak- |  | have-Ppl.InanSg |

B: [zá
nă-1- $\varnothing$
kàn nモ́]
[meal eat.meal-PerfNeg-3SgSbj do Ant.Fut.SS]
àsègé [úló bàrì] bè béá-ngò:- $\varnothing$
animal [house Loc] remain get-IpfvNeg-3SgSbj
A: $\grave{o}^{n} h \hat{o} \rightarrow$
uh-huh
A: 'At first, at the beginning, what they (=Dogon) have caught (noticed) and are saying, from the beginning.'
B: 'If (someone) isn't eating (grain-based) meals, animals cannot stay (for long) at the house.'
[
(02:23)


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: [[gàndà ${ }^{\mathrm{L}}$ kú ì̀ dùgò] [zà ${ }^{\mathrm{L}}$ wádà ì ${ }^{\text {in }}$ kû: $=\varnothing$, [[place ${ }^{\mathrm{L}}$ DiscDef Def] Purp] [meal ${ }^{\mathrm{L}}$ remaining Def] DiscDef=it.is, [tî ${ }^{n} \rightarrow$ ú twá:-ngò ì $\quad$ dìmb-ì: gín, [first 2 SgSbj begin-Ipfv.Ppl.InanSg Def] follow-MP Ant.Past.SS, [órá-m só-ngò ì̀ kû: $=\varnothing$,
[speak-Ipfv have-Ppl.InanSg Def] DiscDef=it.is,
A: 'Because of that (situation), the extra meal is that.'
[
(02:32) A: órú-gó ${ }^{\mathrm{L}}$ kòrò, gàsغ̀gé màngí-tù-W ${ }^{n}$ dè,
$\operatorname{talk}(\mathrm{n}) \quad{ }^{\mathrm{L}}$ meaning, animal accumulate-Pfv1b-2SgSbj if,
[zá sìrà-lú-W ${ }^{n}$ dè]
[meal cook-PfvNeg-2SgSbj if]
àsègè-mángí ú kán-gò:-Ø,
animal ${ }^{\mathrm{L}}$-accumulation 2 SgSbj be.done-IpfvNeg-3SgSbj
[[zá ì $]$ èbě-W $W^{n}$ dè] nà̀-m-nù- $W^{n}$,
[[meal Def] buy.Pfv-2SgSbh if] eat-Ipfv-Ipfv-2SgSbj
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 (at at 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:-пggò:- $\varnothing$ were accepted by my assistant]
(02:40)

```
A: [bèrá: \grave{̀] sín-à:-y dè,}
    [belly Def] be.sated-Pfv1a-3SgSbj if,
    [gàsèg\varepsiloń ì] [kú ní:] tú-m-nù-wn,
    [animal Def] [DiscDef Inst] put-Ipfv-Ipfv-2SgSbj,
    [[gàndà kú] dùg\grave{] [zà wádà]}
    [place DiscDef] Purp] [meal L
    [jìrní-m só-\etagò ì] k\hat{u}=\varnothing\mathrm{ ,}
    [say-Ipfv have-Ppl.Inan Def] DiscDef=it.is,
    ê}
    yes
```

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.'
[]
(02:44)


A: $\grave{m} h \hat{m} \rightarrow$ m-hm!
B: 'As for livestock, the old people too had always talked about it.'
[
(02:48)
$\mathrm{B}:\left[z a^{\mathrm{L}}\right.$ wádà] [zà ${ }^{\mathrm{L}}$ wádà] jí-m̀̀-d-è $]$ è̀;
[meal ${ }^{\mathrm{L}}$ remaining] [meal ${ }^{\mathrm{L}}$ remaining] say-Ipfv-Ipfv-3P1Sbj but,
dày ${ }^{n}$ kán-í:-sú-ŋgò $\quad$ pú $\rightarrow$,
manner do-MP-Pfv2-Ppf.InanSg all,
[ébé yày gín] ńné zé-dè gín wò:-só- $W^{n}$,
[market go Ant.Past.SS] 3 Sg bring Ant.Past.SS] come-Pfv2-2SgSbj

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).'
[zé-dè gín 'having brought', irregular form, see §10.1.3.8]
(02:53)
B: [ह́bé yày gín]
[market go Ant.Past.SS]
dày ${ }^{n \mathrm{~L}}$ ú zèè-sú-ŋgò pú $\rightarrow$,
manner ${ }^{\mathrm{L}} \quad 2 \mathrm{SgSbj} \quad$ bring-Pfv2-Ppl.InanSg all,
[ùlò ${ }^{\mathrm{L}}$ yó ŋ̀gò: $=\varnothing \quad$ dé gày]
[house ${ }^{\mathrm{L}}$ millet not.be. $\mathrm{Ppl}=$ it.is if Topic]
ńné-gì ú zè̀̀-sú-ŋggò pú $\rightarrow$,
3Sg-Acc 2SgSbj 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: zéé-lé ú kán-gò:- $\varnothing$,
voilà, bring-VblN 2 SgSbj be.done-IpfvNeg-3SgSbj
háyà, $\quad o(-g) \quad k \hat{u}:=\varnothing$
well, Prox-InanSg DiscDef=it.is
A: 'There (you have it)! Bringing it is impossible for you. Well, that's it.'
(02:57) $\mathrm{B}: m \dot{\varepsilon}: \quad[z a ́ \quad \grave{n}] \quad t i{ }^{n} \rightarrow \quad n \varepsilon ́ \quad d \grave{\varepsilon}-W^{n}$
dè,

| but $\quad[\mathrm{meal}$ | Def] | first eat | RecPrf-2SgSbj |
| :--- | :--- | :---: | :--- |
| [mà-W | if, |  |  |
| gày] | dùmó | dégé-dégé |  |
| $[$ Dist-InanSg | Topic] | later | gently |

A: wálà:
voilà

| B : dà ${ }^{n \mathrm{~L}}$ | ú | kán-sú-ŋgò | $p u ́ \rightarrow$, |
| :---: | :---: | :---: | :---: |
| manner ${ }^{\text {L }}$ | 2 SgSbj | do-Pfv2-Ppl.InanSg | all, |
| dùmó | [solution | kò-ń] | béà-m-nù-W ${ }^{n}$, |
| later | [solution | Inan-3SgPoss] | get-Ipfv-Ipfv-2SgSbj |

## $\mathrm{A}: \grave{\mathrm{m} h \mathrm{~m}} \rightarrow$ <br> 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)


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),
B: 'Nowadays, some young people, they don't pay attention (to old people).'
A: 'There (you have it)!'
[elsewhere gǎy $\rightarrow$ sò- means 'have a lot', but in combination with 'ear' it means 'disregard, not listen']
(03:08)
B: [[kú
ì] dùg̀̀う,
[[DiscDef Def] Purp],
[dèn ${ }^{\mathrm{L}}$ gàrá:] bú wà: $r^{n a ́}-m \quad s$-ò:
[day ${ }^{\mathrm{L}}$ certain] 3PlSbj mix.up-Ipfv have-SFoc
A: $\hat{e} \rightarrow$
yes
$\mathrm{B}: k u ́=\varnothing \quad$ quoi
DiscDef=it.is $\quad \varnothing$
B: 'For that reason, sometimes it's they [focus] who are mixing (things) up.'
A: 'Yes.'
B: 'That's it.'
[dén-gò '(a specific) day’ (synonym lè:-gó)]


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.'
[
(03:15)

| A: bú 3 Pl | [gándá ì] <br> [place Def] | $\begin{aligned} & \text { yà-ndá, } \\ & \text { see-Pfv.3P1Sbj, } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| [gàndà ${ }^{\text {L }}$ | ò-gú] | dùgò, | ór-sú-ygò |
| [place ${ }^{\text {L }}$ | Prox-InanSg] | Purp, | speak-Pf |
| $\hat{e} \rightarrow$ |  |  |  |
| yes |  |  |  |

A: 'They (=young people) haven't seen the place (=the way things were). They (bld people) spoke about that place (=situation). Yes.'
[
(03:19)


```
[kú là] yàmà-Sú-\etagò bj̀:=là:
[DiscDef too] ruin-Pfv2-Ppl.InanSg be=it.is.not
```

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 it), it will go to ruin, won't it?'
[invariant bò: seems to be a form of 'be' used in this construction with perfective-2 participle; the final = là: is a n'est-ce pas? tag question]


## References cited

Blench, Roger. 2012. "Tebul Ure, a language of the Dogon group in Northern Mali and its affinities." online at
http://www.rogerblench.info/Language/Niger-Congo/Dogon/Tebul\ Ure\ wordlist

## Index

model for index, from Jamsay grammar (additions/comments in pink). Jamsay forms (to be replaced) are here colored dark yellow. References should ultimately be to pages, but while drafting the grammar section references like $\oint 6.2 .1$ are all that one can do.

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When he has eaten we will go.
$\left[\begin{array}{ll}n \varepsilon ́ ~ d \grave{~} & \text { dè }] \quad[i ́ \\ \text { ó-m-nè-y }\end{array}\right]$
relative clauses (spatial adverbial relative)
[(gàndà) gònsá:rª́ mí yá-m=bú-gó gándá] wàgá
'The place where I used to see elephants is far away.'
[gònsá: $r^{n a ́ ~ m i ́ ~ y i ̀-t e ́ r e ́-b u ́-g o ́ ~ g a ́ n d a ́] ~ w a ̀ g a ́ ~}$
'The place where I once saw an elephant is far away.'


[^0]:    a. [ámàdù ${ }^{\mathrm{L}}$ ùlò ${ }^{\mathrm{L}}$ yàgà ${ }^{\mathrm{L}}$ kár ${ }^{n a ̀}$ ì] àndí bù- $\varnothing$
    [A ${ }^{\mathrm{L}}$ house $^{\mathrm{L}}$ fall ${ }^{\mathrm{L}}$ Pfv.Ppl Def] where be-3SgSbj 'Where is Amadou's house that fell?' (ámàdù ${ }^{\mathrm{L}}$ ùlò)

[^1]:    B: [zá ì $]$ [bèrá: ì $] \quad t i i^{n} \rightarrow$
    [meal Def] [belly Def] first
    A: $\grave{o}^{n} h \hat{o} \rightarrow$,
    uh-huh,
    [zà ${ }^{\text {L }}$ wádà] [[kóró kò-ń] nì] kî: $=\varnothing$,
    [meal ${ }^{\mathrm{L}}$ remaining] [[meaning InanSg-3SgPoss] Inst] DiscDef=it.is,
    [gàndà ${ }^{\text {L }}$ kú ì ${ }^{\text {lit, }}$
    [place ${ }^{\mathrm{L}}$ DiscDef.InanSg Def],

